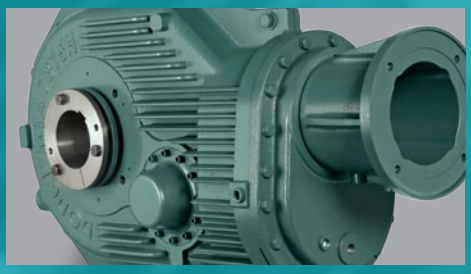
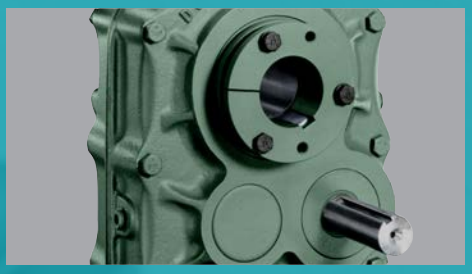
Courtesy of:
Screw Conveyor Parts

DODGE®





TORQUE-ARM FAMILY
GEARING ENGINEERING CATALOG

2016

Courtesy of:
Screw Conveyor Parts

To receive a copy of the DODGE Bearing Engineering Catalog, DODGE Gearing Engineering Catalog, DODGE Power Transmission Components Engineering Catalog, or DODGE Product Manuals, contact your local authorized DODGE Distributor or www.baldor.com.

MEMBER OF…

AMERICAN BEARING MANUFACTURERS ASSOCIATION

AMERICAN GEAR MANUFACTURERS ASSOCIATION

CONVEYOR EQUIPMENT MANUFACTURERS ASSOCIATION

MECHANICAL POWER TRANSMISSION ASSOCIATION

POWER TRANSMISSION DISTRIBUTORS ASSOCIATION

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

BEARING SPECIALIST ASSOCIATION

HYDRAULIC INSTITUTE

MEMBER OF…

MHI - THE INDUSTRY THAT MAKES SUPPLY CHAINS WORK

NATIONAL SONE, SAND & GRAVEL ASSOCIATION

ELECTRICAL APPARATUS SERVICE ASSOCIATION, INC.

SOCIETY FOR MINING, METALLURGY & EXPLORATION INC.

SOCIETY OF WOMEN ENGINEERS

DODGE Products are Manufactured in ISO 9001 Certified Plants

Prices and data indicated in this document are for your convenience and were correct at time of printing with the exception of clerical and/or printing errors. Possession of this document by any person or company is not to be construed as an offer to sell to him or to anyone else the goods listed herein at the prices stated.

ALL DATA AND PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE and shall be subject to those prices in effect at time of shipments. All published and quoted prices are based upon the application of, and all sales are expressly subject to, the Company's Standard Terms and Conditions of Sales are available upon request. This document supersedes all previously published catalog/pricing documents.

WARNING
The information provided for Product Interchange in this catalog is for use only as a general reference by persons qualified to recognize unreasonable selection options. Products suggested as substitutes may have dimensional, rating, pricing and other differences from products to be replaced. This selection method must be used in conjunction with the applicable product catalog which contains important precautions and other pertinent information.

In illustrations throughout this catalog, safety guards have been removed for photographic purposes.

© 2016 Baldor Electric Company

WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be described or as may be specified in safety codes should be provided, and are neither provided by Baldor Electric nor are the responsibility of Baldor Electric. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

Courtesy of:
Screw Conveyor Parts

CONTENTS

Dodge® Gearing Catalog

QUICK REFERENCE . . . . . REFERENCE GUIDE

MOTORIZED TORQUE-ARM II G1

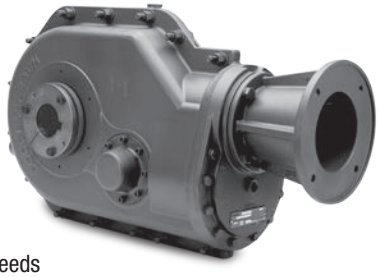
TORQUE-ARM II G2

TORQUE-ARM G3

ENGINEERING G4

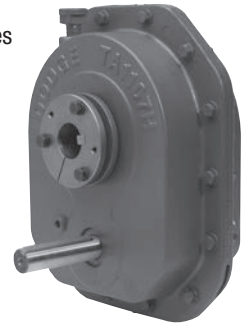
SYSTEM-1 . . . . . G5

Motorized Torque-Arm II Shaft Mount Reducers
Page G1-1



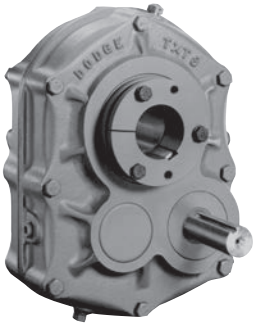
- 7 new reducer sizes with modular accessories
- All reducers can be shaft mounted, screw conveyor, vertical, and flange mounted
- Up through 100 HP
- Torque ratings through 130,000 lb-in
- 12 ratios and multiple motor speeds provide a wide range of output speeds
- 3 piece coupled design eliminates stresses on input shaft and assures removal of motor
- Available as a C-face reducer assembly or a C-face gear-motor assembly
- Bushing bores: 1-7/16" through 4-7/16"
- All-new, highly efficient helical/bevel gearing design
- Meets or exceeds AGMA standards, including minimum class 1 bearing L-10 life of 5,000 hours 25,000 average life
- Harsh duty, metal shielded sealing system with excluder lip
- Smooth, rugged Class 30 cast-iron housings with pry slots
- New 36-month/18-month warranty protection
- ATEX Certified Category 2 and M2 equipment

Torque-Arm II Shaft Mount Reducers
Page G2-1



- 12 new reducer sizes with modular accessories
- All reducers can be shaft mounted, screw conveyor, vertical, and flange mounted
- Up through 400 HP
- Torque ratings through 500,000 lb-in
- Standard 5, 9, 15, 25, and up to 40:1 gear ratios
- Nearly 300:1 speed reduction with V-belt drives
- Bushing bores: 1" through 7"
- All-new, highly efficient helical gearing design
- Meets or exceeds AGMA standards, including minimum class 1 bearing L-10 life of 5,000 hours 25,000 average life
- Harsh duty, metal shielded sealing system with excluder lip
- Smooth, rugged Class 30 cast-iron housings with pry slots
- New 36-month/18-month warranty protection
- ATEX Certified Category 2 and M2 equipment

TXT Torque-Arm Shaft Mount Reducers
Page G3-1



- Exclusive twin tapered bushings
- Rugged cast-iron efficient
- Precision, high-quality helical gearing
- Reliable anti-friction bearings and seals
- Efficient splash lubrication
- Meets/Exceeds AGMA standards
- 100% factory noise and leak tested

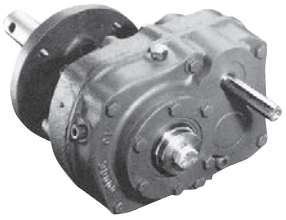
Capabilities & Mounting

- Standard ratios: 5, 9, 15, and 25:1
- Ratios up to 210:1 with V-belts
- Fractional to 700 HP
- Output speeds through 400 RPM
- Optional flange mount and vertical shaft application
- Available with hydraulic motor input

Accessories

- Motor mounts
- Bushing assemblies
- Backstops
- Auxiliary seal kits
- Belt guards
- Cooling fans
- Harsh duty accessories

SCXT Screw Conveyor Shaft Mount Reducers
Page G3-81



- Industry standard, high quality, drive mounting
- Adapter conforms to any CEMA trough ends
- Sealing system alternatives in adapter
- Seals
- Braided felt seal
- Rugged, high-thrust roller bearings
- Conforms to CEMA standards
- CEMA high-strength shafts, 2- and 3-bolt

Capabilities

- Fractional to 75 HP
- Standard ratios: 5, 9, 15, and 25:1
- 1-1/2" to 3-7/16" CEMA drive shafts
- Output speeds through 400 RPM
- Available with hydraulic motor input
- Vertical and incline mounting capability

Accessories

- Standard adapters with optional adjustable packing gland adapters
- Drive shafts - standard steel and stainless steel
- Motor mounts
- Belt guards
- Auxiliary seal kits
- Cooling fans

Courtesy of:
Screw Conveyor Parts

Dodge Motorized Torque-Arm II Speed Reducers -- General Specification:

The speed reducer shall be coupled enclosed shaft mount type unit with a triple reduction ratio. The reducer shall mount directly on the driven shaft and utilize an adjustable torque arm that attaches from the gear case to the support structure or foundation. The motor shall be attached to the reducer with a cast iron adapter and shall utilize a flexible, jaw style, 3 piece coupling to eliminate fretting corrosion and allow for any minor misalignment issues.

The reducer housing shall be constructed of two piece corrosion resistant, class 30 gray iron. All housings shall be doweled and precision machined to assure accurate alignment for all gear sets. Pry slots are provided for ease of repair.

All gearing shall be of helical or helical/bevel design, case carburized and precision finished to insure a high surface durability with a resilient tooth core for impact resistance and optimum service life. Input pinion shall be supported between bearings to maintain proper alignment of gear meshes, maximize load carrying capabilities, and to eliminate overhung loads imposed on bearings. Design meets or exceeds AGMA standards.

Reducer bearings shall be of the tapered roller type, meet or exceed AGMA standards, and provide a minimum 25,000 hour average life, AGMA Class I standard.

All seals shall be of the lip, spring loaded type, made of a premium harsh duty, heat resistant material. A metal excluder seal with rubber lip shall be external to the standard oil seal on all outboard seals.

Reducer installation shall be accomplished by using ductile iron, fully split, two bushing system. Reducer removal shall be accomplished by providing jack screw holes in the bushing flanges to mechanically remove the tapered assembly.

Backstops shall be lift-off sprag type and designed for use with standard and extreme pressure (EP) lubricants.

Dodge Motorized Torque-Arm II Screw Conveyor Drives -- General Specification:

The drive shall consist of a direct drive speed reducer; a cast iron, bolt on, four bolt mounting adapter with double lip seals on both ends, and optional bolt on adjustable packing kit.

A standard three-hole drive shaft will be machined from a high quality alloy steel.

The drive shall conform to Conveyor Equipment Manufacturers Association (CEMA) standards.

Motorized Torque-Arm II is ATEX certified.

Motorized Torque-Arm II has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 2 and M2 equipment, which is intended for use in potentially explosive atmospheres.

These Essential Health and Safety Requirements are given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

Courtesy of:
Screw Conveyor Parts

CONTENTS

Dodge® Motorized Torque-Arm II

Accessories **G1-3**

Easy Selection Method **G1-5**

Determining Service Class **G1-6**

MTA2 - MTA8 Nomenclature and Descriptions **G1-13**

Engineering **G1-15**

EZ Selection HP & Speed

Class I G1-22

Class II G1-26

EZ Selection Tables

MTA2115H G1-30

MTA3203H G1-31

MTA4207H G1-32

MTA5215H G1-33

MTA6307H G1-34

MTA7315H G1-35

MTA8407H G1-36

Shaft Mounted Reducer and Accessories

MTA2115 ..... G1-37

MTA3203 ..... G1-41

MTA4207 ..... G1-45

MTA5215 ..... G1-49

MTA6307 ..... G1-53

MTA7315 ..... G1-57

MTA8407 ..... G1-61

Harsh Duty Accessories **G1-63**

Aftermarket Replacement Parts G1-64

Mounting Positions G1-65

Engineering/Technical

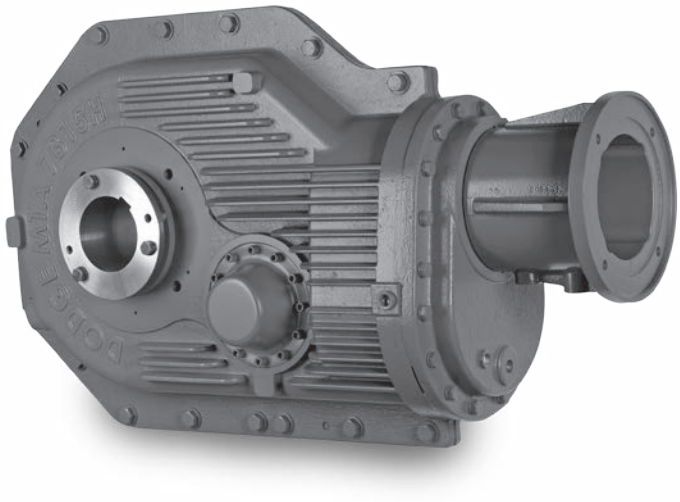
Viscosity Classification Equivalents G1-66

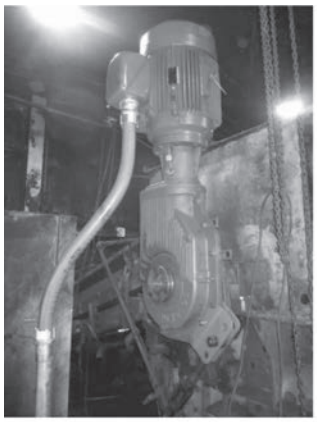
Lubrication of Motorized Torque-Arm II Reducers G1-66

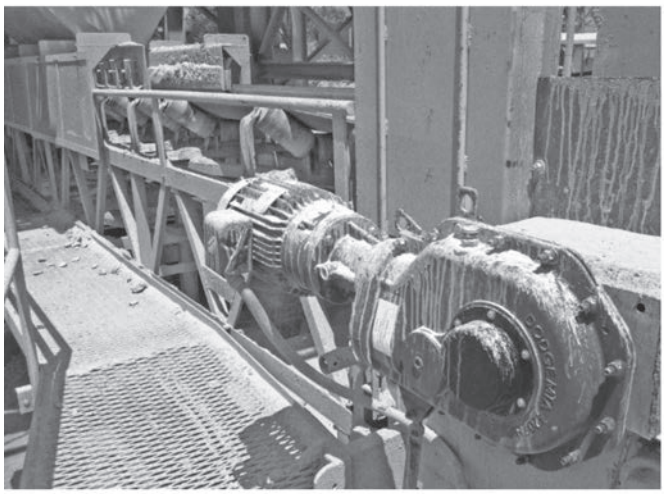
Courtesy of:
Screw Conveyor Parts

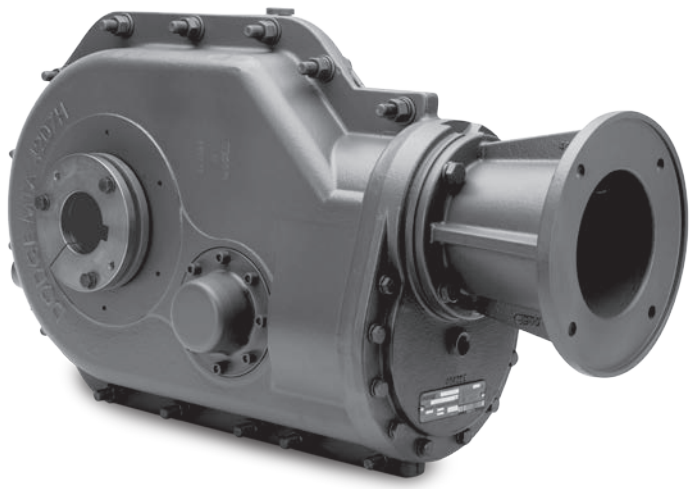
DODGE® MOTO

With 60 years of proven dependability and more than 2 million units in service throughout the world, Dodge Torque-Arm speed reducers are the standard of the industry. Now, that legacy continues with the newest generation in shaft mounted speed reducers: The Dodge Motorized Torque-Arm II - offering patented innovations, new features, plus increased torque and horsepower ratings.









The Dodge Motorized Torque-Arm II surpasses other reducers on the market because of its industry proven design and patented features.

This powerful line of shaft mounted speed reducers - in 7 case sizes with Class 2 rating through 100 horsepower (HP) - offers unparalleled torque ratings and is quickly becoming the new industry standard. Improved features include: an all-new backstop concept, a patented sealing system, a state-of-the-art, totally modular design with a patented twin tapered bushing system.

The backstop design features a unique sprag profile for extended life and designed for use with lubricants containing EP additives.

In addition, the Motorized Torque-Arm II line has a patented, premium sealing system that uses a Harsh Duty oil seal protected by a metal excluder seal with rubbing lip. This harsh duty sealing system makes this reducer series a perfect fit for today's harsh duty industries such as aggregates, mining, cement, asphalt, mixing & milling and ethanol. Its patented twin tapered bushing system - in standard length, short shaft, and metric versions - offers all the features of our standard twin tapered Torque-Arm bushing design which are unique to Dodge.

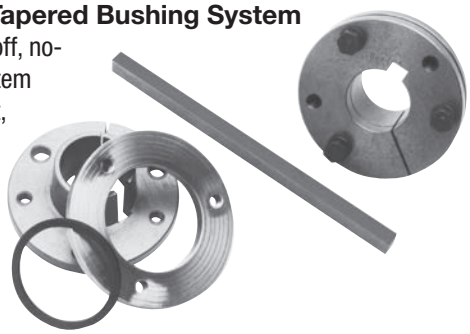
The patented insertable tapered wedge enables the optional extended tapered bushing kit to be applied for shorter shaft lengths, allowing the replacement of straight bore reducers.

Courtesy of:
Screw Conveyor Parts

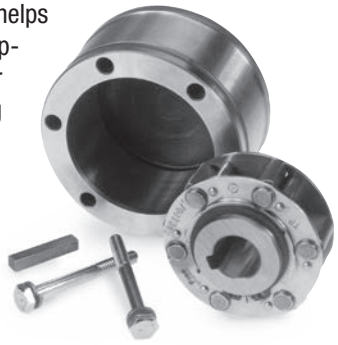
Accessories

MTA uses standard TA II accessories

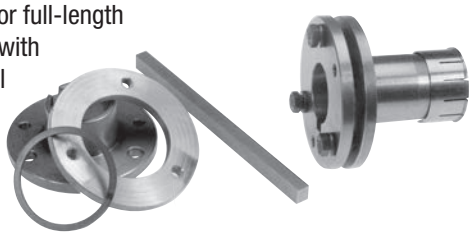
Standard Twin Tapered Bushing System is an easy on, easy off, no-wobble bushing system featuring a fully split, ductile iron 8° taper and reliable twin support. Available in inch and metric bores. Increased bore capability in many sizes.



This new-design **Backstop** option helps prevent reverse rotation in high stop-start loads, and results in less wear and longer life. Its centrifugal sprag design operates with standard and EP lubricants and requires no external lubrication. NOTE: MTA II reducers require a larger backstop than equivalent TA II. See MTA II section for ALL MTA II accessories.

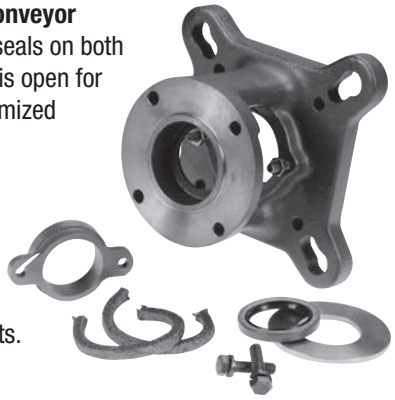


Our Short-Shaft Twin-Tapered Bushing Kits eliminate the need for full-length shafts. Constructed with ductile iron, it has all the Features of our standard bushing system. Available in both inch and metric bores.



The **Cema Bolt-On Screw Conveyor Adapter** features double-lip seals on both surfaces. The adapter center is open for contaminate drop out for optimized sealing.

An optional **Adjustable Packing Kit** bolts to the standard adapter and provides a proven sealing option for hostile environments. Packing can be retightened.



MTA Bushing Covers provide protection from the spinning bushing bolts and offer an added layer of contamination protection.

The MTA II is drilled and tapped for the Heavy Duty ABS covers. The Aluminum covers require customer modification of the gearbox to allow fitment.

ABS Polymer

Aluminum

The **Screw Conveyor Driveshafts** are made from high alloy steel and engineered To CEMA dimensions. They are three-bolt drilled and their tapered fit ensures simple installation. The rugged locking plate (patent pending) also provides a mechanical shaft removal feature. #316 Stainless Steel drive shafts also available.

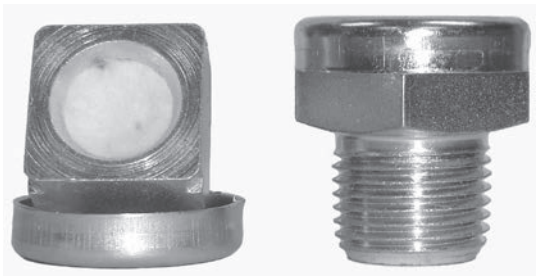
Ruggedly constructed, the **TA Rod Kit** includes standard Brackets and Offers universal mounting options.

Courtesy of:
Screw Conveyor Parts

Torque-Arm Family Breather Technology

1. Standard Breather is a filter breather
- Cotton filter media
- Screen to support filter
- Chamber to allow oil to collect and return to reducer
- Non captured filter (should not clog and block air exit)

1.



Harsh Duty Breathers are available

2. Hydra-Lock Desiccant Breather
- Built in standpipe
- 3 micron filter media top and bottom
- Desiccant material changes color from blue (good) to pink (replace)
- Check valve system, so breather is only open to atmosphere under pressure or vacuum. Closed when not running.

2.

3. Fully Enclosed Canister Breather
- Allows no outside air
- Excellent protections for extreme wet environments

3.

4. Optional Position D Breather Kit
- Use when reducer is mounted in position D (G1-65)
- Includes: Enclosed Breather, sight glass, all necessary piping to allow for fitment to all sizes of MTA

4.

Courtesy of:
Screw Conveyor Parts

Motorized Torque-Arm II Shaft Mount Speed Reducers

Easy Selection Method (For Electric Motors) For Motorized Torque-Arm II Reducer And Screw Conveyor Drive Reducer Applications

When to Use Easy Selection

The Easy Selection tables for MTA II reducers are for electric motor selections up to 100 horsepower with output speeds up to ~150 RPM, using AGMA recommended application class numbers. For extreme shock or high energy loads which must be absorbed, as when stalling; for a power source other than an electric motor; or for extreme ambient temperatures or oversized equipment, consult Dodge Application Engineering, 864-284-5700.

How to Select

Step 1: Determine Class of Service - See Table 1 to determine Load Classification for applications under normal conditions.
Find the type application and duty cycle:

Class 1 - Steady load not exceeding Motor HP rating and light shock loads during 10 hours a day. Moderate shock loads are allowable if operation is intermittent. For Class 1 applications, the maximum value of starting and momentary peak loads should not exceed 2 x Motor HP rating. If it exceeds this amount it should be divided by 2 and the result used in the selection table instead of the Motor HP rating.

Class 2 - Steady load not exceeding Motor HP rating for over 10 hours a day. Moderate shock loads are allowable during 10 hours a day. For Class 2 applications, the maximum value of starting and momentary peak loads should not exceed 2.8 x Motor HP rating. If it exceeds this amount it should be divided by 2.8 and the result used in the selection table instead of the Motor HP rating.

(Note: most Torque-Arm applications are class 2 or better. Torque-Arm products are usually used in heavy duty applications)

Step 2: Determine Reducer Size - From the Easy Selection, Class I, II or III, Tables, pages G1-18 thru G1-25, find the reducer size for the application horsepower and output speed.

Step 3: Compare Hollow Shaft Bore with the size of the driven shaft. All Dodge MTA II Taper Bushed reducers require bushings to mount reducer to driven shaft. Refer to reducer pages for available bushings. If the driven shaft is larger than the bore of the selected reducers, the shaft must be machined to the proper size, or select a larger reducer. Check driven shaft and key for strength.

Step 4: Check Dimensions - See Selection/ Dimension pages for reducer dimensions, weights, part numbers and Torque-Arm rod mounting positions. See Engineering/ Technical pages for reducer mounting positions, G1-61.

Step 5: Select Accessories - See Selection/Dimensions pages for description, dimensions, weights and part numbers for accessories for the MTA II reducer selected: Rod Assembly - Bushing Kit – Backstop Assembly – Bushing Covers – Screw Conveyor Adapter – Adjustable Packing Kit – Drive Shaft – Optional harsh duty breathers

Shaft Mount Reducer Application: A 10 HP 1750 RPM motor is used to drive a belt conveyor moving sand at 70 RPM. The conveyor is uniformly loaded and operates 16 hours per day. The head pulley shaft diameter is 2-3/16". The user specifications call for a means of holding the conveyor from moving backwards.

Step 1: Determine Class of Service - From Table 1 on page G1-6 locate the appropriate application, "belt conveyors, uniformly loaded or fed" for over 10 hours per day. This load is classified as a Class II application.

Step 2: Determine Reducer Size - From Class II Selection, page G1-22, find the column for 10 HP and read down to 70 RPM. At 71 RPM a reducer size M3H25T21C is the closest correct selection. If a full reducer and motor assembly is desired, see page G1-27 and use part number M3H25T21C1018, to include the motor.

Step 3: Compare Hollow Shaft Bore of a size M3 reducer size with the head pulley shaft diameter. Per page G1-38, 2-3/16" is a bore available for this size of reducer. It will work in this application. Be sure to check the driven shaft and key for strength.

Step 4: Check Dimensions and Weights -See Selection/ Dimension pages for reducer dimensions, weights, part numbers and other pertinent drive dimensions, as well as information on Torque-Arm rod mounting positions. See Engineering/Technical pages for information on reducer mounting positions G1-61.

Step 5: Select Accessories - See Selection/Dimensions pages to pick out accessories for this application: TA4207BS Backstop Assembly (MTA II uses larger backstops than same case size TA II), to hold the conveyor from moving backwards; TA3203RA Tie Rod Assembly, for attaching the reducer to the structure. ABS Polymer Bushing covers, to cover and protect the rotating bushing bolts.

Courtesy of:
Screw Conveyor Parts

Determining Service Class Class I - 1.0 service factor, Class II - 1.4 service factor, Class III - 2.0 service factor

Notes:

1. Crane drives are to be selected based upon the gear tooth bending strength using the numeric service factors, K_{SF}, shown in the table or by analysis such as Miner's Rule. In all cases, the pitting resistance service factor shall be a minimum of 1.0. Contact gear manufacturer for ratings.
2. Service factors for paper mill applications are applied to the nameplate rating of the electric drive motor at the motor rated based speed.
3. Anti-friction bearings only. Use 1.5 for sleeve bearings.
4. A service factor of 1.00 may be applied at base speed of a super calender operating over-speed range of part range constant power, part range constant torque where the constant power speed range is greater than 1.5 to 1. A service factor of 1.25 is applicable to super calendars operating over the entire speed range at constant torque or where the constant power speed range is less than 1.5 to 1.

Table A.3 - Application classification

Application	Class Numbes		
	Up to 3 hrs per day	3 - 10 hrs per day	Over 10 hrs per day
Agitators (Mixers)			
Pure Liquids	I	I	II
Liquids and Solids	I	II	II
Liquids-Variable Density	I	II	II
Blowers			
Centrifugal	I	I	II
Lobe	I	II	II
Vane	I	II	II
Brewing and Distilling			
Bottling Machinery	I	I	II
Brew Kettles-Continuous Duty	II	II	II
Cookers-Continuous Duty	II	II	II
Mash Tubs-Continuous Duty	II	II	II
Scale Hopper-Frequent Starts	II	II	II
Can Filling Machines	I	I	II
Car Dumpers	II	III	III
Car Pullers	I	II	II
Clarifiers	I	I	II
Classifiers	I	II	II
Clay Working Machinery			
Brick Press	II	III	III
Briquette Machine	II	III	III
Pug Mill	I	II	II
Compactors	III	III	III
Compressors			
Centrifugal	I	I	II
Lobe	I	II	II
Reciprocating, Multi-Cylinder	II	II	III
Reciprocating, Single-Cylinder	III	III	III
Conveyors-General Purpose	(Includes Apron, Assembly, Belt, Bucket, Chain, Flight, Oven and Screw)		
Uniformly Loaded or Fed	I	I	II
Heavy Duty-Not Uniformly Fed	I	II	II
Severe Duty-Reciprocating or Shaker	II	III	III

(Continued)

Courtesy of:
Screw Conveyor Parts

Determining Service Class Class I - 1.0 service factor, Class II - 1.4 service factor, Class III - 2.0 service factor

Application	Class Numbers		
	Up to 3 hrs per day	3 - 10 hrs per day	Over 10 hrs per day
Cranes (1)			
Dry Dock			
Main Hoist	2.50	2.50	2.50
Auxiliary Hoist	2.50	2.50	3.00
Boom Hoist	2.50	2.50	3.00
Slewing Drive	2.50	2.50	3.00
Traction Drive	3.00	3.00	3.00
Container			
Main Hoist	3.00	3.00	3.00
Boom Hoist	2.00	2.00	2.00
Trolley Drive			
Gantry Drive	3.00	3.00	3.00
Traction Drive	2.00	2.00	2.00
Mill Duty			
Main Hoist	3.50	3.50	3.50
Auxiliary	3.50	3.50	3.50
Bridge Travel	2.50	3.00	3.00
Trolley Travel	2.50	3.00	3.00
Industrial Duty			
Main	2.50	2.50	3.00
Auxiliary	2.50	2.50	3.00
Bridge Travel	2.50	3.00	3.00
Trolley Travel	2.50	3.00	3.00
Crusher			
Stone or Ore	III	III	III
Dredges			
Cable Reels	II	II	II
Conveyors	II	II	II
Cutter Head Drives	III	III	III
Pumps	III	III	III
Screen Drives	III	III	III
Stackers	II	II	II
Winches	II	II	II
Elevators			
Bucket	I	II	II
Centrifugal Discharge	I	I	II
Escalators	I	I	II
Freight	I	II	II
Gravity Discharge	I	I	II
Extruders			
General	II	II	II
Plastics			
Variable Speed Drive	III	III	III
Fixed Speed Drive	III	III	III
Rubber			
Continuous Screw Operation	III	III	III
Intermittent Screw Operation	III	III	III
Fans			
Centrifugal	I	I	II
Cooling Towers	III	III	III
Forced Draft	II	II	II
Induced Draft	II	II	II
Industrial & Mine	II	II	II

(Continued)

Courtesy of:
Screw Conveyor Parts

Determining Service Class Class I - 1.0 service factor, Class II - 1.4 service factor, Class III - 2.0 service factor

Application	Class Numbers		
	Up to 3 hrs per day	3 - 10 hrs per day	Over 10 hrs per day
Feeders			
Aprons	I	II	II
Belt	I	II	II
Disc	I	I	II
Reciprocating	II	III	III
Screw	I	II	II
Food Industry			
Cereal Cooker	I	I	II
Dough Mixer	II	II	II
Meat Grinders	II	II	II
Slicers	I	II	II
Generators and Exciters	II	II	II
Hammer Mills	III	III	III
Hoists			
Heavy Duty	III	III	III
Medium Duty	II	II	II
Skip Hoist	II	II	II
Laundry Tumblers	II	II	II
Laundry Washers	II	II	III
Lumber Industry			
Barkers			
Spindle Feed	II	II	II
Main Drive	III	III	III
Conveyors			
Burner	II	II	II
Main or Heavy Duty	II	II	II
Main Log	III	III	III
Re-saw, Merry-Go-Round	II	II	II
Slab	III	III	III
Transfer	II	II	II
Chains			
Floor	II	II	II
Green	II	II	III
Cut-Off Saws			
Chain	II	II	III
Drag	II	II	III
Debarking Drums	III	III	III
Feeds			
Edger	II	II	II
Gang	II	III	III
Trimmer	II	II	II
Log Deck	III	III	III
Log-Hauls - Incline - Well Type	III	III	III
Log Turning Devices	III	III	III
Planer Feed	II	II	II
Planer Tilting Hoists	II	II	II
Rolls- Live-off brg. - Roll Cases	III	III	III
Sorting Table	II	II	II
Tipple Hoist	II	II	II
Transfers			
Chain	II	II	III
Craneway	II	II	III
Tray Drives	II	II	II
Veneer Lathe Drives	II	II	II

(Continued)

Courtesy of:
Screw Conveyor Parts

Determining Service Class Class I - 1.0 service factor, Class II - 1.4 service factor, Class III - 2.0 service factor

Application	Class Numbers		
	Up to 3 hrs per day	3 - 10 hrs per day	Over 10 hrs per day
Metal Mills			
Draw Bench Carriage and Main Drive	II	II	II
Runout Table			
Non-reversing			
Group Drives	II	II	II
Individual Drives	III	III	III
Reversing	III	III	III
Slab Pushers	II	II	II
Shears	III	III	III
Wire Drawing	II	II	II
Wire Winding Machine	II	II	II
Metal Strip Processing Machinery			
Bridles	II	II	II
Coilers & Uncoilers	I	I	II
Edge Trimmers	I	II	II
Flatteners	II	II	II
Loopers (Accumulators)	I	I	I
Pinch Rolls	II	II	II
Scrap Choppers	II	II	II
Shears	III	III	III
Slitters			
Mills, Rotary Type			
Ball & Rod			
Spur Ring Gear	III	III	III
Helical Ring Gear	II	II	II
Direct Connected	III	III	III
Cement Kilns	II	II	II
Dryers & Coolers	II	II	II
Paper Mills [2]			
Agitator (Mixer)	II	II	II
Agitator for Pure Liquors	II	II	II
Barking Drums	III	III	III
Barkers - Mechanical	III	III	III
Beater	II	II	II
Breaker Stack	II	II	II
Calendar [3]	II	II	II
Chipper	III	III	III
Chip Feeder	II	II	II
Coating Rolls	II	II	II
Conveyors			
Chip, Bark, Chemical	II	II	II
Log (including Slab)	III	III	III
Couch Rolls	II	II	II
Cutter	III	III	III
Cylinder Molds	II	II	II
Dryers [3]			
Paper Machine	II	II	II
Conveyor Type	II	II	II
Embosser	II	II	II
Extruder	II	II	II

(Continued)

Courtesy of:
Screw Conveyor Parts

Determining Service Class Class I - 1.0 service factor, Class II - 1.4 service factor, Class III - 2.0 service factor

Application	Class Numbers		
	Up to 3 hrs per day	3 - 10 hrs per day	Over 10 hrs per day
Paper Mills [2] (continued)			
Fourdrinier Rolls (includes Lump Breaker, Dandy Roll, Wire Turning, and Return Rolls)	II	II	II
Jordan	II	II	II
Kiln Drive	II	II	II
Mt. Hope Roll	II	II	II
Paper Rolls	II	II	II
Platter	II	II	II
Presses - Felt & Suction	II	II	II
Pulper	III	III	III
Pumps - Vacuum	II	II	II
Reel (Surface Type)	II	II	II
Screens			
Chip	II	II	II
Rotary	II	II	II
Vibrating	III	III	III
Size Press	II	II	II
Supercalendar [4]	II	II	II
Thickener (AC Motor)	II	II	II
Thickener (DC Motor)	II	II	II
Washer (AC Motor)	II	II	II
Washer (DC Motor)	II	II	II
Wind and Unwind Stand	I	I	I
Winders (Surface Type)	II	II	II
Yankee Dryers [3]	II	II	II
Plastic Industry - Primary Processing			
Intensive Internal Mixers			
Batch Mixers	III	III	III
Continuous Mixers	II	II	II
Batch Drop Mill - 2 smooth rolls	II	II	II
Continuous Feed, Holding & Blend Mill	II	II	II
Calendars	II	II	II
Plastic Industry - Secondary Processing			
Blow Molders	II	II	II
Coating	II	II	II
Film	II	II	II
Pipe	II	II	II
Pre-Plasticizers	II	II	II
Rods	II	II	II
Sheet	II	II	II
Tubing	II	II	II
Pullers - Barge Haul	II	II	II
Pumps			
Centrifugal	I	I	II
Proportioning	II	II	II
Reciprocating			
Single Acting, 3 or more cylinders	II	II	II
Double Acting, 2 or more cylinders	II	II	II
Rotary			
Gear Type	I	I	II
Lobe	I	I	II
Vane	I	I	II

(Continued)

Determining Service Class Class I - 1.0 service factor, Class II - 1.4 service factor, Class III - 2.0 service factor

Application	Class Numbers		
	Up to 3 hrs per day	3 - 10 hrs per day	Over 10 hrs per day
Rubber Industry			
Intensive Internal Mixers			
Batch Mixers	III	III	III
Continuous Mixers	II	II	II
Mixing Mill			
2 smooth rolls	II	II	II
1 or 2 corrugated rolls	III	III	III
Batch Drop Mill - 2 smooth rolls	II	II	II
Cracker Warmer - 2 roll, 1 corrugated roll	III	III	III
Cracker - 2 corrugated rolls	III	III	III
Holding, Feed & Blend Mill - 2 rolls	II	II	II
Refiner - 2 rolls	II	II	II
Calendars	II	II	II
Sand Muller	II	II	II
Sewage Disposal Equipment			
Bar Screens	II	II	II
Chemical Feeders	II	II	II
Dewatering Screens	II	II	II
Scum Breakers	II	II	II
Slow or Rapid Mixers	II	II	II
Sludge Collectors	II	II	II
Thickener	II	II	II
Vacuum Filters	II	II	II
Screens			
Air Washing	I	I	II
Rotary - Stone or Gravel	II	II	II
Traveling Water Intake	I	I	I
Screw Conveyors			
Uniformly Loaded or Fed	I	I	II
Heavy Duty	I	II	II
Sugar Industry			
Beet Slicer	III	III	III
Cane Knives	II	II	II
Crushers	II	II	II
Mills (low speed end)	III	III	III
Textile Industry			
Batchers	II	II	II
Calendars	II	II	II
Cards	II	II	II
Dry Cans	II	II	II
Dyeing Machinery	II	II	II
Looms	II	II	II
Mangles	II	II	II
Nappers	II	II	II
Pads	II	II	II
Slashers	II	II	II
Soapers	II	II	II
Spinners	II	II	II
Tenter Frames	II	II	II
Washers	II	II	II
Winders	II	II	II

(Continued)

Courtesy of:
Screw Conveyor Parts

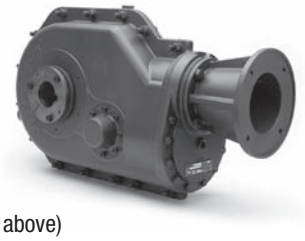
Determining Service Class Class I - 1.0 service factor, Class II - 1.4 service factor, Class III - 2.0 service factor

Notes:

1. Because crane drive selections may require a service factor, K_{SF}, greater than 2.0. Class Numbers are not applicable. Crane drives are to be selected based upon the gear tooth bending strength using the numeric service factors, K_{SF}, shown in the table or by analysis such as Miner's Rule. In all cases, the pitting resistance service factor shall be a minimum of 1.0. Contact gear manufacturer for ratings.
2. The class numbers listed in the table A.3 for paper mill applications are consistent with those show in TAPPI (Technical Association of Pulp and Paper Industry) Technical Information Sheet 0406-18-1967, Service Factors for Gears on Major Equipment in the Paper and Pulp Industry.
3. Anti-friction bearings only.
4. A Class Number of 1.00 may be applied at base speed of a super calender operating over a speed range of part range constant power, part range constant torque where the constant power speed range is greater than 1.5 to 1. A Class Number of II is applicable to super calendars operating over the entire speed range at constant torque or where the constant power speed range is less than 1.5 to 1.

Courtesy of:
Screw Conveyor Parts

MTA2 through MTA8 Nomenclature and Descriptions



MTA C-Face Reducer Nomenclature
M6H67T28C Torque Arm Reducer Only

M - Motorized Torque-Arm II
6 - Case Size, **H** - Heavy Duty,
67 - Nominal Ratio, **T** - Tapered Bore
28 - 280 - Motor Frame, C - NEMA - C-Face, (TSC - accommodates NEMA TS short shaft frame, 2 pole, 280 frame and above)

Part Number	Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
M2H30T18C	M3H51T18C	M4H41T21C	M5H65T21C	M6H52T25C	M7H51T28C	M8H79T28C
M2H32T18C	M3H58T18C	M4H44T21C	M5H72T21C	M6H59T25C	M7H58T28C	M8H51T32C
M2H36T18C	M3H65T18C	M4H49T21C	M5H40T25C	M6H67T25C	M7H67T28C	M8H53T32C
M2H39T18C	M3H70T18C	M4H52T21C	M5H43T25C	M6H79T25C	M7H76T28C	M8H60T32C
M2H44T18C	M3H76T18C	M4H61T21C	M5H48T25C	M6H34T28C	M7H33T32C	M8H69T32C
M2H47T18C	M3H25T21C	M4H66T21C	M5H51T25C	M6H39T28C	M7H38T32C	M8H79T32C
M2H51T18C	M3H29T21C	M4H74T21C	M5H60T25C	M6H45T28C	M7H44T32C	M8H27T36C
M2H58T18C	M3H32T21C	M4H18T25C	M5H65T25C	M6H50T28C	M7H51T32C	M8H31T36C
M2H66T18C	M3H35T21C	M4H22T25C	M5H72T25C	M6H52T28C	M7H58T32C	M8H34T36C
M2H71T18C	M3H38T21C	M4H26T25C	M5H25T28C	M6H59T28C	M7H67T32C	M8H40T36C
M2H77T18C	M3H44T21C	M4H30T25C	M5H29T28C	M6H67T28C	M7H67T32TSC	M8H46T36C
M2H18T21C	M3H47T21C	M4H34T25C	M5H34T28C	M6H67T28TSC	M7H76T32TSC	M8H51T36C
M2H21T21C	M3H51T21C	M4H41T25C	M5H40T28C	M6H79T28TSC	M7H19T36C	M8H53T36C
M2H25T21C	M3H58T21C	M4H44T25C	M5H43T28C	M6H22T32C	M7H22T36C	M8H60T36C
M2H30T21C	M3H65T21C	M4H49T25C	M5H48T28C	M6H24T32C	M7H26T36C	M8H53T36TSC
M2H32T21C	M3H17T25C	M4H52T25C	M5H51T28C	M6H29T32C	M7H29T36C	M8H60T36TSC
M2H36T21C	M3H21T25C	M4H61T25C	M5H43T28TSC	M6H34T32C	M7H33T36C	M8H69T36TSC
M2H39T21C	M3H25T25C	M4H66T25C	M5H48T28TSC	M6H39T32C	M7H38T36C	M8H79T36TSC
M2H44T21C	M3H29T25C	M4H74T25C	M5H51T28TSC	M6H39T32TSC	M7H44T36C	M8H17T405C
M2H47T21C	M3H32T25C	M4H18T28C	M5H60T28TSC	M6H45T32TSC	M7H38T36TSC	M8H23T405C
M2H51T21C	M3H35T25C	M4H22T28C	M5H65T28TSC	M6H50T32TSC	M7H44T36TSC	M8H27T405C
M2H58T21C	M3H38T25C	M4H26T28C	M5H72T28TSC	M6H52T32TSC	M7H51T36TSC	M8H31T405C
M2H66T21C	M3H44T25C	M4H22T28TSC	M5H18T32C	M6H59T32TSC	M7H58T36TSC	M8H34T405C
M2H71T21C	M3H47T25C	M4H26T28TSC	M5H21T32C	M6H67T32TSC	M7H67T36TSC	M8H31T405TSC
M2H77T21C	M3H51T25C	M4H30T28TSC	M5H25T32C	M6H79T32TSC	M7H19T405C	M8H34T405TSC
M2H18T25C	M3H17T28TSC	M4H34T28TSC	M5H29T32C	M6H19T36C	M7H22T405C	M8H40T405TSC
M2H21T25C	M3H21T28TSC	M4H41T28TSC	M5H18T32TSC	M6H22T36C	M7H26T405TSC	M8H46T405TSC
M2H25T25C	M3H25T28TSC	M4H44T28TSC	M5H21T32TSC	M6H24T36C	M7H29T405TSC	M8H51T405TSC
M2H30T25C	M3H29T28TSC	M4H49T28TSC	M5H25T32TSC	M6H22T36TSC	M7H33T405TSC	M8H53T405TSC
M2H32T25C	–	M4H52T28TSC	M5H29T32TSC	M6H24T36TSC	M7H38T405TSC	M8H60T405TSC
M2H36T25C	–	M4H18T32TSC	M5H34T32TSC	M6H29T36TSC	M7H44T405TSC	M8H69T405TSC
–	–	M4H22T32TSC	M5H40T32TSC	M6H34T36TSC	–	–
–	–	M4H26T32TSC	M5H43T32TSC	M6H39T36TSC	–	–
–	–	M4H30T32TSC	M5H48T32TSC	M6H45T36TSC	–	–
–	–	M4H34T32TSC	M5H51T32TSC	M6H50T36TSC	–	–
–	–	–	M5H60T32TSC	M6H52T36TSC	–	–
–	–	–	M5H18T36C	–	–	–
–	–	–	M5H18T36TSC	–	–	–
–	–	–	M5H25T36TSC	–	–	–
–	–	–	M5H29T36TSC	–	–	–
–	–	–	M5H34T36TSC	–	–	–

Note: Use EZ-Selection Charts and verify REQUIRED base C-Face Motor Speed before ordering

Courtesy of:
Screw Conveyor Parts

MTA2 through MTA8 Nomenclature and Descriptions

MTA C-Face Gearmotor Nomenclature
M6H67T28C2518 Torque Arm Reducer & Motor

M - Motorized Torque-Arm II
6 - Case Size, **H** - Heavy Duty,
67 - Nominal Ratio, **T** - Tapered Bore
28 - 280 - Motor Frame, C - NEMA - C-Face, (TSC - accommodates NEMA TS short shaft frame, 2 pole, 280 frame and above)
25 - 25HP Motor, **18 - 1800** RPM Motor Speed

Part Number	Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
M2H66T18C318	M3H51T18C518	M4H61T21C718	M5H65T21C1018	M6H67T25C1518	M7H67T28C2518	M8H79T28C3018
M2H47T18C318	M3H58T18C518	M4H66T21C718	M5H72T21C1018	M6H79T25C1518	M7H76T28C2518	M8H60T32C4018
M2H51T18C318	M3H65T18C518	M4H74T21C718	M5H48T25C1518	M6H52T25C2018	M7H51T28C3018	M8H69T32C4018
M2H71T18C318	M3H70T18C518	M4H41T21C1018	M5H51T25C1518	M6H59T25C2018	M7H58T28C3018	M8H51T32C5018
M2H77T18C318	M3H76T18C518	M4H44T21C1018	M5H60T25C1518	M6H79T25C2018	M7H76T28C3018	M8H53T32C5018
M2H30T18C518	M3H38T21C718	M4H49T21C1018	M5H72T25C1518	M6H45T28C2518	M7H38T32C4018	M8H69T32C5018
M2H32T18C518	M3H44T21C718	M4H52T21C1018	M5H40T25C2018	M6H50T28C2518	M7H44T32C4018	M8H79T32C5018
M2H36T18C518	M3H47T21C718	M4H61T21C1018	M5H43T25C2018	M6H52T28C2518	M7H58T32C4018	M8H40T36C6018
M2H39T18C518	M3H58T21C718	M4H66T21C1018	M5H60T25C2018	M6H67T28C2518	M7H67T32C4018	M8H46T36C6018
M2H44T18C518	M3H65T21C718	M4H74T21C1018	M5H65T25C2018	M6H34T28C3018	M7H76T32TSC4036	M8H53T36C6018
M2H51T18C518	M3H25T21C1018	M4H74T21C1036	M5H34T28C2518	M6H39T28C3018	M7H51T32C5018	M8H60T36C6018
M2H58T18C518	M3H29T21C1018	M4H30T25C1518	M5H48T28C2518	M6H45T28C3018	M7H33T32C5018	M8H79T36TSC6036
M2H66T18C536	M3H32T21C1018	M4H34T25C1518	M5H51T28C2518	M6H50T28C3018	M7H67T32TSC5036	M8H27T36C7518
M2H21T21C718	M3H35T21C1018	M4H41T25C1518	M5H65T28TSC2536	M6H52T28C3018	M7H26T36C6018	M8H31T36C7518
M2H25T21C718	M3H38T21C1018	M4H44T25C1518	M5H72T28TSC2536	M6H59T28C3018	M7H29T36C6018	M8H34T36C7518
M2H32T21C718	M3H44T21C1018	M4H49T25C1518	M5H25T28C3018	M6H67T28TSC3036	M7H38T36C6018	M8H40T36C7518
M2H36T21C718	M3H47T21C1018	M4H52T25C1518	M5H29T28C3018	M6H79T28TSC3036	M7H44T36C6018	M8H46T36C7518
M2H39T21C718	M3H51T21C1018	M4H52T25C1536	M5H34T28C3018	M6H29T32C4018	M7H51T36TSC6036	M8H51T36C7518
M2H44T21C718	M3H51T21C1036	M4H61T25C1536	M5H40T28C3018	M6H39T32C4018	M7H58T36TSC6036	M8H53T36TSC7536
M2H44T21C736	M3H65T21C1036	M4H66T25C1536	M5H43T28C3018	M6H50T32TSC4036	M7H76T36TSC6036	M8H60T36TSC7536
M2H47T21C736	M3H47T21C1036	M4H18T25C2018	M5H43T28TSC3036	M6H52T32TSC4036	M7H19T36C7518	M8H69T36TSC7536
M2H51T21C736	M3H17T25C1518	M4H22T25C2018	M5H48T28TSC3036	M6H59T32TSC4036	M7H22T36C7518	M8H79T36TSC7536
M2H66T21C736	M3H21T25C1518	M4H26T25C2018	M5H51T28TSC3036	M6H79T32TSC4036	M7H26T36C7518	M8H17T405C10018
M2H18T21C1018	M3H25T25C1518	M4H30T25C2018	M5H60T28TSC3036	M6H22T32C5018	M7H29T36C7518	M8H23T405C10018
M2H21T21C1018	M3H29T25C1518	M4H34T25C2018	M5H65T28TSC3036	M6H24T32C5018	M7H33T36C7518	M8H27T405C10018
M2H25T21C1018	M3H32T25C1518	M4H41T25C2036	M5H72T28TSC3036	M6H29T32C5018	M7H38T36TSC7536	M8H31T405C10018
M2H30T21C1018	M3H32T25C1536	M4H44T25C2036	M5H18T32C4018	M6H34T32C5018	M7H44T36TSC7536	M8H34T405C10018
M2H39T21C1036	M3H35T25C1536	M4H49T25C2036	M5H21T32C4018	M6H39T32TSC5036	M7H51T36TSC7536	–
M2H44T21C1036	M3H38T25C1536	M4H61T25C2036	M5H29T32C4018	M6H45T32TSC5036	M7H58T36TSC7536	–
M2H47T21C1036	M3H44T25C1536	M4H66T25C2036	M5H29T32TSC4036	M6H59T32TSC5036	M7H67T36TSC7536	–
M2H51T21C1036	M3H47T25C1536	M4H74T25C2036	M5H34T32TSC4036	M6H67T32TSC5036	M7H19T405C10018	–
M2H18T25C1518	M3H51T25C1536	M4H18T28C2518	M5H40T32TSC4036	M6H19T36C6018	M7H22T405C10018	–
M2H18T25C1536	M3H17T25C2018	M4H26T28C2518	M5H51T32TSC4036	M6H22T36C6018	–	–
M2H25T25C1536	M3H21T25C2018	M4H34T28TSC2536	M5H60T32TSC4036	M6H24T36C6018	–	–
M2H30T25C1536	M3H25T25C2036	M4H49T28TSC2536	M5H21T32C5018	M6H34T36TSC6036	–	–
M2H32T25C1536	M3H29T25C2036	M4H52T28TSC2536	M5H25T32C5018	M6H45T36TSC6036	–	–
M2H36T25C1536	M3H32T25C2036	M4H18T28C3018	M5H18T32TSC5036	M6H50T36TSC6036	–	–
M2H18T25C2018	M3H35T25C2036	M4H22T28C3018	M5H21T32TSC5036	M6H52T36TSC6036	–	–
M2H18T25C2036	M3H38T25C2036	M4H22T28TSC3036	M5H25T32TSC5036	M6H19T36C7518	–	–
M2H21T25C2036	M3H44T25C2036	M4H26T28TSC3036	M5H40T32TSC5036	M6H22T36TSC7536	–	–
–	M3H17T28TSC2536	M4H30T28TSC3036	M5H43T32TSC5036	M6H24T36TSC7536	–	–
–	M3H21T28TSC2536	M4H34T28TSC3036	M5H48T32TSC5036	M6H29T36TSC7536	–	–
–	M3H29T28TSC2536	M4H41T28TSC3036	M5H18T36C6018	M6H34T36TSC7536	–	–
–	M3H17T28TSC3036	M4H44T28TSC3036	M5H29T36TSC6036	M6H39T36TSC7536	–	–
–	M3H21T28TSC3036	M4H18T32TSC4036	M5H34T36TSC6036	–	–	–
–	M3H25T28TSC3036	M4H26T32TSC4036	M5H18T36TSC7536	–	–	–
–	–	M4H30T32TSC4036	M5H21T36TSC7536	–	–	–
–	–	M4H34T32TSC4036	M5H25T36TSC7536	–	–	–
–	–	M4H18T32TSC5036	–	–	–	–
–	–	M4H22T32TSC5036	–	–	–	–

Note: Use EZ-Selection Charts and verify REQUIRED base C-Face Motor Speed before ordering

Courtesy of:
Screw Conveyor Parts

MTA Engineering Information

MTA2 Horsepower and Torque Ratings

MTA2115

Ratio	Mtr speed	NEMA 180TC		NEMA 210TC		NEMA 250TC	
		1750	3450	1750	3450	1750	3450
76.96	Output RPM	23	45	23	45	23	45
	Class I catalog HP	4.4	8.4	–	8.4	–	–
	Class I torque in-lbs	11155	10700	–	10700	–	–
	Part Number	M2H77T18C	M2H77T18C	–	M2H77T21C	–	–
71.18	Output RPM	25	48	25	48	25	48
	Class I catalog HP	4.8	8.9	–	8.9	–	–
	Class I torque in-lbs	11155	10645	–	10645	–	–
	Part Number	M2H71T18C	M2H71T18C	–	M2H71T21C	–	–
66.07	Output RPM	26	52	26	52	26	52
	Class I catalog HP	5.0	9.5	–	9.5	–	–
	Class I torque in-lbs	11155	10525	–	10525	–	–
	Part Number	M2H66T18C	M2H66T18C	–	M2H66T21C	–	–
58.29	Output RPM	30	59	30	59	30	59
	Class I catalog HP	5.8	10.5	–	10.5	–	–
	Class I torque in-lbs	11155	10300	–	10300	–	–
	Part Number	M2H58T18C	M2H58T18C	–	M2H58T21C	–	–
51.31	Output RPM	34	67	34	67	34	67
	Class I catalog HP	6.5	11.7	–	11.7	–	–
	Class I torque in-lbs	11050	10145	–	10145	–	–
	Part Number	M2H51T18C	M2H51T18C	–	M2H51T21C	–	–
47.45	Output RPM	37	73	37	73	37	73
	Class I catalog HP	7.0	12.5	–	12.5	–	–
	Class I torque in-lbs	10950	9874	–	9874	–	–
	Part Number	M2H47T18C	M2H47T18C	–	M2H47T21C	–	–
44.05	Output RPM	40	78	40	78	40	78
	Class I catalog HP	7.6	13.1	7.6	13.1	–	–
	Class I torque in-lbs	10888	9639	10888	9639	–	–
	Part Number	M2H44T18C	M2H44T18C	M2H44T21C	M2H44T21C	–	–
38.86	Output RPM	45	89	45	89	45	89
	Class I catalog HP	8.4	14.6	8.4	14.6	–	–
	Class I torque in-lbs	10700	9440	10700	9440	–	–
	Part Number	M2H39T18C	M2H39T18C	M2H39T21C	M2H39T21C	–	–
35.88	Output RPM	49	96	49	96	49	96
	Class I catalog HP	9.0	15.4	9.0	15.4	–	15.4
	Class I torque in-lbs	10600	9210	10600	9210	–	9210
	Part Number	M2H36T18C	M2H36T18C	M2H36T21C	M2H36T21C	–	M2H36T25C
32.15	Output RPM	54	107	54	107	54	107
	Class I catalog HP	9.8	16.6	9.8	16.6	–	16.6
	Class I torque in-lbs	10459	8920	10459	8920	–	8920
	Part Number	M2H32T18C	M2H32T18C	M2H32T21C	M2H32T21C	–	M2H32T25C
29.64	Output RPM	59	116	59	116	59	116
	Class I catalog HP	10.5	17.6	10.5	17.6	–	17.6
	Class I torque in-lbs	10300	8699	10300	8699	–	8699
	Part Number	M2H30T18C	M2H30T18C	M2H30T21C	M2H30T21C	–	M2H30T25C
24.87	Output RPM	70	139	70	139	70	139
	Class I catalog HP	12.1	19.8	12.1	19.8	–	19.8
	Class I torque in-lbs	9961	8170	9961	8170	–	8170
	Part Number	M2H25T18C	M2H25T18C	M2H25T21C	M2H25T21C	–	M2H25T25C
21.22	Output RPM	82	163	82	163	82	163
	Class I catalog HP	13.7	22.4	13.7	22.4	–	22.4
	Class I torque in-lbs	9594	7900	9594	7900	–	7900
	Part Number	M2H21T18C	M2H21T18C	M2H21T21C	M2H21T21C	–	M2H21T25C
17.68	Output RPM	99	195	99	195	99	195
	Class I catalog HP	15.7	25.6	15.7	25.6	15.7	25.6
	Class I torque in-lbs	9100	7540	9100	7540	9100	7540
	Part Number	M2H18T18C	M2H18T18C	M2H18T21C	M2H18T21C	M2H18T25C	M2H18T25C

This page lists all 'possible' part numbers. Part numbers with service factor higher than 2.0 may not be loaded in the system. Call Dodge for price availability.
For reducer dimensions and accessories, see pages G1-37 through G1-40.

Courtesy of:
SCREW CONVEYOR PARTS

MTA Engineering Information

MTA3 Horsepower and Torque Ratings

MTA3203

Ratio	Mtr speed	NEMA 180TC		NEMA 210TC		NEMA 250TC		NEMA 280TC / 280TSC	
		1750	3450	1750	3450	1750	3450	1750	3450
76.02	Output RPM	23	45	23	45	23	45	23	45
	Class I catalog HP	7.1	13.0	–	13.0	–	–	–	–
	Class I torque in-lbs	17020	16463	–	–	–	–	–	–
	Part Number	M3H76T18C	M3H76T18C	–	M3H76T21C	–	–	–	–
70.30	Output RPM	25	49	25	49	25	49	25	49
	Class I catalog HP	7.4	14.1	–	14.1	–	–	–	–
	Class I torque in-lbs	17020	16311	–	16311	–	–	–	–
	Part Number	M3H70T18C	M3H70T18C	–	M3H70T21C	–	–	–	–
65.26	Output RPM	27	53	27	53	27	53	27	53
	Class I catalog HP	7.8	14.8	7.8	14.8	–	–	–	–
	Class I torque in-lbs	17020	16146	17020	16146	–	–	–	–
	Part Number	M3H65T18C	M3H65T18C	M3H65T21C	M3H65T21C	–	–	–	–
57.58	Output RPM	30	60	30	60	30	60	30	60
	Class I catalog HP	9.0	16.4	9.0	16.4	–	16.4	–	–
	Class I torque in-lbs	17020	15778	17020	15778	–	15778	–	–
	Part Number	M3H58T18C	M3H58T18C	M3H58T21C	M3H58T21C	–	M3H58T25C	–	–
50.68	Output RPM	35	68	35	68	35	68	35	68
	Class I catalog HP	10.1	17.7	10.1	17.7	–	17.7	–	–
	Class I torque in-lbs	16940	15444	16940	15444	–	15444	–	–
	Part Number	M3H51T18C	M3H51T18C	M3H51T21C	M3H51T21C	–	M3H51T25C	–	–
46.87	Output RPM	37	74	37	74	37	74	37	74
	Class I catalog HP	10.9	19.5	10.9	19.5	–	19.5	–	–
	Class I torque in-lbs	16876	15222	16876	15222	–	15222	–	–
	Part Number	M3H47T18C	M3H47T18C	M3H47T21C	M3H47T21C	–	M3H47T25C	–	–
43.51	Output RPM	40	79	40	79	40	79	40	79
	Class I catalog HP	11.9	20.7	11.9	20.7	–	20.7	–	–
	Class I torque in-lbs	16849	15024	16849	15024	–	15024	–	–
	Part Number	M3H44T18C	M3H44T18C	M3H44T21C	M3H44T21C	–	M3H44T25C	–	–
38.39	Output RPM	46	90	46	90	46	90	46	90
	Class I catalog HP	13.1	23.1	13.1	23.1	–	23.1	–	–
	Class I torque in-lbs	16463	14720	16463	14720	–	14720	–	–
	Part Number	M3H38T18C	M3H38T18C	M3H38T21C	M3H38T21C	–	M3H38T25C	–	–
35.44	Output RPM	49	97	49	97	49	97	49	97
	Class I catalog HP	14.2	24.6	14.2	24.6	–	24.6	–	–
	Class I torque in-lbs	16258	14499	16258	14499	–	14499	–	–
	Part Number	M3H35T18C	M3H35T18C	M3H35T21C	M3H35T21C	–	M3H35T25C	–	–
31.75	Output RPM	55	109	55	109	55	109	55	109
	Class I catalog HP	15.3	26.8	15.3	26.8	15.3	26.8	–	26.8
	Class I torque in-lbs	15999	14249	15999	14249	15999	14249	–	14249
	Part Number	M3H32T18C	M3H32T18C	M3H32T21C	M3H32T21C	M3H32T25C	M3H32T25C	–	M3H32T28TSC
29.28	Output RPM	60	118	60	118	60	118	60	118
	Class I catalog HP	16.4	28.7	16.4	28.7	16.4	28.7	–	28.7
	Class I torque in-lbs	15778	14022	15778	14022	15778	14022	–	14022
	Part Number	M3H29T18C	M3H29T18C	M3H29T21C	M3H29T21C	M3H29T25C	M3H29T25C	–	M3H29T28TSC
24.57	Output RPM	71	140	71	140	71	140	71	140
	Class I catalog HP	18.9	32.8	18.9	32.8	18.9	32.8	–	32.8
	Class I torque in-lbs	15322	13412	15322	13412	15322	13412	–	13412
	Part Number	M3H25T18C	M3H25T18C	M3H25T21C	M3H25T21C	M3H25T25C	M3H25T25C	–	M3H25T28TSC
20.96	Output RPM	83	165	83	165	83	165	83	165
	Class I catalog HP	21.6	36.7	21.6	36.7	21.6	36.7	–	36.7
	Class I torque in-lbs	14894	12805	14894	12805	14894	12805	–	12805
	Part Number	M3H21T18C	M3H21T18C	M3H21T21C	M3H21T21C	M3H21T25C	M3H21T25C	–	M3H21T28TSC
17.46	Output RPM	100	198	100	198	100	198	100	198
	Class I catalog HP	25.2	41.1	25.2	41.1	25.2	41.1	25.2	41.1
	Class I torque in-lbs	14450	11933	14450	11933	14450	11933	14450	11933
	Part Number	M3H17T18C	M3H17T18C	M3H17T21C	M3H17T21C	M3H17T25C	M3H17T25C	M3H17T28C	M3H17T28TSC

This page lists all 'possible' part numbers. Part numbers with service factor higher than 2.0 may not be loaded in the system. Call Dodge for price availability.
For reducer dimensions and accessories, see pages G1-41 through G1-44.

Courtesy of:
Screw Conveyor Parts

MTA Engineering Information

MTA4 Horsepower and Torque Ratings

MTA4207

Ratio	Mtr speed	NEMA 180TC		NEMA 210TC		NEMA 250TC		NEMA 280TC / 280TSC		NEMA 320TSC	
		1750	3450	1750	3450	1750	3450	1750	3450	1750	3450
73.57	Output RPM	24	47	24	47	24	47	24	47	24	47
	Class I catalog HP	11.5	20.3	11.5	20.3	–	20.3	–	–	–	–
	Class I torque in-lbs	27555	25341	27555	25341	–	25341	–	–	–	–
	Part Number	M4H74T18C	M4H74T18C	M4H74T21C	M4H74T21C	–	M4H74T25C	–	–	–	–
66.17	Output RPM	26	52	26	52	26	52	26	52	26	52
	Class I catalog HP	12.4	22.5	12.4	22.5	–	22.5	–	–	–	–
	Class I torque in-lbs	27307	24907	27307	24907	–	24907	–	–	–	–
	Part Number	M4H66T18C	M4H66T18C	M4H66T21C	M4H66T21C	–	M4H66T25C	–	–	–	–
61.04	Output RPM	29	57	29	57	29	57	29	57	29	57
	Class I catalog HP	13.2	24.0	13.2	24.0	–	24.0	–	–	–	–
	Class I torque in-lbs	27095	24635	27095	24635	–	24635	–	–	–	–
	Part Number	M4H61T18C	M4H61T18C	M4H61T21C	M4H61T21C	–	M4H61T25C	–	–	–	–
51.72	Output RPM	34	67	34	67	34	67	34	67	34	67
	Class I catalog HP	15.6	27.6	15.6	27.6	15.6	27.6	–	27.6	–	–
	Class I torque in-lbs	26421	24049	26421	24049	26421	24049	–	24049	–	–
	Part Number	M4H52T18C	M4H52T18C	M4H52T21C	M4H52T21C	M4H52T25C	M4H52T25C	–	M4H52T28TSC	–	–
49.04	Output RPM	36	70	36	70	36	70	36	70	36	70
	Class I catalog HP	16.4	29.0	16.4	29.0	16.4	29.0	–	29.0	–	–
	Class I torque in-lbs	26217	23849	26217	23849	26217	23849	–	23849	–	–
	Part Number	M4H49T18C	M4H49T18C	M4H49T21C	M4H49T21C	M4H49T25C	M4H49T25C	–	M4H49T28TSC	–	–
44.11	Output RPM	40	78	40	78	40	78	40	78	40	78
	Class I catalog HP	18.0	31.8	18.0	31.8	18.0	31.8	–	31.8	–	–
	Class I torque in-lbs	25870	23460	25870	23460	25870	23460	–	23460	–	–
	Part Number	M4H44T18C	M4H44T18C	M4H44T21C	M4H44T21C	M4H44T25C	M4H44T25C	–	M4H44T28TSC	–	–
40.70	Output RPM	43	85	43	85	43	85	43	85	43	85
	Class I catalog HP	19.0	33.9	19.0	33.9	19.0	33.9	–	33.9	–	–
	Class I torque in-lbs	25600	23198	25600	23198	25600	23198	–	23198	–	–
	Part Number	M4H41T18C	M4H41T18C	M4H41T21C	M4H41T21C	M4H41T25C	M4H41T25C	–	M4H41T28TSC	–	–
34.48	Output RPM	51	100	51	100	51	100	51	100	51	100
	Class I catalog HP	21.8	39.3	21.8	39.3	21.8	39.3	–	39.3	–	39.3
	Class I torque in-lbs	25059	22592	25059	22592	25059	22592	–	22592	–	22592
	Part Number	M4H34T18C	M4H34T18C	M4H34T21C	M4H34T21C	M4H34T25C	M4H34T25C	–	M4H34T28TSC	–	M4H34T32TSC
30.05	Output RPM	58	115	58	115	58	115	58	115	58	115
	Class I catalog HP	24.7	42.8	24.7	42.8	24.7	42.8	–	42.8	–	42.8
	Class I torque in-lbs	24514	21577	24514	21577	24514	21577	–	21577	–	21577
	Part Number	M4H30T18C	M4H30T18C	M4H30T21C	M4H30T21C	M4H30T25C	M4H30T25C	–	M4H30T28TSC	–	M4H30T32TSC
25.57	Output RPM	68	135	68	135	68	135	68	135	68	135
	Class I catalog HP	28.3	47.4	28.3	47.4	28.3	47.4	28.3	47.4	–	47.4
	Class I torque in-lbs	23946	20336	23946	20336	23946	20336	23946	20336	–	20336
	Part Number	M4H26T18C	M4H26T18C	M4H26T21C	M4H26T21C	M4H26T25C	M4H26T25C	M4H26T28C	M4H26T28TSC	–	M4H26T32TSC
21.82	Output RPM	80	158	80	158	80	158	80	158	80	158
	Class I catalog HP	32.5	52.9	32.5	52.9	32.5	52.9	32.5	52.9	–	52.9
	Class I torque in-lbs	23375	19268	23375	19268	23375	19268	23375	19268	–	19268
	Part Number	M4H22T18C	M4H22T18C	M4H22T21C	M4H22T21C	M4H22T25C	M4H22T25C	M4H22T28C	M4H22T28TSC	–	M4H22T32TSC
17.89	Output RPM	98	193	98	193	98	193	98	193	98	193
	Class I catalog HP	38.6	59.3	38.6	59.3	38.6	59.3	38.6	59.3	–	59.3
	Class I torque in-lbs	22660	17747	22660	17747	22660	17747	22660	17747	–	17747
	Part Number	M4H18T18C	M4H18T18C	M4H18T21C	M4H18T21C	M4H18T25C	M4H18T25C	M4H18T28C	M4H18T28TSC	–	M4H18T32TSC

This page lists all 'possible' part numbers. Part numbers with service factor higher than 2.0 may not be loaded in the system. Call Dodge for price availability.
For reducer dimensions and accessories, see pages G1-45 through G1-48.

Courtesy of:
Screw Conveyor Parts

MTA Engineering Information

MTA5 Horsepower and Torque Ratings

MTA5215

Ratio	Mtr speed	NEMA 180TC		NEMA 210TC		NEMA 250TC		NEMA 280TC / 280TSC		NEMA 320TC / 320TSC		NEMA 360TC / 360TSC	
		1750	3450	1750	3450	1750	3450	1750	3450	1750	3450	1750	3450
71.98	Output RPM	24	48	24	48	24	48	24	48	24	48	24	48
	Class I catalog HP	19.2	35.8	19.2	35.8	19.2	35.8	–	35.8	–	–	–	–
	Class I torque in-lbs	45078	43120	45078	43120	45078	43120	–	43120	–	–	–	–
	Part Number	M5H72T18C	M5H72T18C	M5H72T21C	M5H72T21C	M5H72T25C	M5H72T25C	–	M5H72T28TSC	–	–	–	–
64.74	Output RPM	27	53	27	53	27	53	27	53	27	53	27	53
	Class I catalog HP	20.8	39.5	20.8	39.5	20.8	39.5	–	39.5	–	–	–	–
	Class I torque in-lbs	44903	42605	44903	42605	44903	42605	–	42605	–	–	–	–
	Part Number	M5H65T18C	M5H65T18C	M5H65T21C	M5H65T21C	M5H65T25C	M5H65T25C	–	M5H65T28TSC	–	–	–	–
59.73	Output RPM	29	58	29	58	29	58	29	58	29	58	29	58
	Class I catalog HP	23.0	42.9	23.0	42.9	23.0	42.9	–	42.9	–	42.9	–	–
	Class I torque in-lbs	44821	42323	44821	42323	44821	42323	–	42323	–	42323	–	–
	Part Number	M5H60T18C	M5H60T18C	M5H60T21C	M5H60T21C	M5H60T25C	M5H60T25C	–	M5H60T28TSC	–	M5H60T32TSC	–	–
50.61	Output RPM	35	68	35	68	35	68	35	68	35	68	35	68
	Class I catalog HP	26.7	49.7	26.7	49.7	26.7	49.7	26.7	49.7	–	49.7	–	–
	Class I torque in-lbs	44206	41713	44206	41713	44206	41713	44206	41713	–	41713	–	–
	Part Number	M5H51T18C	M5H51T18C	M5H51T21C	M5H51T21C	M5H51T25C	M5H51T25C	M5H51T28C	M5H51T28TSC	–	M5H51T32TSC	–	–
47.99	Output RPM	36	72	36	72	36	72	36	72	36	72	36	72
	Class I catalog HP	28.2	51.8	28.2	51.8	28.2	51.8	28.2	51.8	–	51.8	–	–
	Class I torque in-lbs	44012	41491	44012	41491	44012	41491	44012	41491	–	41491	–	–
	Part Number	M5H48T18C	M5H48T18C	M5H48T21C	M5H48T21C	M5H48T25C	M5H48T25C	M5H48T28C	M5H48T28TSC	–	M5H48T32TSC	–	–
43.16	Output RPM	41	80	41	80	41	80	41	80	41	80	41	80
	Class I catalog HP	31.1	57.1	31.1	57.1	31.1	57.1	31.1	57.1	–	57.1	–	–
	Class I torque in-lbs	43712	41080	43712	41080	43712	41080	43712	41080	–	41080	–	–
	Part Number	M5H43T18C	M5H43T18C	M5H43T21C	M5H43T21C	M5H43T25C	M5H43T25C	M5H43T28C	M5H43T28TSC	–	M5H43T32TSC	–	–
39.82	Output RPM	44	87	44	87	44	87	44	87	44	87	44	87
	Class I catalog HP	32.9	60.1	32.9	60.1	32.9	60.1	32.9	60.1	–	60.1	–	60.1
	Class I torque in-lbs	39450	43340	39450	43340	39450	43340	39450	43340	–	43340	–	43340
	Part Number	M5H40T18C	M5H40T18C	M5H40T21C	M5H40T21C	M5H40T25C	M5H40T25C	M5H40T28C	M5H40T28TSC	–	M5H40T32TSC	–	M5H40T36TSC
33.74	Output RPM	52	102	52	102	52	102	52	102	52	102	52	102
	Class I catalog HP	38.8	65.7	38.8	65.7	38.8	65.7	38.8	65.7	–	65.7	–	65.7
	Class I torque in-lbs	42734	36628	42734	36628	42734	36628	42734	36628	–	36628	–	36628
	Part Number	M5H34T18C	M5H34T18C	M5H34T21C	M5H34T21C	M5H34T25C	M5H34T25C	M5H34T28C	M5H34T28TSC	–	M5H34T32TSC	–	M5H29T36TSC
29.41	Output RPM	60	117	60	117	60	117	60	117	60	117	60	117
	Class I catalog HP	43.6	70.9	43.6	70.9	43.6	70.9	43.6	70.9	43.6	70.9	–	70.9
	Class I torque in-lbs	42205	34306	42205	34306	42205	34306	42205	34306	42205	34306	–	34306
	Part Number	M5H29T18C	M5H29T18C	M5H29T21C	M5H29T21C	M5H29T25C	M5H29T25C	M5H29T28C	M5H29T28TSC	M5H29T32C	M5H29T32TSC	–	M5H29T36TSC
25.05	Output RPM	70	138	70	138	70	138	70	138	70	138	70	138
	Class I catalog HP	50.4	77.6	50.4	77.6	50.4	77.6	50.4	77.6	50.4	77.6	–	77.6
	Class I torque in-lbs	41608	32014	41608	32014	41608	32014	41608	32014	41608	32014	–	32014
	Part Number	M5H25T18C	M5H25T18C	M5H25T21C	M5H25T21C	M5H25T25C	M5H25T25C	M5H25T28C	M5H25T28TSC	M5H25T32C	M5H25T32TSC	–	M5H25T36TSC
21.35	Output RPM	82	162	82	162	82	162	82	162	82	162	82	162
	Class I catalog HP	58.4	81.2	58.4	81.2	58.4	81.2	58.4	81.2	58.4	81.2	–	81.2
	Class I torque in-lbs	40566	28448	40566	28448	40566	28448	40566	28448	40566	28448	–	28448
	Part Number	M5H21T18C	M5H21T18C	M5H21T21C	M5H21T21C	M5H21T25C	M5H21T25C	M5H21T28C	M5H21T28TSC	M5H21T32C	M5H21T32TSC	–	M5H21T36TSC
17.50	Output RPM	100	197	100	197	100	197	100	197	100	197	100	197
	Class I catalog HP	65.0	85.3	65.0	85.3	65.0	85.3	65.0	85.3	65.0	85.3	65.0	85.3
	Class I torque in-lbs	36974	24363	36974	24363	36974	24363	36974	24363	36974	24363	36974	24363
	Part Number	M5H18T18C	M5H18T18C	M5H18T21C	M5H18T21C	M5H18T25C	M5H18T25C	M5H18T28C	M5H18T28TSC	M5H18T32C	M5H18T32TSC	M5H18T36C	M5H18T36TSC

This page lists all 'possible' part numbers. Part numbers with service factor higher than 2.0 may not be loaded in the system. Call Dodge for price availability.
For reducer dimensions and accessories, see pages G1-49 through G1-52.

Courtesy of:
Screw Conveyor Parts

MTA Engineering Information

MTA6 Horsepower and Torque Ratings

MTA6307

Ratio	Mtr speed	NEMA 210TC		NEMA 250TC		NEMA 280TC / 280TSC		NEMA 320TC / 320TSC		NEMA 360TC / 360TSC	
		1750	3450	1750	3450	1750	3450	1750	3450	1750	3450
78.53	Output RPM	22	44	22	44	22	44	22	44	22	44
	Class I catalog HP	23.6	44.7	23.6	44.7	23.6	44.7	–	44.7	–	–
	Class I torque in-lbs	61675	58420	61675	58420	61675	58420	–	58420	–	–
	Part Number	M6H79T21C	M6H79T21C	M6H79T25C	M6H79T25C	M6H79T28C	M6H79T28TSC	–	M6H79T32TSC	–	–
66.92	Output RPM	26	52	26	52	26	52	26	52	26	52
	Class I catalog HP	27.5	52.1	27.5	52.1	27.5	52.1	–	52.1	–	–
	Class I torque in-lbs	60887	57598	60887	57598	60887	57598	–	57598	–	–
	Part Number	M6H67T21C	M6H67T21C	M6H67T25C	M6H67T25C	M6H67T28C	M6H67T28TSC	–	M6H67T32TSC	–	–
59.05	Output RPM	30	58	30	58	30	58	30	58	30	58
	Class I catalog HP	31.5	57.5	31.5	57.5	31.5	57.5	–	57.5	–	–
	Class I torque in-lbs	60309	57038	60309	57038	60309	57038	–	57038	–	–
	Part Number	M6H59T21C	M6H59T21C	M6H59T25C	M6H59T25C	M6H59T28C	M6H59T28TSC	–	M6H59T32TSC	–	–
52.35	Output RPM	33	66	33	66	33	66	33	66	33	66
	Class I catalog HP	34.3	64.7	34.3	64.7	34.3	64.7	–	64.7	–	64.7
	Class I torque in-lbs	59800	56359	59800	56359	59800	56359	–	56359	–	56359
	Part Number	M6H52T21C	M6H52T21C	M6H52T25C	M6H52T25C	M6H52T28C	M6H52T28TSC	–	M6H52T32TSC	–	M6H52T36TSC
50.26	Output RPM	35	69	35	69	35	69	35	69	35	69
	Class I catalog HP	36.2	67.3	36.2	67.3	36.2	67.3	–	67.3	–	67.3
	Class I torque in-lbs	59500	56100	59500	56100	59500	56100	–	56100	–	56100
	Part Number	M6H50T21C	M6H50T21C	M6H50T25C	M6H50T25C	M6H50T28C	M6H50T28TSC	–	M6H50T32TSC	–	M6H50T36TSC
44.61	Output RPM	39	77	39	77	39	77	39	77	39	77
	Class I catalog HP	39.8	74.4	39.8	74.4	39.8	74.4	–	74.4	–	74.4
	Class I torque in-lbs	59050	55500	59050	55500	59050	55500	–	55500	–	55500
	Part Number	M6H45T21C	M6H45T21C	M6H45T25C	M6H45T25C	M6H45T28C	M6H45T28TSC	–	M6H45T32TSC	–	M6H45T36TSC
39.37	Output RPM	44	88	44	88	44	88	44	88	44	88
	Class I catalog HP	44.7	83.0	44.7	83.0	44.7	83.0	44.7	83.0	–	83.0
	Class I torque in-lbs	58420	54219	58420	54219	58420	54219	58420	54219	–	54219
	Part Number	M6H39T21C	M6H39T21C	M6H39T25C	M6H39T25C	M6H39T28C	M6H39T28TSC	M6H39T32C	M6H39T32TSC	–	M6H39T36TSC
33.51	Output RPM	52	103	52	103	52	103	52	103	52	103
	Class I catalog HP	52.1	94.2	52.1	94.2	52.1	94.2	52.1	94.2	–	94.2
	Class I torque in-lbs	57598	52600	57598	52600	57598	52600	57598	52600	–	52600
	Part Number	M6H34T21C	M6H34T21C	M6H34T25C	M6H34T25C	M6H34T28C	M6H34T28TSC	M6H34T32C	M6H34T32TSC	–	M6H34T36TSC
29.03	Output RPM	60	119	60	119	60	119	60	119	60	119
	Class I catalog HP	59.4	106.0	59.4	106.0	59.4	106.0	59.4	106.0	–	106.0
	Class I torque in-lbs	56877	51200	56877	51200	56877	51200	56877	51200	–	51200
	Part Number	M6H29T21C	M6H29T21C	M6H29T25C	M6H29T25C	M6H29T28C	M6H29T28TSC	M6H29T32C	M6H29T32TSC	–	M6H29T36TSC
24.43	Output RPM	72	141	72	141	72	141	72	141	72	141
	Class I catalog HP	69.8	119.8	69.8	119.8	69.8	119.8	69.8	119.8	69.8	119.8
	Class I torque in-lbs	55995	48900	55995	48900	55995	48900	55995	48900	55995	48900
	Part Number	M6H24T21C	M6H24T21C	M6H24T25C	M6H24T25C	M6H24T28C	M6H24T28TSC	M6H24T32C	M6H24T32TSC	M6H24T36C	M6H24T36TSC
22.04	Output RPM	79	157	79	157	79	157	79	157	79	157
	Class I catalog HP	76.0	129.0	76.0	129.0	76.0	129.0	76.0	129.0	76.0	129.0
	Class I torque in-lbs	55400	47290	55400	47290	55400	47290	55400	47290	55400	47290
	Part Number	M6H22T21C	M6H22T21C	M6H22T25C	M6H22T25C	M6H22T28C	M6H22T28TSC	M6H22T32C	M6H22T32TSC	M6H22T36C	M6H22T36TSC
18.95	Output RPM	92	182	92	182	92	182	92	182	92	182
	Class I catalog HP	86.0	–	86.0	–	86.0	–	86.0	–	86.0	–
	Class I torque in-lbs	53743	–	53743	–	53743	–	53743	–	53743	–
	Part Number	M6H19T21C	–	M6H19T25C	–	M6H19T28C	–	M6H19T32C	–	M6H19T36C	–

This page lists all 'possible' part numbers. Part numbers with service factor higher than 2.0 may not be loaded in the system. Call Dodge for price availability.
For reducer dimensions and accessories, see pages G1-53 through G1-56.

Courtesy of:
Screw Conveyor Parts

MTA Engineering Information

MTA7 Horsepower and Torque Ratings

MTA7315

Ratio	Mtr speed	NEMA 210TC		NEMA 250TC		NEMA 280TC / 280TSC		NEMA 320TC / 320TSC		NEMA 360TC / 360TSC		NEMA 405TC / 405TSC	
		1750	3450	1750	3450	1750	3450	1750	3450	1750	3450	1750	3450
76.46	Output RPM	23	45	23	45	23	45	23	45	23	45	23	45
	Class I catalog HP	36.7	69.6	36.7	69.6	36.7	69.6	–	69.6	–	69.6	–	–
	Class I torque in-lbs	92264	87200	92264	87200	92264	87200	–	87200	–	87200	–	–
	Part Number	M7H76T21C	M7H76T21C	M7H76T25C	M7H76T25C	M7H76T28C	M7H76T28TSC	–	M7H76T32TSC	–	M7H76T36TSC	–	–
66.57	Output RPM	26	52	26	52	26	52	26	52	26	52	26	52
	Class I catalog HP	41.7	78.1	41.7	78.1	41.7	78.1	41.7	78.1	–	78.1	–	–
	Class I torque in-lbs	91073	86100	91073	86100	91073	86100	91073	86100	–	86100	–	–
	Part Number	M7H67T21C	M7H67T21C	M7H67T25C	M7H67T25C	M7H67T28C	M7H67T28TSC	M7H67T32C	M7H67T32TSC	–	M7H67T36TSC	–	–
57.58	Output RPM	30	60	30	60	30	60	30	60	30	60	30	60
	Class I catalog HP	47.3	88.7	47.3	88.7	47.3	88.7	47.3	88.7	–	88.7	–	–
	Class I torque in-lbs	90199	85010	90199	85010	90199	85010	90199	85010	–	85010	–	–
	Part Number	M7H58T21C	M7H58T21C	M7H58T25C	M7H58T25C	M7H58T28C	M7H58T28TSC	M7H58T32C	M7H58T32TSC	–	M7H58T36TSC	–	–
50.97	Output RPM	34	68	34	68	34	68	34	68	34	68	34	68
	Class I catalog HP	53.8	98.7	53.8	98.7	53.8	98.7	53.8	98.7	–	98.7	–	–
	Class I torque in-lbs	89216	84004	89216	84004	89216	84004	89216	84004	–	84004	–	–
	Part Number	M7H51T21C	M7H51T21C	M7H51T25C	M7H51T25C	M7H51T28C	M7H51T28TSC	M7H51T32C	M7H51T32TSC	–	M7H51T36TSC	–	–
44.38	Output RPM	39	78	39	78	39	78	39	78	39	78	39	78
	Class I catalog HP	60.9	111.6	60.9	111.6	60.9	111.6	60.9	111.6	60.9	111.6	–	111.6
	Class I torque in-lbs	88110	82999	88110	82999	88110	82999	88110	82999	88110	82999	–	82999
	Part Number	M7H44T21C	M7H44T21C	M7H44T25C	M7H44T25C	M7H44T28C	M7H44T28TSC	M7H44T32C	M7H44T32TSC	M7H44T36C	M7H44T36TSC	–	M7H44T405TSC
38.39	Output RPM	46	90	46	90	46	90	46	90	46	90	46	90
	Class I catalog HP	69.0	127.6	69.0	127.6	69.0	127.6	69.0	127.6	69.0	127.6	–	127.6
	Class I torque in-lbs	87012	81445	87012	81445	87012	81445	87012	81445	87012	81445	–	81445
	Part Number	M7H38T21C	M7H38T21C	M7H38T25C	M7H38T25C	M7H38T28C	M7H38T28TSC	M7H38T32C	M7H38T32TSC	M7H38T36C	M7H38T36TSC	–	M7H38T405TSC
33.48	Output RPM	52	103	52	103	52	103	52	103	52	103	52	103
	Class I catalog HP	77.9	142.1	77.9	142.1	77.9	142.1	77.9	142.1	77.9	142.1	–	142.1
	Class I torque in-lbs	85900	78264	85900	78264	85900	78264	85900	78264	85900	78264	–	78264
	Part Number	M7H33T21C	M7H33T21C	M7H33T25C	M7H33T25C	M7H33T28C	M7H33T28TSC	M7H33T32C	M7H33T32TSC	M7H33T36C	M7H33T36TSC	–	M7H33T405TSC
28.65	Output RPM	61	120	61	120	61	120	61	120	61	120	61	120
	Class I catalog HP	90.1	162.1	90.1	162.1	90.1	162.1	90.1	162.1	90.1	162.1	–	162.1
	Class I torque in-lbs	84900	75233	84900	75233	84900	75233	84900	75233	84900	75233	–	75233
	Part Number	M7H29T21C	M7H29T21C	M7H29T25C	M7H29T25C	M7H26T29C	M7H26T29TSC	M7H29T32C	M7H29T32TSC	M7H29T36C	M7H29T36TSC	–	M7H29T405TSC
25.66	Output RPM	68	134	68	134	68	134	68	134	68	134	68	134
	Class I catalog HP	98.9	177.0	98.9	177.0	98.9	177.0	98.9	177.0	98.9	177.0	–	177.0
	Class I torque in-lbs	83900	72653	83900	72653	83900	72653	83900	72653	83900	72653	–	72653
	Part Number	M7H26T21C	M7H26T21C	M7H26T25C	M7H26T25C	M7H26T28C	M7H26T28TSC	M7H26T32C	M7H26T32TSC	M7H26T36C	M7H26T36TSC	–	M7H26T405TSC
21.74	Output RPM	80	159	80	159	80	159	80	159	80	159	80	159
	Class I catalog HP	114.7	–	114.7	–	114.7	–	114.7	–	114.7	–	114.7	–
	Class I torque in-lbs	82705	–	82705	–	82705	–	82705	–	82705	–	82705	–
	Part Number	M7H22T21C	–	M7H22T25C	–	M7H22T28C	–	M7H22T32C	–	M7H22T36C	–	M7H22T405C	–
18.77	Output RPM	93	184	93	184	93	184	93	184	93	184	93	184
	Class I catalog HP	129.4	–	129.4	–	129.4	–	129.4	–	129.4	–	129.4	–
	Class I torque in-lbs	80425	–	80425	–	80425	–	80425	–	80425	–	80425	–
	Part Number	M7H19T21C	–	M7H19T25C	–	M7H19T28C	–	M7H19T32C	–	M7H19T36C	–	M7H19T405C	–

This page lists all 'possible' part numbers. Part numbers with service factor higher than 2.0 may not be loaded in the system. Call Dodge for price availability.
For reducer dimensions and accessories, see pages G1-57 through G1-60.

Courtesy of:
Screw Conveyor Parts

MTA Engineering Information

MTA8 Horsepower and Torque Ratings

MTA8407

Ratio	Mtr speed	NEMA 250TC		NEMA 280TC / 280TSC		NEMA 320TC / 320TSC		NEMA 360TC / 360TSC		NEMA 405TC / 405TSC	
		1750	3450	1750	3450	1750	3450	1750	3450	1750	3450
78.80	Output RPM	22	44	22	44	22	44	22	44	22	44
	Class I catalog HP	50.8	94.3	50.8	94.3	50.8	94.3		94.3	–	–
	Class I torque in-lbs	131708	124715	131708	124715	131708	124715		124715	–	–
	Part Number	M8H79T25C	M8H79T25C	M8H79T28C	M8H79T28TSC	M8H79T32C	M8H79T32TSC		M8H79T36TSC	–	–
68.53	Output RPM	26	50	26	50	26	50	26	50	26	50
	Class I catalog HP	58.2	108.4	58.2	108.4	58.2	108.4		108.4	–	108.4
	Class I torque in-lbs	130018	123407	130018	123407	130018	123407		123407	–	123407
	Part Number	M8H69T25C	M8H69T25C	M8H69T28C	M8H69T28TSC	M8H69T32C	M8H69T32TSC		M8H69T36TSC	–	M8H69T405TSC
60.13	Output RPM	29	57	29	57	29	57	29	57	29	57
	Class I catalog HP	64.8	121.0	64.8	121.0	64.8	121.0	64.8	121.0	–	121.0
	Class I torque in-lbs	128779	121749	128779	121749	128779	121749	128779	121749	–	121749
	Part Number	M8H60T25C	M8H60T25C	M8H60T28C	M8H60T28TSC	M8H60T32C	M8H60T32TSC	M8H60T36C	M8H60T36TSC	–	M8H60T405TSC
52.53	Output RPM	33	66	33	66	33	66	33	66	33	66
	Class I catalog HP	74.6	136.0	74.6	136.0	74.6	136.0	74.6	136.0	–	136.0
	Class I torque in-lbs	127379	120296	127379	120296	127379	120296	127379	120296	–	120296
	Part Number	M8H53T25C	M8H53T25C	M8H53T28C	M8H53T28TSC	M8H53T32C	M8H53T32TSC	M8H53T36C	M8H53T36TSC	–	M8H53T405TSC
50.58	Output RPM	35	68	35	68	35	68	35	68	35	68
	Class I catalog HP	76.0	140.9	76.0	140.9	76.0	140.9	76.0	140.9	–	140.9
	Class I torque in-lbs	127250	119990	127250	119990	127250	119990	127250	119990	–	119990
	Part Number	M8H51T25C	M8H51T25C	M8H51T28C	M8H51T28TSC	M8H51T32C	M8H51T32TSC	M8H51T36C	M8H51T36TSC	–	M8H51T405TSC
45.69	Output RPM	38	76	38	76	38	76	38	76	38	76
	Class I catalog HP	84.1	154.8	84.1	154.8	84.1	154.8	84.1	154.8	–	154.8
	Class I torque in-lbs	126275	118900	126275	118900	126275	118900	126275	118900	–	118900
	Part Number	M8H46T25C	M8H46T25C	M8H46T28C	M8H46T28TSC	M8H46T32C	M8H46T32TSC	M8H46T36C	M8H46T36TSC	–	M8H46T405TSC
40.09	Output RPM	44	86	44	86	44	86	44	86	44	86
	Class I catalog HP	96.1	174.5	96.1	174.5	96.1	174.5	96.1	174.5	–	174.5
	Class I torque in-lbs	124850	117057	124850	117057	124850	117057	124850	117057	–	117057
	Part Number	M8H40T25C	M8H40T25C	M8H40T28C	M8H40T28TSC	M8H40T32C	M8H40T32TSC	M8H40T36C	M8H40T36TSC	–	M8H40T405TSC
33.90	Output RPM	52	102	52	102	52	102	52	102	52	102
	Class I catalog HP	109.9	203.6	109.9	203.6	109.9	203.6	109.9	203.6	109.9	203.6
	Class I torque in-lbs	122950	114665	122950	114665	122950	114665	122950	114665	122950	114665
	Part Number	M8H34T25C	M8H34T25C	M8H34T28C	M8H34T28TSC	M8H34T32C	M8H34T32TSC	M8H34T36C	M8H34T36TSC	M8H34T405C	M8H34T405TSC
30.76	Output RPM	57	112	57	112	57	112	57	112	57	112
	Class I catalog HP	120.2	220.5	120.2	220.5	120.2	220.5	120.2	220.5	120.2	220.5
	Class I torque in-lbs	122121	113281	122121	113281	122121	113281	122121	113281	122121	113281
	Part Number	M8H31T25C	M8H31T25C	M8H31T28C	M8H31T28TSC	M8H31T32C	M8H31T32TSC	M8H31T36C	M8H31T36TSC	M8H31T405C	M8H31T405TSC
26.82	Output RPM	65	129	65	129	65	129	65	129	65	129
	Class I catalog HP	135.9	–	135.9	–	135.9	–	135.9	–	135.9	–
	Class I torque in-lbs	120500	–	120500	–	120500	–	120500	–	120500	–
	Part Number	M8H27T25C	–	M8H27T28C	–	M8H27T32C	–	M8H27T36C	–	M8H27T405C	–
22.77	Output RPM	77	152	77	152	77	152	77	152	77	152
	Class I catalog HP	156.3	–	156.3	–	156.3	–	156.3	–	156.3	–
	Class I torque in-lbs	118690	–	118690	–	118690	–	118690	–	118690	–
	Part Number	M8H23T25C	–	M8H23T28C	–	M8H23T32C	–	M8H23T36C	–	M8H23T405C	–
17.43	Output RPM	100	198	100	198	100	198	100	198	100	198
	Class I catalog HP	201.5	–	201.5	–	201.5	–	201.5	–	201.5	–
	Class I torque in-lbs	114960	–	114960	–	114960	–	114960	–	114960	–
	Part Number	M8H17T25C	–	M8H17T28C	–	M8H17T32C	–	M8H17T36C	–	M8H17T405C	–

This page lists all 'possible' part numbers. Part numbers with service factor higher than 2.0 may not be loaded in the system. Call Dodge for price availability.
For reducer dimensions and accessories, see pages G1-61 through G1-62.

Courtesy of:
Screw Conveyor Parts

Class I EZ Selection HP & Speed

HP	Output RPM	Reducer	Motor RPM
3	23	M2H77T18C	1750
	25	M2H71T18C	1750
	26	M2H66T18C	1750
	30	M2H58T18C	1750
	34	M2H51T18C	1750
	37	M2H47T18C	1750
	40	M2H44T18C	1750
	45	M2H39T18C	1750
	49	M2H36T18C	1750
	52	M2H66T18C	3450
	54	M2H32T18C	1750
	59	M2H30T18C	1750
	67	M2H51T18C	3450
	70	M2H25T18C	1750
	73	M2H47T18C	3450
	78	M2H44T18C	3450
	82	M2H21T18C	1750
	89	M2H39T18C	3450
	96	M2H36T18C	3450
	99	M2H18T18C	1750
	107	M2H32T18C	3450
	116	M2H30T18C	3450
	139	M2H25T18C	3450
	163	M2H21T18C	3450
	195	M2H18T18C	3450

HP	Output RPM	Reducer	Motor RPM
5	23	M3H76T18C	1750
	25	M3H70T18C	1750
	26	M2H66T18C	1750
	30	M2H58T18C	1750
	34	M2H51T18C	1750
	37	M2H47T18C	1750
	40	M2H44T18C	1750
	45	M2H39T18C	1750
	49	M2H36T18C	1750
	52	M2H66T18C	3450
	54	M2H32T18C	1750
	59	M2H30T18C	1750
	67	M2H51T18C	3450
	70	M2H25T18C	1750
	73	M2H47T18C	3450
	78	M2H44T18C	3450
	82	M2H21T18C	1750
	89	M2H39T18C	3450
	96	M2H36T18C	3450
	99	M2H18T18C	1750
	107	M2H32T18C	3450
	116	M2H30T18C	3450
	139	M2H25T18C	3450
	163	M2H21T18C	3450
	195	M2H18T18C	3450

HP	Output RPM	Reducer	Motor RPM
7.5	24	M4H74T21C	1750
	26	M4H66T21C	1750
	27	M3H65T21C	1750
	30	M3H58T21C	1750
	35	M3H51T21C	1750
	37	M3H47T21C	1750
	40	M2H44T18C	1750
	45	M2H39T21C	1750
	49	M2H36T21C	1750
	52	M2H66T21C	3450
	54	M2H32T21C	1750
	59	M2H30T21C	1750
	67	M2H51T21C	3450
	70	M2H25T21C	1750
	73	M2H47T21C	3450
	78	M2H44T21C	3450
	82	M2H21T21C	1750
	89	M2H39T21C	3450
	96	M2H36T21C	3450
	99	M2H18T21C	1750
	107	M2H32T21C	3450
	116	M2H30T21C	3450
	139	M2H25T21C	3450
	163	M2H21T21C	3450
	195	M2H18T21C	3450

HP	Output RPM	Reducer	Motor RPM
10	24	M4H74T21C	1750
	26	M4H66T21C	1750
	29	M4H61T21C	1750
	34	M4H52T21C	1750
	35	M3H51T21C	1750
	37	M3H47T21C	1750
	40	M3H44T21C	1750
	46	M3H38T21C	1750
	49	M3H35T21C	1750
	53	M3H65T21C	3450
	55	M3H32T25C	1750
	59	M2H30T21C	1750
	67	M2H51T21C	3450
	70	M2H25T21C	1750
	73	M2H47T21C	3450
	78	M2H44T21C	3450
	82	M2H21T21C	1750
	89	M2H39T21C	3450
	96	M2H36T21C	3450
	99	M2H18T21C	1750
	107	M2H32T21C	3450
	116	M2H30T21C	3450
	139	M2H25T21C	3450
	163	M2H21T21C	3450
	195	M2H18T21C	3450

* Consult Dodge Engineering for thermal considerations of application.
For reducer dimensions and accessories, see pages G1-37 through G1-62.

For reducer part numbers WITH motors, see pages G1-30 through G1-36 Class 1 & 2 selection tables.

Class I EZ Selection HP & Speed

HP	Output RPM	Reducer	Motor RPM
15	24	M5H72T25C	1750
	27	M5H65T25C	1750
	29	M5H60T25C	1750
	34	M4H52T25C	1750
	36	M4H49T25C	1750
	40	M4H44T25C	1750
	43	M4H41T25C	1750
	47	M4H74T25C	3450
	51	M4H34T25C	1750
	52	M4H66T25C	3450
	55	M3H32T25C	1750
	60	M3H29T25C	1750
	68	M3H51T25C	3450
	71	M3H25T25C	1750
	74	M3H47T25C	3450
	79	M3H44T25C	3450
	83	M3H21T25C	1750
	90	M3H38T25C	3450
	96	M2H36T25C	3450
	99	M2H18T25C	1750
	107	M2H32T25C	3450
	116	M2H30T25C	3450
	139	M2H25T25C	3450
	163	M2H21T25C	3450
	195	M2H18T25C	3450

HP	Output RPM	Reducer	Motor RPM
20	22	M6H79T25C	1750
	26	M6H67T25C	1750
	27	M5H65T25C	1750
	29	M5H60T25C	1750
	35	M5H51T25C	1750
	36	M5H48T25C	1750
	41	M5H43T25C	1750
	44	M5H40T25C	1750
	47	M4H74T25C	3450
	51	M4H34T25C	1750
	52	M4H66T25C	3450
	57	M4H61T25C	3450
	58	M4H30T25C	1750
	67	M4H52T25C	3450
	68	M4H26T25C	1750
	70	M4H49T25C	3450
	78	M4H44T25C	3450
	79	M3H44T25C	3450
	83	M3H21T25C	1750
	90	M3H38T25C	3450
	97	M3H35T25C	3450
	100	M3H17T25C	1750
	109	M3H32T25C	3450
	118	M3H29T25C	3450
	140	M3H25T25C	3450
	163	M2H21T25C	3450
	195	M2H18T25C	3450

HP	Output RPM	Reducer	Motor RPM
25	–	–	–
	23	M7H76T28C	1750
	26	M6H67T28C	1750
	30	M6H59T28C	1750
	33	M6H52T28C	1750
	35	M5H51T28C	1750
	36	M5H48T28C	1750
	41	M5H43T28C	1750
	44	M5H40T28C	1750
	48	M5H72T28TSC	3450
	52	M5H34T28C	1750
	53	M5H65T28TSC	3450
	58	M5H60T28TSC	3450
	60	M5H29T28C	1750
	67	M4H52T28TSC	3450
	68	M4H26T28C	1750
	70	M4H49T28TSC	3450
	78	M4H44T28TSC	3450
	80	M4H22T28C	1750
	85	M4H41T28TSC	3450
	98	M4H18T28C	1750
	100	M4H34T28TSC	3450
	118	M3H29T28TSC	3450
	140	M3H25T28TSC	3450
	165	M3H21T28TSC	3450
	198	M3H17T28TSC	3450

HP	Output RPM	Reducer	Motor RPM
30	–	–	–
	23	M7H76T28C	1750
	26	M7H67T28C	1750
	30	M6H59T28C	1750
	33	M6H52T28C	1750
	35	M6H50T28C	1750
	39	M6H45T28C	1750
	41	M5H43T28C	1750
	44	M5H40T28C	1750
	48	M5H72T28TSC	3450
	52	M5H34T28C	1750
	53	M5H65T28TSC	3450
	58	M5H60T28TSC	3450
	60	M5H29T28C	1750
	68	M5H51T28TSC	3450
	70	M5H25T28C	1750
	72	M5H48T28TSC	3450
	78	M4H44T28TSC	3450
	80	M4H22T28C	1750
	85	M4H41T28TSC	3450
	98	M4H18T28C	1750
	100	M4H34T28TSC	3450
	115	M4H30T28TSC	3450
	140	M3H25T28TSC	3450
	165	M3H21T28TSC	3450
	198	M3H17T28TSC	3450

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-37 through G1-62.

For reducer part numbers WITH motors, see pages G1-30 through G1-36 Class 1 & 2 selection tables.

Courtesy of:
Screw Conveyor Parts

Class I EZ Selection HP & Speed

HP	Output RPM	Reducer	Motor RPM
40	–	–	–
	–	–	–
	22	M8H79T32C	1750
	26	M7H67T32C	1750
	30	M7H58T32C	1750
	34	M7H51T32C	1750
	39	M7H44T32C	1750
	44	M6H79T32TSC	3450
	44	M6H39T32C	1750
	52	M6H67T32TSC	3450
	52	M6H34T32C	1750
	58	M5H60T32TSC	3450
	60	M5H29T32C	1750
	68	M5H51T32TSC	3450
	70	M5H25T32C	1750
	72	M5H48T32TSC	3450
	80	M5H43T32TSC	3450
	82	M5H21T32C	1750
	87	M5H40T32TSC	3450
	100	M5H18T32C	1750
	102	M5H34T32TSC	3450
	115	M4H30T32TSC*	3450
	135	M4H26T32TSC*	3450
	158	M4H22T32TSC*	3450
	193	M4H18T32TSC*	3450

HP	Output RPM	Reducer	Motor RPM
50	–	–	–
	22	M8H79T32C	1750
	26	M8H69T32C	1750
	29	M8H60T32C	1750
	34	M7H51T32C	1750
	39	M7H44T32C	1750
	45	M7H76T32TSC	3450
	46	M7H38T32C	1750
	52	M6H67T32TSC	3450
	52	M6H34T32C	1750
	58	M6H59T32TSC	3450
	60	M6H29T32C	1750
	66	M6H52T32TSC	3450
	69	M6H50T32TSC	3450
	72	M5H48T32TSC*	3450
	80	M5H43T32TSC*	3450
	82	M5H21T32C*	1750
	87	M5H40T32TSC*	3450
	100	M5H18T32C*	1750
	102	M5H34T32TSC*	3450
	117	M5H29T32TSC*	3450
	138	M5H25T32TSC*	3450
	158	M4H22T32TSC*	3450
	193	M4H18T32TSC*	3450

HP	Output RPM	Reducer	Motor RPM
60	29	M8H60T36C	1750
	33	M8H53T36C	1750
	34	M8H51T36C	1750
	38	M8H46T36C	1750
	39	M7H44T36C	1750
	45	M7H76T36TSC	3450
	46	M7H38T36C	1750
	52	M7H67T36TSC	3450
	52	M7H33T36C	1750
	60	M7H58T36TSC	3450
	61	M7H29T36C	1750
	66	M6H52T36TSC	3450
	69	M6H50T36TSC	3450
	72	M6H24T36C	1750
	77	M6H45T36TSC	3450
	79	M6H22T36C	1750
	88	M6H39T36TSC	3450
	92	M6H19T36C	1750
	100	M5H18T36C*	1750
	102	M5H34T36TSC*	3450
	117	M5H29T36TSC*	3450
	138	M5H25T36TSC*	3450
	162	M5H21T36TSC*	3450
	197	M5H18T36TSC*	3450

HP	Output RPM	Reducer	Motor RPM
75	–	–	–
	34	M8H51T36C	1750
	38	M8H46T36C	1750
	44	M8H40T36C	1750
	44	M8H79T36TSC	3450
	50	M8H69T36TSC	3450
	52	M7H67T36TSC	3450
	52	M7H33T36C	1750
	60	M7H58T36TSC	3450
	61	M7H29T36C	1750
	68	M7H51T36TSC	3450
	68	M7H26T36C	1750
	78	M7H44T36TSC	3450
	80	M7H22T36C	1750
	88	M6H39T36TSC*	3450
	92	M6H19T36C*	1750
	103	M6H34T36TSC*	3450
	119	M6H29T36TSC*	3450
	138	M5H25T36TSC*	3450
	162	M5H21T36TSC*	3450
	197	M5H18T36TSC*	3450

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-37 through G1-62.

For reducer part numbers WITH motors, see pages G1-30 through G1-36 Class 1 & 2 selection tables.

Courtesy of:
Screw Conveyor Parts

Class I EZ Selection HP & Speed

HP	Output RPM	Reducer	Motor RPM
100	50	M8H69T405TSC*	3450
	52	M8H34T405C*	1750
	57	M8H31T405C*	1750
	57	M8H60T405TSC*	3450
	65	M8H27T405C*	1750
	66	M8H53T405TSC*	3450
	68	M8H51T405TSC*	3450
	76	M8H46T405TSC*	3450
	77	M8H23T405C*	1750
	78	M7H44T405TSC*	3450
	80	M7H22T405C*	1750
	90	M7H38T405TSC*	3450
	93	M7H19T405C*	1750
	103	M7H33T405TSC*	3450
	120	M7H29T405TSC*	3450
	134	M7H26T405TSC*	3450

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-37 through G1-62.

For reducer part numbers WITH motors, see pages G1-30 through G1-36 Class 1 & 2 selection tables

Courtesy of:
Screw Conveyor Parts

Class II EZ Selection HP & Speed

HP	Output RPM	Reducer	Motor RPM
3	23	M2H77T18C	1750
	25	M2H71T18C	1750
	26	M2H66T18C	1750
	30	M2H58T18C	1750
	34	M2H51T18C	1750
	37	M2H47T18C	1750
	40	M2H44T18C	1750
	45	M2H39T18C	1750
	49	M2H36T18C	1750
	52	M2H66T18C	3450
	54	M2H32T18C	1750
	59	M2H30T18C	1750
	67	M2H51T18C	3450
	70	M2H25T18C	1750
	73	M2H47T18C	3450
	78	M2H44T18C	3450
	82	M2H21T18C	1750
	89	M2H39T18C	3450
	96	M2H36T18C	3450
	99	M2H18T18C	1750
	107	M2H32T18C	3450
	116	M2H30T18C	3450
	139	M2H25T18C	3450
	163	M2H21T18C	3450
	195	M2H18T18C	3450

HP	Output RPM	Reducer	Motor RPM
5	23	M3H76T18C	1750
	25	M3H70T18C	1750
	27	M3H65T18C	1750
	30	M3H58T18C	1750
	35	M3H51T18C	1750
	37	M3H47T18C	1750
	40	M2H44T18C	1750
	45	M2H39T18C	1750
	49	M2H36T18C	1750
	52	M2H66T18C	3450
	54	M2H32T18C	1750
	59	M2H30T18C	1750
	67	M2H51T18C	3450
	70	M2H25T18C	1750
	73	M2H47T18C	3450
	78	M2H44T18C	3450
	82	M2H21T18C	1750
	89	M2H39T18C	3450
	96	M2H36T18C	3450
	99	M2H18T18C	1750
	107	M2H32T18C	3450
	116	M2H30T18C	3450
	139	M2H25T18C	3450
	163	M2H21T18C	3450
	195	M2H18T18C	3450

HP	Output RPM	Reducer	Motor RPM
7.5	24	M4H74T21C	1750
	26	M4H66T21C	1750
	29	M4H61T21C	1750
	34	M4H52T21C	1750
	36	M4H49T21C	1750
	37	M3H47T21C	1750
	40	M3H44T21C	1750
	46	M3H38T21C	1750
	49	M3H35T21C	1750
	53	M3H65T21C	3450
	55	M3H32T21C	1750
	60	M3H29T21C	1750
	67	M2H51T21C	3450
	70	M2H25T21C	1750
	73	M2H47T21C	3450
	78	M2H44T21C	3450
	82	M2H21T21C	1750
	89	M2H39T21C	3450
	96	M2H36T21C	3450
	99	M2H18T21C	1750
	107	M2H32T21C	3450
	116	M2H30T21C	3450
	139	M2H25T21C	3450
	163	M2H21T21C	3450
	195	M2H18T21C	3450

HP	Output RPM	Reducer	Motor RPM
10	24	M5H72T21C	1750
	27	M5H65T21C	1750
	29	M5H60T21C	1750
	34	M4H52T21C	1750
	36	M4H49T21C	1750
	40	M4H44T21C	1750
	43	M4H41T21C	1750
	47	M4H74T21C	3450
	49	M3H35T21C	1750
	53	M3H65T21C	3450
	55	M3H32T21C	1750
	60	M3H29T21C	1750
	68	M3H51T21C	3450
	71	M3H25T21C	1750
	74	M3H47T21C	3450
	79	M3H44T21C	3450
	83	M3H21T21C	1750
	89	M2H39T21C	3450
	96	M2H36T21C	3450
	99	M2H18T21C	1750
	107	M2H32T21C	3450
	116	M2H30T21C	3450
	139	M2H25T21C	3450
	163	M2H21T21C	3450
	195	M2H18T21C	3450

* Consult Dodge Engineering for thermal considerations of application
For reducer dimensions and accessories, see pages G1-37 through G1-62.

For reducer part numbers WITH motors, see pages G1-30 through G1-36 Class 1 & 2 selection tables.

Courtesy of:
Screw Conveyor Parts

Class II EZ Selection HP & Speed

HP	Output RPM	Reducer	Motor RPM
15	22	M6H79T25C	1750
	26	M6H67T25C	1750
	29	M5H60T25C	1750
	35	M5H51T25C	1750
	36	M5H48T25C	1750
	41	M5H43T25C	1750
	44	M5H40T25C	1750
	48	M5H72T25C	3450
	51	M4H34T25C	1750
	52	M4H66T25C	3450
	57	M4H61T25C	3450
	58	M4H30T25C	1750
	67	M4H52T25C	3450
	68	M4H26T25C	1750
	70	M4H49T25C	3450
	79	M3H44T25C	3450
	83	M3H21T25C	1750
	90	M3H38T25C	3450
	97	M3H35T25C	3450
	100	M3H17T25C	1750
	109	M3H32T25C	3450
	118	M3H29T25C	3450
	140	M3H25T25C	3450
	163	M2H21T25C	3450
	195	M2H18T25C	3450

HP	Output RPM	Reducer	Motor RPM
20	23	M7H76T25C	1750
	27	M7H67T25C	1750
	30	M6H59T25C	1750
	33	M6H52T25C	1750
	35	M6H50T25C	1750
	39	M6H45T25C	1750
	41	M5H43T25C	1750
	44	M5H40T25C	1750
	48	M5H72T25C	3450
	52	M5H34T25C	1750
	53	M5H65T25C	3450
	58	M5H60T25C	3450
	60	M5H29T25C	1750
	68	M4H26T25C	1750
	70	M4H49T25C	3450
	78	M4H44T25C	3450
	80	M4H22T25C	1750
	85	M4H41T25C	3450
	98	M4H18T25C	1750
	100	M4H34T25C	3450
	115	M4H30T25C	3450
	118	M3H29T25C	3450
	140	M3H25T25C	3450
	165	M3H21T25C	3450
	198	M3H17T25C	3450

HP	Output RPM	Reducer	Motor RPM
25	23	M7H76T28C	1750
	26	M7H67T28C	1750
	30	M7H58T28C	1750
	34	M7H51T28C	1750
	35	M6H504T28C	1750
	39	M6H45T28C	1750
	44	M6H79T28TSC	3450
	44	M6H39T28C	1750
	48	M5H72T28TSC	3450
	52	M5H34T28C	1750
	53	M5H65T28TSC	3450
	58	M5H60T28TSC	3450
	60	M5H29T28C	1750
	68	M5H51T28TSC	3450
	70	M5H25T28C	1750
	72	M5H48T28TSC	3450
	80	M5H43T28TSC	3450
	82	M5H21T32C	1750
	87	M5H40T32TSC	3450
	98	M4H18T28C	1750
	100	M4H34T28TSC	3450
	115	M4H30T28TSC	3450
	135	M4H26T28TSC	3450
	158	M4H22T28TSC	3450
	165	M3H21T28TSC	3450
	198	M3H17T28TSC	3450

HP	Output RPM	Reducer	Motor RPM
30	22	M8H79T28C	1750
	26	M8H69T32C	1750
	30	M7H58T28C	1750
	34	M7H51T28C	1750
	39	M7H44T28C	1750
	44	M6H79T28TSC	3450
	44	M6H39T28C	1750
	52	M6H67T28TSC	3450
	52	M6H34T28C	1750
	58	M5H60T28TSC	3450
	60	M5H29T28C	1750
	68	M5H51T28TSC	3450
	70	M5H25T28C	1750
	72	M5H48T28TSC	3450
	80	M5H43T28TSC	3450
	82	M5H21T28C	1750
	87	M5H40T28TSC	3450
	100	M5H18T28C	1750
	102	M5H34T28TSC	3450
	115	M4H30T28TSC	3450
	135	M4H26T28TSC	3450
	158	M4H22T28TSC	3450
	193	M4H18T28TSC	3450

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-37 through G1-62.

For reducer part numbers WITH motors, see pages G1-30 through G1-36 Class 1 & 2 selection tables

Courtesy of:
Screw Conveyor Parts

Class II EZ Selection HP & Speed

HP	Output RPM	Reducer	Motor RPM
40	26	M8H69T32C	1750
	29	M8H60T32C	1750
	33	M8H53T32C	1750
	34	M8H51T32C	1750
	38	M8H46T32C	1750
	39	M7H44T32C	1750
	45	M7H76T32TSC	3450
	46	M7H38T32C	1750
	52	M7H67T32TSC	3450
	52	M7H33T32C	1750
	58	M6H59T32TSC	3450
	60	M6H29T32C	1750
	66	M6H52T32TSC	3450
	69	M6H50T32TSC	3450
	72	M6H24T32C	1750
	77	M6H45T32TSC	3450
	79	M6H22T32C	1750
	82	M5H21T32C	1750
	87	M5H40T32TSC	3450
	100	M5H18T32C	1750
	102	M5H34T32TSC	3450
	117	M5H29T32TSC	3450
	138	M5H25T32TSC	3450
	162	M5H21T32TSC	3450
	193	M4H18T32TSC*	3450

HP	Output RPM	Reducer	Motor RPM
50	33	M8H53T32C	1750
	34	M8H51T32C	1750
	38	M8H46T32C	1750
	44	M8H40T32C	1750
	44	M8H79T32TSC	3450
	50	M8H69T32TSC	3450
	52	M7H67T32TSC	3450
	52	M7H33T32C	1750
	60	M7H58T32TSC	3450
	61	M7H29T32C	1750
	68	M7H51T32TSC	3450
	68	M7H26T32C	1750
	72	M6H24T32C	1750
	77	M6H45T32TSC	3450
	79	M6H22T32C	1750
	88	M6H39T32TSC	3450
	92	M6H19T32C	1750
	103	M6H34T32TSC	3450
	119	M6H29T32TSC	3450
	138	M5H25T32TSC*	3450
	162	M5H21T32TSC*	3450
	197	M5H18T32TSC*	3450

HP	Output RPM	Reducer	Motor RPM
60	38	M8H46T36C	1750
	44	M8H40T36C	1750
	44	M8H79T36TSC	3450
	50	M8H69T36TSC	3450
	52	M8H34T36C	1750
	57	M8H31T36C	1750
	57	M8H60T36TSC	3450
	60	M7H58T36TSC	3450
	61	M7H29T36C	1750
	68	M7H51T36TSC	3450
	68	M7H26T36C	1750
	78	M7H44T36TSC	3450
	80	M7H22T36C	1750
	90	M7H38T36TSC	3450
	92	M6H19T36C	1750
	103	M6H34T36TSC	3450
	119	M6H29T36TSC	3450
	141	M6H24T36TSC	3450
	157	M6H22T36TSC	3450

HP	Output RPM	Reducer	Motor RPM
75	50	M8H69T36TSC	3450
	52	M8H34T36C	1750
	57	M8H31T36C	1750
	57	M8H60T36TSC	3450
	65	M8H27T36C	1750
	66	M8H53T36TSC	3450
	68	M8H51T36TSC	3450
	76	M8H46T36TSC	3450
	77	M8H23T36C	1750
	78	M7H44T36TSC	3450
	80	M7H22T36C	1750
	90	M7H38T36TSC	3450
	93	M7H19T36C	1750
	103	M7H33T36TSC	3450
	119	M6H29T36TSC*	3450
	141	M6H24T36TSC*	3450
	157	M6H22T36TSC*	3450

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-37 through G1-62.

For reducer part numbers WITH motors, see pages G1-30 through G1-36 Class 1 & 2 selection tables.

Courtesy of:
Screw Conveyor Parts

Class II EZ Selection HP & Speed

HP	Output RPM	Reducer	Motor RPM
100	68	M8H51T405TSC*	3450
	76	M8H46T405TSC*	3450
	77	M8H23T405C*	1750
	86	M8H40T405TSC*	3450
	100	M8H17T405C*	1750
	102	M8H34T405TSC*	3450
	103	M7H33T405TSC*	3450
	120	M7H29T405TSC*	3450
	134	M7H26T405TSC*	3450

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-37 through G1-62.

For reducer part numbers WITH motors, see pages G1-30 through G1-36 Class 1 & 2 selection tables.

Courtesy of:
Screw Conveyor Parts

MTA EZ Selection Tables

Class 1, 1.0 Service Factor

MTA2115H CLASS 1

Output RPM	Ratio	Class 1 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
23	76.96	3	1750	M2H77T18C	M2H77T18C318	1.47
25	71.18	3	1750	M2H71T18C	M2H71T18C318	1.60
26	66.07	5	1750	M2H66T18C	M2H66T18C518	1.01
30	58.29	5	1750	M2H58T18C	M2H58T18C518	1.16
34	51.31	5	1750	M2H51T18	M2H51T18C518	1.29
37	47.45	5	1750	M2H47T18C	M2H47T18C518	1.40
40	44.05	7.5	1750	M2H44T21C	M2H44T21C718	1.01
45	38.86	7.5	1750	M2H39T21C	M2H39T21C718	1.12
49	35.88	7.5	1750	M2H36T21C	M2H36T21C718	1.20
52	66.07	7.5	3450	M2H66T21C	M2H66T21C736	1.27
54	32.15	7.5	1750	M2H32T21C	M2H32T21C718	1.31
59	29.64	10	1750	M2H30T21C	M2H30T21C1018	1.05
67	51.31	10	3450	M2H51T21C	M2H51T21C1036	1.17
70	24.87	10	1750	M2H25T21C	M2H25T21C1018	1.21
73	47.45	10	3450	M2H47T21C	M2H47T21C1036	1.25
78	44.05	10	3450	M2H44T21C	M2H44T21C1036	1.31
82	21.22	10	1750	M2H21T21C	M2H21T21C1018	1.37
89	38.86	10	3450	M2H39T21C	M2H39T21C1036	1.46
96	35.88	15	3450	M2H36T25C	M2H36T25C1536	1.03
99	17.68	15	1750	M2H18T25C	M2H18T25C1518	1.05
107	32.15	15	3450	M2H32T25C	M2H32T25C1536	1.11
116	29.64	15	3450	M2H30T25C	M2H30T25C1536	1.17
139	24.87	15	3450	M2H25T25C	M2H25T25C1536	1.32
163	21.22	20*	3450	M2H21T25C	M2H21T25C2036	1.12
195	17.68	20*	3450	M2H18T25C	M2H18T25C2036	1.28

* Consult Dodge Engineering for thermal considerations of application

MTA EZ Selection Tables

Class 2, 1.4 Service Factor

MTA2115H CLASS 2

Output RPM	Ratio	Class 2 Mtr HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
23	76.96	3	1750	M2H77T18C	M2H77T18C318	1.47
25	71.18	3	1750	M2H71T18C	M2H71T18C318	1.60
26	66.07	3	1750	M2H66T18C	M2H66T18C318	1.68
30	58.29	3	1750	M2H58T18C	M2H58T18C318	1.94
34	51.31	3	1750	M2H51T18C	M2H51T18C318	2.16
37	47.45	3	1750	M2H47T18C	M2H47T18C318	2.33
40	44.05	5	1750	M2H44T18C	M2H44T18C518	1.51
45	38.86	5	1750	M2H39T18C	M2H39T18C518	1.68
49	35.88	5	1750	M2H36T18C	M2H36T18C518	1.80
52	66.07	5	3450	M2H66T18C	M2H66T18C536	1.90
54	32.15	5	1750	M2H32T18C	M2H32T18C518	1.96
59	29.64	5	1750	M2H30T18C	M2H30T18C518	2.11
67	51.31	7.5	3450	M2H51T21C	M2H51T21C736	1.56
70	24.87	7.5	1750	M2H25T21C	M2H25T21C718	1.62
73	47.45	7.5	3450	M2H47T21C	M2H47T21C736	1.66
78	44.05	7.5	3450	M2H44T21C	M2H44T21C736	1.74
82	21.22	7.5	1750	M2H21T21C	M2H21T21C718	1.82
89	38.86	10	3450	M2H39T21C	M2H39T21C1036	1.46
96	35.88	10	3450	M2H36T21C	M2H36T21C1036	1.54
99	17.68	10	1750	M2H18T21C	M2H18T21C1018	1.57
107	32.15	10	3450	M2H32T21C	M2H32T21C1036	1.66
116	29.64	10	3450	M2H30T21C	M2H30T21C1036	1.76
139	24.87	10	3450	M2H25T21C	M2H25T21C1036	1.98
163	21.22	15	3450	M2H21T25C	M2H21T25C1536	1.49
195	17.68	15	3450	M2H18T25C	M2H18T25C1536	1.71

For reducer dimensions and accessories, see pages G1-37 through G1-40.

Courtesy of:
SCREW CONVEYOR PARTS

MTA EZ Selection Tables

Class 1, 1.0 Service Factor

MTA3203H CLASS 1

Output RPM	Ratio	Class 1 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
23	76.02	5	1750	M3H76T18C	M3H76T18C518	1.42
25	70.30	5	1750	M3H70T18C	M3H70T18C518	1.48
27	65.26	7.5	1750	M3H65T21C	M3H65T21C718	1.04
30	57.58	7.5	1750	M3H58T21C	M3H58T21C718	1.20
35	50.68	10	1750	M3H51T21C	M3H51T21C1018	1.01
37	46.87	10	1750	M3H47T21C	M3H47T21C1018	1.09
40	43.51	10	1750	M3H44T21C	M3H44T21C1018	1.19
46	38.39	10	1750	M3H38T21C	M3H38T21C1018	1.31
49	35.44	10	1750	M3H35T21C	M3H35T21C1018	1.42
53	65.26	10	3450	M3H65T21C	M3H65T21C1036	1.48
55	31.75	15	1750	M3H32T25C	M3H32T25C1518	1.02
60	29.28	15	1750	M3H29T25C	M3H29T25C1518	1.09
68	50.68	15	3450	M3H51T25C	M3H51T25C1536	1.18
71	24.57	15	1750	M3H25T25C	M3H25T25C1518	1.26
74	46.87	15	3450	M3H47T25C	M3H47T25C1536	1.30
79	43.51	20	3450	M3H44T25C	M3H44T25C2036	1.04
83	20.96	20	1750	M3H21T25C	M3H21T25C2018	1.08
90	38.39	20	3450	M3H38T25C	M3H38T25C2036	1.15
97	35.44	20	3450	M3H35T25C	M3H35T25C2036	1.23
100	17.46	20	1750	M3H17T25C	M3H17T25C2018	1.26
109	31.75	20	3450	M3H32T25C	M3H32T25C2036	1.34
118	29.28	25	3450	M3H29T28TSC	M3H29T28TSC2536	1.15
140	24.57	30	3450	M3H25T28TSC	M3H25T28TSC3036	1.09
165	20.96	30	3450	M3H21T28TSC	M3H21T28TSC3036	1.22
198	17.46	30	3450	M3H17T28TSC	M3H17T28TSC3036	1.37

* Consult Dodge Engineering for thermal considerations of application

MTA EZ Selection Tables

Class 2, 1.4 Service Factor

MTA3203H CLASS 2

Output RPM	Ratio	Class 2 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
23	76.02	5	1750	M3H76T18C	M3H76T18C518	1.42
25	70.30	5	1750	M3H70T18C	M3H70T18C518	1.48
27	65.26	5	1750	M3H65T18C	M3H65T18C518	1.56
30	57.58	5	1750	M3H58T18C	M3H58T18C518	1.80
35	50.68	5	1750	M3H51T18C	M3H51T18C518	2.03
37	46.87	7.5	1750	M3H47T21C	M3H47T21C718	1.46
40	43.51	7.5	1750	M3H44T21C	M3H44T21C718	1.58
46	38.39	7.5	1750	M3H38T21C	M3H38T21C718	1.74
49	35.44	10	1750	M3H35T21C	M3H35T21C1018	1.42
53	65.26	10	3450	M3H65T21C	M3H65T21C1036	1.48
55	31.75	10	1750	M3H32T21C	M3H32T21C1018	1.53
60	29.28	10	1750	M3H29T21C	M3H29T21C1018	1.64
68	50.68	10	3450	M3H51T21C	M3H51T21C1036	1.77
71	24.57	10	1750	M3H25T21C	M3H25T21C1018	1.89
74	46.87	10	3450	M3H47T21C	M3H47T21C1036	1.95
79	43.51	15	3450	M3H44T25C	M3H44T25C1536	1.38
83	20.96	15	1750	M3H21T25C	M3H21T25C1518	1.44
90	38.39	15	3450	M3H38T25C	M3H38T25C1536	1.54
97	35.44	15	3450	M3H35T25C	M3H35T25C1536	1.64
100	17.46	15	1750	M3H17T25C	M3H17T25C1518	1.68
109	31.75	15	3450	M3H32T25C	M3H32T25C1536	1.79
118	29.28	20	3450	M3H29T25C	M3H29T25C2036	1.44
140	24.57	20	3450	M3H25T25C	M3H25T25C2036	1.64
165	20.96	25	3450	M3H21T28TSC	M3H21T28TSC2536	1.47
198	17.46	25	3450	M3H17T28TSC	M3H17T28TSC2536	1.64

For reducer dimensions and accessories, see pages G1-41 through G1-44.

Courtesy of:
SCREW CONVEYOR PARTS

MTA EZ Selection Tables

Class 1, 1.0 Service Factor

MTA4207H CLASS 1

Output RPM	Ratio	Class 1 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
24	73.57	10	1750	M4H74T21C	M4H74T21C1018	1.15
26	66.17	10	1750	M4H66T21C	M4H66T21C1018	1.24
29	61.04	10	1750	M4H61T21C	M4H61T21C1018	1.32
34	51.72	15	1750	M4H52T25C	M4H52T25C1518	1.04
36	49.04	15	1750	M4H49T25C	M4H49T25C1518	1.09
40	44.11	15	1750	M4H44T25C	M4H44T25C1518	1.20
43	40.70	15	1750	M4H41T25C	M4H41T25C1518	1.27
47	73.57	20	3450	M4H74T25C	M4H74T25C2036	1.01
51	34.48	20	1750	M4H34T25C	M4H34T25C2018	1.09
52	66.17	20	3450	M4H66T25C	M4H66T25C2036	1.13
57	61.04	20	3450	M4H61T25C	M4H61T25C2036	1.20
58	30.05	20	1750	M4H30T25C	M4H30T25C2018	1.24
67	51.72	25	3450	M4H52T28TSC	M4H52T28TSC2536	1.10
68	25.57	25	1750	M4H26T28C	M4H26T28C2518	1.13
70	49.04	25	3450	M4H49T28TSC	M4H49T28TSC2536	1.16
78	44.11	30	3450	M4H44T28TSC	M4H44T28TSC3036	1.06
80	21.82	30	1750	M4H22T28C	M4H22T28C3018	1.08
85	40.70	30	3450	M4H41T28TSC	M4H41T28TSC3036	1.13
98	17.89	30	1750	M4H18T28C	M4H18T28C2518	1.29
100	34.48	30	3450	M4H34T28TSC	M4H34T32TSC3036	1.31
115	30.05	40*	3450	M4H30T32TSC	M4H30T32TSC4036	1.07
135	25.57	40*	3450	M4H26T32TSC	M4H26T32TSC4036	1.18
158	21.82	50*	3450	M4H22T32TSC	M4H22T32TSC5036	1.06
193	17.89	50*	3450	M4H18T32TSC	M4H18T32TSC5036	1.19

* Consult Dodge Engineering for thermal considerations of application

MTA EZ Selection Tables

Class 2, 1.4 Service Factor

MTA4207H CLASS 2

Output RPM	Ratio	Class 2 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
24	73.57	7.5	1750	M4H74T21C	M4H74T21C718	1.53
26	66.17	7.5	1750	M4H66T21C	M4H66T21C718	1.65
29	61.04	7.5	1750	M4H61T21C	M4H61T21C718	1.76
34	51.72	10	1750	M4H52T21C	M4H52T21C1018	1.56
36	49.04	10	1750	M4H49T21C	M4H49T21C1018	1.64
40	44.11	10	1750	M4H44T21C	M4H44T21C1018	1.80
43	40.70	10	1750	M4H41T21C	M4H41T21C1018	1.90
47	73.57	10	3450	M4H74T21C	M4H74T21C1036	2.03
51	34.48	15	1750	M4H34T25C	M4H34T25C1518	1.45
52	66.17	15	3450	M4H66T25C	M4H66T25C1536	1.50
57	61.04	15	3450	M4H61T25C	M4H61T25C1536	1.60
58	30.05	15	1750	M4H30T25C	M4H30T25C1518	1.65
67	51.72	15	3450	M4H52T25C	M4H52T25C1536	1.84
68	25.57	20	1750	M4H26T25C	M4H26T25C2018	1.42
70	49.04	20	3450	M4H49T25C	M4H49T25C2036	1.45
78	44.11	20	3450	M4H44T25C	M4H44T25C2036	1.59
80	21.82	20	1750	M4H22T25C	M4H22T25C2018	1.63
85	40.70	20	3450	M4H41T25C	M4H41T25C2036	1.69
98	17.89	25	1750	M4H18T28C	M4H18T28C2518	1.54
100	34.48	25	3450	M4H34T28TSC	M4H34T28TSC2536	1.57
115	30.05	30	3450	M4H30T28TSC	M4H30T28TSC3036	1.43
135	25.57	30	3450	M4H26T28TSC	M4H26T28TSC3036	1.58
158	21.82	30	3450	M4H22T28TSC	M4H22T28TSC3036	1.76
193	17.89	40*	3450	M4H18T32TSC	M4H18T32TSC4036	1.48

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-45 through G1-48.

Courtesy of:
Screw Conveyor Parts

MTA EZ Selection Tables

Class 1, 1.0 Service Factor

MTA5215H CLASS 1

Output RPM	Ratio	Class 1 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
24	71.98	15	1750	M5H72T25C	M5H72T25C1518	1.28
27	64.74	20	1750	M5H65T25C	M5H65T25C2018	1.04
29	59.73	20	1750	M5H60T25C	M5H60T25C2018	1.15
35	50.61	25	1750	M5H51T28C	M5H51T28C2518	1.07
36	47.99	25	1750	M5H48T28C	M5H48T28C2518	1.13
41	43.16	30	1750	M5H43T28C	M5H43T28C3018	1.04
44	39.82	30	1750	M5H40T28C	M5H40T28C3018	1.10
48	71.98	30	3450	M5H72T28TSC	M5H72T28TSC3036	1.19
52	33.74	30	1750	M5H34T28C	M5H34T28C3018	1.29
53	64.74	30	3450	M5H65T28TSC	M5H65T28TSC3036	1.32
58	59.73	40	3450	M5H60T32TSC	M5H60T32TSC4036	1.07
60	29.41	40	1750	M5H29T32C	M5H29T32C4018	1.09
68	50.61	40	3450	M5H51T32TSC	M5H51T32TSC4036	1.24
70	25.05	50	1750	M5H25T32C	M5H25T32C5018	1.01
72	47.99	50*	3450	M5H48T32TSC	M5H48T32TSC5036	1.04
80	43.16	50*	3450	M5H43T32TSC	M5H43T32TSC5036	1.14
82	21.35	50	1750	M5H21T32C	M5H21T32C5018	1.17
87	39.82	50*	3450	M5H40T32TSC	M5H40T32TSC5036	1.20
100	17.50	60	1750	M5H18T36C	M5H18T36C6018	1.08
102	33.74	60*	3450	M5H34T36TSC	M5H34T36TSC6036	1.10
117	29.41	60*	3450	M5H29T36TSC	M5H29T36TSC6036	1.18
138	25.05	75*	3450	M5H25T36TSC	M5H25T36TSC7536	1.03
162	21.35	75*	3450	M5H21T36TSC	M5H21T36TSC7536	1.08
197	17.50	75*	3450	M5H18T36TSC	M5H18T36TSC7536	1.14

* Consult Dodge Engineering for thermal considerations of application

MTA EZ Selection Tables

Class 2, 1.4 Service Factor

MTA5215H CLASS 2

Output RPM	Ratio	Class 2 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
24	71.98	10	1750	M5H72T21C	M5H72T21C1018	1.92
27	64.74	10	1750	M5H65T21C	M5H65T21C1018	2.08
29	59.73	15	1750	M5H60T25C	M5H60T25C1518	1.53
35	50.61	15	1750	M5H51T25C	M5H51T25C1518	1.78
36	47.99	15	1750	M5H48T25C	M5H48T25C1518	1.88
41	43.16	20	1750	M5H43T25C	M5H43T25C2018	1.55
44	39.82	20	1750	M5H40T25C	M5H40T25C2018	1.65
48	71.98	25	3450	M5H72T28TSC	M5H72T28TSC2536	1.43
52	33.74	25	1750	M5H34T28C	M5H34T28C2518	1.55
53	64.74	25	3450	M5H65T28TSC	M5H65T28TSC2536	1.58
58	59.73	30	3450	M5H60T28TSC	M5H60T28TSC3036	1.43
60	29.41	30	1750	M5H29T28C	M5H29T28C3018	1.45
68	50.61	30	3450	M5H51T28TSC	M5H51T28TSC3036	1.66
70	25.05	30	1750	M5H25T28C	M5H25T28C3018	1.68
72	47.99	30	3450	M5H48T28TSC	M5H48T28TSC3036	1.73
80	43.16	30	3450	M5H43T28TSC	M5H43T28TSC3036	1.90
82	21.35	40	1750	M5H21T32C	M5H21T32C4018	1.46
87	39.82	40	3450	M5H40T32TSC	M5H40T32TSC4036	1.50
100	17.50	40	1750	M5H18T32C	M5H18T32C4018	1.62
102	33.74	40	3450	M5H34T32TSC	M5H34T32TSC4036	1.64
117	29.41	40	3450	M5H29T32TSC	M5H29T32TSC4036	1.77
138	25.05	50*	3450	M5H25T32TSC	M5H25T32TSC5036	1.55
162	21.35	50*	3450	M5H21T32TSC	M5H21T32TSC5036	1.62
197	17.50	50*	3450	M5H18T32TSC	M5H18T32TSC5036	1.71

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-49 through G1-52.

Courtesy of:
Screw Conveyor Parts

MTA EZ Selection Tables

Class 1, 1.0 Service Factor

MTA6307H CLASS 1

Output RPM	Ratio	Class 1 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
22	78.53	20	1750	M6H79T25C	M6H79T25C2018	1.18
26	66.92	25	1750	M6H67T28C	M6H67T28C2518	1.10
30	59.05	30	1750	M6H59T28C	M6H59T28C3018	1.05
33	52.35	30	1750	M6H52T28C	M6H52T28C3018	1.14
35	50.26	30	1750	M6H50T28C	M6H50T28C3018	1.21
39	44.61	30	1750	M6H45T28C	M6H45T28C3018	1.33
44	78.53	40	3450	M6H79T32TSC	M6H79T32TSC4036	1.12
44	39.37	40	1750	M6H39T32C	M6H39T32C4018	1.12
52	66.92	50	3450	M6H67T32TSC	M6H67T32TSC5036	1.04
52	33.51	50	1750	M6H34T32C	M6H34T32C5018	1.04
58	59.05	50	3450	M6H59T32TSC	M6H59T32TSC5036	1.15
60	29.03	50	1750	M6H29T32C	M6H29T32C5018	1.19
66	52.35	60	3450	M6H52T36TSC	M6H52T36TSC6036	1.08
69	50.26	60	3450	M6H50T36TSC	M6H50T36TSC6036	1.12
72	24.43	60	1750	M6H24T36C	M6H24T36C6018	1.16
77	44.61	60	3450	M6H45T36TSC	M6H45T36TSC6036	1.24
79	22.04	60	1750	M6H22T36C	M6H22T36C6018	1.27
88	39.37	75*	3450	M6H39T36TSC	M6H39T36TSC7536	1.11
92	18.95	75*	1750	M6H19T36C	M6H19T36C7518	1.15
103	33.51	75*	3450	M6H34T36TSC	M6H34T36TSC7536	1.26
119	29.03	75*	3450	M6H29T36TSC	M6H29T36TSC7536	1.41
141	24.43	75*	3450	M6H24T36TSC	M6H24T36TSC7536	1.60
157	22.04	75*	3450	M6H22T36TSC	M6H22T36TSC7536	1.72

* Consult Dodge Engineering for thermal considerations of application

MTA EZ Selection Tables

Class 2, 1.4 Service Factor

MTA6307H CLASS 2

Output RPM	Ratio	Class 2 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
22	78.53	15	1750	M6H79T25C	M6H79T25C1518	1.57
26	66.92	15	1750	M6H67T25C	M6H67T25C1518	1.84
30	59.05	20	1750	M6H59T25C	M6H59T25C2018	1.57
33	52.35	20	1750	M6H52T25C	M6H52T25C2018	1.72
35	50.26	25	1750	M6H50T28C	M6H50T28C2518	1.45
39	44.61	25	1750	M6H45T28C	M6H45T28C2518	1.59
44	78.53	30	3450	M6H79T28TSC	M6H79T28TSC3036	1.49
44	39.37	30	1750	M6H39T28C	M6H39T28C3018	1.49
52	66.92	30	3450	M6H67T28TSC	M6H67T28TSC3036	1.74
52	33.51	30	1750	M6H34T28C	M6H34T28C3018	1.74
58	59.05	40	3450	M6H59T32TSC	M6H59T32TSC4036	1.44
60	29.03	40	1750	M6H29T32C	M6H29T32C4018	1.48
66	52.35	40	3450	M6H52T32TSC	M6H52T32TSC4036	1.62
69	50.26	40	3450	M6H50T32TSC	M6H50T32TSC4036	1.68
72	24.43	50	1750	M6H24T32C	M6H24T32C5018	1.40
77	44.61	50	3450	M6H45T32TSC	M6H45T32TSC5036	1.49
79	22.04	50	1750	M6H22T32C	M6H22T32C5018	1.52
88	39.37	50	3450	M6H39T32TSC	M6H39T32TSC5036	1.66
92	18.95	60	1750	M6H19T36C	M6H19T36C6018	1.43
103	33.51	60	3450	M6H34T36TSC	M6H34T36TSC6036	1.57
119	29.03	75*	3450	M6H29T36TSC	M6H29T36TSC7536	1.41
141	24.43	75*	3450	M6H24T36TSC	M6H24T36TSC7536	1.60
157	22.04	75*	3450	M6H22T36TSC	M6H22T36TSC7536	1.72

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-53 through G1-56.

Courtesy of:
Screw Conveyor Parts

MTA EZ Selection Tables

Class 1, 1.0 Service Factor

MTA7315H CLASS 1

Output RPM	Ratio	Class 1 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
23	76.46	30	1750	M7H76T28C	M7H76T28C3018	1.22
26	66.57	40	1750	M7H67T32C	M7H67T32C4018	1.04
30	57.58	40	1750	M7H58T32C	M7H58T32C4018	1.18
34	50.97	50	1750	M7H51T32C	M7H51T32C5018	1.08
39	44.38	60	1750	M7H44T36C	M7H44T36C6018	1.02
45	76.46	60	3450	M7H76T36TSC	M7H76T36TSC6036	1.16
46	38.39	60	1750	M7H38T36C	M7H38T36C6018	1.15
52	66.57	75	3450	M7H67T36TSC	M7H67T36TSC7536	1.04
52	33.48	75	1750	M7H33T36C	M7H33T36C7518	1.04
60	57.58	75	3450	M7H58T36TSC	M7H58T36TSC7536	1.18
61	28.65	75	1750	M7H29T36C	M7H29T36C7518	1.20
68	50.97	75	3450	M7H51T36TSC	M7H51T36TSC7536	1.32
68	25.66	75	1750	M7H26T36C	M7H26T36C7518	1.32
78	44.38	100*	3450	M7H44T405TSC	–	1.12
80	21.74	100	1750	M7H22T405C	M7H22T405C10018	1.15
90	38.39	100*	3450	M7H38T405TSC	–	1.28
93	18.77	100	1750	M7H19T405C	M7H19T405C10018	1.29
103	33.48	100*	3450	M7H33T405TSC	–	1.42
120	28.65	100*	3450	M7H29T405TSC	–	1.62
134	25.66	100*	3450	M7H26T405TSC	–	1.77

* Consult Dodge Engineering for thermal considerations of application

MTA EZ Selection Tables

Class 2, 1.4 Service Factor

MTA7315H CLASS 2

Output RPM	Ratio	Class 2 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
23	76.46	25	1750	M7H76T28C	M7H76T28C2518	1.47
26	66.57	25	1750	M7H67T28C	M7H67T28C2518	1.67
30	57.58	30	1750	M7H58T28C	M7H58T28C3018	1.58
34	50.97	30	1750	M7H51T28C	M7H51T28C3018	1.79
39	44.38	40	1750	M7H44T32C	M7H44T32C4018	1.52
45	76.46	40	3450	M7H76T32TSC	M7H76T32TSC4036	1.74
46	38.39	40	1750	M7H38T32C	M7H38T32C4018	1.73
52	66.57	50	3450	M7H67T32TSC	M7H67T32TSC5036	1.56
52	33.48	50	1750	M7H33T32C	M7H33T32C5018	1.56
60	57.58	60	3450	M7H58T36TSC	M7H58T36TSC6036	1.48
61	28.65	60	1750	M7H29T36C	M7H29T36C6018	1.50
68	50.97	60	3450	M7H51T36TSC	M7H51T36TSC6036	1.64
68	25.66	60	1750	M7H26T36C	M7H26T36C6018	1.65
78	44.38	75	3450	M7H44T36TSC	M7H44T36TSC7536	1.49
80	21.74	75	1750	M7H22T36C	M7H22T36C7518	1.53
90	38.39	75	3450	M7H38T36TSC	M7H38T36TSC7536	1.70
93	18.77	75	1750	M7H19T36C	M7H19T36C7518	1.73
103	33.48	100*	3450	M7H33T405TSC	–	1.42
120	28.65	100*	3450	M7H29T405TSC	–	1.62
134	25.66	100*	3450	M7H26T405TSC	–	1.77

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-57 through G1-60.

Courtesy of:
Screw Conveyor Parts

MTA EZ Selection Tables

Class 1, 1.0 Service Factor

MTA8407H CLASS 1

Output RPM	Ratio	Class 1 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
22	78.80	50	1750	M8H79T32C	M8H79T32C5018	1.02
26	68.53	50	1750	M8H69T32C	M8H69T32C5018	1.16
29	60.13	60	1750	M8H60T36C	M8H60T36C6018	1.08
33	52.53	60	1750	M8H53T36C	M8H53T36C6018	1.24
34	50.85	75	1750	M8H51T36C	M8H51T36C7518	1.01
38	45.69	75	1750	M8H46T36C	M8H46T36C7518	1.12
44	40.09	75	1750	M8H40T36C	M8H40T36C7518	1.28
44	78.80	75	3450	M8H79T36TSC	M8H79T36TSC7536	1.26
50	68.53	100*	3450	M8H69T405TSC	–	1.08
52	33.90	100	1750	M8H34T405C	M8H34T405C10018	1.10
57	30.76	100	1750	M8H31T405C	M8H31T405C10018	1.20
57	60.13	100*	3450	M8H60T405TSC	–	1.21
65	26.82	100	1750	M8H27T405C	M8H27T405C10018	1.36
66	52.53	100*	3450	M8H53T405TSC	–	1.36
68	50.85	100*	3450	M8H51T405TSC	–	1.41
76	45.69	100*	3450	M8H46T405TSC	–	1.55
77	22.77	100	1750	M8H23T405C	M8H23T405C10018	1.56
86	40.09	100*	3450	M8H40T405TSC	–	1.74
100	17.43	100	1750	M8H17T405C	–	2.02
102	33.90	100*	3450	M8H34T405TSC	–	2.04
112	30.76	100*	3450	M8H31T405TSC	–	2.21

* Consult Dodge Engineering for thermal considerations of application

MTA EZ Selection Tables

Class 2, 1.4 Service Factor

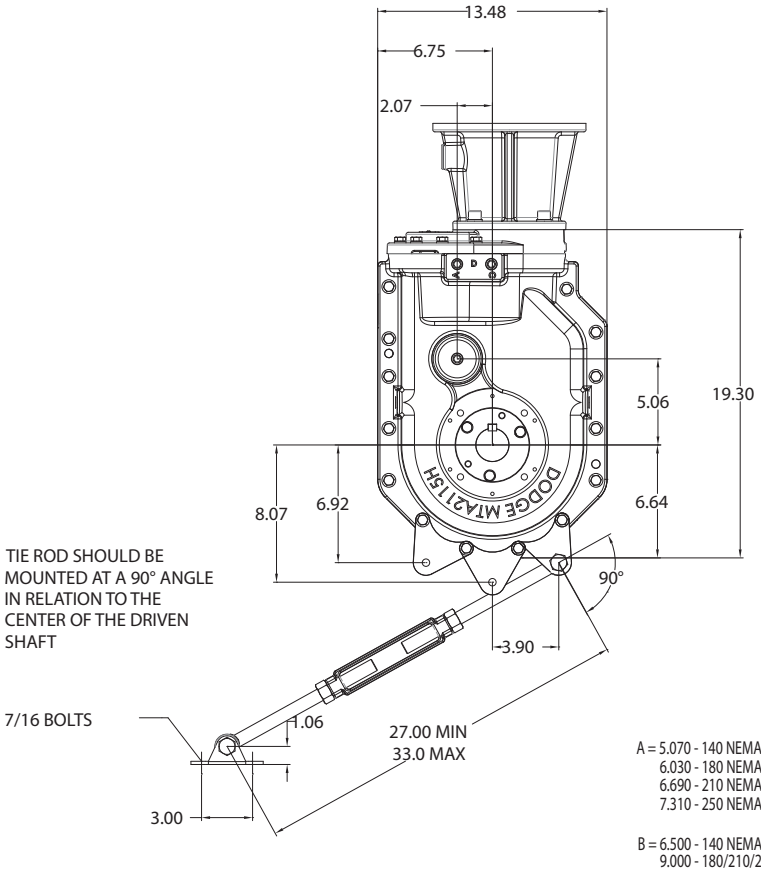
MTA8407H CLASS 2

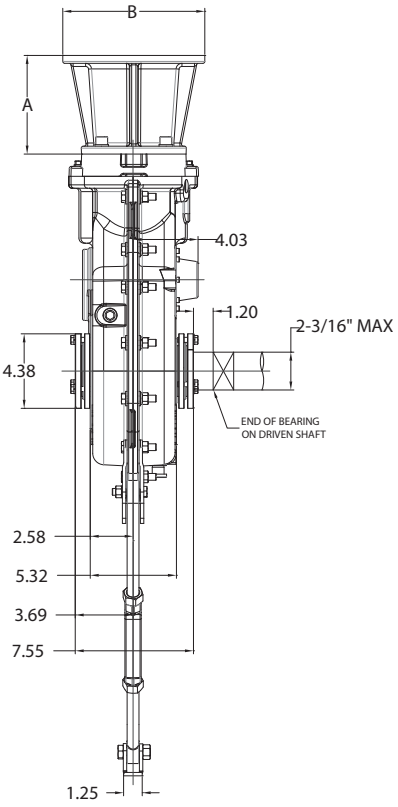
Output RPM	Ratio	Class 2 Motor HP	Motor speed	Part Number	C-Face GearMotor Part Number	Service factor
22	78.80	30	1750	M8H79T28C	M8H79T28C3018	1.69
26	68.53	40	1750	M8H69T32C	M8H69T32C4018	1.45
29	60.13	40	1750	M8H60T32C	M8H60T32C4018	1.62
33	52.53	50	1750	M8H53T32C	M8H53T32C5018	1.49
34	50.85	50	1750	M8H51T32C	M8H51T32C5018	1.52
38	45.69	60	1750	M8H46T36C	M8H46T36C6018	1.40
44	40.09	60	1750	M8H40T36C	M8H40T36C6018	1.60
44	78.80	60	3450	M8H79T36TSC	M8H79T36TSC6036	1.57
50	68.53	75	3450	M8H69T36TSC	M8H69T36TSC7536	1.45
52	33.90	75	1750	M8H34T36C	M8H34T36C7518	1.47
57	30.76	75	1750	M8H31T36C	M8H31T36C7518	1.60
57	60.13	75	3450	M8H60T36TSC	M8H60T36TSC7536	1.61
65	26.82	75	1750	M8H27T36C	M8H27T36C7518	1.81
66	52.53	75	3450	M8H53T36TSC	M8H53T36TSC7536	1.81
68	50.85	100*	3450	M8H51T405TSC	–	1.41
76	45.69	100*	3450	M8H46T405TSC	–	1.55
77	22.77	100	1750	M8H23T405C	M8H23T405C10018	1.56
86	40.09	100*	3450	M8H40T405TSC	–	1.74
100	17.43	100	1750	M8H17T405C	M8H17T405C10018	2.02
102	33.90	100*	3450	M8H34T405TSC	–	2.04
112	30.76	100*	3450	M8H31T405TSC	–	2.21

* Consult Dodge Engineering for thermal considerations of application

For reducer dimensions and accessories, see pages G1-61 through G1-62.

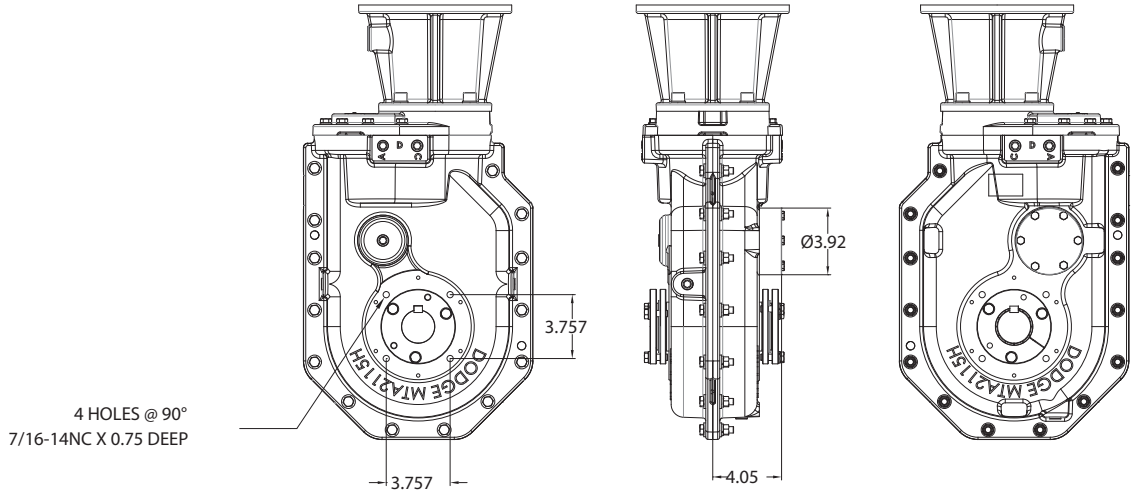
MTA2115 Shaft Mounted Reducer





A = 5.070 - 140 NEMA MOTOR FRAME
6.030 - 180 NEMA MOTOR FRAME
6.690 - 210 NEMA MOTOR FRAME
7.310 - 250 NEMA MOTOR FRAME

B = 6.500 - 140 NEMA MOTOR FRAME
9.000 - 180/210/250 NEMA MOTOR FRAME



Reducer with Backstop

Courtesy of:
Screw Conveyor Parts

MTA2115 Shaft Mounted Accessories

MTA2115 C-Face Reducer Weights with adapter (lbs)

	Adapter size							
Reducer	180	210	250	280	280TSC	320	360	320TSC & 360TSC
Weight (lbs)	155	160	165	–	–	–	–	–

MTA2115H Accessories

Description	Part Number	Weight lbs.
TA2115RA Rod Assembly	902109	6.9
TA3203BS Backstop Assembly use for MTA2115	903102	4.7
TA0-TA3 Vertical Breather Kit	900112	2.0
V-ring Seal Kit	902249	0.1
TA0-TA3 Hydra-Lock Dessicant Breather Kit	964372	0.2
MTA2-8 Vertical Position D Breather Kit	472300	3.0

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			
	Closed	Weight	Split	Weight
MTA2115H	902114	0.6	902115	0.5
Reducer Size	**ABS End Cover Part Numbers**			
	Closed	Weight	Split	Weight
MTA2115H	902142	0.6	902143	0.5

MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

TA2115H Tapered Bushing Kits (5) (6)				TA2115H Short shaft Tapered Bushing Kits			
Bushing Size Standard Shaft (7) Bushing Kit	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit	Part Number (8)	Weight lbs.	Shaft Keyseat Required (9)(10)
TA2115TB x 2-3/16	902020	4.7	1/2 x 1/4 x 7.80	–	–	–	–
TA2115TB x 2	902022	5.2	1/2 x 1/4 x 7.80	–	–	–	–
TA2115TB x 1-15/16 ▲	902023	5.4	1/2 x 1/4 x 7.80	TA2115TBS x 1-15/16	902030	5.6	1/2 x 1/4 x 4.80
TA2115TB x 1-7/8	902024	5.6	1/2 x 1/4 x 7.80	TA2115TBS x 1-7/8	902031	5.9	1/2 x 1/4 x 4.80
TA2115TB x 1-3/4	902025	5.8	3/8 x 3/16 x 7.80	TA2115TBS x 1-3/4	902032	6	3/8 x 3/16 x 4.80
TA2115TB x 1-11/16	902026	6.1	3/8 x 3/16 x 7.80	TA2115TBS x 1-11/16	902033	6.6	3/8 x 3/16 x 4.80
TA2115TB x 1-5/8	902027	6.0	3/8 x 3/16 x 7.80	TA2115TBS x 1-5/8	902034	6.8	3/8 x 3/16 x 4.80
TA2115TB x 1-1/2	902028	6.4	3/8 x 3/16 x 7.80	TA2115TBS x 1-1/2	902035	7.3	3/8 x 3/16 x 4.80
TA2115TB x 1-7/16	902029	6.4	3/8 x 3/16 x 7.80	TA2115TBS x 1-7/16	902036	7.4	3/8 x 3/16 x 4.80
TA2115TB x 1-3/8	902060	6.5	5/16 x 5/32 x 7.80	TA2115TBS x 1-3/8	902037	7.6	5/16 x 5/32 x 4.80
TA2115TB x 1-5/16	902061	6.7	5/16 x 5/32 x 7.80	TA2115TBS x 1-5/16	902038	7.8	5/16 x 5/32 x 4.80

▲ AGMA maximum bore size

(5) Bushing kit required to mount TA II reducer to driven shaft

(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application

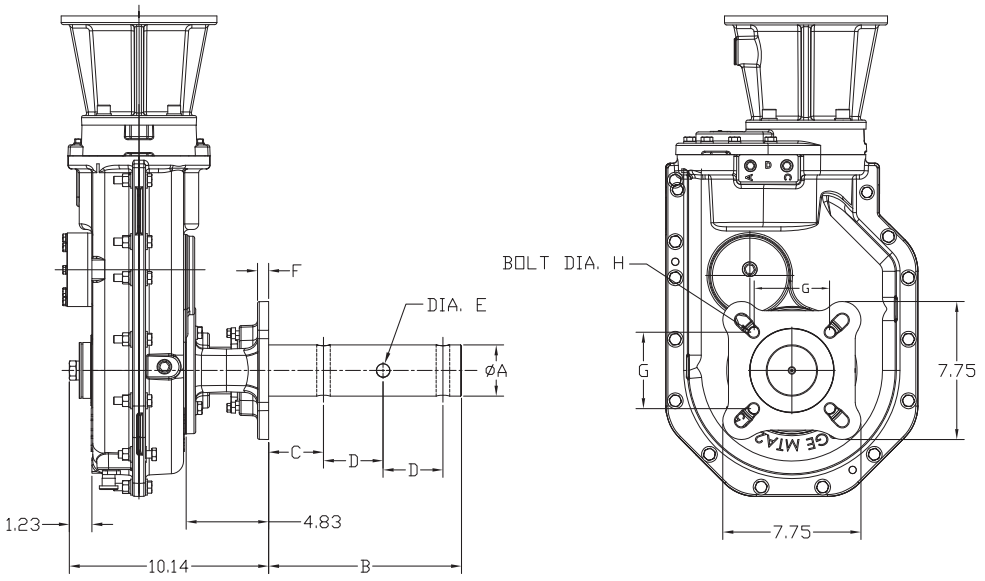
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key

(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.

(9) Minimum keyseat and shaft length required to mount reducer with bushing kit

(10) Always check the driven shaft and key for strength

MTA2115 Screw Conveyor Reducer



MTA2115H Screw Conveyor Drive Dimensions

Dimensions								
Screw Dia	**Drive Shaft Dia A**	**B**	**C**	**D**	**Hole Dia E**	**F**	**G**	**Bolt Dia H**
6, 9	1-1/2	9.00	2.13	3.00	17/32	0.75	4.00	1/2-13
9, 12	2	9.00	2.13	3.00	21/32	0.75	5.13	5/8
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16,	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20	–	–	–	–	–	–	–	–

Courtesy of:
Screw Conveyor Parts

MTA2115 Screw Conveyor Accessories

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			
	Closed	Weight	Split	Weight
MTA2115H	902114	0.6	902115	0.5
Reducer Size	**ABS End Cover Part Numbers**			
	Closed	**Weight**	**Split**	**Weight**
MTA2115H	902142	0.6	902143	0.5

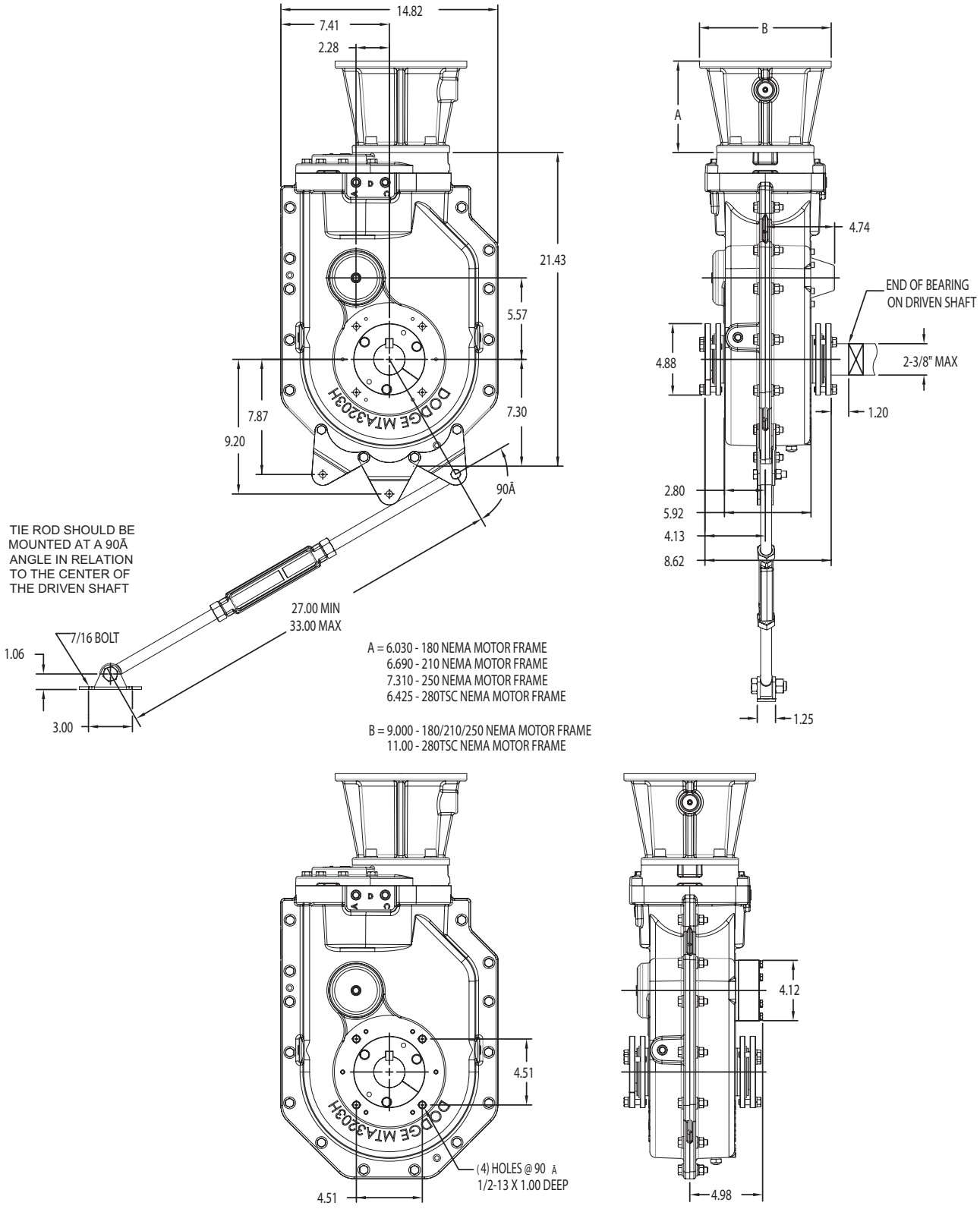
MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

MTA2115H Accessories for Screw Conveyor Drives (4) (5)

Description	Part Number	Weight lbs.
TA2115SCA Adapter & Hardware Kit (2)	902070	19.2
TA2115SCP Adjustable Packing Kit (3)	902071	1.2
TA2115SCS x 1-1/2 Drive Shaft	902072	15.4
TA2115SCS x 2 Drive Shaft	902073	18.6
TA2115SCS x 2-7/16 Drive Shaft	902074	23.3
TA2115SCS x 3 Drive Shaft	902075	29.5
TA2115SCS x 1-1/2 Stainless Steel Drive Shaft	902080	15.4
TA2115SCS x 2 Stainless Steel Drive Shaft	902081	18.6
TA2115SCS x 2-7/16 Stainless Steel Drive Shaft	902082	23.3
TA2115SCS x 3 Stainless Steel Drive Shaft	902083	29.5

(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

MTA3203 Shaft Mounted Reducer



Reducer with Backstop

Courtesy of:
Screw Conveyor Parts

MTA3203 Shaft Mounted Accessories

MTA3203 C-Face Reducer Weights with adapter (lbs)

	Adapter size									
Reducer	180	210	250	280	280TSC	320	360	32/36TSC	405	405TSC
Weight (lbs)	210	215	220	–	245	–	–	–	–	–

MTA3203H Accessories

Description	Part Number	Weight lbs.
TA3203RA Rod Assembly	903109	6.9
TA4207BS Backstop Assembly use for MTA3203	904102	5.2
TA0-TA3 Vertical Breather Kit	900112	2.0
TA0-TA3 Hydra-Lock Dessicant Breather Kit	964372	0.2
MTA2-8 Vertical Position D Breather Kit	472300	3.0

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			Weight
	Closed	Weight	Split	
MTA3203H	903114	0.9	903115	0.8
Reducer Size	**ABS Polymer End Cover Part Numbers**			**Weight**
	Closed	**Weight**	**Split**	
MTA3203H	903142	.6	903143	.5

MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

MTA3203H Tapered Bushing Kits (5) (6)				MTA3203H Short shaft Tapered Bushing Kits			
Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit	Part Number (8)	Weight lbs.	Shaft Keyseat Required (9)(10)
TA3203TB x 2-3/8	903020	6.1	5/8 x 5/16 x 8.55	–	–	–	–
TA3203TB x 2-1/4	903021	6.2	1/2 x 1/4 x 8.55	–	–	–	–
TA3203TB x 2-3/16 ▲	903022	6.8	1/2 x 1/4 x 8.55	TA3203TBS x 2-3/16	903030	7.0	1/2 x 1/4 x 5.46
TA3203TB x 2-1/8	903023	7.0	1/2 x 1/4 x 8.55	TA3203TBS x 2-1/8	903031	7.4	1/2 x 1/4 x 5.46
TA3203TB x 2	903024	7.5	1/2 x 1/4 x 8.55	TA3203TBS x 2	903032	8.0	1/2 x 1/4 x 5.46
TA3203TB x 1-15/16	903025	7.8	1/2 x 1/4 x 8.55	TA3203TBS x 1-15/16	903033	8.4	1/2 x 1/4 x 5.46
TA3203TB x 1-7/8	903026	8.0	1/2 x 1/4 x 8.55	TA3203TBS x 1-7/8	903034	8.7	1/2 x 1/4 x 5.46
TA3203TB x 1-3/4	903027	8.0	3/8 x 3/16 x 8.55	TA3203TBS x 1-3/4	903035	9.0	3/8 x 3/16 x 5.46
TA3203TB x 1-11/16	903028	8.2	3/8 x 3/16 x 8.55	TA3203TBS x 1-11/16	903036	9.3	3/8 x 3/16 x 5.46
TA3203TB x 1-5/8	903029	8.4	3/8 x 3/16 x 8.55	TA3023TBS x 1-5/8	903037	9.6	3/8 x 3/16 x 5.46
TA3203TB x 1-1/2	903060	8.8	3/8 x 3/16 x 8.55	TA3203TBS x 1-1/2	903038	9.9	3/8 x 3/16 x 5.46
TA3203TB x 1-7/16	903061	8.8	3/8 x 3/16 x 8.55	TA3203TBS x 1-7/16	903039	10.0	3/8 x 3/16 x 5.46

▲ AGMA maximum bore size

(5) Bushing kit required to mount TA II reducer to driven shaft

(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application

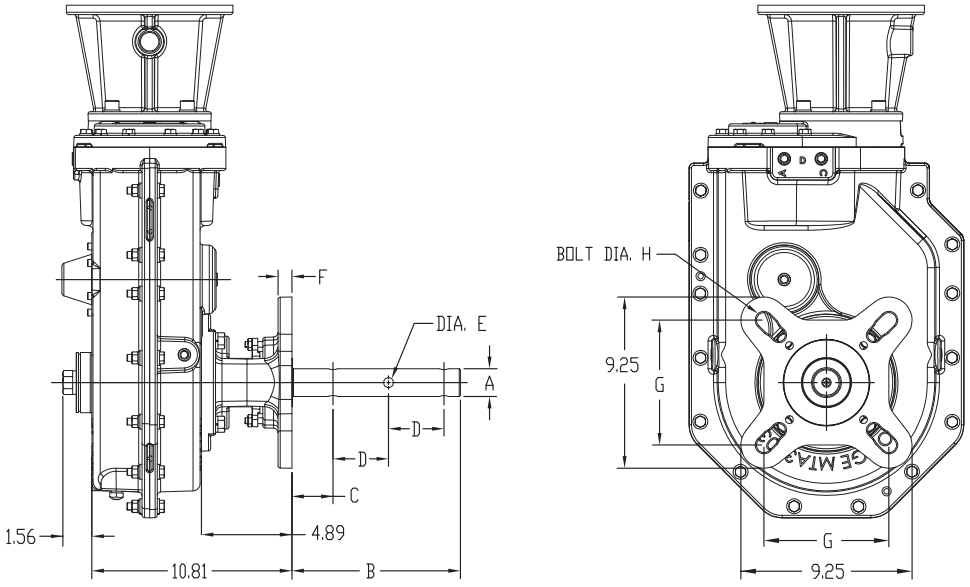
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key

(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.

(9) Minimum keyseat and shaft length required to mount reducer with bushing kit

(10) Always check the driven shaft and key for strength

MTA3203 Screw Conveyor Reducer



MTA3203H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
6, 9	1-1/2	9.00	2.13	3.00	17/32	0.75	4.00	1/2-13
9, 12	2	9.00	2.13	3.00	21/32	0.75	5.13	5/8
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20, 24	3-7/16	13.13	3.88	4.00	29/32	0.75	6.75	3/4

Courtesy of:
Screw Conveyor Parts

MTA3203 Screw Conveyor Accessories

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			Weight
	Closed	Weight	Split	
MTA3203H	903114	0.9	903115	0.8
Reducer Size	**ABS Polymer End Cover Part Numbers**			**Weight**
	Closed	**Weight**	**Split**	
MTA3203H	903142	.6	903143	.5

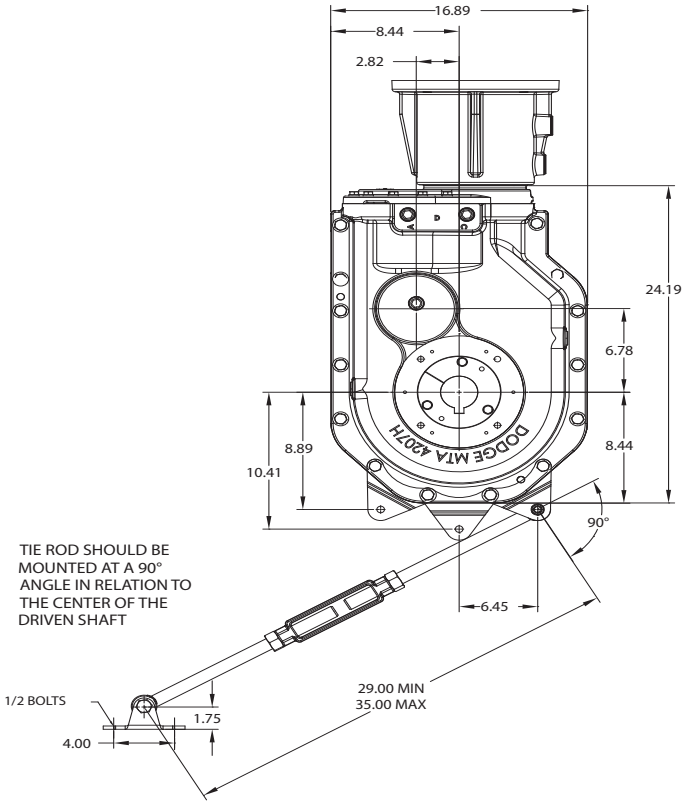
MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

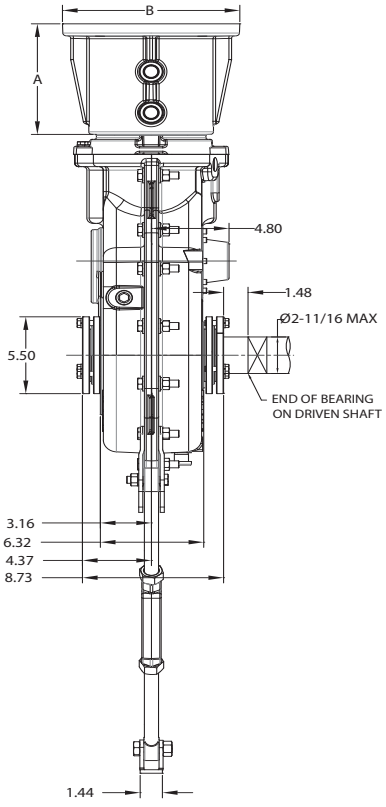
MTA3203H Accessories for Screw Conveyor Drives (4) (5)

Description	Part Number	Weight lbs.
TA3203SCA Adapter & Hardware Kit (2)	903070	22.0
TA3203SCP Adjustable Packing Kit (3)	903071	1.4
TA3203SCS x 1-1/2 Drive Shaft	903072	19.3
TA3203SCS x 2 Drive Shaft	903073	22.6
TA3203SCS x 2-7/16 Drive Shaft	903074	27.2
TA3203SCS x 3 Drive Shaft	903075	33.6
TA3203SCS x 3-7/16 Drive Shaft	903076	44.8
TA3203SCS x 1-1/2 Stainless Steel Drive Shaft	903080	19.3
TA3203SCS x 2 Stainless Steel Drive Shaft	903081	22.6
TA3203SCS x 2-7/16 Stainless Steel Drive Shaft	903082	27.2
TA3203SCS x 3 Stainless Steel Drive Shaft	903083	33.6
TA3203SCS x 3-7/16 Stainless Steel Drive Shaft	903084	44.8

(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

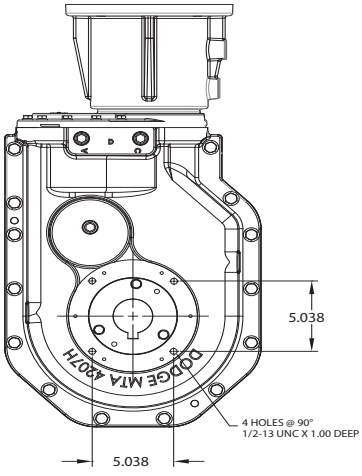
MTA4207 Shaft Mounted Reducer

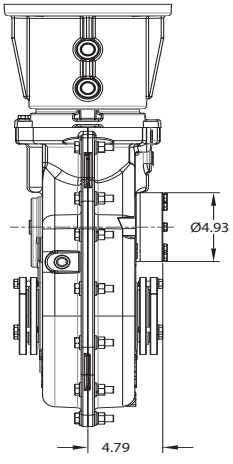




A = 6.030 - 180 NEMA MOTOR FRAME
6.690 - 210 NEMA MOTOR FRAME
7.310 - 250 NEMA MOTOR FRAME
7.800 - 280 NEMA MOTOR FRAME
6.425 - 280TSC NEMA MOTOR FRAME
6.980 - 320TSC/360TSC NEMA MOTOR FRAME

B = 9.00 - 180/210/250 NEMA MOTOR FRAME
11.00 - 280/280TSC NEMA MOTOR FRAME
13.00 - 320TSC/360TSC NEMA MOTOR FRAME





Reducer with Backstop

Courtesy of:
Screw Conveyor Parts

MTA4207 Shaft Mounted Acessories

MTA4207 C-Face Reducer Weights with adapter (lbs)

	Adapter size							
Reducer	180	210	250	280	280TSC	320	360	320TSC & 360TSC
Weight (lbs)	270	275	280	300	300	–	–	320

MTA4207H Accessories

Description	Part Number	Weight lbs.
TA4207RA Rod Assembly	904109	10.6
TA5215BS Backstop Assembly use for MTA4207	905102	8.3
TA4-TA12 Vertical Breather Kit	904112	3.0
V-ring Seal Kit	904249	0.2
TA4-TA9 Hydra-Lock Dessicant Breather Kit	964364	0.8
MTA2-8 Vertical Position D Breather Kit	472300	3.0

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			
	Closed	Weight	Split	Weight
MTA4207H	904114	1.2	904115	1.0
Reducer Size	**ABS End Cover Part Numbers**			
	Closed	**Weight**	**Split**	**Weight**
MTA4207H	904142	1.2	904143	1.0

MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

TA4207H Tapered Bushing Kits (5) (6)				TA4207H Tapered Short Shaft Bushing Kits (5) (6)			
Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9)(10)
TA4207TB x 2-11/16	904020	9.4	5/8 x 5/16 x 8.93	–	–	–	–
TA4207TB x 2-1/2	904021	10.6	5/8 x 5/16 x 8.93	–	–	–	–
TA4207TB x 2-7/16 ▲	904022	10.8	5/8 x 5/16 x 8.93	TA4207TBS x 2-7/16	904032	11.3	5/8 x 5/16 x 5.65
TA4207TB x 2-3/8	904023	11.3	5/8 x 5/16 x 8.93	TA4207TBS x 2-3/8	904033	11.8	5/8 x 5/16 x 5.65
TA4207TB x 2-1/4	904024	11.5	1/2 x 1/4 x 8.93	TA4207TBS x 2-1/4	904034	12.4	1/2 x 1/4 x 5.65
TA4207TB x 2-3/16	904025	11.8	1/2 x 1/4 x 8.93	TA4207TBS x 2-3/16	904035	10.8	1/2 x 1/4 x 5.65
TA4207TB x 2-1/8	904026	12.2	1/2 x 1/4 x 8.93	TA4207TBS x 2-1/8	904036	13.3	1/2 x 1/4 x 5.65
TA4207TB x 2	904027	12.6	1/2 x 1/4 x 8.93	TA4207TBS x 2	904037	13.9	1/2 x 1/4 x 5.65
TA4207TB x 1-15/16	904028	13.0	1/2 x 1/4 x 8.93	TA4207TBS x 1-15/16	904038	14.3	1/2 x 1/4 x 5.65
TA4207TB x 1-7/8	904029	13.2	1/2 x 1/4 x 8.93	TA4207TBS x 1-7/8	904039	14.6	1/2 x 1/4 x 5.65
TA4207TB x 1-3/4	904030	13.3	3/8 x 3/16 x 8.93	TA4207TBS x 1-3/4	904040	15.0	3/8 x 3/16 x 5.65
TA4207TB x 1-11/16	904031	13.5	3/8 x 3/16 x 8.93	TA4207TBS x 1-11/16	904041	15.3	3/8 x 3/16 x 5.65

▲ AGMA maximum bore size

(5) Bushing kit required to mount TA II reducer to driven shaft

(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application

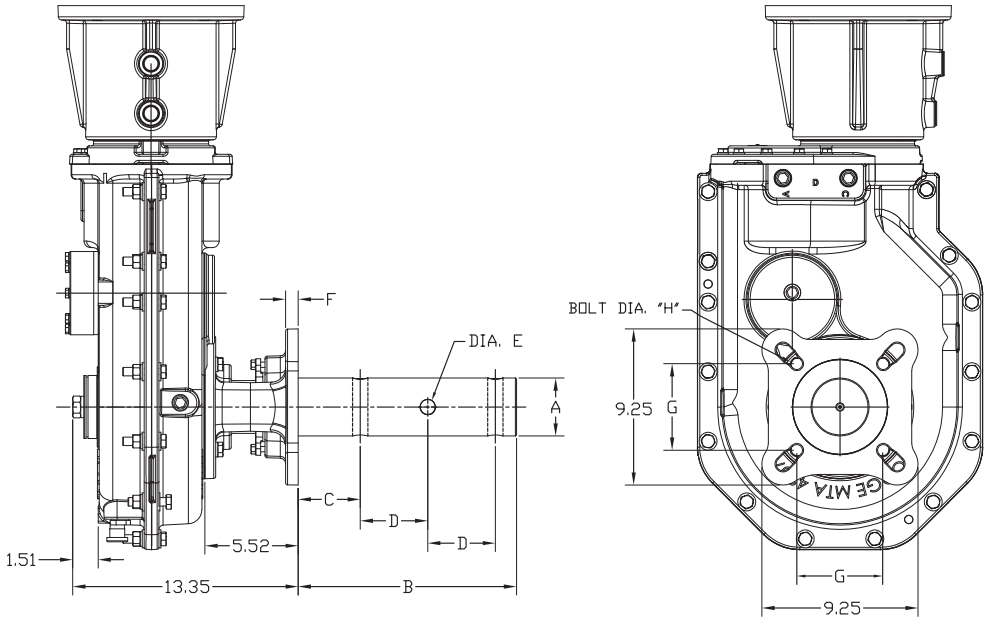
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key

(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.

(9) Minimum keyseat and shaft length required to mount reducer with bushing kit

(10) Always check the driven shaft and key for strength

MTA4207 Screw Conveyor Reducer



MTA4207H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
9, 12	2	9.00	2.13	3.00	21/32	0.75	5.13	5/8
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20, 24	3-7/16	13.13	3.88	4.00	29/32	0.75	6.75	3/4

Courtesy of:
Screw Conveyor Parts

MTA4207 Screw Conveyor Accessories

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			
	Closed	Weight	Split	Weight
MTA4207H	904114	1.2	904115	1.0
Reducer Size	**ABS End Cover Part Numbers**			
	Closed	**Weight**	**Split**	**Weight**
MTA4207H	904142	1.2	904143	1.0

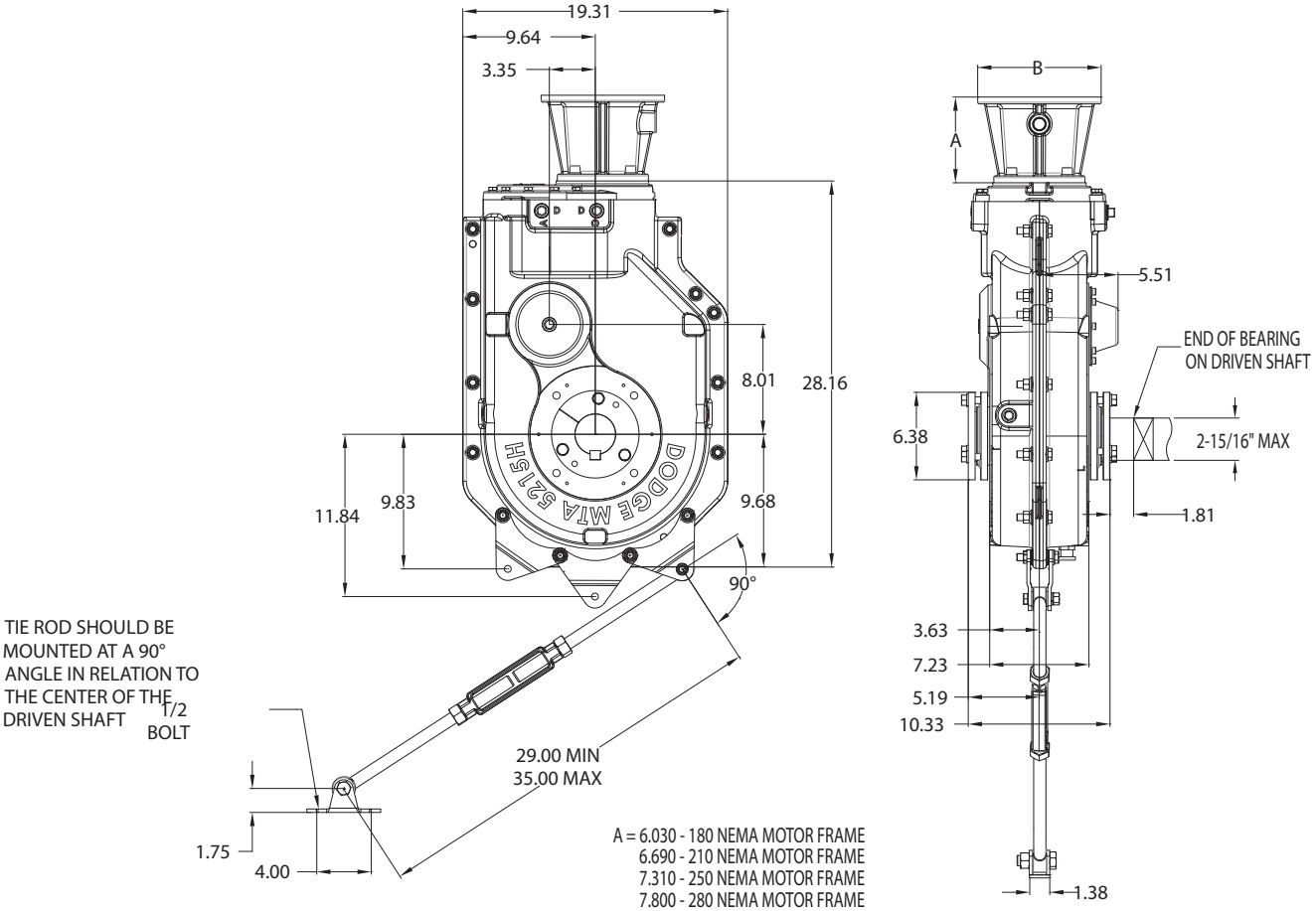
MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

MTA4207H Accessories for Screw Conveyor Drives (4) (5)

Description	Part Number	Weight lbs.
TA4207SCA Adapter & Hardware Kit (2)	904070	33.6
TA4207SCP Adjustable Packing Kit (3)	904071	2.1
TA4207SCS x 2 Drive Shaft	904073	29.8
TA4207SCS x 2-7/16 Drive Shaft	904074	34.5
TA4207SCS x 3 Drive Shaft	904075	40.9
TA4207SCS x 3-7/16 Drive Shaft	904076	54.7
TA4207SCS x 2 Stainless Steel Drive Shaft	904081	29.8
TA4207SCS x 2-7/16 Stainless Steel Drive Shaft	904082	34.5
TA4207SCS x 3 Stainless Steel Drive Shaft	904083	40.9
TA4207SCS x 3-7/16 Stainless Steel Drive Shaft	904084	54.7

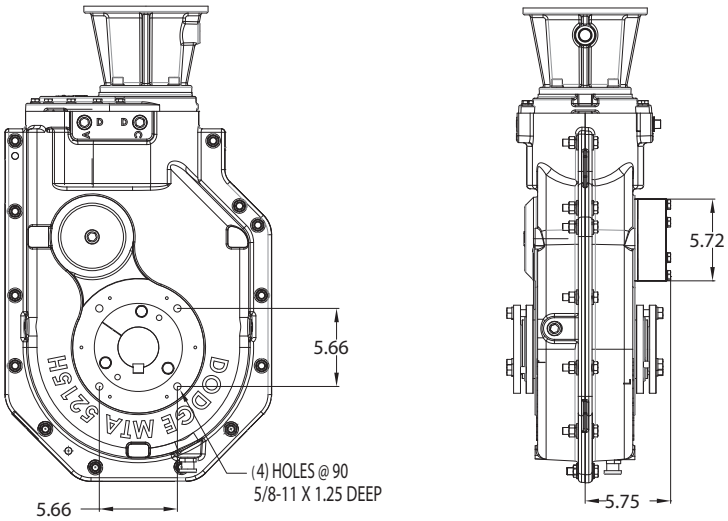
(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

MTA5215 Shaft Mounted Reducer



A = 6.030 - 180 NEMA MOTOR FRAME
6.690 - 210 NEMA MOTOR FRAME
7.310 - 250 NEMA MOTOR FRAME
7.800 - 280 NEMA MOTOR FRAME
6.425 - 280TSC NEMA MOTOR FRAME
8.480 - 320 NEMA MOTOR FRAME
9.100 - 360 NEMA MOTOR FRAME
6.980 - 320TSC/360TSC NEMA MOTOR FRAME

B = 9.00 - 180/210/250 NEMA MOTOR FRAME
11.00 - 280/280TSC NEMA MOTOR FRAME
13.00 - 320/360/320TSC/360TSC NEMA MOTOR FRAME



Reducer with Backstop

Courtesy of:
SCREW CONVEYOR PARTS

MTA5215 Shaft Mounted Accessories

MTA5215 C-Face Reducer Weights with adapter (lbs)

	Adapter size									
Reducer	180	210	250	280	280TSC	320	360	32/36TSC	405	405TSC
Weight (lbs)	370	375	380	405	405	425	–	425	–	–

MTA5215H Accessories

Description	Part Number	Weight lbs.
TA5215RA Rod Assembly	905109	11.0
TA6307BS Backstop Assembly use for MTA5215	906102	11.1
TA4-TA12 Vertical Breather Kit	904112	3.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit	964364	0.8
MTA2-8 Vertical Position D Breather Kit	472300	3.0

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			Weight
	Closed	Weight	Split	
MTA5215H	905114	1.5	905115	1.2
Reducer Size	**ABS Polymer End Cover Part Numbers**			**Weight**
	Closed	**Weight**	**Split**	
MTA5215H & MTA6307H	905142	1.5	905143	1.0

MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

MTA5215H Tapered Bushing Kits (5) (6)				MTA5215H Short shaft Tapered Bushing Kits			
Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9)(10)
TA5215TB x 3-3/16	905020	13.7	3/4 x 3/8 x 10.34	–	–	–	–
TA5215TB x 3	905021	15.1	3/4 x 3/8 x 10.34	–	–	–	–
TA5215TB x 2-15/16 ▲	905022	15.6	3/4 x 3/8 x 10.34	TA5215TBS x 2-15/16	905033	16.2	3/4 x 3/8 x 6.36
TA5215TB x 2-7/8	905023	16.1	3/4 x 3/8 x 10.34	TA5215TBS x 2-7/8	905034	16.9	3/4 x 3/8 x 6.36
TA5215TB x 2-11/16	905024	16.7	5/8 x 5/16 x 10.34	TA5215TBS x 2-11/16	905035	18.1	5/8 x 5/16 x 6.36
TA5215TB x 2-1/2	905025	17.9	5/8 x 5/16 x 10.34	TA5215TBS x 2-1/2	905036	19.7	5/8 x 5/16 x 6.36
TA5215TB x 2-7/16	905026	18.1	5/8 x 5/16 x 10.34	TA5215TBS x 2-7/16	905037	20.1	5/8 x 5/16 x 6.36
TA5215TB x 2-3/8	905027	18.3	5/8 x 5/16 x 10.34	TA5215TBS x 2-3/8	905038	20.5	5/8 x 5/16 x 6.36
TA5215TB x 2-1/4	905028	18.9	1/2 x 1/4 x 10.34	TA5215TBS x 2-1/4	905039	21.4	1/2 x 1/4 x 6.36
TA5215TB x 2-3/16	905029	19.1	1/2 x 1/4 x 10.34	TA5215TBS x 2-3/16	905040	21.8	1/2 x 1/4 x 6.36
TA5215TB x 2-1/8	905030	19.3	1/2 x 1/4 x 10.34	TA5215TBS x 2-1/8	905041	22.2	1/2 x 1/4 x 6.36
TA5215TB x 2	905031	19.9	1/2 x 1/4 x 10.34	TA5215TBS x 2	905042	23.0	1/2 x 1/4 x 6.36
TA5215TB x 1-15/16	905032	20.1	1/2 x 1/4 x 10.34	TA5215TBS x 1-15/16	905043	23.4	1/2 x 1/4 x 6.36

▲ AGMA maximum bore size

(5) Bushing kit required to mount TA II reducer to driven shaft

(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application

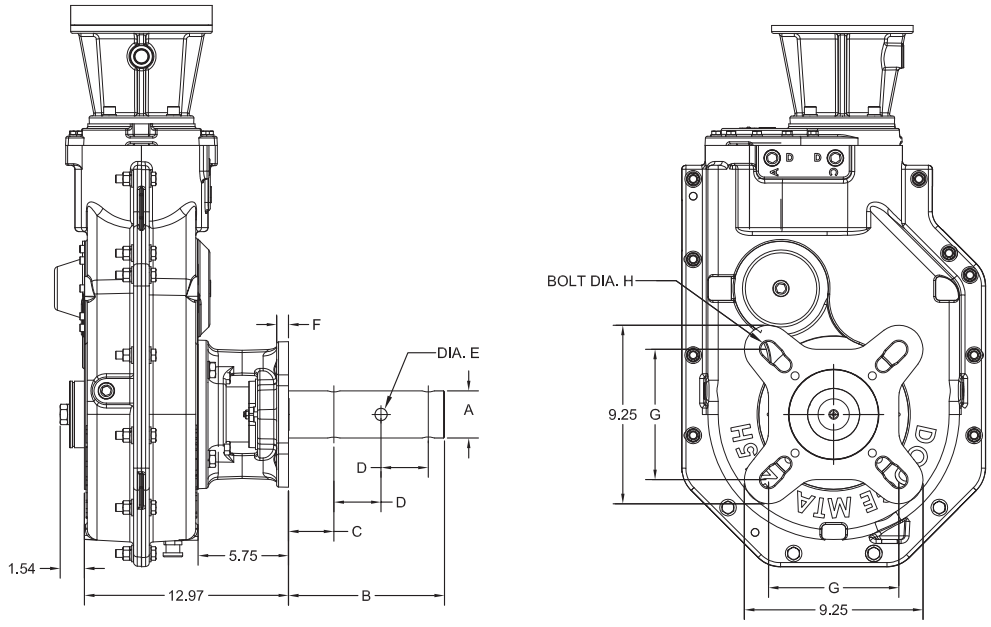
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key

(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.

(9) Minimum keyseat and shaft length required to mount reducer with bushing kit

(10) Always check the driven shaft and key for strength

MTA5215 Screw Conveyor Reducer



MTA5215H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
9, 12	2	9.00	2.13	3.00	21/32	0.75	5.13	5/8
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20, 24	3-7/16	13.13	3.88	4.00	29/32	0.75	6.75	3/4

Courtesy of:
Screw Conveyor Parts

MTA5215 Screw Conveyor Accessories

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			Weight
	Closed	Weight	Split	
MTA5215H	905114	1.5	905115	1.2
Reducer Size	**ABS Polymer End Cover Part Numbers**			**Weight**
	Closed	**Weight**	**Split**	
MTA5215H & MTA6307H	905142	1.5	905143	1.0

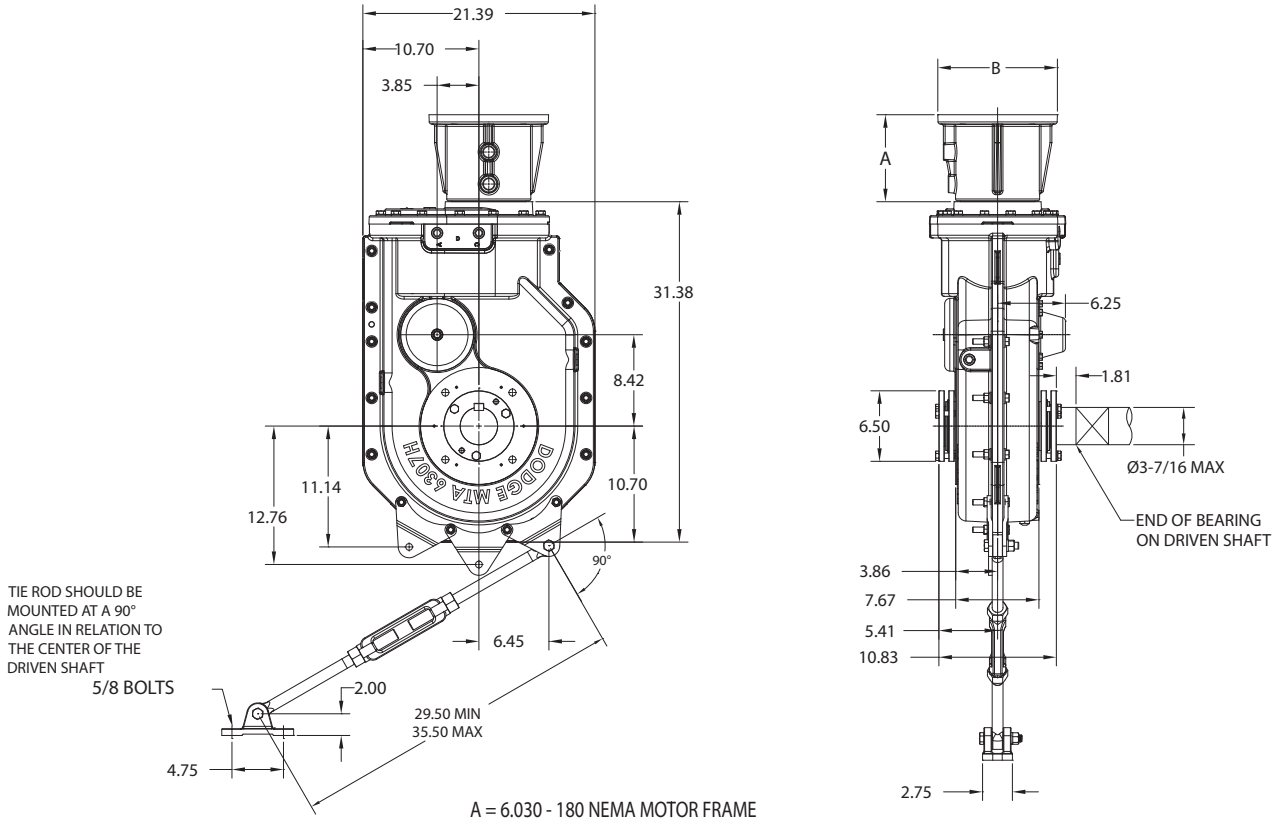
MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

MTA5215H Accessories for Screw Conveyor Drives (4) (5)

Description	Part Number	Weight lbs.
TA5215SCA Adapter & Hardware Kit (2)	905070	38.4
TA5215SCP Adjustable Packing Kit (3)	905071	2.1
TA5215SCS x 2 Drive Shaft	905073	39.0
TA5215SCS x 2-7/16 Drive Shaft	905074	43.6
TA5215SCS x 3 Drive Shaft	905075	50.0
TA5215SCS x 3-7/16Drive Shaft	905076	63.9
TA5215SCS x 2 Stainless Steel Drive Shaft	905081	39.0
TA5215SCS x 2-7/16 Stainless Steel Drive Shaft	905082	43.6
TA5215SCS x 3 Stainless Steel Drive Shaft	905083	50.0
TA5215SCS x 3 -7/16 Stainless Steel Drive Shaft	905084	63.9

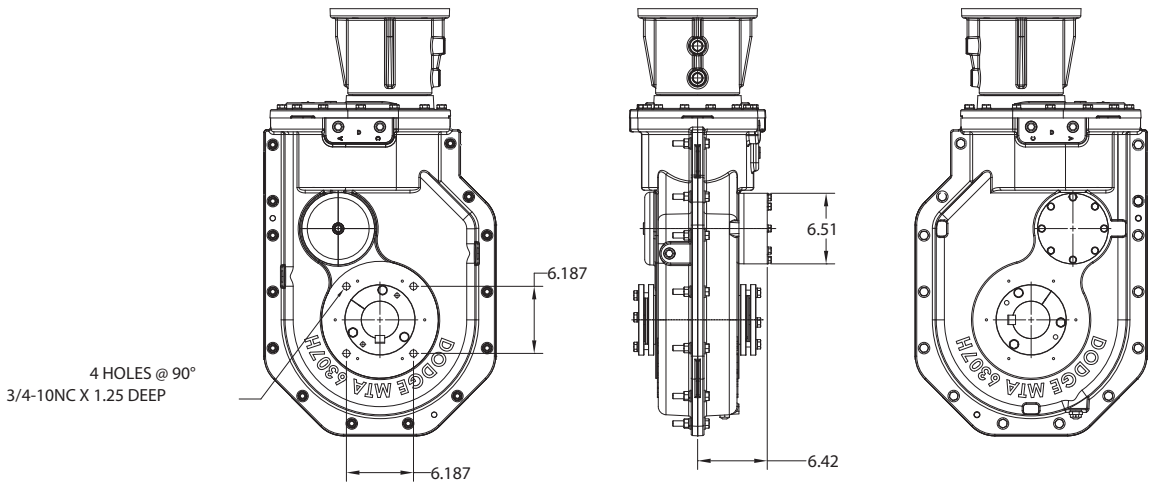
(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

MTA6307 Shaft Mounted Reducer



A = 6.030 - 180 NEMA MOTOR FRAME
6.690 - 210 NEMA MOTOR FRAME
7.310 - 250 NEMA MOTOR FRAME
7.800 - 280 NEMA MOTOR FRAME
6.425 - 280TSC NEMA MOTOR FRAME
8.480 - 320 NEMA MOTOR FRAME
9.100 - 360 NEMA MOTOR FRAME
6.980 - 320TSC/360TSC NEMA MOTOR FRAME

B = 9.00 - 180/210/250 NEMA MOTOR FRAME
11.00 - 280/280TSC NEMA MOTOR FRAME
13.00 - 320/360 & 320TSC/360TSC NEMA MOTOR FRAME



Reducer with Backstop

Courtesy of:
Screw Conveyor Parts

MTA6307 Shaft Mounted Accessories

MTA6307 C-Face Reducer Weights with adapter (lbs)

	Adapter size							
Reducer	180	210	250	280	280TSC	320	360	320TSC & 360TSC
Weight (lbs)	475	480	485	505	505	525	545	525

MTA6307H Accessories

Description	Part Number	Weight lbs.
TA6307RA Rod Assembly	906109	19.9
TA7315BS Backstop Assembly use for MTA6307	907102	20.0
TA4-TA12 Vertical Breather Kit	904112	3.0
V-ring Seal Kit	906249	0.3
TA4-TA9 Hydra-Lock Dessicant Breather Kit	964364	0.8
MTA2-8 Vertical Position D Breather Kit	472300	3.0

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			
	Closed	Weight	Split	Weight
MTA6307H	906114	1.0	906115	1.5
Reducer Size	**ABS End Cover Part Numbers**			
	Closed	**Weight**	**Split**	**Weight**
MTA5215H & MTA6307H	905142	1.0	905143	1.5

MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

TA6307H Tapered Bushing Kits (5) (6)				TA6307H Tapered Short Shaft Bushing Kits (5) (6)			
Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9)(10)
TA6307TB x 3-7/16 s	906020	16.7	7/8 x 7/16 x 10.82	TA6307TBS x 3-7/16	906031	16.5	7/8 x 7/16 x 6.72
TA6307TB x 3-3/16	906021	17.7	3/4 x 3/8 x 10.82	TA6307TBS x 3-3/16	906032	19.0	3/4 x 3/8 x 6.72
TA6307TB x 3	906022	19.1	3/4 x 3/8 x 10.82	TA6307TBS x 3	906033	20.9	3/4 x 3/8 x 6.72
TA6307TB x 2-15/16	906023	19.6	3/4 x 3/8 x 10.82	TA6307TBS x 2-15/16	906034	21.6	3/4 x 3/8 x 6.72
TA6307TB x 2-7/8	906024	20.1	3/4 x 3/8 x 10.82	TA6307TBS x 2-7/8	906035	22.3	3/4 x 3/8 x 6.72
TA6307TB x 2-11/16	906025	20.9	5/8 x 5/16 x 10.82	TA6307TBS x 2-11/16	906036	23.7	5/8 x 5/16 x 6.72
TA6307TB x 2-1/2	906026	22.1	5/8 x 5/16 x 10.82	TA6307TBS x 2-1/2	906037	25.3	5/8 x 5/16 x 6.72
TA6307TB x 2-7/16	906027	22.3	5/8 x 5/16 x 10.82	TA6307TBS x 2-7/16	906038	25.8	5/8 x 5/16 x 6.72
TA6307TB x 2-3/8	906028	22.7	5/8 x 5/16 x 10.82	TA6307TBS x 2-3/8	906039	26.3	5/8 x 5/16 x 6.72
TA6307TB x 2-1/4	906029	23.1	1/2 x 1/4 x 10.82	TA6307TBS x 2-1/4	906040	26.7	1/2 x 1/4 x 6.72
TA6307TB x 2-3/16	906030	23.3	1/2 x 1/4 x 10.82	TA6307TBS x 2-3/16	906041	27.5	1/2 x 1/4 x 6.72

▲ AGMA maximum bore size

(5) Bushing kit required to mount TA II reducer to driven shaft

(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application

(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key

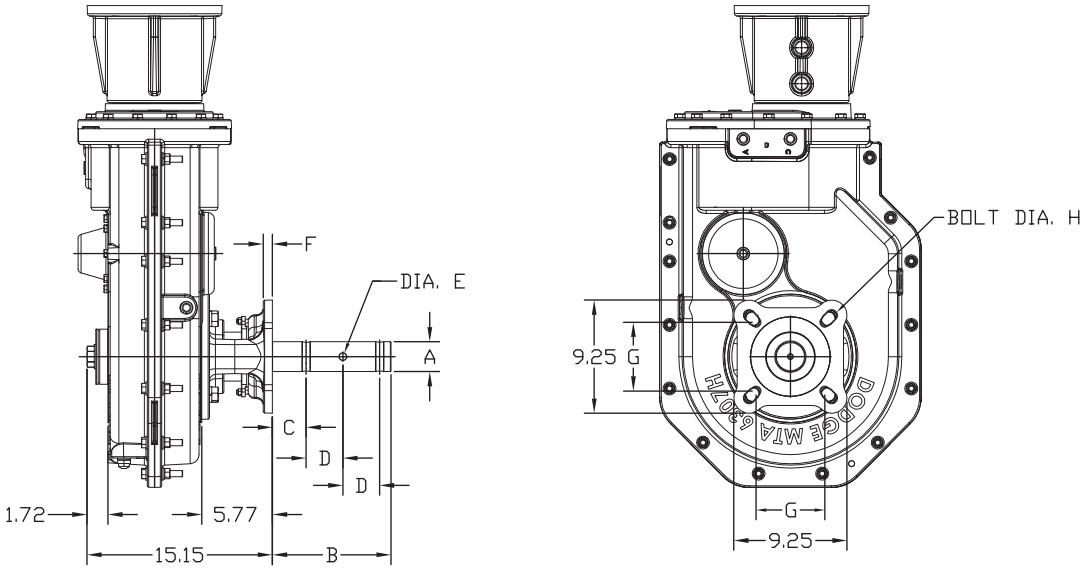
(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.

(9) Minimum keyseat and shaft length required to mount reducer with bushing kit

(10) Always check the driven shaft and key for strength

Courtesy of:
Screw Conveyor Parts

MTA6307 Screw Conveyor Reducer



MTA6307H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16,18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20, 24	3-7/16	13.13	3.88	4.00	29/32	0.75	6.75	3/4

Courtesy of:
Screw Conveyor Parts

MTA6307 Screw Conveyor Accessories

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			
	Closed	Weight	Split	Weight
MTA6307H	906114	1.0	906115	1.5
Reducer Size	**ABS End Cover Part Numbers**			
	Closed	**Weight**	**Split**	**Weight**
MTA5215H & MTA6307H	905142	1.0	905143	1.5

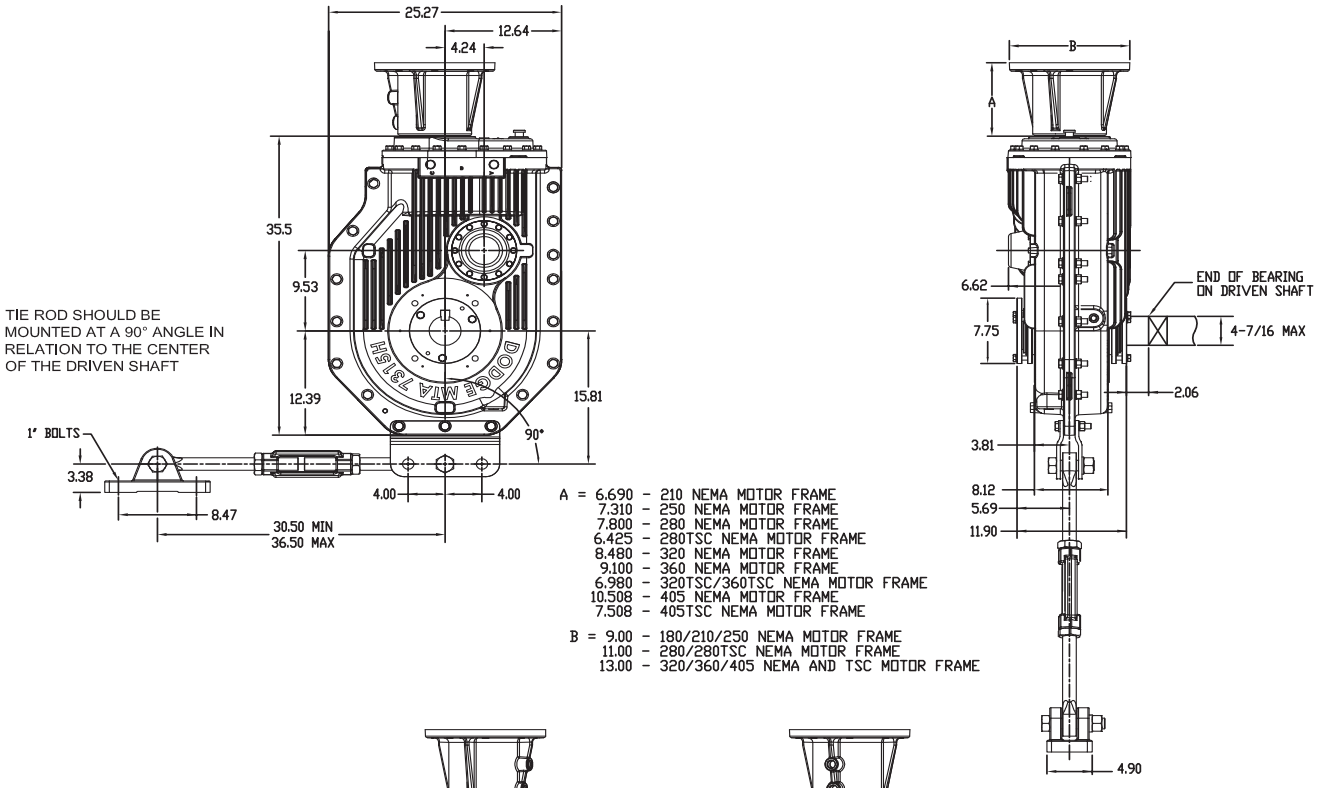
MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

MTA6307H Accessories for Screw Conveyor Drives (4) (5)

Description	Part Number	Weight lbs.
TA6307SCA Adapter & Hardware Kit (2)	906070	40.0
TA6307SCP Adjustable Packing Kit (3)	906071	2.4
TA6307SCS x 2-7/16 Drive Shaft	906074	54.6
TA6307SCS x 3 Drive Shaft	906075	61.0
TA6307SCS x 3-7/16Drive Shaft	906076	74.9
TA6307SCS x 2-7/16 Stainless Steel Drive Shaft	906082	54.6
TA6307SCS x 3 Stainless Steel Drive Shaft	906083	61.0
TA6307SCS x 3-7/16 Stainless Steel Drive Shaft	906084	74.9

(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

MTA7315 Shaft Mounted Reducer



Reducer with Backstop

Courtesy of:
Screw Conveyor Parts

MTA7315 Shaft Mounted Accessories

MTA7315 C-Face Reducer Weights with adapter (lbs)

	Adapter size									
Reducer	**180**	**210**	**250**	**280**	**280TSC**	**320**	**360**	**32/36TSC**	**405**	**405TSC**
Weight (lbs)	–	770	775	800	800	820	835	820	840	830

MTA7315H Accessories

Description	Part Number	Weight lbs.
TA9415RA Rod Assembly use for MTA7315	909109	76.8
TA10507BS Backstop Assembly use for MTA7315	910102	23.0
TA4-TA12 Vertical Breather Kit	904112	3.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit	964364	0.8
MTA2-8 Vertical Position D Breather Kit	472300	3.0

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			Weight
	Closed	**Weight**	**Split**	
MTA7315H	907114	2.2	907115	1.8
Reducer Size	**ABS Polymer End Cover Part Numbers**			**Weight**
	Closed	**Weight**	**Split**	
MTA7315H	907142	1.6	907143	1.1

MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

MTA7315H Tapered Bushing Kits (5) (6)				MTA7315H Short shaft Tapered Bushing Kits			
Bushing Size Standard Shaft Bushing Kit	**Part Number (7)**	**Weight lbs.**	**Shaft Keyseat Required (9) (10)**	**Bushing Size Short Shaft Bushing Kit**	**Part Number (8)**	**Weight lbs.**	**Shaft Keyseat Required (9)(10)**
TA7315TB x 4-7/16	907019	20.5	1 x 1/2 x 11.87	–	–	–	–
TA7315TB x 4-3/16	907021	23.5	1 x 1/2 x 11.87	–	–	–	–
TA7315TB x 3-15/16 ▲	907022	26.3	1 x 1/2 x 11.87	TA7315TBS x 3-15/16	907031	26.7	1 x 1/2 x 7.62
TA7315TB x 3-7/16	907023	30.9	7/8 x 7/16 x 11.87	TA7315TBS x 3-7/16	907032	34.2	7/8 x 7/16 x 7.62
TA7315TB x 3-3/16	907024	32.6	3/4 x 3/8 x 11.87	TA7315TBS x 3-3/16	907033	36.7	3/4 x 3/8 x 7.62
TA7315TB x 3	907025	34.0	3/4 x 3/8 x 11.87	TA7315TBS x 3	907034	38.8	3/4 x 3/8 x 7.62
TA7315TB x 2-15/16	907026	34.6	3/4 x 3/8 x 11.87	TA7315TBS x 2-15/16	907035	39.6	3/4 x 3/8 x 7.62
TA7315TB x 2-7/8	907027	35.0	3/4 x 3/8 x 11.87	TA7315TBS x 2-7/8	907036	40.2	3/4 x 3/8 x 7.62
TA7315TB x 2-11/16	907028	35.8	5/8 x 5/16 x 11.87	TA7315TBS x 2-11/16	907037	41.7	5/8 x 5/16 x 7.62
TA7315TB x 2-1/2	907029	37.2	5/8 x 5/16 x 11.87	TA7315TBS x 2-1/2	907038	43.6	5/8 x 5/16 x 7.62
TA7315TB x 2-7/16	907030	37.4	5/8 x 5/16 x 11.87	TA7315TBS x 2-7/16	907039	44.1	5/8 x 5/16 x 7.62

▲ AGMA maximum bore size

(5) Bushing kit required to mount TA II reducer to driven shaft

(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application

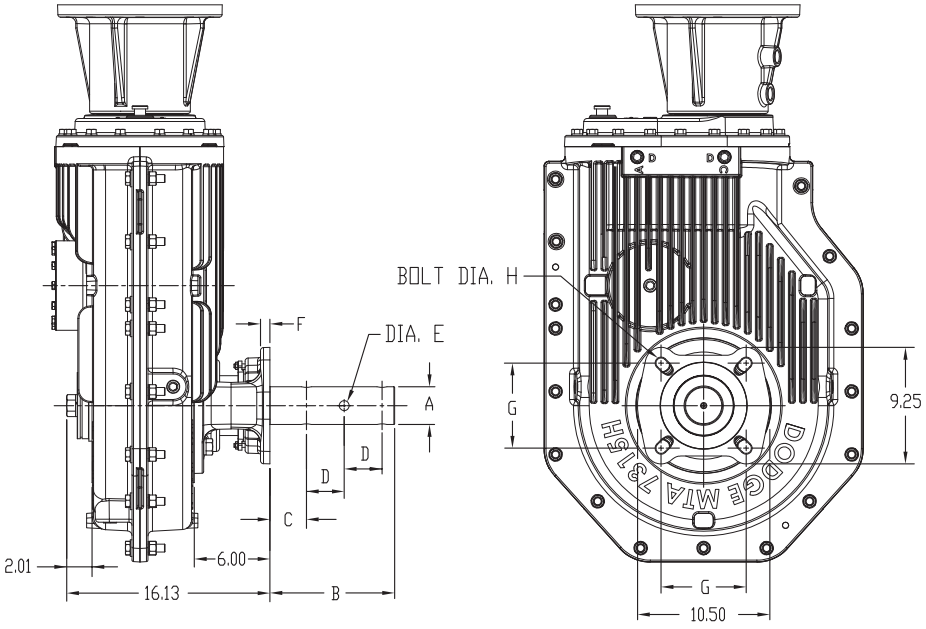
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key

(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.

(9) Minimum keyseat and shaft length required to mount reducer with bushing kit

(10) Always check the driven shaft and key for strength

MTA7315 Screw Conveyor Reducer



MTA7315H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20, 24	3-7/16	13.13	3.88	4.00	29/32	0.75	6.75	3/4

Courtesy of:
Screw Conveyor Parts

MTA7315 Screw Conveyor Accessories

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			Weight
	Closed	Weight	Split	
MTA7315H	907114	2.2	907115	1.8
Reducer Size	**ABS Polymer End Cover Part Numbers**			**Weight**
	Closed	**Weight**	**Split**	
MTA7315H	907142	1.6	907143	1.1

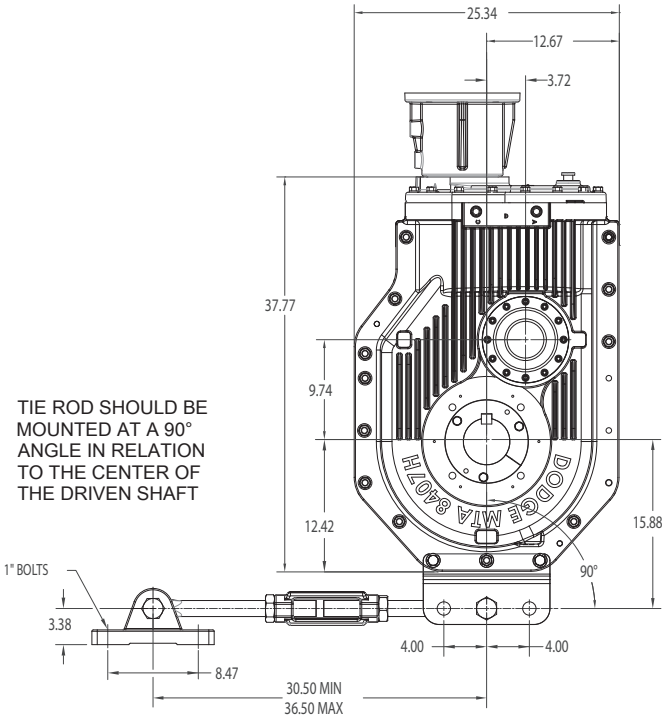
MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

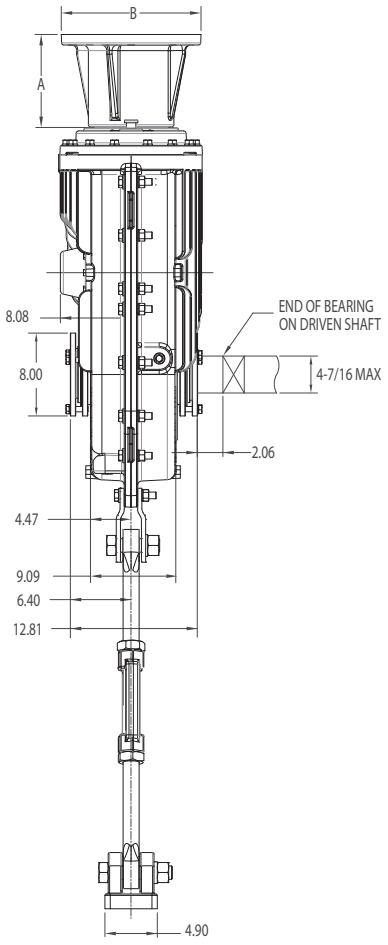
MTA7315H Accessories for Screw Conveyor Drives (4) (5)

Description	Part Number	Weight lbs.
TA7315SCA Adapter & Hardware Kit (2)	907070	50.1
TA7315SCP Adjustable Packing Kit (3)	907071	2.5
TA7315SCS x 2-7/16 Drive Shaft	907074	77.0
TA7315SCS x 3 Drive Shaft	907075	83.4
TA7315SCS x 3-7/16Drive Shaft	907076	97.3
TA7315SCS x 2-7/16 Stainless Steel Drive Shaft	907082	77.0
TA7315SCS x 3 Stainless Steel Drive Shaft	907083	83.4
TA7315SCS x 3-7/16 Stainless Steel Drive Shaft	907084	97.3

(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

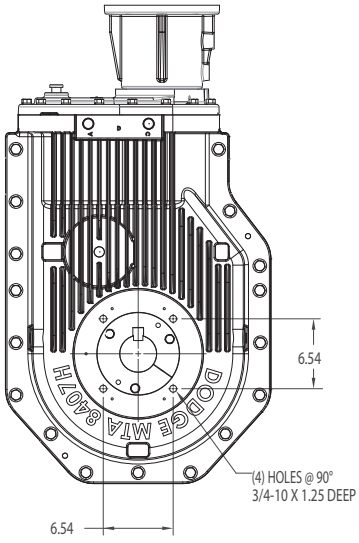
MTA8407 Shaft Mounted Reducer

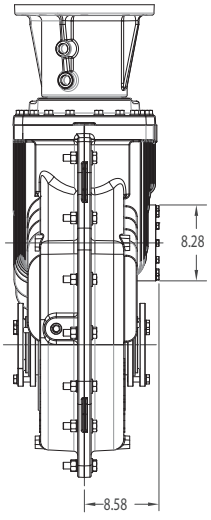




A = 7.310 - 250 NEMA MOTOR FRAME
7.800 - 280 NEMA MOTOR FRAME
6.425 - 280TSC NEMA MOTOR FRAME
8.480 - 320 NEMA MOTOR FRAME
9.100 - 360 NEMA MOTOR FRAME
6.980 - 320TSC/360TSC NEMA MOTOR FRAME
10.508 - 405 NEMA MOTOR FRAME
7.508 - 405TSC NEMA MOTOR FRAME

B = 9.00 - 180/210/250 NEMA MOTOR FRAME
11.00 - 280/280TSC NEMA MOTOR FRAME
13.00 - 320/360/405 NEMA AND TSC MOTOR FRAME





Reducer with Backstop

Courtesy of:
Screw Conveyor Parts

MTA8407 Shaft Mounted Accessories

MTA8407 C-Face Reducer Weights with adapter (lbs)

	Adapter size									
Reducer	**180**	**210**	**250**	**280**	**280TSC**	**320**	**360**	**32/36TSC**	**405**	**405TSC**
Weight (lbs)	–	–	910	935	935	955	970	955	975	965

MTA8407H Accessories

Description	Part Number	Weight lbs.
TA9415RA Rod Assembly use for MTA8407	909109	76.8
TA12608BS Backstop Assembly use for MTA8407	912102	39.0
TA4-TA12 Vertical Breather Kit	904112	3.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit	964364	0.8
MTA2-8 Vertical Position D Breather Kit	472300	3.0

Bushing & Safety End Covers

Reducer Size	Metal End Cover Part Numbers			Weight
	Closed	Weight	Split	
MTA8407H	908114	2.5	908115	2.0
Reducer Size	**ABS Polymer End Cover Part Numbers**			**Weight**
	Closed	**Weight**	**Split**	
MTA8407H	908142	1.7	908143	1.2

MTA is drilled and tapped to accept the ABS bushing cover bolts. Aluminum covers require customer fitment to the reducer. Bushing covers fit both the outboard and inboard side of the MTA reducer.

MTA8407H Tapered Bushing Kits (5) (6)				MTA8407H Tapered Bushing Kits (5) (6) Short shaft Tapered Bushing Kits			
Bushing Size Standard Shaft Bushing Kit	**Part Number (7)**	**Weight lbs.**	**Shaft Keyseat Required (9) (10)**	**Bushing Size Short Shaft Bushing Kit**	**Part Number (8)**	**Weight lbs.**	**Shaft Keyseat Required (9)(10)**
TA8407TB x 4-7/16 ▲	908020	26.0	1 x 1/2 x 12.82	TA8407TBS x 4-7/16	908027	26.9	1 x 1/2 x 8.10
TA8407TB x 4-3/16	908021	29.0	1 x 1/2 x 12.82	TA8407TBS x 4-3/16	908028	31.3	1 x 1/2 x 8.10
TA8407TB x 3-15/16	908022	32.1	1 x 1/2 x 12.82	TA8407TBS x 3-15/16	908029	35.6	1 x 1/2 x 8.10
TA8407TB x 3-7/16	908023	36.7	7/8 x 7/16 x 12.82	TA8407TBS x 3-7/16	908030	42.4	7/8 x 7/16 x 8.10
TA8407TB x 3-3/16	908024	38.4	3/4 x 3/8 x 12.82	TA8407TBS x 3-3/16	908031	45.3	3/4 x 3/8 x 8.10
TA8407TB x 3	908025	39.8	3/4 x 3/8 x 12.82	TA8407TBS x 3	908032	47.5	3/4 x 3/8 x 8.10
TA8407TB x 2-15/16	908026	40.4	3/4 x 3/8 x 12.82	TA8407TBS x 2-15/16	908033	48.3	3/4 x 3/8 x 8.10

▲ AGMA maximum bore size

(5) Bushing kit required to mount TA II reducer to driven shaft

(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application

(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key

(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.

(9) Minimum keyseat and shaft length required to mount reducer with bushing kit

(10) Always check the driven shaft and key for strength

Courtesy of:
Screw Conveyor Parts

Harsh Duty Accessories

Bushing End Covers

Reducer Size	Metal End Cover Part Numbers			Weight	Reducer Size	ABS End Cover Part Numbers			Weight
	Closed	Weight	Split			Closed	Weight	Split	
TA2115H	902114	0.6	902115	0.5	TA2115H	902142	0.6	902143	0.5
TA3203H	903114	0.9	903115	0.8	TA3203H	903142	0.6	903143	0.5
TA4207H	904114	1.2	904115	1.0	TA4207H	904142	1.2	904143	1.0
TA5215H	905114	1.5	905115	1.2	TA5215H	905142	1.5	905143	1.0
TA6307H	906114	1.5	906115	1.2	TA6307H	905142	1.5	905143	1.0
TA7315H	907114	2.2	907115	1.8	TA7315H	907142	1.6	907143	1.1
TA8407H	908114	2.5	908115	2.0	TA8407H	908142	1.7	908143	1.2

End covers fit both the input side and backstop side of MTA reducer.

V-ring Seal Kits

Reducer Size	Part	Weight
MTA2115H	902249	0.1
MTA3203H	903249	0.1
MTA4207H	904249	0.2
MTA5215H	905249	0.2
MTA6307H	906249	0.3
MTA7315H	907249	0.4
MTA8407H	908249	0.4

Harsh Duty Breathers

Enclosed Chamber	
Reducer Size	Part Number
TA0-TA9	240050
TA10-TA12	240051

MTA Engineering Information

Thrust Capacity for Screw Conveyor Drives (Pounds)

Case Size	Output Speed (RPM)								
	10	25	50	75	100	125	150	175	200
MTA2115H	6000	6000	6000	5323	4850	4550	4295	4086	3924
MTA3203H	6000	6000	6000	6000	5761	5328	5020	4813	4636
MTA4207H	6000	6000	6000	6000	6000	6000	6000	6000	6000
MTA5215H	6000	6000	6000	6000	6000	6000	6000	6000	6000
MTA6307H	6000	6000	6000	5885	5185	4706	4435	4303	4269
MTA7315H	†	†	†	†	†	†	†	†	†
MTA8407H	–	–	–	–	–	–	–	–	–

† - Consult Dodge

Horsepower	NEMA Motor Frame	NEMA Motor Frame	Shaft Diameter
	4 pole	2 pole	
3	182T	182T	1-1/8"
5	184T	184T	1-1/8"
7-1/2	213T	213T	1-3/8"
10	215T	215T	1-3/8"
15	254T	254T	1-5/8"
20	256T	256T	1-5/8"

Horsepower	NEMA Motor Frame	NEMA Motor Frame	Shaft Diameter
	4 pole	2 pole	
25	284T	284TS	1-7/8" - 1-5/8"
30	286T	286TS	1-7/8" - 1-5/8"
40	324T	324TS	2-1/8" - 1-7/8"
50	326T	326TS	2-1/8" - 1-7/8"
60	364T	364TS	2-3/8" - 1-7/8"
75	365T	365TS	2-3/8" - 1-7/8"
100	405T	405TS	2-7/8" - 2-1/8"

Courtesy of:
Screw Conveyor Parts

Aftermarket Replacement Parts

Motorized Torque-Arm II Seal Kits (5)

Reducer Size	Part Number	Weight
MTA2115H	M2SEALKIT	0.60
MTA3203H	M3SEALKIT	0.8
MTA4207H	M4SEALKIT	1.00
MTA5215H	M5SEALKIT	1.2
MTA6307H	M6SEALKIT	1.50
MTA7315H	M7SEALKIT	1.65
MTA8407H	M8SEALKIT	1.75

(5) Kit includes 2 output seals, 1 input seal, 2 output excluder seals

Motorized Torque-Arm II Backstop Cover and Gasket (6)

Reducer Size	Part Number	Weight
MTA2115H	M2BSCVRKIT	0.40
MTA3203H	M3BSCVRKIT	0.45
MTA4207H	M4BSCVRKIT	0.50
MTA5215H	M5BSCVRKIT	0.60
MTA6307H	M6BSCVRKIT	0.70
MTA7315H	M7BSCVRKIT	0.80
MTA8407H	M8DSCVRKIT	0.85

(6) Kit includes backstop cover and cork gasket

Motorized Torque-Arm II Coupling Replacement Parts (7) Full Coupling Part numbers for motor frames listed below

Reducer Size	180C	210C	250C	280C	280TSC	–
MTA2115H	M2-18CPLKIT	M2-21CPLKIT	M2-25CPLKIT	–	–	–
MTA3203H	M3-18CPLKIT	M3-21CPLKIT	M3-25CPLKIT	–	M3-28CPLKITTSC	–
MTA4207H	M4-18CPLKIT	M4-21CPLKIT	M4-25CPLKIT	M4-28CPLKIT	M4-28CPLKITTSC	–
MTA5215H	M5-18CPLKIT	M5-21CPLKIT	M5-25CPLKIT	M5-28CPLKIT	M5-28CPLKITTSC	–
MTA6307H	–	M6-21CPLKIT	M6-25CPLKIT	M6-28CPLKIT	M6-28CPLKITTSC	–
MTA7315H	–	M7-21CPLKIT	M7-25CPLKIT	M7-28CPLKIT	M7-28CPLKITTSC	–
MTA8407H	–	M8-21CPLKIT	M8-25CPLKIT	M8-28CPLKIT	M8-28CPLKITTSC	–
	320C	**320TSC**	**360C**	**360TSC**	**405C**	**405TSC**
MTA2115H	–	–	–	–	–	–
MTA3203H	–	–	–	–	–	–
MTA4207H	–	M4-32CPLKITTSC	–	–	–	–
MTA5215H	M5-32CPLKIT	M5-32CPLKITTSC	M5-36CPLKIT	M5-36CPLKITTSC	–	–
MTA6307H	M6-32CPLKIT	M6-32CPLKITTSC	M6-36CPLKIT	M6-36CPLKITTSC	–	–
MTA7315H	M7-32CPLKIT	M7-32CPLKITTSC	M7-36CPLKIT	M7-36CPLKITTSC	M7-40CPLKIT	M7-40CPLKITTSC
MTA8407H	M8-32CPLKIT	M8-32CPLKITTSC	M8-36CPLKIT	M8-36CPLKITTSC	M8-40CPLKIT	M8-40CPLKITTSC

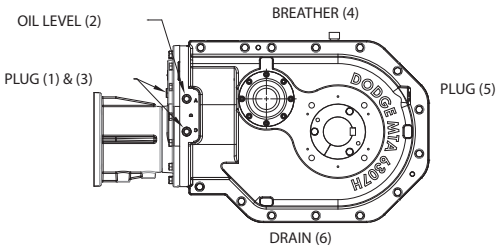
(7) Kit includes two coupling halves and element

Coupling ELEMENT ONLY Part Numbers for Motor Frames

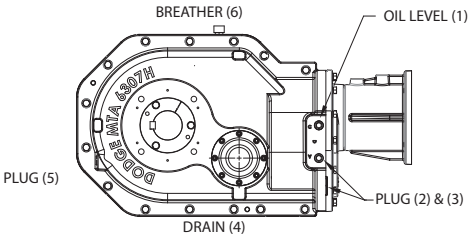
Reducer Size	180C	210C	250C	280C	280TSC	–
MTA2115H	334291	334291	334291	–	–	–
MTA3203H	334291	334291	334291	–	334291	–
MTA4207H	454424	454424	454424	454424	454424	–
MTA5215H	454424	454424	454424	454424	454424	–
MTA6307H	–	454424	454424	454424	454424	–
MTA7315H	–	454424	454424	454424	454424	–
MTA8407H	–	454424	454424	454424	454424	–
	320C	**320TSC**	**360C**	**360TSC**	**405C**	**405TSC**
MTA2115H	–	–	–	–	–	–
MTA3203H	–	–	–	–	–	–
MTA4207H	454434	454434	–	–	–	–
MTA5215H	454434	454434	454434	454434	–	–
MTA6307H	454434	454434	454434	454434	–	–
MTA7315H	454434	454434	454434	454434	454434	454434
MTA8407H	454434	454434	454434	454434	454434	454434

Mounting Positions

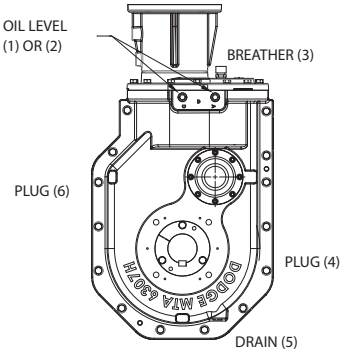
HORIZONTAL MOUNTING



POSITION A

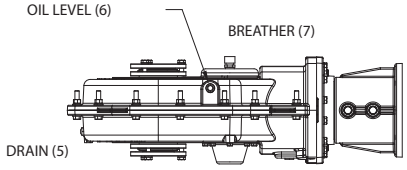


POSITION C

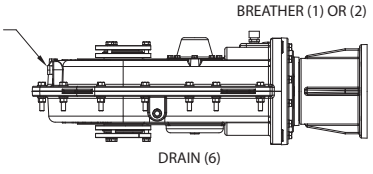


POSITION D

VERTICAL MOUNTING

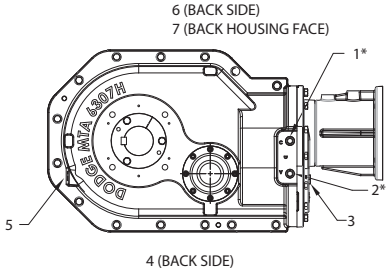


POSITION E



POSITION F

TYPICAL OIL HOLE LOCATIONS



* PLUGS (1) AND (2) ARE LOCATED ON BOTH SIDES OF THE REDUCER. FILL OIL TO PLUG WITH CAST LETTERING THAT MATCHES THE MOUNTING POSITION.

Vent and Plug Locations

Mounting Position	Vent and Plug Locations for all Speeds						
	1	2	3	4	5	6	7
Position A	Plug	Oil Level	Plug	Breather	Plug	Drain	Plug
Position C	Oil Level	Plug	Plug	Drain	Plug	Breather	Plug
Position D	Oil Level*	Oil Level*	Breather	Plug	Drain	Plug	Plug
Position E	Plug	Plug	Plug	Plug	Drain	Oil Level	Breather
Position F	Breather*	Breather*	Plug	Plug	Oil Level	Drain	Plug

*Either Plug (1) or plug (2) may be used

Approximate Oil Volumes

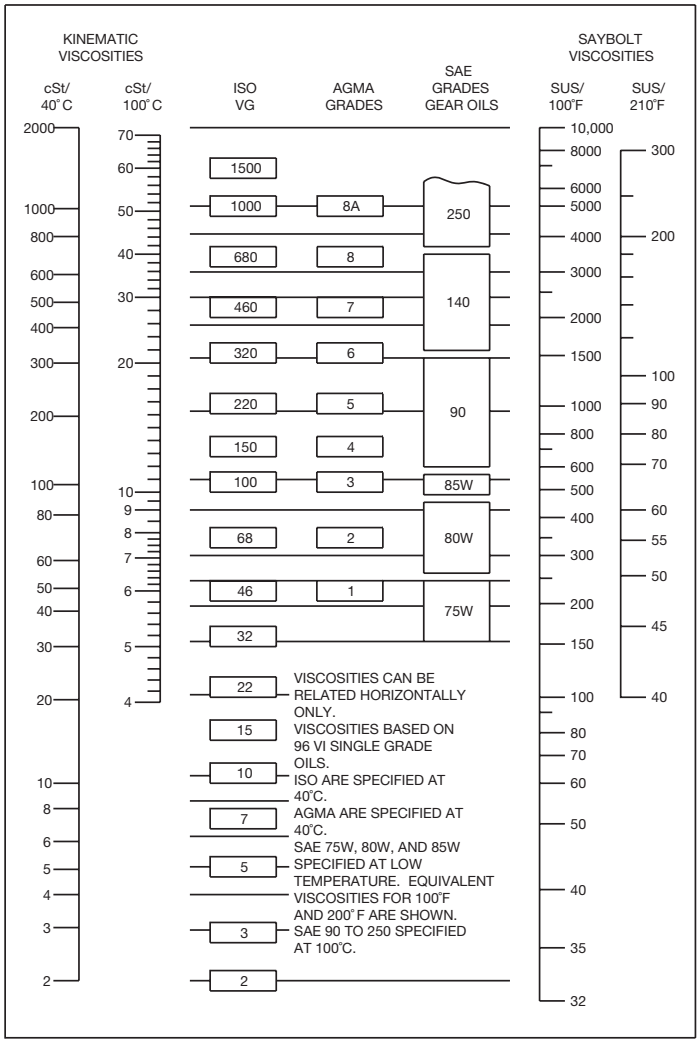
Case Size	Oil Volume in Quarts ■ ● ◘						Oil Volume in Liters ■ ● ◘					
	Horizontal				Vertical		Horizontal				Vertical	
	A	B	C	D❷	E (Up)	F (Down)	A	B	C	D❷	E (Up)	F (Down)
MTA2115H	4-1/4	◘	3-5/8	7	5-3/8	5-5/8	3-3/4	◘	3-1/2	6-5/8	5	5-3/8
MTA3203H	6-3/8	◘	4-3/8	9-3/4	7-3/8	7-5/8	6	◘	4-1/8	9-1/4	7	7-1/8
MTA4207H	8-1/4	◘	6-3/4	13-1/8	9-1/4	9-5/8	7-7/8	◘	6-3/8	12-3/8	8-7/8	9-1/8
MTA5215H	14	◘	10-1/8	21	16	16-7/8	13-1/4	◘	9-5/8	20	15-1/8	16
MTA6307H	18-3/8	◘	15-3/8	30-1/8	23-1/2	24-7/8	17-3/8	◘	14-1/2	28-1/2	22-1/4	23-1/2
MTA7315H	25	◘	19-5/8	38-1/4	23-1/4	26-1/2	23-5/8	◘	18-1/2	36-1/2	22	25-1/8
MTA8407H	29-1/8	◘	22-5/8	52	31-3/4	31-3/4	27-5/8	◘	21-3/8	49-1/4	30	30

■ **Oil quantity is approximate. Service with lubricant until oil runs out of oil level hole as indicated per drawings in figure 1.**
● Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug. If reducer position is to vary from those shown in Figure 1, either more or less oil may be required. Consult Dodge.
◘ Position B not shown OR recommended, check with factory
❷ For Position D - It is recommended to use "Position D Breather Kit" part number - 472300.

Courtesy of:
SCREW CONVEYOR PARTS

MTA Engineering Information

Oil Viscosity Equivalence Chart



Recommended Lubricants for Motorized Torque Arm II & Torque Arm II Reducers

	Standard Oils		EP Oils	
EXXON				
150	Teresstic	150	Spartan EP	150
220		220		220
320		320		320
CHEVRON				
150	Machine	150	Gear Compound EP	150
220		220		220
320		320		320
UNICAL				
150	Turbine Oil	150	Extra Duty HL Gear Lube	141
220		220		207
320		320		300
KLUBER SYNTHETIC				
150	GEM4	150N	–	–
220		220N		–
320		320N		–
KLUBER				
150	GEM1	150N	–	–
220		220N		–
320		320N		–
MOBIL SYNTHETIC				
150	SHC	150	SHC XMP	150
220		220		220
320		320		320
MOBIL				
150	Mobil DTE	Extra Heavy	MobilGear 600 XP	150
220		BB		220
320		AA		320
TEXACO				
150	Regal Oil R&O	150	Meropa	150
220		220		220
320		320		320
SHELL SYNTHETIC				
150	Morlina S4 B	150	–	–
220		220		–
320		320		–
SHELL				
150	Morlina S2 B Morlina S3 B	150	Omala S2 G	150
220		220		220
320		320		320

+ Partial list. Consult Dodge or a lubricant manufacturer for further options and check lubrican manufacturers website for new revisions in oil nomenclature

Table 1 – Oil Recommendations

ISO Grades For Ambient Temperatures of 50°F to 125°F

Output RPM	Motorized Torque-Arm II Reducer Size MTA...						
	2115H	3203H	4207H	5215H	6307H	7315H	8407H
151 – 200	320	220	220	220	220	220	220
126 – 150	320	220	220	220	220	220	220
101 – 125	320	320	220	220	220	220	220
81 – 100	320	320	320	220	220	220	220
41 – 80	320	320	320	220	220	220	220
11 – 40	320	320	320	320	320	320	320
1 – 10	320	320	320	320	320	320	320

Table 2 – Oil Recommendations

ISO Grades For Ambient Temperatures of 15°F to 60°F

Output RPM	Motorized Torque-Arm II Reducer Size MTA...						
	2115H	3203H	4207H	5215H	6307H	7315H	8407H
151 – 200	220	150	150	150	150	150	150
126 – 150w	220	150	150	150	150	150	150
101 – 125	220	220	150	150	150	150	150
81 – 100	220	220	220	150	150	150	150
41 – 80	220	220	220	150	150	150	150
11 – 40	220	220	220	220	220	220	220
1 – 10	220	220	220	220	220	220	220

(1) Assumes auxiliary cooling where recommended in the catalog.

(2) Pour point of lubricant selected should be at least 10°F lower than expected minimum ambient starting temperature.

(3) Extreme pressure (EP) lubricates are not necessary for average operating conditions. When properly selected for specific applications, Torque-Arm II backstops are suitable for use with EP lubricants.

(4) Special lubricants may be required for food and drug industry applications where contact with the product being manufactured may occur. Consult a lubrication manufacturer's representative for his recommendations.

(5) For reducers operating in ambient temperatures between -22°F (-30°C) and 20°F (–6.6°C) use a synthetic hydrocarbon lubricant, 100 ISO grade or AGMA 3 grade (for example, Mobil SHC627). Above 125°F (51°C), consult Dodge Gear Application Engineering (864) 297-4800

(6) Mobil SHC630 Series oil is recommended for high ambient temperatures.

Courtesy of:
SCREW CONVEYOR PARTS

NOTES

Courtesy of:
Screw Conveyor Parts

CONTENTS

Torque-Arm II Shaft Mount Speed Reducers

Features/Benefits **G2-3**

Specifications **G2-7**

Nomenclature **G2-8**

Easy Selection **G2-9**

Selection

Selection Guide G2-12
Application and Class Numbers G2-14
Class I Selections G2-15
Class II Selections G2-21
Class III Selections G2-26

Selection/Dimensions

TA0107L
Taper Bushed Reducers and Accessories G2-32
Screw Conveyor Drive Reducers and Accessories G2-34
Motor Mount Dimensions G2-36

TA1107H
Tapered Bushed Reducers and Accessories G2-40
Screw Conveyor Drive Reducers and Accessories G2-42
Motor Mount Dimensions G2-44

TA2115H
Taper Bushed Reducers and Accessories G2-48
Screw Conveyor Drive Reducers and Accessories G2-50
Motor Mount Dimensions G2-52

TA3203H
Taper Bushed Reducers and Accessories G2-56
Screw Conveyor Drive Reducers and Accessories G2-58
Motor Mount Dimensions G2-60

TA4207H
Taper Bushed Reducers and Accessories G2-64
Screw Conveyor Drive Reducers and Accessories G2-66
Motor Mount Dimensions G2-68

TA5215H
Taper Bushed Reducers and Accessories G2-72
Screw Conveyor Drive Reducers and Accessories G2-74
Motor Mount Dimensions G2-76

TA6307H
Taper Bushed Reducers and Accessories G2-80
Screw Conveyor Drive Reducers and Accessories G2-82
Motor Mount Dimensions G2-84

Courtesy of:
Screw Conveyor Parts

CONTENTS

Torque-Arm II Shaft Mount Speed Reducers

TA7315H
- Taper Bushed Reducers and Accessories G2-88
- Screw Conveyor Drive Reducers and Accessories G2-90
- Motor Mount Dimensions G2-92

TA8407H
- Taper Bushed Reducers and Accessories G2-96
- Motor Mount Dimensions G2-98

TA9415H
- Taper Bushed Reducers and Accessories G2-102
- Motor Mount Dimensions G2-104

TA10507H
- Taper Bushed Reducers and Accessories G2-106
- Motor Mount Dimensions G2-108

TA12608H
- Taper Bushed Reducers and Accessories G2-110
- Motor Mount Dimensions G2-112

Belt Guard Dimensions - TA0107L - TA5215H G2-114
Belt Guard Dimensions - TA6307H - TA12608H G2-116
Cooling Fan Dimensions - TA4207H - TA12608H G2-118

Related Products

Harsh Duty Accessories G2-119
Maximum Bore Straight Bore TA II Reducers G2-121
Nominal Sheave Ratios G2-122
Nominal Sheave Speeds G2-124
Renewal Parts G2-125

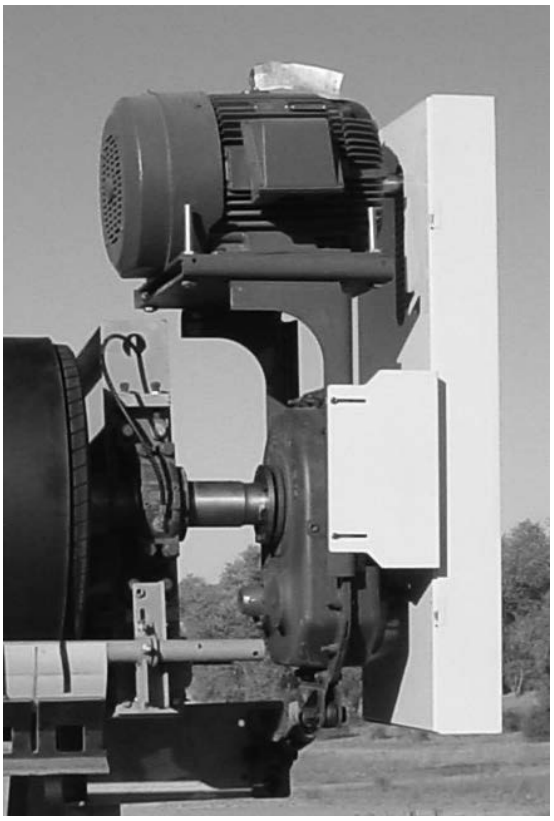
Engineering/Technical

NEMA Motor and TA II Reducer Information, Backstop Lift-off Speed G2-127
Maximum Input and Output Speeds G2-128
Thrust Capacity for Screw Conveyor Drives G2-129
Lubrication of Torque-Arm II Reducers G2-130
Viscosity Classification Equivalents G2-135
Bearing L-10 Life as a Function of Service Factor G2-136

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

The Legacy Continues . . . . . .



With 65 years of proven dependability and more than 2 million units in service throughout the world, **Dodge Torque-Arm** speed reducers are the standard of the industry. Now, that legacy continues with the newest generation in shaft mounted speed reducers - **Torque-Arm II** - offering patented innovations, new features, plus increased torque and horsepower ratings.

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

The Legacy Continues . . . . . .

The Dodge Torque-Arm II surpasses all other reducers on the market because of its industry proven design and patented features.

This powerful line of shaft mounted speed reducers - in 12 case sizes through 700 horsepower (HP) - offers unparalleled torque ratings and is quickly becoming the new industry standard. Improved features include: an all-new backstop concept, a patented sealing]system, a steel motor mount system, a state-of-the-art, totally modular design with an expanded ratio range to 40:1, and a patented twin tapered bushing system.

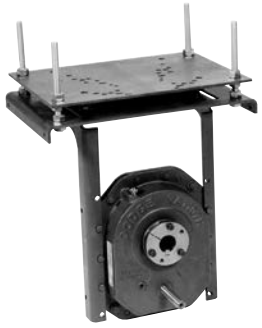
The increased ratings of the Torque-Arm II line are comparable to the next larger sized TXT reducer and are the result of the extended gear centers, wider gear faces, and optimized tooth geometry. The backstop design features centrifugal lift-off sprags for extended life and can be used with lubricants containing EP additives.

In addition, the Torque-Arm II line has a patented, premium sealing system that uses a harsh duty oil seal protected by a metal excluder seal with rubbing lip. This harsh duty sealing system makes this reducer series a perfect fit for today's harsh duty industries such as aggregates, mining, cement, asphalt, mixing & milling and ethanol.

The steel motor mount adjusts to multiple center distances and mounts in shaft mount and screw conveyor positions.

Its patented twin tapered bushing system - in standard length, short shaft, and metric versions - offers all the features of our standard twin tapered Torque-Arm bushing design which are unique to Dodge. The patented insertable tapered wedge enables the optional extended tapered bushing kit to be applied for shorter shaft lengths, allowing the replacement of straight bore or single bushed reducers.

Shaft mounted reducer with twin tapered bushing and motor mount



Screw conveyor drive with adapter, drive shaft and motor mount

Product Capabilities

Twelve reducer sizes with modular accessories
All reducers can be shaft mounted, screw conveyor, vertical and flange mounted
HP through 700 and torque ratings through 500,000 lb. in
Standard 5, 9, 15, 25 and up to 40:1 gear ratios
Nearly 300:1 speed reduction with V belt drives
Bushing bores 1 inch through 7 inches
All new highly efficient helical gearing design
Meets or exceeds AGMA standards including 5,000 hour L-10 bearing life, 25,000 average life
Smooth, rugged class 30 cast iron housings with pry slots
36 month - 18 month warranty protection
Complete Metric TA II product line available
TA II products in conformance to ATEX directive 94//9/EC guidelines
Premium HNBR oil sealing system and filter breather

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

The Legacy Continues . . . . . .

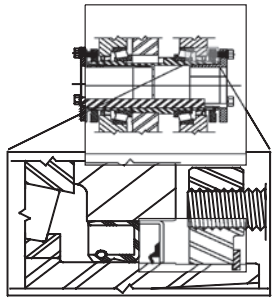
Dodge Torque-Arm II has been engineered throughout with features designed to improve performance, extend service life, and reduce or simplify maintenance.

Three large pry slots make rebuilding easy.

Proven, AGMA-rated, case-carburized gear design ensures high efficiency. Has Class I starting load capability of 200%

Totally modular construction, one reducer for shaft mount, screw conveyor, vertical and flange mount applications.

Premium harsh duty oil seals are protected by a patented labyrinth metal shield and excluder lip auxiliary seal on all shafts. No lubrication required. Factory tested.



100% cast iron housing (Class 30) eliminates bearing cap leak paths and maximizes surface area for heat dissipation.

Patented twin tapered bushings are available in standard, patented short shaft, and metric versions.

Heavy duty tapered roller bearings provide 25,000 hours average life and 5,000 L-10 minimum hours life—even in the heaviest load conditions.

Extended gear centers and increased gear tooth contact provide dramatically increased torque and horsepower ratings.

Magnetic drain plug and filter air breather are standard.

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

The Legacy Continues . . . . . .

Shaft Mounted

Standard Twin Tapered Bushing System is an easy on, easy off, no-wobble bushing system featuring a fully split, ductile iron 8° taper and reliable twin support. Available in inch and metric bores. Increased bore capability in many sizes.

Our **Short-Shaft Twin-Tapered Bushing Kits** eliminate the need for full-length shafts. Constructed with ductile iron, it has all the features of our standard bushing system. Available in both inch and metric bores.

This **Modular Motor Mount** is attached and supported by two angle iron brackets with equally spaced holes, which align with the spacing of the cast slots of the gear case. This way, the motor mount can be adjusted up or down depending on the customer's requirements. It can also be mounted on the side of the reducer for screw conveyor applications.

This **Backstop** option helps prevent reverse rotation in high stop-start loads, and results in less wear and longer life. Its centrifugal throw-out design eliminates sprag sliding and reduces wear. It operates with standard and EP lubricants and requires no external lubrication.

Ruggedly constructed, the **TA Rod Kit** includes standard brackets, functions as a belt-tensioning device, and offers universal mounting options.

Screw Conveyor

The **CEMA Bolt-On Adapter** features double-lip seals on both surfaces. The adapter center is open for contaminate drop out for optimized sealing.

An optional **Adjustable Packing Kit** bolts to the standard adapter and provides a proven sealing option for hostile environments. Packing can be retightened.

The screw conveyor drive shafts are made from high alloy steel and engineered to CEMA dimensions. They are three-bolt drilled and their tapered fit ensures simple installation. The rugged locking plate (patent pending) also provides a mechanical shaft removal feature. #316 Stainless Steel drive shafts also available.

This complete **Bolt-On Belt Guard Package** requires no drilling or straps. It allows multiple height adjustments, and has an open metal inspection feature.

Other accessories include cooling fans and harsh duty breather kits.

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

General Specifications

Torque-Arm II Speed Reducers:

The speed reducer shall be either a belt driven or direct coupled enclosed shaft mount type unit with a single or double reduction ratio. The reducer shall mount directly on the driven shaft and utilize an adjustable torque arm that attaches from the gear case to the support structure or foundation. Optional all steel motor mount adjusts to various belt center distances and supports the motor.

The reducer housing shall be constructed of two piece corrosion resistant, class 30 gray iron. All housings shall be doweled and precision machined to assure accurate alignment for all gear sets. Pry slots are provided for ease of repair.

All gearing shall be of helical design, case carburized and precision finished to insure a high surface durability with a resilient tooth core for impact resistance and optimum service life. Gears shall be supported between bearings to maintain proper alignment of gear meshes, maximize load carrying capabilities, and to eliminate overhung loads imposed on bearings. Design meets or exceed AGMA standards.

Reducer bearings shall be of the tapered roller type, meet or exceed AGMA standards, and provide a 25,000 hour average life, a 5,000 L-10 AGMA Class I standard.

All seals shall be of the lip, spring loaded type, made of a premium harsh duty, heat resistant material. A metal excluder seal with rubber lip is external to the standard oil seal.

Reducer installation shall be accomplished by using ductile iron, fully split, two bushing system. Reducer removal shall be accomplished by providing jack screw holes in the bushing flanges to mechanically remove the tapered assembly.

Backstops should be lift-off sprag type designed for use with standard and extreme pressure (EP) lubricants.

Screw Conveyor Drives:

The drive shall consist of a standard speed reducer; a cast iron, bolt on, four bolt mounting adapter with double lip seals on both ends, and optional bolt on adjustable packing kit.

A standard three-hole drive shaft will be machined from a high quality alloy steel.

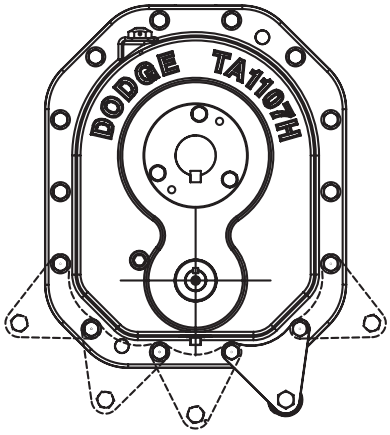
The drive shall conform to Conveyor Equipment Manufacturers Association (CEMA) standards.

Optional all steel motor mount adjusts to various belt center distances and supports the motor.

Torque-Arm II Shaft Mount Speed Reducers

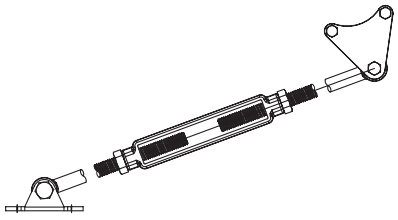
Basic Torque-Arm II Reducer
TA1107H25

TA - Torque-Arm II Shaft Mount Reducer
1- Case Size 1
107 - AGMA Code reference & Traditional Bore Size
H - Heavy Duty Rating & Extended Bore Size
25 - Nominal Reducer Ration

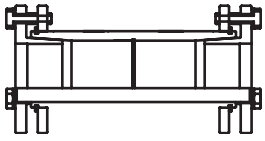


Shaft Mount Reducer Drive Accessories

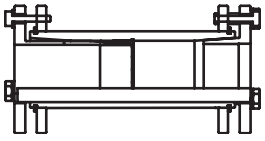
TA1107RA
TA1107 Rod Assembly



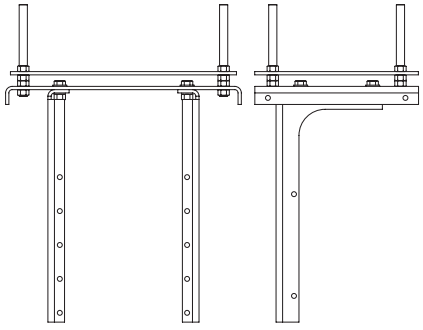
TA1107TB x 1-7/16
TA1107TB x 1-7/16 Twin Tapered Bushing Kit for Standard Length Driven Shaft



TA1107TBS x 1/7-16
TA1107TB x 1-7/16 Twin Tapered Bushing Kit for Short Driven Shaft

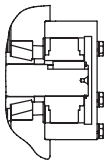


TA1107MM
TA1107MM Motor Mount Assembly

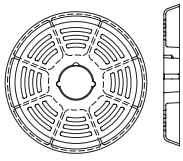


Other Accessories

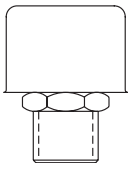
TA1107BS
Backstop Assembly



TA4207CF
Cooling Fan Assembly

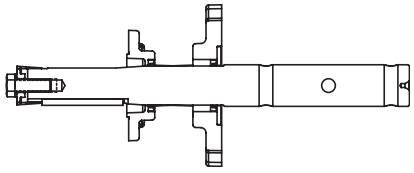


TA1-4 FB KIT
Filter Breather Kit

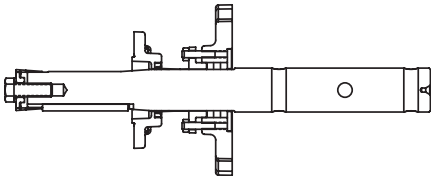


Screw Conveyor Drive Accessories

TA1107SCA
TA1107SCA Screw Conveyor Standard Adapter & Hardware Kit
(Does not include shaft)

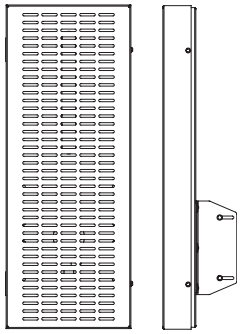


TA1107SCP Kit
TA11070SCP Screw Adjustable Packing Kit
(Does not include shaft)



TA1107SCS x 1-7/16
TA11070SCS Screw Conveyor Drive Shaft x 1-7/17" Diameter

TA1107BG
TA1107BG Belt Guard



Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Easy Selection Method (For Electric Motors) For Torque-Arm II Reducer And Screw Conveyor Drive Reducer Applications

When to Use Easy Selection

The Easy Selection tables for TA II Shaft Mount reducers are for electric motor selections up to 400 horsepower with output speeds up to 400 RPM, using AGMA recommended application class numbers. For extreme shock or high energy loads which must be absorbed, as when stalling; for a power source other than an electric motor; or for extreme ambient temperatures or oversized equipment, consult Dodge Application Engineering, 864-284-5700.

How to Select

Step 1: Determine Class of Service - See Table 1 to determine Load Classification for applications under normal conditions. Find the type application and duty cycle.

Class 1 - Steady load not exceeding Motor HP rating and light shock loads during 10 hours a day. Moderate shock loads are allowable if operation is intermittent.

For Class 1 applications, the maximum value of starting and momentary peak loads should not exceed 2 x Motor HP rating. If it exceeds this amount it should be divided by 2 and the result used in the selection table instead of the Motor HP rating.

Class 2 - Steady load not exceeding Motor HP rating for over 10 hours a day. Moderate shock loads are allowable during 10 hours a day.

For Class 2 applications, the maximum value of starting and momentary peak loads should not exceed 2.8 x Motor HP rating. If it exceeds this amount it should be divided by 2.8 and the result used in the selection table instead of the Motor HP rating.

Class 3 - Moderate shock loads for over 10 hours a day. Heavy shock loads are allowable during 10 hours a day.

For Class 3 applications, the maximum value of starting and momentary peak loads should not exceed 4 x Motor HP rating. If it exceeds this amount it should be divided by 4 and the result used in the selection table instead of the Motor HP rating.

Step 2: Determine Reducer Size - From the Easy Selection, Class I, II or III, Tables, pages G2-15 thru G2-30, find the reducer size for the application horsepower and output speed.

Note: For applications where fan cooling is not acceptable, use the Easy Selection tables with an increased Class of Service number. Where more than one reducer selection is listed, the most economical ratio is generally listed first.

See Engineering/Technical pages for maximum input speed, output speed, and thrust capacity ratings for TA II reducers.

Step 3: Compare Hollow Shaft Bore with the size of the driven shaft. All Dodge TA II Taper Bushed reducers require bushings to mount reducer to driven shaft. Refer to reducer pages for available bushings. If the driven shaft is larger than the bore of the selected reducers, the shaft must be machined to the proper size, or select a larger reducer. Check driven shaft and key for strength.

Step 4: Check Dimensions - See Selection/Dimension pages for reducer dimensions, weights, part numbers and Torque-Arm rod mounting positions. See Engineering/ Technical pages for reducer mounting positions.

Step 5: Select a Belt Drive Arrangement - From the Sheave ratio information, pages G2-122 thru G2-124, select a sheave ratio for the belt drive. The reducer sheave P.D., Pitch Diameter, should not be smaller than the mini mum sheave diameter shown in the selection tables. Note: Mount the sheave as close as possible to the reducer to minimize the effect of overhung load on the reducer.

See Dodge Drives Components catalog to select sheaves, bushings and belts for the appropriate belt drive.

Step- 6: Select Accessories - See Selection/Dimensions pages for description, dimensions, weights and part numbers for accessories for the TA II reducer selected:

Rod Assembly
Bushing Kit
Motor Mount
Backstop Assembly
Belt Guard
Cooling Fan
Screw Conveyor Adapter
Adjustable Packing Kit
Drive Shaft
Harsh Duty Breathers
Vertical Breather Kit

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Easy Selection Method (For Electric Motors) For Torque-Arm II Reducer And Screw Conveyor Drive Reducer Applications

Note: Important Information
TA II reducers are stocked without a Torque-Arm Rod Assembly. Order a TA Rod Assembly as a separate item.

TA II reducers are shipped without oil. They must be lubricated at time of installation.

TA II reducers are suitable, from stock, for vertical or incline mounting and flange mounting; no reducer modification is required. See accessories for vertical breather kit.

TA II Backstop - For best life, select reducer gear ratios which exceed input shaft speeds required for backstop sprag lift-off. See page G1-127 for Backstop Lift-off speeds.

Warning: Backstops are not recommended for applications involving energy absorption and shock or torque loads in excess of reducer ratings or on applications such as chair lift, amusement rides, etc., where the safety of persons or property is dependent on their function. On such applications, other safety devices should be provided.

Note: The TA II reducer has built-in auxiliary sealing which gives extra seal protection for all environments, at no additional cost to the user. See the Feature/Benefits pages for details.

Example: Easy Selection Method For Torque-Arm II Reducers - Shaft Mount And Screw Conveyor Drive

Shaft Mount Reducer Application:
A 10 HP 1750 RPM motor is used to drive a belt conveyor moving sand at 70 RPM. The conveyor is uniformly loaded and operates 16 hours per day. The head pulley shaft diameter is 2-3/16". The user specifications call for a means of holding the conveyor from moving backwards.

Step 1: Determine Class of Service - From Table 1 on page G2-12 locate the appropriate application, "belt conveyors, uniformly loaded or fed" for over 10 hours per day. This load is classified as a Class II application.

Step 2: Determine Reducer Size - From Class II Selection, page G2-22, find the column for 10 HP and read down to 70 RPM. A reducer size TA3203H25 or TA3203H15 reducer is the correct selection. See Engineering/ Technical pages to compare input and output speed and overhung load application requirements with reducer ratings.

Step 3: Compare Hollow Shaft Bore of a size TA3203H25 or TA3203H15 with the head pulley shaft diameter. Per page G2-57, 2-3/16" is a bore available for this size of reducer. It will work in this application. Be sure to check the driven shaft and key for strength.

Step 4: Check Dimensions and Weights -See Selection/ Dimension pages for reducer dimensions, weights, part numbers and other pertinent drive dimensions, as well as information on Torque-Arm rod mounting positions. See Engineering/Technical pages for information on reducer mounting positions.

Step 5: Select a Belt Drive - From the Sheave Ratio information, pages G2-122 thru G2-124, select a belt drive ratio for the conveyor speed of 70 RPM. Then select a belt drive, from the Dodge Drive components catalog, that meets the customer's needs (service factor, minimum number of belts) and preferences (belt style, bushing mounting style, etc.) The sheave diameters must not be smaller than the minimum diameters shown in the selection tables.

Step 6: Select Accessories - See Selection/Dimensions pages to pick out accessories for this application:

TA3203BS Backstop Assembly, to hold the conveyor from moving backwards.

TA3203MM Motor Mount Assembly, for top mounting the motor to the reducer.

TA3203BG - Pos. B Belt Guard, to cover and protect the rotating belt drive.

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Easy Selection Method (For Electric Motors) For Torque-Arm II Reducer And Screw Conveyor Drive Reducer Applications

Example: Easy Selection Method For Torque-Arm II Reducers - Shaft Mount And Screw Conveyor Drive

Screw Conveyor Drive Reducer Application:
A 5 HP 1750 RPM motor is used to drive a heavy duty screw conveyor moving at 72 RPM. The conveyor runs 10 hours per day in a local feed mill conveying grain. The user needs a reducer drive compatible with a CEMA 12" diameter screw and a 2-7/16" diameter drive shaft.

Step 1: Determine Class of Service - From Table 1 page G2-12, locate the appropriate application, "conveyors, general purpose; screw conveyor - heavy duty, not uniformly loaded" for 3 to 10 hours per day. This load is classified as a Class II application.

Step 2: Determine Reducer Size - From Class II Selection Table, page G2-22, find the column for 5 HP and read down to 72 RPM. A TA1107H25 reducer is the correct selection. See Engineering/Technical pages to compare input and output speed and overhung load application requirements with reducer ratings.

Step 3: Check Dimensions - See Selection/Dimensions pages for reducer dimensions, weights, part numbers and other pertinent drive dimensions. See Engineering/ Technical pages for information on reducer mounting positions.

Step 4: Select Drive Shaft to fit screw diameter. See Selection/ Dimension page G2-43. Here we verify that a 2-7/16" diameter drive shaft is compatible with a 12" diameter screw.

Step 5: Select a Belt Drive - From the Sheave Ratio information, pages G2-122 thru G2-124, select a belt drive ratio for the conveyor speed of 70 RPM. Then select a belt drive, from the Dodge Drive components catalog, that meets the customer's needs (service factor, minimum number of belts) and preferences (belt style, bushing mounting style, etc.) The sheave diameters must not be smaller than the minimum diameters shown in the selection tables.

Step 6: Select Accessories - See Selection/Dimensions pages to pick out screw conveyor accessories for this application.

TA1107SCA Adapter & Hardware Kit, to mount reducer to trough end of screw conveyor.

TA1107SCP Adjustable Packing Kit, to add additional sealing protection to reducer drive.

TA1107MM Motor Mount Assembly, for top mounting of motor to the reducer.

TA1107BG-Pos. C Belt Guard, to cover and protect the rotating belt drive.

TA1107SCS X 2-7/16" Drive Shaft, to connect the reducer to the screw conveyor.

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Selection Guide: TA II Torque-Arm Shaft Mount Reducers

This is a reference sheet for quick selection and specification of Dodge torque-arm shaft mount reducers. Use it to identify information needed to make an accurate selection with a step-by-step selection format for choosing reducers, accessories and belt drive.

Name_____ Company Name _____

Phone No. _____ Fax. No. _____

Application Data:

Type of Driven Equipment _____

Hours of service per day _____ Class of Service _____

Type of Load: Uniform _____ Moderate _____ Shock _____

Motor Type: HP _____ RPM _____ Frame Size _____ Shaft Size _____

RPM of Driven Equipment _____ Driven Shaft Size _____

Type of Reducer Mounting: Horizontal _____ Vertical: Input Up _____

Input Down Incline (Degree of) _____

Unusual Ambient Temperature

Other Pertinent Application Characteristics (i.e.-dusty Environment, Reversing Duty, Start/Stop Cycles. Etc.)

_____

Reducer Driver Selection

Step 1 - Determine Class of Service

Step 2 - From Appropriate Service Class Table, Select Reducer Size And Ration That Meets Application HP And Driven RPM Requirements:

Twin Taper Bushed _____ Short Shaft Twin Tapered _____

Step 3 - Select Reducer Accessories Required For Application:

Motor Mount: _____ Tie Rod: _____ Backstop: _____

Belt Guard: _____ Cooling Fan: _____

Bushing Cover: _____ Harsh Duty Breather: _____

Other: _____

Belt Drive Specification:

Service Factor _____ Belt Drive Ratio Needed _____

Belt Center Distance _____ Type of Belt Desired _____

Driver: Shaft Diameter _____ Driven: Shaft Diameter _____

Sheave _____ Sheave _____

Bushing _____ Bushing _____

Belts: Size _____ Quantity _____

Screw Conveyor Shaft Mount Speed Reducers

Selection Guide: TA II Screw Conveyor Drive Reducers

This is a handy reference sheet for quick selection and specification of Dodge screw conveyor drive reducers. Use it to identify information needed to make an accurate selection with a step-by-step selection format for choosing reducer, accessories and v-drive.
Use this page to make your own selections or send this form, with application data to Dodge for assistance.

Name _____ Company Name _____

Phone No. _____ Fax. No. _____

Application Data:

Type of Driven Equipment _____

Hours of Service Per Day _____ Class of Service _____

Type of Load: Uniform _____ Moderate _____ Shock _____

Motor Type: HP _____ RPM _____ Frame Size _____ Shaft Size _____

Screw Conveyor RPM _____

Drive Shaft Diameter And Type _____

Adapter Type _____

Unusual Ambient Temperature _____

Other Pertinent Application Characteristics (i.e. - Dusty Environment, Reversing Duty, Start/Stop Cycles, Etc.) _____

Reducer Drive Selection:

Step 1 Determine Class of Service _____

Step 2 From Appropriate Service Class Table, Select Reducer Size And Rotation That Meets Application HP and Driven RPM Requirements _____

Step 3 Select Drive Shaft With Diameter To Fit Screw Size _____

Determine Type Of Drive Shaft Needed: 3-Hole Standard _____ 3-Hole Stainless _____

Step 4 Select Adapter: Standard _____

Adjustable Packing Kit _____

Step 5 Select accessories required for application:

Motor Mount: _____ Belt Guard: _____ Cooling Fan: _____

Bushing Cover: _____ Harsh Duty Breather: _____ Other: _____

V-Belt Drive Specification:

Service Factor _____ V-Belt Drive Ratio Needed _____

Belt Center Distance _____ Type of Belt Desired _____

Driver: Shaft Diameter _____ Driven: Shaft Diameter _____

Sheave _____ Sheave _____

Bushing _____ Bushing _____

Belts: Size _____ Quantity _____

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Application Classification And Class Numbers

For Application Class and Service, please see pages G1-6 through G1-12.

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Class I Selections ★ (SF = 1.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
1/4	4-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1/3	4	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	5-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1/2	4	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	5-7	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	8-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–

★ See Page G2-132 for lubrication for 15 RPM and slower

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
3/4	4-6	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	7-11	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	12-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1	4-5	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	6-8	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	9-15	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	16-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1-1/2	4-5	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	6-7	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	8-12	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
1-1/2 (cont)	13-23	TA1107H31	4.9	–
		TA1107H25	6.2	–
		TA1107H15	5.5	–
	24-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
2	4	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	5-6	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	7-10	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	11-16	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	17	TA1107H31	4.8	–
		TA2115H25	3.3	–
		TA1107H15	5.4	–
	18-32	TA1107H31	4.8	–
		TA1107H25	5.9	–
		TA1107H15	5.3	–
	33-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–

Torque-Arm II Shaft Mount Speed Reducers

Class I Selections ★ (SF = 1.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
3	4-6	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	7-10	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	11-15	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	16-26	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.2	–
	27-50	TA1107H31	4.6	–
		TA1107H25	5.7	–
		TA1107H15	5.2	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	
5	4	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	5-6	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	7-10	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	11-16	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	17-25	TA3203H32	4.4	–
		TA3203H25	4.5	–
		TA3203H15	4.5	–
	26	TA3203H32	4.2	–
		TA2115H25	3.2	–
		TA2115H15	3.1	–
	27-46	TA2115H33	3.6	–
		TA2115H25	3.2	–
		TA2115H15	3.1	–

★ See Page G2-132 for lubrication for 15 RPM and slower

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
5 (cont)	47-50	TA1107H31	4.4	–
		TA1107H25	5.4	–
		TA1107H15	4.9	–
	51-80	TA1107H25	5.4	–
		TA1107H15	4.9	–
	81-89	TA1107H15	4.6	–
		TA1107H09	7.7	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	
7-1/2	4	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	5-6	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	7-9	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	10-15	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	16-25	TA4207H40	4.8	–
		TA4207H25	5.4	–
		TA4207H15	7.9	–
	26-39	TA3203H32	4.2	–
		TA3203H25	4.4	–
		TA3203H15	4.4	–
	40-50	TA2115H33	3.2	–
		TA2115H25	3.1	–
		TA2115H15	3.2	–
	51-72	TA2115H25	3.1	–
		TA2115H15	3.6	–
	73-80	TA1107H25	5.2	–
		TA1107H15	4.7	–
	81-89	TA1107H15	4.6	–
		TA1107H09	7.7	–
	90-120	TA1107H15	4.6	–
		TA1107H09	7.5	–
		TA1107H05	12.5	–
	121-145	TA1107H09	7.1	–
		TA1107H05	11.2	–
	146-163	TA0107L09	4.8	–
		TA1107H05	10.3	–
	164-200	TA0107L09	4.7	–
		TA0107L05	7.4	–
	201-400	TA0107L05	6.9	

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
10	4	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	5	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	6-8	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	9-12	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	13-20	TA5215H40	6.7	–
		TA5215H25	6.0	–
		TA5215H15	7.0	–
	21-32	TA4207H40	4.7	–
		TA4207H25	5.2	–
		TA4207H15	7.7	–
	34-50	TA3203H32	4.1	–
		TA3203H25	4.3	–
		TA3203H15	4.3	–
	51-55	TA3203H25	4.2	–
		TA3203H15	4.2	–
	56-80	TA2115H25	3.1	–
		TA2115H15	3.6	–
	81-89	TA2115H15	3.7	–
		TA2115H09	6.1	–
	90-100	TA2115H15	3.7	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	101	TA1107H15	4.5	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	102-118	TA1107H15	4.5	–
		TA1107H09	7.4	–
		TA2115H05	6.6	–
	119-120	TA1107H15	4.4	–
		TA1107H09	7.1	–
		TA1107H05	11.2	–
	121-200	TA1107H09	7.1	–
		TA1107H05	11.2	–
	201-276	TA1107H05	9.1	–
	277-400	TA0107L05	5.8	–
15	4	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	5-6	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Class I Selections ★ (SF = 1.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
15 (cont)	7-8	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	9-13	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	14-18	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	19-32	TA5215H40	6.5	–
		TA5215H25	5.9	–
		TA5215H15	6.8	–
	33-50	TA4207H40	4.5	–
		TA4207H25	5.0	–
		TA4207H15	7.3	–
	51-53	TA4207H25	4.7	–
		TA4207H15	6.8	–
	54-80	TA3203H25	4.1	–
		TA3203H15	4.2	–
	81-89	TA3203H15	4.0	–
		TA3203H09	5.2	–
	90-92	TA3203H15	4.0	–
		TA3203H09	5.3	–
		TA3203H05	11.0	–
	93-120	TA2115H15	3.7	–
		TA2115H09	6.2	–
		TA3203H05	10.4	–
	121-143	TA2115H09	6.1	–
		TA3203H05	7.7	–
	144-200	TA2115H09	6.5	–
		TA2115H05	6.4	–
	201-400	TA2115H05	6.0	–
20	4	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	5-6	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	7-8	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	9-11	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	12-18	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–

★ See Page G2-132 for lubrication for 15 RPM and slower
† See page G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducers

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
20 (cont)	19-25	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	26-45	TA5215H40	6.4	–
		TA5215H25	5.7	–
		TA5215H15	6.7	–
	46-50	TA4207H40	4.3	–
		TA4207H25	4.7	–
		TA4207H15	7.0	–
	51-75	TA4207H25	4.7	–
		TA4207H15	6.8	–
	76-80	TA4207H25	4.4	–
		TA3203H15	4.1	–
	81-89	TA3203H15	4.0	–
		TA3203H09	5.2	–
	90-103	TA3203H15	4.0	–
		TA3203H09	5.4	–
		TA4207H05	9.9	–
	104-105	TA4207H15	6.1	–
		TA3203H09	5.4	–
		TA4207H05	9.6	–
	106-120	TA4207H15	6.1	–
		TA3203H09	5.6	–
		TA3203H05	8.6	–
	121-141	TA3203H09	5.7	–
		TA3203H05	7.7	–
	142-200	TA2115H09	6.5	–
		TA3203H05	7.2	–
	201-238	TA3203H05	7.0	–
	239-400	TA2115H05	5.7	–
25	4	TDT1425 †	15.0	–
	5	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	6-7	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	8-10	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	11-15	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	16-23	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	24-32	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
25 (cont)	33-50	TA5215H40	6.3	–
		TA5215H25	5.6	–
		TA5215H15	6.5	–
	51-58	TA5215H25	5.4	–
		TA5215H15	6.3	–
	59-80	TA4207H25	4.6	–
		TA4207H15	6.7	–
	81-89	TA4207H15	6.4	–
		TA4207H09	10.1	–
	90-110	TA4207H15	6.3	–
		TA4207H09	9.9	–
		TA5215H05	13.9	–
	111-120	TA4207H15	6.0	–
		TA4207H09	9.4	–
		TA4207H05	9.5	–
	121-163	TA4207H09	9.3	–
		TA4207H05	9.3	–
	164-200	TA4207H09	8.5	–
		TA3203H05	7.0	–
	201-400	TA3203H05	7.0	–
30	4-5	TDT1425 †	15.0	–
	6	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	7-9	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	10-12	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.3	–
	13-18	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	19-28	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	29-30	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	31-39	TA6307H40	6.2	–
		TA6307H25	6.2	–
		TA6307H15	6.3	–
	40-50	TA5215H40	6.2	–
		TA5215H25	5.5	–
		TA5215H15	6.4	–
	51-72	TA5215H25	5.4	–
		TA5215H15	6.3	–
	73-80	TA4207H25	4.4	–
		TA4207H15	6.5	–

Torque-Arm II Shaft Mount Speed Reducers

Class I Selections * (SF = 1.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
30 (cont)	81-89	TA4207H15	6.4	–
		TA4207H09	10.1	–
	90-120	TA4207H15	6.3	–
		TA4207H09	9.9	–
		TA5215H05	13.9	–
	121-132	TA4207H09	9.3	–
		TA5215H05	11.8	–
	133-200	TA4207H09	9.1	–
		TA4207H05	9.2	–
	201-215	TA4207H05	9.3	–
	216-400	TA3203H05	7.0	–
40	4	TDT1530 †	15.0	–
	5-6	TDT1425 †	15.0	–
	7	TA12608H40	17.2	–
		TDT1425 †	15.0	–
	8	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	9-12	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	13-17	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.5	–
	18-25	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	26-38	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	39-50	TA6307H40	6.2	–
		TA6307H25	6.2	–
		TA6307H15	6.2	–
	51-54	TA6307H25	6.2	–
		TA6307H15	6.2	–
	55-80	TA5215H25	5.4	–
		TA5215H15	6.3	–
	81-89	TA5215H15	6.0	–
		TA5215H09	9.1	–
	90-102	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA5215H05	13.9	–
40 (cont)	103-107	TA4207H15	6.1	–
		TA5215H09	8.6	–
		TA5215H05	12.9	–
	108-120	TA4207H15	6.0	–
		TA4207H09	9.5	–
		TA5215H05	12.6	–
	121-182	TA4207H09	9.3	–
		TA5215H05	11.8	–
	183-185	TA4207H09	8.1	–
		TA4207H05	9.1	–
	186-200	TA4207H09	8.0	–
		TA4207H05	9.2	–
	201-400	TA4207H05	9.8	–
50	4-5	TDT1530 †	15.0	–
	6-8	TDT1425 †	15.0	–
	9-10	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	11-15	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	16-17	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.5	–
	18-21	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.7	–
	22-27	TA8407H40	6.2	Fan
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	28-32	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	33-49	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	50	TA6307H40	6.2	Fan
		TA6307H25	6.2	–
		TA6307H15	6.2	–
	51-69	TA6307H25	6.2	–
		TA6307H15	6.2	–
	70-80	TA5215H25	5.3	Fan
		TA5215H15	6.1	–
	81-89	TA5215H15	6.0	–
		TA5215H09	9.1	–
	90-93	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA6307H05	15.1	–
50 (cont)	94-120	TA5215H15	5.6	–
		TA5215H09	8.8	–
		TA5215H05	13.6	–
	121-144	TA5215H09	8.3	–
		TA5215H05	11.8	–
	145-200	TA4207H09	8.9	–
		TA5215H05	11.2	–
	201-242	TA5215H05	9.9	–
	243-400	TA4207H05	9.7	–
60	4-6	TDT1530 †	15.0	–
	7-10	TDT1425 †	15.0	–
	11-13	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.9	–
	14-18	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	19	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.7	–
	20-26	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	27-30	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA8407H15	6.2	–
	31-39	TA8407H40	6.2	Fan
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	40-50	TA7315H40	6.2	Fan
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	51-60	TA7315H25	6.2	–
		TA7315H15	6.2	–
	61-80	TA6307H25	6.2	–
		TA6307H15	6.2	–
	81-88	TA6307H15	6.3	–
		TA6307H09	9.9	–
	89	TA5215H15	5.7	Fan
		TA6307H09	9.9	–
	90-93	TA5215H15	5.7	–
		TA6307H09	10.1	–
		TA6307H05	15.1	–
	94-115	TA5215H15	5.6	–
		TA5215H09	8.8	–
	116-120	TA5215H15	5.1	Fan
		TA5215H09	8.4	–
	121-131	TA5215H09	8.3	–
		TA6307H05	14.5	–

* See Page G2-132 for lubrication for 15 RPM and slower
† See page G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducers

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Class I Selections * (SF = 1.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
60 (cont)	132-200	TA5215H09	7.9	–
		TA5215H05	11.4	–
	201-400	TA5215H05	9.9	–
75	5-8	TDT1530 †	15.0	–
	9-13	TDT1425 †	15.0	–
	14-16	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.2	–
	17-23	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	24-33	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.8	–
	34-37	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA8407H15	6.2	Fan
	38-49	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA8407H15	6.2	–
	50	TA7315H40	6.2	Fan
		TA7315H25	6.2	Fan
		TA7315H15	6.2	–
	51-77	TA7315H25	6.2	Fan
		TA7315H15	6.2	–
	78-80	TA6307H25	6.2	Fan
		TA6307H15	6.2	Fan
	81-89	TA6307H15	6.3	Fan
		TA6307H09	9.9	Fan
	90-101	TA6307H15	6.5	Fan
		TA6307H09	10.3	Fan
		TA7315H05	14.8	–
	102-120	TA6307H15	6.7	Fan
		TA6307H09	10.8	Fan
		TA6307H05	15.1	–
	121-129	TA6307H09	10.8	Fan
		TA6307H05	14.5	–
	130-196	TA5215H09	7.9	–
		TA6307H05	14.4	–
	197-200	TA5215H09	5.9	Fan
		TA6307H05	13.9	–
	201-208	TA6307H05	13.8	–
	209-400	TA5215H05	9.7	–

* See Page G2-132 for lubrication for 15 RPM and slower
† See page G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducers

P&C (Pump & Coolers) - Use the Dodge Speed Reducer auxiliary cooling package, part number 273933

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
100	6-11	TDT1530 †	15.0	–
	12-17	TDT1425 †	15.0	–
	18-19	TA12608H40	17.1	Fan
		TA12608H25	9.5	–
		TA12608H15	14.4	–
	20-22	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.6	–
	23-26	TA10507H40	8.5	Fan
		TA10507H25	8.5	Fan
		TA10507H15	10.7	–
	27-31	TA10507H40	8.5	Fan
		TA10507H25	8.5	–
		TA10507H15	10.6	–
	32-46	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.8	Fan
	47-50	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA8407H15	6.2	Fan
	51-68	TA8407H25	6.2	Fan
		TA8407H15	7.0	Fan
	69-80	TA7315H25	6.2	Fan
		TA7315H15	6.2	Fan
	81-110	TA7315H15	6.2	Fan
		TA7315H09	8.5	Fan
	111	TA6307H15	6.6	Fan
		TA6307H09	10.5	Fan
	112-120	TA6307H15	6.7	Fan
		TA6307H09	10.8	Fan
		TA7315H05	13.2	–
	121-157	TA6307H09	10.9	Fan
		TA7315H05	12.8	–
	158-200	TA6307H09	10.9	Fan
		TA6307H05	14.2	–
	201-400	TA6307H05	13.8	–
125	8-14	TDT1530 †	15.0	–
	15-21	TDT1425 †	15.0	–
	22-26	TA12608H40	17.1	Fan
		TA12608H25	9.5	Fan
		TA12608H15	14.8	Fan
	27-28	TA12608H40	17.1	Fan
		TA12608H25	9.5	Fan
		TA12608H15	14.9	–
	29	TA10507H40	8.5	Fan
		TA12608H25	9.5	Fan
		TA12608H15	14.9	–
	30-40	TA10507H40	8.5	Fan
		TA10507H25	8.5	Fan
		TA10507H15	10.8	Fan

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
125 (cont)	41-50	TA9415H40	8.0	P&C
		TA9415H25	8.0	P&C
		TA9415H15	10.8	Fan
	51-59	TA9415H25	8.0	P&C
		TA9415H15	10.8	Fan
	60-80	TA8407H25	6.2	P&C
		TA8407H15	7.5	Fan
	81-88	TA8407H15	7.8	Fan
	89-90	TA7315H15	6.2	Fan
	91-120	TA7315H15	6.2	Fan
		TA7315H09	8.5	Fan
	121-149	TA7315H09	8.6	Fan
	150-160	TA6307H09	10.9	Fan
	161-200	TA6307H09	10.8	Fan
		TA7315H05	11.9	–
	201-225	TA7315H05	11.7	–
	226-368	TA6307H05	12.8	–
	369-400	TA6307H05	10.9	Fan
150	9-17	TDT1530 †	15.0	–
	18-26	TDT1425 †	15.0	–
	27	TA12608H40	17.1	P&C
	28-34	TA12608H40	17.1	Fan
		TA12608H25	9.5	Fan
		TA12608H15	15.1	Fan
	35-36	TA10507H40	8.5	P&C
		TA12608H25	9.5	Fan
		TA12608H15	15.2	Fan
	37-49	TA10507H40	8.5	P&C
		TA10507H25	8.5	Fan
		TA10507H15	11.3	–
	50	TA9415H40	8.0	P&C
		TA9415H25	8.0	P&C
		TA9415H15	10.8	Fan
	51-72	TA9415H25	8.0	P&C
		TA9415H15	10.8	Fan
	73-80	TA8407H25	6.2	P&C
		TA8407H15	7.5	Fan
	81-112	TA8407H15	8.6	Fan
	113	TA7315H15	6.2	Fan
	114-120	TA7315H15	6.2	Fan
		TA7315H09	8.5	Fan
	121-200	TA7315H09	8.6	Fan
	213-400	TA7315H05	11.5	–
200	12-23	TDT1530 †	15.0	–
	24-35	TDT1425 †	15.0	–
	36-47	TA12608H40	17.1	P&C
		TA12608H25	9.5	Fan
		TA12608H15	15.6	Fan
	48-50	TA10507H40	8.5	P&C
		TA12608H25	9.5	P&C
		TA12608H15	15.7	Fan

Torque-Arm II Shaft Mount Speed Reducers

Class I Selections * (SF = 1.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
200 (cont)	51	TA12608H25	9.6	Fan
		TA12608H15	15.7	Fan
	52-67	TA10507H25	8.8	P&C
		TA10507H15	12.4	Fan
	68	TA9415H25	8.0	P&C
		TA10507H15	12.5	Fan
	69-80	TA9415H25	8.0	P&C
		TA9415H15	10.7	P&C
	81-100	TA9415H15	10.5	P&C
	101-120	TA8407H15	8.7	P&C
	172-200	TA7315H09	8.4	P&C
	331-400	TA7315H05	10.8	Fan
250	16-30	TDT1530 †	15.0	–
	31-43	TDT1425 †	15.0	Fan
	44-50	TA12608H40	17.1	P&C
		TA12608H25	9.5	P&C
		TA12608H15	15.7	P&C
	51-67	TA12608H25	10.4	P&C
		TA12608H15	16.1	P&C
	68-75	TA10507H25	9.2	P&C
		TA10507H15	13.0	P&C
	76-80	TA10507H25	9.4	P&C
		TA10507H15	13.4	P&C
	81-90	TA10507H15	13.6	P&C
	91-120	TA9415H15	10.3	P&C
300	19-36	TDT1530 †	15.0	–
	37-52	TDT1425 †	15.0	P&C
	53-80	TA12608H25	10.7	P&C
		TA12608H15	16.1	P&C
	81-83	TA12608H15	15.6	P&C
	84-115	TA10507H15	13.6	P&C
	116-120	TA9415H15	10.2	P&C
350	23-42	TDT1530 †	15.0	Fan
	43-61	TDT1425 †	15.0	P&C
	62-80	TA12608H25	10.7	P&C
		TA12608H15	16.1	P&C
	81-103	TA12608H15	15.6	P&C
	104-120	TA10507H15	13.5	P&C
400	27-50	TDT1530 †	15.0	Fan
	51-70	TDT1425 †	15.0	P&C
	71-80	TA12608H25	10.7	P&C
		TA12608H15	16.1	P&C
	81-120	TA12608H15	15.6	P&C
450	30-31	TDT1530 †	15.0	P&C
	32-57	TDT1530 †	15.0	Fan
	59-75	TDT1425 †	15.0	P&C
	84-120	TA12608H15	15.5	P&C
500	34-57	TDT1530 †	15.0	P&C
	66-75	TDT1425 †	15.0	P&C
	97-120	TA12608H15	15.1	P&C
600	41-57	TDT1530 †	15.0	P&C
700	50-57	TDT1530 †	15.0	P&C

* See Page G2-132 for lubrication for 15 RPM and slower

† See page G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducers

P&C (Pump & Coolers) - Use the Dodge Speed Reducer auxiliary cooling package, part number 273933

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Class II Selections * (SF = 1.4)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
1/4	4-5	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	6-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1/3	4-6	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	7-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1/2	4-5	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	6-10	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	11-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
3/4	4-5	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–

* See Page G2-132 for lubrication for 15 RPM and slower

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
3/4 (cont)	6-8	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	9-16	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	17-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1	4	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	5-7	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	8-11	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	12-21	TA1107H31	4.9	–
		TA1107H25	6.3	–
		TA1107H15	5.5	–
	22-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1-1/2	4	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	5-7	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	8-10	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	11-17	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
1-1/2 (cont)	18-34	TA1107H31	4.8	–
		TA1107H25	5.9	–
		TA1107H15	5.3	–
	35-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
2	4-5	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	6-9	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	10-14	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	15-24	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	25-46	TA1107H31	4.7	–
		TA1107H25	5.7	–
		TA1107H15	5.2	–
	47-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
3	4-5	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	6-8	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	9-14	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	15-21	TA3203H32	4.5	–
		TA3203H25	4.5	–
		TA3203H15	4.5	–

Torque-Arm II Shaft Mount Speed Reducers

Class II Selections * (SF = 1.4)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
3 (cont)	22-38	TA2115H33	3.6	–
		TA2115H25	3.3	–
		TA2115H15	3.2	–
	39-50	TA1107H31	4.5	–
		TA1107H25	5.5	–
		TA1107H15	5.0	–
	51-73	TA1107H25	5.4	–
		TA1107H15	4.9	–
	74-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
5	4	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	5-6	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	7-8	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	9-14	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	15-23	TA4207H40	4.9	–
		TA4207H25	5.4	–
		TA4207H15	7.9	–
	24-36	TA3203H32	4.3	–
		TA3203H25	4.4	–
		TA3203H15	4.4	–
	37-50	TA2115H33	3.3	–
		TA2115H25	3.1	–
		TA2115H15	3.2	–
	51-67	TA2115H25	3.1	–
		TA2115H15	3.5	–
	68-80	TA1107H25	5.2	–
		TA1107H15	4.7	–
	81-89	TA1107H15	4.6	–
		TA1107H09	7.7	–
	90-120	TA1107H15	4.6	–
		TA1107H09	7.5	–
		TA1107H05	12.5	–
	121-131	TA1107H09	7.1	–
		TA1107H05	11.2	–
	132-146	TA0107L09	5.0	–
		TA1107H05	10.8	–
	147-200	TA0107L09	4.8	–
		TA0107L05	7.7	–
	201-400	TA0107L05	6.9	–

* See Page G2-132 for lubrication for 15 RPM and slower

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
7-1/2	4	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	5-6	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	7-9	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	10-13	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	14-21	TA5215H40	6.7	–
		TA5215H25	6.0	–
		TA5215H15	7.0	–
	22-35	TA4207H40	4.7	–
		TA4207H25	5.2	–
		TA4207H15	7.7	–
	36-50	TA3203H32	4.1	–
		TA3203H25	4.3	–
		TA3203H15	4.3	–
	51-58	TA3203H25	4.2	–
		TA3203H15	4.2	–
	59-80	TA2115H25	3.1	–
		TA2115H15	3.6	–
	81-89	TA2115H15	3.7	–
		TA2115H09	6.1	–
	90-105	TA2115H15	3.7	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	106-108	TA1107H15	4.5	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	109-120	TA1107H15	4.5	–
		TA1107H09	7.3	–
		TA2115H05	6.6	–
	121-127	TA1107H09	7.1	–
		TA2115H05	6.6	–
	128-200	TA1107H09	7.0	–
		TA1107H05	10.9	–
	201-306	TA1107H05	9.1	–
	307-400	TA0107L05	5.5	–
10	4	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	5	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	6-8	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	9-12	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	13-17	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
10 (cont)	18-29	TA5215H40	6.6	–
		TA5215H25	5.9	–
		TA5215H15	6.8	–
	30-49	TA4207H40	4.5	–
		TA4207H25	5.0	–
		TA4207H15	7.4	–
	50	TA3203H32	4.0	–
		TA3203H25	4.2	–
		TA3203H15	4.2	–
	51-80	TA3203H25	4.2	–
		TA3203H15	4.2	–
	81-84	TA3203H15	4.0	–
		TA3203H09	5.1	–
	85-89	TA2115H15	3.7	–
		TA2115H09	6.1	–
	90-120	TA2115H15	3.7	–
		TA2115H09	6.2	–
		TA3203H05	11.0	–
	121-127	TA2115H09	6.1	–
		TA3203H05	7.7	–
	128-162	TA2115H09	6.2	–
		TA2115H05	6.5	–
	163-200	TA1107H09	6.5	–
		TA2115H05	6.3	–
	201-209	TA2115H05	6.0	–
	210-400	TA1107H05	8.9	–
15	4	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	5-6	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	7-8	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	9-12	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	13-19	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	20-26	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	27-47	TA5215H40	6.4	–
		TA5215H25	5.7	–
		TA5215H15	6.6	–
	48-50	TA4207H40	4.2	–
		TA4207H25	4.7	–
		TA4207H15	6.9	–
	51-80	TA4207H25	4.7	–
		TA4207H15	6.8	–
	81	TA3203H15	4.0	–
		TA4207H09	10.1	–
	82-89	TA3203H15	4.0	–
		TA3203H09	5.2	–

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Class II Selections * (SF = 1.4)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
15 (cont)	90-92	TA3203H15	4.0	–
		TA3203H09	5.3	–
		TA5215H05	13.9	–
	93-118	TA3203H15	4.0	–
		TA3203H09	5.5	–
		TA4207H05	9.8	–
	119-120	TA3203H15	4.0	–
		TA3203H09	5.6	–
		TA3203H05	7.7	–
	121-149	TA3203H09	5.7	–
		TA3203H05	7.7	–
	150-200	TA2115H09	6.5	–
		TA3203H05	7.0	–
	201-260	TA3203H05	7.0	–
	261-400	TA2115H05	5.6	–
20	4	TDT1425 †	15.0	–
	5	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	6-8	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	9-11	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.3	–
	12-17	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	18-26	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	27-36	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	37-50	TA5215H40	6.2	–
		TA5215H25	5.6	–
		TA5215H15	6.5	–
	51-67	TA5215H25	5.4	–
		TA5215H15	6.3	–
	68-80	TA4207H25	4.5	–
		TA4207H15	6.6	–
	81-89	TA4207H15	6.4	–
		TA4207H09	10.1	–
	90-115	TA4207H15	6.3	–
		TA4207H09	9.9	–
		TA5215H05	13.9	–
	116-120	TA4207H15	5.9	–
		TA3203H09	5.6	–
		TA5215H05	12.1	–
	121-123	TA3203H09	5.6	–
		TA5215H05	11.8	–
	124-194	TA3203H09	5.7	–
		TA4207H05	9.3	–
20 (cont)	195-200	TA3203H09	5.5	–
		TA3203H05	7.0	–
	201-400	TA3203H05	7.0	–
25	4-6	TDT1425 †	15.0	–
	7	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	8-10	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	11-14	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.4	–
	15-21	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	22-33	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	34-46	TA6307H40	6.2	–
		TA6307H25	6.2	–
		TA6307H15	6.2	–
	47-50	TA5215H40	6.1	–
		TA5215H25	5.5	–
		TA5215H15	6.3	–
	51-80	TA5215H25	5.4	–
		TA5215H15	6.3	–
	81-87	TA5215H15	6.0	–
		TA5215H09	9.1	–
	88-89	TA4207H15	6.3	–
		TA5215H09	8.9	–
	90-91	TA4207H15	6.3	–
		TA5215H09	8.9	–
		TA5215H05	13.9	–
	92-120	TA4207H15	6.3	–
		TA4207H09	9.8	–
		TA5215H05	13.7	–
	121-154	TA4207H09	9.3	–
		TA5215H05	11.8	–
	155-200	TA4207H09	8.7	–
		TA4207H05	9.2	–
	201-269	TA4207H05	9.8	–
	270-400	TA3203H05	7.0	–
30	4	TDT1530 †	15.0	–
	5-7	TDT1425 †	15.0	–
	8	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	9-12	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	13-18	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.6	–
	19-26	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
30 (cont)	27-41	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	42-50	TA6307H40	6.2	–
		TA6307H25	6.2	–
		TA6307H15	6.2	–
	51-56	TA6307H25	6.2	–
		TA6307H15	6.2	–
	57-80	TA5215H25	5.4	–
		TA5215H15	6.2	–
	81-89	TA5215H15	6.0	–
		TA5215H09	9.1	–
	90-110	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA5215H05	13.9	–
	111-114	TA4207H15	6.0	–
		TA5215H09	8.5	–
		TA5215H05	12.4	–
	115-120	TA4207H15	5.9	–
		TA4207H09	9.4	–
		TA5215H05	12.1	–
	121-195	TA4207H09	9.3	–
		TA5215H05	11.8	–
	196-200	TA4207H09	7.8	–
		TA4207H05	9.2	–
	201-348	TA4207H05	9.8	–
	349-400	TA3203H05	7.0	–
40	4-6	TDT1530 †	15.0	–
	7-9	TDT1425 †	15.0	–
	10-12	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.9	–
	13-17	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	18-24	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.7	–
	25-36	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	37-50	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	51-56	TA7315H25	6.2	–
		TA7315H15	6.2	–
	57-78	TA6307H25	6.2	–
		TA6307H15	6.2	–
	79-80	TA5215H25	5.2	–
		TA5215H15	6.0	–
	81-85	TA5215H15	6.0	–
		TA6307H09	9.8	–
	86-89	TA5215H15	5.8	–
		TA5215H09	9.0	–
	90-112	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA6307H05	15.1	–

* See Page G2-132 for lubrication for 15 RPM and slower

† See Pages G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducers

Torque-Arm II Shaft Mount Speed Reducers

Class II Selections * (SF = 1.4)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
40 (cont)	113-120	TA5215H15	5.1	–
		TA5215H09	8.4	–
		TA5215H05	12.3	–
	121-173	TA5215H09	8.3	–
		TA5215H05	11.8	–
	174-200	TA4207H09	8.2	–
		TA5215H05	10.4	–
	201-299	TA5215H05	9.9	–
	300-400	TA4207H05	8.8	–
50	5-8	TDT1530 †	15.0	–
	9-12	TDT1425 †	15.0	–
	13-15	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.1	–
	16-21	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	22-31	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	32-43	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	44-46	TA8407H40	6.2	Fan
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	47-50	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	51-71	TA7315H25	6.2	–
		TA7315H15	6.2	–
	72-80	TA6307H25	6.2	–
		TA6307H15	6.2	–
	81-89	TA6307H15	6.3	–
		TA6307H09	9.9	–
	90-91	TA6307H15	6.3	–
		TA6307H09	10.0	–
		TA7315H05	14.8	–
	92-114	TA6307H15	6.6	–
		TA6307H09	10.6	–
		TA6307H05	15.1	–
	115-116	TA6307H15	6.7	–
		TA5215H09	8.4	–
		TA6307H05	14.7	–
	117-120	TA5215H15	5.1	–
		TA5215H09	8.4	–
		TA6307H05	14.6	–
	121-177	TA5215H09	8.3	–
		TA6307H05	14.5	–
	178-200	TA5215H09	6.3	–
		TA5215H05	10.4	–
	201-400	TA5215H05	9.9	–
60	5-9	TDT1530 †	15.0	–
	10-14	TDT1425 †	15.0	–
	15-18	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.3	–
	19-26	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	27-38	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	39-50	TA8407H40	6.2	Fan
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	51-56	TA8407H25	6.2	–
		TA8407H15	6.5	–
	57-80	TA7315H25	6.2	–
		TA7315H15	6.2	–
	81-89	TA7315H15	6.2	–
		TA7315H09	8.1	–
	90-120	TA6307H15	6.7	–
		TA6307H09	10.8	–
		TA7315H05	14.8	–
	121	TA6307H09	10.8	–
		TA7315H05	12.8	–
	122-195	TA6307H09	10.9	–
		TA6307H05	14.5	–
	196-199	TA6307H09	10.1	Fan
		TA6307H05	13.9	–
	200	TA5215H09	5.8	–
		TA6307H05	13.8	–
	201-282	TA6307H05	13.8	–
	283-400	TA5215H05	8.4	–
75	7-12	TDT1530 †	15.0	–
	13-18	TDT1425 †	15.0	–
	19-23	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.6	–
	24	TA10507H40	8.5	–
		TA12608H25	9.5	–
		TA12608H15	14.7	–
	25-33	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.7	–
	34-48	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.8	–
	49	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA9415H15	10.8	–
	50	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA8407H15	6.2	–
	51-72	TA8407H25	6.2	Fan
		TA8407H15	7.2	–
	73-80	TA7315H25	6.2	Fan
		TA7315H15	6.2	–
75 (cont)	81-111	TA7315H15	6.2	–
		TA7315H09	8.5	–
	112-117	TA7315H15	6.2	–
		TA7315H09	8.5	–
	118-120	TA6307H15	6.7	Fan
		TA6307H09	10.8	Fan
	121-169	TA6307H09	10.9	Fan
		TA7315H05	12.8	–
	170-200	TA6307H09	10.7	Fan
		TA6307H05	14.0	–
	201-400	TA6307H05	13.8	–
100	8-16	TDT1530 †	15.0	–
	17-24	TDT1425 †	15.0	–
	25-32	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	15.1	–
	33	TA10507H40	8.5	Fan
		TA12608H25	9.5	–
		TA12608H15	15.1	–
	34-45	TA10507H40	8.5	Fan
		TA10507H25	8.5	–
		TA10507H15	11.1	–
	46-50	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.8	Fan
	51-67	TA9415H25	8.0	Fan
		TA9415H15	10.8	Fan
	68-80	TA8407H25	6.2	Fan
		TA8407H15	7.5	Fan
	81-102	TA8407H15	8.3	Fan
	103	TA7315H15	6.2	Fan
	104-120	TA7315H15	6.2	Fan
		TA7315H09	8.5	Fan
	121-180	TA7315H09	8.6	Fan
	181-190	TA6307H09	10.4	Fan
	191-200	TA6307H09	10.2	Fan
		TA7315H05	11.7	–
	201-274	TA7315H05	11.7	–
	275-400	TA6307H05	12.0	–
125	11-20	TDT1530 †	15.0	–
	21-30	TDT1425 †	15.0	–
	31-41	TA12608H40	17.1	Fan
		TA12608H25	9.5	–
		TA12608H15	15.4	–
	42-43	TA10507H40	8.5	Fan
		TA12608H25	9.5	–
		TA12608H15	15.5	–
	44-50	TA10507H40	8.5	Fan
		TA10507H25	8.5	Fan
		TA10507H15	11.3	Fan
	51-58	TA10507H25	8.5	Fan
		TA10507H15	11.8	Fan
	59-80	TA9415H25	8.0	Fan
		TA9415H15	10.8	Fan
	81-85	TA9415H15	10.5	Fan
	86-120	TA8407H15	8.7	Fan
	141-200	TA7315H09	8.6	Fan
	272-400	TA7315H05	10.9	–

* See Page G2-132 for lubrication for 15 RPM and slower

† See page G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducers

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Class II Selections * (SF = 1.4)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
150	13-25	TDT1530 †	15.0	–
	26-36	TDT1425 †	15.0	–
	37-50	TA12608H40	17.1	Fan
		TA12608H25	9.5	Fan
		TA12608H15	15.7	Fan
	51-54	TA12608H25	9.6	Fan
		TA12608H15	15.8	Fan
	55-71	TA10507H25	9.0	Fan
		TA10507H15	12.7	Fan
	72	TA9415H25	8.0	P&C
		TA10507H15	12.8	Fan
	73-80	TA9415H25	8.0	P&C
		TA9415H15	10.6	Fan
	81-105	TA9415H15	10.5	Fan
	106-120	TA8407H15	8.7	Fan
	189-200	TA7315H09	8.2	Fan
	368-400	TA7315H05	10.1	–
200	18-33	TDT1530 †	15.0	–
	34-49	TDT1425 †	15.0	Fan
	50	TA12608H40	17.1	P&C
		TA12608H25	9.5	Fan
		TA12608H15	15.7	Fan
	51-76	TA12608H25	10.7	Fan
		TA12608H15	16.1	Fan
	77-80	TA10507H25	9.4	P&C
		TA10507H15	13.4	Fan
	81-105	TA10507H15	13.6	Fan
	106-120	TA9415H15	10.2	P&C

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
250	23-42	TDT1530 †	15.0	–
	43-61	TDT1425 †	15.0	P&C
	62-80	TA12608H25	10.7	P&C
		TA12608H15	16.1	P&C
	81-103	TA12608H15	15.6	P&C
	104-120	TA10507H15	13.5	P&C
300	28-53	TDT1530 †	15.0	–
	54-75	TDT1425 †	15.0	P&C
	76-80	TA12608H25	10.7	P&C
		TA12608H15	15.8	P&C
	81-120	TA12608H15	15.6	P&C
350	33-57	TDT1530 †	15.0	–
	66-75	TDT1425 †	15.0	P&C
	94-120	TA12608H15	15.2	P&C
400	38-57	TDT1530 †	15.0	Fan
	114-120	TA12608H15	15.1	P&C
450	43-57	TDT1530 †	15.0	Fan
500	50-57	TDT1530 †	15.0	Fan

* See Page G2-132 for lubrication for 15 RPM and slower

† See Pages G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducers

P&C (Pump & Coolers) - Use the Dodge Speed Reducer Auxiliary cooling package, part number 273933

Torque-Arm II Shaft Mount Speed Reducers

Class III Selections * (SF = 2.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
1/4	4	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	5-7	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	8-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1/3	4-5	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	6-9	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	10-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1/2	4-5	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	6-8	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	9-15	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	16-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–

* See Page G2-132 for lubrication for 15 RPM and slower

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
1/2 (cont)	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
3/4	4-5	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	6-7	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	8-12	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	13-23	TA1107H31	4.9	–
		TA1107H25	6.2	–
		TA1107H15	5.5	–
	24-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1	4	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	5-6	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	7-10	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	11-16	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	17	TA1107H31	4.8	–
		TA2115H25	3.3	–
		TA1107H15	5.4	–
	18-32	TA1107H31	4.8	–
		TA1107H25	5.9	–
		TA1107H15	5.3	–
	33-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
1 (cont)	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1-1/2	4-6	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	7-10	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	11-15	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	16-26	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.2	–
	27-50	TA1107H31	4.6	–
		TA1107H25	5.7	–
		TA1107H15	5.2	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
2	4-5	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	6-8	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	9-13	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	14-20	TA3203H32	4.5	–
		TA3203H25	4.5	–
		TA3203H15	4.6	–
	21-36	TA2115H33	3.6	–
		TA2115H25	3.3	–
		TA2115H15	3.2	–
	37-50	TA1107H31	4.5	–
		TA1107H25	5.6	–
		TA1107H15	5.0	–
	51-69	TA1107H25	5.4	–
		TA1107H15	4.9	–
	70-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–

Torque-Arm II Shaft Mount Speed Reducers

Class III Selections * (SF = 2.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
2 (cont)	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
3	4-5	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	6-7	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	8-12	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	13-20	TA4207H40	4.9	–
		TA4207H25	5.5	–
		TA4207H15	8.0	–
	21-30	TA3203H32	4.3	–
		TA3203H25	4.4	–
		TA3203H15	4.4	–
	31	TA3203H32	4.1	–
		TA2115H25	3.1	–
		TA2115H15	3.1	–
	32-50	TA2115H33	3.5	–
		TA2115H25	3.1	–
		TA2115H15	3.2	–
	51-56	TA2115H25	3.1	–
		TA2115H15	3.3	–
	57-80	TA1107H25	5.3	–
		TA1107H15	4.8	–
	81-89	TA1107H15	4.6	–
		TA1107H09	7.7	–
	90-109	TA1107H15	4.6	–
		TA1107H09	7.5	–
		TA1107H05	12.5	–
	110-113	TA1107H15	4.5	–
		TA0107L09	5.1	–
		TA1107H05	11.6	–
	114	TA0107L15	4.0	–
		TA0107L09	5.1	–
		TA1107H05	11.4	–
	115-120	TA0107L15	4.0	–
		TA0107L09	5.1	–
		TA0107L05	8.4	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
5	4	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	5	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
5 (cont)	6-8	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	9-12	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	13-20	TA5215H40	6.7	–
		TA5215H25	6.0	–
		TA5215H15	7.0	–
	21-33	TA4207H40	4.7	–
		TA4207H25	5.2	–
		TA4207H15	7.7	–
	34-50	TA3203H32	4.1	–
		TA3203H25	4.3	–
		TA3203H15	4.3	–
	51-55	TA3203H25	4.2	–
		TA3203H15	4.2	–
	56-80	TA2115H25	3.1	–
		TA2115H15	3.6	–
	81-89	TA2115H15	3.7	–
		TA2115H09	6.1	–
	90-100	TA2115H15	3.7	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	101	TA1107H15	4.5	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	102-118	TA1107H15	4.5	–
		TA1107H09	7.4	–
		TA2115H05	6.6	–
	119-120	TA1107H15	4.4	–
		TA1107H09	7.1	–
		TA1107H05	11.2	–
	121-200	TA1107H09	7.1	–
		TA1107H05	11.2	–
	201-276	TA1107H05	9.1	–
	277-400	TA0107L05	5.8	–
7-1/2	4	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	5-6	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	7-8	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	9-13	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	14-18	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	19-32	TA5215H40	6.5	–
		TA5215H25	5.9	–
		TA5215H15	6.8	–

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
7-1/2 (cont)	33-50	TA4207H40	4.5	–
		TA4207H25	5.0	–
		TA4207H15	7.3	–
	51-53	TA4207H25	4.7	–
		TA4207H15	6.8	–
	54-80	TA3203H25	4.1	–
		TA3203H15	4.2	–
	81-89	TA3203H15	4.0	–
		TA3203H09	5.2	–
	90-92	TA3203H15	4.0	–
		TA3203H09	5.3	–
		TA3203H05	11.0	–
	93-120	TA2115H15	3.7	–
		TA2115H09	6.2	–
		TA3203H05	10.4	–
	121-143	TA2115H09	6.1	–
		TA3203H05	7.7	–
	144-181	TA2115H09	6.3	–
		TA2115H05	6.4	–
	182-200	TA1107H09	6.2	–
		TA2115H05	6.2	–
	201-237	TA2115H05	6.0	–
	238-400	TA1107H05	8.4	–
10	4	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	5-6	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	7-8	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	9-11	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	12-18	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	19-25	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	26-45	TA5215H40	6.4	–
		TA5215H25	5.7	–
		TA5215H15	6.7	–
	46-50	TA4207H40	4.3	–
		TA4207H25	4.7	–
		TA4207H15	7.0	–
	51-75	TA4207H25	4.7	–
		TA4207H15	6.8	–
	76-80	TA3203H25	4.0	–
		TA3203H15	4.1	–
	81-89	TA3203H15	4.0	–
		TA3203H09	5.2	–
	90-105	TA3203H15	4.0	–
		TA3203H09	5.4	–
		TA4207H05	9.9	–

* See Page G2-132 for lubrication for 15 RPM and slower
† See Pages G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducer

Torque-Arm II Shaft Mount Speed Reducers

Class III Selections * (SF = 2.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
10 (cont)	106-120	TA3203H15	4.0	–
		TA3203H09	5.6	–
		TA3203H05	8.6	–
	121-141	TA3203H09	5.7	–
		TA3203H05	7.7	–
	142-200	TA2115H09	6.5	–
		TA3203H05	7.2	–
	201-238	TA3203H05	7.0	–
	239-400	TA2115H05	5.7	–
15	4-5	TDT1425 †	15.0	–
	6	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	7-9	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	10-12	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.3	–
	13-18	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	19-28	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	29-39	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	40-50	TA5215H40	6.2	–
		TA5215H25	5.5	–
		TA5215H15	6.4	–
	51-72	TA5215H25	5.4	–
		TA5215H15	6.3	–
	73-80	TA4207H25	4.4	–
		TA4207H15	6.5	–
	81-89	TA4207H15	6.4	–
		TA4207H09	10.1	–
	90-120	TA4207H15	6.3	–
		TA4207H09	9.9	–
		TA5215H05	13.9	–
	121-125	TA4207H09	9.3	–
		TA5215H05	11.8	–
	126-132	TA3203H09	5.7	–
		TA5215H05	11.6	–
	133-200	TA3203H09	5.7	–
		TA4207H05	9.2	–
	201-215	TA4207H05	9.3	–
	216-400	TA3203H05	7.0	–
20	4	TDT1530 †	15.0	–
	5-6	TDT1425 †	15.0	–
	7	TA12608H40	17.2	–
		TDT1425 †	15.0	–

* See Page G2-132 for lubrication for 15 RPM and slower
† See Pages G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducer

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
20 (cont)	8	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	9-12	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	13-17	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.5	–
	18-25	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	26-38	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	39-50	TA6307H40	6.2	–
		TA6307H25	6.2	–
		TA6307H15	6.2	–
	51-54	TA6307H25	6.2	–
		TA6307H15	6.2	–
	55-80	TA5215H25	5.4	–
		TA5215H15	6.3	–
	81-89	TA5215H15	6.0	–
		TA5215H09	9.1	–
	90-102	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA5215H05	13.9	–
	103-107	TA4207H15	6.1	–
		TA5215H09	8.6	–
		TA5215H05	12.9	–
	108-120	TA4207H15	6.0	–
		TA4207H09	9.5	–
		TA5215H05	12.6	–
	121-182	TA4207H09	9.3	–
		TA5215H05	11.8	–
	183-200	TA4207H09	8.1	–
		TA4207H05	9.2	–
	201-324	TA4207H05	9.8	–
	325-400	TA3203H05	7.0	–
25	4-5	TDT1530 †	15.0	–
	6-8	TDT1425 †	15.0	–
	9-10	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	11-15	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	16-21	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.7	–
	22-32	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	33-49	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
25 (cont)	50	TA6307H40	6.2	–
		TA6307H25	6.2	–
		TA6307H15	6.2	–
	51-69	TA6307H25	6.2	–
		TA6307H15	6.2	–
	70-80	TA5215H25	5.3	–
		TA5215H15	6.1	–
	81-89	TA5215H15	6.0	–
		TA5215H09	9.1	–
	90-93	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA6307H05	15.1	–
	94-120	TA5215H15	5.6	–
		TA5215H09	8.8	–
		TA5215H05	13.6	–
	121-144	TA5215H09	8.3	–
		TA5215H05	11.8	–
	145-200	TA4207H09	8.9	–
		TA5215H05	11.2	–
	201-242	TA5215H05	9.9	–
	243-400	TA4207H05	9.7	–
30	4-6	TDT1530 †	15.0	–
	7-10	TDT1425 †	15.0	–
	11-13	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.9	–
	14-18	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	19-26	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	27-39	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	40-50	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	51-60	TA7315H25	6.2	–
		TA7315H15	6.2	–
	61-80	TA6307H25	6.2	–
		TA6307H15	6.2	–
	81-88	TA6307H15	6.3	–
		TA6307H09	9.9	–
	89	TA5215H15	5.7	–
		TA6307H09	9.9	–
	90-93	TA5215H15	5.7	–
		TA6307H09	10.1	–
		TA6307H05	15.1	–
	94-120	TA5215H15	5.6	–
		TA5215H09	8.8	–
		TA6307H05	15.1	–
	121-131	TA5215H09	8.3	–
		TA6307H05	14.5	–
	132-196	TA5215H09	7.9	–
		TA5215H05	11.4	–

Torque-Arm II Shaft Mount Speed Reducers

Class III Selections * (SF = 2.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
30 (cont)	197-200	TA4207H09	7.8	–
		TA5215H05	10.0	–
	201-344	TA5215H05	9.9	–
	345-400	TA4207H05	8.2	–
40	5-9	TDT1530 †	15.0	–
	10-13	TDT1425 †	15.0	–
	14	TA12608H40	17.1	–
		TDT1425 †	15.0	–
	15-17	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.3	–
	18-25	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	26-36	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	37-50	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	51-53	TA8407H25	6.2	–
		TA8407H15	6.3	–
	54-80	TA7315H25	6.2	–
		TA7315H15	6.2	–
	81-84	TA7315H15	6.2	–
		TA7315H09	8.0	–
	85-89	TA6307H15	6.3	–
		TA6307H09	9.9	–
	90-112	TA6307H15	6.6	–
		TA6307H09	10.6	–
		TA7315H05	14.8	–
	113-120	TA6307H15	6.7	–
		TA6307H09	10.8	–
		TA6307H05	14.7	–
	121-160	TA6307H09	10.9	–
		TA6307H05	14.5	–
	161-200	TA5215H09	6.8	–
		TA6307H05	14.1	–
	201-246	TA6307H05	13.8	–
	247-400	TA5215H05	9.0	–
50	6-11	TDT1530 †	15.0	–
	12-17	TDT1425 †	15.0	–
	18-22	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.6	–
	23-31	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.7	–
	32-37	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	38-46	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.8	–

* See Page G2-132 for lubrication for 15 RPM and slower

† See Pages G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducer

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
50 (cont)	47-50	TA8407H40	6.2	Fan
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	51-68	TA8407H25	6.2	–
		TA8407H15	7.0	–
	69-80	TA7315H25	6.2	–
		TA7315H15	6.2	–
	81-110	TA7315H15	6.2	–
		TA7315H09	8.5	–
	111	TA6307H15	6.6	–
		TA6307H09	10.5	–
	112-120	TA6307H15	6.7	–
		TA6307H09	10.8	–
		TA7315H05	13.2	–
	121-157	TA6307H09	10.9	–
		TA7315H05	12.8	–
	158-200	TA6307H09	10.9	–
		TA6307H05	14.2	–
	201-400	TA6307H05	13.8	–
60	7-14	TDT1530 †	15.0	–
	15-20	TDT1425 †	15.0	–
	21	TA12608H40	17.1	–
		TDT1425 †	15.0	–
	22-27	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.8	–
	28	TA10507H40	8.5	–
		TA12608H25	9.5	–
		TA12608H15	14.9	–
	29-38	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.7	–
	39-45	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	46-50	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	51-56	TA9415H25	8.0	–
		TA9415H15	10.8	–
	57-71	TA8407H25	6.2	–
		TA8407H15	7.1	–
	72-80	TA8407H25	6.2	Fan
		TA8407H15	7.5	–
	81-83	TA8407H15	7.7	–
	84-85	TA7315H15	6.2	–
	86-120	TA7315H15	6.2	–
		TA7315H09	8.5	–
	121-141	TA7315H09	8.6	–
	142-150	TA6307H09	10.9	–
	151-195	TA6307H09	10.9	–
		TA7315H05	12.1	–
	196-200	TA6307H09	10.1	Fan
		TA7315H05	11.7	–
	201-208	TA7315H05	11.7	–
	209-400	TA6307H05	13.5	–

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
75	9-17	TDT1530 †	15.0	–
	18-26	TDT1425 †	15.0	–
	27-34	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	15.1	–
	35-36	TA10507H40	8.5	–
		TA12608H25	9.5	–
		TA12608H15	15.2	–
	37-49	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	11.3	–
	50	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.8	–
	51-72	TA9415H25	8.0	Fan
		TA9415H15	10.8	–
	73-80	TA8407H25	6.2	Fan
		TA8407H15	7.5	–
	81-112	TA8407H15	8.6	–
	113	TA7315H15	6.2	–
	114-120	TA7315H15	6.2	–
		TA7315H09	8.5	–
	121-156	TA7315H09	8.6	–
	157- 200	TA7315H09	8.5	Fan
	213-306	TA7315H05	11.5	–
	307-400	TA6307H05	11.7	–
100	12-23	TDT1530 †	15.0	–
	24-35	TDT1425 †	15.0	–
	36-47	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	15.6	–
	48-50	TA10507H40	8.5	Fan
		TA12608H25	9.5	–
		TA12608H15	15.7	–
	51	TA12608H25	9.6	–
		TA12608H15	15.7	–
	52-56	TA10507H25	8.5	–
		TA10507H15	11.8	–
	57-67	TA10507H25	8.8	Fan
		TA10507H15	12.4	–
	68	TA9415H25	8.0	Fan
		TA10507H15	12.5	–
	69-80	TA9415H25	8.0	Fan
		TA9415H15	10.7	Fan
	81-100	TA9415H15	10.5	Fan
	101-120	TA8407H15	8.7	Fan
	172-200	TA7315H09	8.4	Fan
	331-400	TA7315H05	10.8	–
125	16-30	TDT1530 †	15.0	–
	31-43	TDT1425 †	15.0	–
	44-50	TA12608H40	17.1	Fan
		TA12608H25	9.5	–
		TA12608H15	15.7	–
	51-58	TA12608H25	9.6	–
		TA12608H15	15.9	–
	59-67	TA12608H25	10.4	Fan
		TA12608H15	16.1	–

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Class III Selections * (SF = 2.0)

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
125 (cont)	68-80	TA10507H25	9.4	Fan
		TA10507H15	13.4	Fan
	81-90	TA10507H15	13.6	Fan
	91-120	TA9415H15	10.3	Fan
150	19-36	TDT1530 †	15.0	–
	37-41	TDT1425 †	15.0	–
	42-52	TDT1425 †	15.0	Fan
	53-80	TA12608H25	10.7	Fan
		TA12608H15	16.1	Fan
	81-83	TA12608H15	15.6	Fan
	84-115	TA10507H15	13.6	Fan
	116-120	TA9415H15	10.2	Fan
200	27-50	TDT1530 †	15.0	–
	51-70	TDT1425 †	15.0	P&C
	71-80	TA12608H25	10.7	P&C
		TA12608H15	16.1	Fan
	81-98	TA12608H15	15.6	Fan
	99-120	TA12608H15	15.1	P&C
250	34-57	TDT1530 †	15.0	–
	66-75	TDT1425 †	15.0	P&C
	97-120	TA12608H15	15.1	P&C
300	41-57	TDT1530 †	15.0	–
350	50-57	TDT1530 †	15.0	–

* See Page G2-132 for lubrication for 15 RPM and slower
† See page G3-70 and G3-71 for information on TDT1425 and TDT1530 Reducers

P&C (Pump & Coolers) - Use the Dodge Speed Reducer auxiliary cooling package, part number 273933

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

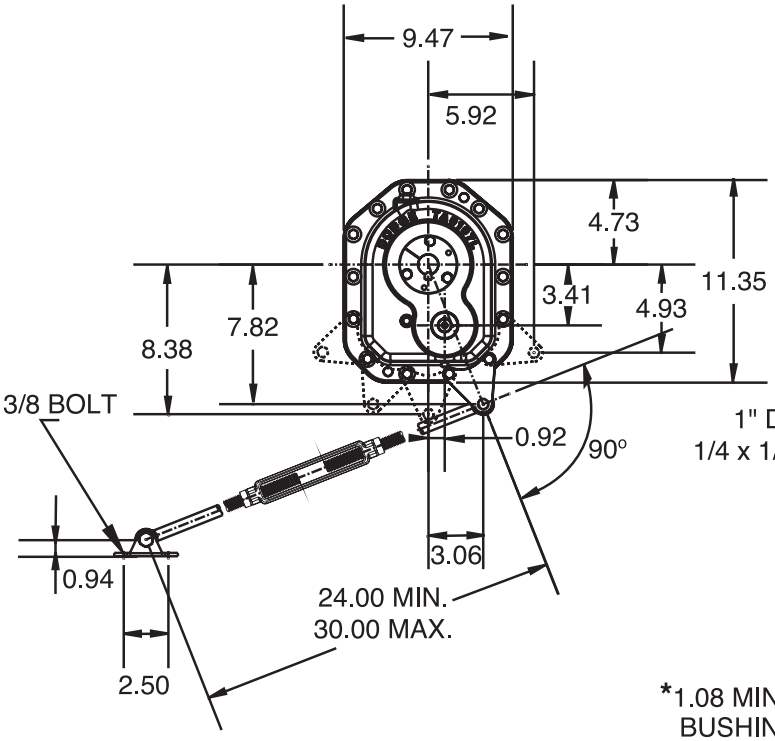
Selection Guide: TA II Torque-Arm Shaft Mount Reducers And Screw Conveyor Drives

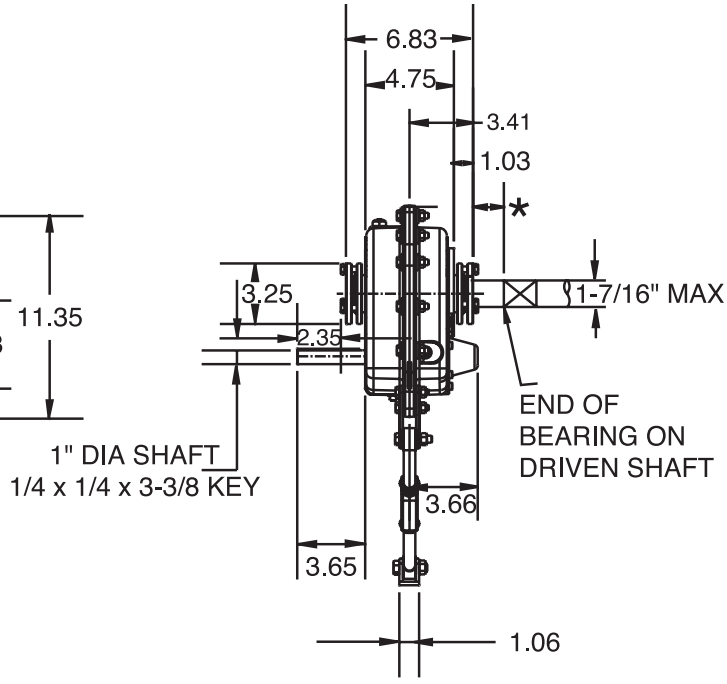
This is a reference sheet for quick selection and specification on Dodge TA II Shaft Mount Reducers. Use it to identify information needed to make an accurate selection with a step-by-step selection format for choosing a reducer, accessories and belt drive.

Name		Company Name		
Phone Number		Fax No.	E-mail Address:	
Application Data:				
Driven Equipment				
Type		RPM	Shaft Size	
Hours of service/day			Class of Service	
Type of Load:		Uniform	Moderate	Shock
Screw Conveyor Applications:				
Screw Diameter		Drive shaft diameter		
Motor	HP	RPM	Frame Size	Shaft Size
Type of reducer mounting:		Horizontal	Vertical - Input up	
Vertical - Input down		Incline (degree of)	Flange Mounting	
Unusual ambient temperature:				
Other important application characteristics (reversing duty, start/stop cycles)				
Reducer Drive Selection:				
Step 1 - Determine class of service				
Step 2 - From Class of Service Table, select reducer type, size and ratio that meets Application HP and Driven RPM requirements				
Twin Taper Bushed		Screw Conveyor		
Step 3 - Select reducer accessories required for application:				
Twin Taper Bushing Kit:		Standard Shaft	Short Shaft	
Rod Assembly		Backstop	Cooling Fan	
Motor Mount		Belt Guard	Adapter & Hardware Kit	
Adjustable Packing Kit		Drive Shaft	Stainless Drive Shaft	
Other				
Belt Drive Specification:				
Service Factor	Belt Type	Center Distance	Sheave Ratio	
Driver: Shaft Diameter	Sheave	Bushing	Belt Size & Qty	
Driven: Shaft Diameter	Sheave	Bushing	Belt Size & Qty	

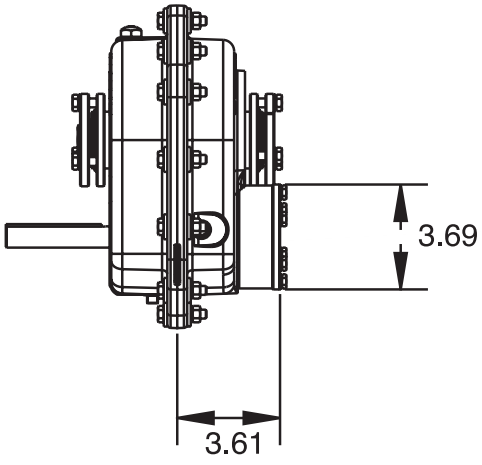
Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA0107L, Single And Double Reductions

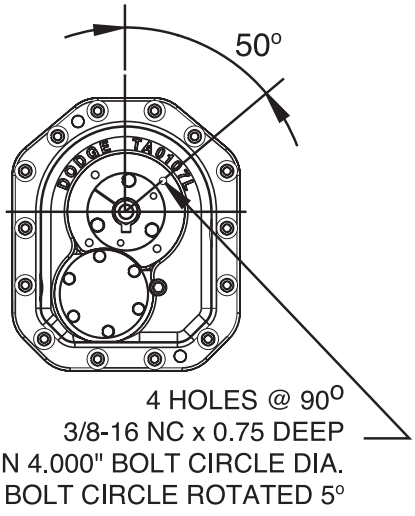




*1.08 MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA0107L, Single And Double Reductions

TA0107L Taper Bushed Reducers (1) ●

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA0107L05	900004	107S05	5.20	39.6
TA0107L09	900003	107D09	9.00	41.2
TA0107L15	900002	107D15	14.93	41.1
TA0107L25	900001	107D25	25.09	41.0
TA0107L31	900000	107D31	30.94	41.2

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

● TA0107L Reducer = Light duty, best value

\+ Rod assembly mounting locations are limited to positions shown in drawing.

TA0107L Accessories

Description	Part Number	Weight lbs.
TA0107RA Rod Assembly (1) +	900109	4.5
TA1107/0107L BS Backstop Assembly (2)	901102	3.9
TA0107MM Motor Mount Assembly (56-215T) (3)	900090	35.4
TA0107BG Belt Guard - Pos. B (56-215T)	900096	40.6
TA0107BG Belt Guard - Pos. C (56-215T) (4)	900097	42.2
TA0107BG Belt Guard - Pos. D (56-215T)	900099	39.0
TA0-TA3 Hydra-Lock Dessicant Breather Kit HLO	964372	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA0-TA3 Vertical Breather Kit	900112	2.0
TA0107L V-Ring Kit	900249	0.1
TA0107L Lube Kit	LUBEKITTA0107	4.6

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off.
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions.
(4) Use Position-C belt guard for TA II reducer in screw conveyor drive applications.

TA0107L Tapered Bushing Kits (5) (6)

Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
TA0107TB x 1-7/16 ▲	900020	1.5	3/8 x 3/16 x 6.83	–	–	–	–
TA0107TB x 1-3/8	900021	1.6	5/16 x 5/32 x 6.83	–	–	–	–
TA0107TB x 1-5/16	900022	1.8	5/16 x 5/32 x 6.83	–	–	–	–
TA0107TB x 1-1/4	900023	1.9	1/4 x 1/8 x 6.83	–	–	–	–
TA0107TB x 1-3/16	900024	2.0	1/4 x 1/8 x 6.83	TA0107TBS x 1-3/16	900027	2.1	1/4 x 1/8 x 4.35
TA0107TB x 1-1/8	900025	2.1	1/4 x 1/8 x 6.83	TA0107TBS x 1-1/8	900028	2.3	1/4 x 1/8 x 4.35
TA0107TB x 1	900026	2.4	1/4 x 1/8 x 6.83	TA0107TBS x 1	900029	2.6	1/4 x 1/8 x 4.35

▲ AGMA maximum bore size
(5) Bushing kit required to mount TA II reducer to driven shaft
(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key
(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

Bushing Covers

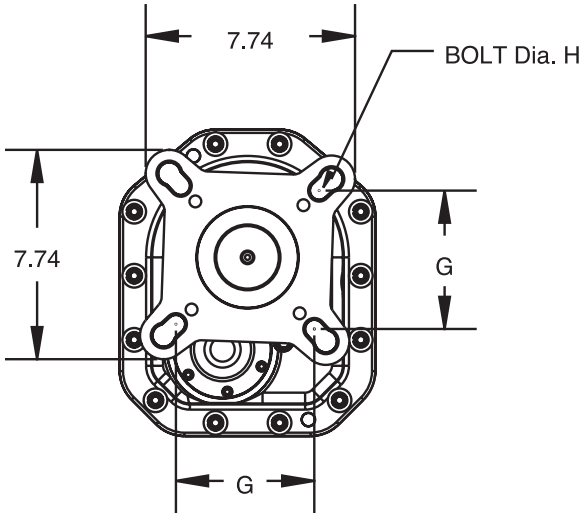
Reducer Size	Description	Part Number	Weight
TA0107L	ABS Polymer Closed (12)	900142	0.3
TA0107L	ABS Polymer split (12)	900143	0.3
Reducer Size	**Description**	**Part Number**	**Weight**
TA0107L	Aluminum Closed (13)	900114	0.3
TA0107L	Aluminum Spllit (13)	900115	0.3

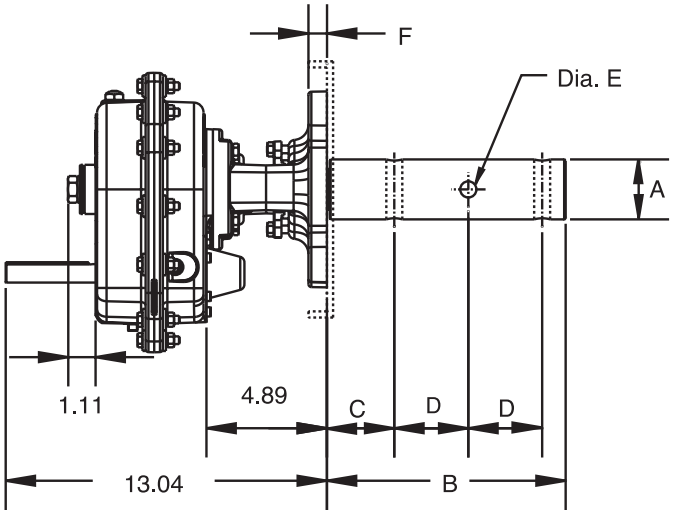
Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on "driven machine" side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA0107L, Single And Double Reductions





Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA0107L, Single And Double Reductions

TA0107L Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
6, 9	1-1/2	9.00	2.13	3.00	17/32	0.75	4.00	1/2
9, 12	2	9.00	2.13	3.00	21/32	0.75	5.13	5/8
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4

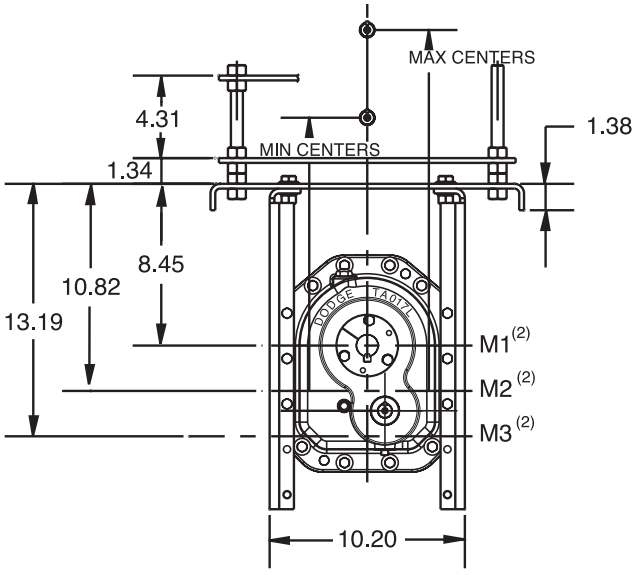
TA0107L Accessories for Screw Conveyor Drives (1) (4) (5)

Description	Part Number	Weight lbs.
TA0107SCA Adapter & Hardware Kit (2)	900070	14.7
TA0107SCP Adjustable Packing Kit (3)	900071	0.9
TA0107SCS x 1-1/2 Drive Shaft	900072	8.8
TA0107SCS x 2 Drive Shaft	900073	12.0
TA0107SCS x 2-7/16 Drive Shaft	900074	16.5
TA0107SCS x 3 Drive Shaft	900075	22.8
TA0107SCS x 1-1/2 Stainless Steel Drive Shaft	900080	8.8
TA0107SCS x 2 Stainless Steel Drive Shaft	900081	12.0
TA0107SCS x 2-7/16 Stainless Steel Drive Shaft	900082	16.5
TA0107SCS x 3 Stainless Steel Drive Shaft	900083	22.8

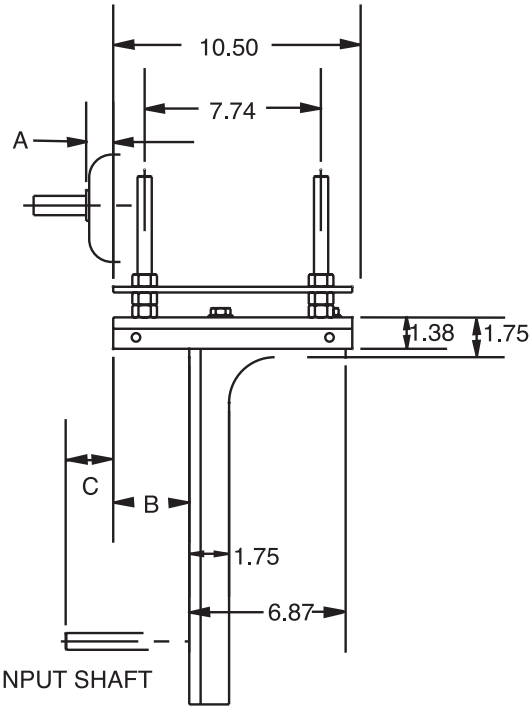
(1) See page G2-33 for Pos "C" Belt Guard for Screw Conveyor Drive applications
(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive, order a TA II Reducer, SCA Adapter & Hardware Kit, and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

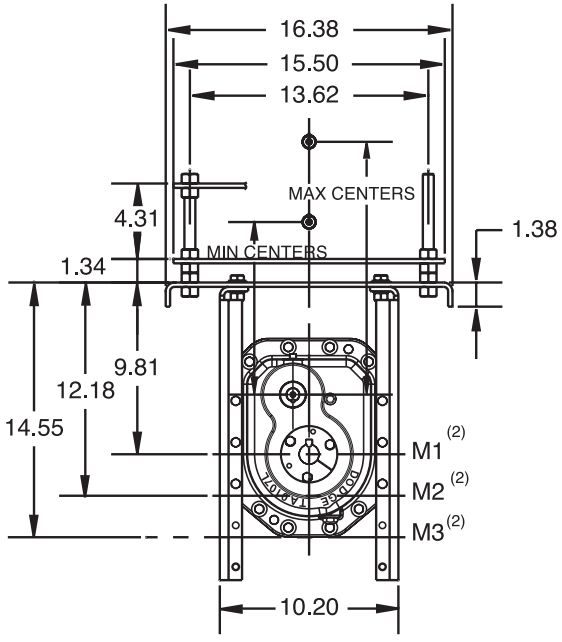
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA0107L, Position B & D



POSITION B





POSITION D

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA0107L, Position B & D (1)

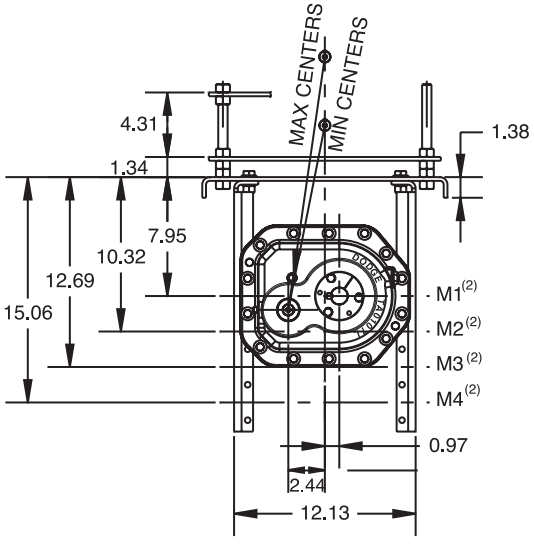
Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame					
						56			143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position B	-0.09	3.33	2.10	5.52	M1	0.78	17.2	21.0	1.22	17.2	21.0
					M2		19.6	23.4		19.6	23.4
					M3		22.0	25.8		22.0	25.8
Position D	-0.09	3.33	2.10	5.52	M1	0.78	11.8	15.6	1.22	11.8	15.6
					M2		14.1	17.9		14.1	17.9
					M3		16.5	20.3		16.5	20.3

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame					
						182T & 184T			213T & 215T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position B	-0.09	3.33	2.10	5.52	M1	1.37	18.2	22.0	1.55	19.0	22.8
					M2		20.6	24.4		21.3	25.1
					M3		23.0	26.8		23.7	27.5
Position D	-0.09	3.33	2.10	5.52	M1	1.37	12.8	16.6	1.55	13.5	17.3
					M2		15.1	18.9		15.9	19.7
					M3		17.5	21.3		18.3	22.1

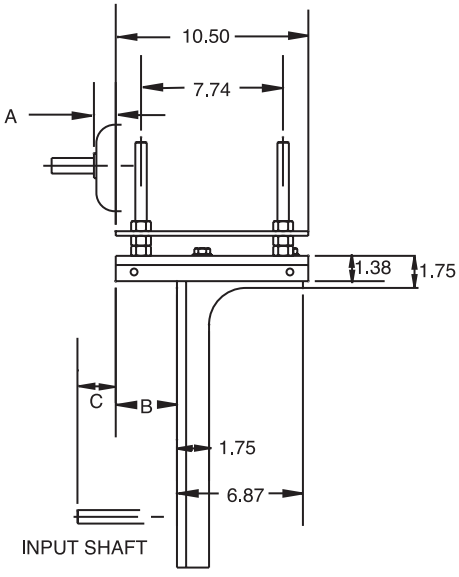
Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3 go through output shaft centerline

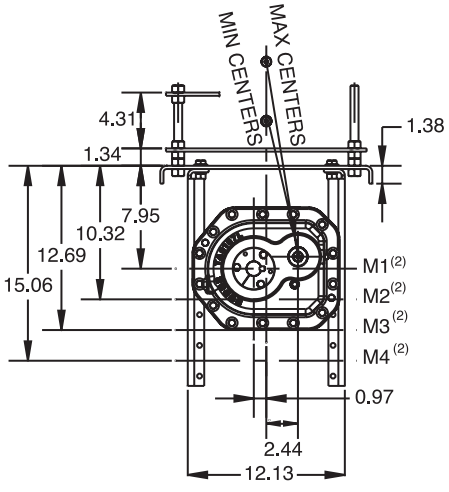
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA0107L, Position A & C



POSITION A





POSITION C

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA0107L, Position A & C (1) (3)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame					
						56			143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position A	-0.09	3.33	3.05	6.47	M1	0.78	14.4	18.2	1.22	14.4	18.2
					M2		16.8	20.5		16.8	20.5
					M3		19.1	22.9		19.1	22.9
					M4		21.5	25.2		21.5	25.2
Position C	-0.09	3.33	3.05	6.47	M1	0.78	12.6	16.4	1.22	12.6	16.4
					M2		14.9	18.7		14.9	18.7
					M3		17.3	21.1		17.3	21.1
					M4		19.6	23.4		19.6	23.4

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame					
						182T & 184T			213T & 215T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position A	-0.09	3.33	3.05	6.47	M1	1.37	15.4	19.2	1.55	16.2	19.9
					M2		17.8	21.5		18.5	22.3
					M3		20.1	23.9		20.8	24.6
					M4		22.5	26.2		23.2	27.0
Position C	-0.09	3.33	3.05	6.47	M1	1.37	13.6	17.4	1.55	14.3	18.1
					M2		15.9	19.7		16.7	20.4
					M3		18.3	22.1		19.0	22.8
					M4		20.6	24.4		21.4	25.2

Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3, M4 go through output shaft centerline
(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

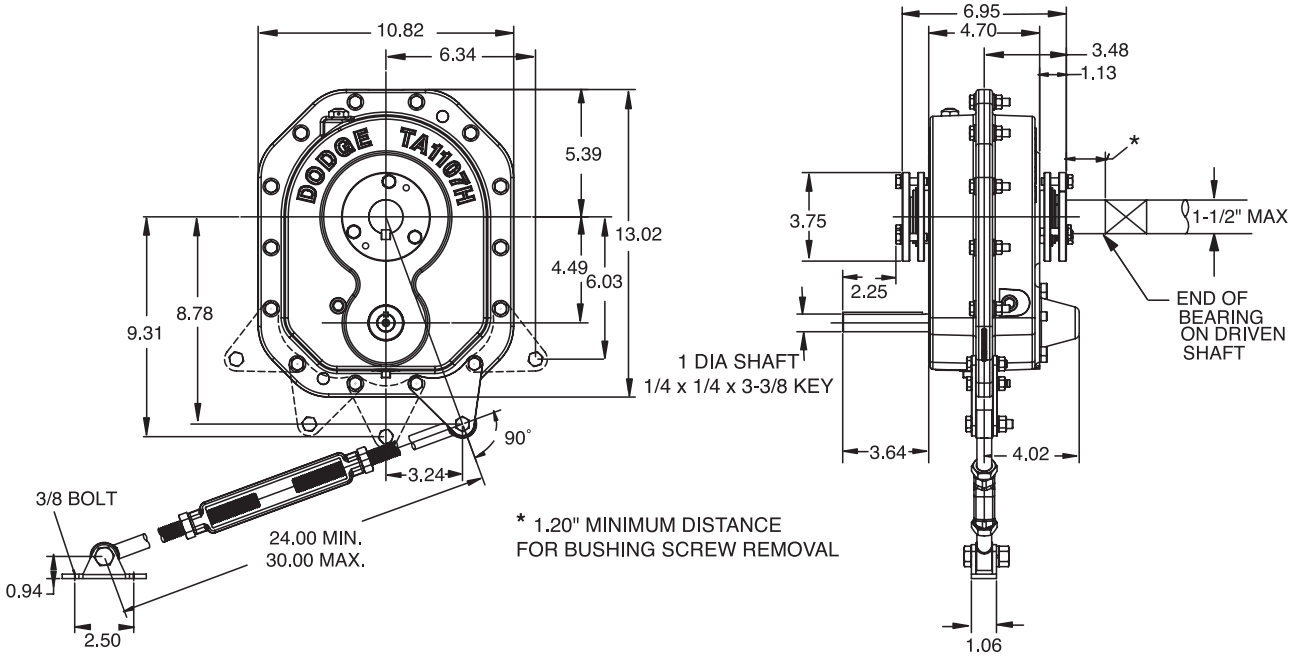
Table A - Screw Conveyor Motor Mount Minimum "M" Mounting Positions (1)

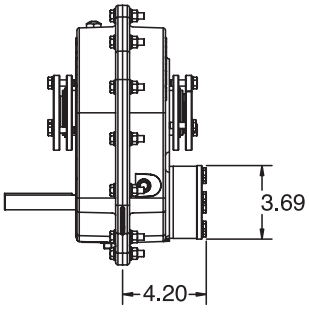
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13	–	–	M4	M4	M3	M3	M2	M2
20	13.50	–	–	M4	M4	M3	M3	M3	M2
24	16.50	–	–	–	–	M4	M3	M3	M3

(1) For U Or Flared Trough Ends Per CEMA 300-014

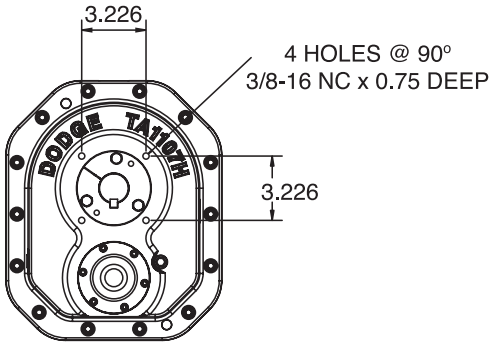
Torque-Arm II Shaft Mount Speed Reducers

Tapered Bushed Reducers - TA1107H, Single And Double Reduction





REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Tapered Bushed Reducers - TA1107H, Single And Double Reduction

TA1107H Taper Bushed Reducers (1) ● ■

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA1107H05	901004	107S05	5.00	55.4
TA1107H09	901003	107D09	8.99	56.8
TA1107H15	901002	107D15	14.91	56.7
TA1107H25	901001	107D25	25.06	56.7
TA1107H31	901000	107D31	30.91	56.8

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

● TA1107H Reducer - Heavy duty, extended value

■ See page G2-121 for Maximum Bore Straight Bore TA II Reducers

\+ Rod Assembly mounting locations are limited to positions show in drawing.

TA1107H Accessories

Description	Part Number	Weight lbs.
TA1107RA Rod Assembly (1) +	901109	4.5
TA1107H/0107L BS Backstop Assembly (2)	901102	3.9
TA1107MM Motor Mount Assembly (56-254T) (3)	901090	39.5
TA1107BG Belt Guard - Pos. B (56-254T)	901096	40.6
TA1107BG Belt Guard - Pos. C (56-254T) (4)	901097	43.1
TA1107BG Belt Guard - Pos D (56-254T)	901099	43.0
TA0-TA3 Hydra-Lock Dessicant Breather Kit HL0	964372	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA0-TA3 - Vertical Breather Kit	900112	2.0
TA1107H - V-Ring Kit	901249	0.1
TA1107H Lube Kit	LUBEKITTA1107	4.6

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions
(4) Use Position-C belt guard for TA II reducer in screw conveyor drive applications

TA1107H Tapered Bushing Kits (5) (6)

Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
TA1107TB x 1-1/2	901020	3.3	3/8 x 3/16 x 6.95	–	–	–	–
TA1107TB x 1-7/16 ▲	901021	3.6	3/8 x 3/16 x 6.95	TA1107TBS x 1-7/16	901030	3.7	3/8 x 3/16 x 4.43
TA1107TB x 1-3/8	901022	3.5	5/16 x 5/32 x 6.95	TA1107TBS x 1-3/8	901031	3.8	5/16 x 5/32 x 4.43
TA1107TB x 1-5/16	901023	3.8	5/16 x 5/32 x 6.95	TA1107TBS x 1-5/16	901032	4	5/16 x 5/32 x 4.43
TA1107TB x 1-1/4	901024	3.7	1/4 x 1/8 x 6.95	TA1107TBS x 1-1/4	901033	4.1	1/4 x 1/8 x 4.43
TA1107TB x 1-3/16	901025	3.8	1/4 x 1/8 x 6.95	TA1107TBS x 1-3/16	901034	4.2	1/4 x 1/8 x 4.43
TA1107TB x 1-1/8	901026	4.0	1/4 x 1/8 x 6.95	TA1107TBS x 1-1/8	901035	4.4	1/4 x 1/8 x 4.43
TA1107TB x 1-1/16	901027	4.0	1/4 x 1/8 x 6.95	TA1107TBS x 1-1/16	901036	4.5	1/4 x 1/8 x 4.43
TA1107TB x 1	901028	4.2	1/4 x 1/8 x 6.95	TA1107TBS x 1	901037	4.7	1/4 x 1/8 x 4.43

▲ AGMA maximum bore size
(5) Bushing kit required to mount TA II reducer to driven shaft
(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

Bushing Covers

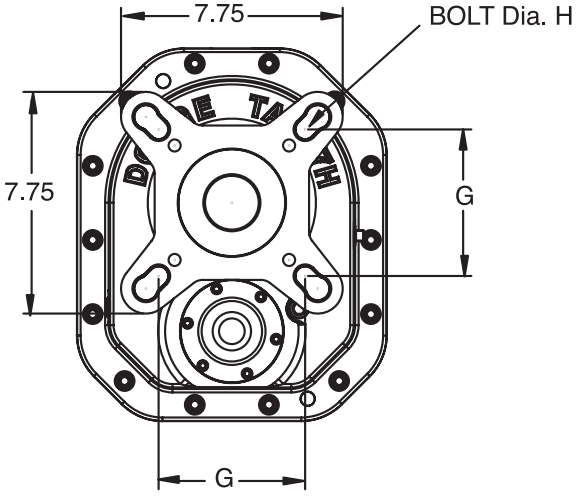
Reducer Size	Description	Part Number	Weight
TA1107H	ABS Polymer Closed (12)	901142	0.5
TA1107H	ABS Polymer split (12)	901143	0.4
Reducer Size	**Description**	**Part Number**	**Weight**
TA1107H	Aluminum Closed (13)	900114	0.5
TA1107H	Aluminum Spllit (13)	900115	0.4

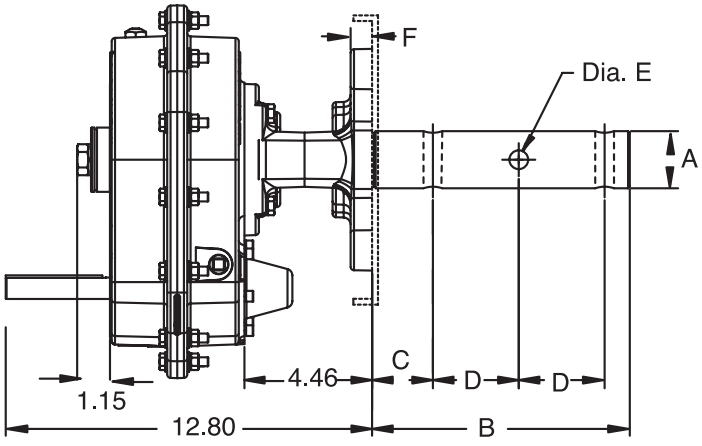
Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on “driven machine” side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA1107H, Single And Double Reduction





Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA1107H, Single And Double Reduction

TA1107H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
6, 9	1-1/2	9.00	2.13	3.00	17/32	0.75	4.00	1/2
9, 12	2	9.00	2.13	3.00	21/32	0.75	5.13	5/8
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4

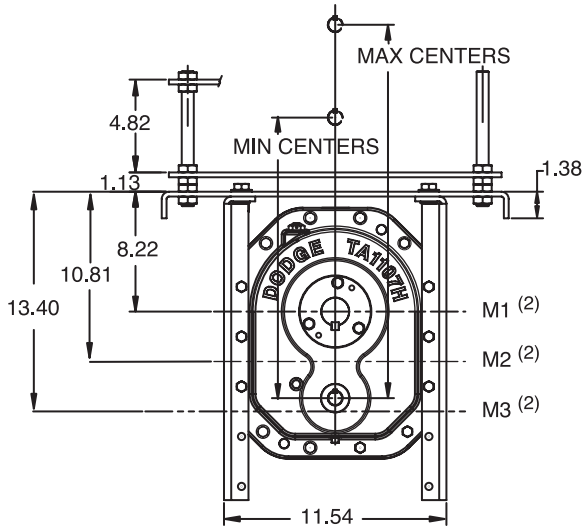
TA1107H Accessories for Screw Conveyor Drives (1) (4) (5)

Description	Part Number	Weight lbs.
TA1107SCA Adapter & Hardware Kit (2)	901070	15.2
TA1107SCP Adjustable Packing Kit (3)	901071	0.8
TA1107SCS x 1-1/2 Drive Shaft	901072	10.3
TA1107SCS x 2 Drive Shaft	901073	13.5
TA1107SCS x 2-7/16 Drive Shaft	901074	18.1
TA1107SCS x 3 Drive Shaft	901075	24.4
TA1107SCS x 1-1/2 Stainless Steel Drive Shaft	901080	10.3
TA1107SCS x 2 Stainless Steel Drive Shaft	901081	13.5
TA1107SCS x 2-7/16 Stainless Steel Drive Shaft	901082	18.1
TA1107SCS x 3 Stainless Steel Drive Shaft	901083	24.4

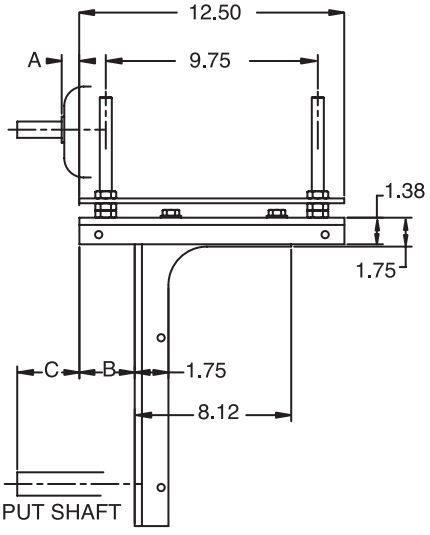
(1) See page G2-41 for Pos "C" Belt Guard for Screw Conveyor Drive applications
(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive, order a TA II Reducer, SCA Adapter & Hardware Kit, and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

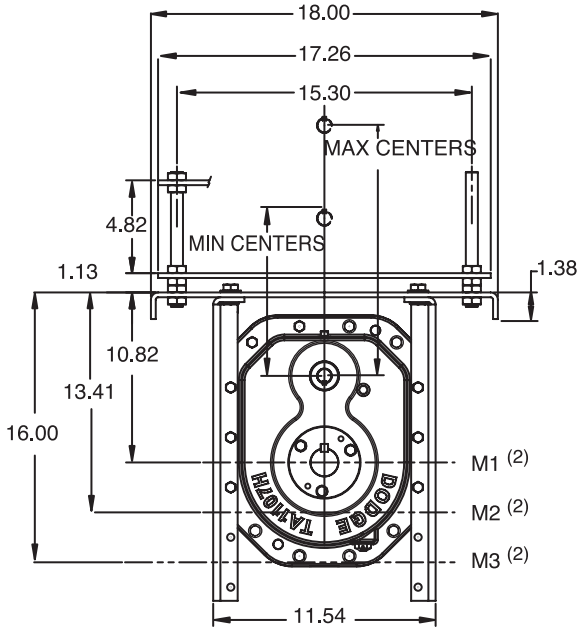
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA1107H, Position B & D



POSITION B





POSITION D

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA1107H, Position B & D (1)

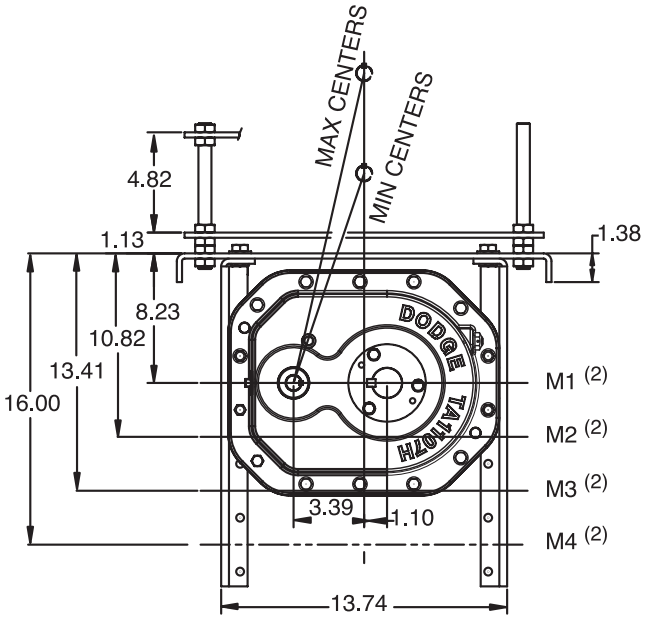
Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame					
						56			143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position B	-0.09	3.33	2.06	5.48	M1	0.78	17.7	22.0	1.22	17.7	22.0
					M2		20.3	24.6		20.3	24.6
					M3		22.9	27.2		22.9	27.2
Position D	-0.09	3.33	2.06	5.48	M1	0.78	11.3	15.7	1.22	11.3	15.7
					M2		13.9	18.2		13.9	18.2
					M3		16.5	20.8		16.5	20.8

Mounting	Motor Mount Height (2)	Motor Frame								
		182T & 184T			213T & 215T			254T		
		A	Centers		A	Centers		A	Centers	
			Min	Max		Min	Max		Min	Max
Position B	M1	1.37	18.7	23.0	1.55	19.5	23.8	1.56	20.5	24.8
	M2		21.3	25.6		22.1	26.4		23.1	27.4
	M3		23.9	28.2		24.6	29.0		25.6	30.0
Position D	M1	1.37	12.3	16.7	1.55	13.1	17.4	1.56	14.1	18.4
	M2		14.9	19.2		15.7	20.0		16.7	21.0
	M3		17.5	21.8		18.3	22.6		19.3	23.6

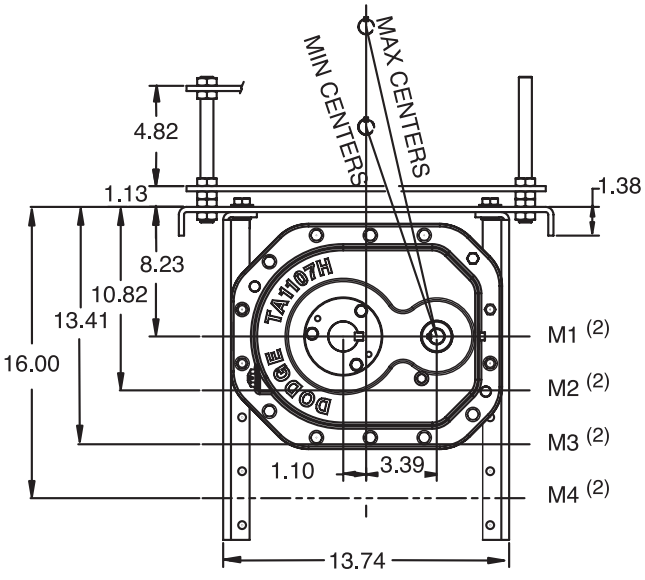
Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3 go through output shaft centerline

Torque-Arm II Shaft Mount Speed Reducers

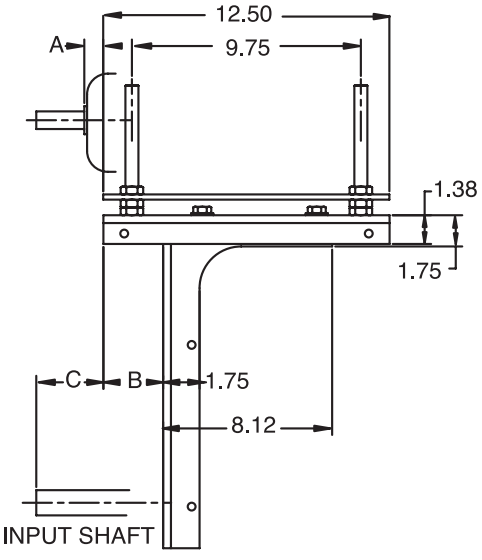
Motor Mount Dimensions - TA1107H, Position A & C



POSITION A



POSITION C



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA1107H, Position A & C (1) (3)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame					
						56			143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position A	-0.09	3.33	3.01	6.43	M1	0.78	13.8	17.9	1.22	13.8	17.9
					M2		16.2	20.5		16.2	20.5
					M3		18.8	23.0		18.8	23.0
					M4		21.3	25.6		21.3	25.6
Position C	-0.09	3.33	3.01	6.43	M1	0.78	13.8	17.9	1.22	13.8	17.9
					M2		16.2	20.5		16.2	20.5
					M3		18.8	23.0		18.8	23.0
					M4		21.3	25.6		21.3	25.6

Mounting	Motor Mount Height (2)	Motor Frame								
		182T & 184T			213T & 215T			254T		
		A	Centers		A	Centers		A	Centers	
			Min	Max		Min	Max		Min	Max
Position A	M1	1.37	14.7	18.9	1.55	15.4	19.6	1.56	16.4	20.6
	M2		17.2	21.4		17.9	22.2		18.9	23.2
	M3		19.7	24.0		20.5	24.7		21.5	25.7
	M4		22.3	26.6		23.0	27.3		24.0	28.3
Position C	M1	1.37	14.7	18.9	1.55	15.4	19.6	1.56	16.4	20.6
	M2		17.2	21.4		17.9	22.2		18.9	23.2
	M3		19.7	24.0		20.5	24.7		21.5	25.7
	M4		22.3	26.6		23.0	27.3		24.0	28.3

Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3, M4 go through output shaft centerline
(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

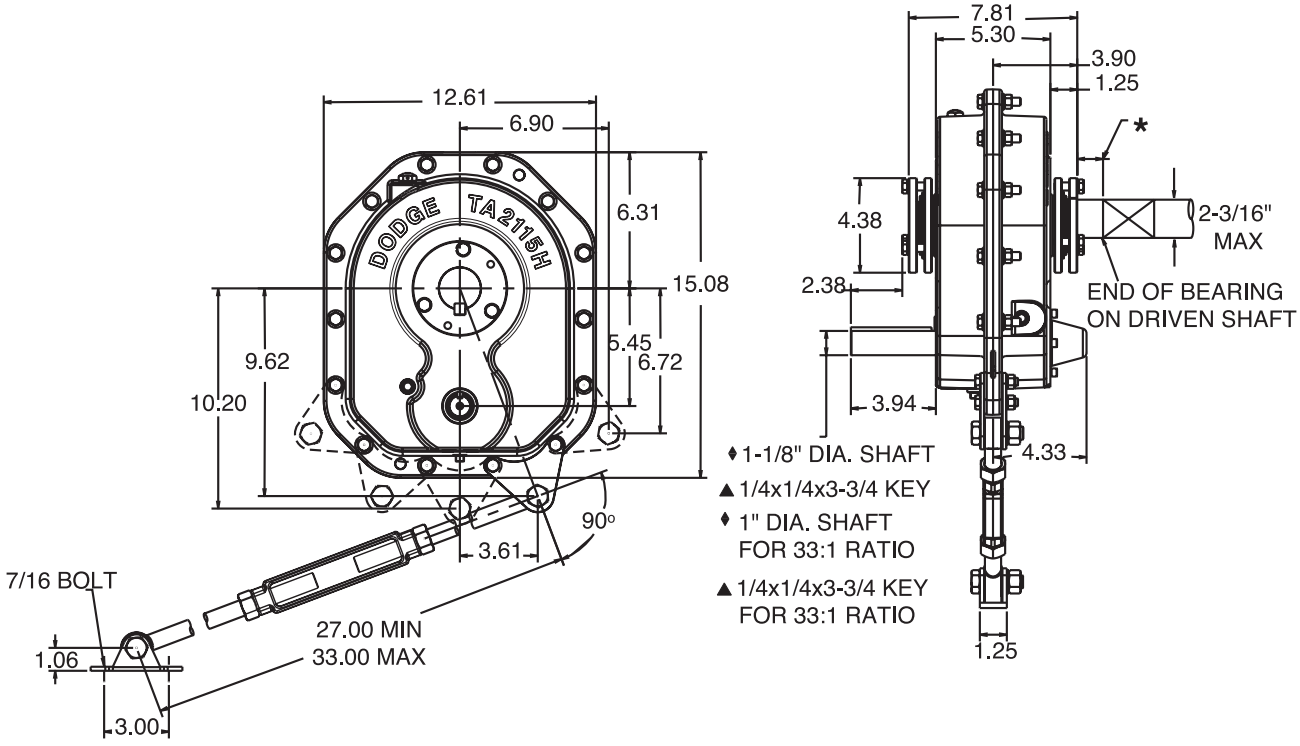
Table A - Screw Conveyor Motor Mount Minimum "M" Mounting Positions (1)

Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13	–	–	M4	M4	M3	M3	M2	M2
20	13.50	–	–	M4	M4	M3	M3	M3	M2
24	16.50	–	–	–	–	M4	M3	M3	M3

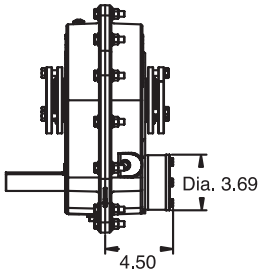
(1) For U Or Flared Trough Ends Per CEMA 300-014

Torque-Arm II Shaft Mount Speed Reducers

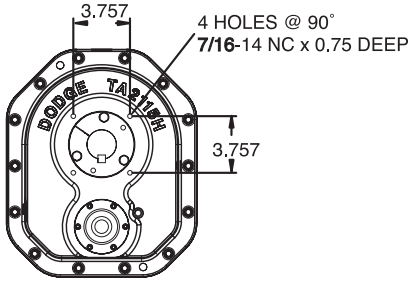
Taper Bushed Reducer - TA2115H, Single And Double Reduction



* 1.20" MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducer - TA2115H, Single And Double Reduction

TA2115H Taper Bushed Reducers (1)

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA2115H05	902004	115S05	5.20	84.2
TA2115H09	902003	115D09	9.10	86.5
TA2115H15	902002	115D15	15.62	86.3
TA2115H25	902001	115D25	25.07	86.1
TA2115H33	902000	115D33	33.33	85.7

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

\+ Rod Assembly mounting locations are limited to positions show in drawing.

TA2115H Accessories

Description	Part Number	Weight lbs.
TA2115RA Rod Assembly (1) +	902109	6.9
TA2115BS Backstop Assembly (2)	902102	3.9
TA2115MM Motor Mount Assembly (56-256T) (3)	902090	52.6
TA2115BG Belt Guard - Pos. B (56-256T)	902096	47.7
TA2115BG Belt Guard - Pos. C (56-256T) (4)	902097	52.1
TA2115BG Belt Guard - Pos. D (56-256T)	902099	51.0
TA0-TA3 Hydra-Lock Dessicant Breather Kit HL0	964372	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA0-TA3 Vertical Breather Kit	900112	2.0
TA2115H V-Ring Kit	902249	0.2
TA2115H Lube Kit	LUBEKITTA2115	8.1

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions
(4) Use Position-C belt guard for TA II reducer in screw conveyor drive applications

TA2115H Tapered Bushing Kits (5) (6)

Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
TA2115TB x 2-3/16	902020	4.7	1/2 x 1/4 x 7.80	–	–	–	–
TA2115TB x 2	902022	5.2	1/2 x 1/4 x 7.80	–	–	–	–
TA2115TB x 1-15/16 ▲	902023	5.4	1/2 x 1/4 x 7.80	TA2115TBS x 1-15/16	902030	5.6	1/2 x 1/4 x 4.80
TA2115TB x 1-7/8	902024	5.6	1/2 x 1/4 x 7.80	TA2115TBS x 1-7/8	902031	5.9	1/2 x 1/4 x 4.80
TA2115TB x 1-3/4	902025	5.8	3/8 x 3/16 x 7.80	TA2115TBS x 1-3/4	902032	6	3/8 x 3/16 x 4.80
TA2115TB x 1-11/16	902026	6.1	3/8 x 3/16 x 7.80	TA2115TBS x 1-11/16	902033	6.6	3/8 x 3/16 x 4.80
TA2115TB x 1-5/8	902027	6.0	3/8 x 3/16 x 7.80	TA2115TBS x 1-5/8	902034	6.8	3/8 x 3/16 x 4.80
TA2115TB x 1-1/2	902028	6.4	3/8 x 3/16 x 7.80	TA2115TBS x 1-1/2	902035	7.3	3/8 x 3/16 x 4.80
TA2115TB x 1-7/16	902029	6.4	3/8 x 3/16 x 7.80	TA2115TBS x 1-7/16	902036	7.4	3/8 x 3/16 x 4.80
TA2115TB x 1-3/8	902060	6.5	5/16 x 5/32 x 7.80	TA2115TBS x 1-3/8	902037	7.6	5/16 x 5/32 x 4.80
TA2115TB x 1-5/16	902061	6.7	5/16 x 5/32 x 7.80	TA2115TBS x 1-5/16	902038	7.8	5/16 x 5/32 x 4.80

▲ AGMA maximum bore size
(5) Bushing kit required to mount TA II reducer to driven shaft
(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

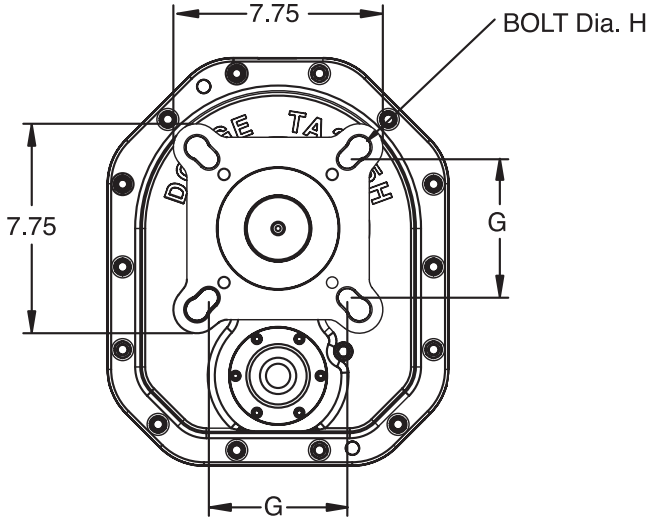
Bushing Covers

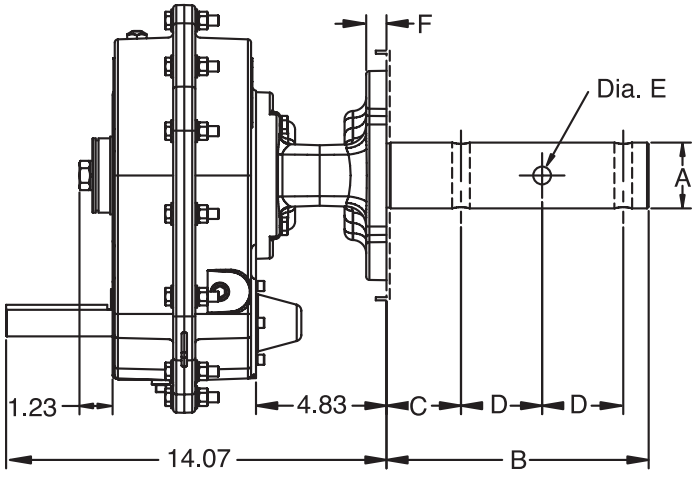
Reducer Size	Description	Part Number	Weight
TA2115H	ABS Polymer Closed (12)	902142	0.6
TA2115H	ABS Polymer split (12)	902143	0.5
Reducer Size	**Description**	**Part Number**	**Weight**
TA2115H	Aluminum Closed (13)	902114	0.6
TA2115H	Aluminum Spllit (13)	902115	0.5

Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on "driven machine" side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA2115H, Single And Double Reduction





Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA2115H, Single And Double Reduction

TA2115H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
6, 9	1-1/2	9.00	2.13	3.00	17/32	0.75	4.00	1/2
9, 12	2	9.00	2.13	3.00	21/32	0.75	5.13	5/8
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4

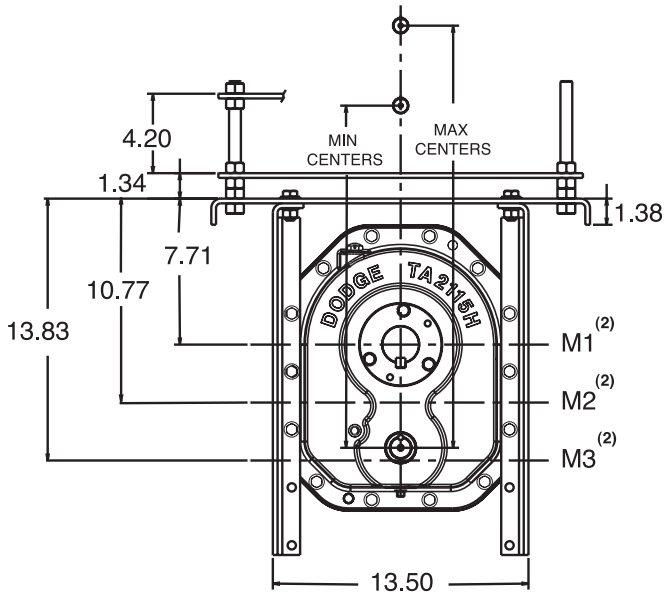
TA2115H Accessories for Screw Conveyor Drives (1) (4) (5)

Description	Part Number	Weight lbs.
TA2115SCA Adapter & Hardware Kit (2)	902070	19.2
TA2115SCP Adjustable Packing Kit (3)	902071	1.2
TA2115SCS x 1-1/2 Drive Shaft	902072	15.4
TA2115SCS x 2 Drive Shaft	902073	18.6
TA2115SCS x 2-7/16 Drive Shaft	902074	23.3
TA2115SCS x 3 Drive Shaft	902075	29.5
TA2115SCS x 1-1/2 Stainless Steel Drive Shaft	902080	15.4
TA2115SCS x 2 Stainless Steel Drive Shaft	902081	18.6
TA2115SCS x 2-7/16 Stainless Steel Drive Shaft	902082	23.3
TA2115SCS x 3 Stainless Steel Drive Shaft	902083	29.5

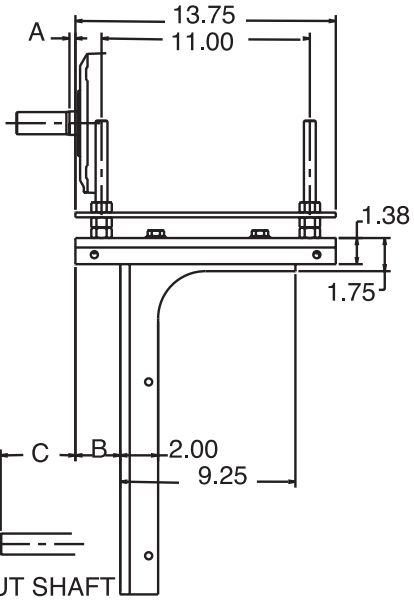
(1) See page G2-49 for Pos "C" Belt Guard for Screw Conveyor Drive applications
(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive, order a TA II Reducer, SCA Adapter & Hardware Kit, and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

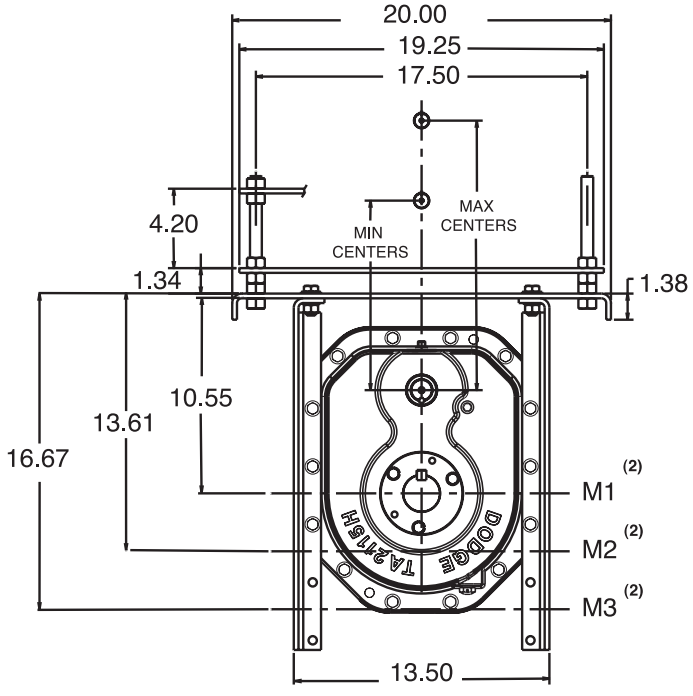
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA2115H, Position B & D



POSITION B





POSITION D

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA2115H, Position B & D (1)

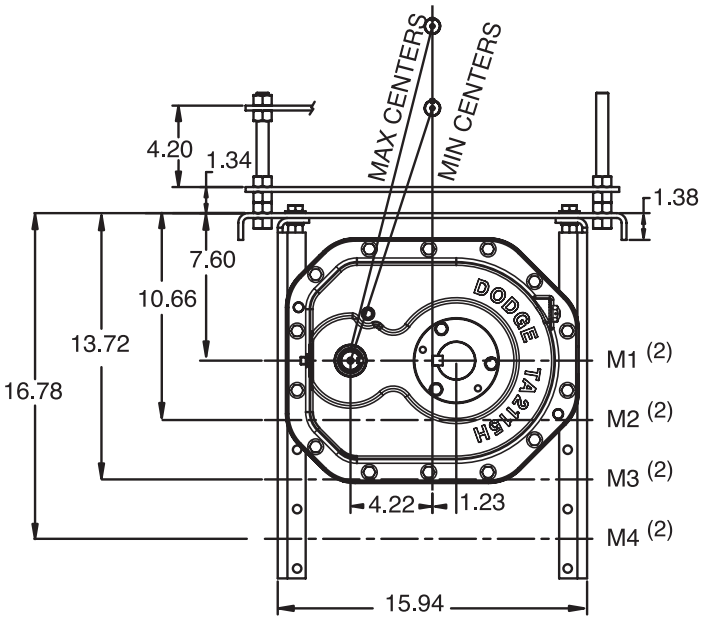
Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame					
						56			143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position B	0.19	3.61	2.32	5.74	M1	0.78	18.5	22.2	1.22	18.5	22.2
					M2		21.6	25.3		21.6	25.3
					M3		24.6	28.3		24.6	28.3
Position D	0.19	3.61	2.32	5.74	M1	0.78	10.4	14.1	1.22	10.4	14.1
					M2		13.5	17.2		13.5	17.2
					M3		16.6	20.3		16.6	20.3

Mounting	Motor Mount Height (2)	Motor Frame								
		182T & 184T			213T & 215T			254T & 256T		
		A	Centers		A	Centers		A	Centers	
			Min	Max		Min	Max		Min	Max
Position B	M1	1.37	19.5	23.2	1.55	20.3	24.0	1.56	21.3	25.0
	M2		22.6	26.3		23.3	27.0		24.3	28.0
	M3		25.6	29.3		26.4	30.1		27.4	31.1
Position D	M1	1.37	11.4	15.1	1.55	12.2	15.9	1.56	13.2	16.9
	M2		14.5	18.2		15.3	19.0		16.3	20.0
	M3		17.6	21.3		18.3	22.0		19.3	23.0

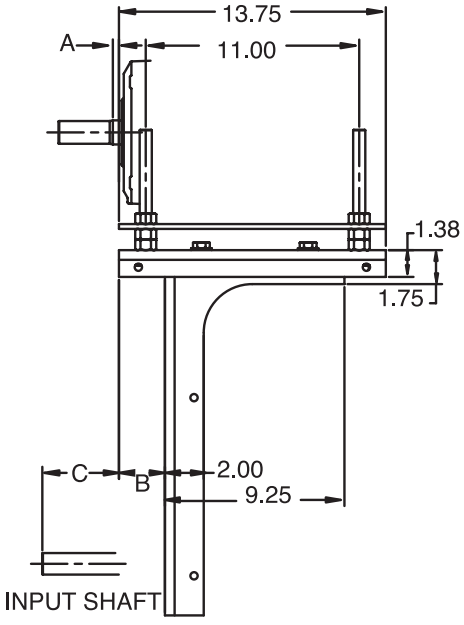
Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3 go through output shaft centerline

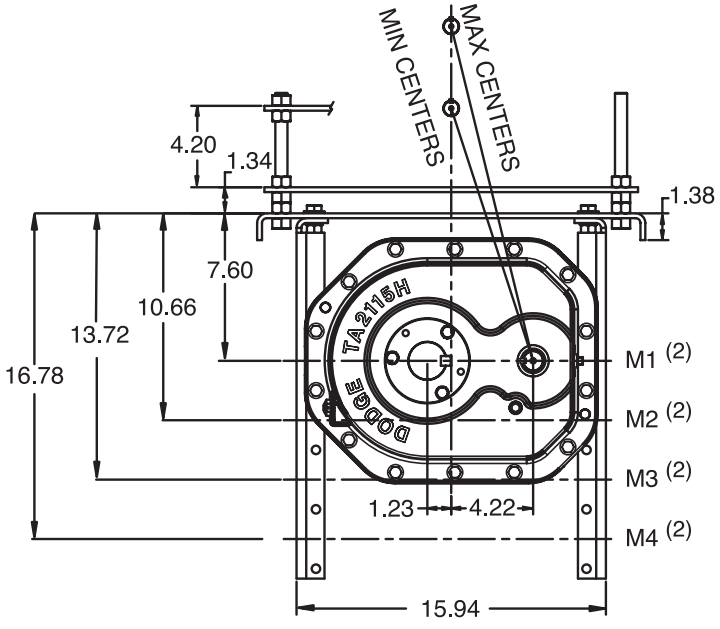
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA2115H, Position A & C



POSITION A





POSITION C

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA2115H, Position A & C (1) (3)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame					
						56			143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position A	0.19	3.61	3.39	6.81	M1	0.78	13.6	17.2	1.22	13.6	17.2
					M2		16.6	20.1		16.6	20.1
					M3		19.5	23.1		19.5	23.1
					M4		22.5	26.2		22.5	26.2
Position C	0.19	3.61	3.39	6.81	M1	0.78	13.6	17.2	1.22	13.6	17.2
					M2		16.6	20.1		16.6	20.1
					M3		19.5	23.1		19.5	23.1
					M4		22.5	26.2		22.5	26.2

Mounting	Motor Mount Height (2)	Motor Frame								
		182T & 184T			213T & 215T			254T & 256T		
		A	Centers		A	Centers		A	Centers	
			Min	Max		Min	Max		Min	Max
Position A	M1	1.37	14.6	18.1	1.55	15.3	18.9	1.56	16.3	19.8
	M2		17.5	21.1		18.3	21.9		19.2	22.8
	M3		20.5	24.1		21.2	24.9		22.2	25.9
	M4		23.5	27.1		24.2	27.9		25.2	28.9
Position C	M1	1.37	14.6	18.1	1.55	15.3	18.9	1.56	16.3	19.8
	M2		17.5	21.1		18.3	21.9		19.2	22.8
	M3		20.5	24.1		21.2	24.9		22.2	25.9
	M4		23.5	27.1		24.2	27.9		25.2	28.9

Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3, M4 go through output shaft centerline
(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

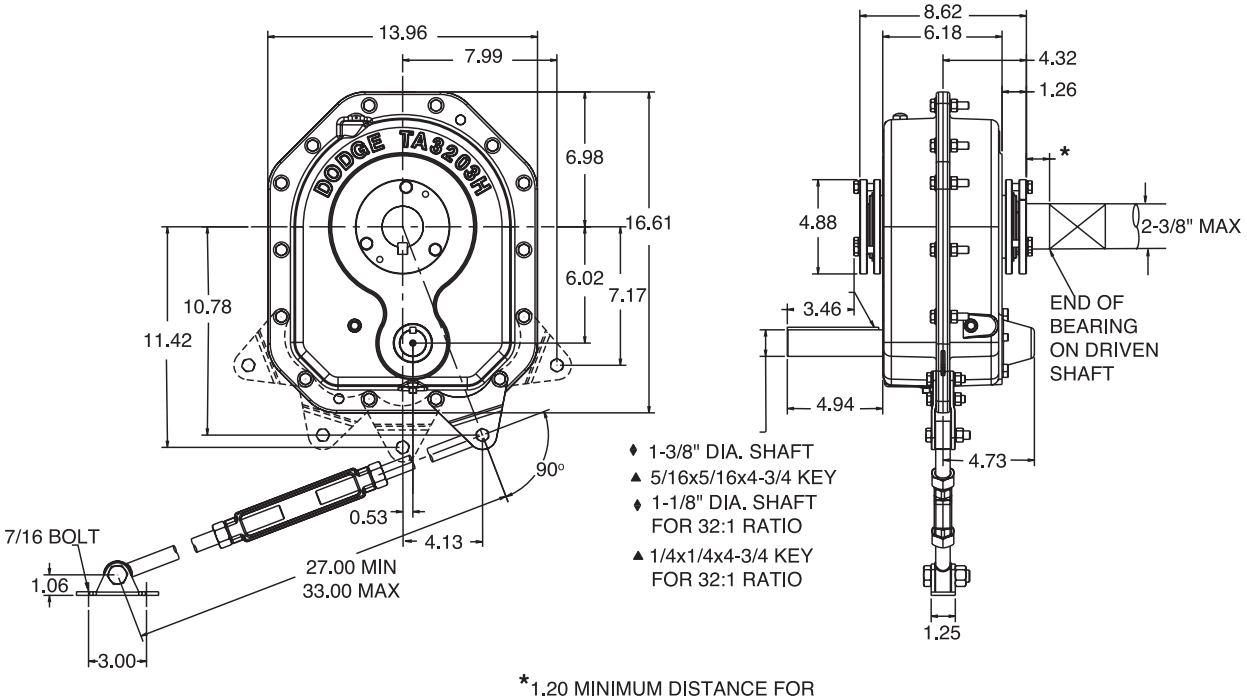
Table A - Screw Conveyor Motor Mount Minimum "M" Mounting Positions (1)

Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13	–	–	M4	M4	M3	M3	M2	M2
20	13.50	–	–	M4	M4	M3	M3	M3	M2
24	16.50	–	–	–	–	M4	M3	M3	M3

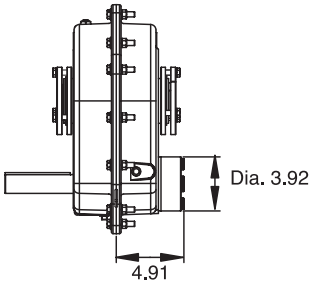
(1) For U Or Flared Trough Ends Per CEMA 300-014

Torque-Arm II Shaft Mount Speed Reducers

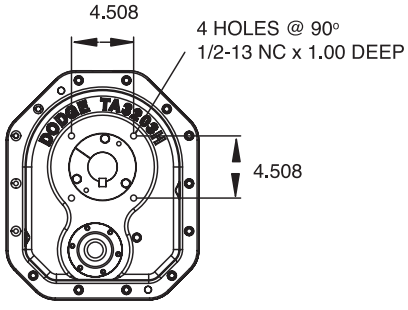
Taper Bushed Reducer - TA3203H, Single And Double Reduction



*1.20 MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducer - TA3203H, Single And Double Reduction

TA3203H Taper Bushed Reducers (1) ■

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA3203H05	903004	203S05	4.91	107.9
TA3203H09	903003	203D09	9.23	112.0
TA3203H15	903002	203D15	15.07	111.8
TA3203H25	903001	203D25	24.95	111.4
TA3203H32	903000	203D32	32.45	110.3

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

■ See page G2-121 for Maximum Bore Straight Bore TA II Reducers

\+ Rod Assembly mounting locations are limited to positions show in drawing.

TA3203H Accessories

Description	Part Number	Weight Lbs
TA3203RA Rod Assembly (1) +	903109	6.9
TA3203BS Backstop Assembly (2)	903102	4.7
TA3203MM Motor Mount Assembly (143-286T) (3)	903090	86.7
TA3203BG Belt Guard - Pos. B (143-286T)	903096	65.5
TA3203BG Belt Guard - Pos. C (143-286T) (4)	903097	67.9
TA3203BG Belt Guard - Pos. D (143-286T)	903099	67.0
TA0-TA3 Hydra-Lock Dessicant Breather Kit HL0	964372	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA0-TA3 Vertical Breather Kit	900112	2.0
TA3203H V-Ring Kit	903249	0.2
TA3203H Lube Kit	LUBEKITTA3203	10.4

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions
(4) Use Position-C belt guard for TA II reducer in screw conveyor drive applications

TA3203H Tapered Bushing Kits (5) (6)

Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Driven Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
TA3203TB x 2-3/8	903020	6.1	5/8 x 5/16 x 8.55	–	–	–	–
TA3203TB x 2-1/4	903021	6.2	1/2 x 1/4 x 8.55	–	–	–	–
TA3203TB x 2-3/16 ▲	903022	6.8	1/2 x 1/4 x 8.55	TA3203TBS x 2-3/16	903030	7.0	1/2 x 1/4 x 5.46
TA3203TB x 2-1/8	903023	7.0	1/2 x 1/4 x 8.55	TA3203TBS x 2-1/8	903031	7.4	1/2 x 1/4 x 5.46
TA3203TB x 2	903024	7.5	1/2 x 1/4 x 8.55	TA3203TBS x 2	903032	8.0	1/2 x 1/4 x 5.46
TA3203TB x 1-15/16	903025	7.8	1/2 x 1/4 x 8.55	TA3203TBS x 1-15/16	903033	8.4	1/2 x 1/4 x 5.46
TA3203TB x 1-7/8	903026	8.0	1/2 x 1/4 x 8.55	TA3203TBS x 1-7/8	903034	8.7	1/2 x 1/4 x 5.46
TA3203TB x 1-3/4	903027	8.0	3/8 x 3/16 x 8.55	TA3203TBS x 1-3/4	903035	9.0	3/8 x 3/16 x 5.46
TA3203TB x 1-11/16	903028	8.2	3/8 x 3/16 x 8.55	TA3203TBS x 1-11/16	903036	9.3	3/8 x 3/16 x 5.46
TA3203TB x 1-5/8	903029	8.4	3/8 x 3/16 x 8.55	TA3023TBS x 1-5/8	903037	9.6	3/8 x 3/16 x 5.46
TA3203TB x 1-1/2	903060	8.8	3/8 x 3/16 x 8.55	TA3203TBS x 1-1/2	903038	9.9	3/8 x 3/16 x 5.46
TA3203TB x 1-7/16	903061	8.8	3/8 x 3/16 x 8.55	TA3203TBS x 1-7/16	903039	10.0	3/8 x 3/16 x 5.46

▲ AGMA maximum bore size
(5) Bushing kit required to mount TA II reducer to driven shaft
(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

Bushing Covers

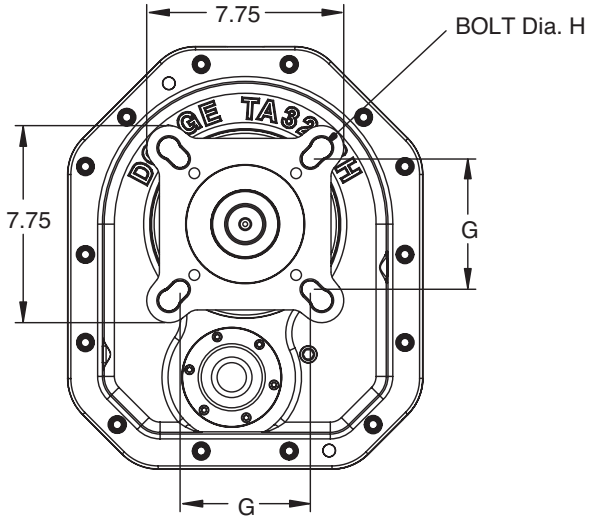
Reducer Size	Description	Part Number	Weight
TA3203H	ABS Polymer Closed (12)	903142	0.6
TA3203H	ABS Polymer split (12)	903143	0.5
Reducer Size	**Description**	**Part Number**	**Weight**
TA3203H	Aluminum Closed (13)	903114	0.6
TA3203H	Aluminum Spllit (13)	903115	0.5

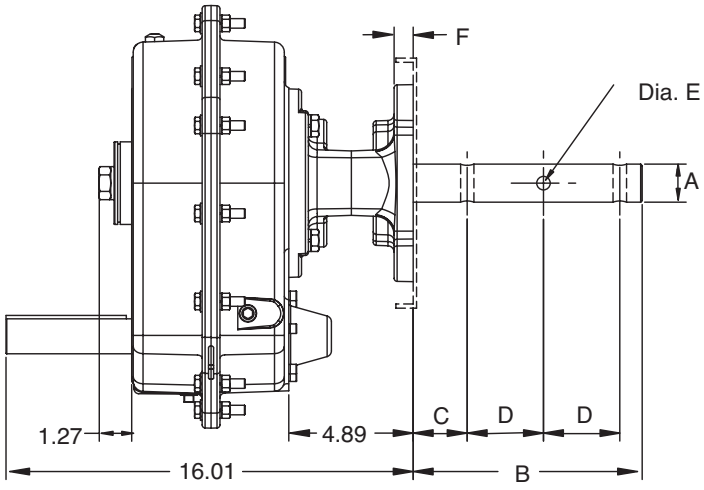
Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on "driven machine" side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA3203H, Single And Double Reduction





Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA3203H, Single And Double Reduction

TA3203H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
6, 9	1-1/2	9.00	2.13	3.00	17/32	0.75	4.00	1/2
9, 12	2	9.00	2.13	3.00	21/32	0.75	5.13	5/8
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20, 24	3-7/16	13.13	3.88	4.00	29/32	.75	6.75	7/8

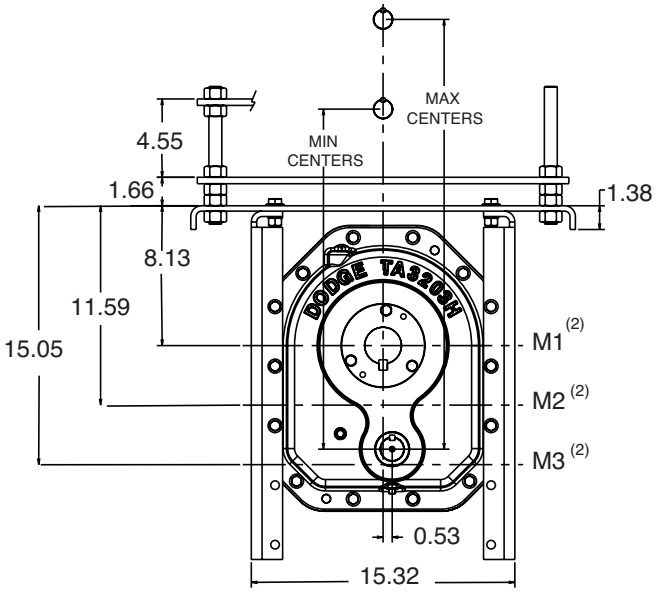
TA3203H Accessories for Screw Conveyor Drives (1) (4) (5)

Description	Part Number	Weight lbs.
TA3203SCA Adapter & Hardware Kit (2)	903070	22.0
TA3203SCP Adjustable Packing Kit (3)	903071	1.4
TA3203SCS x 1-1/2 Drive Shaft	903072	19.3
TA3203SCS x 2 Drive Shaft	903073	22.6
TA3203SCS x 2-7/16 Drive Shaft	903074	27.2
TA3203SCS x 3 Drive Shaft	903075	33.6
TA3203SCS x 3-7/16 Drive Shaft	903076	44.8
TA3203SCS x 1-1/2 Stainless Steel Drive Shaft	903080	19.3
TA3203SCS x 2 Stainless Steel Drive Shaft	903081	22.6
TA3203SCS x 2-7/16 Stainless Steel Drive Shaft	903082	27.2
TA3203SCS x 3 Stainless Steel Drive Shaft	903083	33.6
TA3203SCS x 3-7/16 Stainless Steel Drive Shaft	903084	44.8

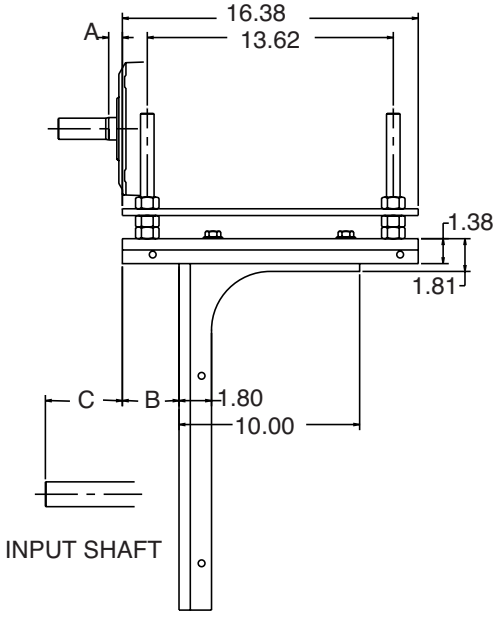
(1) See page G2-57 for Pos "C" Belt Guard for Screw Conveyor Drive applications
(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive, order a TA II Reducer, SCA Adapter & Hardware Kit, and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

Torque-Arm II Shaft Mount Speed Reducers

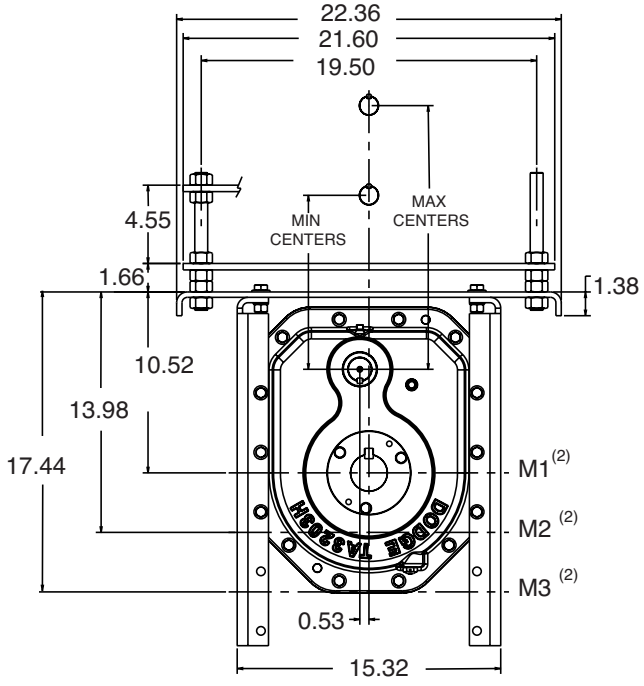
Motor Mount Dimensions - TA3203H, Position B & D



POSITION B



INPUT SHAFT



POSITION D

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA3203H, Position B & D (1)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame					
						143T & 145T			182T & 184T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position B	0.04	5.34	2.06	7.36	M1	1.22	19.8	23.9	1.37	20.8	24.9
					M2		23.3	27.3		24.3	28.3
					M3		26.7	30.8		27.7	31.8
Position D	0.04	5.34	2.06	7.36	M1	1.22	10.2	14.2	1.37	11.2	15.2
					M2		13.6	17.7		14.6	18.7
					M3		17.1	21.1		18.1	22.1

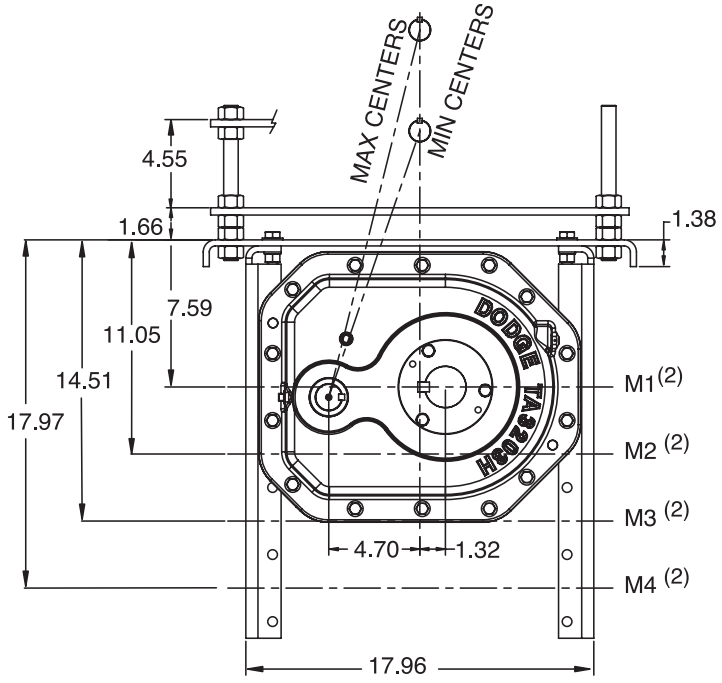
Mounting	Motor Mount Height (2)	Motor Frame								
		213T & 215T			254T & 256T			284T & 286T		
		A	Centers		A	Centers		A	Centers	
			Min	Max		Min	Max		Min	Max
Position B	M1	1.55	21.6	25.6	1.56	22.6	26.6	1.16	23.3	27.4
	M2		25.0	29.1		26.0	30.1		26.8	30.8
	M3		28.5	32.5		29.5	33.5		30.2	34.3
Position D	M1	1.55	11.9	16.0	1.56	12.9	17.0	1.16	13.7	17.7
	M2		15.4	19.4		16.4	20.4		17.1	21.2
	M3		18.8	22.9		19.8	23.9		20.6	24.6

Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3 go through output shaft centerline

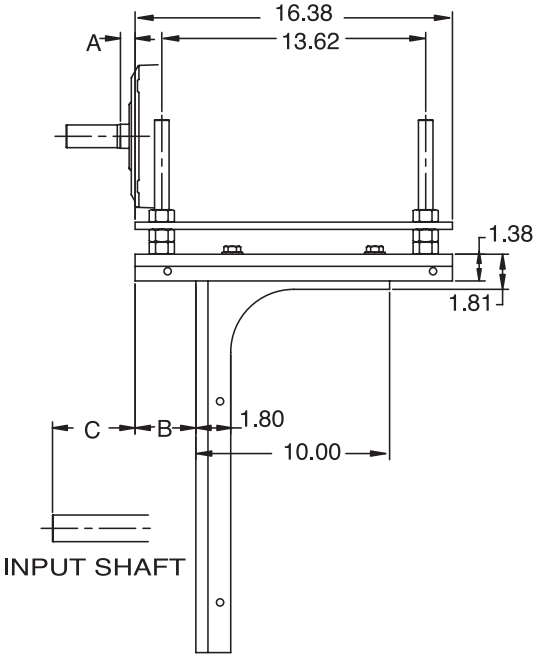
Courtesy of:
SCREW CONVEYOR PARTS

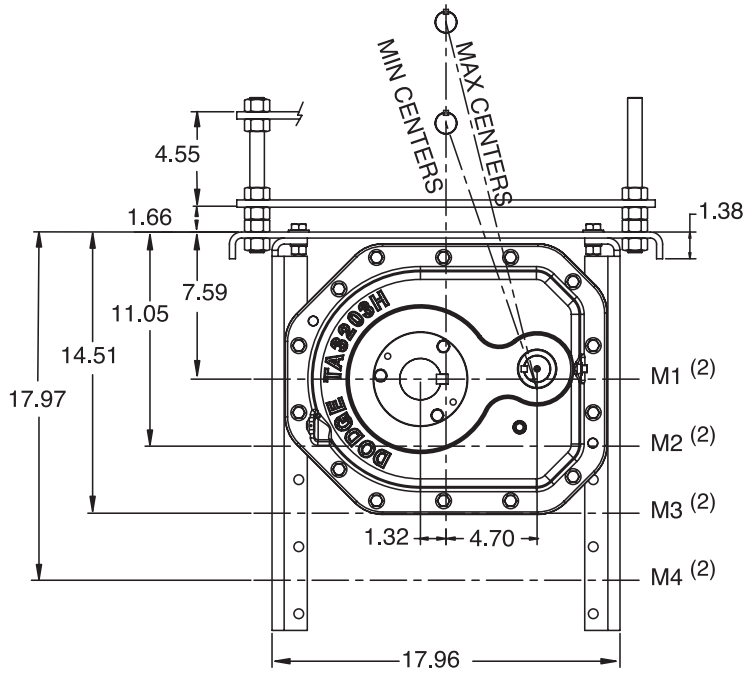
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA3203H, Position A & C



POSITION A





POSITION C

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA3203H, Position A & C (1) (3)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame					
						143T & 145T			182T & 184T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position A	0.04	5.34	3.07	8.37	M1	1.22	14.6	18.4	1.37	15.5	19.4
					M2		17.9	21.8		18.9	22.8
					M3		21.2	25.2		22.2	26.2
					M4		24.6	28.6		25.6	29.6
Position C	0.04	5.34	3.07	8.37	M1	1.22	13.6	17.4	1.37	14.5	18.4
					M2		16.9	20.8		17.8	21.7
					M3		20.2	24.2		21.2	25.1
					M4		23.6	27.6		24.6	28.5

Mounting	Motor Mount Height (2)	Motor Frame								
		213T & 215T			254T & 256T			284T & 286T		
		A	Centers		A	Centers		A	Centers	
			Min	Max		Min	Max		Min	Max
Position A	M1	1.55	16.2	20.1	1.56	17.2	21.1	1.16	17.9	21.8
	M2		19.6	23.5		20.5	24.5		21.3	25.2
	M3		22.9	26.9		23.9	27.9		24.7	28.6
	M4		26.3	30.3		27.3	31.3		28.1	32.1
Position C	M1	1.55	15.2	19.1	1.56	16.2	20.1	1.16	16.9	20.8
	M2		18.6	22.5		19.5	23.5		20.2	24.2
	M3		21.9	25.9		22.9	26.9		23.6	27.6
	M4		25.3	29.3		26.3	30.3		27.0	31.0

Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3, M4 go through output shaft centerline
(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

Table A - Screw Conveyor Motor Mount Minimum "M" Mounting Positions (1)

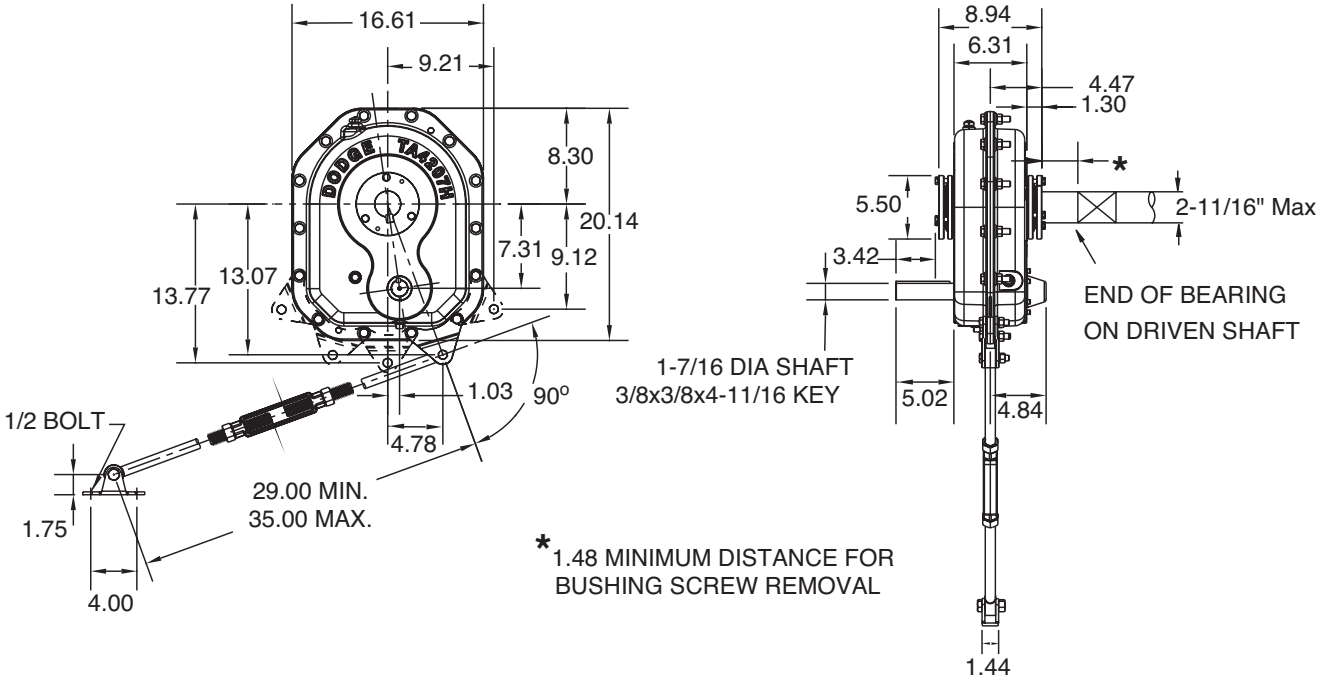
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13	–	–	M4	M4	M3	M3	M2	M2
20	13.50	–	–	M4	M4	M3	M3	M3	M2
24	16.50	–	–	–	–	M4	M3	M3	M3

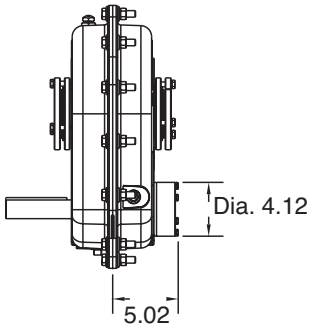
(1) For U Or Flared Trough Ends Per CEMA 300-014

Courtesy of:
SCREW CONVEYOR PARTS

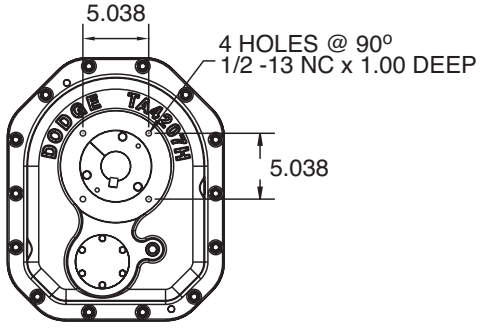
Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA4207H, Single And Double Reduction





REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA4207H, Single And Double Reduction

TA4207H Taper Bushed Reducers (1) ■

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA4207H05	904004	207S05	5.00	178.5
TA4207H09	904003	207D09	9.23	187.1
TA4207H15	904002	207D15	15.00	186.7
TA4207H25	904001	207D25	25.13	186.0
TA4207H40	904000	207D40	39.11	185.4

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

■ See page G2-121 for Maximum Bore Straight Bore TA II Reducers

\+ Rod Assembly mounting locations are limited to positions show in drawing.

TA4207H Accessories

Description	Part Number	Weight lbs.
TA4207RA Rod Assembly (1) +	904109	10.6
TA4207BS Backstop Assembly (5, 9, 15, 25:1) (2)	904102	5.2
TA4207BS 40:1 Backstop Assembly (2)	904103	5.2
TA4207MM Motor Mount Assembly (143-326T) (3)	904090	114.3
TA4207BG Belt Guard - Pos. B (143-326T)	904096	79.6
TA4207BG Belt Guard - Pos. C (143-326T) (4)	904097	82.7
TA4207BG Belt Guard - Pos. D (143-326T)	904099	80.6
TA4207CF Cooling Assembly ●	904106	2.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit HL1	964364	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA4207H V-Ring Kit	904249	0.3
TA4207H Lube Kit	LUBEKITTA4207	16.2

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions
(4) Use Position-C belt guard for TA II reducer in screw conveyor drive applications

TA4207H Tapered Bushing Kits (5) (6)

Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
TA4207TB x 2-11/16	904020	9.4	5/8 x 5/16 x 8.93	–	–	–	–
TA4207TB x 2-1/2	904021	10.6	5/8 x 5/16 x 8.93	–	–	–	–
TA4207TB x 2-7/16 ▲	904022	10.8	5/8 x 5/16 x 8.93	TA4207TBS x 2-7/16	904032	11.3	5/8 x 5/16 x 5.65
TA4207TB x 2-3/8	904023	11.3	5/8 x 5/16 x 8.93	TA4207TBS x 2-3/8	904033	11.8	5/8 x 5/16 x 5.65
TA4207TB x 2-1/4	904024	11.5	1/2 x 1/4 x 8.93	TA4207TBS x 2-1/4	904034	12.4	1/2 x 1/4 x 5.65
TA4207TB x 2-3/16	904025	11.8	1/2 x 1/4 x 8.93	TA4207TBS x 2-3/16	904035	10.8	1/2 x 1/4 x 5.65
TA4207TB x 2-1/8	904026	12.2	1/2 x 1/4 x 8.93	TA4207TBS x 2-1/8	904036	13.3	1/2 x 1/4 x 5.65
TA4207TB x 2	904027	12.6	1/2 x 1/4 x 8.93	TA4207TBS x 2	904037	13.9	1/2 x 1/4 x 5.65
TA4207TB x 1-15/16	904028	13.0	1/2 x 1/4 x 8.93	TA4207TBS x 1-15/16	904038	14.3	1/2 x 1/4 x 5.65
TA4207TB x 1-7/8	904029	13.2	1/2 x 1/4 x 8.93	TA4207TBS x 1-7/8	904039	14.6	1/2 x 1/4 x 5.65
TA4207TB x 1-3/4	904030	13.3	3/8 x 3/16 x 8.93	TA4207TBS x 1-3/4	904040	15.0	3/8 x 3/16 x 5.65
TA4207TB x 1-11/16	904031	13.5	3/8 x 3/16 x 8.93	TA4207TBS x 1-11/16	904041	15.3	3/8 x 3/16 x 5.65

▲ AGMA maximum bore size
(5) Bushing kit required to mount TA II reducer to driven shaft
(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

Bushing Covers

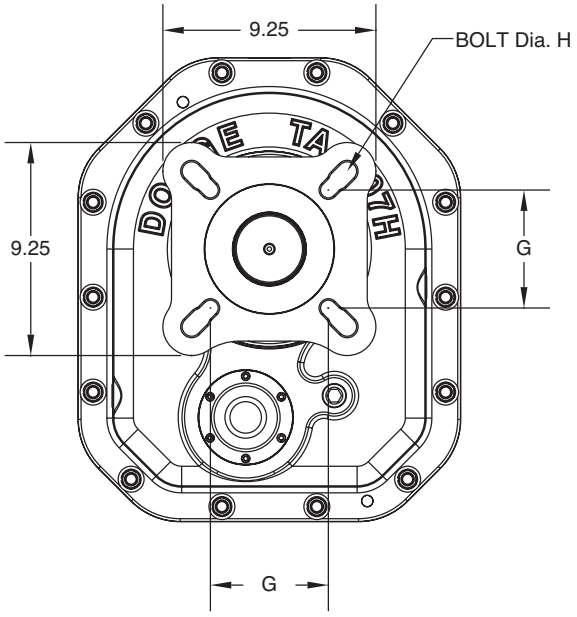
Reducer Size	Description	Part Number	Weight
TA4207H	ABS Polymer Closed (12)	904142	0.6
TA4207H	ABS Polymer split (12)	904143	0.5
Reducer Size	**Description**	**Part Number**	**Weight**
TA4207H	Aluminum Closed (13)	904114	0.6
TA4207H	Aluminum Spllit (13)	904115	0.5

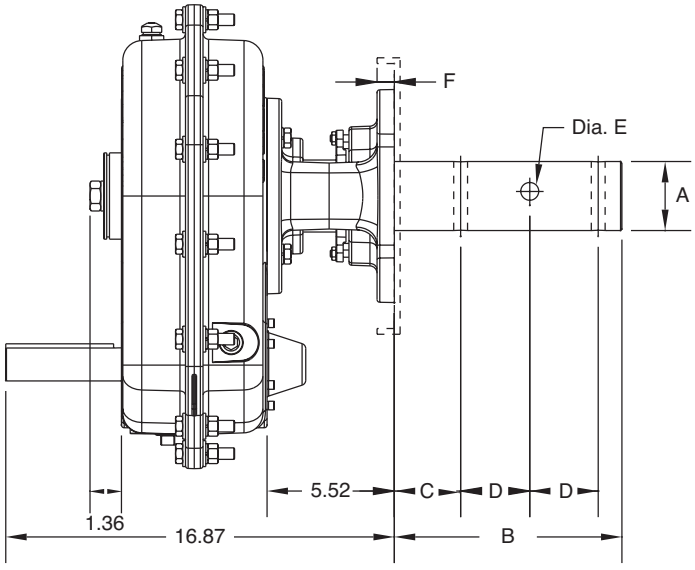
Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on “driven machine” side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA4207H, Single And Double Reduction





Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA4207H, Single And Double Reduction

TA4207H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
9, 12	2	9.00	2.13	3.00	21/32	0.75	5.13	5/8
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20, 24	3-7/16	13.13	3.88	4.00	29/32	0.75	6.75	7/8

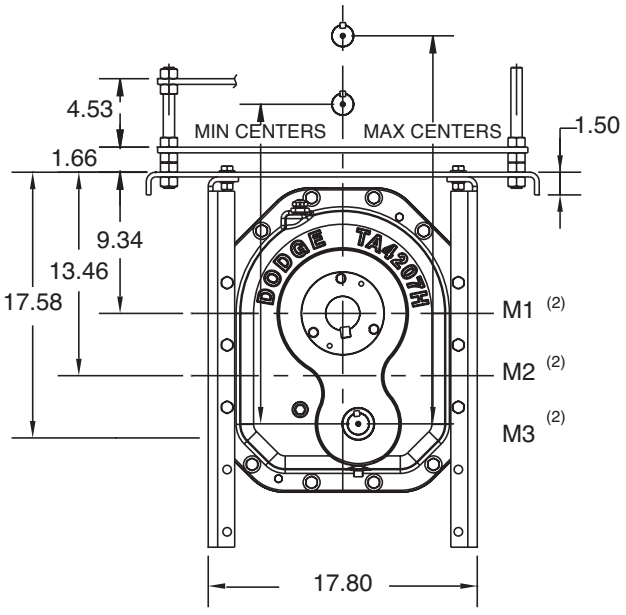
TA4207H Accessories for Screw Conveyor Drives (1) (4) (5)

Description	Part Number	Weight lbs.
TA4207SCA Adapter & Hardware Kit (2)	904070	33.6
TA4207SCP Adjustable Packing Kit (3)	904071	2.1
TA4207SCS x 2 Drive Shaft	904073	29.8
TA4207SCS x 2-7/16 Drive Shaft	904074	34.5
TA4207SCS x 3 Drive Shaft	904075	40.9
TA4207SCS x 3-7/16 Drive Shaft	904076	54.7
TA4207SCS x 2 Stainless Steel Drive Shaft	904081	29.8
TA4207SCS x 2-7/16 Stainless Steel Drive Shaft	904082	34.5
TA4207SCS x 3 Stainless Steel Drive Shaft	904083	40.9
TA4207SCS x 3-7/16 Stainless Steel Drive Shaft	904084	54.7

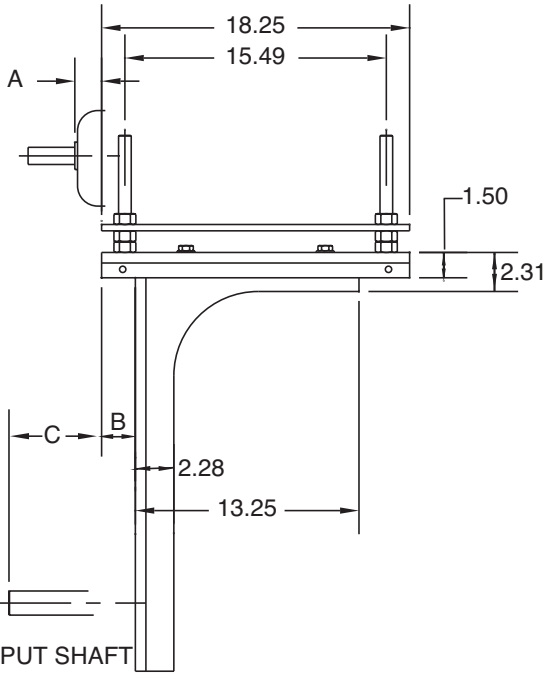
(1) See page G2-65 for Pos "C" Belt Guard for Screw Conveyor Drive applications
(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive, order a TA II Reducer, SCA Adapter & Hardware Kit, and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

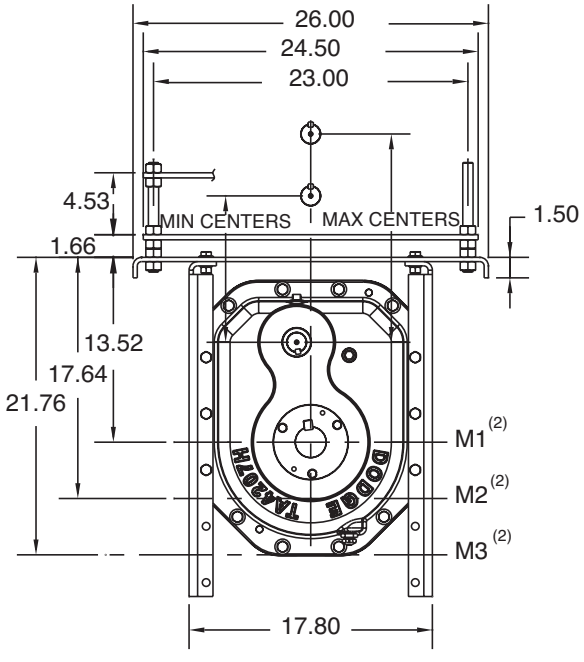
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA4207H, Position B & D



POSITION B





POSITION D

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA4207H, Position B & D (1)

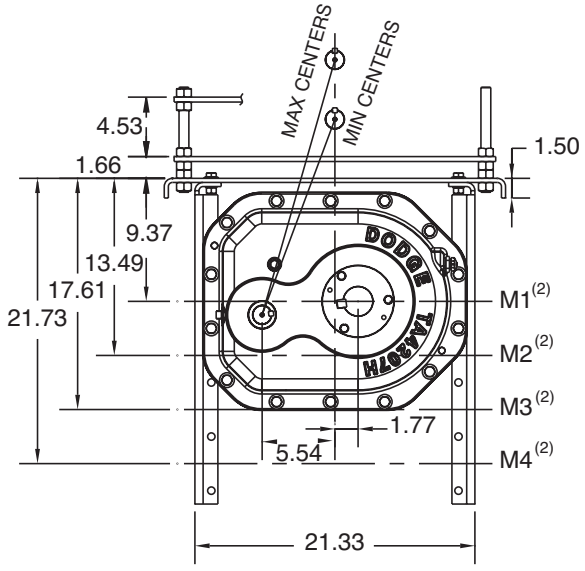
Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						143T & 145T			182T & 184T			213T & 215T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	-0.21	4.21	3.28	7.70	M1	1.22	22.6	26.7	1.37	23.6	27.7	1.55	24.4	28.4
					M2		26.8	30.8		27.8	31.8		28.5	32.5
					M3		30.9	34.9		31.9	35.9		32.6	36.7
Position D	-0.21	4.21	3.28	7.70	M1	1.22	12.2	16.2	1.37	13.2	17.2	1.55	14.0	18.0
					M2		16.3	20.4		17.3	21.4		18.1	22.1
					M3		20.4	24.5		21.4	25.5		22.2	26.2

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						254T & 256T			284T & 286T			324T & 326T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	-0.21	4.21	3.28	7.70	M1	1.56	25.4	29.4	1.16	26.1	30.2	0.38	27.1	31.2
					M2		29.5	33.5		30.3	34.3		31.3	35.3
					M3		33.6	37.7		34.4	38.4		35.4	39.4
Position D	-0.21	4.21	3.28	7.70	M1	1.56	15.0	19.0	1.16	15.7	19.7	0.38	16.7	20.7
					M2		19.1	23.1		19.8	23.9		20.8	24.9
					M3		23.2	27.2		23.9	28.0		24.9	29.0

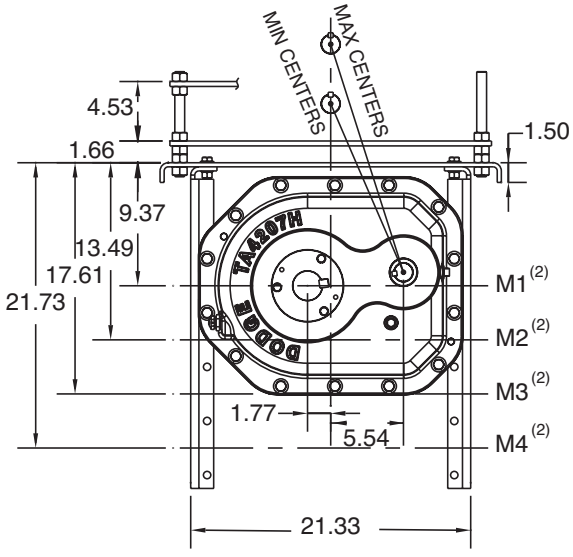
Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3 go through output shaft centerline

Torque-Arm II Shaft Mount Speed Reducers

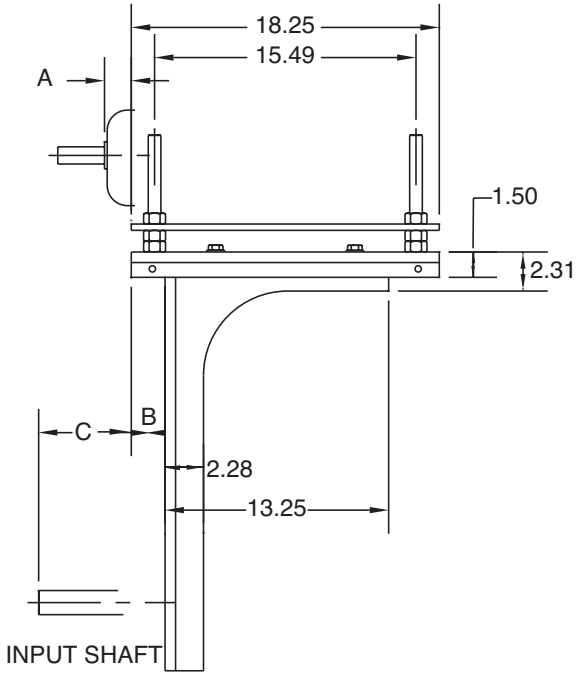
Motor Mount Dimensions - TA4207H, Position A & C



POSITION A



POSITION C



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA4207H, Position A & C (1) (3)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						143T & 145T			182T & 184T			213T & 215T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position A	-0.21	4.21	4.35	8.77	M1	1.22	17.3	21.1	1.37	18.3	22.1	1.55	19.0	22.8
					M2		21.2	25.1		22.2	26.1		22.9	26.8
					M3		25.2	29.2		26.2	30.2		26.9	30.9
					M4		29.3	33.2		30.2	34.2		31.0	34.9
Position C	-0.21	4.21	4.35	8.77	M1	1.22	15.4	19.2	1.37	16.3	20.1	1.55	17.0	20.8
					M2		19.3	23.1		20.2	24.1		20.9	24.8
					M3		23.2	27.2		24.2	28.1		24.9	28.9
					M4		27.3	31.2		28.2	32.2		29.0	32.9

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						254T & 256T			284T & 286T			324T & 326T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position A	-0.21	4.21	4.35	8.77	M1	1.56	19.9	23.8	1.16	20.6	24.5	0.38	21.6	25.5
					M2		23.9	27.8		24.6	28.6		25.6	29.5
					M3		27.9	31.9		28.7	32.6		29.6	33.6
					M4		32.0	35.9		32.7	36.7		33.7	37.7
Position C	-0.21	4.21	4.35	8.77	M1	1.56	18.0	21.8	1.16	18.7	22.5	0.38	19.6	23.5
					M2		21.9	25.8		22.6	26.5		23.6	27.5
					M3		25.9	29.9		26.6	30.6		27.6	31.6
					M4		29.9	33.9		30.7	34.6		31.7	35.6

Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3, M4 go through output shaft centerline
(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

Table A - Screw Conveyor Motor Mount Minimum "M" Mounting Positions (1)

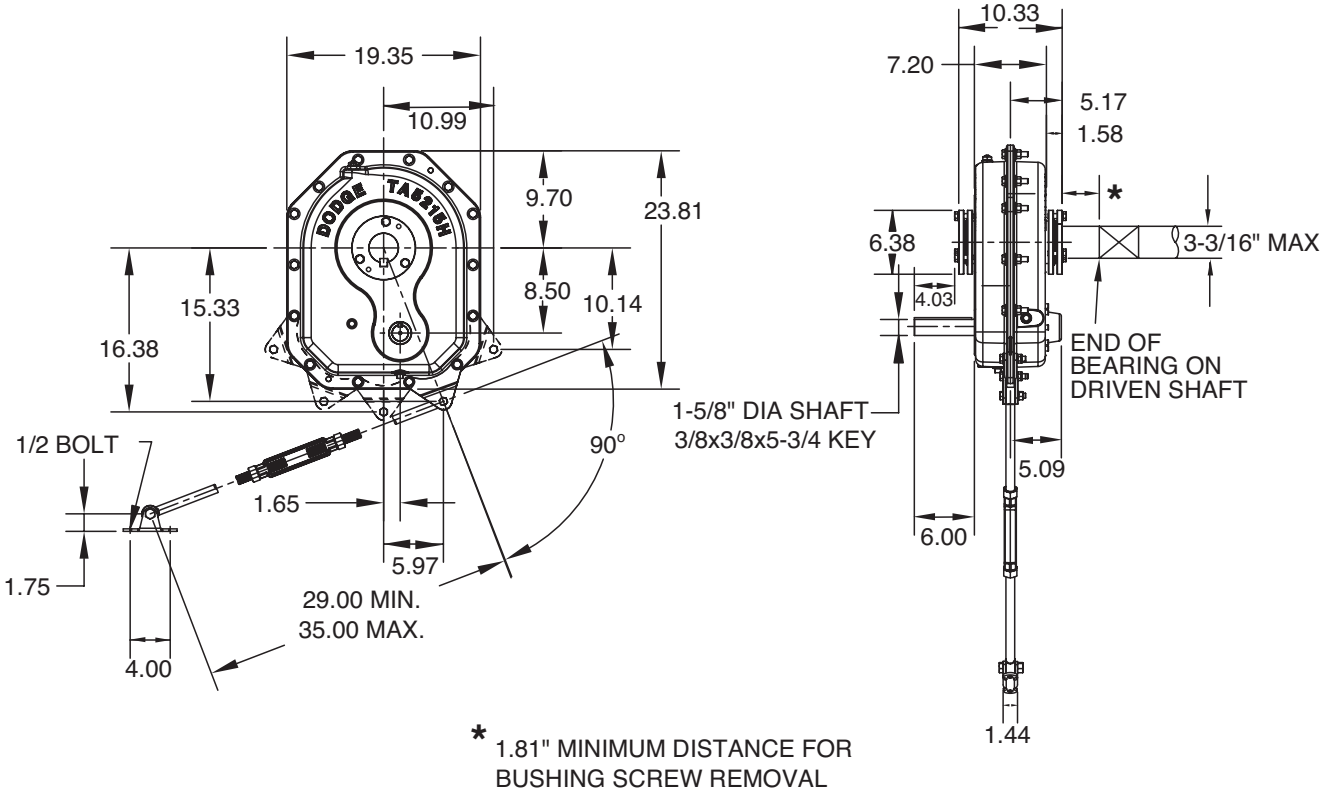
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13	–	–	M4	M4	M3	M3	M2	M2
20	13.50	–	–	M4	M4	M3	M3	M3	M2
24	16.50	–	–	–	–	M4	M3	M3	M3

(1) For U Or Flared Trough Ends Per CEMA 300-014

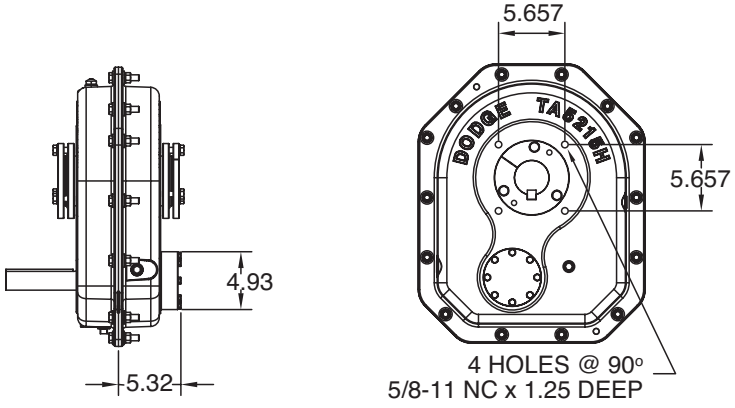
Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA5215H, Single And Double Reduction



* 1.81" MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP **FLANGE MOUNTING DIMENSIONS**

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA5215H, Single And Double Reduction

TA5215H Taper Bushed Reducers (1) ■

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA5215H05	905004	215S05	5.11	259.8
TA5215H09	905003	215D09	9.18	274.4
TA5215H15	905002	215D15	14.92	273.9
TA5215H25	905001	215D25	25.00	272.9
TA5215H40	905000	215D40	38.91	272.1

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

■ See page G2-121 for Maximum Bore Straight Bore TA II Reducers

\+ Rod Assembly mounting locations are limited to positions show in drawing.

TA5215H Accessories

Description	Part Number	Weight lbs.
TA5215RA Rod Assembly (1) +	905109	11.0
TA5215BS Backstop Assembly (5, 9, 15, 25:1) (2)	905102	8.3
TA521BS 40:1 Backstop Assembly (2)	905103	8.3
TA5215MM Motor Mount Assembly (182-365T) (3)	905090	124.8
TA5215BG Belt Guard - Pos. B (182-365T)	905096	101.5
TA5215BG Belt Guard - Pos. C (182-365T) (4)	905097	105.5
TA5215BG Belt Guard - Pos. D (182-365T)	905099	105.0
TA5215CF Cooling Fan Assembly ●	905106	3.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit HL1	964364	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA5215H V-Ring Kit	905249	0.3
TA5215H Lube Kit	LUBEKITTA5215	28.9

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions
(4) Use Position-C belt guard for TA II reducer in screw conveyor drive applications
● See page G2-118 for cooling fan dimensions

TA5215H Tapered Bushing Kits (5) (6)

Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
TA5215TB x 3-3/16	905020	13.7	3/4 x 3/8 x 10.34	–	–	–	–
TA5215TB x 3	905021	15.1	3/4 x 3/8 x 10.34	–	–	–	–
TA5215TB x 2-15/16 ▲	905022	15.6	3/4 x 3/8 x 10.34	TA5215TBS x 2-15/16	905033	16.2	3/4 x 3/8 x 6.36
TA5215TB x 2-7/8	905023	16.1	3/4 x 3/8 x 10.34	TA5215TBS x 2-7/8	905034	16.9	3/4 x 3/8 x 6.36
TA5215TB x 2-11/16	905024	16.7	5/8 x 5/16 x 10.34	TA5215TBS x 2-11/16	905035	18.1	5/8 x 5/16 x 6.36
TA5215TB x 2-1/2	905025	17.9	5/8 x 5/16 x 10.34	TA5215TBS x 2-1/2	905036	19.7	5/8 x 5/16 x 6.36
TA5215TB x 2-7/16	905026	18.1	5/8 x 5/16 x 10.34	TA5215TBS x 2-7/16	905037	20.1	5/8 x 5/16 x 6.36
TA5215TB x 2-3/8	905027	18.3	5/8 x 5/16 x 10.34	TA5215TBS x 2-3/8	905038	20.5	5/8 x 5/16 x 6.36
TA5215TB x 2-1/4	905028	18.9	1/2 x 1/4 x 10.34	TA5215TBS x 2-1/4	905039	21.4	1/2 x 1/4 x 6.36
TA5215TB x 2-3/16	905029	19.1	1/2 x 1/4 x 10.34	TA5215TBS x 2-3/16	905040	21.8	1/2 x 1/4 x 6.36
TA5215TB x 2-1/8	905030	19.3	1/2 x 1/4 x 10.34	TA5215TBS x 2-1/8	905041	22.2	1/2 x 1/4 x 6.36
TA5215TB x 2	905031	19.9	1/2 x 1/4 x 10.34	TA5215TBS x 2	905042	23.0	1/2 x 1/4 x 6.36
TA5215TB x 1-15/16	905032	20.1	1/2 x 1/4 x 10.34	TA5215TBS x 1-15/16	905043	23.4	1/2 x 1/4 x 6.36

▲ AGMA maximum bore size
(5) Bushing kit required to mount TA II reducer to driven shaft
(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

Bushing Covers

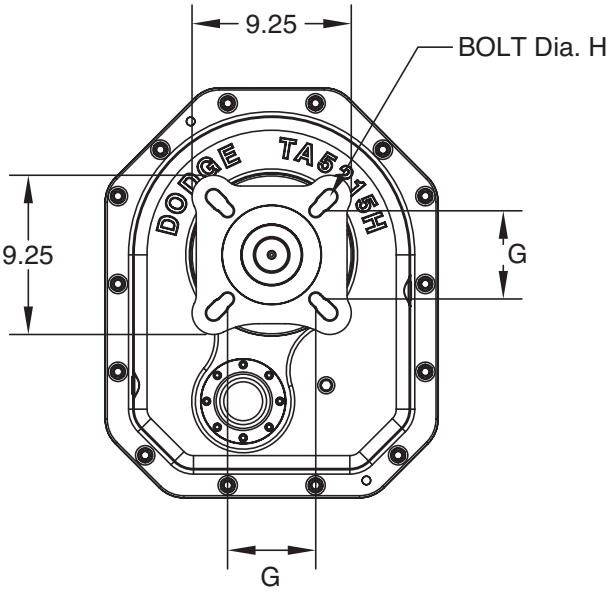
Reducer Size	Description	Part Number	Weight
TA5215H	ABS Polymer Closed (12)	905142	1.5
TA5215H	ABS Polymer Split (12)	905143	1.3
Reducer Size	**Description**	**Part Number**	**Weight**
TA5215H	Aluminum Closed (13)	905114	1.3
TA5215H	Aluminum Spllit (13)	905115	1.3

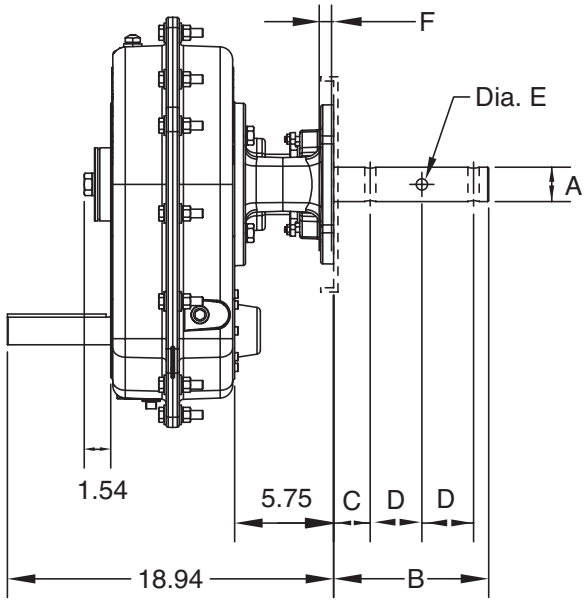
Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on "driven machine" side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA5215H, Single And Double Reduction





Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA5215H, Single And Double Reduction

TA5215H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
9, 12	2	9.00	2.13	3.00	21/32	0.75	5.13	5/8
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20, 24	3-7/16	13.13	3.88	4.00	29/32	0.75	6.75	7/8

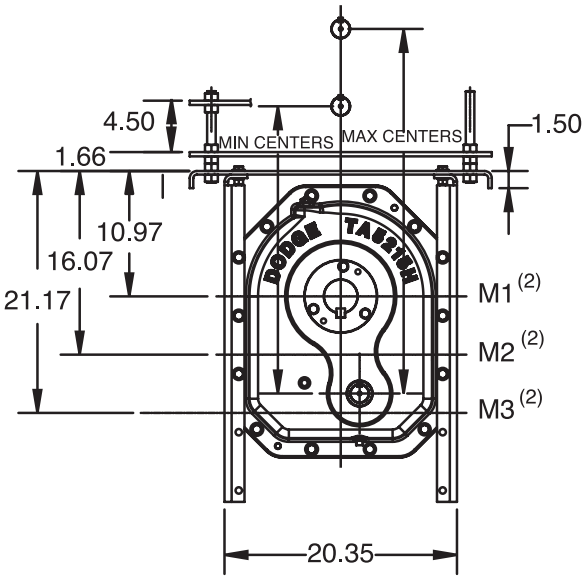
TA5215H Accessories for Screw Conveyor Drives (1) (4) (5)

Description	Part Number	Weight lbs.
TA5215SCA Adapter & Hardware Kit (2)	905070	38.4
TA5215SCP Adjustable Packing Kit (3)	905071	2.1
TA5215SCS x 2 Drive Shaft	905073	39.0
TA5215SCS x 2-7/16 Drive Shaft	905074	43.6
TA5215SCS x 3 Drive Shaft	905075	50.0
TA5215SCS x 3-7/16Drive Shaft	905076	63.9
TA5215SCS x 2 Stainless Steel Drive Shaft	905081	39.0
TA5215SCS x 2-7/16 Stainless Steel Drive Shaft	905082	43.6
TA5215SCS x 3 Stainless Steel Drive Shaft	905083	50.0
TA5215SCS x 3 -7/16 Stainless Steel Drive Shaft	905084	63.9

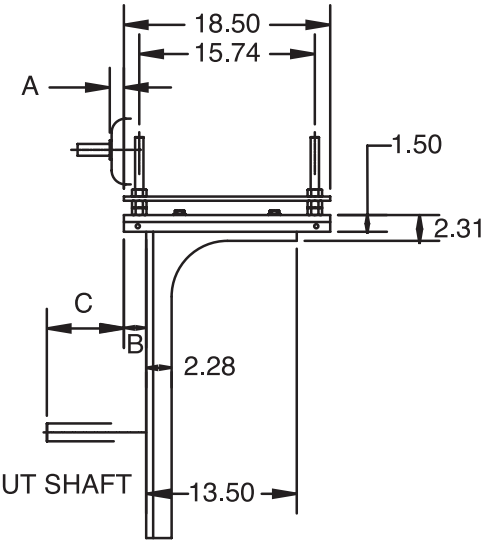
(1) See page G2-73 for Pos "C" Belt Guard for Screw Conveyor Drive applications
(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
(5) A complete TA II Screw Conveyor Drive, order a TA II Reducer, SCA Adapter & Hardware Kit, and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

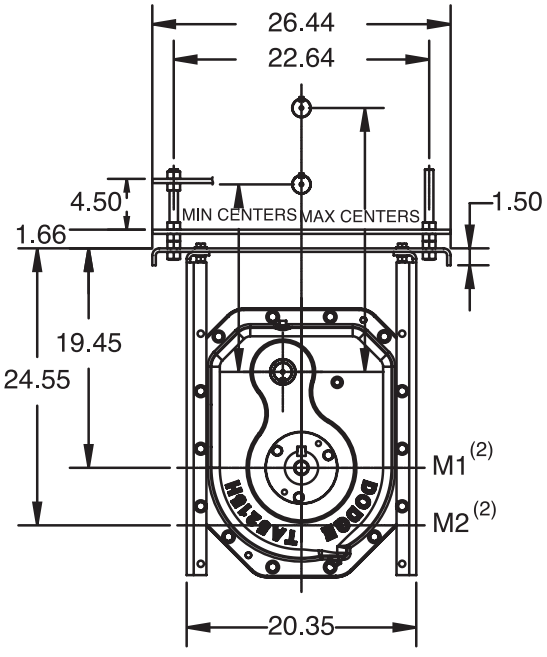
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA5215H, Position B & D



POSITION B





POSITION D

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA5215H, Position B & D (1)

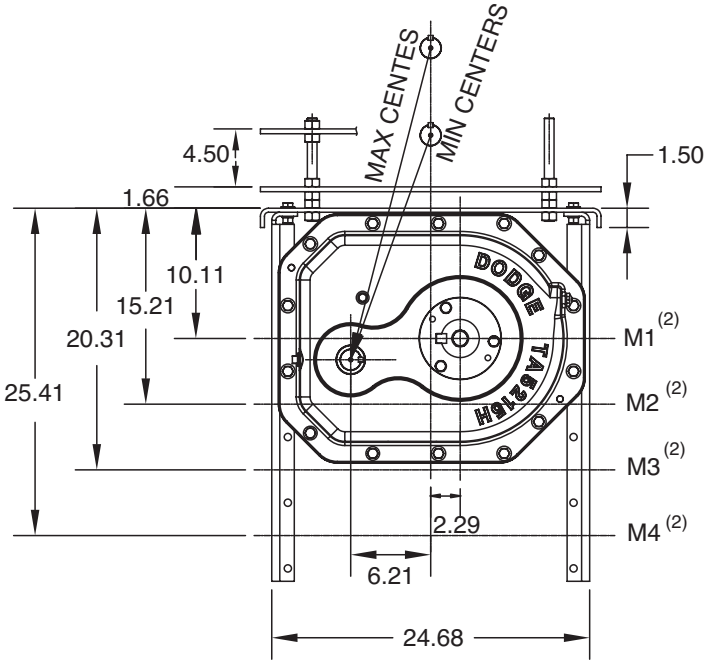
Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						182T & 184T			213T & 215T			254T & 256T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	-0.21	4.21	4.70	9.12	M1	1.37	26.2	30.3	1.55	26.9	31.1	1.56	27.9	32.1
					M2		31.2	35.3		31.9	36.1		32.9	37.1
					M3		36.2	40.3		36.9	41.1		37.9	42.1
Position D	-0.21	4.21	4.70	9.12	M1	1.37	17.7	21.8	1.55	18.4	22.6	1.56	19.4	23.6
					M2		22.7	26.8		23.4	27.6		24.4	28.6

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						284T & 286T			324T & 326T			364T & 365T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	-0.21	4.21	4.70	9.12	M1	1.16	28.7	32.8	0.38	29.7	33.8	1.01	30.7	34.8
					M2		33.7	37.8		34.7	38.8		35.7	39.8
					M3		38.7	42.8		39.7	43.8		40.7	44.8
Position D	-0.21	4.21	4.70	9.12	M1	1.16	20.2	24.3	0.38	21.2	25.3	1.01	22.2	26.3
					M2		25.2	29.3		26.2	30.3		27.2	31.3

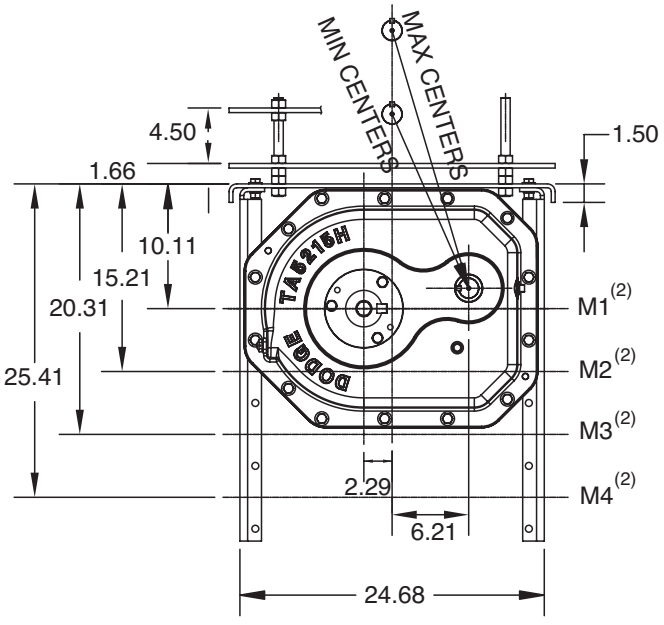
Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3 go through output shaft centerline

Torque-Arm II Shaft Mount Speed Reducers

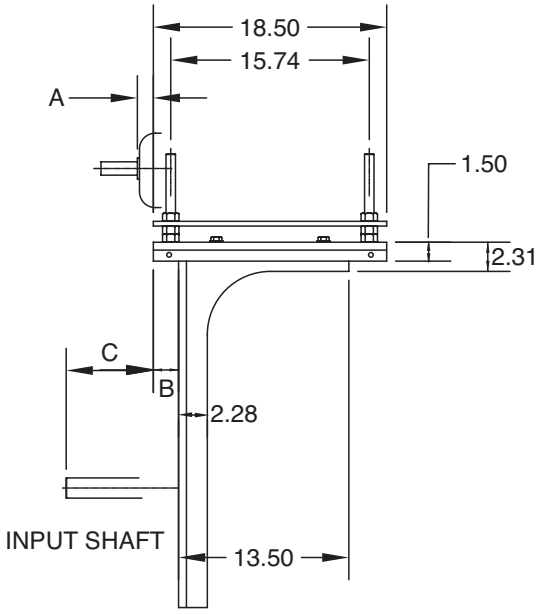
Motor Mount Dimensions - TA5215H, Position A & C



POSITION A



POSITION C



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA5215H, Position A & C (1) (3)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						182T & 184T			213T & 215T			254T & 256T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position A	-0.21	4.21	5.77	10.19	M1	1.37	19.5	23.4	1.55	20.2	24.1	1.56	21.1	25.1
					M2		24.2	28.3		25.0	29.0		25.9	30.0
					M3		29.1	33.2		29.8	33.9		30.8	34.9
					M4		34.0	38.1		34.7	38.8		35.7	39.8
Position C	-0.21	4.21	5.77	10.19	M1	1.37	16.4	20.3	1.55	17.1	21.0	1.56	18.0	21.9
					M2		21.1	25.1		21.8	25.8		22.8	26.8
					M3		25.9	29.9		26.6	30.7		27.6	31.6
					M4		30.8	34.8		31.5	35.6		32.5	36.6

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						284T & 286T			324T & 326T			364T & 365T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position A	-0.21	4.21	5.77	10.19	M1	1.16	21.8	25.8	0.38	22.8	26.8	1.01	23.8	27.8
					M2		26.7	30.7		27.6	31.7		28.6	32.7
					M3		31.5	35.6		32.5	36.6		33.5	37.6
					M4		36.5	40.6		37.4	41.5		38.4	42.5
Position C	-0.21	4.21	5.77	10.19	M1	1.16	18.7	22.6	0.38	19.7	23.6	1.01	20.6	24.6
					M2		23.5	27.5		24.4	28.5		25.4	29.4
					M3		28.3	32.4		29.3	33.4		30.3	34.3
					M4		33.2	37.3		34.2	38.3		35.2	39.3

Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3, M4 go through output shaft centerline
(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

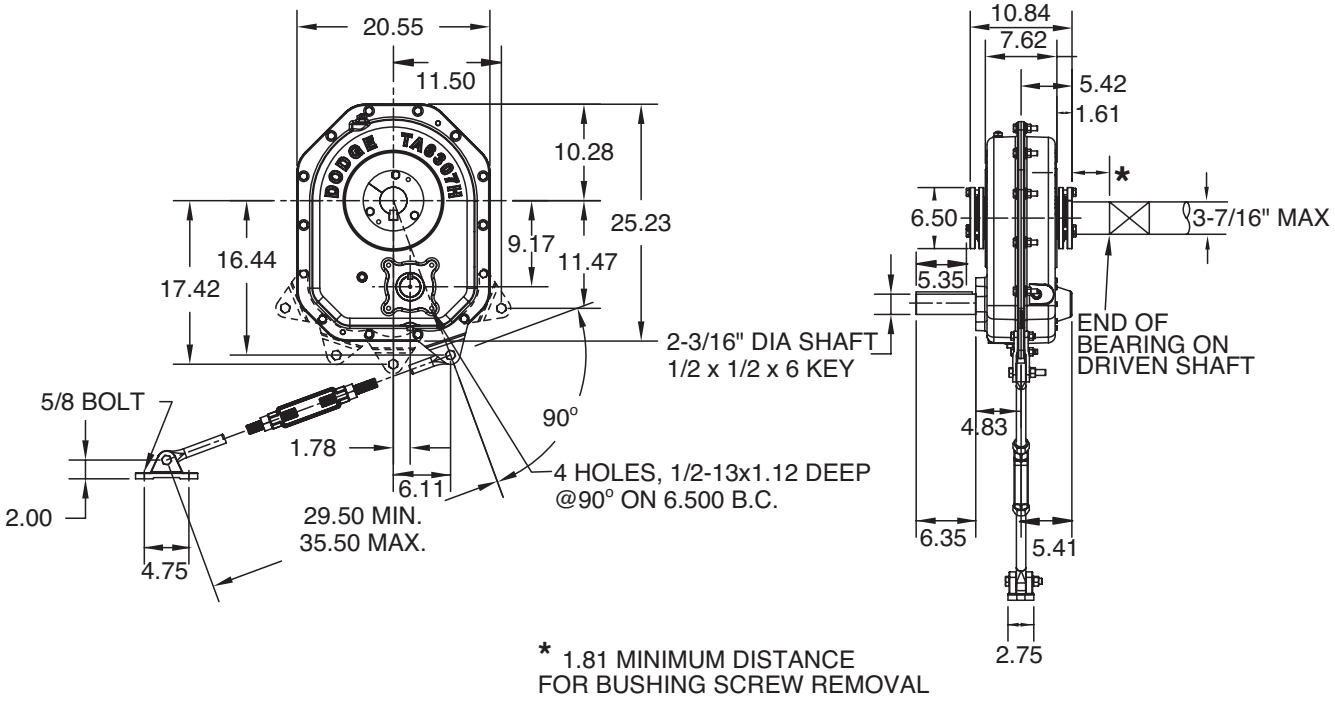
Table A - Screw Conveyor Motor Mount Minimum "M" Mounting Positions (1)

Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13	–	–	M4	M4	M3	M3	M2	M2
20	13.50	–	–	M4	M4	M3	M3	M3	M2
24	16.50	–	–	–	–	M4	M3	M3	M3

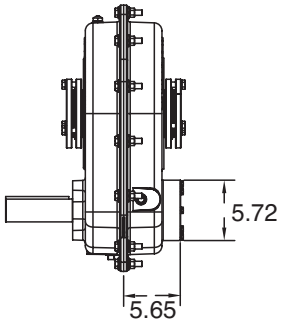
(1) For U Or Flared Trough Ends Per CEMA 300-014

Torque-Arm II Shaft Mount Speed Reducers

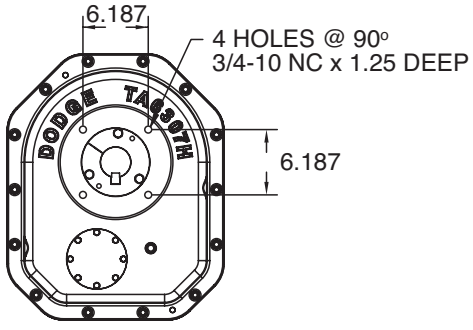
Taper Bushed Reducers - TA6307H, Single And Double Reduction



* 1.81 MINIMUM DISTANCE
FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA6307H, Single And Double Reduction

TA6307H Taper Bushed Reducers (1) ■

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA6307H05	906004	307S05	4.94	316.0
TA6307H09	906003	307D09	9.22	334.0
TA6307H15	906002	307D15	15.45	333.0
TA6307H25	906001	307D25	24.87	331.0
TA6307H40	906000	307D40	38.32	330.0

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

■ See page G2-121 for Maximum Bore Straight Bore TA II Reducers

\+ Rod Assembly mounting locations are limited to positions show in drawing.

TA6307H Accessories

Description	Part Number	Weight lbs.
TA6307RA Rod Assembly (1) +	906109	19.9
TA6307BS Backstop Assembly (5, 9, 15:1) (2)	906102	11.1
TA6307BS 25:1 & 40:1 Backstop Assembly (2)	906103	11.1
TA6307MM Motor Mount Assembly (182-405T) (3)	906090	156.7
TA6307BG Belt Guard - Pos. B (182-405T)	906096	121.2
TA6307BG Belt Guard - Pos. C (182-405T) (4)	906097	129.4
TA6307BG Belt Guard - Pos. D (182-405T)	906099	122.2
TA6307CF Cooling Fan Assembly ●	906106	10.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit HL1	964364	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA4-TA12 Vertical Breather Kit	904112	3.0
TA6307H V-Ring Kit	906249	0.4
TA6307H Lube Kit	LUBEKITTA6307	34.7

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions
(4) Use Position-C belt guard for TA II reducer in screw conveyor drive applications
● See page G2-118 for cooling fan dimensions

TA6307H Tapered Bushing Kits (5) (6)

Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size Short Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
TA6307TB x 3-7/16 ▲	906020	16.7	7/8 x 7/16 x 10.82	TA6307TBS x 3-7/16	906031	16.5	7/8 x 7/16 x 6.72
TA6307TB x 3-3/16	906021	17.7	3/4 x 3/8 x 10.82	TA6307TBS x 3-3/16	906032	19.0	3/4 x 3/8 x 6.72
TA6307TB x 3	906022	19.1	3/4 x 3/8 x 10.82	TA6307TBS x 3	906033	20.9	3/4 x 3/8 x 6.72
TA6307TB x 2-15/16	906023	19.6	3/4 x 3/8 x 10.82	TA6307TBS x 2-15/16	906034	21.6	3/4 x 3/8 x 6.72
TA6307TB x 2-7/8	906024	20.1	3/4 x 3/8 x 10.82	TA6307TBS x 2-7/8	906035	22.3	3/4 x 3/8 x 6.72
TA6307TB x 2-11/16	906025	20.9	5/8 x 5/16 x 10.82	TA6307TBS x 2-11/16	906036	23.7	5/8 x 5/16 x 6.72
TA6307TB x 2-1/2	906026	22.1	5/8 x 5/16 x 10.82	TA6307TBS x 2-1/2	906037	25.3	5/8 x 5/16 x 6.72
TA6307TB x 2-7/16	906027	22.3	5/8 x 5/16 x 10.82	TA6307TBS x 2-7/16	906038	25.8	5/8 x 5/16 x 6.72
TA6307TB x 2-3/8	906028	22.7	5/8 x 5/16 x 10.82	TA6307TBS x 2-3/8	906039	26.3	5/8 x 5/16 x 6.72
TA6307TB x 2-1/4	906029	23.1	1/2 x 1/4 x 10.82	TA6307TBS x 2-1/4	906040	26.7	1/2 x 1/4 x 6.72
TA6307TB x 2-3/16	906030	23.3	1/2 x 1/4 x 10.82	TA6307TBS x 2-3/16	906041	27.5	1/2 x 1/4 x 6.72

▲ AGMA maximum bore size
(5) Bushing kit required to mount TA II reducer to driven shaft
(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

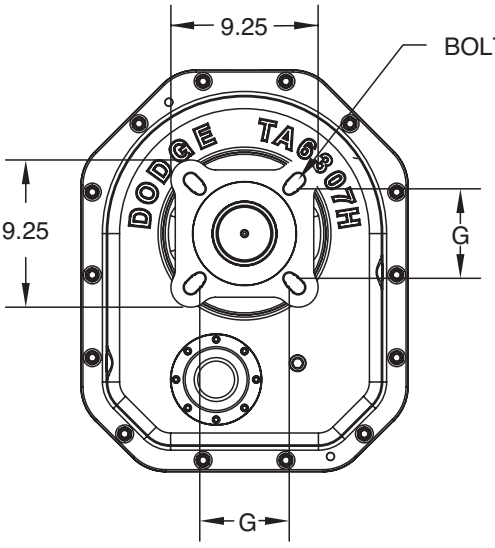
Bushing Covers

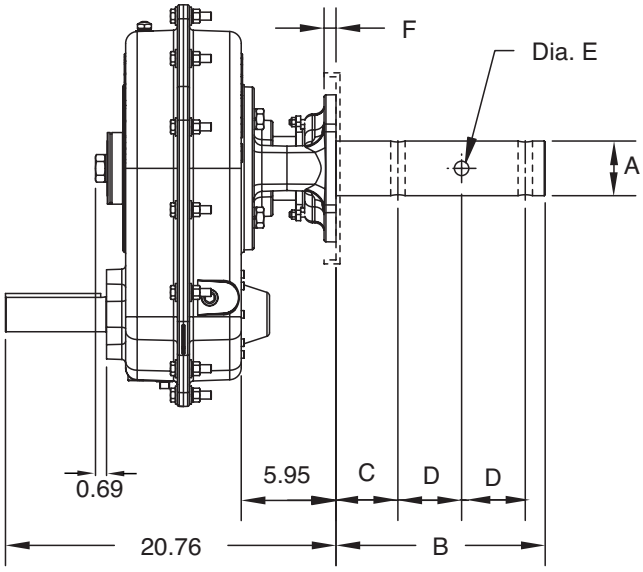
Reducer Size	Description	Part Number	Weight
TA6307H	ABS Polymer Closed (12)	906142	1.5
TA6307H	ABS Polymer Split (12)	906143	1.3
Reducer Size	**Description**	**Part Number**	**Weight**
TA6307H	Aluminum Closed (13)	906114	1.5
TA6307H	Aluminum Spllit (13)	906115	1.5

Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on “driven machine” side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA6307H, Single And Double Reduction





Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA6307H, Single And Double Reduction

TA6307H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16,18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20, 24	3-7/16	13.13	3.88	4.00	29/32	0.75	6.75	7/8

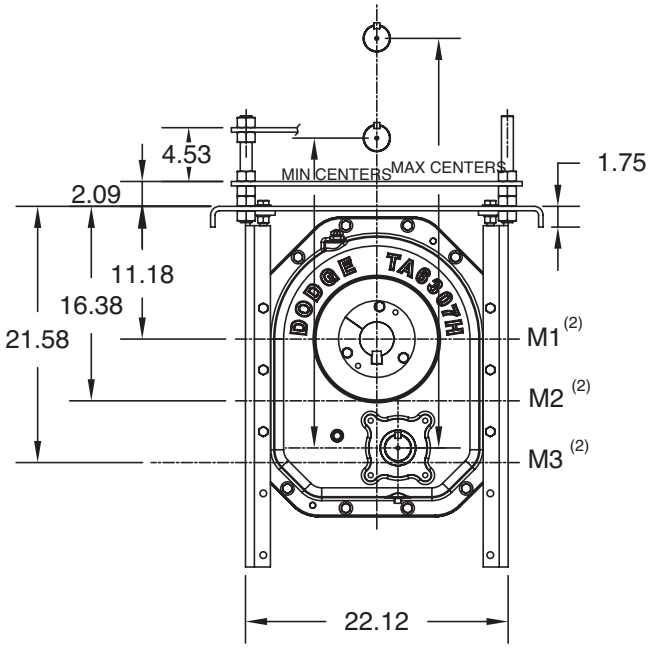
TA6307H Accessories for Screw Conveyor Drives (1) (4) (5)

Description	Part Number	Weight lbs.
TA6307SCA Adapter & Hardware Kit (2)	906070	40.0
TA6307SCP Adjustable Packing Kit (3)	906071	2.4
TA6307SCS x 2-7/16 Drive Shaft	906074	54.6
TA6307SCS x 3 Drive Shaft	906075	61.0
TA6307SCS x 3-7/16 Drive Shaft	906076	74.9
TA6307SCS x 2-7/16 Stainless Steel Drive Shaft	906082	54.6
TA6307SCS x 3 Stainless Steel Drive Shaft	906083	61.0
TA6307SCS x 3-7/16 Stainless Steel Drive Shaft	906084	74.9

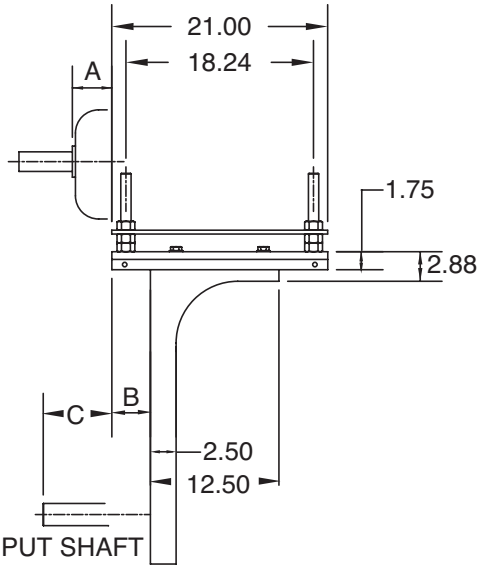
(1) See page G2-81 for Poc "C" Belt Guard for Screw Conveyor Drive applications
(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit.
(5) A complete TA II Screw Conveyor Drive, order a TA II Reducer, SCA Adapter & Hardware Kit, and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

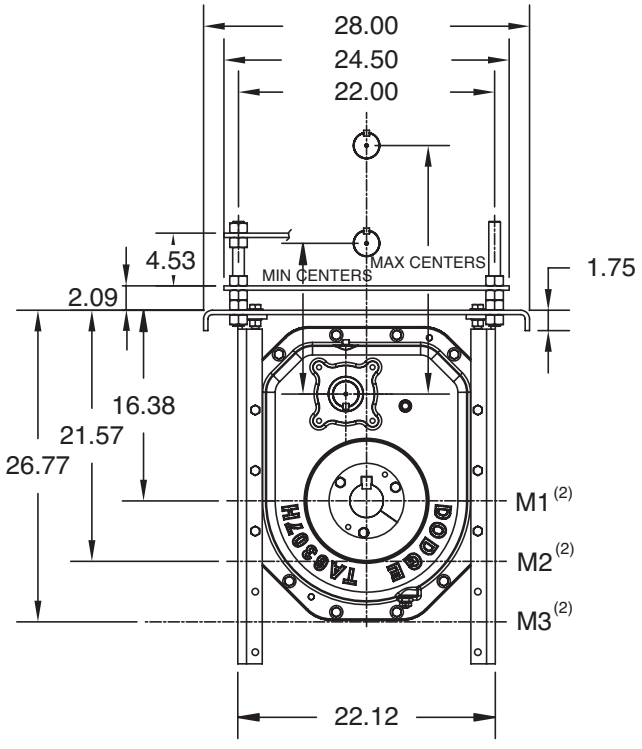
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA6307H, Position B & D



POSITION B





POSITION D

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA6307H, Position B & D (1)

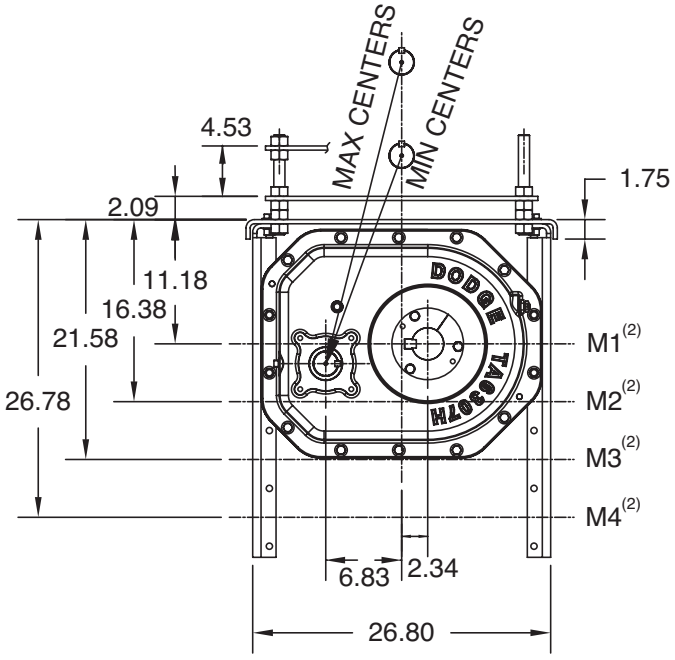
Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame											
						182T & 184T			213T & 215T			254T & 256T			284T & 286T		
						A	Centers		A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	4.51	8.83	M1	1.37	27.5	31.5	1.55	28.2	32.3	1.56	29.2	33.3	1.16	30.0	34.0
					M2		32.7	36.7		33.4	37.5		34.4	38.5		35.2	39.2
					M3		37.9	41.9		38.6	42.7		39.6	43.7		40.4	44.4
Position D	1.59	5.91	4.51	8.83	M1	1.37	14.4	18.4	1.55	15.2	19.2	1.56	16.1	20.2	1.16	16.9	20.9
					M2		19.6	23.6		20.3	24.3		21.3	25.3		22.1	26.1
					M3		24.8	28.8		25.5	29.5		26.5	30.5		27.3	31.3

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						324T & 326T			364T & 365T			404T & 405T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	4.51	8.83	M1	0.38	31.0	35.0	1.01	32.0	36.0	0.75	33.0	37.0
					M2		36.2	40.2		37.2	41.2		38.2	42.2
					M3		41.4	45.4		42.4	46.4		43.4	47.4
Position D	1.59	5.91	4.51	8.83	M1	0.38	17.9	21.9	1.01	18.9	22.9	0.75	19.9	23.9
					M2		23.1	27.1		24.1	28.1		25.1	29.1
					M3		28.3	32.3		29.3	33.3		30.2	34.3

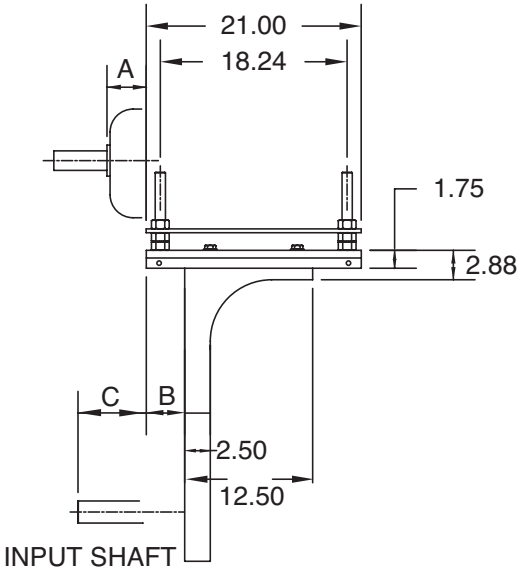
Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3 go through output shaft centerline

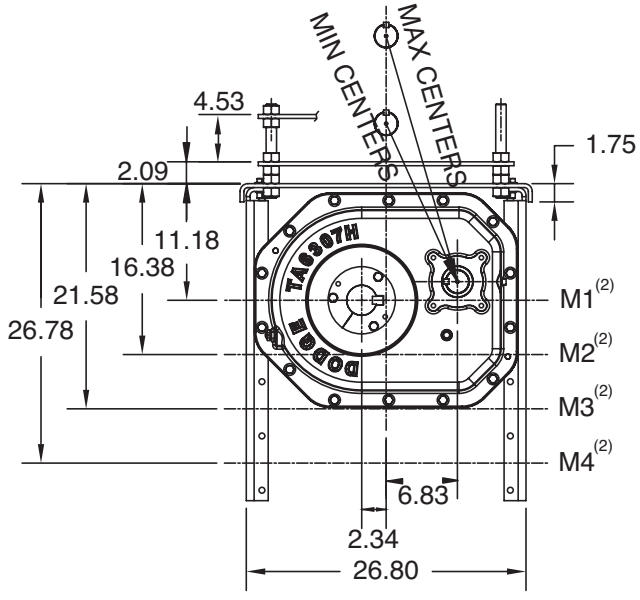
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA6307H, Position A & C



POSITION A





POSITION C

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA6307H, Position A & C (1) (3)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame											
						182T & 184T			213T & 215T			254T & 256T			284T & 286T		
						A	Centers		A	Centers		A	Centers		A	Centers	
	B Min	B Min	C Min	C Min			Min	Max		Min	Max		Min	Max		Min	Max
Position A	1.59	5.91	5.65	9.97	M1	1.37	21.2	25.0	1.55	21.9	25.8	1.56	22.9	26.7	1.16	23.6	27.4
					M2		26.2	30.1		26.9	30.8		27.9	31.8		28.6	32.5
					M3		31.2	35.1		32.0	35.9		32.9	36.9		33.7	37.6
					M4		36.3	40.3		37.0	41.0		38.0	42.0		38.8	42.7
Position C	1.59	5.91	5.65	9.97	M1	1.37	17.9	21.6	1.55	18.6	22.3	1.56	19.5	23.3	1.16	20.2	24.0
					M2		22.8	26.6		23.5	27.3		24.4	28.3		25.2	29.0
					M3		27.8	31.7		28.5	32.4		29.5	33.4		30.2	34.1
					M4		32.8	36.8		33.5	37.5		34.5	38.5		35.3	39.2

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						324T & 326T			364T & 365T			404T & 405T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position A	1.59	5.91	5.65	9.97	M1	0.38	24.5	28.4	1.01	25.5	29.4	0.75	26.5	30.4
					M2		29.6	33.5		30.5	34.5		31.5	35.4
					M3		34.6	38.6		35.6	39.6		36.6	40.6
					M4		39.7	43.7		40.7	44.7		41.7	45.7
Position C	1.59	5.91	5.65	9.97	M1	0.38	21.1	25.0	1.01	22.1	25.9	0.75	23.0	26.9
					M2		26.1	30.0		27.1	31.0		28.0	32.0
					M3		31.2	35.1		32.1	36.1		33.1	37.1
					M4		36.2	40.2		37.2	41.2		38.2	42.2

Note:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3, M4 go through output shaft centerline
(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

Table A - Screw Conveyor Motor Mount Minimum "M" Mounting Positions (1)

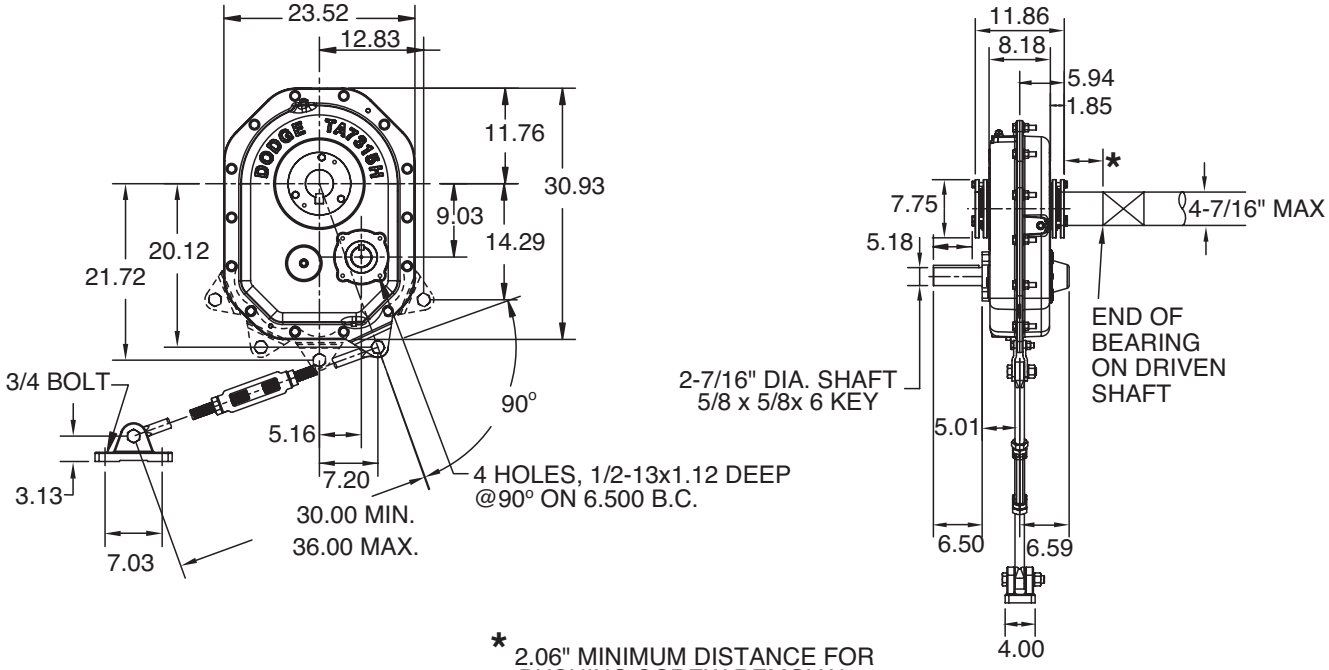
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13	–	–	M4	M4	M3	M3	M2	M2
20	13.50	–	–	M4	M4	M3	M3	M3	M2
24	16.50	–	–	–	–	M4	M3	M3	M3

(1) For U Or Flared Trough Ends Per CEMA 300-014

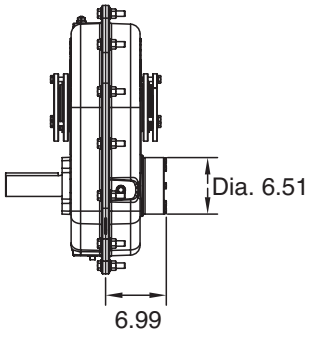
Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

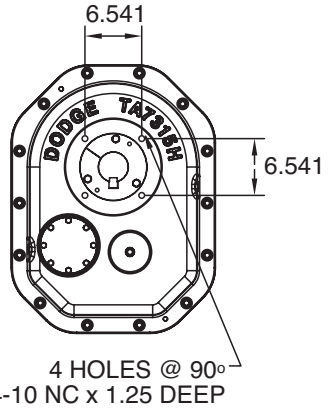
Taper Bushed Reducers - TA7315H, Single And Double Reduction



* 2.06" MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA7315H, Single And Double Reduction

TA7315H Taper Bushed Reducers (1)

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA7315H05	907004	315S05	5.19	449.0
TA7315H09	907003	315D09	9.72	494.0
TA7315H15	907002	315D15	14.91	493.0
TA7315H25	907001	315D25	24.84	494.0
TA7315H40	907000	315D40	39.66	492.0

TA7315H Accessories

Description	Part Number	Weight lbs.
TA7315/8407RA Rod Assembly (1) +	907109	43.2
TA7315BS Backstop Assembly (5, 9, 15, 25:1) (2)	907102	20.0
TA7315/9415BS 40:1 Backstop Assembly (2)	907103	21.0
TA7315/8407MM Motor Mount Assembly (213-405T) (3)	907090	183.3
TA7315/8407BG Belt Guard - Pos. B (213-405T)	907096	147.2
TA7315/8407BG Belt Guard - Pos. C (213-405T) (4)	907097	152.7
TA7315/8407BG Belt Guard - Pos. D (213-405T)	907099	148.2
TA7315/8407CF Cooling Fan Assembly ●	907106	10.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit HL1	964364	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA7315/8407H V-Ring Kit	907249	0.4
TA7315H Lube Kit	LUBEKITTA7315	53.2

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions
(4) Use Position-C belt guard for TA II reducer in screw conveyor drive applications
● See page G2-118 for cooling fan dimensions

TA7315H Tapered Bushing Kits (5) (6)

Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (10)	Bushing Size Short Shaft Bushing Kit (8)	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
TA7315TB x 4-7/16	907019	20.5	1 x 1/2 x 11.87	–	–	–	–
TA7315TB x 4-3/16	907021	23.5	1 x 1/2 x 11.87	–	–	–	–
TA7315TB x 3-15/16 ▲	907022	26.3	1 x 1/2 x 11.87	TA7315TBS x 3-15/16	907031	26.7	1 x 1/2 x 7.62
TA7315TB x 3-7/16	907023	30.9	7/8 x 7/16 x 11.87	TA7315TBS x 3-7/16	907032	34.2	7/8 x 7/16 x 7.62
TA7315TB x 3-3/16	907024	32.6	3/4 x 3/8 x 11.87	TA7315TBS x 3-3/16	907033	36.7	3/4 x 3/8 x 7.62
TA7315TB x 3	907025	34.0	3/4 x 3/8 x 11.87	TA7315TBS x 3	907034	38.8	3/4 x 3/8 x 7.62
TA7315TB x 2-15/16	907026	34.6	3/4 x 3/8 x 11.87	TA7315TBS x 2-15/16	907035	39.6	3/4 x 3/8 x 7.62
TA7315TB x 2-7/8	907027	35.0	3/4 x 3/8 x 11.87	TA7315TBS x 2-7/8	907036	40.2	3/4 x 3/8 x 7.62
TA7315TB x 2-11/16	907028	35.8	5/8 x 5/16 x 11.87	TA7315TBS x 2-11/16	907037	41.7	5/8 x 5/16 x 7.62
TA7315TB x 2-1/2	907029	37.2	5/8 x 5/16 x 11.87	TA7315TBS x 2-1/2	907038	43.6	5/8 x 5/16 x 7.62
TA7315TB x 2-7/16	907030	37.4	5/8 x 5/16 x 11.87	TA7315TBS x 2-7/16	907039	44.1	5/8 x 5/16 x 7.62

▲ AGMA maximum bore size
(5) Bushing kit required to mount TA II reducer to driven shaft
(6) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application
(7) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

Bushing Covers

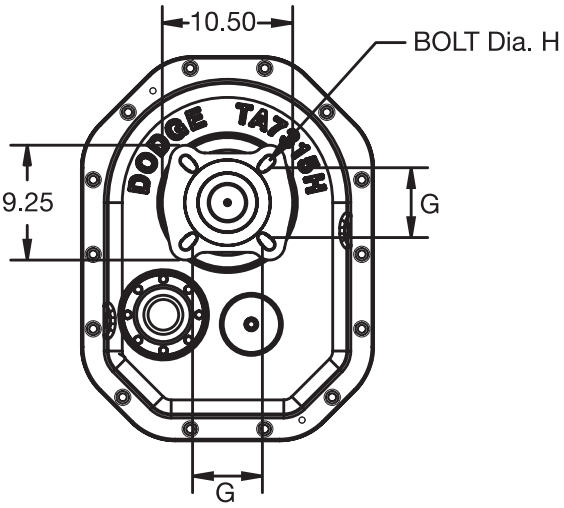
Reducer Size	Description	Part Number	Weight
TA7315H	ABS Polymer Closed (12)	907142	1.6
TA7315H	ABS Polymer Split (12)	907143	1.5
Reducer Size	**Description**	**Part Number**	**Weight**
TA7315H	Aluminum Closed (13)	907114	1.5
TA7315H	Aluminum Spllit (13)	907115	1.5

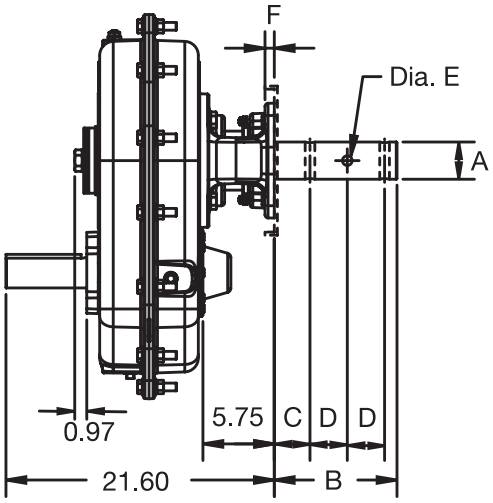
Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on "driven machine" side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA7315H, Single And Double Reduction





Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA7315H, Single And Double Reduction

TA7315H Screw Conveyor Drive Dimensions

Screw Dia	Drive Shaft Dia A	Dimensions						
		B	C	D	Hole Dia E	F	G	Bolt Dia H
12, 14	2-7/16	9.69	2.75	3.00	21/32	0.75	5.63	5/8
12, 14, 16, 18, 20	3	9.88	2.88	3.00	25/32	0.75	6.00	3/4
18, 20, 24	3-7/16	13.13	3.88	4.00	29/32	0.75	6.75	7/8

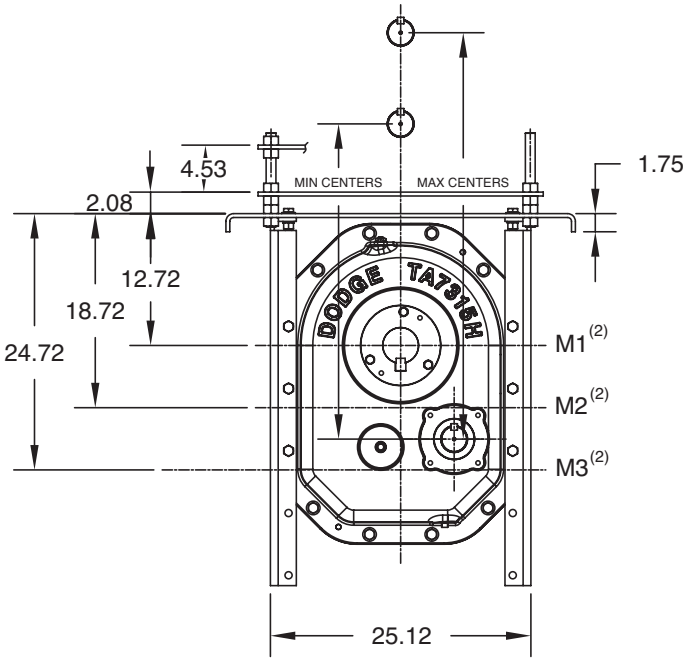
TA7315H Accessories for Screw Conveyor Drives (1) (4) (5)

Description	Part Number	Weight lbs.
TA7315SCA Adapter & Hardware Kit (2)	907070	50.1
TA7315SCP Adjustable Packing Kit (3)	907071	2.5
TA7315SCS x 2-7/16 Drive Shaft	907074	77.0
TA7315SCS x 3 Drive Shaft	907075	83.4
TA7315SCS x 3-7/16Drive Shaft	907076	97.3
TA7315SCS x 2-7/16 Stainless Steel Drive Shaft	907082	77.0
TA7315SCS x 3 Stainless Steel Drive Shaft	907083	83.4
TA7315SCS x 3-7/16 Stainless Steel Drive Shaft	907084	97.3

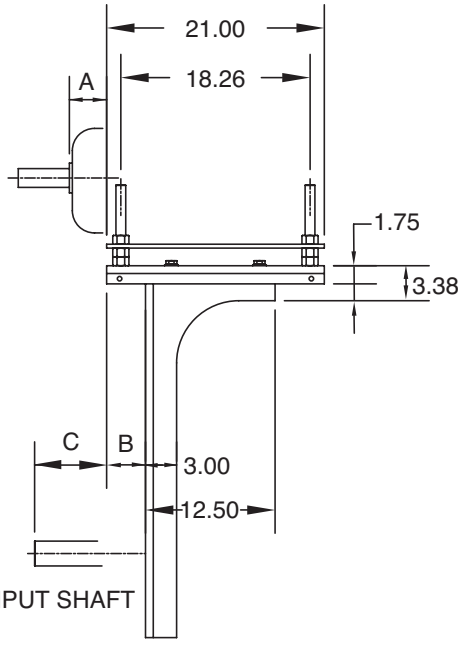
(1) See page G2-89 for Pos "C" Belt Guard for Screw Conveyor Drive applications.
(2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware.
(3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals.
(4) SCS Drive Shaft is a shaft only. Mounting hardware is stocked with the adapter & hardware kit.
(5) A complete TA II Screw Conveyor Drive, order a TA II Reducer, SCA Adapter & Hardware Kit, and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.

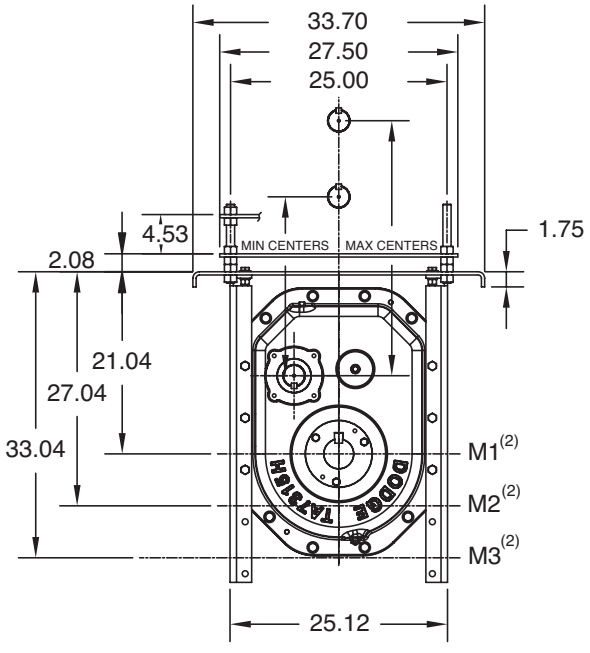
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA7315H, Position B & D



POSITION B





POSITION D

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA7315H, Position B & D (1)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						213T & 215T			254T & 256T			284T & 286T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	4.78	9.10	M1	1.55	30.0	34.0	1.56	31.0	35.0	1.16	31.8	35.7
					M2		36.0	40.0		37.0	40.9		37.7	41.7
					M3		41.9	45.9		42.9	46.9		43.6	47.6
Position D	1.59	5.91	4.78	9.10	M1	1.55	20.5	24.4	1.56	21.5	25.4	1.16	22.2	26.1
					M2		26.4	30.3		27.4	31.3		28.1	32.0
					M3		32.3	36.3		33.3	37.2		34.0	38.0

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						324T & 326T			364T & 365T			404T & 405T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	4.78	9.10	M1	0.38	32.8	36.7	1.01	33.7	37.7	0.75	34.7	38.7
					M2		38.7	42.7		39.7	43.7		40.7	44.7
					M3		44.6	48.6		45.6	49.6		46.6	50.6
Position D	1.59	5.91	4.78	9.10	M1	0.38	23.2	27.1	1.01	24.2	28.1	0.75	25.1	29.1
					M2		29.1	33.0		30.1	34.0		31.0	35.0
					M3		35.0	39.0		36.0	40.0		37.0	41.0

Notes:

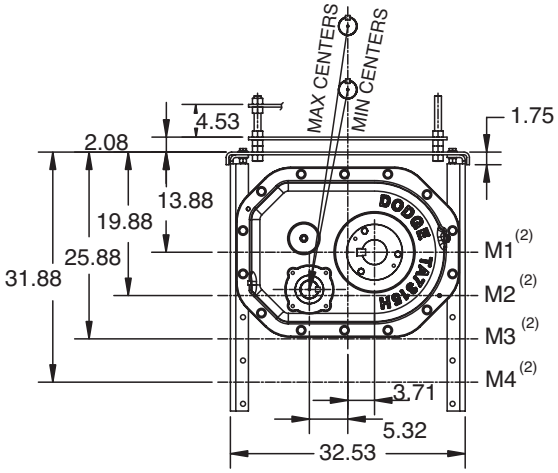
Minimum centers contains 0.5" to allow for belt assembly

(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions

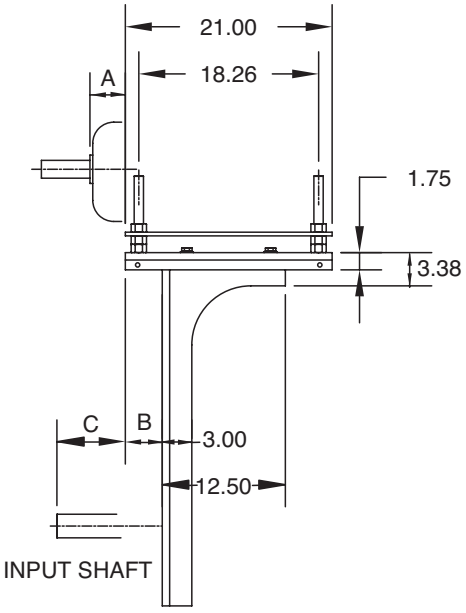
(2) M1, M2, M3 go through output shaft centerline

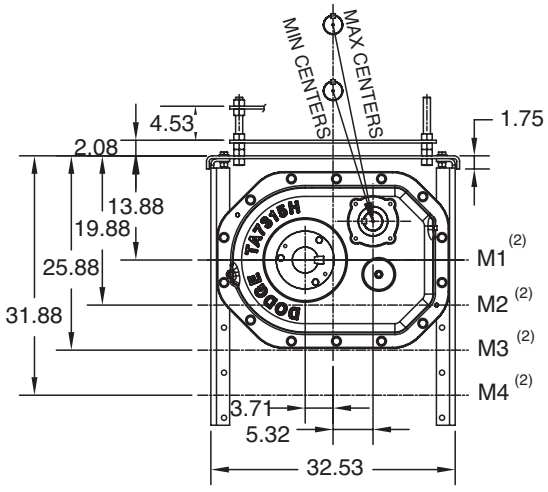
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA7315H, Position A & C



POSITION A





POSITION C

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA7315H, Position A & C (1) (3)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						213T & 215T			254T & 256T			284T & 286T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position A	1.59	5.91	6.04	10.36	M1	1.55	27.4	31.4	1.56	28.4	32.4	1.16	29.1	33.1
					M2		33.3	37.3		34.3	38.3		35.0	39.0
					M3		39.2	43.2		40.2	44.2		41.0	45.0
					M4		45.2	49.2		46.2	50.2		46.9	50.9
Position C	1.59	5.91	6.04	10.36	M1	1.55	17.4	21.3	1.56	18.4	22.2	1.16	19.1	23.0
					M2		23.2	27.1		24.2	28.1		24.9	28.8
					M3		29.1	33.0		30.0	34.0		30.8	34.7
					M4		35.0	39.0		36.0	39.9		36.7	40.7

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						324T & 326T			364T & 365T			404T & 405T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position A	1.59	5.91	6.04	10.36	M1	0.38	30.1	34.1	1.01	31.1	35.1	0.75	32.1	36.1
					M2		36.0	40.0		37.0	41.0		38.0	42.0
					M3		42.0	46.0		43.0	47.0		44.0	48.0
					M4		47.9	51.9		48.9	52.9		49.9	53.9
Position C	1.59	5.91	6.04	10.36	M1	0.38	20.0	23.9	1.01	21.0	24.9	0.75	22.0	25.9
					M2		25.9	29.8		26.9	30.8		27.8	31.8
					M3		31.8	35.7		32.8	36.7		33.7	37.7
					M4		37.7	41.7		38.7	42.7		39.7	43.7

Notes:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3, M4 go through output shaft centerline
(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

Table A - Screw Conveyor Motor Mount Minimum "M" Mounting Positions (1)

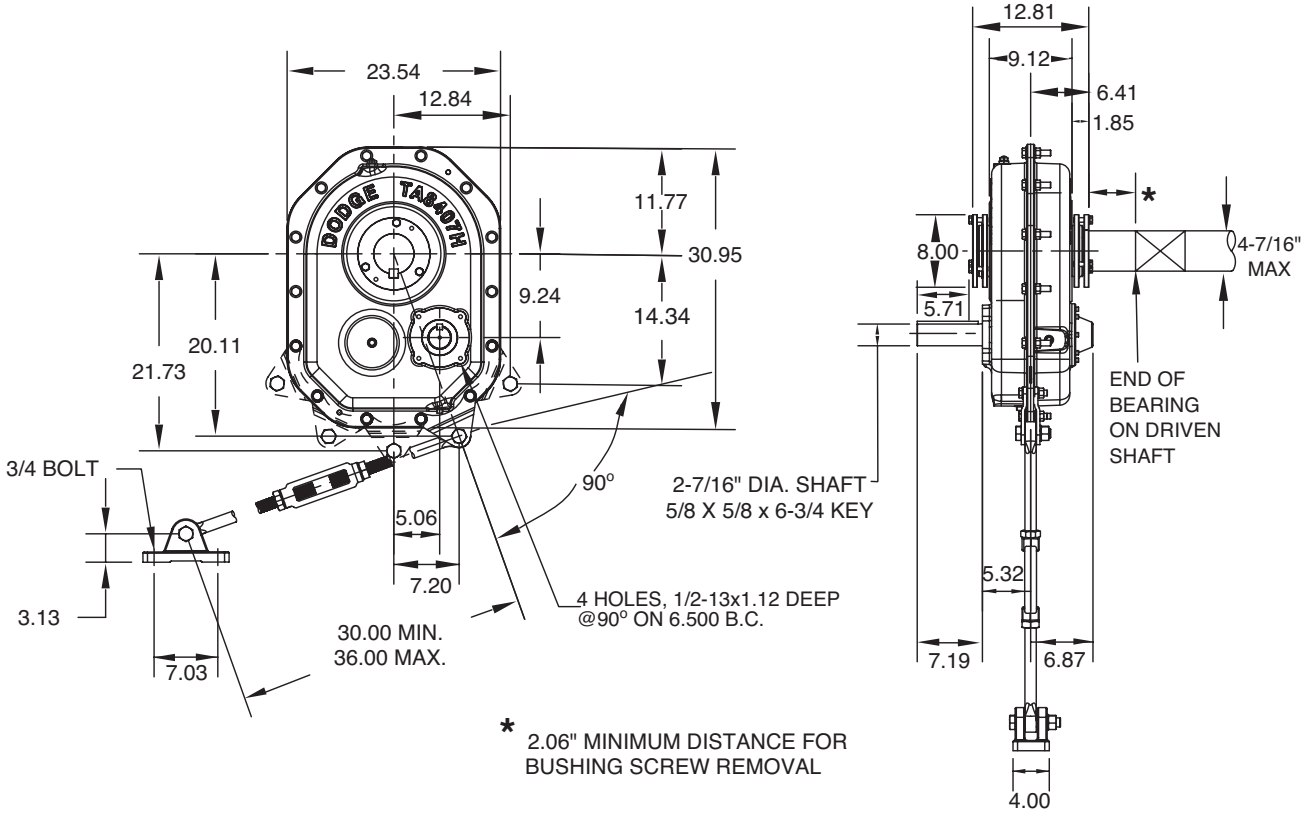
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13	–	–	M4	M4	M3	M3	M2	M2
20	13.50	–	–	M4	M4	M3	M3	M3	M2
24	16.50	–	–	–	–	M4	M3	M3	M3

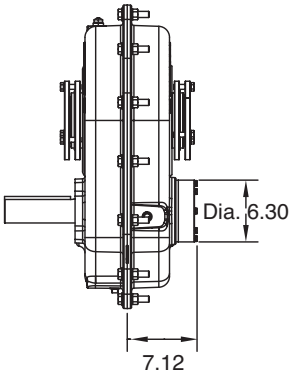
(1) For U Or Flared Trough Ends Per CEMA 300-014

Courtesy of:
SCREW CONVEYOR PARTS

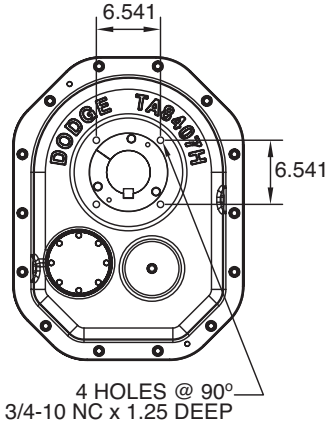
Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA8407H, Double Reduction





REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA8407H, Double Reduction

TA8407H Taper Bushed Reducers [1]

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA8407H15	908002	407D15	15.12	511.0
TA8407H25	908001	407D25	24.97	511.0
TA8407H40	908000	407D40	39.67	507.0

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

\+ Rod Assembly mounting locations are limited to positions show in drawing.

TA8407H Accessories

Description	Part Number	Weight lbs.
TA7315/8407RA Rod Assembly [1] +	907109	43.2
TA8407BS Backstop Assembly (15, 25:1) [2]	908102	15.0
TA8407BS 40:1 Backstop Assembly [2]	908103	15.7
TA7315/8407MM Motor Mount Assembly (213-405T) [3]	907090	183.3
TA7315/8407BG Belt Guard - Pos. B (213-405T)	907096	147.2
TA7315/8407BG Belt Guard - Pos. C (213-405T)	907097	152.7
TA7315/8407BG Belt Guard - Pos. D (213-405T)	907099	148.2
TA7315/8407CF Cooling Fan Assembly ●	907106	10.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit HL1	964364	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA7315/8407H V-Ring Kit	907249	0.4
TA8407H Lube Kit	LUBEKITTA8407	53.2

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions
● See page G2-118 for cooling fan dimensions
◆ SCA Adapter & Hardware Kit is available for TA8407H reducers as a non-stock product. Consult Dodge about SCS Drive Shafts.

TA8407H Tapered Bushing Kits [4] [5]

Bushing Size Standard Shaft Bushing Kit	Part Number [6]	Weight lbs.	Shaft Keyseat Required [8] [9]	Bushing Size Short Shaft Bushing Kit [7]	Part Number	Weight lbs.	Shaft Keyseat Required [8] [9]
TA8407TB x 4-7/16 ▲	908020	26.0	1 x 1/2 x 12.82	TA8407TBS x 4-7/16	908027	26.9	1 x 1/2 x 8.10
TA8407TB x 4-3/16	908021	29.0	1 x 1/2 x 12.82	TA8407TBS x 4-3/16	908028	31.3	1 x 1/2 x 8.10
TA8407TB x 3-15/16	908022	32.1	1 x 1/2 x 12.82	TA8407TBS x 3-15/16	908029	35.6	1 x 1/2 x 8.10
TA8407TB x 3-7/16	908023	36.7	7/8 x 7/16 x 12.82	TA8407TBS x 3-7/16	908030	42.4	7/8 x 7/16 x 8.10
TA8407TB x 3-3/16	908024	38.4	3/4 x 3/8 x 12.82	TA8407TBS x 3-3/16	908031	45.3	3/4 x 3/8 x 8.10
TA8407TB x 3	908025	39.8	3/4 x 3/8 x 12.82	TA8407TBS x 3	908032	47.5	3/4 x 3/8 x 8.10
TA8407TB x 2-15/16	908026	40.4	3/4 x 3/8 x 12.82	TA8407TBS x 2-15/16	908033	48.3	3/4 x 3/8 x 8.10

▲ AGMA maximum bore size
(4) Bushing kit required to mount TA II reducer to driven shaft
(5) Bushing kit is not required to mount TA II reducer on SCS Drive Shaft in a screw conveyor application
(6) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(7) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(8) Minimum keyseat and shaft length required to mount reducer with bushing kit
(9) Always check the driven shaft and key for strength

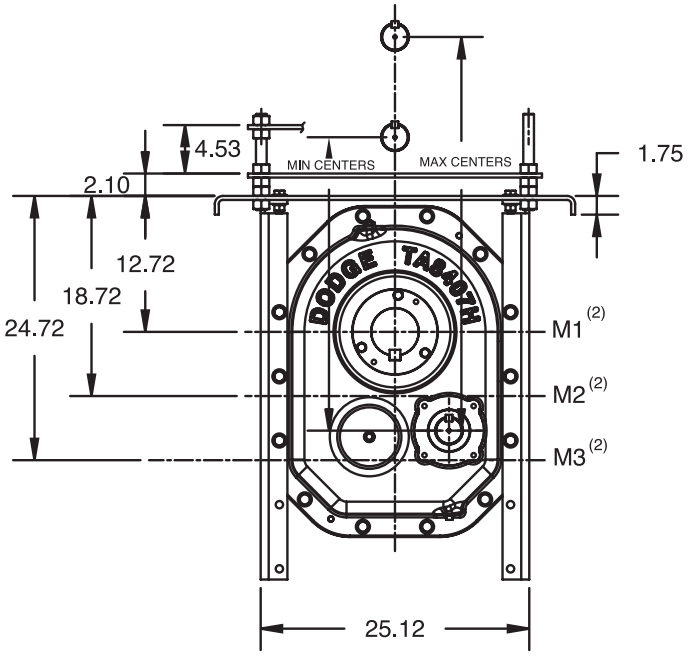
Bushing Covers

Reducer Size	Description	Part Number	Weight
TA8407H	ABS Polymer Closed [12]	908142	1.7
TA8407H	ABS Polymer Split [12]	908143	1.6
Reducer Size	**Description**	**Part Number**	**Weight**
TA8407H	Aluminum Closed [13]	908114	2.5
TA8407H	Aluminum Spllit [13]	908115	2.5

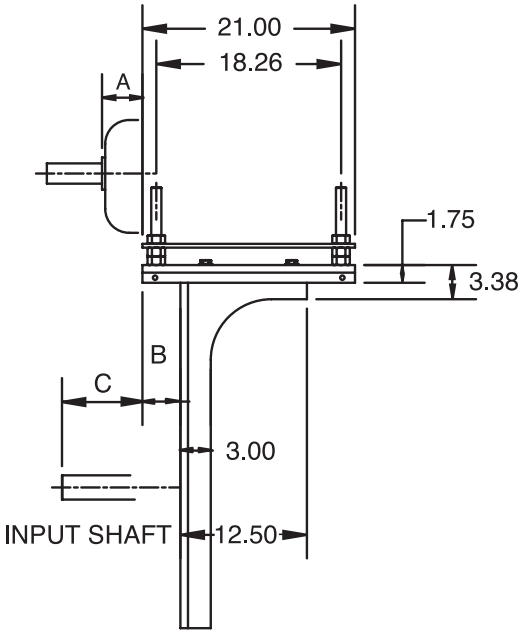
Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on “driven machine” side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

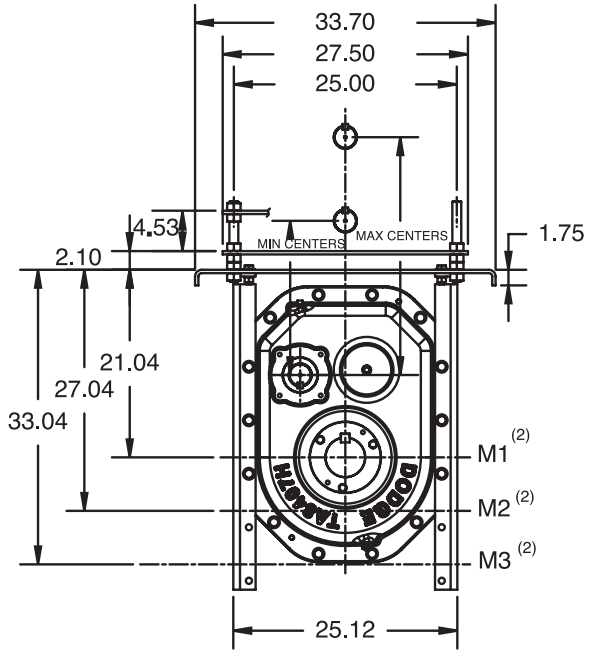
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA8407H, Position B & D



POSITION B





POSITION D

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA8407H, Position B & D (1)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						213T & 215T			254T & 256T			284T & 286T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	5.78	10.10	M1	1.55	30.2	34.2	1.56	31.2	35.2	1.16	32.0	35.9
					M2		36.2	40.1		37.1	41.1		37.9	41.9
					M3		42.1	46.1		43.1	47.1		43.8	47.8
Position D	1.59	5.91	5.78	10.10	M1	1.55	20.3	24.2	1.56	21.3	25.2	1.16	22.0	25.9
					M2		26.1	30.1		27.1	31.1		27.9	31.8
					M3		32.1	36.0		33.0	37.0		33.8	37.8

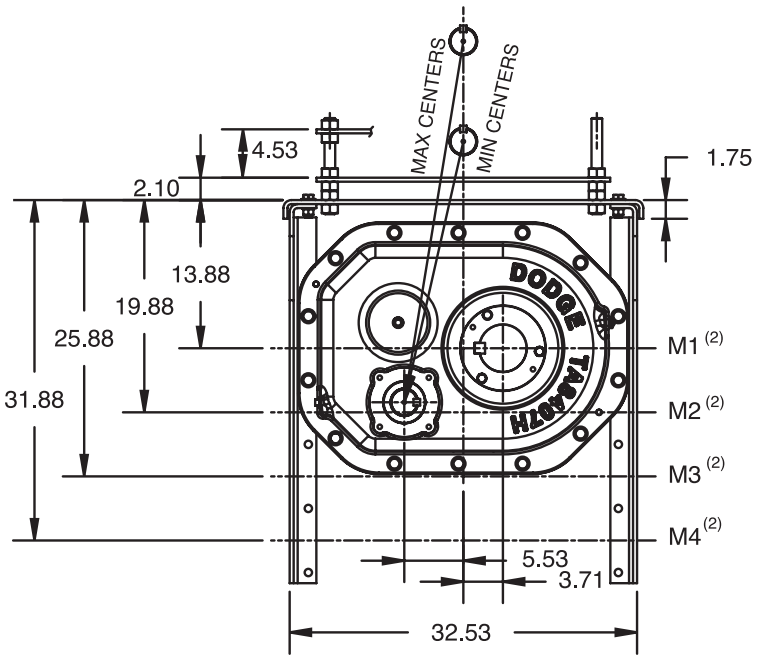
Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						324T & 326T			364T & 365T			404T & 405T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	5.78	10.10	M1	0.38	32.9	36.9	1.01	33.9	37.9	0.75	34.9	38.9
					M2		38.9	42.9		39.9	43.9		40.9	44.9
					M3		44.8	48.8		45.8	49.8		46.8	50.8
Position D	1.59	5.91	5.78	10.10	M1	0.38	23.0	26.9	1.01	23.9	27.9	0.75	24.9	28.9
					M2		28.8	32.8		29.8	33.8		30.8	34.8
					M3		34.8	38.8		35.8	39.7		36.7	40.7

Notes:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3 go through output shaft centerline

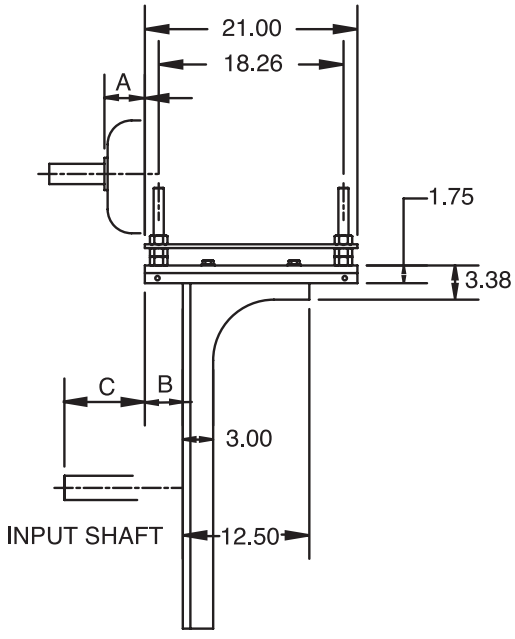
Courtesy of:
SCREW CONVEYOR PARTS

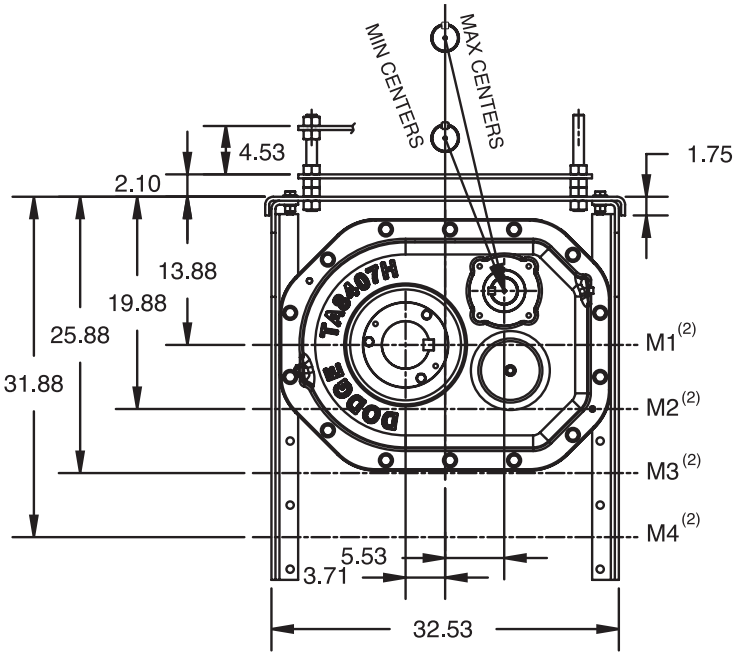
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA8407H, Position A & C



POSITION A





POSITION C

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA8407H, Position A & C (1)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						213T & 215T			254T & 256T			284T & 286T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position A	1.59	5.91	7.04	11.36	M1	1.55	27.4	31.3	1.56	28.3	32.3	1.16	29.1	33.0
					M2		33.2	37.2		34.2	38.2		35.0	39.0
					M3		39.2	43.2		40.2	44.2		40.9	44.9
					M4		45.1	49.1		46.1	50.1		46.9	50.9
Position C	1.59	5.91	7.04	11.36	M1	1.55	17.6	21.4	1.56	18.5	22.4	1.16	19.2	23.1
					M2		23.3	27.3		24.3	28.2		25.0	29.0
					M3		29.2	33.2		30.2	34.1		30.9	34.9
					M4		35.1	39.1		36.1	40.1		36.8	40.8

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						324T & 326T			364T & 365T			404T & 405T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position A	1.59	5.91	7.04	11.36	M1	0.38	30.1	34.0	1.01	31.0	35.0	0.75	32.0	36.0
					M2		36.0	39.9		37.0	40.9		37.9	41.9
					M3		41.9	45.9		42.9	46.9		43.9	47.9
					M4		47.9	51.9		48.8	52.8		49.8	53.8
Position C	1.59	5.91	7.04	11.36	M1	0.38	20.2	24.1	1.01	21.2	25.1	0.75	22.1	26.0
					M2		26.0	30.0		27.0	30.9		28.0	31.9
					M3		31.9	35.9		32.9	36.9		33.9	37.8
					M4		37.8	41.8		38.8	42.8		39.8	43.8

Notes:

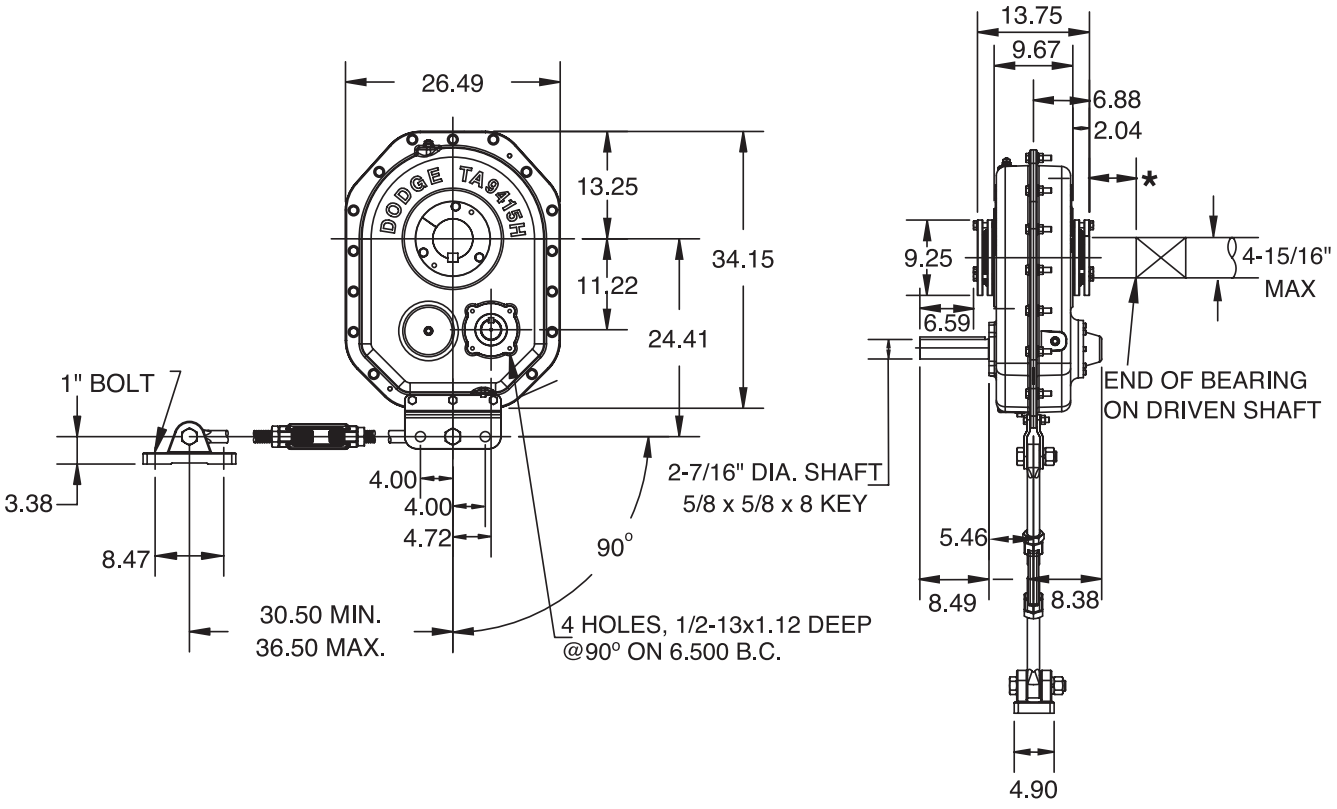
Minimum centers contains 0.5" to allow for belt assembly

(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions

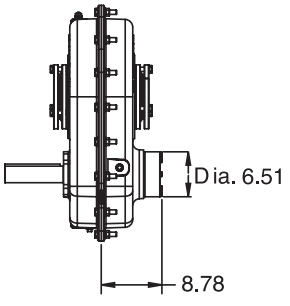
(2) M1, M2, M3 go through output shaft centerline

Torque-Arm II Shaft Mount Speed Reducers

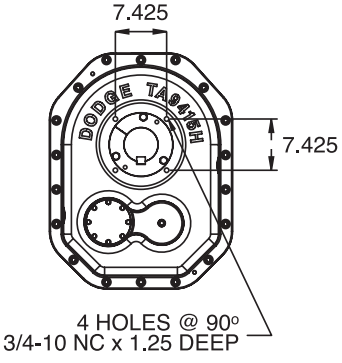
Taper Bushed Reducers - TA9415H, Double Reduction



* 2.39" MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA9415H, Double Reduction

TA9415H Taper Bushed Reducers (1)

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA9415H15	909002	415D15	15.10	735.0
TA9415H25	909001	415D25	25.44	735.0
TA9415H40	909000	415D40	39.41	732.0

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

\+ Rod Assembly mounting locations are limited to positions show in drawing.

TA9415H Accessories

Description	Part Number	Weight lbs.
TA9415RA Rod Assembly (1) +	909109	76.8
TA9415BS Backstop Assembly (15, 25:1) (2)	909102	20.0
TA7315/9415BS 40:1 Backstop Assembly (2)	907103	21.0
TA9415MM Motor Mount Assembly (254-445T) (3)	909090	273.7
TA9415BG Belt Guard - Pos. B (254-445T)	909096	158.1
TA9415BG Belt Guard - Pos. D (254-445T)	909099	159.1
TA9415CF Cooling Fan Assembly ●	909106	12.4
TA4-TA9 Hydra-Lock Dessicant Breather Kit HL1	964364	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA9415H V-Ring Kit	909249	0.5
TA9415H Lube Kit	LUBEKITTA9415	79.8

(2) See page G12-127 for input shaft speed necessary for backstop sprag lift-off

(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions

● See page G2-118 for cooling fan dimensions.

TA9415H Tapered Bushing Kits (4)

Bushing Size Standard Shaft Bushing Kit	Part Number (5)	Weight lbs.	Shaft Keyseat Required (7) (8)	Bushing Size Short Shaft Bushing Kit (6)	Part Number	Weight lbs.	Shaft Keyseat Required (7) (8)
TA9415TB x 4-15/16 ▲	909020	38.4	1-1/4 x 5/8 x 13.74	TA9415TBS x 4-15/16	909025	40.2	1-1/4 x 5/8 x 8.56
TA9415TB x 4-7/16	909021	43.4	1 x 1/2 x 13.74	TA9415TBS x 4-7/16	909026	48.8	1 x 1/2 x 8.56
TA9415TB x 4-3/16	909022	46.4	1 x 1/2 x 13.74	TA9415TBS x 4-3/16	909027	53.4	1 x 1/2 x 8.56
TA9415TB x 3-15/16	909023	49.2	1 x 1/2 x 13.74	TA9415TBS x 3-15/16	909028	57.7	1 x 1/2 x 8.56
TA9415TB x 3-7/16	909024	53.1	7/8 x 7/16 x 13.74	TA9415TBS x 3-7/16	909029	64.4	7/8 x 7/16 x 8.56

▲ AGMA maximum bore size

(4) Bushing kit required to mount TA II reducer to driven shaft

(5) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.

(6) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.

(7) Minimum keyseat and shaft length required to mount reducer with bushing kit

(8) Always check the driven shaft and key for strength

Bushing Covers

Reducer Size	Description	Part Number	Weight
TA9415H	ABS Polymer Closed (12)	909142	2.0
TA9415H	ABS Polymer Split (12)	909143	1.8
Reducer Size	**Description**	**Part Number**	**Weight**
TA9415H	Aluminum Closed (13)	909114	4.0
TA9415H	Aluminum Spllit (13)	909115	3.7

Closed bushing covers may not be compatible with belt guards or large sheave installations

Split bushing covers are designed for use on “driven machine” side of reducer with shaft through

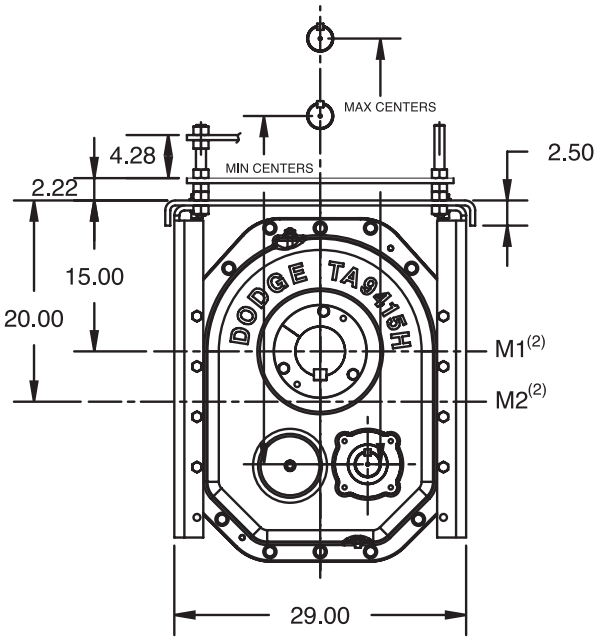
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer

(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

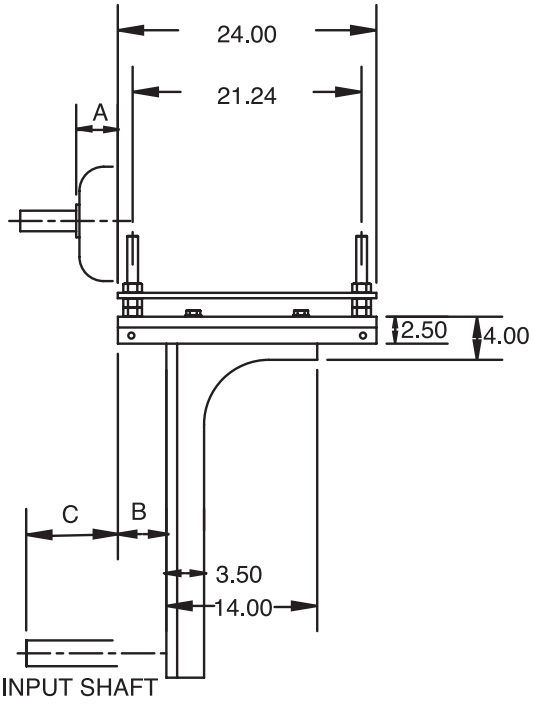
Courtesy of:
SCREW CONVEYOR PARTS

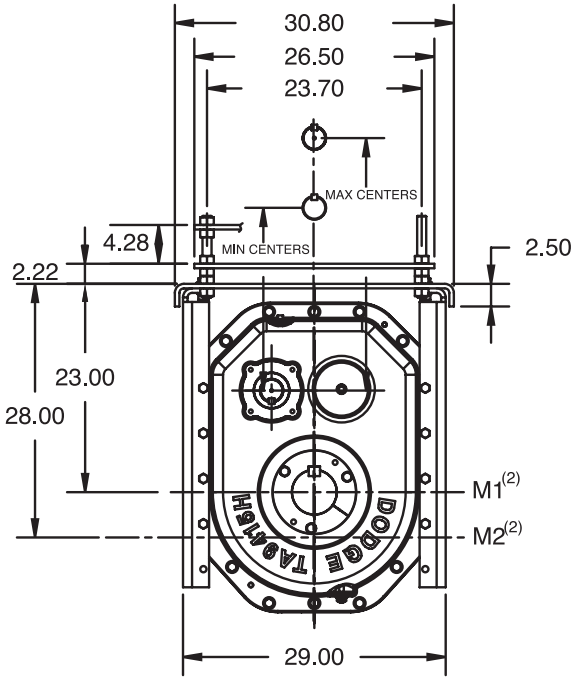
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA9415H, Position B & D



POSITION B





POSITION D

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA9415H, Position B & D (1)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						254T & 256T			284T & 286T			324T & 326T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	2.18	6.82	6.26	10.90	M1	1.56	35.5	39.2	1.16	36.2	40.0	0.38	37.2	41.0
					M2		40.5	44.2		41.2	45.0		42.2	46.0
Position D	2.18	6.82	6.26	10.90	M1	1.56	21.3	25.0	1.16	22.0	25.7	0.38	23.0	26.7
					M2		26.2	29.9		26.9	30.6		27.9	31.6

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						364T & 365T			404T & 405T			444T & 445T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	2.18	6.82	6.26	10.90	M1	1.01	38.2	42.0	0.75	39.2	43.0	1.62	40.2	44.0
					M2		43.2	47.0		44.2	47.9		45.2	48.9
Position D	2.18	6.82	6.26	10.90	M1	1.01	24.0	27.7	0.75	25.0	28.7	1.62	25.9	29.7
					M2		28.9	32.6		29.9	33.6		30.9	34.6

Notes:

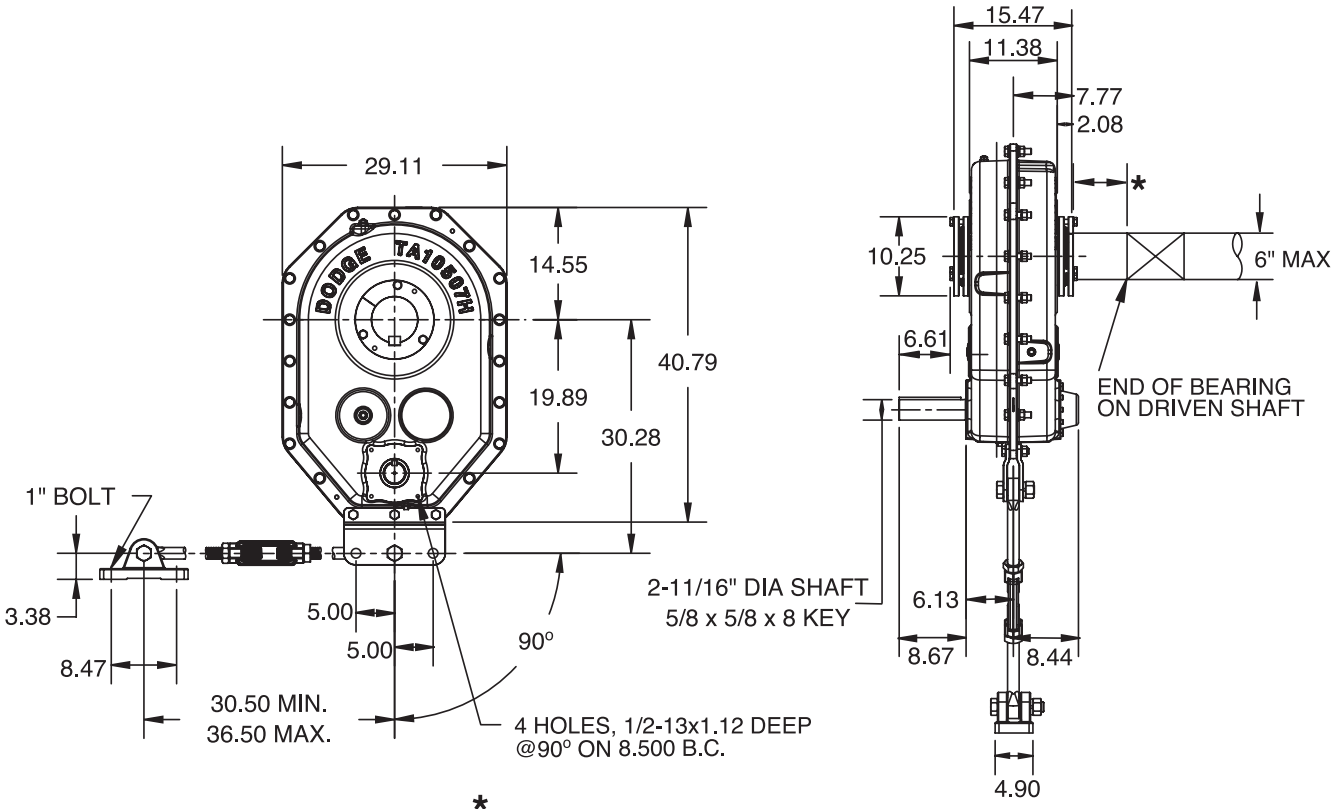
Minimum centers contains 0.5" to allow for belt assembly

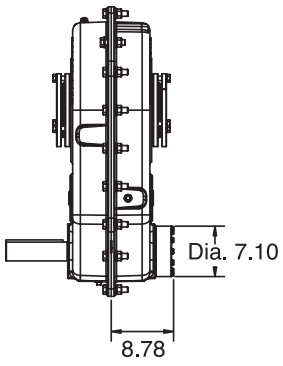
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions

(2) M1, M2, M3 go through output shaft centerline

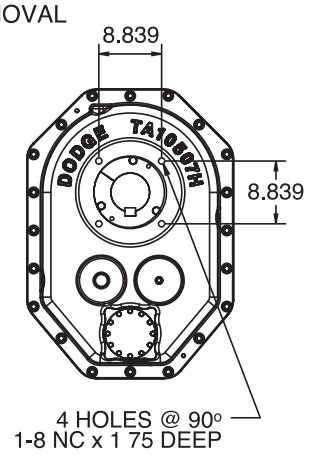
Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA10507H, Double Reduction





REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA10507H, Double Reduction

TA10507H Taper Bushed Reducers (1)

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA10507H15	910002	507D15	15.09	1022.0
TA10507H25	910001	507D25	25.18	1022.0
TA10507H40	910000	507D40	39.68	1018.0

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

\+ Rod Assembly mounting locations are limited to positions show in drawing.

TA10507H Accessories

Description	Part Number	Weight lbs.
TA10507RA Rod Assembly (1) +	910109	87.0
TA10507BS Backstop Assembly (15, 25:1) (2)	910102	23.5
TA10507BS 40:1 Backstop Assembly (2)	910103	25.0
TA10507MM Motor Mount Assembly (254-445T) (3)	910090	286.7
TA10507BG Belt Guard - Pos. B (254-445T)	910096	158.1
TA10507BG Belt Guard - Pos. D (254-445T)	910099	175.0
TA10507CF Cooling Fan Assembly ●	910106	12.4
TA10-TA12 Hydra-Lock Dessicent Breather Kit HL2	964366	2.0
XT Enclosed Breather System, TA10-2	240051	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA10507H V-Ring Kit	910249	0.8
TA10507H Lube Kit	LUBEKITTA10507	121.5

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions
● See page G2-118 for cooling fan dimensions.

TA10507H Tapered Bushing Kits (4)

Bushing Size Standard Shaft Bushing Kit	Part Number (5)	Weight lbs.	Shaft Keyseat Required (7) (8)	Bushing Size Short Shaft Bushing Kit (6)	Part Number	Weight lbs.	Shaft Keyseat Required (7) (8)
TA10507TB x 6	910020	40.8	1-1/2 x 3/4 x 15.46	–	–	–	–
TA10507TB x 5-15/16	910021	43.2	1-1/2 x 3/4 x 15.46	–	–	–	–
TA10507TB x 5-7/16 ▲	910022	50.0	1-1/4 x 5/8 x 15.46	TA10507TBS x 5-7/16	910027	47.2	1-1/4 x 5/8 x 9.67
TA10507TB x 4-15/16	910023	57.8	1-1/4 x 5/8 x 15.46	TA10507TBS x 4-15/16	910028	66.9	1-1/4 x 5/8 x 9.67
TA10507TB x 4-7/16	910024	52.8	1 x 1/2 x 15.46	TA10507TBS x 4-7/16	910029	75.7	1 x 1/2 x 9.67
TA10507TB x 4-3/16	910025	65.6	1 x 1/2 x 15.46	TA10507TBS x 4-3/16	910030	80.5	1 x 1/2 x 9.67
TA10507TB x 3-15/16	910026	68.4	1 x 1/2 x 15.46	TA10507TBS x 3-15/16	910031	85.2	1 x 1/2 x 9.67

▲ AGMA maximum bore size
(4) Bushing kit required to mount TA II reducer to driven shaft
(5) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(6) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(7) Minimum keyseat and shaft length required to mount reducer with bushing kit
(8) Always check the driven shaft and key for strength

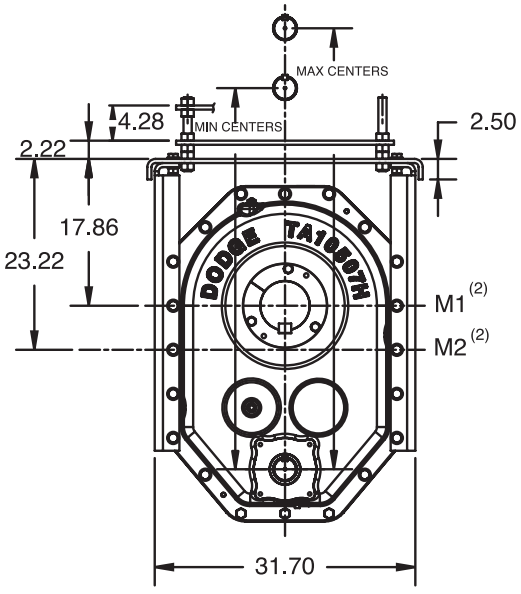
Bushing Covers

Reducer Size	Description	Part Number	Weight
TA10507H	ABS Polymer Closed (12)	910142	3.0
TA10507H	ABS Polymer Split (12)	910143	2.8
Reducer Size	**Description**	**Part Number**	**Weight**
TA10507H	Aluminum Closed (13)	910114	4.6
TA10507H	Aluminum Spllit (13)	910115	3.9

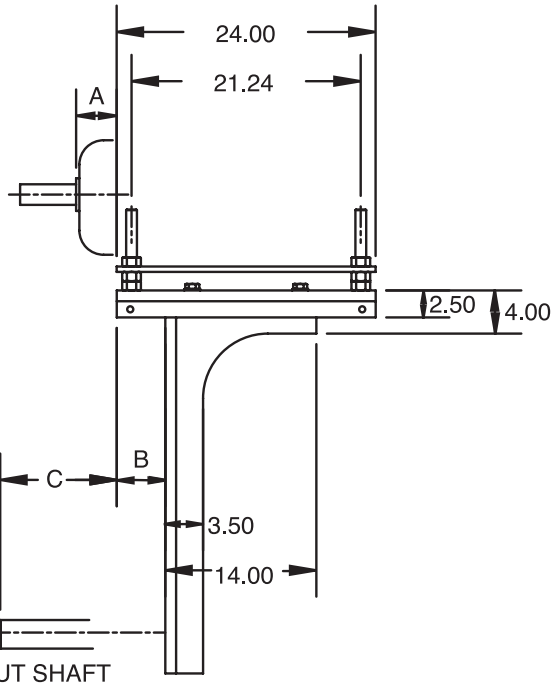
Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on “driven machine” side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

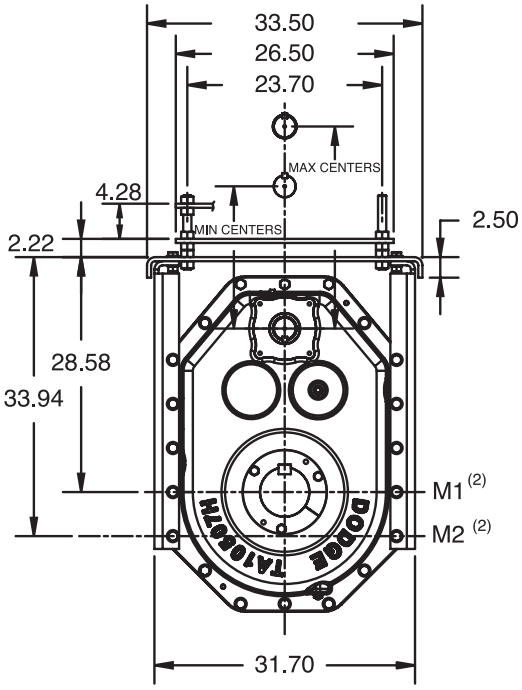
Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA10507H, Position B & D



POSITION B





POSITION D

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA10507H, Position B & D (1)

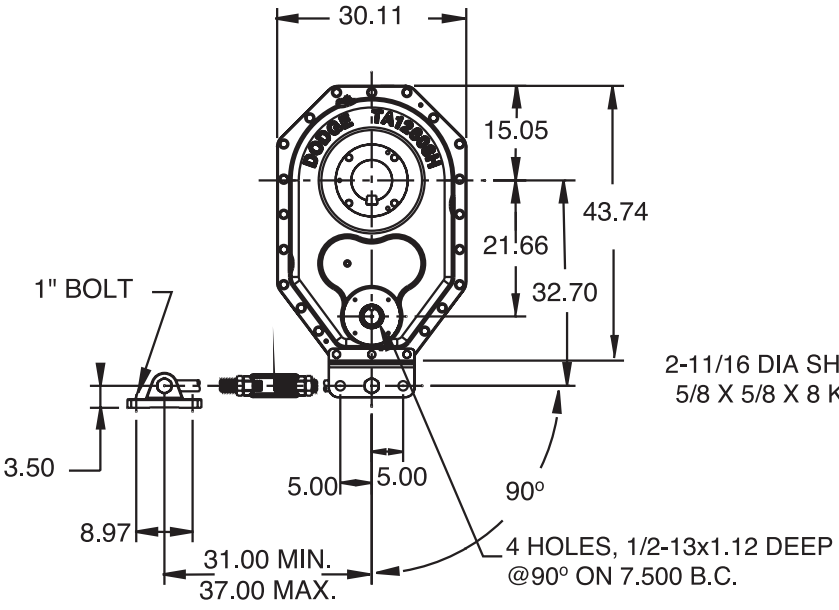
Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						254T & 256T			284T & 286T			324T & 326T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	2.18	6.82	6.98	11.62	M1	1.56	46.7	50.5	1.16	47.5	51.2	0.38	48.5	52.2
					M2		52.1	55.9		52.8	56.6		53.8	57.6
Position D	2.18	6.82	6.98	11.62	M1	1.56	17.7	21.4	1.16	18.4	22.2	0.38	19.4	23.2
					M2		23.0	26.8		23.8	27.5		24.8	28.5

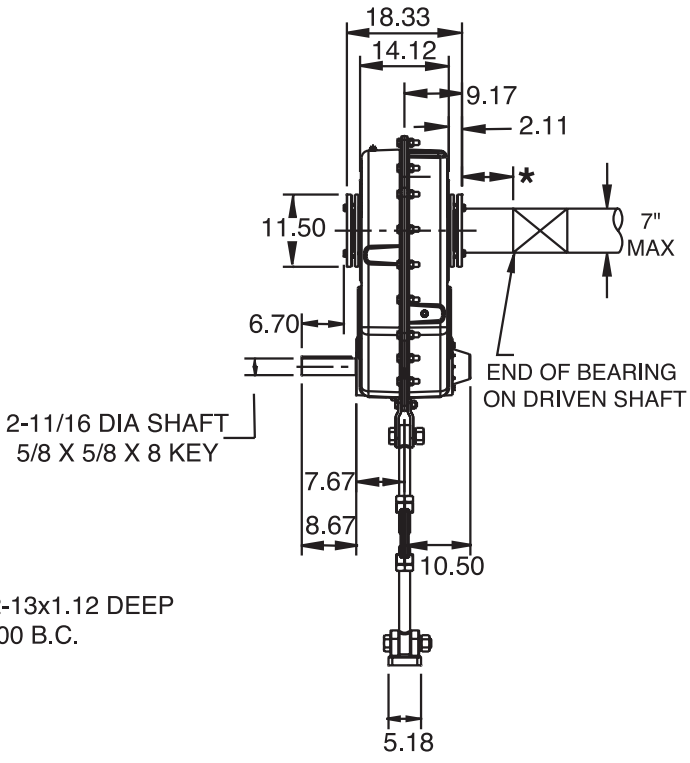
Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						364T & 365T			404T & 405T			444T & 445T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	2.18	6.82	6.98	11.62	M1	1.01	49.5	53.2	0.75	50.5	54.2	1.62	51.5	55.2
					M2		54.8	58.6		55.8	59.6		56.8	60.6
Position D	2.18	6.82	6.98	11.62	M1	1.01	20.4	24.2	0.75	21.4	25.2	1.62	22.4	26.2
					M2		25.8	29.5		26.8	30.5		27.8	31.5

Notes:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions
(2) M1, M2, M3 go through output shaft centerline

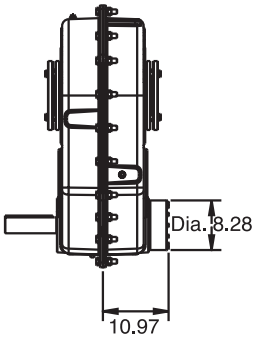
Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA12608H, Double Reduction

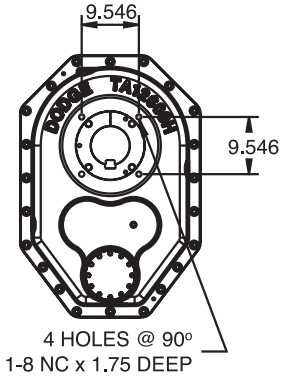




* 2.39" MINIMUM DISTANCE
FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA12608H, Double Reduction

TA12608H Taper Bushed Reducers (1)

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight lbs.
TA12608H15	912002	608D15	14.79	1392.0
TA12608H25	912001	608D25	25.03	1395.0
TA12608H40	912000	608D40	38.19	1393.0

(1) Reducers are supplied from stock ready for vertical mounting and for flange mounting. Rod assembly is not included with reducer. Order as a separate part number.

\+ Rod Assembly mounting locations are limited to positions show in drawing.

TA12608H Accessories

Description	Part Number	Weight lbs.
TA12608RA Rod Assembly (1) +	912109	106.4
TA12608BS Backstop Assembly (15, 25:1) (2)	912102	40.0
TA12608BS 40:1 Backstop Assembly (2)	912103	41.1
TA12608MM Motor Mount Assembly (254-445T) (3)	912090	289.6
TA12608BG Belt Guard - Pos. B (254-445T)	912096	190.5
TA12608BG Belt Guard - Pos. D (254-445T)	912099	181.0
TA12608CF Cooling Fan Assembly ●	912106	13.7
TA10-TA12 Hydra-Lock Dessicant Breather Kit HL2	964366	2.0
XT Enclosed Breather System, TA 10-12	240051	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA12608H V-Ring Kit	912249	0.8
TA12608H Lube Kit	LUBEKITTA12608	170.1

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however hardware are inch dimensions
● See page G2-118 for cooling fan dimensions.

TA12608H Tapered Bushing Kits (4)

Bushing Size Standard Shaft Bushing Kit	Part Number (5)	Weight lbs.	Shaft Keyseat Required (7) (8)	Bushing Size Short Shaft Bushing Kit (6)	Part Number	Weight lbs.	Shaft Keyseat Required (7) (8)
TA12608TB x 7	912020	58.2	1-3/4 x 3/4 x 18.32	–	–	–	–
TA12608TB x 6-1/2 ▲	912021	67.8	1-1/2 x 3/4 x 18.32	TA12608TBS x 6-1/2	912027	73.5	1-1/2 x 3/4 x 11.60
TA12608TB x 6-7/16	912022	69.1	1-1/2 x 3/4 x 18.32	TA12608TBS x 6-7/16	912028	75.7	1-1/2 x 3/4 x 11.60
TA12608TB x 6	912023	78.1	1-1/2 x 3/4 x 18.32	TA12608TBS x 6	912029	90.5	1-1/2 x 3/4 x 11.60
TA12608TB x 5-15/16	912024	79.4	1-1/2 x 3/4 x 18.32	TA12608TBS x 5-15/16	912030	92.6	1-1/2 x 3/4 x 11.60
TA12608TB x 5-7/16	912025	86.7	1-1/4 x 5/8 x 18.32	TA12608TBS x 5-7/16	912031	106.1	1-1/4 x 5/8 x 11.60
TA12608TB x 4-15/16	912026	94.6	1-1/4 x 5/8 x 18.32	TA12608TBS x 4-15/16	912032	119.3	1-1/4 x 5/8 x 11.60

▲ AGMA maximum bore size
(4) Bushing kit required to mount TA II reducer to driven shaft
(5) Standard Shaft Bushing Kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(6) Short Shaft Bushing Kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(7) Minimum keyseat and shaft length required to mount reducer with bushing kit
(8) Always check the driven shaft and key for strength

Bushing Covers

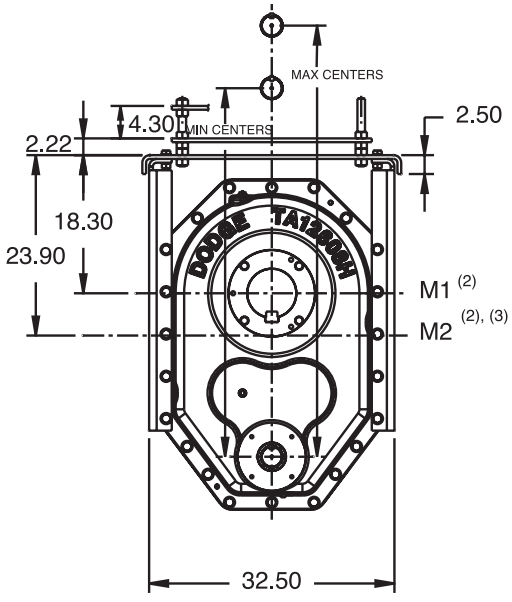
Reducer Size	Description	Part Number	Weight
TA12608H	ABS Polymer Closed (12)	912142	4.0
TA12608H	ABS Polymer Split (12)	912143	3.8
Reducer Size	**Description**	**Part Number**	**Weight**
TA12608H	Aluminum Closed (13)	912114	4.8
TA12608H	Aluminum Spllit (13)	912115	4.1

Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on “driven machine” side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer
(13) Aluminum covers are designed with bolts for non tapped reducers and will require the use of self tapping screws and customer modification of reducer

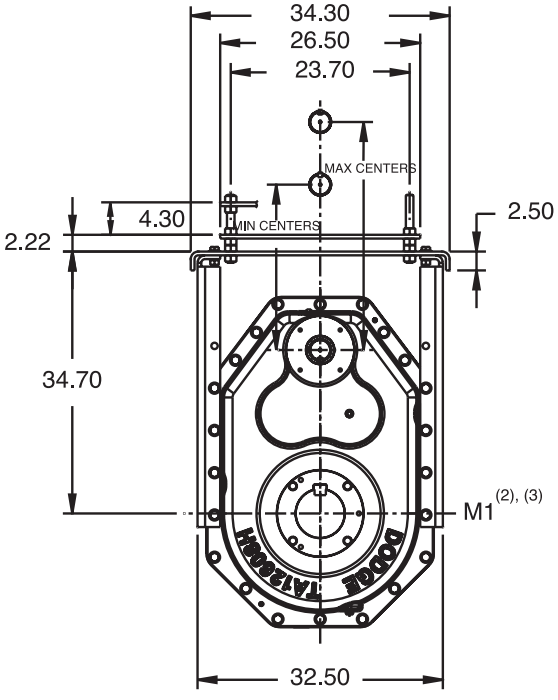
Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

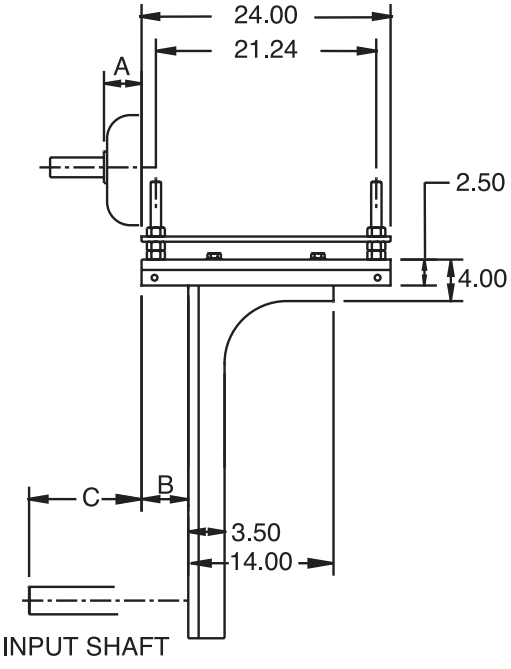
Motor Mount Dimensions - TA12608H, Position B & D



POSITION B



POSITION D



INPUT SHAFT

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA12608H, Position B & D (1)

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						254T & 256T			284T & 286T			324T & 326T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.68	7.32	8.02	13.66	M1	1.56	48.9	52.7	1.16	49.7	53.5	0.38	50.7	54.5
					M2		54.5	58.3		55.3	59.1		56.3	60.1
Position D	1.68	7.32	8.02	13.66	M1	1.56	22.0	25.8	1.16	22.8	26.6	0.38	23.8	27.6

Mounting	Lateral Adjustment				Motor Mount Height (2)	Motor Frame								
						364T & 365T			404T & 405T			444T & 445T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.68	7.32	8.02	13.66	M1	1.01	51.7	55.5	0.75	52.7	56.5	1.62	53.7	57.5
					M2		57.3	61.1	–	58.3	62.1		59.3	63.1
Position D	1.68	7.32	8.02	13.66	M1	1.01	24.8	28.6	0.75	25.8	29.6	1.62	26.8	30.6

Notes:

Minimum centers contains 0.5" to allow for belt assembly

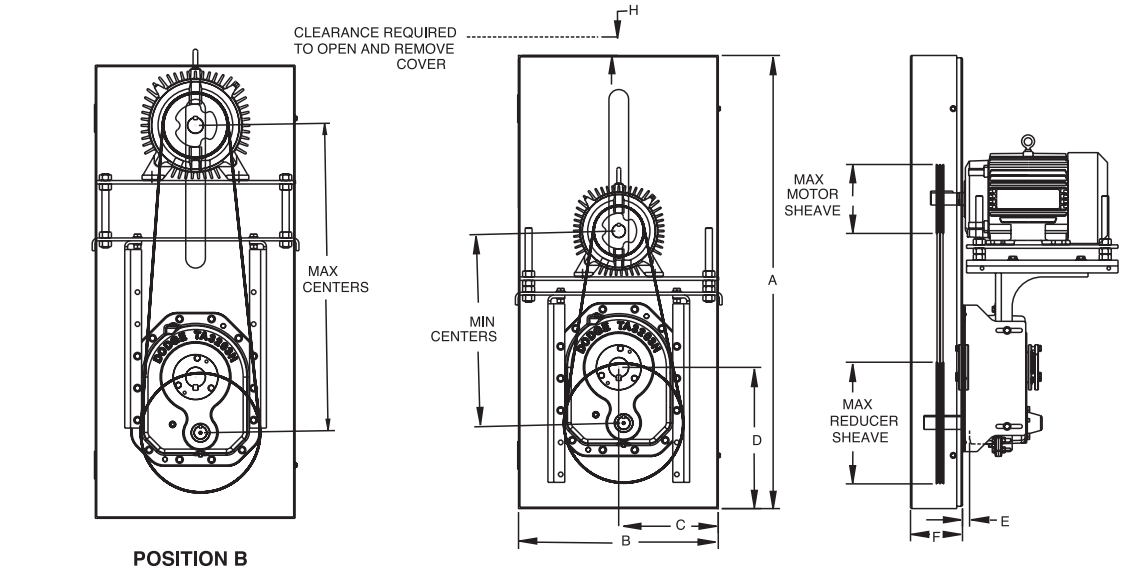
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions

(2) M1, M2, M3 go through output shaft centerline

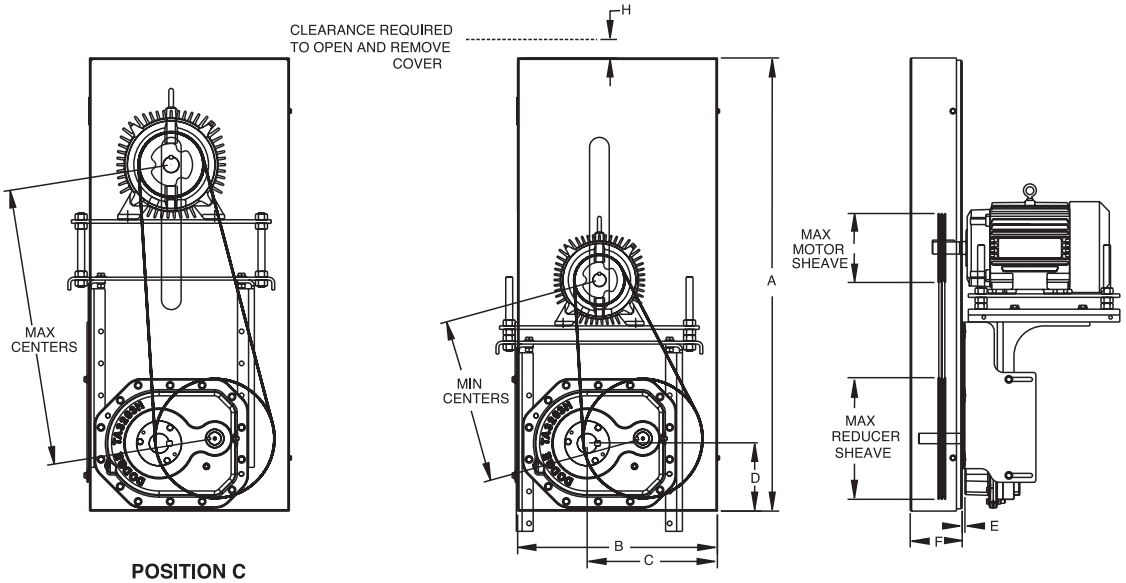
Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Belt Guard Dimensions, TA0107L - TA5215H



POSITION B



POSITION C

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Belt Guard Dimensions, TA0107L - TA5215H

Case Size	Mounting Position	Centers		Max Sheave Dia.		A	B	C
		Min	Max	Motor	Reducer			
TA0107L	B	16.7	26.9	11.0	12.4	41.50	16.00	8.00
	C	14.4	25.5	11.4	12.3	41.50	16.00	10.43
TA1107H	B	16.0	28.0	10.8	12.8	41.50	16.00	8.00
	C	16.0	26.3	9.4	9.4	41.50	16.00	11.55
TA2115H	B	17.8	31.1	8.6	12.8	43.50	19.25	9.62
	C	16.8	28.9	9.3	12.3	43.50	19.25	13.07
TA3203H	B	18.9	34.3	9.2	16.8	49.00	21.60	10.80
	C	15.0	31.0	15.8	14.0	49.00	21.60	14.12
TA4207H	B	21.8	38.3	10.3	16.9	53.50	24.60	12.30
	C	22.4	35.5	16.5	15.9	53.50	24.60	16.11
TA5215H	B	25.7	44.1	11.8	17.8	60.50	27.60	13.80
	C	25.6	39.6	18.6	16.9	60.50	27.60	17.85

Case Size	Mounting Position	D	E		F	H	J
			Min	Max			
TA0107L	B	11.74	0.04	1.66	4.23	2.00	4.22
	C	7.33	0.04	1.66	4.23	2.00	4.22
TA1107H	B	11.74	0.00	1.57	4.23	2.00	4.22
	C	5.50	0.00	1.62	4.23	2.00	4.22
TA2115H	B	12.70	0.19	1.60	4.23	2.00	4.22
	C	7.00	0.19	1.56	4.23	2.00	4.22
TA3203H	B	15.27	0.04	2.54	5.62	2.00	5.59
	C	7.32	0.09	2.66	5.62	2.00	5.59
TA4207H	B	16.56	0.00	2.50	5.62	2.00	5.59
	C	8.32	0.13	2.70	5.62	2.00	5.59
TA5215H	B	18.25	0.00	2.44	6.37	2.00	6.09
	C	9.60	0.08	2.64	6.37	2.00	6.09

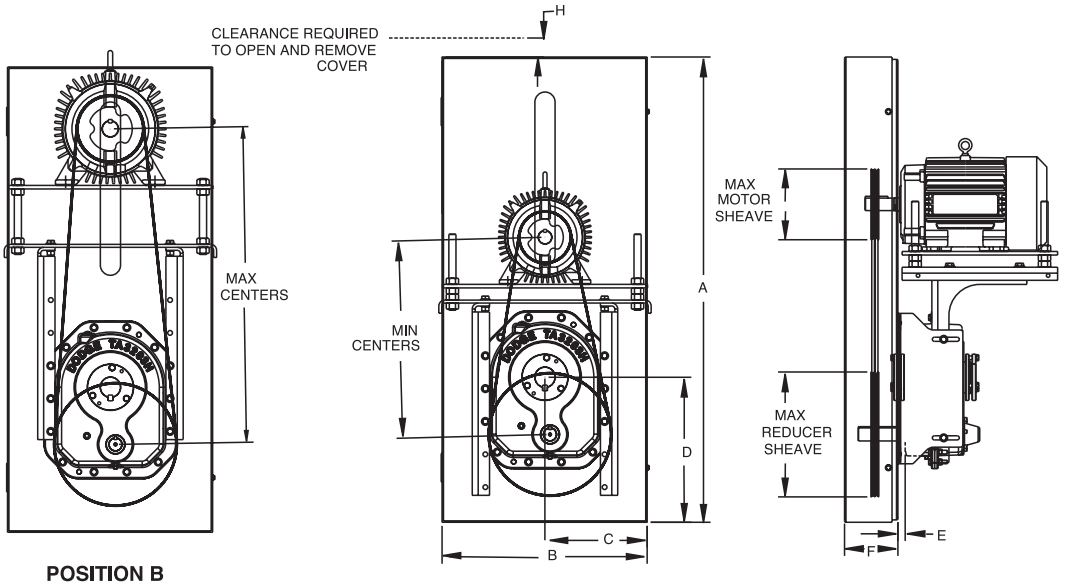
Notes:

(1) Minimum centers allow 0.5" for belt assembly
(2) Maximum sheave diameters allow 0.5" clearance for belt assembly
(3) Range of center distances on belt guard may be less than the full range of center distances available on the motor mount
(4) Belt guard cover is lift-off cover construction
(5) Belt guard attaches to motor mount brackets
(6) "E" maximum dimension allows clearance for cooling fan
(7) Stock Position-B Belt Guards cannot be used with TA II Reducers mounted in 'D' position. Use a Position-D Belt Guard
(8) Stock Position-C Belt Guards cannot be used with TA II Reducers mounted in 'A' position. A special belt guard is required. Consult Dodge for price and delivery.

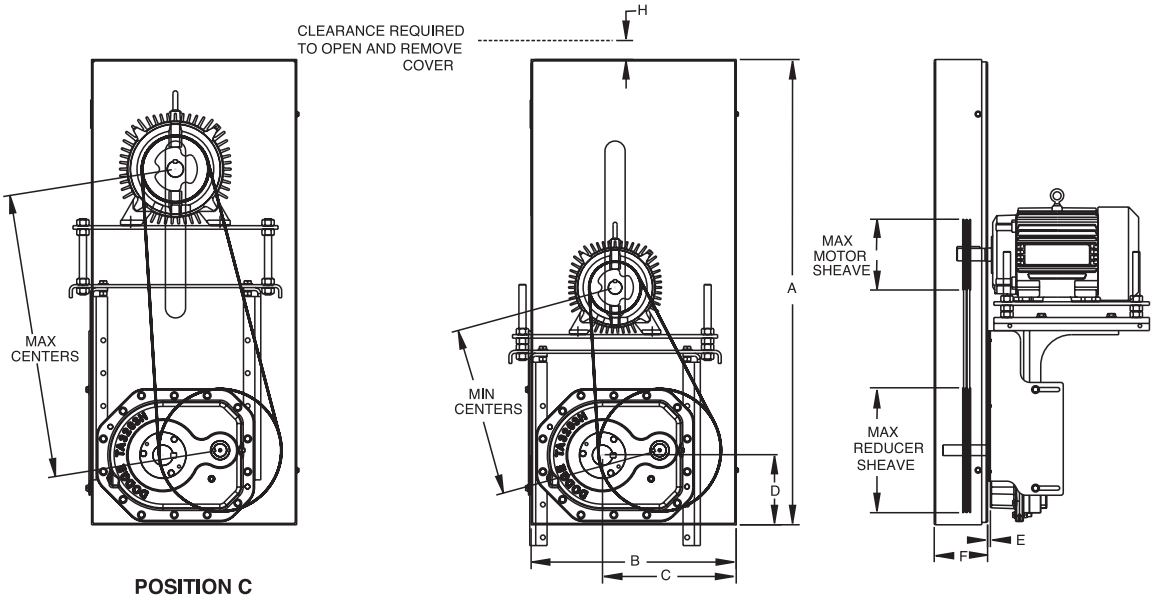
Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Belt Guard Dimensions, TA6307H - TA12608H



POSITION B



POSITION C

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Belt Guard Dimensions, TA6307H - TA12608H

Case Size	Mounting Position	Centers		Max Sheave Dias.		A	B	C
		Min	Max	Motor	Reducer			
TA6307H	B	26.6	46.5	12.8	19.9	64.50	29.10	14.15
	C	26.8	40.9	21.0	20.0	64.50	29.10	17.94
TA7315H	B	29.5	50.6	12.0	25.0	71.50	30.60	18.51
	C	28.6	43.6	22.0	25.0	71.50	30.60	22.39
TA8407H	B	29.7	50.8	12.0	25.2	71.50	30.60	13.45
	C	28.7	43.8	22.0	24.6	71.50	30.60	22.39
TA9415H	B	35.0	49.2	15.4	28.0	72.50	31.60	19.57
TA10507H	B	46.2	60.8	23.2	30.8	89.50	32.60	16.30
TA12608H	B	48.4	63.3	18.2	30.8	89.50	32.60	16.30

Case Size	Mounting Position	D	E		F	H	J
			Min	Max			
TA6307H	B	19.92	0.00	3.56	6.87	2.00	6.59
	C	10.72	0.00	3.60	6.87	2.00	6.59
TA7315H	B	23.38	0.00	4.43	7.37	2.00	7.09
	C	10.25	0.00	3.17	7.37	2.00	7.09
TA8407H	B	23.38	0.00	4.12	7.37	2.00	7.09
	C	10.25	0.00	2.86	7.37	2.00	7.09
TA9415H	B	26.22	0.00	3.50	8.37	2.00	8.09
TA10507H	B	36.14	0.00	3.56	8.87	2.00	8.59
TA12608H	B	37.91	0.00	3.56	8.87	2.00	8.59

Notes:

(1) Minimum centers allow 0.5" for belt assembly
(2) Maximum sheave diameters allow 0.5" clearance for belt assembly
(3) Range of center distances on belt guard may be less than the full range of center distances available on the motor mount
(4) Belt guard cover is lift-off cover construction
(5) Belt guard attaches to motor mount brackets
(6) "E" maximum dimension allows clearance for cooling fan
(7) Stock Position-B Belt Guards cannot be used with TA II Reducers mounted in 'D' position. Use a Position-D Belt Guard
(8) Stock Position-C Belt Guards cannot be used with TA II Reducers mounted in 'A' position. A special belt guard is required. Consult Dodge for price and delivery.

Torque-Arm II Shaft Mount Speed Reducers

Cooling Fan Dimensions, TA4207H - TA12608H

When the thermal capacity of a Torque-Arm II reducer is exceeded, cooling fans provide an optional, inexpensive way of lowering the oil temperature, thus increasing the thermal horsepower capacity of the reducer. Selection tables indicate when a cooling fan is required.

The computer designed fan assembly, which fastens to the input shaft, is compact enough to allow installation of the V-drive originally designed for the reducer. The fan assemblies are designed to allow free circulation of air at the back of the housing as well as through the front of the unit. The fan blade offers a radial streamline airflow, which means smaller fans yet a more efficient movement of air. See Figure 1 and Table 1 for cooling fan installation dimensions.

For thermal capacities beyond the range of cooling fans, pump and cooler auxiliary cooling packages may be used.

Note: See page G2-128 for maximum input shaft speeds.

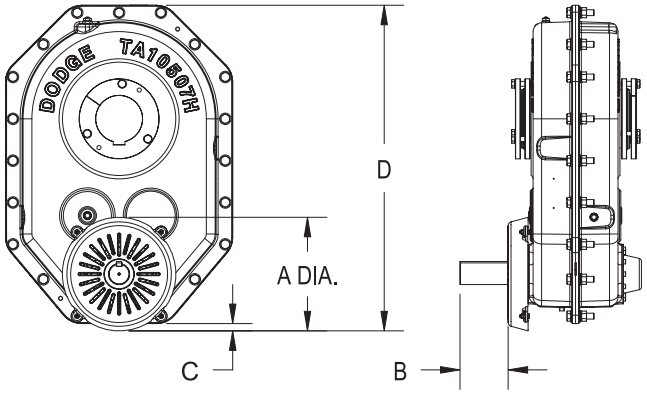


Figure 1 - Cooling Fan Assembly

Table 1 - Cooling Fan Installation Dimensions ●

Reducer	A Dia.	B	C	D
TA4207H	9.00	3.77	–	–
TA5215H	10.75	4.63	–	–
TA6307H	11.85	4.00	0.14	25.37
TA7315H	11.85	4.10	–	–
TA8407H	11.85	4.79	–	–
TA9415H	14.55	5.98	–	–
TA10507H	14.55	6.16	0.93	41.72
TA12608H	14.55	6.16	0.25	43.98

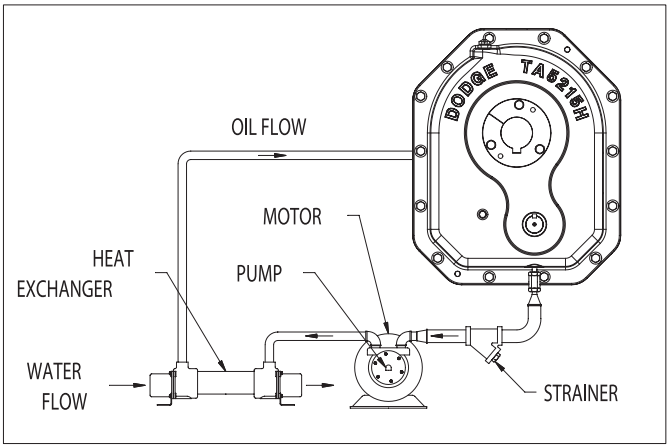
● See individual reducer pages for cooling fan part numbers

Reducer Pump and Auxiliary Cooling Package

For thermal capacities beyond the range of cooling fans, an optional pump and cooler auxiliary cooling package is available to prevent overheating the reducer and allow the use of full mechanical HP rating by lowering the oil temperature to an acceptable level.

Specifications for the heat exchanger are as follows: 1/2 HP, 60 Hz, 3 PH. 230/460 Volt, TEFC, 56 Frame. Maximum coolant (water) flow is 3 G.P.M. based upon a maximum water temperature of 80 degrees F. Minimum oil temperature for operation is 60 degrees F.

Figure 2 - Pump and Auxiliary Cooling Package, Part Number 273933



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Harsh Duty Accessories

ABS Polymer Bushing Covers

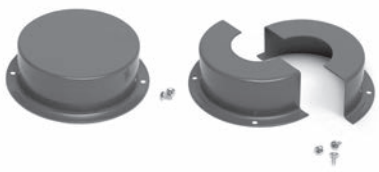
Reducer Size	Bushing Cover Part Numbers				Dimensions					
	Closed	Weight	Split	Weight	A	B	C	D	E	F
TA0107L	900142	0.3	900143	0.3	8.01	3.75	3.75	2.02	0.35	0.40
TA1107H	901142	0.5	901143	0.4	8.20	4.25	4.25	1.89	0.08	-0.10
TA2115H	902142	0.6	902143	0.5	8.80	4.88	4.88	2.19	0.07	-0.10
TA3203H	903142	0.6	903143	0.5	10.48	5.56	5.56	2.79	0.48	0.30
TA4207H	904142	1.2	904143	1.0	10.62	6.11	6.11	2.87	0.47	0.29
TA5215H	905142	1.5	905143	1.3	11.98	7.00	7.00	3.61	0.90	0.67
TA6307H	905142	1.5	905143	1.3	12.40	7.00	7.00	4.98	0.80	0.56
TA7315H	907142	1.6	907143	1.5	13.43	8.50	8.50	4.80	0.12	-0.28
TA8407H	908142	1.7	908143	1.6	14.50	8.75	8.75	5.26	0.38	0.13
TA9415H	909142	2.0	909143	1.8	15.42	9.75	9.75	6.25	-0.67	-1.07
TA10507H	910142	3.0	910143	2.8	17.13	10.75	10.75	6.24	0.13	-0.21
TA12608H	912142	4.0	912143	3.8	20.00	12.00	12.00	6.34	-0.50	-0.97

Aluminum Bushing Covers

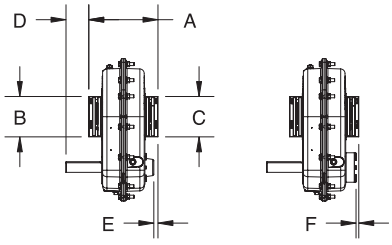
Reducer Size	Bushing Cover Part Numbers				Dimensions					
	Closed	Weight	Split	Weight	A	B	C	D	E	F
TA0107L	900114	0.3	900115	0.3	7.77	3.63	3.63	2.14	0.22	0.05
TA1107H	901114	0.5	901115	0.4	7.95	4.13	4.13	2.02	-0.05	-0.22
TA2115H	902114	0.6	902115	0.5	8.80	4.75	4.75	2.19	0.07	-0.10
TA3203H	903114	1.0	903115	0.6	9.68	5.25	5.25	3.19	0.08	-0.10
TA4207H	904114	1.2	904115	1.0	9.95	5.88	5.88	3.21	0.14	-0.04
TA5215H	905114	1.3	905115	1.3	11.57	6.75	6.75	3.81	0.70	0.46
TA6307H	906114	1.5	906115	1.5	12.12	6.88	6.88	5.12	0.66	0.41
TA7315H	907114	1.5	907115	1.5	13.18	8.13	8.13	4.92	0.00	-0.41
TA8407H	908114	2.5	908115	2.5	14.12	8.38	8.38	5.45	0.19	-0.06
TA9415H	909114	4.0	909115	3.7	15.17	9.63	9.63	6.37	-0.79	-1.20
TA10507H	910114	4.6	910115	3.9	16.88	10.63	10.63	6.36	0.00	-0.34
TA12608H	912114	4.8	912115	4.1	19.75	11.88	11.88	6.47	-0.63	-1.09

ABS Covers

Metal End Covers



Drawing A - End Cover



REDUCER WITHOUT BACKSTOP

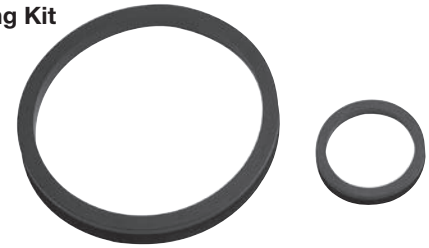
REDUCER WITH BACKSTOP

Optional V-Ring Flinger Seal Kit For Harsh Duty Environments (1)

Reducer Size	Part Number	Weight
TA0107L	900249	0.1
TA1107H	901249	0.1
TA2115H	902249	0.2
TA3203H	903249	0.2
TA4207H	904249	0.3
TA5215H	905249	0.3
TA6307H	906249	0.4
TA7315H	907249	0.4
TA8407H	907249	0.4
TA9415H	909249	0.5
TA10507H	910249	0.8
TA12608H	912249	0.8

(1) Consists of 1 input and 2 output V-ring seals which fit in seal OD of housing; provides additional sealing protection for keeping contaminants out of reducer.

V-Ring Kit



Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Harsh Duty Accessories

Hydra-Lock Breathers

Enclosed Breather

Oil Sump Heater

Hydra-Lock Breather System

Reducer Size	Size	Part Number
TA0107-TA3203	HL-0	964372
TA4207-TA9415	HL-1	964364
TA10507-TA12608	HL-2	964366

Enclosed Breather Chamber

Reducer Size	Part Number
TA0-TA9	240050
TA4-TA12	240051

Oil Sump Immersion Heaters (2) (3)

Reducer Size	Part Number
TA0-TA3	Not Available
TA4	241103 (with reducer factory modification)
TA5-TA6	241103
TA7-TA9	241105
TA10-TA12	241105 (with reducer factory modification)

(2) 110 volt, single phase, AC cartridge heater, threads into special tapped housing hole. Provides for approximately 70 degrees (F) temperature rise in one hour for cold climates. Simple time phased on-off constructions without thermostate.

(3) All TA II reducers have to be factory modified to allow installation of sump heater. Reducer mounting position will determine modification requirement. Consult Dodge.

Oil Sight Glasses

Reducer Size	Size	Part Number
TA0-TA3	3/8"	430120
TA4-TA12	3/4"	430159

Oil Sight Tubes

Reducer Size	Size	Part Number
TA0-TA3	3/8"	900110
TA4-TA12	3/4"	904110

Torque-Arm II Shaft Mount Speed Reducers

TDNC Coated Tapered Bushings (Thin Dense Nickel Chrome)

- TDNC coated for maximum corrosion resistance with minimum premium cost adder
- TDNC bushings, backing plates and snap rings
- Corrosion resistant bolts and lock washers

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Maximum Bore Straight Bore TA II Reducers (1) (2) (3)

Reducer Size	Max. Bore	TA II Reducer									
		5:1		9:1		15:1		25:1		31:1 - 40:1	
		Part No.	Weight	Part No.	Weight	Part No.	Weight	Part No.	Weight	Part No.	Weight
TA1107H	1-11/16"	901149	56.6	901148	58.0	901147	57.9	901146	57.9	901145	58.0
TA3203H	2-7/16"	903149	109.2	903148	113.3	903147	113.1	903146	112.8	903145	112.0
TA4207H	2-15/16"	904149	182.0	904148	190.7	904147	190.3	904146	189.6	904145	189.0
TA5215H	3-7/16"	905149	262.4	905148	277.0	905147	276.5	905146	275.5	905145	274.7
TA6307H	3-15/16"	906149	316.0	906148	334.0	906147	333.0	906146	331.0	906145	330.0

(1) See individual reducer catalog pages for accessories for above reducers
(2) Non-stock, made-to-order reducers
(3) See Drawing B and Table 4 for catalog dimensions for Maximum Bore Straight Bore TA II Reducers

Drawing B - Maximum Bore Straight Bore Reducers

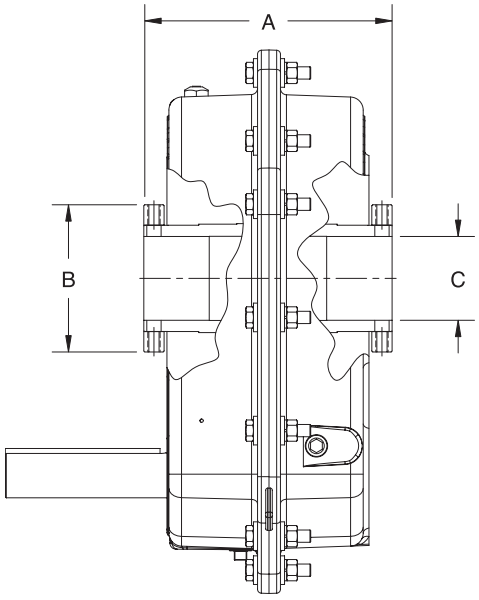


Table 4 (4)

Reducer Size	A	B	C Bore	Shaft Keyseat Required (5)
TA1107H	5.82	3.50	1-11/16"	3/8 x 3/16 x 5.81
TA3203H	7.59	4.50	2-7/16"	5/8 x 5/16 x 7.58
TA4207H	8.02	5.00	2-15/16"	3/4 x 3/8 x 8.01
TA5215H	8.97	5.50	3-7/16"	7/8 x 7/16 x 8.96
TA6307H	9.40	5.75	3-15/16"	1 x 1/2 x 9.39

(4) Always check the driven shaft and key for strength
(5) Minimum keyset and shaft length required to mount reducer

Courtesy of:
RELATED PR
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Nominal Sheave Ratios Required For Dodge Torque-Arm II Reducers - 5:1, 9:1, 15:1

Reducer Output RPM	25:1 Nominal Reducer Ratio			Reducer Output RPM	31:1, 32:1 and 33:1 Nominal Reducer Ratios			Reducer Output RPM	40:1 Nominal Reducer Ratio		
	Motor Speed				Motor Speed				Motor Speed		
	1750	1450	1170		1750	1450	1170		1750	1450	1170
400	**1.14**	**1.38**	**1.71**	200	**1.03**	**1.24**	**1.54**	120	**1.03**	**1.24**	**1.54**
395	**1.13**	**1.36**	**1.69**	198	**1.02**	**1.23**	**1.52**	118	**1.01**	**1.22**	**1.51**
390	**1.11**	**1.34**	**1.67**	196	**1.01**	**1.22**	**1.51**	116	1.01	**1.20**	**1.49**
385	**1.10**	**1.33**	**1.65**	194	1.00	**1.20**	**1.49**	114	1.02	**1.18**	**1.46**
380	**1.09**	**1.31**	**1.62**	192	1.01	**1.19**	**1.48**	112	1.04	**1.16**	**1.44**
375	**1.07**	**1.29**	**1.60**	190	1.02	**1.18**	**1.46**	110	1.06	**1.14**	**1.41**
370	**1.06**	**1.28**	**1.58**	188	1.03	**1.17**	**1.45**	108	1.08	**1.12**	**1.38**
365	**1.04**	**1.26**	**1.56**	186	1.05	**1.15**	**1.43**	106	1.10	**1.10**	**1.36**
360	**1.03**	**1.24**	**1.54**	184	1.06	**1.14**	**1.42**	104	1.12	**1.08**	**1.33**
355	**1.01**	**1.22**	**1.52**	182	1.07	**1.13**	**1.40**	102	1.14	**1.06**	**1.31**
350	1.00	**1.21**	**1.50**	180	1.08	**1.12**	**1.38**	100	1.17	**1.03**	**1.28**
345	1.01	**1.19**	**1.47**	178	1.09	**1.10**	**1.37**	98	1.19	**1.01**	**1.26**
340	1.03	**1.17**	**1.45**	176	1.10	**1.09**	**1.35**	96	1.22	1.01	**1.23**
335	1.04	**1.16**	**1.43**	174	1.12	**1.08**	**1.34**	94	1.24	1.03	**1.21**
330	1.06	**1.14**	**1.41**	172	1.13	**1.07**	**1.32**	92	1.27	1.05	**1.18**
325	1.08	**1.12**	**1.39**	170	1.14	**1.06**	**1.31**	90	1.30	1.07	**1.15**
320	1.09	**1.10**	**1.37**	168	1.16	**1.04**	**1.29**	88	1.33	1.10	**1.13**
315	1.11	**1.09**	**1.35**	166	1.17	**1.03**	**1.28**	86	1.36	1.12	**1.10**
310	1.13	**1.07**	**1.32**	164	1.19	**1.02**	**1.26**	84	1.39	1.15	**1.08**
305	1.15	**1.05**	**1.30**	162	1.20	**1.01**	**1.25**	82	1.42	1.18	**1.05**
300	1.17	**1.03**	**1.28**	160	1.22	1.01	**1.23**	80	1.46	1.21	**1.03**
295	1.19	**1.02**	**1.26**	158	1.23	1.02	**1.22**	78	1.50	1.24	1.00
290	1.21	1.00	**1.24**	156	1.25	1.03	**1.20**	76	1.54	1.27	1.03
285	1.23	1.02	**1.22**	154	1.26	1.05	**1.18**	74	1.58	1.31	1.05
280	1.25	1.04	**1.20**	152	1.28	1.06	**1.17**	72	1.62	1.34	1.08
275	1.27	1.05	**1.18**	150	1.30	1.07	**1.15**	70	1.67	1.38	1.11
270	1.30	1.07	**1.15**	148	1.31	1.09	**1.14**	68	1.72	1.42	1.15
265	1.32	1.09	**1.13**	146	1.33	1.10	**1.12**	66	1.77	1.46	1.18
260	1.35	1.12	**1.11**	144	1.35	1.12	**1.11**	64	1.82	1.51	1.22
255	1.37	1.14	**1.09**	142	1.37	1.13	**1.09**	62	1.88	1.56	1.26
250	1.40	1.16	**1.07**	140	1.39	1.15	**1.08**	60	1.94	1.61	1.30
245	1.43	1.18	**1.05**	138	1.41	1.17	**1.06**	58	2.01	1.67	1.34
240	1.46	1.21	**1.03**	136	1.43	1.18	**1.05**	56	2.08	1.73	1.39
235	1.49	1.23	1.00	134	1.45	1.20	**1.03**	54	2.16	1.79	1.44
230	1.52	1.26	1.02	132	1.47	1.22	**1.02**	52	2.24	1.86	1.50
225	1.56	1.29	1.04	130	1.50	1.24	1.00	50	2.33	1.93	1.56
220	1.59	1.32	1.06	128	1.52	1.26	1.02	48	2.43	2.01	1.63
215	1.63	1.35	1.09	126	1.54	1.28	1.03	46	2.54	2.10	1.70
210	1.67	1.38	1.11	124	1.57	1.30	1.05	44	2.65	2.20	1.77
205	1.71	1.41	1.14	122	1.59	1.32	1.07	42	2.78	2.30	1.86
200	1.75	1.45	1.17	120	1.62	1.34	1.08	40	2.92	2.42	1.95
195	1.79	1.49	1.20	118	1.65	1.37	1.10	38	3.07	2.54	2.05
190	1.84	1.53	1.23	116	1.68	1.39	1.12	36	3.24	2.69	2.17
185	1.89	1.57	1.26	114	1.71	1.41	1.14	34	3.43	2.84	2.29
180	1.94	1.61	1.30	112	1.74	1.44	1.16	32	3.65	3.02	2.44
175	2.00	1.66	1.34	110	1.77	1.46	1.18	30	3.89	3.22	2.60
170	2.06	1.71	1.38	108	1.80	1.49	1.20	28	4.17	3.45	2.79
165	2.12	1.76	1.42	106	1.83	1.52	1.23	26	4.49	3.72	3.00
160	2.19	1.81	1.46	104	1.87	1.55	1.25	24	4.86	4.03	3.25
155	2.26	1.87	1.51	102	1.91	1.58	1.27	22	5.30	4.39	3.55
150	2.33	1.93	1.56	100	1.94	1.61	1.30	20	5.83	4.83	3.90
145	2.41	2.00	1.61	–	–	–	–	18	6.48	5.37	4.33
140	2.50	2.07	1.67	–	–	–	–	16	7.29	6.04	4.88
135	2.59	2.15	1.73	–	–	–	–	14	8.33	6.90	5.57
130	2.69	2.23	1.80	–	–	–	–	12	9.72	8.06	6.50
125	2.80	2.32	1.87	–	–	–	–	10	11.67	9.67	7.80
120	2.92	2.42	1.95	–	–	–	–	–	–	–	–
115	3.04	2.52	2.03	–	–	–	–	–	–	–	–
110	3.18	2.64	2.13	–	–	–	–	–	–	–	–
105	3.33	2.76	2.23	–	–	–	–	–	–	–	–
100	**3.50**	**2.90**	**2.34**	–	–	–	–	–	–	–	–

Note: Speed increase ratios are shown in bold type

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Nominal Sheave Ratios Required For Dodge Torque-Arm II Reducers - 25:1, 31-33:1, 40:1

Reducer Output RPM	25:1 Nominal Reducer Ratio			Reducer Output RPM	31:1, 32:1 and 33:1 Nominal Reducer Ratios			Reducer Output RPM	40:1 Nominal Reducer Ratio		
	Motor Speed				Motor Speed				Motor Speed		
	1750	1450	1170		1750	1450	1170		1750	1450	1170
80	**1.14**	**1.38**	**1.71**	50	1.09	**1.10**	**1.37**	50	**1.14**	**1.38**	**1.71**
78	**1.11**	**1.34**	**1.67**	48	1.14	**1.06**	**1.31**	48	**1.10**	**1.32**	**1.64**
76	**1.09**	**1.31**	**1.62**	46	1.19	**1.02**	**1.26**	46	**1.05**	**1.27**	**1.57**
74	**1.06**	**1.28**	**1.58**	44	1.24	1.03	**1.20**	44	**1.01**	**1.21**	**1.50**
72	**1.03**	**1.24**	**1.54**	42	1.30	1.08	**1.15**	42	1.04	**1.16**	**1.44**
70	1.00	**1.21**	**1.50**	40	1.37	1.13	**1.09**	40	1.09	**1.10**	**1.37**
68	1.03	**1.17**	**1.45**	38	1.44	1.19	**1.04**	38	1.15	**1.05**	**1.30**
66	1.06	**1.14**	**1.41**	36	1.52	1.26	1.02	36	1.22	1.01	**1.23**
64	1.09	**1.10**	**1.37**	34	1.61	1.33	1.08	34	1.29	1.07	**1.16**
62	1.13	**1.07**	**1.32**	32	1.71	1.42	1.14	32	1.37	1.13	**1.09**
60	1.17	**1.03**	**1.28**	30	1.82	1.51	1.22	30	1.46	1.21	**1.03**
58	1.21	1.00	**1.24**	28	1.95	1.62	1.31	28	1.56	1.29	1.04
56	1.25	1.04	**1.20**	26	2.10	1.74	1.41	26	1.68	1.39	1.13
54	1.30	1.07	**1.15**	24	2.28	1.89	1.52	24	1.82	1.51	1.22
52	1.35	1.12	**1.11**	22	2.49	2.06	1.66	22	1.99	1.65	1.33
50	1.40	1.16	**1.07**	20	2.73	2.27	1.83	20	2.19	1.81	1.46
48	1.46	1.21	**1.03**	18	3.04	2.52	2.03	18	2.43	2.01	1.63
46	1.52	1.26	1.02	16	3.42	2.83	2.29	16	2.73	2.27	1.83
44	1.59	1.32	1.06	14	3.91	3.24	2.61	14	3.13	2.59	2.09
42	1.67	1.38	1.11	12	4.56	3.78	3.05	12	3.65	3.02	2.44
40	1.75	1.45	1.17	10	5.47	4.53	3.66	10	4.38	3.63	2.93
38	1.84	1.53	1.23	8	6.84	5.66	4.57	8	5.47	4.53	3.66
36	1.94	1.61	1.30	6	9.11	7.55	6.09	6	7.29	6.04	4.88
34	2.06	1.71	1.38	–	–	–	–	–	–	–	–
32	2.19	1.81	1.46	–	–	–	–	–	–	–	–
30	2.33	1.93	1.56	–	–	–	–	–	–	–	–
28	2.50	2.07	1.67	–	–	–	–	–	–	–	–
26	2.69	2.23	1.80	–	–	–	–	–	–	–	–
24	2.92	2.42	1.95	–	–	–	–	–	–	–	–
22	3.18	2.64	2.13	–	–	–	–	–	–	–	–
20	3.50	2.90	2.34	–	–	–	–	–	–	–	–
18	3.89	3.22	2.60	–	–	–	–	–	–	–	–
16	4.38	3.63	2.93	–	–	–	–	–	–	–	–
14	5.00	4.14	3.34	–	–	–	–	–	–	–	–
12	5.83	4.83	3.90	–	–	–	–	–	–	–	–
10	7.00	5.80	4.68	–	–	–	–	–	–	–	–
8	8.75	7.25	5.85	–	–	–	–	–	–	–	–
6	11.67	9.67	7.80	–	–	–	–	–	–	–	–

Note: Speed increase ratios are shown in bold type

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Nominal Sheave Speed (RPM) At Input For Dodge Reducers - 1750 Motor

Reducer Output RPM	5:1 Nominal Reducer Ratio	Reducer Output RPM	9:1 Nominal Reducer Ratio	Reducer Output RPM	15:1 Nominal Reducer Ratio	Reducer Output RPM	25:1 Nominal Reducer Ratio	Reducer Output RPM	31:1, 32:1 and 33:1 Nominal Reducer Ratio	Reducer Output RPM	40:1 Nominal Reducer Ratio
400	2000	200	1800	120	1800	80	2000	50	1600	50	2000
395	1975	198	1782	118	1770	78	1950	48	1536	48	1920
390	1950	196	1764	116	1740	76	1900	46	1472	46	1840
385	1925	194	1746	114	1710	74	1850	44	1408	44	1760
380	1900	192	1728	112	1680	72	1800	42	1344	42	1680
375	1875	190	1710	110	1650	70	1750	40	1280	40	1600
370	1850	188	1692	108	1620	68	1700	38	1216	38	1520
365	1825	186	1674	106	1590	66	1650	36	1152	36	1440
360	1800	184	1656	104	1560	64	1600	34	1088	34	1360
355	1775	182	1638	102	1530	62	1550	32	1024	32	1280
350	1750	180	1620	100	1500	60	1500	30	960	30	1200
345	1725	178	1602	98	1470	58	1450	28	896	28	1120
340	1700	176	1584	96	1440	56	1400	26	832	26	1040
335	1675	174	1566	94	1410	54	1350	24	768	24	960
330	1650	172	1548	92	1380	52	1300	22	704	22	880
325	1625	170	1530	90	1350	50	1250	20	640	20	800
320	1600	168	1512	88	1320	48	1200	18	576	18	720
315	1575	166	1494	86	1290	46	1150	16	512	16	640
310	1550	164	1476	84	1260	44	1100	14	448	14	560
305	1525	162	1458	82	1230	42	1050	12	384	12	480
300	1500	160	1440	80	1200	40	1000	10	320	10	400
295	1475	158	1422	78	1170	38	950	8	256	8	320
290	1450	156	1404	76	1140	36	900	6	192	6	240
285	1425	154	1386	74	1110	34	850	–	–	–	–
280	1400	152	1368	72	1080	32	800	–	–	–	–
275	1375	150	1350	70	1050	30	750	–	–	–	–
270	1350	148	1332	68	1020	28	700	–	–	–	–
265	1325	146	1314	66	990	26	650	–	–	–	–
260	1300	144	1296	64	960	24	600	–	–	–	–
255	1275	142	1278	62	930	22	550	–	–	–	–
250	1250	140	1260	60	900	20	500	–	–	–	–
245	1225	138	1242	58	870	18	450	–	–	–	–
240	1200	136	1224	56	840	16	400	–	–	–	–
235	1175	134	1206	54	810	14	350	–	–	–	–
230	1150	132	1188	52	780	12	300	–	–	–	–
225	1125	130	1170	50	750	10	250	–	–	–	–
220	1100	128	1152	48	720	8	200	–	–	–	–
215	1075	126	1134	46	690	6	150	–	–	–	–
210	1050	124	1116	44	660	–	–	–	–	–	–
205	1025	122	1098	42	630	–	–	–	–	–	–
200	1000	120	1080	40	600	–	–	–	–	–	–
195	975	118	1062	38	570	–	–	–	–	–	–
190	950	116	1044	36	540	–	–	–	–	–	–
185	925	114	1026	34	510	–	–	–	–	–	–
180	900	112	1008	32	480	–	–	–	–	–	–
175	875	110	990	30	450	–	–	–	–	–	–
170	850	108	972	28	420	–	–	–	–	–	–
165	825	106	954	26	390	–	–	–	–	–	–
160	800	104	936	24	360	–	–	–	–	–	–
155	775	102	918	22	330	–	–	–	–	–	–
150	750	100	900	20	300	–	–	–	–	–	–
145	725	–	–	18	270	–	–	–	–	–	–
140	700	–	–	16	240	–	–	–	–	–	–
135	675	–	–	14	210	–	–	–	–	–	–
130	650	–	–	12	180	–	–	–	–	–	–
125	625	–	–	10	150	–	–	–	–	–	–
120	600	–	–	–	–	–	–	–	–	–	–
115	575	–	–	–	–	–	–	–	–	–	–
110	550	–	–	–	–	–	–	–	–	–	–
105	525	–	–	–	–	–	–	–	–	–	–
100	500	–	–	–	–	–	–	–	–	–	–

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Renewal Parts For TA II Reducers

Torque-Arm II Bearing Kits (1)

Size	Ratio	Kit P/N	Size	Ratio	Kit P/N
TA0107L	5:1	900128	TA6307H	5:1	906128
TA0107L	9:1 - 40:1	900129	TA6307H	9:1 - 15:1	906129
TA1107H	5:1	901128	TA6307H	25:1 - 40:1	906130
TA1107H	9:1 - 15:1	901129	TA7315H	5:1	907128
TA1107H	25:1 - 40:1	901130	TA7315H	9:1 - 25:1	907129
TA2115H	5:1	902128	TA7315H	40:1	907130
TA2115H	9:1 - 25:1	902129	TA8407H	15:1 - 25:1	908129
TA2115H	40:1	902130	TA8407H	40:1	908130
TA3203H	5:1	903128	TA9415H	15:1 - 25:1	909129
TA3203H	9:1 - 25:1	903129	TA9415H	40:1	909130
TA3203H	40:1	903130	TA10507H	15:1 - 25:1	910129
TA4207H	5:1	904128	TA10507H	40:1	910130
TA4207H	9:1 - 25:1	904129	TA12608H	15:1 - 25:1	912129
TA4207H	40:1	904130	TA12608H	40:1	912130
TA5215H	5:1	905128			
TA5215H	9:1 - 15:1	905129			
TA5215H	25:1	905130			
TA5215H	40:1	905131			

(1) Kit contains complete set of bearings for reducer size and ratio indicated.

Torque-Arm II Seal Kits (2)

Size	Ratio	Kit P/N
TA0107L	All	900126
TA1107H	All	901126
TA2115H	5:1 - 25:1	902126
TA2115H	40:1	902127
TA3203H	5:1-25:1	903126
TA3203H	40:1	903127
TA4207H	All	904126
TA5215H	All	905126
TA6307H	All	906126
TA7315H	All	907126
TA8407H	All	908126
TA9415H	All	909126
TA10507	All	910126
TA12608	All	912126

(2) Kit includes input & output seals, backstop cover gasket and RTV sealant for reducer size and ratio indicated

Torque-Arm II Level 1 Rebuild Kits (3)

Size	Ratio	Kit P/N	Size	Ratio	Kit P/N
TA0107L	5:1	900135	TA6307H	5:1	906135
TA0107L	9:1 - 40:1	900136	TA6307H	9:1 - 15:1	906136
TA1107H	5:1	901135	TA6307H	25:1 - 40:1	906137
TA1107H	9:1 - 15:1	901136	TA7315H	5:1	907135
TA1107H	25:1 - 40:1	901137	TA7315H	9:1 - 25:1	907136
TA2115H	5:1	902135	TA7315H	40:1	907137
TA2115H	9:1 - 25:1	902136	TA8407H	15:1 - 25:1	908136
TA2115H	40:1	902137	TA8407H	40:1	908137
TA3203H	5:1	903135	TA9415H	15:1 - 25:1	909136
TA3203H	9:1 - 25:1	903136	TA9415H	40:1	909137
TA3203H	40:1	903137	TA10507H	15:1 - 25:1	910136
TA4207H	5:1	904135	TA10507H	40:1	910137
TA4207H	9:1 - 25:1	904136	TA12608H	15:1 - 25:1	912136
TA4207H	40:1	904137	TA12608H	40:1	912137
TA5215H	5:1	905135			
TA5215H	9:1 - 15:1	905136			
TA5215H	25:1	905137			
TA5215H	40:1	905138			

(3) Level 1 Rebuild Kit includes input & output seals, all bearings, shims and sealant for reducer size and ratio indicated. See Instruction Manual # MN1601 for gearing part numbers.

Torque-Arm II Super Shim Kits (4)

Size	Kit P/N
TA0107L	900180
TA1107H	901180
TA2115H	902180
TA3203H	903180
TA4207H	904180
TA5215H	905180
TA6307H	906180
TA7315H	907180
TA8407H	908180
TA9415H	909180
TA10507H	910180
TA12608H	912180

(4) Kit contains complete set of shims for reducer size. TA II shims are not color coded.

Courtesy of:
Screw Conveyor Parts

Torque-Arm II Shaft Mount Speed Reducers

Renewal Parts For TA II Reducers

Torque-Arm II Lube Kits [5]

Size	Kit P/N
TA0107L	LUBEKITTA0107
TA1107H	LUBEKITTA1107
TA2115H	LUBEKITTA2115
TA3203H	LUBEKITTA3203
TA4207H	LUBEKITTA4207
TA5215H	LUBEKITTA5215
TA6307H	LUBEKITTA6307
TA7315H	LUBEKITTA7315
TA8407H	LUBEKITTA8407
TA9415H	LUBEKITTA9415
TA10507H	LUBEKITTA10507
TA12608H	LUBEKITTA12608

(5) Kit contains factory recommended mineral oil ISO220 in volumes sufficient for all recommended mounting positions.

Lubricant:

It is important that a rebuilt reducer be refilled with fresh lubricant of the proper viscosity group.

To make this an easy selection we have prepackaged the required volume of factory standard lubricant which may be ordered along with the rebuild kit. See Accessory table for kit part numbers.

Torque-Arm II Level 2 Rebuild Kits [6]

Size	Ratio	Kit P/N	Size	Ratio	Kit P/N
TA0107L	5:1	9001355	TA6307H	5:1	9061355
	9:1	9001369		9:1	9061369
	15:1	90013615		15:1	90613615
	25:1	90013625		25:1	90613725
	40:1	90013640		40:1	90613740
TA1107H	5:1	9011355	TA7315H	5:1	9071355
	9:1	9011369		9:1	9071369
	15:1	90113615		15:1	90713615
	25:1	90113725		25:1	90713625
	40:1	90113740		40:1	90713740
TA2115H	5:1	9021355	TA8407H	15:1	90813615
	9:1	9021369		25:1	90813625
	15:1	90213615		40:1	90814740
	25:1	90213625	TA9415H	15:1	90913615
	40:1	90213740		25:1	90913625
TA3203H	5:1	9031355		40:1	90913740
	9:1	9031369	TA10507H	15:1	91013615
	15:1	90313615		25:1	91013625
	25:1	90313625		40:1	91013740
	40:1	90313740	TA12608H	15:1	91213615
TA4207H	5:1	9041355		25:1	91213625
	9:1	9041369		40:1	91213740
	15:1	90413615			
	25:1	90413625			
	40:1	90413740			
TA5215H	5:1	9051355			
	9:1	9051369			
	15:1	90513615			
	25:1	90513725			
	40:1	90513840			

(6) Level 2 Rebuild Kit includes all items in Level 1 Kit plus high speed input pinion and mating 1st stage gear. Provides maximum protection against downtime. Part number is Level 1 Kit part number + ratio.

Courtesy of:
ENGINEERII
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Table 1: NEMA Motor Information (1750 RPM)

Horsepower	NEMA Motor Frame	Shaft Diameter
1	143T	7/8
1-1/2	145T	7/8
2	145T	7/8
3	182T	1-1/8
5	184T	1-1/8
7-1/2	213T	1-3/8
10	215T	1-3/8
15	254T	1-5/8
20	256T	1-5/8
25	284T	1-7/8
30	286T	1-7/8
40	324T	2-1/8
50	326T	2-1/8
60	364T	2-3/8
75	365T	2-3/8
100	405T	2-7/8
125	444T	3-3/8
150	445T	3-3/8
200	447T	3-3/8

Table 2: Torque-Arm II Reducer Information

TA II Reducer	Ratio	Input Shaft Diameter	Minimum Sheave Diameter
TA0107L	All	1”	See Class I, II and III Selection Tables for minimum reducer sheave recommendations
TA1107H	All	1”	
TA2115H	5:1 - 25:1	1-1/8”	
	33:1	1”	
TA3203H	5:1 - 25:1	1-3/8”	
	32:1	1-1/8”	
TA4207H	All	1-7/16”	
TA5215H	All	1-5/8”	
TA6307H	All	2-3/16”	
TA7315H	All	2-7/16”	
TA8407H	All	2-7/16”	
TA9415H	All	2-7/16”	
TA10507H	All	2-11/16”	
TA12608H	All	2-11/16”	

Table 3: Torque-Arm II Backstop Lift-off Speed (1)

TA II Reducer	Minimum Input Shaft RPM
TA0107L	875
TA1107H	875
TA2115H	875
TA3203H	825
TA4207H	780
TA5215H	720
TA6307H	610
TA7315H	490
TA8407H	610
TA9415H	490
TA10507H	480
TA12608H	450

(1) For best results, select reducer ratios which exceed input shaft speeds required for backstop sprag lift-off.

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Maximum Input Speed - RPM

Case Size	Nominal Ratio				
	05	09	15	25	32/40
TA0107L	2080	1800	1791	2007	1750
TA1107H	2000	1798	1789	2005	1750
TA2115H	2080	1821	1874	2005	1750
TA3203H	1965	1847	1808	1996	1750
TA4207H	2000	1846	1800	2010	1955
TA5215H	2042	1837	1791	2000	1945
TA6307H	1978	1843	1854	1989	1916
TA7315H	2075	1943	1790	1987	1983
TA8407H	N/A	N/A	1814	1997	1983
TA9415H	N/A	N/A	1812	2035	1970
TA10507H	N/A	N/A	1811	2015	1984
TA12608H	N/A	N/A	1775	2002	1909

Maximum Output Speed - RPM

Case Size	Nominal Ratio				
	05	09	15	25	32/40
TA0107L	400	200	120	80	57
TA1107H	400	200	120	80	57
TA2115H	400	200	120	80	53
TA3203H	400	200	120	80	54
TA4207H	400	200	120	80	50
TA5215H	400	200	120	80	50
TA6307H	400	200	120	80	50
TA7315H	400	200	120	80	50
TA8407H	N/A	N/A	120	80	50
TA9415H	N/A	N/A	120	80	50
TA10507H	N/A	N/A	120	80	50
TA12608H	N/A	N/A	120	80	50

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Thrust Capacity for Screw Conveyor Drives (Pounds)

Case Size	Output Speed (RPM) Single Reduction Reducers (05:1)						
	100	150	200	250	300	350	400
TA0107L	2568	2288	2092	2000	1922	1855	1798
TA1107H	3106	2835	2626	2505	2396	2309	2232
TA2115H	5373	4771	4417	4186	4015	3885	3785
TA3203H	6000	5834	5387	5053	4783	4561	4386
TA4207H	6000	6000	6000	6000	6000	5776	5570
TA5215H	6000	6000	6000	6000	6000	6000	6000
TA6307H	6000	5803	5374	5202	4977	4807	4737
TA7315H	†	†	†	†	†	†	†

Thrust Capacity for Screw Conveyor Drives (Pounds)

Case Size	Output Speed (RPM) Double Reduction Reducers (09:1 thru 40:1)								
	10	25	50	75	100	125	150	175	200
TA0107L	5300	4028	3141	2730	2465	2281	2165	2071	1989
TA1107H	6000	4833	3705	3196	2865	2639	2568	2438	2315
TA2115H	6000	6000	6000	5323	4850	4550	4295	4086	3924
TA3203H	6000	6000	6000	6000	5761	5328	5020	4813	4636
TA4207H	6000	6000	6000	6000	6000	6000	6000	6000	6000
TA5215H	6000	6000	6000	6000	6000	6000	6000	6000	6000
TA6307H	6000	6000	6000	5885	5185	4706	4435	4303	4269
TA7315H	†	†	†	†	†	†	†	†	†

† Consult Dodge

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Lubrication Of Torque-Arm II Reducers

Caution: Unit is shipped without oil. Add proper amount of rust and oxidation inhibited (R & O) gear oil before operating. Follow instructions on reducer warning tags and in the instruction manual. Failure to observe these precautions could result in damage to, or destruction of, the equipment.

Warning: To ensure that drive is not unexpectedly started, turn off and lock out or tag power source before proceeding. Remove all external loads from drive before removing or servicing drive or accessories. Failure to observe these precautions could result in bodily injury.

Lubrication is extremely important for satisfactory operation. The proper oil level as shown on page 132 & 133, showing oil level plug location, must be maintained at all times. Approximate oil quantities are shown on page 134. Frequent inspections with the unit not running and allowing sufficient time for the oil to cool and the entrapped air to settle out of the oil should be made by removing the level plug to see that the level is being maintained. If low, add the proper type and viscosity of lubricant through one of the upper openings until it comes out of the oil level hole. Replace the oil level plug securely. Refer to Tables 1 and 2 for viscosity recommendations.

After an initial operation of about two weeks, the oil should be changed. If desired, this oil may be filtered and reused. Very often, small metal particles will show up in the oil due to the wearing process. After the initial break in period, the lubricant should be drained, magnetic drain plug cleaned, gear case flushed and refilled every 2500 hours of operation under average industrial operating conditions.

Caution: Too much oil will cause overheating and too little will result in gear failure. Check oil level regularly.

More frequent oil changes are recommended when operating continuously or at high temperatures or under conditions of extreme dirt or dust. Use only recommended grades of lubricant listed on next page, or equivalent. Special attention should be given to checking of lubricants when any of the following conditions exist:

High operating temperatures resulting from heavy intermittent loads causes the temperature of the gear case to rise rapidly and then cool

Unusual ambient conditions, which may tend to cause condensation on the inside of the gearcase thereby contaminating the oil

Operating temperatures that would cause oil to approach 200°F continually

Subjection of reducer to unusual vapors or moist atmosphere

Subjection of reducer to extremely dusty or dirty environment

Under these extreme operating conditions, the oil should be changed every 1 to 3 months depending on severity of conditions.

Operating Temperatures

Heating is a natural characteristic of enclosed gearing, and a maximum gear case temperature approaching 200°F is not uncommon for some units operating in normal ambient temperatures (80°F). When operating at rated capacity, no damage will result from this temperature as this was taken into consideration in the design of the gear case and in the selection of the lubricants.

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Lubrication Of Torque-Arm II Reducers (Cont'd)

Table 1 – Oil Recommendations

ISO Grades For Ambient Temperatures of 50°F to 125°F

Output RPM	Torque-Arm II Reducer Size											
	TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H	TA8407H	TA9415H	TA10507H	TA12608H
301 – 400	320	320	320	220	220	220	220	220	220	220	220	220
201 – 300	320	320	320	220	220	220	220	220	220	220	220	220
151 – 200	320	320	320	220	220	220	220	220	220	220	220	220
126 – 150	320	320	320	220	220	220	220	220	220	220	220	220
101 – 125	320	320	320	320	220	220	220	220	220	220	220	220
81 – 100	320	320	320	320	320	220	220	220	220	220	220	220
41 – 80	320	320	320	320	320	220	220	220	220	220	220	220
11 – 40	320	320	320	320	320	320	320	320	320	320	220	220
1 – 10	320	320	320	320	320	320	320	320	320	320	320	320

Table 2 – Oil Recommendations

ISO Grades For Ambient Temperatures of 15°F to 60°F

Output RPM	Torque-Arm II Reducer Size											
	TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H	TA8407H	TA9415H	TA10507H	TA12608H
301 – 400	220	220	220	150	150	150	150	150	150	150	150	150
201 – 300	220	220	220	150	150	150	150	150	150	150	150	150
151 – 200	220	220	220	150	150	150	150	150	150	150	150	150
126 – 150	220	220	220	150	150	150	150	150	150	150	150	150
101 – 125	220	220	220	220	150	150	150	150	150	150	150	150
81 – 100	220	220	220	220	220	150	150	150	150	150	150	150
41 – 80	220	220	220	220	220	150	150	150	150	150	150	150
11 – 40	220	220	220	220	220	220	220	220	220	220	150	150
1 – 10	220	220	220	220	220	220	220	220	220	220	220	220

Notes:

(1) Assumes auxiliary cooling where recommended in the catalog.

(2) Pour point of lubricant selected should be at least 10°F lower than expected minimum ambient starting temperature.

(3) Extreme pressure (EP) lubricates are not necessary for average operating conditions. When properly selected for specific applications, Torque-Arm II backstops are suitable for use with EP lubricants.

(4) Special lubricants may be required for food and drug industry applications where contact with the product being manufactured may occur. Consult a lubrication manufacturer's repre sentative for his recommendations.

(5) For reducers operating in ambient temperatures between -22°F (-30°C) and 20°F (–6.6°C) use a synthetic hydrocarbon lubricant, 100 ISO grade or AGMA 3 grade (for example, Mobil SHC627). Above 125°F (51°C), consult Dodge Gear Application Engineering (864) 284-5700 for lubrication recommendation.

(6) Mobil SHC630 Series oil is recommended for high ambient temperatures.

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Lubrication Of Torque-Arm II Reducers (Cont'd)

Lubricant Grade Equivalents*

ISO	AGMA
150	4
220	5
320	6

* See page G1-135 for complete lubricant interchange chart

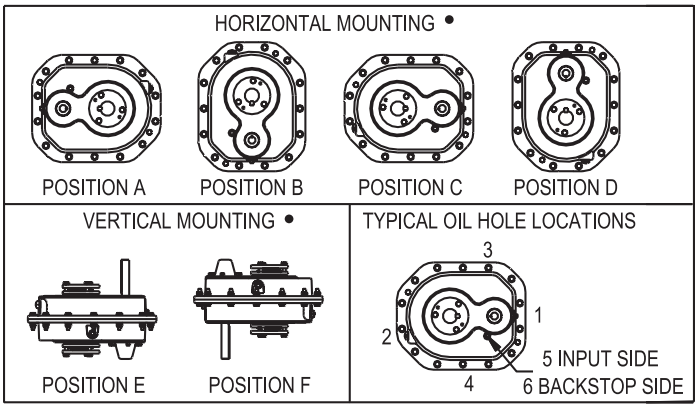
Installation

Horizontal Installations - Install the magnetic drain plug in the hole closest to the bottom of the reducer. Throw away the tape that covers the filter/ventilation plug in shipment and install plug in topmost hole. Of the 2 remaining plugs on the sides of the reducer, the lowest one is the minimum oil level plug.

Vertical Installations - Install the filter/ventilation plug in the hole provided in the upper face of the reducer housing as installed. If space is restricted on the upper face, install the vent in the highest hole on the side of the reducer per Figure 1. Install a plug in the hole in the bottom face of the reducer. Do not use this hole for the magnetic drain plug. Of the remaining holes on the sides of the reducer, use the plug in the upper housing half for the minimum oil level plug.

Mounting Position - The running position of the reducer in the horizontal application is not limited to the four positions shown in Figure 1. However, if the running position is over 20° off of position "B" or "D" or 5° off of position "A" or "C", either way from the sketches, the oil level plug cannot be used to safely check the oil level, unless during the checking, the torque arm is disconnected and the reducer is swung to within 20° for position "A" and "C" or 5° for position "B" and D" of the positions shown in Figure 1. Because of the many possible positions, of the reducer, it may be necessary or desirable to make special adaptations using the lubrication filling holes furnished along with other standard pipe fittings, stand pipes and oil level gauges as required.

Figure 1



- Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug. If reducer position is to vary from those shown in Figure 1, either more or less oil may be required. Consult Dodge.

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Lubrication Of Torque-Arm II Reducers (Cont'd)

Table 3 - Vent and Plug Locations (See Figure 1, page G2-132)

Mounting Position	Output Speed Above 15 RPM Vent and Plug Locations						Output Speed 15 RPM and Below ● Vent and Plug Locations					
	1	2	3	4	5	6	1	2	3	4	5	6
Position A	Level	Plug	Drain	Vent	Plug	Plug	Plug	Level	Drain	Vent	Plug	Plug
Position B	Drain	Vent	Level	Plug	Plug	Plug	Drain	Vent	Plug	Level	Plug	Plug
Position C	Plug	Level	Vent	Drain	Plug	Plug	Level	Plug	Vent	Drain	Plug	Plug
Position D	Vent	Drain	Level	Plug	Plug	Plug	Vent	Drain	Level	Plug	Plug	Plug
Position E	Level	* Plug	Plug	Drain	Vent	Plug	Level	* Plug	Plug	Drain	Vent	Plug
Position F	Plug	Drain	Level	* Plug	Plug	Vent	Plug	Drain	Level	* Plug	Plug	Vent

* Where space constraints prevent installing the breather in vent locations 5 or 6, install vent in this location and order a vertical breather kit

● Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug. If reducer position is to vary from those shown in Figure 1, either more or less oil may be required. Consult Dodge.

Recommended Lubricants for Motorized Torque Arm II & Torque Arm II Reducers
Recommended Lubricants for Torque-Arm Reducers +
For further lubrication information, refer to Dodge Torque-Arm Lubrication Manual MN1682 or individual product manuals

	Standard Oils		EP Oils	
EXXON				
150	Teresstic	150	Spartan EP	150
220	Teresstic	220	Spartan EP	220
320	Teresstic	320	Spartan EP	320
CHEVRON				
150	Machine	150	Gear Compound EP	150
220	Machine	220	Gear Compound EP	220
320	Machine	320	Gear Compound EP	320
UNICAL				
150	Turbine Oil	150	Extra Duty HL Gear Lube	141
220	Turbine Oil	220	Extra Duty HL Gear Lube	207
320	Turbine Oil	320	Extra Duty HL Gear Lube	300
KLUBER SYNTHETIC				
150	GEM4	150N	–	–
220	GEM4	220N	–	–
320	GEM4	320N	–	–
KLUBER				
150	GEM1	150N	–	–
220	GEM1	220N	–	–
320	GEM1	320N	–	–
MOBIL SYNTHETIC				
150	SHC	629	SHC XMP	150
220	SHC	630	SHC XMP	220
320	SHC	632	SHC XMP	320
MOBIL				
150	Mobil DTE	Extra Heavy	MobilGear 600 XP	150
220	Mobil DTE	BB	MobilGear 600 XP	220
320	Mobil DTE	AA	MobilGear 600 XP	320
TEXACO				
150	Regal Oil R&O	150	Meropa	150
220	Regal Oil R&O	220	Meropa	220
320	Regal Oil R&O	320	Meropa	320
SHELL SYNTHETIC				
150	Morlina S4 B	150	–	–
220	Morlina S4 B	220	–	–
320	Morlina S4 B	320	–	–
SHELL				
150	Morlina Oil S2 B & S3 B	150	Omala S2 G	150
220	Morlina Oil S2 B & S3 B	220	Omala S2 G	220
320	Morlina Oil S2 B & S3 B	320	Omala S2 G	320

+ Partial list. Consult Dodge or a lubricant manufacturer for further options and check lubricant manufacturers website for new revisions in oil nomenclature

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

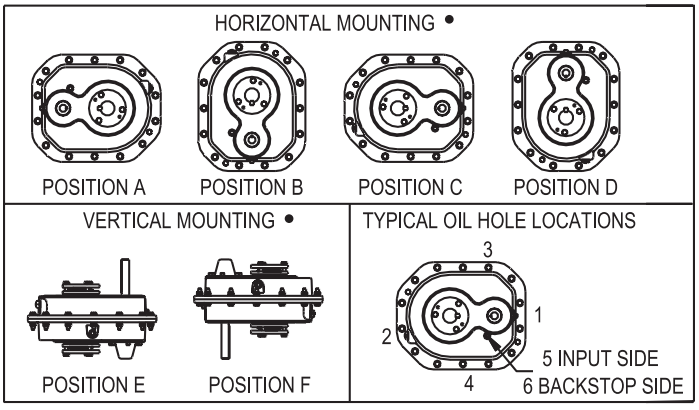
Lubrication Of Torque-Arm II Reducers (Cont'd)

Table 4 - Oil Volumes

Case Size	Ratios	Oil Volume in Quarts † ■ ▲ ●						Oil Volume in Liters † ■ ▲ ●					
		Horizontal				Vertical		Horizontal				Vertical	
		A	B	C	D	E (Up)	F (Down)	A	B	C	D	E (Up)	F (Down)
TA0107L	Single	0.7	0.5	0.7	1.4	1.3	1.5	0.6	0.5	0.6	1.3	1.2	1.4
	Doubles	0.7	0.5	0.6	1.3	1.2	1.4	0.6	0.5	0.6	1.3	1.2	1.3
TA1107H	Single	1.3	0.7	0.7	1.7	1.5	1.9	1.3	0.7	0.6	1.6	1.4	1.8
	Doubles	1.3	0.7	0.6	1.7	1.5	1.9	1.3	0.7	0.6	1.6	1.4	1.8
TA2115H	Single	2.1	1.2	1.1	2.7	2.3	3.1	2.0	1.2	1.0	2.5	2.2	2.9
	Doubles	2.1	1.1	1.0	2.6	2.4	3.0	2.0	1.1	1.0	2.5	2.3	2.8
TA3203H	Single	2.8	1.6	1.8	4.1	3.3	4.4	2.7	1.6	1.7	3.9	3.1	4.2
	Doubles	2.8	1.5	1.7	4.0	3.4	4.2	2.7	1.4	1.6	3.8	3.3	4.0
TA4207H	Single	4.4	2.6	2.9	7.4	6.3	7.8	4.2	2.5	2.8	7.0	6.0	7.3
	Doubles	4.4	2.5	2.8	7.3	6.4	7.5	4.2	2.4	2.6	6.9	6.0	7.1
TA5215H	Single	7.4	4.9	5.8	13.2	11.6	13.1	7.0	4.7	5.5	12.5	11.0	12.4
	Doubles	7.4	4.7	5.5	12.9	11.4	12.6	7.0	4.4	5.2	12.2	10.8	11.9
TA6307H	Single	8.8	5.8	6.6	16.1	13.2	16.1	8.4	5.5	6.2	15.3	12.5	15.3
	Doubles	8.8	5.5	6.2	15.8	13.9	15.3	8.4	5.2	5.9	15.0	13.1	14.5
TA7315H	Single	8.4	11.8	13.9	22.5	22.1	25.1	8.0	11.1	13.2	21.3	20.9	23.7
	Doubles	8.4	10.8	13.2	22.0	22.4	23.1	8.0	10.3	12.5	20.9	21.2	21.8
TA8407H	Doubles	7.7	11.7	13.7	25.1	24.0	25.8	7.3	11.1	12.9	23.8	22.7	24.4
TA9415H	Doubles	17.0	16.8	18.1	33.2	33.2	38.6	16.1	15.9	17.1	31.4	31.4	36.5
TA10507H	Doubles	38.0	27.6	25.8	53.5	53.8	56.1	36.0	26.1	24.4	50.6	50.9	53.0
TA12608H	Doubles	53.0	41.5	37.1	70.7	72.2	80.4	50.2	39.3	35.1	66.9	68.3	76.1

■ Oil quantity is approximate. Service with lubricant until oil runs out of oil level hole
† Refer to Figure 1 for mounting positions
▲ US measure: 1 quart = 32 fluid ounces =.94646 liters
● Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug. If reducer position is to vary from those shown in Figure 1, either more or less oil may be required. Consult Dodge.

Figure 1



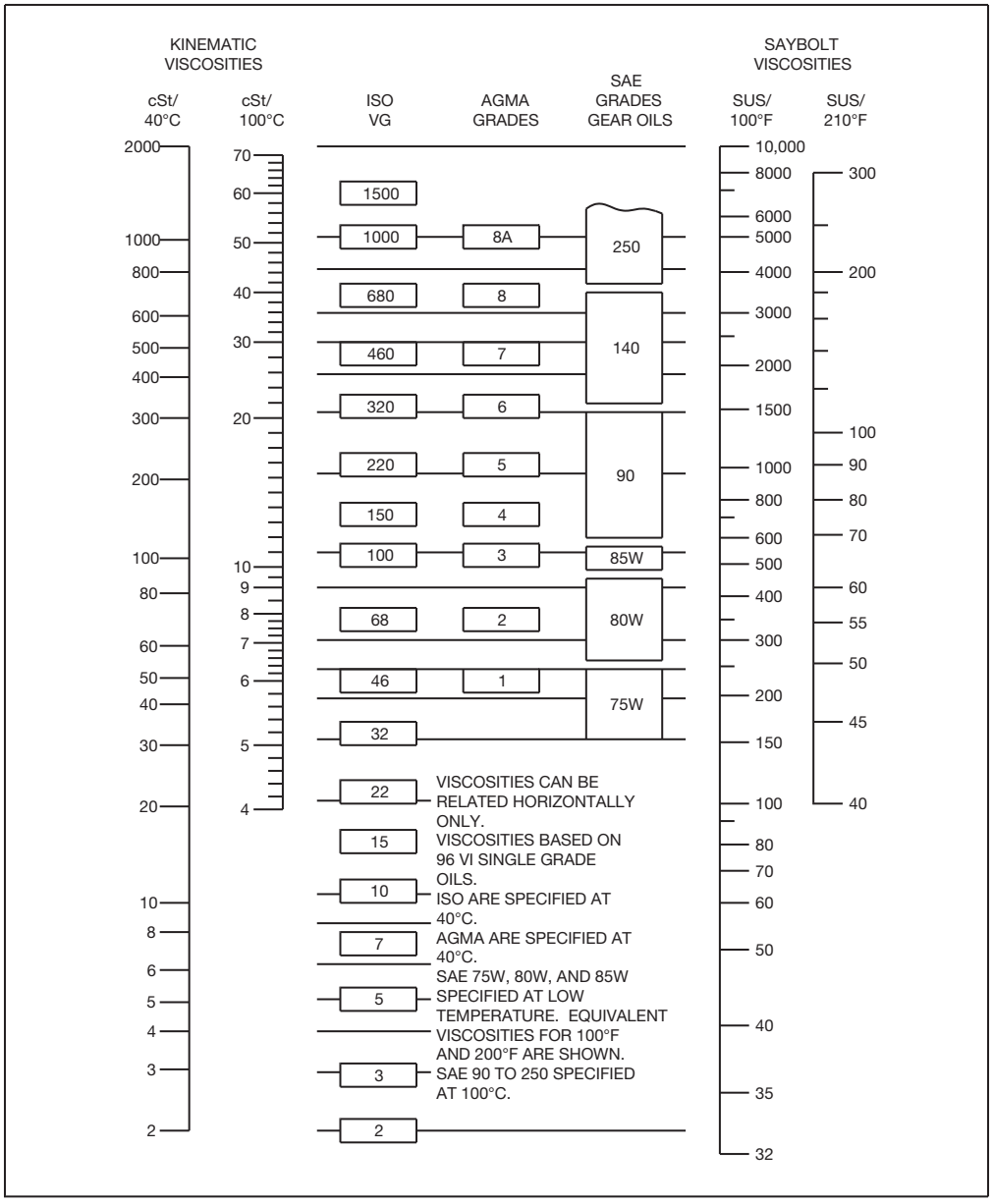
• Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug. If reducer position is to vary from those shown in Figure 1, either more or less oil may be required. Consult Dodge.

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Torque-Arm II Shaft Mount Speed Reducers

Viscosity Classification Equivalents

OIL VISCOSITY EQUIVALENCY CHART



ISO Viscosity Classification System

All industrial oils are graded according to the ISO Viscosity Classification System, approved by the International Standards Organizations (ISO). Each ISO viscosity grade number corresponds to the mid-point of viscosity range expressed in centistokes (cSt) at 40C. For example, a lubricant with an ISO grade of 32 has a viscosity within the range of 28.80-35.2, the midpoint of which is 32.

Rule-of-Thumb: The comparable ISO grade of a competitive product whose viscosity in SUS at 100°F is known can be determined by using the following conversion formula:

SUS @ 100°F ÷ 5 = cSt @ 40°C

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

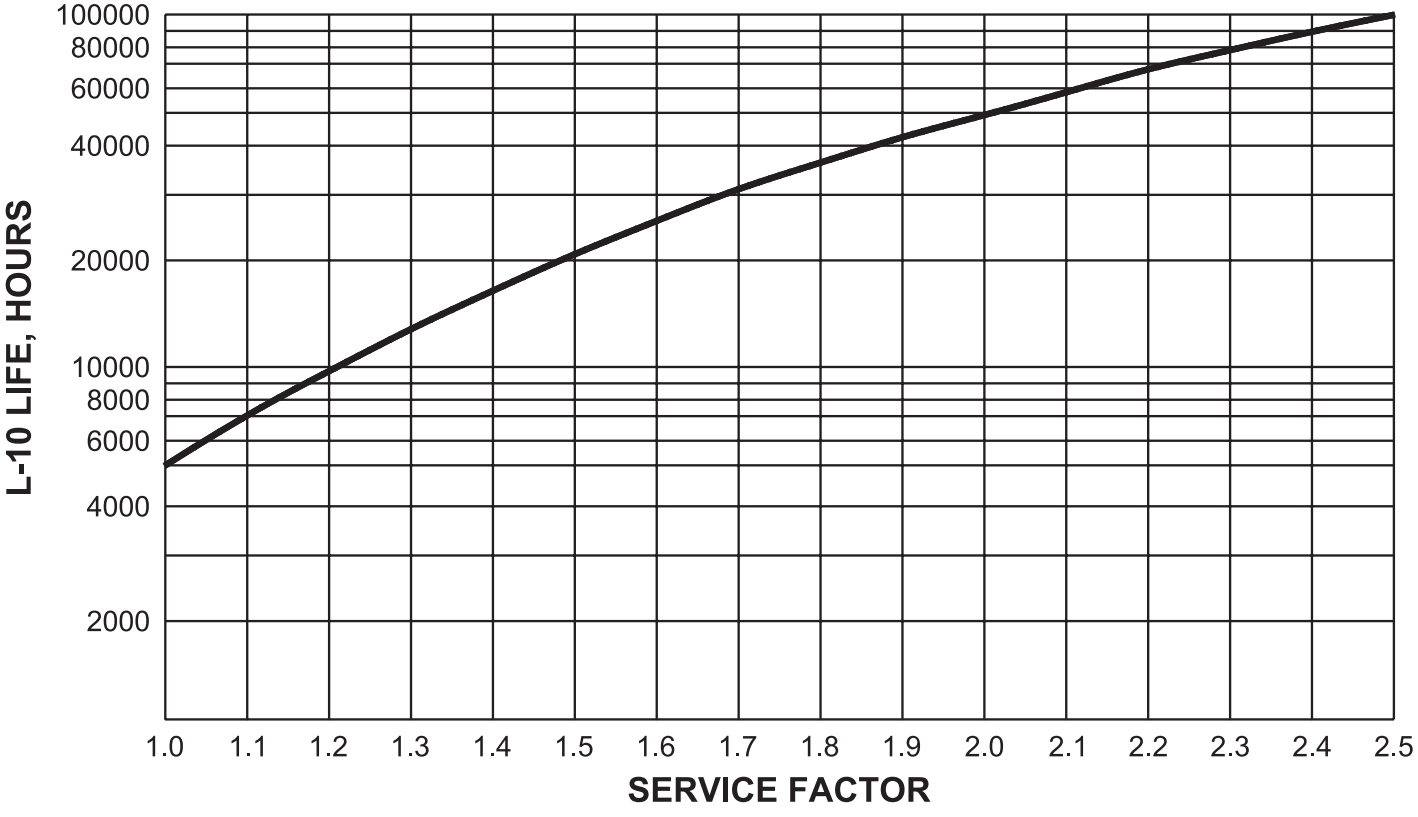
Torque-Arm II Shaft Mount Speed Reducers

Bearing L-10 Life As A Function Of Service Factor - AGMA Standard 6009-A00

Dodge Torque-Arm II Reducers are designed to provide a minimum L-10 bearing life of 5,000 hours for the most severe operating conditions. Since the probability of all maximum load conditions occurring in an application is remote, the actual L-10 life of an application is much greater.

Remember, the L-50 average life would be approximately 25,000 hours.

The graph illustrates how bearing life varies with different service factors. For example, a Dodge Torque-Arm II TA3203H Reducer with a 2.0 service factor has over **50,000** hours L-10 life.



1.0 Service Factor = 5,000 hours L-10 bearing life, 25,000 L-50 hours
1.4 Service Factor = 15,300 hours L-10 bearing life, 76,500 L-50 hours
2.0 Service Factor = 50,300 hours L-10 bearing life, 251,500 L-50 hours

Note: Average bearing life (L-50) is typically 5 times L-10 bearing life

Courtesy of:
Screw Conveyor Parts

CONTENTS

Torque-Arm Shaft Mount Speed Reducers

Features/Benefits **G3-2**

Specifications **G3-9**

Nomenclature **G3-10**

TXT - Selection **G3-12**

TXT - Easy Selection

Class I Selections G3-18
Class II Selections G3-22
Class III Selections G3-26

TXT - TDT Selection/Dimensions

Taper Bushed Reducers and Accessories G3-30

TXT - Modifications/Accessories **G3-72**

SCXT - Selection **G3-82**

SCXT - Easy Selection

Class I Selections G3-85
Class II Selections G3-88
Class III Selections G3-90

SCXT - Selection/Dimensions

Screw Conveyor Drives Reducers and Accessories G3-92

SCXT - Modifications/Accessories **G3-122**

HXT - Selection **G3-129**

HXT - Easy Selection

Class I Selections - Double Reduction G3-130
Class II Selections - Double Reduction G3-134
Class III Selections - Double Reduction G3-138
Class I Selections - Single Reduction G3-142
Class II Selections - Single Reduction G3-143
Class III Selections - Single Reduction G3-144

HXT - Selection/Dimensions

Taper Bushed Reducers and Accessories G3-146

Related Products

CHAR-LYNN Compatible 6B Spline Reducer G3-154
Harsh Duty Accessories G3-156
TXT-ABHS Reducers G3-160
BIO-DISC Reducers G3-162
V-Drives for Torque-Arm Reducers G3-163

Engineering/Technical **G3-171**

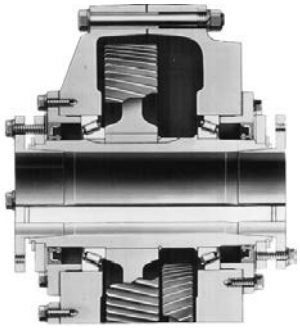
Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Dodge Torque-Arm Twin Tapered Bushings Make Dodge Torque-Arm The Leader

Dodge Twin Tapered Bushings have provided customers over forty years of reliable and proven service. This exclusive feature revolutionized the shaft mount reducer concept and insured that Torque-Arm Speed Reducers would not seize to the customer's driven shaft. Another first from Dodge, the supplier of industry preferred quality speed reducers.

Torque-Arm Speed Reducers provide positive, easy-on, easy-off mounting for all reducer sizes from fractional to 700 HP.



A tapered bore in both sides of the reducer's output hub snugs up against a matching taper on the outer surface of the bushing . . . "Twin Tapered".

Bushing mounting screws pass through the bushing flange into a mounting collar on the hub. As the screws are tightened, the bushing moves inward, gripping the driven machine's input shaft tightly and evenly around every point on its circumference.

You can now realize significant cost savings with the TXT Torque-Arm Speed Reducer.

And here is how:

- The reducer mounts directly on the driven shaft, eliminating the need for a coupling or chain drive, sliding motor base, and support structure. There's no alignment problem.

- **TXT reducers incorporate standard Dodge features**
  - Ratios up to 210:1.
  - Capacities fractional to 700 HP
  - Output speeds through 400 RPM.
  - Trouble-free maintenance.
  - Up-front installation savings.
  - Quality proven design.
  - Easier, more accurate drive alignment.

- **Rugged, cast iron housing.** Cast, corrosion-resistant gray and ductile iron housings are precision machined for positive gear alignment. Rugged housing construction provides strong, rigid support for bearings and gearing. Additionally, internal rib design helps channel oil to all bearings for superior lubrication.

- **Efficient helical gear tooth design** produces an efficiency rating of 98.5% per gear set. Gear teeth feature a softer core to resist shock loads, combined with a case carburized surface for maximum wear resistance. Precision crown shaving produces an ellipsoid tooth shape, so that teeth mesh at the stronger center area eliminating end loading. The result: uniform load distribution with no tooth-end wear.

- **Lip seals.** Metal cased lip seals keep lubricating oil in, lock dirt and contaminants out. The cavity between the inner and outer lips is filled with grease at assembly to prelubricate the seal. A garter spring exerts a constant, gentle pressure at every point around the circumference of the shaft to insure a positive seal. All seals ride on precision ground surfaces for maximum life.

- **Dependable performance.** All Dodge Torque-Arm speed reducers are 100% factory noise and leak tested to assure long life and trouble-free service.

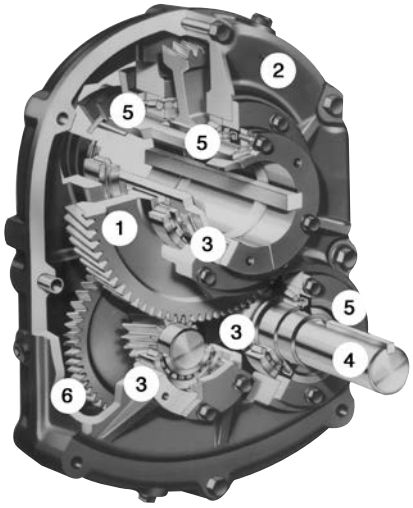
- **Dodge has a Torque-Arm** reducer for every application.

And all this adds up to more savings for you! The TXT reducer-the best package available to meet tough industrial requirements.

It's easy to see why Dodge Torque-Arm is America's #1 Shaft Mounted Speed Reducer.

Courtesy of:
Screw Conveyor Parts

Dodge Torque-Arm
The Complete Shaft Mount Speed Reducer System



Dodge Torque-Arm Is America's Leading Shaft-Mount Reducer Because:

Experience-over 2,000,000 sold.
Delivery-nearly 5,000 reducers and 20,000 accessories in stock.
Quality-warranties of less than 1/2% of sales.
Customer Preferred-over 60 years of proven experience.
Twin Tapered Bushings-reliable installation and removal.
Performance Capability-applications through 700 HP.
Product Configurations-Torque-Arm, Screw Conveyor and Hydroil.
Accessory Package-motor mount, backstop, bushings and auxiliary seals.

1. **Precision High Quality Gearing**
   - Computer Designed Helical Gears
   - 98.5% Efficiency Per Gear Stage
   - Case Carburized for Long Life
   - Strong Alloy Materials for High Load Capacity
   - Crown Shaved Gear Tooth Profile for Even Load Distribution
   - Smooth Quiet Operation with Several Teeth in Mesh
   - Designed in Conformance with AGMA

2. **Maximum Capacity Housing Design**
   - Rugged Cast Iron and Ductile Iron
   - Rigid Bearing Support and Positive Gear Alignment
   - High Corrosion Resistance
   - Excellent Vibration Dampening & Shock Resistance Features

3. **Reliable Anti-Friction Bearings**
   - Anti-friction Bearing Manufacturers Association Bearing Ratings
   - Combination Ball & Tapered Roller Designs
   - Straddle Mounted Gears for Optimum Support
   - High Thrust Capacity Screw Conveyor Drive Bearings

4. **Strong Shafts For Support**
   - Precision-Machined & Hardened for Maximum Load
   - High Alloy Steel for Maximum Torsional Loads
   - Generous Size Shaft Keys for Shock Loading
   - Press or Heat-Shrunk Design for Total Reliability

5. **Proven Seals Keep Oil In And Contaminants Out**
   - Lip Spring-Loaded Construction
   - Metal Reinforcement for Strength
   - Broad Operating Range of -20°F to 225°F
   - 100% Factory-Tested Before Shipment
   - Smooth Ground Shaft Surfaces for Maximum Life
   - Seal Kits Available for All Reducer Sizes

6. **Efficient Splash Lubrication System**
   - Generous Oil Sump for Lubricating All Gears & Bearings
   - Standard Gear Petroleum Lubricants Are Suitable
   - Multiple Oil Plugs for Total Mounting Flexibility
   - New Breather With Baffle And Filter
   - Magnetic Drain Plug for Protection

Dodge has been the leader as a shaft mounted reducer manufacturer for over 60 years. Since our start in 1949, we have developed thousands of satisfied customers. The Torque-Arm success is due to initial design and rating conservatism and a rigid quality control program. We have recently tabulated the quantity of reducers sold. This has resulted in the kind of quality and dependability that's proven by one of the lowest percentage replacement rates in the industry-and that's with more than 2.0 million units sold. Design features built into every shaft mounted Torque-Arm reducer are presented in this bulletin. Remember, a speed reducer is a complete system of balanced, high quality components.

Our success as a manufacturer begins with our design features and extends to our rigid quality program which provides the highest quality and dependability that customers have grown to expect from Dodge. The Torque-Arm shaft mounted reducer line, consisting of many sizes and types and with capacities from fractional through 700 HP, is available from our factory warehouse stock, branch warehouse stocks, and authorized distributors located throughout the United States. No other manufacturer in the world can claim this type of coverage and back-up assistance for their products and customer.

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Dodge Torque-Arm Accessories

Tapered Bushing Assemblies

Securely mounts Taper Bushed Reducer to driven shaft

Features	Benefits
• Twin Bushings	• Reliably supports both sides of reducer.
• Full Length Shaft Key	• Maximum torque & shock load capability.
• Flanged Bushing Mount	• Fast & simple installation.
• Removal Screws	• Reliable demount of reducer.
• Fully Split Bushings	• Eliminates fretting & seizing problems.
• Ductile Iron	• Strong, shock resistant bushings.
• No Setscrews	• Eliminates driven shaft damage.
• Clamp Fit	• Reduces wobble & fits undersized shafts.

Straight Bore Bushing Assemblies

Accommodate less than maximum bore straight bore reducer applications

Features	Benefits
• Steel or Ductile Iron	• High load capacity.
• Two Bushings	• Locking setscrews on both sides of reducer.
• Mount in Reducer Bore	• Suitable for shorter driven shafts.
• Original Design	• Equivalent to most competitive reducers.

Motor Mounts

Provide a compact and economical method of mounting electric motors on Torque-Arm Reducers

Features	Benefits
• All-Steel Construction	• Rigid motor support.
• Compactness	• Eliminates separate motor bases.
• Adjustable Top Plate	• Fast & easy belt tensioning.
• Pre-Drilled	• Accommodates standard NEMA Motors.
• Economical	• Low cost & eliminates alignment problems.
• Flexible Mounting	• Pre-drilled for belt guard attachment.
• Interchangeability	• Also fits screw conveyor drives.

Auxiliary Seal Kits

Provide extra sealing on Taper Bushed Reducers

Features	Benefits
• Labyrinth Seals	• Protection from dust, dirt, & moisture.
• Economical	• Low cost reducer protection.
• Simple Installation	• Can be grease purged for protection.
• Lubrication Fittings	• Filtered air breather included.
• Air Breather	

Backstops

Prevents reverse of shaft direction

Features	Benefits
• Quick Installation	• Fits input shaft of all Torque-Arm Reducers
• Internally Mounted	• Sealed inside reducer for protection.
• Oil Lubricated	• No external relubrication required.
• Long Life	• Case hardened, shock resistant sprags.
• Keyed to Reducer	• High load capacity.
• Reversible	• Suitable for either direction of rotation.

Torque-Arm Belt Guards

Enclose and Protect Belt Drive

Features	Benefits
• Slotted Metal Panel Construction	• Light weight, ventilated
• Yellow Paint	• Meets safety requirements
• Mounting Hardware	• Quick easy assembly
• Assembles to Reducer and Motor Mount Holes	• No machining needed
• Flexibility	• One size fits most common sheave diameters

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Application Flexibility
Typical Dodge Torque-Arm Reducer Installations

Vertical Shaft Application

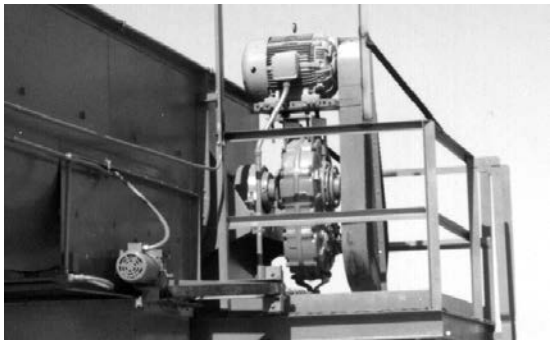
Dodge Torque-Arm Twin Tapered Bushed Vertical Speed Reducer

TDT1530T

Application: 200 HP, Class III Service on vertical shaft mixer application. This TDT 1530 Vertical Tapered Bushed Speed Reducer with shock absorbing DYNA-V Belt Drive package replaced an expensive, hard-to-replace, open gear drive system. Torque-Arm reducers can mount in many positions, such as vertical shaft applications simply by repositioning the breather and drain plug for lubrication purposes. Another standard feature of compact and highly efficient Torque-Arm reducers.

Horizontal Shaft Application

Standard Dodge Torque-Arm Twin Tapered Bushed Speed Reducer

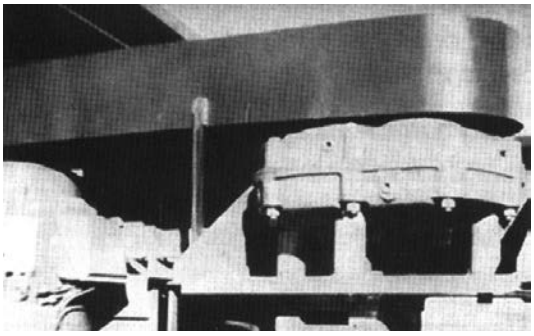


TXT725T X 3-15/16”

Application: 40 HP drive, Class II service, on main conveyor drive. Standard Tapered Bushed TXT 725 x 3-15/ 16” Speed Reducer package offers long life and dependability. Other user benefits on this horizontal shaft application include compactness, off-the-shelf components, flexible motor mount arrangement, and reliable easy-on, easy-off Tapered Bushings. The lowest cost installed system for moving bulk materials.

Flange Mounted Application

Dodge Torque-Arm Flange Mounted Vertical Twin Taper Bushed Speed Reducer



TXT625T

Application: 15 HP, Class II Service, on Vertical Agitator Shaft in cement mixing system. This rugged reducer is rigidly mounted via the flange mounting pads which are standard on all Torque-Arm reducers. This no-charge, flange drilling option allows the reducer to support the agitator shaft and any thrust loads imposed. Flange mounted reducers do not require Torque-Arm rod assemblies.

Hydraulic Reducer Application

Dodge Hydroil Torque-Arm Twin Taper Bushed Speed Reducer

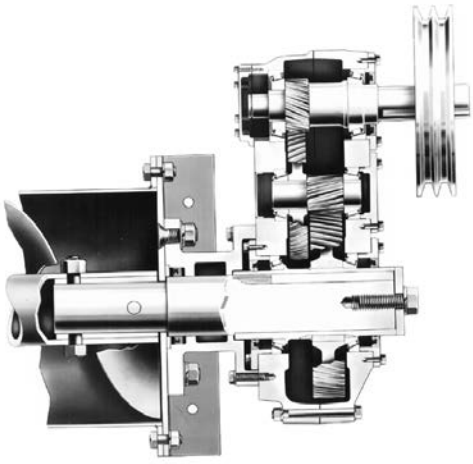
HXT525T WITH B30 MOTOR

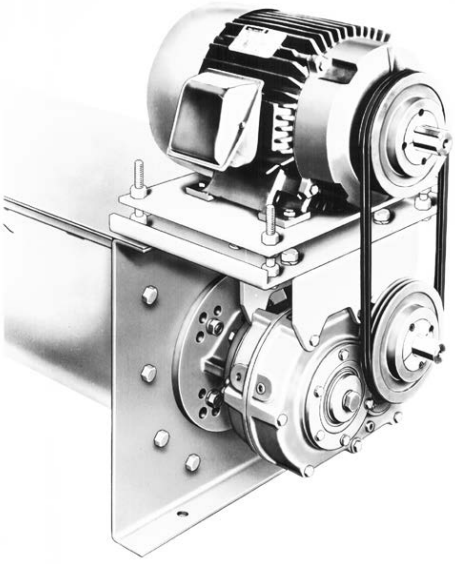
Application: Variable speed Dodge Hydroil speed reducer with hydraulic power is another example of Torque-Arm reducer flexibility. This version powers a rugged, mobile brand of road construction equipment. Simply regulating the pressure and volume of fluid to the motor provides variable speed, variable torque, and even direction of rotation change.

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Dodge Screw Conveyor Drives Industry Wide Application





Dodge quality designed with the Screw Conveyor Industry in mind

The dependable Dodge Screw Conveyor Drives provide a rugged, competitively priced, application-engineered drive for standard CEMA screw conveyors. And the screw conveyor drive incorporates the proven reliability you have come to expect from the Dodge Torque-Arm reducer line.

Tapered roller bearings within the drive eliminate the need for an external thrust bearing. The bearings take thrust from the screw conveyor and make external thrust bearings unnecessary.

Dodge Screw Conveyor Drives are available in 5:1, 9:1, 15:1 and 25:1 ratios and the durable drives include:

- A compact design reducer with increased torque ratings.
- The CEMA standard drive shaft.
- A standard trough end mounting adapter with CEMA four-bolt mounting.
- Standard adapter for use with choice of lip, braided or waste pack seals.
- Optional adjustable packing adapter kit.

The Dodge complete, rugged, highly developed, screw conveyor drive mounts on the trough end of your screw conveyor. Tapered roller bearings in the reducer take the thrust from the screw conveyor. This eliminates the external thrust bearing commonly required. The drives may be mounted in any position on horizontal, inclined, or vertical shafts by relocating breather and drain plugs. For complete drive between trough and motor, specify the screw conveyor drive and the following accessories: trough end plate and motor mount.
Where V-belt drives or electric motors cannot be used, Dodge offers a screw conveyor drive powered by a hydraulic motor.

Note: Guards have been removed for photographic purposes

Typical Industry Applications

Food	Agriculture
Grain	Soaps
Aggregates	Lumber
Chemicals	Stone
Minerals	Clay
Coal	Glass

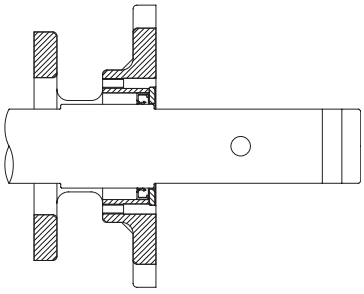
. . . and many more

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Dodge Screw Conveyor Drives
Two alternative seals in CEMA Standard Adapter

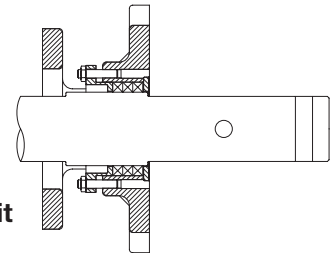
Lip Seals.
They're pre-lubricated for protection from dust and dirt during installation and are excellent for conveying semi-solids. Metallic parts are partially coated with synthetic rubber for added protection from corrosion.



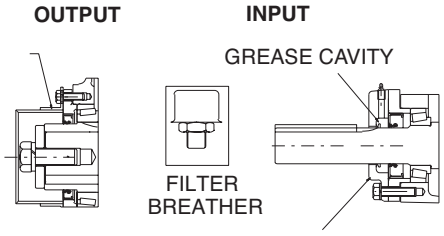
Standard CEMA Adapter

Adjustable Packing Adapter Kit
The adjustable packing adapter kit is used with the standard CEMA adapter to allow repacking the adapter without removing it from the trough end. The adjustable packing kit is a proven sealing option for hostile environments, such as cement dust. Packing can be retightened.

Standard CEMA Adapter with Adjustable Packing Kit



Auxiliary Seal Kit



Auxiliary Seal Kits for Dodge Screw Conveyor Drives are available for SCXT Sizes 1-7 Speed Reducers. Each kit contains an input shaft auxiliary seal with cover, output shaft end cap and a filter air breather.

Belt Guard
A slotted metal panel style belt guard with mounting straps for SCXT Reducers will fit standard M series motor mounts. The belt guards are designed to fit most common sheave diameters. They mount easily with no machining required.

Motor mounts need no drilling.
Rugged, all-steel Dodge motor mounts bolt directly to the screw conveyor drive reducer. They're available in fourteen sizes, which easily fit NEMA motor frames. Since the four adjusting bolts allow easy belt tensioning, it's less time-consuming and you save on installation costs immediately.

CEMA drive shafts offer easy installation and maintenance.
This means increased production, less down-time and substantial cost savings. You can save even more because of convenience and interchangeability. Different diameter drive shafts are interchangeable within each drive, and there's a wide range of diameters from 1-1/2 to 3-7/16 inches to choose from. Stainless steel and three-hole CEMA drive shafts are available on request.

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Dodge Hydroil™ Drives

Hydraulically Powered Torque-Arm Speed Reducers with Infinitely Adjustable Speed and Torque

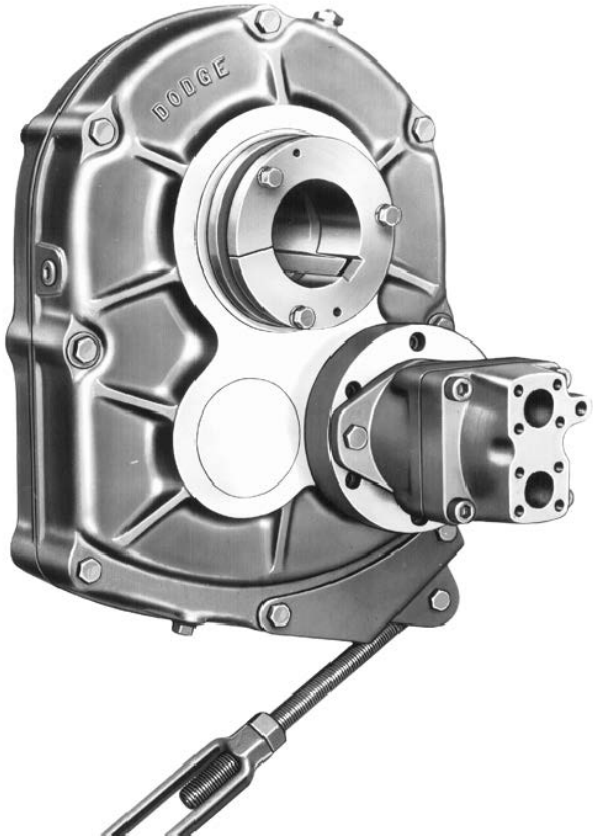
This is a modified version of the famous Torque-Arm speed reducer with the same quality features and ease of installation.

A Hydraulic motor powers the Hydroil reducer, greatly expanding its scope of application and versatility. It has proven to be popular for locations remote from the prime mover where shafts or belt and chain drives are impractical or where electric motors are not available. Exceptional flexibility is provided in the control of the driven machine by simply regulating the pressure and volume of fluid fed to the Hydroil motor.

Users can provide flexible control of the Hydroil drive by selecting proper auxiliary equipment. Output speeds of the reducer are infinitely adjustable through the use of regulating valves in the hydraulic circuit. Both speed and torque can be adjusted to meet the requirements of the driven machine which can be inched or jogged. The direction of rotation is reversible.

Where V-belt drives or electric motors cannot be used, Dodge offers a screw conveyor drive powered by a hydraulic motor.

Hydroil Vane Motors-are a superior single stage vane type fluid motor. A series of internal ports admit oil to and carry it from the power element. Complete hydraulic balance of the assembly contributes to the mechanical efficiency and long life of these motors as well as to their unusually quiet operation. Other exclusive features assure a minimum of friction and efficient valving action regardless of operating speeds.



Hydroil Vane Motors A10 and A20

Hydroil Vane Motors B30

Hydroil Vane Motors B40

Hydroil Vane Motors B50

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

General Specifications

Torque-Arm Speed Reducers:

The speed reducer shall be a belt driven enclosed shaft mount type unit with a single or double reduction ratio. The reducer shall mount directly on the driven shaft and utilize an adjustable torque arm that attaches from the gear case to the support structure or foundation. Optional all steel motor mount adjusts to various belt center distances and supports the motor.

The reducer housing shall be constructed of two-piece corrosion resistant, class 30 gray iron. All housings shall be doweled and precision machined to assure accurate alignment for all gear sets.

All gearing shall be of helical design, case carburized and precision finished to insure a high surface durability with a resilient tooth core for impact resistance and optimum service life. Gears shall be supported between bearings to maintain proper alignment of gear meshes, to maximize load carrying capabilities, and to eliminate overhung loads imposed on bearings. Design meets or exceeds AGMA standards.

Reducer bearings shall be of the ball or tapered roller type, and provide a 25,000 hour minimum average life, 5,000 L-10 AGMA Class I standard.

All seals shall be of the lip, spring loaded type, made of a premium harsh duty, heat resistant material.

Reducer installation shall be accomplished by using ductile iron, fully split, two bushing system. Reducer removal shall be accomplished by providing jack screw holes in the bushing flanges to mechanically remove the tapered assembly.

Screw Conveyor Drives:

The drive shall be a belt driven enclosed, adapter mounted unit with a single or double reduction ratio. The drive shall consist of a standard speed reducer; a cast iron, bolt on, four bolt mounting adapter with double lip seals on both ends, an optional bolt on adjustable packing kit, and a drive shaft machined from a high quality alloy steel. The drive shall conform to Conveyor Equipment Manufacturers Association (CEMA) standards. Optional all steel motor mount adjusts to various belt center distances and supports the motor.

The reducer housing shall be constructed of two-piece corrosion resistant, class 30 gray iron. All housings shall be doweled and precision machined to assure accurate alignment of all gear sets.
All gearing shall be of helical design, case carburized and precision finished to insure a high surface durability with a resilient tooth core for impact resistance and optimum service life. Gears shall be supported between bearings to maintain proper alignment of gear meshes, to maximize load carrying capabilities, and to eliminate overhung loads imposed on bearings. Design meets or exceeds AGMA standards.

Reducer output bearings shall be of the tapered roller type, to absorb thrust loads from the screw conveyor. All bearings shall provide 25,000 hour minimum average life, 5,000 L-10 AGMA Class I standard.

All seals shall be of the lip, spring loaded type, made of a premium harsh duty, heat resistant material.

Hydroil Drives:

The speed reducer shall be a hydraulically powered enclosed shaft mount type unit with a single or double reduction ratio. The reducer shall mount directly on the driven shaft and utilize an adjustable torque arm that attaches from the gear case to the support structure or foundation.

The reducer shall be powered using a Hydroil single stage vane type fluid motor. The reducer shall be provided with a cast iron SAE mounting flange adaptor and splined input shaft to allow an integral fit with the splined hydraulic motor shaft.

The reducer housing shall be constructed of two-piece corrosion resistant, class 30 gray iron. All housings shall be doweled and precision machined to assure accurate alignment for all gear sets.

All gearing shall be of helical design, case carburized and precision finished to insure a high surface durability with a resilient tooth core for impact resistance and optimum service life. Gears shall be supported between bearings to maintain proper alignment of gear meshes, to maximize load carrying capabilities, and to eliminate overhung loads imposed on bearings. Design meets or exceeds AGMA standards.

Reducer bearings shall be of the ball or tapered roller type and provide a 25,000 hour minimum average life, 5,000 L-10 AGMA Class I standard.

All seals shall be of the lip, spring loaded type, made of nitrile rubber or HNBR.

Reducer installation shall be accomplished by using ductile iron, fully split, two bushing system. Reducer removal shall be accomplished by providing jack screw holes in the bushing flanges to mechanically remove the tapered assembly.

Courtesy of:
Screw Conveyor Parts

NOMENCLAT

Torque-Arm Shaft Mount Speed Reducers

Nomenclature: Torque-Arm Reducers

XXXX - X XX - x - X - XXXXX

Configuration
- TXT Standard Torque-Arm Reducer, 1 - 12
- TDT Large Torque-Arm Reducer, 13 - 15
- HXT Hydroil Torque-Arm Reducer, 1 - 7

Gear Case Size

1 thru 12	TXT
13 thru 15	TDT
1 thru 7	HXT

Ratio*

5:1	Single Reduction
9, 15, 25:1	Double Reduction

Bushing Bore Size

1" - 10"	TDT Twin Tapered Bushing Assembly
1" - 5-7/16"	TAXD Straight Bore Bushing Assembly

Type of Reducer/Bushing

T	Twin Taper Bushed Reducer
S	Straight Bore Reducer

Nomenclature Example: Torque-Arm Reducers

TXT - 6 - 25 - T - x - 3-7/16"
- Standard Torque-Arm Shaft Mount Reducer
- Case Size 6
- 25:1 Ratio, Double Reduction
- Twin Taper Bushed Reducer
- Twin Tapered Bushing Assembly with bore to fit 3-7/16" diameter driven shaft

TXT - 2 - 05 - S - x- 1-15/16"
- Standard Torque-Arm Shaft Mount Reducer
- Case Size 2
- 5:1 Ratio, Single Reduction
- Straight Bore Reducer
- 1-15/16" is maximum bore for TXT2 Straight Bore Reducer; no bushing required

HXT - 1 - 25 - T - x - 1-7/16"
- Hydroil Shaft Mount Reducer
- Case Size 1
- 25:1 Ratio, Double Reduction
- Twin Taper Bushed Reducer
- Twin Tapered Bushing Assembly with bore to kit 1-7/16" diameter driven shaft

*** Note: "A" , "B" or "C" in nomenclature after ratio denotes latest reducer design**

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Nomenclature: Screw Conveyor Drive Reducers

XXXXX - X XX - x - XXXXX - XX - XXXXX

Configuration
- SCXT — Screw Conveyor Drive Reducer
- HSCXT — Hydroil Screw Conveyor Drive Reducer

Gear Case Size
- 1 thru 7 — SCXT
- 1 thru 7 — HSCXT

Ratio*
- 5:1 — Single Reduction
- 9, 15, 25:1 — Double Reduction

Motor Mount
- M — Standard Motor Mount for 6” - 20” screw
- ML — Long Motor Mount for 24” screw

Adapter Style
- C — Standard CEMA 4-bolt Adapter
- AC — Adjustable Packing Kit

CEMA Standard Drive Shaft Diameter
- Sizes — 1-1/2”, 2”, 2-7/16”, 3”, 3-7/16”
- Dependent on screw diameter

Nomenclature Example: Screw Conveyor Drive Reducers

SCXT - 7 25 - x - 3-7/16” - C - M724L
- SCXT — Screw Conveyor Drive Reducer
- 7 — Case Size 7
- 25 — 25:1 Ration, Double Reduction
- 3-7/16” — 3-7/16” diameter Drive Shaft
- C — Standard CEMA 4-bolt Adapter
- M724L — Long Motor Mount for 24” screw

SCXT - 5 25 - x 2-7/16” - C - M518
- SCXT — Screw Conveyor Drive Reducer
- 5 — Case Size 5
- 25 — 25:1 Ratio, Double Reduction
- 2-7/16” — 2-7/16” diameter Drive Shaft
- C — Standard CEMA 4-bolt Adapter
- M518 — Standard Motor Mount for 12” screw

HSCXT - 2 05 - x - 1-1/2” - AC
- HSCXT — Hydroil Screw Conveyor Drive Reducer
- 2 — Case Size 2
- 05 — 5:1 Ratio, single Reduction
- 1-1/2” — 1-1/2” diameter Drive Shaft
- AC — C Adapter with Adjustable Packing Kit

*** Note: “A”, “B” or “C” in nomenclature after ratio denotes latest reducer design**

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

When to Use Easy Selection

The Easy Selection tables for TXT Shaft Mount reducers are for electric motor selections up to 700 horsepower with output speeds up to 400 RPM, using AGMA recommended application class numbers. For extreme shock or high energy loads which must be absorbed, as when stalling; for power source other than an electric motor; or for extreme ambient temperatures, or oversized equipment, consult Dodge Application Engineering, (864) 284-5700.

How to Select

Step 1: Determine Class of Service-See Table 1, page G1-6, to determine Load Classification for applications under normal conditions. Find the type application and duty cycle that most closely matches your specific application.

Class I Steady load not exceeding Motor HP rating and light shock loads during 10 hours a day. Moderate shock loads are allowable if operation is intermittent.

For Class I applications, the maximum value of starting and momentary peak loads should not exceed 2 x Motor HP rating. If it exceeds this amount it should be divided by 2 and the result used in the selection table instead of the Motor HP rating.

Class II Steady load not exceeding Motor HP rating for over 10 hours a day. Moderate shock loads are allowable during 10 hours a day.

For Class II applications, the maximum value of starting and momentary peak loads should not exceed 2.8 x Motor HP rating. If it exceeds this amount it should be divided by 2.8 and the result used in the selection table instead of the Motor HP rating.

Class III Moderate shock loads for over 10 hours a day. Heavy shock loads are allowable during 10 hours a day.

For Class III applications, the maximum value of starting and momentary peak loads should not exceed 4 x Motor HP rating. If it exceeds this amount it should be divided by 4 and the result used in the selection table instead of the Motor HP rating.

Step 2: Determine Reducer Size-See the Easy Selection Tables, pages G3-18 thru G3-29. From Selection Table I, II or III read the reducer size for the application horsepower and output speed. Note: For applications where fan cooling is unacceptable use the Easy Selection tables with an increased Class number. Where more than one reducer selection is listed, the most economical ratio is generally listed first. See Table 31, page G3-179 for maximum input and output speeds.

Step 3: Compare Hollow Shaft Bore with the size of the driven shaft. All Dodge Torque-Arm Taper Bushed reducers require bushings. Refer to reducer pages for available bushings. If the driven shaft is larger than the bore of the selected reducer, the shaft must be machined to the proper size, or select a larger reducer. Check driven shaft and key for strength.

Step 4: Check Dimensions-See Selection/Dimensions section, pages G3-30 thru G3-71 for reducer dimensions, weights and part numbers. See Engineering/Technical section, page G3-173 for reducer mounting positions. For optional Torque-Arm rod mounting positions, see page G3-176.

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Step 5: Select a Belt Drive Arrangement-From the Sheave Ratio table, page G3-164 through G3-167, select the required sheave ratio for the belt drive. Be careful to select the belt drive so that the sheave mounted on the reducer shaft is not smaller than the minimum sheave diameter shown in Table 19, page G3-163. Note: Mount the sheave as close as possible to the reducer to minimize the effect of overhung load on the reducer.

Step 6: Select Accessories-See Modifications/Accessories section, pages G3-73 thru G3-81, for description, dimensions, weights, and part numbers for accessories available for the Torque-Arm reducer selected:

Motor Mounts
Backstop Assemblies
Belt Guards
Cooling Fans
Auxiliary Seal Kits
Filter Breathers
Auxiliary End Covers

Note: A Torque-Arm rod assembly is furnished with all TXT and HXT reducers, except for those factory-prepared for flange mounting. Torque- Arm reducers are shipped without oil.

Ratings and selections are the same for both taper bushed and straight bore reducers - standard, inclined or vertically mounted.

Examples: Easy Selection Method - TXT Torque-Arm Reducers

A 10 HP 1750 RPM motor is used to drive a uniformly loaded belt conveyor moving sand at 70 RPM, operating 16 hours per day. Head pulley shaft diameter is 2-7/16". Spec calls for a means of holding the conveyor from moving backwards. User needs immediately so does not have time to build his own motor mount or belt guard.

Step 1: Determine Class of Service-From Table 1, locate "belt conveyors, uniformly loaded or fed" for over 10 hours per day. This load is classified as a Class II application.

Step 2: Determine Reducer Size-From Table 3-Class II Application, page G3-22, find the column for 10 HP and read down to 70 RPM. A TXT425 reducer is the correct selection.

Step 3: Compare Hollow Shaft Bore of TXT425 with the application driven shaft diameter. Per page G3-43, 2-7/16" is the maximum bore available for this size reducer, so it will work in this application. Be sure to check driven shaft and key for strength.

Step 4: Check Dimensions and Weights-See Selection/ Dimensions section, page G3-43, for reducer dimensions, weights, part numbers and other pertinent drive dimensions. See Engineering/Technical section, page G3-173 for information on mounting positions.

Step 5: Select a Belt Drive Arrangement-From the Sheave Ratio table, page G3-164 select a V-drive ratio for the conveyor speed of 70 RPM. With this information, select a belt drive that meets your customer's needs-i.e. belt style preference, service factor requirements, Taper Lock or QD mounting, etc. Sheave diameter must not be less than minimum diameters shown in Table 20, page G3-163.

Step 6: Select Accessories-See Modifications/Accessories section of catalog to pick out accessories for this application:
TXT4 Backstop Assembly - to hold conveyor from moving backwards when shutdown

TXT4 Auxiliary Seal Kit - extra help to keep sand out of the TXT425 reducer

TA4M Motor Mount - to mount motor to top of TXT425 reducer

TXT4D Belt Guard - to cover and protect the rotating belt drive

Torque-Arm Shaft Mount Speed Reducers

Selection Guide: TXT Torque-Arm Shaft Mount Reducers

This is a reference sheet for quick selection and specification of Dodge TXT Torque-Arm shaft mount reducers. Use it to identify information needed to make an accurate selection with a step-by-step selection format for choosing reducers, accessories and belt drive.

Name _____ Company Name _____

Phone No. _____ Fax. No. _____

Application Data:

Type of Driven Equipment _____

Hours of service per day _____ Class of Service _____

Type of Load: Uniform _____ Moderate _____ Shock _____

Motor Type: HP _____ RPM _____ Frame Size _____ Shaft Size _____

RPM of Driven Equipment _____ Driven Shaft Size _____

Type of Reducer Mounting: Horizontal _____ Vertical: Input Up _____

Input Down Incline (Degree of) _____ Flange _____

Unusual Ambient Temperature

Other Pertinent Application Characteristics (i.e.-dusty Environment, Reversing Duty, Start/Stop Cycles. Etc.)

_____

Reducer Driver Selection

Step 1 - Determine Class of Service

Step 2 - From Appropriate Service Class Table, Select Reducer Size And Ration That Meets Application HP And Driven RPM Requirements:

Twin Taper Bushed _____ Straight Bore _____

Step 3 - Select Reducer Accessories Required For Application: Backstop

Motor Mount: Standard _____ Long _____ Bottom _____

Belt Guard: Standard _____ Long _____ Cooling Fan _____

Auxiliary Seal Kit _____

Other _____

Belt Drive Specification:

Service Factor _____ Belt Drive Ratio Needed _____

Belt Center Distance _____ Type of Belt Desired _____

Driver: Shaft Diameter _____ Driven: Shaft Diameter _____

Sheave _____ Sheave _____

Bushing _____ Bushing _____

Belts: Size _____ Quantity _____

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Application Classification And Class

For Application Class and Service, please see pages G1-6 through G1-12.

Courtesy of:
Screw Conveyor Parts

Dodge® Torque-Arm Family Breather Technology

1. Standard Breather is a filter breather
- Cotton filter media
- Screen to support filter
- Chamber to allow oil to collect and return to reducer
- Non captured filter (should not clog and block air exit)

1.

2. Harsh Duty Breathers are available
- 40 micron ceramic filter breather
- Ceramic filter with metal cover

2.

3. Hydra-Lock Desiccant Breather
- Built in standpipe
- 3 micron filter media top and bottom
- Desiccant material changes color from blue (good) to pink (replace)
- Check valve system, so breather is only open to atmosphere under pressure or vacuum. Closed when not running.

3.

4. Fully Enclosed Canister Breather
- Allows no outside air
- Excellent protections for extreme wet environments

4.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

NOTES

Courtesy of:
EASY SELEC
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 2 - Class I Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
1/4	4-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1/3	5-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1/2	4-6	–	TXT225A	
	7-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
3/4	4-5	–	TXT325B	
	6-10	–	TXT225A	
	11-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1	4-5	–	TXT425B	
	6-7	–	TXT325B	
	8-15	–	TXT225A	
	16-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1-1/2	4	–	TXT525C	
	5-7	–	TXT425B	
	8-12	–	TXT325B	
1-1/2 (Continued)	13-23	–	TXT225A	
	24-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
2	4-6	–	TXT525C	
	7-10	–	TXT425B	
	11-17	–	TXT325B	
	18-32	–	TXT225A	TXT215A
	33-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	
3	4-5	–	TXT625A	
	6-10	–	TXT525C	
	11-15	–	TXT425B	
	16-26	–	TXT325B	
	27-51	–	TXT225A	TXT215A
	52-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
5	5-6	–	TXT725A	
	7-9	–	TXT625A	
	10-17	–	TXT525C	
	18-26	–	TXT425B	TXT415B
	27-46	–	TXT325B	TXT315B
	47-70	–	TXT225A	TXT215A
	71-85	–	TXT215A	TXT225A
	86-92	–	TXT109A	TXT215A
	93-115	–	TXT115A	TXT109A
	116-119	–	TXT109A	TXT115A
	120-140	TXT105	TXT109A	TXT115A

★ See page G3-173 for lubrication for 15 RPM and slower

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 2 - Class I Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
5 (Continued)	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
7-1/2	4-6	–	TXT825A	
	7-9	–	TXT725A	
	10-15	–	TXT625A	
	16-26	–	TXT525C	
	27-40	–	TXT425B	TXT415B
	41-70	–	TXT325B	TXT315B
	71-74	–	TXT315B	TXT325B
	75-85	–	TXT215A	TXT225A
	86-95	–	TXT215A	TXT209A
	96-140	TXT205	TXT209A	TXT215A
	141-200	TXT205	TXT209A	
	201-231	TXT205	–	–
	232-400	TXT105	–	–
10	5	–	TXT926A	
	6-8	–	TXT825A	
	9-12	–	TXT725A	
	13-20	–	TXT625A	
	21-36	–	TXT525C	TXT515C
	37-56	–	TXT425B	TXT415B
	57-70	–	TXT325B	TXT315B
	71-85	–	TXT315B	TXT325B
	86-103	–	TXT315B	TXT309B
	104-115	–	TXT215A	TXT209A
	116-140	TXT305A	TXT215A	
	141-158	TXT305A	TXT309B	
	159-200	TXT305A	TXT309B	
	201-400	TXT205	–	–
15	5-6	–	TXT1024A	
	7-8	–	TXT926A	
	9-13	–	TXT825A	
	14-19	–	TXT725A	
	20-32	–	TXT625A	TXT615A
	33-56	–	TXT525C	TXT515C
	57-70	–	TXT425B	TXT415B
	71-85	–	TXT415B	TXT425B
	86-93	–	TXT415B	TXT409B
	94-115	–	TXT309B+	TXT315B

★ See page G3-173 for lubrication for 15 RPM and slower

HP	Output RPM	Reducer Selection		
		Single	Double	
15 (Continued)	116-140	TXT405A	TXT315B	TXT309B+
	141-145	TXT405A	TXT309B+	
	146-200	TXT305A	TXT309B+	
	201-400	TXT305A	–	
20	4-6	–	TXT1225	
	7-8	–	TXT1024A	
	9-12	–	TXT926A	
	13-18	–	TXT825A	
	19-26	–	TXT725A	TXT715A
	27-45	–	TXT625A	TXT615A
	46-70	–	TXT525C	TXT515C
	71-78	–	TXT515C	TXT525C
	79-85	–	TXT415B	TXT425B
	86-115	–	TXT415B	TXT409B+
	116-140	TXT405A	TXT409B+	TXT415B+
	141-200	TXT405A	TXT309B+	
	201-241	TXT405A	–	–
	242-400	TXT305A+	–	–
25	5-7	–	TXT1225	
	8-10	–	TXT1024A	
	11-15	–	TXT926A	
	16-23	–	TXT825A	
	24-33	–	TXT725A	TXT715A
	34-59	–	TXT625A	TXT615A
	60-70	–	TXT525C+	TXT515C+
	71-80	–	TXT515C+	TXT525C+
	81-101	–	TXT515C+	TXT509C+
	102-132	TXT505A	TXT415B+	TXT409B+
	133-140	TXT505A	TXT409B+	TXT415B+
	141-163	TXT505A	TXT409B+	
	164-200	TXT405A+	TXT409B+	
	201-400	TXT405A+	–	–
30	4-5	–	TDT1425	
	6-9	–	TXT1225	
	10-13	–	TXT1024A	
	14-19	–	TXT926A	
	20-28	–	TXT825A	TXT815A
	29-41	–	TXT725A	TXT715A
	42-70	–	TXT625A	TXT615A

+ Fan cooling required - see page G3-81.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
EASY SELEC
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 2 - Class I Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
30 (Continued)	71-75	–	TXT615A	TXT625A
	76-115	–	TXT515C+	TXT509C+
	116-125	TXT605	TXT509C+	TXT515C+
	126-131	TXT605	TXT409B+	
	132-200	TXT505A	TXT409B+	
	201-215	TXT505A+	–	
	216-400	TXT405A+	–	–
40	5-6	–	TDT1425	
	7	–	TDT1325	
	8-12	–	TXT1225	
	13-18	–	TXT1024A	
	19-25	–	TXT926A	TXT915A
	26-38	–	TXT825A	TXT815A
	39-57	–	TXT725A	TXT715A
	58-70	–	TXT625A	TXT615A
	71-81	–	TXT615A+	TXT625A+
	82-114	TXT605	TXT615A+	TXT609A+
	115-125	TXT605	TXT515C+	TXT509C+
	126-200	TXT605	TXT509C+	
	201-241	TXT605	–	–
	242-400	TXT505A+	–	–
50	3-5	–	TDT1530	
	6-8	–	TDT1425	
	9	–	TDT1325	
	10-15	–	TXT1225	
	16-22	–	TXT1024A	
	23-32	–	TXT926A	TXT915A
	33-49	–	TXT825A	TXT815A
	50-70	–	TXT725A	TXT715A
	71-74	–	TXT715A	TXT725A
	75-125	–	TXT615A+	TXT709A+
	126-163	TXT605+	TXT709A+	
	164-200	TXT605+	TXT609A+	
	201-400	TXT605+	–	–
60	4-6	–	TDT1530	
	7-11	–	TDT1425	
	12	–	TDT1325	
	13-18	–	TXT1225	
	19-27	–	TXT1024A	TXT1015A

HP	Output RPM	Reducer Selection		
		Single	Double	
60 (Continued)	28-39	–	TXT926A	TXT915A
	40-60	–	TXT825A	TXT815A
	61-70	–	TXT725A+	TXT715A+
	71-120	–	TXT715A+	TXT709A+
	121-131	TXT705	TXT709A+	
	132-200	TXT605+	TXT709A+	
	201-400	TXT605+	–	–
75	5-8	–	TDT1530	
	9-13	–	TDT1425	
	14-15	–	TDT1325	
	16-23	–	TXT1225	
	24-34	–	TXT1024A	TXT1015A
	35-50	–	TXT926A	TXT915A
	51-70	–	TXT825A	TXT815A
	71-78	–	TXT815A+	
	79-120	–	TXT715A+	TXT709A+
	121-200	TXT705	TXT709A+	
	201-210	TXT705	–	–
	211-400	TXT605+	–	–
100	6-11	–	TDT1530	
	12-17	–	TDT1425	
	18-22	–	TDT1325	
	23-31	–	TXT1225	TXT1215
	32-46	–	TXT1024A	TXT1015A
	47-69	–	TXT926A+	TXT915A+
	70-120	–	TXT815A+	
	121-123	TXT805+	TXT709A+	
	124-200	TXT705+	TXT709A+	
	201-400	TXT705+	–	–
125	8-14	–	TDT1530	
	15-22	–	TDT1425	
	23-29	–	TDT1325	
	30-40	–	TXT1225	TXT1215
	41-59	–	TXT1024A	TXT1015A
	60-70	–	TXT915A+	TXT926A+
	71-90	–	TXT915A+	
	91-123	–	TXT815A+	
	124-172	TXT805+	–	–
	173-400	TXT705+	–	–

★ See page G3-173 for lubrication for 15 RPM and slower

+ Fan cooling required - see page G3-81.

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 2 - Class I Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
150	9-17	–	TDT1530	
	18-27	–	TDT1425	
	28-36	–	TDT1325	
	37-49	–	TXT1225	TXT1215
	50-70	–	TXT1024A	TXT1015A
	71-75	–	TXT1015A+	TXT1024A+
	76-80	–	TXT1015A+	
	81-120	–	TXT915A+	
	121-165	TXT905	–	–
	166-400	TXT805+	–	–
200	12-23	–	TDT1530	
	24-36	–	TDT1425	
	37-51	–	TDT1325+	
	52-68	–	TXT1225✻	TXT1215✻
	69-120	–	TXT1015A+	
	212-400	TXT905+	–	–
250	16-30	–	TDT1530	
	31-46	–	TDT1425+	
	47-67	–	TDT1325+	
	68-75	–	TXT1225✻	TXT1215✻
	76-120	–	TXT1215✻	

HP	Output RPM	Reducer Selection	
		Single	Double
300	19-36	–	TDT1530
	37-58	–	TDT1425✻
	59-70	–	TDT1325+
	71-75	–	TDT1325✻
	83-120	–	TXT1215✻
350	23-43	–	TDT1530+
	44-69	–	TDT1425✻
	70-75	–	TDT1325✻
400	27-50	–	TDT1530+
	51-75	–	TDT1425✻
450	30-31	–	TDT1530✻
	32-57	–	TDT1530+
	59-75	–	TDT1425✻
500	34-57	–	TDT1530✻
	66-75	–	TDT1425✻
600	41-57	–	TDT1530✻
700	50-57	–	TDT1530✻

★ See page G3-173 for lubrication for 15 RPM and slower

\+ Fan cooling required - see page G3-81.

✻ Heat exchanger required - see page G3-81.

Courtesy of:
EASY SELEC
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 3 - Class II Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
1/4	5-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1/3	4-6	–	TXT225A	
	7-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1/2	4-5	–	TXT325B	
	6-9	–	TXT225A	
	10-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
3/4	4-5	–	TXT425B	
	6-8	–	TXT325B	
	9-16	–	TXT225A	
	17-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1	5-7	–	TXT425B	
	8-11	–	TXT325B	
	12-22	–	TXT225A	
	23-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–

HP	Output RPM	Reducer Selection		
		Single	Double	
1-1/2	5-6	–	TXT525C	
	7-11	–	TXT425B	
	12-18	–	TXT325B	
	19-34	–	TXT225A	TXT215A
	35-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
2	4-5	–	TXT625A	
	6-9	–	TXT525C	
	10-14	–	TXT425B	
	15-24	–	TXT325B	TXT315B
	25-47	–	TXT225A	TXT215A
	48-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
3	4-5	–	TXT725A	
	6-8	–	TXT625A	
	9-14	–	TXT525C	
	15-22	–	TXT425B	TXT415B
	23-38	–	TXT325B	TXT315B
	39-70	–	TXT225A	TXT215A
	71-75	–	TXT215A	TXT225A
	76-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
5	4-6	–	TXT825A	
	7-8	–	TXT725A	
	9-14	–	TXT625A	
	15-24	–	TXT525C	
	25-37	–	TXT425B	TXT415B
	38-69	–	TXT325B	TXT315B

★ See page G3-173 for lubrication for 15 RPM and slower

+ Fan cooling required - see page G3-81.

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Table 3 - Class II Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
5 (Continued)	70-85	–	TXT215A	TXT225A
	86-89	–	TXT215A	TXT209A
	90-136	TXT205	TXT209A	TXT215A
	137-140	TXT205	TXT115A	TXT209A
	141-191	TXT205	TXT109A	
	192-200	TXT105	TXT109A	
	201-400	TXT105	–	–
7-1/2	5	–	TXT926A	
	6-9	–	TXT825A	
	10-13	–	TXT725A	
	14-21	–	TXT625A	
	22-38	–	TXT525C	TXT515C
	39-59	–	TXT425B	TXT415B
	60-70	–	TXT325B	TXT315B
	71-85	–	TXT315B	TXT325B
	86-110	–	TXT315B	TXT309B
	111-122	–	TXT215A	
	123-140	TXT305A	TXT209A	TXT215A
	141-183	TXT305A	TXT209A	
	184-200	TXT205	TXT209A	
	201-400	TXT205	–	–
10	4	–	TXT1225	
	5	–	TXT1024A	
	6-7	–	TXT926A	
	8-12	–	TXT825A	
	13-18	–	TXT725A	
	19-29	–	TXT625A	TXT615A
	30-52	–	TXT525C	TXT515C
	53-70	–	TXT425B	TXT415B
	71-84	–	TXT415B	TXT425B
	85-130	–	TXT315B	TXT309B
	131-140	TXT305A	TXT315B	TXT309B
	141-200	TXT305A	TXT309B	
	201-353	TXT305A	–	–
	354-400	TXT205	–	–
15	4-6	–	TXT1225	
	7-9	–	TXT1024A	
	10-12	–	TXT926A	
	13-19	–	TXT825A	

★ See page G3-173 for lubrication for 15 RPM and slower

HP	Output RPM	Reducer Selection		
		Single	Double	
15 (Continued)	20-27	–	TXT725A	
	28-47	–	TXT625A	TXT615A
	48-70	–	TXT525C	TXT515C
	71-82	–	TXT515C	TXT525C
	83-117	–	TXT415B	TXT409B
	118-140	TXT405A	TXT409B	TXT415B
	141-150	TXT405A	TXT409B	
	151-200	TXT405A	TXT309B+	
	201-269	TXT405A	–	–
	270-400	TXT305A	–	–
20	5	–	TDT1325	
	6-8	–	TXT1225	
	9-12	–	TXT1024A	
	13-17	–	TXT926A	
	18-26	–	TXT825A	
	27-38	–	TXT725A	TXT715A
	39-68	–	TXT625A	TXT615A
	69-80	–	TXT515C	TXT525C
	81-89	–	TXT515C	
	90-117	–	TXT515C+	TXT509C+
	118-125	TXT505A	TXT409B+	TXT415B+
	126-200	TXT505A	TXT409B+	
	201-400	TXT405A+	–	–
25	4-6	–	TDT1425	
	7-10	–	TXT1225	
	11-15	–	TXT1024A	
	16-22	–	TXT926A	
	23-33	–	TXT825A	TXT815A
	34-49	–	TXT725A	TXT715A
	50-80	–	TXT615A	TXT625A
	81-94	–	TXT615A	TXT609A
	95-125	TXT605	TXT509C+	TXT515C+
	126-174	TXT605	TXT509C+	
	175-200	TXT505A	TXT409B+	
	201-270	TXT505A	–	–
	271-400	TXT405A+	–	–
30	5-7	–	TDT1425	
	8	–	TDT1325	
	9-12	–	TXT1225	

+ Fan cooling required - see page G3-81.

Torque-Arm Shaft Mount Speed Reducers

Table 3 - Class II Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
30 (Continued)	13-19	–	TXT1024A	
	20-27	–	TXT926A	TXT915A
	28-41	–	TXT825A	TXT815A
	42-60	–	TXT725A	TXT715A
	61-76	–	TXT625A	TXT615A
	77-89	–	TXT615A	TXT609A
	90-125	TXT605	TXT615A+	TXT609A+
	126-200	TXT605	TXT509C+	
	201-233	TXT605	–	–
	234-349	TXT505A+	–	–
	350-400	TXT405A+	–	–
40	4-6	–	TDT1530	
	7-9	–	TDT1425	
	10-11	–	TDT1325	
	12-17	–	TXT1225	
	18-25	–	TXT1024A	
	26-36	–	TXT926A	TXT915A
	37-56	–	TXT825A	TXT815A
	57-75	–	TXT725A	TXT715A
	76-88	–	TXT715A	
	89-114	–	TXT615A+	TXT609A+
	115-120	–	TXT615A+	TXT609A+
	121-200	TXT605	TXT609A+	
	201-347	TXT605+	–	–
	348-400	TXT505A+	–	–
50	5-8	–	TDT1530	
	9-12	–	TDT1425	
	13-14	–	TDT1325	
	15-21	–	TXT1225	
	22-32	–	TXT1024A	TXT1015A
	33-46	–	TXT926A	TXT915A
	47-70	–	TXT825A	TXT815A
	71-72	–	TXT815A	TXT825A
	73-95	–	TXT715A+	
	96-110	TXT705	TXT709A	TXT715A+
	111-120	TXT705	TXT709A+	TXT715A+
	121-179	TXT705	TXT709A+	
	180-200	TXT605+	TXT609A+	
	201-400	TXT605+	–	–

★ See page G3-173 for lubrication for 15 RPM and slower

HP	Output RPM	Reducer Selection		
		Single	Double	
60	5-9	–	TDT1530	
	10-14	–	TDT1425	
	15-18	–	TDT1325	
	19-26	–	TXT1225	
	27-39	–	TXT1024A	TXT1015A
	40-56	–	TXT926A	TXT915A
	57-70	–	TXT825A	TXT815A
	71-75	–	TXT815A	TXT825A
	76-89	–	TXT815A	
	90-120	TXT705	TXT715A+	TXT709A+
	121-200	TXT705	TXT709A+	
	201-285	TXT705	–	–
	286-400	TXT605+	–	–
75	7-12	–	TDT1530	
	13-18	–	TDT1425	
	19-24	–	TDT1325	
	25-33	–	TXT1225	TXT1215
	34-49	–	TXT1024A	TXT1015A
	50-73	–	TXT926A	TXT915A
	74-75	–	TXT815A	TXT825A
	76-120	TXT805	TXT815A+	
	121-133	TXT805	TXT709A+	
	134-200	TXT705	TXT709A+	
	201-400	TXT705	–	–
100	8-16	–	TDT1530	
	17-25	–	TDT1425	
	26-33	–	TDT1325	
	34-45	–	TXT1225	TXT1215
	46-67	–	TXT1024A	TXT1015A
	68-75	–	TXT915A+	TXT926A+
	76-103	–	TXT915A+	
	104-120	TXT905	TXT815A+	
	121-149	TXT905	–	–
	150-180	TXT805	–	–
	181-200	TXT805	TXT709A	
	201-204	TXT805	–	–
	205-246	TXT705	–	–
	247-400	TXT705+	–	–

+Fan cooling required - see page G3-81.
✻ Heat exchange required - see page G3-81

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 3 - Class II Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
125	11-20	–	TDT1530	
	21-31	–	TDT1425	
	32-43	–	TDT1325	
	44-58	–	TXT1225	TXT1215
	59-75	–	TXT1024A	TXT1015A
	76-85	–	TXT1015A	
	86-120	–	TXT915A+	
	145-209	TXT905	–	–
	210-303	TXT805+	–	–
	304-400	TXT705+	–	–
150	13-25	–	TDT1530	
	26-38	–	TDT1425	
	39-54	–	TDT1325	
	55-72	–	TXT1225+	TXT1215+
	73-75	–	TXT1015A+	TXT1024A+
	76-120	–	TXT1015A+	
	184-279	TXT905+	–	–
	280-400	TXT805+	–	–

HP	Output RPM	Reducer Selection	
		Single	Double
200	18-33	–	TDT1530
	34-53	–	TDT1425+
	54-75	–	TDT1325+
	77-120	–	TXT1215✻
250	23-42	–	TDT1530
	43-46	–	TDT1425+
	47-69	–	TDT1425✻
	70-75	–	TDT1325+
300	28-53	–	TDT1530
	54-75	–	TDT1425✻
350	33-57	–	TDT1530
	66-75	–	TDT1425✻
400	38-57	–	TDT1530+
450	43-57	–	TDT1530+
500	50-57	–	TDT1530+

★ See page G3-173 for lubrication for 15 RPM and slower

\+ Fan cooling required - see page G3-81.

✻ Heat exchanger required - see page G3-81.

Courtesy of:
EASY SELEC
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 4 - Class III Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
1/4	4-6	–	TXT225A	
	7-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-89	–	TXT115A	TXT109A
	90-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1/3	5-9	–	TXT225A	
	10-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1/2	4-5	–	TXT425B	
	6-7	–	TXT325B	
	8-15	–	TXT225A	
	16-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
3/4	4	–	TXT525C	
	5-7	–	TXT425B	
	8-12	–	TXT325B	
	13-23	–	TXT225A	
	24-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1	4-6	–	TXT525C	
	7-10	–	TXT425B	
	11-17	–	TXT325B	
	18-32	–	TXT225A	
	33-70	–	TXT125A	TXT115A
1 (Continued)	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
1-1/2	4-5	–	TXT625A	
	6-10	–	TXT525C	
	11-15	–	TXT425B	
	16-26	–	TXT325B	
	27-51	–	TXT225A	TXT215A
	52-70	–	TXT125A	TXT115A
	71-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
2	5-7	–	TXT625A	
	8-13	–	TXT525C	
	14-21	–	TXT425B	
	22-36	–	TXT325B	TXT315B
	37-71	–	TXT225A	TXT215A
	72-85	–	TXT115A	TXT125A
	86-115	–	TXT115A	TXT109A
	116-140	TXT105	TXT109A	TXT115A
	141-200	TXT105	TXT109A	
	201-400	TXT105	–	–
3	4-5	–	TXT825A	
	6-7	–	TXT725A	
	8-12	–	TXT625A	
	13-20	–	TXT525C	
	21-32	–	TXT425B	TXT415B
	33-57	–	TXT325B	TXT315B
	58-70	–	TXT225A	TXT215A
	71-85	–	TXT215A	TXT225A
	86-89	–	TXT215A	TXT209A
	90-113	TXT205	TXT215A	TXT209A
	114-140	TXT205	TXT109A	TXT115A
	141-155	TXT205	TXT109A	
	156-200	TXT105	TXT109A	
	201-400	TXT105	–	–

★ See page G3-173 for lubrication for 15 RPM and slower

FEATURES/BENEFITS PAGE G3-2 | SPECIFICATION PAGE G3-9 | MODIFICATION/ACCESSORIES PAGE G3-72, G3-122 | RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 4 - Class III Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
5	5	–	TXT926A	
	6-8	–	TXT825A	
	9-12	–	TXT725A	
	13-20	–	TXT625A	
	21-36	–	TXT525C	TXT515C
	37-56	–	TXT425B	TXT415B
	57-70	–	TXT325B	TXT315B
	71-85	–	TXT315B	TXT325B
	86-103	–	TXT315B	TXT309B
	104-114	TXT305A	TXT215A	TXT309B
	115-140	TXT305A	TXT209A	TXT215A
	141-167	TXT305A	TXT209A	
	168-200	TXT205	TXT209A	
	201-400	TXT205	–	–
7-1/2	5-6	–	TXT1024A	
	7-8	–	TXT926A	
	9-13	–	TXT825A	
	14-19	–	TXT725A	
	20-32	–	TXT625A	TXT615A
	33-56	–	TXT525C	TXT515C
	57-70	–	TXT425B	TXT415B
	71-85	–	TXT415B	TXT425B
	86-93	–	TXT415B	TXT409B
	94-140	TXT405A	TXT309B	TXT315B
	141-144	TXT405A	TXT309B	
	145-200	TXT305A	TXT309B	
	201-400	TXT305A	–	–
10	4-6	–	TXT1225	
	7-8	–	TXT1024A	
	9-12	–	TXT926A	
	13-18	–	TXT825A	
	19-26	–	TXT725A	TXT715A
	27-45	–	TXT625A	TXT615A
	46-70	–	TXT525C	TXT515C
	71-78	–	TXT515C	TXT525C
	79-92	–	TXT415B	
	93-105	–	TXT415B	TXT409B
	106-141	TXT405A	TXT409B	TXT415B
	142-200	TXT405A	TXT309B	

HP	Output RPM	Reducer Selection		
		Single	Double	
10 (Continued)	201-241	TXT405A	–	–
	242-400	TXT305A	–	–
15	4-5	–	TDT1425	
	6-9	–	TXT1225	
	10-13	–	TXT1024A	
	14-19	–	TXT926A	
	20-28	–	TXT825A	TXT815A
	29-41	–	TXT725A	TXT715A
	42-70	–	TXT625A	TXT615A
	71-75	–	TXT615A	TXT625A
	76-93	–	TXT515C	
	94-115	–	TXT515C	TXT509C
	116-125	TXT605	TXT509C	TXT515C
	126-131	TXT605	TXT509C	
	132-200	TXT505A	TXT409B	
	201-215	TXT505A	–	–
	216-400	TXT405A	–	–
20	5-6	–	TDT1425	
	7	–	TDT1325	
	8-12	–	TXT1225	
	13-18	–	TXT1024A	
	19-25	–	TXT926A	TXT915A
	26-38	–	TXT825A	TXT815A
	39-57	–	TXT725A	TXT715A
	58-70	–	TXT625A	TXT615A
	71-114	–	TXT615A	TXT609A
	115-125	TXT605	TXT509C+	TXT515C+
	126-200	TXT605	TXT509C+	
	201-218	TXT605	–	–
	219-324	TXT505A	–	–
	325-400	TXT405A+	–	–
25	4-5	–	TDT1530	
	6-8	–	TDT1425	
	9	–	TDT1325	
	10-15	–	TXT1225	
	16-22	–	TXT1024A	
	23-32	–	TXT926A	TXT915A
	33-49	–	TXT825A	TXT815A
	50-70	–	TXT725A	TXT715A

★ See page G3-173 for lubrication for 15 RPM and slower

+ Fan cooling required - see page G3-81.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Torque-Arm Shaft Mount Speed Reducers

Table 4 - Class III Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
25 (Continued)	71-74	–	TXT715A	TXT725A
	75-104	–	TXT615A	TXT609A
	105-113	–	TXT615A+	TXT609A
	114-125	TXT605	TXT615A+	TXT609A+
	126-200	TXT605	TXT609A+	
	201-294	TXT605	–	–
	295-400	TXT505A+	–	–
30	4-6	–	TDT1530	
	7-10	–	TDT1425	
	11-12	–	TDT1325	
	13-18	–	TXT1225	
	19-27	–	TXT1024A	TXT1015A
	28-39	–	TXT926A	TXT915A
	40-60	–	TXT825A	TXT815A
	61-70	–	TXT725A	TXT715A
	71-98	–	TXT715A	
	99-125	–	TXT615A+	TXT609A+
	126-131	TXT705	TXT609A+	
	132-200	TXT605	TXT609A+	
	201-381	TXT605	–	–
	382-400	TXT505A+	–	–
40	5-9	–	TDT1530	
	10-14	–	TDT1425	
	15-17	–	TDT1325	
	18-25	–	TXT1225	
	26-37	–	TXT1024A	TXT1015A
	38-53	–	TXT926A	TXT915A
	54-70	–	TXT825A	TXT815A
	71-84	–	TXT815A	
	85-89	–	TXT715A	TXT709A
	90-120	TXT705	TXT715A+	TXT709A
	121-200	TXT705	TXT709A+	
	201-249	TXT705	–	–
	250-400	TXT605+	–	–
50	6-11	–	TDT1530	
	12-17	–	TDT1425	
	18-22	–	TDT1325	
	23-31	–	TXT1225	TXT1215
	32-46	–	TXT1024A	TXT1015A

HP	Output RPM	Reducer Selection		
		Single	Double	
50 (Continued)	47-69	–	TXT926A	TXT915A
	70-75	–	TXT815A	TXT825A
	76-110	–	TXT815A	
	111-120	–	TXT715A+	TXT709A+
	121-123	TXT805	TXT709A+	
	124-200	TXT705	TXT709A+	
	201-400	TXT705	–	–
60	7-14	–	TDT1530	
	15-21	–	TDT1425	
	22-28	–	TDT1325	
	29-38	–	TXT1225	TXT1215
	39-56	–	TXT1024A	TXT1015A
	57-75	–	TXT926A	TXT915A
	76-85	–	TXT915A	
	86-115	–	TXT815A	
	116-141	TXT805	–	–
	142-161	TXT805	TXT709A+	
	162-200	TXT705	TXT709A+	
	201-400	TXT705		
75	9-17	–	TDT1530	
	18-26	–	TDT1425	
	27-36	–	TDT1325	
	37-49	–	TXT1225	TXT1215
	50-72	–	TXT1024A	TXT1015A
	73-75	–	TXT915A+	TXT926A+
	76-120	–	TXT915A+	
	121-165	TXT905	–	–
	166-234	TXT805	–	–
	235-400	TXT705	–	–
100	12-23	–	TDT1530	
	24-36	–	TDT1425	
	37-51	–	TDT1325	
	52-68	–	TXT1225+	TXT1215+
	69-120	–	TXT1015A	
	175-259	TXT905	–	–
	260-387	TXT805+	–	–
	388-400	TXT705+	–	–
125	16-30	–	TDT1530	
	31-43	–	TDT1425	

★ See page G3-173 for lubrication for 15 RPM and slower

+ Fan cooling required - see page G3-81.

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 4 - Class III Selection Table TXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
125 (Continued)	44-46	–	TDT1425+	
	47-67	–	TDT1325	
	68-70	–	TXT1225+	TXT1215+
	71-75	–	TXT1215+	TXT1225+
	76-90	–	TXT1215+	
	91-120	–	TXT1015A+	
150	19-36	–	TDT1530	
	37-41	–	TDT1425	
	42-58	–	TDT1425+	
	59-75	–	TDT1325+	
	83-110	–	TXT1215✻	

HP	Output RPM	Reducer Selection	
		Single	Double
200	27-50	–	TDT1530
	51-75	–	TDT1425✻
250	34-57	–	TDT1530
	66-75	–	TDT1425✻
300	41-57	–	TDT1530
350	50-57	–	TDT1530

★ See page G3-173 for lubrication for 15 RPM and slower

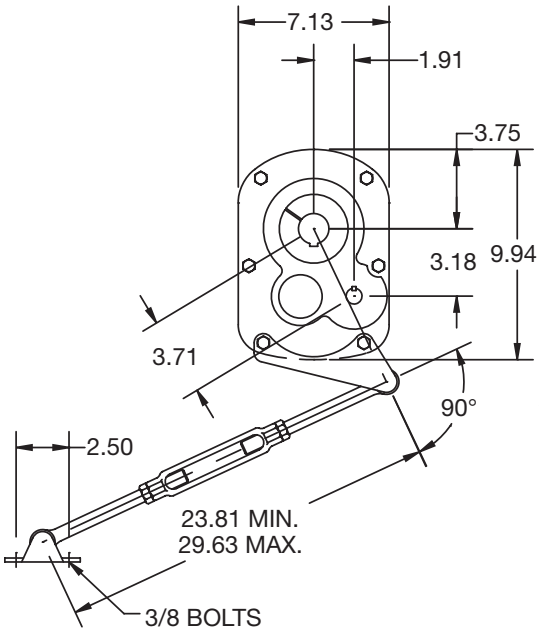
\+ Fan cooling required - see page G3-81.

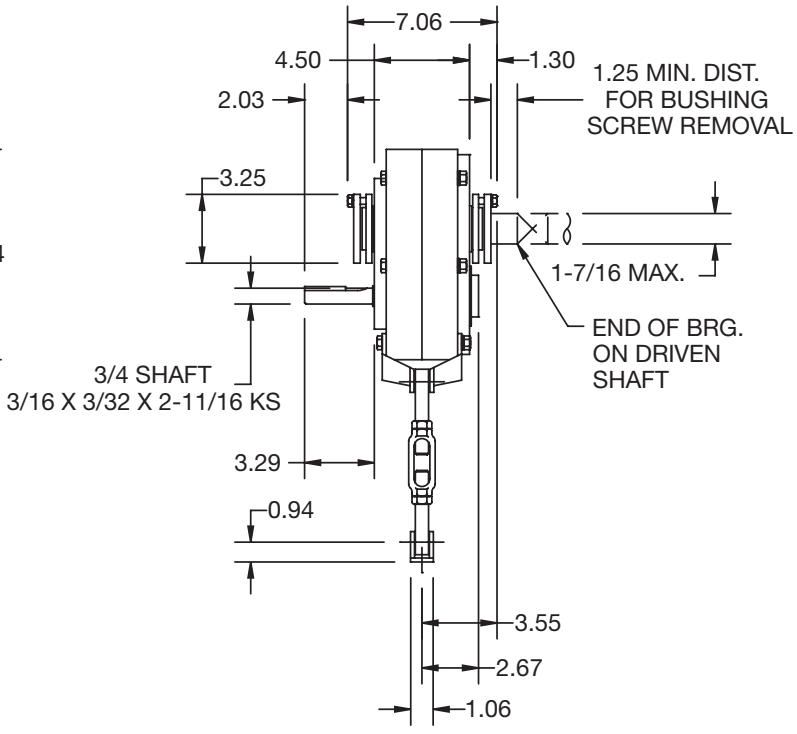
✻ Heat exchanger required - see page G3-81.

Courtesy of:
Screw Conveyor Parts

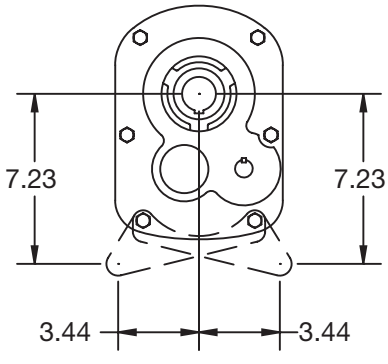
Torque-Arm Shaft Mount Speed Reducers

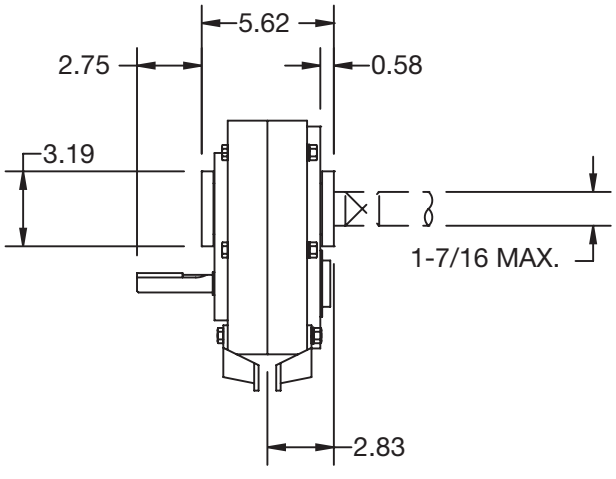
TXT1A - Double Reduction Taper Bushed





TXT1A - Double Reduction Straight Bore





FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT1A Taper Bushed Reducers ■ ○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT109AT	241092	107D09	9.44	45
TXT115AT	241065	107D15	15.35	45
TXT125AT	241066	107D25	25.64	45

TXT1A Straight Bore Reducers ■ ○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT109AS	241327 ♣	107D09	9.44	45
TXT115AS	241073	107D15	15.35	45
TXT125AS	241074	107D25	25.64	45

Accessories for TXT1A Reducers

Description	Part Number	Weight
TA1M Standard Motor Mount (56T-215T)	241391	37.3
TAB1 Bottom Motor Mount (56T-215T) ♣ ♠	241421	34
TXT1 Backstop Assembly	242101	.8
TXT1D TA Reducer Belt Guard (56T-215T)	241395	30
TXT1 Taconite Auxiliary Seal Kit ♥	272515	4.40
TXT1 Lube Kit	LUBEKITTXT1	4.6

TXT1 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
1-7/16	(Max.)	241292	◆	3/8 x 3/16 x 6-7/16	3/8 x 3/16 x 2	2.0	–
1-3/8		241294	–	5/16 x 5/32 x 6-7/16	–	1.8	–
1-5/16	▲	241290	241347	5/16 x 5/32 x 6-7/16	5/16 x 5/32 x 2	1.8	0.4
1-1/4	▲	241288	241346	1/4 x 1/8 x 6-7/16	1/4 x 1/8 x 2	2.0	0.6
1-3/16	▲	241286	241345	1/4 x 1/8 x 6-7/16	1/4 x 1/8 x 2	2.2	0.6
1-1/8	▲	241282	241344	1/4 x 1/8 x 6-7/16	1/4 x 1/8 x 1-3/4	2.2	0.6
1	▲	241278	241342	1/4 x 1/8 x 6-7/16	1/4 x 1/8 x 1-3/4	2.5	1.0

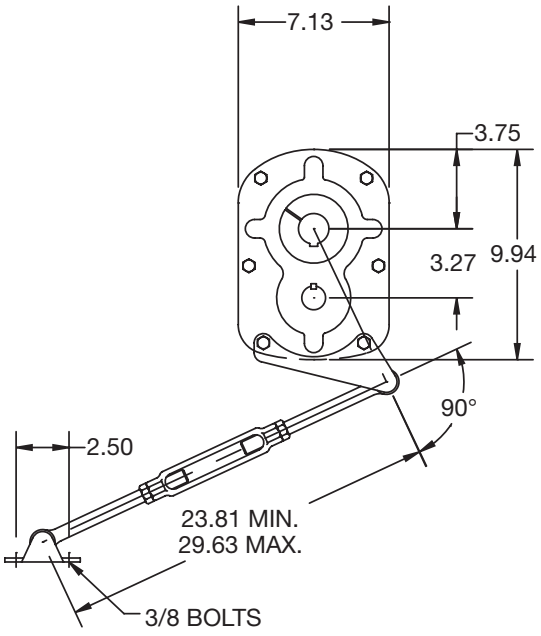
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
○ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

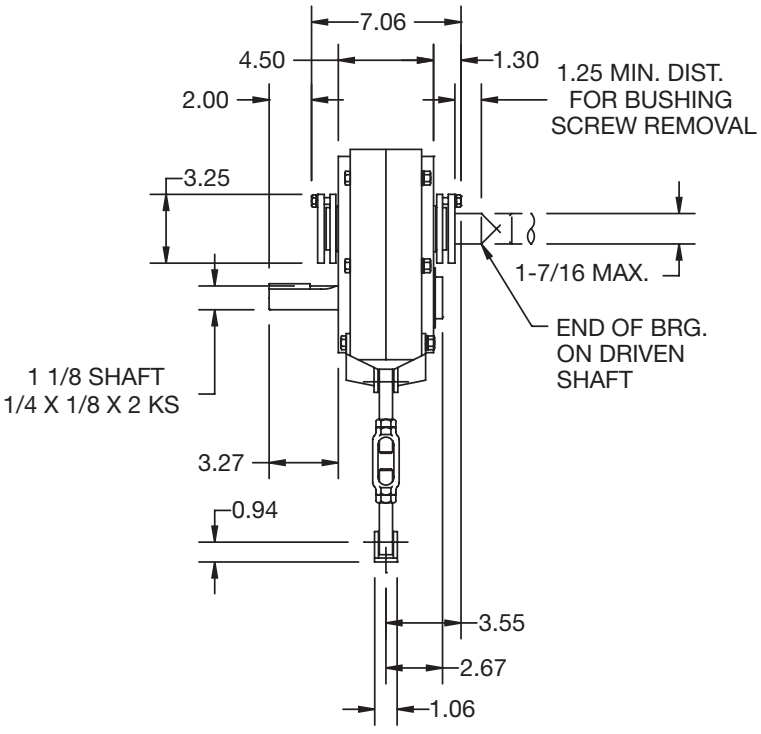
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-177 for drill and tap information required to mount to reducer.

Courtesy of:
Screw Conveyor Parts

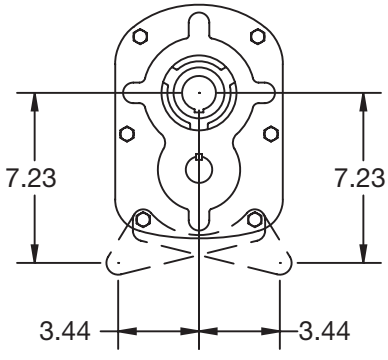
Torque-Arm Shaft Mount Speed Reducers

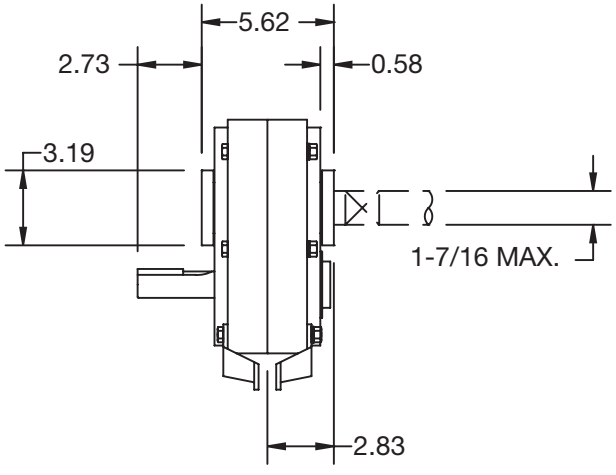
TXT105 - Single Reduction Taper Bushed





TXT105 - Single Reduction Straight Bore





Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT105 Taper Bushed Reducers ■ ○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT105T	241083	107S05	5.62	40

TXT105 Straight Bore Reducers ■ ○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT105S	241087	107S05	5.62	40

Accessories for TXT105 Reducers

Description	Part Number	Weight
TA1M Standard Motor Mount (56T-215T)	241391	37.3
TAB1 Bottom Motor Mount (56T-215T) ♠ ♣	241421	34
TXT105 Backstop Assembly	242101	.8
TXT1S TA Reducer Belt Guard (56T-215T)	241397	30
TXT105 Taconite Auxiliary Seal Kit ♥	272521	5
TXT105 Lube Kit	LUBEKITTXT105	4.5

TXT1 Bushing Assemblies ○

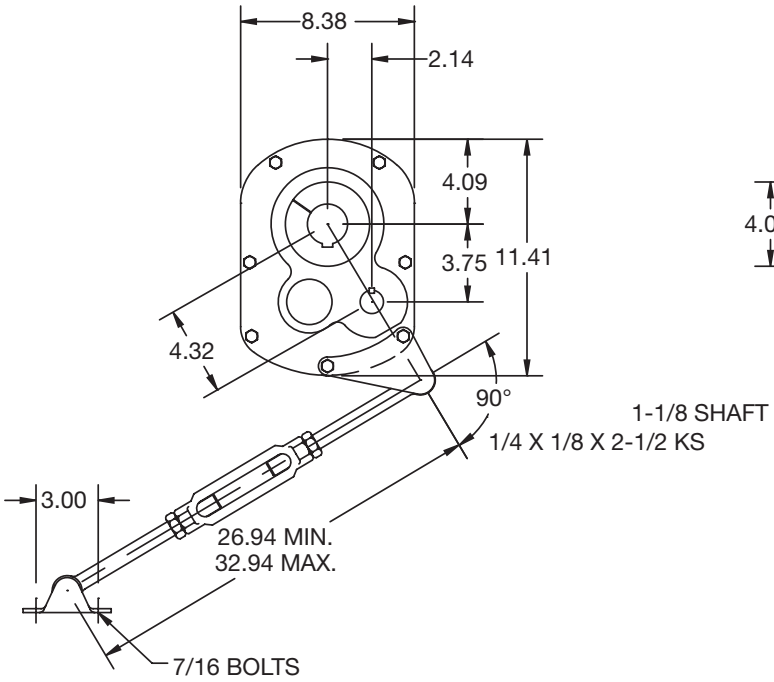
Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
1-7/16	(Max.)	241292	◆	3/8 x 3/16 x 6-7/16	3/8 x 3/16 x 2	2.0	–
1-3/8	–	241294	–	5/16 x 5/32 x 6-7/16	–	1.8	–
1-5/16	▲	241290	241347	5/16 x 5/32 x 6-7/16	5/16 x 5/32 x 2	1.8	0.4
1-1/4	▲	241288	241346	1/4 x 1/8 x 6-7/16	1/4 x 1/8 x 2	2.0	0.6
1-3/16	▲	241286	241345	1/4 x 1/8 x 6-7/16	1/4 x 1/8 x 2	2.2	0.6
1-1/8	▲	241282	241344	1/4 x 1/8 x 6-7/16	1/4 x 1/8 x 1-3/4	2.2	0.6
1	▲	241278	241342	1/4 x 1/8 x 6-7/16	1/4 x 1/8 x 1-3/4	2.5	1.0

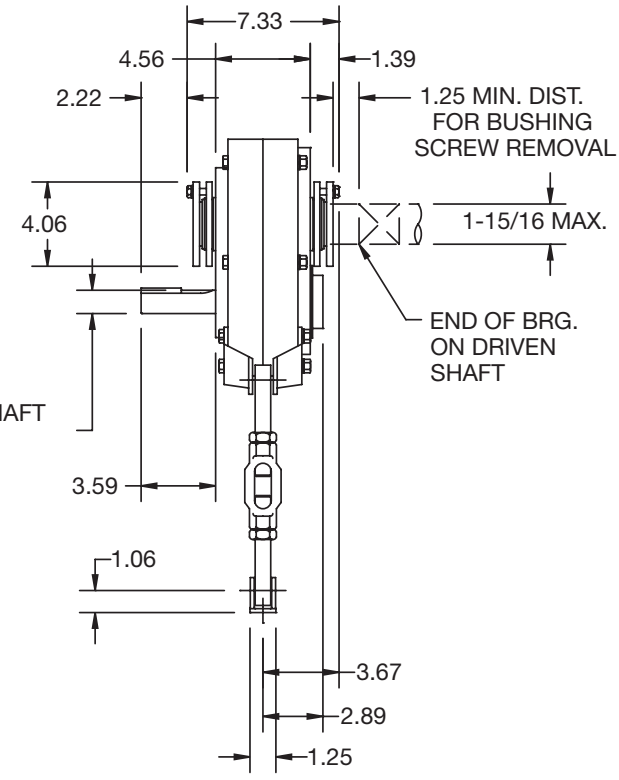
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
○ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-177 for drill and tap information required to mount to reducer.

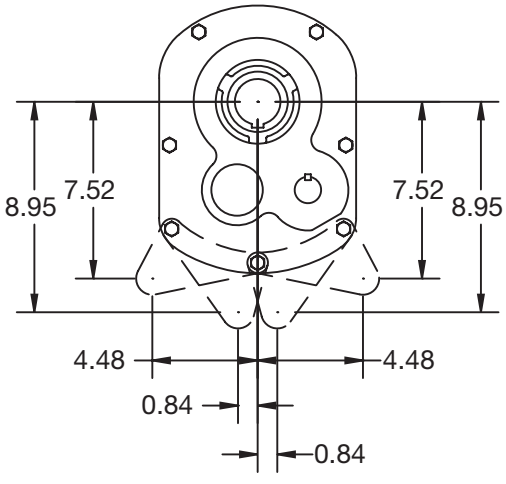
Torque-Arm Shaft Mount Speed Reducers

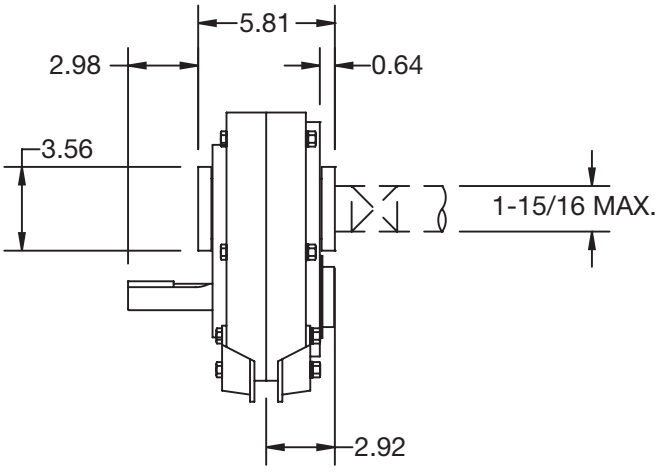
TXT2A - Double Reduction Taper Bushed





TXT2A - Double Reduction Straight Bore





FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT2A Taper Bushed Reducers ■ ○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT209AT	242079	115D09	9.25	58
TXT215AT	242082	115D15	14.10	58
TXT225AT	242083	115D25	23.46	58

TXT2A Straight Bore Reducers ■ ○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT209AS	242327 ♣	115D09	9.25	58
TXT215AS	242090	115D15	14.10	58
TXT225AS	242091	115D25	23.46	58

Accessories for TXT2A Reducers

Description	Part Number	Weight
TA1M Standard Motor Mount (56T-215T)	241391	37.3
TAB2 Bottom Motor Mount (56T-215T) ♠ ♣	242421	34
TXT2 Backstop Assembly	252101	1
TXT2D TA Reducer Belt Guard (56T-215T)	242395	36
TXT2 Taconite Auxiliary Seal Kit ♥	272446	5.5
TXT2 Lube Kit	LUBEKITTXT2	4.6

TXT2 Bushing Assemblies ●

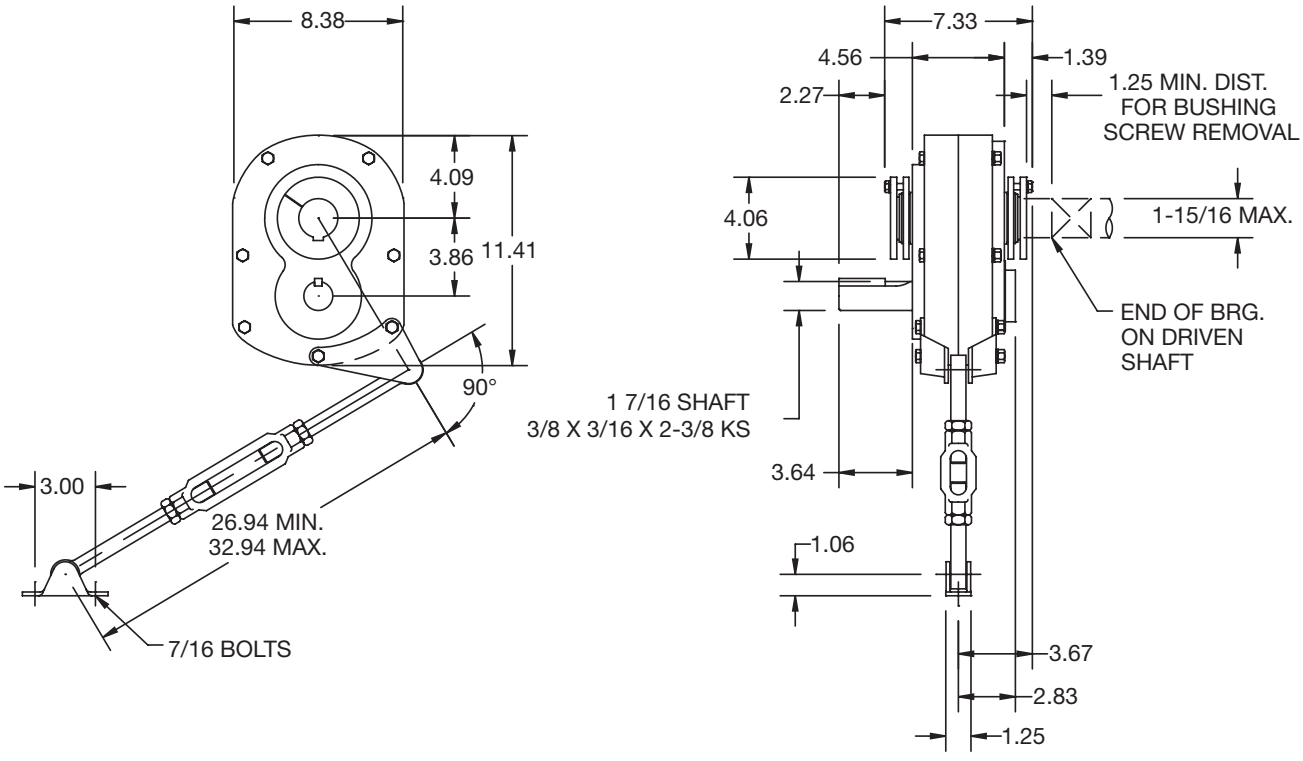
Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
1-15/16	(Max.)	242168	◆	1/2 x 1/4 x 6-11/16	1/2 x 1/4 x 2-1/2	2.9	–
1-3/4	–	242166	242351	3/8 x 3/16 x 6-11/16	3/8 x 3/16 x 2-7/8	3.3	0.8
1-11/16	–	242164	242350	3/8 x 3/16 x 6-11/16	3/8 x 3/16 x 2-7/8	3.4	1.1
1-5/8	▲	242162	242349	3/8 x 3/16 x 6-11/16	3/8 x 3/16 x 2-7/8	3.2	1.2
1-1/2	▲	242158	242348	3/8 x 3/16 x 6-11/16	3/8 x 3/16 x 2-1/2	3.8	1.5
1-7/16	▲	242156	242347	3/8 x 3/16 x 6-11/16	3/8 x 3/16 x 2-1/2	4.0	1.7
1-3/8	▲	242154	242346	5/16 x 5/32 x 6-11/16	5/16 x 5/32 x 2	3.6	1.8
1-5/16	▲	242152	242345	5/16 x 5/32 x 6-11/16	5/16 x 5/32 x 2	3.6	1.8
1-1/4	▲	242150	242344	1/4 x 1/8 x 6-11/16	1/4 x 1/8 x 2	3.6	2.1
1-3/16	▲	242148	242343	1/4 x 1/8 x 6-11/16	1/4 x 1/8 x 2	3.6	2.2
1-1/8	▲	242146	–	1/4 x 1/8 x 6-11/16	–	3.8	–

♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
○ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

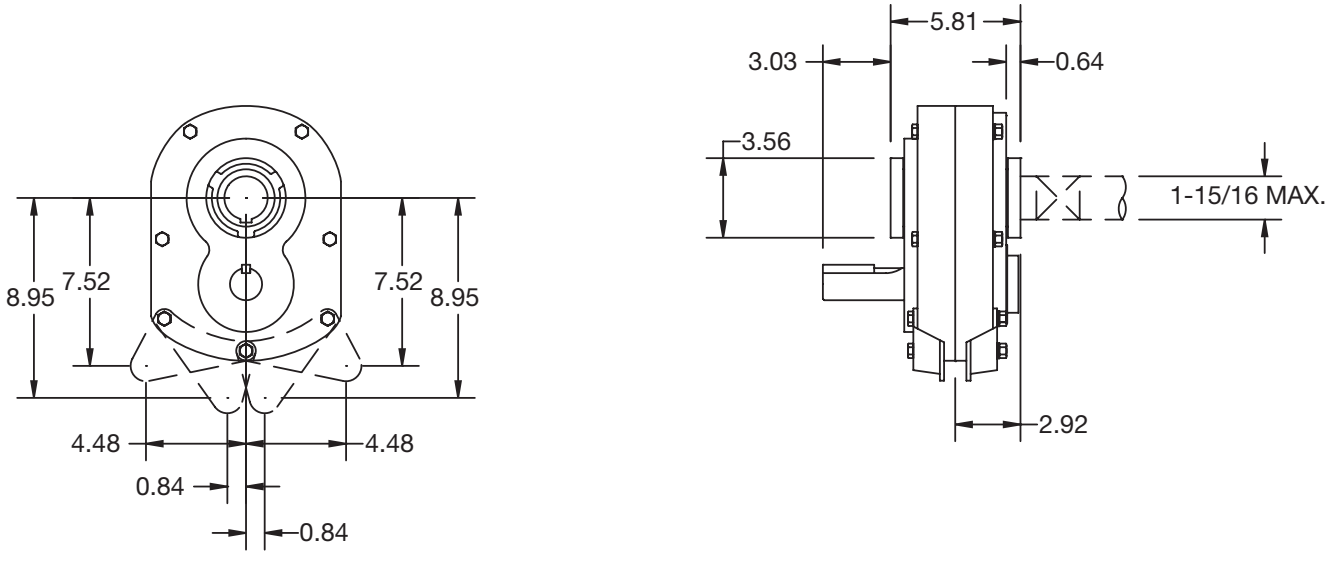
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-177 for drill and tap information required to mount to reducer.

Torque-Arm Shaft Mount Speed Reducers

TXT205 - Single Reduction Taper Bushed



TXT205 - Single Reduction Straight Bore



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT205 Taper Bushed Reducers ■○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT205T	242249	115S05	5.29	52

TXT205 Straight Bore Reducers ■○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT205S	242253	115S05	5.29	52

Accessories for TXT205 Reducers

Description	Part Number	Weight
TA1M Standard Motor Mount (56T-215T)	241391	37.3
TAB2 Bottom Motor Mount (56T-215T) ♠ ♣	242421	34
TXT205 Backstop Assembly	252101	1
TXT2S TA Reducer Belt Guard (56T-215T)	242397	36
TXT205 Taconite Auxiliary Seal Kit ♥	272459	5.8
TXT205 Lube Kit	LUBEKITTXT205	6.9

TXT2 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
1-15/16	(Max.)	242168	◆	1/2 x 1/4 x 6-11/16	1/2 x 1/4 x 2-1/2	2.9	–
1-3/4	–	242166	242351	3/8 x 3/16 x 6-11/16	3/8 x 3/16 x 2-7/8	3.3	0.8
1-11/16	–	242164	242350	3/8 x 3/16 x 6-11/16	3/8 x 3/16 x 2-7/8	3.4	1.1
1-5/8	▲	242162	242349	3/8 x 3/16 x 6-11/16	3/8 x 3/16 x 2-7/8	3.2	1.2
1-1/2	▲	242158	242348	3/8 x 3/16 x 6-11/16	3/8 x 3/16 x 2-1/2	3.8	1.5
1-7/16	▲	242156	242347	3/8 x 3/16 x 6-11/16	3/8 x 3/16 x 2-1/2	4.0	1.7
1-3/8	▲	242154	242346	5/16 x 5/32 x 6-11/16	5/16 x 5/32 x 2	3.6	1.8
1-5/16	▲	242152	242345	5/16 x 5/32 x 6-11/16	5/16 x 5/32 x 2	3.6	1.8
1-1/4	▲	242150	242344	1/4 x 1/8 x 6-11/16	1/4 x 1/8 x 2	3.6	2.1
1-3/16	▲	242148	242343	1/4 x 1/8 x 6-11/16	1/4 x 1/8 x 2	3.6	2.2
1-1/8	▲	242146	–	1/4 x 1/8 x 6-11/16	–	3.8	–

♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
○ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

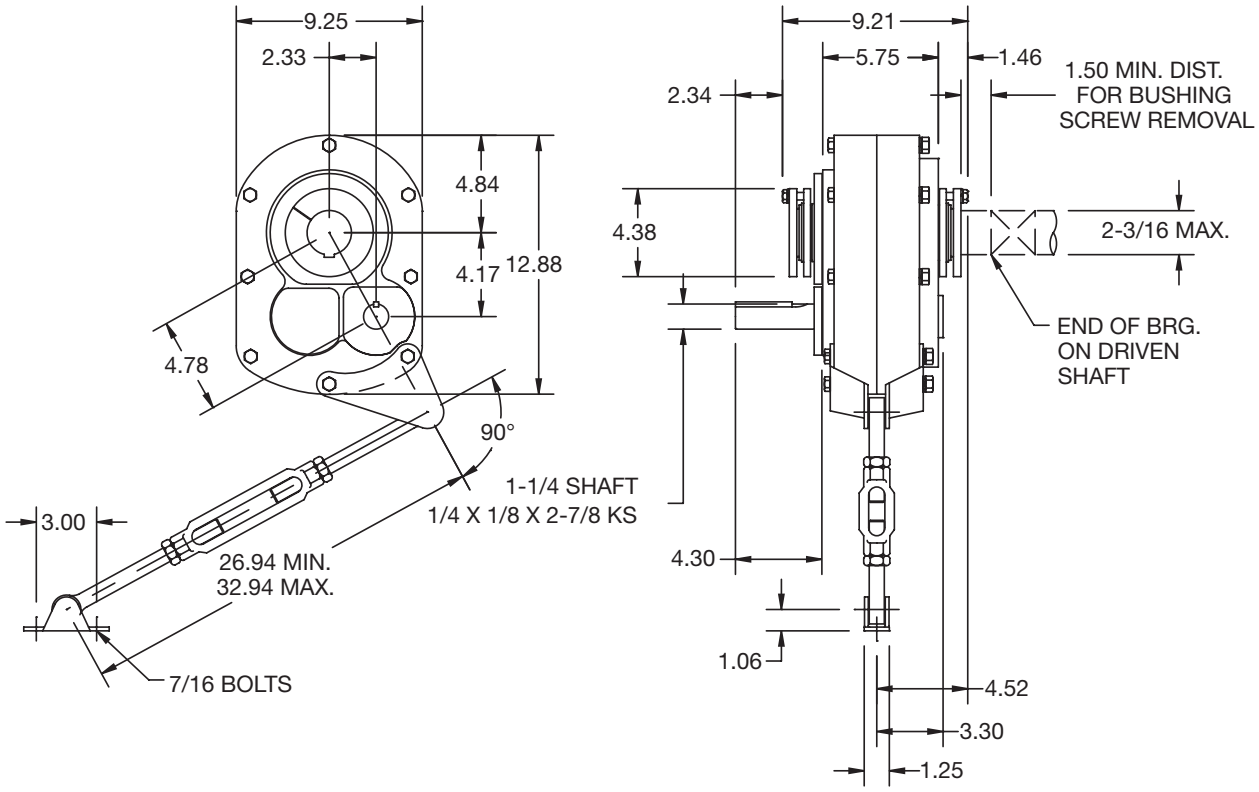
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-177 for drill and tap information required to mount to reducer.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

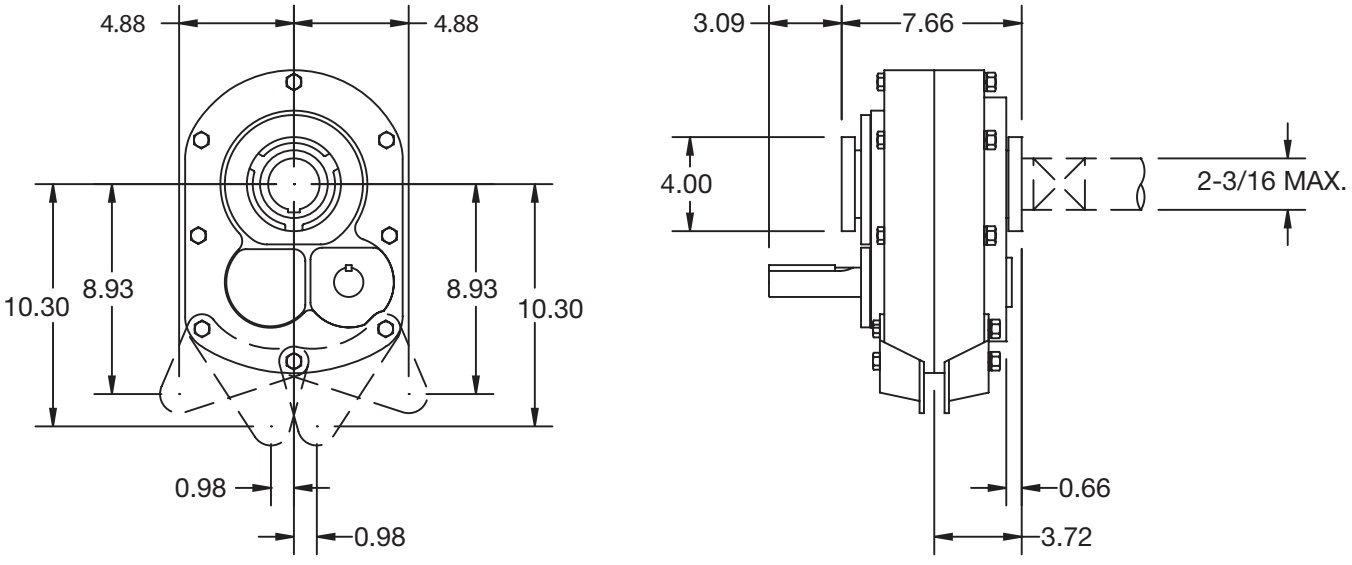
Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT3B - Double Reduction Taper Bushed



TXT3B - Double Reduction Straight Bore



FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT3B Taper Bushed Reducers ■ ○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT309BT	243500	203D09	8.91	98
TXT315BT	243501	203D15	14.88	98
TXT325BT	243502	203D25	24.71	98

TXT3B Straight Bore Reducers ■ ○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT309BS	243512 ♣	203D09	8.91	98
TXT315BS	243513	203D15	14.88	98
TXT325BS	243514	203D25	24.71	98

Accessories for TXT3B Reducers

Description	Part Number	Weight
TA3M Standard Motor Mount (56T-215T)	243391	38
TA3M Special Motor Mount (254T-256T) ♠ ♣	243393	45
TA3ML Long Motor Mount (143T-215T) ♣	243392	42
TAB3 Bottom Motor Mount (143T-286T) ♠ ♣	243404	54
TXT3A Backstop Assembly	243106	.6
TXT3D TA Reducer Belt Guard (56T-215T)	243387	43
TXT3D TA Reducer Belt Guard for Long Motor Mount (56T-215T) ♣	243153	52
TXT3A Cooling Fan Assembly	243581	3
TXT3A Taconite Auxiliary Seal Kit ♥	243577	7.3
TXT3 Lube Kit	LUBEKITTXT3	6.9

TXT3 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
2-3/16	(Max.)	243276	◆	1/2 x 1/4 x 8-1/16	1/2 x 1/4 x 3-5/8	3.7	–
2	–	243274	243429	1/2 x 1/4 x 8-1/16	1/2 x 1/4 x 3-5/8	4.1	1.0
1-15/16	–	243272	243428	1/2 x 1/4 x 8-1/16	1/2 x 1/4 x 3-5/8	4.4	1.2
1-7/8	▲	243270	243427 ♣	1/2 x 1/4 x 8-1/16	1/2 x 1/4 x 3-5/8	4.3	1.9
1-3/4	▲	243266	243426	3/8 x 3/16 x 8-1/16	3/8 x 3/16 x 3-1/4	4.8	1.9
1-11/16	▲	243268	243425	3/8 x 3/16 x 8-1/16	3/8 x 3/16 x 3-1/4	4.8	2.2
1-5/8	▲	243264 ♣	243424	3/8 x 3/16 x 8-1/16	3/8 x 3/16 x 2-1/4	4.8	2.3
1-1/2	▲	243262	243423	3/8 x 3/16 x 8-1/16	3/8 x 3/16 x 2-1/4	5.4	2.5
1-7/16	▲	243260	243422	3/8 x 3/16 x 8-1/16	3/8 x 3/16 x 2-1/4	5.6	2.7
1-3/8	▲	243284	243421	5/16 x 5/32 x 8-1/16	5/16 x 5/32 x 2-1/4	5.8	3.2
1-5/16	▲	243282	243420	5/16 x 5/32 x 8-1/16	5/16 x 5/32 x 2-1/4	5.8	3.8

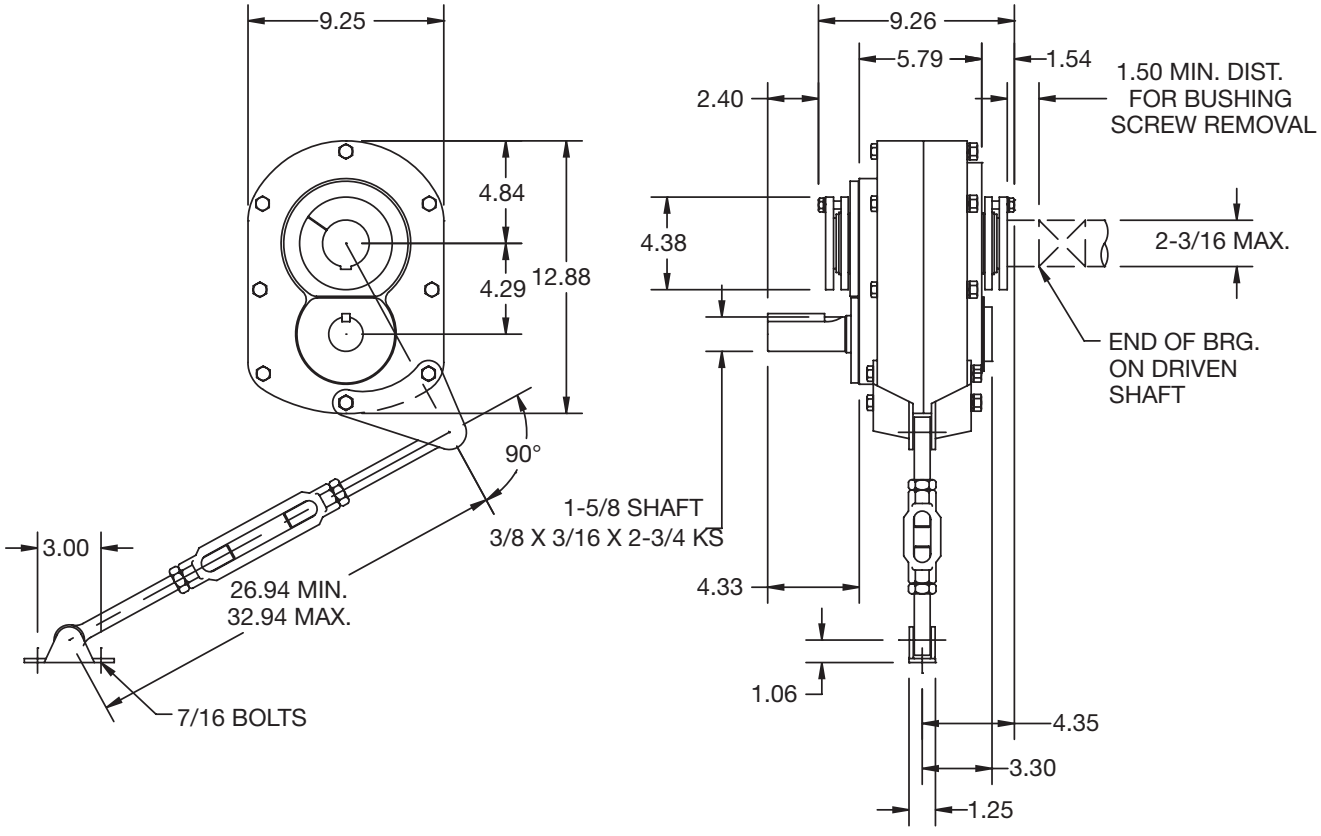
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
○ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-177 for drill and tap information required to mount to reducer.

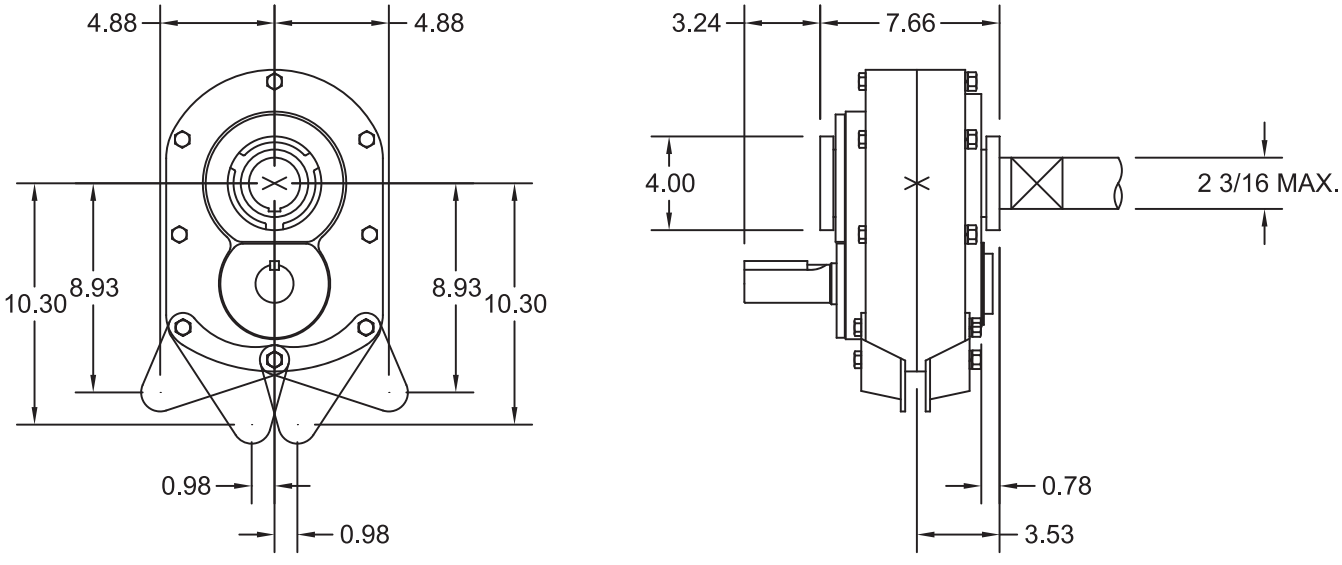
Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT305A - Single Reduction Taper Bushed



TXT305A - Single Reduction Straight Bore



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT305A Taper Bushed Reducers ■ ○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT305AT	253151	203S05	5.60	86

TXT305A Straight Bore Reducers ■ ○

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT305AS	–	203S05	5.60	86

Accessories for TXT305A Reducers

Description	Part Number	Weight
TA3M Standard Motor Mount (56T-215T)	243391	38
TA3M Special Motor Mount (254T-256T) ♠ ♣	243393	45
TA3ML Long Motor Mount (143T-215T) ♣	243392	42
TAB3 Bottom Motor Mount (143T-286T) ♠ ♣	243404	54
TXT305A Backstop Assembly	252101	1
TXT3S TA Reducer Belt Guard (56T-215T)	243389	43
TXT3S TA Reducer Belt Guard for Long Motor Mount (56T-215T) ♣	243164	55
TXT305A Cooling Fan Assembly	253188	3
TXT305A Taconite Auxiliary Seal Kit ♥	253186	7.6
TXT305 Lube Kit	LUBEKITTXT305	8.1

TXT3 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
2-3/16	(Max.)	243276	◆	1/2 x 1/4 x 8-1/16	1/2 x 1/4 x 3-5/8	3.7	–
2	–	243274	243429	1/2 x 1/4 x 8-1/16	1/2 x 1/4 x 3-5/8	4.1	1.0
1-15/16	–	243272	243428	1/2 x 1/4 x 8-1/16	1/2 x 1/4 x 3-5/8	4.4	1.2
1-7/8	▲	243270	243427 ♣	1/2 x 1/4 x 8-1/16	1/2 x 1/4 x 3-5/8	4.3	1.9
1-3/4	▲	243266	243426	3/8 x 3/16 x 8-1/16	3/8 x 3/16 x 3-1/4	4.8	1.9
1-11/16	▲	243268	243425	3/8 x 3/16 x 8-1/16	3/8 x 3/16 x 3-1/4	4.8	2.2
1-5/8	▲	243264 ♣	243424	3/8 x 3/16 x 8-1/16	3/8 x 3/16 x 2-1/4	4.8	2.3
1-1/2	▲	243262	243423	3/8 x 3/16 x 8-1/16	3/8 x 3/16 x 2-1/4	5.4	2.5
1-7/16	▲	243260	243422	3/8 x 3/16 x 8-1/16	3/8 x 3/16 x 2-1/4	5.6	2.7
1-3/8	▲	243284	243421	5/16 x 5/32 x 8-1/16	5/16 x 5/32 x 2-1/4	5.8	3.2
1-5/16	▲	243282	243420	5/16 x 5/32 x 8-1/16	5/16 x 5/32 x 2-1/4	5.8	3.8

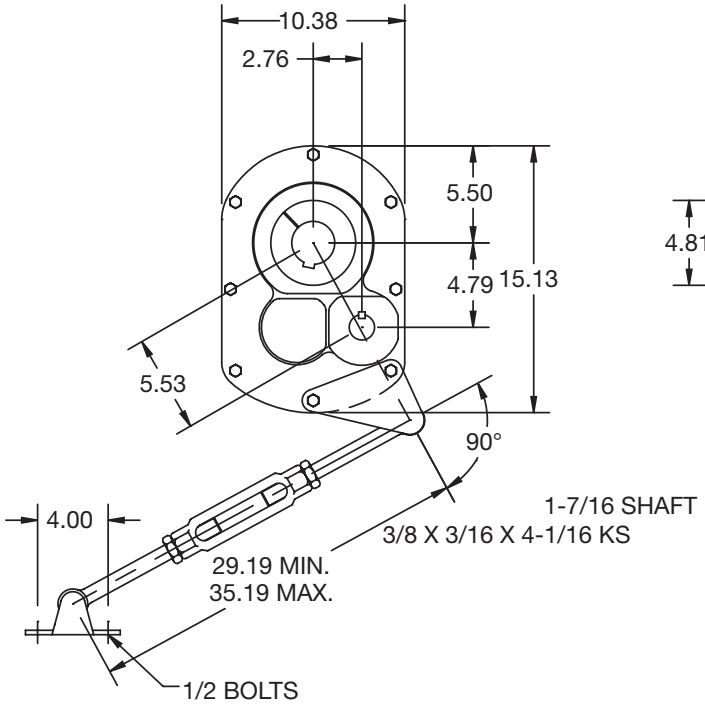
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
○ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

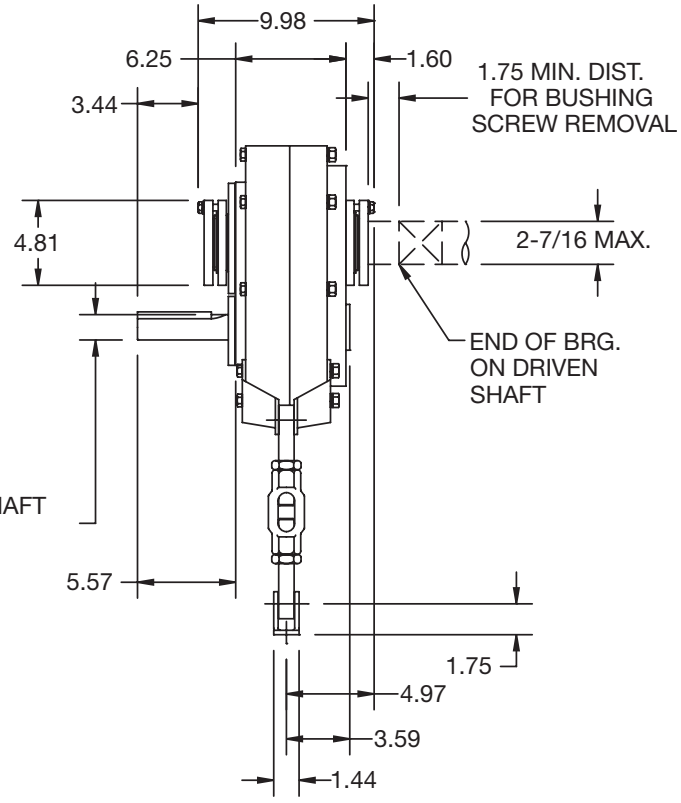
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-177 for drill and tap information required to mount to reducer.

Courtesy of:
Screw Conveyor Parts

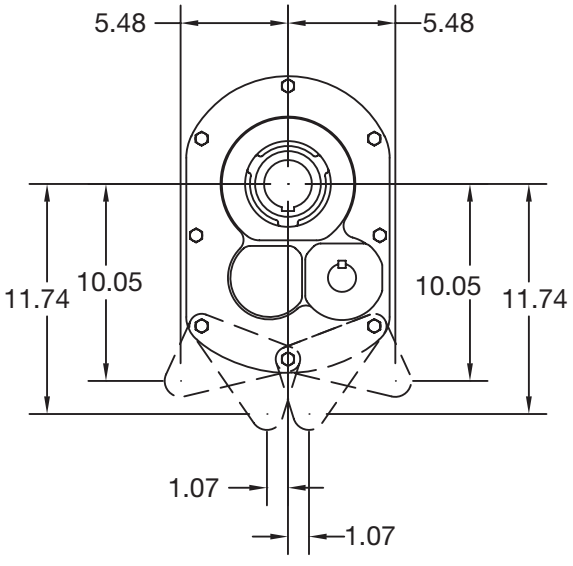
Torque-Arm Shaft Mount Speed Reducers

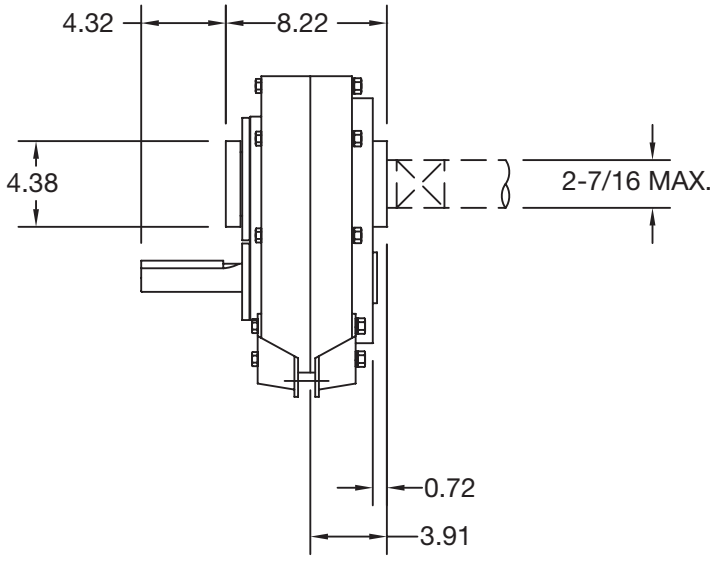
TXT4B - Double Reduction Taper Bushed





TXT4B - Double Reduction Straight Bore





FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT4B Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT409BT	244525	207D09	9.67	139
TXT415BT	244526	207D15	15.13	139
TXT425BT	244527	207D25	24.38	139

TXT4B Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT409BS	244537 ♣	207D09	9.67	139
TXT415BS	244538	207D15	15.13	139
TXT425BS	244539	207D25	24.38	139

Accessories for TXT4B Reducers

Description	Part Number	Weight
TA4M Standard Motor Mount (143T-286T)	244391	75
TA4ML Long Motor Mount (143T-286T)	244392	75
TAB4 Bottom Motor Mount (143T-326T) ♠ ♣	244404	55
TXT4A Backstop Assembly	244106	1.2
TXT4D TA Reducer Belt Guard (143T-286T)	244395	54
TXT4D TA Reducer Belt Guard for Long Motor Mount (143T-286T) ♠ ♣	244151	65
TXT4A Cooling Fan Assembly	272594	3
TXT4A Taconite Auxiliary Seal Kit ♥	244676	7.7
TXT4 Lube Kit	LUBEKITTXT4	10.4

TXT4 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
2-7/16	(Max.)	244115	◆	5/8 x 5/16 x 9-1/32	5/8 x 5/16 x 3-3/8	5.8	–
2-1/4	▲	244113	244430	1/2 x 1/4 x 9-1/32	1/2 x 1/4 x 3-3/8	6.3	1.2
2-3/16	▲	244111	244429	1/2 x 1/4 x 9-1/32	1/2 x 1/4 x 3-3/8	6.7	1.5
2-1/8	▲	244109	244428	1/2 x 1/4 x 9-1/32	1/2 x 1/4 x 3-3/8	7.0	2.6
2	▲	244095	244427	1/2 x 1/4 x 9-1/32	1/2 x 1/4 x 4	7.1	2.6
1-15/16	▲	244093	244426	1/2 x 1/4 x 9-1/32	1/2 x 1/4 x 4	7.4	3.5
1-3/4	▲	244087	244424	3/8 x 3/16 x 9-1/32	3/8 x 3/16 x 2-7/16	8.0	3.6
1-11/16	▲	244085	244423 ♣	3/8 x 3/16 x 9-1/32	3/8 x 3/16 x 2-7/16	8.3	3.6
1-1/2	▲	244081	244421	3/8 x 3/16 x 9-1/32	3/8 x 3/16 x 2-7/16	8.3	4.1
1-7/16	▲	244079	244420	3/8 x 3/16 x 9-1/32	3/8 x 3/16 x 2-7/16	8.8	4.1

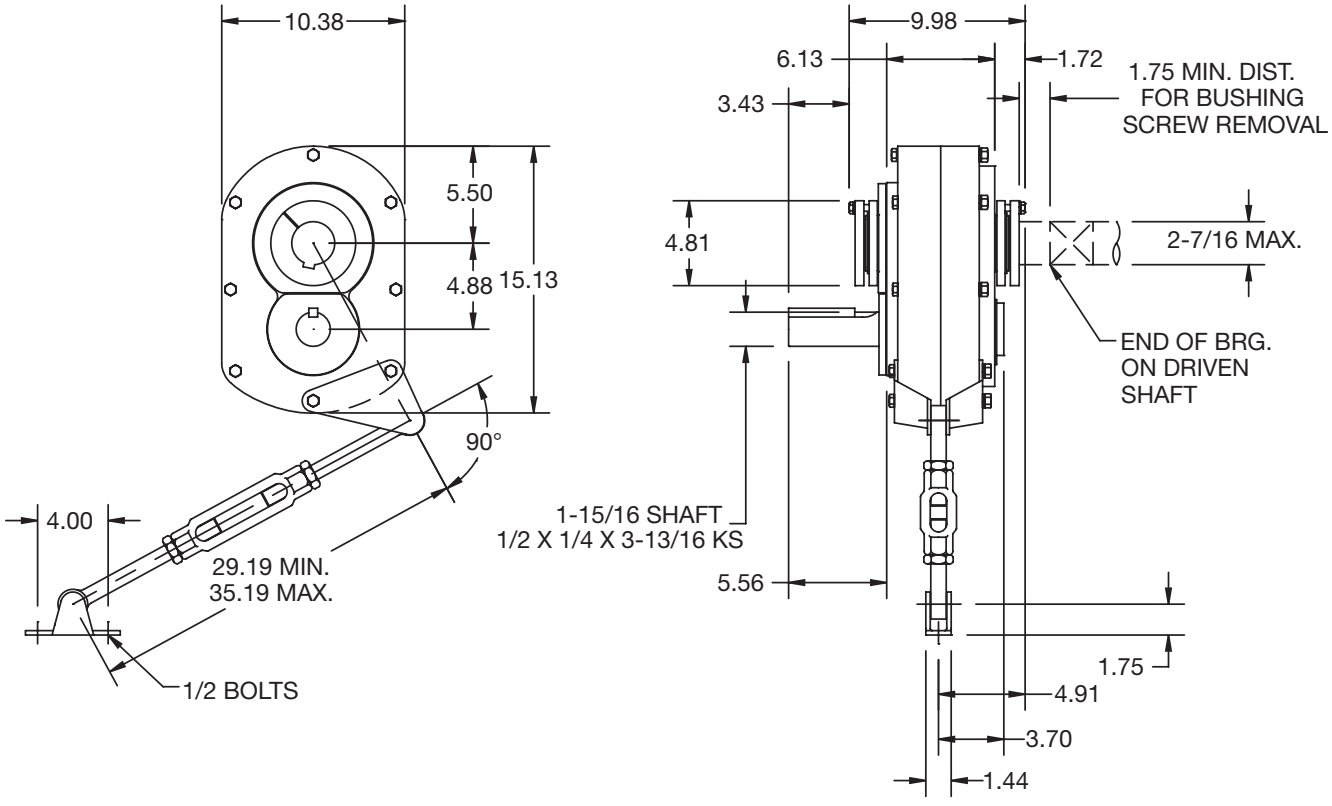
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-177 for drill and tap information required to mount to reducer.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

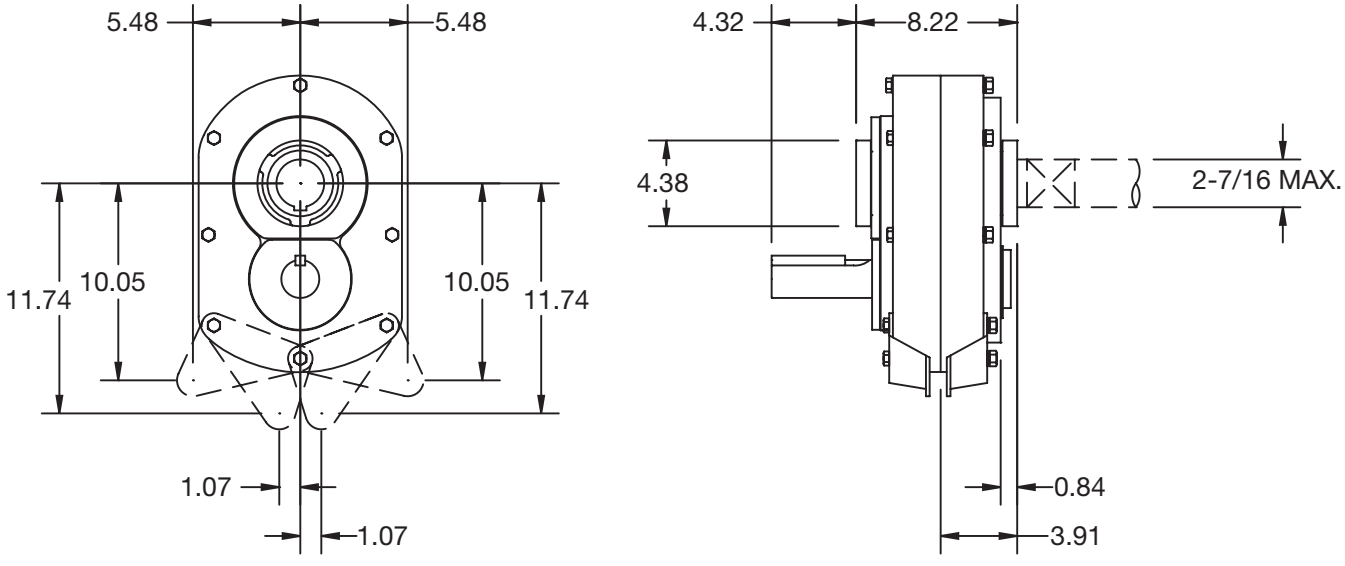
Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT405A - Single Reduction Taper Bushed



TXT405A - Single Reduction Straight Bore



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT405A Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT405AT	254200	207S05	5.65	122

TXT405A Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT405AS	254204	207S05	5.65	122

Accessories for TXT405A Reducers

Description	Part Number	Weight
TA4M Standard Motor Mount (143T-286T)	244391	75
TA4ML Long Motor Mount (143T-286T)	244392	75
TAB4 Bottom Motor Mount (143T-326T) ♠ ♣	244404	55
TXT405A Backstop Assembly	244148	.9
TXT4S TA Reducer Belt Guard (143T-286T)	244397	54
TXT4S TA Reducer Belt Guard for Long Motor Mount (143T-286T) ♠ ♣	244164	65
TXT405A Cooling Fan Assembly	254268	3
TXT405A Taconite Auxiliary Seal Kit ♥	254267	7.9
TXT405 Lube Kit	LUBEKITTXT405	12.7

TXT4 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
2-7/16	(Max.)	244115	◆	5/8 x 5/16 x 9-1/32	5/8 x 5/16 x 3-3/8	5.8	–
2-1/4	▲	244113	244430	1/2 x 1/4 x 9-1/32	1/2 x 1/4 x 3-3/8	6.3	1.2
2-3/16	▲	244111	244429	1/2 x 1/4 x 9-1/32	1/2 x 1/4 x 3-3/8	6.7	1.5
2-1/8	▲	244109	244428	1/2 x 1/4 x 9-1/32	1/2 x 1/4 x 3-3/8	7.0	2.6
2	▲	244095	244427	1/2 x 1/4 x 9-1/32	1/2 x 1/4 x 4	7.1	2.6
1-15/16	▲	244093	244426	1/2 x 1/4 x 9-1/32	1/2 x 1/4 x 4	7.4	3.5
1-3/4	▲	244087	244424	3/8 x 3/16 x 9-1/32	3/8 x 3/16 x 2-7/16	8.0	3.6
1-11/16	▲	244085	244423 ♣	3/8 x 3/16 x 9-1/32	3/8 x 3/16 x 2-7/16	8.3	3.6
1-1/2	▲	244081	244421	3/8 x 3/16 x 9-1/32	3/8 x 3/16 x 2-7/16	8.3	4.1
1-7/16	▲	244079	244420	3/8 x 3/16 x 9-1/32	3/8 x 3/16 x 2-7/16	8.8	4.1

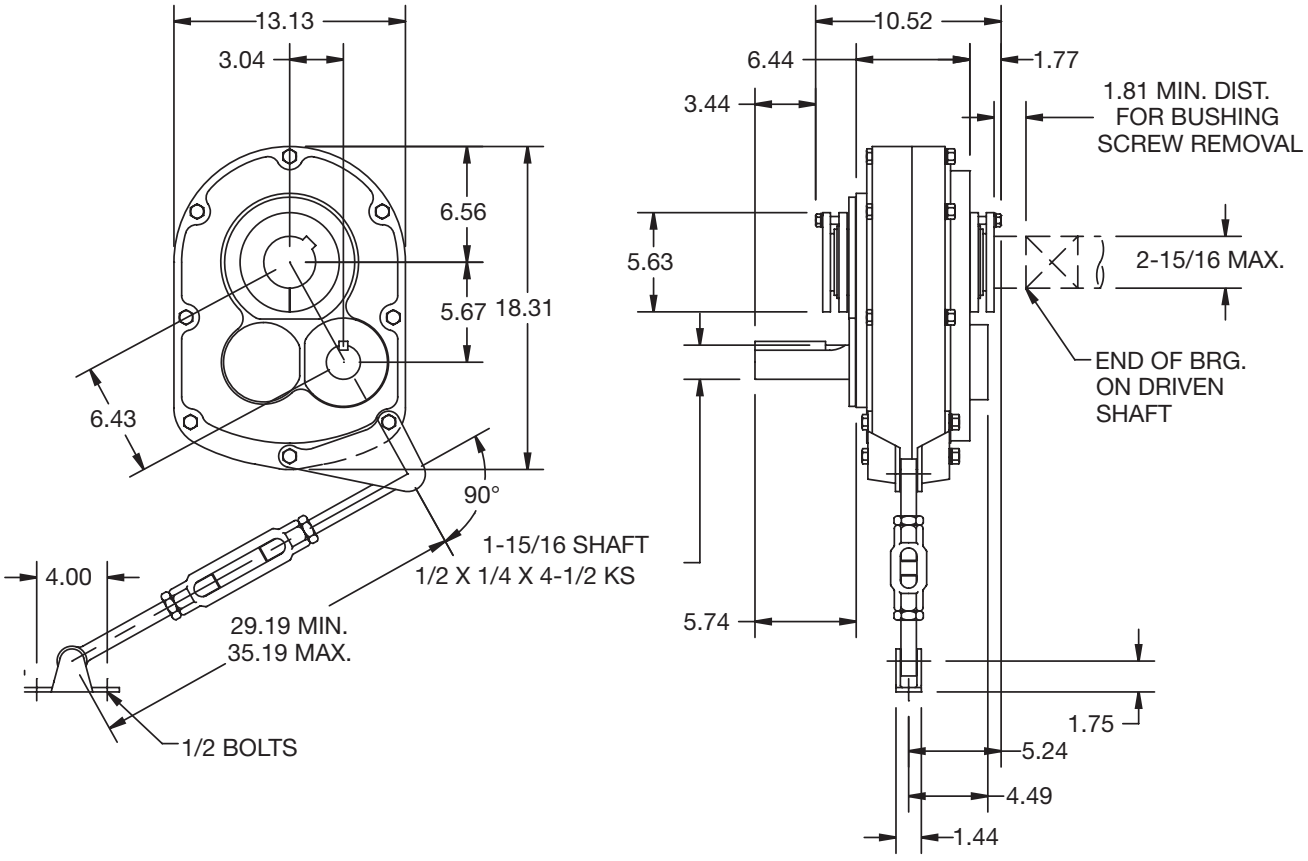
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-177 for drill and tap information required to mount to reducer.

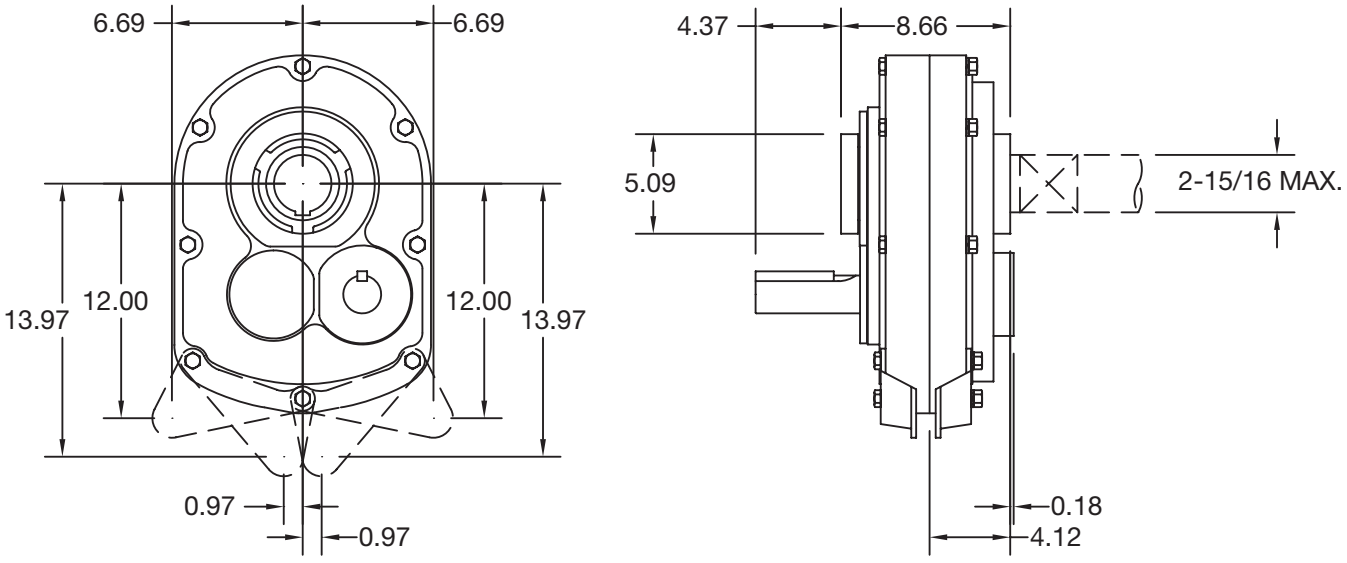
Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Torque-Arm Shaft Mount Speed Reducers

TXT5C - Double Reduction Taper Bushed



TXT5C - Double Reduction Straight Bore



Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT5C Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT509CT	245550	215D09	8.95	207
TXT515CT	245551	215D15	15.40	207
TXT525CT	245552	215D25	25.56	207

TXT5C Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT509CS	245562 ♣	215D09	8.95	207
TXT515CS	245563	215D15	15.40	207
TXT525CS	245564	215D25	25.56	207

Accessories for TXT5C Reducers

Description	Part Number	Weight
TA5M Standard Motor Mount (143T-286T)	245391	76
TA5M Special Motor Mount (324T-326T) ♠ ♣	245393	79
TA5ML Long Motor Mount (143T-286T)	245392	89
TAB5 Bottom Motor Mount (143T-326T) ♠	245405	55
TXT5B Backstop Assembly	245154	2.2
TXT5D TA Reducer Belt Guard (143T-286T)	245387	75
TXT5D TA Reducer Belt Guard for Long Motor Mount (143T-286T) ♣	245102	90
TXT5B Cooling Fan Assembly	272369	3
TXT5B Taconite Auxiliary Seal Kit ♥	245635	11.9
TXT5 Lube Kit	LUBEKITTXT5	18.5

TXT5 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
2-15/16	(Max.)	245112	◆	3/4 x 3/8 x 9-3/8	3/4 x 3/8 x 4-3/8	7.8	–
2-11/16	–	245110	245428	5/8 x 5/16 x 9-3/8	5/8 x 5/16 x 4-3/8	7.9	3.0
2-1/2	▲	245099	245427	5/8 x 5/16 x 9-3/8	5/8 x 5/16 x 4-3/8	8.5	3.4
2-7/16	▲	245094	245426	5/8 x 5/16 x 9-3/8	5/8 x 5/16 x 4-3/8	8.5	4.3
2-1/4	▲	245092	245425	1/2 x 1/4 x 9-3/8	1/2 x 1/4 x 3	9.2	4.7
2-3/16	▲	245090	245424	1/2 x 1/4 x 9-3/8	1/2 x 1/4 x 3	10.0	5.6
2	▲	245088	245423	1/2 x 1/4 x 9-3/8	1/2 x 1/4 x 3	10.2	5.9
1-15/16	▲	245086	245422	1/2 x 1/4 x 9-3/8	1/2 x 1/4 x 3	10.3	6.1

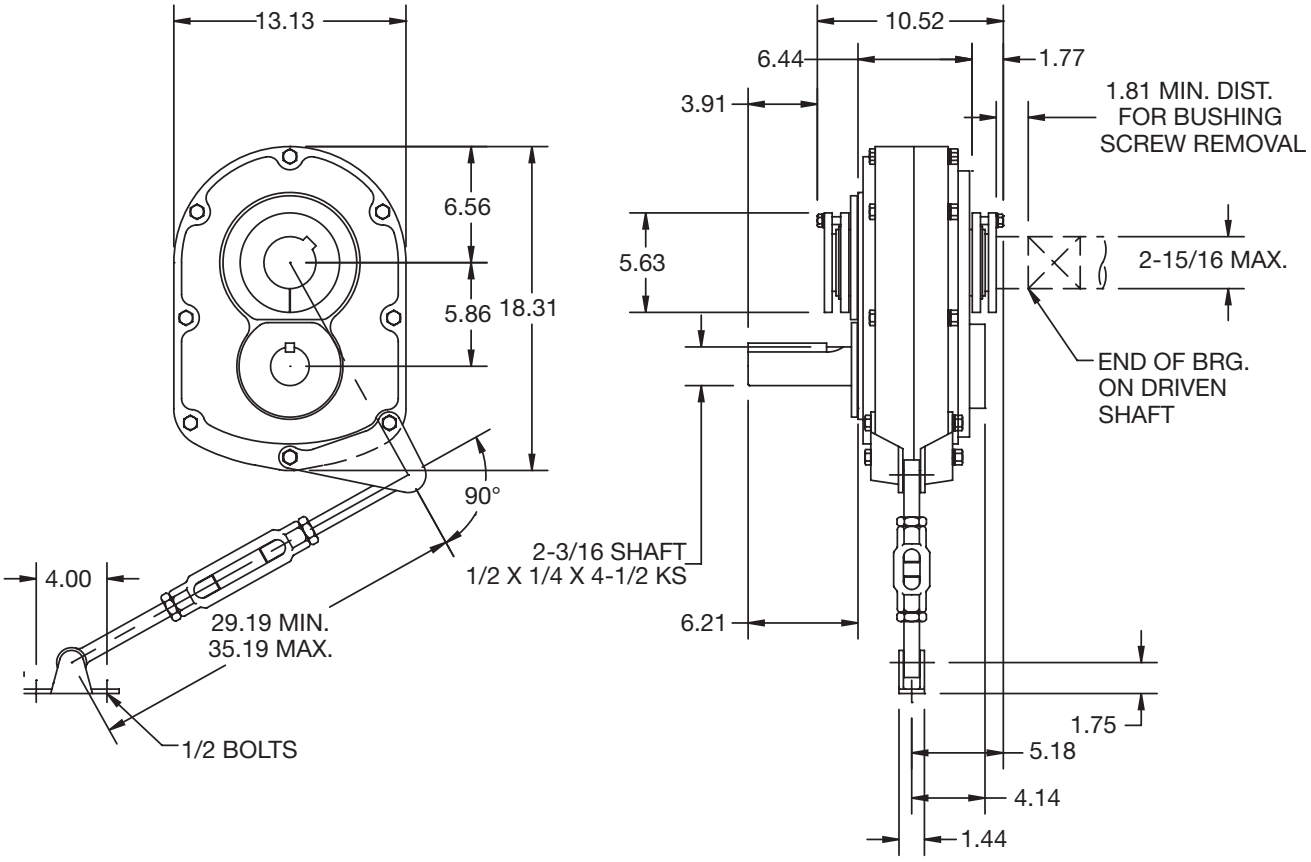
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-177 for drill and tap information required to mount to reducer.

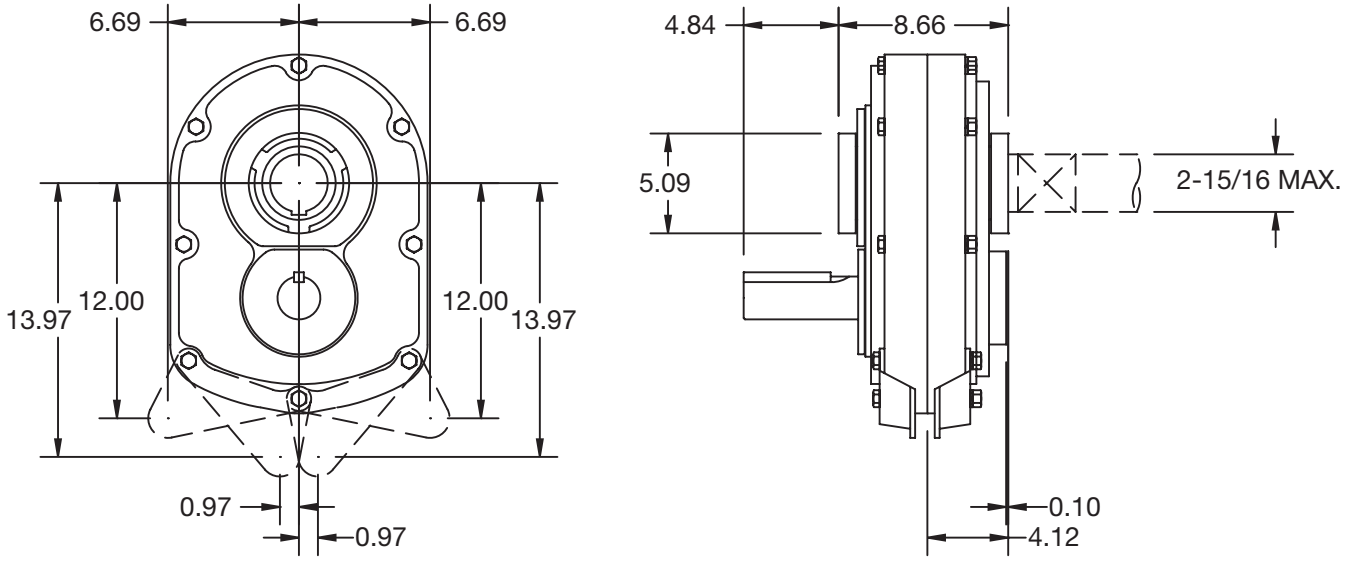
Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT505A - Single Reduction Taper Bushed



TXT505A - Single Reduction Straight Bore



FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT505A Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT505AT	255200	215S05	5.67	182

TXT505A Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT505AS	255204	215S05	5.67	182

Accessories for TXT505A Reducers

Description	Part Number	Weight
TA5M Standard Motor Mount (143T-286T)	245391	76
TA5M Special Motor Mount (324T-326T) ♠ ♣	245393	79
TA5ML Long Motor Mount (143T-286T)	245392	89
TAB5 Bottom Motor Mount (143T-326T) ♠	245405	55
TXT505A Backstop Assembly	246101	1.8
TXT5S TA Reducer Belt Guard (143T-286T)	245389	59
TXT5S TA Reducer Belt Guard for Long Motor Mount (143T-286T) ♣	245162	90
TXT505A Cooling Fan Assembly	255231	3
TXT505A Taconite Auxiliary Seal Kit ♥	255230	12.3
TXT505 Lube Kit	LUBEKITTXT505	18.5

TXT5 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
2-15/16	(Max.)	245112	◆	3/4 x 3/8 x 9-3/8	3/4 x 3/8 x 4-3/8	7.8	–
2-11/16	–	245110	245428	5/8 x 5/16 x 9-3/8	5/8 x 5/16 x 4-3/8	7.9	3.0
2-1/2	▲	245099	245427	5/8 x 5/16 x 9-3/8	5/8 x 5/16 x 4-3/8	8.5	3.4
2-7/16	▲	245094	245426	5/8 x 5/16 x 9-3/8	5/8 x 5/16 x 4-3/8	8.5	4.3
2-1/4	▲	245092	245425	1/2 x 1/4 x 9-3/8	1/2 x 1/4 x 3	9.2	4.7
2-3/16	▲	245090	245424	1/2 x 1/4 x 9-3/8	1/2 x 1/4 x 3	10.0	5.6
2	▲	245088	245423	1/2 x 1/4 x 9-3/8	1/2 x 1/4 x 3	10.2	5.9
1-15/16	▲	245086	245422	1/2 x 1/4 x 9-3/8	1/2 x 1/4 x 3	10.3	6.1

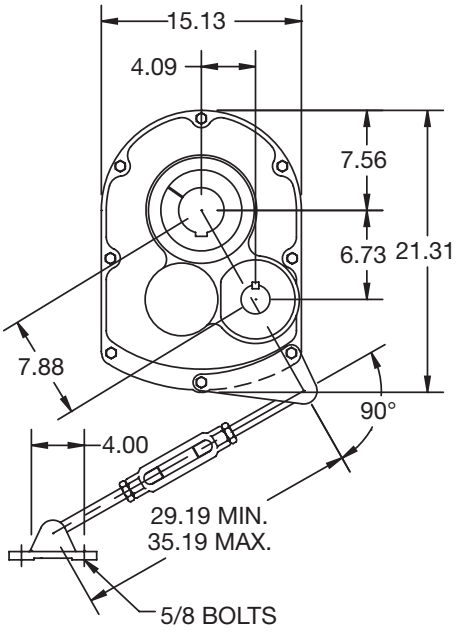
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

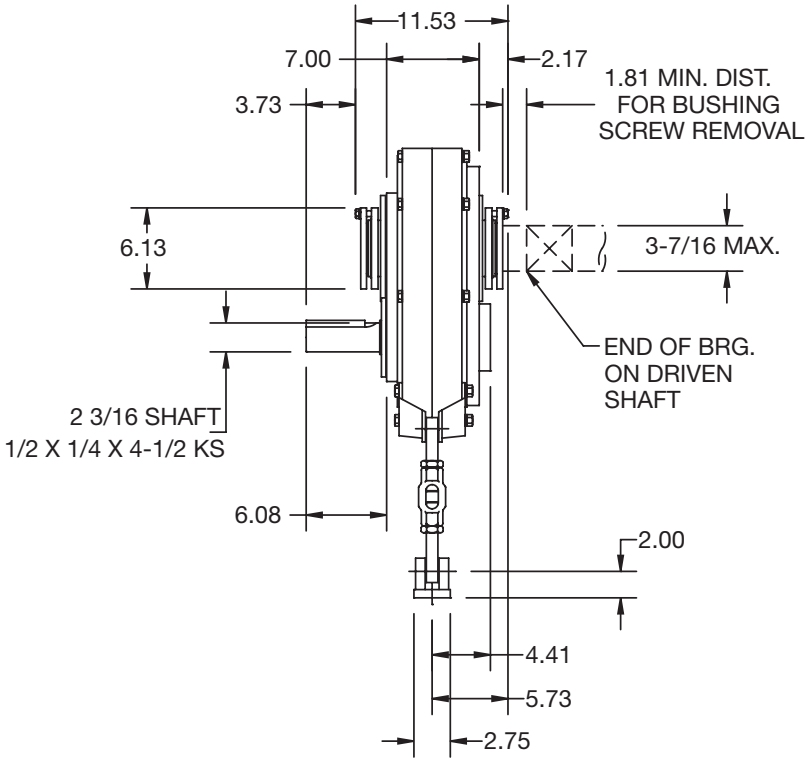
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-177 for drill and tap information required to mount to reducer.

Courtesy of:
Screw Conveyor Parts

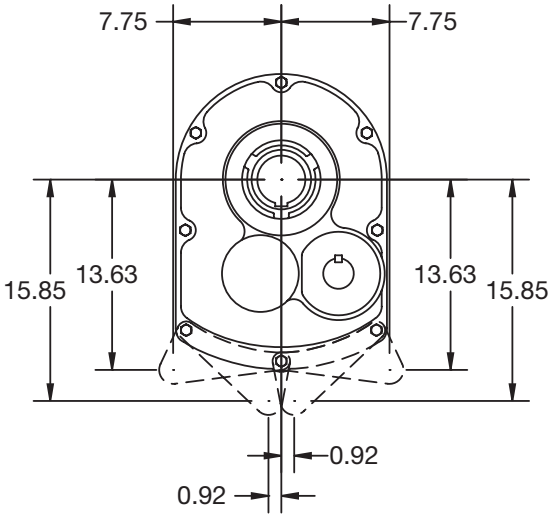
Torque-Arm Shaft Mount Speed Reducers

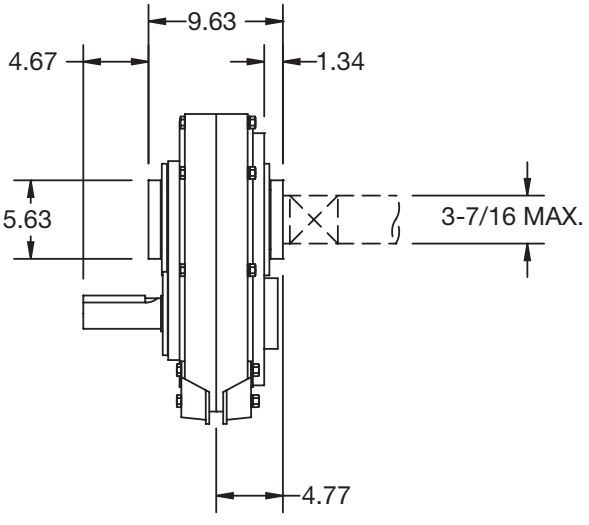
TXT6A - Double Reduction Taper Bushed





TXT6A - Double Reduction Straight Bore





Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT6A Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT609AT	246149 ♣	307D09	9.20	285
TXT615AT	246150	307D15	15.33	285
TXT625AT	246151	307D25	25.13	285

TXT6A Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT609AS	246327 ♣	307D09	9.20	285
TXT615AS	246158 ♣	307D15	15.33	285
TXT625AS	246159	307D25	25.13	285

Accessories for TXT6A Reducers

Description	Part Number	Weight
TA6M Standard Motor Mount (143T-326T)	246391	99
TA6M Special Motor Mount (364T) ♣ ♠	246388	110
TA6ML Long Motor Mount (143T-326T)	246390	100
TAB6 Bottom Motor Mount (182T-326T) ♠	246392	84
TXT6 Backstop Assembly	246092	2.5
TXT6D TA Reducer Belt Guard (143T-326T)	246366	83
TXT6D TA Reducer Belt Guard for Long Motor Mount (143T-326T)	246147	100
TXT6 Cooling Fan Assembly	272325	3
TXT6 Taconite Auxiliary Seal Kit ♥	272450	17.7
TXT6 Lube Kit	LUBEKITTXT6	20.8

TXT6 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
3-7/16	(Max.)	246268	◆	7/8 x 7/16 x 10-11/16	7/8 x 7/16 x 5-7/8	9.0	–
3	▲	246283	246427	3/4 x 3/8 x 10-11/16	3/4 x 3/8 x 5-7/8	11.3	4.6
2-15/16	▲	246267	246426	3/4 x 3/8 x 10-11/16	3/4 x 3/8 x 5-7/8	11.6	6.7
2-7/8	▲	246266	246425	3/4 x 3/8 x 10-11/16	3/4 x 3/8 x 5-7/8	12.2	6.7
2-11/16	▲	246265	246424	5/8 x 5/16 x 10-11/16	5/8 x 5/16 x 5-7/8	12.9	6.7
2-1/2	▲	246264	246423	5/8 x 5/16 x 10-11/16	5/8 x 5/16 x 3-1/2	14.0	8.2
2-7/16	▲	246263	246422	5/8 x 5/16 x 10-11/16	5/8 x 5/16 x 3-1/2	14.4	8.5
2-1/4	▲	246262	246421	1/2 x 1/4 x 10-11/16	1/2 x 1/4 x 3-1/2	14.9	9.8
2-3/16	▲	246261	246420 ♣	1/2 x 1/4 x 10-11/16	1/2 x 1/4 x 3-1/2	15.3	11.0

♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

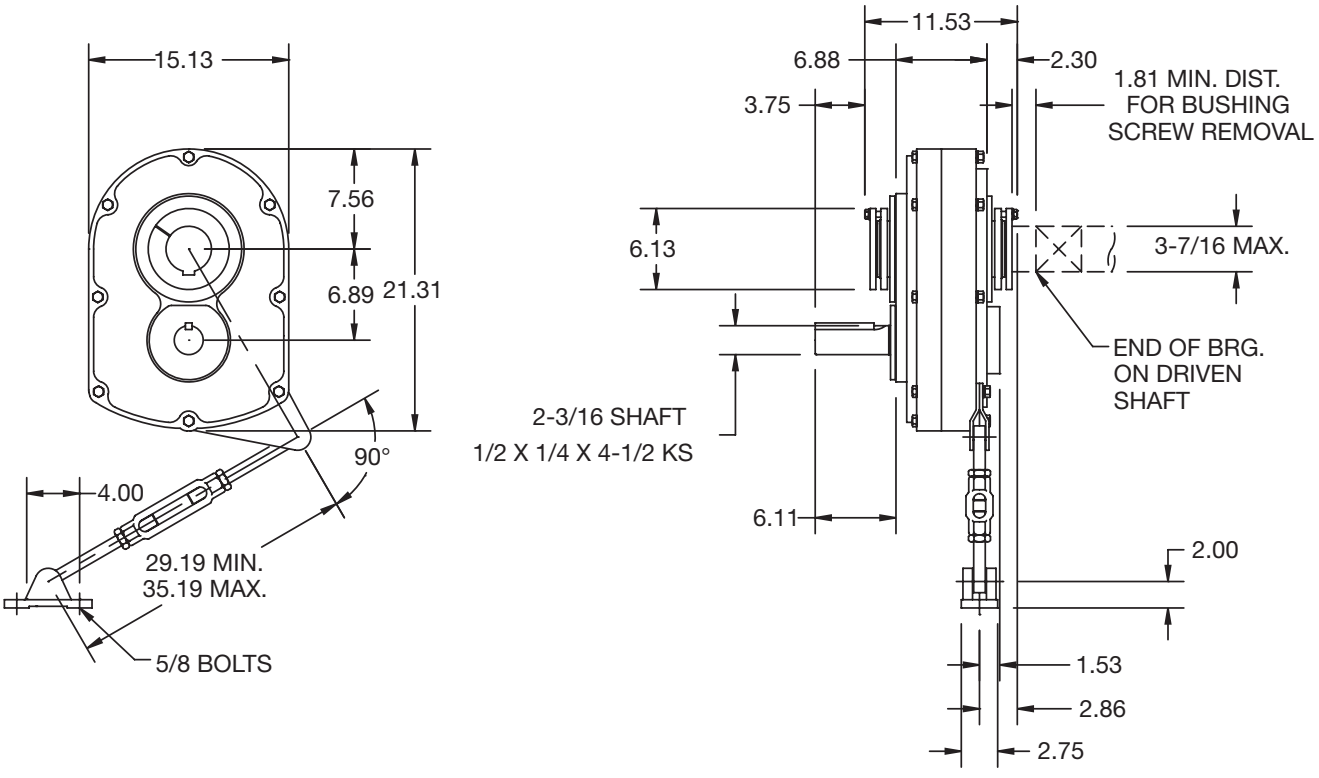
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-178 for drill and tap information required to mount to reducer.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

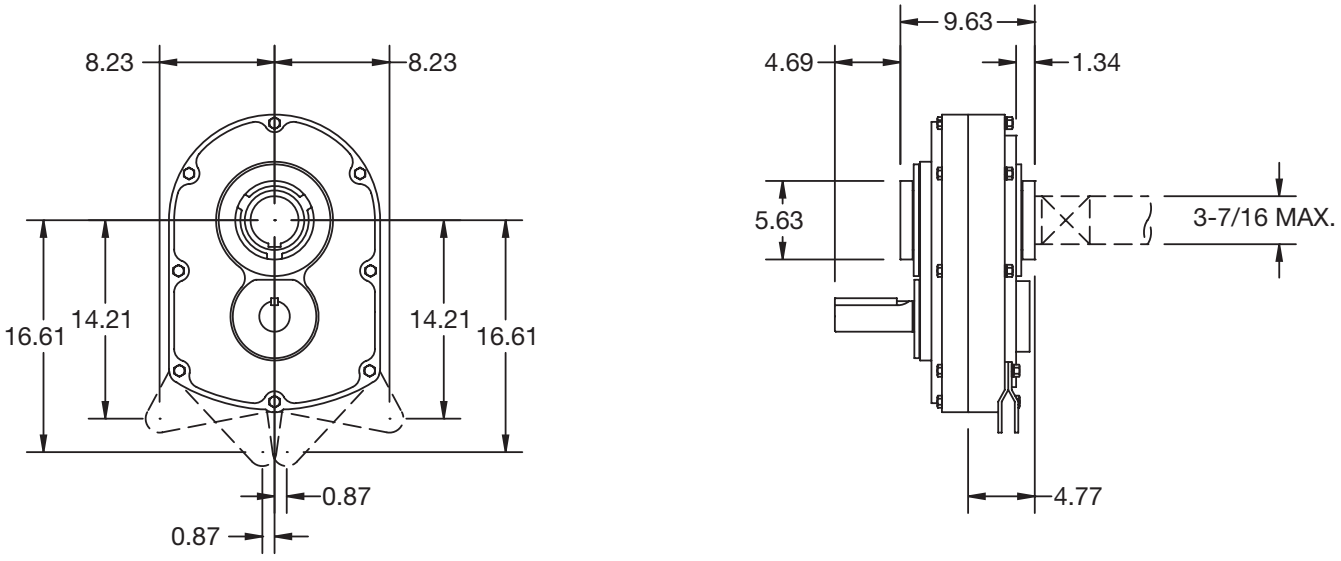
Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT605 - Single Reduction Taper Bushed



TXT605 - Single Reduction Straight Bore



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT605 Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT605T	246380	307S05	5.67	251

TXT605 Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT605S	246382	307S05	5.67	251

Accessories for TXT605 Reducers

Description	Part Number	Weight
TA6M Standard Motor Mount (143T-326T)	246391	99
TA6ML Long Motor Mount (143T-326T)	246390	100
TAB6 Bottom Motor Mount (182T-326T) ♠	246392	84
TXT605 Backstop Assembly	246092	2.5
TXT6S TA Reducer Belt Guard (143T-326T)	246368	95
TXT6S TA Reducer Belt Guard for Long Motor Mount (143T-326T) ♣	246132	100
TXT605 Cooling Fan Assembly ♣	272681	3
TXT605 Taconite Auxiliary Seal Kit ♥	272450	17.7
TXT605 Lube Kit	LUBEKITTXT605	24.3

TXT6 Bushing Assemblies ●

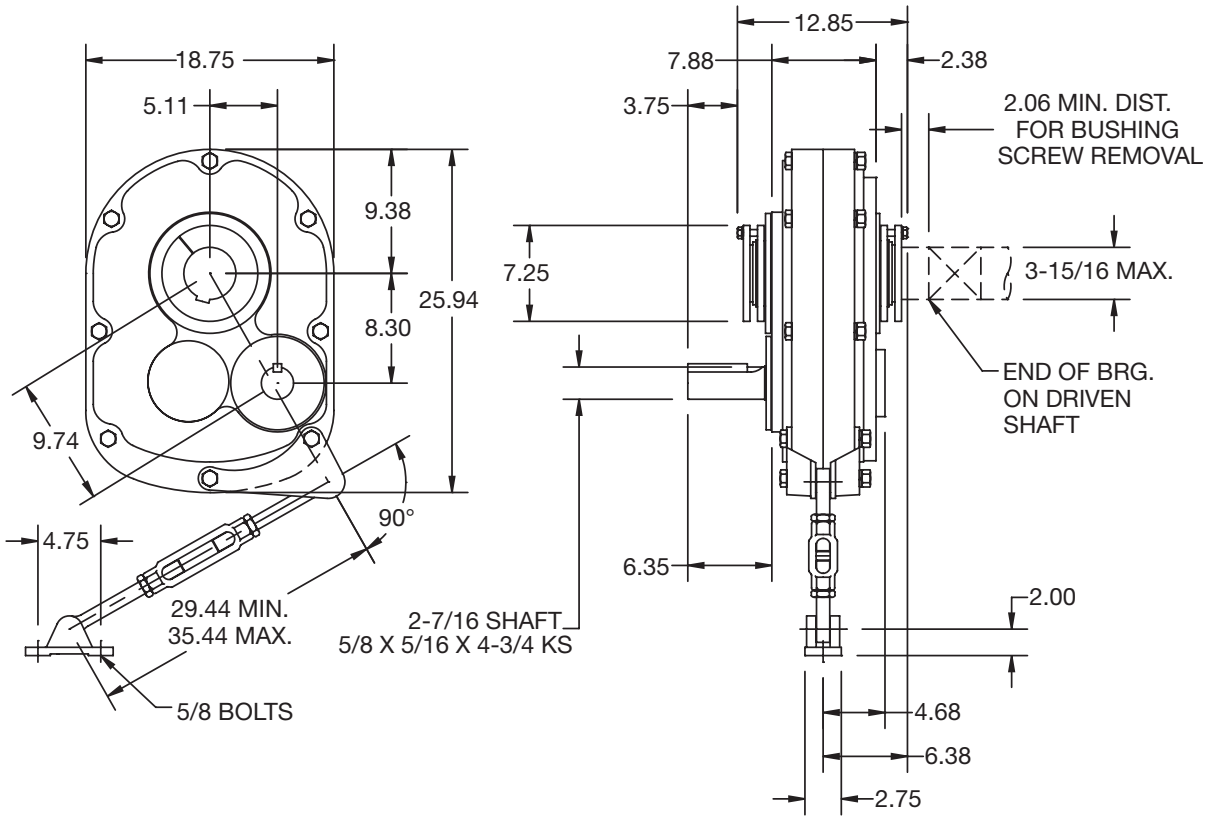
Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
3-7/16	(Max.)	246268	◆	7/8 x 7/16 x 10-11/16	7/8 x 7/16 x 5-7/8	9.0	–
3	▲	246283	246427	3/4 x 3/8 x 10-11/16	3/4 x 3/8 x 5-7/8	11.30	4.6
2-15/16	▲	246267	246426	3/4 x 3/8 x 10-11/16	3/4 x 3/8 x 5-7/8	11.60	6.7
2-7/8	▲	246266	246425	3/4 x 3/8 x 10-11/16	3/4 x 3/8 x 5-7/8	12.20	6.7
2-11/16	▲	246265	246424	5/8 x 5/16 x 10-11/16	5/8 x 5/16 x 5-7/8	12.90	6.7
2-1/2	▲	246264	246423	5/8 x 5/16 x 10-11/16	5/8 x 5/16 x 3-1/2	14.0	8.2
2-7/16	▲	246263	246422	5/8 x 5/16 x 10-11/16	5/8 x 5/16 x 3-1/2	14.40	8.5
2-1/4	▲	246262	246421	1/2 x 1/4 x 10-11/16	1/2 x 1/4 x 3-1/2	14.90	9.8
2-3/16	▲	246261	246420 ♣	1/2 x 1/4 x 10-11/16	1/2 x 1/4 x 3-1/2	15.30	11.0

♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-178 for drill and tap information required to mount to reducer.

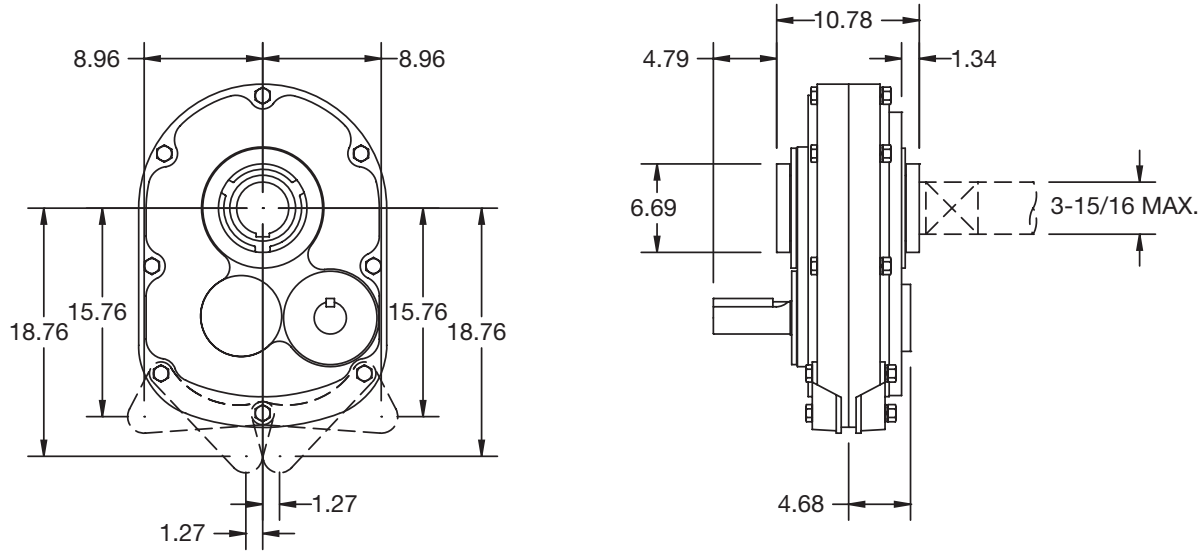
Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT7A - Double Reduction Taper Bushed



TXT7A - Double Reduction Straight Bore



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT7A Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT709AT	247159	315D09	9.61	462
TXT715AT	247160	315D15	15.23	462
TXT725AT	247161	315D25	24.59	462

TXT7A Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT709AS	247327 ♣	315D09	9.61	462
TXT715AS	247168 ♣	315D15	15.23	462
TXT725AS	247169	315D25	24.59	462

Accessories for TXT7A Reducers

Description	Part Number	Weight
TA7M Standard Motor Mount (143T-365T)	247395	110
TA7ML Long Motor Mount (143T-326T) ♣	247396	100
TAB7 Bottom Motor Mount (182T-326T) ♠ ♣	247404	105
TXT7 Backstop Assembly	247260	2.8
TXT7D TA Reducer Belt Guard (143T-365T)	247390	90
TXT7D TA Reducer Belt Guard for Long Motor Mount (143T-365T) ♣	247152	108
TXT7 Cooling Fan Assembly	272326	6
TXT7 Taconite Auxiliary Seal Kit ♥	272451	25
TXT7 Lube Kit	LUBEKITTXT7	34.7

TXT7 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
3-15/16	(Max.)	272136	◆	1 x 1/2 x 11-27/32	1 x 1/2 x 4-7/8	13.8	–
3-7/16	–	272135	247428	7/8 x 7/16 x 11-27/32	7/8 x 7/16 x 6-3/8	16.9	7.8
3-3/16	▲	272134	247427	3/4 x 3/8 x 11-27/32	3/4 x 3/8 x 6-3/8	19.2	9.0
3	▲	272133	247426	3/4 x 3/8 x 11-27/32	3/4 x 3/8 x 6-3/8	20.1	10.1
2-15/16	▲	272132	247425	3/4 x 3/8 x 11-27/32	3/4 x 3/8 x 4-7/8	21.3	10.1
2-11/16	▲	272147	247422	5/8 x 5/16 x 11-27/32	5/8 x 5/16 x 3-1/2	23.0	14.0
2-7/16	▲	272125	247420	5/8 x 5/16 x 11-27/32	5/8 x 5/16 x 3-1/2	24.2	14.2

♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

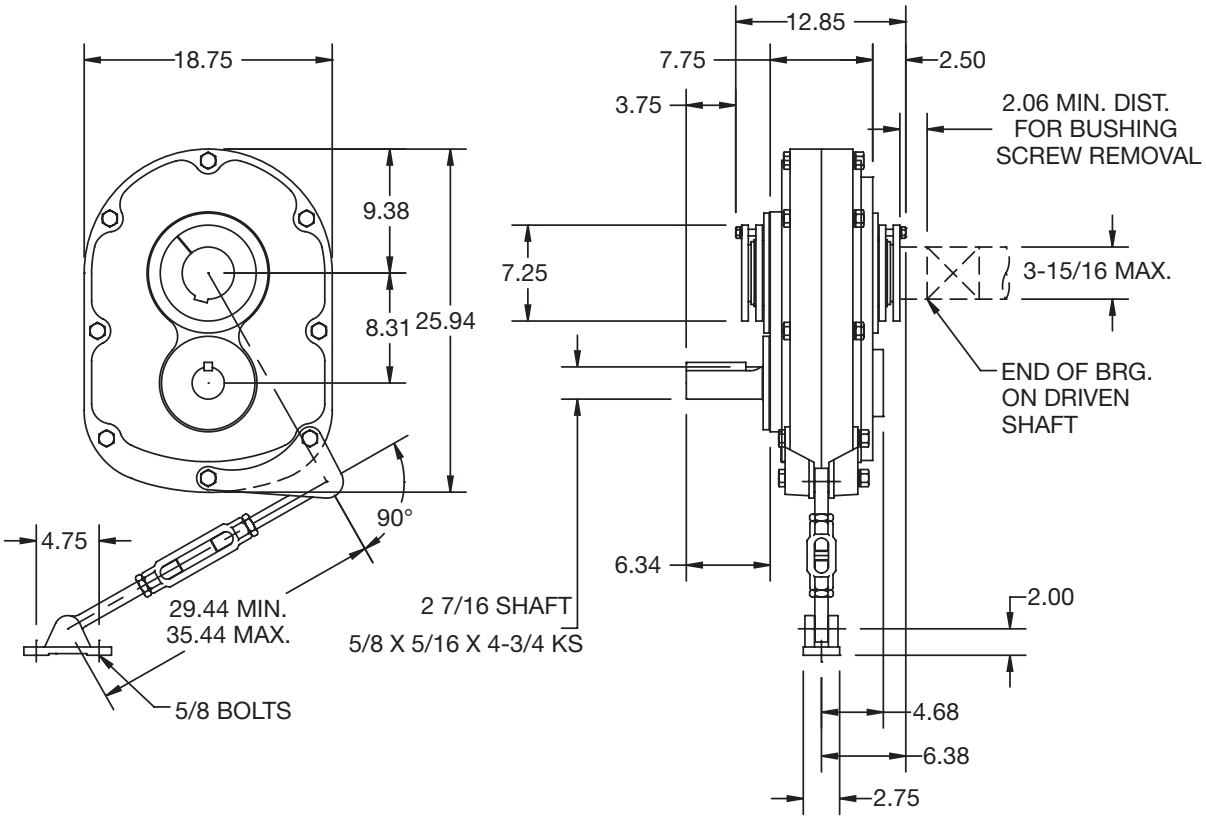
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-178 for drill and tap information required to mount to reducer.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

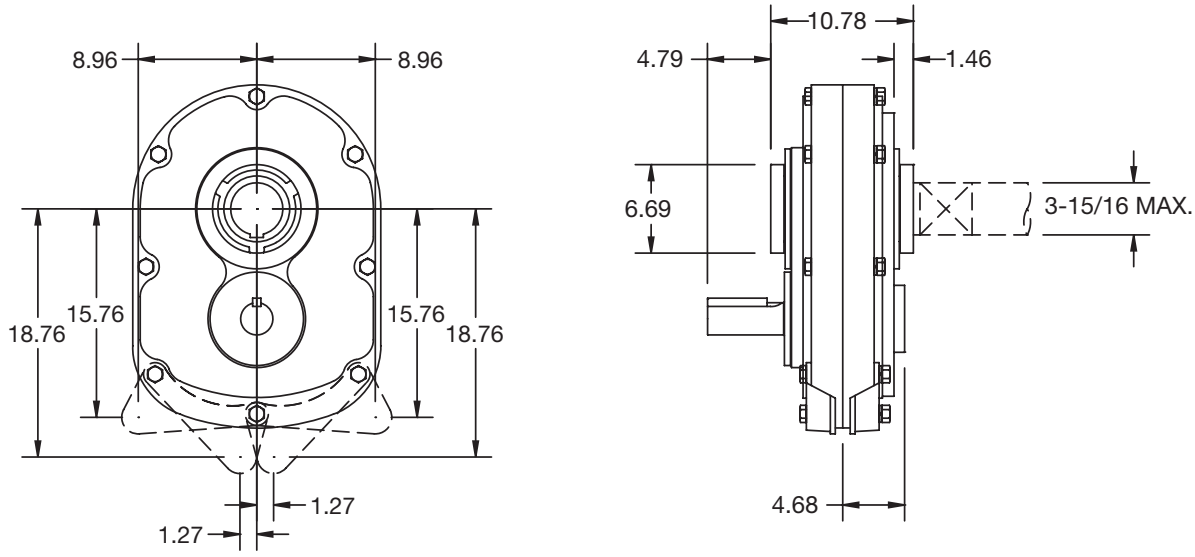
Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT705 - Single Reduction Taper Bushed



TXT705 - Single Reduction Straight Bore



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT705 Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT705T	247285 ♣	315S05	5.36	410

TXT705 Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT705S	247287 ♣	315S05	5.36	410

Accessories for TXT705 Reducers

Description	Part Number	Weight
TA7M Standard Motor Mount (143T-365T)	247395	110
TA7ML Long Motor Mount (143T-326T) ♣	247396	100
TAB7 Bottom Motor Mount (182T-326T) ♠ ♣	247404	105
TXT705 Backstop Assembly	247260	2.80
TXT7S TA Reducer Belt Guard (143T-365T)	247392	112
TXT7S TA Reducer Belt Guard for Long Motor Mount (143T-365T) ♣	247146	135
TXT705 Cooling Fan Assembly ♣	272685	6
TXT705 Taconite Auxiliary Seal Kit ♥	272451	25
TXT705 Lube Kit	LUBEKITTXT705	39.3

TXT7 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
3-15/16	(Max.)	272136	◆	1 x 1/2 x 11-27/32	1 x 1/2 x 4-7/8	13.8	–
3-7/16	–	272135	247428	7/8 x 7/16 x 11-27/32	7/8 x 7/16 x 6-3/8	16.9	7.8
3-3/16	▲	272134	247427	3/4 x 3/8 x 11-27/32	3/4 x 3/8 x 6-3/8	19.2	9.0
3	▲	272133	247426	3/4 x 3/8 x 11-27/32	3/4 x 3/8 x 6-3/8	20.1	10.1
2-15/16	▲	272132	247425	3/4 x 3/8 x 11-27/32	3/4 x 3/8 x 4-7/8	21.3	10.1
2-11/16	▲	272147	247422	5/8 x 5/16 x 11-27/32	5/8 x 5/16 x 3-1/2	23.0	14.0
2-7/16	▲	272125	247420	5/8 x 5/16 x 11-27/32	5/8 x 5/16 x 3-1/2	24.2	14.2

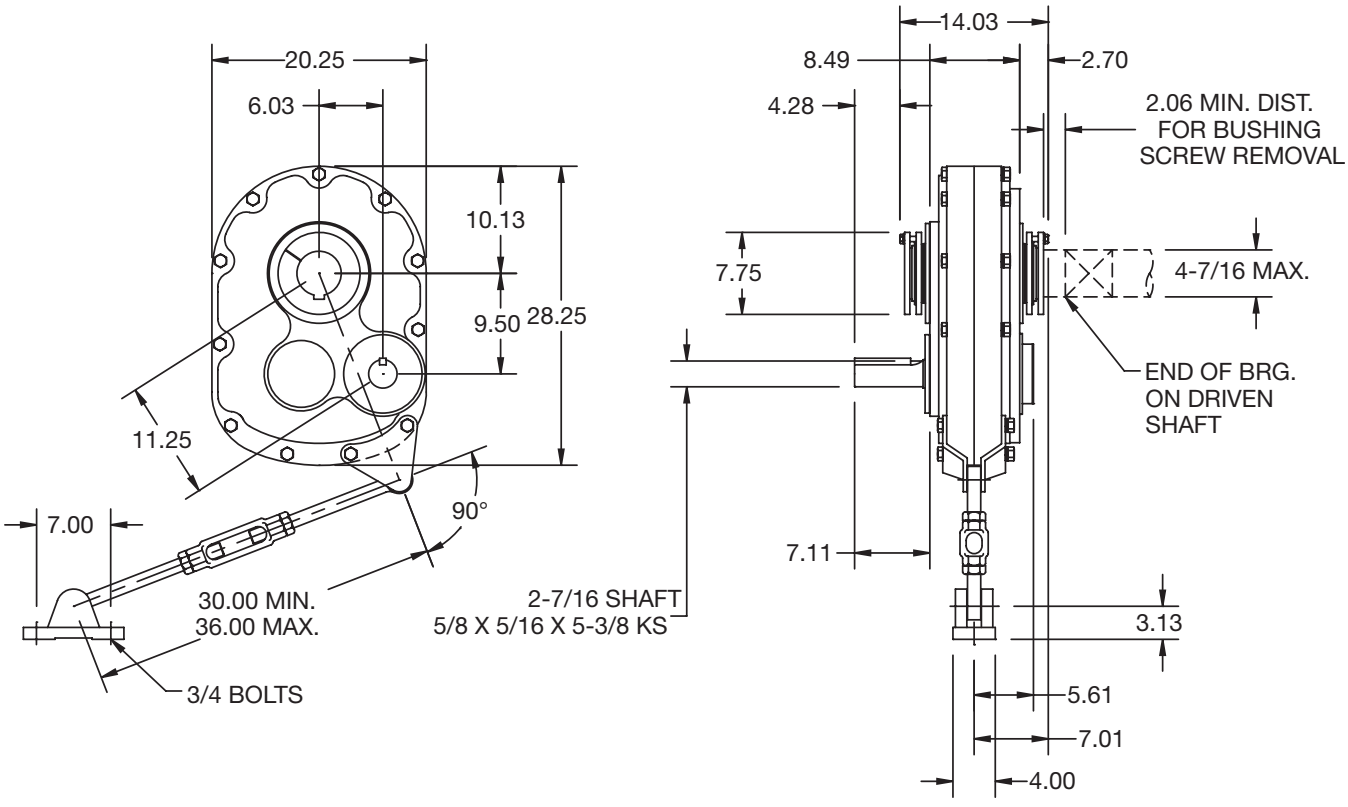
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-178 for drill and tap information required to mount to reducer.

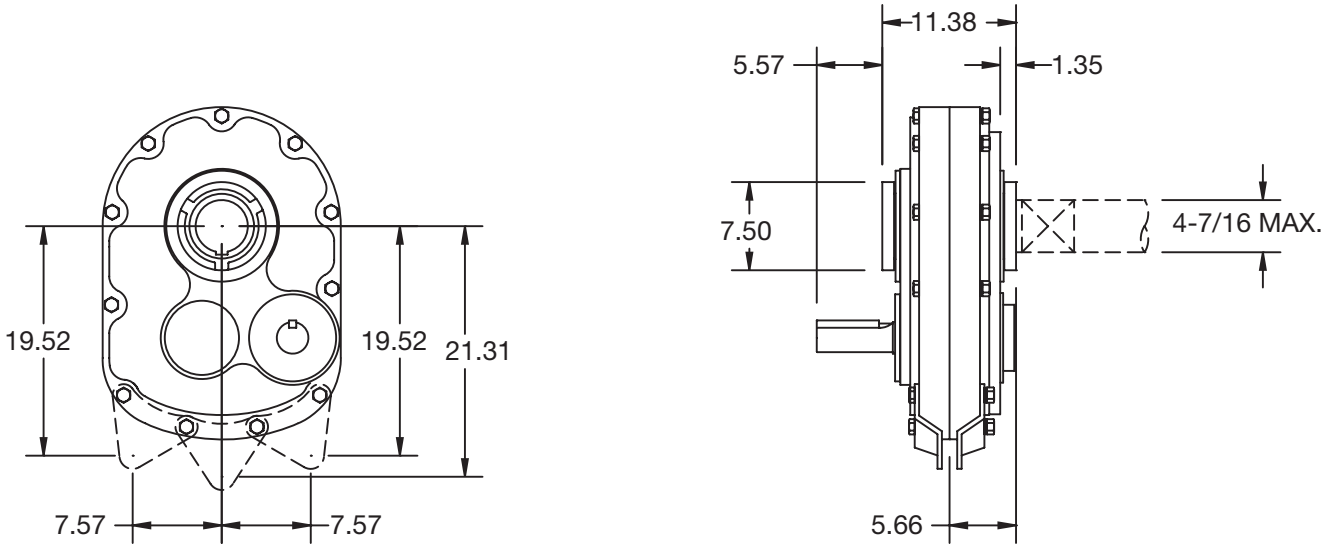
Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT8A - Double Reduction Taper Bushed



TXT8A - Double Reduction Straight Bore



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT8A Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT815AT	248279	407D15	15.08	633
TXT825AT	248280	407D25	24.62	633

TXT8A Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT815AS	248283 ♣	407D15	15.08	633
TXT825AS	248284	407D25	24.62	633

Accessories for TXT8A Reducers

Description	Part Number	Weight
TA8 Standard Motor Mount (213T-365T)	248401	119
TAB8 Bottom Motor Mount (213T-365T) ♠ ♣	248406	120
TXT8 Backstop Assembly	249260	3.8
TXT8D TA Reducer Belt Guard (213T-365T)	248395	107
TXT8 Cooling Fan Assembly	272327	9
TXT8 Taconite Auxiliary Seal Kit ♥	272452	26.3
TXT8 Lube Kit	LUBEKITTXT8	40.5

TXT8 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
4-7/16	(Max.)	272035	◆	1 x 1/2 x 13-1/16	1 x 1/2 x 6-7/8	15	–
4-3/16	–	272034	248424	1 x 1/2 x 13-1/16	1 x 1/2 x 6-7/8	17	6.8
3-15/16	–	272033	248423	1 x 1/2 x 13-1/16	1 x 1/2 x 6-7/8	20	8.0
3-7/16	▲	272032	248422	7/8 x 7/16 x 13-1/16	7/8 x 7/16 x 6-7/8	25	12
2-15/16	▲	272048	248420	3/4 x 3/8 x 13-1/16	3/4 x 3/8 x 4-3/8	29	19

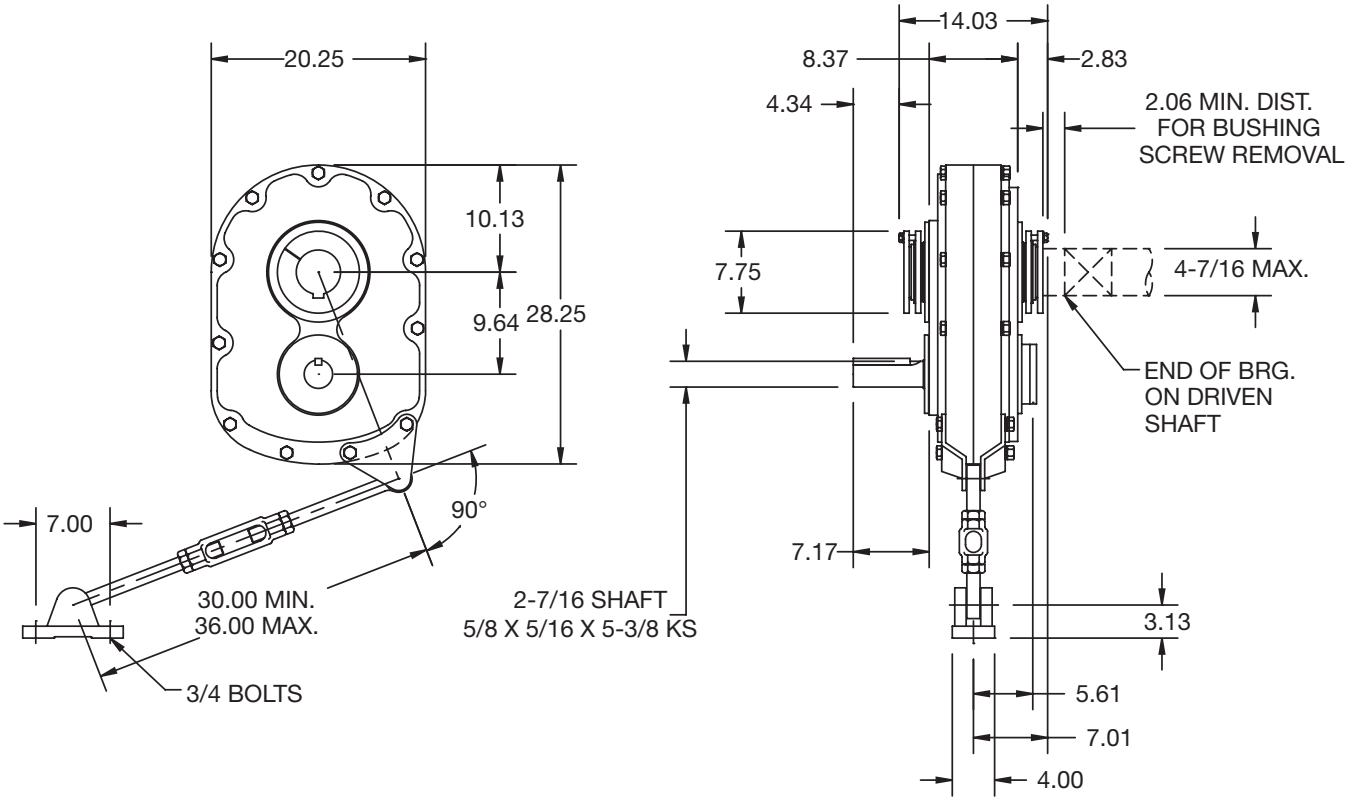
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-178 for drill and tap information required to mount to reducer.

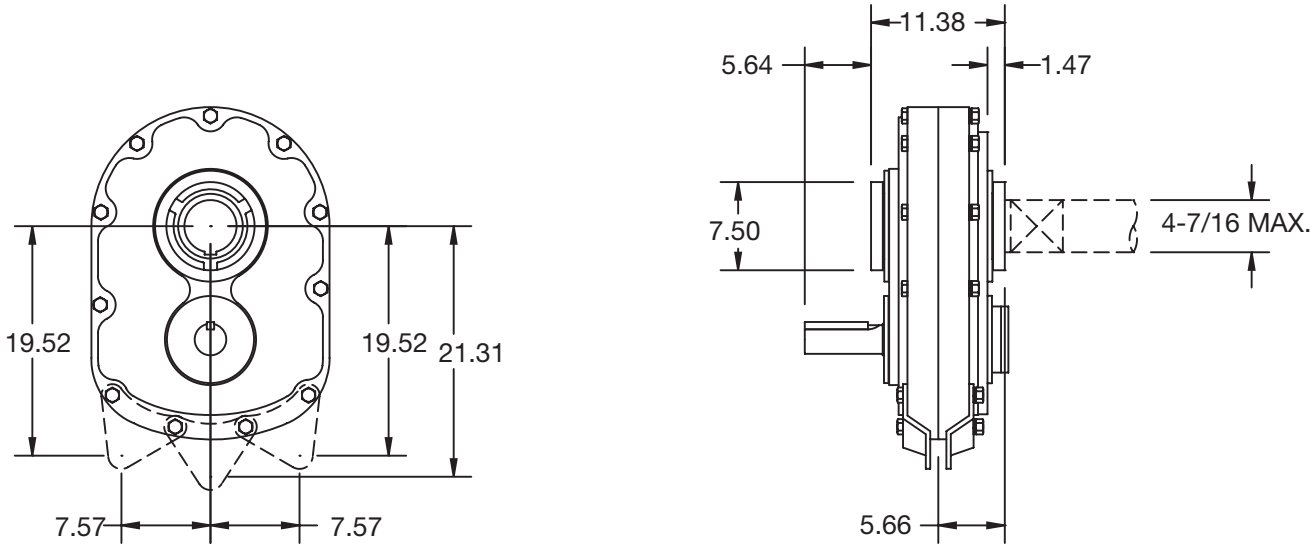
Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT805 - Single Reduction Taper Bushed



TXT805 - Single Reduction Straight Bore



Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT805 Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT805T	248275 ♣	407S05	5.50	557

TXT805 Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT805S	248277 ♣	407S05	5.50	557

Accessories for TXT805 Reducers

Description	Part Number	Weight
TA8 Standard Motor Mount (254T-365T)	248401	119
TAB8 Bottom Motor Mount (213T-365T) ♠ ♣	248406	120
TXT805 Backstop Assembly	250260	5.6
TXT8S TA Reducer Belt Guard (213T-365T)	248397	125
TXT8 Cooling Fan Assembly	272327	9
TXT8 Taconite Auxiliary Seal Kit ♥	272452	26.3
TXT8 Lube Kit	LUBEKITTXT805	45.1

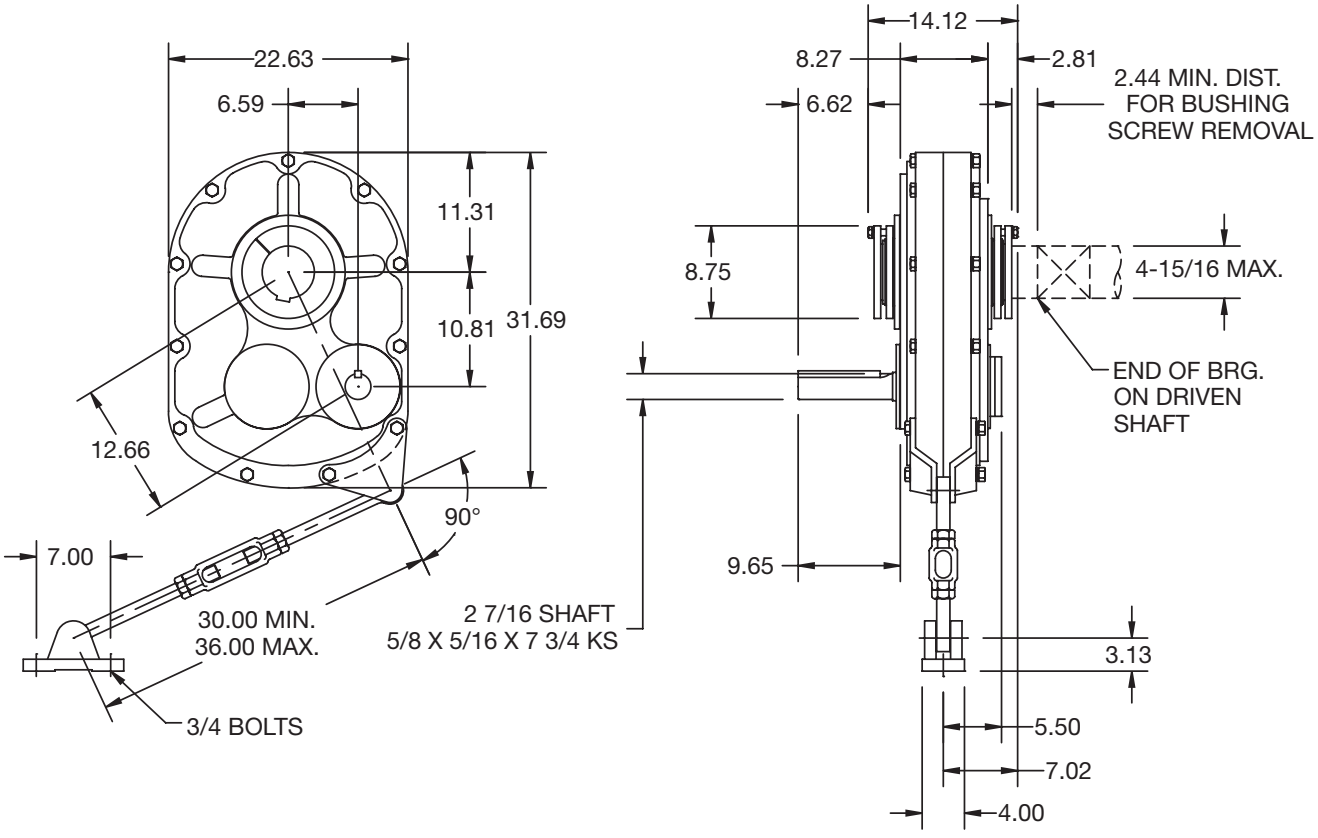
TXT8 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
4-7/16	(Max.)	272035	◆	1 x 1/2 x 13-1/16	1 x 1/2 x 6-7/8	15	–
4-3/16	–	272034	248424	1 x 1/2 x 13-1/16	1 x 1/2 x 6-7/8	17	6.8
3-15/16	–	272033	248423	1 x 1/2 x 13-1/16	1 x 1/2 x 6-7/8	20	8.0
3-7/16	▲	272032	248422	7/8 x 7/16 x 13-1/16	7/8 x 7/16 x 6-7/8	25	12
2-15/16	▲	272048	248420	3/4 x 3/8 x 13-1/16	3/4 x 3/8 x 4-3/8	29	19

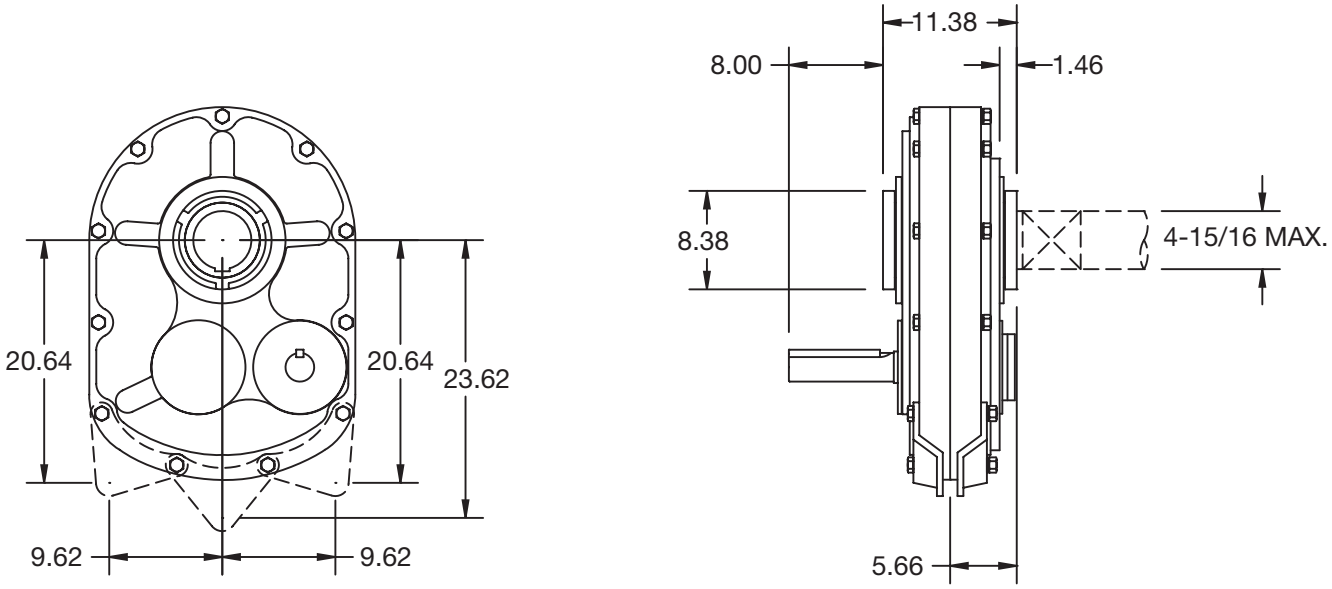
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-178 for drill and tap information required to mount to reducer.

Torque-Arm Shaft Mount Speed Reducers

TXT9A - Double Reduction Taper Bushed



TXT9A - Double Reduction Straight Bore



Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT9A Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT915AT	249269	415D15	15.12	760
TXT926AT	249270	415D26	25.66	760

TXT9A Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT915AS	249273 ♣	415D15	15.12	760
TXT926AS	249274	415D26	25.66	760

Accessories for TXT9A Reducers

Description	Part Number	Weight
TA9 Standard Motor Mount (213T-365T)	249401	120
TA9 Special Motor Mount (404T-405T) ♣ ♠	249399	125
TAB9 Bottom Motor Mount (213T-365T) ♠ ♣	249404	125
TXT9 Backstop Assembly	249260	3.8
TXT9D TA Reducer Belt Guard (213T-365T)	249395	125
TXT9 Cooling Fan Assembly	272328	15
TXT9 Taconite Auxiliary Seal Kit ♥	272453	32.6
TXT9 Lube Kit	LUBEKITTXT9	53.2

TXT9 Bushing Assemblies ●

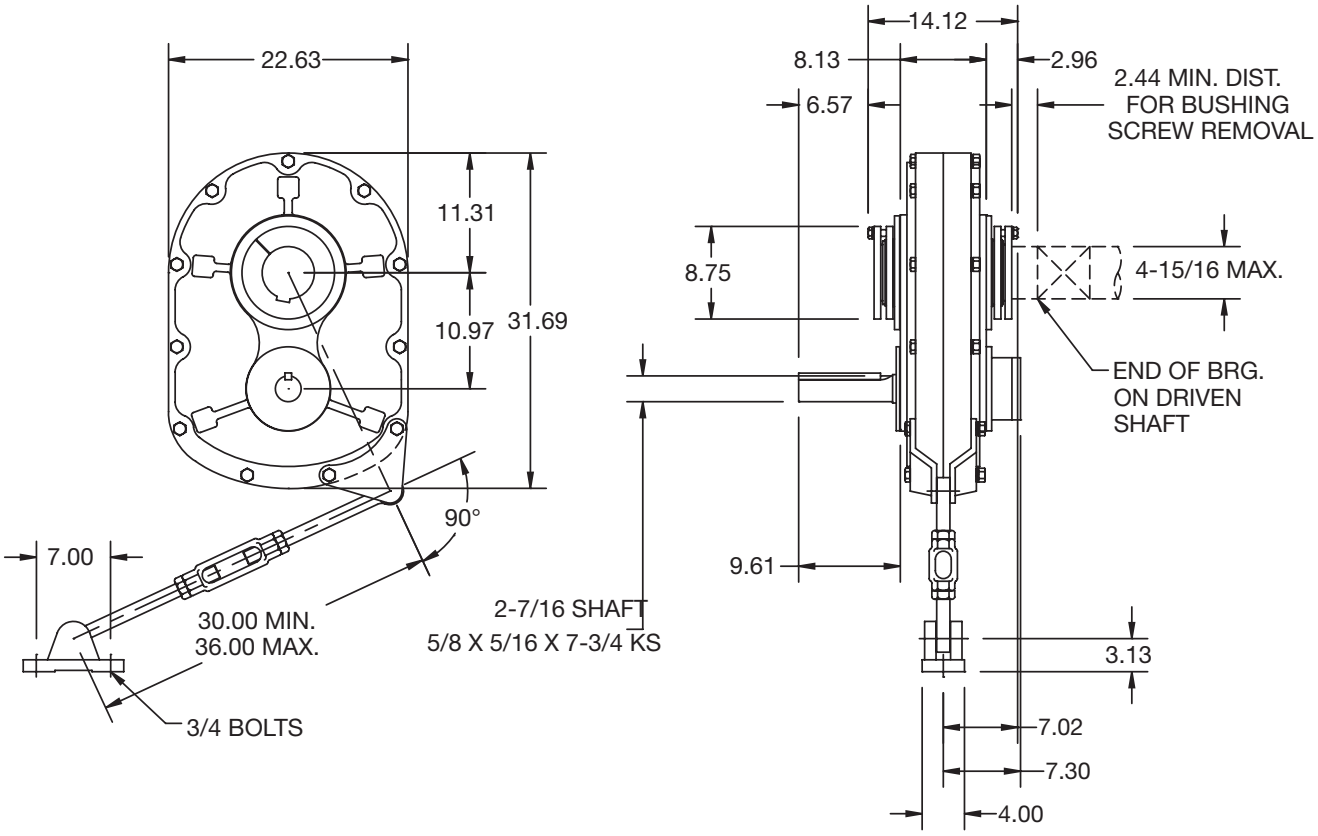
Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
4-15/16	(Max.)	272080	◆	1-1/4 x 5/8 x 12-15/16	1-1/4 x 5/8 x 11-3/8	22	–
4-7/16	–	272079	249422	1 x 1/2 x 12-15/16	1 x 1/2 x 11-3/8	27	12.5
3-15/16	▲	272077	249421	1 x 1/2 x 12-15/16	1 x 1/2 x 11-3/8	32.4	26
3-7/16	▲	272056	249420	7/8 x 7/16 x 12-15/16	7/8 x 7/16 x 5	36	28

♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

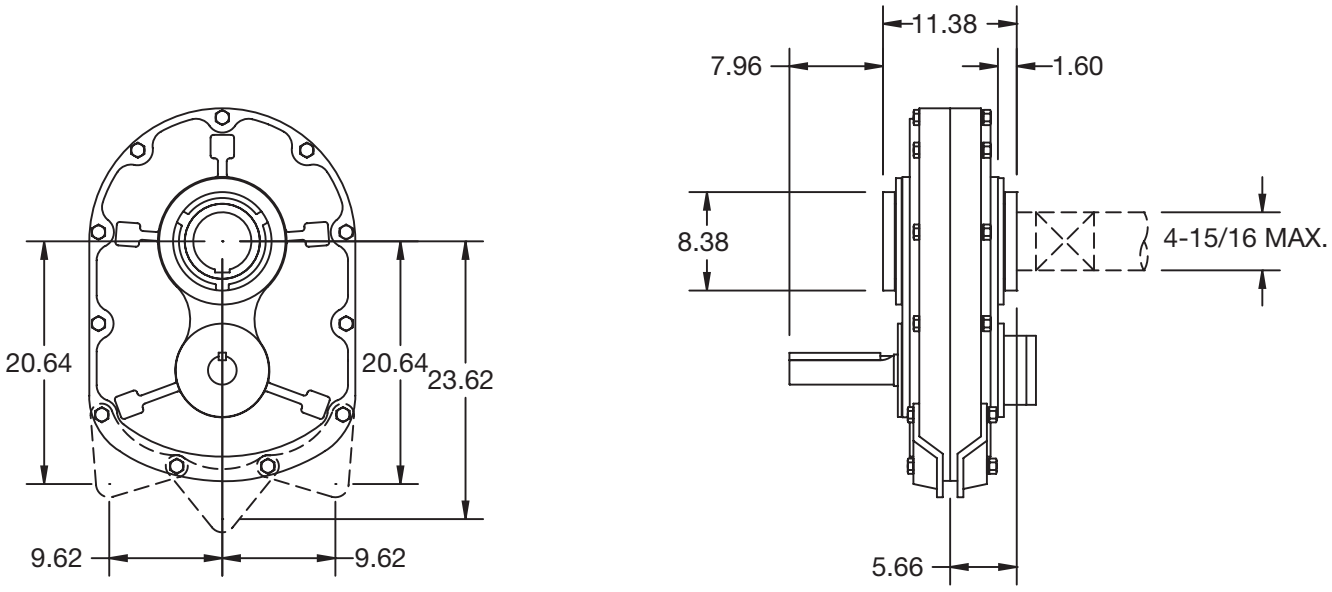
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-178 for drill and tap information required to mount to reducer.

Torque-Arm Shaft Mount Speed Reducers

TXT905 - Single Reduction Taper Bushed



TXT905 - Single Reduction Straight Bore



Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT905 Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT905T	249265 ♣	415S05	5.38	668

TXT905 Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT905S	249267 ♣	415S05	5.38	668

Accessories for TXT905 Reducers

Description	Part Number	Weight
TA9 Standard Motor Mount (284T-365T)	249401	120
TA9 Special Motor Mount (404T-445T) ♣ ♠	249399	125
TAB9 Bottom Motor Mount (213T-365T) ♣ ♠	249404	125
TXT905 Backstop Assembly	272259	6.7
TXT9-S TA Reducer Belt Guard (213T-365T)	249397	156
TXT905 Cooling Fan Assembly ♣	272324	15
TXT9 Taconite Auxiliary Seal Kit ♥	272453	32.6
TXT9 Lube Kit	LUBEKITTXT905	64.8

TXT9 Bushing Assemblies ●

Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
4-15/16	(Max.)	272080	◆	1-1/4 x 5/8 x 12-15/16	1-1/4 x 5/8 x 11-3/8	22	–
4-7/16	–	272079	249422	1 x 1/2 x 12-15/16	1 x 1/2 x 11-3/8	27	12.5
3-15/16	▲	272077	249421	1 x 1/2 x 12-15/16	1 x 1/2 x 11-3/8	32.4	26
3-7/16	▲	272056	249420	7/8 x 7/16 x 12-15/16	7/8 x 7/16 x 5	36	28

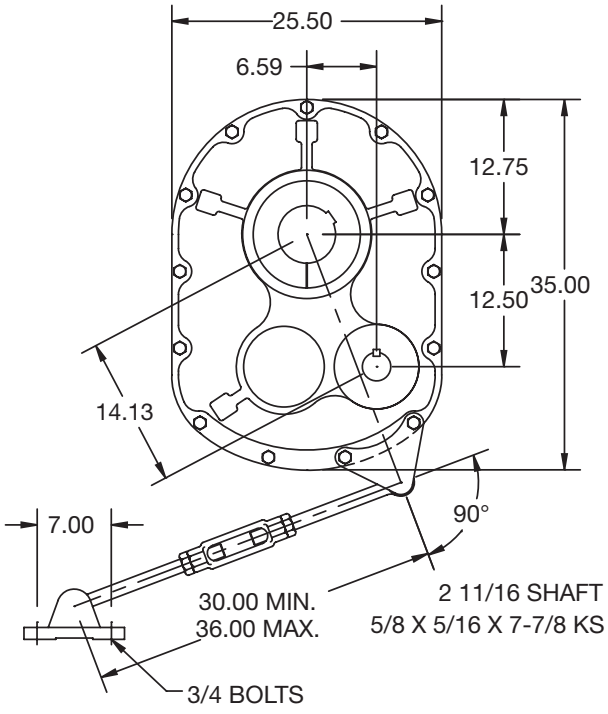
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.

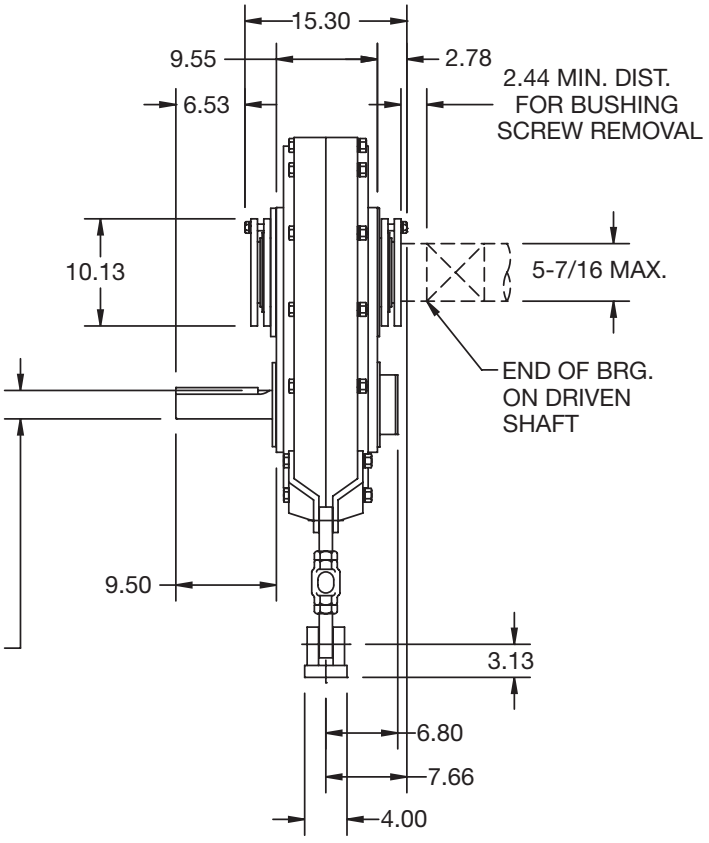
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-178 for drill and tap information required to mount to reducer.

Courtesy of:
Screw Conveyor Parts

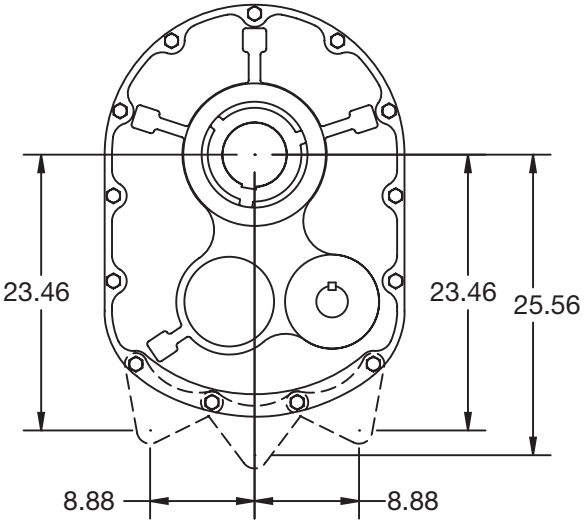
Torque-Arm Shaft Mount Speed Reducers

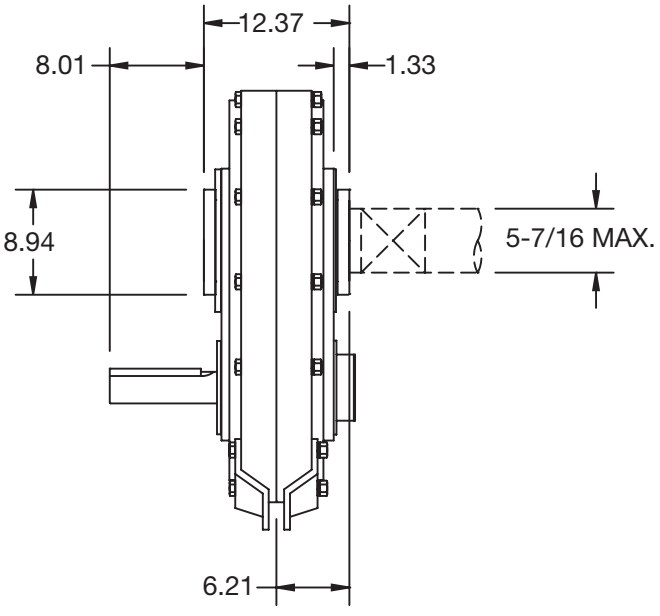
TXT10A - Double Reduction Taper Bushed





TXT10A - Double Reduction Straight Bore





FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT10A Taper Bushed Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT1015AT	272600	507D15	15.16	1020
TXT1024AT	272601	507D24	24.30	1020

TXT10A Straight Bore Reducers ■ ❍

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT1015AS	272604 ♣	507D15	15.16	1020
TXT1024AS	272605 ♣	507D24	24.30	1020

Accessories for TXT10A Reducers

Description	Part Number	Weight
TA10 Standard Motor Mount (254T-365T)	250401	130
TA10 Special Motor Mount (404T-445T)	250404	150
TAB10 Bottom Motor Mount (254T-365T) ♠ ♣	250411	150
TXT10 Backstop Assembly	250260	5.60
TXT10D TA Reducer Belt Guard (254T-445T)	250395	140
TXT10 Cooling Fan Assembly	272329	15
TXT10 Taconite Auxiliary Seal Kit ♥	272454	35.80
TXT10 Lube Kit	LUBEKITTXT10	89.1

TXT10 Bushing Assemblies ●

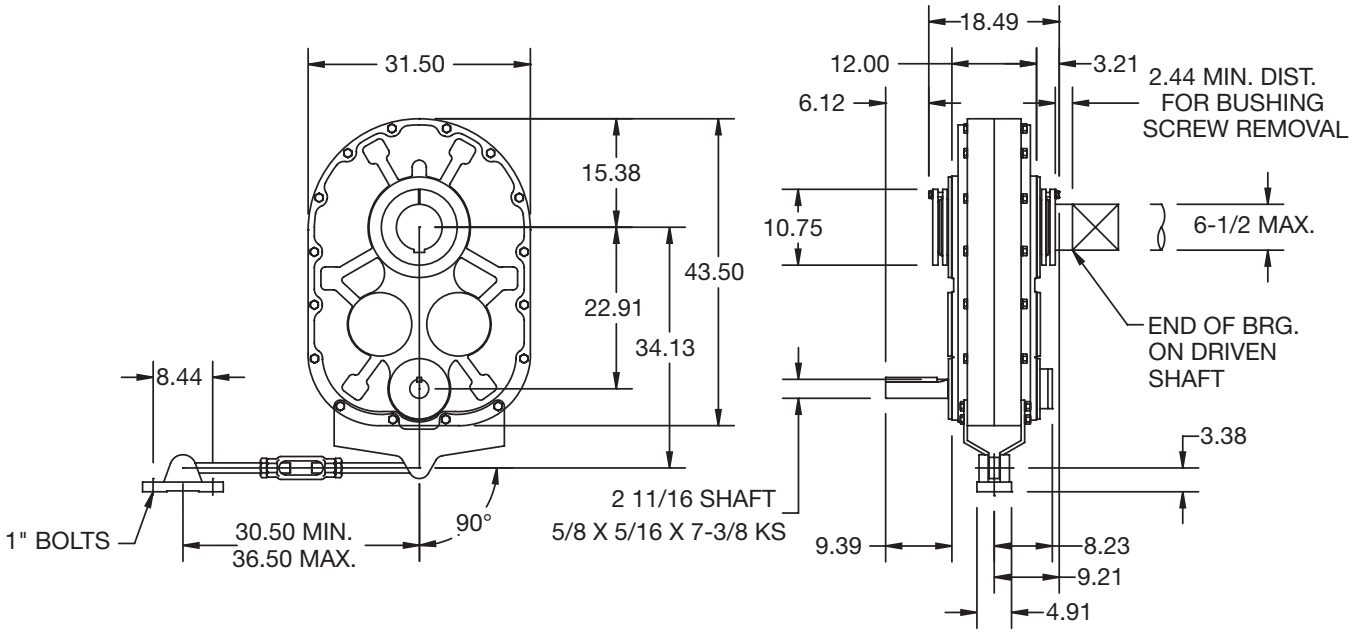
Stock Bore Size		Part Number		Shaft Keyseat Required †		Weight	
		Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing	Tapered Bushing	Straight Bore Bushing
5-7/16	(Max.)	272240	◆	1-1/4 x 5/8 x 14-1/16	1-1/4 x 5/8 x 12-3/8	26.50	–
4-15/16	–	272239	250422	1-1/4 x 5/8 x 14-1/16	1-1/4 x 5/8 x 12-3/8	33.50	12.90
4-7/16	▲	272238	250421	1 x 1/2 x 14-1/16	1 x 1/2 x 12-3/8	38.40	31.40
3-15/16	▲	272214	250420	1 x 1/2 x 14-1/16	1 x 1/2 x 6-5/8	44	33

♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
◆ Preferred bore. No bushing required for this bore size.
❍ Stock TXT Reducers are drilled for vertical mounting.
♠ Dodge standard belt guards will not fit this motor mount.
■ See pages G3-174 and G3-175 for reducer part numbers and drill and tap dimesions for Flange Mount TXT Reducers. Now available only as special factory order.
● Taper Bushed Reducers require bushing for all bore sizes.
♥ Use with Taper Bushed Reducer only. See page G3-178 for drill and tap information required to mount to reducer.

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

TXT12 - Double Reduction Taper Bushed



TXT12 Taper Bushed Reducers ❒

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TXT1215TV	272615 ♣	608D15	14.89	2042
TXT1225TV	272617	608D25	24.65	2042

TXT12 Accessories

Description	Part Number	Weight
TA12 Standard Motor Mount (286T-445T)	272310	255
TXT12 Backstop Assembly	250260	5.6
TXT12 Cooling Fan Assembly	272330	15
Heat Exchanger Cooling Package	014148	55
TXT12 Taconite Auxiliary Seal Kit	272455	67.8
TXT12D TA Reducer Belt Guard (320T-445T) ♣	272688	170
TXT12 Lube Kit	LUBEKITTXT12	202.5

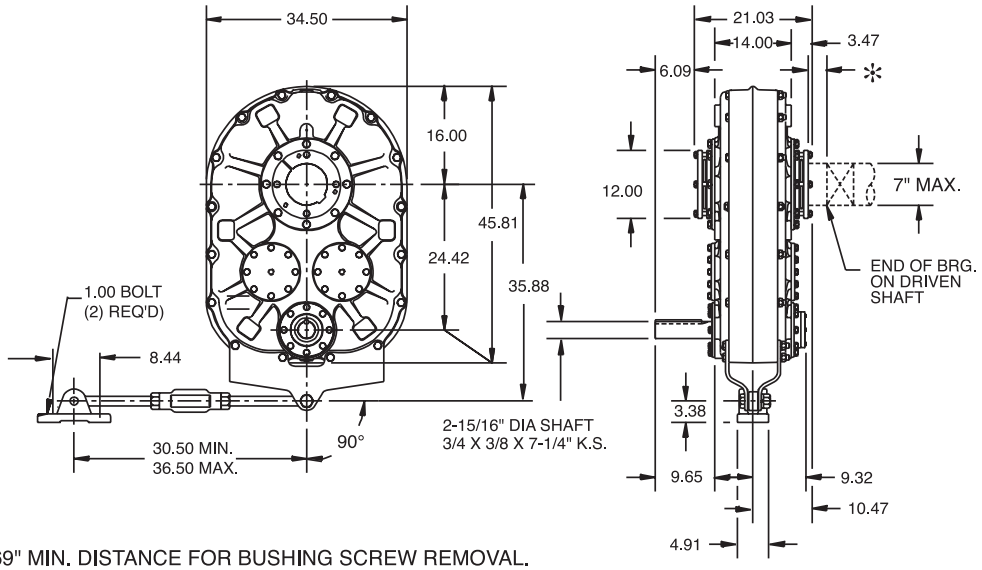
TXT12 Tapered Bushing Assemblies ●

Stock Bore Size		Part Number	Shaft Keyseat Required †	Weight
6-1/2	(Max.)	272219	1-1/2 x 3/4 x 17-5/16	37.4
6-7/16	–	272218	1-1/2 x 3/4 x 17-5/16	38.4
6	–	272217	1-1/2 x 3/4 x 17-5/16	46.2
5-15/16	–	272216	1-1/2 x 3/4 x 17-5/16	47.3
5-7/16	▲	272215	1-1/4 x 5/8 x 17-5/16	53.1

♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
● Taper Bushed Reducers require bushing for all bore sizes.
❒ Reducers are supplied already drilled and tapped for vertical mounting and flange mounting. See page G3-175 for Flange Mounting dimensions

Torque-Arm Shaft Mount Speed Reducers

TDT13 - Double Reduction Taper Bushed



❊ 2.69" MIN. DISTANCE FOR BUSHING SCREW REMOVAL.

TDT13 Taper Bushed Reducer ❒

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TDT1325T	272250	700D25	24.73	2476

TDT13 Accessories

Description	Part Number	Weight
TA13 Standard Motor Mount (324T-447T)	272313	290
TDT13 Backstop Assembly	272259	6.70
TDT13 Cooling Fan Assembly	272331	20
Heat Exchanger Cooling Package	014148	55
TDT13 Taconite Auxiliary Seal Kit ♣	272456	87
TDT13 Lube Kit	LUBEKITTXT13	223.8

TDT13 Tapered Bushing Assemblies ●

Stock Bore Size		Part Number	Shaft Keyseat Required †	Weight
7	(Max.)	272257	1-3/4 x 3/4 x 19-9/16	74
6-1/2	▲	272292 ♣	1-1/2 x 3/4 x 19-9/16	92
6	▲	272291 ♣	1-1/2 x 3/4 x 19-9/16	111
5-15/16	▲	272290	1-1/2 x 3/4 x 19-9/16	113

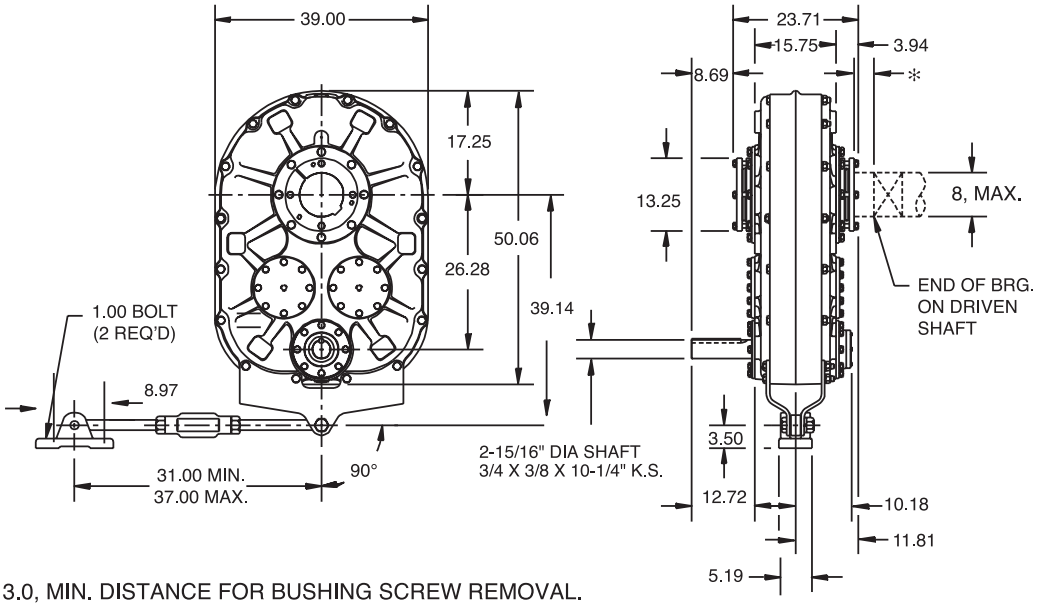
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
● Taper Bushed Reducers require bushing for all bore sizes.
❒ Reducers are supplied already drilled and tapped for vertical mounting and flange mounting. See page G3-175 for Flange Mounting dimensions

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TDT14 - Double Reduction Taper Bushed



* 3.0, MIN. DISTANCE FOR BUSHING SCREW REMOVAL.

TDT14 Taper Bushed Reducer ❒

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TDT1425T	272150 ♣	800D25	24.80	3436

TDT14 Accessories

Description	Part Number	Weight
TA14 Standard Motor Mount (324T-447T)	272318	295
TDT14 Backstop Assembly	272293	13.4
TDT14 Cooling Fan Assembly	272332	20
Heat Exchanger Cooling Package	014148	55
TDT14 Taconite Auxiliary Seal Kit ♣	272457	131
TDT14 Lube Kit	LUBEKITTXT14	307.8

TDT14 Tapered Bushing Assemblies ●

Stock Bore Size		Part Number	Shaft Keyseat Required †	Weight
8	(Max.)	272194 ♣	2 x 3/4 x 22-1/4	135
7	▲	272193 ♣	1-3/4 x 3/4 x 22-1/4	144
6-1/2	▲	272192 ♣	1-1/2 x 3/4 x 22-1/4	162.1
6	▲	272191 ♣	1-1/2 x 3/4 x 22-1/4	188

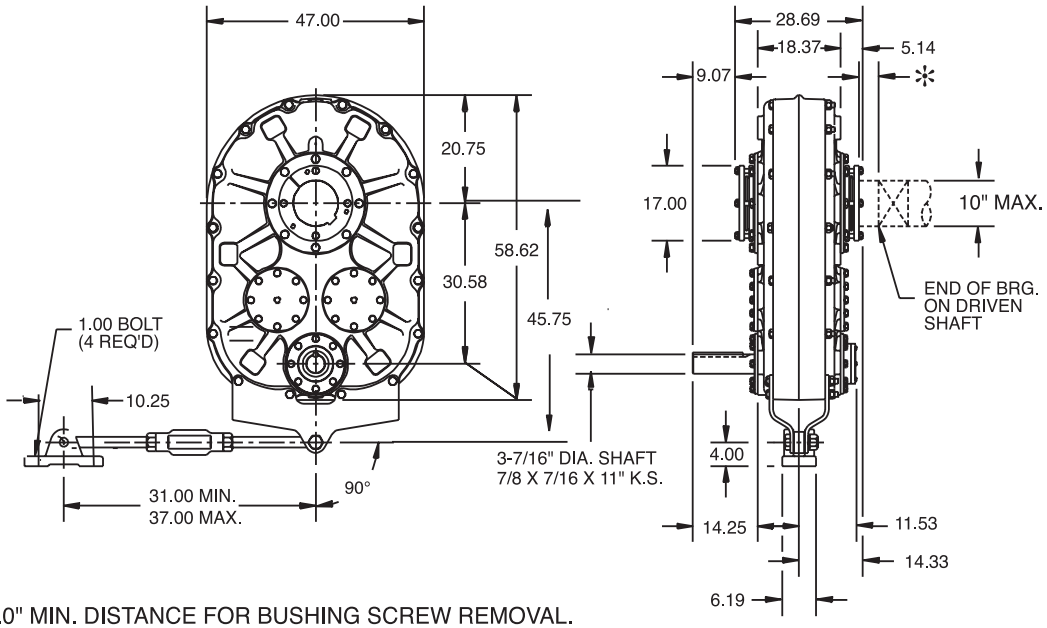
♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
● Taper Bushed Reducers require bushing for all bore sizes.
❒ Reducers are supplied already drilled and tapped for vertical mounting and flange mounting. See page G3-175 for Flange Mounting dimensions

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TDT15 - Double Reduction Taper Bushed



❊ 3.0" MIN. DISTANCE FOR BUSHING SCREW REMOVAL.

TDT15 Taper Bushed Reducer

Reducer Size	Part Number	AGMA Code	Actual Ratio	Weight
TDT1530T	272370 ♣	1000D30	30.64	5622

TDT15 Accessories

Description	Part Number	Weight
TA15 Standard Motor Mount (405T-449T) ♣	272392	300
TDT15 Backstop Assembly	272293	13.40
TDT15 Cooling Fan Assembly	272333	23
Heat Exchanger Cooling Package	014148	55
TDT15 Taconite Auxiliary Seal Kit ♣	272458	180
TDT15 Lube Kit	LUBEKITTXT15	575.1

TDT15 Tapered Bushing Assemblies ●

Stock Bore Size		Part Number	Shaft Keyseat Required †	Weight
10	(Max.)	272395	2-1/2 x 7/8 x 27-5/16	202
9	▲	272396	2 x 3/4 x 27-5/16	267
8-1/2	▲	272397	2 x 3/4 x 27-5/16	300
8	▲	272398 ♣	2 x 3/4 x 27-5/16	307

♣ Made to order
† Shaft key furnished.
▲ Check the driven shaft and key for strength.
● Taper Bushed Reducers require bushing for all bore sizes.
❒ Reducers are supplied already drilled and tapped for vertical mounting and flange mounting. See page G3-175 for Flange Mounting dimensions

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Table 5- Dodge Torque-Arm Reducers And Accessories Compatibility

TXT Reducer	Maximum Bore	AGMA Code	Input HP @75 RPM Output 15, 25:1	Input HP @100 RPM Output 5:1	Taper Bushed	Straight Bore	Hydroil Style	Vertical Style	Motor Mount	Backstop	Taconite Auxiliary Seals	Belt Guards
TXT1	1-7/16”	107	4.15	4.49	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TXT2	1-15/16”	115	7.52	7.70	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TXT3	2-3/16”	203	12.7	11.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TXT4	2-7/16”	207	19.3	19.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TXT5	2-15/16”	215	29.9	25.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TXT6	3-7/16”	307	50.3	51.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TXT7	3-15/16”	315	72.3	87.4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TXT8	4-7/16”	407	106.9	111.0	Yes	Yes	–	Yes	Yes	Yes	Yes	Yes
TXT9	4-15/16”	415	154.7	140.0	Yes	Yes	–	Yes	Yes	Yes	Yes	Yes
TXT10	5-7/16”	507	216.0	–	Yes	Yes	–	Yes	Yes	Yes	Yes	Yes
TXT12	6-1/2”	608	275.0	–	Yes	–	–	Yes	Yes	Yes	Yes	Yes
TDT13	7”	700	374.0	–	Yes	–	–	Yes	Yes	Yes	Yes	Yes
TDT14	8”	800	561.0	–	Yes	–	–	Yes	Yes	Yes	Yes	Yes
TDT15	10”	1000	–	–	Yes	–	–	Yes	Yes	Yes	Yes	Yes

Table 6 - Dodge Screw Conveyor Drive Reducers And Accessories Compatibility

SCXT Reducer	AGMA Code	Input HP@ 75 RPM Output 15,25:1	Input HP@100 RPM Output 5:1	Hydroil Style	Drive Shafts	Adapter	Motor Mount	Taconite Auxiliary Seals	Belt Guards
SCXT1	107	4.15	4.49	Yes	Yes	Yes	Yes	Yes	Yes
SCXT2	115	7.52	7.70	Yes	Yes	Yes	Yes	Yes	Yes
SCXT3	203	12.70	11.70	Yes	Yes	Yes	Yes	Yes	Yes
SCXT4	207	19.30	19.60	Yes	Yes	Yes	Yes	Yes	Yes
SCXT5	215	29.90	25.00	Yes	Yes	Yes	Yes	Yes	Yes
SCXT6	307	50.30	51.60	Yes	Yes	Yes	Yes	Yes	Yes
SCXT7	315	72.30	87.40	Yes	Yes	Yes	Yes	Yes	Yes
SCXT8	407	106.90	111.00	–	Yes	Yes	Yes	Yes	Yes

Table 7 - NEMA Motor Information (1750 RPM)

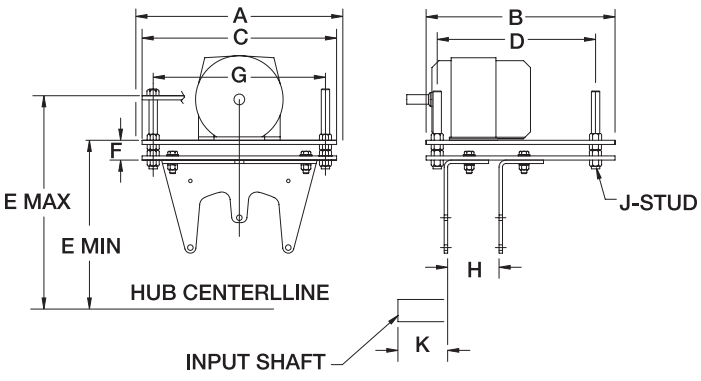
Horsepower	NEMA Motor Frame	Shaft Diameter	Minimum Sheave Diameters
1	143T	7/8	2.2
1-1/2	145T	7/8	2.4
2	145T	7/8	2.4
3	182T	1-1/8	2.4
5	184T	1-1/8	3.0
7-1/2	213T	1-3/8	3.0
10	215T	1-3/8	3.8
15	254T	1-5/8	4.4
20	256T	1-5/8	4.4
25	284T	1-7/8	4.4
30	286T	1-7/8	5.2
40	324T	2-1/8	6.0
50	326T	2-1/8	6.8
60	364T	2-3/8	7.4
75	365T	2-3/8	8.6
100	405T	2-7/8	8.6
125	444T	3-3/8	10.5
150	445T	3-3/8	10.5
200	447T	3-3/8	13.2

Table 8 - Minimum Sheave Diameters For Dodge Torque-Arm Reducers

TXT, SCXT Reducer	Single Reduction		Double Reduction			
	Shaft Diameter	5:1	Shaft Diameter	9:1	15:1	25:1
1	1-1/8	4.0	3/4	4.0	3.0	3.0
2	1-7/16	3.0	1-1/8	5.0	3.0	3.0
3	1-5/8	7.0	1-1/4	5.0	4.0	4.0
4	1-15/16	7.5	1-7/16	6.5	4.6	4.6
5	2-3/16	9.5	1-15/16	7.0	5.4	5.4
6	2-3/16	6.5	2-3/16	7.0	6.2	6.2
7	2-7/16	7.5	2-7/16	7.0	6.2	6.2
8	2-7/16	9.2	2-7/16	–	6.2	6.2
9	2-7/16	9.5	2-7/16	–	8.0	8.0
10	–	–	2-11/16	–	8.5	8.5
12	–	–	2-11/16	–	9.5	9.5
13	–	–	2-15/16	–	–	12.0
14	–	–	2-15/16	–	–	15.0
15	–	–	3-7/16	–	–	20.0

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers



TA Motor Mounts

The TA Motor Mount is a rugged all steel unit which requires no drilling and no foundation. It bolts directly to the top of the Torque-Arm reducer and can be located in any position around the shaft. It permits easy belt tensioning.

Each motor mount accommodates a wide variety of NEMA motor frames - see table below.

All motor mount fasteners are supplied with zinc-plated finish as standard. Bolt hole configuration will also allow this mount to fasten to the top of a Screw Conveyor Drive reducer of equivalent size.

Torque-Arm Motor Mounts - TA1M Thru TA7M

Motor Mount No. ■	Part Number ●	Wt.	Reducer Size	NEMA Motor Frame	A	B	C	D	E ◆		G	H	J	K
									Min	Max				
TA1M	241391	37	TXT1A	56T - 215T	14.63	11.00	13.50	9.25	10.03	14.18	12.00	3.38	5/8 x 7	3.88
			TXT2A						10.59	14.75				4.18
TA3M	243391	40	TXT3B	56T - 215T	14.63	11.00	13.50	9.25	11.59	15.78	12.00	4.25	5/8 x 7	4.88
	243393 ▲	70		254T - 256T	18.63	17.00	17.50	14.25	11.59	15.78	15.50		3/4 x 8	
TA4M	244391	75	TXT4B	143T - 286T	18.63	17.00	17.50	14.25	11.96	16.73	15.50	4.63	3/4 x 8	6.13
TA5M	245391	76	TXT5C	143T - 286T	18.63	17.00	17.50	14.25	12.53	17.28	15.50	4.13	3/4 x 8	6.65
	245393 ▲ ♣			324T - 326T	20.50	18.50	19.25	16.50	12.53	17.28	17.50		3/4 x 8	
TA6M	246391	99	TXT6A	143T - 326T	20.50	18.50	19.25	16.50	14.56	19.31	17.50	4.50	3/4 x 8	7.31
TA7M	247395	110	TXT7A	143T - 365T	22.50	19.00	21.25	16.50	17.62	22.13	19.25	4.75	1 x 9	7.81

V-Belt Drive Center Distances For TA1M Thru TA7M Torque-Arm Motor Mounts

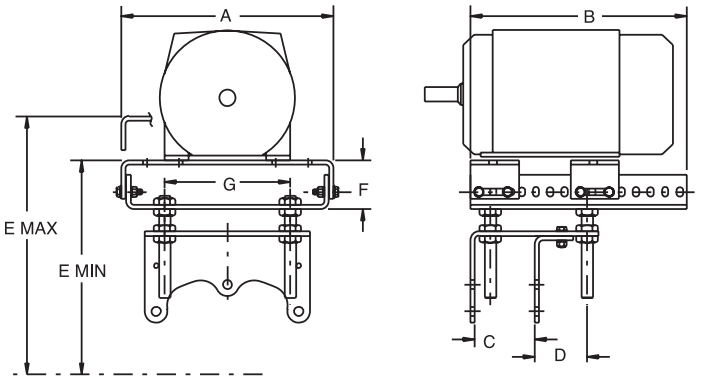
Motor Mount No.	Reducer Size	Center Distances For Various NEMA Motor Frames															
		56		140		180		210		250		280		320		360	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
TA1M	TXT1A	17.6	21.0	17.6	21.0	18.5	22.0	19.3	22.7	–	–	–	–	–	–	–	–
	TXT2A	18.7	22.1	18.7	22.1	19.7	23.1	20.5	23.9	–	–	–	–	–	–	–	–
TA3M	TXT3B	20.2	23.6	20.2	23.6	21.2	24.6	22.0	25.3	23.0	26.3	–	–	–	–	–	–
TA4M	TXT4B	–	–	21.2	25.2	22.2	26.2	23.0	26.9	23.9	27.9	24.7	28.7	–	–	–	–
TA5M	TXT5C	–	–	22.7	26.6	23.7	27.6	24.4	28.4	25.4	29.4	26.2	30.1	27.2	31.1	–	–
TA6M	TXT6A	–	–	25.9	29.7	26.9	30.7	27.6	31.4	28.6	32.4	29.4	33.2	30.4	34.2	–	–
TA7M	TXT7A	–	–	30.6	34.4	31.6	35.4	32.4	36.2	33.4	37.2	34.1	37.9	35.1	38.9	36.1	40.0

♣ Made to order
▲ Made to order belt guards required for these motor mounts. Consult Dodge.
◆ Provides for V-belt adjustment
■ Can be used with any ratio Torque-Arm Reducer (5, 9, 15, 25)
● Necessary mounting bolts are included

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers



Torque-Arm Motor Mounts - TA8 Thru TA15

Motor Mount No.	Part Number ●	Wt.	Reducer Size	Nominal Ratio	NEMA Motor Frame	A	B	C	D	E ◆		F	G
										Min	Max		
TA8	248401 ■	119	TXT8A	15, 25	213T - 365T	18.63	19	5.25	4.36	19.4	23.9	4.25	11
				5	254T - 365T								
TA9	249401 ■	120	TXT9A	15, 26	213T - 365T	18.63	19	5.25	4.63	21.46	25.9	4.25	11
				5	284T - 365T								
	249399 ♣ ▲	125		15, 26	404T - 445T	25.06	24			20.21	24.71	3.81	
TA10	250401	130	TXT10A	15, 24	254T - 365T	18.63	19	6	3.88	22.6	27.09	4.25	11
	250404	200			404T - 445T	25.06	24	6	3.88	21.86	27.38	3.81	18.5
TA12	272310	255	TXT12	15, 25	286T - 445T	25.06	24	7.63	5.25	25.65	31.13	3.81	18.5
TA13	272313	290	TDT13	25	324T - 445T	25.06	24	8.75	8.63	25.65	31.13	3.81	18.5
TA14	272318	295	TDT14	25	324T - 447T	25.06	24	10	7.38	25.81	31.31	3.81	18.5
TA15	272392 ♣	320	TDT15	30	405T - 449T	25.06	24	12.63	5.75	33.5	39	3.81	18.5

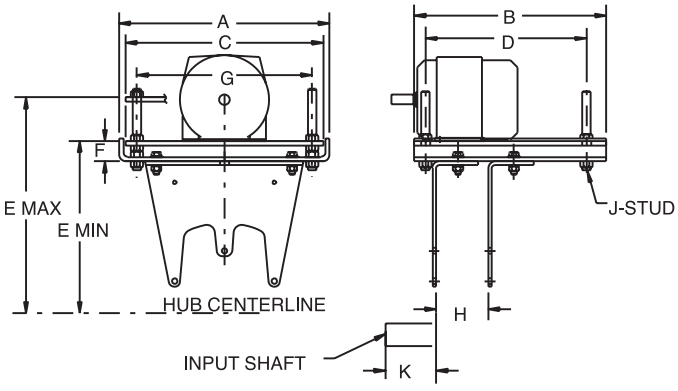
V-BELT Drive Center Distances For TA8 Thru TA15 Torque-Arm Motor Mounts

Motor Mount No.	Reducer Size	Nominal Ratio	Center Distances For Various NEMA Motor Frames													
			210		250		280		320		360		400		440	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
TA8	TXT8A	15, 25	35.5	40.5	36.4	41.2	37.2	42.2	38.2	43.2	39.2	44.2	–	–	–	–
		5	–	–	37.2	41.5	37.9	42.3	38.9	43.3	39.9	44.3	–	–	–	–
TA9	TXT9A	15, 26	38.0	43.0	39.0	44.0	39.8	44.7	40.7	45.7	41.7	46.7	42.8	47.7	–	–
		5	–	–	–	–	40.5	44.8	41.5	45.8	42.5	46.8	43.5	47.8	–	–
TA10	TXT10A	15, 24	–	–	42.6	47.5	43.3	48.2	44.3	49.2	45.3	50.2	45.8	50.7	47.3	51.7
TA12	TXT12	15, 25	–	–	–	–	57.0	61.0	57.7	62.1	58.7	63.1	59.7	64.1	60.7	65.1
TA13	TDT13	25	–	–	–	–	–	–	59.7	65.1	60.7	66.1	61.7	67.1	62.0	66.7
TA14	TDT14	25	–	–	–	–	–	–	61.7	67.1	62.7	68.1	63.7	69.1	64.7	70.1
TA15	TDT15	30	–	–	–	–	–	–	–	–	–	–	75.0	80.5	76.0	81.5

♣ Made to order
▲ Made to order belt guards required for these motor mounts. Consult Dodge.
◆ Provides for V-belt adjustment
■ Can be used with any ratio Torque-Arm Reducer (5, 9, 15, 25)
● Necessary mounting bolts are included

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers



TAML Long Motor Mounts

The TAML Motor Mount has longer support brackets, which allows for more clearance between the conveyor pulley and the bottom plate of the motor mount. (Reference table below for clearance dimensions). The motor mount is a rugged all steel unit which requires no drilling and no foundation. It bolts directly to the top of the Torque-Arm reducer and can be located in any position around the shaft. It permits easy belt tensioning and accommodates a wide variety of NEMA motor frames.

All motor mount fasteners are supplied with zinc-plated finish as standard.

Bolt hole configuration will also allow this mount to fasten to the top of a Screw Conveyor Drive Reducer of equivalent size.

Torque-Arm Long Motor Mounts - TA3ML Thru TA7ML ▲†

Motor Mount No. ■	Part Number ●	Wt.	Reducer Size	NEMA Motor Frame	A	B	C	D	E ◆		F	G	H	J	K
									Min	Max					
TA3ML	243392 ♣	42	TXT3B	56T - 215T	14.63	11.00	13.50	9.25	14.59	18.72	1.59	12.00	4.25	5/8 x 7	4.88
TA4ML	244392	78	TXT4B	143T - 286T	18.63	17.00	17.50	14.25	16.46	21.20	1.78	15.50	4.63	3/4 x 8	6.13
TA5ML	245392	80	TXT5C	143T - 286T	18.63	17.00	17.50	14.25	19.28	24.03	1.84	15.50	4.13	3/4 x 8	6.65
TA6ML	246390	102	TXT6A	143T - 326T	20.50	18.50	19.25	16.50	28.56	33.30	1.84	17.50	4.50	3/4 x 8	7.31
TA7ML	247396 ♣	115	TXT7A	143T - 326T	22.50	19.00	21.25	16.50	32.46	37.20	1.84	19.25	4.75	3/4 x 8	7.81

V-BELT Drive Center Distances For TA3ML Thru TA7ML Torque-Arm Long Motor Mounts

Motor Mount No.	Reducer Size	Center Distances For Various NEMA Motor Frames													
		56		140		180		210		250		280		320	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
TA3ML	TXT3B	23.1	26.5	23.1	26.5	24.1	27.5	24.9	28.3	–	–	–	–	–	–
TA4ML	TXT4B	–	–	25.6	30.6	26.7	30.6	27.4	31.4	28.3	32.4	29.2	33.1	–	–
TA5ML	TXT5C	–	–	29.4	33.4	30.4	34.3	31.1	35.1	32.1	36.1	32.9	36.8	–	–
TA6ML	TXT6A	–	–	–	–	40.8	44.6	41.6	45.4	42.6	46.4	43.3	47.1	44.3	48.1
TA7ML	TXT7A	–	–	–	–	47.0	50.8	47.7	51.5	48.7	52.5	49.5	53.3	50.5	54.3

Clearance Dimensions ■

Reducer	Motor Mount	Clearance Dimensions (1)
TXT1A	TA1M	7.63
TXT2A	TA1M	8.25
TXT3B	TA3M	9.25
TXT4B	TA4M	9.44
TXT5C	TA5M	10.00
TXT6A	TA6M	11.97
XT7A	TA7M	14.38

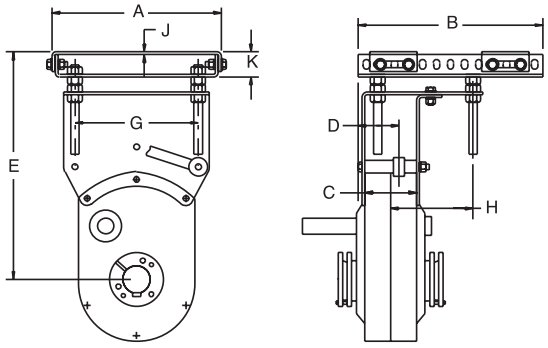
Clearance Dimensions ■

Reducer	Motor Mount	Clearance Dimensions (1)
TXT3B	TA3ML	12.25
TXT4B	TA4ML	13.94
TXT5C	TA5ML	16.75
TXT6A	TA6ML	25.96
TXT7A	TA7ML	29.88

♣ Made to order
† Consult Dodge for Long Motor Mounts for reducers TXT8A and larger.
▲ Made to order belt guards required for these motor mounts. Consult Dodge.
◆ Provides for V-belt adjustment

■ Can be used with any ratio Torque-Arm Reducer (5, 9, 15, 25)
● Necessary mounting bolts are included
(1) Distance from centerline of head shaft (reducer bore) and lowest component of motor mount hardware extending over top of conveyor

Torque-Arm Shaft Mount Speed Reducers



TAB Bottom Motor Mounts

For those applications where space constraints do not allow a Dodge Torque-Arm motor mount to be mounted from the top end of the reducer with our standard Torque-Arm motor mounts, TAB Bottom Motor Mounts are available. The TAB Motor Mount is a rugged all-steel unit which requires no drilling or foundation. It bolts directly to the bottom of a Torque-Arm reducer housing and also serves as a support member for the Torque-Arm rod assembly. Each mount accommodates a wide variety of NEMA AC motor frames. For initial belt installation, the adjusting screws can be set at a minimum position which offers adequate future V-belt adjustment.

Torque-Arm Bottom Motor Mounts - TAB 1 Thru TAB 10 ▲

Motor Mount No.	Part Number ●	Wt.	Reducer Size	Nominal Ratio	NEMA Motor Frame	A	B	C	D	E ◆ Min	E ◆ Max	G	H	J	K
TAB1	241421 ♣	40	TXT1A	5, 9, 15, 25	56T - 215T	12-1/8	11-1/2	3-3/8	2-43/64	14-17/64	17-61/64	8	5-25/32	1/4	2-3/8
TAB2	242421 ♣	45	TXT2A	5, 9, 15, 25	56T - 215T	12-1/8	11-1/2	3-3/8	2-43/64	14-29/32	18-19/32	8	5-25/32	1/4	2-3/8
TAB3	243404 ♣	60	TXT3B	5, 9, 15, 25	143T - 286T	15-1/8	16-1/2	4-1/4	3-15/32	19-1/4	23-7/8	11	5-13/32	1/4	2-3/8
TAB4	244404 ♣	65	TXT4B	5, 9, 15, 25	143T - 145T	15-1/8	16-1/2	4-5/8	5-13/32	20-13/32	25-1/32	11	5-1/32	1/4	2-3/8
					182T - 326T				3-21/32						
TAB5	245405	70	TXT5C	5, 9, 15, 25	143T - 145T	15-1/8	16-1/2	4-1/8	5-21/64	21-15/32	26-3/32	11	5-17/32	1/4	2-3/8
					182T - 326T				3-37/64						
TAB6	246392	75	TXT6A	5, 9, 15, 25	182T - 215T	15-1/8	16-1/2	4-1/2	5-5/32	24-1/4	28-13/16	11	5-17/16	1/4	2-3/8
					254T - 326T				3-13/32						
TAB7	247404 ♣	85	TXT7A	5, 9, 15, 25	182T - 215T	15-1/8	16-1/2	4-3/4	5-1/2	27-3/4	32-1/4	11	5-1/8	1/4	2-3/8
					254T - 326T				3-3/4						
TAB8	248406 ♣	90	TXT8A	5, 15, 25	213T - 256T	15-1/8	19	5-1/4	3-5/8	33-13/32	37-25/32	11	4-5/8	3/8	4-1/4
					284T - 365T				3-7/8						
TAB9	249404 ♣	95	TXT9A	5, 15, 26	213T - 256T	18-5/8	19	5-1/4	5-5/8	34-29/32	39-9/32	11	4-5/8	3/8	4-1/4
					284T - 365T				3-7/8						
TAB10	250411 ♣	105	TXT10A	15, 24	254T - 365T	25-1/16	24	6	4-23/32	36-3/32	41-17/32	18-1/2	4-1/8	3/8	3-13/16

♣ Made to order
▲ Made to order belt guards required for these motor mounts. Consult Dodge.
◆ Provides for V-belt adjustment
● Necessary mounting bolts are included

V-BELT Drive Center Distances For Torque-Arm Bottom Motor Mounts

Motor Mount No.	Reducer Size	Nominal Ratio	Center Distances For Various NEMA Motor Frames															
			56		140		180		210		250		280		320		360	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
TAB1	TXT1A	9, 15, 25	14.70	18.40	14.70	18.40	15.70	19.40	–	–	–	–	–	–	–	–	–	–
		5	14.50	18.20	14.50	18.20	16.30	19.20	17.20	19.90	–	–	–	–	–	–	–	–
TAB2	TXT2A	9, 15, 25	14.80	18.50	14.80	18.50	15.80	19.50	16.50	20.20	–	–	–	–	–	–	–	–
		5	–	–	14.60	18.20	15.60	19.20	16.30	20.00	–	–	–	–	–	–	–	–
TAB3	TXT3B	9, 15, 25	18.70	23.30	18.70	23.30	19.70	24.30	20.50	25.10	–	–	–	–	–	–	–	–
	TXT305A	5	–	–	19.50	24.10	20.20	24.80	21.20	25.80	–	–	–	–	–	–	–	–
TAB4	TXT4B	9, 15, 25	19.30	23.90	19.30	23.90	20.30	24.90	21.10	25.70	22.10	26.60	–	–	–	–	–	–
	TX405A	5	–	–	20.00	24.70	20.80	25.40	21.80	26.40	22.50	27.20	–	–	–	–	–	–
TAB5	TXT5C	9, 15, 25	–	–	19.50	24.10	20.50	25.10	21.30	25.90	22.30	26.90	23.00	27.60	–	–	–	–
	TXT505A	5	–	–	–	–	20.90	25.50	21.90	26.50	22.60	27.20	23.60	28.20	–	–	–	–
TAB6	TXT6A	9, 15, 25	–	–	21.40	25.90	22.40	26.90	23.10	27.60	24.10	28.60	24.90	29.40	25.80	30.40	–	–
		5	–	–	–	–	–	–	23.60	28.20	24.40	28.90	25.40	29.90	–	–	–	–
TAB7	TXT7A	9, 15, 25	–	–	–	–	24.50	28.90	25.20	29.70	26.20	30.60	26.90	31.40	27.90	32.40	–	–
		5	–	–	–	–	–	–	25.70	30.20	26.40	30.90	27.40	31.90	–	–	–	–
TAB8	TXT8A	15, 25	–	–	–	–	–	–	29.50	33.80	30.50	34.80	31.20	35.60	32.20	36.50	33.20	37.50
	TXT8	5	–	–	–	–	–	–	–	–	30.50	34.90	31.50	35.90	32.50	36.90	–	–
TAB9	TXT9A	15, 26	–	–	–	–	–	–	29.90	34.10	30.80	35.10	31.60	35.90	32.50	36.80	33.50	37.80
	TXT9	5	–	–	–	–	–	–	–	–	–	–	31.70	36.10	32.70	37.10	–	–
TAB10	TXT10A	15, 24	–	–	–	–	–	–	–	–	32.00	37.00	32.80	38.00	33.70	39.00	34.70	40.00

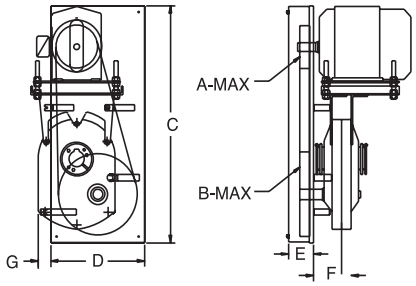
FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

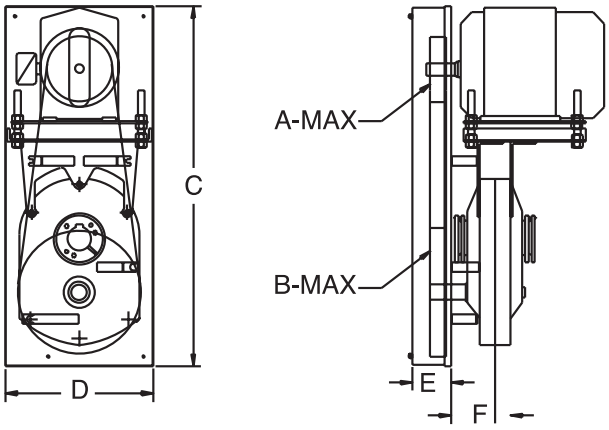
Slotted Metal Panel Belt Guard

Belt guards with mounting straps for TXT Reducers will fit standard TA motor mounts. The belt guards are designed to fit most common sheave diameters. They mount easily with no machining required.



Belt Guards For Double Reduction TXT Reducers (9, 15, 25:1) With Standard Motor Mounts ■

Reducer Size	Belt Guard Size	Part Number	Motor Mount No.	Wt.	NEMA Motor Frame	Center Distance		A	B	C	D	E	F	G
						Min	Max							
TXT1A	TXT1D	241395	TA1M	30	56T-215T	17.6	22.7	5.0	12.0	32.0	13.0	3.50	3.63	–
TXT2A	TXT2D	242395	TA1M	36	56T-215T	18.7	23.9	6.0	12.0	34.0	15.0	4.00	3.50	–
TXT3B	TXT3D	243387 ▲	TA3M	43	56T-215T	20.2	25.3	7.0	14.0	37.0	17.0	4.00	3.94	–
TXT4B	TXT4D	244395	TA4M	54	143T-286T	21.2	28.7	7.0	15.0	43.0	18.0	4.50	5.19	–
TXT5C	TXT5D	245387 ▲	TA5M	75	143T-286T	22.7	30.2	7.0	15.0	45.0	18.0	4.25	5.13	0.625
TXT6A	TXT6D	246366	TA6M	83	143T-326T	25.9	34.2	8.0	18.0	50.0	20.0	6.00	6.06	1.63
TXT7A	TXT7D	247390	TA7M	90	143T-365T	30.6	40	10.0	20.0	56.0	23.0	6.00	6.88	0.500
TXT8A	TXT8D	248395	TA8	107	213T-365T	35.4	44.2	12.0	25.0	63.0	27.0	6.50	7.46	0.156
TXT9A	TXT9D	249395 ▲	TA9	125	213T-365T	38	46.7	12.0	25.0	66.0	30.0	9.00	7.63	2.91
TXT10A	TXT10D	250395	TA10	140	254T-445T	42.5	50.8	12.0	25.0	72.5	30.0	9.00	8.25	4.31
TXT12	TXT12D	272688 ♣	TA12	170	320T-445T	58.1	66.6	15.0	30.0	91.0	34.0	9.50	8.13	–



Belt Guards For Single Reduction TXT Reducers (5:1) With Standard Motor Mounts ■

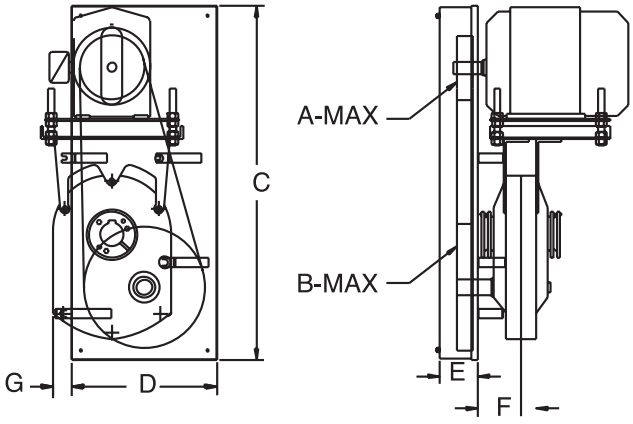
Reducer Size	Belt Guard Size	Part Number	Motor Mount No.	Wt.	NEMA Motor Frame	Center Distance		A	B	C	D	E	F
						Min	Max						
TXT105	TXT1S	241397	TA1M	30	56T-215T	17.6	22.7	5.0	12.0	32.0	13.0	3.50	3.63
TXT205	TXT2S	242397	TA1M	36	56T-215T	18.7	23.9	6.0	13.0	34.0	15.0	4.00	3.50
TXT305A	TXT3S	243389 ▲	TA3M	43	56T-215T	20.2	25.3	7.0	15.0	37.0	17.0	4.00	3.94
TXT405A	TXT4S	244397	TA4M	54	143T-286T	21.2	28.7	8.0	16.0	43.0	18.0	4.50	5.19
TXT505A	TXT5S	245389 ▲	TA5M	59	143T-286T	22.7	30.2	8.0	16.0	45.0	18.0	5.25	5.13
TXT605	TXT6S	246368	TA6M	95	143T-326T	25.9	34.2	10.0	18.0	50.0	20.0	6.00	6.06
TXT705	TXT7S	247392	TA7M	112	143T-365T	30.6	40.0	10.0	25.0	58.0	27.0	6.00	6.88
TXT805	TXT8S	248397	TA8	125	213T-365T	35.1	43.9	13.0	30.0	66.0	32.0	6.50	7.46
TXT905	TXT9S	249397 ▲	TA9	156	213T-365T	37.6	46.4	13.0	30.0	69.0	32.0	9.00	7.63

♣ Made to order

▲ These belt guards do not fit the larger frame, higher H.P. Torque-Arm motor mounts on pages G3-73 and G3-74.

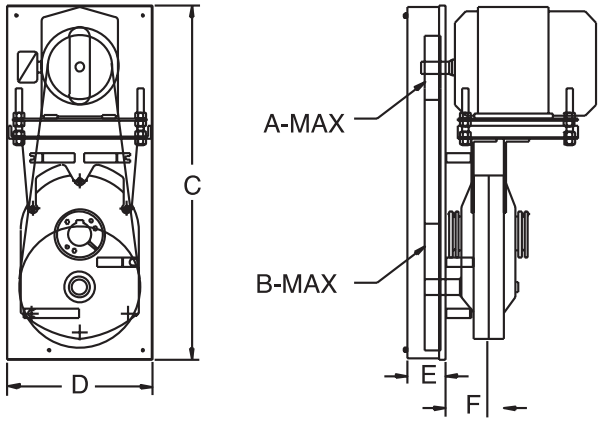
■ These belt guards do not fit TAB Bottom Motor Mounts. Consult Dodge for made-to-order belt guards for use with Bottom Motor Mounts

Torque-Arm Shaft Mount Speed Reducers



Belt Guards For Double Reduction TXT Reducers (9, 15, 25:1) With Long Motor Mounts

Reducer Size	Belt Guard Size	Part Number	Motor Mount No.	Wt.	NEMA Motor Frame	Center Distance		A	B	C	D	E	F	G
						Min	Max							
TXT3B	TXT3DLMM	243153 ▲ ♣	TA3ML	52	56T-215T	23.1	28.3	7	14	40	17	4	3.94	–
TXT4B	TXT4DLMM	244151 ♣	TA4ML	65	143T-286T	25.6	33.1	7	15	47.5	18	4.5	5.19	–
TXT5C	TXT5DLMM	245102 ▲ ♣	TA5ML	90	143T-286T	29.4	36.8	7	15	51.7	18	4.25	5.13	0.625
TXT6A	TXT6DLMM	246147	TA6ML	100	143T-326T	39.8	48.1	8	18	64	20	6	6.06	1.63
TXT7A	TXT7DLMM	247152 ♣	TA7ML	108	143T-365T	46	55.3	10	20	71.5	23	6	6.88	0.5



Belt Guards For Single Reduction TXT Reducers (5:1) With Long Motor Mounts

Reducer Size	Belt Guard Size	Part Number	Motor Mount No.	Wt.	NEMA Motor Frame	Center Distance		A	B	C	D	E	F
						Min	Max						
TXT305A	TXT3SLMM	243164 ▲ ♣	TA3ML	55	56T-215T	23.1	28.3	7.0	15.0	40.0	17.0	4.00	3.94
TXT405A	TXT4SLMM	244164 ♣	TA4ML	65	143T-286T	25.6	33.1	8.0	16.0	47.5	18.0	4.50	5.19
TXT505A	TXT5SLMM	245162 ▲ ♣	TA5ML	90	143T-286T	29.4	36.8	8.0	16.0	51.7	18.0	4.25	5.13
TXT605	TXT6SLMM	246132 ♣	TA6ML	100	143T-326T	39.8	48.1	10.0	18.0	64.0	20.0	6.00	6.06
TXT705	TXT7SLMM	247146 ♣	TA7ML	135	143T-365T	46.0	55.3	10.0	20.0	71.5	23.0	6.00	6.88

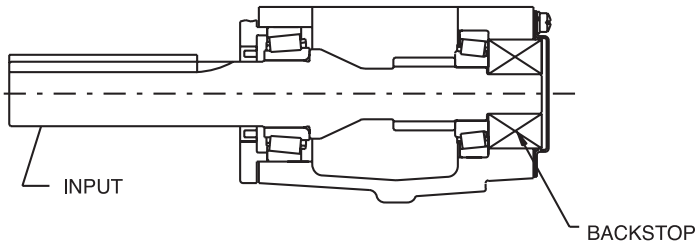
♣ Made to order

▲ These belt guards do not fit the larger frame, higher H.P. Torque-Arm motor mounts on pages G3-73 and G3-74.

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Backstop Assemblies For Torque-Arm Reducers



Backstops are offered for service conditions that require the prevention of reverse direction. They can be quickly installed by removing cover plate and slipping the backstop over the input shaft. After cover is replaced, backstop becomes completely sealed inside the reducer case. Since the reducer lubricates the backstop, no additional lubrication is required.

When ordering backstops, specify by reducer size and ratio. Keys are included in each backstop assembly.

Warning: Backstops are not recommended for applications involving energy absorption and shock or torque loads in excess of reducer ratings or on applications such as chair lifts, amusement rides, etc., where the safety of persons or property is dependent on their function. On such applications, other safety devices should be provided. Not for use with lubricants containing EP additives.

Backstop Assemblies ■

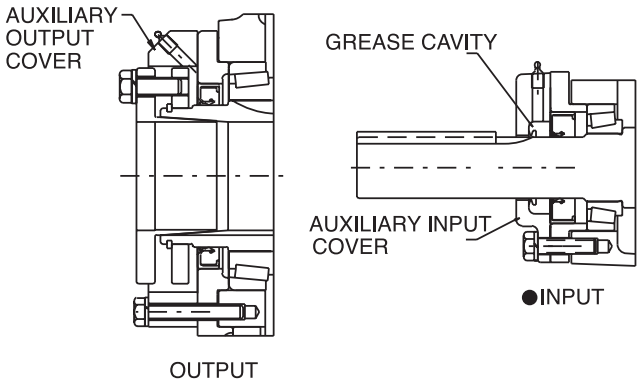
Reducer Size	Nominal Ratio	Part Number	Weight
TXT1A	5, 9, 15, 25	242101	0.6
TXT2A	5, 9, 15, 25	252101	1.0
TXT3B	9, 15, 25	243106	0.6
TXT3A	5	252101	1.0
TXT4B	9, 15, 25	244106	1.2
TXT4A	5	244148	0.9
TXT5C	9, 15, 25	245154	2.2
TXT5A	5	246101	1.8
TXT6 A	5, 9, 15, 25	246092	2.5
TXT7A	5, 9, 15, 25	247260	2.8
TXT8A	15, 25	249260	3.8
TXT8	5	250260	5.6
TXT9A	15, 26	249260	3.8
TXT9	5	272259	6.7
TXT10A	15, 24	250260	5.6
TXT12	15, 25	250260	5.6
TDT13	25	272259	6.7
TDT14	25	272293	13.4
TDT15	30	272293	13.4

■ See pages G3-184 and G3-185 for complete listing of Backstop assemblies for all generations of Dodge TXT Torque-Arm reducers.

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Auxiliary Seal Kits For Torque-Arm Reducers



An Auxiliary Seal Kit consists of two output seals and one input seal with necessary mounting hardware. Seal rings are equipped with a standard grease fitting and a large cavity which permits grease purging of the seal in severe applications, such as taconite mining, rock processing, fertilizer processing, etc. Reducer housings, sizes 1 thru 5, must be drilled and tapped to accommodate seal. On sizes 6 and larger, the auxiliary seal bolts to the existing seal carrier, with the longer bolts supplied with the kit. A filter breather is included with each auxiliary seal kit.

Auxiliary Seal Kits ★■●

Reducer Size	Nominal Ratio	Part Number	Reducer Size	Nominal Ratio	Part Number
TXT1A	9, 15, 25	272515	TXT6A	5, 9, 15, 25	272450
TXT1	5	272521	TXT7A	5, 9, 15, 25	272451
TXT2A	9, 15, 25	272446	TXT8A	5, 15, 25	272452
TXT2	5	272459	TXT9A	5, 15, 26	272453
TXT3B	9, 15, 25	243577	TXT10A	15, 24	272454
TXT3A	5	253186	TXT12	15, 25	272455
TXT4B	9, 15, 25	244676	TDT13	25	272456
TXT4A	5	254267	TDT14	25	272457 ♣
TXT5C	9, 15, 25	245635	TDT15	30	272458 ♣
TXT5A	5	255230			

♣ Made to order
■ See page G3-177 and G3-178 for dimensions to drill and tap reducer housing for mounting of auxiliary seal kit. Dodge will install upon request.
● Input auxiliary seal can not be used on same input shaft with a cooling fan
★ For Taper Bushed reducers only

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

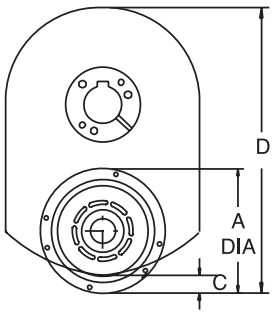
Cooling Fan Assemblies For Torque-Arm Reducers

When the thermal capacity of a Torque-Arm reducer is exceeded, cooling fans provide an optional, inexpensive way of lowering the oil temperature, thus increasing the thermal horsepower capacity of the reducer. Selection tables indicate when a cooling fan is required.

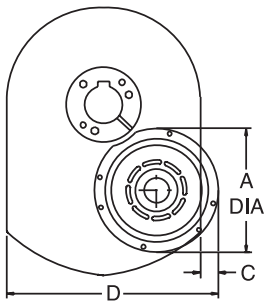
Installation is accomplished simply by attaching formed steel mounting straps to the reducer input shaft seal carrier. The fan assembly, which fastens to the input shaft, is compact enough to allow installation of the originally designed for the reducer. The fan housing is attached to the outer edges of the straps, which are spaced to allow free circulation of air at the back of the housing as well as through the front of the unit. The fan blade offers a radial streamline air flow which means smaller fans yet a more efficient movement of air.

For thermal capacities beyond the range of cooling fans, heat exchangers may be used-see below.

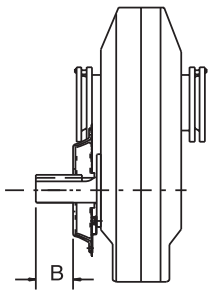
: See page G3-179 for maximum input shaft speeds



TXT305A THRU TXT905 (5:1)
TXT12 THRU TDT15 (15, 25, 30:1)



TXT3A THRU TXT10
RATIOS 9,15,25:1



Torque-Arm Reducer Cooling Fan Assemblies

Reducer Size	Cooling Fan No.	Part Number	Nominal Ratios	Wt.	A	B	C	D
TXT3B, SCXT3B	TXT3A	243581	9, 15, 25	3.0	4.88	2.13	0.15	9.38
TXT305A, SCXT305A	TXT305A	253188	5	3.0	3.94	1.88	–	–
TXT4B, SCXT4B	TDT4	272594	9, 15, 25	3.0	5.88	2.94	0.50	10.88
TXT405A, SCXT405A	TXT405A	254268	5	3.0	4.68	2.94	–	–
TXT5C, SCXT5C	TDT5	272369	9, 15, 25	3.0	7.08	3.44	–	–
TXT505A, SCXT505A	TXT505A	255231	5	3.0	5.75	3.44	–	–
TXT6A, SCXT6A	TDT6	272325	9, 15, 25	6.0	10.25	3.44	1.31	16.44
TXT605, SCXT605	TXT605	272681 ♣	5	6.0	7.08	3.42	–	–
TXT7A, SCXT7A	TDT7	272326	9, 15, 25	6.0	12.75	3.68	2.18	20.94
TXT705, SCXT705	TXT705	272685 ♣	5	6.0	9.25	3.88	–	–
TXT8A	TDT8	272327	15, 25	9.0	12.75	4.18	2.38	22.63
TXT805	TDT8	272327	5	9.0	12.75	4.25	–	–
TXT9A	TDT9	272328	15, 26	15.0	16.75	6.31	3.75	26.38
TXT905	T19	272324 ♣	5	15.0	12.75	7.44	–	–
TXT10A	TDT10	272329	15, 24	15.0	16.75	6.13	2.25	27.75
TXT12	TDT12	272330	15, 25	15.0	16.75	5.88	3.25	46.75
TDT13	TDT13	272331	25	20.0	18.50	5.68	3.94	49.75
TDT14	TDT14	272332	25	20.0	18.50	8.63	2.81	52.88
TDT15	TDT15	272333	30	23.0	18.50	9.50	2.00	60.63

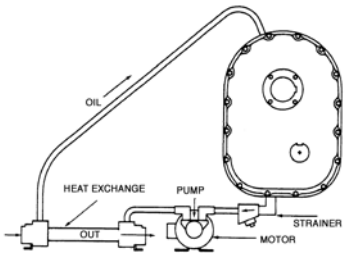
♣ Made to order

Reducer Heat Exchanger Cooling Package

For thermal capacities beyond the range of cooling fanes, an optional heat exchanger cooling package is available to prevent overheating the reducer and allow the use of full mechanical HP rating by lowering the oil temperature to an acceptable level.

Specifications for the heat exchange motor are as follows:
1/2 HP, 60 Hz, 3PH, 230/460 Volt, TEFC, 56 frame

Minimum coolant (water) flow is 3 G.P.M. based upon a maximum water temperature of 80°F. Minimum oil temperature for operation is 60°F



Part Number
273933 ♣

♣ Made to order

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
Screw Conveyor Parts

Screw Conveyor Shaft Mount Speed Reducers

Easy Selection Method (For Electric Motors)

When to Use Easy Selection

The Easy Selection tables for Shaft Mount reducers are for electric motor selections up to 75 horsepower with output speeds up to 400 RPM, using AGMA recommended application class numbers. For extreme shock or high energy loads which must be absorbed, as when stalling; for power source other than an electric motor; or for extreme ambient temperatures, or oversized equipment, consult Dodge Application Engineering, (864) 284-5700.

How to Select

Step 1: Determine Class of Service-See Table 1, page G1-6 to determine Load Classification for applications under normal conditions. Find the type application and duty cycle that most closely matches your specific application.

Class I Steady load not exceeding Motor HP rating and light shock loads during 10 hours a day. Moderate shock loads are allowable if operation is intermittent.

For Class I applications, the maximum value of starting and momentary peak loads should not exceed 2 x Motor HP rating. If it exceeds this amount it should be divided by 2 and the result used in the selection table instead of the Motor HP rating.

Class II Steady load not exceeding Motor HP rating for over 10 hours a day. Moderate shock loads are allowable during 10 hours a day.

For Class II applications, the maximum value of starting and momentary peak loads should not exceed 2.8 x Motor HP rating. If it exceeds this amount it should be divided by 2.8 and the result used in the selection table instead of the Motor HP rating.

Class III Moderate shock loads for over 10 hours a day. Heavy shock loads are allowable during 10 hours a day.

For Class III applications, the maximum value of starting and momentary peak loads should not exceed 4 x Motor HP rating. If it exceeds this amount it should be divided by 4 and the result used in the selection table instead of the Motor HP rating.

Step 2: Determine Reducer Size-See the Easy Selection Tables, pages G3-85 thru G3-91. From Selection Table I, II or III read the reducer size for the application horsepower and output speed. Note: For applications where fan cooling is unacceptable use the Easy Selection tables with an increased Class number. Where more than one reducer selection is listed, the most economical ratio is generally listed first. See page G3-179 for maximum input and output speeds, overhung load ratings and WR2 ratings.

Step 3: Check Dimensions-See Selection/Dimensions sections, pages G3-92 thru G3-121 for reducer dimensions, weights and part numbers. See Engineering/ Technical section, page G3-173 for reducer and mounting positions.

Step 4: Select Screw Conveyor Drive Shaft and Adapter-to fit screw diameter-See Selection/Dimensions section, pages G3-92 thru G3-121 for compatibility of screw diameter and drive shaft diameter.

Step 5: Select a Belt Drive Arrangement-From the Sheave Ratio table, page G3-164 thru G3-165, select the required sheave ratio for the belt drive. Select the belt drive so that the sheave mounted on the reducer shaft is not smaller than the minimum sheave diameter shown in Table 20, page G3-163. **Note:** Mount the sheave as close as possible to the reducer to minimize the effect of overhung load on the reducer.

Step 6: Select Accessories-See Modifications/ Accessories section, pages G3-122 thru G3-128, for description, dimensions, weights, and part numbers for accessories available for the Screw Conveyor Drive reducer selected:

Motor Mounts
Belt Guards
Cooling Fans
Auxiliary Seal Kits
Alternative drive shaft styles
Filter Breathers

Note: Screw Conveyor Drive reducers are shipped without oil. Screw Conveyor Drive reducers are suitable from stock for vertical or incline mounting, no modification required.

Screw Conveyor Shaft Mount Speed Reducers

Example: Easy Selection Method - SCXT Screw Conveyor Drive Reducers

A 5 HP 1750 RPM motor is used to drive a heavy duty screw conveyor that runs 10 hours per day in a local feed mill, conveying grain. User needs a replacement reducer drive for a CEMA standard screw conveyor with a 12" diameter screw and 2-7/16, diameter drive shaft. Conveyor speed is 72 RPM.

Step 1: Determine Class of Service-From Table 1, page G3-15, locate "conveyors, general purpose; screw conveyor heavy duty, not uniformly loaded" for 3 to 10 hours per day. This load is classified as a Class II application.

Step 2: Determine Reducer Size-From Table 10, Class II Selection, page G3-88, find the column for 5 HP and read down to 72 RPM. An SCXT225 reducer is the correct selection. Check maximum input and output speed, overhung load, and WR2 requirements with reducer ratings on page G3-179.

Step 3: Check Dimensions-See Selection/Dimensions section, page G3-96 & 97, for reducer dimensions, weights, part numbers and other pertinent drive dimensions. See Engineering/ Technical section page G3-173 for information on mounting positions

Step 4: Select Screw Conveyor Drive Shaft and Adapter to fit screw diameter-See Selection/Dimensions section, page G3-96. Here we verify that a 2-7/16" diameter drive shaft is compatible with 12" diameter screw. From this same page, select a C2A adapter which fits the 2-7/16" CEMA standard screw conveyor drive shaft.

Step 5: Select a Belt Drive Arrangement-From the Sheave Ratio table, page G3-164, select a V-drive ratio for the conveyor speed of 72 RPM. With this information, select a belt drive that meets your customer's needs -i.e. belt style preference, service factor requirements, Taper Lock or QD mounting, etc. Sheave diameter must not be less than minimum diameters shown in Table 20, page G3-163.

Step 6: Select Accessories-See Selection/Dimensions page G3-97 and Modifications/Accessories page G3-126 to pick out accessories for this application:

M214 Motor Mount-to mount motor to side of SCXT225 reducer.

SCXT2D Expanded Metal Belt Guard-to cover and protect the rotating belt drive.

Courtesy of:
Screw Conveyor Parts

SELECTION

Screw Conveyor Shaft Mount Speed Reducers

Selection Guide: SCXT Screw Conveyor Drive Reducers

This Is A Handy Reference Sheet For Quick Selection And Specification Of Dodge Screw Conveyor Drive Reducers. Use It To Identify Information Needed To Make An Accurate Selection With A Step-By-Step Selection Format For Choosing Reducer, Accessories And V-Drive.
Use This Page To Make Your Own Selections Or Send This Form, With Application Data To Dodge For Assistance.

Name _____ Company Name _____

Phone No. _____ Fax. No. _____

Application Data:

Type of Driven Equipment _____

Hours of Service Per Day _____ Class of Service _____

Type of Load: Uniform _____ Moderate _____ Shock _____

Motor Type: HP _____ RPM _____ Frame Size _____ Shaft Size _____

Screw Conveyor RPM _____

Drive Shaft Diameter And Type _____

Adapter Type _____

Unusual Ambient Temperature _____

Other Pertinent Application Characteristics (i.e. - Dusty Environment, Reversing Duty, Start/Stop Cycles, Etc.) _____

Reducer Drive Selection:

Step 1 Determine Class of Service _____

Step 2 From Appropriate Service Class Table, Select Reducer Size And Rotation That Meets Application HP and Driven RPM Requirements _____

Step 3 Select Drive Shaft With Diameter To Fit Screw Size _____

Determine Type Of Drive Shaft Needed: Standard _____ Stainless Steel _____

3-Hole Standard _____ 3-Hole Stainless _____

Step 4 Select Adapter: C Standard _____

AC Adjustable Packing Kit _____

Step 5 Select accessories required for application:

Motor Mount: Standard _____ Long _____

Belt Guard: Standard _____ Long _____

Cooling Fan _____ Auxiliary Seal Kit _____ Filter Breather _____

Other _____

V-Belt Drive Specification:

Service Factor _____ V-Belt Drive Ratio Needed _____

Belt Center Distance _____ Type of Belt Desired _____

Driver: Shaft Diameter _____ Driven: Shaft Diameter _____

Sheave _____ Sheave _____

Bushing _____ Bushing _____

Belts: Size _____ Quantity _____

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

Table 9 - Class II Selection Table SCXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
1/4	4-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1/3	5-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1/2	4-6	–	SCXT225A	
	7-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
3/4	4-5	–	SCXT325B	
	6-10	–	SCXT225A	
	11-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1	4-5	–	SCXT425B	
	6-7	–	SCXT325B	
	8-15	–	SCXT225A	
	16-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1-1/2	4	–	SCXT525C	
	5-7	–	SCXT425B	
	8-12	–	SCXT325B	
	13-23	–	SCXT225A	
	24-70	–	SCXT125A	SCXT115A
1-1/2 (Continued)	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
2	4-6	–	SCXT525C	
	7-10	–	SCXT425B	
	11-17	–	SCXT325B	
	18-32	–	SCXT225A	SCXT215A
	33-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
3	4-5	–	SCXT625A	
	6-10	–	SCXT525C	
	11-15	–	SCXT425B	
	16-26	–	SCXT325B	–
	27-51	–	SCXT225A	SCXT215A
	52-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
5	5-6	–	SCXT725A	
	7-9	–	SCXT625A	
	10-17	–	SCXT525C	
	18-26	–	SCXT425B	SCXT415B
	27-46	–	SCXT325B	SCXT315B
	47-70	–	SCXT225A	SCXT215A
	71-85	–	SCXT215A	SCXT225A
	86-92	–	SCXT109A	SCXT215A
	93-115	–	SCXT115A	SCXT109A
	116-119	–	SCXT109A	SCXT115A
	120-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
7-1/2	4-6	–	SCXT825A	
	7-9	–	SCXT725A	

★ See Page G3-173 for lubrication for 15 RPM and slower

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Screw Conveyor Shaft Mount Speed Reducers (Continued)

Table 9 - Class I Selection Table SCXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
7-1/2 (Continued)	10-15	–	SCXT625A	
	16-26	–	SCXT525C	
	27-40	–	SCXT425B	SCXT415B
	41-70	–	SCXT325B	SCXT315B
	71-74	–	SCXT315B	SCXT325B
	75-85	–	SCXT215A	SCXT225A
	86-95	–	SCXT215A	SCXT209A
	96-140	SCXT205	SCXT209A	SCXT215A
	141-200	SCXT205	SCXT209A	
	201-231	SCXT205	–	–
10	6-8	–	SCXT825A	
	9-12	–	SCXT725A	
	13-20	–	SCXT625A	
	21-36	–	SCXT525C	SCXT515C
	37-56	–	SCXT425B	SCXT415B
	57-70	–	SCXT325B	SCXT315B
	71-85	–	SCXT315B	SCXT325B
	86-103	–	SCXT315B	SCXT309B
	104-115	–	SCXT215A	SCXT209A
	116-140	SCXT305A	SCXT215A	
	141-158	SCXT305A	SCXT309B	
	159-200	SCXT305A	SCXT309B	
	201-400	SCXT205	–	–
15	9-13	–	SCXT825A	
	14-19	–	SCXT725A	
	20-32	–	SCXT625A	SCXT615A
	33-56	–	SCXT525C	SCXT515C
	57-70	–	SCXT425B	SCXT415B
	71-85	–	SCXT415B	SCXT425B
	86-93	–	SCXT415B	SCXT409B
	94-115	–	SCXT309B+	SCXT315B
	116-140	SCXT405A	SCXT315B	SCXT309B+
	141-145	SCXT405A	SCXT309B+	
	146-200	SCXT305A	SCXT309B+	
	201-400	SCXT305A	–	–
20	13-18	–	SCXT825A	
	19-26	–	SCXT725A	SCXT715A
	27-45	–	SCXT625A	SCXT615A
	46-70	–	SCXT525C	SCXT515C
	71-78	–	SCXT515C	SCXT525C

★ See Page G3-173 for lubrication for 15 RPM and slower

HP	Output RPM	Reducer Selection		
		Single	Double	
20 (Continued)	79-85	–	SCXT415B	SCXT42B
	86-115	–	SCXT415B	SCXT409B+
	116-140	SCXT405A	SCXT409B+	SCXT415B+
	141-200	SCXT405A	SCXT309B+	
	201-241	SCXT405A	–	–
	242-400	SCXT305A+	–	–
25	16-23	–	SCXT825A	
	24-33	–	SCXT725A	SCXT715A
	34-59	–	SCXT625A	SCXT615A
	60-70	–	SCXT525C+	SCXT515C+
	71-80	–	SCXT515C+	SCXT525C+
	81-101	–	SCXT515C+	SCXT509C+
	102-132	SCXT505A	SCXT415B+	SCXT409B+
	133-140	SCXT505A	SCXT409B+	SCXT415B+
	141-163	SCXT505A	SCXT409B+	
	164-200	SCXT405A+	SCXT409B+	
	201-400	SCXT405A+	–	–
30	20-28	–	SCXT825A	SCXT815A
	29-41	–	SCXT725A	SCXT715A
	42-70	–	SCXT625A	SCXT615A
	71-75	–	SCXT615A	SCXT625A
	76-115	–	SCXT515C+	SCXT509C+
	116-125	SCXT605	SCXT509C+	SCXT515C+
	126-131	SCXT605	SCXT409B+	
	132-200	SCXT505A	SCXT409B+	
	201-215	SCXT505A+	–	–
	216-400	SCXT405A+	–	–
40	26-38	–	SCXT825A	SCXT815A
	39-57	–	SCXT725A	SCXT715A
	58-70	–	SCXT625A	SCXT615A
	71-81	–	SCXT615A+	SCXT625A+
	82-114	SCXT605	SCXT615A+	SCXT609A+
	115-125	SCXT605	SCXT515C+	SCXT509C+
	126-200	SCXT605	SCXT509C+	
	201-241	SCXT605	–	–
	242-400	SCXT505A+	–	–
50	33-49	–	SCXT825A	SCXT815A
	50-70	–	SCXT725A	SCXT715A
	71-74	–	SCXT715A	SCXT725A
	75-125	–	SCXT615A+	SCXT709A+

+ Fan cooling required - see page G3-81

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers (Continued)

Table 9 - Class I Selection Table SCXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
50 (Continued)	126-163	SCXT605+	SCXT709A+	
	164-200	SCXT605+	SCXT609A+	
	201-400	SCXT605+	–	–
60	40-60	–	SCXT825A	SCXT815A
	61-70	–	SCXT725A+	SCXT715A+
	71-120	–	SCXT715A+	SCXT709A+
	121-131	SCXT705	SCXT709A+	
	132-200	SCXT605+	SCXT709A+	
	201-400	SCXT605+	–	–
75	51-70	–	SCXT825A	SCXT815A
	71-78	–	SCXT815A+	
	79-120	–	SCXT715A+	SCXT709A+
	121-200	SCXT705	SCXT709A+	
	201-210	SCXT705	–	–
	211-400	SCXT605+	–	–

★ See Page G3-173 for lubrication for 15 RPM and slower

+ Fan cooling required - see page G3-81

Screw Conveyor Shaft Mount Speed Reducers

Table 10 - Class II Selection Table SCXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
1/4	5-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1/3	4-6	–	SCXT225A	
	7-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1/2	4-5	–	SCXT325B	
	6-9	–	SCXT225A	
	10-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
3/4	4-5	–	SCXT425B	
	6-8	–	SCXT325B	
	9-16	–	SCXT225A	
	17-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1	5-7	–	SCXT425B	
	8-11	–	SCXT325B	
	12-22	–	SCXT225A	
	23-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1-1/2	5-6	–	SCXT525C	
	7-11	–	SCXT425B	
	12-18	–	SCXT325A	
	19-34	–	SCXT225A	SCXT215A
	35-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
2	4-5	–	SCXT625A	
	6-9	–	SCXT525C	
	10-14	–	SCXT425B	
	15-24	–	SCXT325B	SCXT315B
	25-47	–	SCXT225A	SCXT215A
	48-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
3	4-5	–	SCXT725A	
	6-8	–	SCXT625A	
	9-14	–	SCXT525C	
	15-22	–	SCXT425B	SCXT415B
	23-38	–	SCXT325B	SCXT315B
	39-70	–	SCXT225A	SCXT215A
	71-75	–	SCXT215A	SCXT225A
	76-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
5	4-6	–	SCXT825A	
	7-8	–	SCXT725A	
	9-14	–	SCXT625A	
	15-24	–	SCXT525C	
	25-37	–	SCXT425B	SCXT415B
	38-69	–	SCXT325B	SCXT315B
	70-85	–	SCXT215A	SCXT225A
	86-89	–	SCXT215A	SCXT209A
	90-136	SCXT205	SCXT209A	SCXT215A
	137-140	SCXT205	SCXT115A	SCXT209A
	141-191	SCXT205	SCXT109A	
	192-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
7-1/2	6-9	–	SCXT825A	
	10-13	–	SCXT725A	
	14-21	–	SCXT625A	
	22-38	–	SCXT525C	SCXT515C
	39-59	–	SCXT425B	SCXT415B
	60-70	–	SCXT325B	SCXT315B
	71-85	–	SCXT315B	SCXT325B
	86-110	–	SCXT315B	SCXT309B
	111-122	–	SCXT215A	
	123-140	SCXT305A	SCXT209A	SCXT215A
	141-183	SCXT305A	SCXT209A	
	184-200	SCXT205	SCXT209A	
	201-400	SCXT205	–	–

★ See Page G3-173 for lubrication for 15 RPM and slower

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers (Continued)

Table 10 - Class II Selection Table SCXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
10	8-12	–	SCXT825A	
	13-18	–	SCXT725A	
	19-29	–	SCXT625A	SCXT615A
	30-52	–	SCXT525C	SCXT515C
	53-70	–	SCXT425B	SCXT415B
	71-84	–	SCXT415B	SCXT425B
	85-130	–	SCXT315B	SCXT309B
	131-140	SCXT305A	SCXT315B	SCXT309B
	141-200	SCXT305A	SCXT309B	
	201-353	SCXT305A	–	–
	354-400	SCXT205	–	–
15	13-19	–	SCXT825A	
	20-27	–	SCXT725A	
	28-47	–	SCXT625A	SCXT615A
	48-70	–	SCXT525C	SCXT515C
	71-82	–	SCXT515C	SCXT525C
	83-117	–	SCXT415B	SCXT409B
	118-140	SCXT405A	SCXT409B	SCXT415B
	141-150	SCXT405A	SCXT409B	
	151-200	SCXT405A	SCXT309B+	
	201-269	SCXT405A	–	–
	270-400	SCXT305A	–	–
20	18-26	–	SCXT825A	
	27-38	–	SCXT725A	SCXT715A
	39-68	–	SCXT625A	SCXT615A
	69-80	–	SCXT515C	SCXT525C
	81-89	–	SCXT515C	
	90-117	–	SCXT515C+	SCXT509C+
	118-125	SCXT505A	SCXT409B+	SCXT415B+
	126-200	SCXT505A	SCXT409B+	
	201-400	SCXT405A+	–	–
25	23-33	–	SCXT825A	SCXT815A
	34-49	–	SCXT725A	SCXT715A
	50-80	–	SCXT615A	SCXT625A
	81-94	–	SCXT615A	SCXT609A
	95-125	SCXT605	SCXT509C+	SCXT515C+
	126-174	SCXT605	SCXT509C+	
	175-200	SCXT505A	SCXT409B+	
	201-270	SCXT505A	–	–
	271-400	SCXT405A+	–	–
30	28-41	–	SCXT825A	SCXT815A
	42-60	–	SCXT725A	SCXT715A
	61-76	–	SCXT625A	SCXT615A
	77-89	–	SCXT615A	SCXT609A
	90-125	SCXT605	SCXT615A+	SCXT609A+
	126-200	SCXT605	SCXT509C+	
	201-233	SCXT605	–	–
	234-349	SCXT505A+	–	–
	350-400	SCXT405A+	–	–

HP	Output RPM	Reducer Selection		
		Single	Double	
40	37-56	–	SCXT825A	SCXT815A
	57-75	–	SCXT725A	SCXT715A
	76-88	–	SCXT715A	
	89-114	–	SCXT615A+	SCXT609A+
	115-120	–	SCXT615A+	SCXT609A+
	121-200	SCXT605	SCXT609A+	
	201-347	SCXT605+	–	–
	348-400	SCXT505A+	–	–
50	47-70	–	SCXT825A	SCXT815A
	71-72	–	SCXT815A	SCXT825A
	73-95	–	SCXT715A+	
	96-110	SCXT705	SCXT709A	SCXT715A+
	111-120	SCXT705	SCXT709A+	SCXT715A+
	121-179	SCXT705	SCXT709A+	
	180-200	SCXT605	SCXT609A+	
	201-400	SCXT605+	–	–
60	57-70	–	SCXT825A	SCXT815A
	71-75	–	SCXT815A	SCXT825A
	76-89	–	SCXT815A	
	90-120	SCXT705	SCXT715A+	SCXT709A+
	121-200	SCXT705	SCXT709A+	
	201-285	SCXT705	–	–
	286-400	SCXT605+	–	–
75	74-75	–	SCXT815A	SCXT825A
	76-120	–	SCXT815A+	
	121-133	–	SCXT709A+	
	134-200	SCXT705	SCXT709A+	
	201-400	SCXT705	–	–

★ See Page G3-173 for lubrication for 15 RPM and slower

+ Fan cooling required - see page G3-81

FEATURES/BENEFITS PAGE G3-2 | SPECIFICATION PAGE G3-9 | MODIFICATION/ACCESSORIES PAGE G3-72, G3-122 | RELATED PRODUCTS PAGE G3-154

Screw Conveyor Shaft Mount Speed Reducers

Table 10 - Class III Selection Table SCXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
1/4	4-6	–	SCXT225A	
	7-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-89	–	SCXT115A	SCXT109A
	90-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1/3	5-9	–	SCXT225A	
	10-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1/2	4-5	–	SCXT425B	
	6-7	–	SCXT325B	
	8-15	–	SCXT225A	–
	16-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
3/4	4	–	SCXT525C	
	5-7	–	SCXT425B	–
	8-12	–	SCXT325B	–
	13-23	–	SCXT225A	–
	24-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1	4-6	–	SCXT525C	
	7-10	–	SCXT425B	
	11-17	–	SCXT325B	
	18-32	–	SCXT225A	–
	33-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
1-1/2	4-5	–	SCXT625A	
	6-10	–	SCXT525C	
	11-15	–	SCXT425B	
	16-26	–	SCXT325B	
	27-51	–	SCXT225A	SCXT215A

HP	Output RPM	Reducer Selection		
		Single	Double	
1-1/2 (Continued)	52-70	–	SCXT125A	SCXT115A
	71-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
2	5-7	–	SCXT625A	
	8-13	–	SCXT525C	
	14-21	–	SCXT425B	
	22-36	–	SCXT325B	SCXT315B
	37-71	–	SCXT225A	SCXT215A
	72-85	–	SCXT115A	SCXT125A
	86-115	–	SCXT115A	SCXT109A
	116-140	SCXT105	SCXT109A	SCXT115A
	141-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
3	4-5	–	SCXT825A	
	6-7	–	SCXT725A	
	8-12	–	SCXT625A	
	13-20	–	SCXT525C	
	21-32	–	SCXT425B	SCXT415B
	33-57	–	SCXT325B	SCXT315B
	58-70	–	SCXT225A	SCXT215A
	71-85	–	SCXT215A	SCXT225A
	86-89	–	SCXT215A	SCXT209A
	90-113	SCXT205	SCXT215A	SCXT209A
	114-140	SCXT205	SCXT109A	SCXT115A
	141-155	SCXT205	SCXT109A	
	156-200	SCXT105	SCXT109A	
	201-400	SCXT105	–	–
5	6-8	–	SCXT825A	
	9-12	–	SCXT725A	
	13-20	–	SCXT625A	
	21-36	–	SCXT525C	SCXT515C
	37-56	–	SCXT425B	SCXT415B
	57-70	–	SCXT325B	SCXT315B
	71-85	–	SCXT315B	SCXT325B
	86-103	–	SCXT315B	SCXT309B
	104-114	SCXT305A	SCXT215A	SCXT309B
	115-140	SCXT305A	SCXT209A	SCXT215A
	141-167	SCXT305A	SCXT209A	
	168-200	SCXT205	SCXT209A	
	201-400	SCXT205	–	–
7-1/2	9-13	–	SCXT825A	
	14-19	–	SCXT725A	
	20-32	–	SCXT625A	SCXT615A
	33-56	–	SCXT525C	SCXT515C
	57-70	–	SCXT425B	SCXT415B
	71-85	–	SCXT415B	SCXT425B

★ See Page G3-173 for lubrication for 15 RPM and slower

Courtesy of:
Screw Conveyor Parts

Screw Conveyor Shaft Mount Speed Reducers (Continued)

Table 10 - Class III Selection Table SCXT Reducers ★

HP	Output RPM	Reducer Selection		
		Single	Double	
7-1/2 (Continued)	86-93	–	SCXT415B	SCXT409B
	94-140	SCXT405A	SCXT309B	SCXT315B
	141-144	SCXT405A	SCXT309B	
	145-200	SCXT305A	SCXT309B	
	201-400	SCXT305A	–	–
10	13-18	–	SCXT825A	
	19-26	–	SCXT725A	SCXT715A
	27-45	–	SCXT625A	SCXT615A
	46-70	–	SCXT525C	SCXT515C
	71-78	–	SCXT515C	SCXT525C
	79-92	–	SCXT415B	
	93-105	–	SCXT415B	SCXT409B
	106-141	SCXT405A	SCXT409B	SCXT415B
	142-200	SCXT405A	SCXT309B	–
	201-241	SCXT405A	–	–
	242-400	SCXT305A	–	–
15	20-28	–	SCXT825A	SCXT815A
	29-41	–	SCXT725A	SCXT715A
	42-70	–	SCXT625A	SCXT615A
	71-75	–	SCXT615A	SCXT625A
	76-93	–	SCXT515C	
	94-115	–	SCXT515C	SCXT509C
	116-125	SCXT605	SCXT509C	SCXT515C
	126-131	SCXT605	SCXT509C	
	132-200	SCXT505A	SCXT409B	
	201-215	SCXT505A	–	–
	216-400	SCXT405A	–	–
20	26-38	–	SCXT825A	SCXT815A
	39-57	–	SCXT725A	SCXT715A
	58-70	–	SCXT625A	SCXT615A
	71-114	–	SCXT615A	SCXT609A
	115-125	SCXT605	SCXT509C+	SCXT515C+
	126-200	SCXT605	SCXT509C+	
	201-218	SCXT605	–	–
	219-324	SCXT505A	–	–
	325-400	SCXT405A+	–	–
25	33-49	–	SCXT825A	SCXT815A
	50-70	–	SCXT725A	SCXT715A
	71-74	–	SCXT715A	SCXT725A
	75-104	–	SCXT615A	SCXT609A
	105-113	–	SCXT615A+	SCXT609A
	114-125	SCXT605	SCXT615A+	SCXT609A+
	126-200	SCXT605	SCXT609A+	
	201-294	SCXT605	–	–
	295-400	SCXT505A+	–	–
30	40-60	–	SCXT825A	SCXT815A
	61-70	–	SCXT725A	SCXT715A
	71-98	–	SCXT715A	
	99-125	–	SCXT615A	SCXT609A+

HP	Output RPM	Reducer Selection		
		Single	Double	
30 (Continued)	126-131	SCXT705	SCXT609A+	
	132-200	SCXT605	SCXT609A+	
	201-381	SCXT605	–	–
	382-400	SCXT505A+	–	–
40	54-70	–	SCXT825A	SCXT815A
	71-84	–	SCXT815A	
	85-89	–	SCXT715A	SCXT709A
	90-120	SCXT705	SCXT715A+	SCXT709A
	121-200	SCXT705	SCXT709A+	
	201-249	SCXT705	–	–
	250-400	SCXT605+	–	–
50	70-75	–	SCXT815A	SCXT825A
	76-110	–	SCXT815A	
	111-120	–	SCXT715A+	SCXT709A+
	121-123	–	SCXT709A+	
	124-200	SCXT705	SCXT709A+	
	201-400	SCXT705	–	–
60	86-120	–	SCXT815A	
	142-161	–	SCXT709A+	
	162-200	SCXT705	SCXT709A+	
	201-400	SCXT705	–	–

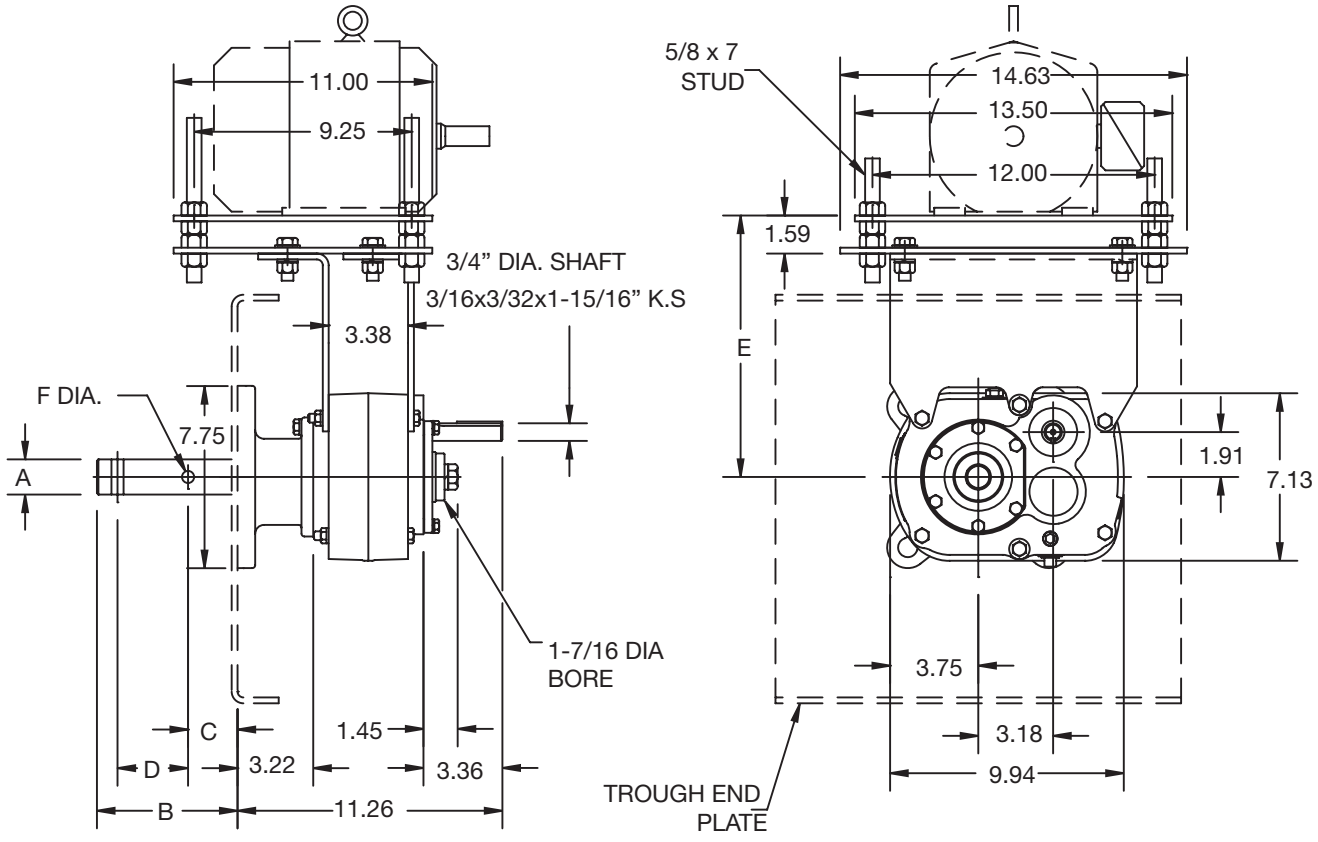
★ See Page G3-173 for lubrication for 15 RPM and slower

+ Fan cooling required - see page G3-81

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Screw Conveyor Shaft Mount Speed Reducers

SCXT1A - Double Reduction Screw Conveyor Drives



CEMA Drive Shafts ★						
Drive Shaft	**Screw Dia.**	**A**	**B**	**C**	**D**	**F Dia.**
C1 x 1-1/2	6" - 9"	1.50	6.00	2.13	3.00	.52
C1 x 2	9" - 12"	2.00	6.00	2.13	3.00	.64
C1 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C1 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT1A - Double Reduction Screw Conveyor Drives

SCXT1A Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT109A	241480	107D09	9.44	45
SCXT115A	351163	107D15	15.35	45
SCXT125A	351164	107D25	25.64	45

Description	Part No.	Weight
C1A Adapter Assembly ▲	351086	13
AC1 Adjustable Packing Kit ♠	356301	0.8
C1 x 1-1/2 Drive Shaft ★	351094	7.2
C1 x 2 Drive Shaft ★	351095	9.1
C1 x 2 7/16 Drive Shaft ★	351096	12.5
C1 x 3 Drive Shaft ★	351097	17.4

Accessories for SCXT1A Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M112 Standard Motor Mount	56T thru 210T	6"-12"	351069	42
M120L Long Motor Mount	56T thru 210T	14"-20"	272625	51
SCXT1D SCD Reducer Belt Guard	56T thru 210T	–	241489	27
SCXT1D SCD Reducer Belt Guard for Long Motor Mount	56T thru 210T	–	241149	32
SCXT1 Auxiliary Seal Kit ♥	–	–	272721	2
SCXT1 Lube Kit	–	–	LUBEKITTXT1	4.6

SCXT1 Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames					
			56, 140		180		210	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M112	11.1	15.3	13.5	17.0	14.5	18.0	15.3	19.0
M120L	17.1	21.3	19.5	22.9	20.5	23.9	21.2	24.7

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

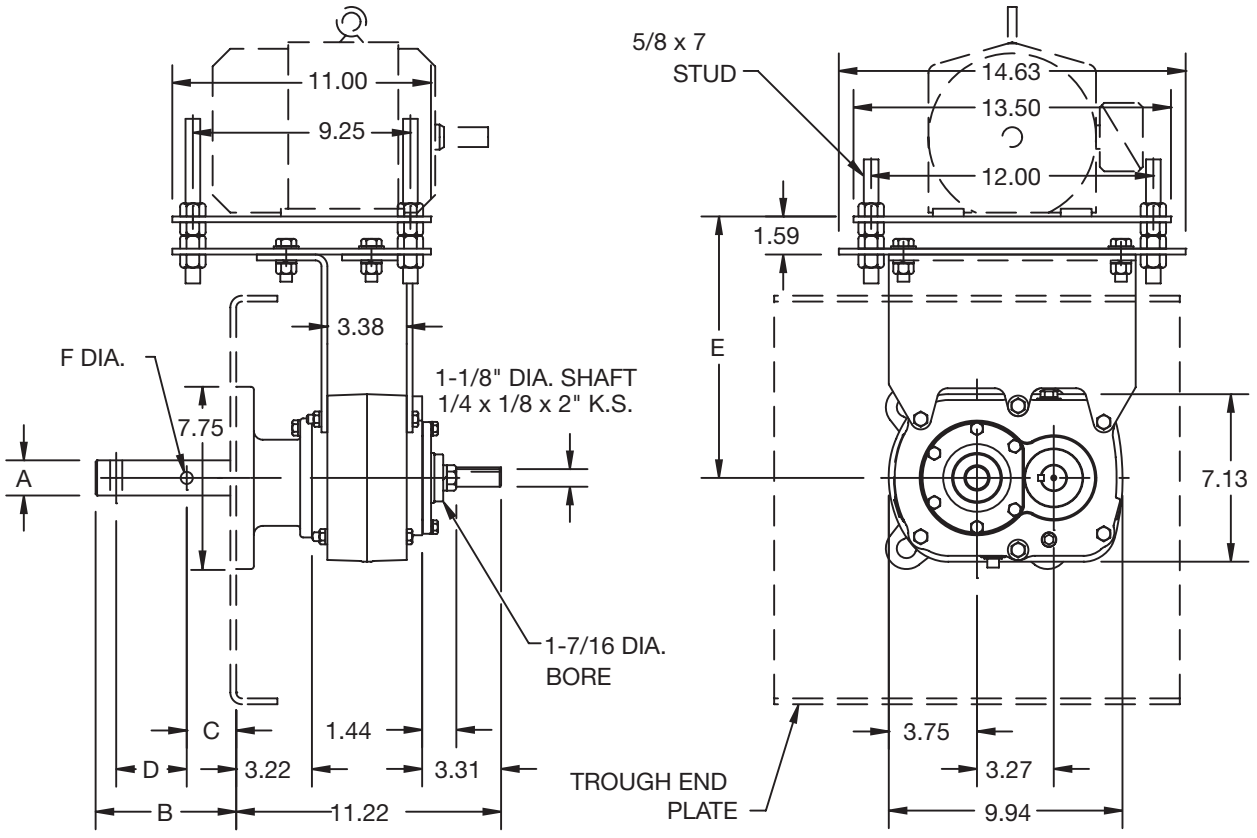
♥ See page G3-177 for drill and tap information required to mount to reducer.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

Screw Conveyor Shaft Mount Speed Reducers

SCXT105 - Single Reduction Screw Conveyor Drives



CEMA Drive Shafts ★						
Drive Shaft	**Screw Dia.**	**A**	**B**	**C**	**D**	**F Dia.**
C1 x 1-1/2	6" - 9"	1.50	6.00	2.13	3.00	.52
C1 x 2	9" - 12"	2.00	6.00	2.13	3.00	.64
C1 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C1 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT105 - Single Reduction Screw Conveyor Drives

SCXT105 Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT105	351165	107S05	5.62	40

Description	Part No.	Weight
C1A Adapter Assembly ▲	351086	13
AC1 Adjustable Packing Kit ♠	356301	0.8
C1 x 1-1/2 Drive Shaft ★	351094	7.2
C1 x 2 Drive Shaft ★	351095	9.1
C1 x 2 7/16 Drive Shaft ★	351096	12.5
C1 x 3 Drive Shaft ★	351097	17.4

Accessories for SCXT105 Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M112 Standard Motor Mount	56T thru 210T	6"-12"	351069	42
M120L Long Motor Mount	56T thru 210T	14"-20"	272625	51
SCXT1S SCD Reducer Belt Guard	56T thru 210T	–	241491	30
SCXT1S SCD Reducer Belt Guard for Long Motor Mount ♠	56T thru 210T	–	241142	36
SCXT105 Auxiliary Seal Kit ♥ ♣	–	–	251146	2
SCXT105 Lube Kit	–	–	LUBEKITTXT105	4.5

SCXT105 Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames					
			56, 140		180		210	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M112	11.1	15.3	15.4	19.0	16.4	20.0	17.2	20.6
M120L	17.1	21.3	21.4	24.8	22.4	25.8	23.1	26.6

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

♥ See page G2-177 for drill and tap information required to mount to reducer.

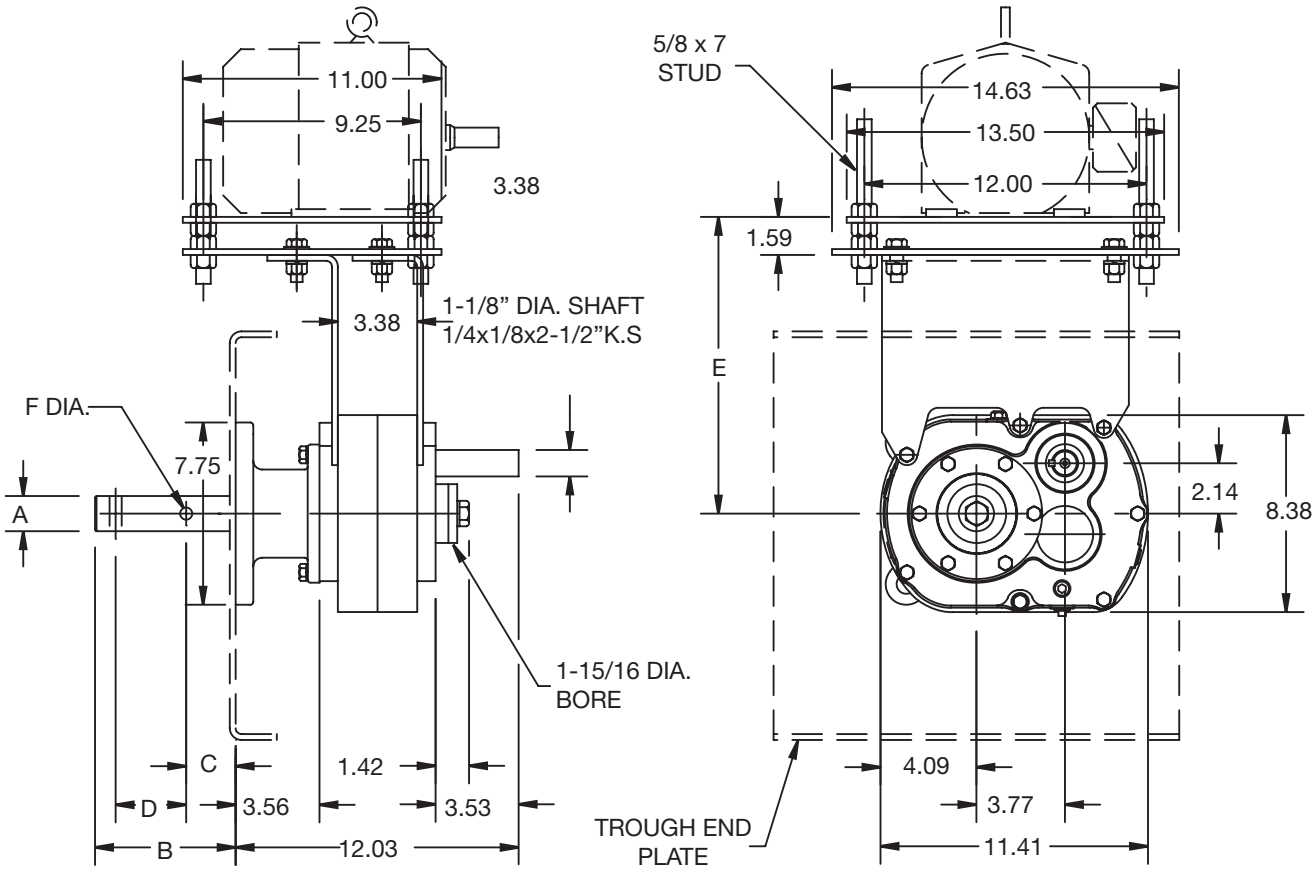
▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G2-123 thru G3-125 for optional drive shafts available from Dodge.

♣ Made to order.

Screw Conveyor Shaft Mount Speed Reducers

SCXT2A - Double Reduction Screw Conveyor Drives



CEMA Drive Shafts ★

Drive Shaft	Screw Dia.	A	B	C	D	F Dia.
C2 x 1-1/2	6" - 9"	1.50	6.00	2.13	3.00	.52
C2 x 2	9" - 12"	2.00	6.00	2.13	3.00	.64
C2 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C2 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT2A - Double Reduction Screw Conveyor Drives

SCXT2A Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT209A	242480	115D09	9.25	58
SCXT215A	352065	115D15	14.10	58
SCXT225A	352066	115D25	23.46	58

Description	Part No.	Weight
C2A Adapter Assembly ▲	352052	15
AC2 Adjustable Packing Kit ♠	356302	1.2
C2 x 1-1/2 Drive Shaft ★	352090	11.4
C2 x 2 Drive Shaft ★	352091	13.8
C2 x 2 7/16 Drive Shaft ★	352092	17.3
C2 x 3 Drive Shaft ★	352093	19

Accessories for SCXT2A Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M214 Standard Motor Mount	56T thru 210T	6"-14"	352069	43
M220L Long Motor Mount	56T thru 210T	16"-20"	272626	51
SCXT2D SCD Reducer Belt Guard	56T thru 210T	–	242489	32
SCXT2D SCD Reducer Belt Guard for Long Motor Mount	56T thru 210T	–	242223	38
SCXT2 Auxiliary Seal Kit ♥	–	–	272722	3
SCXT2 Lube Kit	–	–	LUBEKITTXT2	4.6

SCXT2 Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames					
			56, 140		180		210	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M214	12.6	16.8	14.9	18.3	15.9	19.3	16.6	20.0
M220L	18.6	22.8	20.9	24.2	21.9	25.3	22.6	26.0

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

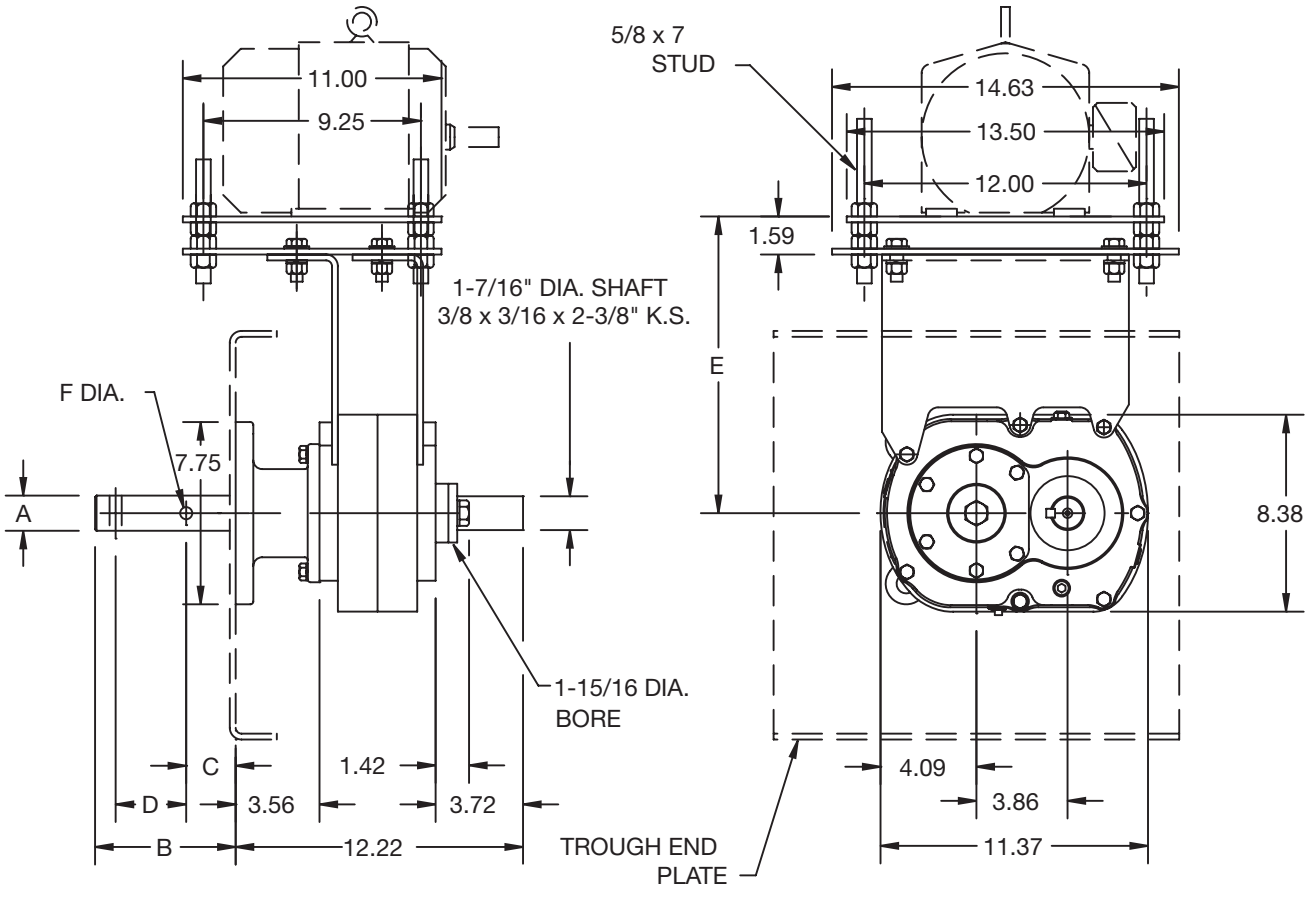
♥ See page G3-177 for drill and tap information required to mount to reducer.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

Screw Conveyor Shaft Mount Speed Reducers

SCXT205 - Single Reduction Screw Conveyor Drives



CEMA Drive Shafts ★

Drive Shaft	Screw Dia.	A	B	C	D	F Dia.
C2 x 1-1/2	6" - 9"	1.50	6.00	2.13	3.00	.52
C2 x 2	9" - 12"	2.00	6.00	2.13	3.00	.64
C2 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C2 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT205 - Single Reduction Screw Conveyor Drives

SCXT205 Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT205	352218	115S05	5.29	52

Description	Part No.	Weight
C2A Adapter Assembly ▲	352052	15
AC2 Adjustable Packing Kit ♠	356302	1.2
C2 x 1-1/2 Drive Shaft ★	352090	11.4
C2 x 2 Drive Shaft ★	352091	13.8
C2 x 2 7/16 Drive Shaft ★	352092	17.3
C2 x 3 Drive Shaft ★	352093	19

Accessories for SCXT205 Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M214 Standard Motor Mount	56T thru 210T	6"-12"	352069	43
M220L Long Motor Mount	56T thru 210T	14"-20"	272626	51
SCXT2S SCD Reducer Belt Guard	56T thru 210T	–	242491	34
SCXT2S SCD Reducer Belt Guard for Long Motor Mount	56T thru 210T	–	242114	41
SCXT205 Auxiliary Seal Kit ♥ ♣	–	–	252146	3
SCXT205 Lube Kit	–	–	LUBEKITTXT205	6.9

SCXT105 Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames					
			56, 140		180		210	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M214	12.6	16.8	17.0	20.5	18.0	21.4	18.7	22.2
M220L	18.6	22.8	23.0	26.4	24.0	27.5	24.7	28.2

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

♥ See page G2-177 for drill and tap information required to mount to reducer.

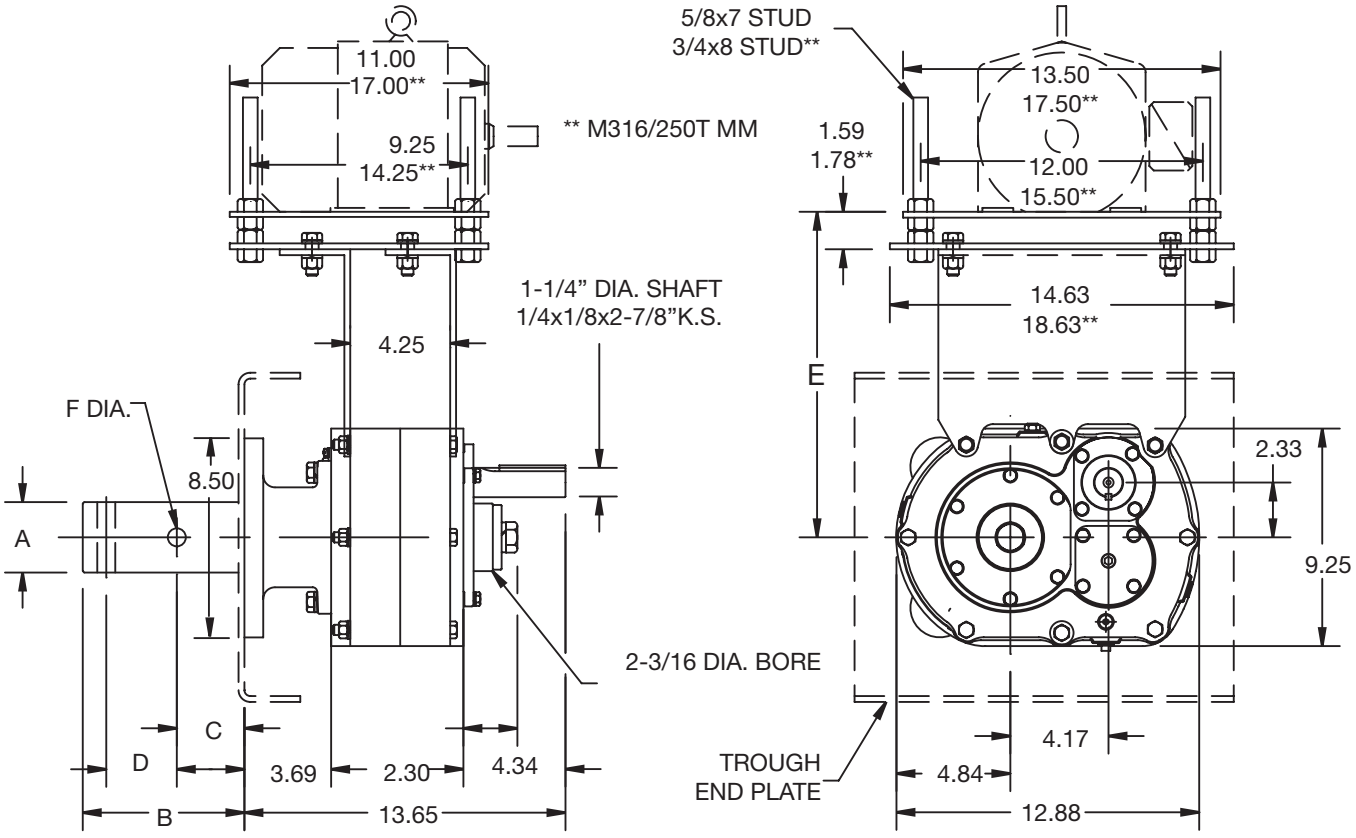
▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

♣ Made to order.

Screw Conveyor Shaft Mount Speed Reducers

SCXT3B - Double Reduction Screw Conveyor Drives



CEMA Drive Shafts ★						
Drive Shaft	**Screw Dia.**	**A**	**B**	**C**	**D**	**F Dia.**
C3 x 1-1/2	9"	1.50	6.00	2.13	3.00	.52
C3 x 2	9" - 12"	2.00	6.00	2.13	3.00	.64
C3 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C3 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT3B - Double Reduction Screw Conveyor Drives

SCXT3B Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT309B	243524	203D09	8.91	98
SCXT315B	243525	203D15	14.88	98
SCXT325B	243526	203D25	24.71	98

Description	Part No.	Weight
C3 Adapter Assembly ▲	353047	29
AC3 Adjustable Packing Kit ♠	356303	1.4
C3 x 1-1/2 Drive Shaft ★	243562	15
C3 x 2 Drive Shaft ★	243563	16
C3 x 2 7/16 Drive Shaft ★	243564	19.5
C3 x 3 Drive Shaft ★	243565	26

Driveshafts listed are compatible with SCXT3A & SCXT3B revisions only. For driveshafts compatible with older generations, please consult the Renewal Parts manual.

Accessories for SCXT3B Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M316 Standard Motor Mount	56T thru 210T	6"-16"	353069	44
M316/250T Special Motor Mount ■ ●	250T	6"-16"	353070	44
M320L Long Motor Mount	56T thru 210T	18"-20"	272627	56
SCXT3-D SCD Reducer Belt Guard	56T thru 210T	–	243416	40
SCXT3-D SCD Reducer Belt Guard for Long Motor Mount	56T thru 210T	–	243154	48
SCXT3A Cooling Fan Assembly	–	–	243581	3
SCXT3A Auxiliary Seal Kit	–	–	243582	5
SCXT3 Lube Kit	–	–	LUBEKITTXT3	6.9

SCXT3 Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames							
			56, 140		180		210		250	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M316	13.8	18.0	15.8	19.3	16.8	20.3	17.6	21.0	18.6	22.0
M320L	19.8	24.0	21.8	25.3	22.8	26.3	23.6	27.0	–	–

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

● Drawing dimensions are noted as **.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

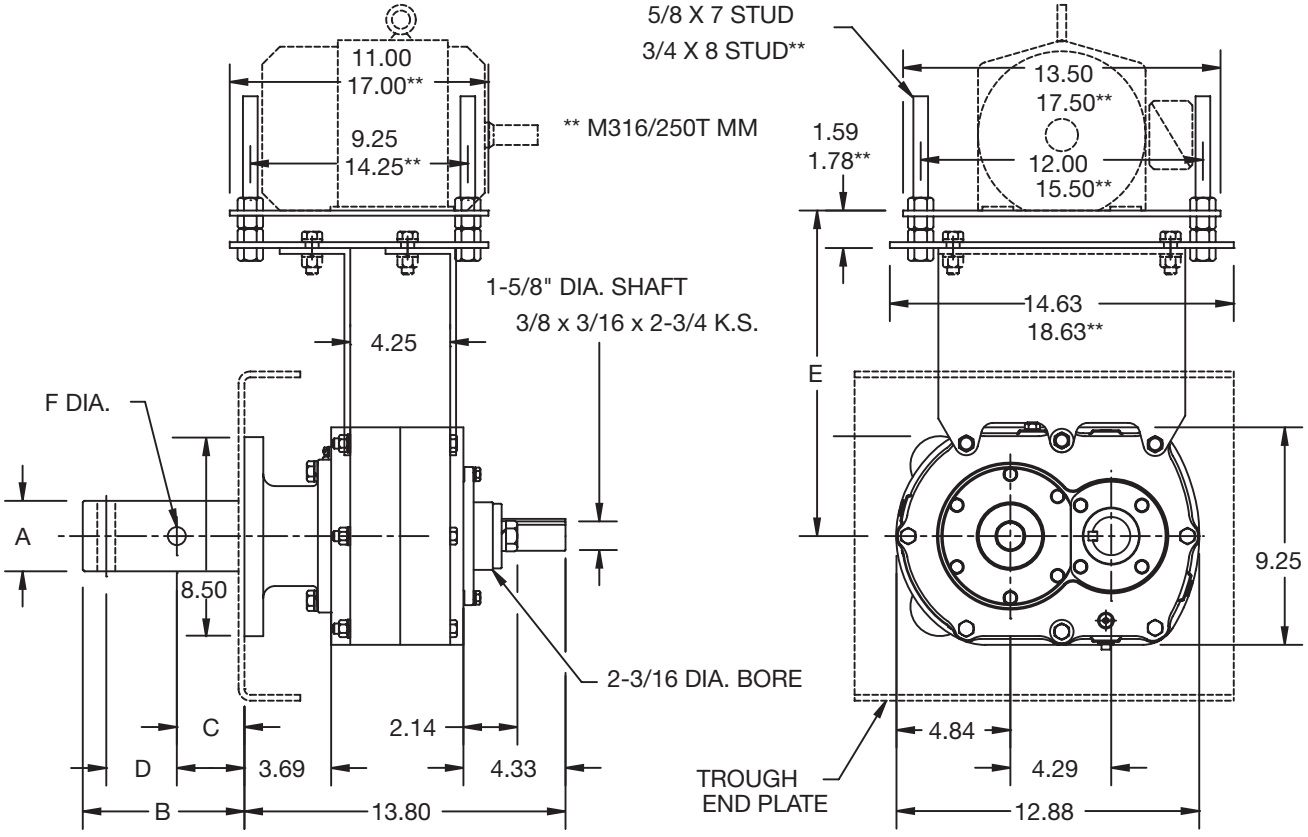
★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

■ Dodge standard belt guards will not fit with this motor mount.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Screw Conveyor Shaft Mount Speed Reducers

SCXT305A - Single Reduction Screw Conveyor Drives



CEMA Drive Shafts ★						
Drive Shaft	**Screw Dia.**	**A**	**B**	**C**	**D**	**F Dia.**
C3 x 1-1/2	9"	1.50	6.00	2.13	3.00	.52
C3 x 2	9" - 12"	2.00	6.00	2.13	3.00	.64
C3 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C3 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT305A - Single Reduction Screw Conveyor Drives

SCXT305 Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT305A	253159	203S05	5.60	86

Description	Part No.	Weight
C3 Adapter Assembly ▲	353047	29
AC3 Adjustable Packing Kit ♠	356303	1.4
C3 x 1-1/2 Drive Shaft ★	243562	15
C3 x 2 Drive Shaft ★	243563	16
C3 x 2 7/16 Drive Shaft ★	243564	19.5
C3 x 3 Drive Shaft ★	243565	26

Driveshafts listed are compatible with SCXT3A & SCXT3B revisions only. For driveshafts compatible with older generations, please consult the Renewal Parts manual.

Accessories for SCXT305A Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M316 Standard Motor Mount	56T thru 210T	6"-16 "	353069	44
M316/250T Special Motor Mount ■ ● ♣	250T	6"-16 "	353070	44
M320L Long Motor Mount	56T thru 210T	18"-20"	272627	56
SCXT3S SCD Reducer Belt Guard	56T thru 210T	–	243418	40
SCXT3S SCD Reducer Belt Guard for Long Motor Mount	56T thru 210T	–	243167	48
SCXT305A Cooling Fan Assembly	–	–	253188	3
SCXT305A Auxiliary Seal Kit ♣	–	–	253146	5
SCXT305 Lube Kit	–	–	LUBEKITTXT305	8.1

SCXT305 Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames							
			56, 140		180		210		250	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M316	13.8	18.0	18.2	21.6	19.2	22.6	19.5	23.4	20.9	24.4
M320L	19.8	24.0	24.2	27.6	25.2	28.6	25.9	29.4	–	–

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

● Drawing dimensions are noted as **.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

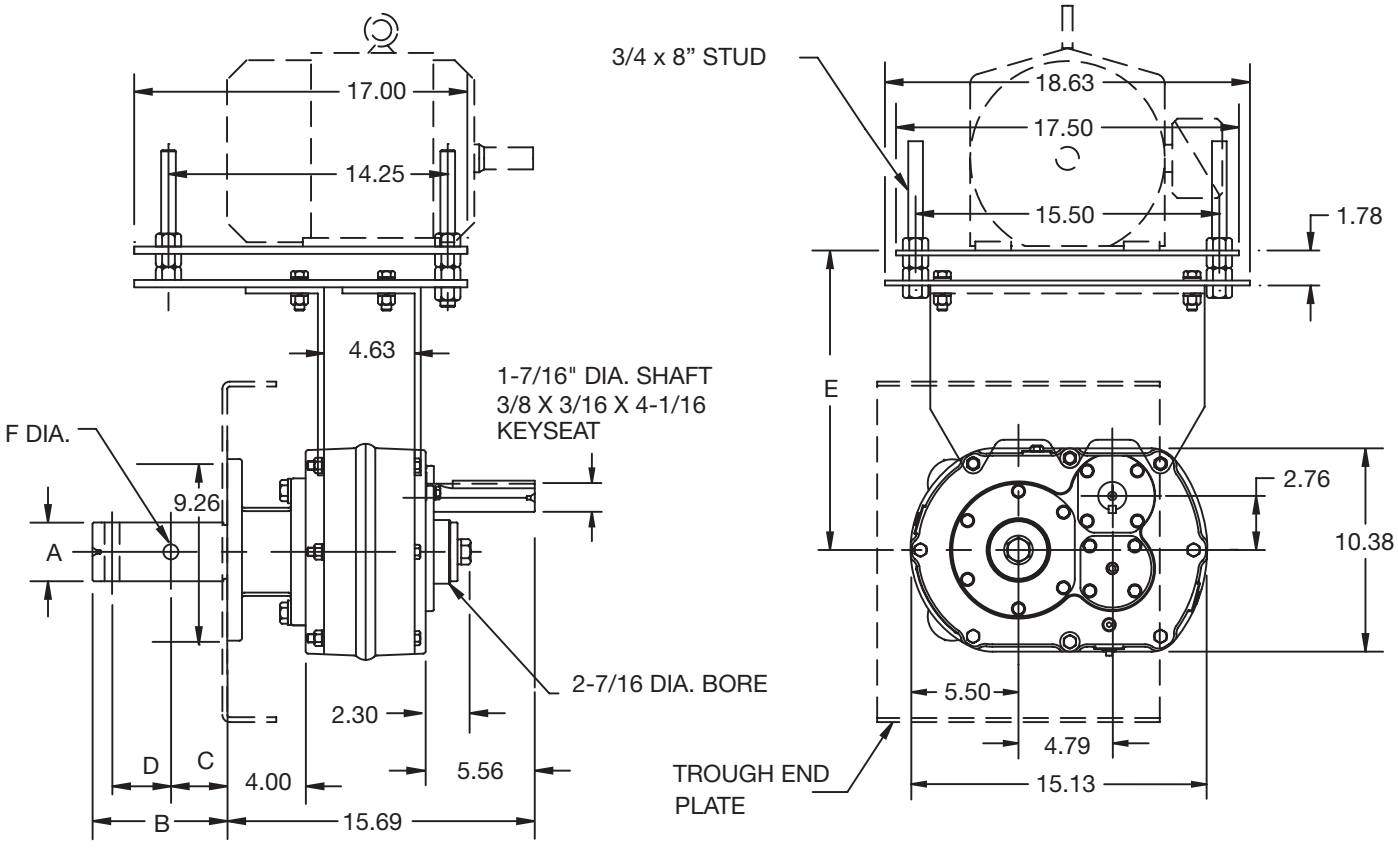
■ Dodge standard belt guards will not fit with this motor mount.

♣ Made to order.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Screw Conveyor Shaft Mount Speed Reducers

SCXT4B - Double Reduction Screw Conveyor Drives



CEMA Drive Shafts ★						
Drive Shaft	**Screw Dia.**	**A**	**B**	**C**	**D**	**F Dia.**
C4 x 1-1/2	9"	1.50	6.00	2.13	3.00	.52
C4 x 2	9" - 12"	2.00	6.00	2.13	3.00	.64
C4 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C4 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77
C4 x 3-7/16	18" - 24"	3.44	9.13	3.88	4.00	.89

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers
SCXT4B - DOUBLE REDUCTION SCREW CONVEYOR DRIVES

SCXT4B Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT409B	244549	207D09	9.67	139
SCXT415B	244550	207D15	15.13	139
SCXT425B	244551	207D25	24.38	139

Description	Part No.	Weight
C4 Adapter Assembly ▲	354121	33
AC4 Adjustable Packing Kit ♠	356304	2.1
C4 x 1-1/2 Drive Shaft ★	244594	19
C4 x 2 Drive Shaft ★	244595	20.80
C4 x 2 7/16 Drive Shaft ★	244596	24.30
C4 x 3 Drive Shaft ★	244597	29.20
C4 x 3-7/16 Drive Shaft ★	244598	39.30

Driveshafts listed are compatible with SCXT4A & SCXT4B revisions only. For driveshafts compatible with older generations, please consult the Renewal Parts manual.

Accessories for SCXT4B Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M418 Standard Motor Mount	140T thru 280T	9"-18"	354069	86
M418/320T Special Motor Mount ■ ♣	320T	9"-18"	354028	90
M424L Long Motor Mount	140T thru 280T	20"-24"	272628	100
SCXT4D SCD Reducer Belt Guard	140T thru 280T	–	244489	44
SCXT4D SCD Reducer Belt Guard for Long Motor Mount	140T thru 280T	–	244152	53
SCXT4A Cooling Fan Assembly	–	–	272594	3
SCXT4A Auxiliary Seal Kit	–	–	244677	5
SCXT4 Lube Kit	–	–	LUBEKITTXT4	10.4

SCXT4 Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames											
			56, 140		180		210		250		280		320	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M418	15.3	20.1	16.9	21.0	17.9	22.0	18.6	22.7	19.6	23.7	20.4	24.5	21.4	25.4
M424L	21.3	26.1	23.2	27.0	24.2	28.0	24.9	28.6	25.9	29.6	26.7	30.4	–	–

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

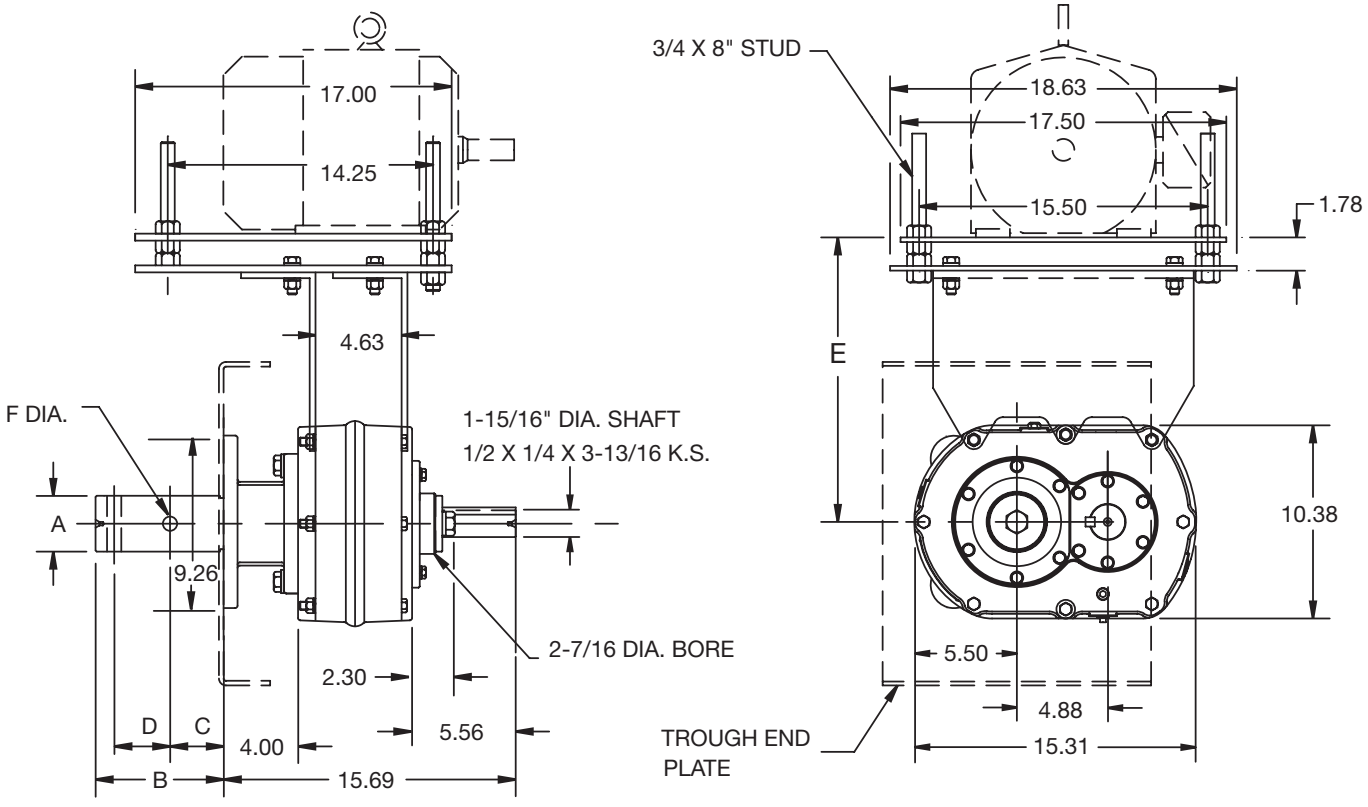
■ Dodge standard belt guards will not fit with this motor mount.

♣ Made to order.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Screw Conveyor Shaft Mount Speed Reducers

SCXT405A - Single Reduction Screw Conveyor Drives



CEMA Drive Shafts ★						
Drive Shaft	**Screw Dia.**	**A**	**B**	**C**	**D**	**F Dia.**
C4 x 1-1/2	9"	1.50	6.00	2.13	3.00	.52
C4 x 2	9" - 12"	2.00	6.00	2.13	3.00	.64
C4 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C4 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77
C4 x 3-7/16	18" - 24"	3.44	9.13	3.88	4.00	.89

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT405A - Single Reduction Screw Conveyor Drives

SCXT405 Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT405A	254208	207S05	5.65	122

Description	Part No.	Weight
C4 Adapter Assembly ▲	354121	33
AC4 Adjustable Packing Kit ♠	356304	2.1
C4 x 1-1/2 Drive Shaft ★	244594	19
C4 x 2 Drive Shaft ★	244595	20.80
C4 x 2 7/16 Drive Shaft ★	244596	24.30
C4 x 3 Drive Shaft ★	244597	29.20
C4 x 3-7/16 Drive Shaft ★	244598	39.30

Driveshafts listed are compatible with SCXT4A & SCXT4B revisions only. For driveshafts compatible with older generations, please consult the Renewal Parts manual.

Accessories for SCXT405A Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M418 Standard Motor Mount	140T thru 280T	9"-18 "	354069	86
M418/320T Special Motor Mount ■ ♣	140T thru 320T	9"-18 "	354028	90
M424L Long Motor Mount	140T thru 280T	20"-24"	272628	100
SCXT4S SCD Reducer Belt Guard	140T thru 280T	–	244491	50
SCXT4S SCD Reducer Belt Guard for Long Motor Mount ♣	140T thru 280T	–	244167	60
SCXT405A Cooling Fan Assembly	–	–	254268	3
SCXT405A Auxiliary Seal Kit ♣	–	–	254146	5
SCXT405 Lube Kit	–	–	LUBEKITTXT405	12.7

SCXT405 Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames											
			56, 140		180		210		250		280		320	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M418	15.3	20.1	19.6	23.7	20.6	24.7	21.4	25.5	22.4	26.5	23	27.2	21.4	25.4
M424L	21.3	26.1	25.9	29.7	26.9	30.7	27.7	31.4	28.7	32.3	29.4	33.2	–	–

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

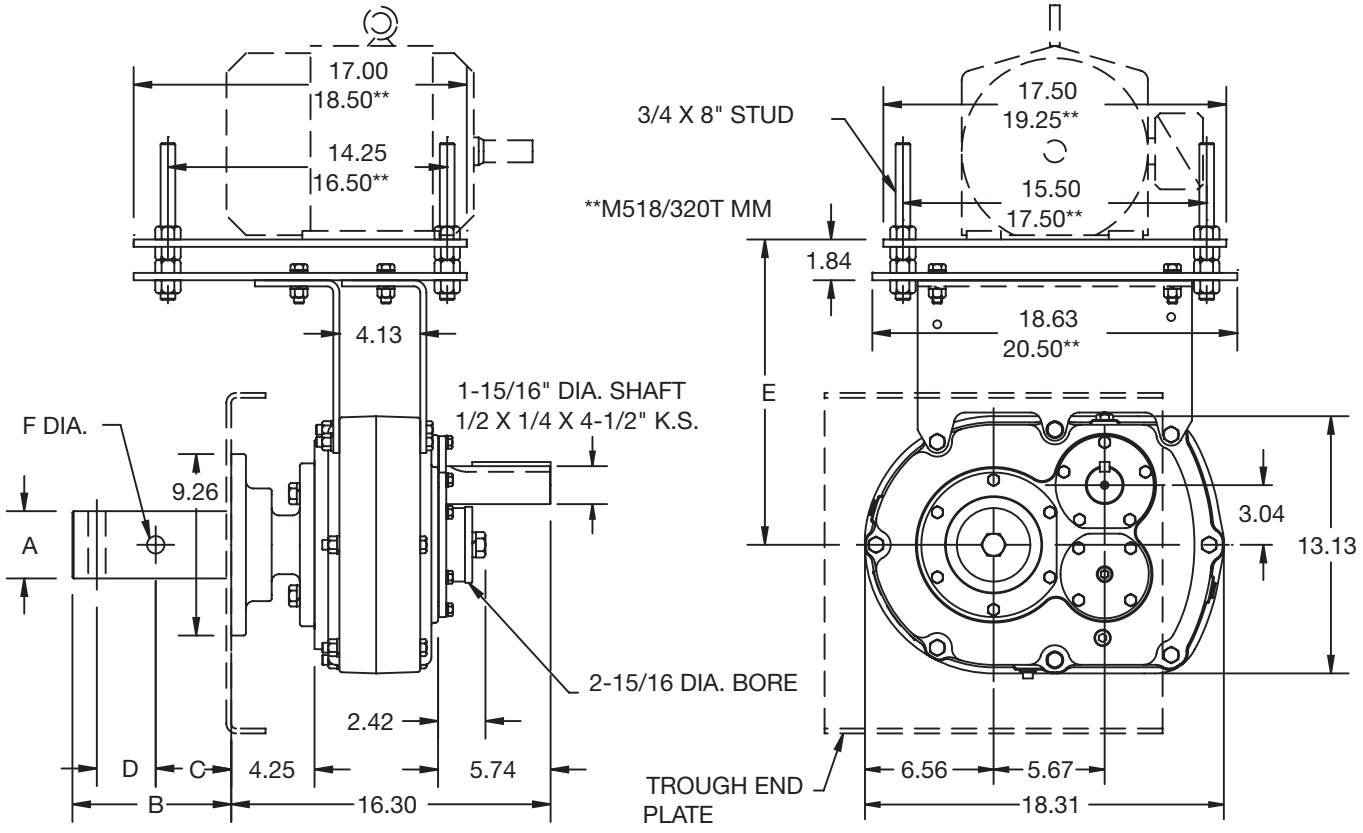
★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

■ Dodge standard belt guards will not fit with this motor mount.

♣ Made to order.

Screw Conveyor Shaft Mount Speed Reducers

SCXT5C - Double Reduction Screw Conveyor Drives



CEMA Drive Shafts ★						
Drive Shaft	**Screw Dia.**	**A**	**B**	**C**	**D**	**F Dia.**
C5B x 2	9" - 12"	2.00	6.00	2.13	3.00	.64
C5B x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C5B x 3	12" - 20"	3.00	6.88	2.88	3.00	.77
C5B x 3-7/16	18" - 24"	3.44	9.13	3.88	4.00	.89

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT5C - Double Reduction Screw Conveyor Drives

SCXT5C Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT509C	245574 ♣	215D09	8.95	207
SCXT515C	245575	215D15	15.40	207
SCXT525C	245576	215D25	25.56	207

Description	Part No.	Weight
C5 Adapter Assembly ▲	355072	43
AC5 Adjustable Packing Kit ♠	356305	2.1
C5B x 2 Drive Shaft ★	355175	29.4
C5B x 2 7/16 Drive Shaft ★	355176	33
C5B x 3 Drive Shaft ★	355177	37.9
C5B x 3-7/16 Drive Shaft ★	355178	48.3

Driveshafts listed are compatible with SCXT5B & SCXT5C revisions only. For driveshafts compatible with older generations, please consult the Renewal Parts manual.

Accessories for SCXT5C Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M518 Standard Motor Mount	140T thru 280T	9"-18"	355169	82
M518/320T Special Motor Mount ● ■ ♣	320T	9"-18"	355168	82
M524L Long Motor Mount	140T thru 280T	20"-24"	272629	110
SCXT5D SCD Reducer Belt Guard	140T thru 280T	–	245495	45
SCXT5D SCD Reducer Belt Guard for Long Motor Mount	140T thru 280T	–	245103	54
SCXT5B Cooling Fan Assembly	–	–	272369	3
SCXT5B Auxiliary Seal Kit	–	–	245637	6
SCXT5 Lube Kit	–	–	LUBEKITTXT5	18.5

SCXT5C Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames											
			56, 140		180		210		250		280		320	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M518	15.3	20.1	16.6	20.7	17.6	21.7	18.4	22.4	19.4	23.4	20	24.2	21.1	25.2
M524L	21.3	26.1	22.9	26.6	23.9	27.6	24.7	28.4	25.7	29.4	26.4	30.1	–	–

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

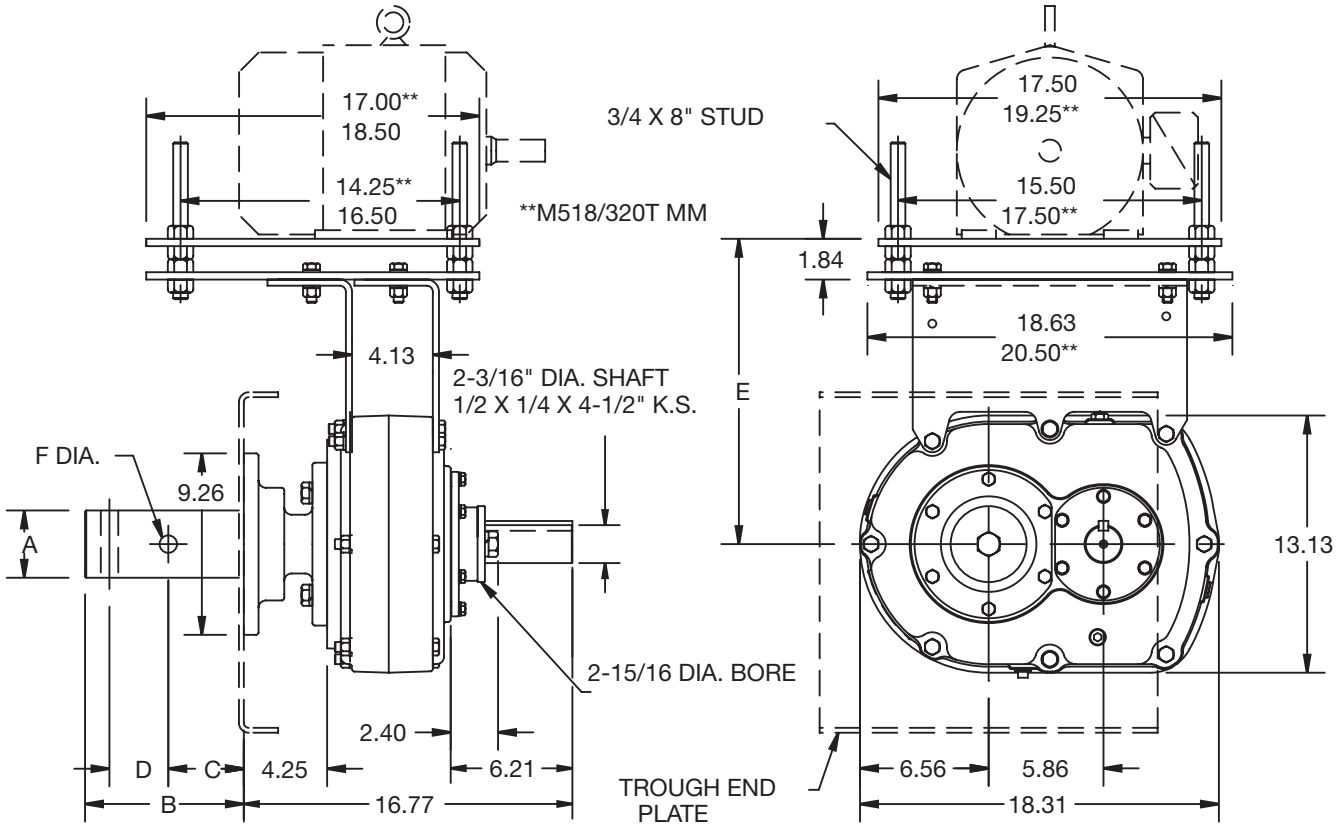
■ Dodge standard belt guards will not fit with this motor mount.

♣ Made to order.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Screw Conveyor Shaft Mount Speed Reducers

SCXT505A - Single Reduction Screw Conveyor Drives



CEMA Drive Shafts ★						
Drive Shaft	**Screw Dia.**	**A**	**B**	**C**	**D**	**F Dia.**
C5B x 2	9" - 12"	2.00	6.00	2.13	3.00	.64
C5B x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C5B x 3	12" - 20"	3.00	6.88	2.88	3.00	.77
C5B x 3-7/16	18" - 24"	3.44	9.13	3.88	4.00	.89

Courtesy of:
Screw Conveyor Parts

Screw Conveyor Shaft Mount Speed Reducers

SCXT505A - Single Reduction Screw Conveyor Drives

SCXT505A Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT505A	255208	215S05	5.67	182

Description	Part No.	Weight
C5 Adapter Assembly ▲	355072	43
AC5 Adjustable Packing Kit ♠	356305	2.1
C5B x 2 Drive Shaft ★	355175	29.4
C5B x 2 7/16 Drive Shaft ★	355176	33
C5B x 3 Drive Shaft ★	355177	37.9
C5B x 3-7/16 Drive Shaft ★	355178	48.3

Driveshafts listed are compatible with SCXT5B & SCXT5C revisions only. For driveshafts compatible with older generations, please consult the Renewal Parts manual.

Accessories for SCXT505A Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M518 Standard Motor Mount	140T thru 280T	9"-18 "	355169	82
M518/320T Special Motor Mount ● ■ ♣	320T	9"-18 "	355168	82
M524L Long Motor Mount	140T thru 280T	20"-24"	272629	110
SCXT5S SCD Reducer Belt Guard	140T thru 280T	–	245497	70
SCXT5S SCD Reducer Belt Guard for Long Motor Mount ♣	140T thru 280T	–	245015	84
SCXT505A Cooling Fan Assembly	–	–	255231	3
SCXT505A Auxiliary Seal Kit ♣	–	–	255148	6
SCXT505 Lube Kit	–	–	LUBEKITTXT505	18.5

SCXT505A Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames											
			56, 140		180		210		250		280		320	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M518	15.3	20.1	19.7	23.8	20.7	24.7	21.4	25.5	22.4	26.5	23	27.2	24.2	28.2
M524L	21.3	26.1	25.9	29.7	26.9	30.7	27.7	31.4	28.7	32.4	29.5	33.2	–	–

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

● Drawing dimensions are noted as **.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

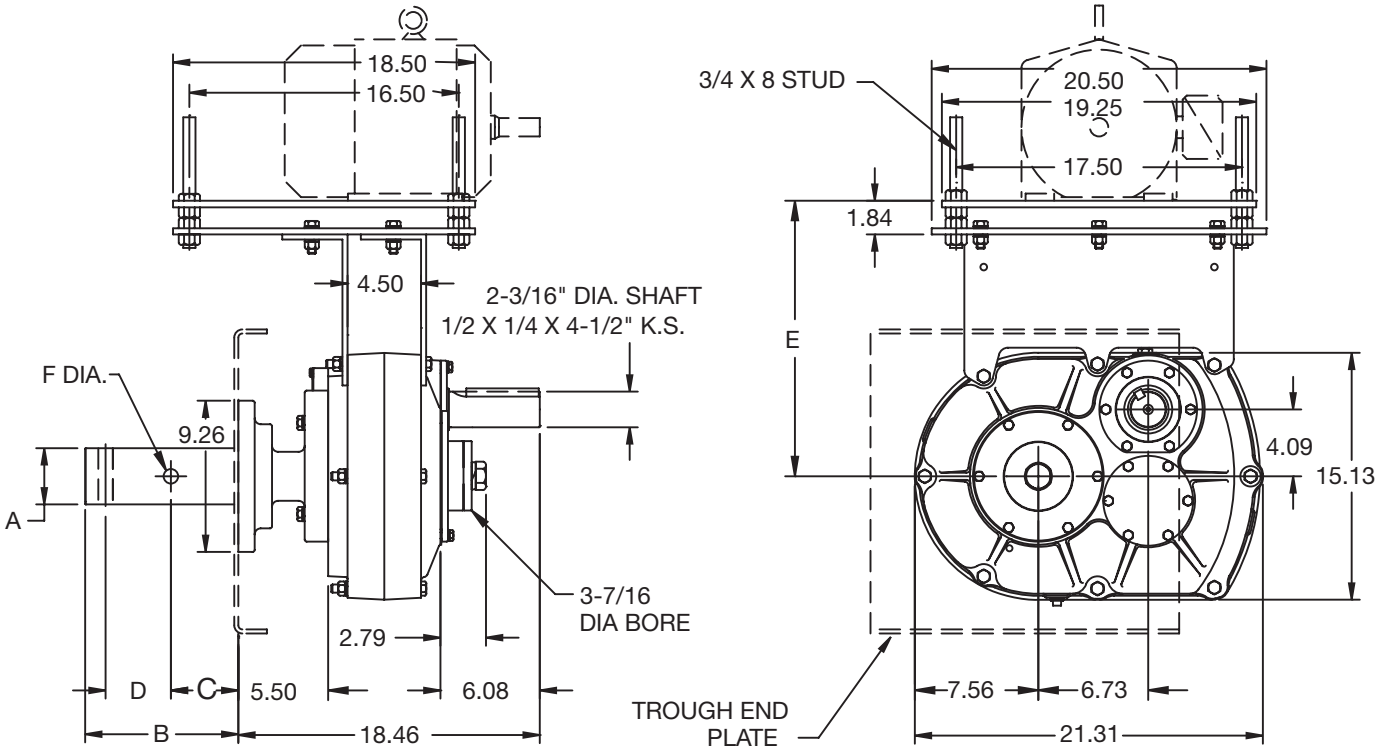
■ Dodge standard belt guards will not fit with this motor mount.

♣ Made to order.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Screw Conveyor Shaft Mount Speed Reducers

SCXT6A - Double Reduction Screw Conveyor Drives



CEMA Drive Shafts ★

Drive Shaft	Screw Dia.	A	B	C	D	F Dia.
C6 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C6 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77
C6 x 3-7/16	18" - 24"	3.44	9.13	3.88	4.00	.89

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT6A - Double Reduction Screw Conveyor Drives

SCXT6A Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT609A	246480 ♣	307D09	9.20	285
SCXT615A	356057	307D15	15.33	285
SCXT625A	356058	307D25	25.13	285

Description	Part No.	Weight
C6 Adapter Assembly ▲	356055	56
AC6/AC7 Adjustable Packing Kit ♠	356306	2.4
C6 x 2 7/16 Drive Shaft ★	356042	47.7
C6 x 3 Drive Shaft ★	356043	52.7
C6 x 3-7/16 Drive Shaft ★	356044	63

Accessories for SCXT6A Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M620 Standard Motor Mount	140T thru 320T	12"-20"	356069	105
M624L Long Motor Mount ♣	140T thru 320T	24"	272630	122
SCXT6D SCD Reducer Belt Guard	140T thru 320T	–	246476	60
SCXT6D SCD Reducer Belt Guard for Long Motor Mount	140T thru 320T	–	246148	72
SCXT6 Cooling Fan Assembly	–	–	272325	3
SCXT6 Auxiliary Seal Kit	–	–	272726	7
SCXT6 Lube Kit	–	–	LUBEKITTXT6	20.8

SCXT6A Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames											
			56, 140		180		210		250		280		320	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M620	16.7	21.4	17.0	21.0	18.0	22.0	18.8	22.8	19.7	23.8	20.5	24.5	21.5	25.5
M624L	22.7	27.4	23.2	27.0	24.2	27.9	27.9	28.7	25.9	29.7	26.7	30.5	27.6	31.4

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

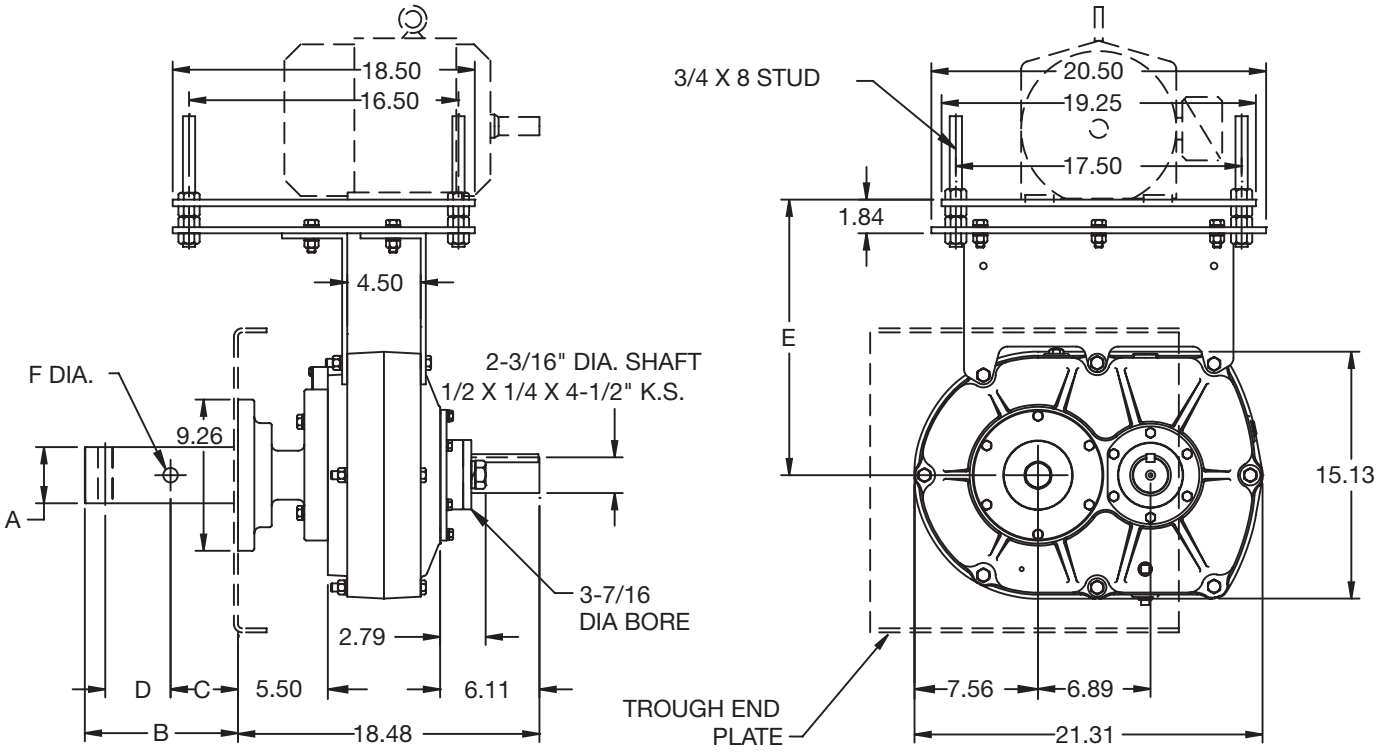
★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

♣ Made to order.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Screw Conveyor Shaft Mount Speed Reducers

SCXT605 - Single Reduction Screw Conveyor Drives



CEMA Drive Shafts ★

Drive Shaft	Screw Dia.	A	B	C	D	F Dia.
C6 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C6 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77
C6 x 3-7/16	18" - 24"	3.44	9.13	3.88	4.00	.89

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT605 - Single Reduction Screw Conveyor Drives

SCXT605 Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT605	356285	307S05	5.67	251

Description	Part No.	Weight
C6 Adapter Assembly ▲	356055	56
AC6/AC7 Adjustable Packing Kit ♠	356306	2.4
C6 x 2 7/16 Drive Shaft ★	356042	47.7
C6 x 3 Drive Shaft ★	356043	52.7
C6 x 3-7/16 Drive Shaft ★	356044	63

Accessories for SCXT605 Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M620 Standard Motor Mount	140T thru 320T	12"-20"	356069	105
M624L Long Motor Mount ♣	140T thru 320T	24"	272630	122
SCXT6S SCD Reducer Belt Guard	140T thru 320T	–	246478	77
SCXT6S SCD Reducer Belt Guard for Long Motor Mount ♣	140T thru 320T	–	246142	92
SCXT605 Cooling Fan Assembly ♣	–	–	272681	3
SCXT6 Auxiliary Seal Kit	–	–	272726	7
SCXT605 Lube Kit	–	–	LUBEKITTXT605	24.3

SCXT605 Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames											
			56, 140		180		210		250		280		320	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M620	16.7	21.4	21.1	25.1	22.1	26.1	22.8	26.8	23.8	27.9	24.6	28.6	25.6	29.6
M624L	22.7	27.4	27.2	31.1	28.2	32.1	29	32.8	30	33.8	30.7	34.6	31.7	35.5

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

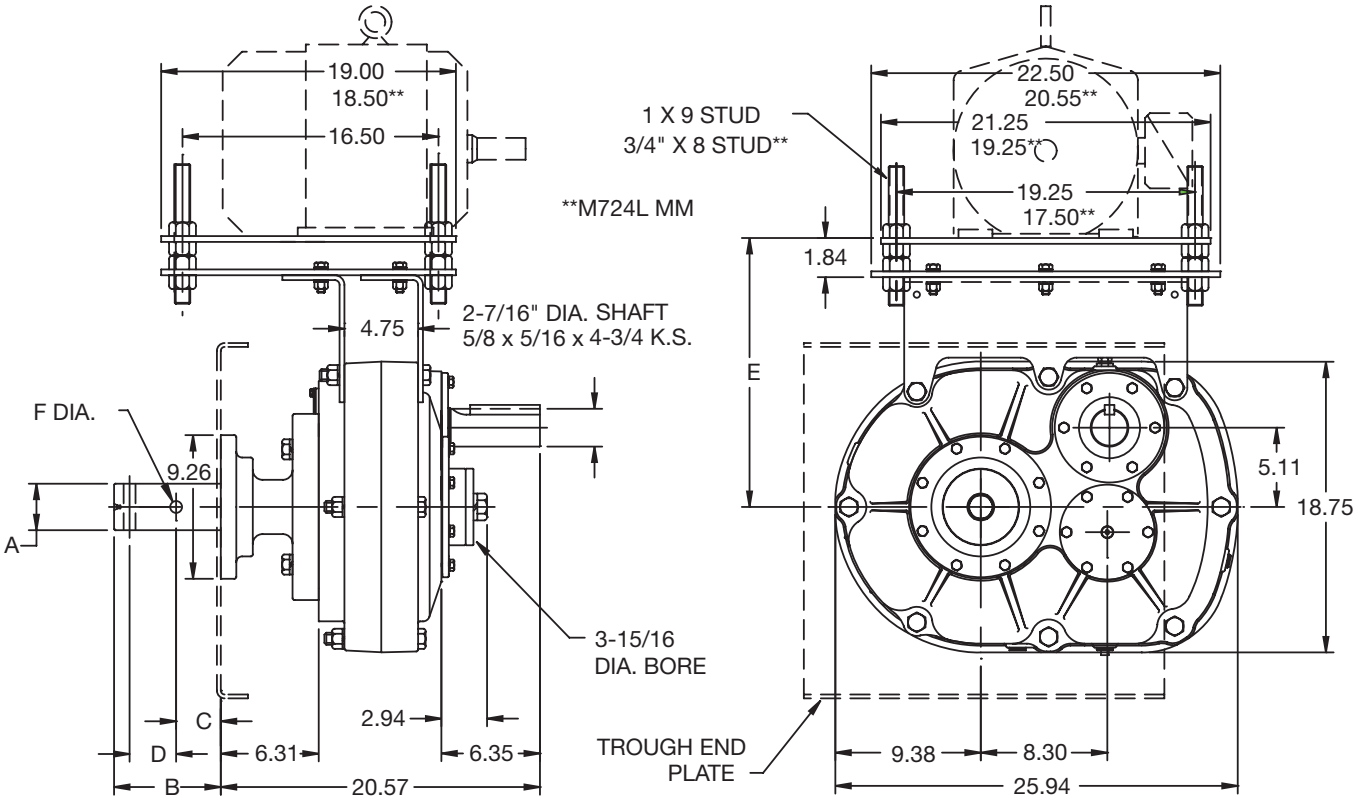
★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

♣ Made to order.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Screw Conveyor Shaft Mount Speed Reducers

SCXT7A - Double Reduction Screw Conveyor Drives



CEMA Drive Shafts ★

Drive Shaft	Screw Dia.	A	B	C	D	F Dia.
C7 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C7 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77
C7 x 3-7/16	18" - 24"	3.44	9.13	3.88	4.00	.89

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT7A - Double Reduction Screw Conveyor Drives

SCXT7A Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT709A	247480 ♣	315D09	9.61	462
SCXT715A	356256 ♣	315D15	15.23	462
SCXT725A	356257	315D25	24.59	462

Description	Part No.	Weight
C7 Adapter Assembly ▲	356187	72
AC6/AC7 Adjustable Packing Kit ♠	356306	2.4
C7 x 2 7/16 Drive Shaft ★	356182 ♣	58
C7 x 3 Drive Shaft ★	356183	70
C7 x 3-7/16 Drive Shaft ★	356184	80.3

Accessories for SCXT7A Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M720 Standard Motor Mount	140T thru 360T	12"-20"	356269	106
M724L Long Motor Mount ♣ ●	140T thru 320T	24"	272631	130
SCXT7D SCD Reducer Belt Guard	140T thru 360T	–	247474	75
SCXT7D SCD Reducer Belt Guard for Long Motor Mount	140T thru 320T	–	247153	90
SCXT7 Cooling Fan Assembly	–	–	272326	6
SCXT7 Auxiliary Seal Kit	–	–	272727	8
SCXT7 Lube Kit	–	–	LUBEKITTXT7	34.7

SCXT7A Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames													
			56, 140		180		210		250		280		320		360	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M720	17.5	21.7	17.1	20.5	18.1	21.5	18.8	22.2	19.8	23.2	20.5	24.0	21.5	25.0	22.5	26.0
M724L	23.5	27.7	22.4	26.1	23.3	27.1	24.1	27.8	25.0	28.8	25.8	29.5	26.8	30.5	–	–

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

● Drawing dimensions are noted as **.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

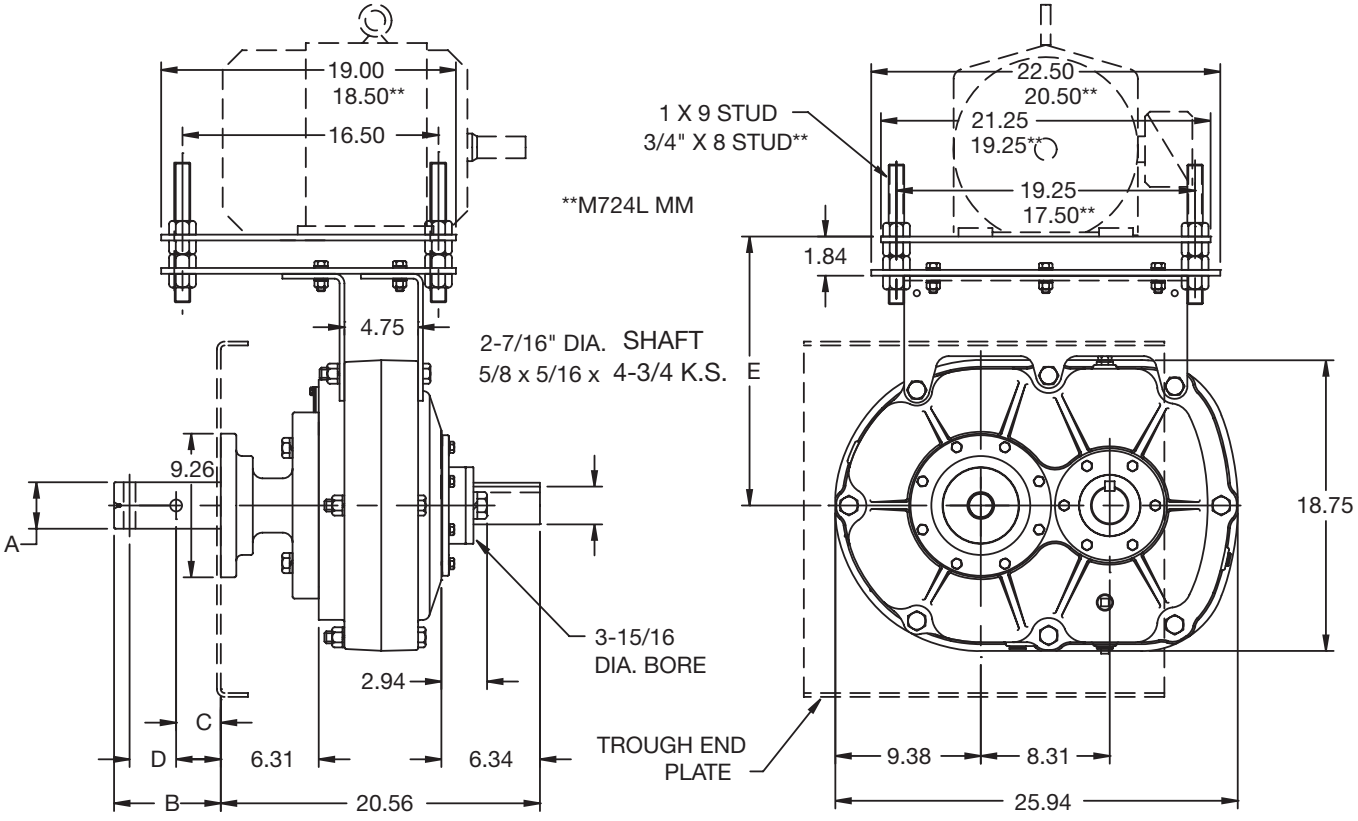
★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

♣ Made to order.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Screw Conveyor Shaft Mount Speed Reducers

SCXT705 - Single Reduction Screw Conveyor Drives



CEMA Drive Shafts ★

Drive Shaft	Screw Dia.	A	B	C	D	F Dia.
C7 x 2-7/16	12" - 14"	2.44	6.69	2.75	3.00	.64
C7 x 3	12" - 20"	3.00	6.88	2.88	3.00	.77
C7 x 3-7/16	18" - 24"	3.44	9.13	3.88	4.00	.89

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT705 - Single Reduction Screw Conveyor Drives

SCXT705 Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT705	356295 ♣	315S05	5.36	410

Description	Part No.	Weight
C7 Adapter Assembly ▲	356187	72
AC6/AC7 Adjustable Packing Kit ♠	356306	2.4
C7 x 2 7/16 Drive Shaft ★	356182 ♣	58
C7 x 3 Drive Shaft ★	356183	70
C7 x 3-7/16 Drive Shaft ★	356184	80.3

Accessories for SCXT705 Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M720 Standard Motor Mount	140T thru 360T	12"-20 "	356269	106
M724L Long Motor Mount ♣ ●	140T thru 320T	24 "	272631	130
SCXT7S SCD Reducer Belt Guard	140T thru 360T	–	247476	84
SCXT7S SCD Reducer Belt Guard for Long Motor Mount	140T thru 320T	–	247149	100
SCXT705 Cooling Fan Assembly ♣	–	–	272685	6
SCXT705 Auxiliary Seal Kit	–	–	272727	8
SCXT705 Lube Kit	–	–	LUBEKITTXT705	39.3

SCXT705 Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames													
			56, 140		180		210		250		280		320		360	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M720	17.5	21.7	22.1	25.6	23.1	26.5	23.8	27.3	24.8	28.3	25.6	29.0	26.6	30.0	27.5	31.0
M724L	23.5	27.7	27.3	31.1	28.3	32.1	29.1	32.9	30.1	33.9	30.8	34.7	31.8	35.6	–	–

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

● Drawing dimensions are noted as **.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

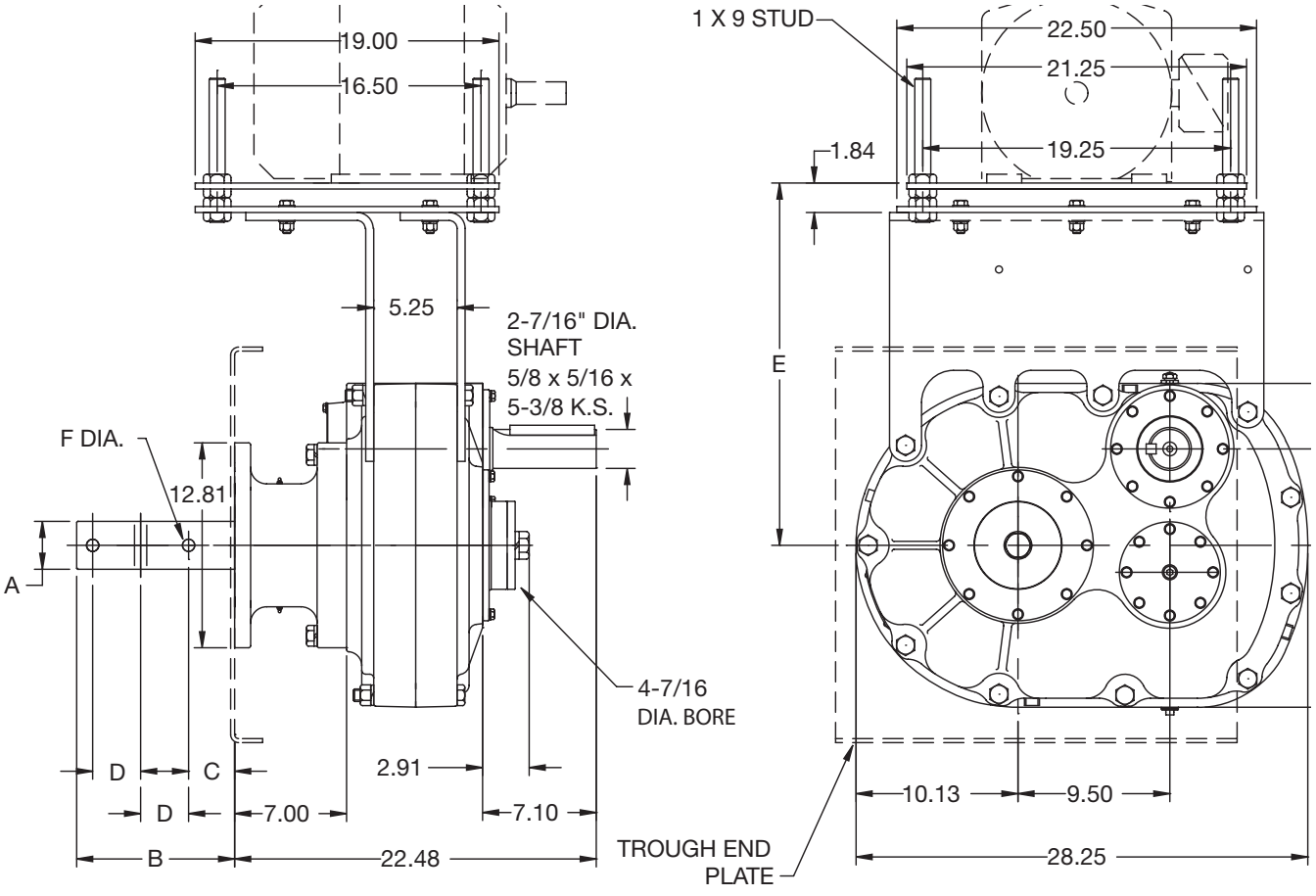
★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

♣ Made to order.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Screw Conveyor Shaft Mount Speed Reducers

SCXT8A - Double Reduction Screw Conveyor Drives



CEMA Drive Shafts ★

Drive Shaft	Screw Dia.	A	B	C	D	F Dia.
C8 x 3	12" - 20"	3.00	9.88	2.88	3.00	.77
C8 x 3-7/16	18" - 24"	3.44	13.13	3.88	4.00	.89

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT8A - Double Reduction Screw Conveyor Drives

SCXT8A Screw Conveyor Drives †

Reducers				
Size	**Part No.**	**AGMA Code**	**Ratio**	**Weight**
SCXT815A	248464 ♣	407D15	15.08	633
SCXT825A	248465 ♣	407D25	24.62	633

Description	Part No.	Weight
C8 Adapter Assembly ▲	248470 ♣	90
C8 x 3 Drive Shaft ★	248473 ♣	88
C8 x 3-7/16 Drive Shaft ★	248474 ♣	100

Accessories for SCXT8A Reducers

Description	NEMA Motor Frame	Screw Dia.	Part No.	Weight
M824L Long Motor Mount ♣	210T thru 360T	12" - 24"	248469	163
SCXT8D SCD Reducer Belt Guard ♣	210T thru 360T	–	248477	113
SCXT8 Cooling Fan Assembly	–	–	272327	9
SCXT8 Auxiliary Seal Kit ♣	–	–	248484	10
SCXT78 Lube Kit	–	–	LUBEKITTXT8	40.5

SCXT8A Motor Mount Assembly Dimensions

Motor Mount	E ◆		V-Belt Drive Center Distances for Various NEMA Motor Frames													
			56, 140		180		210		250		280		320		360	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M824	22.7	28.6	–	–	–	–	23.3	28.4	24.3	29.4	25.1	30.1	26.0	31.1	27.0	32.1

† For a complete SCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

♠ AC Adjustable Packing Kit , with braided seals, is furnished if specified. It bolts to the C adapter.

◆ Provides for V-Belt adjustment.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seal. See page G3-122 for adapter bolt pattern details.

★ CEMA drive shaft and key is furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

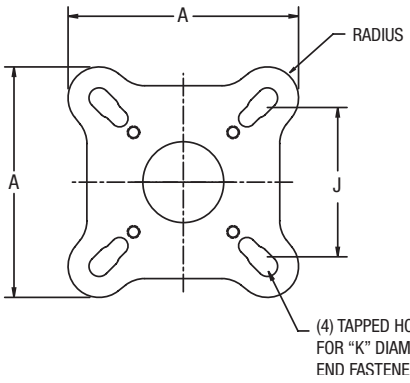
♣ Made to order.

Courtesy of:
Screw Conveyor Parts

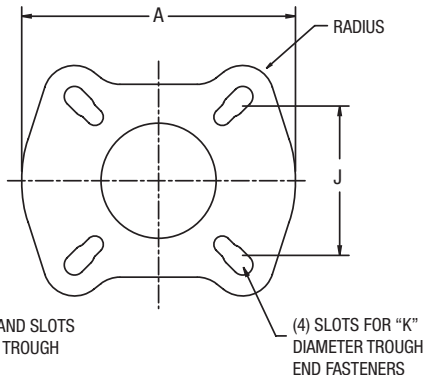
Screw Conveyor Shaft Mount Reducers

SCXT Screw Conveyor Adapters

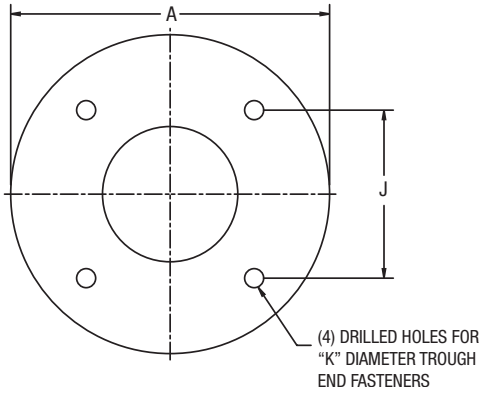
SCXT Sizes 1-6



SCXT Size 7



SCXT Size 8



Reducer Size	Drive Shaft Diameter	J	K	A	Radius
SCXT 1	1-1/2	4	1/2	7.75	0.875
	2	5-1/8	5/8	7.75	0.875
	2-7/16	5-5/8	5/8	7.75	0.875
	3	6	3/4	7.75	0.875
SCXT 2	1-1/2	4	1/2	7.75	0.875
	2	5-1/8	5/8	7.75	0.875
	2-7/16	5-5/8	5/8	7.75	0.875
	3	6	3/4	7.75	0.875
SCXT 3	1-1/2	4	1/2	8.50	1.25
	2	5-1/8	5/8	8.50	1.25
	2-7/16	5-5/8	5/8	8.50	1.25
	3	6	3/4	8.50	1.25
SCXT 4	1-1/2	4	1/2	9.26	1.25
	2	5-1/8	5/8	9.26	1.25
	2-7/16	5-5/8	5/8	9.26	1.25
	3	6	3/4	9.26	1.25
	3-7/16	6-3/4	3/4	9.26	1.25
SCXT 5	2	5-1/8	5/8	9.26	1.25
	2-7/16	5-5/8	5/8	9.26	1.25
	3	6	3/4	9.26	1.25
	3-7/16	6-3/4	3/4	9.26	1.25
SCXT 6	2-7/16	5-5/8	5/8	9.26	1.25
	3	6	3/4	9.26	1.25
	3-7/16	6-3/4	3/4	9.26	1.25
SCXT 7	2-7/16	5-5/8	5/8	11.00	1.25
	3	6	3/4	11.00	1.25
	3-7/16	6-3/4	3/4	11.00	1.25
SCXT 8	3	6	3/4	12.81	n/a
	3-7/16	6-3/4	3/4	12.81	n/a

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Screw Conveyor Shaft Mount Speed Reducers

SCXT Screw Conveyor Drive Optional Drive Shafts

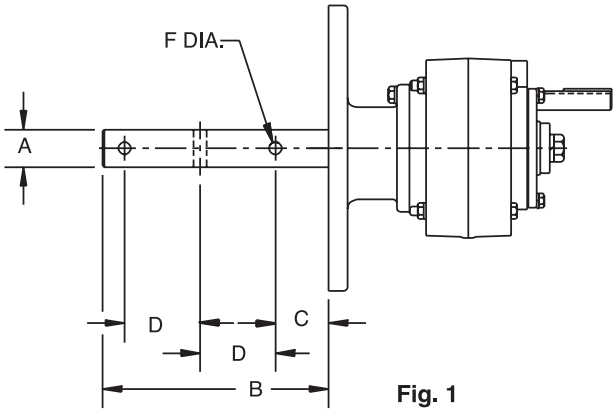


Fig. 1

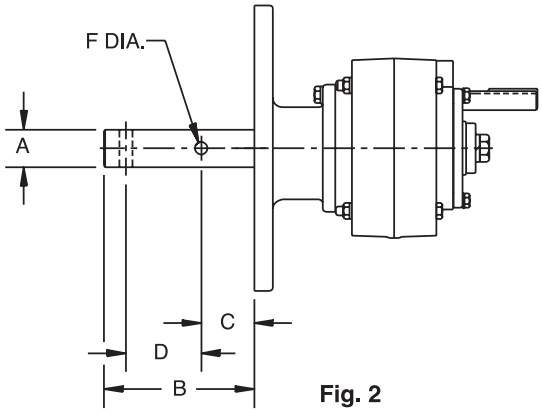


Fig. 2

Optional Drive Shafts for SCXT1A Reducers ♣

Description	Drive Shaft	Screw Dia.	Part No.	Figure	A	B	C	D	F	Weight
Stainless Steel * Drive Shafts	C1 x 1-1/2	6" - 9"	351147	2	1.50	6.00	2.13	3.00	0.52	7.20
	C1 x 2	9" - 12"	351148	2	2.00	6.00	2.13	3.00	0.64	9.10
	C1 x 2-7/16	12" - 14"	351149	2	2.44	6.69	2.75	3.00	0.64	12.50
	C1 x 3	12" - 20"	351150	2	3.00	6.88	2.88	3.00	0.77	17.40
3-Hole Drive Shafts	C1 x 1-1/2	6" - 9"	351300	1	1.50	9.00	2.13	3.00	0.52	8.70
	C1 x 2	9" - 12"	351301	1	2.00	9.00	2.13	3.00	0.64	11.80
	C1 x 2-7/16	12" - 14"	351302	1	2.44	9.69	2.75	3.00	0.64	16.40
	C1 x 3	12" - 20"	351303	1	3.00	9.88	2.88	3.00	0.77	23.40
Stainless Steel * 3-Hole Drive Shafts	C1 x 1-1/2	6" - 9"	351025	1	1.50	9.00	2.13	3.00	0.52	8.70
	C1 x 2	9" - 12"	351026	1	2.00	9.00	2.13	3.00	0.64	11.80
	C1 x 2-7/16	12" - 14"	351027	1	2.44	9.69	2.75	3.00	0.64	16.40
	C1 x 3	12" - 20"	351028	1	3.00	9.88	2.88	3.00	0.77	23.40

Optional Drive Shafts for SCXT2A Reducers ♣

Description	Drive Shaft	Screw Dia.	Part No.	Figure	A	B	C	D	F	Weight
Stainless Steel * Drive Shafts	C2 x 1-1/2	6" - 9"	352160	2	1.50	6.00	2.13	3.00	0.52	11.40
	C2 x 2	9" - 12"	352161	2	2.00	6.00	2.13	3.00	0.64	13.80
	C2 x 2-7/16	12" - 14"	352162	2	2.44	6.69	2.75	3.00	0.64	17.30
	C2 x 3	12" - 20"	352163	2	3.00	6.88	2.88	3.00	0.77	19
3-Hole Drive Shafts	C2 x 1-1/2	6" - 9"	351305	1	1.50	9.00	2.13	3.00	0.52	12.90
	C2 x 2	9" - 12"	351306	1	2.00	9.00	2.13	3.00	0.64	16.50
	C2 x 2-7/16	12" - 14"	351307	1	2.44	9.69	2.75	3.00	0.64	21.20
	C2 x 3	12" - 20"	351308	1	3.00	9.88	2.88	3.00	0.77	25
Stainless Steel * 3-Hole Drive Shafts	C2 x 1-1/2	6" - 9"	352186	1	1.50	9.00	2.13	3.00	0.52	12.90
	C2 x 2	9" - 12"	352187	1	2.00	9.00	2.13	3.00	0.64	16.50
	C2 x 2-7/16	12" - 14"	352188	1	2.44	9.69	2.75	3.00	0.64	21.20
	C2 x 3	12" - 20"	352189	1	3.00	9.88	2.88	3.00	0.77	25

* Supplied as #316 stainless steel.

♣ Made to order. Consult Dodge for lead time.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Screw Conveyor Shaft Mount Speed Reducers

Optional Drive Shafts for SCXT3B and SCXT305A Reducers ♣

Description	Drive Shaft	Screw Dia.	Part No.	Figure	A	B	C	D	F	Weight
Stainless Steel *	C3A x 1-1/2	9”	243446	2	1.50	6.00	2.13	3.00	0.52	15
	C3A x 2	9” - 12”	243447	2	2.00	6.00	2.13	3.00	0.64	16
	C3A x 2-7/16	12” - 14”	243448	2	2.44	6.69	2.75	3.00	0.64	19.50
	C3A x 3	12” - 20”	243449	2	3.00	6.88	2.88	3.00	0.77	26
Drive Shafts 3-Hole Drive Shafts	C3A x 1-1/2	9”	243016	1	1.50	9.00	2.13	3.00	0.52	16.50
	C3A x 2	9” - 12”	243017	1	2.00	9.00	2.13	3.00	0.64	18.70
	C3A x 2-7/16	12” - 14”	243018	1	2.44	9.69	2.75	3.00	0.64	23.40
	C3A x 3	12” - 20”	243019	1	3.00	9.88	2.88	3.00	0.77	32
Stainless Steel * 3-Hole Drive Shafts	C3A x 1-1/2	9”	353180	1	1.50	9.00	2.13	3.00	0.52	16.50
	C3A x 2	9” - 12”	353181	1	2.00	9.00	2.13	3.00	0.64	18.70
	C3A x 2-7/16	12” - 14”	353182	1	2.44	9.69	2.75	3.00	0.64	23.40
	C3A x 3	12” - 20”	353183	1	3.00	9.88	2.88	3.00	0.77	32

Optional Drive Shafts for SCXT4B and SCXT405A Reducers ♣

Description	Drive Shaft	Screw Dia.	Part No.	Figure	A	B	C	D	F	Weight
Stainless Steel * Drive Shafts	C4A x 1-1/2	9”	244680	2	1.50	6.00	2.13	3.00	0.52	19
	C4A x 2	9” - 12”	244681	2	2.00	6.00	2.13	3.00	0.64	20.80
	C4A x 2-7/16	12” - 14”	244682	2	2.44	6.69	2.75	3.00	0.64	24.30
	C4A x 3	12” - 20”	244683	2	3.00	6.88	2.88	3.00	0.77	29.20
	C4A x 3-7/16	18” - 24”	244684	2	3.44	9.13	3.88	4.00	0.89	39.30
3-Hole Drive Shafts	C4A x 1-1/2	9”	244494	1	1.50	9.00	2.13	3.00	0.52	20.50
	C4A x 2	9” - 12”	244496	1	2.00	9.00	2.13	3.00	0.64	23.50
	C4A x 2-7/16	12” - 14”	244497	1	2.44	9.69	2.75	3.00	0.64	28.20
	C4A x 3	12” - 20”	244498	1	3.00	9.88	2.88	3.00	0.77	35.20
	C4A x 3-7/16	18” - 24”	244499	1	3.44	14.13	3.88	4.00	0.89	49.80
Stainless Steel * 3-Hole Drive Shafts	C4A x 1-1/2	9”	354351	1	1.50	9.00	2.13	3.00	0.52	20.50
	C4A x 2	9” - 12”	354352	1	2.00	9.00	2.13	3.00	0.64	23.50
	C4A x 2-7/16	12” - 14”	354353	1	2.44	9.69	2.75	3.00	0.64	28.20
	C4A x 3	12” - 20”	354354	1	3.00	9.88	2.88	3.00	0.77	35.20
	C4A x 3-7/16	18” - 24”	354355	1	3.44	14.13	3.88	4.00	0.89	49.80

Optional Drive Shafts for SCXT5C and SCXT505A Reducers ♣

Description	Drive Shaft	Screw Dia.	Part No.	Figure	A	B	C	D	F	Weight
Stainless Steel * Drive Shafts	C5B x 2	9” - 12”	245651	2	2.00	6.00	2.13	3.00	0.64	29.40
	C5B x 2-7/16	12” - 14”	245652	2	2.44	6.69	2.75	3.00	0.64	33
	C5B x 3	12” - 20”	245653	2	3.00	6.88	2.88	3.00	0.77	37.90
	C5B x 3-7/16	18” - 24”	245654	2	3.44	9.13	3.88	4.00	0.89	48.30
3-Hole Drive Shafts	C5B x 2	9” - 12”	245474	1	2.00	9.00	2.13	3.00	0.64	32.10
	C5B x 2-7/16	12” - 14”	245476	1	2.44	9.69	2.75	3.00	0.64	36.90
	C5B x 3	12” - 20”	245477	1	3.00	9.88	2.88	3.00	0.77	43.90
	C5B x 3-7/16	18” - 24”	245478	1	3.44	14.13	3.88	4.00	0.89	58.80
Stainless Steel * 3-Hole Drive Shafts	C5B x 2	9” - 12”	355225	1	2.00	9.00	2.13	3.00	0.64	32.10
	C5B x 2-7/16	12” - 14”	355226	1	2.44	9.69	2.75	3.00	0.64	36.90
	C5B x 3	12” - 20”	355227	1	3.00	9.88	2.88	3.00	0.77	43.90
	C5B x 3-7/16	18” - 24”	355228	1	3.44	14.13	3.88	4.00	0.89	58.80

* Supplied as #316 stainless steel.

♣ Made to order. Consult Dodge for lead time.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Courtesy of:
SCREW CONVEYOR PARTS

Screw Conveyor Shaft Mount Speed Reducers

SCXT Screw Conveyor Drive Optional Drive Shafts (Continued)

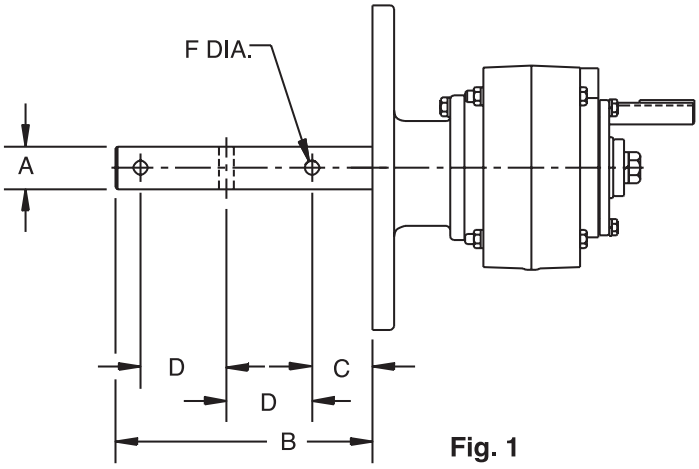


Fig. 1

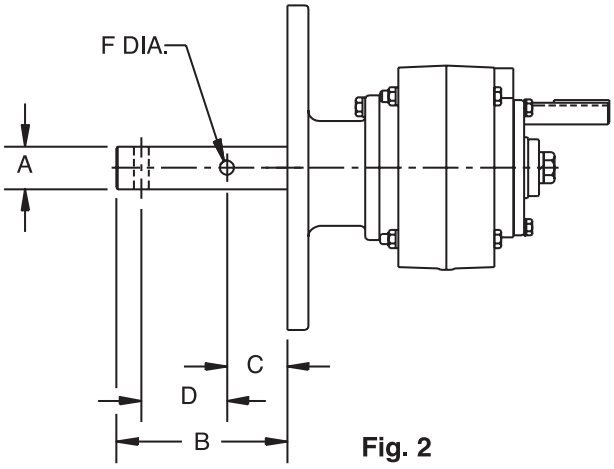


Fig. 2

Optional Drive Shafts for SCXT6A Reducers ♣

Description	Drive Shaft	Screw Dia.	Part No.	Figure	A	B	C	D	F	Weight
Stainless Steel * Drive Shafts	C6 x 2-7/16	12" - 14"	356014	2	2.44	6.69	2.75	3.00	0.64	47.7
	C6 x 3	12" - 20"	356015	2	3.00	6.88	2.88	3.00	0.77	52.7
	C6 x 3-7/16	18" - 24"	356016	2	3.44	9.13	3.88	4.00	0.89	63.0
3-Hole Drive Shafts	C6 x 2-7/16	12" - 14"	351327	1	2.44	9.69	2.75	3.00	0.64	51.6
	C6 x 3	12" - 20"	351328	1	3.00	9.88	2.88	3.00	0.77	58.7
	C6 x 3-7/16	18" - 24"	351329	1	3.44	14.13	3.88	4.00	0.89	73.5
Stainless Steel * 3-Hole Drive Shafts	C6 x 2-7/16	12" - 14"	356275	1	2.44	9.69	2.75	3.00	0.64	51.6
	C6 x 3	12" - 20"	356276	1	3.00	9.88	2.88	3.00	0.77	58.7
	C6 x 3-7/16	18" - 24"	356277	1	3.44	14.13	3.88	4.00	0.89	73.5

Optional Drive Shafts for SCXT7A Reducers ♣

Description	Drive Shaft	Screw Dia.	Part No.	Figure	A	B	C	D	F	Weight
Stainless Steel * Drive Shafts	C7 x 2-7/16	12" - 14"	356240	2	2.44	6.69	2.75	3.00	0.64	58.0
	C7 x 3	12" - 20"	356241	2	3.00	6.88	2.88	3.00	0.77	70.0
	C7 x 3-7/16	18" - 24"	356242	2	3.44	9.13	3.88	4.00	0.89	80.3
3-Hole Drive Shafts	C7 x 2-7/16	12" - 14"	351332	1	2.44	9.69	2.75	3.00	0.64	61.9
	C7 x 3	12" - 20"	351333	1	3.00	9.88	2.88	3.00	0.77	76.0
	C7 x 3-7/16	18" - 24"	351334	1	3.44	14.13	3.88	4.00	0.89	90.8
Stainless Steel* 3-Hole Drive Shafts	C7 x 2-7/16	12" - 14"	356281	1	2.44	9.69	2.75	3.00	0.64	61.9
	C7 x 3	12" - 20"	356282	1	3.00	9.88	2.88	3.00	0.77	76.0
	C7 x 3-7/16	18" - 24"	356283	1	3.44	14.13	3.88	4.00	0.89	90.8

* Supplied as #316 stainless steel.

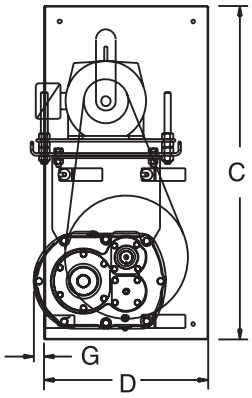
♣ Made to order. Consult Dodge for lead time.

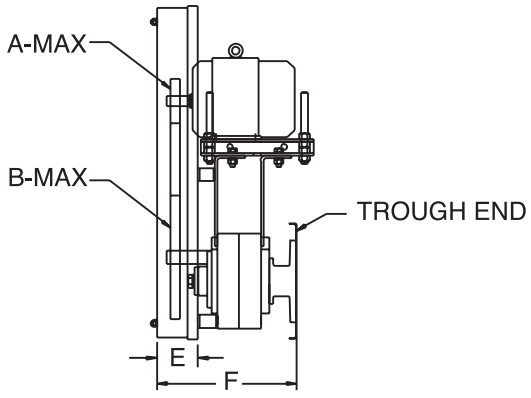
Note: See page G3-120 and G3-121 for dimensions and part numbers for drive shafts available for SCXT8A Screw Conveyor Drives.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Screw Conveyor Shaft Mount Speed Reducers

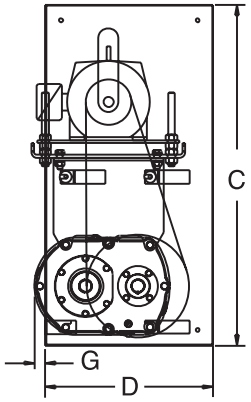
Slotted Metal Panel Belt Guards

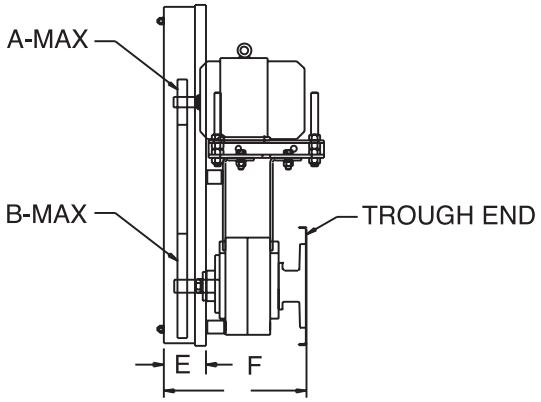




Belt Guards For Double Reduction SCXT Reducers (9, 15, 25:1) With Standard Motor Mounts

Reducer Size	Belt Guard Size	Part Number	Motor Mount No.	Wt.	NEMA Motor Frame	Center Distance		A	B	C	D	E	F	G
						Min.	Max.							
SCXT1A	SCXT1D	241489	M 112L	21	56T-215T	13.5	19.0	5.0	12.0	27.5	13.0	3.5	12.5	1.00
SCXT2A	SCXT2D	242489	M 214L	32	56T-215T	14.9	20.0	5.0	12.0	30.0	14.0	3.8	13.5	0.875
SCXT3B	SCXT3D	243416 ▲	M 316L	40	56T-215T	15.8	22.0	6.0	14.0	32.5	16.0	4.0	14.6	1.06
SCXT4B	SCXT4D	244489	M 418L	44	143T-286T	16.9	24.5	7.0	15.0	37.0	17.0	5.0	16.8	1.78
SCXT5C	SCXT5D	245495 ▲	M 518L	45	143T-286T	16.6	25.2	7.0	15.0	37.0	18.0	4.3	18.9	3.25
SCXT6A	SCXT6D	246476	M 620L	60	143T-326T	17.0	25.5	8.0	18.0	41.0	20.0	6.0	21.4	4.38
SCXT7A	SCXT7D	247474	M 720L	75	143T-365T	17.1	26.0	10.0	20.0	43.0	23.0	6.0	23.5	6.25





Belt Guards For Double Reduction SCXT Reducers (5:1) With Standard Motor Mounts

Reducer Size	Belt Guard Size	Part Number	Motor Mount No.	Wt.	NEMA Motor Frame	Center Distance		A	B	C	D	E	F	G
						Min.	Max.							
SCXT105	SCXT1S	241491	M 112	30	56T-215T	15.4	20.6	5.0 ■	12.0	31.0	13.50	3.50	12.50	0.38
SCXT205	SCXT2S	242491	M 214	34	56T-215T	17.0	22.2	6.0 ■	12.0	33.0	13.50	3.75	13.50	1.25
SCXT305A	SCXT3S	243418 ▲	M 316	40	56T-215T	18.2	24.4	7.0	12.0	35.0	13.50	4.00	14.63	2.38
SCXT405A	SCXT4S	244491	M 418	50	143T-286T	19.6	27.2	8.0	12.0	40.0	14.50	5.00	16.75	3.63
SCXT505A	SCXT5S	245497 ▲	M 518	70	143T-286T	19.7	28.2	8.0	12.0	40.0	14.50	5.50	18.91	5.68
SCXT605	SCXT6S	246478	M 620	77	143T-326T	21.1	29.6	10.0	16.0	45.0	18.00	6.00	21.44	5.97
SCXT705	SCXT7S	247476	M 720	84	143T-365T	22.1	31.0	10.0	16.0	45.5	19.00	6.00	23.53	9.25

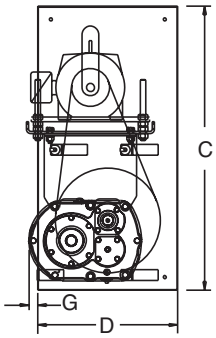
■ Guard will interfere with floor when used with 6" screw unless trough is raised above floor.

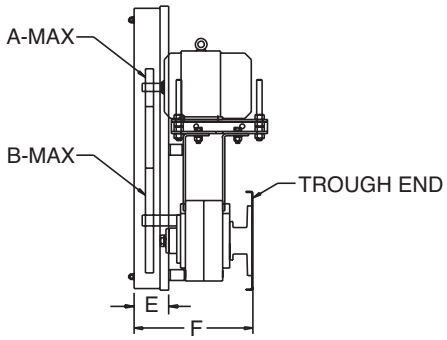
▲ These belt guards do not fit the larger frame, higher H.P. motor mounts in SCXT Selection/Dimension pages. Consult Dodge for special belt guard.

Courtesy of:
Screw Conveyor Parts

Screw Conveyor Shaft Mount Speed Reducers

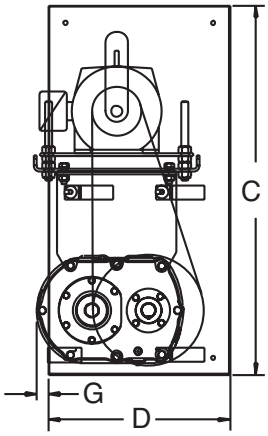
Slotted Metal Panel Belt Guards

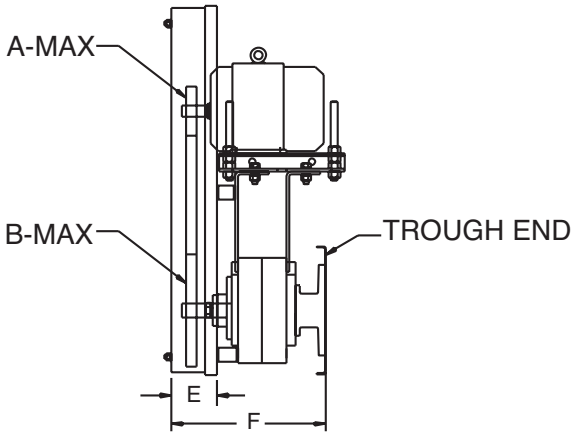




Belt Guards For Double Reduction SCXT Reducers (9, 15, 25:1) With Long Motor Mounts

Reducer Size	Belt Guard Size	Part Number	Motor Mount No.	Wt.	NEMA Motor Frame	Center Distance		A	B	C	D	E	F	G
						Min.	Max.							
SCXT1A	SCXT1DLMM	241149	M120L	26	56T-215T	19.5	25.0	5.0	12.0	33.5	13.0	3.50	12.50	1.00
SCXT2A	SCXT2DLMM	242223	M220L	37	56T-215T	20.9	26.0	5.0	12.0	36.0	14.0	3.75	13.50	0.875
SCXT3B	SCXT3DLMM	243154 ▲	M320L	45	56T-215T	21.8	27.0	6.0	14.0	38.0	16.0	4.00	14.63	1.06
SCXT4B	SCXT4DLMM	244152 ▲	M424L	50	143T-286T	23.2	30.4	7.0	15.0	43.0	17.0	5.00	16.75	1.78
SCXT5C	SCXT5DLMM	245103 ▲	M524L	52	143T-286T	22.9	30.9	7.0	15.0	43.0	18.0	4.25	18.91	3.25
SCXT6A	SCXT6DLMM	246148	M624L	65	143T-326T	23.3	31.4	8.0	18.0	47.0	20.0	6.00	21.44	4.38
SCXT7A	SCXT7DLMM	247153 ▲	M724L	80	143T-326T	23.2	30.5	10.0	20.0	49.0	23.0	6.00	23.53	6.25
SCXT8A	SCXT8DLMM	248477 ♣	M824L	113	210T-360T	23.3	32.1	12.0	25.0	53.0	28.0	6.50	24.81	5.62





Belt Guards For Single Reduction SCXT Reducers (5:1) With Long Motor Mounts

Reducer Size	Belt Guard Size	Part Number	Motor Mount No.	Wt.	NEMA Motor Frame	Center Distance		A	B	C	D	E	F	G
						Min.	Max.							
SCXT105	SCXT1SLMM	241142	M120L	35	56T-215T	21.4	26.6	5.0 ■	12.0	37.0	13.5	3.50	12.50	0.38
SCXT205	SCXT2SLMM	242114	M220L	40	56T-215T	23.3	28.2	6.0 ■	12.0	39.0	13.5	3.75	13.50	1.25
SCXT305A	SCXT3SLMM	243167 ▲	M320L	45	56T-215T	24.2	29.4	7.0	12.0	41.0	13.5	4.00	14.63	2.38
SCXT405A	SCXT4SLMM	244167 ▲	M424L	55	143T-286T	25.9	33.2	8.0	12.0	46.0	14.5	5.00	16.75	3.63
SCXT505A	SCXT5SLMM	245015 ▲	M524L	70	143T-286T	26.0	33.2	8.0	12.0	46.0	14.5	5.50	18.91	5.68
SCXT605	SCXT6SLMM	246142	M624L	82	143T-326T	27.4	35.5	10.0	16.0	51.0	18.0	6.00	21.44	5.97
SCXT705	SCXT7SLMM	247149	M724L	90	143T-326T	28.2	35.6	10.0	16.0	51.5	19.0	6.00	23.53	9.25

■ Guard will interfere with floor when used with 6" screw unless trough is raised above floor.

▲ These belt guards do not fit the larger frame, higher H.P. motor mounts in SCXT Selection/Dimension pages. Consult Dodge for special belt guard.

♣ Made to order.

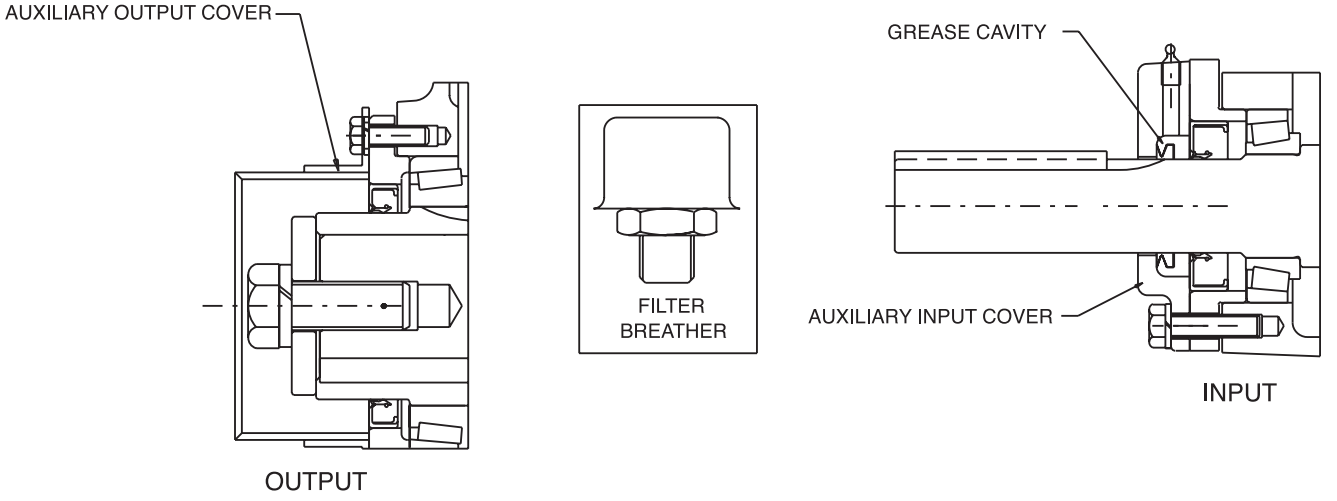
FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
Screw Conveyor Parts

Screw Conveyor Shaft Mount Speed Reducers

Auxiliary Seal Kit For Screw Conveyor Drive Reducers

Screw conveyor drives often operate in harsh environments in which the input shaft side of the reducer ends up turning in such materials as sand, cement, saw dust and grain. These materials are very abrasive and often damage seals, bearings and gears. These damages can lead to costly repair bills and downtime. To help prevent these maintenance problems Dodge offers an Auxiliary Seal Kit to protect the input side of the reducer. The kit contains a drive shaft end cover, special filter breather and a grease purged input seal with necessary mounting hardware. The auxiliary seals prevent contaminates from getting to the seal area and thus prevents them from entering the reducer. Use the auxiliary seal kit to get the longest possible life out of your Dodge Screw Conveyor Drive Reducer. Reducer housings on sizes SCXT1 and SCXT2 must be drilled and tapped to accommodate the input auxiliary seal.



Auxiliary Seal Kits for SCXT Reducers ● ♦

Reducer Size	Nominal Ratio	Part Number	Nominal Ratio	Part Number ♣
SCXT1A	9, 15, 25	272721	5	251146
SCXT2A	9, 15, 25	272722	5	252146
SCXT3B	9, 15, 25	243582	5	253146
SCXT4B	9, 15, 25	244677	5	254146
SCXT5C	9, 15, 25	245637	5	255148
SCXT6A	5, 9, 15, 25	272726	–	–
SCXT7A	5, 9, 15, 25	272727	–	–
SCXT8A	15, 25	248484 ♣	–	–

Input Auxiliary Seal for SCXT Reducers ● ■

Reducer Size	Nominal Ratio	Part Number	Nominal Ratio	Part Number
SCXT1A	9, 15, 25	241102	5	241109
SCXT2A	9, 15, 25	242102 ♣	5	242109 ♣
SCXT3B	9, 15, 25	243108	5	243109
SCXT4B	9, 15, 25	244117	5	244159 ♣
SCXT5C	9, 15, 25	245104	5	245106 ♣
SCXT6A	5, 9, 15, 25	246102	–	–
SCXT7A	5, 9, 15, 25	247102 ♣	–	–
SCXT8A	15, 25	248102	–	–

■ Guard will interfere with floor when used with 6" screw unless trough is raised above floor.

● Input auxiliary seals cannot be used on the same input shaft with a cooling fan

♦ Auxiliary seal kit consists of drive shaft end cover, filter breather, grease purged input seal and all mounting hardware.

♣ Made to order.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Easy Selection Method (For Hydraulic Motors)

When to Use Easy Selection

The Easy Selection tables for HXT Shaft Mount reducers are for hydraulic motor selections up to approximately horsepower with output speeds up to 400 RPM, using AGMA recommended application class numbers. For extreme repetitive shock loads, consult Dodge Application Engineering, (864) 284-5700.

How to Select

Step 1: Determine Class of Service-See Table 1, G3-15 to determine Load Classification for applications under normal conditions. Find the type application and duty cycle that most closely matches your specific application.

Class I Steady load not exceeding Motor HP rating and light shock loads during 10 hours a day. Moderate shock loads are allowable if operation is intermittent.

For Class I applications, the maximum value of starting and momentary peak loads should not exceed 2 x Motor HP rating. If it exceeds this amount it should be divided by 2 and the result used in the selection table instead of the Motor HP rating.

Class II Steady load not exceeding Motor HP rating for over 10 hours a day. Moderate shock loads are allowable during 10 hours a day.

For Class II applications, the maximum value of starting and momentary peak loads should not exceed 2.8 x Motor HP rating. If it exceeds this amount it should be divided by 2.8 and the result used in the selection table instead of the Motor HP rating.

Class III Moderate shock loads for over 10 hours a day. Heavy shock loads are allowable during 10 hours a day.

For Class III applications, the maximum value of starting and momentary peak loads should not exceed 4 x Motor HP rating. If it exceeds this amount it should be divided by 4 and the result used in the selection table instead of the Motor HP rating.

Step 2: Determine Reducer Size-See the Easy Selection Tables, pages G3-130 thru G3-144. From Selection Table I, II or III read the reducer size for the application horsepower and output speed. Also compare the reducer/ motor running and starting torque, running pressure and flow rate with that required for the application. See Table 18, page G3-145 for maximum hydraulic motor starting pressure for Hydroil Vane Motors.

Step 3: Compare Hollow Shaft Bore with the size of the driven shaft. All Dodge Torque-Arm Taper Bushed reducers require bushings. Refer to TXT reducer pages for available bushings. If the driven shaft is larger than the bore of the selected reducer, the shaft must be machined to the proper size, or select a larger reducer. Check driven shaft and key for strength.

Step 4: Check Dimensions-See Selection/Dimensions sections, pages G3-146 thru G3-149 for reducer dimensions, weights and part numbers. See Engineering/ Technical section, pages G3-173 and G3-176 for reducer and torque-arm rod mounting positions.

Step 5: Select a Hydroil Vane Motor-See Selection/ Dimensions pages for listing of HYDROIl Vane Motors required to drive each size and ratio of HXT reducer. See page G3-153 for dimensions and part numbers. **Note: 100 RPM is minimum speed for Hydroil Vane Motors.**

Example: Easy Selection Method-HXT Torque-Arm Reducer

A 3HP motor is used to drive the head shaft on a heavily loaded bucket elevator at 30 RPM, 16 hours per day. Head shaft diameter is 2-3/16". User wants to use a hydraulic motor as prime mover since drive is not in an easily accessible location.

Step 1: Determine Class of Service-From Table 1, page G3-15 locate "bucket elevators, heavily loaded" for over 10 hours per day. This load will be classified as a Class II application.

Step 2: Determine Reducer Size-From Table 13 -Class II Application, page G3-134, find the 30 RPM output column at the top of the table. Read down to the HP rating of 3HP or greater. At 3.6HP, trace to the far left column to find that the basic reducer size for the application is an HXT3. Either an HXT315 or an HXT325 may be used, depending on the starting torque requirements.

Step 3: Compare Hollow Shaft Bore of an HXT315/325 with the application driven shaft diameter. Per page G3-146, 2-3/16" is the maximum bore available for this size reducer, so it will work in this application. Select reducer bushing from part numbers listed with TXT reducers on page G3-39. Be sure to check driven shaft and key for strength.

Step 4: Check Dimensions and Weights-See Selection/ Dimensions section, page G3-146, for reducer dimensions, weights, part numbers and other pertinent drive dimensions. See Engineering/Technical section, pages G3-173 and G3-176 for information on reducer and torque-arm rod mounting positions.

Step 5: Select a Hydroil Vane Motor-See Selection/ Dimension page G3-146. Trace from Reducer size HXT315 right to column labeled Hydroil Motor. It must be driven by a size B30 Hydroil Vane Motor. Likewise a reducer size HXT325 is designed to be driven by an A20 Hydroil Vane Motor. See page G3-153 for the motor part numbers and dimensions.

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 12 - Class I Selection Table HXT Reducers - Double Reduction
HXT115A - HXT425B

Reducer Size	Requirements ★	Output Speed										
		10	15	20	25	30	35	40	45	50	55	60
HXT115A	OUTPUT HP (RUN)	0.6	0.9	1.2	1.4	1.7	1.9	2.2	2.4	2.7	2.9	3.1
	Running Torque (lb.-in.)	4025	3776	3651	3577	3527	3491	3465	3396	3342	3298	3260
	Starting Torque (lb.-in.)	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	Running Pressure (psi)	1685	1581	1529	1498	1477	1462	1451	1422	1399	1381	1365
	Flow Rate (gpm)	2.0	2.3	2.7	3.0	3.4	3.8	4.1	4.5	4.9	5.2	5.6
HXT125A	OUTPUT HP (RUN)	0.5	0.8	1.1	1.3	1.6	1.9	2.2	2.4	2.7	2.9	3.1
	Running Torque (lb.-in.)	3403	3403	3403	3403	3403	3403	3403	3396	3342	3298	3260
	Starting Torque (lb.-in.)	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868
	Running Pressure (psi)	2000	2000	2000	2000	2000	2000	2000	1996	1964	1938	1916
	Flow Rate (gpm)	1.5	1.8	2.1	2.3	2.6	2.9	3.2	3.4	3.7	3.9	4.2
HXT215A	OUTPUT HP (RUN)	0.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	3.5	3.8	4.2
	Running Torque (lb.-in.)	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387
	Starting Torque (lb.-in.)	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	Running Pressure (psi)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	Flow Rate (gpm)	2.2	2.6	2.9	3.3	3.6	4.0	4.3	4.7	5.0	5.4	5.7
HXT225A	OUTPUT HP (RUN)	1.1	1.6	2.1	2.6	3.0	3.5	4.0	4.4	4.8	5.2	5.6
	Running Torque (lb.-in.)	7245	6824	6613	6486	6402	6342	6297	6171	6070	5988	5919
	Starting Torque (lb.-in.)	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152
	Running Pressure (psi)	1985	1870	1812	1777	1754	1737	1725	1691	1663	1640	1622
	Flow Rate (gpm)	2.7	3.2	3.7	4.3	4.8	5.4	6.0	6.5	7.1	7.6	8.2
HXT315B	OUTPUT HP (RUN)	1.8	2.6	3.4	4.3	5.1	5.9	6.8	7.4	8.1	8.7	9.4
	Running Torque (lb.-in.)	11098	10894	10791	10730	10689	10660	10638	10379	10171	10001	9860
	Starting Torque (lb.-in.)	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190
	Running Pressure (psi)	1523	1495	1481	1473	1467	1463	1460	1425	1396	1373	1353
	Flow Rate (gpm)	4.6	5.7	6.9	8.0	9.2	10.3	11.5	12.6	13.7	14.8	15.9
HXT325B	OUTPUT HP (RUN)	1.2	1.8	2.4	3.0	3.7	4.3	4.9	5.5	6.1	6.7	7.3
	Running Torque (lb.-in.)	7689	7689	7689	7689	7689	7689	7689	7689	7689	7689	7689
	Starting Torque (lb.-in.)	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479
	Running Pressure (psi)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	Flow Rate (gpm)	2.7	3.4	4.0	4.6	5.2	5.8	6.4	7.0	7.6	8.3	8.9
HXT415B	OUTPUT HP (RUN)	2.6	3.9	5.1	6.3	7.5	8.7	9.9	11.0	12.1	13.1	14.2
	Running Torque (lb.-in.)	16676	16229	16005	15871	15781	15717	15669	15424	15227	15066	14932
	Starting Torque (lb.-in.)	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	Running Pressure (psi)	2251	2191	2161	2142	2130	2122	2115	2082	2056	2034	2016
	Flow Rate (gpm)	5.7	6.8	8.0	9.1	10.3	11.4	12.6	13.7	14.9	16.0	17.2
HXT425B	OUTPUT HP (RUN)	2.6	3.9	5.1	6.3	7.5	8.7	9.9	11.0	12.1	13.1	14.2
	Running Torque (lb.-in.)	16676	16229	16005	15871	15781	15717	15669	15424	15227	15066	14932
	Starting Torque (lb.-in.)	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164
	Running Pressure (psi)	1397	1360	1341	1330	1322	1317	1313	1292	1276	1262	1251
	Flow Rate (gpm)	5.9	7.7	9.6	11.5	13.4	15.3	17.2	19.0	20.9	22.8	24.7

★ See Page G3-145 for definition of requirements.

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 12 - Class I Selection Table HXT Reducers - Double Reduction
HXT115A - HXT425B

Reducer Size	Output Speed															
	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
	3.3	3.6	3.8	4.0	4.2	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.50
	3229	3202	3179	3158	3140	3124	3099	3076	3056	3037	3020	3005	2983	2964	2945	2929
HXT115A	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	1352	1341	1331	1322	1315	1308	1298	1288	1280	1272	1265	1258	1249	1241	1233	1226
	6.0	6.3	6.7	7.1	7.5	7.8	8.2	8.6	9.0	9.3	9.7	10.1	10.5	10.8	11.2	11.6
	3.3	3.6	3.8	4.0	4.2	–	–	–	–	–	–	–	–	–	–	–
	3229	3202	3179	3158	3140	–	–	–	–	–	–	–	–	–	–	–
HXT125A	2868	2868	2868	2868	2868	–	–	–	–	–	–	–	–	–	–	–
	1898	1882	1868	1856	1845	–	–	–	–	–	–	–	–	–	–	–
	4.5	4.7	5.0	5.2	5.5	–	–	–	–	–	–	–	–	–	–	–
	4.5	4.9	5.2	5.6	5.9	6.3	6.6	7.0	7.3	7.7	8.0	8.4	8.7	9.0	9.4	9.7
	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387
HXT215A	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	6.1	6.4	6.8	7.1	7.5	7.8	8.2	8.5	8.9	9.2	9.6	9.9	10.3	10.6	11.0	11.3
	6.0	6.5	6.9	7.3	7.7	–	–	–	–	–	–	–	–	–	–	–
	5861	5811	5768	5730	5697	–	–	–	–	–	–	–	–	–	–	–
HXT225A	6152	6152	6152	6152	6152	–	–	–	–	–	–	–	–	–	–	–
	1606	1592	1580	1570	1561	–	–	–	–	–	–	–	–	–	–	–
	8.8	9.3	9.9	10.5	11.1	–	–	–	–	–	–	–	–	–	–	–
	10.0	10.7	11.4	12.0	12.7	13.3	13.8	14.3	14.8	15.3	15.8	15.9	15.7	15.5	15.2	15.0
	9740	9637	9549	9471	9402	9341	9172	9020	8883	8758	8644	8351	7916	7515	7096	6753
HXT315B	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17078	16862	16663	16478	16306
	1337	1323	1311	1300	1291	1282	1259	1238	1219	1202	1186	1146	1087	1031	974	927
	17.1	18.2	19.4	20.5	21.7	22.8	23.9	25.1	26.2	27.3	28.5	29.6	30.6	31.7	32.8	33.9
	7.9	8.5	9.1	9.8	10.4	–	–	–	–	–	–	–	–	–	–	–
	7689	7689	7689	7689	7689	–	–	–	–	–	–	–	–	–	–	–
HXT325B	6479	6479	6479	6479	6479	–	–	–	–	–	–	–	–	–	–	–
	2000	2000	2000	2000	2000	–	–	–	–	–	–	–	–	–	–	–
	9.5	10.1	10.7	11.3	11.9	–	–	–	–	–	–	–	–	–	–	–
	15.3	16.3	17.4	18.5	19.6	20.6	21.5	22.0	21.5	21.0	20.5	20.0	19.5	19.0	18.5	18.0
	14818	14721	14636	14563	14497	14440	14295	13866	12905	12032	11235	10504	9832	9211	8637	8103
HXT415B	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	2000	1987	1976	1966	1957	1949	1930	1872	1742	1624	1517	1418	1327	1244	1166	1094
	18.30	19.5	20.7	21.8	23.0	24.1	25.3	26.4	27.4	28.4	29.4	30.4	31.5	32.5	33.6	34.7
	15.30	16.3	17.4	18.5	19.6	–	–	–	–	–	–	–	–	–	–	–
	14818	14721	14636	14563	14497	–	–	–	–	–	–	–	–	–	–	–
HXT425B	28164	28164	28164	28164	28164	–	–	–	–	–	–	–	–	–	–	–
	1241	1233	1226	1220	1215	–	–	–	–	–	–	–	–	–	–	–
	26.6	28.5	30.3	32.2	34.1	–	–	–	–	–	–	–	–	–	–	–

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 12 - Class I Selection Table HXT Reducers - Double Reduction
HXT515C - HXT725A

Reducer Size	Requirements ★	Output Speed										
		10	15	20	25	30	35	40	45	50	55	60
HXT515C	OUTPUT HP (RUN)	4.6	6.5	8.5	10.5	12.5	14.4	16.4	17.9	19.3	20.8	22.3
	Running Torque (lb.-in.)	28751	27474	26835	26451	26196	26013	25876	25046	24381	23838	23384
	Starting Torque (lb.-in.)	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924
	Running Pressure (psi)	2125	2031	1983	1955	1936	1923	1913	1851	1802	1762	1728
	Flow Rate (gpm)	10.0	11.9	13.9	16.0	18.1	20.2	22.3	24.3	26.3	28.4	30.5
HXT525C	OUTPUT HP (RUN)	4.6	6.5	8.5	10.5	12.5	14.4	16.4	17.9	19.3	20.8	22.3
	Running Torque (lb.-in.)	28751	27474	26835	26451	26196	26013	25876	25046	24381	23838	23384
	Starting Torque (lb.-in.)	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528
	Running Pressure (psi)	2298	2195	2144	2114	2093	2079	2068	2001	1948	1905	1869
	Flow Rate (gpm)	7.4	9.3	11.2	13.1	15.1	17.1	19.0	20.9	22.8	24.8	26.7
HXT615A	OUTPUT HP (RUN)	5.3	8.0	10.7	13.4	16.0	18.7	21.4	24.0	26.7	29.4	32.1
	Running Torque (lb.-in.)	33671	33671	33671	33671	33671	33671	33671	33671	33671	33671	33671
	Starting Torque (lb.-in.)	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779
	Running Pressure (psi)	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
	Flow Rate (gpm)	11.0	13.1	15.3	17.4	19.5	21.7	23.8	26.0	28.1	30.3	32.4
HXT625A	OUTPUT HP (RUN)	7.2	10.4	13.7	16.9	20.1	23.3	26.6	29.1	31.6	34.1	36.6
	Running Torque (lb.-in.)	45427	43830	43031	42552	42233	42004	41833	40699	39792	39050	38431
	Starting Torque (lb.-in.)	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094
	Running Pressure (psi)	2058	1985	1949	1927	1913	1903	1895	1843	1802	1769	1741
	Flow Rate (gpm)	12.5	15.8	19.3	22.7	26.2	29.7	33.2	36.6	40.0	43.4	46.8
HXT715A	OUTPUT HP (RUN)	9.6	14.4	19.2	23.8	28.3	32.9	37.4	41.4	45.3	49.3	53.2
	Running Torque (lb.-in.)	60533	60533	60533	59918	59483	59173	58940	57937	57135	56478	55931
	Starting Torque (lb.-in.)	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132
	Running Pressure (psi)	2500	2500	2500	2475	2457	2444	2434	2393	2360	2333	2310
	Flow Rate (gpm)	12.7	16.6	20.4	24.2	28.0	31.9	35.7	39.5	43.3	47.1	50.9
HXT725A	OUTPUT HP (RUN)	8.6	12.9	17.1	21.4	25.7	30.0	34.3	38.6	42.8	47.1	51.4
	Running Torque (lb.-in.)	54009	54009	54009	54009	54009	54009	54009	54009	54009	54009	54009
	Starting Torque (lb.-in.)	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975
	Running Pressure (psi)	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
	Flow Rate (gpm)	13.6	17.0	20.4	23.9	27.3	30.7	34.2	37.6	41.1	44.5	47.9

★ See Page G3-145 for definition of requirements.

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 12 - Class I Selection Table HXT Reducers - Double Reduction
HXT515C - HXT725A

Reducer Size	Output Speed															
	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
HXT515C	23.7	24.8	24.2	23.5	22.9	22.3	21.7	21.1	20.5	19.8	19.2	18.6	18.0	–	–	–
	23001	22329	20336	18514	16980	15616	14396	13298	12305	11345	10522	9769	9076	–	–	–
	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	–	–	–
	1700	1650	1503	1368	1255	1154	1064	983	909	838	778	722	671	–	–	–
	32.5	34.6	36.3	38.1	40.0	41.8	43.8	45.7	47.7	49.6	51.6	53.6	55.6	–	–	–
HXT525C	23.7	24.8	24.2	23.5	–	–	–	–	–	–	–	–	–	–	–	–
	23001	22329	20336	18514	–	–	–	–	–	–	–	–	–	–	–	–
	29528	29528	29528	29528	–	–	–	–	–	–	–	–	–	–	–	–
	1838	1784	1625	1479	–	–	–	–	–	–	–	–	–	–	–	–
	28.7	30.6	32.3	34.1	–	–	–	–	–	–	–	–	–	–	–	–
HXT615A	34.7	37.4	39.6	37.6	35.7	33.7	31.8	29.8	27.8	25.9	23.9	22.0	20.0	–	–	–
	33671	33671	33277	29622	26471	23599	21097	18781	16687	14840	13098	11555	10084	–	–	–
	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	–	–	–
	2500	2500	2471	2199	1965	1752	1566	1395	1239	1102	973	858	749	–	–	–
	34.5	36.7	38.8	40.2	41.7	43.3	44.9	46.6	48.3	50.1	51.9	53.7	55.6	–	–	–
HXT625A	39.1	41.5	39.6	37.6	–	–	–	–	–	–	–	–	–	–	–	–
	37908	37365	33277	29622	–	–	–	–	–	–	–	–	–	–	–	–
	52094	52094	52094	52094	–	–	–	–	–	–	–	–	–	–	–	–
	1717	1692	1507	1342	–	–	–	–	–	–	–	–	–	–	–	–
	50.3	53.7	56.7	59.8	–	–	–	–	–	–	–	–	–	–	–	–
HXT715A	57.2	55.6	53.5	51.4	49.3	47.2	45.0	43.0	41.0	39.0	37.0	35.0	–	–	–	–
	55468	50060	44958	40494	36555	33053	29854	27101	24610	22345	20278	18382	–	–	–	–
	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	–	–	–	–
	2291	2067	1857	1672	1510	1365	1233	1119	1016	923	837	759	–	–	–	–
	54.7	58.1	61.5	65.0	68.5	72.1	75.7	79.3	83.0	86.6	90.3	94.0	–	–	–	–
HXT725A	55.7	55.6	53.5	–	–	–	–	–	–	–	–	–	–	–	–	–
	54009	50060	44958	–	–	–	–	–	–	–	–	–	–	–	–	–
	50975	50975	50975	–	–	–	–	–	–	–	–	–	–	–	–	–
	2500	2317	2081	–	–	–	–	–	–	–	–	–	–	–	–	–
	51.4	54.3	57.1	–	–	–	–	–	–	–	–	–	–	–	–	–

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 13 - Class II Selection Table HXT Reducers - Double Reduction
HXT115A - HXT425B

Reducer Size	Requirements ★	Output Speed										
		10	15	20	25	30	35	40	45	50	55	60
HXT115A	OUTPUT HP (RUN)	0.5	0.6	0.8	1.0	1.2	1.4	1.6	1.7	1.9	2.1	2.2
	Running Torque (lb.-in.)	2875	2697	2608	2555	2519	2494	2475	2426	2387	2355	2329
	Starting Torque (lb.-in.)	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	Running Pressure (psi)	1204	1129	1092	1070	1055	1044	1036	1016	1000	986	975
	Flow Rate (gpm)	1.7	2.0	2.4	2.7	3.1	3.5	3.8	4.2	4.6	4.9	5.3
HXT125A	OUTPUT HP (RUN)	0.5	0.6	0.8	1.0	1.2	1.4	1.6	1.7	1.9	2.1	2.2
	Running Torque (lb.-in.)	2875	2697	2608	2555	2519	2494	2475	2426	2387	2355	2329
	Starting Torque (lb.-in.)	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868
	Running Pressure (psi)	1690	1585	1533	1501	1480	1465	1454	1426	1403	1384	1369
	Flow Rate (gpm)	1.4	1.6	1.8	2.1	2.4	2.6	2.9	3.1	3.4	3.7	3.9
HXT215A	OUTPUT HP (RUN)	0.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	3.4	3.7	4.0
	Running Torque (lb.-in.)	4387	4387	4387	4387	4387	4387	4387	4387	4336	4277	4228
	Starting Torque (lb.-in.)	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	Running Pressure (psi)	2000	2000	2000	2000	2000	2000	2000	2000	1976	1950	1927
	Flow Rate (gpm)	2.2	2.6	2.9	3.3	3.6	4.0	4.3	4.7	5	5.3	5.7
HXT225A	OUTPUT HP (RUN)	0.8	1.2	1.5	1.8	2.2	2.5	2.9	3.1	3.4	3.7	4.0
	Running Torque (lb.-in.)	5175	4874	4723	4633	4573	4530	4498	4408	4336	4277	4228
	Starting Torque (lb.-in.)	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152
	Running Pressure (psi)	1418	1335	1294	1269	1253	1241	1232	1208	1188	1172	1158
	Flow Rate (gpm)	2.2	2.8	3.3	3.9	4.4	5.0	5.6	6.2	6.7	7.3	7.9
HXT315B	OUTPUT HP (RUN)	1.3	1.9	2.4	3.0	3.6	4.2	4.8	5.3	5.8	6.2	6.7
	Running Torque (lb.-in.)	7927	7781	7708	7664	7635	7614	7599	7413	7265	7144	7043
	Starting Torque (lb.-in.)	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190
	Running Pressure (psi)	1088	1068	1058	1052	1048	1045	1043	1018	997	981	967
	Flow Rate (gpm)	4.0	5.1	6.2	7.4	8.5	9.7	10.8	12.0	13.1	14.2	15.4
HXT325B	OUTPUT HP (RUN)	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.3	5.8	6.2	6.7
	Running Torque (lb.-in.)	7689	7689	7689	7664	7635	7614	7599	7413	7265	7144	7043
	Starting Torque (lb.-in.)	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479
	Running Pressure (psi)	2000	2000	2000	1994	1986	1981	1977	1928	1890	1858	1832
	Flow Rate (gpm)	2.7	3.4	4.0	4.6	5.2	5.8	6.4	7.0	7.6	8.1	8.7
HXT415B	OUTPUT HP (RUN)	1.9	2.8	3.6	4.5	5.4	6.2	7.1	7.9	8.6	9.4	10.2
	Running Torque (lb.-in.)	11911	11592	11432	11336	11272	11227	11192	11017	10876	10761	10665
	Starting Torque (lb.-in.)	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	Running Pressure (psi)	1608	1565	1543	1530	1522	1516	1511	1487	1468	1453	1440
	Flow Rate (gpm)	4.8	5.9	7.0	8.2	9.4	10.5	11.7	12.8	14	15.2	16.3
HXT425B	OUTPUT HP (RUN)	1.9	2.8	3.6	4.5	5.4	6.2	7.1	7.9	8.6	9.4	10.2
	Running Torque (lb.-in.)	11911	11592	11432	11336	11272	11227	11192	11017	10876	10761	10665
	Starting Torque (lb.-in.)	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164
	Running Pressure (psi)	998	971	958	950	944	941	938	923	911	902	894
	Flow Rate (gpm)	5.3	7.2	9.0	10.9	12.8	14.7	16.6	18.5	20.4	22.3	24.1

★ See Page G3-145 for definition of requirements.

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 13 - Class II Selection Table HXT Reducers - Double Reduction
HXT115A - HXT425B

Reducer Size	Output Speed															
	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
	2.40	2.50	2.70	2.90	3.00	3.20	3.30	3.50	3.60	3.80	3.90	4.10	4.20	4.40	4.50	4.60
	2306	2287	2271	2256	2243	2232	2214	2197	2183	2169	2157	2146	2131	2117	2104	2092
HXT115A	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	966	958	951	945	939	934	927	920	914	908	903	899	892	886	881	876
	5.7	6.1	6.4	6.8	7.2	7.6	7.9	8.3	8.7	9.1	9.4	9.8	10.2	10.6	10.9	11.3
	2.4	2.5	2.7	2.9	3.0	–	–	–	–	–	–	–	–	–	–	–
	2306	2287	2271	2256	2243	–	–	–	–	–	–	–	–	–	–	–
HXT125A	2868	2868	2868	2868	2868	–	–	–	–	–	–	–	–	–	–	–
	1355	1344	1334	1326	1318	–	–	–	–	–	–	–	–	–	–	–
	4.2	4.5	4.7	5.0	5.3	–	–	–	–	–	–	–	–	–	–	–
	4.3	4.6	4.9	5.2	5.5	5.8	6.0	6.3	6.6	6.8	7.1	7.4	7.6	7.9	8.2	8.4
	4186	4151	4120	4093	4069	4048	4010	3976	3945	3917	3891	3868	3847	3828	3810	3793
HXT215A	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	1908	1892	1878	1866	1855	1845	1828	1812	1798	1786	1774	1763	1754	1745	1737	1729
	6.0	6.3	6.7	7.0	7.4	7.7	8.0	8.4	8.7	9.0	9.4	9.7	10.1	10.4	10.8	11.1
	4.3	4.6	4.9	5.2	5.5	–	–	–	–	–	–	–	–	–	–	–
	4186	4151	4120	4093	4069	–	–	–	–	–	–	–	–	–	–	–
HXT225A	6152	6152	6152	6152	6152	–	–	–	–	–	–	–	–	–	–	–
	1147	1137	1129	1121	1115	–	–	–	–	–	–	–	–	–	–	–
	8.4	9.0	9.6	10.2	10.7	–	–	–	–	–	–	–	–	–	–	–
	7.2	7.6	8.1	8.6	9.1	9.5	9.9	10.2	10.6	10.9	11.3	11.6	11.9	12.3	12.6	12.9
	6957	6884	6820	6765	6716	6672	6552	6443	6345	6256	6174	6099	6022	5951	5885	5824
HXT315B	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17078	16862	16663	16478	16306
	955	945	936	929	922	916	899	884	871	859	847	837	827	817	808	799
	16.5	17.7	18.8	20	21.1	22.2	23.4	24.5	25.7	26.8	27.9	29.1	30.2	31.4	32.5	33.7
	7.2	7.6	8.1	8.6	9.1	–	–	–	–	–	–	–	–	–	–	–
	6957	6884	6820	6765	6716	–	–	–	–	–	–	–	–	–	–	–
HXT325B	6479	6479	6479	6479	6479	–	–	–	–	–	–	–	–	–	–	–
	1810	1791	1774	1760	1747	–	–	–	–	–	–	–	–	–	–	–
	9.3	9.9	10.5	11.1	11.7	–	–	–	–	–	–	–	–	–	–	–
	10.9	11.7	12.4	13.2	14.0	14.7	15.4	16.1	16.7	17.4	18.0	18.7	19.2	19.0	18.5	18.0
	10584	10515	10455	10402	10355	10314	10211	10118	10034	9957	9887	9823	9693	9211	8637	8103
HXT415B	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	1429	1419	1411	1404	1398	1392	1378	1366	1355	1344	1335	1326	1309	1244	1166	1094
	17.5	18.6	19.8	21.0	22.1	23.3	24.5	25.6	26.8	28.0	29.1	30.3	31.4	32.5	33.6	34.7
	10.9	11.7	12.4	13.2	14.0	–	–	–	–	–	–	–	–	–	–	–
	10584	10515	10455	10402	10355	–	–	–	–	–	–	–	–	–	–	–
HXT425B	28164	28164	28164	28164	28164	–	–	–	–	–	–	–	–	–	–	–
	887	881	876	871	868	–	–	–	–	–	–	–	–	–	–	–
	26	27.9	29.8	31.7	33.6	–	–	–	–	–	–	–	–	–	–	–

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 13 - Class II Selection Table HXT Reducers - Double Reduction
HXT515C - HXT725A

Reducer Size	Requirements ★	Output Speed										
		10	15	20	25	30	35	40	45	50	55	60
HXT515C	OUTPUT HP (RUN)	3.3	4.7	6.1	7.5	8.9	10.3	11.7	12.8	13.8	14.9	15.9
	Running Torque (lb.-in.)	20537	19624	19168	18894	18711	18581	18483	17890	17415	17027	16703
	Starting Torque (lb.-in.)	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924
	Running Pressure (psi)	1518	1450	1417	1396	1383	1373	1366	1322	1287	1258	1235
	Flow Rate (gpm)	8.4	10.3	12.4	14.5	16.6	18.7	20.9	22.9	25.0	27.1	29.1
HXT525C	OUTPUT HP (RUN)	3.3	4.7	6.1	7.5	8.9	10.3	11.7	12.8	13.8	14.9	15.9
	Running Torque (lb.-in.)	20537	19624	19168	18894	18711	18581	18483	17890	17415	17027	16703
	Starting Torque (lb.-in.)	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528
	Running Pressure (psi)	1641	1568	1532	1510	1495	1485	1477	1430	1392	1361	1335
	Flow Rate (gpm)	6.4	8.3	10.3	12.2	14.2	16.2	18.2	20.1	22.0	24.0	25.9
HXT615A	OUTPUT HP (RUN)	5.1	7.5	9.8	12.1	14.4	16.7	19.0	20.8	22.5	24.3	26.1
	Running Torque (lb.-in.)	32448	31307	30737	30394	30166	30003	29881	29071	28423	27893	27451
	Starting Torque (lb.-in.)	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779
	Running Pressure (psi)	2409	2325	2282	2257	2240	2228	2219	2158	2110	2071	2038
	Flow Rate (gpm)	10.7	12.6	14.7	16.7	18.8	21.0	23.1	25.1	27.1	29.1	31.2
HXT625A	OUTPUT HP (RUN)	5.1	7.5	9.8	12.1	14.4	16.7	19.0	20.8	22.5	24.3	26.1
	Running Torque (lb.-in.)	32448	31307	30737	30394	30166	30003	29881	29071	28423	27893	27451
	Starting Torque (lb.-in.)	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094
	Running Pressure (psi)	1470	1418	1392	1377	1366	1359	1353	1317	1287	1263	1243
	Flow Rate (gpm)	11.0	14.3	17.8	21.3	24.7	28.2	31.7	35.1	38.6	42.0	45.5
HXT715A	OUTPUT HP (RUN)	7.2	10.5	13.7	17.0	20.2	23.5	26.7	29.5	32.4	35.2	38.0
	Running Torque (lb.-in.)	45591	44040	43264	42798	42488	42266	42100	41384	40811	40342	39951
	Starting Torque (lb.-in.)	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132
	Running Pressure (psi)	1883	1819	1787	1768	1755	1746	1739	1709	1685	1666	1650
	Flow Rate (gpm)	11.5	15.2	19.0	22.8	26.6	30.5	34.3	38.1	41.9	45.7	49.5
HXT725A	OUTPUT HP (RUN)	7.2	10.5	13.7	17.0	20.2	23.5	26.7	29.5	32.4	35.2	38.0
	Running Torque (lb.-in.)	45591	44040	43264	42798	42488	42266	42100	41384	40811	40342	39951
	Starting Torque (lb.-in.)	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975
	Running Pressure (psi)	2110	2039	2003	1981	1967	1956	1949	1916	1889	1867	1849
	Flow Rate (gpm)	12.5	15.8	19.1	22.5	25.9	29.3	32.7	36.1	39.4	42.8	46.2

★ See Page G3-145 for definition of requirements.

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 13 - Class II Selection Table HXT Reducers - Double Reduction
HXT515C - HXT725A

Reducer Size	Output Speed															
	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
HXT515C	16.9	18.0	19.0	20.1	21.1	22.2	21.7	21.1	20.5	19.8	19.2	18.6	18.0	–	–	–
	16429	16195	15991	15813	15656	15517	14396	13298	12305	11344	10522	9769	9076	–	–	–
	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	–	–	–
	1214	1197	1182	1169	1157	1147	1064	983	909	838	778	722	671	–	–	–
	31.2	33.3	35.5	37.6	39.7	41.8	43.8	45.7	47.7	49.6	51.6	53.6	55.6	–	–	–
HXT525C	16.9	18.0	19.0	20.1	–	–	–	–	–	–	–	–	–	–	–	–
	16429	16195	15991	15813	–	–	–	–	–	–	–	–	–	–	–	–
	29528	29528	29528	29528	–	–	–	–	–	–	–	–	–	–	–	–
	1313	1294	1278	1264	–	–	–	–	–	–	–	–	–	–	–	–
	27.9	29.8	31.8	33.8	–	–	–	–	–	–	–	–	–	–	–	–
HXT615A	27.9	29.7	31.5	33.3	35.1	33.7	31.8	29.8	27.8	25.9	23.9	22.0	20.0	–	–	–
	27077	26756	26479	26236	26021	23599	21097	18781	16687	14840	13098	11555	10084	–	–	–
	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	–	–	–
	2010	1987	1966	1948	1932	1752	1566	1395	1239	1102	973	858	749	–	–	–
	33.2	35.3	37.4	39.5	41.6	43.3	44.9	46.6	48.3	50.1	51.9	53.7	55.6	–	–	–
HXT625A	27.9	29.7	31.5	33.3	–	–	–	–	–	–	–	–	–	–	–	–
	27077	26756	26479	26236	–	–	–	–	–	–	–	–	–	–	–	–
	52094	52094	52094	52094	–	–	–	–	–	–	–	–	–	–	–	–
	1226	1212	1199	1188	–	–	–	–	–	–	–	–	–	–	–	–
	49.0	52.4	55.9	59.4	–	–	–	–	–	–	–	–	–	–	–	–
HXT715A	40.9	43.7	46.5	49.3	49.3	47.2	45.0	43.0	41.0	39.0	37.0	35.0	–	–	–	–
	39620	39337	39091	38876	36555	33053	29854	27101	24610	22345	20278	18382	–	–	–	–
	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	–	–	–	–
	1636	1625	1614	1606	1510	1365	1233	1119	1016	923	837	759	–	–	–	–
	53.4	57.2	61.0	64.9	68.5	72.1	75.7	79.3	83.0	86.6	90.3	94.0	–	–	–	–
HXT725A	40.9	43.7	46.5	–	–	–	–	–	–	–	–	–	–	–	–	–
	39620	39337	39091	–	–	–	–	–	–	–	–	–	–	–	–	–
	50975	50975	50975	–	–	–	–	–	–	–	–	–	–	–	–	–
	1834	1821	1809	–	–	–	–	–	–	–	–	–	–	–	–	–
	49.6	53.0	56.4	–	–	–	–	–	–	–	–	–	–	–	–	–

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 14 - Class III Selection Table HXT Reducers - Double Reduction
HXT115A - HXT1425B

Reducer Size	Requirements ★	Output Speed										
		10	15	20	25	30	35	40	45	50	55	60
HXT115A	OUTPUT HP (RUN)	0.3	0.4	0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.4	1.6
	Running Torque (lb.-in.)	2013	1888	1826	1788	1763	1746	1732	1698	1671	1649	1630
	Starting Torque (lb.-in.)	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	Running Pressure (psi)	843	791	764	749	738	731	725	711	700	690	683
	Flow Rate (gpm)	1.4	1.7	2.1	2.5	2.8	3.2	3.6	4.0	4.3	4.7	5.1
HXT125A	OUTPUT HP (RUN)	0.3	0.4	0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.4	1.6
	Running Torque (lb.-in.)	2013	1888	1826	1788	1763	1746	1732	1698	1671	1649	1630
	Starting Torque (lb.-in.)	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868
	Running Pressure (psi)	1183	1110	1073	1051	1036	1026	1018	998	982	969	958
	Flow Rate (gpm)	1.1	1.4	1.6	1.9	2.1	2.4	2.7	2.9	3.2	3.5	3.7
HXT215A	OUTPUT HP (RUN)	0.6	0.8	1.0	1.3	1.5	1.8	2.0	2.2	2.4	2.6	2.8
	Running Torque (lb.-in.)	3623	3412	3306	3243	3201	3171	3148	3085	3035	2994	2959
	Starting Torque (lb.-in.)	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	Running Pressure (psi)	1651	1555	1507	1478	1459	1445	1435	1406	1383	1365	1349
	Flow Rate (gpm)	2.0	2.2	2.5	2.9	3.2	3.5	3.9	4.2	4.5	4.9	5.2
HXT225A	OUTPUT HP (RUN)	0.6	0.8	1.0	1.3	1.5	1.8	2.0	2.2	2.4	2.6	2.8
	Running Torque (lb.-in.)	3623	3412	3306	3243	3201	3171	3148	3085	3035	2994	2959
	Starting Torque (lb.-in.)	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152
	Running Pressure (psi)	993	935	906	889	877	869	863	845	832	820	811
	Flow Rate (gpm)	1.9	2.5	3.0	3.6	4.2	4.7	5.3	5.9	6.4	7.0	7.6
HXT315B	OUTPUT HP (RUN)	0.9	1.3	1.7	2.1	2.5	3.0	3.4	3.7	4.0	4.4	4.7
	Running Torque (lb.-in.)	5549	5447	5396	5365	5345	5330	5319	5189	5086	5001	4930
	Starting Torque (lb.-in.)	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190
	Running Pressure (psi)	762	748	741	736	734	732	730	712	698	686	677
	Flow Rate (gpm)	3.5	4.6	5.8	6.9	8.1	9.2	10.4	11.5	12.6	13.8	14.9
HXT325B	OUTPUT HP (RUN)	0.9	1.3	1.7	2.1	2.5	3.0	3.4	3.7	4.0	4.4	4.7
	Running Torque (lb.-in.)	5549	5447	5396	5365	5345	5330	5319	5189	5086	5001	4930
	Starting Torque (lb.-in.)	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479
	Running Pressure (psi)	1443	1417	1403	1396	1390	1386	1384	1350	1323	1301	1282
	Flow Rate (gpm)	2.3	2.9	3.5	4.1	4.7	5.3	6.0	6.5	7.1	7.7	8.3
HXT415B	OUTPUT HP (RUN)	1.3	1.9	2.5	3.1	3.8	4.4	5.0	5.5	6.0	6.6	7.1
	Running Torque (lb.-in.)	8338	8114	8002	7935	7891	7859	7835	7712	7613	7533	7466
	Starting Torque (lb.-in.)	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	Running Pressure (psi)	1126	1095	1080	1071	1065	1061	1058	1041	1028	1017	1008
	Flow Rate (gpm)	4.1	5.2	6.3	7.5	8.7	9.8	11.0	12.2	13.3	14.5	15.7
HXT425B	OUTPUT HP (RUN)	1.3	1.9	2.5	3.1	3.8	4.4	5.0	5.5	6.0	6.6	7.1
	Running Torque (lb.-in.)	8338	8114	8002	7935	7891	7859	7835	7712	7613	7533	7466
	Starting Torque (lb.-in.)	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164
	Running Pressure (psi)	699	680	670	665	661	658	656	646	638	631	625
	Flow Rate (gpm)	4.9	6.7	8.6	10.5	12.4	14.3	16.2	18.1	20.0	21.8	23.7

★ See Page G3-145 for definition of requirements.

Courtesy of:
Screw Conveyor Parts

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 14 - Class III Selection Table HXT Reducers - Double Reduction
HXT115A - HXT1425B

Reducer Size	Output Speed															
	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.7	2.8	2.9	3.0	3.1	3.2	3.3
	1615	1601	1589	1579	1570	1562	1550	1538	1528	1519	1510	1502	1492	1482	1473	1464
HXT115A	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	676	670	666	661	657	654	649	644	640	636	632	629	625	620	617	613
	5.5	5.8	6.2	6.6	7.0	7.3	7.7	8.1	8.5	8.9	9.2	9.6	10.0	10.4	10.7	11.1
	1.7	1.8	1.9	2.0	2.1	–	–	–	–	–	–	–	–	–	–	–
	1615	1601	1589	1579	1570	–	–	–	–	–	–	–	–	–	–	–
HXT125A	2868	2868	2868	2868	2868	–	–	–	–	–	–	–	–	–	–	–
	949	941	934	928	923	–	–	–	–	–	–	–	–	–	–	–
	4.0	4.3	4.5	4.8	5.1	–	–	–	–	–	–	–	–	–	–	–
	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.3	5.5	5.7	5.9
	2930	2906	2884	2865	2848	2834	2807	2783	2762	2742	2724	2707	2693	2679	2667	2655
HXT215A	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	1336	1324	1315	1306	1298	1292	1280	1269	1259	1250	1242	1234	1228	1221	1216	1210
	5.6	5.9	6.2	6.6	6.9	7.3	7.6	8.0	8.3	8.6	9.0	9.3	9.7	10.0	10.4	10.7
	3.0	3.2	3.4	3.6	3.8	–	–	–	–	–	–	–	–	–	–	–
	2930	2906	2884	2865	2848	–	–	–	–	–	–	–	–	–	–	–
HXT225A	6152	6152	6152	6152	6152	–	–	–	–	–	–	–	–	–	–	–
	803	796	790	785	780	–	–	–	–	–	–	–	–	–	–	–
	8.2	8.7	9.3	9.9	10.5	–	–	–	–	–	–	–	–	–	–	–
	5.0	5.4	5.7	6.0	6.3	6.7	6.9	7.2	7.4	7.6	7.9	8.1	8.4	8.6	8.8	9.1
	4870	4819	4774	4735	4701	4671	4586	4510	4441	4379	4322	4270	4216	4166	4119	4077
HXT315B	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17078	16862	16663	16478	16306
	668	661	655	650	645	641	630	619	610	601	593	586	579	572	565	560
	16.1	17.2	18.4	19.5	20.7	21.8	23.0	24.1	25.3	26.4	27.6	28.7	29.9	31.0	32.2	33.3
	5.0	5.4	5.7	6.0	6.3	–	–	–	–	–	–	–	–	–	–	–
	4870	4819	4774	4735	4701	–	–	–	–	–	–	–	–	–	–	–
HXT325B	6479	6479	6479	6479	6479	–	–	–	–	–	–	–	–	–	–	–
	1267	1253	1242	1232	1223	–	–	–	–	–	–	–	–	–	–	–
	8.9	9.5	10.1	10.7	11.3	–	–	–	–	–	–	–	–	–	–	–
	7.6	8.2	8.7	9.2	9.8	10.3	10.8	11.2	11.7	12.2	12.6	13.1	13.5	13.8	14.2	14.6
	7409	7360	7318	7281	7249	7220	7147	7082	7024	6970	6921	6876	6785	6701	6623	6551
HXT415B	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	1000	994	988	983	979	975	965	956	948	941	934	928	916	905	894	884
	16.8	18.0	19.2	20.3	21.5	22.7	23.9	25.0	26.2	27.4	28.5	29.7	30.9	32.0	33.2	34.3
	7.6	8.2	8.7	9.2	9.8	–	–	–	–	–	–	–	–	–	–	–
	7409	7360	7318	7281	7249	–	–	–	–	–	–	–	–	–	–	–
HXT425B	28164	28164	28164	28164	28164	–	–	–	–	–	–	–	–	–	–	–
	621	617	613	610	607	–	–	–	–	–	–	–	–	–	–	–
	25.6	27.5	29.4	31.3	33.2	–	–	–	–	–	–	–	–	–	–	–

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 14 - Class III Selection Table HXT Reducers - Double Reduction
HXT515C - HXT725A

Reducer Size	Requirements ★	Output Speed										
		10	15	20	25	30	35	40	45	50	55	60
HXT515C	OUTPUT HP (RUN)	2.3	3.3	4.3	5.2	6.2	7.2	8.2	8.9	9.7	10.4	11.1
	Running Torque (lb.-in.)	14376	13737	13417	13226	13098	13007	12938	12523	12191	11919	11692
	Starting Torque (lb.-in.)	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924
	Running Pressure (psi)	1063	1015	992	978	968	961	956	926	901	881	864
	Flow Rate (gpm)	7.1	9.2	11.3	13.4	15.5	17.6	19.8	21.9	23.9	26.0	28.2
HXT525C	OUTPUT HP (RUN)	2.3	3.3	4.3	5.2	6.2	7.2	8.2	8.9	9.7	10.4	11.1
	Running Torque (lb.-in.)	14376	13737	13417	13226	13098	13007	12938	12523	12191	11919	11692
	Starting Torque (lb.-in.)	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528
	Running Pressure (psi)	1149	1098	1072	1057	1047	1039	1034	1001	974	952	934
	Flow Rate (gpm)	5.7	7.6	9.6	11.5	13.5	15.5	17.5	19.4	21.4	23.3	25.3
HXT615A	OUTPUT HP (RUN)	3.6	5.2	6.8	8.4	10.1	11.7	13.3	14.5	15.8	17	18.3
	Running Torque (lb.-in.)	22714	21915	21516	21276	21116	21002	20917	20350	19896	19525	19216
	Starting Torque (lb.-in.)	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779
	Running Pressure (psi)	1686	1627	1598	1580	1568	1559	1553	1511	1477	1450	1427
	Flow Rate (gpm)	8.8	10.8	12.8	14.9	17.1	19.2	21.3	23.3	25.4	27.5	29.5
HXT625A	OUTPUT HP (RUN)	3.6	5.2	6.8	8.4	10.1	11.7	13.3	14.5	15.8	17	18.3
	Running Torque (lb.-in.)	22714	21915	21516	21276	21116	21002	20917	20350	19896	19525	19216
	Starting Torque (lb.-in.)	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094
	Running Pressure (psi)	1029	993	975	964	956	951	947	922	901	884	870
	Flow Rate (gpm)	9.8	13.2	16.7	20.1	23.6	27.1	30.6	34.1	37.5	41.0	44.5
HXT715A	OUTPUT HP (RUN)	5.1	7.3	9.6	11.9	14.2	16.4	18.7	20.7	22.7	24.6	26.6
	Running Torque (lb.-in.)	31914	30828	30285	29959	29742	29587	29470	28969	28567	28239	27966
	Starting Torque (lb.-in.)	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132
	Running Pressure (psi)	1318	1273	1251	1237	1228	1222	1217	1196	1180	1166	1155
	Flow Rate (gpm)	10.3	14.1	17.9	21.7	25.6	29.4	33.3	37.1	40.9	44.7	48.6
HXT725A	OUTPUT HP (RUN)	5.1	7.3	9.6	11.9	14.2	16.4	18.7	20.7	22.7	24.6	26.6
	Running Torque (lb.-in.)	31914	30828	30285	29959	29742	29587	29470	28969	28567	28239	27966
	Starting Torque (lb.-in.)	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975
	Running Pressure (psi)	1477	1427	1402	1387	1377	1370	1364	1341	1322	1307	1294
	Flow Rate (gpm)	10.8	14.1	17.5	20.9	24.3	27.7	31.2	34.5	37.9	41.3	44.7

★ See Page G3-145 for definition of requirements.

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 14 - Class III Selection Table HXT Reducers - Double Reduction
HXT515C - HXT725A

Reducer Size	Output Speed															
	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
	11.9	12.6	13.3	14.1	14.8	15.5	16.1	16.6	17.2	17.7	18.2	18.6	18	–	–	–
	11501	11336	11194	11069	10959	10862	10653	10466	10296	10141	10000	9769	9076	–	–	–
HXT515C	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	–	–	–
	850	838	827	818	810	803	787	774	761	750	739	722	671	–	–	–
	30.3	32.4	34.5	36.6	38.8	40.9	43.0	45.1	47.3	49.4	51.5	53.6	55.6	–	–	–
	11.9	12.6	13.3	14.1	–	–	–	–	–	–	–	–	–	–	–	–
	11501	11336	11194	11069	–	–	–	–	–	–	–	–	–	–	–	–
HXT525C	29528	29528	29528	29528	–	–	–	–	–	–	–	–	–	–	–	–
	919	906	895	885	–	–	–	–	–	–	–	–	–	–	–	–
	27.3	29.2	31.2	33.2	–	–	–	–	–	–	–	–	–	–	–	–
	19.5	20.8	22.1	23.3	24.6	25.8	26.6	27.5	27.8	25.9	23.9	22.0	20.0	–	–	–
	18954	18729	18535	18365	18215	18081	17680	17318	16687	14840	13098	11555	10084	–	–	–
HXT615A	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	–	–	–
	1407	1391	1376	1364	1352	1343	1313	1286	1239	1102	973	858	749	–	–	–
	31.6	33.7	35.8	37.9	40.1	42.2	44.2	46.3	48.3	50.1	51.9	53.7	55.6	–	–	–
	19.5	20.8	22.1	23.3	–	–	–	–	–	–	–	–	–	–	–	–
	18954	18729	18535	18365	–	–	–	–	–	–	–	–	–	–	–	–
HXT625A	52094	52094	52094	52094	–	–	–	–	–	–	–	–	–	–	–	–
	858	848	840	832	–	–	–	–	–	–	–	–	–	–	–	–
	48.0	51.5	55.0	58.4	–	–	–	–	–	–	–	–	–	–	–	–
	28.6	30.6	32.6	34.5	36.5	38.5	40.2	41.9	41.0	39.0	37.0	35.0	–	–	–	–
	27734	27536	27364	27213	27080	26962	26663	26394	24610	22345	20278	18382	–	–	–	–
HXT715A	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	–	–	–	–
	1145	1137	1130	1124	1118	1114	1101	1090	1016	923	837	759	–	–	–	–
	52.4	56.2	60.1	63.9	67.8	71.6	75.4	79.3	83	86.6	90.3	94	–	–	–	–
	28.6	30.6	32.6	–	–	–	–	–	–	–	–	–	–	–	–	–
	27734	27536	27364	–	–	–	–	–	–	–	–	–	–	–	–	–
HXT725A	50975	50975	50975	–	–	–	–	–	–	–	–	–	–	–	–	–
	1284	1275	1267	–	–	–	–	–	–	–	–	–	–	–	–	–
	48.1	51.5	55.0	–	–	–	–	–	–	–	–	–	–	–	–	–

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 15 - Class I Selection Table HXT Reducers - Single Reduction
HXT105 - HXT505A

Reducer Size	Requirements ★	Output Speed														
		90	100	110	120	130	140	150	160	180	200	220	250	300	350	400
HXT105	OUTPUT HP (RUNNING)	3.9	4.2	4.4	4.7	5.0	5.2	5.5	5.7	6.2	6.7	6.9	7.1	7.6	7.9	8.3
	Running Torque (lb.-in.)	2758	2641	2546	2467	2400	2342	2293	2249	2176	2118	1973	1799	1586	1424	1303
	Starting Torque (lb.-in.)	5515	5283	5093	4934	4800	4685	4585	4498	4353	4237	3946	3598	3172	2848	2605
	Running Pressure (psi)	982	940	907	878	854	834	816	801	775	754	702	640	565	507	464
	Flow Rate (gpm)	9.4	10.2	11.0	11.8	12.7	13.5	14.4	15.2	16.9	18.7	20.3	22.9	27.1	31.4	35.7
HXT205	OUTPUT HP (RUNNING)	6.8	7.1	7.4	7.7	8.0	8.3	8.6	8.9	9.5	10.1	10.5	11.1	12.0	12.9	13.8
	Running Torque (lb.-in.)	4759	4475	4243	4049	3886	3745	3624	3517	3340	3198	3014	2793	2523	2322	2171
	Starting Torque (lb.-in.)	6238	6238	6238	6238	6238	6238	6238	6238	6238	6238	6028	5586	5046	4644	4342
	Running Pressure (psi)	1800	1693	1605	1532	1470	1417	1371	1330	1263	1210	1140	1056	954	878	821
	Flow Rate (gpm)	10.1	10.8	11.5	12.2	12.9	13.7	14.4	15.2	16.7	18.3	19.9	22.2	26.2	30.2	34.2
HXT305A	OUTPUT HP (RUNNING)	10.1	10.7	11.3	12.0	12.6	13.2	13.8	14.4	15.7	16.9	17.6	17.7	16.8	15.9	15.0
	Running Torque (lb.-in.)	7074	6758	6499	6284	6102	5946	5810	5692	5495	5337	5056	4462	3529	2863	2363
	Starting Torque (lb.-in.)	11851	11851	11851	11851	11851	11851	11621	11384	10989	10673	10112	9438	8614	7705	7024
	Running Pressure (psi)	1408	1346	1294	1251	1215	1184	1157	1133	1094	1063	1007	888	703	570	471
	Flow Rate (gpm)	17.9	19.3	20.7	22.1	23.6	25.1	26.6	28.1	31.1	34.2	37.1	41.5	48.9	56.3	63.9
HXT405A	OUTPUT HP (RUNNING)	17.7	18.5	19.3	20.1	20.9	21.7	22.5	23.3	24.5	23.8	23.1	22.1	20.4	18.7	17.0
	Running Torque (lb.-in.)	12387	11655	11056	10557	10135	9773	9459	9185	8578	7500	6618	5571	4286	3367	2679
	Starting Torque (lb.-in.)	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956
	Running Pressure (psi)	2445	2300	2182	2083	2000	1929	1867	1813	1693	1480	1306	1099	846	665	529
	Flow Rate (gpm)	20.8	21.9	23.2	24.5	25.9	27.3	28.7	30.1	33.0	35.6	38.3	42.4	49.7	57.1	64.6
HXT505A	OUTPUT HP (RUNNING)	21.9	23.1	24.3	25.5	26.7	27.9	29.1	30.4	31.3	30.1	28.9	27.1	24.1	21.0	18.0
	Running Torque (lb.-in.)	15321	14552	13923	13398	12954	12574	12244	11955	10959	9485	8279	6832	5063	3782	2836
	Starting Torque (lb.-in.)	21713	21713	21713	21713	21713	21713	21713	21713	21713	21713	21529	20748	19794	18659	17808
	Running Pressure (psi)	1665	1581	1513	1456	1408	1366	1331	1299	1191	1031	900	742	550	411	308
	Flow Rate (gpm)	29.2	31.9	34.6	37.3	40.1	42.9	45.7	48.5	54.0	59.5	64.9	73.2	87.20	101.3	115.4

★ See Page G3-145 for definition of requirements.

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 16 - Class II Selection Table HXT Reducers - Single Reduction
HXT105 - HXT505A

Reducer Size	Requirements ★	Output Speed															
		90	100	110	120	130	140	150	160	180	200	220	250	300	350	400
HXT105	OUTPUT HP (RUNNING)	2.8	3.0	3.2	3.4	3.5	3.7	3.9	4.1	4.4	4.8	4.9	5.1	5.4	5.6	5.9
	Running Torque	1970	1887	1819	1762	1714	1673	1638	1606	1555	1513	1409	1285	1133	1017	930
	Starting Torque	5515	5283	5093	4934	4800	4685	4585	4498	4353	4237	3946	3598	3172	2848	2605
	Running Pressure	701	672	648	627	610	596	583	572	553	539	502	457	403	362	331
	Flow Rate, GPM	8.9	9.8	10.6	11.5	12.3	13.2	14.0	14.9	16.6	18.3	20.0	22.6	26.9	31.2	35.5
HXT205	OUTPUT HP (RUNNING)	4.9	5.1	5.3	5.5	5.7	5.9	6.2	6.4	6.8	7.2	7.5	7.9	8.6	9.2	9.8
	Running Torque	3399	3197	3031	2892	2775	2675	2588	2512	2386	2284	2153	1995	1802	1659	1551
	Starting Torque	6238	6238	6238	6238	6238	6238	6238	6238	6238	6238	6028	5586	5046	4644	4342
	Running Pressure	1286	1209	1146	1094	1050	1012	979	950	902	864	814	755	682	627	587
	Flow Rate, GPM	9.4	10.1	10.8	11.5	12.3	13.1	13.8	14.6	16.2	17.8	19.4	21.7	25.8	29.8	33.9
HXT305A	OUTPUT HP (RUNNING)	7.2	7.7	8.1	8.5	9.0	9.4	9.9	10.3	11.2	12.1	12.6	13.4	14.6	15.3	15.0
	Running Torque	5053	4827	4642	4489	4358	4247	4150	4066	3925	3812	3611	3371	3076	2752	2363
	Starting Torque	11851	11851	11851	11851	11851	11851	11621	11384	10989	10673	10112	9438	8614	7705	7024
	Running Pressure	1006	961	924	894	868	846	826	810	781	759	719	671	613	548	471
	Flow Rate, GPM	16.8	18.2	19.7	21.2	22.7	24.2	25.7	27.2	30.3	33.4	36.4	40.9	48.6	56.3	63.9
HXT405A	OUTPUT HP (RUNNING)	12.6	13.2	13.8	14.4	14.9	15.5	16.1	16.7	17.8	19.0	20.2	22.0	20.4	18.7	17.0
	Running Torque	8848	8325	7897	7541	7239	6981	6757	6561	6234	5973	5776	5541	4286	3367	2679
	Starting Torque	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956
	Running Pressure	1746	1643	1559	1488	1429	1378	1333	1295	1230	1179	1140	1093	846	665	529
	Flow Rate, GPM	18.9	20.2	21.5	22.9	24.4	25.8	27.3	28.7	31.7	34.8	37.8	42.4	49.7	57.1	64.6
HXT505A	OUTPUT HP (RUNNING)	15.6	16.5	17.4	18.2	19.1	20.0	20.8	21.7	23.4	25.1	26.8	27.1	24.1	21.0	18.0
	Running Torque	10944	10394	9945	9570	9253	8981	8746	8540	8196	7921	7689	6832	5063	3782	2836
	Starting Torque	21713	21713	21713	21713	21713	21713	21713	21713	21713	21713	21529	20748	19794	18659	17808
	Running Pressure	1189	1130	1081	1040	1006	976	950	928	891	861	836	742	550	411	308
	Flow Rate, GPM	28.2	31.0	33.7	36.5	39.3	42.1	44.9	47.8	53.4	59.1	64.8	73.2	87.2	101.3	115.4

★ See Page G3-145 for definition of requirements.

Courtesy of:
EASY SELEC
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Table 17 - Class III Selection Table HXT Reducers - Single Reduction
HXT105 - HXT505A

Reducer Size	Requirements ★	Output Speed														
		90	100	110	120	130	140	150	160	180	200	220	250	300	350	400
HXT105	OUTPUT HP (RUNNING)	2.0	2.1	2.2	2.3	2.5	2.6	2.7	2.9	3.1	3.4	3.4	3.6	3.8	4.0	4.1
	Running Torque (lb.-in.)	1379	1321	1273	1234	1200	1171	1146	1125	1088	1059	987	899	793	712	651
	Starting Torque (lb.-in.)	5515	5283	5093	4934	4800	4685	4585	4498	4353	4237	3946	3598	3172	2848	2605
	Running Pressure (psi)	491	470	453	439	427	417	408	400	387	377	351	320	282	254	232
	Flow Rate (gpm)	8.6	9.5	10.3	11.2	12.0	12.9	13.8	14.6	16.4	18.1	19.8	22.4	26.7	31.0	35.4
HXT205	OUTPUT HP (RUNNING)	3.4	3.6	3.7	3.9	4.0	4.2	4.3	4.5	4.8	5.1	5.3	5.5	6.0	6.4	6.9
	Running Torque (lb.-in.)	2380	2238	2121	2025	1943	1873	1812	1759	1670	1599	1507	1397	1262	1161	1086
	Starting Torque (lb.-in.)	6238	6238	6238	6238	6238	6238	6238	6238	6238	6238	6028	5586	5046	4644	4342
	Running Pressure (psi)	900	846	802	766	735	708	685	665	632	605	570	528	477	439	411
	Flow Rate (gpm)	8.8	9.5	10.3	11.0	11.8	12.6	13.4	14.2	15.8	17.4	19.0	21.4	25.5	29.5	33.6
HXT305A	OUTPUT HP (RUNNING)	5.1	5.4	5.7	6.0	6.3	6.6	6.9	7.2	7.8	8.5	8.8	9.4	10.3	10.7	11.1
	Running Torque (lb.-in.)	3537	3379	3250	3142	3051	2973	2905	2846	2747	2668	2528	2359	2153	1926	1756
	Starting Torque (lb.-in.)	11851	11851	11851	11851	11851	11851	11621	11384	10989	10673	10112	9438	8614	7705	7024
	Running Pressure (psi)	704	673	647	626	607	592	578	567	547	531	503	470	429	384	350
	Flow Rate (gpm)	16.0	17.5	19.0	20.5	22.0	23.5	25.0	26.6	29.7	32.7	35.8	40.4	48.1	55.8	63.6
HXT405A	OUTPUT HP (RUNNING)	8.8	9.2	9.6	10.1	10.5	10.9	11.3	11.7	12.5	13.3	14.1	15.4	17.5	18.7	17.0
	Running Torque (lb.-in.)	6194	5828	5528	5279	5068	4887	4730	4592	4364	4181	4043	3879	3677	3367	2679
	Starting Torque (lb.-in.)	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956
	Running Pressure (psi)	1222	1150	1091	1042	1000	964	933	906	861	825	798	765	726	665	529
	Flow Rate (gpm)	17.5	18.9	20.3	21.7	23.2	24.7	26.2	27.7	30.7	33.8	36.9	41.5	49.3	57.1	64.6
HXT505A	OUTPUT HP (RUNNING)	10.9	11.5	12.1	12.8	13.4	14.0	14.6	15.2	16.4	17.6	18.8	20.6	23.6	21.0	18.0
	Running Torque (lb.-in.)	7661	7276	6961	6699	6477	6287	6122	5978	5737	5545	5382	5187	4948	3782	2836
	Starting Torque (lb.-in.)	21713	21713	21713	21713	21713	21713	21713	21713	21713	21713	21529	20748	19794	18659	17808
	Running Pressure (psi)	832	791	756	728	704	683	665	650	623	603	585	564	538	411	308
	Flow Rate (gpm)	27.5	30.3	33.1	35.9	38.7	41.5	44.4	47.2	52.9	58.6	64.3	72.9	87.2	101.3	115.4

★ See Page G3-145 for definition of requirements.

Courtesy of:
Screw Conveyor Parts

Hydroil Torque-Arm Shaft Mount Speed Reducers

★ Requirements:
Output HP-Horsepower rating of the reducer/motor under continuous operation after load has been started.
Running Torque-Continuous output torque rating of reducer/motor (in.-lbs.)
Starting Torque-Momentary output torque available for starting (in.-lbs.)
Running Pressure-Motor pressure required to generate running torque. This will start loads not to exceed 75% of the running load. For greater starting requirements, motor pressure may be increased-see table 18. (PSI)
Flow Rate-Flow required for given output RPM. With oil viscosity of 300SUS @ 100-F. for A10 and A20 motors, and 200SUS @ 100-F. for B30, B40 and B50 motors.

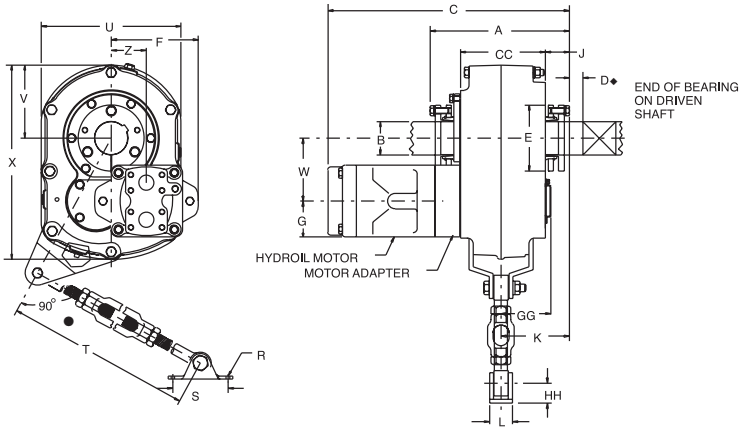
Table 18 - Maximum Hydraulic Motor Pressures Available For Starting

Double Reduction	Single Reduction	Maximum Hydraulic Pressure
–	HXT105	–
–	HXT205	–
HXT315B	HXT305A	–
HXT415B, 425B	HXT405A	2500 psi
HXT515C, 525C	HXT505A	–
HXT615A, 625A	–	–
HXT715A, 725A	–	–
HXT115A, 125A	–	–
HXT215A, 225A	–	2000 psi
HXT325B	–	–

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

HXT1 Thru HXT7 Taper Bushed Reducers



Reducer will operate satisfactorily at 90° or 180° from normal position shown in front view by relocating breather and drain plugs.

- ◆ Recommended minimum distance to loosen bushing using bushing screws as jack screws.
- ● The ideal position for the Torque-Arm is at right angles to a line between the point of attachment of the Torque-Arm to the reducer and the output shaft. This may vary up to + / - 20° in tension, and + / - 20° in compression.

Caution: Exceeding the position variance of the Torque-Arm could result in excessive reaction load and result in damage to the equipment.

HXT1A Thru HXT7A Hydroil Double Reduction Taper Bushed Torque-Arm Speed Reducers

Reducer Size		AGMA Code		Gear Ratio		Part Number		Wt.	Hydroil Motor		A	B Max. Bore ♥	C	D	E	F	G	J	K
15:1	25:1	15:1	25:1	15:1	25:1	15:1	25:1		Size	Wt.									
–	HXT125A	–	107H25	–	25.64	–	241070 ♣	49	A10	11	7.06	1.44	13.22	1.25	3.25	4.47	2.41	1.28	3.53
HXT115A	–	107H15	–	15.35	–	241069 ♣	–		A20										
HXT215A	HXT225A	115H15	115H25	14.10	23.46	242086 ♣	242087 ♣	65	A20	11	7.31	1.94	13.38	1.25	4.06	4.69	2.41	1.38	3.66
–	HXT325B	–	203H25	–	24.71	–	243508	112	A20	11	9.22	2.19	14.64	1.50	4.38	4.88	2.41	1.58	4.44
HXT315B	–	203H15	–	14.88	–	243507	–		B30	30			15.45			5.75	2.38		
HXT415B	HXT425B	207H15	207H25	15.13	24.38	244532	244533 ♣	143	B30	30	10	2.44	16.13	1.75	4.81	6.19	2.38	1.81	4.75
–	HXT525C	–	215H25	–	25.56		245558	212	B30	30	10.5	2.94	16.88	1.81	5.63	6.50	2.38	1.94	5.50
HXT515C	–	215H15	–	15.40	–	245557	–		B40	55			17.63			7.25	3.06		
HXT615A	HXT625A	307H15	307H25	15.33	25.13	246154 ♣	246155 ♣	293	B40	55	11.5	3.44	18.58	1.81	6.13	8.28	3.06	1.94	5.70
–	HXT725A	–	315H25	–	24.59	–	247165 ♣	470	B40	55	12.81	3.94	19.16	2.06	7.25	9.30	3.06	2.16	6.34
HXT715A	–	315H15	–	15.23	–	247164 ♣	–		B50	106			22.75			9.30	3.69		

Reducer Size	L	R Bolt	S	T		U	V	W	X	Z	CC	GG	HH
				Min.	Max.								
HXT1A	1.06	0.38	2.50	23.81	29.63	7.13	3.75	3.19	9.94	1.91	4.50	2.66	0.94
HXT2A	1.25	0.44	3.00	26.94	32.94	8.38	4.13	3.75	11.41	2.13	4.56	2.94	1.06
HXT3B	1.25	0.44	3.00	26.94	32.94	9.25	4.81	4.19	12.88	2.31	6.38	3.25	1.06
HXT4B	1.44	0.50	4.00	29.19	35.19	10.38	5.50	4.78	15.13	2.75	6.88	3.38	1.75
HXT5C	1.44	0.50	4.00	29.19	35.19	13.13	6.56	5.69	18.31	3.06	7.06	4.50	1.75
HXT6A	2.75	0.63	4.75	29.19	35.19	15.13	7.56	6.75	21.31	4.09	7.63	4.56	2.00
HXT7A	2.75	0.63	4.75	29.44	35.44	18.75	9.38	8.31	25.94	5.13	8.13	4.69	2.00

Note: All reducers on this page require bushings. Stock HXT reducers are drilled for vertical mounting. Reducer includes motor adapter.

♥ See pages G3-30 thru G3-57 for bore and keyseat information and bushing part numbers.

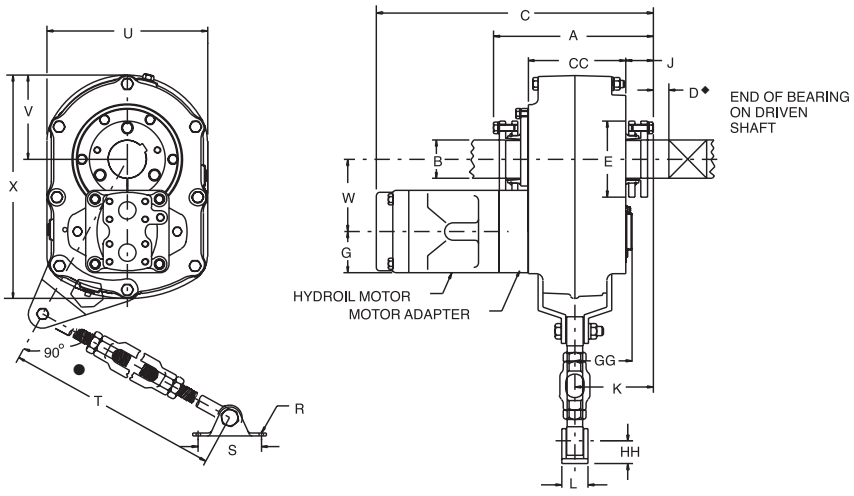
♣ Made to order.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

HXT105 Thru HXT505 Taper Bushed Reducers



Reducer will operate satisfactorily at 90° or 180° from normal position shown in front view by relocating breather and drain plugs.

- ◆ Recommended minimum distance to loosen bushing using bushing screws as jack screws.
- ● The ideal position for the Torque-Arm is at right angles to a line between the point of attachment of the Torque-Arm to the reducer and the output shaft. This may vary up to + / - 20° in tension, and + / - 20° in compression.

Caution: Exceeding the position variance of the Torque-Arm could result in excessive reaction load and result in damage to the equipment.

HXT105 Thru HXT505A HYDROL Single Reduction Taper Bushed Torque-Arm Speed Reducers

Reducer Size	AGMA Code	Gear Ratio	Part Number	Reducer Wt.	Hydroil Motor		A	B Max. Bore ♥	C	D	E	G	J	K	L
					Size	Wt.									
HXT105	107H05	5.62	241085	44	B30	30	5.63	1.44	14.97	1.25	3.25	2.38	1.28	3.53	1.06
HXT205	115H05	5.29	242251	56	B30	30	5.81	1.94	15.25	1.25	4.06	2.38	1.38	3.66	1.25
HXT305A	203H05	5.60	253153 ♣	90	B40	55	6.88	2.19	17.66	1.5	4.38	3.06	1.58	4.44	1.25
HXT405A	207H05	5.65	254202 ♣	126	B40	55	7.81	2.44	18.69	1.75	4.81	3.06	1.81	4.75	1.44
HXT505A	215H05	5.67	255202 ♣	186	B50	106	8.38	2.94	22	1.81	5.63	3.69	1.92	4.13	1.44

HXT105 Thru HXT505A HYDROL Single Reduction Taper Bushed Torque-Arm Speed Reducers

Reducer Size	R Bolt	S	T		U	V	W	X	CC	GG	HH
			Min.	Max.							
HXT105	0.38	2.50	23.81	29.63	7.13	3.75	3.25	9.94	4.50	2.64	0.94
HXT205	0.44	3.00	26.94	32.94	8.50	4.13	3.88	11.41	4.56	2.83	1.06
HXT305A	0.44	3.00	26.94	32.94	9.25	4.81	4.28	12.88	6.38	3.25	1.06
HXT405A	0.50	4.00	29.19	35.19	10.38	5.50	4.88	15.13	6.88	3.38	1.75
HXT505A	0.50	4.00	29.19	35.19	13.13	6.56	5.88	18.31	7.06	4.50	1.75

Note: All reducers on this page require bushings. Stock HXT reducers are drilled for vertical mounting.
Reducer includes motor adapter.

♥ See pages G3-30 thru G3-57 for bore and keyseat information and bushing part numbers.

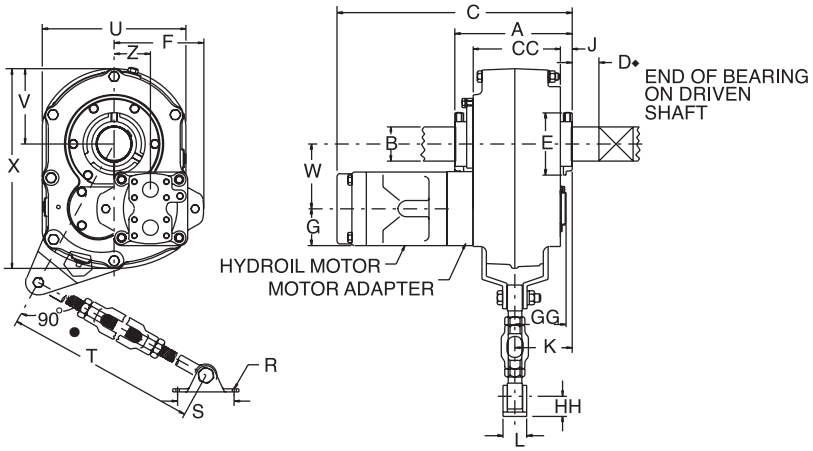
♣ Made to order.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

HXT1 Thru HXT7 Straight Bore Reducers



Reducer will operate satisfactorily at 90° or 180° from normal position shown in front view by relocating breather and drain plugs.

- The ideal position for the Torque-Arm is at right angles to a line between the point of attachment of the Torque-Arm to the reducer and the output shaft. This may vary up to + / - 20° in tension, and + / - 20° in compression.

Caution: Exceeding the position variance of the Torque-Arm could result in excessive reaction load and result in damage to the equipment.

HXT1A Thru HXT7A Hydroil Double Reduction Straight Bore Torque-Arm Speed Reducers ♣

Reducer Size		AGMA Code		Gear Ratio		Part Number		Wt.	Hydroil Motor		A	B Max. Bore ♥	C	E	F	G	J	K	L
15:1	25:1	15:1	25:1	15:1	25:1	15:1	25:1		Size	Wt.									
–	HXT125A	–	107H25	–	25.64	–	241078	49	A10	11	5.63	1.44	12.50	3.19	4.47	2.41	0.56	2.81	1.06
HXT115A	–	107H15	–	15.35	–	241077	–		A20										
HXT215A	HXT225A	115H15	115H25	14.10	23.46	242094	242095	65	A20	11	5.81	1.94	12.63	3.56	4.69	2.41	0.63	2.91	1.25
–	HXT325B	–	203H25	–	24.71	–	243520	112	A20	11	7.81	2.19	13.69	4.00	4.88	2.41	0.63	2.47	1.25
HXT315B	–	203H15	–	14.88	–	243519	–		B30	30			14.50		5.75	2.38			
HXT415B	HXT425B	207H15	207H25	15.13	24.38	244544	244545	143	B30	30	8.22	2.44	15.16	4.38	6.19	2.38	0.84	3.88	1.44
–	HXT525C	–	215H25	–	25.56	–	245570	212	B30	30	8.66	2.94	15.94	5.13	6.50	2.38	1.00	4.13	1.44
HXT515C	–	215H15	–	15.40	–	245569	–		B40	55			16.69		7.25	3.06			
HXT615A	HXT625A	307H15	307H25	15.33	25.13	246162	246163	293	B40	55	9.63	3.44	17.69	5.63	8.28	3.06	1.00	4.81	2.75
–	HXT725A	–	315H25	–	24.59	–	247173	470	B40	55	10.78	3.94	18.19	6.69	9.31	3.06	1.14	5.39	2.75
HXT715A	–	315H15	–	15.23	–	247172	–		B50	106			21.50		8.38	3.69			

Reducer Size	R Bolt	S	T		U	V	W	X	Z	CC	GG	HH
			Min.	Max.								
HXT1A	0.38	2.50	23.81	29.63	7.13	3.75	3.19	9.94	1.91	4.50	2.66	0.94
HXT2A	0.44	3.00	26.94	32.94	8.38	4.13	3.75	11.41	2.13	4.56	2.94	1.06
HXT3B	0.44	3.00	26.94	32.94	9.25	4.81	4.19	12.88	2.31	6.38	3.25	1.06
HXT4B	0.50	4.00	29.19	35.19	10.38	5.50	4.78	15.13	2.75	6.88	3.38	1.75
HXT5C	0.50	4.00	29.19	35.19	13.13	6.56	5.69	18.31	3.06	7.06	4.50	1.75
HXT6A	0.63	4.75	29.19	35.19	15.13	7.50	6.75	21.31	4.09	7.63	4.56	2.00
HXT7A	0.63	4.75	29.44	35.44	18.75	9.38	8.31	25.94	5.13	8.50	4.69	2.00

Note: All reducers on this page require bushings. Stock HXT reducers are drilled for vertical mounting. Reducer includes motor adapter.

♥ See pages G3-30 thru G3-57 for bore and keyseat information and bushing part numbers.

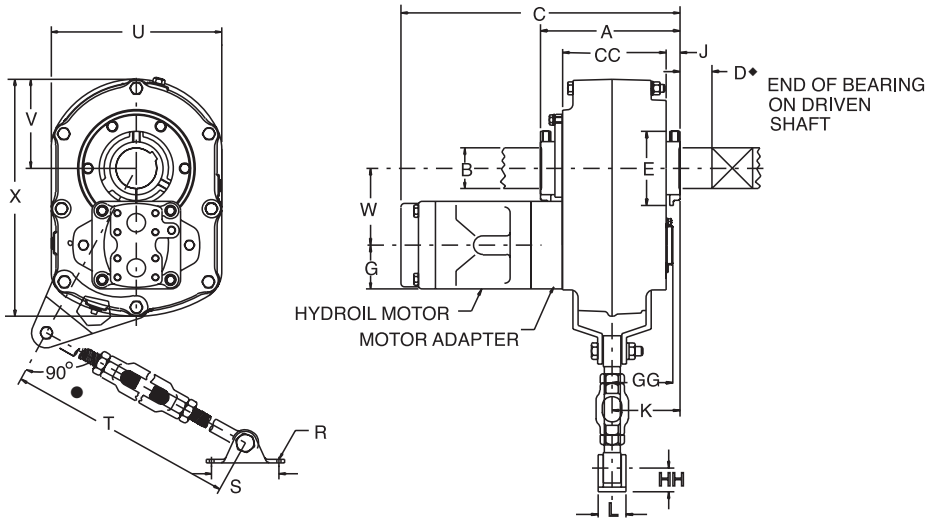
♣ Made to order.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

HXT105 Thru HXT505A Straight Bore Reducers



Reducer will operate satisfactorily at 90° or 180° from normal position shown in front view by relocating breather and drain plugs.

- The ideal position for the Torque-Arm is at right angles to a line between the point of attachment of the Torque-Arm to the reducer and the output shaft. This may vary up to + / - 20° in tension, and + / - 20° in compression.

Caution: Exceeding the position variance of the Torque-Arm could result in excessive reaction load and result in damage to the equipment.

HXT105 Thru HXT505A Hydroil Single Reduction Straight Bore Torque-Arm Speed Reducers

Reducer Size	AGMA Code	Gear Ratio	Part Number	Reducer Wt.	Hydroil Motor		A	B Max. Bore ♥	C	D	E	G	J	K
					Size	Wt.								
HXT105	107H05	5.62	241089 ♣	44	B30	30	5.63	1.44	14.25	3.19	2.38	0.56	2.81	1.06
HXT205	115H05	5.29	242255	56	B30	30	5.81	1.94	14.5	3.56	2.38	0.63	2.91	1.25
HXT305A	203H05	5.60	253157	90	B40	55	7.41	2.19	16.69	4	3.06	0.63	4.44	1.25
HXT405A	207H05	5.65	254206 ♣	126	B40	55	8.22	2.44	17.72	4.38	3.06	0.84	4.75	1.44
HXT505A	215H05	5.67	255206 ♣	186	B50	106	8.66	2.94	21.06	5.13	3.69	1	4.13	1.44

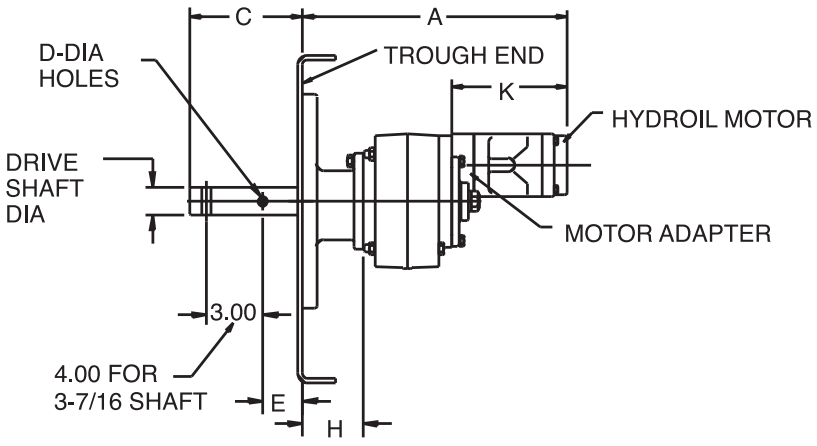
Reducer Size	R Bolt	S	T		U	V	W	X	CC	GG	HH
			Min.	Max.							
HXT105	0.38	2.5	23.81	29.63	7.13	3.75	3.25	9.94	4.5	2.64	0.94
HXT205	0.44	3	26.94	32.94	8.5	4.13	3.88	11.41	4.56	2.83	1.06
HXT305A	0.44	3	26.94	32.94	9.25	4.81	4.29	12.88	6.38	3.25	1.06
HXT405A	0.5	4	29.19	35.19	10.38	5.5	4.88	15.13	6.88	3.38	1.75
HXT505A	0.5	4	29.19	35.19	13.13	6.56	5.88	18.31	7.06	4.15	1.75

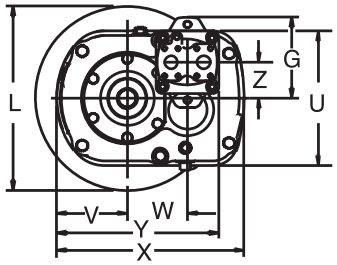
Note: All reducers on this page require bushings. Stock HXT reducers are drilled for vertical mounting.
Reducer includes motor adapter.

♥ See pages G3-30 thru G3-57 for bore and keyseat information and bushing part numbers.

♣ Made to order.

Hydroil Torque-Arm Shaft Mount Speed Reducers





HSCT1A Thru HSCXT7A Double Reduction Hydroil Screw Conveyor Drives †

Reducer Size	Drive Shaft Dia.	To Fit Screw Dia.	Hydroil Motor		Parts When Ordering Separately											
					Reducer ■			CEMA Drive Shaft ★						Adapter		
					Part Number									Assy. ▲		
			Size	Wt.	15:1	25:1	Wt.	Size	Part No.	Wt.	C	D	E	Size	Part No.	Wt.
HSCXT115A	1-1/2	6, 9	A20	11	351191	351192	46	C1 x 1-1/2	351094	7.2	6.00	0.52	2.13	C1A	351086	17
	2	9, 12						C1 x 2	351095	9.1	6.00	0.64	2.13			
HSCXT125A	2-7/16	12, 14	A10				46	C1 x 2-7/16	351096	12.5	6.69	0.64	2.75			
	3	12 thru 20						C1 x 3	351097	17.4	6.88	0.77	2.88			
HSCXT215A	1-1/2	6, 9	A20	11	352191	352192	58	C2 x 1-1/2	352090	11.4	6.00	0.52	2.13	C2A	352052	20
	2	9, 12						C2 x 2	352091	13.8	6.00	0.64	2.13			
HSCXT225A	2-7/16	12, 14					58	C2 x 2-7/16	352092	17.3	6.69	0.64	2.75			
	3	12 thru 20						C2 x 3	352093	22.1	6.88	0.77	2.88			
HSCXT315B	1-1/2	9	B30	11	243528	243529	90	C3A x 1-1/2	243562	13.5	6.00	0.52	2.13	C3	353047	27
	2	9, 12						C3A x 2	243563	16	6.00	0.64	2.13			
HSCXT325B	2-7/16	12, 14	A20	30				C3A x 2-7/16	243564	19.5	6.69	0.64	2.75			
	3	12 thru 20						C3A x 3	243565	26	6.88	0.77	2.88			
HSCXT415B	1-1/2	9	B30	30	244553	244554	113	C4A x 1-1/2	244594	19	6.00	0.52	2.13	C4	354121	31
	2	9, 12						C4A x 2	244595	20.8	6.00	0.64	2.13			
	2-7/16	12, 14						C4A x 2-7/16	244596	24.3	6.69	0.64	2.75			
HSCXT425B	3	12 thru 20						C4A x 3	244597	29.2	6.88	0.77	2.88			
	3-7/16	18 thru 24						C4A x 3-7/16	244598	29.3	9.13	0.89	3.88			
HSCXT515C	2	9, 12	B40	30	245578	245579	165	C5B x 2	355175	29.4	6.00	0.64	2.13	C5	355072	43
	2-7/16	12, 14						C5B x 2-7/16	355176	33	6.69	0.64	2.75			
HSCXT525C	3	12 thru 20	B30	55				C5B x 3	355177	37.9	6.88	0.77	2.88			
	3-7/16	18 thru 24						C5B x 3-7/16	355178	48.3	9.13	0.89	3.88			
HSCXT615A	2-7/16	12, 14	B40	55	356291	356292	225	C6 x 2-7/16	356042	47.7	6.69	0.64	2.75	C6	356055	56
	3	12 thru 20						C6 x 3	356043	52.7	6.88	0.77	2.88			
HSCXT625A	3-7/16	18 thru 24						C6 x 3-7/16	356044	63	9.13	0.89	3.88			
HSCXT715A	2-7/16	12, 14	B50	55	356296	356297	390	C7 x 2-7/16	356182	65	6.69	0.64	2.75	C7	356187	72
	3	12 thru 20						C7 x 3	356183	70	6.88	0.77	2.88			
HSCXT725A	3-7/16	18 thru 24	B40	106				C7 x 3-7/16	356184	80.3	9.13	0.89	3.88			

Courtesy of:
Screw Conveyor Parts

Hydroil Torque-Arm Shaft Mount Speed Reducers

HSCXT1A Thru HSCXT7A Double Reduction Hydroil Screw Conveyor Drives †

Reducer Size	Actual Ratio		Max. RPM of Shaft				A	G	H	K	L	U	V	W	X	Y	Z
			Input		Driven												
	15:1	25:1	15:1	25:1	15:1	25:1											
HSCXT1A	15.35	–	2149	–	140	–	15.34	4.47	3.22	7.44	7.00	7.13	3.75	3.38	9.94	9.34	1.91
	–	25.64	–	2179	–	85											
HSCXT2A	14.97	24.92	2096	2118	140	85	15.94	4.69	3.56	7.44	7.00	8.38	4.09	3.77	11.41	10.27	2.14
HSCXT3B	15.26	–	2136	–	140	–	17.81	5.75	3.69	7.44	11.38	9.25	4.84	4.17	13.72	11.39	2.33
	–	25.34	–	2155	–	85	17.00	4.88								11.42	
HSCXT4B	15.30	24.64	2142	2094	140	85	18.44	6.19	4.00	7.38	11.38	10.38	5.50	4.78	15.31	12.66	2.75
HSCXT5C	15.38	–	1919	–	125	–	20.56	7.25	4.25	9.19	11.38	13.13	6.56	5.67	18.31	14.30	3.05
	–	25.54	–	2043	–	80	19.81	6.50		7.75						14.61	
HSCXT6A	15.33	25.13	1895	1985	125	80	21.81	8.28	5.50	9.31	11.38	15.13	7.56	6.73	21.31	17.36	4.09
HSCXT7A	15.23	–	1767	–	116	–	26.28	8.38	6.31	10.56	11.38	18.75	9.38	8.30	25.94	22.11	5.11
	–	24.59	–	1844	–	75	23.00	9.31		8.81						20.36	

† For a complete HSCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

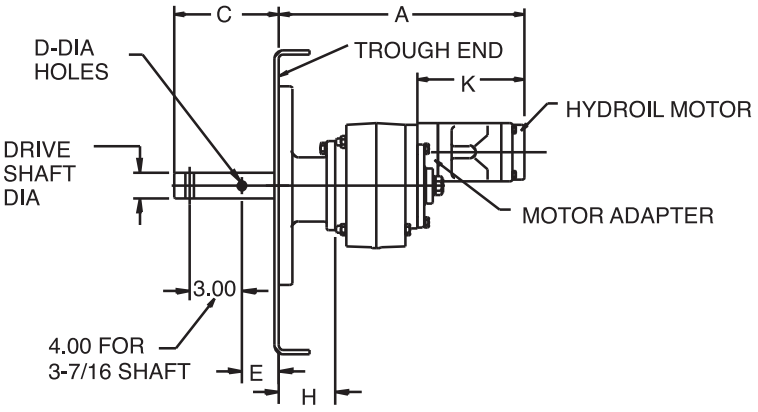
▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seals. See page G3-122 for adapter bolt pattern details.

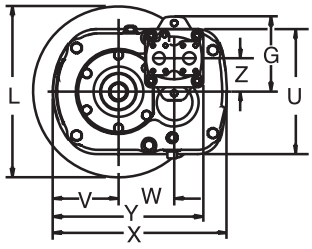
■ Reducer includes hydroil motor adapter.

★ CEMA drive shaft and key furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers





HSCXT105 Thru HSCXT505A Single Reduction Hydroil Screw Conveyor Drives †

Reducer Size	Drive Shaft Dia.	To Fit Screw Dia	Hydroil Motor		Parts When Ordering Separately										
					Reducer ■ ♣		CEMA Drive Shaft ★						Adapter Assy. ▲		
			Size	Wt.	Part No.	Wt.	Size	Part No.	Wt.	C	D	E	Size	Part No.	Wt.
HSCXT105	1-1/2	6, 9	B30	30	351190	41	C1 x 1-1/2	351094	7.2	6.00	0.52	2.13	C1A	351086	17
	2	9, 12					C1 x 2	351095	9.1	6.00	0.64	2.13			
	2-7/16	12, 14					C1 x 2-7/16	351096	12.5	6.69	0.64	2.75			
	3	12 thru 20					C1 x 3	351097	14.4	6.88	0.77	2.88			
HSCXT205	1-1/2	6, 9	B30	30	352190	53	C2 x 1-1/2	352090	11.4	6.00	0.52	2.13	C2A	352052	20
	2	9, 12					C2 x 2	352091	13.8	6.00	0.64	2.13			
	2-7/16	12, 14					C2 x 2-7/16	352092	17.3	6.69	0.64	2.75			
	3	12 thru 20					C2 x 3	352093	22.1	6.88	0.77	2.88			
HSCXT305A	1-1/2	9	B40	55	253160	79	C3A x 1-1/2	243562	13.5	6.00	0.52	2.13	C3	353047	27
	2	9, 12					C3A x 2	243563	16.0	6.00	0.64	2.13			
	2-7/16	12, 14					C3A x 2-7/16	243564	19.5	6.69	0.64	2.75			
	3	12 thru 20					C3A x 3	243565	26.0	6.88	0.77	2.88			
HSCXT405A	1-1/2	9	B40	55	254209	101	C4A x 1-1/2	244594	19.0	6.00	0.52	2.13	C4	354121	31
	2	9, 12					C4A x 2	244595	20.8	6.00	0.64	2.13			
	2-7/16	12, 14					C4A x 2-7/16	244596	24.3	6.69	0.64	2.75			
	3	12 thru 20					C4A x 3	244597	29.2	6.88	0.77	2.88			
	3-7/16	18 thru 24					C4A x 3-7/16	244598	39.3	9.13	0.89	3.88			
HSCXT505A	2	9, 12	B50	106	**255209**	160	C5B x 2	355175	29.4	6.00	0.64	2.13	C5	355072	43
	2-7/16	12, 14					C5B x 2-7/16	355176	33.0	6.69	0.64	2.75			
	3	12 thru 20					C5B x 3	355177	37.9	6.88	0.77	2.88			
	3-7/16	18 thru 24					C5B x 3-7/16	355178	48.3	9.13	0.89	3.88			

Reducer Size	Actual Ratio	Max. RPM of Shaft		A	H	K	L	U	V	W	X	Y
		Input	Driven									
HSCXT105	5.62	2246	400	16.28	3.22	8.38	7.00	7.13	3.75	3.27	9.94	9.39
HSCXT205	5.62	2246	400	16.50	3.56	8.50	7.00	8.38	4.09	3.86	11.41	10.33
HSCXT305A	5.31	2124	400	20.00	3.69	10.31	11.38	9.25	4.84	4.28	13.72	12.19
HSCXT405A	5.27	2108	400	21.00	4.00	10.63	11.38	10.38	5.50	4.88	15.94	16.50
HSCXT505A	5.69	2275	400	22.00	4.25	11.72	11.38	13.00	6.56	5.86	18.31	16.86

† For a complete HSCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seals. See page G3-122 for adapter bolt pattern details.

■ Reducer includes hydroil motor adapter.

★ CEMA drive shaft and key furnished unless otherwise specified. See pages G3-123 thru G3-125 for optional drive shafts available from Dodge.

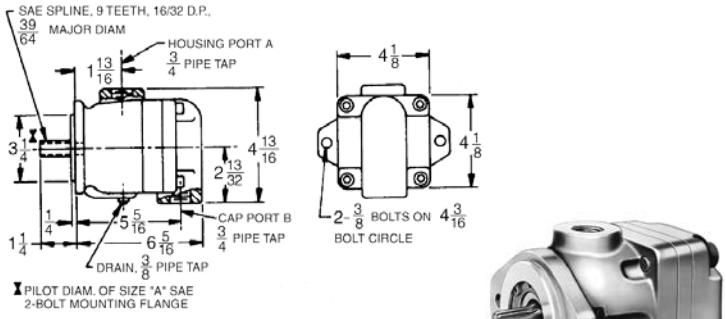
♣ Made to order.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

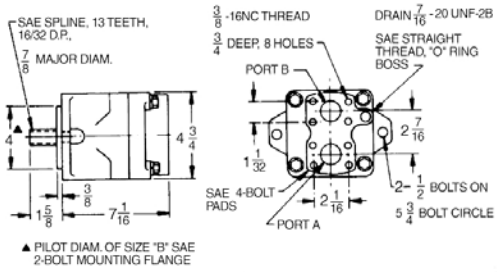
Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

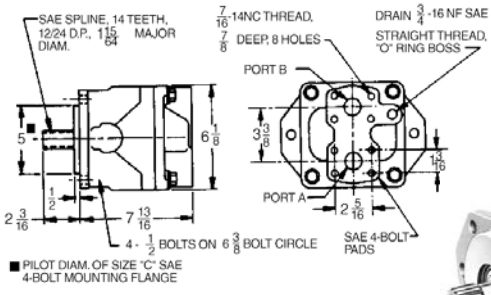
Hydroil Vane Motors



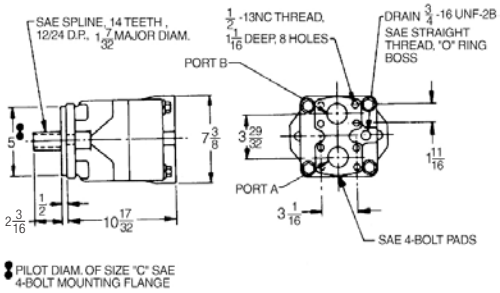
A10 & A20



B30 (Port A & Port B, 1" dia.)



B40 (Port A and Port B, 1' 1/4" dia.)



B50 (Port A & Port B, 2" dia.)

Hydroil Vane Motors-are superior single stage vane type fluid motor. A series of internal ports admit oil to and carry it from the power element. Complete hydraulic balance of the assembly contributes to the mechanical efficiency and long life of these motors as well as to their unusually quiet operation. Other exclusive features assure a minimum of friction and efficient valving action regardless of operating speeds.

Hydroil Vane Motors can be run in either direction of rotation. Flow into port A (see drawing) will result in clockwise rotation as viewed from shaft end of motor. Flow into port B will result in counterclockwise rotation.

Inlet and outlet ports on sizes A10 and A20 will accommodate standard tapered pipe fittings. Larger sizes will accommodate SAE split flanges.

Drains should be connected to tank with connections and hoses capable of withstanding 50 psi. No drain is required on sizes A10 and A20 if the housing port is the low pressure port and is never subjected to more than 20 psi, in which case the motor drains internally.

Hydroil Vane Motors for HXT Reducers

Motor Size	Part Number	Displacemnt (in^3/rev.)	Running Torque (in lb/100 psi)	Starting Torque (in lb/100 psi)	Flow Rate (gpm/100 rmp)	Internal Leakage (gpm/1000 psi) *	Minimum Motor RPM	Wt. (lbs)
A10	444049	0.49	6.9	5.75	0.21	0.49	60	11
A20	444050	1.14	16.1	13.4	0.50	0.76	60	11
B30	444054	3.59	51.3	46.2	1.60	1.50	100	30
B40	444055	6.40	91.8	82.6	2.77	2.67	100	55
B50	444056	11.69	167.4	150.7	5.10	2.00	100	106

* 120 SUS oil at 25°C

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Char-Lynn* Compatible 6B Spline Reducer

New hydraulically powered Dodge Torque-Arm Twin Taper bushed speed reducers with 6B spline, SAE "A" 2-bolt motor flange. Suitable for Char-Lynn H, S, T and 2000 series motors or equal. This is a modified version of the HXT Torque-Arm speed reducer

- Twin Tapered Mounting
- Material Cost Savings
- Installed Cost Savings
- Simple Installation
- No Periodic Maintenance Cost Associated with Chain Drives
- Eliminate V-Drives
- Compact Drive Design
- Infinitely Adjustable Speeds/Torque
  - Driven machinery can be inched/jogged
  - Direction of rotation can be reversed
  - Low speed, high torque capability
- Shock Resistant Helical Gearing
- Reduced Motor Costs
- Optimized Pressure, Ratio and Flow
- No Motor Drain

Specifications

Reducer will be modified on the input section to facilitate the mounting of a basic Char-Lynn hydraulic motor or equivalent. This modification allows the mounting of H, S and T series motors which must be equipped with a two-bolt SAE "A" flange (3.25 pilot diameter) and a 6B splined shaft (other comparably equipped motor brands will also work). Reducer installation shall be accomplished by using ductile iron, fully split Twin Tapered bushings. Reducer removal shall be accomplished by providing jack screw holes in the bushing flanges to mechanically remove the tapered assembly.

*Char-Lynn is a registered trademark of EATON

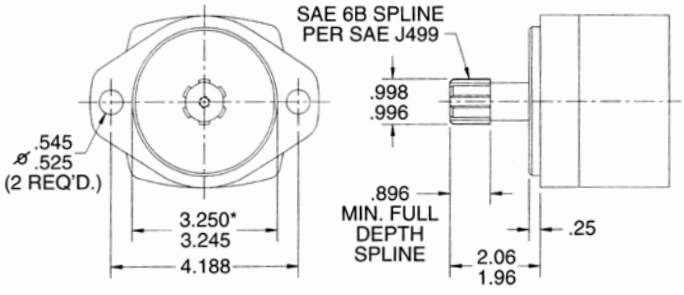
Maximum Input and Driven Speeds for HXT6B Reducers

Reducer Size	Double Reduction					Single Reduction		
	Input RPM		Driven RPM			Reducer Size	Input RPM	Driven
	15	25	9	15	25			
HXT3 6B	–	2100	200	140	85	HXT105 6B	2246	400
HXT4 6B	2118	2072	200	140	85	HXT205 6B	2116	400
HXT5 6B	–	2044	200	125	80	HXT305 6B	2240	400
HXT6 6B	–	2010	200	125	80	HXT405 6B	2280	400
HXT7 6B	–	1844	200	125	75	HXT505 6B	2287	400

Torque-Arm Hydraulic Taper Bushed Speed Reducers

Reducer Size	Part Number	Exact Ratios	Max. Bore
HXT105T C/L 6B	251140	5.62	1.44
HXT205T C/L 6B	252140	5.29	1.94
HXT305AT C/L 6B	253140	5.60	2.19
HXT405AT C/L 6B	254140	5.65	2.44
HXT505AT C/L 6B	255160	5.67	2.94
HXT325BT CL 6B	243571	24.71	2.19
HXT415BT C/L 6B	244556	15.13	2.44
HXT425BT C/L 6B	244557	24.38	2.44
HXT525CT C/L 6B	245640	25.56	2.94
HXT625AT C/L 6B	246520	25.13	3.44
HXT725AT C/L 6B	247520	24.59	3.94

Motor Mounting Dimensions



* PILOT DIA. OF SIZE "A" SAE TWO-BOLT MOUNTING FLANGE

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Hydroil Torque-Arm Shaft Mount Speed Reducers

Class I - Refer to pages G3-15 thru G3-17 - to determine appropriate drive service factor for your specific application and duty cycle. Refer to tables below for reducer Class I ratings.

Class II - Refer to pages G3-15 thru G3-17 to determine appropriate drive service factor for your specific application and duty cycle. To obtain Class II reducer ratings, divide Class I ratings from the tables below by 1.4.

Class III - Refer to pages G3-15 thru G3-17 to determine appropriate drive service factor for your specific application and duty cycle. To obtain Class III reducer ratings, divide Class I ratings from the tables below by 2.0.

Continuous Input Horsepower - Class I*

Output RPM	Reducer Size										
	HXT105 C/L	HXT205 C/L	HXT305A C/L	HXT405A C/L	HXT505A C/L	HXT325B C/L	HXT415B C/L	HXT425B C/L	HXT525C C/L	HXT625A C/L	HXT725A C/L
1	0.06	0.11	0.16	0.22	0.33	0.17	0.26	0.26	0.44	0.69	1.00
5	0.26	0.52	0.72	1.01	1.55	0.84	1.29	1.29	2.18	3.46	4.98
10	0.50	0.99	1.41	1.96	3.04	1.68	2.52	2.52	4.35	6.89	9.66
20	0.98	1.95	2.45	3.88	6.05	3.30	4.98	4.98	8.38	13.37	18.68
30	1.47	2090	4.14	5.78	8.74	4.90	7.33	7.33	12.24	–	–
40	1.95	3.85	5.51	7.64	11.13	–	9.52	–	–	–	–
50	2.43	4.81	6.88	9.55	13.51	–	11.57	–	–	–	–
60	2.70	5.34	7.92	11.07	–	–	–	–	–	–	–
70	2.95	5.86	8.97	12.46	–	–	–	–	–	–	–
80	3.22	6.38	10.01	13.85	–	–	–	–	–	–	–
90	3.48	6.92	11.06	15.29	–	–	–	–	–	–	–
100	3.75	7.44	12.10	16.83	–	–	–	–	–	–	–
110	3.77	7.48	12.53	–	–	–	–	–	–	–	–
120	3.98	7.92	13.46	–	–	–	–	–	–	–	–
130	4.21	8.37	14.41	–	–	–	–	–	–	–	–
140	4.42	8.81	–	–	–	–	–	–	–	–	–
150	4.66	9.27	–		–	–	–	–	–	–	–
160	4.87	9.71	–	–	–	–	–	–	–	–	–

* INPUT HP-HP rating of reducer at input shaft under continuous operation after load has been started

Continuous Output Torque - Class I**

Output RPM	Reducer Size										
	HXT105 C/L	HXT205 C/L	HXT305A C/L	HXT405A C/L	HXT505A C/L	HXT325B C/L	HXT415B C/L	HXT425B C/L	HXT525C C/L	HXT625A C/L	HXT725A C/L
1	3470	6980	9580	13500	20100	10400	16000	16000	27000	42700	61600
5	3200	6380	8950	12500	19200	10400	16000	16000	27000	42700	61600
10	3100	6140	8700	12100	18800	10400	15600	15600	26900	42600	59700
20	3040	6020	8580	12000	18700	10200	15400	15400	25900	41300	57700
30	3020	5980	8530	11900	18000	10100	15100	15100	25200	–	–
40	3010	5950	8510	11800	17200	–	14700	–	–	–	–
50	3000	5940	8500	11800	16700	–	14300	–	–	–	–
60	2780	5500	8160	11400	–	–	–	–	–	–	–
70	2600	5170	7920	11000	–	–	–	–	–	–	–
80	2490	4930	7730	10700	–	–	–	–	–	–	–
90	2390	4750	7590	10500	–	–	–	–	–	–	–
100	2320	4600	7480	10400	–	–	–	–	–	–	–
110	2120	4200	7040	–	–	–	–	–	–	–	–
120	2050	4080	6930	–	–	–	–	–	–	–	–
130	2000	3980	6850	–	–	–	–	–	–	–	–
140	1950	2890	–	–	–	–	–	–	–	–	–
150	1920	3820	–	–	–	–	–	–	–	–	–
160	1880	3750	–	–	–	–	–	–	–	–	–

** OUTPUT TORQUE - Continuous output torque rating of reducer (lb-in)

PEAK HP - Momentarily, peak horsepower may be very high. For example, in applications with high inertia loads, oversize or high torque motors, etc.

Where this momentary peak exceeds 200% of normal (100% overload) the equivalent HP may be obtained by dividing the peak HP by two. If the results exceed the horsepower obtained from a consideration of service and duty, it should be used to select the reducer size.

Note: Below 15 RPM output speed, oil level must be adjusted to reach highest oil level plug (P).

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Harsh Duty Accessories
XT Corrosion Resistance

Zinc Plated Fasteners
Includes all housing and Torque-Arm rod fasteners. Factory assembled.

TDNC Coated Tapered Bushings (Thin Dense Nickel Chrome)
TDNC coating on bushing, backup plate and snap rings provide maximum corrosion resistance. Zinc plated fasteners included. Consult Dodge for price and delivery.

CEMA Stainless Steel Drive Shafts for Screw Conveyor Drives
#316 stainless steel, three hole construction now available on short cycle delivery. Consult Dodge for delivery.

XT Hostile Environment

1. Hydra-Lock Desiccant Breather
Built in standpipe • 3 micron filter media top and bottom • Desiccant material changes color from blue (good) to pink (replace) • Check valve system, so breather is only open to atmosphere under pressure or vacuum. Closed when not running.

2. Enclosed Breather Chamber
Elastic diaphragm enclosed in steel chamber provides closed system. Protects reducer components and lubricant in wet, dusty or hot environments. Install in new reducer installations only. Mounts in uppermost position and replaces standard breather. Stock item.

Oil Sump Heater
110 volt, single phase, AC cartridge heater, threads into standard tapped drain hole. Provides approximately 70° F temperature rise in one hour for cold climates. Simple time phased on/off construction. Standard oil sump heater does not come with thermostat. Factory cycle item.

CEMA Adjustable Packing Adaptor Kit
For tough, abrasive environments. Protects reducer from contamination. Multiple braided felt seal rings. Repack without removal. Stock item.

Long Term Storage
Preparation for long storage or delayed job start-up. Reducer is protected internally with a vapor phase corrosion inhibiting oil. Breather removed and reducer sealed with pipe plug. See page G2-181 for details.

Hydra-Lock Breathers

Enclosed Breather

Oil Sump Heater

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers
Harsh Duty Accessories

Torque-Arm Shaft Mount Speed Reducers
Harsh Duty Accessories

XT Safety & Sealing

Metal End Covers, Closed and Split

Protection for oil seal areas and from rotating components. Enhances seal life.
Closed or open for input shaft side. Two piece split for backstop side.
Simply position on reducer, drill holes and insert self tapping screws. Stock item.

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Harsh Duty Accessories

XT Lubrication

- Oil level sight gauge. Stock item
- New Dodge/AGMA/ISO viscosity standards
- New higher viscosity lubricant selections
- Brand options

Maximizing productivity and uptime is paramount in today's industry. By following some simple recommendations on lubrication, OEMs and users can improve product performance and reduce downtime. Remember, the purpose of speed reducer lubrication is to minimize frictional forces, eliminate wear and dissipate heat.

The American Gear Manufacturing Association (AGMA) and ISO have changed their lubrication standards.

This change was necessitated by the increased horsepower that helical gearing is asked to transmit. As a result, higher ISO viscosity grades have been selected. The proper oil viscosity is based upon ambient temperature and gearing pitch line velocity. Dodge has converted pitch line velocity into reducer output speed (RPM).

Recommended Lubricants For Torque-Arm Reducers +
For further lubrication information, refer to Dodge Torque-Arm Lubrication Manual MN1682 or individual product manuals.

Brand	With Or Without Backstop		EP Oils Without Backstops	
EXXON				
150	Teresstic	150	Spartan EP	150
220	Teresstic	220	Spartan EP	220
320	Teresstic	320	Spartan EP	320
CHEVRON				
150	Machine	150	Gear Compound	150
220	Machine	220	EP	220
320	Machine	320	–	320
UNICAL				
150	Turbine Oil	150	Extra Duty HL	141
220	Turbine Oil	220	Gear Lube	207
320	Turbine Oil	320	–	300
KLUBER SYNTHETIC				
150	Gem 4-150N	–	–	–
220	GEM 4-220N	–	–	–
320	GEM 4-320N	–	–	–
KLUBER				
150	Gem 4-150N	–	–	–
220	GEM 4-220N	–	–	–
320	GEM 4-320N	–	–	–
MOBIL SYNTHETIC				
150	SHC	629	SHC	629
220	SHC	630	SHC	630
320	SHC	632	SHC	632
MOBIL				
150	Mobil DTE	BB	Mobil Gear	629
220	Extra Heavy	AA	Mobil Gear	630
320	–	–	Mobil Gear	632
TEXACO				
150	Regal Oil R&O	150	Meropa	150
220	Regal Oil R&O	220	Meropa	220
320	Regal Oil R&O	320	Meropa	320
SHELL SYNTHETIC				
150	Morlina S4 B	150	–	–
220	Morlina S4 B	220	–	–
320	Morlina S4 B	320	–	–
SHELL				
150	Morlina S2 B or S3 BA	150	Omala S2 G	150
220	Morlina S2 B or S3 BA	220	Omala S2 G	220
320	Morlina S2 B or S3 BA	320	Omala S2 G	320

+ Partial list. Consult Dodge or a lubricant manufacturer for further options

For further lubrication information, refer to Dodge Torque-Arm Lubrication Manual # 499336 or individual product manuals.

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Harsh Duty & Sensorized Accessories

Product	Part #
TXT Encl Breather Sys. Sm (1-10)	240050
TXT Encl Breather Sys. Lg. (12-15)	240051
Pressure Breather Vent Plug	* 6-030657
TXT 1-4 Immersion Heater	241103
TXT 5-6 Immersion Heater	241104
TXT 7-10 Immersion Heater	241105
TXT1 SS Cls Aux Cvr Asy	246601
TXT1 BS Split Aux Cvr Asy	246603
TXT2 SS Cls Aux Cvr Asy	246604
TXT2 BS Split Aux Cvr Asy	246606
TXT3 SS Cls Aux Cvr Asy	246607
TXT3 BS Split Aux Cvr Asy	246609
TXT4 SS Cls Aux Cvr Asy	246610
TXT4 BS Split Aux Cvr Asy	246612
TXT5 SS Cls Aux Cvr Asy	246616
TXT5 SS BS Split Aux Cvr Asy	246618
TXT6 SS Cls Aux Cvr Asy	246619
TXT6 BS Split Aux Cvr Asy	246621
TXT7 SS Cls Aux Cvr Asy	246622
TXT7 BS Split Aux Cvr Asy	246624
TXT8 SS Cls Aux Cvr Asy	246625
TXT8 BS Split Aux Cvr Asy	246627
TXT9 SS Cls Aux Cvr Asy	246628
TXT9 SS Split Aux Cvr Asy	246630
TXT10 SS Cls Aux Cvr Asy	246631
TXT10 SS Split Aux Cvr Asy	246633
TXT12 SS Cls Aux Cvr Asy	246634
TXT12 SS Split Aux Cvr Asy	246635
TXT105 BS SPL Aux Cvr Asy	246613
TXT205 BS SPL Aux Cvr Asy	246614
TXT305 BS SPL Aux Cvr Asy	246615
TXT1 Taconite Aux Seal Kit	272515
TXT105 Taconite Aux Seal Kit	272521
TXT2 Taconite Aux Seal Kit	272446
TXT205 Taconite Aux Seal kit	272459
TXT305A Taconite Aux Seal Kit	253186
TXT3A,3B Taconite Aux Seal Kit	243577
TXT405A Taconite Aux Seal Kit	254267
TXT4A,4B Taconite Aux Seal Kit	244676
TXT505A Taconite Aux Seal Kit	255230
TXT5B,5C Taconite Aux Seal Kit	245635
TXT6 Taconite Aux Seal	272450
TXT7 Taconite Aux Seal Kit	272451
TXT8 Taconite Aux Seal Kit	272452
TXT9 Taconite Aux Seal Kit	272453
TXT10 Taconite Aux Seal Kit	272454
TXT12 Taconite Aux Seal Kit	272455
TDT13 Taconite Aux Seal Kit	272456

Product	Part #
TDT14 Taconite Aux Seal Kit	272457
TDT15 Taconite Aux Seal Kit	272458
3/8 Sight Oil Level Gauge (TXT1-4)	* 430120
1/2 Sight Oil Level Gauge (TXT5-6)	* 430121
3/4 Sight Oil Level Gauge (TXT7-TDT15)	* 430159
C1x1-1/2 3H SS Drive Shaft	351025
C1x2 3H SS Drive Shaft	351026
C2x1-1/2 3H SS Drive Shaft	352186
C2x2 3H SS Drive Shaft	352187
C3Ax2 3H SS Drive Shaft	353181
C3Ax2-7/16 3H SS Drive Shaft	353182
C4Ax2 3H SS Drive Shaft	354352
C4Ax2-7/16 3H SS Drive Shaft	354353
C4Ax3 3H SS Drive Shaft	354354
C5Bx2-7/16 3H SS Drive Shaft	355226
C5Bx3 3H SS Drive Shaft	355227
C6x3 3H SS Drive Shaft	356276
C7x3-7/16 3H SS Drive Shaft	356283
AC1 Adjustable Packing Kit	356301
AC2 Adjustable Packing Kit	356302
AC3 Adjustable Packing Kit	356303
AC4 Adjustable Packing Kit	356304
AC5 Adjustable Packing Kit	356305
AC6/AC7 Adjustable Packing Kit	356306
SCXT1 Taconite Aux Seal Kit	272721
SCXT2 Taconite Aux Seal Kit	272722
SCXT3A,3BTaconite Aux Seal Kit	243582
SCXT4A,4B Taconite Aux Seal Kit	244677
SCXT5B,5C Taconite Aux Seal Kit	245637
SCXT505A Taconite Aux Seal Kit	255148
SCXT6 Taconite Aux Seal Kit	272726
SCXT7 Taconite Aux Seal Kit	272727
TXT/SCXT1 Input Taconite Seal	241102
TXT/SCXT2 Input Taconite Seal	242102
TXT/SCXT3A,3B Input Tac. Seal	243108
TXT/SCXT4A,4B Input Tac. Seal	244117
TXT/SCXT5B,5C Input Tac. Seal	245104
TXT/SCXT6, 605 Input Tac. Seal	246102
TXT/SCXT7, 705 Input Tac. Seal	247102
TXT8, 805 Input Taconite Seal	248102
TXT9, 905 Input Taconite Seal	249102
TXT10 Input Taconite Seal	250102
TXT12 Input Taconite Seal	242102
TXT/SCXT105 Input Taconite Seal	241109
TXT/SCXT205 Input Taconite Seal	242109
TXT/SCXT305A Input Tac. Seal	243109
TXT/SCXT405A Input Tac. Seal	244159
TXT/SCXT505A Input Tac. Seal	245106

* Available as Renewal Parts

	Part #
Hydra-Lock - TXT1-TXT4 = size HL-0	964372
Hydra-Lock - TXT5-TXT9 = size HL-1	964364
Hydra-Lock - TXT10-TXT12 = size HL-2	964366
Hydra-Lock - TDT13-TDT15 = size HL-2	964366

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
SCREW CONVEYOR PARTS

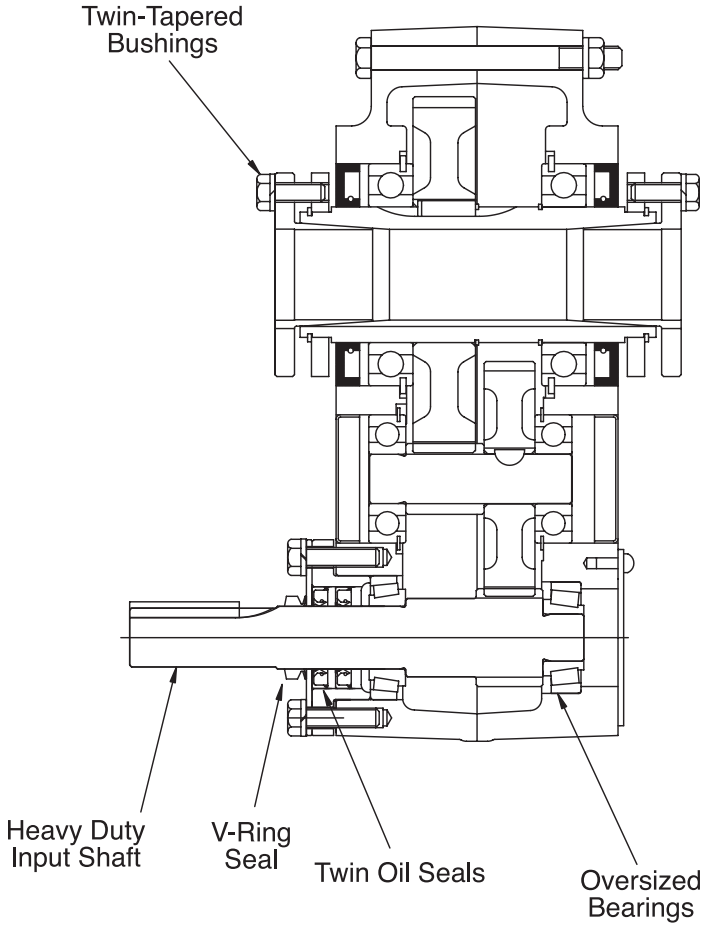
Torque-Arm Shaft Mount Speed Reducers

TXT-ABHS Airport Baggage Handling System Reducer For Conveyors

With 60 years of proven dependability and more than 2.0 million units in service throughout the world, Dodge Torque-Arm speed reducers are the standard of the industry.

Shaft Mount Concept

Twin-Tapered Mounting to the Driven Shaft



Material Cost Savings
- Eliminates support structures
- Eliminates chain, sprocket or coupling

Installed Cost Savings
- No installation and alignment of chains or coupling
- Simple installation and motor alignment

Compact Flexible Drive Design
- Space Savings
- Reducer mounts 360° around the shaft

Flexibility to Change Output Speed
- Ease of changing V-belt drives
- Economical to change speeds
- Ability to fine tune speeds at a later date

Efficiency
- 98.5% per gear stage

Hollow Bore
- Exclusive Twin-Tapered bushings
- Wide range of bore sizes

Performance
- Oversized input bearings and shaft for extended duty hours and service
- New premium material oil seals for continuous duty operation
- 100% factory tested and shipped with mobil DTE-BB premium lubrication
- Zinc plated torque arm rods for corrosion resistance
- Thousands of units in operation
- Maintenance Free
- Ease of repair, fewer spares, high parts availability
- Designed with years of industry analysis and research

Interchanges with Standard Dodge TXT Dimensions and Ratios

36/12 Warranty

Meets or Exceeds AGMA Standards

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

TXT-ABHS Reducers For Airport Baggage Handling System Conveyors

Dodge Torque-Arm Speed Reducer. The speed reducer shall be either a belt driven or direct coupled enclosed shaft mount type unit with a single or double reduction ratio. The reducer shall mount directly on the driven shaft and utilize an adjustable Torque-Arm that attaches from the gear case to the support structure or foundation.

The reducer housing shall be constructed of two-piece corrosion resistant, gray or ductile iron. All housings shall be doweled and precision machined.

All gearing shall be helical design and crown shaved. All gears shall be case carburized to ensure a high surface durability with a resilient tooth core for greater impact resistance and longer service life. Gears shall be supported between bearings to maintain proper alignment of gear meshes.

Reducer bearings shall be ball or tapered roller type. All seals are premium material for continuous duty operation. Dual seals and V-ring seal on input. Reducer gears and bearings shall be splash lubricated using a premium lubricant. Reducer installation shall be accomplished by using ductile iron, fully split Twin Tapered bushings.

Reducer removal shall be accomplished by providing jack screw holes in the busing flanges to mechanically remove the tapered assembly.

TXT-ABHS Reducers

Size	Part Number
TXT 125T ABHS Reducer ▲	241153+
TXT 115T ABHS Reducer ▲	241155+
TXT 109T ABHS Reducer ▲	241154+
TXT 105T ABHS Reducer ▲	251120
TXT 225T ABHS Reducer ▲	242258
TXT 215T ABHS Reducer ▲	242257
TXT 209T ABHS Reducer ▲	242259
TXT 205T ABHS Reducer ▲	252120
TXT 325T ABHS Reducer	243251
TXT 315T ABHS Reducer	243252
TXT 309T ABHS Reducer	243253
TXT 305T ABHS Reducer	253199
TXT 425T ABHS Reducer	244251
TXT 415T ABHS Reducer	244252
TXT 409T ABHS Reducer	244253
TXT 405T ABHS Reducer	254199
TXT 525T ABHS Reducer	245251
XT 515T ABHS Reducer	245252
TXT 509T ABHS Reducer	245253
TXT 505T ABHS Reducer	255199
TXT 1 ABHS TA Assembly ★	241213
TXT 2 ABHS TA Assembly ★	242280
TXT 3 ABHS TA Assembly ★	243254
TXT 4 ABHS TA Assembly ★	244254
XT 5 ABHS TA Assembly ★	245254

\+ 15/16" diameter input shaft.
▲ Backstops not available.
★ Torque-Arm assembly does not come with the TXT ABHS Reducer. It must be ordered separately by the above part number

Taper Bushing Assemblies

Stock Bore	Reducer	Size	Part Number
1-7/16(Max.)	TXT1 ABHS	TDT1	241292
1-3/8			241294
1-5/16 ▲			241290
1-1/4 ▲			241288
1-3/16 ▲			241286
1-1/8 ▲			241282
1-1/16 ▲			241280
1 ▲			241278
1-15/16(Max.)	TXT2 ABHS	TDT2	242168
1-3/4			242166
1-11/16			242164
1-5/8 ▲			242162
1-1/2 ▲			242158
1-7/16 ▲			242156
1-3/8 ▲			242154
1-5/16			242152
1-1/4 ▲			242150
1-3/16 ▲			242148
1-1/8 ▲			242146
2-3/16(Max.)	TXT3 ABHS	TDT3	243276
2			243274
1-15/16			243272
1-7/8 ▲			243270
1-3/4 ▲			243266
1-11/16 ▲			243268
1-5/6 ▲			243264
1-1/2 ▲			243262
1-7/16 ▲			243260
1-3/6 ▲			243284
1-5/16 ▲			243282
2-7/16(Max.)	TXT4 ABHS	TDT4	244115
2-1/4 ▲			244113
2-3/16 ▲			244111
2-1/8 ▲			244109
2 ▲			244095
1-15/16 ▲			244093
1-3/4 ▲			244087
1-11/16 ▲			244085
1-1/2 ▲			244081
1-7/16 ▲			244079
2-15/16(Max.)	TXT5 ABHS	TDT5	245112
2-11/16			245110
2-7/16 ▲			245094
2-1/4 ▲			245092
2-3/16 ▲			245090
2 ▲			245088
1-15/16 ▲			245086

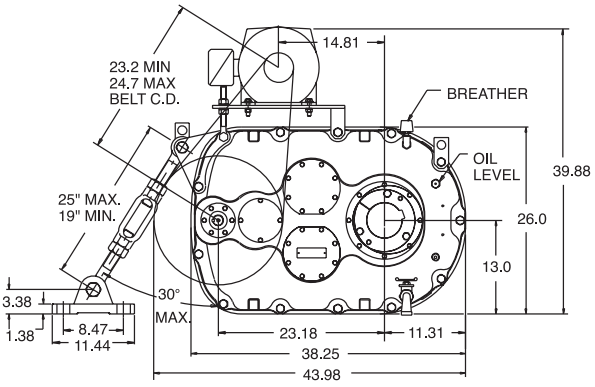
▲ Check driven shaft and key for strength.

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

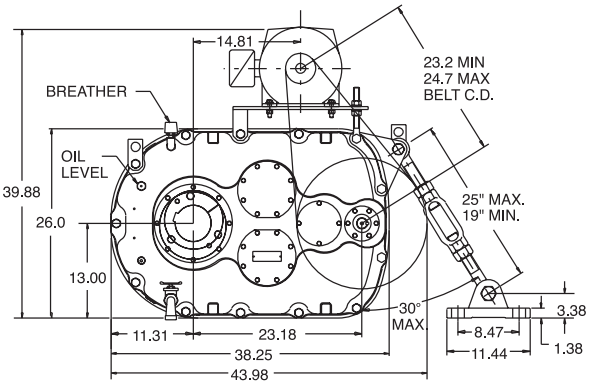
Torque-Arm Shaft Mount Speed Reducers

Dodge Biological Contact Drive (Bio-Disc)

Industrial Drive For Wastewater Treatment Industry



#188D L.H. BIO-DISC ASSY



#188D R.H. BIO-DISC ASSY

Product Specification

The speed reducer shall be either a belt driven or direct coupled enclosed shaft mount type unit with a triple reduction ratio of 170.44:1. The reducer shall mount directly on the driven shaft and utilize an adjustable Torque-Arm that attaches to the support structure or foundation.

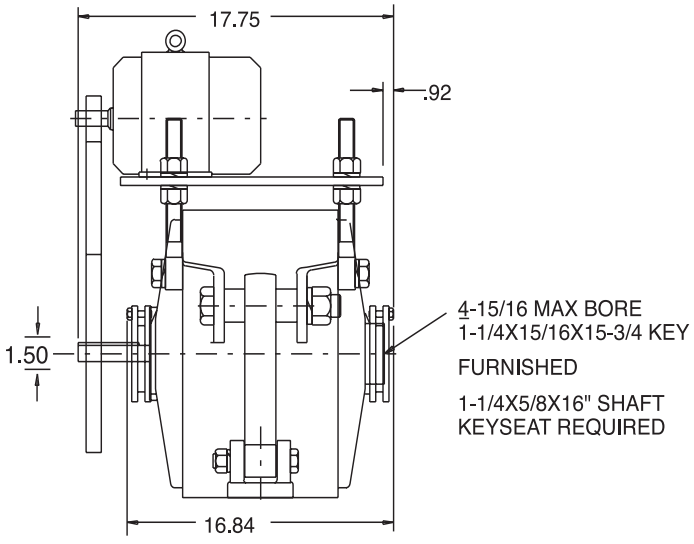
The reducer housing shall be constructed of two-piece corrosion resistant, gray iron and be ribbed for added strength. All housings shall be doweled and precision machined to assure accurate alignment for all gear sets. The reducer housing shall be painted with primer plus two (2) coats of epoxy ester enamel to minimize corrosion.

All gearing shall be of helical or spur design, and crown shaved to provide an ellipsoid tooth to eliminate tooth end bearing and assure meshing at the strongest tooth area. All gears shall be case carburized to ensure a high surface durability with a resilient tooth core for greater impact resistance and long service life. Gears shall be supported between bearings to maintain proper alignment on gear meshes, to maximize load carrying capabilities, and eliminate overhung loads imposed on bearings. The gears shall be rated for 7-1/2 horsepower at 1.5 RPM - Class I service and 5 horsepower at 1.5 RPM - Class II Service.

All seals shall be of the lip, spring loaded type, harsh duty design

Reducer gears and bearings shall be splash lubricated using a quality petroleum base oil, containing anti-foamants and rust inhibitors.

Reducer installation shall be accomplished by using ductile iron, fully split twin-tapered bushings. The maximum and preferred bore shall be 4-15/16 inch. Reducer removal shall be accomplished by providing jack screw holes in the bushing flanges to mechanically remove the tapered assembly.



Dodge 188D Bio-Disc Drive Products

	PART NUMBER
5 HP Class 2.0 Service Factor Reducer	
BioDisc Drive Gearbox and accessories*	259168
BioDisc V-Drive Kit**	BIO DR KIT
188D Universal Belt Guard	963763
Baldor 5 HP, 1200 RPM, NEMA Premium Efficient, severe duty, XEX, 210 Frame, TEFC Motor	ECP3768T
7.5 HP Class 1.0 Service Factor Reducer	
BioDisc Drive Gearbox and accessories*	259168
BioDisc V-Drive Kit**	BIO DR KIT
188D Universal Belt Guard	963763
Baldor 7.5 HP, 1200 RPM, NEMA Premium Efficient, severe duty, XEX, 210 Frame, TEFC Motor	ECP2276T

* Includes Gearbox, Bushings, Motor Mount, Tie Rod, and Breather
** Includes Bushings, Sheaves, and Belt for 5 HP and 7.5 HP Motors

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

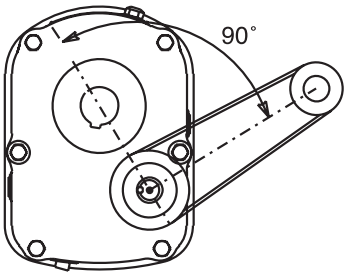
Dodge V-Belt Drives For Torque-Arm Reducers And Screw Conveyor Drive Reducers

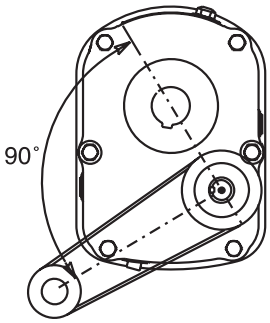
These are typical drives for average service conditions. For other conditions, output speeds or motor speeds, see reducer specifications for minimum driven sheave diameter and use V-belt drive selection tables.

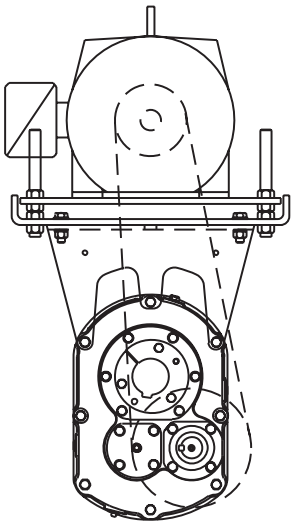
For adequate horsepower, 3v, 5v, and 8v sheaves require 3VX, 5VX and 8VX belts; and A, B, C and D sheaves require AX, BX, CX and DX belts.

Keep driven sheave as close to reducer housing as possible.

The belt drive may be located in any convenient position. If the torque-arm is to be used to tighten the belts, the drive should be at about 90° to a line between the input and output shafts.







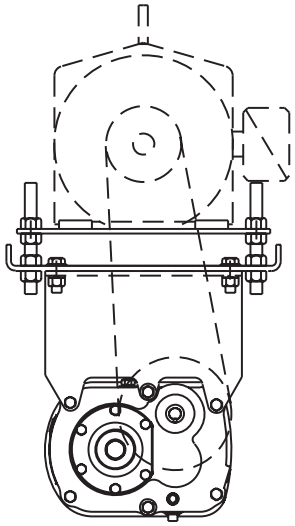


Table 19 - NEMA Motor Information (1750 RPM)

Horsepower	NEMA Motor Frame	Shaft Diameter	Minimum Sheave Diameters
1	143T	7/8	2.20
1-1/2	145T	7/8	2.40
2	145T	7/8	2.40
3	182T	1-1/8	2.40
5	184T	1-1/8	3.00
7-1/2	213T	1-3/8	3.00
10	215T	1-3/8	3.80
15	254T	1-5/8	4.40
20	256T	1-5/8	4.40
25	284T	1-7/8	4.40
30	286T	1-7/8	5.20
40	324T	2-1/8	6.00
50	326T	2-1/8	6.80
60	364T	2-3/8	7.40
75	365T	2-3/8	8.60
100	+405T	2-7/8	8.60
125	+444T	3-3/8	10.50
150	+445T	3-3/8	10.50
200	+447T	3-3/8	13.20

+ Energy Efficient (TEFC-XE) Frame

Table 20 - Minimum Sheave Diameters For Dodge Torque-Arm Reducers

TXT, SCXT Reducer	Single Reduction		Double Reduction			
	Shaft Diameter	5:1	Shaft Diameter	9:1	15:1	25:1
1	1-1/8	4.00	3/4	4.0	3.0	3.0
2	1-7/16	3.00	1-1/8	5.0	3.0	3.0
3	1-5/8	7.00	1-1/4	5.0	4.0	4.0
4	1-15/16	7.50	1-7/16	6.5	4.6	4.6
5	2-3/16	9.50	1-15/16	7.0	5.4	5.4
6	2-3/16	6.50	2-3/16	7.0	6.2	6.2
7	2-7/16	7.50	2-7/16	7.0	6.2	6.2
8	2-7/16	9.20	2-7/16	–	6.2	6.2
9	2-7/16	9.50	2-7/16	–	8.0	8.0
10	–	–	2-11/16	–	8.5	8.5
12	–	–	2-11/16	–	9.5	9.5
13	–	–	2-15/16	–	–	12.0
14	–	–	2-15/16	–	–	15.0
15	–	–	3-7/16	–	–	20.0

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Torque-Arm Shaft Mount Speed Reducers

Table 21 - Nominal Sheave Ratios Required For Dodge Torque-Arm Reducers

Reducer Output RPM	5:1 Nominal Reducer Ratio Motor Speed			Reducer Output RPM	9:1 Nominal Reducer Ratio Motor Speed			Reducer Output RPM	15:1 Nominal Reducer Ratio Motor Speed			Reducer Output RPM	25:1 Nominal Reducer Ratio Motor Speed		
	1750	1450	1170		1750	1450	1170		1750	1450	1170		1750	1450	1170
400.00	**1.14**	**1.38**	**1.71**	200.00	**1.03**	**1.24**	**1.54**	120.00	**1.03**	**1.24**	**1.54**	76.00	**1.09**	**1.31**	**1.62**
395.00	**1.13**	**1.36**	**1.69**	198.00	**1.02**	**1.23**	**1.52**	118.00	**1.01**	**1.22**	**1.51**	74.00	**1.06**	**1.28**	**1.58**
390.00	**1.11**	**1.34**	**1.67**	196.00	**1.01**	**1.22**	**1.51**	116.00	1.01	**1.20**	**1.49**	72.00	**1.03**	**1.24**	**1.54**
385.00	**1.10**	**1.33**	**1.65**	194.00	1.00	**1.20**	**1.49**	114.00	1.02	**1.18**	**1.46**	70.00	1.00	**1.21**	**1.50**
380.00	**1.09**	**1.31**	**1.62**	192.00	1.01	**1.19**	**1.48**	112.00	1.04	**1.16**	**1.44**	68.00	1.03	**1.17**	**1.45**
375.00	**1.07**	**1.29**	**1.60**	190.00	1.02	**1.18**	**1.46**	110.00	1.06	**1.14**	**1.41**	66.00	1.06	**1.14**	**1.41**
370.00	**1.06**	**1.28**	**1.58**	188.00	1.03	**1.17**	**1.45**	108.00	1.08	**1.12**	**1.38**	64.00	1.09	**1.10**	**1.37**
365.00	**1.04**	**1.26**	**1.56**	186.00	1.05	**1.15**	**1.43**	106.00	1.10	**1.10**	**1.36**	62.00	1.13	**1.07**	**1.32**
360.00	**1.03**	**1.24**	**1.54**	184.00	1.06	**1.14**	**1.42**	104.00	1.12	**1.08**	**1.33**	60.00	1.17	**1.03**	**1.28**
355.00	**1.01**	**1.22**	**1.52**	182.00	1.07	**1.13**	**1.40**	102.00	1.14	**1.06**	**1.31**	58.00	1.21	1.00	1.24
350.00	1.00	**1.21**	**1.50**	180.00	1.08	**1.12**	**1.38**	100.00	1.17	**1.03**	**1.28**	56.00	1.25	1.04	1.20
345.00	1.01	**1.19**	**1.47**	178.00	1.09	**1.10**	**1.37**	98.00	1.19	**1.01**	**1.26**	54.00	1.30	1.07	1.15
340.00	1.03	**1.17**	**1.45**	176.00	1.10	**1.09**	**1.35**	96.00	1.22	1.01	**1.23**	52.00	1.35	1.12	1.11
335.00	1.04	**1.16**	**1.43**	174.00	1.12	**1.08**	**1.34**	94.00	1.24	1.03	**1.21**	50.00	1.40	1.16	1.07
330.00	1.06	**1.14**	**1.41**	172.00	1.13	**1.07**	**1.32**	92.00	1.27	1.05	**1.18**	48.00	1.46	1.21	1.03
325.00	1.08	**1.12**	**1.39**	170.00	1.14	**1.06**	**1.31**	90.00	1.30	1.07	**1.15**	46.00	1.52	1.26	1.02
320.00	1.09	**1.10**	**1.37**	168.00	1.16	**1.04**	**1.29**	88.00	1.33	1.10	**1.13**	44.00	1.59	1.32	1.06
315.00	1.11	**1.09**	**1.35**	166.00	1.17	**1.03**	**1.28**	86.00	1.36	1.12	**1.10**	42.00	1.67	1.38	1.11
310.00	1.13	**1.07**	**1.32**	164.00	1.19	**1.02**	**1.26**	84.00	1.39	1.15	**1.08**	40.00	1.75	1.45	1.17
305.00	1.15	**1.05**	**1.30**	162.00	1.20	**1.01**	**1.25**	82.00	1.42	1.18	**1.05**	38.00	1.84	1.53	1.23
300.00	1.17	**1.03**	**1.28**	160.00	1.22	1.01	**1.23**	80.00	1.46	1.21	**1.03**	36.00	1.94	1.61	1.30
295.00	1.19	**1.02**	**1.26**	158.00	1.23	1.02	**1.22**	78.00	1.50	1.24	1.00	34.00	2.06	1.71	1.38
290.00	1.21	1.00	**1.24**	156.00	1.25	1.03	**1.20**	76.00	1.54	1.27	1.03	32.00	2.19	1.81	1.46
285.00	1.23	1.02	**1.22**	154.00	1.26	1.05	**1.18**	74.00	1.58	1.31	1.05	30.00	2.33	1.93	1.56
280.00	1.25	1.04	**1.20**	152.00	1.28	1.06	**1.17**	72.00	1.62	1.34	1.08	28.00	2.50	2.07	1.67
275.00	1.27	1.05	**1.18**	150.00	1.30	1.07	**1.15**	70.00	1.67	1.38	1.11	26.00	2.69	2.23	1.80
270.00	1.30	1.07	**1.15**	148.00	1.31	1.09	**1.14**	68.00	1.72	1.42	1.15	24.00	2.92	2.42	1.95
265.00	1.32	1.09	**1.13**	146.00	1.33	1.10	**1.12**	66.00	1.77	1.46	1.18	22.00	3.18	2.64	2.13
260.00	1.35	1.12	**1.11**	144.00	1.35	1.12	**1.11**	64.00	1.82	1.51	1.22	20.00	3.50	2.90	2.34
255.00	1.37	1.14	**1.09**	142.00	1.37	1.13	**1.09**	62.00	1.88	1.56	1.26	18.00	3.89	3.22	2.60
250.00	1.40	1.16	**1.07**	140.00	1.39	1.15	**1.08**	60.00	1.94	1.61	1.30	16.00	4.38	3.63	2.93
245.00	1.43	1.18	**1.05**	138.00	1.41	1.17	**1.06**	58.00	2.01	1.67	1.34	14.00	5.00	4.14	3.34
240.00	1.46	1.21	**1.03**	136.00	1.43	1.18	**1.05**	56.00	2.08	1.73	1.39	12.00	5.83	4.83	3.90
235.00	1.49	1.23	1.00	134.00	1.45	1.20	**1.03**	54.00	2.16	1.79	1.44	10.00	7.00	5.80	4.68
230.00	1.52	1.26	1.02	132.00	1.47	1.22	**1.02**	52.00	2.24	1.86	1.50	8.00	8.75	7.25	5.85
225.00	1.56	1.29	1.04	130.00	1.50	1.24	1.00	50.00	2.33	1.93	1.56	6.00	11.67	9.67	7.80
220.00	1.59	1.32	1.06	128.00	1.52	1.26	1.02	48.00	2.43	2.01	1.63	–	–	–	–
215.00	1.63	1.35	1.09	126.00	1.54	1.28	1.03	46.00	2.54	2.10	1.70	–	–	–	–
210.00	1.67	1.38	1.11	124.00	1.57	1.30	1.05	44.00	2.65	2.20	1.77	–	–	–	–
205.00	1.71	1.41	1.14	122.00	1.59	1.32	1.07	42.00	2.78	2.30	1.86	–	–	–	–
200.00	1.75	1.45	1.17	120.00	1.62	1.34	1.08	40.00	2.92	2.42	1.95	–	–	–	–

Speed Increase Ratios are shown in bold type

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 21 - Nominal Sheave Ratios Required For Dodge Torque-Arm Reducers (Continued)

Reducer Output RPM	5:1 Nominal Reducer Ratio Motor Speed			Reducer Output RPM	9:1 Nominal Reducer Ratio Motor Speed			Reducer Output RPM	15:1 Nominal Reducer Ratio Motor Speed			Reducer Output RPM	25:1 Nominal Reducer Ratio Motor Speed		
	1750	1450	1170		1750	1450	1170		1750	1450	1170		1750	1450	1170
195.00	1.79	1.49	1.20	118.00	1.65	1.37	1.10	38.00	3.07	2.54	2.05	–	–	–	–
190.00	1.84	1.53	1.23	116.00	1.68	1.39	1.12	36.00	3.24	2.69	2.17	–	–	–	–
185.00	1.89	1.57	1.26	114.00	1.71	1.41	1.14	34.00	3.43	2.84	2.29	–	–	–	–
180.00	1.94	1.61	1.30	112.00	1.74	1.44	1.16	32.00	3.65	3.02	2.44	–	–	–	–
175.00	2.00	1.66	1.34	110.00	1.77	1.46	1.18	30.00	3.89	3.22	2.60	–	–	–	–
170.00	2.06	1.71	1.38	108.00	1.80	1.49	1.20	28.00	4.17	3.45	2.79	–	–	–	–
165.00	2.12	1.76	1.42	106.00	1.83	1.52	1.23	26.00	4.49	3.72	3.00	–	–	–	–
160.00	2.19	1.81	1.46	104.00	1.87	1.55	1.25	24.00	4.86	4.03	3.25	–	–	–	–
155.00	2.26	1.87	1.51	102.00	1.91	1.58	1.27	22.00	5.30	4.39	3.55	–	–	–	–
150.00	2.33	1.93	1.56	100.00	1.94	1.61	1.30	20.00	5.83	4.83	3.90	–	–	–	–
145.00	2.41	2.00	1.61	–	–	–	–	18.00	6.48	5.37	4.33	–	–	–	–
140.00	2.50	2.07	1.67	–	–	–	–	16.00	7.29	6.04	4.88	–	–	–	–
135.00	2.59	2.15	1.73	–	–	–	–	14.00	8.33	6.90	5.57	–	–	–	–
130.00	2.69	2.23	1.80	–	–	–	–	12.00	9.72	8.06	6.50	–	–	–	–
125.00	2.80	2.32	1.87	–	–	–	–	10.00	11.67	9.67	7.80	–	–	–	–
120.00	2.92	2.42	1.95	–	–	–	–	–	–	–	–	–	–	–	–
115.00	3.04	2.52	2.03	–	–	–	–	–	–	–	–	–	–	–	–
110.00	3.18	2.64	2.13	–	–	–	–	–	–	–	–	–	–	–	–
105.00	3.33	2.76	2.23	–	–	–	–	–	–	–	–	–	–	–	–
100.00	3.50	2.90	2.34	–	–	–	–	–	–	–	–	–	–	–	–

Speed Increase Ratios are shown in bold type

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Table 22 - Nominal Sheave Speed (RPM) At Input For Dodge Reducers 1750 RPM Motor

Reducer Output RPM	5:1 Nominal Reducer Ratio	Reducer Output RPM	9:1 Nominal Reducer Ratio	Reducer Output RPM	15:1 Nominal Reducer Ratio	Reducer Output RPM	25:1 Nominal Reducer Ratio
400.00	2000	200.00	1800	120.00	1800	76.00	1900
395.00	1975	198.00	1782	118.00	1770	74.00	1850
390.00	1950	196.00	1764	116.00	1740	72.00	1800
385.00	1925	194.00	1746	114.00	1710	70.00	1750
380.00	1900	192.00	1728	112.00	1680	68.00	1700
375.00	1875	190.00	1710	110.00	1650	66.00	1650
370.00	1850	188.00	1692	108.00	1620	64.00	1600
365.00	1825	186.00	1674	106.00	1590	62.00	1550
360.00	1800	184.00	1656	104.00	1560	60.00	1500
355.00	1775	182.00	1638	102.00	1530	58.00	1450
350.00	1750	180.00	1620	100.00	1500	56.00	1400
345.00	1725	178.00	1602	98.00	1470	54.00	1350
340.00	1700	176.00	1584	96.00	1440	52.00	1300
335.00	1675	174.00	1566	94.00	1410	50.00	1250
330.00	1650	172.00	1548	92.00	1380	48.00	1200
325.00	1625	170.00	1530	90.00	1350	46.00	1150
320.00	1600	168.00	1512	88.00	1320	44.00	1100
315.00	1575	166.00	1494	86.00	1290	42.00	1050
310.00	1550	164.00	1476	84.00	1260	40.00	1000
305.00	1525	162.00	1458	82.00	1230	38.00	950
300.00	1500	160.00	1440	80.00	1200	36.00	900
295.00	1475	158.00	1422	78.00	1170	34.00	850
290.00	1450	156.00	1404	76.00	1140	32.00	800
285.00	1425	154.00	1386	74.00	1110	30.00	750
280.00	1400	152.00	1368	72.00	1080	28.00	700
275.00	1375	150.00	1350	70.00	1050	26.00	650
270.00	1350	148.00	1332	68.00	1020	24.00	600
265.00	1325	146.00	1314	66.00	990	22.00	550
260.00	1300	144.00	1296	64.00	960	20.00	500
255.00	1275	142.00	1278	62.00	930	18.00	450
250.00	1250	140.00	1260	60.00	900	16.00	400
245.00	1225	138.00	1242	58.00	870	14.00	350
240.00	1200	136.00	1224	56.00	840	12.00	300
235.00	1175	134.00	1206	54.00	810	10.00	250
230.00	1150	132.00	1188	52.00	780	8.00	200
225.00	1125	130.00	1170	50.00	750	6.00	150
220.00	1100	128.00	1152	48.00	720	–	–
215.00	1075	126.00	1134	46.00	690	–	–
210.00	1050	124.00	1116	44.00	660	–	–
205.00	1025	122.00	1098	42.00	630	–	–
200.00	1000	120.00	1080	40.00	600	–	–

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 22 - Nominal Sheave Speed (RPM) At Input For Dodge Reducers 1750 RPM Motor

Reducer Output RPM	5:1 Nominal Reducer Ratio	Reducer Output RPM	9:1 Nominal Reducer Ratio	Reducer Output RPM	15:1 Nominal Reducer Ratio	Reducer Output RPM	25:1 Nominal Reducer Ratio
195.00	975	118.00	1062	38.00	570	–	–
190.00	950	116.00	1044	36.00	540	–	–
185.00	925	114.00	1026	34.00	510	–	–
180.00	900	112.00	1008	32.00	480	–	–
175.00	875	110.00	990	30.00	450	–	–
170.00	850	108.00	972	28.00	420	–	–
165.00	825	106.00	954	26.00	390	–	–
160.00	800	104.00	936	24.00	360	–	–
155.00	775	102.00	918	22.00	330	–	–
150.00	750	100.00	900	20.00	300	–	–
145.00	725	–	–	18.00	270	–	–
140.00	700	–	–	16.00	240	–	–
135.00	675	–	–	14.00	210	–	–
130.00	650	–	–	12.00	180	–	–
125.00	625	–	–	10.00	150	–	–
120.00	600	–	–	–	–	–	–
115.00	575	–	–	–	–	–	–
110.00	550	–	–	–	–	–	–
105.00	525	–	–	–	–	–	–
100.00	500	–	–	–	–	–	–

Torque-Arm Shaft Mount Speed Reducers

Dodge Torque-Arm Protection Plan

Pre-Packaged Rebuild Kits for TXT, SCXT & Torque-Arm II Reducers

Dodge Torque-Arm reducers are designed to achieve optimum service life from all components. Wear does occur over the service life of a reducer, particularly to bearings and seals. To rebuild Dodge Torque-Arm reducers to factory tolerances and specifications, use only genuine Dodge replacement parts.

Preventive actions such as scheduled maintenance and on-site inventory of Torque-Arm Level 1 or Level 2 Rebuild Kits are recommended to minimize the cost of down time. Having replacement parts available before they are needed contributes to a quick return of the machine to productivity. Unexpected machine downtime usually means loss of productivity.

Consider:

- Time to diagnose and order replacement parts
- Time waiting for parts to arrive

Each Rebuild Kit is assigned a unique part number based on reducer size and ratio making selection easy. Kits components are packaged individually and marked for easy identification. Individual components are then over packed and shipped in one clearly marked container that can be dedicated to a specific reducer.

Dodge Rebuild Kits offer protection and economy. Pricing is structured to offer savings over the purchase of individual components.

Level 1 Kit Includes:

- Input & output Seals
- Complete set of bearings
- Shim kit
- Gearcase sealant
- Instruction manual

Level 2 Kit Includes:

- 1st stage input shaft with pinion
- 1st stage mating gear
- Input & output seals
- Complete set of bearings
- Shim kit
- Gearcase sealant
- Instruction manual

Log on to **ptplace.com** to locate your nearest authorized Key Parts Distributor

Rebuild Kit Accessories Available for Order (not included in kit)

Lubricant:

It is important that a rebuilt reducer be refilled with fresh lubricant of the proper viscosity group.

To make this an easy selection we have prepackaged the required volume of factory standard lubricant which may be ordered along with the rebuild kit. See Accessory table for kit part numbers.

Paint – Touch Up

To restore damaged paint following the rebuild you may order Dodge part number 810001 on PTPlace. This is a 12 oz aerosol spray can of factory original Reliance blue-green paint.

Courtesy of:
SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Dodge TDT-TX-SCX Torque-Arm Rebuild Kits

Level 1 Kit includes input and output seals, set of bearings, shim kit, sealant and instruction manual. Kit provides protection against down time due to fatigue of high wear components.

Level 2 Kit includes all items in Level 1 along with input pinion and 1st stage gear. Level 2 kit provides maximum protection against down time.

Rebuild kits available for all current sizes as listed below. For older, obsolete sizes not listed it is recommended that seal kit, bearing kit and shim kit be ordered for Level 1 coverage. Add input pinion and gear for Level 2 protection.

TXT-TDT Rebuild Kits			
Size	**Size/Ratio**	**Level 1**	**Level 2**
TXT1	TXT109	392270	392271
	TXT115		392272
	TXT125		392273
TXT1A	TXT109A	392270	392271
	TXT115A		392272
	TXT125A		392273
TXT2	TXT209	392274	392275
	TXT215		392276
	TXT225		392277
TXT2A	TXT209A	392274	392275
	TXT215A		392276
	TXT225A		392277
TXT3A	TXT309A	392278	392279
	TXT315A		392280
	TXT325A		392281
TXT3B	TXT309B	392278	392279
	TXT315B		392280
	TXT325B		392281
TXT4A	TXT409A	392282	392283
	TXT415A		392284
	TXT425A		392285
TXT4B	TXT409B	392282	392283
	TXT415B		392284
	TXT425B		392285
TXT5B	TXT509B	392287	392288
	TXT515B		392289
	TXT525B		392290
TXT5C	TXT509C	392287	392288
	TXT515C		392289
	TXT525C		392290

TXT-TDT Rebuild Kits (Continued)			
Size	**Size/Ratio**	**Level 1**	**Level 2**
TXT-TDT6	TXT609	392291	392292
	TXT615		392293
	TXT625		392294
TXT6A	TXT609A	392291	392292
	TXT615A		392293
	TXT625A		392294
TXT-TDT7	TXT709	392295	392296
	TXT715		392297
	TXT725		392298
TXT7A	TXT709A	392295	392296
	TXT715A		392297
	TXT725A		392298
TXT-TDT8	TXT815	392299	392300
	TXT825		392301
TXT8A	TXT815A	392299	392300
	TXT825A		392301
TXT-TDT9	TXT915	392302	392303
	TXT926		392304
TXT9A	TXT915A	392302	392303
	TXT926A		392304
TXT-TDT10	TXT1015	392305	392306
	TXT1024		392307
TXT10A	TXT1015A	392305	392306
	TXT1024A		392307
TXT-TDT12	TXT1215	392308	392309
	TXT1225		392310
TDT13	TDT1325	392311	392312
TDT14	TDT1425	392313	392314
TDT15	TDT1530	392315	392316

Torque-Arm Shaft Mount Speed Reducers (Continued)

Dodge TDT-TX-SCX Torque-Arm Rebuild Kits

SCXT Rebuild Kits			
Size	**Size/Ratio**	**Level 1**	**Level 2**
SCXT1	SCXT109	392395	392398
	SCXT115		392399
	SCXT125		392400
SCXT1A	SCXT109A	392395	392398
	SCXT115A		392399
	SCXT125A		392400
SCXT2	SCXT209	392396	392401
	SCXT215		392402
	SCXT225		392403
SCXT2A	SCXT209A	392396	392401
	SCXT215A		392402
	SCXT225A		392403
SCXT3A	SCXT309A	392278	392279
	SCXT315A		392280
	SCXT325A		392281
SCXT3B	SCXT309B	392278	392279
	SCXT315B		392280
	SCXT325B		392281
SCXT4A	SCXT409A	392282	392283
	SCXT415A		392284
	SCXT425A		392285
SCXT4B	SCXT409B	392282	392283
	SCXT415B		392284
	SCXT425B		392285
SCXT5B	SCXT509B	392287	392288
	SCXT515B		392289
	SCXT525B		392290
SCXT5C	SCXT509C	392287	392288
	SCXT515C		392289
	SCST525C		392290
SCXT6	SCXT609	392291	392292
	SCXT615		392293
	SCXT625		392294
SCXT6A	SCXT609A	392291	392292
	SCXT615A		392293
	SCXT625A		392294

SCXT Rebuild Kits			
Size	**Size/Ratio**	**Level 1**	**Level 2**
SCXT7	SCXT709	392295	392296
	SCXT715		392297
	SCXT725		392298
SCXT7A	SCXT709A	392295	392296
	SCXT715A		392297
	SCXT725A		392298
SCXT8	SCXT815	392397	392404
	SCXT825		392405
SCXT8A	SCXT815A	392397	392404
	SCXT825A		392405

TXT - SCXT 5:1

TXT Rebuild Kits 5:1 Ratio	
Size	**Level 1**
TXT105	392379
TXT205	392380
TXT305A	392381
TXT405A	392382
TXT505A	392383
TXT605	392384
TXT705	392385
TXT805	392386
TXT905	392387

SCXT Rebuild Kits 5:1 Ratio	
Size	**Level 1**
SCXT105	392388
SCXT205	392389
SCXT305A	392390
SCXT405A	392391
SCXT505A	392392
SCXT605	392393
SCXT705	392394

Courtesy of:
Screw Conveyor Parts

Torque-Arm Shaft Mount Speed Reducers

Lubrication Of Torque-Arm Reducers

> **Caution:** Unit is shipped without oil. Add proper amount of rust and oxidation inhibited (R & O) gear oil before operating. Failure to observe these precautions could result in damage to, or destruction of, the equipment.

Lubrication is extremely important for satisfactory operation. The proper oil level as shown in Table 25, page G2-173, must be maintained at all times. Frequent inspections with the unit not running and allowing sufficient time for the oil to cool and the entrapped air to settle out of the oil should be made by removing the level plug to see that the level is being maintained. If low, add the proper type and viscosity of lubricant through one of the upper openings until it comes out of the oil level hole. Replace the oil level plug securely. Refer to Tables 23 and 24 for viscosity recommendations.

After an initial operation of about two weeks, the oil should be changed. If desired, this oil may be filtered and reused. Very often, small metal particles will show up in the oil due to the wearing process. After the initial break in period, the lubricant should be drained, magnetic drain plug cleaned, gear case flushed and refilled every 2500 hours of operation under average industrial conditions.

Caution: Too much oil will cause overheating and too little will result in gear failure. Check oil level regularly.

More frequent oil changes are recommended when operating continuously or at high temperatures or under conditions of extreme dirt or dust. Use only recommended lubricants listed on next page, or equivalent. Special attention should be given to checking of lubricants when any of the following conditions exist:

1. High operating temperatures resulting from heavy intermittent loads causes the temperature of the gear case to rise rapidly and then cool.
2. Unusual ambient conditions, which may tend to cause condensation on the inside of the gearcase thereby contaminating the oil.
3. Operating temperatures that would cause oil to approach 200° F continually.
4. Subjection of reducer to unusual vapors or moist atmosphere.
5. Subjection of reducer to extremely dusty or dirty environment.

Under these extreme operating conditions, the oil should be changed every 1 to 3 months depending on severity of conditions.

Operating Temperatures

Heating is a natural characteristic of enclosed gearing, and a maximum gear case temperature approaching 200°F is not uncommon for some units operating in normal ambient temperatures (80°F). When operating at rated capacity, no damage will result from this temperature as this was taken into consideration in the design of the gear case and in the selection of the lubricants.

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Lubrication Of Torque-Arm Reducers (Continued)

Table 23: Lubrication Recommendations - ISO Grades
For Ambient Temperatures Of 50°F Thru 125°F ✧

Output	TXT, SCXT, HXT Reducers													
RPM	1	2	3	4	5	6	7	8	9	10	12	13	14	15
301-4w00	320	320	220	220	220	220	220	220	220	220	220	220	220	220
201-300	320	320	220	220	220	220	220	220	220	220	220	220	220	220
151-200	320	320	220	220	220	220	220	220	220	220	220	220	220	220
126-150	320	320	320	220	220	220	220	220	220	220	220	220	220	220
101-125	320	320	320	320	220	220	220	220	220	220	220	220	220	220
81-100	320	320	320	320	320	220	220	220	220	220	220	220	220	220
41-80	320	320	320	320	320	220	220	220	220	220	220	220	220	220
11-40	320	320	320	320	320	320	320	320	320	320	220	220	220	220
1-10	320	320	320	320	320	320	320	320	320	320	320	320	320	320

Table 24: Lubrication Recommendations - ISO Grades
For Ambient Temperatures Of 15°F Thru 60°F ✧

Output	TXT, SCXT, HXT Reducers													
RPM	1	2	3	4	5	6	7	8	9	10	12	13	14	15
301-400	220	220	150	150	150	150	150	150	150	150	150	150	150	150
201-300	220	220	150	150	150	150	150	150	150	150	150	150	150	150
151-200	220	220	150	150	150	150	150	150	150	150	150	150	150	150
126-150	220	220	220	150	150	150	150	150	150	150	150	150	150	150
101-125	220	220	220	220	150	150	150	150	150	150	150	150	150	150
81-100	220	220	220	220	220	150	150	150	150	150	150	150	150	150
41-80	220	220	220	220	220	150	150	150	150	150	150	150	150	150
11-40	220	220	220	220	220	220	220	220	220	220	150	150	150	150
1-10	220	220	220	220	220	220	220	220	220	220	220	220	220	220

Lubricant Grade Equivalents

ISO	AGMA
150	4
220	5
320	6

Note: Mobil SHC 600 Series oil is recommended for high ambient temperatures

✧ **Notes:**

1. Assumes auxiliary cooling where recommended in the catalog.
2. Pour point of lubricant selected should be at least 10°F. lower than expected minimum ambient starting temperature.
3. Extreme pressure (EP) lubricants are not necessary for average operating conditions. Torque-Arm internal backstops are not suitable for use with EP lubricants.
4. Special lubricants may be required for food and drug industry applications where contact with the product being manufactured may occur. Consult a lubrication manufacturer's representative for his recommendations.
5. Do not use oils containing additives such as graphite or molybdenum disuphide in the reducer when a backstop is used. These additives will destroy sprag action.
6. For reducers operating in ambient temperatures between -22°F (-30°C) and 20°F (-6.6°C) use a synthetic hydrocarbon lubricant, 100 ISO grade or AGMA 35 grade (for example - Mobil SHC627). Above 125°F (51°C), consult Dodge Gear Application Engineering (864) 284-5700 for lubrication recommendation.

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

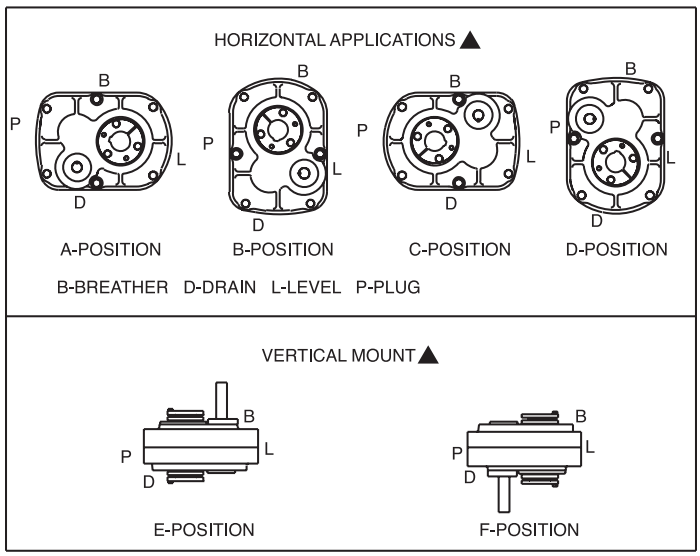
Torque-Arm Shaft Mount Speed Reducers

Lubrication Of Torque-Arm Reducers (Continued)

Horizontal Installations - Install the magnetic drain plug in the hole closest to the bottom of the reducer. Throw away the tape that covers the filler/ventilation plug in shipment and install plug in topmost hole. Of the remaining plugs on the sides of the reducer, the lowest one is the minimum oil level plug. Vertical installations-Install the filler/ventilation plug in the hole provided in the top face of the reducer housing. Use the hole in the bottom face for the magnetic drain plug. Of the remaining holes on the sides of the reducer, use a plug in the upper housing half for the minimum oil level plug

The running position of the reducer in a horizontal application is not limited to the four positions shown below. However, if running position is over 20° either way from sketches, the oil level plug cannot be safely used to check the oil level, unless during the checking the torque arm is disconnected and the reducer is swung to within 20° in position B or D, or 5° in position A and C shown below. Because of the many possible positions of the reducer, it may be necessary or desirable to make special adaptations using the lubrication fitting holes furnished along with other standard pipe fittings, stand pipes and oil level gauges as required.

Mounting Positions



▲ **Note:** Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug (P)

Vertical Installations - Install the filter/ventilation plug in the hole provided in the top face of the reducer housing. Use the hole in the bottom face for the magnetic drain plug. Of the remaining holes on the sides of the reducer, use a plug in the upper housing half for the minimum oil level plug.

Table 25 - Approx. Oil Capacity in Quarts ■ ◆

Reducer Size TXT SCXT HXT	Reducer Positions					
	Horizontal				Vertical	
	A	B	C	D	E	F
109,115,125	1/2	1/2	5/8	3/4	1	1-1/4
105	5/8	3/4	5/8	3/4	1-1/8	1-3/8
209,215,225	7/8	1	5/8	1	1-5/8	1-3/4
205	3/4	7/8	7/8	7/8	1-3/4	2-1/4
309,315,325	1-1/2	1-1/2	3/4	2-1/4	2-5/8	3
305	7/8	1-1/2	1-3/8	1-3/8	2-1/2	3-1/8
409,415,425	1-7/8	2-1/4	1-1/4	1-3/4	3-3/8	4-1/4
405	1-1/2	2-1/4	2-1/8	1-7/8	4	4-7/8
509,515,525	3-1/4	4	3-1/4	4	7	8-5/8
505	3-3/8	4-1/4	3-7/8	3-3/4	7-3/4	9
609, 615, 625	4-1/4	5	4-1/4	5	8-5/8	9-1/8
605	4-1/2	5-3/4	4-1/2	5	12	11
709,715,725	6-1/2	8	7-1/4	9-1/4	15-3/8	16-3/8
705	7-1/2	9	7-1/2	9-1/4	19	17-1/4
815,825	8-1/2	11	10-1/2	8-1/2	19-1/8	19-1/8
805	6	15	10	8-1/2	22	18-3/4
915,926	13	13	12-1/2	14-1/4	25-3/8	25-3/8
905	14-3/4	15	16-1/4	13-3/4	31-7/8	31-7/8
1015, 1024	23	14	15-3/4	18-3/4	41	41
1215, 1225	59	38	59	36-1/2	100	100
TDT1325	86	62	86	59	110	110
TDT1425	120	88	120	61	150	150
TDT1530	197	138	197	170	281	281

■ U.S. Measure: 1 qt. = 32 fluid oz. = .94616 liters

◆ Consult Dodge for proper oil level for reducers with backstops and which are mounted in C-position or D-position.

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Torque-Arm Speed Reducer Flange Mounting And Clearance Dimensions

TXT Taper Bushed and Straight Bore Reducers can be supplied with mounting pads on the back of the housing which are drilled and tapped to permit bolting the reducer to the supporting framework. Reducers are now provided from the factory with this feature. They can no longer be field modified. There is no additional charge for the modification. Order flange mount TXT reducers per the part number below. Consult Dodge for delivery. Consult Dodge for allowable output shaft overhung loads.

TXT Flange Mount Taper Bushed Reducers (1) (2) (3)

Part No	Reducer Size	Weight
241415	TXT105T Flange Mount Reducer	40
241417	TXT115AT Flange Mount Reducer	45
241419	TXT125AT Flange Mount Reducer	45
242415	TXT205T Flange Mount Reducer	52
242417	TXT215AT Flange Mount Reducer	58
242419	TXT225AT Flange Mount Reducer	58
243620	TXT305AT Flange Mount Reducer	86
243622	TXT315BT Flange Mount Reducer	98
243624	TXT325BT Flange Mount Reducer	98
244381	TXT405AT Flange Mount Reducer	122
244383	TXT415BT Flange Mount Reducer	139
244385	TXT425BT Flange Mount Reducer	139
245341	TXT505AT Flange Mount Reducer	182
245343	TXT515CT Flange Mount Reducer	207
245345	TXT525CT Flange Mount Reducer	207
246428	TXT605T Flange Mount Reducer	251
246430	TXT615AT Flange Mount Reducer	285
246432	TXT625AT Flange Mount Reducer	285
247431	TXT705T Flange Mount Reducer	410
247433	TXT715AT Flange Mount Reducer	462
247435	TXT725AT Flange Mount Reducer	462
248414	TXT805T Flange Mount Reducer	557
248416	TXT815AT Flange Mount Reducer	633
248418	TXT825AT Flange Mount Reducer	633
249414	TXT905T Flange Mount Reducer	668
249416	TXT915AT Flange Mount Reducer	760
249418	TXT926AT Flange Mount Reducer	760
250416	TXT1015AT Flange Mount Reducer	1020
250418	TXT1024AT Flange Mount Reducer	1020

TXT Flange Mount Straight Bore Reducers (1) (2) (3)

Part No	Reducer Size	Weight
241416	TXT105S Flange Mount Reducer	40
241418	TXT115AS Flange Mount Reducer	45
241420	TXT125AS Flange Mount Reducer	45
242416	TXT205S Flange Mount Reducer	52
242418	TXT215AS Flange Mount Reducer	58
242420	TXT225AS Flange Mount Reducer	58
243621	TXT305AS Flange Mount Reducer	86
243623	TXT315BS Flange Mount Reducer	98
243625	TXT325BS Flange Mount Reducer	98
244382	TXT405AS Flange Mount Reducer	122
244384	TXT415BS Flange Mount Reducer	139
244386	TXT425BS Flange Mount Reducer	139
245342	TXT505AS Flange Mount Reducer	182
245344	TXT515CS Flange Mount Reducer	207
245346	TXT525CS Flange Mount Reducer	207
246429	TXT605S Flange Mount Reducer	251
246431	TXT615AS Flange Mount Reducer	285
246433	TXT625AS Flange Mount Reducer	285
247432	TXT705S Flange Mount Reducer	410
247434	TXT715AS Flange Mount Reducer	462
247436	TXT725AS Flange Mount Reducer	462
248415	TXT805S Flange Mount Reducer	557
248417	TXT815AS Flange Mount Reducer	633
248419	TXT825AS Flange Mount Reducer	633
249415	TXT905S Flange Mount Reducer	668
249417	TXT915AS Flange Mount Reducer	760
249419	TXT926AS Flange Mount Reducer	760
250417	TXT1015AS Flange Mount Reducer	1020
250419	TXT1024AS Flange Mount Reducer	1020

(1) Flange mount reducers are Made-to-order with two week cycle time.
(2) Torque-Arm Assembly not included with flange mount reducers.
(3) TXT12 & TDT13-15 reducers are supplied from stock already drilled and tapped for flange mounting. See page G3-68 Thru G3-71.

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Torque-Arm Speed Reducer Flange Mounting Pads And Clearance Dimensions

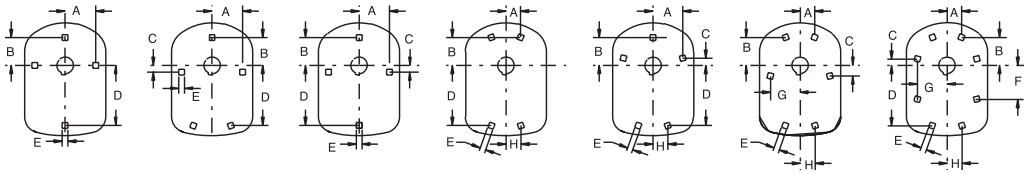


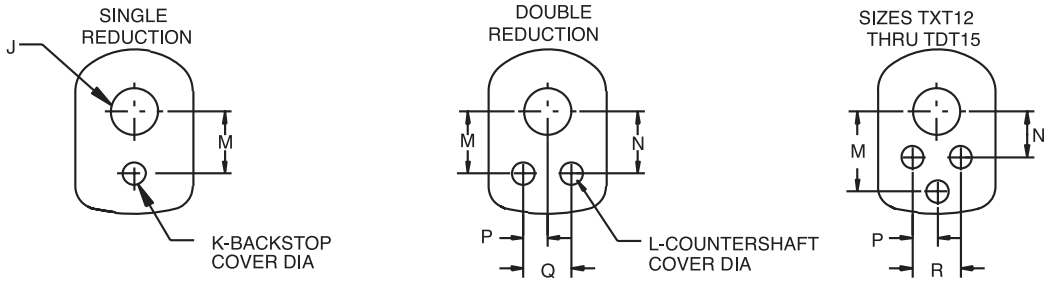
FIG. 1 FIG. 2 FIG. 3 FIG. 4 FIG. 5 FIG. 6 FIG. 7

Table 28 - Flange Mounting Drilling Dimensions For TXT Reducers

Reducer Size	Nominal Ratio	Reference	A	B	C	D	E	F	G	H	Tap Size	Tap Drill Depth	Tap Depth
TXT1	5, 9, 15, 25	Fig. 1	2-13/16	3	–	5-1/2	7/8	–	–	–	7/16 -14	29/32	17/32
TXT2	9, 15, 25	Fig. 1	3-3/8	3-5/16	–	5-7/8	13/16	–	–	–	7/16 -14	7/8	1/2
TXT2	5	Fig. 2	3-3/8	3-5/16	–	4-7/8	7/8	–	–	2-17/32	7/16 -14	7/8	1/2
TXT3	9, 15, 25	Fig. 3	3-5/8	3-5/16	7/8	6-3/16	1-1/4	–	–	–	1/2-13	1	5/8
TXT3	5	Fig. 2	3-7/8	3-5/16	1	5-19/32	3/4	–	–	2-11/16	1/2-13	29/32	17/32
TXT4	5, 9, 15, 25	Fig. 3	3-5/8	3-7/8	2	7-5/8	1	–	–	–	1/2-13	1	5/8
TXT5	9, 15, 25	Fig. 3	4-5/8	4-9/16	2-9/32	9-1/2	1-1/4	–	–	–	5/8-11	7/8	7/16
TXT5	5	Fig. 3	4-5/8	4-9/16	2-9/32	9-1/4	1-1/4	–	–	–	5/8-11	7/8	7/16
TXT6	5, 9, 15, 25	Fig. 3	6-3/16	5-1/8	2-3/16	11	1-7/8	–	–	–	5/8-11	1-1/8	11/16
TXT7	5, 9, 15, 25	Fig. 3	5-5/8	6-1/4	2-15/16	13-1/4	2	–	–	–	3/4-10	1-3/8	7/8
TXT8	5, 15, 25	Fig. 3	6-5/16	7	3	15-1/16	2	–	–	–	3/4-10	1-11/32	27/32
TXT9	15, 26	Fig. 4	5-7/16	5-15/16	–	16-7/8	2	–	–	3-3/8	3/4-10	1-1/32	17/32
TXT9	5	Fig. 5	8-1/16	8-1/16	5/8	13-7/8	2	–	–	7-15/16	3/4-10	1-1/32	15/16
TXT10	15, 24	Fig. 6	5-13/16	7-15/16	3-1/2	19	2	–	9-13/16	3-1/8	3/4-10	1-7/32	23/32
TXT12	15, 25	Fig. 6	6-1/8	10-3/4	7-1/4	22-11/16	2-1/2	–	12-9/16	9-1/16	3/4-10	1-25/32	1-9/32
TDT13	25	Fig. 6	7-5/16	12-3/4	6-1/2	25-3/4	2-1/2	–	15-3/4	7-5/16	1-8	2-3/8	1-3/4
TDT14	25	Fig. 7	8-1/4	12-3/4	1-1/4	28-1/4	2-1/2	16-3/4	18-1/16	8-1/4	1-8	2-5/8	2
TDT15	30	Fig. 7	11	15-1/8	1-1/4	32-3/8	3-1/2	19-5/8	22	11	1-8	2-5/8	2

Table 29 - Flange Mounting Clearance Dimensions

Reducer Size	Nominal Ratio	J	K	L	M	N	P	Q	R	Reducer Size	Nominal Ratio	J	K	L	M	N	P	Q	R
TXT1	9, 15, 25	3-1/4	2-9/16	–	3-3/16	3-3/16	1-29/32	2-17/32	–	TXT7	9, 15, 25	9-1/8	5-1/16	4-11/16	8-5/16	8-5/32	5-1/8	6-3/4	–
TXT1	5	3-1/4	2-13/16	–	3-1/4	–	–	–	–	TXT7	5	9-1/8	5-1/16	–	8-5/16	–	–	–	–
TXT2	9, 15, 25	4-1/16	3-1/2	–	3-3/4	3-3/4	2-1/8	3	–	TXT8	15, 25	9-1/2	7-5/8	6	9-1/2	9-1/2	6-1/32	7-23/32	–
TXT2	5	4-1/16	3-1/2	–	3-7/8	–	–	–	–	TXT8	5	9-1/2	7-1/2	–	9-41/64	–	–	–	–
TXT3	9, 15, 25	4-3/8	3-1/2	2-11/16	4-3/16	4-3/16	2-5/16	3-5/16	–	TXT9	15, 26	10-15/16	8	8	10-13/16	10-13/16	6-19/32	8-5/8	–
TXT3	5	4-3/8	3-1/2	–	4-1/4	–	–	–	–	TXT9	5	10-15/16	8	–	10-31/32	–	–	–	–
TXT4	9, 15, 25	4-13/16	3-7/8	3-1/4	4-25/32	4-25/32	2-3/4	3-11/16	–	TXT10	15, 24	12-1/4	8	7-5/8	12-1/2	12-1/2	6-9/16	8-23/32	–
TXT4	5	4-13/16	4-1/16	–	4-7/8	–	–	–	–	TXT12	15, 25	14-1/4	8-5/8	9	22-29/32	13-25/32	5-9/16	–	11-1/8
TXT5	9, 15, 25	5-5/8	4-1/4	3-1/4	5-11/16	5-21/32	3-1/16	4-9/16	–	TDT13	25	15-5/8	8-5/8	10-1/4	24-27/64	14-15/32	6-5/16	–	12-5/8
TXT5	5	5-5/8	4-3/4	–	5-7/8	–	–	–	–	TDT14	25	17-5/8	10-3/4	11-3/4	26-9/32	15-5/16	7-1/8	–	14-1/4
TXT6	9, 15, 25	8-1/8	5-1/16	4	6-3/4	6-23/32	4-3/32	5-5/8	–	TDT15	30	22-1/2	10-3/4	13-1/2	30-9/16	18-1/8	8	–	16
TXT6	5	8-1/8	5-1/16	–	6-7/8	–	–	–	–	–	–	–	–	–	–	–	–	–	–

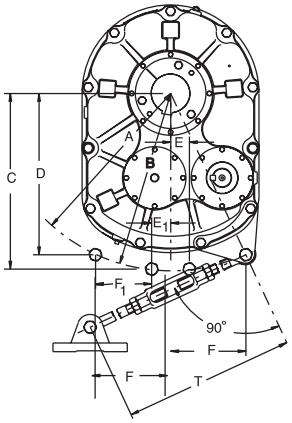


FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

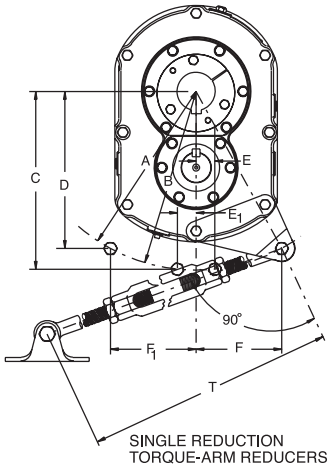
Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Optional Torque-Arm Rod Mounting Positions For Torque-Arm Reducers



DOUBLE REDUCTION
TORQUE-ARM REDUCERS



SINGLE REDUCTION
TORQUE-ARM REDUCERS

Table 26 - Torque-Arm Rod Optional Mounting Positions For TXT1 Thru TXT10 Double Reduction Reducers ★

Reducer Size	A - Radius	B - Radius	C	D	E, E1	F, F1	T	
							Min.	Max.
TXT1A	8.00	–	–	7.25	–	3.41	23.81	29.63
TXT2A	8.75	9.00	8.94	7.50	0.81	4.50	26.94	32.94
TXT3B	10.16	10.38	10.31	8.88	0.97	4.94	26.94	32.94
TXT4B	11.47	11.84	11.78	10.06	1.09	5.50	29.19	35.19
TXT5C	13.75	14.03	13.97	12.06	1.00	6.63	29.19	35.19
TXT6A	15.69	15.88	15.84	13.63	0.94	7.75	29.19	35.19
TXT7A	18.19	18.84	18.81	15.88	1.25	8.94	29.44	35.44
TXT8A	21.00	21.38	21.38	19.56	–	7.63	30.00	36.00
TXT9A	22.72	23.63	23.63	20.63	–	9.50	30.00	36.00
TXT10A	25.20	25.56	25.56	23.56	–	8.94	30.00	36.00

Table 27 - Torque-Arm Rod Optional Mounting Positions For TXT105 Thru TXT905 Single Reduction Reducers ★

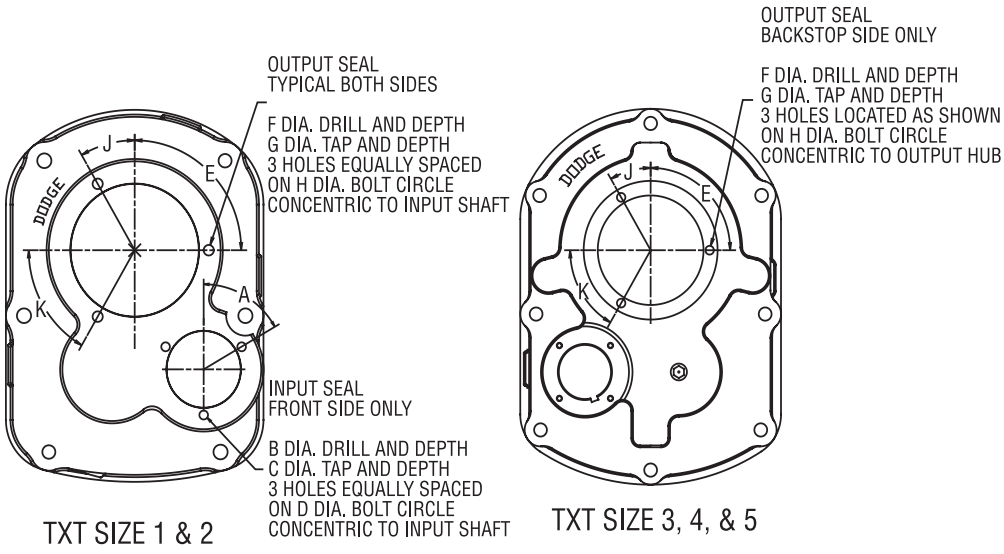
Reducer Size	A - Radius	B - Radius	C	D	E, E1	F, F1	T	
							Min.	Max.
TXT105	8.00	–	–	7.25	–	3.41	23.81	29.63
TXT205	8.75	9.00	8.94	7.50	0.81	4.50	26.94	32.94
TXT305A	10.16	10.38	10.31	8.88	0.97	4.94	26.94	32.94
TXT405A	11.47	11.84	11.78	10.06	1.09	5.50	29.19	35.19
TXT505A	14.53	14.81	14.78	12.59	0.91	7.25	29.19	35.19
TXT605	16.44	16.66	16.63	14.22	0.88	8.22	29.19	35.19
TXT705	18.19	18.84	18.81	15.88	1.25	8.94	29.44	35.44
TXT805	21.00	21.38	21.38	19.56	–	7.63	30.00	36.00
TXT905	22.70	23.63	23.63	20.63	–	9.50	30.00	36.00

★ It is preferred to mount the Torque-Arm rod in tension. However, the design allows mounting in compression as well. If mounted in compression, observe the tolerance ± 20° to the 90° referenced above, to minimize bending. The housing direction will be opposite to the direction of output or driven shaft rotation.

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Machining Dimensions for Installation of Taconite Auxiliary Seal Kits

TXT1A Thru TXT5C And TXT105 Thru TXT 505A



Reducer Size	A (Degrees)	B ▲ (Inches)	C (Inches)	D (Inches)	E (Degrees)	F ▲ (Inches)	G (Inches)	H (Inches)	J (Degrees)	K (Degrees)
TXT1A	60º	#7 DIA 3/4 DP	1/4-20 1/2 DP	2-5/8	120º	#7 DIA 3/4 DP	1/4-20 1/2 DP	4-1/8	0º	30º
TXT2A	60º	#7 DIA 13/16 DP	1/4-20 9/16 DP	2-15/16	120º	#7 DIA 7/8 DP	1/4-20 9/16 DP	4-3/4	0º	30º
TXT3B	N/A	–	–	–	90º	#F DIA 3/4 DP	5/16-18 17/32 DP	5-1/4	30º	50º
TXT4B	N/A	–	–	–	30º	5/16 DIA 15/16 DP	3/8-16 9/16 DP	6.0	90º	130º
TXT5C	N/A	–	–	–	90º	5/16 DIA 15/16 DP	3/8-16 9/16 DP	6-5/8	30º	60º
TXT105	60º	#7 DIA 3/4 DP	1/4-20 1/2 DP	2-15/16	120º	#7 DIA 3/4 DP	1/4-20 1/2 DP	4-1/8	0º	30º
TXT205	60º	#7 DIA 13/16 DP	1/4-20 9/16 DP	3-11/16	120º	#7 DIA 7/8 DP	1/4-20 5/8 DP	4-3/4	0º	30º
TXT305A	N/A	–	–	–	90º	#F DIA 3/4 DP	5/16-18 17/32 DP	5-1/4	30º	50º
TXT405A	N/A	–	–	–	30º	5/16 DIA 15/16 DP	3/8-16 9/16 DP	6.0	90º	130º
TXT505A	N/A	–	–	–	90º	5/16 DIA 15/16 DP	3/8-16 9/16 DP	6-5/8	30º	60º

▲ Drill depth is maximum and must not be exceeded.
– Place auxiliary seal cover on input seal carrier using bolts provided.
N/A Not applicable.

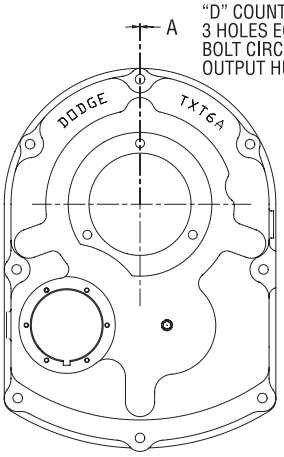
FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Machining Dimensions for Installation of Taconite Auxiliary Seal Kits

TXT6A Thru TXT10A

TXT 6A ONLY
OUTPUT SEAL INSTALLATION
BACKSTOP SIDE ONLY

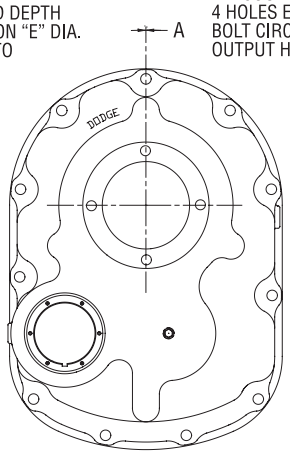
"B" DIA. DRILL AND DEPTH
"C" DIA. TAP AND DEPTH
"D" COUNTERBORE DIA. AND DEPTH
3 HOLES EQUALLY SPACED ON "E" DIA.
BOLT CIRCLE CONCENTRIC TO
OUTPUT HUB



TXT SIZE 6A
BACKSTOP SIDE ONLY

TXT7A THRU 10A ONLY
OUTPUT SEAL INSTALLATION
BACKSTOP SIDE ONLY

"B" DIA. DRILL AND DEPTH
"C" DIA. TAP AND DEPTH
"D" COUNTERBORE DIA. AND DEPTH
4 HOLES EQUALLY SPACED ON "E" DIA.
BOLT CIRCLE CONCENTRIC TO
OUTPUT HUB



TXT SIZE 7A THRU 10A
BACKSTOP SIDE ONLY

Reducer Size	A (Degrees)	B ▲ (Inches)	C (Inches)	D (Inches)	E (Inches)
TXT6A	0º	5/16 ∅	3/8-16	7/16 ∅	7-1/4 ∅
		1-3/8 DP	1-1/16 DP	3/8 DP	
TXT7A	0º	23/64 ∅	7/16-14	1/2 ∅	8-1/8 ∅
		1-11/16 DP	1-5/16 DP	3/8 DP	
TXT8A	0º	5/16 ∅	3/8-16	7/16 ∅	8-5/8 ∅
		1-11/16 DP	1-3/8 DP	3/8 DP	
TXT9A	0º	5/16 ∅	3/8-16	7/16 ∅	9-15/16 ∅
		1-5/8 DP	1-5/16 DP	3/8 DP	
TXT10A	0º	5/16 ∅	3/8-16	7/16 ∅	11.0 ∅
		1-5/8 DP	1-5/16 DP	3/8 DP	

▲ Drill depth is maximum and must not be exceeded.

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Table 31 - Maximum Input and Driven Speeds for TXT and SCXT Reducers

Single Reduction			Double Reduction													
Reducer Size	Input	Driven	Reducer Size	Input RPM			Driven RPM			Reducer Size	Input RPM			Driven RPM		
				Nominal Ratio			Nominal Ratio				Nominal Ratio			Nominal Ratio		
TXT/SCXT1	2248	400		9	15	25	9	15	25		15	25	30	15	25	30
TXT/SCXT2	2116	400														
TXT/SCXT3	2240	400	TXT/SCXT1	1888	2149	2179	200	140	85	TXT/SCXT8	1809	1847	–	120	75	–
TXT/SCXT4	2260	400	TXT/SCXT2	1850	1974	1994	200	140	85	TXT9	1814	1925	–	120	75	–
TXT/SCXT5	2268	400	TXT/SCXT3	1782	2083	2100	200	140	85	TXT10	1819	1823	–	120	75	–
TXT/SCXT6	2268	400	TXT/SCXT4	1934	2118	2072	200	140	85	TXT12	1786	1849	–	120	75	–
TXT/SCXT7	2144	400	TXT/SCXT5	1790	1925	2044	200	125	80	TDT13	–	1855	–	–	75	–
TXT8	2200	400	TXT/SCXT6	1840	1916	2010	200	125	80	TDT14	–	1860	–	–	75	–
TXT9	2154	400	TXT/SCXT7	1922	1827	1844	200	120	75	TDT15	–	–	1746	–	57	–

Table 32 - Output Shaft Overhung Load Ratings for Double Reduction TXT Reducers

Reducer Size	Nominal Ratio	Shaft Size	Overhung Load (Lbs.) @ Various RPM's *										
			10	20	30	50	80	100	120	140	160	180	200
TXT1	9, 15, 25	1-1/4 1-7/16	1990	1520	1300	1100	930	780	760	740	720	700	680
TXT2	9, 15, 25	1-7/16 1-15/16	2000	1510	1270	1010	840	820	720	720	710	710	700
TXT3	9, 15, 25	1-15/16 2-3/16	5400	4250	3680	3050	2620	2440	2310	2210	2110	2040	1980
TXT4	9, 15, 25	2-3/16 2-7/16	6520	5180	4510	3800	3230	3000	2830	2710	2600	2510	2430
TXT5	9, 15, 25	2-7/16	7460	5860	5080	4280	3690	3450	3270	3110	2980	2880	2790
		2-15/16	7060	5540	4800	4040	3490	3260	3090	2940	2820	2720	2640
TXT6	9, 15, 25	2-15/16	9100	7100	6100	5000	4100	4050	3700	3550	3400	3300	3200
		3-7/16	8200	6400	5500	4500	3700	3650	3400	3300	3250	3200	3150
TXT7	9, 15, 25	3-7/16	11,400	9500	7300	5950	4750	5050	4500	4300	4250	4200	4150

* Values shown are for loads applied at one output shaft diameter from reducer bushing. Interpolate for values between RPM's listed.

Table 33 - Output Shaft Overhung Load Ratings for Single Reduction TXT Reducers

Reducer Size	Nominal Ratio	Shaft Size	Overhung Load (Lbs.) @ Various RPM's *						
			100	150	200	250	300	350	400
TXT1	5	1-1/4	775	610	600	500	500	500	490
		1-7/16	660	520	520	430	430	420	420
TXT2	5	1-7/16	760	620	530	530	530	530	520
		1-15/16	665	545	470	470	470	460	460
TXT3	5	1-15/16	2370	2100	1950	1840	1760	1700	1660
		2-3/16	2300	2040	1890	1780	1710	1650	1610
TXT4	5	2-3/16	3030	2720	2490	2310	2170	2060	1970
		2-7/16	2930	2640	2400	2240	2100	1990	1900
TXT5	5	2-7/16	3080	2750	2560	2400	2260	2160	2080
		2-15/16	2920	2610	2430	2270	2140	2050	1980
TXT6	5	2-15/16	4350	3850	3500	3250	3200	3100	3050
		3-7/16	3950	3500	3200	2950	2900	2800	2750
TXT7	5	3-7/16	3800	3650	3300	3450	3500	3400	3300

* Values shown are for loads applied at one output shaft diameter from reducer bushing. Interpolate for values between RPM's listed.

Table 1 - WR² (Lb.-FT²) At High Speed Shaft for TXT Reducers *

Reducer Size	Nominal Ratio				Reducer Size	Nominal Ratio			
	5:1	9:1	15:1	25:1		5:1	9:1	15:1	25:1
TXT1	0.002	0.013	0.008	0.007	TXT9	1.66	–	1.39	0.794
TXT2	0.013	0.027	0.011	0.007	TXT10	–	–	1.63	0.927
TXT3	0.034	0.059	0.026	0.013	TXT12	–	–	7.71	3.68
TXT4	0.075	0.092	0.043	0.023	TDT13	–	–	–	6.56
TXT5	0.15	0.233	0.099	0.067	TDT14	–	–	–	9.0
TXT6	0.201	0.461	0.197	0.109	TDT15	–	–	–	11.42
TXT7	0.48	1.004	0.417	0.285	–	–	–	–	–
TXT8	0.96	–	0.942	0.571	–	–	–	–	–

* For WR^2 at low speed shaft, multiply WR^2 value listed by (actual ratio)^2.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Thrust Capacity Of Screw Conveyor Drive Reducers

The screw conveyor drive reducer uses tapered roller bearings which take thrust in either direction from the screw conveyor. This eliminates the need for external Thrust bearings commonly used.

Table 1 - Thrust Capacity Of Screw Conveyor Drive Reducers (Pounds) ●

Reducer Size	Screw Conveyor RPM						
	80	100	120	140	160	180	200
SCXT109A	3986	3765	3588	3434	3303	3192	3092
SCXT209A	5389	5025	4742	4505	4304	4138	3990
SCXT309B	5290	4920	4660	4450	4240	4100	3970
SCXT409B	6000	6000	5800	5500	5200	5000	5000
SCXT509C	6000	6000	6000	6000	5800	5700	5500
SCXT609A	6000	6000	6000	6000	6000	6000	6000
SCXT709A	4863	4527	4244	3959	3713	3520	3335

Reducer Size	Screw Conveyor RPM					
	25	50	75	100	125	140
SCXT115A	6000	4840	4220	3820	3540	3414
SCXT215A	6000	6000	5440	4920	4560	4380
SCXT315B	6000	6000	5400	4920	4600	4450
SCXT415B	6000	6000	6000	6000	5800	5600
SCXT515C	6000	6000	6000	6000	6000	–
SCXT615A	6000	6000	6000	6000	6000	–
SCXT715A †	6000	6000	5220	4530	–	–

Reducer Size	Screw Conveyor RPM				
	25	50	75	80	85
SCXT125A	6000	4840	4220	4130	4040
SCXT225A	6000	6000	5440	5320	5000
SCXT325B	6000	6000	5400	5290	5200
SCXT425B	6000	6000	6000	6000	6000
SCXT525C	6000	6000	6000	6000	–
SCXT625A	6000	6000	6000	6000	–
SCXT725A	6000	6000	5220	–	–

Reducer Size	Screw Conveyor RPM						
	100	150	200	250	300	350	400
SCXT105	6000	5500	5060	4730	4520	4340	4200
SCXT205	5310	4760	4390	4160	3970	3810	3680
SCXT305A	6000	5300	4900	4600	4400	4300	4200
SCXT405A	6000	5900	5500	5000	4600	4500	4500
SCXT505B	6000	6000	6000	6000	5700	5400	5000
SCXT605	6000	6000	6000	6000	6000	6000	6000
SCXT705	5860	5500	4810	4710	4830	4980	4900

† Actual maximum output speed for SCXT715 reducer is 120 RPM
● Consult Dodge for SCXT8 Thrust capacity

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Guidelines For Long-Term Storage Of Torque-Arm Reducers

During periods of long storage (3 months or more), or when awaiting delivery or installation of other equipment, special care should be taken to protect a gear reducer to have it in the best condition when placed into service.

By taking special precautions, problems such as seal leakage and reducer failure due to the lack of lubrication, improper lubrication quantity, or contamination can be avoided. The following precautions will protect gear reducers during periods of extended storage.

Preparation

1. Drain the oil from the unit. Add a vapor phase corrosion inhibiting oil such as VCI-105 oil by Daubert Chemical Co.
2. Seal the unit air tight. Replace the vent plug with standard pipe plug and wire the vent to the unit.
3. Cover the shaft extension with a waxy rust preventive compound that will keep oxygen away from the bare metal such as Non-Rust X-110 by Daubert Chemical Co.
4. The instruction manuals and lubrication tags are paper and must be kept dry. Either remove these documents and store them inside or cover the unit with a durable waterproof cover which can keep moisture away.
5. Protect the reducer from dust, moisture, and other contaminants by storing the unit in a dry area.
6. In damp environments, the reducer should be packed inside a moisture-proof container or an envelope of plastic containing a desiccant material. If the reducer is to be stored outdoors, cover the entire exterior with a rust preventive.
7. Once a month rotate the input shaft at least 30 revolutions to redistribute the weight of gears and shafts and to prevent brinnelling of the bearings and drying of the seal track.

Table 1 - VCI #105 Oil For Torque-Arm Reducers

Case Size	Quarts Or Liters
TXT1	0.1
TXT2	0.1
TXT3	0.1
TXT4	0.2
TXT5	0.3
TXT6	0.4
TXT7	0.5
TXT8	0.6
TXT9	0.9
TXT10	1.3
TXT11	1.9
TXT12	2.5

VCI #105 & #10 are interchangeable, but VCI #105 is more readily available.

When Placing The Reducer Into Service

1. Assemble the vent plug into the proper hole.
2. Clean the shaft extensions with petroleum solvents.
3. Fill the unit to the proper oil level using a recommended lubricant. The VCI oil will not affect the new lubricant.
4. Follow the installation instructions provided with the unit.

Torque-Arm Shaft Mount Speed Reducers

Trouble-Shooting Guide For Torque-Arm Reducers

Symptom	Probable Cause	Remedy
Excessive Noise and Vibration	Improper arm attachment.	Check instructions and correct. Tighten all fasteners properly.
	Low oil level.	Check level. Fill to proper oil capacity per instruction manual.
	Excessive premature gear wear due to improper size reducer.	Reselect reducer in catalog with proper service factor. Replace worn unit.
	Driven shaft undersized.	Replace shaft or remachine to properly fit next smaller bushing size. (Check shaft strength.)
	Driven shaft bent.	Check runout. Replace or straighten shaft.
	Worn gears and bearings.	Replace gears and bearings as necessary.
	Driven shaft not projecting through output bore or bushings.	Reposition reducer on shaft or replace shaft.
	Tapered reducer bushings improperly tightened.	Check instruction manual and tighten per recommended torque values.
	Improper connection to driver and driven equipment.	Check belt tension and V-belt sheave alignment. Check coupling alignment. Check all fasteners and setscrews; tighten properly. Inspect driven shaft key positioning.
	Worn or cracked V-belts.	Replace with new belts.
	Driven equipment noise.	Check for source, reducer may amplify existing noise.
Overheating Reducers	Improper oil level	Check oil and fill to proper oil capacity per instruction manual. Too much oil causes heat due to churning and friction; too little starves components.
Exceeds 195 Deg F. Housing Temperature	Improper reducer size.	Reselect reducer in catalog. Decrease load or replace reducer with proper unit.
	Excessive V-belt tension.	Tension belts properly. Position sheaves as close to reducer as possible.
	Excessive reducer operating speed.	Check catalog recommendations. If necessary refer all application details to manufacturer.
	Located near high ambient heat source.	Shield reducer from heat source. Relocate reducer. Refer application details to manufacturer.
	No cooling fan installed.	Check catalog recommendation. Install fan if required.
Oil Leakage	Undetermined source of leak.	Clean reducer and dry all surfaces. Run for one hour and inspect for leak from seals, gaskets, covers and plugs.
	Plugged breather air passage.	Clean air passage. Remove air passage tape on new reducers.
	Loose drain, breather or pipe plugs.	Tighten securely. Check oil level.
	Excessive oil level.	Check level. Fill to proper oil capacity per instruction manual.
	Breather plug below oil.	Relocate breather to highest location. Check oil level.
	Premature seal wear due to hostile environment.	Replace seals. Install auxiliary seal kit.
Excessive Backlash	Worn gears.	Replace worn gears in sets.
	Loose bearings.	Check bearing wear, adjustment and replace.
	Worn shaft keys	Replace worn keys. Check shaft keyway for wear
	Driven equipment backlash	Check equipment for backlash
Excessive Lateral Movement	Worn and loose bearings	Replace bearings.
	Improper bearing adjustment.	Readjust bearing per instruction manual.
	Loose bearing carrier caps.	Check and tighten fasteners.
	Improper reducer mounting.	Check and tighten straight bore reducer set screws to recommended torque values. Check and tighten tapered reducer bearing fasteners to recommended torque values. See instruction manual.
	Reversing duty applications.	Refer application details to manufacturer.
Excessive Reducer Wobble	Driven shaft undersized.	Replace shaft or remachine to properly fit next smaller bushing size. (Check shaft strength.)
	Driven shaft bent.	Check runout. Replace or straighten shaft.
	Improper torque arm attachment.	Check instructions and correct. Tighten all fasteners promptly.
	Driven shaft not projecting through output bore or bushings.	Reposition reducer on shaft or replace shaft.
	Worn or loose driven shaft key.	Check for proper size and replace. Check shaft keyway size.

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Trouble-Shooting Guide For Torque-Arm Reducers

Symptom	Probable Cause	Remedy
Reducer Shafts Will Not Rotate	Improper backstop installation.	Remove backstop and install properly. (Rotate end for end.)
	Driven equipment locked.	Check for rotation of driven equipment.
	Damaged gearing	Check gearing and replace. Inspect driven equipment and check for rotation.
Premature Input Bearing Failure	Excessive V-belt tension	Tension V-belts properly.
	Excessive overhung load.	Mount sheave as close to reducer as possible. Check minimum sheave requirement and replace if necessary.
	Improper oil level.	Check oil and fill to proper oil capacity per instruction manual.
	Excessive reducer operating speed.	Check catalog recommendations. If necessary, refer application details to manufacturer.
Premature Backstop Wear or Backstop Slips	Improper oil	Check oil. Avoid lubricants with EP additives, e.g., graphite. Check instruction manual for proper type.
	Backstop wear.	Check wear and replace. Inspect periodically.
	Excessive input shaft lateral movement.	Check for bearing, shaft, and housing wear. Replace components and readjust reducer per instruction manual.
	Excessive V-belt tension.	Tension V-belts properly.
	Excessive overhung load.	Mount sheave as close to reducer as possible. Check minimum sheave requirement and replace if necessary.
	Backstop key not installed	Install key or keys.
	Improper installation.	Check for proper direction of shaft rotation in backstop.
	Improper input bearing adjustment	Readjust bearings per instruction manual.
	Contaminated oil.	Flush reducer and replace oil.
	Excessive reducer operating speed.	Check catalog recommendations. Refer application details to manufacturer.

Consult Dodge for other applications.

Replacement Interchange Txt Series Equivalents

FOUR GENERATIONS OF Dodge Torque-Arm REDUCERS											
AGMA CASE SIZE	RATIO										
	5:1			9:1	15:1				25:1		
-	#10	#10	-	-	-	TD015	-	-	TD025	-	-
107	#11	T11	TXT105	TXT109	#1	TD115	TDT115	TXT115	TD125	TDT125	TXT125
115	#12	T12	TXT205	TXT209	#2	TD215	TDT215	TXT215	TD225	TDT225	TXT225
203	#13	T13	TXT305	TXT309	#3	TD315	TDT315	TXT315	TD325	TDT325	TXT325
207	#14	T14	TXT405	TXT409	#4	TD415	TDT415	TXT415	TD425	TDT425	TXT425
215	#15	T15	TXT505	TXT509	#5	TD515	TDT515	TXT515	TD525	TDT525	TXT525
307	#16	T16	TXT605	TXT609	#6	TD615	TDT615	TXT615	TD625	TDT625	TXT625
315	#17	T17	TXT705	TXT709	#7	TD715	TDT715	TXT715	TD725	TDT725	TXT725
407	#18	T18	TXT805	-	#8	TD815	TDT815	TXT815	TD825	TDT825	TXT825
415	#19	T19	TXT905	-	#9	TD915	TDT915	TXT915	TD926	TDT926	TXT926
507	-	-	-	-	-	TD1015	TDT1015	TXT1015	TD1024	TDT1024	TXT1024
-	-	-	-	-	-	-	TDT1115	-	TD1125	TDT1125	-
608	-	-	-	-	-	-	TDT1215	TXT1215	TD1225	TDT1225	TXT1225
700	-	-	-	-	-	-	-	-	TD1325	TDT1325	TDT1325
800	-	-	-	-	-	-	-	-	TD1425	TDT1425	TDT1425
1000	-	-	-	-	-	-	-	-	-	TDT1530	TDT1530

Notes:

(1) The "#" series and TD Dodge Torque-Arm reducers were manufactured with straight bore mountings only. The TDT and current TXT Dodge Torque-Arm reducers were/are manufactured with both straight bore and twin tapered bore bushings.

(2) With the increased HP ratings of the TXT reducer, it may be possible to downsize to a smaller gearbox when replacing an old-style Dodge Torque-Arm reducer. Be sure to review the application.

FEATURES/BENEFITS PAGE G3-2	SPECIFICATION PAGE G3-9	MODIFICATION/ACCESSORIES PAGE G3-72, G3-122	RELATED PRODUCTS PAGE G3-154

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

Backstop Interchange For Dodge TXT-TDT-TD-T-NO. Torque-Arm Reducers

Part Number	Current TXT Series Housing Redesign 2005	TXT Series Brg Redesign 1991	TXT Series Intro 1985	TDT Series	TD Series	Number Series
241101	– –	– –	– –	TDT115 TDT125	TD115 TD125	No. 1
242101	TXT109A TXT115A TXT125A	– – – –	TXT105 TXT109 TXT115 TXT125	T11 TDT215 TDT225	TD215 TD225	No. 2 No. 3 No. 11
243101	– –	– –	– –	TDT315 TDT325	TD315 TD325	– –
243102	Use Part Number 244106					
243106	TXT309B TXT315B TXT325B	TXT309A TXT315A TXT325A	– – –	– – –	– – –	– – –
244092	– –	– –	– –	TDT415 TDT425	TD415 TD425	– –
244101	– –	– –	– –	– –	– –	No. 4 No. 5
244106	TXT409B TXT415B TXT425B	TXT409A TXT415A TXT425A	TXT309 TXT315 TXT325	– – –	– – –	– – –
244148	– – – –	TXT405A	TXT405 TXT409 TXT415 TXT425	– – – –	– – – –	– – – –
245101	– –	– –	– –	TDT515 TDT525	TD515 TD525	– –
245154	TXT509C TXT515C TXT525C	TXT509B TXT515B TXT525B	TXT509A, TXT509 TXT515A, TXT515 TXT525A, TXT525	– – –	– – –	– – –
246092	TXT609A TXT615A TXT625A	TXT605 TXT609 TXT615 TXT625	– – – –	T16 TDT615 TDT625	TD615A, TD615 TD625A, TD625	No. 16A

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

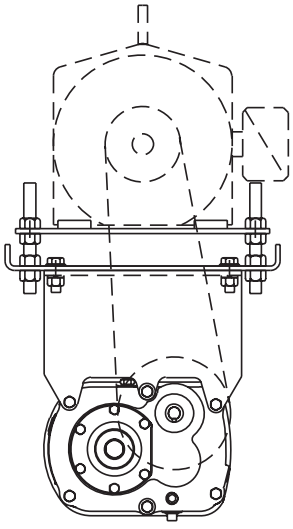
Backstop Interchange For All Dodge Torque-Arm Reducers

Part Number	Current TXT Series Housing Redesign 2005	TXT Series Brg Redesign 1991	TXT Series Intro 1985	TDT Series	TD Series	Number Series
246101	–	TXT505A	TXT505	T15	–	No. 6
247092	Use Part Number 247260					
247101	–	–	–	–	–	No. 7A
247260	TXT709A	TXT705	–	T17	TD715A, TD715	No. 17A
	TXT715A	TXT709	–	TDT715	TD725A, TD725	
	TXT725A	TXT715	–	TDT725	–	
	–	TXT725	–	–	–	
248101	Use Part Number 249260					
249260	TXT 815A	TXT815	–	TDT815	TD815A, TD815	No. 8
	TXT 825A	TXT825	–	TDT825	TD825A, TD825	No. 9
	TXT 915A	TXT915	–	TDT915	TD915	No. 18
	TXT 926A	TXT926	–	TDT926	TD926	–
	–	–	–	TDT1115	TD1115	–
	–	–	–	TDT1125	TD1125	–
250101	Use Part Number 250260					
250260	TXT1015A	TXT805	–	T18	TD1015	–
	TXT1024A	TXT1015	–	TDT1015	TD1024	–
	–	TXT1024	–	TDT1024	TD1215	–
	–	TXT1215	–	TDT1215	TD1225	–
	–	TXT1225	–	TDT1225	–	–
252101	TXT209A	TXT305A	TXT205	T12	–	No. 13
	TXT215A	–	TXT209	T13	–	–
	TXT225A	–	TXT215	–	–	–
	–	–	TXT225	–	–	–
	–	–	TXT305	–	–	–
254101	–	–	–	T14	–	No. 14
255101	–	–	–	–	–	No. 15
256101	–	–	–	–	–	No. 16
257101	–	–	–	–	–	No. 17
272259	–	TXT905	–	T19,	–	–
	–	–	–	TDT1325	–	–
272293	–	–	–	TDT1425	–	–
	–	–	–	TDT1530	–	–

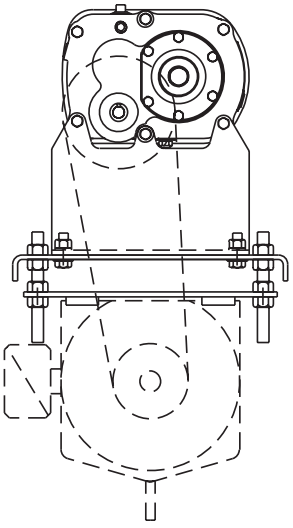
Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Torque-Arm Shaft Mount Speed Reducers

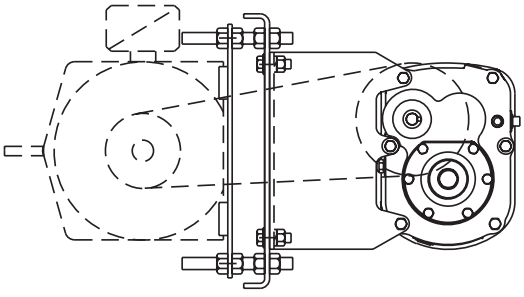
Screw Conveyor Drive Mounting Positions Based On Screw Diameter



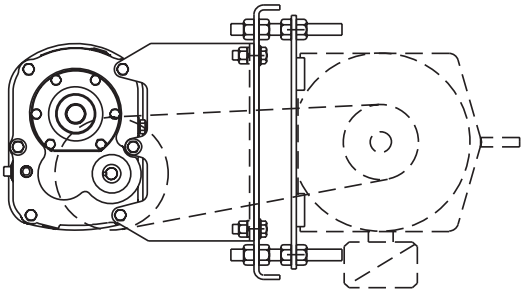
TOP POSITION



BOTTOM POSITION



LEFT SIDE POSITION



RIGHT SIDE POSITION

Reducer Size	Motor Mount No. ★	For Use on Troughs with Screw Diameters of:	
		Top, Right and Left Side Portions	Bottom Position
SCXT1A	M112	6, 9, 12”	6, 9”
SCXT2A	M214	6, 9, 12, 14”	6, 9, 12”
SCXT3B	M316	6, 9, 12, 14, 16”	6, 9, 12, 14”
SCXT4B, SCXT5C	M418, M518	9, 12, 14, 16, 18”	9, 12, 14, 16”
SCXT6A, SCXT7A	M620, M720	12, 14, 16, 18, 20”	12, 14, 16, 18”

★ Long Series Motor Mount to fit troughs with screws up Thru 24” diameter are available from stock.
See pages G3-92 Thru G3-119.

Courtesy of:
Screw Conveyor Parts

CONTENTS

Engineering/Technical

Bearing Engineering

Vibration Frequencies of Anti-Friction Mounted Bearings G4-2
Mounted Bearings Life Adjustment Factors G4-7

PT Component Engineering

V-Belt Sheave Groove Dimensions G4-9
Conveyor Belt FPM to RPM G4-10
Material Characteristics G4-11

General Engineering

Shafting G4-13
Expansion of Shafting G4-18
Weights/Properties of Steel Shafting G4-19
Oil Viscosity Classification G4-21
English Standard Measurement G4-22
Metric Standard Measurement & Conversion G4-24
Common Conversion Factors G4-25
Flywheel Formulas G4-32
Centrifugal Force G4-32
Formulas and Constants G4-32
Torque and Horsepower Equivalents G4-33
Overhung Loads G4-33
Mathematical Equations G4-33
Strength and Physical Properties of Various Metals G4-34
Properties of Sections G4-36
Coefficients of Friction (f) G4-37
Hardness of Comparisons G4-37
U.S. Standard Sheet Metal Gages G4-37
Trigonometric Formula G4-38

NEMA Quick Reference Chart G4-39

IEC Quick Reference Chart G4-40

Vibration Frequencies of Dodge Anti-Friction Mounted Bearings

More and more manufacturing facilities are getting involved with plant-wide preventive maintenance programs. By monitoring vibration levels of motors, pumps, fans and compressors, maintenance supervisors can predict imminent failures. Knowing that a piece of equipment is showing signs of potential failure permits scheduling of maintenance at an appropriate time and avoids the consequences of catastrophic failures. Shown on Table 1 - Table 10are vibration frequencies generated by bearing components defects. All frequencies are based on unity inner ring or cone rotation.

How to Use the Tables

If a 2-7/16 Type E pillow block is rotating at 1000 RPM, the vibration due to a failed component will show up at the following frequencies: (Table 3, Line 6)

Frequency

Cup Nick or Spall	1000 x 9.249 = 9249 RPM
Cone Nick or Spall	1000 x 11.751 = 11751 RPM
Roller Nick or Spail	1000 x 8.068 = 8068 RPM
Roll Size Variation	1000 x.440 = 440 RPM

Since all the values on Table 1 - Table 10 are based on unity inner ring or cone rotation, the vibration due to flaws will show up at the frequencies obtained by multiplying the RPM times the factors found on the appropriate table. The resulting product will have units of REV./MIN.

Table 1: All Setscrew, Eccentric & D-Lok Ball Bearing Parameters for Vibration Analysis (1-RPS)

Series	SC Bore	SCM Bore	# Balls	Diameter of Balls	Pitch Diameter	Outer Ring Frequency Hz	Inner Ring Frequency Hz	Ball Spin Frequency Hz	Cage Frequency Hz
203	1/2 - 5/8	–	8	17/64	1.1506	3.076569	4.923431	2.050406	0.384571
204	1/2 - 3/4	–	8	5/16	1.3251	3.056675	4.943325	2.002244	0.382084
205	7/8 - 1	–	9	5/16	1.5325	3.582382	5.417618	2.350042	0.398042
206	1-1/6 - 1-1/4	1	9	3/8	1.823	3.574328	5.425672	2.327814	0.397148
207	1-1/4 - 1-7/16	1-3/16	9	7/16	2.136	3.578301	5.421699	2.338732	0.397589
208	1-1/2 - 1-5/8	1-7/16 - 1-1/2	9	1/2	2.387	3.557394	5.442606	2.282266	0.395266
209	1-11/16 - 1-3/4	1-1/2	9	13/25	2.5591	3.585616	5.414384	2.359075	0.398402
210	1-15/16 - 2	1-11/16 - 1-3/4	10	1/2	2.7645	4.095677	5.904323	2.674068	0.409568
211	2 2-1/4	1-15/16 - 2	10	9/16	3.092	4.090395	5.909605	2.657484	0.409039
212	2-1/4 - 2-7/16	2-3/16 - 2-1/4	10	5/8	3.385	4.076809	5.923191	2.615681	0.407681
214	2-11/16	2-7/16 - 2-1/2	10	11/16	3.775	4.089404	5.910596	2.654395	0.408940
215	2-15/16	2-11/16	11	11/16	4.085	4.574357	6.425643	2.886760	0.415851
216	–	2-15/16 - 3	11	3/4	4.33	4.547344	6.452656	2.800062	0.413395
218	–	3-7/16 - 3-1/2	11	27/32	4.9199	4.556764	6.443236	2.829748	0.414251

Table 2: CC Ball Bearing Parameters For Vibration Analysis (1-RPS)

Series	Shaft Size	# Balls	Diameter of Balls	Pitch Diameter	Outer Ring Frequency Hz	Inner Ring Frequency Hz	Ball Spin Frequency Hz	Cage Frequency Hz
205	15/16 - 1	9	5/16	1.516	3.572394	5.427606	2.322533	0.396933
206	1-1/8 - 1-3/16	9	3/8	1.811	3.568194	5.431806	2.311133	0.396466
207	1-1/4 - 1-7/16	9	7/16	2.106	3.565171	5.434829	2.302987	0.396130
209	1-11/16 - 1-3/4	9	1/2	2.362	3.547417	5.452583	2.256157	0.394157
210	1-15/16	10	1/2	2.756	4.092888	5.907112	2.665289	0.409289
211	2-3/16	10	9/16	3.051	4.078171	5.921829	2.619817	0.407817

Table 3: Type E, K, DI and TAF Tapered Roller Bearing Parameters For Vibration Analysis (1-RPS)

Bore Size	# Rollers Per Row	Mean Diameter of Rollers	Pitch Diameter	Contact Angle	Cup Frequency Hz	Cone Frequency Hz	Roller Spin Frequency Hz	Cage Frequency Hz
1-3/16 - 1-1/4	19	0.23	1.774	17.533	8.325540	10.674460	3.797580	0.438186
1-3/8 - 1-7/16	20	0.29	2.084	16.5	8.665750	11.334250	3.529138	0.433287
1-1/2 - 1-11/16	18	0.35	2.411	16	7.744100	10.255900	3.377216	0.430228
1-3/4 - 2	17	0.41	2.709	12.033	7.241814	9.758186	3.231274	0.425989
'2-3/16	19	0.41	3.014	13.283	8.242270	10.757730	3.611184	0.433804
2-1/4 - 2-1/2	21	0.41	3.337	14.5	9.251011	11.748989	4.011931	0.440524
2-11/16 - 3	24	0.41	3.9	16.733	10.791879	13.208121	4.707891	0.449662
3-3/16 - 3-1/2	26	0.46	4.78	18.167	11.811316	14.188684	5.152213	0.454281
3-15/16 - 4	26	0.51	5.12	17.567	11.765467	14.234533	4.974340	0.452518
4-7/16 - 4-1/2	25	0.59	5.727	18.983	11.282275	13.717725	4.807330	0.451291
4-15/16 - 5	25	0.68	6.568	17	11.262395	13.737605	4.782071	0.450496
5-7/16 - 6	32	0.67	8.444	17.75	14.790895	17.209105	6.265507	0.462215
6-7/16 - 7	27	0.93	9.791	19.167	12.288783	14.711217	5.221605	0.455140

Cup Frequency = N * RPM * (1 - (Bd * cos a / Pd)) / 2
Cone Frequency = N * RPM * (1 + (Bd * cos a / Pd)) / 2
Roller Spin Frequency = Pd * RPM * (1 - (Bd * cos a / Pd) ^2) / (2 * Bd)
Cage Frequency = RPM * (1 - (Bd * cos a / Pd)) / 2

Pd = Pitch Diameter
N = Number of rollers
Bd = Roller Diameter
a = Cup Angle (contact angle)

Table 4: Type C Tapered Roller Bearing Parameters For Vibration Analysis (1-RPS)

Bore Size	# Rollers Per Row	Mean Diameter of Rollers	Pitch Diameter	Contact Angle	Cup Frequency Hz	Cone Frequency Hz	Roller Spin Frequency Hz	Cage Frequency Hz
1-3/16 - 1-7/16	19	0.31	2.251	14.92	8.235801	10.764199	3.566352	0.433463
1-1/2 - 1-3/4	21	0.32	2.604	11.50	9.235581	11.764419	4.009748	0.439790
1-15/16	22	0.33	2.848	15.00	9.768852	12.231148	4.261097	0.444039
2 - 2-1/4	21	0.40	3.335	16.83	9.294571	11.705429	4.113807	0.442599
2-3/16 - 2-7/16	25	0.35	3.533	18.00	11.322284	13.677716	5.002340	0.452891
2-1/2 - 2-11/16	23	0.43	3.827	16.50	10.261076	12.738924	4.398352	0.446134
2-7/16 - 2-15/16	26	0.42	4.22	16.50	11.759442	14.240558	4.978061	0.452286
3 - 3-3/16	22	0.55	4.612	16.50	9.742225	12.257775	4.137910	0.442828
3-1/4 - 3-7/16	24	0.51	4.761	16.42	10.766982	13.233018	4.618367	0.448624
3-1/2 - 4	25	0.59	5.727	18.98	11.282253	13.717747	4.807328	0.451290
4-7/16 - 4-1/2	33	0.46	3.109	11.50	14.107710	18.892290	3.308310	0.427506
4-15/16 - 5	26	0.68	6.983	18.00	11.796028	14.203972	5.090519	0.453693

Cup Frequency = N * RPM * (1 - (Bd * cos a / Pd)) / 2
Cone Frequency = N * RPM * (1 + (Bd * cos a / Pd)) / 2
Roller Spin Frequency = Pd * RPM * (1 - (Bd * cos a / Pd) ^2) / (2 * Bd)
Cage Frequency = RPM * (1 - (Bd * cos a / Pd)) / 2

Pd = Pitch Diameter
N = Number of rollers
Bd = Roller Diameter
a = Cup Angle (contact angle)

Type 5: Special Duty Tapered Roller Bearing Parameters For Vibration Analysis (1-RPS)

Bore Size	# Rollers Per Row	Mean Diameter of Rollers	Pitch Diameter	Contact Angle	Cup Frequency Hz	Cone Frequency Hz	Roller Spin Frequency Hz	Cage Frequency Hz
1-3/8 - 1-1/2	16	0.40	2.563	11.54	6.776702	9.223298	3.128839	0.423544
1-9/16 - 1-3/4	18	0.40	2.854	12.72	7.769570	10.230430	3.500820	0.431643
1-7/8 - 2	19	0.41	3.014	13.28	8.242255	10.757745	3.611183	0.433803
2-1/8 - 2-1/4	22	0.41	3.475	15	9.746381	12.253619	4.182764	0.443017
2-3/8 - 2-1/2	20	0.46	3.695	14.38	8.794078	11.205922	3.957897	0.439704
2-5/8 - 3	22	0.51	4.336	15.07	9.750677	12.249323	4.196146	0.443213
3-3/16 - 3-1/2	23	0.59	5.22	17.42	10.259806	12.740194	4.372280	0.446079
3-11/16 - 4	23	0.68	5.942	15.50	10.231809	12.768191	4.315984	0.444861
4-7/16 - 4-1/2	26	0.68	6.983	18	11.796028	14.203972	5.090519	0.453693
4-15/16 - 5	24	0.81	7.537	16.42	10.762960	13.237040	4.603028	0.448457
5-7/16 - 6	24	0.93	9.123	17.33	10.832249	13.167751	4.858391	0.451344
6-1/2 - 7	29	0.93	10.19	19.23	13.250482	15.749518	5.437812	0.456913
7-15/16 - 8	27	1.12	11.471	12.42	12.212741	14.787259	5.074422	0.452324
8-1/2 - 10	41	0.87	13.979	16.40	19.276067	21.723933	8.005271	0.470148
11 - 12	37	1.20	16.061	12.50	17.150534	19.849466	6.656476	0.463528

Cup Frequency = N * RPM * (1 - (Bd * cos a / Pd)) / 2
Cone Frequency = N * RPM * (1 + (Bd * cos a / Pd)) / 2
Roller Spin Frequency = Pd * RPM * (1 - (Bd * cos a / Pd) ^2) / (2 * Bd)
Cage Frequency = RPM * (1 - (Bd * cos a / Pd)) / 2

Pd = Pitch Diameter
N = Number of rollers
Bd = Roller Diameter
a = Cup Angle (contact angle)

Table 6: All Steel Tapered Roller Bearing Parameters For Vibration Analysis (1-RPS)

Bore Size	# Rollers Per Row	Mean Diameter of Rollers	Pitch Diameter	Contact Angle	Cup Frequency Hz	Cone Frequency Hz	Roller Spin Frequency Hz	Cage Frequency Hz
2-11/16 - 3	27	0.36	4.114	15.50	12.361632	14.638368	5.673261	0.457838
3-1/4 - 3-1/2	26	0.51	5.120	17.57	11.765488	14.234512	4.974342	0.452519
3-15/16 - 4	33	0.48	5.814	12.50	15.170061	17.829939	6.016904	0.459699
4-7/16 - 4-1/2	29	0.60	6.503	12.92	13.196026	15.803974	5.375340	0.455035
4-15/16 - 5	32	0.61	7.355	12.50	14.704466	17.295534	5.989163	0.459515
5-7/16	27	0.84	8.272	12	12.159067	14.840933	4.875231	0.450336
5-15/16 - 6	26	0.85	8.323	12	11.701366	14.298634	4.847026	0.450053
6-7/16 - 7	32	0.81	9.748	12.50	14.702011	17.297989	5.977683	0.459438
7-1/2 - 8	27	1.12	11.471	12.42	12.212741	14.787259	5.074422	0.452324
9 - 10	32	1.28	14.026	12.03	14.571921	17.428079	5.435259	0.455373

Cup Frequency = N * RPM * (1 - (Bd * cos a / Pd)) / 2
Cone Frequency = N * RPM * (1 + (Bd * cos a / Pd)) / 2
Roller Spin Frequency = Pd * RPM * (1 - (Bd * cos a / Pd) ^2) / (2 * Bd)
Cage Frequency = RPM * (1 - (Bd * cos a / Pd)) / 2

Pd = Pitch Diameter
N = Number of rollers
Bd = Roller Diameter
a = Cup Angle (contact angle)

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Table 7: Spherical Roller Bearing Parameters for Vibration Analysis (1-RPS)

Basic Bearing Series	USAF/SAF-XT Bore Sizes (in)	S2000 Unisphere II Sizes (in)	Imperial Bore Sizes (in)	# Rollers Per Row	Diameter of Rollers	Pitch Diameter	Contact Angle	Outer Ring Frequency Hz	Inner Ring Frequency Hz	Spin Frequency Hz	Cage Frequency Hz
22207E1ASKM	–	–	–	15	0.3937	2.166	11.750	6.165339	8.834661	2.663713	0.411023
22208E1ASKM	–	1-3/8 - 1-1/2	1-1/8 - 1-1/2	15	0.4488	2.449	10.583	6.148942	8.851058	2.639849	0.409929
22209E1ASKM	1-7/16	1-11/16 - 1-3/4	1 5/8 - 1-3/4	17	0.4291	2.665	9.750	7.151157	9.848843	3.027139	0.420656
22210E1ASKM	1-11/16	1-15/16 - 2	1 7/8 - 2	18	0.4331	2.858	9.083	7.653247	10.346753	3.225588	0.425180
22211E1ASKM	1-15/16	2-3/16	2-3/16 - 2-1/4	19	0.4646	3.189	8.750	8.132069	10.867931	3.360826	0.428004
22213E1ASKM	2-3/16	2 -7/16	2-3/8 - 2-1/2	18	0.5827	3.795	9.083	7.635432	10.364568	3.181534	0.424191
22215E1ASKM	2 7/16 - 2-1/2	2-11/16 - 3	2-11/16 - 3	20	0.5748	4.197	8.250	8.644623	11.355377	3.583768	0.432231
22216E1ASKM	2-11/16 - 2-3/4	–	–	19	0.6535	4.48	8.167	8.128283	10.871717	3.356234	0.427804
22217E1ASKM	2-15/16 - 3	–	–	18	0.7323	4.764	8.417	7.631462	10.368538	3.177554	0.423970
22218E1ASKM	3-3 /16	3-7 /16	3-3/16 - 3-1 /2	18	0.7795	5.079	8.833	7.635107	10.364893	3.182930	0.424173
22220E1ASKM	3-7 /16 - 3-1 /2	3-1 5/16 - 4	3-1 1/16 - 4	18	0.878	5.705	9.000	7.631952	10.368048	3.173794	0.423997
22222E1ASKM	3-1 5/16 - 4	4-7/16	4-7/16 - 4-1/2	17	1.0197	6.287	9.417	7.139947	9.860053	3.003844	0.419997
22224E1ASKM	4-3/16	–	–	18	1.0472	6.819	9.417	7.636487	10.363513	3.181095	0.424249
22226E1ASKM	4-7/16 - 4-1/2	4-15/16	4-15/16 - 5	18	1.1181	7.307	9.750	7.642733	10.357267	3.193282	0.424596
22228E1ASKM	4-15/16 - 5	–	5-7/16 - 5-1/2	18	1.2165	7.933	9.583	7.639139	10.360861	3.186035	0.424397
22230E1ASKM	5-3/16	–	–	18	1.315	8.559	9.500	7.636209	10.363791	3.179646	0.424234
22232E1ASKM	5-7/16 - 5-1/2	–	5-15/16 - 6	18	1.4094	9.189	9.667	7.639189	10.360811	3.185371	0.424399
22234E1ASKM	5-15/16 - 6	–	–	17	1.5827	9.74	9.833	7.139085	9.860915	2.998143	0.419946
22236E1ASKM	6-7/16 - 6-1/2	–	6-7/16 - 7	18	1.5591	10.157	9.417	7.637116	10.362884	3.182632	0.424284
22238E1ASKM	6-15/16 - 7	–	–	20	1.4961	10.669	10.667	8.621944	11.378056	3.497892	0.431097
22240E1ASKM	7-3/16	–	–	19	1.6142	11.021	10.833	8.133372	10.866628	3.343119	0.428072
22244E1ASKM	7-1/2 - 8	–	–	19	1.8504	12.48	10.833	8.116546	10.883454	3.300728	0.427187
23048KMB	8-7/16 - 9	–	–	29	1.1417	12.008	9.333	13.139616	15.860384	5.212536	0.453090
23052KMB	9-7/16 - 9-1/2	–	–	27	1.378	13.228	9.667	12.113633	14.886367	4.749092	0.448653
23056KMB	9-15/16 - 10-1/2	–	–	28	1.378	13.976	9.333	12.637908	15.362092	5.023115	0.451354

Outer Ring Frequency = N * RPM * (1 - (Bd * cos a / Pd)) / 120
Inner Ring Frequency = N * RPM * (1 + (Bd * cos a / Pd)) / 120
Roller Spin Frequency = Pd * RPM * (1 - (Bd * cos a / Pd) ^2) / (120 * Bd)
Cage Frequency = RPM * (1 - (Bd * cos a / Pd)) / 120

Pd = Pitch Diameter
N = Number of rollers
Bd = Roller Diameter
a = Cup Angle (contact angle)

Table 8: Dodge USAF Air Handling Spherical Roller Bearing Parameters For Vibration Analysis (1-RPS)

Bore Size	Basic Bearing Series	# Rollers Per Row	Diameter of Rollers	Pitch Diameter	Contact Angle	Outer Ring Frequency Hz	Inner Ring Frequency Hz	Roller Spin Frequency Hz	Cage Frequency Hz
1-7/16	22209E1K	17	0.3937	2.5976	10.0000	7.231287	9.768713	3.225462	0.425370
1-11/16	22210E1K	19	0.3937	2.7976	9.2500	8.180471	10.819529	3.484413	0.430551
1-15/16	22211E1K	18	0.4528	3.0921	8.9200	7.698000	10.302000	3.342963	0.427667
2-3/16	22213E1K	19	0.5315	3.7110	9.2500	8.157076	10.842924	3.421302	0.429320
2-7/16 - 2-1/2	22215E1K	21	0.5315	4.1098	8.3300	9.156413	11.843587	3.802922	0.436020
2-11/16 - 2-3/4	22216E1K	20	0.5709	4.3638	8.2500	8.705275	11.294725	3.757794	0.435264
2-15/16 - 3	22217E1K	20	0.6299	4.6811	8.5000	8.669157	11.330843	3.649937	0.433458
3-3/16	22218E1K	20	0.6693	4.9602	8.8300	8.666651	11.333349	3.639636	0.433333
3-7/16 - 3-1/2	22220E1K	19	0.7677	5.5606	9.0000	8.204572	10.795428	3.554256	0.431820
3-15/16 - 4	22222E1K	19	0.8661	6.1559	9.4200	8.181428	10.818572	3.485342	0.430601
4-3/16	22224E1K	19	0.9252	6.6382	9.5800	8.194401	10.805599	3.519683	0.431284
4-7/16 - 4-1/2	22226E1K	19	0.9843	7.1358	9.9200	8.209178	10.790822	3.557887	0.432062
4-15/16 - 5	22228E1K	19	1.0630	7.7232	9.6700	8.211024	10.788976	3.565861	0.432159

Outer Ring Frequency = N * RPM * (1 - (Bd * cos a / Pd)) / 120
Inner Ring Frequency = N * RPM * (1 + (Bd * cos a / Pd)) / 120
Roller Spin Frequency = Pd * RPM * (1 - (Bd * cos a / Pd) ^2) / (120 * Bd)
Cage Frequency = RPM * (1 - (Bd * cos a / Pd)) / 120

Pd = Pitch Diameter
N = Number of rollers
Bd = Roller Diameter
a = Cup Angle (contact angle)

Courtesy of:
ENGINEERIN
SCREW CONVEYOR PARTS

Table 9: Split-Spherical Roller Bearing Parameters For Vibration Analysis

Bore Size	Basic Bearing Series	# Rollers Per Row	Diameter of Rollers	Pitch Diameter	Contact Angle	Outer Ring Frequency Hz	Inner Ring Frequency Hz	Roller Spin Frequency Hz	Cage Frequency Hz
2-3/16	22213SS	17	0.559	3.414	9.000	7.125120	9.874880	2.973241	0.419125
2-7/16	22215SS	18	0.551	3.748	9.083	7.693012	10.306988	3.328155	0.427390
2-11/16	22216SS	19	0.579	3.950	8.667	8.124082	10.875918	3.341232	0.427583
2-15/16	22217SS	20	0.575	4.153	8.250	8.630263	11.369737	3.544783	0.431513
3-3/16	22218SS	19	0.654	4.435	8.167	8.114365	10.885635	3.321078	0.427072
3-7/16	22220SS	18	0.780	5.079	8.833	7.635107	10.364893	3.182930	0.424173
3-15/16 - 4	22222SS	18	0.878	5.634	9.000	7.614712	10.385288	3.132415	0.423040
4-3/16	22224SS	17	1.110	6.203	9.417	6.999864	10.000136	2.707845	0.411757
4-7/16 - 4-1/2	22226SS	18	1.047	6.727	9.417	7.617839	10.382161	3.136146	0.423213
4-15/16	22228SS	18	1.118	7.202	9.750	7.622945	10.377055	3.145244	0.423497
5-3/16	22230SS	18	1.217	7.822	9.583	7.619828	10.380172	3.139355	0.423324
5-7/16	22232SS	18	1.315	8.442	9.500	7.617307	10.382693	3.134123	0.423184
5-15/16 - 6	22234SS	18	1.409	9.059	9.667	7.619661	10.380339	3.138182	0.423314
6-7/16 - 6-1/2	22236SS	18	1.409	9.059	9.667	7.619661	10.380339	3.138182	0.423314
6-15/16 - 7	22238SS	18	1.559	10.021	9.417	7.618619	10.381381	3.138004	0.423257
7-3/16	22240SS	16	1.579	10.716	9.417	6.837308	9.162692	3.322243	0.427332
7-1/2 - 8	22244SS	16	1.752	11.257	9.500	6.771984	9.228016	3.136916	0.423249
8-1/2 - 9	23048SS	20	1.307	11.189	8.083	8.843406	11.156594	4.222831	0.442170
9-1/2	23052SS	22	1.339	11.949	8.417	9.780985	12.219015	4.408432	0.444590
10	23056SS	20	1.539	13.175	8.667	8.844916	11.155084	4.222170	0.442246

Outer Ring Frequency = N * RPM * (1 - (Bd * cos a / Pd)) / 120
Inner Ring Frequency = N * RPM * (1 + (Bd * cos a / Pd)) / 120
Roller Spin Frequency = Pd * RPM * (1 - (Bd * cos a / Pd) ^2) / (120 * Bd)
Cage Frequency = RPM * (1 - (Bd * cos a / Pd)) / 120

Pd = Pitch Diameter
N = Number of rollers
Bd = Roller Diameter
a = Cup Angle (contact angle)

Table 10: USDAF Spherical Roller Bearing Parameters For Vibration Analysis (1-RPS)

Bore Size	Basic Bearing Series	# Rollers Per Row	Diameter of Rollers	Pitch Diameter	Contact Angle	Outer Ring Frequency Hz	Inner Ring Frequency Hz	Roller Spin Frequency Hz	Cage Frequency Hz
10-15/16 - 11	23060K	27	1.575	15.066	9.5	12.108065	14.891935	4.732011	0.448447
11-7/16 - 12	23064K	28	1.575	15.85	9.333	12.627248	15.372752	4.983368	0.450973
12-7/16 - 12-1/2	23068K	27	1.732	17.007	9.5	12.144010	14.855990	4.860109	0.449778
12-15/16 - 13-1/2	23072K	28	1.732	17.793	9.333	12.655257	15.344743	5.089157	0.451973
13-15/16 - 14	23076K	30	1.732	18.587	9	13.619458	16.380542	5.320311	0.453982
15	23080K	29	1.929	19.822	9.167	13.106938	15.893062	5.090472	0.451963
15-3/4	23084K	30	1.929	20.609	9	13.613287	16.386713	5.296232	0.453776
9-7/16 - 9-1/2	23152K	23	1.693	13.914	12.5	10.133894	12.866106	4.051285	0.440604
10-7/16 - 10-1/2	23156K	24	1.732	14.711	12	10.618053	13.381947	4.190502	0.442419
10-15/16 - 11	23160K	23	1.89	15.923	12.333	10.166494	12.833506	4.155793	0.442021
11-15/16 - 12	23164K	23	2.087	17.044	12.833	10.127024	12.872976	4.025170	0.440305
12-7/16 - 12-1/2	23168K	23	2.244	18.272	12.833	10.122953	12.877047	4.012925	0.440128
13-7/16 - 13-1/2	23172K	24	2.244	19.077	12.333	10.621032	13.378968	4.194537	0.442543
13-15/16 - 14	23176K	25	2.323	19.833	12	11.067894	13.932106	4.212801	0.442716
8-15/16 - 9	23248K	20	1.929	13.523	14	8.615913	11.384087	3.438035	0.430796
9-7/16 - 9-1/2	23252K	19	2.126	14.745	14	8.170935	10.829065	3.399907	0.430049
10-7/16 - 10-1/2	23256K	20	2.126	15.537	13.583	8.669925	11.330075	3.589401	0.433496
10-15/16 - 11	23260K	20	2.323	16.706	13.833	8.649811	11.350189	3.530230	0.432491
11-15/16 - 12	23264K	20	2.441	17.878	14	8.675192	11.324808	3.597751	0.433760
12-7/16 - 12-1/2	23268K	20	2.638	19.048	14.167	8.657198	11.342802	3.545213	0.432860

Outer Ring Frequency = N * RPM * (1 - (Bd * cos a / Pd)) / 120
Inner Ring Frequency = N * RPM * (1 + (Bd * cos a / Pd)) / 120
Roller Spin Frequency = Pd * RPM * (1 - (Bd * cos a / Pd) ^2) / (120 * Bd)
Cage Frequency = RPM * (1 - (Bd * cos a / Pd)) / 120

Pd = Pitch Diameter
N = Number of rollers
Bd = Roller Diameter
a = Cup Angle (contact angle)

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Mounted Bearings Life Adjustment Factor

1.1 General. For certain applications, it is desirable to specify life for reliability other than 90%. In such cases a life adjustment factor for reliability may be applied to the RATING LIFE. Section 1.2 discusses life adjustment factors for reliability

Some bearing steels; e.g., vacuum-melted steels, and improved processing techniques, permit manufacture of bearings which offer endurance greater than that calculated by the RATING LIFE formula. Section 1.3 recommends methods to incorporate life adjustment factors for bearing materials into the life formula.

Bearing life calculated according to the RATING LIFE formula assumes proper application conditions. If lubrication is not adequate, loading unusual, or temperatures extreme, the ability of the bearing to attain or exceed the RATING LIFE is seriously impaired. Section 1.4 contains some basic recommendations concerning the effect of unusual application conditions on bearing life.

1.2 Life Adjustment Factor For Reliability. Bearing life estimated in accordance with this standard is RATING LIFE; i.e., the life associated With 90% reliability or the life which 90% of a group of apparently identical bearings in a given application under similar conditions of load and speed will complete or exceed. While RATING LIFE has proven useful over a period of years as a criterion of performance, some applications require definition of life at reliabilities greater than 90%.

To determine bearing life with reliabilities other than 90% (as previously calculated in the Selection Procedure) the L_{10} must be adjusted by factor a_1, such that $L_n = a_1 \times L10$.

The life adjustment factors for reliability from Table 11 are recommended.

Table 11: Life Adjustment Factors For Reliability

Reliability %	Ln		Life Adjustment Factor for Reliability a1
90	L10	(Rating Life)	1
95	L5		0.62
96	L4		0.53
97	L3		0.44
98	L2		0.33
99	L1		0.21

1.3 Life Adjustment Factor For Material. For bearings, which incorporate improved materials and processing, the L_{10} (as previously calculated in the Selection Procedure) must be adjusted by factor a_2. Factor a_2 depends upon steel analysis, metallurgical processing, forming methods, heat treatment and manufacturing methods in general.

Bearings fabricated from consumable vacuum remelted steels and certain other special analysis steels have demonstrated extraordinarily long endurance. These steels are of exceptionally high quality, and bearings fabricated from these are usually considered special manufacture. As such, a_2 values will not be specified for such steels in this discussion. Generally, a_2 values for such steels can be obtained from the bearing manufacturer.

Courtesy of:
ENGINEERING Screw Conveyor Parts

1.4 Life Adjustment Factor For Application Conditions.

Application conditions which affect bearing life include:

1. Lubrication.
2. Load distribution (including effects of clearance, misalignment, housing, and shaft stiffness, type of loading and thermal gradients).
3. Temperature.
   Consideration of (1.2) and (1.3) above requires analytical and experimental techniques beyond the scope of this discussion, therefore, the user should consult the bearing manufacturer for evaluations and recommendations.

   In most bearing applications, lubrication serves to separate the rolling surfaces; i.e., rolling elements and raceways; to reduce retainer-rolling elements and retainer-land friction and sometimes to act as a coolant to remove frictional heat generated by the bearing.
   If all limitations and qualifications specified by this discussion are observed, then the life adjustment application factor for bearings which are adequately lubricated is 1; i.e., a_3=1.

Operating conditions where a_3 might be less than 1 include:

a) Exceptionally low values of Ndm (RPM times bore diameter in mm); e.g., Ndm 1000.

b) Lubricant viscosity less than 20.4 centistokes (100 SUS) at operating temperature.

c) Excessively high operating temperatures.

When a3 is less than 1, it may not be assumed that the deficiency in lubrication can be overcome by using an improved steel.

1.5 Factor Combinations. A fatigue life formula including the life adjustment factors is:

Ball Bearings:

$$Ln = a1 \times a2 \times a3 \left(\frac{C^*}{P}\right)^3 \times \frac{(16.667)}{RPM}$$

Tapered Roller Bearings:

$$Ln = a1 \times a2 \times a3 \left(\frac{C90^*}{P}\right)^{10/3} \times \frac{(1{,}500{,}000)}{RPM}$$

Spherical Roller Bearings:

$$Ln = a1 \times a2 \times a3 \left(\frac{C^*}{P}\right)^{10/3} \times \frac{(16.667)}{RPM}$$

Indiscriminate application of the life adjustment factors in this formula may lead to serious over-estimation of bearing endurance, since fatigue life is only one criterion for bearing selection.

Care must be exercised to select bearings which are of sufficient size for the application. Undersizing of shaft and housing structures by using bearings which appear adequate from a life standpoint could lead to misalignment and fitting problems which could invalidate the formulas in this discussion.

* C = Basic Load Rating computed in accordance with ABMA-ANSI Standards. C90 = C x .259

V-Belt Drive Formulas

V-belt tensioning In cases where tensioning of a drive effects belt pull and bearing loads, the following formulas may be used.

$$T_1 - T_2 = 33{,}000 \left(\frac{HP}{V}\right)$$

where:
T_1 = tight side tension, pounds
T_2 = slack side tension, pounds
HP = design horsepower
V = belt speed, feet per minute

$$T_1 + T_2 = 33{,}000\ (2.5\text{-}G) \left(\frac{HP}{GV}\right)$$

where:
T_1 = tight side tension, pounds
T_2 = slack side tension, pounds
HP = design horsepower
V = belt speed, feet per minute"
G = arc of contact correction factor*

$$T_1/T_2 = \frac{1}{1\text{-}0.8G} \quad (\text{Also } T1/T2 = e^{K\emptyset})$$

where:
T_1 = tight side tension, pounds
T_2 = slack side tension, pounds
G = arc of contact correction factor*
e = base of natural logarithms
K = .51230, a constant for V-belt drive design
Ø = arc of contact in radians

$$T_1 = 41{,}250\ (HP/GV)$$

where:
T_1 = tight side tension, pounds
HP = design horsepower
V = belt speed, feet per minute
G = arc of contact correction factor

$$T_2 = 33{,}000\ (1.25\text{-}G)\ (HP/GV)$$

where:
T_2 = slack side tension, pounds
HP = design horsepower
V = belt speed, feet per minute
G = arc of contact correction factor

Belt Speed

$$V = \frac{(PD)\ (RPM)}{3.82} = (PD)\ (RPM)\ (.262)$$

where:
V = belt speed, feet per minute
PD = pitch diameter of sheave or pulley
RPM = revolutions per minute of the same sheave or pulley

* See Table 12 at left

Table 12: Arc of Contact Correction Factor G

D-d / C	Small Sheave Arc of Contact	Factor G	D-d / C	Small Sheave Arc of Contact	Factor G
.00	180°	1.00	.80	133°	.87
.10	174°	.99	.90	127°	.85
.20	169°	.97	1.00	120°	.82
.30	163°	.96	1.10	130°	.80
.40	157°	.94	1.20	106°	.77
.50	151°	.93	1.30	99°	.73
.60	145°	.91	1.40	91°	.70
.70	139°	.89	1.50	83°	.65

D = Diam. of large sheave. d = Diam. of small sheave
C = Center distance

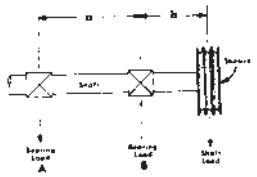
Table 13: Allowable Sheave Rim Speed

Sheave Material	Rim Speed in Feet per Minute
Cast Iron	6,500
Ductile Iron	8,000
Steel	10,000

Note: Above rim speed values are maximum for normal considerations. In some cases these values may be exceeded. Consult factory and include complete details of proposed application.

Bearing Load Calculations

To find actual bearing loads, it is necessary to know machine component weights and values of all other forces contributing to the load. Sometimes it becomes desirable to know the bearing load imposed by the V-belt drive alone. This can be done if you know bearing spacing with respect to the sheave center and shaft load and apply it to the following formulas:

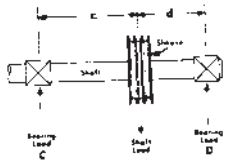


Overhung Sheave

$$\text{Load at B, lbs.} = \frac{\text{Shaft Load x } (a + b)}{a}$$

$$\text{Load at A, lbs} = \text{Shaft Load x } \frac{b}{a}$$

Where: a and b = Spacing, inches



Sheave Between Bearings

$$\text{Load at D, lbs.} = \frac{\text{Shaft Load x c}}{c + d}$$

$$\text{Load at C, lbs} = \frac{\text{Shaft Load x d}}{c + d}$$

Where: c and d = Spacing, inches

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Nominal V-Belt Cross Sections

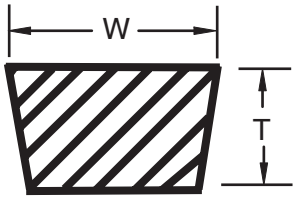


Table 14: Nominal V-Belt Cross Sections

Belt Section	Industry Standard Description	Width W, in Inches	Thickness T, in Inches
3L	FHP, Single	3/8	7/32
4L		1/2	5/16
5L		21/32	3/8
3V	Narrow	3/8	5/16
5V		5/8	17/32
8V		1	29/32
A	Classical Multiple	1/2	5/16
B		21/32	13/32
C		7/8	17/32
D		1-1/4	3/4

Pulley Dia. Inches	FPM												
	100	150	200	250	300	350	400	500	600	700	800	900	1000
6	64	95	127	159	191	223	254	318	382	445	509	573	636
8	48	72	95	119	143	167	191	239	286	334	382	429	477
10	38	57	76	95	115	134	153	191	229	267	305	344	382
12	32	48	64	80	95	111	127	159	191	223	254	286	318
14	27	41	55	68	82	95	109	136	164	191	218	245	273
16	24	36	48	60	72	83	95	119	143	167	191	215	239
18	21	32	42	53	64	74	85	106	127	148	170	191	212
20	19	29	38	48	57	67	76	95	115	134	153	172	191
24	16	24	32	40	48	56	64	80	95	111	127	143	159
30	13	19	25	32	38	45	51	64	76	89	102	115	127
36	11	16	21	27	32	37	42	53	64	74	85	95	106
42	9	14	18	23	27	32	36	45	55	64	73	82	91
48	8	12	16	20	24	28	32	40	48	56	64	72	80
54	7	11	14	18	21	25	28	35	42	49	57	64	71
60	6	10	13	16	19	22	25	32	38	45	51	57	64

For values not shown use formula below:
SFM =.2618 x D x RPM
SFM = Surface feet Per Minute
D = Pulley Diameter, Inches
RPM = Revolutions per Minute

Table 15: Material Characteristics

MATERIAL	DENSITY (LB/fT3)	ANGLE OF REPOSE (DEG)	RECOMMENDED MAXIMUM INCLINATION
Alfalfa, Ground	16	45°	–
Alum, Lumpy	50 - 60	35°	–
Alum, Pulverized	45 - 50	35°	–
Alumina	60	30°	10-12
Aluminum Oxide	70 - 120	30°	–
Ammonium Sulphate	45 - 60	45°	–
Asbestos, Shredded	20 - 25	45°	–
Ashes, Dry	35 - 40	45°	–
Ashes, Wet	45 - 50	45°	–
Ashes, Soft Coal	35 - 45	40°	–
Asphalt, Crushed	45	35°	–
Bagasse	7.50	45°	–
Bakelite, Powder	30 - 40	45°	–
Baking Powder	40 - 50	35°	–
Bark, Wood Refuse	10 - 20	45°	27
Barley	38	25°	10-15
Basalt	80 - 120	25°	–
Bauxite, Crushed	75 - 85	35°	20
Beans, Castor, Whole	30 - 45	25°	8-10
Beans, Cocoa	30 - 45	35°	–
Beans, Navy	50	25°	–
Beans, Whole	45	45°	–
Bentonite, Crude	35 - 40	45°	–
Bentonite, Fine	50 - 60	45°	–
Bones, Pulverized	50 - 60	45°	–
Borax, Fine	50 - 55	35°	–
Borax Coarse	60 - 70	35°	–
Bran	16	35°	–
Brewers Grain, Dry	25 - 35	45°	–
Brewers Grain, Wet	55 - 60	45°	–
Buck Wheat	40	25°	11-13
Calcium, Carbide	70 - 80	35°	–
Carbon Black, Pellets	25	25°	–
Carbon Black, Powder	5	35°	–
Cast Iron Chips	100 -120	45°	–
Cement, Clinker	75 - 90	35°	–
Cement, Portland	80 -100	35°	20-23
Chalk, Fine	65 - 75	45°	–
Chalk, Lumpy	80 - 95	45°	–
Charcoal, Wood	15 - 30	35°	20-25
Chromium Ore	125 - 140	35°	–
Cinders, Coal	40	35°	20
Clay, Dry, Fine	100 - 120	35°	20-22
Clay, Dry, Lumpy	60 - 75	35°	18-20
Coal, Anthracite, Coarse	60 - 70	35°	18
Coal, Anthracite, Loose	50 - 60	30°	16
Coal, Bituminous, Coarse	50 - 60	35°	18
Coal, Bituminous, Loose	45 - 50	35°	16
Cocoa Nibs	35 - 40	35°	–
Coconut, Shredded	20 - 25	45°	–
Coffee, Fresh Beans	30 - 40	35°	10-15
Coffee, Roasted Beans	22 - 30	25°	–
Coke, Loose	23 - 32	35°	18
Coke Pulverized	25 - 35	45°	20-22
Coke, Petroleum Calcinated	35 - 45	35°	20
Concrete, Cinder	112	0°	12-30
Concrete, Gravel & Sand	150	0°	–
Copper Ore	120 - 150	35°	20
Copper Sulfate	75 - 85	30°	17
Cork, Ground	5 - 15	45°	–
Corn, On Cob	45	0°	–

MATERIAL	DENSITY (LB/fT3)	ANGLE OF REPOSE (DEG)	RECOMMENDED MAXIMUM INCLINATION
Corn, Shelled	45	25°	10
Corn Sugar	30	35°	–
Corn Grits	40 - 45	35°	–
Cornmeal	32- 40	35°	22
Cottonseed, Dry, De-Linted	35	35°	16
Cottonseed, Dry, Not De-Linted	18- 25	45°	19
Cottonseed, Cake, Lumpy	40- 45	35°	–
Cottonseed, Hulls	12	45°	–
Cottonseed, Meal	35- 40	35°	22
Cottonseed, Meats	40	35°	–
Cryolite	90-110	35°	–
Cullet	80-120	35°	20
Diatomaceous Earth	11- 14	35°	–
Dolomite, Lumpy	90-100	35°	22
Dolomite, Pulverized	46	40°	–
Earth, Dry"	70- 80	35°	20
Earth, Moist	75-110	40°	23
Earth, Fullers Dry	30- 35	23°	20
Emery	225	25°	–
Epsom Salt	40- 50	35°	–
Feldspar, Lumps	70-100	35°	17
Feldspar, Dust	80-100	40°	–
Fish, Meal	35- 40	40°	–
Fish, Scrap	40- 50	0°	–
Flaxseed, Whole	45	25°	12
Flaxseed, Meal	25	35°	–
Flour, Wheat	35- 40	45°	21
Flue Dust, Dry	30- 40	20°	–
Fluorspar, Dust	85- 95	45°	–
Fluorspar, Lumps	80-110	45°	–
Foundry, Refuse	60- 80	35°	–
Foundry Sand, Loose	80- 90	35°	–
Foundry Sand, Rammed	100-110	0°	–
Galena	250	35°	–
Garbage, Average	30	25°	–
Glass, Batch Fiber	45 - 55	10°	–
Glass, Batch Wool	80-100	35°	20-22
Glass, Broken	80-100	10°	–
Glue, Animal, Flaked	35	25°	–
Glue, Vegetable, Powdered	40	35°	–
Gluten, Meal	39	35°	–
Granite, Lumps	150 -170	25°	–
Graphite, Flakes	40	35°	–
Graphite, Powder	30	25°	–
Graphite, Ore	65 - 75	35°	–
Grass Seed	10	35°	–
Gravel, Dry	90-100	35°	15-17
Gravel, Wet	100-120	35°	–
Gypsum, Lumps	90-100	35°	15
Gypsum, Ground	75- 80	35°	21
Hay, Loose	5	0°	–
Hay, Pressed	25	0°	–
Hominy	35- 50	35°	–
Hops, Spent, Dry	25- 35	45°	–
Hops, Spent, Wet	55- 60	45°	–
Ice, Crushed	35- 40	20-	–
Ilmenite Ore	140-160	35°	–
Iron Ore	120-180	35°	18-20
Iron Ore, Pellets	120-140	35°	13-15
Iron Sulphate	50- 75	35°	–
Iron Sulfide	120-140	35°	–

Table 16: Material Characteristics

MATERIAL	DENSITY (LB/fT3)	ANGLE OF REPOSE (DEG)	RECOMMENDED MAXIMUM INCLINATION
Kaolin, Clay	60	35°	19
Lactose	30	35°	–
Lead Ore, Crushed	180 - 270	30°	–
Lead Oxides	60 - 150	40°	–
Lead Sulfate	170 - 190	45°	–
Lead Sulfide	240 - 260	35°	–
Lignite, Air Dried	45 - 55	35°	–
Lime, Ground	60 - 65	40°	23
Lime, Hydrated	40	40°	21
Lime, Pebble	30 - 40	40°	17
Limestone, Loose	80 - 100	35°	20
Limestone, Pulverized	85 - 90	45°	18
Linseed, Whole	45 - 50	25°	–
Linseed, Meal	30 - 40	35°	20
Magnesium Chloride	30 - 35	40°	–
Magnesium Sulfate	40 - 60	35°	–
Malt, Dry	25 - 30	30°	–
Malt, Wet	60 - 65	45°	–
Malt, Meal	35 - 40	35°	–
Manganese Ore	125 - 140	40°	–
Manganese Oxide	120	35°	–
Manganese Sulfate	70	35°	–
Manure	25	0°	–
Marble, Crushed	80 - 95	35°	–
Marl	80	35°	–
Mica, Flakes	20	20°	–
Mica, Ground	15	35°	23
Milk, Dried, Flaked	5	35°	–
Milk, Malted	25 - 35	45°	–
Milk, Powdered	20 - 30	40°	–
Milo Maize	55 - 60	35°	–
Molybdenum Ore	100 - 110	40°	–
Mortar, Wet	150	0°	–
Niacin	35	35°	–
Nickel-Cobalt Sulfate Ore	80 - 150	35°	–
Oats	25 - 35	25°	10
Oats, Rolled	20	35°	–
Oil Cake	50	45°	–
Oxalic Acid Crystals	60	35°	–
Oyster Shells, Ground	50 - 60	35°	–
Oyster Shells, Whole	80	35°	–
Paper Pulp Stock	40 - 60	20°	–
Peanuts, Shelled	35 - 45	35°	–
Peanuts, Not Shelled	15 - 20	35°	–
Peas, Dried	45 - 50	0°	–
Phosphate, Fertilizer	50 - 60	35°	30
Phosphate, Rock, Crushed	60 - 100	35°	25
Potash	70 - 80	30°	–
Potassium Chloride	120 - 130	35°	–
Potassium Nitrate	75 - 80	25°	–
Potassium Sulfate	45	45°	–
Potatoes, White"	48	0°	–
Pumice, Ground	40 - 45	45°	–
Pyrites, Lumps	135 - 145	25°	–
Pyrites, Pellets	120 - 130	35°	–
Quartz, Lumps	95 - 100	25°	–
Quartz, Sand	70 - 80	25°	–
Rice, Hulled	45 - 50	20°	8
Rice, Rough	35	35°	–
Rice, Grits	40 - 45	35°	–
Rock, Crushed	100 - 150	30°	–
Rubber, Pellets	50 - 55	35°	22
Rubber, Ground Scrap	25 - 35	45°	18
Rye	42 - 45	25°	8
Rye Meal	35 - 40	20°	–
Salt Cake	80 - 95	30°	21
Salt, Coarse"	45 - 55	35°	18-22
Salt, Fine"	70 - 80	35°	11
Sand, Wet	110 - 130	45°	20-22
Sand, Dry	90 - 110	35°	16-18
Sand, Loose, Foundry	80 - 100	35°	22
Sand, Foundry, Rammed	100 - 110	0°	24
Sandstone	80 - 90	35°	–
Sawdust	10 - 25	30°	22
Scale, Rolling Mill	125 - 160	45°	–
Sewage Sludge, Dry	45 - 55	35°	–
Sewage Sludge, Wet	50 - 60	35°	–
Shale, Broken	90 - 100	25°	–
Shale, Crushed	85 - 90	40°	22
Silica Gel, Dry	45	35°	–
Slag, Blast Furnace	80 - 90	25°	10
Slag, Granular, Dry	60 - 65	25°	13-16
Slag, Granular, Wet	90 - 100	45°	20-22
Slate, Ground	80 - 90	30°	15
Slate, Lumps	85 - 95	0°	–
Snow, Compacted	15 - 50	0°	–
Soap	10 - 25	35°	–
Soda Ash, Briquettes	50	20°	7
Soda Ash, Heavy	55 - 65	30°	19
Soda Ash, Light	20 - 35	35°	22
Sodium Aluminum, Ground	72	35°	–
Sodium Nitrate, Ground	70 - 80	24°	11
Sodium Phosphate	50 - 65	35°	–
Soybeans, Cracked	30 - 40	35°	15-18
Soybeans, Whole"	45 - 50	25°	12-16
Starch, Powdered	25 - 45	25°	12
Steel, Chips	100 - 150	35°	18
Steel, Turnings	60 - 120	45°	–
Sugar, Cane, Raw	55 - 65	45°	–
Sugar. Granulated, Dry	50 - 55	35°	–
Sugar, Granulated, Wet	55 - 65	40°	–
Sugar Cane, Knifed	15 - 18	45°	–
Sulphur, Lumps	80 - 85	35°	–
Sulphur, Dust	50 - 70	35°	–
Saconite, Pellets	120 - 140	35°	13-15
Salc, Granulated	50 - 70	20°	–
Titanium Dioxide	140	35°	–
Titanium Sponge	60 - 70	45°	–
Tobacco, Leaves	14	45°	–
Tobacco, Scraps	15 - 25	45°	–
Tobacco, Stems	15	45°	–
Traprock, Crushed	95 - 110	35°	–
Traprock, Lumps	100 - 110	35°	–
Turf	20 - 30	0°	–
Walnut, Shells	35 - 45	35°	–
Wheat	48	25°	12
Wheat, Cracked	40 - 45	35°	–
Wheat Germ, Dry	20 - 30	25°	27
Wood Chips	10 - 30	45°	22
Zinc Ore, Granular	160	35°	–
Zinc Oxide	10 - 35	45°	–

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Shafting

Table 17: Typical Commercial Shaft Tolerances

Shaft Size	Plus	Minus
Up to 1-1/2"	.000	.002
Over 1-1/2 to 2-1/2"	.000	.003
Over 2-1/2 to 4"	.000	.004
Over 4 to 6"	.000	.005
Over 6 to 8"	.000	.006
Over 8 to 9"	.000	.007
Over 9"	.000	.008

Table 18: Shaft Tolerances

Shaft Size	Tolerance, Inches
Up to 1-1/2"	+.0000 -.0005"
1-5/8 to 4"	+.000 -.001"
4-7/16 to 6"	+.000 -.0015"
6-7/16 to 8"	+.000 -.002"

Table 18 lists the recommended tolerances for all setscrew locking, eccentric locking and D-LOK locking ball and roller bearings

Table 19: Shaft Tolerances

Shaft Size	Tolerance, Inches
Up to 1-1/2"	+.000 -.002"
1-9/16 to 2-1/2"	+.000 -.003"
2-5/8 to 4"	+.000 -.004"
4-3/16 to 6"	+.000 -.005"
6-7/16" and above	+.000 -.006"

Table 19 list the recommended tolerances for all tapered adapter sleeve ball and roller bearings

Standard Shafting-Table 17 indicates standard shafting is cold drawn in the smaller sizes and turned and polished in the larger diameters. It has a smooth surface, is commercially straight and is readily machinable; suitable and recommended for general power transmission and material handling service.

Special Shafting-While standard shafting is suitable for most installations, special shafting is sometimes required for certain chemical, temperature or physical requirements. Such materials as high carbon steel, alloy steel, stainless steel, brass, Monel metal, etc., can be furnished plain or heat treated. Stepped, flanged, hollow or other special forms are available.

Special shafting should be avoided in favor of standard shafting wherever possible because special shafting is usually considerably more expensive and requires a greater length of time to obtain, which is an especially important consideration should quick replacement ever become necessary.

Ordering Shafting-Standard shafting can be obtained from most supply houses and dealers who handle power transmission material.

Turning Down Shaft Ends-When necessary to turn down shaft ends, use as large a fillet as possible to keep the stress concentration to a minimum. The radius of this fillet should preferably be not less than the difference in the two diameters joined by the fillet. The fillet should be finished and polished as smoothly as possible to avoid scratches which might start cracks and lead to failure of the shaft by fatigue.

Selection of Shaft Diameters

Tables 20 - 23 inclusive can be used to find approximate shaft diameter for various service conditions For greater accuracy use chart under heading "Combined Torsion and Bending of Standard Shafts" (B16-19).

Tables and chart are based upon a safe shear stress of 6,000 pounds per square inch for standard keyseated shafting. Be generous in the selection of shaft diameters as liberal diameters not only reduce deflection and vibration but also generally increase bearing life.

When necessary to use other than standard shafting, find the required diameter for standard shafting as outlined above and multiply by proper factor shown in Table 24, under heading "Factors for Shafting Other than Standard Shafting, "(B16-18).

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Selection of Shaft Diameters (Cont'd)

Table 20: No Bending Moment (Shafts without pulleys, sprockets or gears - Torsion only)

Shaft Size	Horse Power at Various Revolutions per Minute																		
	25	50	75	100	125	150	175	200	225	250	275	300	350	400	500	600	700	800	900
15/16	0.30	0.70	1.10	1.50	1.90	2.30	2.60	3	3.40	3.80	4.20	4.60	5.30	6.10	7.70	9.20	10.70	12.30	13.80
1-3/16	0.70	1.50	2.30	3.10	3.90	4.60	5.40	6.20	7	7.80	8.60	9.30	10.90	12.50	15.60	18.70	21.90	25	28.10
1-7/16	1.30	2.70	4.10	5.50	6.90	8.30	9.70	11.10	12.40	13.80	15.20	16.60	19.40	22.20	27.70	33.30	38.80	44.40	49.90
1-11/16	2.20	4.40	6.60	8.90	11.20	13.40	15.70	17.90	20.20	22.40	24.70	26.90	31.40	35.90	44.90	53.80	62.80	71.80	80.80
1-15/16	3.30	6.70	10.10	13.50	16.90	20.30	23.70	27.10	30.50	33.90	37.30	40.70	47.50	54.30	67.90	81.50	95.10	108	122
2-3/16	4.90	9.80	14.60	19.50	24.40	29.30	34.20	39.10	44	48.90	53.80	58.60	68.40	78.20	97.80	117	136	156	176
2-7/16	6.70	13.50	20.20	27	33.80	40.60	47.30	54.10	60.90	67.60	74.40	81.20	94.70	108	135	162	189	216	243
2-11/16	9	18.10	27.10	36.20	45.30	54.40	63.40	72.50	81.60	90.70	99.70	108	126	145	181	217	253	290	326
2-15/16	11.80	23.60	35.40	47.30	59.20	71	82.90	94.70	106	118	130	142	165	189	236	284	331	379	426
3-7/16	19	37.90	57	75.90	94.90	113	132	151	170	189	208	227	265	303	379	455	531	607	683
3-15/16	28.50	57	85.50	114	142	171	199	228	256	285	313	342	399	456	570	684	798	912	1026
4-7/16	40.80	81.60	122	163	204	245	286	327	367	408	449	490	572	653	816	980	1143	1306	1470

Table 21: Limited Bending Moment (Pulleys, sprockets or gears near bearings. Ordinary line shafts.)

Shaft Size	Horse Power at Various Revolutions per Minute																		
	25	50	75	100	125	150	175	200	225	250	275	300	350	400	500	600	700	800	900
15/16	0.20	0.50	0.70	1	1.20	1.50	1.70	2	2.30	2.50	2.80	3	3.50	4.10	5.10	6.10	7.10	8.20	9.20
1-3/16	0.50	1	1.50	2	2.60	3.10	3.60	4.10	4.70	5.20	5.70	6.20	7.30	8.30	10.40	12.50	14.60	16.70	18.80
1-7/16	0.90	1.80	2.70	3.70	4.60	5.50	6.40	7.40	8.30	9.20	10.10	11.10	12.90	14.80	18.50	22.20	25.90	29.60	33.30
1-11/6	1.40	2.90	4.30	5.90	7.40	8.90	10.40	11.90	13.40	14.90	16.40	17.90	20.90	23.90	29.90	35.90	41.90	47.90	53.90
1-15/16	2.20	4.50	6.70	9	11.30	13.60	15.80	18.10	20.40	22.60	24.90	27.20	31.70	36.20	45.30	54.40	63.40	72.50	81.60
2-3/16	3.20	6.50	9.70	13	16.30	19.50	22.80	26.10	29.30	32.60	35.80	39.10	45.60	52.20	65.20	78.30	91.30	104	117
2-7/16	4.50	9	13.50	18	22.50	27	31.60	36.10	40.60	45.10	49.60	54.10	63.20	72.20	90.20	108	126	144	162
2-11/16	6	12.10	18.10	24.20	30.20	36.30	42.30	48.40	54.40	60.50	66.50	72.60	84.70	96.80	121	145	169	193	217
2-15/16	7.90	15.80	23.70	31.60	39.50	47.40	55.30	63.20	71.10	79	86.90	94.80	110	126	158	189	221	252	284
3-7/16	12.60	25.30	37.90	50.60	63.30	75.90	88.60	101	113	126	139	151	177	202	253	303	354	405	455
3-15/16	19	38	57	76.10	94.10	114	133	152	171	190	209	228	266	304	380	456	532	608	685
4-7/16	27	54	81	108	136	163	190	217	245	272	299	326	381	435	544	653	762	871	980
4-15/16	37	75	112	150	187	225	262	300	337	375	412	450	525	600	750	900	1050	1200	1350
5-7/16	50	100	150	200	250	300	350	400	451	501	551	601	701	801	1002	1202	1403	1603	1804
5-15/16	65	130	195	261	326	391	456	522	587	652	717	783	913	1044	1305	1566	1827	2088	2349
6-1/2	85	171	256	342	427	513	598	684	769	855	940	1026	1197	1368	1710	2052	2394	2736	3078

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Selection of Shaft Diameters (Cont'd)

Table 22: Heavy Bending Moment. (Use for main or important shafts.)

Shaft Size	Horse Power at Various Revolutions per Minute																		
	25	50	75	100	125	150	175	200	225	250	275	300	350	400	500	600	700	800	900
1-11/16	0.80	1.70	2.50	3.50	4.40	5.30	6.20	7.10	8	8.90	9.80	10.70	12.50	14.30	17.90	21.50	25.10	28.70	32.30
1-15/16	1.30	2.70	4	5.40	6.70	8.10	9.50	10.80	12.20	13.50	14.90	16.30	19	21.70	27.10	32.60	38	43.50	48.90
2-3/16	1.90	3.90	5.80	7.80	9.70	11.70	13.70	15.60	17.60	19.50	21.50	23.40	27.40	31.30	39.10	46.90	54.80	62.60	70.40
2-7/16	2.70	5.40	8.10	10.80	13.50	16.20	18.90	21.60	24.30	27	29.70	32.40	37.90	43.30	54.10	64.90	75.80	86.60	97.40
2-11/16	3.60	7.20	10.80	14.50	18.10	21.70	25.40	29	32.60	36.20	39.90	43.50	50.80	58	72.50	87.10	101	116	130
2-15/16	4.70	9.40	14.10	18.90	23.60	28.40	33.10	37.90	42.60	47.30	52.10	56.80	66.30	75.80	94.70	113	132	151	170
3-7/16	7.50	15.10	22.60	30.30	37.90	45.50	53.10	60.70	68.30	75.90	83.50	91.10	106	121	151	182	212	243	273
3-15/16	11.40	22.80	34.20	45.60	57	68.40	79.90	91.30	102	114	125	136	159	182	228	273	319	365	410
4-7/16	16.30	32.60	48.90	65.30	81.60	98	114	130	147	163	179	196	228	261	326	392	457	522	588
4-15/16	22.50	45	67.50	90	112	135	157	180	202	225	247	270	315	360	450	540	630	720	810
5-7/16	30	60	90	120	150	180	210	240	270	300	330	360	420	480	601	721	841	961	1082
5-15/16	39	78	117	156	195	234	273	313	352	391	430	469	547	626	782	939	1095	1252	1409
6-1/2	51	102	153	205	256	308	359	410	462	513	564	616	718	821	1027	1232	1437	1643	1848
7	64	128	192	256	320	384	448	513	577	641	705	769	897	1026	1282	1539	1795	2052	2308
7-1/2	78.50	157	235	315	394	473	552	631	709	788	867	946	1104	1262	1577	1893	2208	2524	2839
8	95.50	191	286	382	478	574	670	765	861	957	1053	1148	1340	1531	1914	2297	2680	3063	3446
8-1/2	114	229	343	459	574	688	803	918	1033	1148	1263	1377	1607	1837	2296	2755	3215	3674	4133
9	136	272	408	545	681	817	954	1090	1226	1363	1499	1635	1908	2181	2726	3271	3816	4362	4907
9-1/2	160	320	480	641	801	961	1122	1282	1442	1603	1763	1923	2244	2565	3206	3847	4488	5130	5771
10	186	373	559	747	934	1121	1308	1495	1682	1869	2056	2243	2617	2991	3739	4487	5235	5983	6731

Table 23: Severe Conditions (Heavy shock loads. Excessively tight belts, long clutch sleeves.)

Shaft Size	Horse Power at Various Revolutions per Minute																		
	25	50	75	100	125	150	175	200	225	250	275	300	350	400	500	600	700	800	900
1-11/16	0.4	0.8	1.2	1.7	2.2	2.6	3.1	3.5	4	4.4	4.9	5.3	6.2	7.1	8.9	10.7	12.5	14.3	16.10
1-15/16	0.6	1.3	2	2.7	3.3	4	4.7	5.4	6.1	6.7	7.4	8.1	9.5	10.8	13.5	16.3	19	21.7	24.40
2-3/16	0.90	1.90	2.90	3.90	4.80	5.80	6.80	7.80	8.80	9.70	10.70	11.70	13.70	15.60	19.50	23.40	27.40	31.30	35.20
2-7/16	1.30	2.70	4	5.40	6.70	8.10	9.40	10.80	12.10	13.50	14.80	16.20	18.90	21.60	27	32.40	37.90	43.30	48.70
2-11/16	1.80	3.60	5.40	7.20	9	10.80	12.70	14.50	16.30	18.10	19.90	21.70	25.40	29	36.20	43.50	50.50	58	65
2-15/16	2.30	4.70	7	9.40	11.80	14.20	16.50	18.90	21.30	23.60	26	28.40	33.10	37.90	47.30	56.50	66	75.50	85
3-7/16	3.70	7.50	11.30	15.1	18.90	22.70	26.50	30.30	34.10	37.90	41.70	45.50	53	60.50	75.50	91	106	121	136
3-15/16	5.70	11.40	17.10	22.8	28.50	34.20	39.90	45.60	51	57	62.50	68	79.50	91	114	136	159	182	205
4-7/16	8.10	16.30	24.40	32.6	40.80	49	57	65	73.50	81.50	89.50	98	114	130	163	196	228	261	294
4-15/16	11.20	22.50	33.70	45	56	67.50	78.50	90	101	112	123	135	157	180	225	270	315	360	405
5-7/16	15	30	45	60	75	90	105	120	135	150	165	180	210	240	300	360	420	480	541
5-15/16	19.50	39	58.50	78	97.10	117	136	156	171	195	215	234	273	313	391	469	547	626	704
6-1/2	25.50	51	76.50	102.5	128	154	179	205	231	256	282	308	359	410	513	616	718	821	924
7	32	64.90	96	128	160	192	224	256	288	320	352	384	448	513	641	769	897	1026	1154
7-1/2	39.20	78.50	117	157	197	236	276	315	354	394	433	473	552	631	788	946	1104	1262	1419
8	47.70	95.50	143	191	239	287	335	382	430	478	526	574	670	765	957	1148	1340	1531	1723
8-1/2	57	114	171	229	287	344	401	459	516	574	631	688	803	918	1148	1377	1607	1837	2066
9	68	136	204	272	340	408	477	545	613	681	749	817	954	1090	1363	1635	1908	2181	2453
9-1/2	80	160	240	320	400	480	561	641	721	801	881	961	1122	1282	1603	1923	2244	2565	2885
10	93	186	279	373	467	560	654	747	841	934	1028	1121	1308	1495	1869	2243	2617	2991	3365

Caution: Be generous in the selection of shaft diameters as liberal diameters not only reduce deflection and vibration but also generally increase bearing life. See notes on next page.

Selection of Shaft Diameters (Cont'd)

Shaft Stiffness, Shaft Deflection-Standard shafting of adequate strength usually has a sufficiently large diameter to prevent excessive deflection in ordinary installations. It is wise to select shafting of generous diameter, as the greater the diameter, the greater the stiffness. A high tensile strength alloy shaft, although stronger, is no stiffer than a standard shaft of the same diameter.

While it is sometimes possible to use an alloy shaft of less diameter than a standard shaft of equal strength, this practice is usually inadvisable, as the deflection is increased.

Shafts carrying medium or long clutch sleeves should be especially generous.

High Speed Shafts - High speed sometimes causes shaft whipping or vibration. This can be prevented by making the shaft diameter generous and the distance between bearing centers short.

Location of the bearings close to wheels and couplings is advisable whether the shaft is transmitting heavy or light loads.

The use of high tensile strength alloy shafting instead of standard shafting is of no help in preventing vibration as this will not improve the stiffness nor deflection characteristics of the shaft.

Stepped Shafts - For a heavily loaded wheel, a shaft with a boss or enlarged section under the wheel and turned to a smaller diameter at the bearings often provides the most economical installation. The two different diameters should be joined by a very generous fillet, otherwise a dangerous concentration of stress will occur at the fillet. See heading -"Turning Down Shaft Ends." (B16-15).

Shaft Keyseats - Plain keyseats are preferable to round end keyseats in respect to causing the least concentration of stress. However, round end keyseats are often used because of design and assembly requirements. Ends left by the milling cutter should not project into babbitted or bronze bushed bearing, but may project under the sleeve of any Dodge anti-friction bearing.

Shaft diameters obtained from the tables or chart allow for the use of keyseats.

Shaft Bearings - On ordinary line shafting, bearings are commonly spaced about eight feet centers. On large diameter shafts, the spacing may be somewhat greater.

Wheels and clutches should be located near bearings to avoid dangerous bending, deflection and vibration.

Bearings should be mounted on adequate supports so that accurate alignment may be maintained. Shaft misalignment may cause shaft or bearing failure.

Shaft Couplings - Where a rigid coupling is used, it is preferable to have a bearing fairly close. Where a cutoff coupling or a flexible coupling is used, locate bearings close to each end of the coupling.

Expansion of Shafting - Where changes in the length of the shaft due to changes in temperature are to be expected and the bearings are mounted on supporting structures other than steel, consideration must be given to expansion. For more detailed information see B16-20, headed: "Expansion of Shafting."

Factors for Shafting Other Than Standard Shafting

When it is necessary to use other than standard shafting, multiply required diameter for standard shafting as found in the tables or chart by proper factor from Table 24 below.

Standard keyseated shafting, using a safe shear stress of 6,000 PSI is the basis of shafting tables and chart. For safe shear stress of other materials, use 1/10 of nominal ultimate tensile strength. For example, use 8,000 for C1045 and 10,000 for 4140 keyseated shafting. When definite physical specifications are known the least of 13.5% of minimum ultimate tensile strength and 22.5% of minimum elastic limit in tension may be used for keyseated shafting; 18% and 30% respectively if not keyseated.

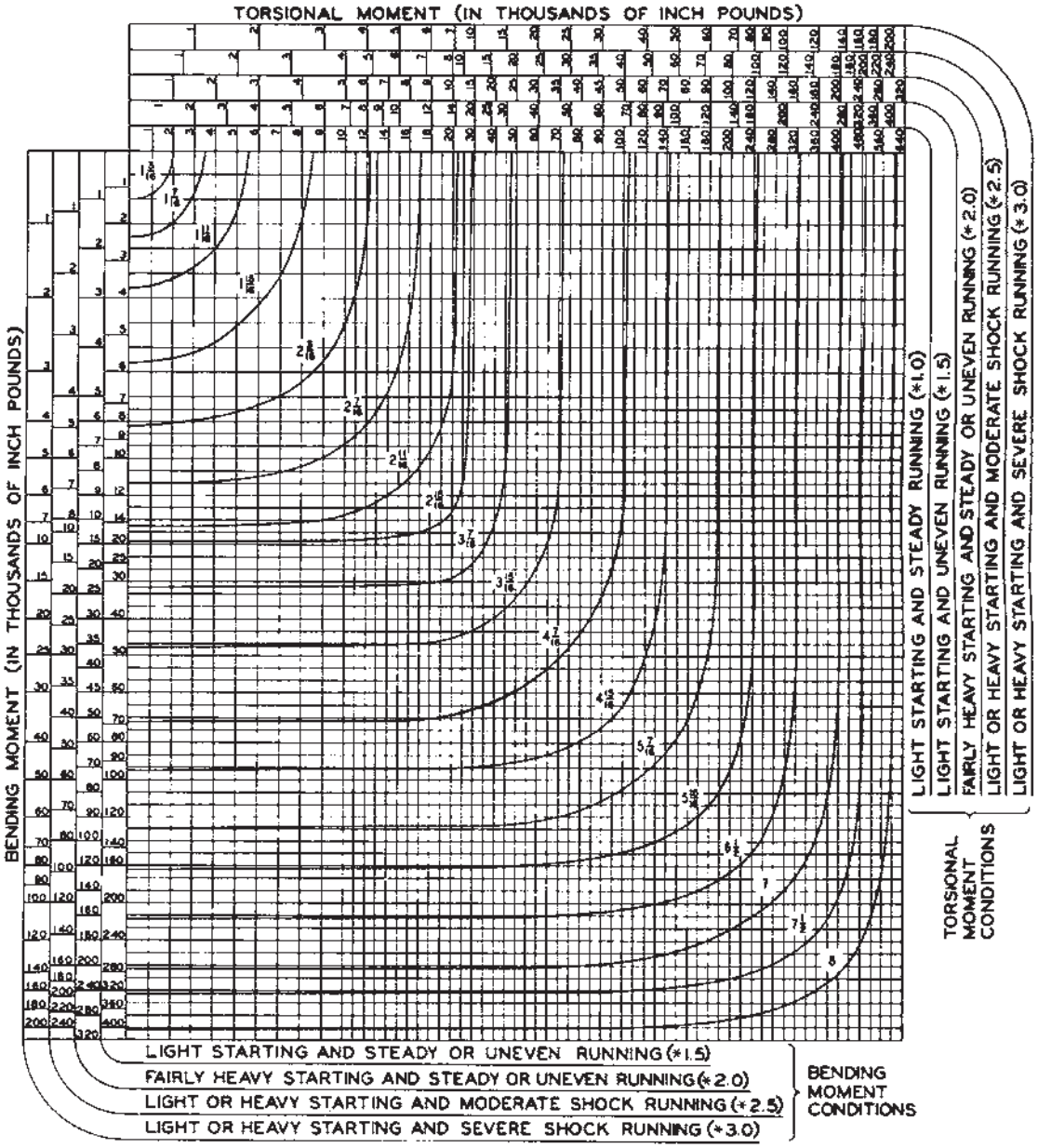
Caution - As the deflection of steel shafting depends upon the diameter and not upon the analysis of the steel, care should be exercised in the use of alloy shafting not to reduce the diameter unduly. Deflection should not be excessive and bearing capacities should be adequate. It is usually best to use standard shafting instead of a smaller diameter alloy shaft. The smaller alloy shaft may safely transmit the torque but often is undesirable in respect to deflection, vibration and bearing life

Table 24: Shear Stress Factors

Safe Shear Stress	Factor	Safe Shear Stress	Factor	Safe Shear Stress	Factor	Safe Shear Stress	Factor	Safe Shear Stress	Factor
500	2.289	3,000	1.260	5,500	1.029	9,000	.874	14,000	.754
1,000	1.817	3,500	1.197	6,000	1.000	10,000	.843	15,000	.737
1,500	1.587	4,000	1.145	6,500	.974	11,000	.817	16,000	.721
2,000	1.442	4,500	1.101	7,000	.950	12,000	.794	17,000	.707
2,500	1.339	5,000	1.063	8,000	.909	13,000	.773	18,000	.693

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Combine Torsion and Bending of Standard Shaft (Based on a Safe Shear Stress of 6,000 PS for KeyseatedShafting)



Example: Engine extension shaft driving single cylinder compressor, 15,000 pound-inches torsional moment, 14,000 pound- inches bending moment. Because of the heavy shock running load conditions use scales designated “Light or Heavy Starting and Severe Shock Running”. Project a line down from 15,000 torsional moment. Project a line to the right from 14,000 bending moment. The two lines intersect between 3-7/16 and 3-15/16 curves. Use 3-15/16 standard shafting.

Note: The above chart is based on ASME approved standard ASA-B17C-1927 withdrawn in 1954. If the latest shaft selection analysis is required refer to ANSI/ASME B106.1M-1985.

Note: If considering use of other shafting material refer to “Selection of Shaft Diameters” on page B16-18.

FEATURES/BENEFITS PAGE G2-2	SPECIFICATION PAGE G2-9	MODIFICATION/ACCESSORIES PAGE G2-120	RENEWAL PARTS PAGE G2-166

Courtesy of:
Screw Conveyor Parts

Expansion of Shafting

Provision should be made to permit the free movement of shafting endwise due to temperature changes. One bearing should serve as an anchor bearing to locate the shaft endwise. All other bearings should permit the shaft to move freely endwise.

The anchor bearing is often located near an important wheel. On long shafts it should preferably be located near the center of the shaft to keep the expansion of the two ends to a minimum. If the anchor bearing is babbitted it should be fitted with collars. If it is an anti-friction bearing it should be of the non-expansion type, which is the designation of Dodge roller and ball bearings for use as anchor bearings.

All bearings on the shafting other than the anchor bearing should permit the shaft to move freely endwise. If babbitted there should be no thrust collars. If anti-friction these bearings should be of the expansion type.

Several shafts firmly fastened together expand as if one continuous shaft. An example of this is line shafting with flange couplings. If the expansion is considered excessive a long line shaft may be split into two or more sections, the sections being connected with expansion couplings.

Amount of Expansion to be provided for-

The amount of shaft expansion is given in Table 25 below. For example, with a 100°F temperature rise on a 150 ft. line shaft with the anchor bearing located 70 ft. from one end and 80 ft. from the other end the ends will move .529" and .605" respectively away from the anchor bearing. The structure supporting the bearings may also expand but usually not as rapidly and as much as the shafting. Several cases follow:

Case 1- Bearings supported on steel structures, where the shaft and structure are exposed to the same temperatures, will expand at the same rate. Expansion allowance is usually not required. If the shaft is exposed to a higher temperature than the support, allowances should be made. For example, if the shaft temperature is expected to change 80°, and the temperature of the structure 60°, the resulting movement between shafting and support ends will be equivalent to a 20° change.

Case 2 - For bearings supported on wood, brick, or concrete walls, or on piers with foundations in the ground, the amount of expansion is usually considered negligible. Therefore, the full amount of shafting expansion as calculated in Table 25 below, may be accommodated.

Case 3 - Certain structural designs have built-in flexibility. Where this is the case, expansion type bearings are not necessary.

Case 4 - Short shafts with only two bearings are usually designed without compensation for expansion, if temperature variations are not excessive.

Advice on Expansion Problems-

Dodge power transmission engineers will gladly make recommendations concerning shaft expansion problems and the use of suitable bearings.

Table 25: Linear Expansion of Steel Shafting
Base on Expansion In Inches = 0.0000063 x 12 x Length in Feet x Temp. Increase in Degrees Fahrenheit

Length (Feet)	Temperature Increase-Degrees F.					Length (Feet)	Temperature Increase-Degrees F.				
	20°	40°	60°	80°	100°		20°	40°	60°	80°	100°
1	.0015	.0030	.0045	.0060	.0075	40	.060	.121	.181	.242	.302
2	.0030	.0060	.0091	.0121	.0151	45	.068	.136	.204	.272	.340
3	.0045	.0091	.0136	.0181	.0227	50	.076	.151	.227	.302	.378
4	.0060	.0121	.0181	.0242	.0302	55	.083	.166	.249	.333	.416
5	.0076	.0151	.0227	.0302	.0378	60	.091	.181	.272	.363	.454
6	.0091	.0181	.0272	.0363	.0454	65	.098	.197	.295	.393	.491
7	.0106	.0212	.0318	.0423	.0529	70	.106	.212	.317	.423	.529
8	.0121	.0242	.0363	.0484	.0605	75	.113	.227	.340	.454	.567
9	.0136	.0272	.0408	.0544	.0680	80	.121	.242	.363	.484	.605
10	.0151	.0302	.0454	.0605	.0756	85	.129	.257	.386	.514	.643
12	.0181	.0363	.0544	.0726	.0907	90	.136	.272	.408	.544	.680
14	.0212	.0423	.0635	.0847	.1058	95	.144	.287	.431	.575	.718
16	.024	.048	.073	.097	.121	100	.151	.302	.454	.605	.756
18	.027	.054	.082	.109	.136	110	.166	.333	.499	.665	.832
20	.030	.060	.091	.121	.151	120	.181	.363	.544	.726	.907
25	.038	.076	.113	.151	.189	130	.197	.393	.590	.786	.983
30	.045	.091	.136	.181	.227	140	.212	.423	.635	.847	1.058
35	.053	.106	.158	.212	.265	150	.227	.454	.680	.907	1.134

Courtesy of:
ENGINEERII
SCREW CONVEYOR PARTS

Weights and Properties of Steel Shafting

Table 26: Weight of Round Steel Shafting

Shaft Size	Weight of Shafting for Various Lengths in feet																	Weight per Inch
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	22	24	
3/4	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15	18	21	24	27	30	33	36	.125
7/8	2.0	4.0	6.1	8.1	10.2	12.2	14.3	16.3	18.4	20	25	29	33	37	41	45	49	.170
*15/16	2.3	4.7	7.0	9.4	11.7	14.1	16.5	18.8	21.2	23	28	33	38	42	47	52	56	.195
1	2.7	5.3	8.0	10.6	13.3	16.0	18.6	21.3	24.0	27	32	37	43	48	53	59	64	.223
1-1/8	3.4	6.8	10.0	13.4	16.7	20.1	23.4	26.7	30.1	34	41	47	54	61	68	74	81	.281
*1-3/16	3.8	7.6	11.3	15.1	18.9	22.6	26.4	30.1	34.0	38	45	53	60	68	75	83	90	.314
1-1/4	4.2	8.3	12.5	16.7	20.8	25.0	29.2	33.3	37.5	42	50	58	67	75	83	92	100	.348
1-3/8	5.0	10.1	15.3	20.2	25.3	30.3	35.4	40.4	45.4	50	60	71	81	91	101	111	121	.420
*1-7/16	5.5	11	17	22	28	33	39	44	50	55	66	77	88	99	110	121	133	.460
1-1/2	6.0	12	18	24	30	36	42	48	54	60	72	84	96	108	120	132	144	.500
*1-11/16	7.6	15	23	30	38	46	53	61	68	76	91	107	122	137	152	167	183	.634
*1-15/16	10.0	20	30	40	50	60	70	80	90	100	120	140	161	181	201	221	241	.835
2	10.7	21	32	43	53	64	75	85	96	107	128	150	171	192	214	235	256	.890
*2-3/16	12.8	26	38	51	64	77	90	102	115	128	153	179	205	230	256	281	307	1.06
*2-7/16	15.9	32	48	63	79	95	111	127	143	159	190	222	254	286	317	349	381	1.32
2-1/2	16.7	34	50	67	83	100	117	134	150	167	200	234	267	301	334	367	401	1.39
*2-11/16	19.3	39	58	77	97	116	135	154	174	193	232	270	309	348	386	425	463	1.61
*2-15/16	23.0	46	69	92	115	138	161	184	208	231	277	323	369	415	461	507	553	1.92
*3-7/16	31.6	63	95	126	158	189	221	253	284	316	379	442	505	568	631	695	758	2.63
*3-15/16	41.4	83	124	166	207	248	290	331	373	414	497	580	662	745	828	911	994	3.45
*4-7/16	52.6	105	158	210	263	315	368	421	473	526	631	736	841	946	1052	1157	1262	4.38
*4-15/6	65.1	130	195	260	326	391	456	521	586	651	781	911	1041	1172	1302	1432	1562	5.42
*5-7/16	79.0	158	237	316	395	474	553	632	711	790	947	1105	1263	1421	1579	1737	1894	6.58
*6	96	192	288	384	481	577	673	769	865	961	1154	1346	1538	1730	1923	2115	2307	8.01

* **Recommended Diameters** These shaft diameters are recommended for use whenever possible as various transmission items such as couplings, collars, pulleys, etc., are carried in stock in these sizes, at least up to 3-15/16", in the principal cities throughout the United States.

Table 27: Weight and Properties of Round Steel Shafting

Shaft Size	Weight per Inch	Section Modulus		Moment of Inertia		Shaft Size	Weight per Inch	Section Modulus		Moment of Inertia	
		Bending	Torsion	Bending	Torsion			Bending	Torsion	Bending	Torsion
1/16	.00087	.000024	.000048	.000001	.000002	2-7/16	1.32	1.422	2.844	1.733	3.466
1/8	.0035	.000192	.000383	.000012	.000024	2-1/2	1.39	1.534	3.068	1.918	3.835
3/16	.0078	.000647	.001294	.000061	.000121	2-9/16	1.46	1.652	3.304	2.117	4.233
1/4	.0139	.001534	.003068	.000192	.000383	2-5/8	1.53	1.776	3.552	2.331	4.661
5/16	.0217	.002996	.005992	.000468	.000936	2-11/16	1.61	1.906	3.811	2.561	5.122
3/8	.0313	.005177	.010354	.000971	.001941	2-3/4	1.68	2.042	4.084	2.807	5.615
7/16	.0425	.008221	.016442	.001798	.003597	2-13/16	1.76	2.184	4.368	3.071	6.143
1/2	.0556	.0123	.0245	.0031	.0061	2-7/8	1.84	2.333	4.666	3.354	6.707
9/16	.0703	.0175	.0349	.0049	.0098	2-15/16	1.92	2.489	4.977	3.655	7.310
5/8	.0868	.0240	.0479	.0075	.0150	3	2.00	2.651	5.301	3.976	7.952
11/16	.1051	.0319	.0638	.0110	.0219	3-1/16	2.08	2.820	5.640	4.318	8.636
3/4	.125	.0414	.0828	.0155	.0311	3-1/8	2.17	2.996	5.992	4.681	9.363
13/16	.1467	.0527	.1053	.0214	.0428	3-3/16	2.26	3.179	6.359	5.067	10.13
7/8	.1701	.0658	.1315	.0288	.0575	3-1/4	2.35	3.370	6.740	5.477	10.95
15/16	.1954	.0809	.1618	.0379	.0758	3-5/16	2.44	3.568	7.137	5.910	11.82
1	.22	.0982	.1963	.0491	.0982	3-3/8	2.53	3.774	7.548	6.369	12.74
1-1/16	.25	.1178	.2355	.0626	.1251	3-7/16	2.63	3.988	7.976	6.854	13.71
1-1/8	.28	.1398	.2796	.0786	.1573	3-1/2	2.72	4.209	8.419	7.366	14.73
1-3/16	.31	.1644	.3288	.0976	.1952	3-9/16	2.82	4.439	8.878	7.907	15.81
1-1/4	.35	.1917	.3835	.1198	.2397	3-5/8	2.92	4.677	9.353	8.476	16.95
1-5/16	.38	.2220	.4439	.1457	.2913	3-11/16	3.02	4.923	9.845	9.076	18.15
1-3/8	.42	.2552	.5104	.1755	.3509	3-3/4	3.13	5.177	10.35	9.707	19.41
1-7/16	.46	.2916	.5832	.2096	.4192	3-13/16	3.23	5.440	10.88	10.37	20.74
1-1/2	.50	.3313	.6627	.2485	.4970	3-7/8	3.34	5.712	11.42	11.07	22.14
1-9/16	.54	.3745	.7490	.2926	.5852	3-15/16	3.45	5.993	11.99	11.80	23.60
1-5/8	.59	.4213	.8425	.3423	.6846	4	3.56	6.283	12.57	12.57	25.13
1-11/16	.63	.4718	.9435	.3981	.7961	4-1/16	3.67	6.582	13.16	13.37	26.74
1-3/4	.68	.5262	1.052	.4604	.9208	4-1/8	3.78	6.891	13.78	14.21	28.42
1-13/16	.73	.5846	1.169	.5298	1.060	4-3/16	3.90	7.209	14.42	15.09	30.19
1-7/8	.78	.6471	1.294	.6067	1.213	4-1/4	4.01	7.536	15.07	16.01	32.03
1-15/16	.83	.7140	1.428	.6917	1.384	4-5/16	4.13	7.874	15.75	16.98	33.96
2	.89	.7854	1.571	.7854	1.571	4-3/8	4.25	8.221	16.44	17.98	35.97
2-1/16	.94	.8614	1.723	.8883	1.777	4-7/16	4.38	8.579	17.16	19.03	38.07
2-1/8	1.00	.9421	1.884	1.001	2.002	4-1/2	4.50	8.946	17.89	20.13	40.26
2-3/16	1.06	1.028	2.055	1.124	2.248	4-9/16	4.63	9.324	18.65	21.27	42.54
2-1/4	1.13	1.118	2.237	1.258	2.516	4-5/8	4.75	9.713	19.43	22.46	44.92
2-5/16	1.19	1.214	2.428	1.404	2.808	4-11/16	4.88	10.11	20.22	23.70	47.40
2-3/8	1.25	1.315	2.630	1.562	3.124	4-3/4	5.01	10.52	21.04	24.99	49.98

FEATURES/BENEFITS PAGE G2-2	SPECIFICATION PAGE G2-9	MODIFICATION/ACCESSORIES PAGE G2-120	RENEWAL PARTS PAGE G2-166

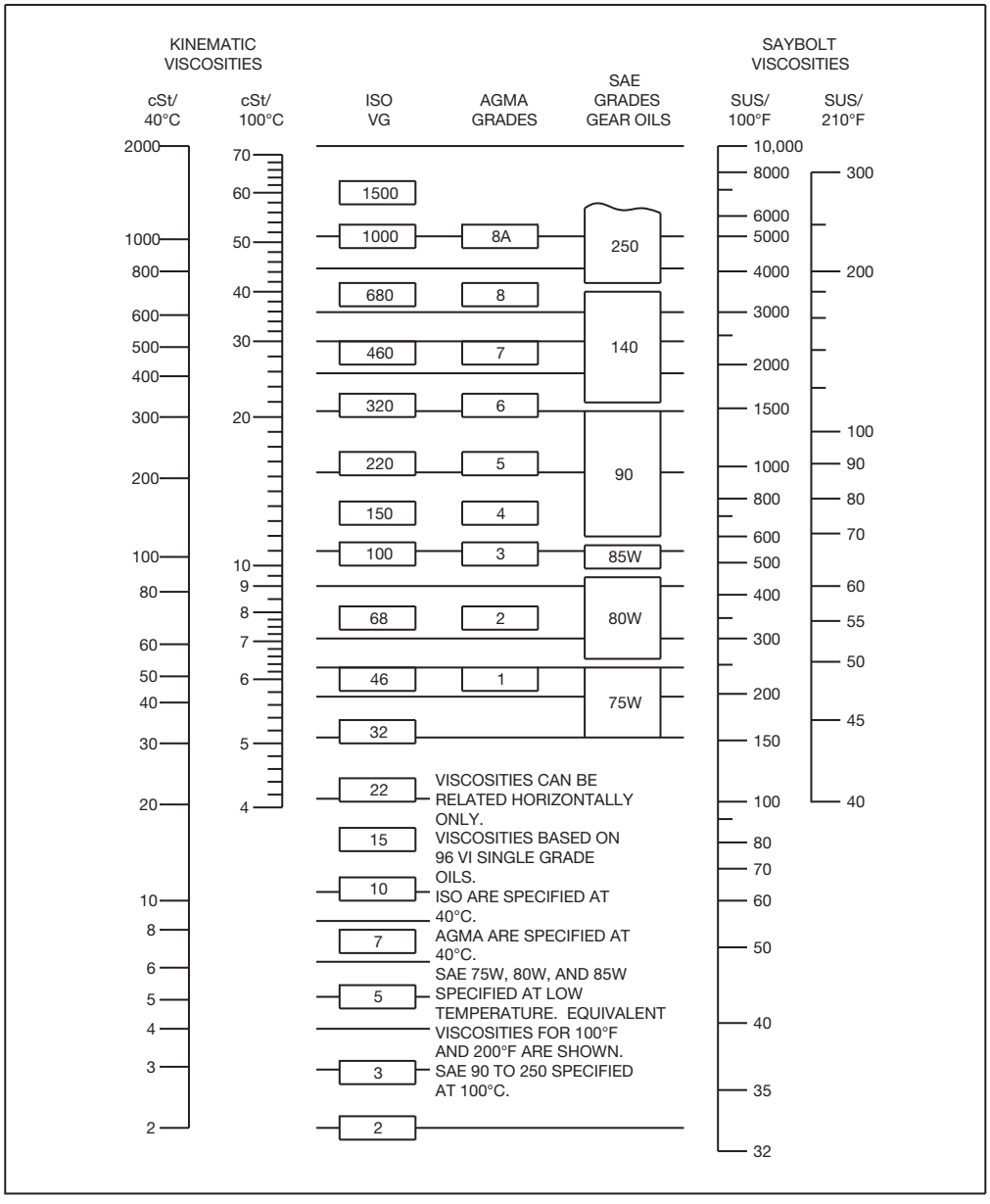
Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Table 27: Weight and Properties of Round Steel Shafting

Shaft Size	Weight per Inch	Section Modulus		Moment of Inertia		Shaft Size	Weight per Inch	Section Modulus		Moment of Inertia	
		Bending	Torsion	Bending	Torsion			Bending	Torsion	Bending	Torsion
4-13/16	5.15	10.94	21.88	26.33	52.66	13-1/2	40.50	241.50	483.10	1630	3261
4-7/8	5.28	11.37	22.75	27.72	55.45	13-3/4	42.00	255.20	510.40	1755	3509
4-15/16	5.42	11.82	23.63	29.17	58.35	14	43.60	269.40	538.80	1886	3771
5	5.56	12.27	24.54	30.68	61.36	14-1/4	45.10	284.10	568.20	2024	4048
5-1/16	5.70	12.74	25.48	32.24	64.49	14-1/2	46.70	299.30	598.60	2170	4340
5-1/8	5.84	13.22	26.43	33.86	67.73	14-3/4	48.40	315.00	630.10	2324	4647
5-3/16	5.98	13.70	27.41	35.55	71.09	15	50.00	331.30	662.70	2485	4970
5-1/4	6.13	14.21	28.41	37.29	74.58	15-1/4	51.70	348.20	696.40	2655	5310
5-5/16	6.27	14.72	29.44	39.10	78.20	15-1/2	53.40	365.60	731.20	2833	5667
5-3/8	6.42	15.25	30.49	40.97	81.94	15-3/4	55.10	383.60	767.10	3021	6041
5-7/16	6.58	15.78	31.57	42.91	85.82	16	56.90	402.10	804.20	3217	6434
5-1/2	6.72	16.33	32.67	44.92	89.84	16-1/4	58.70	421.30	842.50	3422	6846
5-9/16	6.88	16.90	33.79	46.99	93.99	16-1/2	60.50	441.00	882.00	3638	7277
5-5/8	7.03	17.47	34.95	49.14	98.29	16-3/4	62.40	461.40	922.70	3864	7728
5-11/16	7.19	18.06	36.12	51.36	102.70	17	64.20	482.30	964.70	4100	8200
5-3/4	7.35	18.66	37.33	53.66	107.30	17-1/4	66.10	503.90	1008	4346	8693
5-13/16	7.51	19.28	38.56	56.03	112.10	17-1/2	68.10	526.20	1052	4604	9208
5-7/8	7.67	19.91	39.82	58.48	117.00	17-3/4	70.00	549.10	1098	4873	9745
5-15/16	7.84	20.55	41.10	61.01	122.00	18	72.00	572.60	1145	5153	10306
6	8.00	21.21	42.41	63.62	127.20	18-1/4	74.00	596.70	1193	5445	10891
6-1/16	8.17	21.88	43.75	66.31	132.60	18-1/2	76.10	621.60	1243	5750	11500
6-1/8	8.34	22.56	45.12	69.09	138.20	18-3/4	78.10	647.10	1294	6067	12134
6-3/16	8.51	23.26	46.51	71.95	143.90	19	80.20	673.40	1347	6397	12794
6-1/4	8.68	23.97	47.94	74.90	149.80	19-1/4	82.40	700.30	1401	6741	13481
6-5/16	8.86	24.69	49.39	77.94	155.90	19-1/2	84.50	728.00	1456	7098	14195
6-3/8	9.03	25.44	50.87	81.08	162.20	19-3/4	86.70	756.30	1513	7469	14937
6-7/16	9.21	26.19	52.38	84.30	168.60	20	88.90	785.40	1571	7854	15708
6-1/2	9.39	26.96	53.92	87.62	175.20	20-1/4	91.10	815.20	1630	8254	16508
6-5/8	9.76	28.55	57.09	94.56	189.10	20-1/2	93.40	845.80	1692	8669	17339
6-3/4	10.10	30.19	60.39	101.90	203.80	20-3/4	95.70	877.10	1754	9100	18200
6-7/8	10.50	31.90	63.80	109.70	219.30	21	98.00	909.20	1818	9547	19093
7	10.90	33:67	67.35	117.90	235.70	21-1/4	100.40	942.10	1884	10009	20019
7-1/8	11.30	35.51	71.02	126.50	253.00	21-1/2	102.70	975.70	1951	10489	20978
7-1/4	11.70	37.41	74.82	135.60	271.20	21-3/4	105.10	1010	2020	10985	21970
7-3/8	12.10	39.38	78.76	145.20	290.40	22	107.60	1045	2091	11499	22998
7-1/2	12.50	41.42	82.84	155.30	310.60	22-1/4	110.00	1081	2163	12031	24061
7-5/8	12.90	43.52	87.05	165.90	331.90	22-1/2	112.50	1118	2237	12581	25161
7-3/4	13.30	45.70	91.40	177.10	354.20	22-3/4	115.00	1156	2312	13149	26298
7-7/8	13.80	47.95	95.89	188.80	377.60	23	117.60	1194	2389	13737	27473
8	14.30	50.27	100.50	201.10	402.10	23-1/4	120.10	1234	2468	14344	28687
8-1/8	14.70	52.66	105.30	213.90	427.90	23-1/2	122.70	1274	2548	14971	29941
8-1/4	15.10	55.13	110.30	227.40	454.80	23-3/4	125.40	1315	2630	15618	31236
8-3/8	15.60	57.67	115.30	241.50	483.00	24	128.00	1357	2714	16286	32572
8-1/2	16.10	60.29	120.60	256.20	512.50	24-1/4	130.70	1400	2800	16975	33951
8-5/8	16.50	62.99	126.00	271.60	543.30	24-1/2	133.40	1444	2888	17686	35372
8-3/4	17.00	65.77	131.60	287.70	575.50	24-1/4	136.20	1488	2977	18419	36838
8-7/8	17.50	68.63	137.30	304.50	609.10	25	138.90	1534	3068	19175	38350
9	18.00	71.57	143.10	322.10	644.10	25-1/4	141.70	1580	3161	19954	39907
9-1/8	18.50	74.59	149.20	340.30	680.70	25-1/2	144.50	1628	3256	20755	41511
9-1/4	19.00	77.70	155.40	359.40	718.70	25-3/4	147.40	1676	3352	21581	43163
9-3/8	19.50	80.89	161.80	379.20	758.40	26	150.30	1726	3451	22432	44864
9-1/2	20.10	84.17	168.30	399.80	799.60	26-1/4	153.20	1776	3552	23307	46614
9-5/8	20.60	87.54	175.10	421.30	842.60	26-1/2	156.10	1827	3654	24208	48415
9-3/4	21.10	90.99	182.00	443.60	887.20	26-3/4	159.00	1879	3758	25134	50268
9-7/8	21.70	94.54	189.10	466.80	933.60	27	162.00	1932	3865	26087	52174
10	22.20	98.17	196.30	490.90	981.70	27-1/2	168.10	2042	4083	28074	56148
10-1/4	23.40	105.72	211.40	541.80	1084	28	174.30	2155	4310	30172	60344
10-1/2	24.50	113.65	227.30	596.70	1193	28-1/2	180.50	2273	4545	32385	64771
10-3/4	25.70	121.96	243.90	655.50	1311	29	186.90	2394	4789	34719	69437
11	26.90	130.67	261.30	718.70	1437	29-1/2	193.40	2520	5041	37176	74351
11-1/4	28.10	139.78	279.60	786.30	1573	30	200.00	2651	5301	39761	79522
11-1/2	29.40	149.31	298.60	858.50	1717	30-1/2	206.80	2785	5571	42479	84957
11-3/4	30.70	159.26	318.50	935.70	1871	31	213.60	2925	5849	45333	90666
12	32.00	169.65	339.30	1018	2036	31-1/2	220.50	3069	6137	48329	96659
12-1/4	33.40	180.47	360.90	1105	2211	32	227.60	3217	6434	51472	102944
12-1/2	34.70	191.75	383.50	1198	2397	32-1/2	234.80	3370	6740	54765	109530
12-3/4	36.10	203.48	407.00	1297	2594	33	242.10	3528	7056	58214	116428
13	37.60	215.69	431.40	1402	2804	34	256.90	3859	7717	65597	131194
13-1/4	39.00	228.37	456.70	1513	3026	35	272.30	4209	8418	73662	147324

Viscosity Classification Equivalents

OIL VISCOSITY EQUIVALENCY CHART



ISO Viscosity Classification System

All industrial oils are graded according to the ISO Viscosity Classification System, approved by the International Standards Organizations (ISO). Each ISO viscosity grade number corresponds to the mid-point of viscosity range expressed in centistokes (cSt) at 40°C. For example, a lubricant with an ISO grade of 32 has a viscosity within the range of 28.80-35.2, the midpoint of which is 32.

Rule-of-Thumb: The comparable ISO grade of a competitive product whose viscosity in SUS at 100°F is known can be determined by using the following conversion formula:

SUS @ 100° F ÷ 5 = cSt @ 40°C

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

English Standard Measures

Long Measure

1 mile = 1760 yards = 5280 feet.
1 yard = 3 feet = 36 inches.
1 foot = 12 inches.

Surveyor's Measure

1 mile = 8 furlongs = 80 chains.
1 furlong = 10 chains = 220 yards.
1 chain = 4 rods = 22 yards = 66 feet = 100 links.
1 link = 7.92 inches.

Square Measure

1 square mile = 640 acres = 6400 square chains.
1 acre = 10 square chains = 4840 square yards = 43,560 square feet.
1 square chain = 16 square rods = 484 square yards = 4356 square feet.
1 square rod = 30.25 square yards = 272.25 square feet = 625 square links.
1 square yard = 9 square feet.
1 square foot = 144 square inches.
An acre is equal to a square, the side of which is 208.7 feet.

Dry Measure

1 bushel (U.S. or Winchester struck bushel) = 1.2445 cubic foot = 2150.42 cubic inches.
1 bushel = 4 pecks = 32 quarts = 64 pints.
1 peck = 8 quarts = 16 pints.
1 quart = 2 pints.
1 heaped bushel = 1 1/4 struck bushel.
1 cubic foot = 0.8036 struck bushel.
1 British Imperial bushel=8 Imperial gallons=1.2837 cubic foot = 2218.19 cubic inches.

Liquid Measure

1 U.S. gallon = 0.1337 cubic foot = 231 cubic inches = 4 quarts = 8 pints.
1 quart = 2 pints = 8 gills.
1 pint = 4 gills.
1 British Imperial gallon = 1.2003 U.S. gallon = 277.27 cubic inches.
1 cubic foot = 7.48 U.S. gallons.

Circular and Angular Measure

60 seconds (") =1 minute (')
60 minutes =1 degree (-)
360 degrees =1 circumference (C)
57.3 degrees =1 radian
2 π radians =1 circumference (C)

Specific Gravity

The specific gravity of a substance is its weight as compared with the weight of an equal bulk of pure water.

For making specific gravity determinations the temperature of the water is usually taken at 62° F. when 1 cubic foot of water weighs 62.355 lbs. Water is at its greatest density at 39.20° F. or 4° Centigrade.

Temperature

The following equation will be found convenient for transforming temperature from one system to another:

Let F = degrees Fahrenheit; C = degrees Centigrade; R = degrees Reamur.

$$\frac{F-32}{180} = \frac{C}{100} = \frac{R}{80}$$

Avoirdupois or Commercial Weight

1 gross or long ton = 2240 pounds.
1 net or short ton = 2000 pounds.
1 pound = 16 ounces = 7000 grains.
1 ounce = 16 drams = 437.5 grains.

Measures of Pressure

1 pound per square inch = 144 pounds per square foot = 0.068 atmosphere = 2.042 inches of mercury at 62 degrees F. = 27.7 inches of water at 62 degrees F. = 2.31 feet of water at 62 degrees F.

1 atmosphere = 30 inches of mercury at 62 degrees F. = 14.7 pounds per square inch = 2116.3 pounds per square foot = 33.95 feet of water at 62 degrees F.

1 foot of water at 62 degrees F. = 62.355 pounds per square foot = 0.433 pound per square inch.

1 inch of mercury at 62 degrees F. = 1.132 foot of water = 13.58 inches of water = 0.491 pound per square inch.

Column of water 12 in. high, 1 in. dia. = .341 lbs.

Cubic Measure

1 cubic yard = 27 cubic feet.
1 cubic foot = 1728 cubic inches.
The following measures are also used for wood and masonry:
1 cord of wood = 4 X 4 X 8 feet = 128 cubic feet.
1 perch of masonry = 16-1/2 X 1-1/2 X 1 foot = 24-3/4 cubic feet.

Shipping Measure

For measuring entire internal capacity of a vessel: 1 register ton = 100 cubic feet.
For measurement of cargo:
1 U.S. shipping ton = 40 cubic feet = 32.143 U.S. bushels = 31.16 Imperial bushels.
British shipping ton = 42 cubic feet = 33.75 U.S. bushels = 32.72 Imperial bushels.

Troy Weight, Used for Weighing Gold and Silver

1 pound = 12 ounces = 5760 grains.
1 ounce = 20 pennyweights = 480 grains.
1 pennyweight = 24 grains.
1 carat (used in weighing diamonds) = 3.086 grains.
1 grain Troy = 1 grain avoirdupois = 1 grain apothecaries' weight.

Measure Used for Diameters and Areas of Electric Wires

1 circular inch = area of circle 1 inch in diameter = 0.7854 square inch.
1 circular inch = 1,000,000 circular mils.
1 square inch = 1.2732 circular inch = 1,273,239 circular mils.
A circular mil is the area of a circle 0.001 inch in diameter.

Board Measure

One foot board measure is a piece of wood 12 inches square by 1 inch thick, or 144 cubic inches. 1 cubic foot therefore equals 12 feet board measure

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

TABLE 28: Decimal and Millimeter Equivalents of Fractions

Inches Fractions	Decimals	Milli-meters	Inches Fractions	Decimals	Milli-meters	Inches Fractions	Decimals	Milli-meters
1/64	.015625	.397	11/32	.34375	8.7319	11/16	.6875	17.463
1/32	.03125	.794	23/64	.359375	9.128	45/64	.703125	17.859
3/64	.046875	1.191	3/8	.375	9.525	23/32	.71875	18.256
1/16	.0625	1.588	25/64	.390625	9.922	47/64	.734375	18.653
5/64	.078125	1.984	13/32	.40625	10.319	3/4	.750	19.050
3/32	.09375	2.381	27/64	4.21875	10.716	49/64	.765625	19.447
7/64	.109375	2.778	7/16	4.375	11.113	25/32	.78125	19.844
1/8	.125	3.175	29/64	4.53125	11.509	51/64	.796875	20.241
9/64	.140625	3.582	15/32	.46875	11.906	13/16	.8125	20.638
5/32	.15625	3.969	31/64	.48376	12.303	53/64	.828125	21.034
11/64	.171875	4.366	1/2	.500	12.700	27/32	.84375	21.431
3/16	.1875	4.763	33/64	.515625	13.097	55/64	.859375	21.828
13/64	.203125	5.159	17/32	.53125	13.494	7/8	.875	22.225
7/32	.21875	5.556	35/64	.546875	13.891	57/64	.890625	22.622
15/64	.234375	5.953	9/16	.5625	14.288	29/32	.90524	23.019
1/41	.250	6.350	37/64	.578125	14.684	59/64	.921875	23.416
7/64	.265625	6.747	19/32	.59375	14.081	15/16	.9375	23.813
9/32	.28125	7.144	39/64	.609375	15.478	61/64	.953125	24.209
19/64	.296875	7.541	5/8	.625	15.875	31/32	.96875	24.606
5/16	.3125	7.938	41/64	.60625	16.272	63/64	.984375	25.003
21/64	.328125	8.334	21/32	.65625	16.669	–	1.000	25.400
			43/64	.671875	17.066	–	–	–

Table 29: Millimeter-Inch Equivalents: 1" = 25.4mm (.03937" = 1mm)

Millimeter	Decimal	Millimeter	Decimal	Millimeter	Decimal	Millimeter	Decimal	Millimeter	Decimal
1	.03937	52	2.04724	103	4.05511	154	6.06299	205	8.07086
2	.07874	53	2.08661	104	4.09448	155	6.10236	206	8.11023
3	.11811	54	2.12598	105	4.13385	156	6.14173	207	8.14960
4	.15748	55	2.16535	106	4.17322	157	6.18110	208	8.18897
5	.19685	56	2.20472	107	4.21259	158	6.22047	209	8.22834
6	.23622	57	2.24409	108	4.25196	159	6.25984	210	8.26771
7	.27559	58	2.28346	109	4.29133	160	6.29921	211	8.30708
8	.31496	59	2.32283	110	4.33070	161	6.33858	212	8.34645
9	.35433	60	2.36220	111	4.37007	162	6.37795	213	8.38582
10	.39370	61	2.40157	112	4.40944	163	6.41732	214	8.42519
11	.43307	62	2.44094	113	4.44881	164	6.45669	215	8.46456
12	.47244	63	2.48031	114	4.48818	165	6.49606	216	8.50393
13	.51181	64	2.51968	115	4.52755	166	6.53543	217	8.54330
14	.55118	65	2.55905	116	4.56692	167	6.57480	218	8.58267
15	.59055	66	2.59842	117	4.60629	168	6.61417	219	8.62204
16	.62992	67	2.63779	118	4.64566	169	6.65354	220	8.66141
17	.66929	68	2.67716	119	4.68503	170	6.69291	221	8.70078
18	.70866	69	2.71653	120	4.72440	171	6.73228	222	8.74015
19	.74803	70	2.75590	121	4.76378	172	6.77165	223	8.77952
20	.78740	71	2.79527	122	4.80315	173	6.81102	224	8.81889
21	.82677	72	2.83464	123	4.84252	174	.685039	225	8.85826
22	.86614	73	2.87401	124	4.88189	175	6.88976	226	8.897.63
23	.90551	74	2.91338	125	4.92126	176	6.92913	227	8.93700
24	.94488	75	2.95275	126	4.96063	177	.696850	228	8.97637
25	.98425	76	2.99212	127	5.00000	178	7.00787	229	9.01574
26	1.02362	77	3.03149	128	5.03937	179	7.04724	230	9.05511
27	1.06299	78	3.07086	129	5.07875	180	7.08661	231	9.09448
28	1.10236	79	3.11023	130	5.11811	181	7.12598	232	9.13385
29	1.14173	80	3.14960	131	5.15749	182	7.16535	233	9.17322
30	1.18110	81	3.18897	132	5.19685	183	7.20472	234	9.21259
31	1.22047	82	3.22834	133	5.23622	184	7.24409	235	9.25196
32	1.25984	83	3.26771	134	5.27559	185	7.28346	236	9.29133
33	1.29921	84	.303708	135	5.31496	186	7.32283	237	9.33070
34	1.33858	85	3.34645	136	5.35433	187	7.36220	238	9.37007
35	1.37795	86	3.38582	137	5.39370	188	7.40157	239	9.40944
36	1.41732	87	.342519	138	.543307	189	7.44094	240	9.44881
37	1.45669	88	3.46456	139	.547244	190	7.48031	241	9.48818
38	1.49606	89	3.50393	140	5.51181	191	7.51968	242	9.52755
39	1.53543	90	3.54330	141	5.55118	192	7.55905	243	9.56692
40	1.57480	91	.358267	142	5.59055	193	7.59842	244	9.60629
41	1.61417	92	3.62204	143	5.62992	194	7.63779	245	9.64566
42	1.65354	93	3.66141	144	5.66929	195	7.67716	246	9.68503
43	1.69291	94	3.70078	145	5.70866	196	7.71653	247	9.72440
44	1.73228	95	3.74015	146	5.748.4	197	7.75590	248	9.76378
45	1.77165	96	3.77952	147	5.78740	198	7.79527	249	9.80315
46	1.81102	97	3.81899	148	5.82677	199	7.83464	250	9.84252
47	1.85039	98	3.85826	149	5.86614	200	7.87401	251	9.88189
48	1.88976	99	3.89763	150	5.90551	201	7.91338	252	9.92126
49	1.92913	100	3.93710	151	5.94488	202	795275	253	9.96063
50	1.96850	101	3.97637	152	5.98425	203	799221	254	10.00000
51	2.00787	102	4.01574	153	6.02362	204	8.03149	–	–

FEATURES/BENEFITS PAGE G2-2	SPECIFICATION PAGE G2-9	MODIFICATION/ACCESSORIES PAGE G2-120	RENEWAL PARTS PAGE G2-166

Gearing Reference Guide
MOTORIZED TORQUE-ARM II
TORQUE-ARM II
TORQUE-ARM
Engineering
System-1
Part Number Index

Metric System of Measurements

Measures of Length

10	millimeters (mm.)	=	1 centimeter (cm.)
10	centimeters	=	1 decimeter (dm.)
10	decimeters	=	1 meter (m.)
1000	meter	=	1 kilometer (km.)

Measure of Weight

10	milligrams (mg.)	=	1 centigram (cg.)
10	centigrams	=	1 decigram (dg.)
10	decigrams	=	1 gram (g.)
10	grams	=	1 decagram (Dg.)
10	decagrams	=	1 hectogram (Hg.)
10	hectograms	=	1 Kilogram (Kg.)
1000	kilograms	=	1 (metric) ton (T.)

Surveyor's Square Measure

100	square meters (m.2)	=	1 are (ar.)
100	acres	=	1 hectare (har.)
100	hectares	=	1 sq. kilometer (Km.2)

Square Measure

100	sq. millimeters (mm.2)	=	1 sq. centimeter (cm.2)
100	sq. centimeters	=	1 sq. decimeter (dm.2)
100	sq. decimeters	=	1 sq. meter (m.2)

Cubic Measure

1000	cu. millimeters (mm.3)	=	1 cu. centimeter (cm.3)
1000	cu. centimeters	=	1 cu. decimeter (dm.3)
1000	cu. decimeters	=	1 cu. meter (m.3)

Dry and Liquid Measure

10	milliliters (ml.)	=	1 centiliter (cl.)
10	centiliters	=	1 deciliter (dl.)
10	deciliters	=	1 liter (l.)
100	liters	=	1 hectoliter (Hl.)

1 liter = 1 cubic decimeter = the volume of 1 kilogram of pure water at a temperature of 39.2 degrees F.

Length Conversion Constants for Metric and U.S. Units

Millimeters X.039370 = inches.
Meters x 39.370 = inches.
Meters X 3.2808 = feet.
Meters X 1.09361 = yards.
Kilometers X 3,280.8 = feet.
Kilometers X.62137 = Statute Miles.
Kilometers x.53959 = Nautical Miles.

Inches X 25.4001 = millimeters.
Inches X.0254 = meters.
Feet x.30480 = meters.
Yards X.91440 = meters.
Feet x.0003048 = kilometers.
Statute Miles X 1.60935 = kilometers.
Nautical Miles x 1.85325 = kilometers.

Weight Conversion Constants for Metric and U.S. Units

Grams X 981 = dynes.
Grams X 15.432 = grains.
Grams X.03527 = ounces (Avd.).
Grams x.033818 = fluid ounces (water).
Kilograms X 35.27 = ounces (Avd.).
Kilograms X 2.20462 = pounds (Avd.).
Metric Tons (1000 Kg.) X 1.10231 = Net Ton (2000 lbs.).
Metric Tons (1000 Kg.) X.98421 = Gross Ton (2240 lbs.).

Dynes X.0010193 = grams.
Grains X.0648 = grams.
Ounces (Avd.) X 28.35 = grams.
Fluid Ounces (Water) X 29.57 = grams.
Ounces (Avd.) X.02835 = kilograms.
Pounds (Avd.) X.45359 = kilograms.
Net Ton (2000 lbs.) X.90719 = Metric Tons (1000 Kg.).
Gross Ton (2240 lbs.) X 1.01605 = Metric Tons (1000 Kg.).

Area Conversion Constants for Metric and U.S. Units

Square Millimeters X.00155 = square inches.
Square centimeters X.155 = square inches.
Square Meters X 10.76387 = square feet.
Square Meters X 1.19599 = square yards.
Hectares X 2.47104 = acres.
Square Kilometers X 247.104 = acres.
Square Kilometers X.3861 = square miles.

Square Inches X 645.163 = square millimeters.
Square Inches x 6.45163 = square centimeters.
Square Feet x.0929 = square meters.
Square Yards X.83613 = square meters.
Acres X.40469 = hectares.
Acres X.0040469 = square kilometers.
Square Miles X 2.5899 = square kilometers.

Volume Conversion Constants for Metric and U.S. Units

Cubic centimeters X.033818 = fluid ounces.
Cubic centimeters X.061023 = cubic inches.
Cubic centimeters X.271 = fluid drams.
Liters X 61.023 = cubic inches.
Liters X 1.05668 = quarts.
Liters X .26417 = gallons.
Liters X.035317 = cubic feet.
Hectoliters X 26.417 = gallons.
Hectoliters X 3.5317 = cubic feet.
Hectoliters X 2.83794 = bushel (2150.42 cu. in.).
Hectoliters X.1308 = cubic yards.
Cubic Meters x 264.17 = gallons.
Cubic Meters x 35.317 = cubic feet.
Cubic Meters X 1.308 = cubic yards.

Fluid Ounces X 29.57 = cubic centimeters.
Cubic Inches X 16.387 = cubic centimeters.
Fluid Drams x 3.69 = cubic centimeters.
Cubic Inches X.016387 = liters.
Quarts x.94636 = liters.
Gallons x 3.78543 = liters.
Cubic Feet x 28.316 = liters.
Gallons x.0378543 = hectoliters.
Cubic Feet x.28316 = hectoliters.
Bushels (2150.42 cu. in.) X.352379 = hectoliters.
Cubic Yards x 7.645 = hectoliters.
Gallons x.00378543 = cubic meters.
Cubic Feet x.028316 = cubic meters.
Cubic Yards x.7645 = cubic meters.

Power and Heat Conversion Constants for Metric and U.S. Units

Calorie x 0.003968 = B.T.U.
Joules X.7373 = pound-feet.
Newton-Meters X 8.851 = pound-inches
Cheval Vapeur X.9863 = Horsepower.
Kilowatts X 1.34 = Horsepower.
Kilowatt Hours X 3415 = B.T.U.
(Degrees Cent. X 1.8) +32 = degrees Fahr.
(Degrees Reamur X 2.25) + 32 = degrees Fahr.

B.T.U. X 252 = calories.
Pound-Feet X 1.3563 = joules.
Pound-inches X.11298 = Newton-meters.
Horsepower X 1.014 = Cheval Vapeur.
Horsepower X.746 = kilowatts.
B.T.U. X.00029282 = kilowatt hours.
(Degrees Fahr. - 32) x.555 = degrees Cent.
(Degrees Fahr. - 32) x.444 = degrees Reamur.

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Common Conversion Factors Useful In Mechanical Power Transmission

Symbols and Abbreviations Used in Conversion Factors

Symbols and abbreviations found in this section are those currently used in many texts and product publications. Considerable effort is underway to standardize on abbreviations for metric and English units of measurement. Recently, ASTM (American Society for Testing and Materials) and IEEE (Institute of Electrical and Electronic Engineers) published a standard practice on the metric system. † This publication consolidates a great deal of the current thinking and provides a system of abbreviations and symbols that differ somewhat from those used here.

This Handbook has retained use of familiar abbreviations consistent with existing product and trade literature rather than the abbreviations found in current publications of technical and scientific societies.

Prefixes Used in the Metric System

Common prefixes and symbols used in the metric system are listed below. An example of use is 1000 meters is equivalent to 1 kilometer, and 1/1000 of one meter is equivalent to 1 millimeter.

giga	G	1,000,000,000 or 109 or one billion
mega	M	1,000,000 or 106 or one million
kilo	k	1,000 or 103 or one thousand
*hecto	h	100 or 102 or one hundred
*deka	da	10 or 101 or ten
**deci	d	0.1 or 10-1 or one tenth
**centi	c	0.01 or 10-2 or one hundredth
mill	m	0.001 or 10-3 or one thousandth
micro	μ	0.000,001 or 10-6 or one millionth
nano	n	0.000,000,001 or 10-9 or one billionth

* Not commonly used.

** Not commonly used except for special situations.
The centimeter as a unit of length is in common use.
The decibel is a unit in both electrical and acoustical work.

† ASTM/IEEE Standard Metric Practice, ASTM E 380-75, IEEE Std. 268-1976.

"Reprinted with Permission of the Power Transmission Distributors Association"

Courtesy of:
SCREW CONVEYOR PARTS

Symbol or Abbreviation	Term
atm	atmosphere
avdp	avoirdupois
bbl	barrels
bu	bushels
C	degrees Centigrade or Celsius
cc	cubic centimeters
cfm	cubic feet per minute
cfs	cubic feet per second
cm	centimeter
cu	cubic
deg	degrees
F	degrees Fahrenheit
fps	feet per second
ft	feet
ft-lb	foot-pounds (work or energy)
ft per sec	feet per second (alternate)
ft per sec^2	feet per second per second
g	acceleration due to gravity
g	grams
gal	gallons
gpm	gallons per minute
Hp	horsepower
hr	hour
in	inches
in-lb	inch-pounds (work or energy)
K	degrees Kelvin
kg	kilograms
km	kilometers
kn	knots
kW	kilowatts

Symbol or Abbreviation	Term
l	liters
lb	pounds
lb-ft	pound-feet (torque)
m	meters
m per sec^2	meters per second per second
mi	miles
mm	millimeters
mph	miles per hour
MGD	millions of gallons per day
N	Newtons
oz	ounces
oz-in	ounce-inches (torque)
Pa	Pascals
psi	pounds per square inch
psia or psig	pounds per square inch “absolute” or gauge
pt	pint
qt	quart
R	degrees Rankine (Fahrenheit, absolute)
rad	radians
rev	revolutions
RPM	revolutions per minute
sec	seconds
sq	square
std	standard
temp	temperature
wt	weight
yd	yard
yr	year

Rounding of Numbers

A minimum of four significant figures are used in conversion factors presented here. Where the conversion factor is exact (for example, 1 foot contains 12 inches), decimal fractions are not necessary. Also, where large whole numbers are used (for example, 1 square kilometer contains 1195990 square yards), decimal fractions are not used unless justified by the accuracy of ordinary computations.

1195990	(sq yd in a sq km)
4389.12	(cc in a cu ft)
448.86	(gpm in a liter per sec)
14.70	(psi in an atmosphere)
0.4331	(psi in a ft of water)
0.0625	(lb-in in an oz-in)

Courtesy of:
ENGINEERII
SCREW CONVEYOR PARTS

Velocity

centimeters per second (cm per sec)	feet per second (fps or ft per sec)	0.3281
feet per second (fps)	centimeters per second (cm per sec)	30.48
	meters per second (m per sec)	0.3048
	kilometers per hour (km per hr)	1.097
	miles per hour (mph)	0.6818
kilometers per hour (km per hr)	knots (kn)	0.5396
	feet per second (fps)	1.467
	kilometers per hour (km per hr)	1.609
	feet per minute (ft per min.)	88
knots (kn)	miles per hour (mph)	1.152
	kilometers per hour (km per hr)	1.853
radians per second (rad per sec)	revolutions per minute (RPM)	9.55
	degrees per minute (deg per min.)	3437.7
revolutions per minute (RPM)	radians per second (rad per sec)	0.1047
	degrees per minute (deg per min.)	360

Acceleration

Column A

To Convert From...	To...	Multiply Col. A by
feet per second per second (ft per sec^2)	meters per second per second (m per sec^2)	0.3048
m per sec^2	ft per sec^2	3.281
revolutions per minute per second (RPM per sec)	radians per second per second (rad per sec^2)	0.1047
rad per sec^2	per sec	9.55

Courtesy of:
ENGINEERIN Screw Conveyor Parts

Volumetric Flow Rates

gallons per minute, US (gpm)	liters per second (l per sec)	0.008434
	cubic feet per minute (cfm)	0.1337
	cubic feet per hour (cu ft per hr)	8.022
gallons per minute, UK or Canadian (gpm)	liters per second (l per sec)	0.0101
	cubic feet per minute (cfm)	0.1606
	cubic feet per hour (cu ft per hr)	9.634
cubic feet per second (cfs)	gpm (UK or Canadian)	373.77
	gpm (US)	448.86
	liters per second (l per sec)	1699.2
liters per second (l per sec)	cubic feet per minute (cfm)	2.119
	gpm (UK or Canadian)	13.20
	gpm (US)	15.85
millions of gallons per day, US (MGD)	liters per second (l per sec)	43.81
	cubic feet per minute (cfm)	92.85
	gallons per minute, US (gpm)	694.44

Pressure

pascals (Pa)	pounds per square inch (psi)	0.0001450
	pounds per square foot (lb per ft^2)	0.02089
	newtons per square meter	1
pounds per square inch (psi)	atmospheres, std. (atm)	0.0680
	pounds per square foot (lb per ft^2)	144
	pascals (Pa)	6894.8
	foot of water (ft of H20) 60F	2.301
atmospheres (atm), standard	psi	14.70
	lb per ft^2	2116.8
	Pa	101325
inch of water, 60F (in of H20)	psi	0.03609
	lb per ft^2	5.197
	Pa	248.84
foot of water, 60F (ft of H20)	psi	0.4331
	lb per ft^2	62.36
	Pa	2985.9

Weight, Mass, Inertia

pounds (lb)*	kilograms (kg)	0.4536
	ounces (oz)	16
kilograms (kg)	pounds (lb)	2.205
	ounces (oz)	35.27

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Weight, Mass, Inertia, Continued

Column A

Convert From	To	Multiply Col A By This Factor
tons (short)	metric tons	0.9072
	kilograms (kg)	907.2
	pounds (lb)	2000
metric tons	tons (short)	1.102
	kilograms	1000
	pounds	2205
pounds, weight (lb)	slugs, mass (lb-sec2 per ft)	0.03106
pound-foot2 (lb-ft2)	kilogram-meters2 (kg-m2)	0.04214

*pounds and ounces are avoirdupois

Force And Torque

pounds (lb)	newtons(N)	4.448
newtons (N)	pounds (lb)	0.2248
newton-meters (N-m)	pound-feet (lb-ft)	0.7376
	pound-inches (lb-in)	8.851
	ounce-inches (oz-in)	141.60
ounce-inches (oz-in)	lb-ft.	0.005208
	N-m	0.007062
	lb-in	0.0625
pound-inches (lb-in)	lb-ft.	0.0833
	N-m	0.1298
	oz-In	16
pound-feet (lb-ft)	N-m	1.356
	lb -in	12
	oz-In	192

Power

horsepower (Hp)	kilowatts (kW)	0.7457
	foot-pounds per second (ft-lb per sec)	550
	foot-pounds per minute (ft-lb per min.)	33000
kilowatts (kW)	horsepower (Hp)	1.341

Temperature		Use This Relationship
degrees Fahrenheit (F)	degrees Celsius (C)	C =5/9 (F-32)
degrees Celsius (C)	degrees Fahrenheit (F)	F=9/5C+32
degrees Fahrenheit (F)	degrees Rankine (R)	R =F+459.69
degrees Celsius (C)	degrees Kelvin (K)	K=C+273.16

Examples:

1. Convert 12F to C. C = 5/9 (F-32) = 5/9 (12-32) = 5/9 (-20)
   Answer = -11.1C

2. Convert 40C to F. F = 9/5C + 32 = 9/5 (40) + 32 = 72 + 32
   Answer = 104F

Gravitational Constant

g = 32.174 feet per second per second (ft per sec2)
= 9.8067 meters per second per second (m per sec2)

Approximate Densities Of Common Materials

	Representative Densities Grams per cc	lb per cu ft
Gases @ 68F, std atm		
Air	1.30 grams per liter	0.07528
Oxygen	1.45 grams per liter	0.08305
Hydrogen	0.09 grams per liter	0.005234
Nitrogen	1.25 grams per liter	0.07274
	All Other Materials grams per cc	
Liquids		
Water @ 4C	1.000 grams per cc	62.43
20C	0.998	62.32
40C	0.992	61.94
SeaWater	1.02-1.03	64.00
Ethyl alcohol 100%	0.789	49.2
Kerosene	0.78-0.82	50
Gasoline	0.70-0.75	45
Metals		
Aluminum (95% Al)	2.70	169
Bronze (90% Cu, 10% Zn)	8.80	549
Copper (Annealed, ACS)	8.89	555
Gold	19.32	1206
Iron, gray cast	7.10	443
Lead	11.36	709
Magnesium	1.74	109
Steel (0.4-0.5% Carbon)	7.80	487
Steel, 410 stainless	7.70	480
Engineering Plastics		
ABS, general purpose	1.01-1.05	64
Acrylics, cast sheet	1.19	74
Nylon 6/6	1.13-1.15	71
Phenolic, general purpose	1.35-1.46	87
Polycarbonates, general purpose	1.2	75
Polyesters, thermoplastic, unreinforced	1.31 - 1.43	86
Polyehtylene, medium density	0.926-0.940	58
Polyvinyl Chloride	1.30-1.58	89

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Approximate Densities Of Common Materials

Other Materials	Representative Densities Grams per cc	lb per cu ft
Concrete (stone and sand)	2.2-2.4	144
Limestone	1.5	94
Anthracite coal, not piled	1.4-1.8	100
Bituminous coal, not piled.	1.2-1.5	83
Lignite coal, not piled	1.1-1.4	78
Wood, air dried:		
Douglas fir.	0.48-0.55	32
White oak	0.77	48
White maple	0.53	33
Oregon pine.	0.51	32
Hickory	0.74-0.80	48
Mahogany	0.56-0.85	44
African teak.	0.99	62
Indian teak	0.66-0.88	48

Formulas and Constants

1 HP = 33,000 Foot-pounds of work per minute.

1 HP =.746 K.W. = K.W.P 1.341.

1 HP = 2547 B.T.U. per hour.

1 B.T.U. = Heat required to raise 1 lb. water 1-F.

1 B.T.U. = 777.6 Foot-pounds work.

1 Kilowatt Hour = 3415 B.T.U.

Heat Value of Carbon = 14,600 B.T.U. per pound.

Latent Heat of Fusion of Ice = 143.15 B.T.U. per pound.

Latent Heat of Evaporation of Water at 212° F. = 970.4 B.T.U. per pound.

Total Heat of Saturated Steam at atmospheric pressure = 1,150.4 B.T.U. per pound.

1 Ton of Refrigeration = 288,000 B.T.U. per 24 hours.

g = Acceleration of Gravity (commonly taken as 32.16 feet per second per second).

1 Radian = 57.296 degrees.

1 Meter = 100 cm. = 39.37 inches.

1 Kilometer =.62137 miles.

1 Gallon = 231 cubic inches.

1 Barrel = 31.5 gallons.

Atmospheric Pressure = 14.7 pounds per sq. in. = 29.92 inches mercury at 32º F.

1 Lb. per Sq. In. Pressure = 2.3095 feet fresh water at 62º F. = 2.0355 inches mercury at 32º F. = 2.0416 inches mercury at 62º F.

Water Pressure (pounds per sq. in.) =.433 X height of water in feet (Fresh water at 62ºF.).

Weight of 1 cu. ft. fresh Water = 62.355 lbs. at 62ºF. = 59.76 lbs. at 212º F.

Weight of 1 cu. ft. Air at 14.7 lbs. per sq. in. Pressure = .07608 lbs. at 62º F. =.08073 lbs. at 32º F.

† Also look in the General Index under Weights, Measures, or the subject material required.

Courtesy of:
Screw Conveyor Parts

Flywheel Formulas

Flywheels are used on some machines, for example air compressors, to even out load pulsations. The following formulas are useful in designing entire flywheels and flywheel rims. A V-belt sheave may also be used as a flywheel eliminating the need for a separate flywheel in the system.

Formulas for Entire Flywheel

Kinetic energy of rotation of a flywheel (foot pounds)
$=.0001705\ N^2(WR^2)^*$.

Torque to uniformly accelerate or decelerate a flywheel

$$= \frac{.03908\ (N_2 - N_1)\ \ (WR^2),\ ^*\ \text{pound-inches}}{t}$$

where N_2 = final R.P.M. and N_1 = initial R.P.M.
Velocity at outside diameter (feet per minute) = 0.2618 ND.

W = weight (pounds).

R = radius of gyration (feet).

N = speed (R.P.M.)

t = time to change from N_1 to N_2 (seconds).

F = face of rim (inches).

D = outside diameter of rim (inches).

d = inside diameter of rim (inches).

K = weight per cubic inch of material (pounds).

*WR^2 = flywheel effect (pounds X feet^2). See table to the right for WR^2 of rims. Ordinarily the WR^2 of the rim only is considered. In unusual instances the relatively small WR^2 values of the hub and arms or web can be added directly to the WR^2 of the rim if desired. To find the WR^2 of a hub or web use the WR^2 formula for rims, substituting the hub or web outside diameter, inside diameter, and width for D, d and F respectively. When arms are used instead of a web an approximate WR^2 value of the arms is the total weight of the arms in pounds times the square of the radius in feet from the shaft center line to the mid point of the arms between hub and rim.

Table 30: Formulas for Flywheel Rims

Property	Cast Iron Rim (Based on.26 lbs. per cu. in.)	Steel Rim (Based on .283 lbs. per cu. in.)	Rim of any material weighing K pounds per cubic inch
Volume (Cubic Inches)	$.7854F(D^2-d^2)$	$.7854F(D^2-d^2)$	$.7854F(D^2-d^2)$
W Weight (Pounds)	$.2042F(D^2-d^2)$	$.2223F(D^2-d^2)$	$.7854FK(D^2-d^2)$
R Radius of Gyration (Feet)	$\sqrt{\frac{.8681\ (D^2-d^2)}{1000}}$	$\sqrt{\frac{0.8681\ (D^2-d^2)}{1000}}$	$\sqrt{\frac{.8681\ (D^2-d^2)}{1000}}$
WR^2 Wt X Sq. of Radius of Gyration (Lbs. X Ft.^{2})	$\frac{.1773F(D^4-d^4)}{1000}$	$\frac{.1929F(D^4-d^4)}{1000}$	$\frac{.6818FK(D^4-d^4)}{1000}$
T ▲ Tensile Load in rim (Lbs.)	$\frac{.3078FN2(D^3-d^3)}{1000000}$	$\frac{.3350FN2(D^3-d^3)}{1000000}$	$\frac{1,184FKN2(D^3-d^3)}{1000000}$

▲ Centrifugal force causes this tensile load at each and every section of the rim. Hence, on rims split into two or more sections the fastening at each joint should be designed to take the full load as calculated from the formula here given.

Centrifugal Force

R = Distance from the axis of rotation to the center of gravity of the body (feet).

N = Revolutions per minute.

v = Velocity of the center of gravity of the body (feet per second).

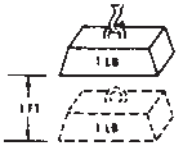
g = Acceleration due to gravity (32.16 commonly).

$$F = \frac{Wv^2}{gR} = \frac{WRN^2}{2933} = .000341\ WRN^2$$

F = Centrifugal force tending to move the body outward from the axis of rotation (pounds).

W = Weight of body (pounds).

Torque and Horsepower Equivalents

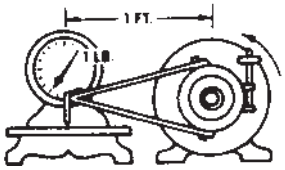


A foot-pound is the amount of energy expended in lifting a one-pound mass a distance of one foot against the pull of gravity

Foot-Pounds Indicate Energy

TORQUE

It is: a turning moment or twisting effort.
Is it expressed in foot-pounds? or pound-feet?



A pound-foot is the moment created by a force of one pound applied to the end of a lever arm one

Pound-Feet Indicate Torque

Torque (in Pound-Inches) $= \frac{63025 \times HP}{RPM}$
$=$ Force X Lever Arm (In Inches)

Torque (in Pound-Feet) $= \frac{5252 \times HP}{RPM}$
$=$ Force X Lever Arm (In Feet)

Force = Working Load in Pounds.
FPM = Feet Per Minute.
RPM = Revolutions Per Minute.
Lever Arm = Distance from the Force to the center of rotation in Inches or Feet.

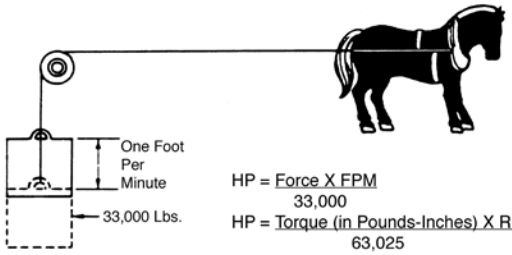
Example:
25 HP at 150 RPM = 10504 Pound-Inches Torque
2.5 HP at 150 RPM = 1050.4 Pound-Inches Torque

For other values of RPM move decimal point in RPM values to the left or right as desired, and in Torque values move to the right or left (opposite way) the same number of places.

Example:
25 HP at 150 RPM = 10504 Pound-Inches Torque
25 HP at 1.50 RPM = 1050400 Pound-Inches Torque
2.5 HP at 1.50 RPM = 105040 Pound-Inches Torque

Horsepower

Common Unit of Mechanical power - (HP)
One HP is the rate of work required to raise 33,000 pounds one foot in one minute



HP = Force X FPM / 33,000
HP = Torque (in Pounds-Inches) X RPM / 63,025
HP = Torque (in Pounds-Feet) X RPM / 5,252

Overhung Loads

An overhung load is a bending force imposed on a shaft due to the torque transmitted by V-drives, chain drives and other power transmission devices, other than flexible couplings.

Most motor and reducer manufacturers list the maximum values allowable for overhung loads. It is desirable that these figures be compared with the load actually imposed by the connected drive.

Overhung loads may be calculated as follows:

$$O.H.L. = \frac{63{,}000 \times HP \times F}{N \times R}$$

Where HP = Transmitted HP X service factor
N = RPM of shaft
R = Radius of sprocket, pulley. etc. (inches)
F = Factor (See chart to right)

Weights of the drive components are usually negligible. The formula is based on the assumption that the load is applied at a point equal to one shaft diameter from the bearing face. Factor F depends on the type of drive used:

F= { 1.00 for single chain drives.
1.3 for TIMING Belt Drives and HTD belt Drives.
1.25 for spur or helical gear or double chain drives.
1.50 for V-belt drives. 2.50 for flat belt drives.
2.50 for flat belt drives.

Example: Find the overhung load imposed on a reducer by a double chain drive transmitting 7 HP @ 30 RPM. The pitch diameter of the sprocket is 10"; service factor is 1.3.
Solution:

$$O.H.L. = \frac{(63{,}000)\ (7 \times 1.3)\ (1.25)}{(30)\ (5)} = 4{,}780 \text{ lbs.}$$

Mathematical Equations

To find circumference of a circle, multiply diameter by 3.1416.
To find diameter of a circle, multiply circumference by .31831.
To find area of a circle, multiply square of diameter by .7854.
To find area of a rectangle, multiply length by breadth.
To find area of a triangle, multiply base by 1/2 perpendicular height.
To find area of ellipse, multiply product of both diameters by .7854.
To find area of parallelogram, multiply base by altitude.
To find side of an inscribed square, multiply diameter by 0.7071 or multiply circumference by 0.2251 or divide circumference by 4.4428.
To find side of inscribed cube, multiply radius of sphere by 1.1547.
To find side of an equal square, multiply diameter by .8862.
To find the surface of a sphere, square the diameter and multiply by 3.1416.
To find the volume of a sphere, cube the diameter and multiply by .5236.
A side of a square multiplied by 1.4142 equals diameter of its circumscribing circle.
A side of a square multiplied by 4.443 equals circumference of its circumscribing circle.

FEATURES/BENEFITS PAGE G2-2	SPECIFICATION PAGE G2-9	MODIFICATION/ACCESSORIES PAGE G2-120	RENEWAL PARTS PAGE G2-166

Courtesy of:
ENGINEERIN SCREW CONVEYOR PARTS

Table 31: Strength and Physical Properties of Various Metals

Metals and Alloys	Stress in Thousands of Pounds per Sq. Inch				Modulus of Elasticity Millions	Elongation%
	Tension Ultimate	Tension Yield Point	Compression Ultimate	Shear Ultimate		
Aluminum, Type 1100.0, Annealed	13	5	–	9	10	45
Aluminum, Type 1100-H18, Hard	24	22	–	13	10	15
Aluminum. Type 3003-0, Annealed	16	6	–	11	10	40
Aluminum, Type 3003-H18, Hard	29	27	–	16	10	10
Aluminum, Type 5052-0, Annealed	28	13	–	18	10.20	30
Aluminum, Type 5052-H38, Hard	42	37	–	24	10.20	8
Aluminum, Type 5056-0, Annealed	42	22	–	26	10.30	35
Aluminum, Type 2014-0, Annealed	27	14	–	18	10.60	18
Aluminum, Type 2014-T4, Heat Treated	62	42	–	38	10.60	20
Aluminum, Type C4A, Casting. Solution Heat Treat	32	16	16▲	24	–	8.50
Aluminum, Type S5C, As Die Cast	30	16	16▲	19	–	9
Brass, Admiralty, Annealed	53	22	–	–	16	65
Brass, Aluminum, Annealed	60	27	–	–	16	55
Brass, Cartridge, 30% Zn, Annealed	44	11	–	32	16	66
Brass, Cartridge, 30% Zn, Hard	76	63	–	44	16	8
Brass, Naval, Annealed	57†	25†	–	40 †	15	47†
Brass, Naval, Leaded, Annealed	57†	25†	–	36 †	15	40†
Brass, Red, 15% Zn, Annealed	39	10	–	31	17	48
Brass, Red, 15% Zn, Hard	70	57	–	42	17	5
Brass, Red, Leaded, Cast, Grade 4A	33-46	17-24	10-12▲	–	9.1-14.8	20-35
Brass, Red, Leaded, Cast, Grade 4B	30-38	12-17	11-12▲	–	–	15-27
Brass, Semi-Red, Leaded, Cast, Grade 5A	29-39	13-17	–	–	7.7-14.3	18-30
Brass, Semi-Red, Leaded, Cast, Grade 5B	30-40	12-16	8-10▲	–	10-14	20-35
Brass, Yellow, 35% Zn, Annealed	46	14	–	32	15	65
Brass, Yellow, 35% Zn, Hard	74	60	–	43	15	8
Bronze, Aluminum, As Cast	67-95	27-45	–	–	15-18	5-35
Bronze, Commercial, 10% Zn, Annealed	37†	10†	–	28 †	17	45=
Bronze, Manganese, Annealed	65†	30†	–	42 v	15	33=
Bronze, Phosphor, Annealed	40-66	14-24	–	–	16-17	48-70
Bronze, Tin, High Leaded, Cast	23-38	11-22	12-16▲	–	8.5-13	7-20
Bronze, Tin, Leaded, Cast	33-48	16-26	9-15▲	–	10.6-16	15-40
Copper, Beryllium, Annealed	60-80	25-35v	–	50-60 †	19	35-50†
Copper, Electrolytic, Tough Pitch, Annealed	32†	10†	–	22 †	17	45†
Inconel, Cast	65-90	–	–	–	23	10-20
Inconel, S, Cast	90-120	80-100	–	–	25	1-3
Inconel, Shapes, Plate, Etc., Annealed	80-100†	30-45†	–	–	31	35-55†
Inconel, X, Shapes, Plate, Etc., Annealed	110-130†	45-65†	–	–	31	40-55†
Iron, Cast, Class 30	30-34	–	115	44	15	–
Iron, Cast, Class 35	35-40	–	125	43	16	–
Iron, Ingot, Hot Rolled	44	23	–	–	29.80	47
Iron, Malleable, Class 32510	50	33	90	46	25	10-18
Iron, Malleable, Class 35018	55	37	90	51	25	18-25
Iron, Nodular (Ductile) Class 60-45-10	60	45	120	–	22-25	10-25
Iron, Nodular (Ductile) Class 80-60-3	80	60	160	–	22-25	3-10
Iron, Pearlitic, Malleable	60-90	40-70	–	–	28	3-12
Iron, Wrought, Hot Rolled	34-47	23-24	–	–	29	7-35
Lead, Hard, Rolled	4.0-4.6	–	–	–	–	31-48
Magnesium Alloy, Extruded, ASTM MIA	26-28	23-28	10-13	16	6.50	8-11
Magnesium Alloy, Extruded, ASTM AZ6IA-F	40-45	22-32	15-21	21	6.50	15-16
Magnesium Alloy, Cast, ASTM MIB	14	4.50	–	11	6.50	5
Magnesium Alloy, Cast, ASTM AZ92A	24	14	–	19	6.50	2
Magnesium Alloy, Cast, ASTM AZ9IA	36	23	–	20	6.50	4

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Table 31: Strength and Physical Properties of Various Metals

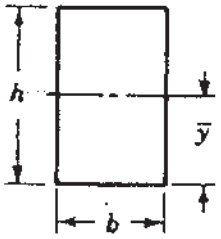
Metals and Alloys	Stress in Thousands of Pounds per Sq. Inch				Modulus of Elasticity Millions	Elongation%
	Tension Ultimate	Tension Yield Point	Compression Ultimate	Shear Ultimate		
Monel, Cast	65-90	32-45	–	–	23	20-50
Monel, S, Cast	120-145	80-130	–	–	24.20	1-4
Monel, Shapes, Plate, Etc., Annealed	70-85†	25-45†	–	–	26	35-50†
Monel, K, Shapes, Plate, Etc., Annealed	90-105†	40-65†	–	26	25-45	35-55†
Muntz Metal, Cu 59.63%, Zn balance	54	21	–	40	15	45
Nickel, Cast .	50-65	15-30	–	–	21.50	15-30
Nickel, Silver, Annealed	49-63†	18-30†	–	–	17-18	35-60†
Steel, Cast Carbon, Class 70,000 Normalized	70	38	–	–	30	28
Steel, Cast Low Alloy, Class 100,000, Normalized and Tempered	100	68	–	–	29-30	20
Steel, Cast Low Alloy, Class 120,000, Quenched and Tempered	120	95	–	–	29-30	16
Steel, Cast Low Alloy, Class 200,000, Quenched and Tempered	200	170	–	–	29-30	5
Steel, Sheets	48	25	–	–	29-30	18-27
Steel, Stainless, Austenitic, Types 304, 316	85	35	–	–	28	55-60
Steel, Stainless, Martensitic, Type 416	75	40	–	–	29	30
Steel, Structural, Bridge and Building, ASTM A7	60-72	33	33▲	45-54	29-30	21
Steel, Structural, High Strength, Low Alloy, ASTM A242	63-70	42-50	42-50▲	47-53	29-30	18-24
Zinc, Die Cast Alloy XXIII	41	–	60▲	31	–	10

† When hardened, strength values are higher, elongation less
▲ Compression yield point

Table 32: Properties of Sections

A = area
I = moment of inertia
J = polar moment of inertia
Z = section modulus π
k = radius of gyration
y = centroidal distance

Rectangle



$A = bh$

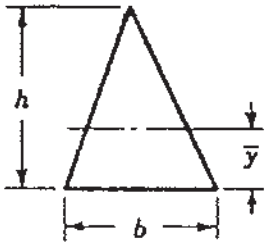
$I = \frac{bh^3}{12}$

$Z = \frac{bh^2}{6}$

$k = 0.289h$

$\bar{y} = \frac{h}{2}$

Triangle



$A = \frac{bh}{2}$

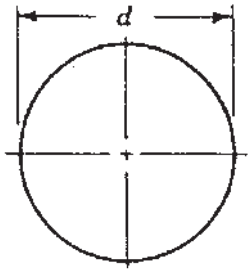
$I = \frac{bh^3}{36}$

$Z = \frac{bh^2}{24}$

$k = 0.236h$

$\bar{y} = \frac{h}{3}$

Circle



$A = \frac{\pi d^2}{4}$

$I = \frac{\pi d^4}{64}$

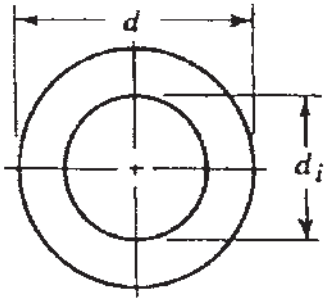
$Z = \frac{\pi d^3}{32}$

$J = \frac{\pi d^4}{32}$

$k = \frac{d}{4}$

$\bar{y} = \frac{d}{2}$

Hollow Circle



$A = \frac{\pi}{4}(d^2 - d_i^2)$

$I = \frac{\pi}{64}(d^4 - d_i^4)$

$Z = \frac{\pi}{32d}(d^4 - d_i^4)$

$J = \frac{\pi}{32}(d^4 - d_i^4)$

$k = \sqrt{\frac{d^2 - d_i^2}{16}}$

$\bar{y} = \frac{d}{2}$

Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

Table 33: Coefficients of Friction "f"

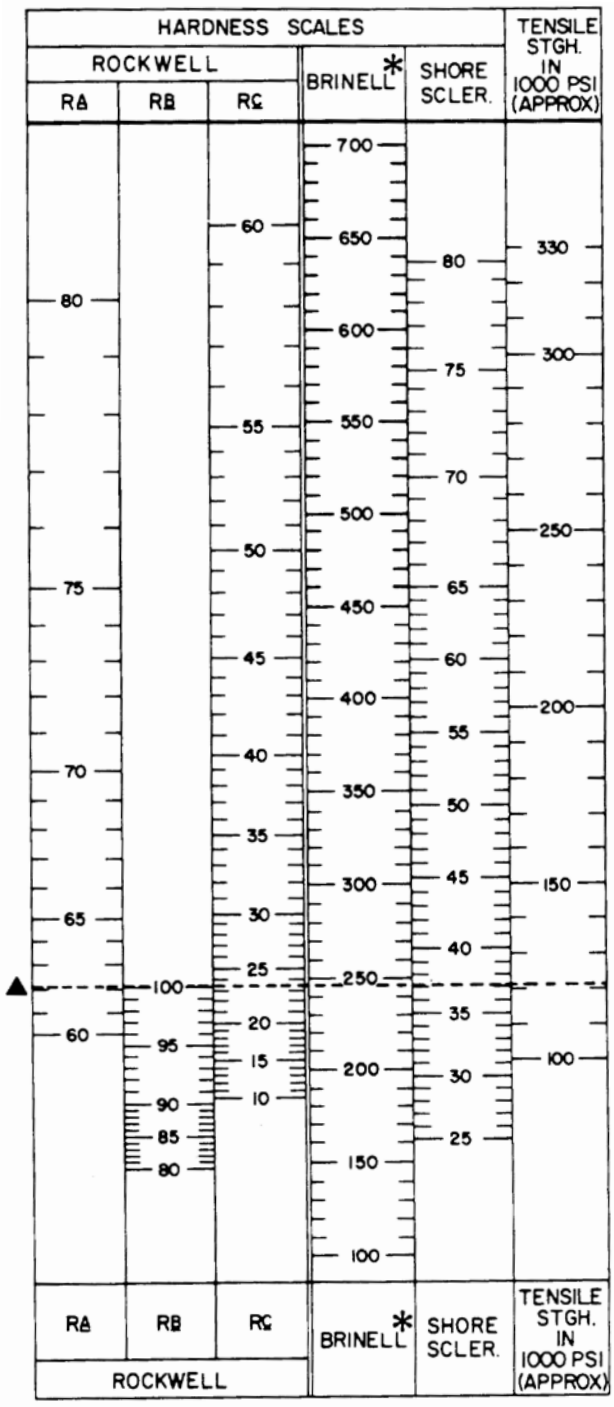
Material	Static		Sliding	
	Dry	Lubricated	Dry	Lubricated
Aluminum on aluminum	1.35	–	–	–
Canvas belt on rubber lagging	0.30	–	–	–
Canvas belt, stitched, on steel	–	–	0.20	0.10
Canvas belt, woven, on steel	–	–	0.22	0.10
Cast iron on asbestos, fabric	–	–	–	–
brake material	–	–	0.35-0.40	–
Cast iron on brass	–	–	0.30	–
Cast iron on bronze	–	–	0.22	0.07-0.08
Cast iron on cast iron	1.10	–	0.15	0.06-0.10
Cast iron on copper	1.05	–	0.29	–
Cast iron on lead	–	–	0.43	–
Cast iron on leather	0.60	–	–	0.13-0.36
Cast iron on oak (parallel)	–	–	0.30-0.50	0.07-0.20
Cast iron on magnesium	–	–	0.25	–
Cast iron on steel, mild	–	0.18	0.23	1/0/00 3:11
Cast iron on tin	–	–	0.32	–
Cast iron on zinc	0.85	–	0.21	–
Earth on earth	0.25-1.0	–	–	–
Glass on glass	0.94	–	0.40	–
Hemp rope on wood	0.50-0.80	–	0.40-0.70	–
Nickel on nickel	1.10	–	0.53	0.12
Oak on leather (parallel)	0.50-0.60	–	0.30-0.50	–
Oak on oak (parallel)	0.62	–	0.48	0.16
Oak on oak (perpendicular)	0.54	–	0.32	0.07
Rubber tire on pavement	0.8-0.9	0.6-0.7 *	0.75-0.85	0.5-0.7*
Steel on ice	0.03	–	0.01	-
Steel, hard, on babbit	0.42-0.70	0.08-0.25	0.33-0.35	0.05-0.16
Steel, hard. on steel, hard	0.78	0.11-0.23	0.42	0.03-0.12
Steel, mild, on aluminum	0.61	–	0.47	–
Steel, mild, on brass	0.51	–	0.44	–
Steel, mild, on bronze	–	–	0.34	0.17
Steel, mild, on copper	0.53	–	0.36	0.18
Steel, mild, on steel, mild	0.74	–	0.57	0.09-0.19
Stone masonry on concrete	0.76	–	–	–
Stone masonry on ground	0.65	–	–	–
Wrought iron on bronze	0.19	0.07-0.08	0.18	–
Wrought iron on wrought iron	–	0.11	0.44	0.08-0.10

* Wet pavement

Table 34: U.S. Standard Sheet Metal Gages

Gage No.	Thickness in Decimal Parts of an Inch	Gage No.	Thickness in Decimal Parts of an Inch
1	.2813	20	.0359
2	.2656	21	.0329
3	.2391	22	.0299
4	.2242	23	.0269
5	.2092	24	.0239
6	.1943	25	.0209
7	.1793	26	.0179
8	.1644	27	.0164
9	.1495	28	.0149
10	.1345	29	.0135
11	.1196	30	.0120
12	.1046	31	.0109
13	.0897	32	.0102
14	.0747	33	.0094
15	.0673	34	.0086
16	.0598	35	.0078
17	.0538	36	0070
18	.0478	37	.0066
19	.0418	38	.0063

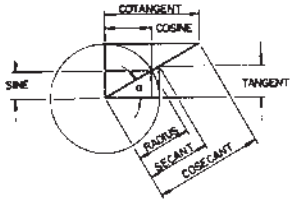
Hardness Comparison Chart

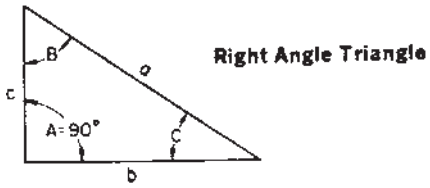


* Shaded area indicates values may vary depending on type of ball used.

▲ Example: A Brinell number of 245 is equal to 62 Rockwell "A", 100 Rockwell "B", 23 Rockwell "C", 37 Shore with a tensile of approximately 120,000 psi.

Trigonometric Formula





Right Angle Triangle

Table 35: Formulas for Finding Functions of Angles

Side opposite / Hypotenuse	=	SINE
Side adjacent / Hypotenuse	=	COSINE
Side opposite / Side adjacent	=	TANGENT
Side adjacent / Side opposite	=	COTANGENT
Hypotenuse / Side adjacent	=	SECANT
Hypotenuse / Side opposite	=	COSECANT

Table 36: Formulas for Finding Sides of Right Angle Triangles with an Angle and Side Known

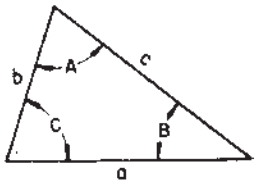
To find: Length of side opposite	Hypotenuse x Sine Hypotenuse ÷ Coscant Side adjacent x Tangent Side adjacent ÷ Cotangent
To find: Length of side adjacent	Hypotenuse X Cosine Hypotenuse ÷ Secant Side opposite X Cotangent Side opposite ÷ Tangent
To find: Length of Hypotenuse	Side opposite X Cosecant Side opposite ÷ Sine Side adjacent X Secant Side adjacent ÷ Cosine

Table 37: To Find Angles and Sides of Right Angle Triangles

To Find Angles				To Find Angles		
To Find:	**Formulas**			**To Find:**	**Formulas**	
C	c / a	=	Sine C	a	$\sqrt{b^2 + c^2}$	–
C	b / a	=	Cosine C	a	c x Cosec. C	c / Sine C
C	c / b	=	Tan. C	a	c x Secant B	c / Cosine B
C	b / c	=	Cotan C	a	b x Cosec. B	b / Sine B
C	a / b	=	Secant C	a	b x Secant C	b / Cosine C
C	a / c	=	Cosec. C	b	$\sqrt{a^2 + c^2}$	–
B	c / a	=	Sine B	b	a x Sine B	a / Cosecant B
B	c / a	=	Cosine B	b	a x Cos. C	a / Secant C
B	b / c	=	Tan. B	b	c x Tan. B	c / Cotangent B
B	c / d	=	Cotan. B	b	c x Cot. C	c / Tangent C
B	a / c	=	Secant B	c	$\sqrt{a^2 + b^2}$	–
B	a / b	=	Cosec. B	c	a x Cos. B	a / Secant B
				c	a x Sine C	a / Cosecant C
				c	b x Cot. B	b / Tangent B
				c	b x Tan. C	b / Cotangent C

Table 38: To Find Angles and Sides of Oblique Angle Triangle

Oblique Angle Triangle

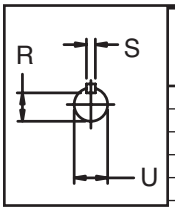


To Find Angles and Sides of Oblique Angle Triangle					
To find:	**Known**	**Formulas**	**To Find:**	**Known**	**Formulas**
C	A, B	180° (A + B)	A	B, C	180° - (B + C)
b	a, B, A	a x Sin. B / Sin A	Cos. A	a, b, c	$b^2 + c^2 - a^2$ / 2bc
c	a, A, C	a x Sin. C / Sin. A	Sin. C	c, A, a	c x Sin. A / a
Tan. A	a, C, b	a x Sin. C / b - (a x Cos. C)	Cot. B	a, C, b	a x Cosec. C / b
B	A, C	180° - (A + C)	c	b, C, B	b x Sin. C x Cosec. B
Sin. B	b, A, a	b x Sin. A / a	–	–	–

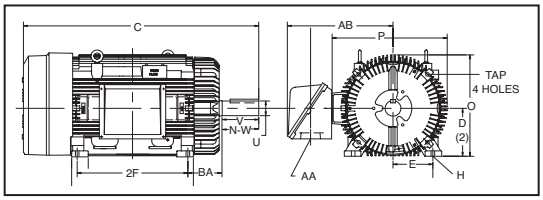
Courtesy of:
ENGINEERII SCREW CONVEYOR PARTS

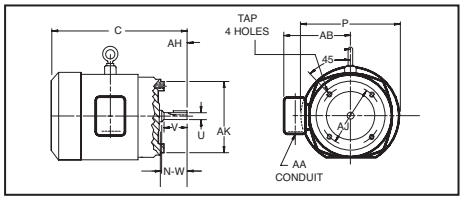
NEMA
Quick Reference Chart

- Dimensions are for reference only



FRAME		NEMA SHAFT	KEYSEAT DIMENSIONS		FRAME		NEMA SHAFT	KEYSEAT DIMENSIONS	
		U	R	S			U	R	S
48	48	1/2	29/64	FLAT	284T	286T	1-7/8	1-19/32	1/2
56	56	5/8	33/64	3/16	324T	326T	2-1/8	1-27/32	1/2
143T	145T	7/8	49/64	3/16	364T	365T	2-3/8	2-1/64	5/8
182T	184T	1-1/8	63/64	1/4	404T	405T	2-7/8	2-29/64	3/4
213T	215T	1-3/8	1-13/64	5/16	444T	445T	3-3/8	2-7/8	7/8
254T	256T	1-5/8	1-13/32	3/8	447T	449T	3-3/8	2-7/8	7/8





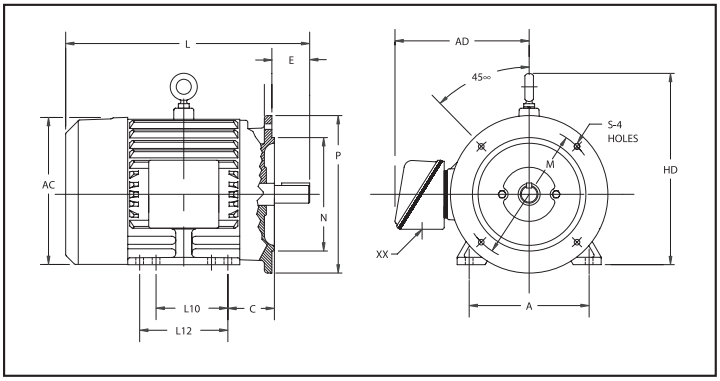
NEMA C-FACE	BA Dimensions
143TC - 145TC	2-3/4
182TC - 184 TC	3-1/2
213TC - 215TC	4-1/4
254TC- 256TC	4-3/4

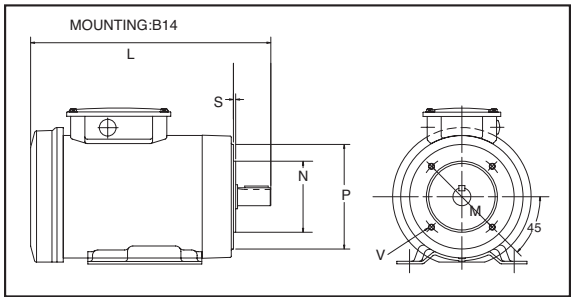
NEMA Frame	D	E	2F	H	N-W	O	P	U	Keyway	V	AA	AB	AH	AJ	AK	BA	Tap Size
48	3	2-1/8	2-3/4	11/32 SLOT	1-1/2	5-13/16	5-5/8	1/2		1-1/2	1/2	–	1-11/16	3-3/4	3	2-1/2	1/4-20
56	3-1/2	2-7/16	3	11/32	1-7/8	8-9/16	7-9/32	5/8	3/16x3/32	1-7/8	1/2	–	2-1/16	5-7/8	4-1/4	2-3/4	3/8-16
56H	3-1/2	2-7/16	5	SLOT	1-7/8	8-9/16	7-9/32	5/8	3/16x3/32	1-7/8	1/2	–	2-1/16	5-7/8	4-1/2	2-3/4	3/8-16
143T	3-1/2	2-7/16	4	11/32	2-1/4	8-9/16	7-9/32	7/8	3/16x3/32	2-1/4	3/4	–	2-1/8	5-7/8	4-1/2	2-1/4	3/8-16
145T	3-1/2	2-3/4	5	11/32	2-1/4	8-9/16	7-9/32	7/8	3/16x3/32	2-1/4	3/4	–	2-1/8	5-7/8	4-1/2	2-1/4	3/8-16
182	4-1/2	3-3/4	4-1/2	13/32	2-1/4	9-7/8	9-1/4	7/8	3/16x3/32	2-1/4	3/4	8-7/16	2-1/8	5-7/8	4-1/2	2-3/4	3/8-16
184	4-1/2	3-3/4	5-1/2	13/32	2-1/4	9-7/8	9-1/4	7/8	3/16x3/32	2-1/4	3/4	8-7/16	2-1/8	5-7/8	4-1/2	2-3/4	3/8-16
182T	4-1/2	3-3/4	4-1/2	13/32	2-3/4	9-7/8	9-1/4	1-1/8	1/4x1/8	2-3/4	3/4	7-13/16	2-5/8	7-1/4	8-1/2	2-3/4	1/2-13
184T	4-1/2	3-3/4	5-1/2	13/32	2-3/4	9-7/8	9-1/4	1-1/8	1/4x1/8	2-3/4	3/4	7-13/16	2-5/8	7-1/4	8-1/2	2-3/4	1/2-13
213	5-1/4	4-1/4	5-1/2	13/32	3	11-1/4	10-1/2	1-1/8	1/4x1/8	3	1	9-5/16	2-3/4	7-1/4	8-1/2	3-1/2	1/2-13
215	5-1/4	4-1/4	7	13/32	3	11-1/4	10-1/2	1-1/8	1/4x1/8	3	1	9-5/16	2-3/4	7-1/4	8-1/2	3-1/2	1/2-13
213T	5-1/4	4-1/4	5-1/2	13/32	3-3/8	11-1/4	10-1/2	1-3/8	5/16x5/32	3-3/8	1	8-11/16	3-1/8	7-1/4	8-1/2	3-1/2	1/2-13
215T	5-1/4	4-1/4	7	13/32	3-3/8	11-1/4	10-1/2	1-3/8	5/16x5/32	3-3/8	1	8-11/16	3-1/8	7-1/4	8-1/2	3-1/2	1/2-13
254U	6-1/4	5	8-1/4	17/32	3-3/4	13-1/4	13-1/4	1-3/8	5/16x5/32	3-3/4	1-1/4	10-13/16	3-1/2	7-1/4	8-1/2	4-1/4	1/2-13
256U	6-1/4	5	10	17/32	3-3/4	13-1/4	13-1/4	1-3/8	5/16x5/32	3-3/4	1-1/4	10-13/16	3-1/2	7-1/4	8-1/2	4-1/4	1/2-13
254T	6-1/4	5	8-1/4	17/32	4	13-1/4	13-1/4	1-5/8	3/8x3/16	4	1-1/4	10-3/4	3-3/4	7-1/4	8-1/2	4-1/4	1/2-13
256T	6-1/4	5	10	17/32	4	13-1/4	13-1/4	1-5/8	3/8x3/16	4	1-1/4	10-3/4	3-3/4	7-1/4	8-1/2	4-1/4	1/2-13
284U	7	5-1/2	9-1/2	17/32	4-7/8	14-3/4	14-7/8	1-5/8	3/8x3/16	4-7/8	1-1/2	12-5/8	4-5/8	9	10-1/2	4-3/4	1/2-13
286U	7	5-1/2	11	17/32	4-7/8	14-3/4	14-7/8	1-5/8	3/8x3/16	4-7/8	1-1/2	12-5/8	4-5/8	9	10-1/2	4-3/4	1/2-13
284T	7	5-1/2	9-1/2	17/32	4-5/8	14-3/4	14-7/8	1-7/8	1/2x1/4	4-5/8	1-1/2	12-3/4	4-3/8	9	10-1/2	4-3/4	1/2-13
286T	7	5-1/2	11	17/32	4-5/8	14-3/4	14-7/8	1-7/8	1/2x1/4	4-5/8	1-1/2	12-3/4	4-3/8	9	10-1/2	4-3/4	1/2-13
284TS	7	5-1/2	9-1/2	17/32	3-1/4	14-3/4	14-7/8	1-5/8	3/8x3/16	3-1/4	1-1/2	12-3/4	3	9	10-1/2	4-3/4	1/2-13
286TS	7	5-1/2	11	17/32	3-1/4	14-3/4	14-7/8	1-5/8	3/8x3/16	3-1/4	1-1/2	12-3/4	3	9	10-1/2	4-3/4	1/2-13
324U	8	6-1/4	10-1/2	21/32	5-5/8	16-11/16	17	1-7/8	1/2x1/4	5-5/8	2	15-7/16	5-3/8	11	12-1/2	5-1/4	5/8-11
326U	8	6-1/4	12	21/32	5-5/8	16-11/16	17	1-7/8	1/2x1/4	5-5/8	2	15-7/16	5-3/8	11	12-1/2	5-1/4	5/8-11
324T	8	6-1/4	10-1/2	21/32	5-1/4	16-11/16	17	2-1/8	1/2x1/4	5-1/4	2	15-3/16	5	11	12-1/2	5-1/4	5/8-11
326T	8	6-1/4	12	21/32	5-1/4	16-11/16	17	2-1/8	1/2x1/4	5-1/4	2	15-3/16	5	11	12-1/2	5-1/4	5/8-11
324TS	8	6-1/4	10-1/2	21/32	3-3/4	16-11/16	17	1-7/8	1/2x1/4	3-3/4	2	15-3/16	3-1/2	11	12-1/2	5-1/4	5/8-11
326TS	8	6-1/4	12	21/32	3-3/4	16-11/16	17	1-7/8	1/2x1/4	3-3/4	2	15-3/16	3-1/2	11	12-1/2	5-1/4	5/8-11
364U	9	7	11-1/4	21/32	6-3/8	18-1/2	19-1/2	2-1/8	1/2x1/4	6-3/8	2-1/2	18	6-1/8	11	12-1/2	5-7/8	5/8-11
365U	9	7	12-1/4	21/32	6-3/8	18-1/2	19-1/2	2-1/8	1/2x1/4	6-3/8	2-1/2	18	6-1/8	11	12-1/2	5-7/8	5/8-11
364T	9	7	11-1/4	21/32	5-7/8	18-1/2	19-1/2	2-3/8	5/8x5/16	5-7/8	2-1/2	18-1/16	5-5/8	11	12-1/2	5-7/8	5/8-11
365T	9	7	12-1/4	21/32	5-7/8	18-1/2	19-1/2	2-3/8	5/8x5/16	5-7/8	2-1/2	18-1/16	5-5/8	11	12-1/2	5-7/8	5/8-11
364TS	9	7	11-1/4	21/32	3-3/4	18-1/2	19-1/2	1-7/8	1/2x1/4	3-3/4	2-1/2	18-1/16	3-1/2	11	12-1/2	5-7/8	5/8-11
365TS	9	7	12-1/4	21/32	3-3/4	18-1/2	19-1/2	1-7/8	1/2x1/4	3-3/4	2-1/2	18-1/16	3-1/2	11	12-1/2	5-7/8	5/8-11
404U	10	8	12-1/4	13/16	7-1/8	21-5/16	22-1/2	2-3/8	5/8x5/16	7-1/8	3	19-1/4	6-7/8	11	12-1/2	6-5/8	5/8-11
405U	10	8	13-3/4	13/16	7-1/8	21-5/16	22-1/2	2-3/8	5/8x5/16	7-1/8	3	19-1/4	6-7/8	11	12-1/2	6-5/8	5/8-11
404T	10	8	12-1/4	13/16	7-1/4	21-5/16	22-1/2	2-7/8	3/4x3/8	7-1/4	3	19-5/16	7	11	12-1/2	6-5/8	5/8-11
405T	10	8	13-3/4	13/16	7-1/4	21-5/16	22-1/2	2-7/8	3/4x3/8	7-1/4	3	19-5/16	7	11	12-1/2	6-5/8	5/8-11
404TS	10	8	12-1/4	13/16	4-1/4	21-5/16	22-1/2	2-1/8	1/2x1/4	4-1/4	3	19-5/16	4	11	12-1/2	6-5/8	5/8-11
405TS	10	8	13-3/4	13/16	4-1/4	21-5/16	22-1/2	2-1/8	1/2x1/4	4-1/4	3	19-5/16	4	11	12-1/2	6-5/8	5/8-11
444U	11	9	14-1/2	13/16	8-5/8	23-3/8	25-1/4	2-7/8	3/4x3/8	8-5/8	3	22-3/16	8-3/8	14	16	7-1/2	5/8-11
445U	11	9	16-1/2	13/16	8-5/8	23-3/8	25-1/4	2-7/8	3/4x3/8	8-5/8	3	22-3/16	8-3/8	14	16	7-1/2	5/8-11
444T	11	9	14-1/2	13/16	8-1/2	23-3/8	25-1/4	3-3/8	7/8x7/16	8-1/2	3	23-3/8	8-1/4	14	16	7-1/2	5/8-11
445T	11	9	16-1/2	13/16	8-1/2	23-3/8	25-1/4	3-3/8	7/8x7/16	8-1/2	3	23-3/8	8-1/4	14	16	7-1/2	5/8-11
447T	11	9	20	13/16	8-1/2	23-5/8	26	3-3/8	7/8x7/16	8-1/2	3	23-7/8	8-1/4	14	16	7-1/2	5/8-11
449T	11	9	25	13/16	8-1/2	23-5/8	26	3-3/8	7/8x7/16	8-1/2	3	23-7/8	8-1/4	14	16	7-1/2	5/8-11
444TS	11	9	14-1/2	13/16	4-3/4	23-3/8	25-1/4	2-3/8	5/8x5/16	4-3/4	3	23-3/8	4-1/2	14	16	7-1/2	5/8-11
445TS	11	9	16-1/2	13/16	4-3/4	23-3/8	25-1/4	2-3/8	5/8x5/16	4-3/4	3	23-3/8	4-1/2	14	16	7-1/2	5/8-11
447TS	11	9	20	13/16	4-3/4	23-5/8	26	2-3/8	5/8x5/16	4-3/4	4 NPT	23-7/8	4-1/2	14	16	7-1/2	5/8-11
449TS	11	9	25	13/16	4-3/4	23-5/8	26	2-3/8	5/8x5/16	4-3/4	4 NPT	23-7/8	4-1/2	14	16	7-1/2	5/8-11

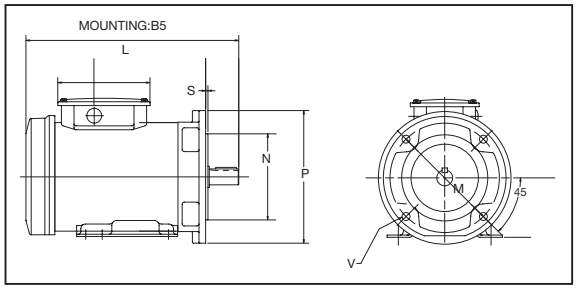
FEATURES/BENEFITS PAGE G2-2	SPECIFICATION PAGE G2-9	MODIFICATION/ACCESSORIES PAGE G2-120	RENEWAL PARTS PAGE G2-166

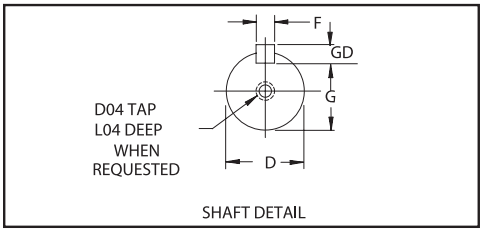
IEC Quick Reference Chart

- Dimensions are for reference only
- Drawings represent standard TEFC general purpose motors
  Contact your local Dodge/Reliance Sales Office at 1-864-284-5700 for "C" dimensions.









KEY AND KEYSEAT DIMENSIONS									
FRAME	D	G	F	GD	FRAME	D	G	F	GD
71	14	11	5	5	160	37	42	12	8
80	19	15.5	6	6	180	48	42.5	14	9
90	24	20	8	7	200	55	49	16	10
100	28	24	8	7	225	60	53	18	11
112	28	24	8	7	250	70	67.5	20	12
132	38	33	10	8	280	80	71	22	14

Frame	B3 RIGID BASE					SHAFT		B5 FLANGE					B14 FACE					GENERAL		
	A	L10	L12	HD	C	E	D	N	M	P	S	V	N	M	P	S	V	AC	AD	XX
71	–	–	–	–	–	–	–	110	130	160	"3,5"	"9,5"	70	85	105	2.5	M6	143	–	13
80	125	100	–	188	50	40	19	130	165	200	"3,5"	"11,5"	80	100	120	3	M6	143	–	13
90	140	100	125	208	56	50	24	130	165	200	"3,5"	"11,5"	95	115	140	3	M8	163	–	13
100	160	112	140	229	63	60	28	180	215	250	4	14	110	130	160	3.5	M8	175	–	19
112S	190	114	–	301.8	71.4	60	28	180	215	250	4	14	110	130	160	3.5	M8	243	210	32
112M	190	–	140	301.8	71.4	60	28	180	215	250	4	14	110	130	160	3.5	M8	243	210	32
132S	216	140	–	336.6	88.9	80	38	230	265	300	4	14	130	165	200	3.5	M8	286	243	32
132M	216	–	178	336.6	88.9	80	38	230	265	300	4	14	130	165	200	3.5	M8	286	243	32
160M	254	210	–	399	108	110	42	250	300	350	5	18	180	215	250	4	M12	324	320	40
160L	254	–	254	399	108	110	42	250	300	350	5	18	180	215	250	4	M12	324	320	40
180M	279	241	–	436	121	110	48	250	300	350	5	18	398	355	40	–	–	398	355	40
180L	279	–	279	436	121	110	48	250	300	350	5	18	398	355	40	–	–	398	355	40
200M	318	267	–	486	133	110	55	300	350	400	5	18	442	445	50	–	–	442	445	50
200L	318	–	305	486	133	110	55	300	350	400	5	18	442	445	50	–	–	442	445	50
225S	356	286	–	545	149	140	60	350	400	450	5	18	490	470	50	–	–	490	470	50
225M	356	–	311	545	149	140	60	350	400	450	5	18	490	470	50	–	–	490	470	50
250S	406	311	–	616	168	140	65	–	–	–	–	–	–	–	–	–	–	600	510	63
250M	406	–	349	616	168	140	65	–	–	–	–	–	–	–	–	–	–	600	535	63
280S	457	368	–	677	190	140	75	–	–	LEGEND				–	–	–	–	650	535	63
280M	457	–	419	677	190	140	75	–	–	Metric Dimensions in MM				–	–	–	–	650	535	63
280K	457	500	–	677	190	140	75	–	–	1 mm = .03937"				–	–	–	–	650	535	63
280H	457	630	–	677	190	140	75	–	–	–	–	–	–	–	–	–	–	650	535	63
L280H	457	635	–	677	202	205	75	–	–	–	–	–	–	–	–	–	–	650	535	63

Courtesy of:
Screw Conveyor Parts

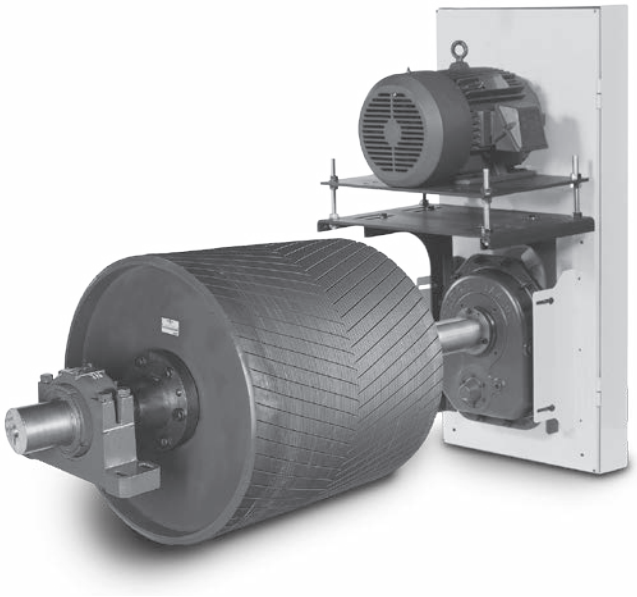
SYSTEM-1

One System • One Source • One Solution

For over 20 years, System-1 has offered an integrated single source for all your mechanical and electrical power transmission needs featuring Baldor•Reliance and Baldor•Dodge products. System-1 can optimize your equipment performance and reliability, reduce overall costs, assist in coordinating multi-product projects, and ultimately improve your company's profitability.

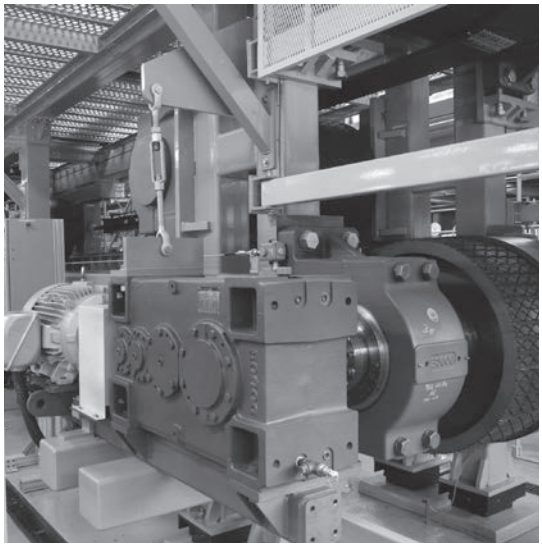
The System-1 team includes engineering and product marketing specialists, in addition to Baldor's full complement of resources for product engineering and selection programs. The System-1 team also work directly with Baldor's Industry Solutions team to provide industry specific solutions.

To estimate the total cost of a project, companies must consider the time they spend in designing, selecting, and sourcing all the Power Transmission components of a drive system. System-1 can reduce costs by eliminating the need to order from multiple vendors, ordering mismatched components, coordinating multiple shipments from various vendors, and paying multiple invoices. Contact System-1 for your next package opportunity and find out why we are the industry's proven single source provider for innovative drive system solutions.



What is System-1?

System-1 is a product marketing group that facilitates the design, quotation, and order processing of multiple power transmission, electrical products and services into a complete package solution.



Courtesy of:
Screw Conveyor Parts

SYSTEM-1

When do I use System-1?

A System-1 request for quote typically consists of multiple products that are combined to make up a complete assembly.

Examples are:

- Dodge Torque Arm gear reducer, v-belt drive, Baldor Reliance motors, pulleys, shafts, and bearings
- Creep Drive / Turning gear sets
- Dodge Magnagear packages for large HP applications (up to 5,000HP)
- Dodge Quantis reducers, Baldor Reliance motors, Dodge couplings, and Variable Frequency Drives

System-1 can also incorporate non-Baldor products such as external backstops and over running clutches.

Why should I use System-1?

- Saves you up front engineering and quoting time
- Single point of contact from the initial quote phase up through receipt of your product
- Pre-assembled packages
- Single point of contact should any issues arise

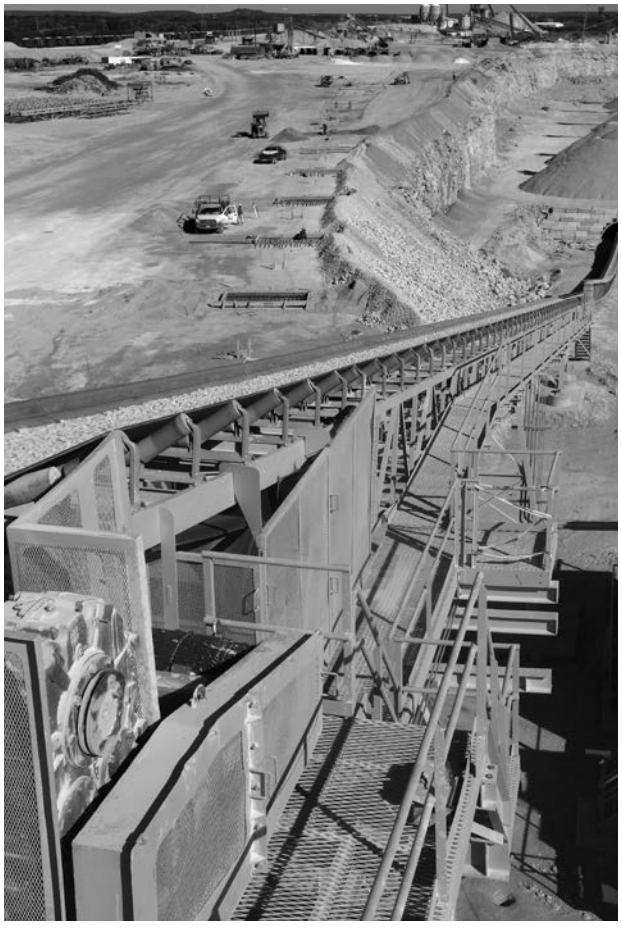
All these add up to a lower total cost of ownership to you and your customer!

Who can I contact about System-1?

System-1 phone number:
864-284-5767

Fax:
864-281-2355

Email:
pssystem1@baldor.abb.com



Customized Conveyor Package Solutions

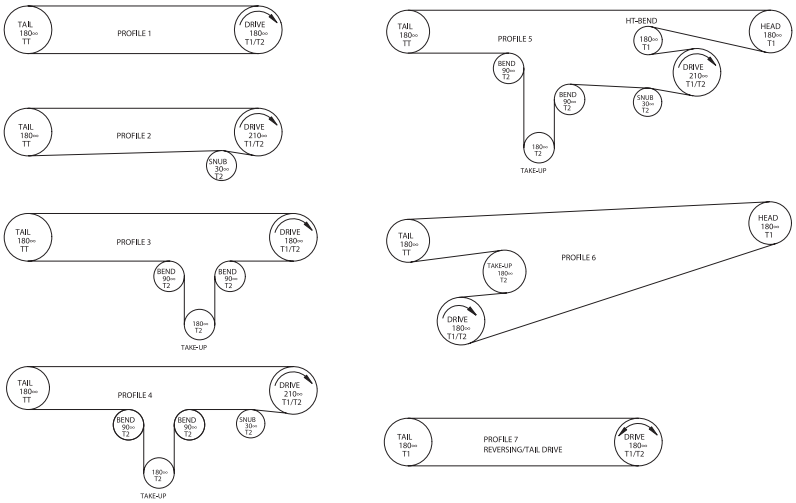
Use this quick fax form to receive your customized solution quotation.

To: System-1 Group
Fax: (864) 281-2355
Re: Customized Quotation
E-Mail Address: pssystem1@baldor.com

From: _____
Company / Customer Number: _____
City, State: _____
Phone: _____
Fax: _____

Desired System Capacity (TPH)	_____	Length of Conveyor	_____
Material Type	_____	Change in Elevation	_____
Estimated Weight of Material	_____	Number of Belt Scrapers/Plows	_____
Desired Belt Width	_____	Idler Angle	_____
Desired Belt Speed	_____	Bearing Center Distance	_____

Desired Conveyor Profile (Please Circle Your Selection)



Additional Comments

Motor Type:
- Premium Efficiency Super-E ❒
- E-Pact ❒
- Severe Duty ❒
- Crusher Duty ❒
- 841-XL ❒

Reducer Type:
- QUANTIS ❒
- Torque-Arm (TXT) ❒
- Torque-Arm II (TAII) ❒
- Motorized Torque-Arm II (MTA II) ❒
- MAXUM ❒
- MagnaGear ❒
- TIGEAR 2 ❒

Bearing Type:
- SCM Ball Bearing ❒
- Type-E ❒
- S-2000 ❒
- IMPERIAL ❒
- TAF ❒
- IMPERIAL SAF ❒
- USAF ❒
- SPLIT-SPHERE ❒
- ISAF ❒

Conveyor Pulley Type:
- Cema Drum ❒
- Mine Duty Extra Drum ❒
- 1/2” Herringbone Lagging ❒
- 1/2” Plain Lagging ❒
- 1/2” Diamond Lagging ❒
- 1/2” Holz Lagging ❒
- Ceramic Lagging ❒
- Chevron Lagging ❒
- Cema Wing ❒
- Mine Duty Wing ❒
- Wing Lagging ❒

Courtesy of:
Screw Conveyor Parts

Customized Conveyor Package Solutions

Use this quick fax form to receive your customized solution quotation.

To: System-1 Group
Fax: (864) 281-2355
Re: Customized Quotation
E-Mail Address: pssystem1@baldor.com

From: _____
Company / Cust Number: _____
City, State: _____
Phone: _____
Fax: _____

Motor HP / Voltage:
Reducer Output Speed:
Reducer Configuration:

Right Angle	❒	Output Connection:	
In-Line	❒	Chain Drive	❒
Offset Parallel	❒	Synchronous Drive	❒
Worm Gear	❒	Coupled	❒
Shaft Mount	❒	V-Belt	❒

Mounting:

Shaft	❒	Softstart Device:	
Baseplate	❒	Yes	
Flange	❒	No	

Motor/Reducer Connection:

Type of coupling: fluid, paraflex, grid, gear _____

Direct Coupled	❒	Environment:	❒
Belt Driven	❒	Standard	❒
C-face	❒	Extra Tough	❒
		Washdown	❒
		Division I	❒

Output Torque Requirements: _____

Is High Starting Torque Required?

Yes	❒	Classes	_____
No	❒	Groups	_____
		Temp Code	_____

Variable Speed

Yes	❒		
(Circle One) Constant or Variable Torque		Division II	
Speed Range	_____	Classes	_____
No	❒	Groups	_____
		Temp Code	_____

Application Description / Other Comments:

Courtesy of:
Screw Conveyor Parts

PART NUMB

Part Number	Page
014148	G3-68, G3-69, G3-70, G3-71
240050	G1-63, G2-33, G2-41, G2-49, G2-57, G2-65, G2-73, G2-81, G2-89, G2-9, G2-103, G2-120, G3-159
240051	G1-63, G2-107, G2-111, G2-120, G3-159
241065	G3-31
241066	G3-31
241069	G3-146
241070	G3-146
241073	G3-31
241074	G3-31
241077	G3-148
241078	G3-148
241083	G3-33
241085	G3-147
241087	G3-33
241089	G3-149
241092	G3-31
241101	G3-184
241102	G3-128, G3-159
241103	G2-120, G3-159
241104	G3-159
241105	G2-120, G3-159
241109	G3-128, G3-159
241142	G3-95, G3-127
241149	G3-93, G3-127
241153	G3-161
241154	G3-161
241155	G3-161
241213	G3-161
241278	G3-31, G3-33, G3-161
241280	G3-161
241282	G3-31, G3-33, G3-161
241286	G3-31, G3-33, G3-161
241288	G3-31, G3-33, G3-161
241290	G3-31, G3-33, G3-161
241292	G3-31, G3-33, G3-161
241294	G3-31, G3-33, G3-161
241327	G3-31
241342	G3-31, G3-33
241344	G3-31, G3-33
241345	G3-31, G3-33
241346	G3-31, G3-33
241347	G3-31, G3-33
241391	G3-31, G3-33, G3-35, G3-37, G3-73
241395	G3-31, G3-77
241397	G3-33, G3-77
241415	G3-174
241416	G3-174
241417	G3-174
241418	G3-174
241419	G3-174
241420	G3-174
241421	G3-31, G3-33, G3-76
241480	G3-93
241489	G3-93, G3-126
241491	G3-95, G3-126
242079	G3-35
242082	G3-35
242083	G3-35
242086	G3-146
242087	G3-146
242090	G3-35
242091	G3-35
242094	G3-148
242095	G3-148
242101	G3-31, G3-33, G3-79, G3-184
242102	G3-128, G3-159
242109	G3-128, G3-159
242114	G3-99, G3-127
242146	G3-35, G3-37, G3-161
242148	G3-35, G3-37, G3-161
242150	G3-35, G3-37, G3-161
242152	G3-35, G3-37, G3-161
242154	G3-35, G3-37, G3-161
242156	G3-35, G3-37, G3-161
242158	G3-35, G3-37, G3-161
242162	G3-35, G3-37, G3-161
242164	G3-35, G3-37, G3-161
242166	G3-35, G3-37, G3-161
242168	G3-35, G3-37, G3-161
242223	G3-97, G3-127
242249	G3-37
242251	G3-147
242253	G3-37
242255	G3-149
242257	G3-161
242258	G3-161
242259	G3-161
242280	G3-161
242327	G3-35
242343	G3-35, G3-37
242344	G3-35, G3-37
242345	G3-35, G3-37
242346	G3-35, G3-37
242347	G3-35, G3-37
242348	G3-35, G3-37
242349	G3-35, G3-37
242350	G3-35, G3-37
242351	G3-35, G3-37
242395	G3-35, G3-77
242397	G3-37, G3-77
242415	G3-174
242416	G3-174
242417	G3-174
242418	G3-174
242419	G3-174
242420	G3-174
242421	G3-35, G3-37, G3-76
242480	G3-97
242489	G3-97, G3-126
242491	G3-99, G3-126
243016	G3-124
243017	G3-124
243018	G3-124
243019	G3-124
243101	G3-184
243102	G3-184
243106	G3-39, G3-79, G3-184
243108	G3-128, G3-159
243109	G3-128, G3-159
243153	G3-39, G3-78
243154	G3-101, G3-127
243164	G3-41, G3-78
243167	G3-103, G3-127
243251	G3-161
243252	G3-161
243253	G3-161
243254	G3-161
243260	G3-39, G3-41, G3-161
243262	G3-39, G3-41, G3-161
243264	G3-39, G3-41, G3-161
243266	G3-39, G3-41, G3-161
243268	G3-39, G3-41, G3-161
243270	G3-39, G3-41, G3-161
243272	G3-39, G3-41, G3-161
243274	G3-39, G3-41, G3-161
243276	G3-39, G3-41, G3-161
243282	G3-39, G3-41, G3-161
243284	G3-39, G3-41, G3-161
243387	G3-39, G3-77
243389	G3-41, G3-77
243391	G3-39, G3-41, G3-73
243392	G3-39, G3-41, G3-75
243393	G3-39, G3-41, G3-73
243404	G3-39, G3-41, G3-76
243416	G3-101, G3-126
243418	G3-103, G3-126
243420	G3-39, G3-41
243421	G3-39, G3-41
243422	G3-39, G3-41
243423	G3-39, G3-41
243424	G3-39, G3-41
243425	G3-39, G3-41
243426	G3-39, G3-41
243427	G3-39, G3-41
243428	G3-39, G3-41
243429	G3-39, G3-41
243446	G3-124
243447	G3-124
243448	G3-124
243449	G3-124
243500	G3-39
243501	G3-39
243502	G3-39
243507	G3-146
243508	G3-146
243512	G3-39
243513	G3-39
243514	G3-39
243519	G3-148
243520	G3-148
243524	G3-101
243525	G3-101
243526	G3-101
243528	G3-150
243529	G3-150
243562	G3-101, G3-103, G3-150, G3-152
243563	G3-101, G3-103, G3-150, G3-152
243564	G3-101, G3-103, G3-150, G3-152
243565	G3-101, G3-103, G3-150, G3-152
243571	G3-154
243577	G3-39, G3-80, G3-159
243581	G3-39, G3-81, G3-101
243582	G3-101, G3-128, G3-159
243620	G3-174
243621	G3-174
243622	G3-174
243623	G3-174
243624	G3-174
243625	G3-174
244079	G3-43, G3-45, G3-161
244081	G3-43, G3-45, G3-161
244085	G3-43, G3-45, G3-161
244087	G3-43, G3-45, G3-161
244092	G3-184
244093	G3-43, G3-45, G3-161
244095	G3-43, G3-45, G3-161
244101	G3-184
244106	G3-43, G3-79, G3-184
244109	G3-43, G3-45, G3-161
244111	G3-43, G3-45, G3-161
244113	G3-43, G3-45, G3-161
244115	G3-43, G3-45, G3-161
244117	G3-128, G3-159
244148	G3-45, G3-79, G3-184
244151	G3-43, G3-78
244152	G3-105, G3-127
244159	G3-128, G3-159
244164	G3-45, G3-78
244167	G3-107, G3-127
244251	G3-161
244252	G3-161
244253	G3-161
244254	G3-161
244381	G3-174
244382	G3-174
244383	G3-174
244384	G3-174
244385	G3-174
244386	G3-174
244391	G3-43, G3-45, G3-73
244392	G3-43, G3-45, G3-75
244395	G3-43, G3-77
244397	G3-45, G3-77
244404	G3-43, G3-45, G3-76
244420	G3-43, G3-45
244421	G3-43, G3-45
244423	G3-43, G3-45
244424	G3-43, G3-45
244426	G3-43, G3-45
244427	G3-43, G3-45
244428	G3-43, G3-45
244429	G3-43, G3-45
244430	G3-43, G3-45
244489	G3-105, G3-126
244491	G3-107, G3-126
244494	G3-124
244496	G3-124
244497	G3-124
244498	G3-124
244499	G3-124
244525	G3-43
244526	G3-43
244527	G3-43
244532	G3-146
244533	G3-146
244537	G3-43
244538	G3-43
244539	G3-43
244544	G3-148
244545	G3-148
244549	G3-105
244550	G3-105
244551	G3-105

Courtesy of:
Screw Conveyor Parts

PART NUMBE

Part Number	Page
244553	G3-150
244554	G3-150
244556	G3-154
244557	G3-154
244594	G3-105, G3-107 G3-150, G3-152
244595	G3-105, G3-107 G3-150, G3-152
244596	G3-105, G3-107 G3-150, G3-152
244597	G3-105, G3-107 G3-150, G3-152
244598	G3-105, G3-107 G3-150, G3-152
244676	G3-43, G3-80, G3-159
244677	G3-105, G3-128, G3-159
244680	G3-124
244681	G3-124
244682	G3-124
244683	G3-124
244684	G3-124
245015	G3-111, G3-127
245086	G3-47, G3-49, G3-161
245088	G3-47, G3-49, G3-161
245090	G3-47, G3-49, G3-161
245092	G3-47, G3-49, G3-161
245094	G3-47, G3-49, G3-161
245099	G3-47, G3-49
245101	G3-184
245102	G3-47, G3-78
245103	G3-109, G3-127
245104	G3-128, G3-159
245106	G3-128, G3-159
245110	G3-47, G3-49, G3-161
245112	G3-47, G3-49, G3-161
245154	G3-47, G3-79, G3-184
245162	G3-49, G3-78
245251	G3-161
245252	G3-161
245253	G3-161
245254	G3-161
245341	G3-174
245342	G3-174
245343	G3-174
245344	G3-174
245345	G3-174
245346	G3-174
245387	G3-47, G3-77
245389	G3-49, G3-77
245391	G3-47, G3-49, G3-73
245392	G3-47, G3-49, G3-75
245393	G3-47, G3-49, G3-73
245405	G3-47, G3-49, G3-76
245422	G3-47, G3-49
245423	G3-47, G3-49
245424	G3-47, G3-49
245425	G3-47, G3-49
245426	G3-47, G3-49
245427	G3-47, G3-49
245428	G3-47, G3-49
245474	G3-124
245476	G3-124
245477	G3-124
245478	G3-124
245495	G3-109, G3-126
245497	G3-111, G3-126
245550	G3-47
245551	G3-47
245552	G3-47
245557	G3-146
245558	G3-146
245562	G3-47
245563	G3-47
245564	G3-47
245569	G3-148
245570	G3-148
245574	G3-109
245575	G3-109
245576	G3-109
245578	G3-150
245579	G3-150
245635	G3-47, G3-80, G3-159
245637	G3-109, G3-128, G3-159
245640	G3-154
245651	G3-124
245652	G3-124
245653	G3-124
245654	G3-124
246092	G3-51, G3-53 G3-79, G3-184
246101	G3-49, G3-79, G3-185
246102	G3-128, G3-159
246132	G3-53, G3-78
246142	G3-115, G3-127
246147	G3-51, G3-78
246148	G3-113, G3-127
246149	G3-51
246150	G3-51
246151	G3-51
246154	G3-146
246155	G3-146
246158	G3-51
246159	G3-51
246162	G3-148
246163	G3-148
246261	G3-51, G3-53
246262	G3-51, G3-53
246263	G3-51, G3-53
246264	G3-51, G3-53
246265	G3-51, G3-53
246266	G3-51, G3-53
246267	G3-51, G3-53
246268	G3-51, G3-53
246283	G3-51, G3-53
246327	G3-51
246366	G3-51, G3-77
246368	G3-53, G3-77
246380	G3-53
246382	G3-53
246388	G3-51
246390	G3-51, G3-53, G3-75
246391	G3-51, G3-53, G3-73
246392	G3-51, G3-53, G3-76
246420	G3-51, G3-53
246421	G3-51, G3-53
246422	G3-51, G3-53
246423	G3-51, G3-53
246424	G3-51, G3-53
246425	G3-51, G3-53
246426	G3-51, G3-53
246427	G3-51, G3-53
246428	G3-174
246429	G3-174
246430	G3-174
246431	G3-174
246432	G3-174
246433	G3-174
246476	G3-113, G3-126
246478	G3-115, G3-126
246480	G3-113
246520	G3-154
246601	G3-159
246603	G3-159
246604	G3-159
246606	G3-159
246607	G3-159
246609	G3-159
246610	G3-159
246612	G3-159
246613	G3-159
246614	G3-159
246615	G3-159
246616	G3-159
246618	G3-159
246619	G3-159
246621	G3-159
246622	G3-159
246624	G3-159
246625	G3-159
246627	G3-159
246628	G3-159
246630	G3-159
246631	G3-159
246633	G3-159
246634	G3-159
246635	G3-159
247092	G3-185
247101	G3-185
247102	G3-128, G3-159
247146	G3-57, G3-78
247149	G3-119, G3-127
247152	G3-55, G3-78
247153	G3-117, G3-127
247159	G3-55
247160	G3-55
247161	G3-55
247164	G3-146
247165	G3-146
247168	G3-55
247169	G3-55
247172	G3-148
247173	G3-148
247260	G3-55, G3-57 G3-79, G3-185
247285	G3-57
247287	G3-57
247327	G3-55
247390	G3-55, G3-77
247392	G3-57, G3-77
247395	G3-55, G3-57, G3-73
247396	G3-55, G3-57, G3-75
247404	G3-55, G3-57, G3-76
247420	G3-55, G3-57
247422	G3-55, G3-57
247425	G3-55, G3-57
247426	G3-55, G3-57
247427	G3-55, G3-57
247428	G3-55, G3-57
247431	G3-174
247432	G3-174
247433	G3-174
247434	G3-174
247435	G3-174
247436	G3-174
247474	G3-117, G3-126
247476	G3-119, G3-126
247480	G3-117
247520	G3-154
248101	G3-185
248102	G3-128, G3-159
248275	G3-61
248277	G3-61
248279	G3-59
248280	G3-59
248283	G3-59
248284	G3-59
248395	G3-59, G3-77
248397	G3-61, G3-77
248401	G3-59, G3-61, G3-74
248406	G3-59, G3-61, G3-76
248414	G3-174
248415	G3-174
248416	G3-174
248417	G3-174
248418	G3-174
248419	G3-174
248420	G3-59, G3-61
248422	G3-59, G3-61
248423	G3-59, G3-61
248424	G3-59, G3-61
248464	G3-121
248465	G3-121
248469	G3-121
248470	G3-121
248473	G3-121
248474	G3-121
248477	G3-121, G3-127
248484	G3-121, G3-128
249102	G3-159
249260	G3-59, G3-63 G3-79, G3-185
249265	G3-65
249267	G3-65
249269	G3-63
249270	G3-63
249273	G3-63
249274	G3-63
249395	G3-63, G3-77
249397	G3-65, G3-77
249399	G3-63, G3-65, G3-74
249401	G3-63, G3-65, G3-74
249404	G3-63, G3-65, G3-76
249414	G3-174
249415	G3-174
249416	G3-174
249417	G3-174
249418	G3-174
249419	G3-174
249420	G3-63, G3-65
249421	G3-63, G3-65
249422	G3-63, G3-65
250101	G3-185
250102	G3-159

Courtesy of:
SCREW CONVEYOR PARTS

PART NUMB

Part Number	Page
250260	G3-61, G3-67 G3-68, G3-79, G3-185
250395	G3-67, G3-77
250401	G3-67, G3-74
250404	G3-67, G3-74
250411	G3-67, G3-76
250416	G3-174
250417	G3-174
250418	G3-174
250419	G3-174
250420	G3-67
250421	G3-67
250422	G3-67
251120	G3-161
251140	G3-154
251146	G3-95, G3-128
252101	G3-35, G3-37 G3-41, G3-79, G3-185
252120	G3-161
252140	G3-154
252146	G3-99, G3-128
253140	G3-154
253146	G3-103, G3-128
253151	G3-41
253153	G3-147
253155	G3-41
253157	G3-149
253159	G3-103
253160	G3-152
253186	G3-41, G3-80, G3-159
253188	G3-41, G3-81, G3-103
253199	G3-161
254101	G3-185
254140	G3-154
254146	G3-107, G3-128
254199	G3-161
254200	G3-45
254202	G3-147
254204	G3-45
254206	G3-149
254208	G3-107
254209	G3-152
254267	G3-45, G3-80, G3-159
254268	G3-45, G3-81, G3-107
255101	G3-185
255148	G3-111, G3-128, G3-159
255160	G3-154
255199	G3-161
255200	G3-49
255202	G3-147
255204	G3-49
255206	G3-149
255208	G3-111
255209	G3-152
255230	G3-49, G3-80, G3-159
255231	G3-49, G3-81, G3-111
256101	G3-185
257101	G3-185
259168	G3-162
272032	G3-59, G3-61
272033	G3-59, G3-61
272034	G3-59, G3-61
272035	G3-59, G3-61
272048	G3-59, G3-61
272056	G3-63, G3-65
272077	G3-63, G3-65
272079	G3-63, G3-65
272080	G3-63, G3-65
272125	G3-55, G3-57
272132	G3-55, G3-57
272133	G3-55, G3-57
272134	G3-55, G3-57
272135	G3-55, G3-57
272136	G3-55, G3-57
272147	G3-55, G3-57
272150	G3-70
272191	G3-70
272192	G3-70
272193	G3-70
272194	G3-70
272214	G3-67
272215	G3-68
272216	G3-68
272217	G3-68
272218	G3-68
272219	G3-68
272238	G3-67
272239	G3-67
272240	G3-67
272250	G3-69
272257	G3-69
272259	G3-65, G3-69 G3-79, G3-185
272290	G3-69
272291	G3-69
272292	G3-69
272293	G3-70, G3-71 G3-79, G3-185
272310	G3-68, G3-74
272313	G3-69, G3-74
272318	G3-70, G3-74
272324	G3-65, G3-81
272325	G3-51, G3-81, G3-113
272326	G3-55, G3-81, G3-117
272327	G3-59, G3-61 G3-81, G3-121
272328	G3-63, G3-81
272329	G3-67, G3-81
272330	G3-68, G3-81
272331	G3-69, G3-81
272332	G3-70, G3-81
272333	G3-71, G3-81
272369	G3-47, G3-81, G3-109
272370	G3-71
272392	G3-71, G3-74
272395	G3-71
272396	G3-71
272397	G3-71
272398	G3-71
272446	G3-35, G3-80, G3-159
272450	G3-51, G3-53 G3-80, G3-159
272451	G3-55, G3-57 G3-80, G3-159
272452	G3-59, G3-61 G3-80, G3-159
272453	G3-63, G3-65 G3-80, G3-159
272454	G3-67, G3-80, G3-159
272455	G3-68, G3-80, G3-159
272456	G3-69, G3-80, G3-159
272457	G3-70, G3-80, G3-159
272458	G3-71, G3-80, G3-159
272459	G3-37, G3-80, G3-159
272515	G3-31, G3-80, G3-159
272521	G3-33, G3-80, G3-159
272594	G3-43, G3-81, G3-105
272600	G3-67
272601	G3-67
272604	G3-67
272605	G3-67
272615	G3-68
272617	G3-68
272625	G3-93, G3-95
272626	G3-97, G3-99
272627	G3-101, G3-103
272628	G3-105, G3-107
272629	G3-109, G3-111
272630	G3-113, G3-115
272631	G3-117, G3-119
272681	G3-53, G3-81, G3-115
272685	G3-57, G3-81, G3-119
272688	G3-68, G3-77
272721	G3-93, G3-128, G3-159
272722	G3-97, G3-128, G3-159
272726	G3-113, G3-115 G3-128, G3-159
272727	G3-117, G3-119, G3-128, G3-159
273933	G3-81
334291	G1-64
351025	G3-123, G3-159
351026	G3-123, G3-159
351027	G3-123
351028	G3-123
351069	G3-93, G3-95
351086	G3-93, G3-95 G3-150, G3-152
351094	G3-93, G3-95 G3-150, G3-152
351095	G3-93, G3-95 G3-150, G3-152
351096	G3-93, G3-95 G3-150, G3-152
351097	G3-93, G3-95 G3-150, G3-152
351147	G3-123
351148	G3-123
351149	G3-123
351150	G3-123
351163	G3-93
351164	G3-93
351165	G3-95
351190	G3-152
351191	G3-150
351192	G3-150
351300	G3-123
351301	G3-123
351302	G3-123
351303	G3-123
351305	G3-123
351306	G3-123
351307	G3-123
351308	G3-123
351327	G3-125
351328	G3-125
351329	G3-125
351332	G3-125
351333	G3-125
351334	G3-125
352052	G3-97, G3-99 G3-150, G3-152
352065	G3-97
352066	G3-97
352069	G3-97, G3-99
352090	G3-97, G3-99 G3-150, G3-152
352091	G3-97, G3-99 G3-150, G3-152
352092	G3-97, G3-99 G3-150, G3-152
352093	G3-97, G3-99 G3-150, G3-152
352160	G3-123
352161	G3-123
352162	G3-123
352163	G3-123
352186	G3-123, G3-159
352187	G3-123, G3-159
352188	G3-123
352189	G3-123
352190	G3-152
352191	G3-150
352192	G3-150
352218	G3-99
353047	G3-101, G3-103 G3-150, G3-152
353069	G3-101, G3-103
353070	G3-101, G3-103
353180	G3-124
353181	G3-124, G3-159
353182	G3-124, G3-159
353183	G3-124
354028	G3-105, G3-107
354069	G3-105, G3-107
354121	G3-105, G3-107 G3-150, G3-152
354351	G3-124
354352	G3-124, G3-159
354353	G3-124, G3-159
354354	G3-124, G3-159
354355	G3-124
355072	G3-109, G3-111 G3-150, G3-152
355168	G3-109, G3-111
355169	G3-109, G3-111
355175	G3-109, G3-111 G3-150, G3-152
355176	G3-109, G3-111 G3-150, G3-152
355177	G3-109, G3-111 G3-150, G3-152
355178	G3-109, G3-111 G3-150, G3-152
355225	G3-124
355226	G3-124, G3-159
355227	G3-124, G3-159
355228	G3-124
356014	G3-125
356015	G3-125
356016	G3-125
356042	G3-113, G3-115, G3-150
356043	G3-113, G3-115, G3-150
356044	G3-113, G3-115, G3-150

Courtesy of:
Screw Conveyor Parts

PART NUMBE

Part Number	Page
356055	G3-113, G3-115, G3-150
356057	G3-113
356058	G3-113
356069	G3-113, G3-115
356182	G3-117, G3-119, G3-150
356183	G3-117, G3-119, G3-150
356184	G3-117, G3-119, G3-150
356187	G3-117, G3-119, G3-150
356240	G3-125
356241	G3-125
356242	G3-125
356256	G3-117
356257	G3-117
356269	G3-117, G3-119
356275	G3-125
356276	G3-125, G3-159
356277	G3-125
356281	G3-125
356282	G3-125
356283	G3-125, G3-159
356285	G3-115
356291	G3-150
356292	G3-150
356295	G3-119
356296	G3-150
356297	G3-150
356301	G3-93, G3-95, G3-159
356302	G3-97, G3-99, G3-159
356303	G3-101, G3-103, G3-159
356304	G3-105, G3-107, G3-159
356305	G3-109, G3-111, G3-159
356306	G3-113, G3-115 G3-117, G3-119, G3-159
392270	G3-169
392271	G3-169
392272	G3-169
392273	G3-169
392274	G3-169
392275	G3-169
392276	G3-169
392277	G3-169
392278	G3-169, G3-170
392279	G3-169, G3-170
392280	G3-169, G3-170
392281	G3-169, G3-170
392282	G3-169, G3-170
392283	G3-169, G3-170
392284	G3-169, G3-170
392285	G3-169, G3-170
392287	G3-169, G3-170
392288	G3-169, G3-170
392289	G3-169, G3-170
392290	G3-169, G3-170
392291	G3-169, G3-170
392292	G3-169, G3-170
392293	G3-169, G3-170
392294	G3-169, G3-170
392295	G3-169, G3-170
392296	G3-169, G3-170
392297	G3-169, G3-170
392298	G3-169, G3-170
392299	G3-169
392300	G3-169
392301	G3-169
392302	G3-169
392303	G3-169
392304	G3-169
392305	G3-169
392306	G3-169
392307	G3-169
392308	G3-169
392309	G3-169
392310	G3-169
392311	G3-169
392312	G3-169
392313	G3-169
392314	G3-169
392315	G3-169
392316	G3-169
392379	G3-170
392380	G3-170
392381	G3-170
392382	G3-170
392383	G3-170
392384	G3-170
392385	G3-170
392386	G3-170
392387	G3-170
392388	G3-170
392389	G3-170
392390	G3-170
392391	G3-170
392392	G3-170
392393	G3-170
392394	G3-170
392395	G3-170
392396	G3-170
392397	G3-170
392398	G3-170
392399	G3-170
392400	G3-170
392401	G3-170
392402	G3-170
392403	G3-170
392404	G3-170
392405	G3-170
430120	G2-120, G3-159
430121	G3-159
430159	G2-120, G3-159
444049	G3-153
444050	G3-153
444054	G3-153
444055	G3-153
444056	G3-153
454424	G1-64
454434	G1-64
472300	G1-38, G1-42, G1-46 G1-50, G1-54, G1-58, G1-62
6-030657	G3-159
900000	G2-33
900001	G2-33
900002	G2-33
900003	G2-33
900004	G2-33
900020	G2-33
900021	G2-33
900022	G2-33
900023	G2-33
900024	G2-33
900025	G2-33
900026	G2-33
900027	G2-33
900028	G2-33
900029	G2-33
900070	G2-35
900071	G2-35
900072	G2-35
900073	G2-35
900074	G2-35
900075	G2-35
900080	G2-35
900081	G2-35
900082	G2-35
900083	G2-35
900090	G2-33
900096	G2-33
900097	G2-33
900099	G2-33
900109	G2-33
900110	G2-120
900112	G1-38, G1-42, G2-33 G2-41, G2-49, G2-57
900114	G2-33, G2-41, G2-119
900115	G2-33, G2-41, G2-119
900126	G2-125
900128	G2-125
900129	G2-125
900135	G2-125
9001355	G2-126
900136	G2-125
90013615	G2-126
90013625	G2-126
90013640	G2-126
9001369	G2-126
900142	G2-33, G2-119
900143	G2-33, G2-119
900180	G2-125
900249	G2-33, G2-119
901000	G2-41
901001	G2-41
901002	G2-41
901003	G2-41
901004	G2-41
901020	G2-41
901021	G2-41
901022	G2-41
901023	G2-41
901024	G2-41
901025	G2-41
901026	G2-41
901027	G2-41
901028	G2-41
901030	G2-41
901031	G2-41
901032	G2-41
901033	G2-41
901034	G2-41
901035	G2-41
901036	G2-41
901037	G2-41
901070	G2-43
901071	G2-43
901072	G2-43
901073	G2-43
901074	G2-43
901075	G2-43
901080	G2-43
901081	G2-43
901082	G2-43
901083	G2-43
901090	G2-41
901096	G2-41
901097	G2-41
901099	G2-41
901102	G2-33, G2-41
901109	G2-41
901114	G2-119
901126	G2-125
901128	G2-125
901129	G2-125
901130	G2-125
901135	G2-125
9011355	G2-126
901136	G2-125
90113615	G2-126
9011369	G2-126
901137	G2-125
90113725	G2-126
90113740	G2-126
901142	G2-41, G2-119
901143	G2-41, G2-119
901145	G2-121
901146	G2-121
901147	G2-121
901148	G2-121
901149	G2-121
901180	G2-125
901249	G2-41, G2-119
902000	G2-49
902001	G2-49
902002	G2-49
902003	G2-49
902004	G2-49
902020	G1-38, G2-49
902022	G1-38, G2-49
902023	G1-38, G2-49
902024	G1-38, G2-49
902025	G1-38, G2-49
902026	G1-38, G2-49
902027	G1-38, G2-49
902028	G1-38, G2-49
902029	G1-38, G2-49
902030	G1-38, G2-49
902031	G1-38, G2-49
902032	G1-38, G2-49
902033	G1-38, G2-49
902034	G1-38, G2-49
902035	G1-38, G2-49
902036	G1-38, G2-49
902037	G1-38, G2-49
902038	G1-38, G2-49
902060	G1-38, G2-49
902061	G1-38, G2-49
902070	G1-40, G2-51
902071	G1-40, G2-51
902072	G1-40, G2-51
902073	G1-40, G2-51
902074	G1-40, G2-51
902075	G1-40, G2-51
902080	G1-40, G2-51
902081	G1-40, G2-51
902082	G1-40, G2-51
902083	G1-40, G2-51
902090	G2-49

Courtesy of:
Screw Conveyor Parts

PART NUMB

Part Number	Page
902096	G2-49
902097	G2-49
902099	G2-49
902102	G2-49
902109	G1-38, G2-49
902114	G1-38, G1-40 G1-63, G2-49, G2-119
902115	G1-38, G1-40 G1-63, G2-49, G2-119
902126	G2-125
902127	G2-125
902128	G2-125
902129	G2-125
902130	G2-125
902135	G2-125
9021355	G2-126
902136	G2-125
90213615	G2-126
90213625	G2-126
9021369	G2-126
902137	G2-125
90213740	G2-126
902142	G1-38, G1-40 G1-63, G2-49, G2-119
902143	G1-38, G1-40 G1-63, G2-49, G2-119
902180	G2-125
902249	G1-38, G1-63 G2-49, G2-119
903000	G2-57
903001	G2-57
903002	G2-57
903003	G2-57
903004	G2-57
903020	G1-42, G2-57
903021	G1-42, G2-57
903022	G1-42, G2-57
903023	G1-42, G2-57
903024	G1-42, G2-57
903025	G1-42, G2-57
903026	G1-42, G2-57
903027	G1-42, G2-57
903028	G1-42, G2-57
903029	G1-42, G2-57
903030	G1-42, G2-57
903031	G1-42, G2-57
903032	G1-42, G2-57
903033	G1-42, G2-57
903034	G1-42, G2-57
903035	G1-42, G2-57
903036	G1-42, G2-57
903037	G1-42, G2-57
903038	G1-42, G2-57
903039	G1-42, G2-57
903060	G1-42, G2-57
903061	G1-42, G2-57
903070	G1-44, G2-59
903071	G1-44, G2-59
903072	G1-44, G2-59
903073	G1-44, G2-59
903074	G1-44, G2-59
903075	G1-44, G2-59
903076	G1-44, G2-59
903080	G1-44, G2-59
903081	G1-44, G2-59
903082	G1-44, G2-59
903083	G1-44, G2-59
903084	G1-44, G2-59
903090	G2-57
903096	G2-57
903097	G2-57
903099	G2-57
903102	G1-38, G2-57
903109	G1-42, G2-57
903114	G1-42, G1-44 G1-63, G2-57, G2-119
903115	G1-42, G1-44 G1-63, G2-57, G2-119
903126	G2-125
903127	G2-125
903128	G2-125
903129	G2-125
903130	G2-125
903135	G2-12
9031355	G2-126
903136	G2-125
90313615	G2-126
90313625	G2-126
9031369	G2-126
903137	G2-125
90313740	G2-126
903142	G1-42, G1-44 G1-63, G2-57, G2-119
903143	G1-42, G1-44 G1-63, G2-57, G2-119
903145	G2-121
903146	G2-121
903147	G2-121
903148	G2-121
903149	G2-121
903180	G2-125
903249	G1-63, G2-57, G2-119
904000	G2-65
904001	G2-65
904002	G2-65
904003	G2-65
904004	G2-65
904020	G1-46, G2-65
904021	G1-46, G2-65
904022	G1-46, G2-65
904023	G1-46, G2-65
904024	G1-46, G2-65
904025	G1-46, G2-65
904026	G1-46, G2-65
904027	G1-46, G2-65
904028	G1-46, G2-65
904029	G1-46, G2-65
904030	G1-46, G2-65
904031	G1-46, G2-65
904032	G1-46, G2-65
904033	G1-46, G2-65
904034	G1-46, G2-65
904035	G1-46, G2-65
904036	G1-46, G2-65
904037	G1-46, G2-65
904038	G1-46, G2-65
904039	G1-46, G2-65
904040	G1-46, G2-65
904041	G1-46, G2-65
904070	G1-48, G2-67
904071	G1-48, G2-67
904073	G1-48, G2-67
904074	G1-48, G2-67
904075	G1-48, G2-67
904076	G1-48, G2-67
904081	G1-48, G2-67
904082	G1-48, G2-67
904083	G1-48, G2-67
904084	G1-48, G2-67
904090	G2-65
904096	G2-65
904097	G2-65
904099	G2-65
904102	G1-42, G2-65
904103	G2-65
904106	G2-65
904109	G1-46, G2-65
904110	G2-120
904112	G1-46, G1-50, G1-54 G1-58, G1-62, G2-65, G2-73 G2-81, G2-89, G2-97 G2-103, G2-107, G2-111
904114	G1-46, G1-48 G1-63, G2-65, G2-119
904115	G1-46, G1-48 G1-63, G2-65, G2-119
904126	G2-125
904128	G2-125
904129	G2-125
904130	G2-125
904135	G2-125
9041355	G2-126
904136	G2-125
90413615	G2-126
90413625	G2-126
9041369	G2-126
904137	G2-125
90413740	G2-126
904142	G1-46, G1-48 G1-63, G2-65, G2-119
904143	G1-46, G1-48 G1-63, G2-65, G2-119
904145	G2-121
904146	G2-121
904147	G2-121
904148	G2-121
904149	G2-121
904180	G2-125
904249	G1-46, G1-63 G2-65, G2-119
905000	G2-73
905001	G2-73
905002	G2-73
905003	G2-73
905004	G2-73
905020	G1-50, G2-73
905021	G1-50, G2-73
905022	G1-50, G2-73
905023	G1-50, G2-73
905024	G1-50, G2-73
905025	G1-50, G2-73
905026	G1-50, G2-73
905027	G1-50, G2-73
905028	G1-50, G2-73
905029	G1-50, G2-73
905030	G1-50, G2-73
905031	G1-50, G2-73
905032	G1-50, G2-73
905033	G1-50, G2-73
905034	G1-50, G2-73
905035	G1-50, G2-73
905036	G1-50, G2-73
905037	G1-50, G2-73
905038	G1-50, G2-73
905039	G1-50, G2-73
905040	G1-50, G2-73
905041	G1-50, G2-73
905042	G1-50, G2-73
905043	G1-50, G2-73
905070	G1-52, G2-75
905071	G1-52, G2-75
905073	G1-52, G2-75
905074	G1-52, G2-75
905075	G1-52, G2-75
905076	G1-52, G2-75
905081	G1-52, G2-75
905082	G1-52, G2-75
905083	G1-52, G2-75
905084	G1-52, G2-75
905090	G2-73
905096	G2-73
905097	G2-73
905099	G2-73
905102	G1-46, G2-73
905103	G2-73
905106	G2-73
905109	G1-50, G2-73
905114	G1-50, G1-52 G1-63, G2-73, G2-119
905115	G1-50, G1-52 G1-63, G2-73, G2-119
905126	G2-125
905128	G2-125
905129	G2-125
905130	G2-125
905131	G2-125
905135	G2-125
9051355	G2-126
905136	G2-125
90513615	G2-126
9051369	G2-126
905137	G2-125
90513725	G2-126
905138	G2-125
90513840	G2-126
905142	G1-50, G1-52, G1-54 G1-56, G1-63, G2-73, G2-119
905143	G1-50, G1-54, G1-56 G1-59, G1-63, G2-73, G2-119
905145	G2-121
905146	G2-121
905147	G2-121
905148	G2-121
905149	G2-121
905180	G2-125
905249	G1-63, G2-73, G2-119
906000	G2-81
906001	G2-81
906002	G2-81
906003	G2-81
906004	G2-81
906020	G1-54, G2-81
906021	G1-54, G2-81
906022	G1-54, G2-81

Courtesy of:
Screw Conveyor Parts

PART NUMBE

Part Number	Page
906023	G1-54, G2-81
906024	G1-54, G2-81
906025	G1-54, G2-81
906026	G1-54, G2-81
906027	G1-54, G2-81
906028	G1-54, G2-81
906029	G1-54, G2-81
906030	G1-54, G2-81
906031	G1-54, G2-81
906032	G1-54, G2-81
906033	G1-54, G2-81
906034	G1-54, G2-81
906035	G1-54, G2-81
906036	G1-54, G2-81
906037	G1-54, G2-81
906038	G1-54, G2-81
906039	G1-54, G2-81
906040	G1-54, G2-81
906041	G1-54, G2-81
906070	G1-56, G2-83
906071	G1-56, G2-83
906074	G1-56, G2-83
906075	G1-56, G2-83
906076	G1-56, G2-83
906082	G1-56, G2-83
906083	G1-56, G2-83
906084	G1-56, G2-83
906090	G2-81
906096	G2-81
906097	G2-81
906099	G2-81
906102	G1-50, G2-81
906103	G2-81
906106	G2-81
906109	G1-54, G2-81
906114	G1-54, G1-56 G1-63, G2-81, G2-119
906115	G1-54, G1-56 G1-63, G2-81, G2-119
906126	G2-125
906128	G2-125
906129	G2-125
906130	G2-125
906135	G2-125
9061355	G2-126
906136	G2-125
90613615	G2-126
9061369	G2-126
906137	G2-125
90613725	G2-126
90613740	G2-126
906142	G2-81, G2-119
906143	G1-63, G2-81, G2-119
906145	G2-121
906146	G2-121
906147	G2-121
906148	G2-121
906149	G2-121
906180	G2-125
906249	G1-54, G1-63 G2-81, G2-119
907000	G2-89
907001	G2-89
907002	G2-89
907003	G2-89
907004	G2-89
907019	G1-58, G2-89
907021	G1-58, G2-89
907022	G1-58, G2-89
907023	G1-58, G2-89
907024	G1-58, G2-89
907025	G1-58, G2-89
907026	G1-58, G2-89
907027	G1-58, G2-89
907028	G1-58, G2-89
907029	G1-58, G2-89
907030	G1-58, G2-89
907031	G1-58, G2-89
907032	G1-58, G2-89
907033	G1-58, G2-89
907034	G1-58, G2-89
907035	G1-58, G2-89
907036	G1-58, G2-89
907037	G1-58, G2-89
907038	G1-58, G2-89
907039	G1-58, G2-89
907070	G1-60, G2-91
907071	G1-60, G2-91
907074	G1-60, G2-91
907075	G1-60, G2-91
907076	G1-60, G2-91
907082	G1-60, G2-91
907083	G1-60, G2-91
907084	G1-60, G2-91
907090	G2-89, G2-97
907096	G2-89, G2-97
907097	G2-89, G2-97
907099	G2-89, G2-97
907102	G1-54, G2-89
907103	G2-89, G2-103
907106	G2-89, G2-97
907109	G2-89, G2-97
907114	G1-58, G1-60 G1-63, G2-89, G2-119
907115	G1-58, G1-60 G1-63, G2-89, G2-119
907126	G2-125
907128	G2-125
907129	G2-125
907130	G2-125
907135	G2-125
9071355	G2-126
907136	G2-125
90713615	G2-126
90713625	G2-126
9071369	G2-126
907137	G2-125
90713740	G2-126
907142	G1-58, G1-60 G1-63, G2-89, G2-119
907143	G1-58, G1-60 G1-63, G2-89, G2-119
907180	G2-125
907249	G1-63, G2-89 G2-97, G2-119
908000	G2-97
908001	G2-97
908002	G2-97
908020	G1-62, G2-97
908021	G1-62, G2-97
908022	G1-62, G2-97
908023	G1-62, G2-97
908024	G1-62, G2-97
908025	G1-62, G2-97
908026	G1-62, G2-97
908027	G1-62, G2-97
908028	G1-62, G2-97
908029	G1-62, G2-97
908030	G1-62, G2-97
908031	G1-62, G2-97
908032	G1-62, G2-97
908033	G1-62, G2-97
908102	G2-97
908103	G2-97
908114	G1-62, G1-63 G2-97, G2-119
908115	G1-62, G1-63 G2-97, G2-119
908126	G2-125
908129	G2-125
908130	G2-125
908136	G2-125
90813615	G2-126
90813625	G2-126
908137	G2-125
908142	G1-62, G1-63 G2-97, G2-119
908143	G1-62, G1-63 G2-97, G2-119
90814740	G2-126
908180	G2-125
908249	G1-63
909000	G2-103
909001	G2-103
909002	G2-103
909020	G2-103
909021	G2-103
909022	G2-103
909023	G2-103
909024	G2-103
909025	G2-103
909026	G2-103
909027	G2-103
909028	G2-103
909029	G2-103
909090	G2-103
909096	G2-103
909099	G2-103
909102	G2-103
909106	G2-103
909109	G1-58, G1-62, G2-103
909114	G2-103, G2-119
909115	G2-103, G2-119
909126	G2-125
909129	G2-125
909130	G2-125
909136	G2-125
90913615	G2-126
90913625	G2-126
909137	G2-125
90913740	G2-126
909142	G2-103, G2-119
909143	G2-103, G2-119
909180	G2-125
909249	G2-103, G2-119
910000	G2-107
910001	G2-107
910002	G2-107
910020	G2-107
910021	G2-107
910022	G2-107
910023	G2-107
910024	G2-107
910025	G2-107
910026	G2-107
910027	G2-107
910028	G2-107
910029	G2-107
910030	G2-107
910031	G2-107
910090	G2-107
910096	G2-107
910099	G2-107
910102	G1-58, G2-107
910103	G2-107
910106	G2-107
910109	G2-107
910114	G2-107, G2-119
910115	G2-107, G2-119
910126	G2-125
910129	G2-125
910130	G2-125
910136	G2-125
91013615	G2-126
91013625	G2-126
910137	G2-12
91013740	G2-126
910142	G2-107, G2-119
910143	G2-107, G2-119
910180	G2-125
910249	G2-107, G2-119
912000	G2-111
912001	G2-111
912002	G2-111
912020	G2-111
912021	G2-111
912022	G2-111
912023	G2-111
912024	G2-111
912025	G2-111
912026	G2-111
912027	G2-111
912028	G2-111
912029	G2-111
912030	G2-111
912031	G2-111
912032	G2-111
912090	G2-111
912096	G2-111
912099	G2-111
912102	G1-62, G2-111
912103	G2-111
912106	G2-111
912109	G2-111
912114	G2-111, G2-119
912115	G2-111, G2-119
912126	G2-125
912129	G2-125
912130	G2-125
912136	G2-125
91213615	G2-126
91213625	G2-126
912137	G2-125
91213740	G2-126

Courtesy of:
Screw Conveyor Parts

PART NUMB

Part Number	Page
912142	G2-111, G2-119
912143	G2-111, G2-119
912180	G2-125
912249	G2-111, G2-119
963763	G3-162
964364	G1-46, G1-50, G1-54 G1-58, G1-62, G2-65, G2-73 G2-81, G2-89, G2-97 G2-103, G2-120, G3-159
964366	G2-107, G2-111 G2-120, G3-159
964372	G1-38, G1-42, G2-33 G2-41, G2-49, G2-57 G2-120, G3-159
BIO DR KIT	G3-162
ECP2276T	G3-162
ECP3768T	G3-162
LUBEKITTA0107	G2-33, G2-126
LUBEKITTA10507	G2-107, G2-126
LUBEKITTA1107	G2-41, G2-126
LUBEKITTA12608	G2-111, G2-126
LUBEKITTA2115	G2-49, G2-126
LUBEKITTA3203	G2-57, G2-126
LUBEKITTA4207	G2-65, G2-126
LUBEKITTA5215	G2-73, G2-126
LUBEKITTA6307	G2-81, G2-126
LUBEKITTA7315	G2-89, G2-126
LUBEKITTA8407	G2-97, G2-126
LUBEKITTA9415	G2-103, G2-126
LUBEKITTXT1	G3-31, G3-93
LUBEKITTXT10	G3-67
LUBEKITTXT12	G3-68
LUBEKITTXT13	G3-69
LUBEKITTXT14	G3-70
LUBEKITTXT15	G3-71
LUBEKITTXT105	G3-33, G3-95
LUBEKITTXT2	G3-35, G3-97
LUBEKITTXT205	G3-37, G3-99
LUBEKITTXT3	G3-39, G3-101
LUBEKITTXT305	G3-41, G3-103
LUBEKITTXT4	G3-43, G3-105
LUBEKITTXT405	G3-45, G3-107
LUBEKITTXT5	G3-47, G3-109
LUBEKITTXT505	G3-49, G3-111
LUBEKITTXT6	G3-51, G3-113
LUBEKITTXT605	G3-53, G3-115
LUBEKITTXT7	G3-55, G3-117
LUBEKITTXT705	G3-57, G3-119
LUBEKITTXT8	G3-59, G3-121
LUBEKITTXT805	G3-61
LUBEKITTXT9	G3-63
LUBEKITTXT905	G3-65
M2-18CPLKIT	G1-64
M2-21CPLKIT	G1-64
M2-25CPLKIT	G1-64
M2BSCVRKIT	G1-64
M2H18T18C	G1-15, G1-22, G1-26
M2H18T21C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H18T21C1018	G1-14, G1-30
M2H18T25C	G1-13, G1-15 G1-23, G1-27, G1-30
M2H18T25C1518	G1-14, G1-30
M2H18T25C1536	G1-14, G1-30
M2H18T25C2018	G1-14
M2H18T25C2036	G1-14, G1-30
M2H21T18C	G1-15, G1-22, G1-26
M2H21T21C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H21T21C1018	G1-14, G1-30
M2H21T21C718	G1-14, G1-30
M2H21T25C	G1-13, G1-15 G1-23, G1-27, G1-30
M2H21T25C1536	G1-30
M2H21T25C2036	G1-14, G1-30
M2H25T18C	G1-15, G1-22, G1-26
M2H25T21C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H25T21C1018	G1-14, G1-30
M2H25T21C1036	G1-30
M2H25T21C718	G1-14, G1-30
M2H25T25C	G1-13, G1-15 G1-23, G1-30
M2H25T25C1536	G1-14, G1-30
M2H30T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H30T18C518	G1-14, G1-30
M2H30T21C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H30T21C1018	G1-14, G1-30
M2H30T21C1036	G1-30
M2H30T25C	G1-13, G1-15 G1-23, G1-30
M2H30T25C1536	G1-14, G1-30
M2H32T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H32T18C518	G1-14, G1-30
M2H32T21C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H32T21C1036	G1-30
M2H32T21C718	G1-14, G1-30
M2H32T25C	G1-13, G1-15 G1-23, G1-30
M2H32T25C1536	G1-14, G1-30
M2H36T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H36T18C518	G1-14, G1-30
M2H36T21C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H36T21C1036	G1-30
M2H36T21C718	G1-14, G1-30
M2H36T25C	G1-13, G1-15 G1-23, G1-30
M2H36T25C1536	G1-14, G1-30
M2H39T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H39T18C518	G1-14, G1-30
M2H39T21C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H39T21C1036	G1-14, G1-30
M2H39T21C718	G1-14, G1-30
M2H44T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H44T18C518	G1-14, G1-30
M2H44T21C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H44T21C1036	G1-14, G1-30
M2H44T21C718	G1-14, G1-30
M2H44T21C736	G1-14, G1-30
M2H47T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H47T18C318	G1-14, G1-30
M2H47T18C518	G1-30
M2H47T21C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H47T21C1036	G1-14, G1-30
M2H47T21C736	G1-14, G1-30
M2H51T18	G1-30
M2H51T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H51T18C318	G1-14, G1-30
M2H51T18C518	G1-14, G1-30
M2H51T21C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H51T21C1036	G1-14, G1-30
M2H51T21C736	G1-14, G1-30
M2H58T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H58T18C318	G1-30
M2H58T18C518	G1-14, G1-30
M2H58T21C	G1-13, G1-15
M2H66T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H66T18C318	G1-14, G1-30
M2H66T18C518	G1-30
M2H66T18C536	G1-14, G1-30
M2H66T21C	G1-13, G1-15 G1-22, G1-30
M2H66T21C736	G1-14, G1-30
M2H71T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H71T18C318	G1-14, G1-30
M2H71T21C	G1-13, G1-15
M2H77T18C	G1-13, G1-15 G1-22, G1-26, G1-30
M2H77T18C318	G1-14, G1-30
M2H77T21C	G1-13, G1-15
M2SEALKIT	G1-64
M3-18CPLKIT	G1-64
M3-21CPLKIT	G1-64
M3-25CPLKIT	G1-64
M3-28CPLKITTSC	G1-64
M3BSCVRKIT	G1-64
M3H17T18C	G1-16
M3H17T21C	G1-16
M3H17T25C	G1-13, G1-16 G1-23, G1-27, G1-31
M3H17T25C1518	G1-14, G1-31
M3H17T25C2018	G1-14, G1-31
M3H17T28C	G1-16
M3H17T28TSC	G1-13, G1-16 G1-23, G1-27, G1-31
M3H17T28TSC2536	G1-14, G1-31
M3H17T28TSC3036	G1-14, G1-31
M3H21T18C	G1-16
M3H21T21C	G1-16, G1-20, G1-26
M3H21T25C	G1-13, G1-16 G1-23, G1-27, G1-31
M3H21T25C1518	G1-14, G1-31
M3H21T25C2018	G1-14, G1-31
M3H21T28TSC	G1-13, G1-16 G1-23, G1-27, G1-31
M3H21T28TSC2536	G1-14, G1-31
M3H21T28TSC3036	G1-14, G1-31
M3H25T18C	G1-16
M3H25T21C	G1-13, G1-16 G1-20, G1-26, G1-31
M3H25T21C1018	G1-14, G1-31
M3H25T25C	G1-13, G1-16 G1-23, G1-27, G1-31
M3H25T25C1518	G1-14, G1-31
M3H25T25C2036	G1-14, G1-31
M3H25T28TSC	G1-13, G1-16 G1-23, G1-25, G1-31
M3H25T28TSC3036	G1-14, G1-31
M3H29T18C	G1-16
M3H29T21C	G1-13, G1-16 G1-26, G1-31
M3H29T21C1018	G1-14, G1-31
M3H29T25C	G1-13, G1-16 G1-23, G1-27, G1-31
M3H29T25C1518	G1-14, G1-31
M3H29T25C2036	G1-14, G1-31
M3H29T28TSC	G1-13, G1-16 G1-23, G1-31
M3H29T28TSC2536	G1-14, G1-31
M3H32T18C	G1-16
M3H32T21C	G1-13, G1-16 G1-26, G1-31
M3H32T21C1018	G1-14, G1-31
M3H32T25C	G1-13, G1-16, G1-22 G1-23, G1-27, G1-31
M3H32T25C1518	G1-14, G1-31
M3H32T25C1536	G1-14, G1-31
M3H32T25C2036	G1-14, G1-31
M3H32T28TSC	G1-16
M3H35T18C	G1-16
M3H35T21C	G1-13, G1-16 G1-22, G1-26, G1-31
M3H35T21C1018	G1-14, G1-31
M3H35T25C	G1-13, G1-16 G1-23, G1-27, G1-31
M3H35T25C1536	G1-14, G1-31
M3H35T25C2036	G1-14, G1-31
M3H38T18C	G1-16
M3H38T21C	G1-13, G1-16 G1-22, G1-26, G1-31
M3H38T21C1018	G1-14, G1-31
M3H38T21C718	G1-14, G1-31
M3H38T25C	G1-13, G1-16 G1-23, G1-27, G1-31
M3H38T25C1536	G1-14, G1-31
M3H38T25C2036	G1-14, G1-31
M3H44T18C	G1-16
M3H44T21C	G1-13, G1-16 G1-22, G1-26, G1-31
M3H44T21C1018	G1-14, G1-31
M3H44T21C718	G1-14, G1-31
M3H44T25C	G1-13, G1-16 G1-23, G1-27, G1-31
M3H44T25C1536	G1-14, G1-31
M3H44T25C2036	G1-14, G1-31
M3H47T18C	G1-16, G1-20, G1-26
M3H47T21C	G1-13, G1-16 G1-22, G1-26, G1-31
M3H47T21C1018	G1-14, G1-31
M3H47T21C1036	G1-14, G1-31
M3H47T21C718	G1-14, G1-31
M3H47T25C	G1-13, G1-16 G1-23, G1-31
M3H47T25C1536	G1-14, G1-31
M3H51T18C	G1-13, G1-16 G1-20, G1-26, G1-31
M3H51T18C518	G1-14, G1-31

Courtesy of:
SCREW CONVEYOR PARTS

PART NUMBE

Part Number	Page
M3H51T21C	G1-13, G1-16 G1-22, G1-26, G1-31
M3H51T21C1018	G1-14, G1-31
M3H51T21C1036	G1-14, G1-31
M3H51T25C	G1-13, G1-16 G1-23, G1-31
M3H51T25C1536	G1-14, G1-31
M3H58T18C	G1-13, G1-16 G1-20, G1-26, G1-31
M3H58T18C518	G1-14, G1-31
M3H58T21C	G1-13, G1-16 G1-22, G1-25, G1-31
M3H58T21C718	G1-14, G1-31
M3H58T25C	G1-16
M3H65T18C	G1-13, G1-16 G1-20, G1-26, G1-31
M3H65T18C518	G1-14, G1-31
M3H65T21C	G1-13, G1-16 G1-22, G1-26, G1-31
M3H65T21C1036	G1-14, G1-31
M3H65T21C718	G1-14, G1-31
M3H70T18C	G1-13, G1-16 G1-22, G1-26, G1-31
M3H70T18C518	G1-14, G1-31
M3H70T21C	G1-16
M3H76T18C	G1-13, G1-16 G1-22, G1-26, G1-31
M3H76T18C518	G1-14, G1-31
M3H76T21C	G1-16
M3SEALKIT	G1-64
M4-18CPLKIT	G1-64
M4-21CPLKIT	G1-64
M4-25CPLKIT	G1-64
M4-28CPLKIT	G1-64
M4-28CPLKITTSC	G1-64
M4-32CPLKITTSC	G1-64
M4BSCVRKIT	G1-64
M4H18T18C	G1-17
M4H18T21C	G1-17
M4H18T25C	G1-13, G1-17 G1-21, G1-27
M4H18T25C2018	G1-14
M4H18T28C	G1-13, G1-17 G1-23, G1-27, G1-32
M4H18T28C2518	G1-14, G1-32
M4H18T28C3018	G1-14
M4H18T28TSC	G1-17, G1-27
M4H18T32TSC	G1-13, G1-17 G1-24, G1-28, G1-32
M4H18T32TSC4036	G1-14, G1-32
M4H18T32TSC5036	G1-14, G1-32
M4H22T18C	G1-17
M4H22T21C	G1-17
M4H22T25C	G1-13, G1-17 G1-21, G1-27, G1-32
M4H22T25C2018	G1-14, G1-32
M4H22T28C	G1-13, G1-17 G1-23, G1-26, G1-32
M4H22T28C3018	G1-14, G1-32
M4H22T28TSC	G1-13, G1-17 G1-27, G1-32
M4H22T28TSC3036	G1-14, G1-32
M4H22T32TSC	G1-13, G1-17 G1-24, G1-32
M4H22T32TSC5036	G1-14, G1-32
M4H26T18C	G1-17
M4H26T21C	G1-17
M4H26T25C	G1-13, G1-17 G1-23, G1-27, G1-32
M4H26T25C2018	G1-14, G1-32
M4H26T28C	G1-13, G1-17G1-23, G1-32
M4H26T28C2518	G1-14, G1-32
M4H26T28TSC	G1-13, G1-17 G1-27, G1-32
M4H26T28TSC3036	G1-14, G1-32
M4H26T32TSC	G1-13, G1-17 G1-24, G1-32
M4H26T32TSC4036	G1-14, G1-32
M4H30T18C	G1-17
M4H30T21C	G1-17
M4H30T25C	G1-13, G1-17 G1-23, G1-27, G1-32
M4H30T25C1518	G1-14, G1-32
M4H30T25C2018	G1-14, G1-32
M4H30T28TSC	G1-13, G1-17 G1-23, G1-27, G1-32
M4H30T28TSC3036	G1-14, G1-32
M4H30T32TSC	G1-13, G1-17 G1-24, G1-32
M4H30T32TSC4036	G1-14, G1-32
M4H34T18C	G1-17
M4H34T21C	G1-17
M4H34T25C	G1-13, G1-17 G1-23, G1-27, G1-32
M4H34T25C1518	G1-14, G1-32
M4H34T25C2018	G1-14, G1-32
M4H34T28TSC	G1-13, G1-17 G1-23, G1-27, G1-32
M4H34T28TSC2536	G1-14, G1-32
M4H34T28TSC3036	G1-14
M4H34T32TSC	G1-13, G1-17
M4H34T32TSC3036	G1-32
M4H34T32TSC4036	G1-14
M4H41T18C	G1-17
M4H41T21C	G1-13, G1-17 G1-20, G1-26, G1-32
M4H41T21C1018	G1-14, G1-32
M4H41T25C	G1-13, G1-17G1-23, G1-27, G1-32
M4H41T25C1518	G1-14, G1-32
M4H41T25C2036	G1-14, G1-32
M4H41T28TSC	G1-13, G1-17 G1-23, G1-26, G1-32
M4H41T28TSC3036	G1-14, G1-32
M4H44T18C	G1-17
M4H44T21C	G1-13, G1-17 G1-20, G1-26, G1-32
M4H44T21C1018	G1-14, G1-32
M4H44T25C	G1-13, G1-17 G1-23, G1-27, G1-32
M4H44T25C1518	G1-14, G1-32
M4H44T25C2036	G1-14, G1-32
M4H44T28TSC	G1-13, G1-17 G1-23, G1-26, G1-32
M4H44T28TSC3036	G1-14, G1-32
M4H49T18C	G1-17
M4H49T21C	G1-13, G1-17 G1-26, G1-32
M4H49T21C1018	G1-14, G1-32
M4H49T25C	G1-13, G1-17 G1-23, G1-27, G1-32
M4H49T25C1518	G1-14, G1-32
M4H49T25C2036	G1-14, G1-32
M4H49T28TSC	G1-13, G1-17 G1-23, G1-32
M4H49T28TSC2536	G1-14, G1-32
M4H52T18C	G1-17
M4H52T21C	G1-13, G1-17 G1-22, G1-26, G1-32
M4H52T21C1018	G1-14, G1-32
M4H52T25C	G1-13, G1-17 G1-23, G1-27, G1-32
M4H52T25C1518	G1-14, G1-32
M4H52T25C1536	G1-14, G1-32
M4H52T28TSC	G1-13, G1-17 G1-23, G1-32
M4H52T28TSC2536	G1-14, G1-32
M4H61T18C	G1-17
M4H61T21C	G1-13, G1-17 G1-22, G1-26, G1-32
M4H61T21C1018	G1-14, G1-32
M4H61T21C718	G1-14, G1-32
M4H61T25C	G1-13, G1-17 G1-23, G1-27, G1-32
M4H61T25C1536	G1-14, G1-32
M4H61T25C2036	G1-14, G1-32
M4H66T18C	G1-17
M4H66T21C	G1-13, G1-17 G1-22, G1-26, G1-32
M4H66T21C1018	G1-14, G1-32
M4H66T21C718	G1-14, G1-32
M4H66T25C	G1-13, G1-17 G1-23, G1-27, G1-32
M4H66T25C1536	G1-14, G1-32
M4H66T25C2036	G1-14, G1-32
M4H74T18C	G1-17
M4H74T21C	G1-13, G1-17 G1-22, G1-26, G1-32
M4H74T21C1018	G1-14, G1-32
M4H74T21C1036	G1-14, G1-32
M4H74T21C718	G1-14, G1-32
M4H74T25C	G1-13, G1-17 G1-23, G1-26, G1-32
M4H74T25C2036	G1-14, G1-32
M4SEALKIT	G1-64
M5-18CPLKIT	G1-64
M5-21CPLKIT	G1-64
M5-25CPLKIT	G1-64
M5-28CPLKIT	G1-64
M5-28CPLKITTSC	G1-64
M5-32CPLKIT	G1-64
M5-32CPLKITTSC	G1-64
M5-36CPLKIT	G1-64
M5-36CPLKITTSC	G1-64
M5BSCVRKIT	G1-64
M5H18T18C	G1-18
M5H18T21C	G1-18
M5H18T25C	G1-18
M5H18T28C	G1-18, G1-27
M5H18T28TSC	G1-18
M5H18T32C	G1-13, G1-18 G1-24, G1-28, G1-33
M5H18T32C4018	G1-14, G1-33
M5H18T32TSC	G1-13, G1-18 G1-28, G1-33
M5H18T32TSC5036	G1-14, G1-33
M5H18T36C	G1-13, G1-18 G1-24, G1-33
M5H18T36C6018	G1-14, G1-33
M5H18T36TSC	G1-13, G1-18 G1-24, G1-33
M5H18T36TSC7536	G1-14, G1-33
M5H21T18C	G1-18
M5H21T21C	G1-18
M5H21T25C	G1-18
M5H21T28C	G1-18, G1-27
M5H21T28TSC	G1-18
M5H21T32C	G1-13, G1-18, G1-24 G1-27, G1-28, G1-33
M5H21T32C4018	G1-14, G1-33
M5H21T32C5018	G1-14, G1-33
M5H21T32TSC	G1-13, G1-18 G1-28, G1-33
M5H21T32TSC5036	G1-14, G1-33
M5H21T36TSC	G1-18 G1-24, G1-33
M5H21T36TSC7536	G1-14, G1-33
M5H25T18C	G1-18
M5H25T21C	G1-18
M5H25T25C	G1-18
M5H25T28C	G1-13, G1-18 G1-23, G1-27, G1-33
M5H25T28C3018	G1-14, G1-33
M5H25T28TSC	G1-18
M5H25T32C	G1-13, G1-18 G1-24, G1-33
M5H25T32C5018	G1-14, G1-33
M5H25T32TSC	G1-13, G1-18 G1-24, G1-28, G1-33
M5H25T32TSC5036	G1-14, G1-33
M5H25T36TSC	G1-13, G1-18 G1-24, G1-33
M5H25T36TSC7536	G1-14, G1-33
M5H29T18C	G1-18
M5H29T21C	G1-18
M5H29T25C	G1-18, G1-21, G1-27
M5H29T28C	G1-13, G1-18 G1-23, G1-27, G1-33
M5H29T28C3018	G1-14, G1-33
M5H29T28TSC	G1-18
M5H29T32C	G1-13, G1-18 G1-24, G1-33
M5H29T32C4018	G1-14, G1-33
M5H29T32TSC	G1-13, G1-18 G1-24, G1-28, G1-33
M5H29T32TSC4036	G1-14, G1-33
M5H29T36TSC	G1-13, G1-18 G1-24, G1-27, G1-33
M5H29T36TSC6036	G1-14, G1-33
M5H34T18C	G1-18
M5H34T21C	G1-18
M5H34T25C	G1-18, G1-21, G1-27
M5H34T28C	G1-13, G1-18 G1-23, G1-27, G1-33
M5H34T28C2518	G1-14, G1-33
M5H34T28C3018	G1-14, G1-33
M5H34T28TSC	G1-18, G1-27
M5H34T32TSC	G1-13, G1-18 G1-24, G1-28, G1-33
M5H34T32TSC4036	G1-14, G1-33
M5H34T36TSC	G1-13 G1-24, G1-33

Courtesy of:
SCREW CONVEYOR PARTS

PART NUMB

Part Number	Page
M5H34T36TSC6036	G1-14, G1-33
M5H40T18C	G1-18
M5H40T21C	G1-18
M5H40T25C	G1-13, G1-18 G1-23, G1-27, G1-33
M5H40T25C2018	G1-14, G1-33
M5H40T28C	G1-13, G1-18 G1-23, G1-27, G1-33
M5H40T28C3018	G1-14, G1-33
M5H40T28TSC	G1-18, G1-27
M5H40T32TSC	G1-13, G1-18 G1-24, G1-27 G1-28, G1-33
M5H40T32TSC4036	G1-14, G1-33
M5H40T32TSC5036	G1-14, G1-33
M5H40T36TSC	G1-18
M5H43T18C	G1-18
M5H43T21C	G1-18
M5H43T25C	G1-13, G1-18 G1-23, G1-27, G1-33
M5H43T25C2018	G1-14, G1-33
M5H43T28C	G1-13, G1-18 G1-23, G1-27, G1-33
M5H43T28C3018	G1-14, G1-33
M5H43T28TSC	G1-13, G1-18 G1-27, G1-33
M5H43T28TSC3036	G1-14, G1-33
M5H43T32TSC	G1-13, G1-18 G1-24, G1-33
M5H43T32TSC5036	G1-14, G1-33
M5H48T18C	G1-18
M5H48T21C	G1-18
M5H48T25C	G1-13, G1-18, G1-21, G1-23, G1-27, G1-33
M5H48T25C1518	G1-14, G1-33
M5H48T28C	G1-13, G1-18 G1-23, G1-33
M5H48T28C2518	G1-14, G1-33
M5H48T28TSC	G1-13, G1-18 G1-23, G1-27, G1-33
M5H48T28TSC3036	G1-14, G1-33
M5H48T32TSC	G1-13, G1-18 G1-24, G1-33
M5H48T32TSC5036	G1-14, G1-33
M5H51T18C	G1-18
M5H51T21C	G1-18
M5H51T25C	G1-13, G1-18, G1-21 G1-23, G1-27, G1-33
M5H51T25C1518	G1-14, G1-33
M5H51T28C	G1-13, G1-18 G1-23, G1-33
M5H51T28C2518	G1-14, G1-33
M5H51T28TSC	G1-13, G1-18 G1-23, G1-27, G1-33
M5H51T28TSC3036	G1-14, G1-33
M5H51T32TSC	G1-13, G1-18 G1-24, G1-33
M5H51T32TSC4036	G1-14, G1-33
M5H60T18C	G1-18
M5H60T21C	G1-18, G1-20, G1-26
M5H60T25C	G1-13, G1-18 G1-23, G1-27, G1-33
M5H60T25C1518	G1-14, G1-33
M5H60T25C2018	G1-14, G1-33
M5H60T28TSC	G1-13, G1-18 G1-23, G1-27, G1-33
M5H60T28TSC3036	G1-14, G1-33
M5H60T32TSC	G1-13, G1-18 G1-24, G1-33
M5H60T32TSC4036	G1-14, G1-33
M5H65T18C	G1-18
M5H65T21C	G1-13, G1-18 G1-20, G1-26, G1-33
M5H65T21C1018	G1-14, G1-33
M5H65T25C	G1-13, G1-18 G1-23, G1-27, G1-33
M5H65T25C2018	G1-14, G1-33
M5H65T28TSC	G1-13, G1-18 G1-23, G1-27, G1-33
M5H65T28TSC2536	G1-14, G1-33
M5H65T28TSC3036	G1-14, G1-33
M5H72T18C	G1-18
M5H72T21C	G1-13, G1-18 G1-20, G1-26, G1-33
M5H72T21C1018	G1-14, G1-33
M5H72T25C	G1-13, G1-18 G1-23, G1-27, G1-33
M5H72T25C1518	G1-14, G1-33
M5H72T28TSC	G1-13, G1-18 G1-23, G1-27, G1-33
M5H72T28TSC2536	G1-14, G1-33
M5H72T28TSC3036	G1-14, G1-33
M5SEALKIT	G1-64
M6-21CPLKIT	G1-64
M6-25CPLKIT	G1-64
M6-28CPLKIT	G1-64
M6-28CPLKITTSC	G1-64
M6-32CPLKIT	G1-64
M6-32CPLKITTSC	G1-64
M6-36CPLKIT	G1-64
M6-36CPLKITTSC	G1-64
M6BSCVRKIT	G1-64
M6H19T21C	G1-19
M6H19T25C	G1-19
M6H19T28C	G1-19
M6H19T32C	G1-22, G1-28
M6H19T36C	G1-13, G1-19 G1-24, G1-28, G1-34
M6H19T36C6018	G1-14, G1-34
M6H19T36C7518	G1-14, G1-34
M6H22T21C	G1-19
M6H22T25C	G1-19
M6H22T28C	G1-19
M6H22T28TSC	G1-19
M6H22T32C	G1-13, G1-19 G1-28, G1-34
M6H22T32C5018	G1-14, G1-34
M6H22T32TSC	G1-19
M6H22T36C	G1-13, G1-24 G1-28, G1-34
M6H22T36C6018	G1-14, G1-34
M6H22T36TSC	G1-13, G1-19 G1-28, G1-34
M6H22T36TSC7536	G1-14, G1-34
M6H24T21C	G1-19
M6H24T25C	G1-19
M6H24T28C	G1-19
M6H24T28TSC	G1-19
M6H24T32C	G1-13, G1-19 G1-28, G1-34
M6H24T32C5018	G1-14, G1-34
M6H24T32TSC	G1-19
M6H24T36C	G1-13, G1-24 G1-28, G1-34
M6H24T36C6018	G1-14, G1-34
M6H24T36TSC	G1-13, G1-19 G1-28, G1-34
M6H24T36TSC7536	G1-14, G1-34
M6H29T21C	G1-19
M6H29T25C	G1-19
M6H29T28C	G1-19
M6H29T28TSC	G1-19
M6H29T32C	G1-13, G1-19 G1-24, G1-28, G1-34
M6H29T32C4018	G1-14, G1-34
M6H29T32C5018	G1-14, G1-34
M6H29T32TSC	G1-22, G1-28
M6H29T36TSC	G1-13, G1-19 G1-24, G1-28, G1-34
M6H29T36TSC7536	G1-14, G1-34
M6H34T21C	G1-19
M6H34T25C	G1-19
M6H34T28C	G1-13, G1-21 G1-27, G1-34
M6H34T28C3018	G1-14, G1-34
M6H34T28TSC	G1-19
M6H34T32C	G1-13, G1-19 G1-24, G1-28, G1-34
M6H34T32C5018	G1-14, G1-34
M6H34T32TSC	G1-22, G1-28
M6H34T36TSC	G1-13, G1-19 G1-24, G1-28, G1-34
M6H34T36TSC6036	G1-14, G1-34
M6H34T36TSC7536	G1-14, G1-34
M6H39T21C	G1-19
M6H39T25C	G1-19
M6H39T28C	G1-13, G1-19 G1-27, G1-28, G1-34
M6H39T28C3018	G1-14, G1-34
M6H39T28TSC	G1-19
M6H39T32C	G1-13, G1-24 G1-28, G1-34
M6H39T32C4018	G1-14, G1-34
M6H39T32TSC	G1-13, G1-22 G1-28, G1-34
M6H39T32TSC5036	G1-14, G1-34
M6H39T36TSC	G1-24 G1-28, G1-34
M6H39T36TSC7536	G1-14, G1-34
M6H45T21C	G1-19
M6H45T25C	G1-19, G1-21, G1-27
M6H45T28C	G1-13, G1-19 G1-23, G1-27, G1-34
M6H45T28C2518	G1-14, G1-34
M6H45T28C3018	G1-14, G1-34
M6H45T28TSC	G1-19
M6H45T32TSC	G1-13, G1-19 G1-28, G1-34
M6H45T32TSC5036	G1-14, G1-34
M6H45T36TSC	G1-24 G1-28, G1-34
M6H45T36TSC6036	G1-14, G1-34
M6H50T21C	G1-19
M6H50T25C	G1-19, G1-21, G1-27
M6H50T28C	G1-13, G1-19 G1-23, G1-34
M6H50T28C2518	G1-14, G1-34
M6H50T28C3018	G1-14, G1-34
M6H50T28TSC	G1-19
M6H50T32TSC	G1-13, G1-22 G1-24, G1-28, G1-34
M6H50T32TSC4036	G1-14, G1-34
M6H50T36TSC	G1-24 G1-28, G1-34
M6H50T36TSC6036	G1-14, G1-34
M6H52T21C	G1-19
M6H52T25C	G1-13, G1-19 G1-21, G1-27, G1-34
M6H52T25C2018	G1-14, G1-34
M6H52T28C	G1-13, G1-19 G1-23, G1-28, G1-34
M6H52T28C2518	G1-14
M6H52T28C3018	G1-14, G1-34
M6H52T28TSC	G1-19
M6H52T32TSC	G1-13, G1-22 G1-24, G1-28, G1-34
M6H52T32TSC4036	G1-14, G1-34
M6H52T36TSC	G1-24 G1-28, G1-34
M6H52T36TSC6036	G1-14, G1-34
M6H59T21C	G1-19
M6H59T25C	G1-13, G1-19 G1-21, G1-27, G1-34
M6H59T25C2018	G1-14, G1-34
M6H59T28C	G1-13, G1-19 G1-23, G1-28, G1-34
M6H59T28C3018	G1-14, G1-34
M6H59T28TSC	G1-19
M6H59T32TSC	G1-13, G1-19 G1-24, G1-28, G1-34
M6H59T32TSC4036	G1-14, G1-34
M6H59T32TSC5036	G1-14, G1-34
M6H67T21C	G1-19
M6H67T25C	G1-13, G1-19, G1-21 G1-23, G1-27, G1-34
M6H67T25C1518	G1-14, G1-34
M6H67T28C	G1-13, G1-23 G1-28, G1-34
M6H67T28C2518	G1-14, G1-34
M6H67T28TSC	G1-13, G1-21 G1-27, G1-34
M6H67T28TSC3036	G1-14, G1-34
M6H67T32TSC	G1-13, G1-24 G1-28, G1-34
M6H67T32TSC5036	G1-14, G1-34
M6H79T21C	G1-19
M6H79T25C	G1-13, G1-19 G1-23, G1-27, G1-34
M6H79T25C1518	G1-14, G1-34
M6H79T25C2018	G1-14, G1-34
M6H79T28C	G1-19
M6H79T28TSC	G1-13, G1-19 G1-27, G1-28, G1-34
M6H79T28TSC3036	G1-14, G1-34
M6H79T32TSC	G1-13, G1-24 G1-28, G1-34
M6H79T32TSC4036	G1-14, G1-34
M6H504T28C	G1-27
M6SEALKIT	G1-64
M7-21CPLKIT	G1-64
M7-25CPLKIT	G1-64
M7-28CPLKIT	G1-64
M7-28CPLKITTSC	G1-64
M7-32CPLKIT	G1-64

Courtesy of:
SCREW CONVEYOR PARTS

Part Number	Page
M7-32CPLKITTSC	G1-64
M7-36CPLKIT	G1-64
M7-36CPLKITTSC	G1-64
M7-40CPLKIT	G1-64
M7-40CPLKITTSC	G1-64
M7BSCVRKIT	G1-64
M7H19T21C	G1-20
M7H19T25C	G1-20
M7H19T28C	G1-20
M7H19T32C	G1-20
M7H19T36C	G1-13, G1-20, G1-28, G1-35
M7H19T36C7518	G1-14, G1-35
M7H19T405C	G1-13, G1-20, G1-25, G1-35
M7H19T405C10018	G1-14, G1-35
M7H22T21C	G1-20
M7H22T25C	G1-20
M7H22T28C	G1-20
M7H22T32C	G1-20
M7H22T36C	G1-13, G1-20, G1-24, G1-28, G1-29, G1-35
M7H22T36C7518	G1-14, G1-35
M7H22T405C	G1-13, G1-20, G1-25, G1-35
M7H22T405C10018	G1-14, G1-35
M7H26T21C	G1-20
M7H26T25C	G1-20
M7H26T28C	G1-20
M7H26T28TSC	G1-20
M7H26T29C	G1-20
M7H26T29TSC	G1-20
M7H26T32C	G1-20, G1-28
M7H26T32TSC	G1-20
M7H26T36C	G1-13, G1-20, G1-24, G1-28, G1-35
M7H26T36C6018	G1-14, G1-35
M7H26T36C7518	G1-14, G1-35
M7H26T36TSC	G1-20
M7H26T405TSC	G1-13, G1-20, G1-25, G1-29, G1-35
M7H29T21C	G1-20
M7H29T25C	G1-20
M7H29T32C	G1-20, G1-28
M7H29T32TSC	G1-20
M7H29T36C	G1-13, G1-20, G1-24, G1-28, G1-35
M7H29T36C6018	G1-14, G1-35
M7H29T36C7518	G1-14, G1-35
M7H29T36TSC	G1-20
M7H29T405TSC	G1-13, G1-20, G1-25, G1-29, G1-35
M7H33T21C	G1-20
M7H33T25C	G1-20
M7H33T28C	G1-20
M7H33T28TSC	G1-20
M7H33T32C	G1-13, G1-20, G1-28, G1-29, G1-35
M7H33T32C5018	G1-14, G1-35
M7H33T32TSC	G1-20
M7H33T36C	G1-13, G1-20, G1-24, G1-29, G1-35
M7H33T36C7518	G1-14, G1-35
M7H33T36TSC	G1-22, G1-28
M7H33T405TSC	G1-13, G1-20, G1-25, G1-29, G1-35
M7H38T21C	G1-20
M7H38T25C	G1-20
M7H38T28C	G1-20
M7H38T28TSC	G1-20
M7H38T32C	G1-13, G1-20, G1-24, G1-28, G1-35
M7H38T32C4018	G1-14, G1-35
M7H38T32TSC	G1-20
M7H38T36C	G1-13, G1-20, G1-24, G1-35
M7H38T36C6018	G1-14, G1-35
M7H38T36TSC	G1-13, G1-20, G1-28, G1-29, G1-35
M7H38T36TSC7536	G1-14, G1-35
M7H38T405TSC	G1-13, G1-20, G1-25, G1-35
M7H44T21C	G1-20
M7H44T25C	G1-20
M7H44T28C	G1-20, G1-27
M7H44T28TSC	G1-20
M7H44T32C	G1-13, G1-20, G1-24, G1-28, G1-29, G1-35
M7H44T32C4018	G1-14, G1-35
M7H44T32TSC	G1-20
M7H44T36C	G1-13, G1-20, G1-24, G1-35
M7H44T36C6018	G1-14, G1-35
M7H44T36TSC	G1-13, G1-20, G1-24, G1-28, G1-29, G1-35
M7H44T36TSC7536	G1-14, G1-35
M7H44T405TSC	G1-13, G1-20, G1-25, G1-35
M7H51T21C	G1-20
M7H51T25C	G1-20
M7H51T28C	G1-13, G1-20, G1-27, G1-29, G1-35
M7H51T28C3018	G1-14, G1-35
M7H51T28TSC	G1-20
M7H51T32C	G1-13, G1-20, G1-24, G1-29, G1-35
M7H51T32C5018	G1-14, G1-35
M7H51T32TSC	G1-20, G1-28
M7H51T36TSC	G1-13, G1-20, G1-24, G1-28, G1-35
M7H51T36TSC6036	G1-14, G1-35
M7H51T36TSC7536	G1-14, G1-35
M7H58T21C	G1-20
M7H58T25C	G1-20
M7H58T28C	G1-13, G1-20, G1-27, G1-29, G1-35
M7H58T28C3018	G1-14, G1-35
M7H58T28TSC	G1-20
M7H58T32C	G1-13, G1-20, G1-24, G1-35
M7H58T32C4018	G1-14, G1-35
M7H58T32TSC	G1-20, G1-28
M7H58T36TSC	G1-13, G1-20, G1-24, G1-28, G1-35
M7H58T36TSC6036	G1-14, G1-35
M7H58T36TSC7536	G1-14, G1-35
M7H67T21C	G1-20
M7H67T25C	G1-20, G1-21, G1-27
M7H67T28C	G1-13, G1-20, G1-23, G1-27, G1-35
M7H67T28C2518	G1-14, G1-35
M7H67T28TSC	G1-20
M7H67T32C	G1-13, G1-20, G1-24, G1-35
M7H67T32C4018	G1-14, G1-35
M7H67T32TSC	G1-13, G1-20, G1-28, G1-29, G1-35
M7H67T32TSC5036	G1-14, G1-35
M7H67T36TSC	G1-13, G1-20, G1-24, G1-29, G1-35
M7H67T36TSC7536	G1-14, G1-35
M7H76T21C	G1-20
M7H76T25C	G1-20, G1-21, G1-27
M7H76T28C	G1-13, G1-20, G1-23, G1-27, G1-35
M7H76T28C2518	G1-14, G1-35
M7H76T28C3018	G1-14, G1-35
M7H76T28TSC	G1-20
M7H76T32TSC	G1-13, G1-20, G1-24, G1-28, G1-35
M7H76T32TSC4036	G1-14, G1-35
M7H76T36TSC	G1-20, G1-24, G1-35
M7H76T36TSC6036	G1-14, G1-35
M7SEALKIT	G1-64
M8-21CPLKIT	G1-64
M8-25CPLKIT	G1-64
M8-28CPLKIT	G1-64
M8-28CPLKITTSC	G1-64
M8-32CPLKIT	G1-64
M8-32CPLKITTSC	G1-64
M8-36CPLKIT	G1-64
M8-36CPLKITTSC	G1-64
M8-40CPLKIT	G1-64
M8-40CPLKITTSC	G1-64
M8DSCVRKIT	G1-64
M8H17T25C	G1-21
M8H17T28C	G1-21
M8H17T32C	G1-21
M8H17T36C	G1-21
M8H17T405C	G1-13, G1-21, G1-29, G1-36
M8H17T405C10018	G1-14, G1-36
M8H23T25C	G1-21
M8H23T28C	G1-21
M8H23T32C	G1-21
M8H23T36C	G1-21, G1-28
M8H23T405C	G1-13, G1-21, G1-25, G1-29, G1-36
M8H23T405C10018	G1-14, G1-36
M8H27T25C	G1-21
M8H27T28C	G1-21
M8H27T32C	G1-21
M8H27T36C	G1-13, G1-21, G1-28, G1-36
M8H27T36C7518	G1-14, G1-36
M8H27T405C	G1-13, G1-21, G1-25, G1-36
M8H27T405C10018	G1-14, G1-36
M8H31T25C	G1-21
M8H31T28C	G1-21
M8H31T28TSC	G1-21
M8H31T32C	G1-21
M8H31T32TSC	G1-21
M8H31T36C	G1-13, G1-21, G1-28, G1-30, G1-36
M8H31T36C7518	G1-14, G1-36
M8H31T36TSC	G1-21
M8H31T405C	G1-13, G1-21, G1-25, G1-36
M8H31T405C10018	G1-14, G1-36
M8H31T405TSC	G1-13, G1-21, G1-25, G1-29, G1-36
M8H34T25C	G1-21
M8H34T28C	G1-21
M8H34T28TSC	G1-21
M8H34T32C	G1-21
M8H34T32TSC	G1-21
M8H34T36C	G1-13, G1-21, G1-28, G1-30, G1-36
M8H34T36C7518	G1-14, G1-36
M8H34T36TSC	G1-21
M8H34T405C	G1-13, G1-21, G1-25, G1-36
M8H34T405C10018	G1-14, G1-36
M8H34T405TSC	G1-13, G1-21, G1-29, G1-36
M8H40T25C	G1-21
M8H40T28C	G1-21
M8H40T28TSC	G1-21
M8H40T32C	G1-21, G1-28
M8H40T32TSC	G1-21
M8H40T36C	G1-13, G1-21, G1-24, G1-28, G1-36
M8H40T36C6018	G1-14, G1-36
M8H40T36C7518	G1-14, G1-36
M8H40T36TSC	G1-21
M8H40T405TSC	G1-13, G1-21, G1-29, G1-36
M8H46T25C	G1-21
M8H46T28C	G1-21
M8H46T28TSC	G1-21
M8H46T32C	G1-21, G1-28
M8H46T32TSC	G1-21
M8H46T36C	G1-13, G1-21, G1-24, G1-28, G1-36
M8H46T36C6018	G1-14, G1-36
M8H46T36C7518	G1-14, G1-36
M8H46T36TSC	G1-21, G1-28
M8H46T405TSC	G1-13, G1-21, G1-25, G1-29, G1-36
M8H51T25C	G1-21
M8H51T28C	G1-21
M8H51T28TSC	G1-21
M8H51T32C	G1-13, G1-21, G1-28, G1-30, G1-36
M8H51T32C5018	G1-14, G1-36
M8H51T32TSC	G1-21
M8H51T36C	G1-13, G1-21, G1-24, G1-30, G1-36
M8H51T36C7518	G1-14, G1-36
M8H51T36TSC	G1-21, G1-28
M8H51T405TSC	G1-13, G1-21, G1-25, G1-29, G1-36
M8H53T25C	G1-21
M8H53T28C	G1-21
M8H53T28TSC	G1-21
M8H53T32C	G1-13, G1-21, G1-28, G1-30, G1-36
M8H53T32C5018	G1-14, G1-36
M8H53T32TSC	G1-21
M8H53T36C	G1-13, G1-21, G1-24, G1-36

Courtesy of:
Screw Conveyor Parts

PART NUMB

Part Number	Page
M8H53T36C6018	G1-14, G1-36
M8H53T36TSC	G1-13, G1-21 G1-28, G1-36
M8H53T36TSC7536	G1-14, G1-36
M8H53T405TSC	G1-13, G1-21 G1-25, G1-36
M8H60T25C	G1-21
M8H60T28C	G1-21
M8H60T28TSC	G1-21
M8H60T32C	G1-13, G1-21 G1-24, G1-28, G1-36
M8H60T32C4018	G1-14, G1-36
M8H60T32TSC	G1-21
M8H60T36C	G1-13, G1-21 G1-24, G1-36
M8H60T36C6018	G1-14, G1-36
M8H60T36TSC	G1-13, G1-21 G1-28, G1-30, G1-36
M8H60T36TSC7536	G1-14, G1-36
M8H60T405TSC	G1-13, G1-21 G1-25, G1-36
M8H69T25C	G1-21
M8H69T28C	G1-21
M8H69T28TSC	G1-21
M8H69T32C	G1-13, G1-21, G1-24 G1-27, G1-28, G1-36
M8H69T32C4018	G1-14, G1-36
M8H69T32C5018	G1-14, G1-36
M8H69T32TSC	G1-21, G1-28
M8H69T36TSC	G1-13, G1-21 G1-24, G1-28 G1-30, G1-36
M8H69T36TSC7536	G1-14, G1-36
M8H69T405TSC	G1-13, G1-21 G1-25, G1-36
M8H79T25C	G1-21
M8H79T28C	G1-13, G1-21 G1-27, G1-36
M8H79T28C3018	G1-14, G1-36
M8H79T28TSC	G1-21
M8H79T32C	G1-13, G1-21 G1-24, G1-30, G1-36
M8H79T32C5018	G1-14, G1-36
M8H79T32TSC	G1-21, G1-28
M8H79T36TSC	G1-13, G1-21 G1-24, G1-28, G1-36
M8H79T36TSC6036	G1-14, G1-36
M8H79T36TSC7536	G1-14, G1-36
M8SEALKIT	G1-64
MTA2115H	G1-39
SCXT42B	G3-86
SCXT105	G3-85, G3-88 G3-90, G3-95
SCXT109A	G3-85, G3-88, G3-90
SCXT115A	G3-85, G3-88, G3-90
SCXT125A	G3-85, G3-88, G3-90
SCXT205	G3-86, G3-88 G3-89, G3-90
SCXT209A	G3-86, G3-88, G3-90
SCXT215A	G3-85, G3-86 G3-88, G3-90
SCXT225A	G3-85, G3-86 G3-88, G3-90
SCXT305A	G3-86, G3-88 G3-89, G3-90, G3-91
SCXT309B	G3-86, G3-88 G3-89, G3-90, G3-91
SCXT315B	G3-85, G3-86, G3-88 G3-89, G3-90, G3-91
SCXT325A	G3-88
SCXT325B	G3-85, G3-86 G3-88, G3-90
SCXT405A	G3-86, G3-89, G3-91
SCXT409B	G3-86, G3-89, G3-91
SCXT415B	G3-85, G3-86, G3-88 G3-89, G3-90, G3-91
SCXT425B	G3-85, G3-86 G3-88, G3-89, G3-90
SCXT505A	G3-86, G3-89, G3-91
SCXT509C	G3-86, G3-89, G3-91
SCXT515C	G3-86, G3-88 G3-89, G3-90, G3-91
SCXT525C	G3-85, G3-86, G3-88 G3-89, G3-90, G3-91
SCXT605	G3-86, G3-87 G3-89, G3-91
SCXT609A	G3-86, G3-87 G3-89, G3-91
SCXT615A	G3-86, G3-89 G3-90, G3-91
SCXT625A	G3-85, G3-86, G3-88 G3-89, G3-90, G3-91
SCXT705	G3-87, G3-89, G3-91
SCXT709A	G3-86, G3-87 G3-89, G3-91
SCXT715A	G3-86, G3-87 G3-89, G3-91
SCXT725A	G3-85, G3-86 G3-87, G3-88, G3-89 G3-90, G3-91
SCXT815A	G3-86, G3-87 G3-89, G3-91
SCXT825A	G3-85, G3-86 G3-87, G3-88, G3-89 G3-90, G3-91
TA0107L05	G2-15, G2-16, G2-21 G2-22, G2-26, G2-27
TA0107L09	G2-15, G2-16, G2-21 G2-22, G2-26, G2-27
TA0107L15	G2-15, G2-16, G2-21 G2-22, G2-26, G2-27
TA0107L25	G2-15, G2-16 G2-21, G2-22, G2-26
TA0107L31	G2-15, G2-21, G2-26
TA1107H05	G2-16, G2-22, G2-27
TA1107H09	G2-16, G2-22, G2-27
TA1107H15	G2-15, G2-16, G2-21 G2-22, G2-26, G2-27
TA1107H25	G2-15, G2-16, G2-21 G2-22, G2-26, G2-27
TA1107H31	G2-15, G2-16 G2-21, G2-22, G2-26
TA2115H05	G2-16, G2-17, G2-22 G2-23, G2-27, G2-28
TA2115H09	G2-16, G2-17, G2-22 G2-23, G2-27, G2-28
TA2115H15	G2-15, G2-16 G2-17, G2-21, G2-22 G2-26, G2-27
TA2115H25	G2-15, G2-16, G2-21 G2-22, G2-26, G2-27
TA2115H33	G2-15, G2-16, G2-21 G2-22, G2-26, G2-27
TA3203H05	G2-17, G2-18, G2-22 G2-23, G2-27, G2-28
TA3203H09	G2-17, G2-22 G2-23, G2-27, G2-28
TA3203H15	G2-15, G2-16, G2-17 G2-21, G2-22, G2-23 G2-26, G2-27, G2-28
TA3203H25	G2-15, G2-16 G2-17, G2-21, G2-22 G2-26, G2-27
TA3203H32	G2-15, G2-16, G2-21 G2-22, G2-26, G2-27
TA4207H05	G2-17, G2-18 G2-23, G2-24, G2-27 G2-28, G2-29
TA4207H09	G2-17, G2-18 G2-22, G2-23, G2-24 G2-28, G2-29
TA4207H15	G2-15, G2-16, G2-17 G2-18, G2-21, G2-22 G2-23, G2-26 G2-27, G2-28
TA4207H25	G2-15, G2-16, G2-17 G2-21, G2-22, G2-23 G2-26, G2-27, G2-28
TA4207H40	G2-15, G2-16 G2-17, G2-21, G2-22 G2-26, G2-27
TA5215H	G2-115
TA5215H05	G2-17, G2-18 G2-19, G2-23, G2-24 G2-28, G2-29
TA5215H09	G2-18, G2-19, G2-23 G2-24, G2-28, G2-29
TA5215H15	G2-15, G2-16, G2-17 G2-18, G2-21, G2-22 G2-23, G2-24, G2-26 G2-27, G2-28
TA5215H25	G2-15, G2-16, G2-17 G2-18, G2-21, G2-22 G2-23, G2-26 G2-27, G2-28
TA5215H40	G2-15, G2-16, G2-17 G2-21, G2-22, G2-23 G2-26, G2-27, G2-28
TA6307H	G1-54
TA6307H05	G2-18, G2-19, G2-23 G2-24, G2-28, G2-29
TA6307H09	G2-18, G2-19, G2-23 G2-24, G2-28, G2-29
TA6307H15	G2-16, G2-17, G2-18 G2-19, G2-21, G2-22 G2-23, G2-24, G2-26 G2-27, G2-28, G2-29
TA6307H25	G2-16, G2-17, G2-18 G2-19, G2-21, G2-22 G2-23, G2-24, G2-26 G2-27, G2-28
TA6307H40	G2-16, G2-17, G2-18 G2-21, G2-22, G2-23 G2-26, G2-27, G2-28
TA7315H05	G2-19, G2-20 G2-24, G2-25, G2-29
TA7315H09	G2-19, G2-20 G2-24, G2-25, G2-29
TA7315H15	G2-16, G2-17, G2-18 G2-19, G2-22, G2-23 G2-24, G2-27 G2-28, G2-29
TA7315H25	G2-16, G2-17, G2-18 G2-19, G2-22, G2-23 G2-24, G2-27 G2-28, G2-29
TA7315H40	G2-16, G2-17, G2-18 G2-19, G2-22, G2-23 G2-24, G2-27, G2-28
TA8407H15	G2-16, G2-17, G2-18 G2-19, G2-20, G2-22 G2-23, G2-24, G2-25 G2-27, G2-28, G2-29
TA8407H25	G2-16, G2-17, G2-18 G2-19, G2-22, G2-23 G2-24, G2-27 G2-28, G2-29
TA8407H40	G2-16, G2-17, G2-18 G2-19, G2-22, G2-23 G2-24, G2-27 G2-28, G2-29
TA9415H15	G2-16, G2-17, G2-18 G2-19, G2-20, G2-22 G2-23, G2-24, G2-25 G2-27, G2-28 G2-29, G2-30
TA9415H25	G2-16, G2-17, G2-18 G2-19, G2-20, G2-22 G2-23, G2-24, G2-25 G2-27, G2-28, G2-29
TA9415H40	G2-16, G2-17, G2-18 G2-19, G2-22, G2-23 G2-24, G2-27 G2-28, G2-29
TA10507H15	G2-16, G2-17, G2-18 G2-19, G2-20, G2-22 G2-23, G2-24, G2-25 G2-27, G2-28 G2-29, G2-30
TA10507H25	G2-16, G2-17, G2-18 G2-19, G2-20, G2-22 G2-23, G2-24, G2-25 G2-27, G2-28 G2-29, G2-30
TA10507H40	G2-16, G2-17, G2-18 G2-19, G2-22, G2-23 G2-24, G2-27 G2-28, G2-29
TA12608H15	G2-17, G2-18, G2-19 G2-20, G2-22, G2-23 G2-24, G2-25, G2-27 G2-28, G2-29, G2-30
TA12608H25	G2-17, G2-18, G2-19 G2-20, G2-22, G2-23 G2-24, G2-25, G2-27 G2-28, G2-29, G2-30
TA12608H40	G2-17, G2-18, G2-19 G2-20, G2-22, G2-23 G2-24, G2-25, G2-27 G2-28, G2-29

Courtesy of:
Screw Conveyor Parts

PART NUMBE

Part Number	Page
TDT1325	G3-20, G3-21, G3-23, G3-24, G3-25, G3-27, G3-28, G3-29
TDT1425	G2-17, G2-18, G2-19, G2-20, G2-23, G2-24, G2-25, G2-28, G2-29, G2-30, G3-19, G3-20, G3-21, G3-23, G3-24, G3-25, G3-27, G3-28, G3-29
TDT1530	G2-18, G2-19, G2-20, G2-23, G2-24, G2-25, G2-28, G2-29, G2-30, G3-20, G3-21, G3-24, G3-25, G3-27, G3-28, G3-29
TXT 5 ABHS TA	G3-161
TXT1015A	G3-20, G3-21, G3-24, G3-25, G3-28, G3-29
TXT1024A	G3-19, G3-20, G3-21, G3-23, G3-24, G3-2, G3-27, G3-28
TXT105	G3-18, G3-19, G3-22, G3-23, G3-26
TXT109A	G3-18, G3-19, G3-22, G3-23, G3-26
TXT115A	G3-18, G3-22, G3-23, G3-26
TXT1215	G3-20, G3-21, G3-24, G3-25, G3-28, G3-29
TXT1215TV	G3-68
TXT1225	G3-19, G3-20, G3-21, G3-23, G3-24, G3-25, G3-27, G3-28, G3-29
TXT1225TV	G3-68
TXT125A	G3-18, G3-22, G3-26
TXT205	G3-19, G3-23, G3-26, G3-27
TXT209A	G3-19, G3-23, G3-26, G3-27
TXT215A	G3-18, G3-19, G3-22, G3-23, G3-26, G3-27
TXT225A	G3-18, G3-19, G3-22, G3-23, G3-26
TXT305A	G3-19, G3-23, G3-27
TXT309B	G3-19, G3-23, G3-27
TXT315B	G3-18, G3-19, G3-22, G3-23, G3-26, G3-27
TXT325B	G3-18, G3-19, G3-22, G3-23, G3-26, G3-27
TXT405A	G3-19, G3-20, G3-23, G3-24, G3-27
TXT409B	G3-19, G3-20, G3-23, G3-27
TXT415B	G3-18, G3-19, G3-22, G3-23, G3-26, G3-27
TXT425B	G3-18, G3-19, G3-22, G3-23, G3-26, G3-27
TXT505A	G3-19, G3-20, G3-23, G3-24, G3-27, G3-28
TXT509C	G3-19, G3-20, G3-23, G3-24, G3-27
TXT515C	G3-19, G3-20, G3-23, G3-27
TXT525C	G3-18, G3-19, G3-22, G3-23, G3-26, G3-27
TXT605	G3-20, G3-23, G3-24, G3-27, G3-28
TXT609A	G3-20, G3-23, G3-24, G3-27, G3-28
TXT615A	G3-19, G3-20, G3-23, G3-24, G3-27, G3-28
TXT625A	G3-18, G3-19, G3-20, G3-22, G3-23, G3-24, G3-26, G3-27
TXT705	G3-20, G3-24, G3-25, G3-28
TXT709A	G3-20, G3-24, G3-28
TXT715A	G3-19, G3-20, G3-23, G3-24, G3-27, G3-28
TXT725A	G3-18, G3-19, G3-20, G3-22, G3-23, G3-24, G3-26, G3-27, G3-28
TXT805	G3-20, G3-21, G3-24, G3-25, G3-28
TXT815A	G3-19, G3-20, G3-23, G3-24, G3-27, G3-28
TXT825A	G3-19, G3-20, G3-22, G3-23, G3-24, G3-26, G3-27, G3-28
TXT905	G3-21, G3-24, G3-25, G3-28
TXT915A	G3-20, G3-21, G3-24, G3-25, G3-27, G3-28
TXT926A	G3-19, G3-20, G3-23, G3-24, G3-27, G3-28

Courtesy of:
SCREW CONVEYOR PARTS

Also See These Publications For Additional Gearing Information

Metric Motorized Torque-Arm II
ICA1611 - 9AKK106536
- Heavy Duty right angle gear reducer
- 7 case sizes
- AGMA rated design
- Uses standard TAII accessories
- Twin Tapered bushing system
- Shaft sizes up to 120mm or 4-7/16”
- Torque Ratings up to 15,000 Nm or 130,000 in-lb

Quantis Engineering Catalog
CA1603
- In Line Helical (ILH)
- Right Angle Helical Bevel (RHB)
- Motorized Shaft Mount (MSM)
- Eight sizes (38 through 168)
- Four Input Configurations
- Torque Ratings up to 120k in-lb
- High efficiency product

Metric Torque-Arm II
ICA1602
- 12 case sizes
- Metric TAII Reducers
- Metric Twin Taper Bushings
- Metric Modular accessories
- Shaft sizes up to 190mm
- Torque Ratings up to 50,000 N-M

MAGNAGEAR XTR REDUCERS
CA1610
- 8 Case sizes
- Parallel and Right Angle configurations
- Base or Shaft mounted
- Solid or hollow shaft output
- Torque ratings up to 1,000,000 in-lb

Courtesy of:
SCREW CONVEYOR PARTS

MISSION

Our mission is to be the best (as determined by our customers)
marketers, designers and manufacturers of industrial electric motors,
drives and mechanical power transmissions products

Taking care of our customers safely

BALDOR
A MEMBER OF THE ABB GROUP

P.O. Box 2400, Fort Smith, AR 72902-2400 U.S.A., Ph: (1) 479.646.4711, Fax (1) 479.648.5792, International Fax (1) 479.648.5895

Baldor - Dodge
6040 Ponders Court, Greenville, SC 29615-4617 U.S.A., Ph: (1) 864.297.4800, Fax: (1) 864.281.2433

www.baldor.com

© Baldor Electric Company
All Rights Reserved. Printed in USA.
CA1601
06/16 CJK 10,000