



TORQUE-ARM II Shaft Mount Speed Reducers

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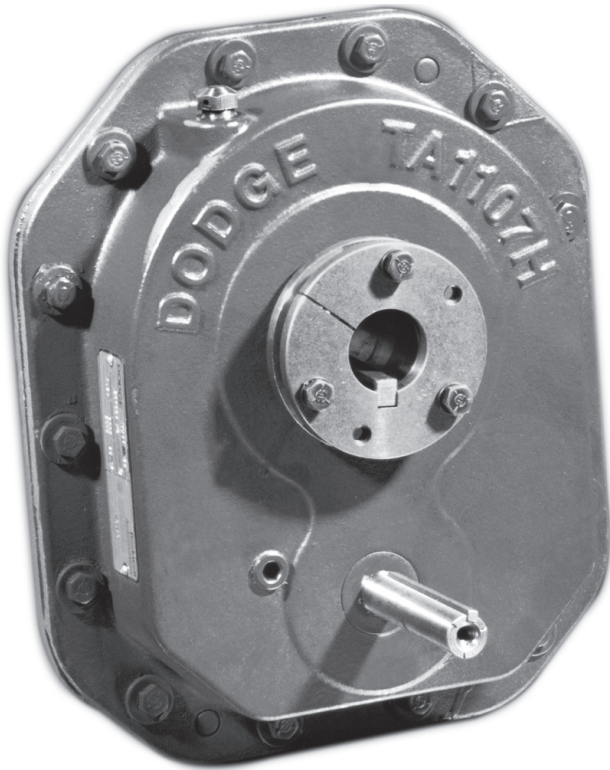
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FEATURES/BENEFITS

TORQUE-ARM II Shaft Mount Speed Reducers

THE LEGACY CONTINUES



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 - TORQUE-ARM II - offering patented innovations, new features, plus increased torque and horsepower ratings.



FEATURES/BENEFITS

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 an HNBR 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.

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

Shaft mounted reducer with twin tapered bushing and motor mount



Screw conveyor drive with adapter, drive shaft and motor mount





FEATURES/BENEFITS

TORQUE-ARM II Shaft Mount Speed Reducers

THE LEGACY CONTINUES

The new-generation DODGE TORQUE-ARM II has been engineered throughout with features designed to improve performance, extend service life, and reduce or simplify maintenance.

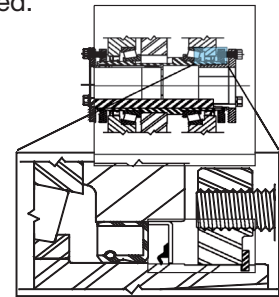
Three large pry slots make rebuilding easy.

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 HNBR oil seals are protected by a patented labyrinth metal shield and excluder lip auxiliary seal on all shafts.

No lubrication required.
Factory tested.



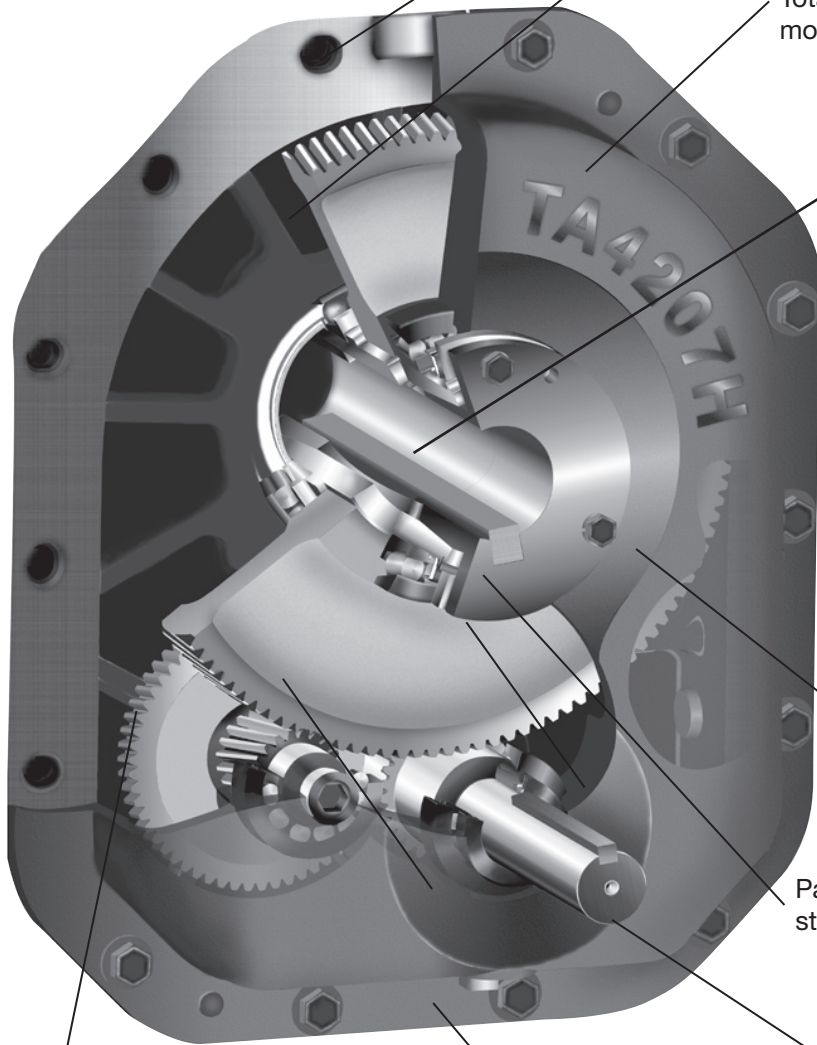
100% cast iron housing (Class 30) eliminates bearing cap leak paths and maximizes surface area for heat dissipation.

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 baffled air breather are standard.





FEATURES/BENEFITS

TORQUE-ARM II Shaft Mount Speed Reducers

THE LEGACY CONTINUES

Shaft Mounted

Screw Conveyor



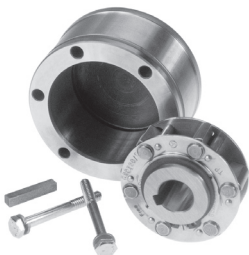
STANDARD TWIN TAPERED BUSHING SYSTEM is an easy on, easy off, no-wobble bushing system featuring a fully split, ductile iron 8° taper and reliable twin

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 new-design **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.

The CEMA BOLT-ON ADAPTER features double-lip seals on both surfaces. The adapter center is open for contaminant 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 vertical breather kits.



SPECIFICATIONS

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 Hydrogenated Nitrile Butadiene Rubber. 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.

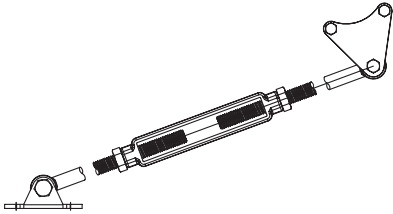


NOMENCLATURE

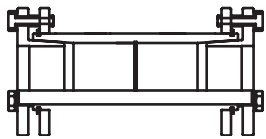
TORQUE-ARM II Shaft Mount Speed Reducers Basic TORQUE-ARM II Reducer TA1107H25

Shaft Mount Reducer Drive Accessories

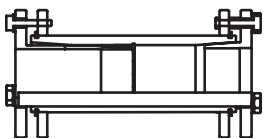
TA1107RA
TA1107 Rod Assembly



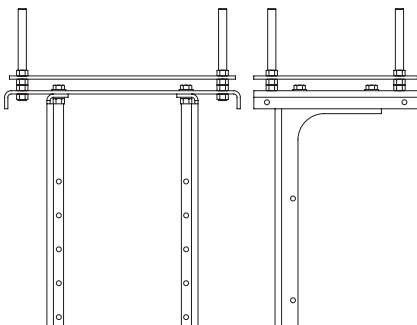
TA1107TB x 1-7/16
TA1107TB x 1-7/16 Twin Tapered Bushing Kit for Standard Length Driven Shaft



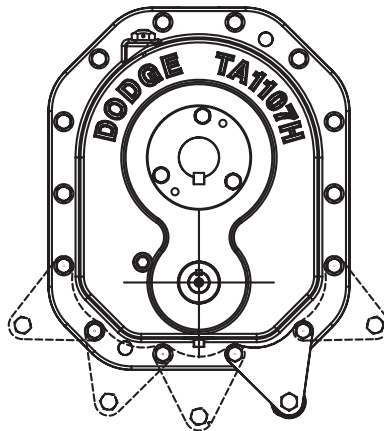
TA1107TBS x 1/7-16
TA1107TB x 1-7/16 Twin Tapered Bushing Kit for Short Driven Shaft



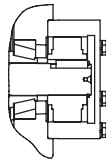
TA1107MM
TA1107MM Motor Mount Assembly



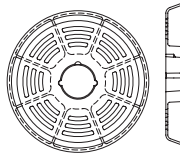
TA - TORQUE-ARM II Shaft Mount Reducer
1- Case Size 1
107 - AGMA Code reference & Traditional Bore Size
H - Heavy Duty Rating & Extended Bore Size
25 - Nominal Reducer Ratio



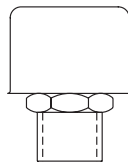
Other Accessories
TA1107BS
Backstop Assembly



TA4207CF
Cooling Fan Assembly

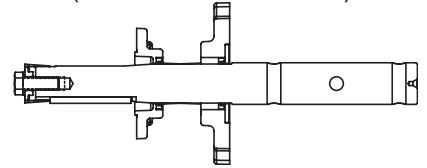


TA1-4 FB KIT
Filter Breather Kit

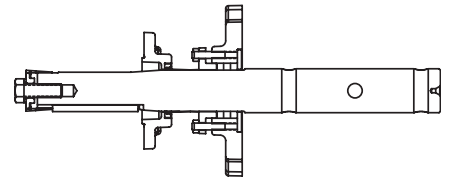


Screw Conveyor Drive Accessories

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



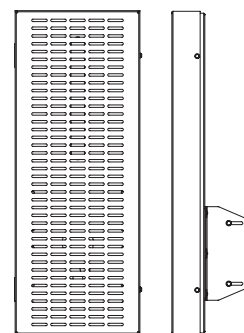
TA1107SCP Kit
TA1107SCP Screw Adjustable Packing Kit (Does not include shaft)



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



TA1107BG
TA1107BG Belt Guard





EASY SELECTION

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 that most closely matches your specific application.

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 - See the Easy Selection Tables, pages G1-12- G1-34. From Class I, II or III Table, find the reducer size for the application horsepower and output speed.

Note: For applications where fan cooling is 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 G1-125 thru G1-126, select a sheave ratio for the belt drive. The reducer sheave P.D., Pitch Diameter, should not be smaller than the minimum 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 Cooling Fan Backstop Assembly Belt Guard Screw Conveyor Adapter Filter Breather Drive Shaft Adjustable Packing Kit Vertical Breather Kit



EASY SELECTION

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 G1-129 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 G1-12 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 G1-22, 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 G1-60, 2-3/16" is the maximum 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 G1-125 thru G1-126, 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.



EASY SELECTION

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 G1-12, 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 G1-22, 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 G1-40. 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 G1-125 thru G1-126, select a belt drive ratio for the screw conveyor speed of 72 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.



SELECTION

TORQUE-ARM II Shaft Mount Speed Reducers

Table 1: Application Classification And Class Numbers

Application	Class Numbers		Application	Class Numbers	
	3 to 10 Hrs per Day	Over 10 Hrs per Day		3 to 10 Hrs per Day	Over 10 Hrs per Day
AGITATORS (Mixers)			EXTRUDERS (cont)		
Pure Liquids	I	II	Variable Speed Drive	III	III
Liquids and Solids	II	II	Fixed Speed Drive	III	III
Liquids-Variable Density	II	II	Rubber		
BLOWERS			Continuous Screw Operation	III	III
Centrifugal	I	II	Intermittent Screw Operation	III	III
Lobe	II	II	FANS		
Vane	II	II	Centrifugal	I	II
BREWING AND DISTILLING			Forced Draft	II	II
Bottling Machinery	I	II	Induced Draft	II	II
Brew Kettles-Continuous Duty	II	II	Industrial & Mine	II	II
Cookers-Continuous Duty	II	II	FEEDERS		
Mash Tubs-Continuous Duty	II	II	Apron	II	II
Scale Hopper-Frequent Starts	II	II	Belt	II	II
CAN FILLING MACHINES	I	II	Disc	I	II
CAR DUMPERS	III	III	Reciprocating	III	III
CAR PULLERS	II	II	Screw	II	II
CLARIFIERS	I	II	FOOD INDUSTRY	I	II
CLASSIFIERS	II	II	Cereal Cooker	II	II
CLAY WORKING MACHINERY	III	III	Dough Mixer	II	II
Brick Press	III	III	Meat Grinders	II	II
Briquette Machine	II	II	Slicers		
Pug Mill			GENERATORS AND EXCITERS	II	II
COMPACTORS	★	★	HAMMER MILLS	III	III
COMPRESSORS			HOISTS	★	★
Centrifugal	I	II	LAUNDRY TUMBLERS	II	II
Lobe	II	II	LAUNDRY WASHERS	II	III
Reciprocating, Multi-Cylinder	II	III	LUMBER INDUSTRY		
Reciprocating, Single-Cylinder	III	III	Barkers		
CONVEYORS-GENERAL PURPOSE			Spindle Feed	II	II
Includes Apron, Assembly, Belt, Bucket, Chain, Flight, Oven and Screw			Main Drive	III	III
Uniformly Loaded or Fed	I	II	Conveyors		
Heavy Duty-Not Uniformly Fed	II	II	Burner	II	II
Severe Duty-Reciprocating or Shaker	III	III	Main or Heavy Duty	II	II
CRANES	★	★	Main Log	III	III
CRUSHER			Re-saw, Merry-Go-Round	II	II
Stone or Ore	III	III	Slab	III	III
DREDGES			Transfer	II	II
Cable Reels	II	II	Chains		
Conveyors	II	II	Floor	II	II
Cutter Head Drives	III	III	Green	II	III
Pumps	III	III	Cut-Off Saws		
Screen Drives	III	III	Chain	II	III
Stackers	II	II	Drag	II	III
Winches	II	II	Debarking Drums	III	III
ELEVATORS			Feeds		
Bucket	II	II	Edger	II	II
Centrifugal Discharge	I	II	Gang	III	III
Escalators	I	II	Trimmer	II	II
Freight	II	II	Log Deck	III	III
Gravity Discharge	I	II	Log Hauls-Incline-Well Type	III	III
EXTRUDERS			Log Tuning Devices	III	III
General	II	II	Planer Feed	II	II
Plastics			Planer Tilting Hoists	II	II
			Rolls-Live-off brg.- Roll Cases	III	III
			Sorting Table	II	II
			Triple Hoist	II	II

★ Consult DODGE for more information on class number



SELECTION

TORQUE-ARM II Shaft Mount Speed Reducers

Table 1: Application Classification And Class Numbers

Application	Class Numbers		Application	Class Numbers	
	3 to 10 Hrs per Day	Over 10 Hrs per Day		3 to 10 Hrs per Day	Over 10 Hrs per Day
LUMBER INDUSTRY (cont)			PAPER MILLS (cont)		
Transfers			Jordan	II	II
Chain	II	III	Kiln Drive	II	II
Craneway	II	III	Mt. Hope Roll	II	II
Tray Drives	II	II	Paper Rolls	II	II
Veneer Lathe Drives	II	II	Platter	II	II
METAL MILLS			Presses-Felt & Suction	III	III
Draw bench Carriage and Main Drive	II	II	Pulper	II	II
Runout Table			Pumps-Vacuum	II	II
Non-Reversing			Reel (Surface Type)		
Group Drives	III	II	Screens		
Individual Drives	III	III	Chip	II	II
Reversing	II	III	Rotary	II	II
Slab Pushers	III	II	Vibrating	III	III
Shears	II	III	Size Press	II	II
Wire Drawing	II	II	Thickener (AC Motor)	II	II
Wire Winding Machine	II	II	(DC Motor)	II	II
METAL STRIP PROCESSING MACHINERY			Washer (AC Motor)	II	II
Bridles	II	II	(DC Motor)	II	II
Coilers & Uncoilers	I	II	Wind and Unwind Stand	I	I
Edge Trimmers	II	II	Winders (Surface Type)	II	II
Flatteners	II	II	PLASTICS INDUSTRY-SECONDARY		
Loopers (Accumulators)	I	I	PROCESSING	II	II
Pinch Rolls	II	II	Blow Molders	II	II
Scrap Choppers	II	II	Coating	II	II
Shears	III	III	Film	II	II
Slitters	II	II	Pipe	II	II
MILLS, ROTARY TYPE			Pre-Plasticizers	II	II
Ball & Rod			Rods	II	II
Spur Ring Gear	III	III	Sheet	II	II
Helical Ring Gear	II	II	Tubing		
Direct Connected	III	III	PULLERS-BARGE HAUL	II	II
Cement Kilns	II	II	PUMPS		
Dryers & Coolers	II	II	Centrifugal	I	II
MIXERS, CEMENT	II	II	Proportioning	II	II
PAPER MILLS			Reciprocating		
Agitator (Mixer)	II	II	Single Acting, 3 or more cylinders	II	II
Agitator for Pure Liquors	II	II	Double Acting, 2 or more cylinders	II	II
Barking Drums	III	III	Rotary		
Barkers-Mechanical	III	III	Gear Type	I	II
Beater	II	II	Lobe	I	II
Breaker Stack	II	II	Vane	I	II
Chipper	III	III	RUBBER AND PLASTICS INDUSTRY		
Chip Feeder	II	II	Intensive Internal Mixers	III	III
Coating Rolls	II	II	Batch Mixers	II	II
Conveyors			Continuous Mixers		
Chip, Bark, Chemical	II		Mixing Mill		
Log (including Slab)	III		2 smooth rolls	II	II
Couch Rolls	II		1 or 2 corrugated rolls	III	III
Cutter	III		Batch Drop Mill - 2 smooth rolls	II	II
Cylinder Molds	II		Cracker Warmer - 2 roll, 1 corrugated roll	III	III
Embosses	II		Cracker-2 corrugated rolls	III	III
Extruder	II		Holding, Feed & Blend Mill-2 rolls	II	II
Fourdrinier Rolls (includes Lump			Refiner-2 rolls	II	II
breaker, dandy roll, wire	II	II	Calenders	II	II
turning, and return rolls)	II	II	SAND MULLER	II	II



SELECTION

TORQUE-ARM II Shaft Mount Speed Reducers

Table 1: Application Classification And Class Numbers

Application	Class Numbers	
	3 to 10 Hrs per Day	Over 10 Hrs per Day
SEWAGE DISPOSAL EQUIPMENT		
Bar Screens	II	II
Chemical Feeders	II	II
Dewatering Screens	II	II
Scum Breakers	II	II
Slow or Rapid Mixers	II	II
Sludge Collectors	II	II
Thickener	II	II
Vacuum Filters	II	II
SCREENS		
Air Washing	I	II
Rotary-Stone or Gravel	II	II
Traveling Water Intake	I	I
SCREW CONVEYORS		
Uniformly Loaded or Fed	I	II
Heavy Duty	II	II
SUGAR INDUSTRY		
Beet Slicer	III	III
Cane knives	II	II
Crushers	II	II
Mills (low speed end)	III	III

Application	Class Numbers	
	3 to 10 Hrs per Day	Over 10 Hrs per Day
TEXTILE INDUSTRY		
Batchers	II	II
Calenders	II	II
Cards	II	II
Dry Cans	II	II
Dyeing Machinery	II	II
Looms	II	II
Mangles	II	II
Nappers	II	II
Pads	II	II
Stashers	II	II
Soapers	II	II
Spinners	II	II
Tenter Frames	II	II
Washers	II	II
Winders	II	II

Gearing Reference Guide

TORQUE-ARM II

TORQUE-ARM

MAXUM

TIGEAR-2



SELECTION

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	---	
	TA0107L05	8.3	---	
201-400	TA0107L05	6.9	---	

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	---
		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	---	

★ See Page G1-132 for lubrication for 15 RPM and slower



SELECTION

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	---	

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	---
	121-200	TA0107L05	9.2	---
		TA0107L09	5.0	---
	201-400	TA0107L05	8.3	---
7-1/2	4	TA8407H40	6.2	---
		TA8407H25	6.2	---
		TA8407H15	6.2	---
	5-6	TA7315H40	6.2	---
		TA7315H25	6.2	---
	7-9	TA7315H15	6.2	---
		TA6307H40	6.3	---
	10-15	TA6307H25	6.3	---
		TA6307H15	6.4	---
		TA5215H40	6.8	---
	16-25	TA5215H25	6.1	---
		TA5215H15	7.1	---
TA4207H40		4.8	---	
26-39	TA4207H25	5.4	---	
	TA4207H15	7.9	---	
	TA3203H32	4.2	---	
40-50	TA3203H25	4.4	---	
	TA3203H15	4.4	---	
	TA2115H33	3.2	---	
51-72	TA2115H25	3.1	---	
	TA2115H15	3.2	---	
	TA2115H25	3.1	---	
73-80	TA2115H15	3.6	---	
	TA1107H25	5.2	---	
81-89	TA1107H15	4.7	---	
	TA1107H15	4.6	---	
90-120	TA1107H09	7.7	---	
	TA1107H15	4.6	---	
	TA1107H09	7.5	---	
121-145	TA1107H05	12.5	---	
	TA1107H09	7.1	---	
146-163	TA1107H05	11.2	---	
	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	---	
	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	---

* See Page G1-132 for lubrication for 15 RPM and slower



SELECTION

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	---

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	---	
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	---	

★ See Page G1-132 for lubrication for 15 RPM and slower

† See page G2-68 and G2-69 for information on TDT1425 and TDT1530 Reducers



SELECTION

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	---
	121-132	TA5215H05	13.9	---
		TA4207H09	9.3	---
	133-200	TA5215H05	11.8	---
TA4207H09		9.1	---	
201-215	TA4207H05	9.2	---	
	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	---	

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
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	---	
TA4207H09		8.1	---	
183-185	TA4207H05	9.1	---	
	TA4207H09	8.0	---	
	TA4207H05	9.2	---	
186-200	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	---	
	TA5215H25	5.3	Fan	
70-80	TA5215H15	6.1	---	
	TA5215H15	6.0	---	
81-89	TA5215H09	9.1	---	
	TA5215H09	9.1	---	
90-93	TA5215H15	5.7	---	
	TA5215H09	8.9	---	
	TA6307H05	15.1	---	

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
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	---	
	TA6307H25	6.2	---	
61-80	TA6307H15	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	---	
94-115	TA6307H05	15.1	---	
	TA5215H15	5.6	---	
116-120	TA5215H09	8.8	---	
	TA5215H15	5.1	Fan	
121-131	TA5215H09	8.4	---	
	TA5215H09	8.3	---	
		TA6307H05	14.5	---

* See Page G1-132 for lubrication for 15 RPM and slower

† See page G2-68 and G2-69 for information on TDT1425 and TDT1530 Reducers



SELECTION

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	P&C
		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

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
600	41-57	TDT1530 †	15.0	P&C
700	50-57	TDT1530 †	15.0	P&C

* See Page G1-132 for lubrication for 15 RPM and slower

† See page G2-68 and G2-69 for information on TDT1425 and TDT1530 Reducers

P&C (Pump & Coolers) - Use the DODGE Speed Reducer auxiliary cooling package, part number 014148

SELECTION



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	---	
121-200	TA0107L05	9.2	---	
	TA0107L09	5.0	---	
201-400	TA0107L05	8.3	---	
	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	---	
121-200	TA0107L05	9.2	---	
	TA0107L09	5.0	---	
201-400	TA0107L05	8.3	---	
	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	---	
	TA0107L05	6.9	---	
3/4	4-5	TA3203H32	4.6	---
		TA3203H25	4.6	---
		TA3203H15	4.6	---

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	---	
	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	---	
	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	---	
121-200	TA0107L05	9.2	---	
	TA0107L09	5.0	---	
201-400	TA0107L05	8.3	---	
	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	---	
	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	---	

* See Page G1-132 for lubrication for 15 RPM and slower

SELECTION



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

* See Page G1-132 for lubrication for 15 RPM and slower
 † See Pages G2-68 and G2-69 for information on
 TDT1425 and TDT1530 Reducers



SELECTION

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	P&C
		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	P&C
		TA12608H15	15.7	Fan
	51-76	TA12608H25	10.7	P&C
		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 G1-132 for lubrication for 15 RPM and slower

† See Pages G2-68 and G2-69 for information on TDT1425 and TDT1530 Reducers

P&C (Pump & Coolers) - Use the DODGE Speed Reducer Auxiliary cooling package, part number 014148



SELECTION

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	---
		TA0107L09	5.3	---
81-89	TA0107L15	4.0	---	
	TA0107L09	5.3	---	
	TA0107L05	9.2	---	
90-120	TA0107L15	4.0	---	
	TA0107L09	5.2	---	
	TA0107L05	9.2	---	
121-200	TA0107L09	5.0	---	
	TA0107L05	8.3	---	
	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	---
		TA0107L09	5.3	---
81-89	TA0107L15	4.0	---	
	TA0107L09	5.3	---	
	TA0107L05	9.2	---	
90-120	TA0107L15	4.0	---	
	TA0107L09	5.2	---	
	TA0107L05	9.2	---	
121-200	TA0107L09	5.0	---	
	TA0107L05	8.3	---	
	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	---	
	TA0107L09	5.3	---	

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	---
		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	---	
	TA0107L09	5.3	---	
81-89	TA0107L15	4.0	---	
	TA0107L09	5.3	---	
	TA0107L05	9.2	---	
90-120	TA0107L15	4.0	---	
	TA0107L09	5.2	---	
	TA0107L05	9.2	---	
121-200	TA0107L09	5.0	---	
	TA0107L05	8.3	---	
	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	---	
	TA0107L09	5.3	---	
81-89	TA0107L15	4.0	---	
	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	---
		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	---	
	TA0107L09	5.3	---	
81-89	TA0107L15	4.0	---	
	TA0107L09	5.3	---	
	TA0107L05	9.2	---	
90-120	TA0107L15	4.0	---	
	TA0107L09	5.2	---	
	TA0107L05	9.2	---	
121-200	TA0107L09	5.0	---	
	TA0107L05	8.3	---	
	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	---	
	TA0107L25	4.0	---	
70-80	TA0107L25	4.0	---	
	TA0107L15	4.0	---	
	TA0107L09	5.3	---	
81-89	TA0107L15	4.0	---	
	TA0107L15	4.0	---	
	TA0107L09	5.3	---	

* See Page G1-132 for lubrication for 15 RPM and slower

SELECTION



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	---	
	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	---	
	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	---	
	TA3203H25	4.0	---	
76-80	TA3203H15	4.1	---	
	TA3203H15	4.0	---	
81-89	TA3203H15	4.0	---	
	TA3203H09	5.2	---	
90-105	TA3203H15	4.0	---	
	TA3203H09	5.4	---	
	TA4207H05	9.9	---	

* See Page G1-132 for lubrication for 15 RPM and slower
 † See Pages G2-68 and G2-69 for information on
 TDT1425 and TDT1530 Reducer



SELECTION

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	Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method	Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method
10 (cont)	106-120	TA3203H15	4.0	---	20 (cont)	8	TA12608H40	17.2	---	25 (cont)	50	TA6307H40	6.2	---
		TA3203H09	5.6	---			TA12608H25	9.5	---			TA6307H25	6.2	---
		TA3203H05	8.6	---			TA12608H15	13.7	---			TA6307H15	6.2	---
	121-141	TA3203H09	5.7	---		9-12	TA10507H40	8.5	---		51-69	TA6307H25	6.2	---
		TA3203H05	7.7	---			TA10507H25	8.5	---			TA6307H15	6.2	---
		TA2115H09	6.5	---			TA10507H15	10.8	---			TA5215H25	5.3	---
	142-200	TA3203H05	7.2	---		13-17	TA9415H40	8.0	---		70-80	TA5215H15	6.1	---
		TA2115H09	6.5	---			TA9415H25	8.0	---			TA5215H15	6.1	---
	201-238	TA3203H05	7.0	---		18-25	TA9415H15	10.5	---		81-89	TA5215H09	9.1	---
		TA3203H05	7.2	---			TA8407H40	6.2	---			TA5215H15	5.7	---
239-400	TA2115H05	5.7	---	26-38	TA8407H25	6.2	---	90-93	TA5215H09	8.9	---			
					TA8407H15	6.2	---		TA6307H05	15.1	---			
15	4-5	TDT1425 †	15.0	---	20 (cont)	26-38	TA7315H40	6.2	---	25 (cont)	94-120	TA5215H15	5.6	---
	6	TA12608H40	17.2	---			TA7315H25	6.2	---			TA5215H09	8.8	---
		TA12608H25	9.5	---		TA7315H15	6.2	---	TA5215H05		13.6	---		
		TA12608H15	13.7	---		39-50	TA6307H40	6.2	---		121-144	TA5215H09	8.3	---
	7-9	TA10507H40	8.5	---			TA6307H25	6.2	---			TA5215H05	11.8	---
		TA10507H25	8.5	---		TA6307H15	6.2	---	145-200		TA4207H09	8.9	---	
		TA10507H15	10.8	---		51-54	TA6307H15	6.2			---	TA5215H05	11.2	---
	10-12	TA9415H40	8.0	---			55-80	TA5215H25	5.4		---	201-242	TA5215H05	9.9
		TA9415H25	8.0	---		TA5215H15		6.3	---		243-400		TA4207H05	9.7
		TA9415H15	10.3	---		81-89	TA5215H15	6.0	---			4-6	TDT1530 †	15.0
13-18	TA8407H40	6.2	---	90-102	TA5215H09		9.1	---	7-10	TDT1425 †	15.0	---		
	TA8407H25	6.2	---		TA5215H15	5.7	---	11-13	TA12608H40	17.2	---			
	TA8407H15	6.2	---	TA5215H05	13.9	---	TA12608H25		9.5	---				
19-28	TA7315H40	6.2	---	103-107	TA4207H15	6.1	---		TA12608H15	13.9	---			
	TA7315H25	6.2	---		TA5215H09	8.9	---	14-18	TA10507H40	8.5	---			
	TA7315H15	6.2	---	TA5215H05	13.9	---	TA10507H25		8.5	---				
29-39	TA6307H40	6.3	---	108-120	TA4207H15	6.1	---		TA10507H15	10.8	---			
	TA6307H25	6.3	---		TA4207H09	9.5	---	19-26	TA9415H40	8.0	---			
	TA6307H15	6.3	---	TA5215H05	12.9	---	TA9415H25		8.0	---				
40-50	TA5215H40	6.2	---	121-182	TA4207H09	9.3	---		TA9415H15	10.8	---			
	TA5215H25	5.5	---		TA5215H05	11.8	---	27-39	TA8407H40	6.2	---			
	TA5215H15	6.4	---	183-200	TA4207H09	8.1	---		TA8407H25	6.2	---			
51-72	TA5215H25	5.4	---		TA4207H05	9.2	---		TA8407H15	6.2	---			
	TA5215H15	6.3	---	201-324	TA4207H05	9.8	---	40-50	TA7315H40	6.2	---			
	73-80	TA4207H25	4.4		---	325-400	TA3203H05		7.0	---	TA7315H25	6.2	---	
TA4207H15		6.5	---	4-5	TDT1530 †		15.0		---	TA7315H15	6.2	---		
81-89		TA4207H15	6.4	---	6-8	TDT1425 †	15.0	---	51-60	TA7315H25	6.2	---		
	TA4207H09	10.1	---	9-10	TA12608H40	17.2	---	TA7315H15		6.2	---			
	90-120	TA4207H15	6.3		---	TA12608H25	9.5	---		61-80	TA6307H25	6.2	---	
TA4207H09		9.9	---	TA12608H15	13.7	---	TA6307H15	6.2	---					
TA5215H05		13.9	---	11-15	TA10507H40	8.5	---	81-88	TA6307H15		6.3	---		
121-125	TA4207H09	9.3	---		TA10507H25	8.5	---		89	TA5215H15	5.7	---		
	TA5215H05	11.8	---		TA10507H15	10.8	---			TA6307H09	9.9	---		
	TA3203H09	5.7	---	16-21	TA9415H40	8.0	---	90-93		TA5215H15	5.7	---		
TA5215H05	11.6	---	TA9415H25		8.0	---	TA6307H09		9.9	---				
TA3203H09	5.7	---	TA9415H15		10.7	---	TA6307H05		15.1	---				
133-200	TA4207H05	9.2	---	22-32	TA8407H40	6.2	---	94-120	TA5215H15	5.6	---			
	TA4207H05	9.2	---		TA8407H25	6.2	---		TA5215H09	8.8	---			
	TA4207H05	9.3	---		TA8407H15	6.2	---		TA6307H05	15.1	---			
201-215	TA4207H05	9.3	---	33-49	TA7315H40	6.2	---	121-131	TA5215H09	8.3	---			
216-400	TA3203H05	7.0	---		TA7315H25	6.2	---		TA6307H05	14.5	---			
					TA7315H15	6.2	---		TA5215H09	7.9	---			
20	4	TDT1530 †	15.0	---						25 (cont)	132-196	TA5215H05	11.4	---
	5-6	TDT1425 †	15.0	---										
	7	TA12608H40	17.2	---										
		TDT1425 †	15.0	---										

* See Page G1-132 for lubrication for 15 RPM and slower
 † See Pages G2-68 and G2-69 for information on TDT1425 and TDT1530 Reducer



SELECTION

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 TA5215H05	7.8 10.0	---	
	201-344	TA5215H05	9.9	---	
	345-400	TA4207H05	8.2	---	
	5-9	TDT1530 †	15.0	---	
40	10-13	TDT1425 †	15.0	---	
	14	TA12608H40 TDT1425 †	17.1 15.0	---	
		TA12608H40	17.1	---	
	15-17	TA12608H25 TA12608H15	9.5 14.3	---	
		18-25	TA10507H40 TA10507H25 TA10507H15	8.5 8.5 10.8	---
			26-36	TA9415H40 TA9415H25 TA9415H15	8.0 8.0 10.8
	37-50	TA8407H40 TA8407H25 TA8407H15		6.2 6.2 6.2	---
		51-53		TA8407H25 TA8407H15	6.2 6.3
			54-80	TA7315H25 TA7315H15	6.2 6.2
	81-84	TA7315H15 TA7315H09		6.2 8.0	---
85-89		TA6307H15 TA6307H09	6.3 9.9	---	
	90-112	TA6307H15 TA6307H09 TA7315H05	6.6 10.6 14.8	---	
113-120		TA6307H15 TA6307H09 TA6307H05	6.7 10.8 14.7	---	
	121-160	TA6307H09 TA6307H05	10.9 14.5	---	
161-200		TA5215H09 TA6307H05	6.8 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 TA12608H25 TA12608H15	17.1 9.5 14.6	---	
		23-31	TA10507H40 TA10507H25 TA10507H15	8.5 8.5 10.7	---
			32-37	TA9415H40 TA9415H25 TA9415H15	8.0 8.0 10.8
	38-46			TA9415H40 TA9415H25 TA9415H15	8.0 8.0 10.8

Motor HP	Output RPM	Reducer Selection	Min. Sheave Dia. P.D.	Cooling Method	
50 (cont)	47-50	TA8407H40 TA8407H25 TA8407H15	6.2 6.2 6.2	Fan --- ---	
		51-68	TA8407H25 TA8407H15	6.2 7.0	---
			69-80	TA7315H25 TA7315H15	6.2 6.2
	81-110	TA7315H15 TA7315H09	6.2 8.5	---	
		111	TA6307H15 TA6307H09	6.6 10.5	---
	112-120	TA6307H15 TA6307H09 TA7315H05	6.7 10.8 13.2	---	
		121-157	TA6307H09 TA7315H05	10.9 12.8	---
	158-200		TA6307H09 TA6307H05	10.9 14.2	---
		201-400	TA6307H05	13.8	---
	60	7-14	TDT1530 †	15.0	---
15-20		TDT1425 †	15.0	---	
21		TA12608H40 TDT1425 †	17.1 15.0	---	
		22-27	TA12608H40 TA12608H25 TA12608H15	17.1 9.5 14.8	---
28			TA10507H40 TA12608H25 TA12608H15	8.5 9.5 14.9	---
		29-38	TA10507H40 TA10507H25 TA10507H15	8.5 8.5 10.7	---
			39-45	TA9415H40 TA9415H25 TA9415H15	8.0 8.0 10.8
46-50		TA9415H40 TA9415H25 TA9415H15		8.0 8.0 10.8	Fan --- ---
		51-56	TA9415H25 TA9415H15	8.0 10.8	---
57-71			TA8407H25 TA8407H15	6.2 7.1	---
	72-80	TA8407H25 TA8407H15	6.2 7.5	Fan ---	
81-83		TA8407H15	7.7	---	
84-85	TA7315H15	6.2	---		
86-120	TA7315H15 TA7315H09	6.2 8.5	---		
	121-141	TA7315H09 TA6307H09	8.6 10.9	---	
142-150		TA6307H09 TA7315H05	10.9 12.1	---	
	151-195	TA6307H09 TA7315H05	10.1 11.7	Fan ---	
196-200		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 TA12608H25 TA12608H15	17.1 9.5 15.1	---	
		35-36	TA10507H40 TA12608H25 TA12608H15	8.5 9.5 15.2	---
			37-49	TA10507H40 TA10507H25 TA10507H15	8.5 8.5 11.3
	50	TA9415H40 TA9415H25 TA9415H15		8.0 8.0 10.8	Fan Fan ---
		51-72		TA9415H25 TA9415H15	8.0 10.8
			73-80	TA8407H25 TA8407H15	6.2 7.5
	81-112	TA8407H15 TA7315H15		8.6 6.2	---
		114-120	TA7315H15 TA7315H09	6.2 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 TA12608H25 TA12608H15	17.1 9.5 15.6	---	
		48-50	TA10507H40 TA12608H25 TA12608H15	8.5 9.5 15.7	Fan --- ---
			51	TA12608H25 TA12608H15	9.6 15.7
	52-56	TA10507H25 TA10507H15		8.5 11.8	---
		57-67	TA10507H25 TA10507H15	8.8 12.4	Fan ---
	68		TA9415H25 TA10507H15	8.0 12.5	Fan ---
		69-80	TA9415H25 TA9415H15	8.0 10.5	Fan 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 TA12608H25 TA12608H15	17.1 9.5 15.7	Fan --- ---	
		51-58	TA12608H25 TA12608H15	9.6 15.9	---
			59-67	TA12608H25 TA12608H15	10.4 16.1

* See Page G1-132 for lubrication for 15 RPM and slower
† See Pages G2-68 and G2-69 for information on TDT1425 and TDT1530 Reducer



SELECTION

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 G1-132 for lubrication for 15 RPM and slower

† See page G2-68 and G2-69 for information on TDT1425 and TDT1530 Reducers

P&C (Pump & Coolers) - Use the DODGE Speed Reducer auxiliary cooling package, part number 014148



SELECTION

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.

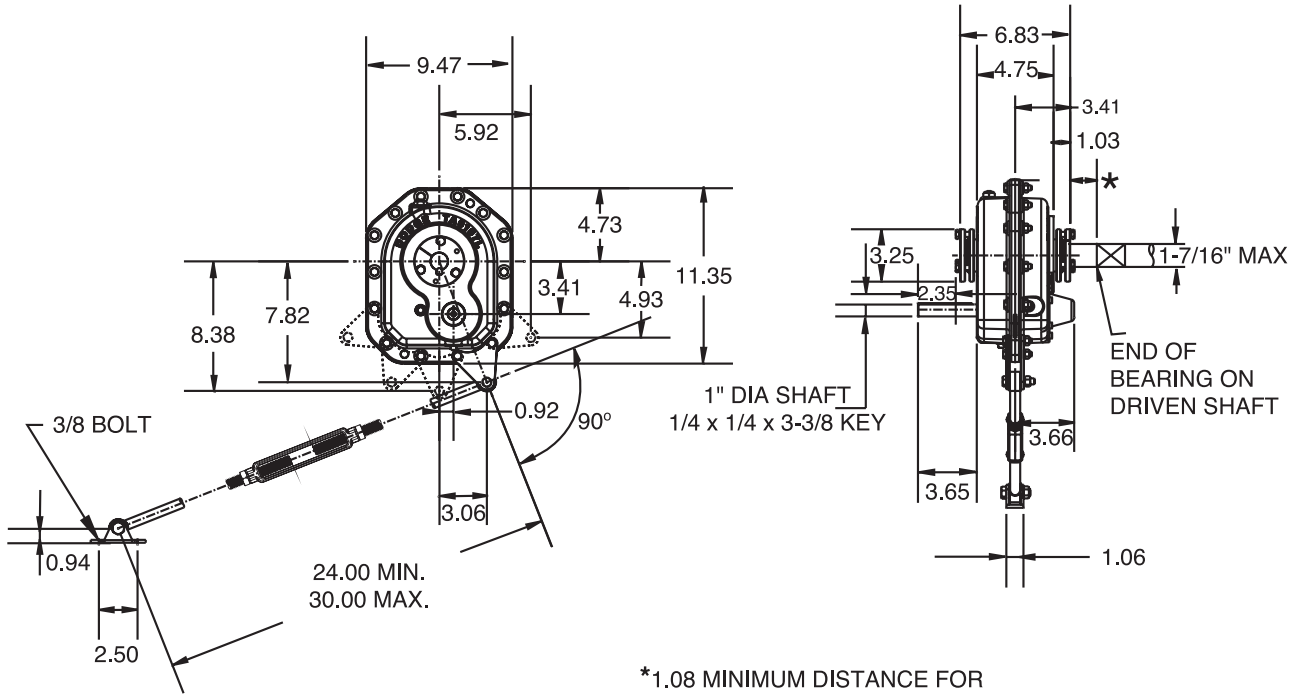
Name		Company Name	
Phone Number		Fax No.	e-mail Address:
Application Data:			
Driven Equipment			
Type	RPM	Shaft Size	
Hours of service/day		Class of Service	
Type of Load:	Uniform	Moderate	Shock
Screw Conveyor Applications:			
Screw Diameter		Drive shaft diameter	
Motor	HP	RPM	Shaft Size
Type of reducer 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



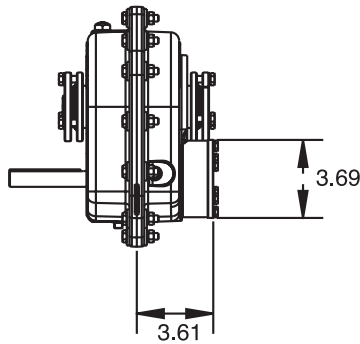
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

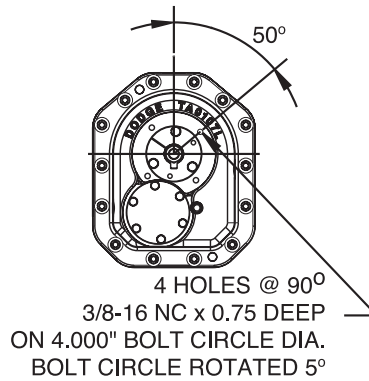
Taper Bushed Reducers - Ta01071, Single And Double Reductions



*1.08 MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS



SELECTION/DIMENSIONS

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 Vertical Breather Kit	900112	2.0
TA0107L V-Ring Kit	900249	0.1
Filter Breather Plug	430048	0.2
TA0107L Lube Kit	LUBEKITA0107	4.6

- (2) See page G1-128 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	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
				Short Shaft Bushing Kit (8)			
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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA0107L, Single And Double Reductions

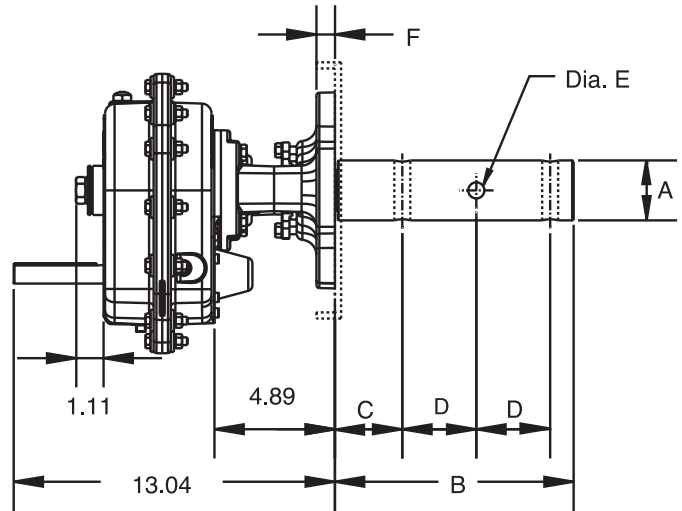
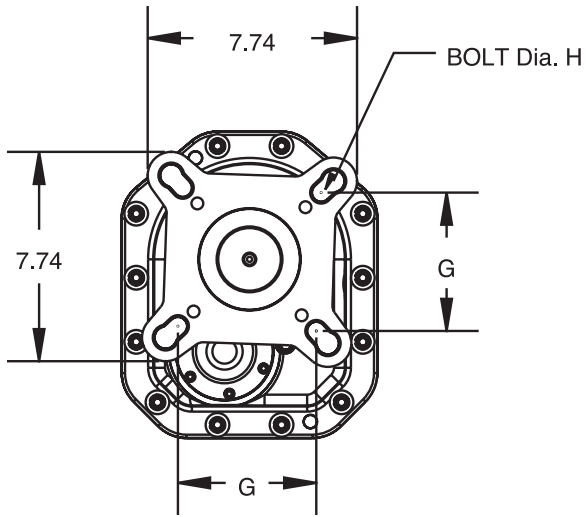
Gearing Reference Guide

TORQUE-ARM II

TORQUE-ARM

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SELECTION/DIMENSIONS

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	1/2-13
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

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 G1-35 for 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 includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA0107L, Position B & D

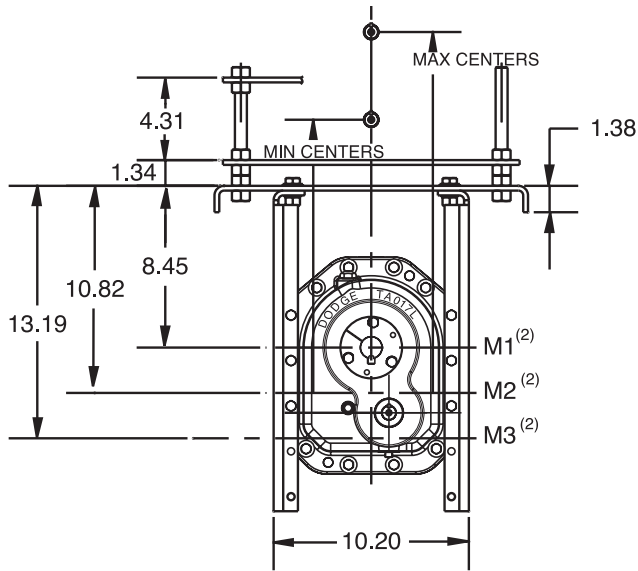
Gearing Reference Guide

TORQUE-ARM II

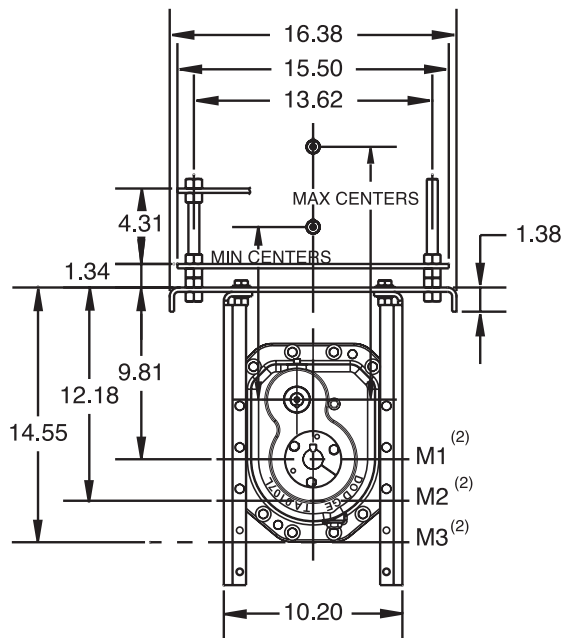
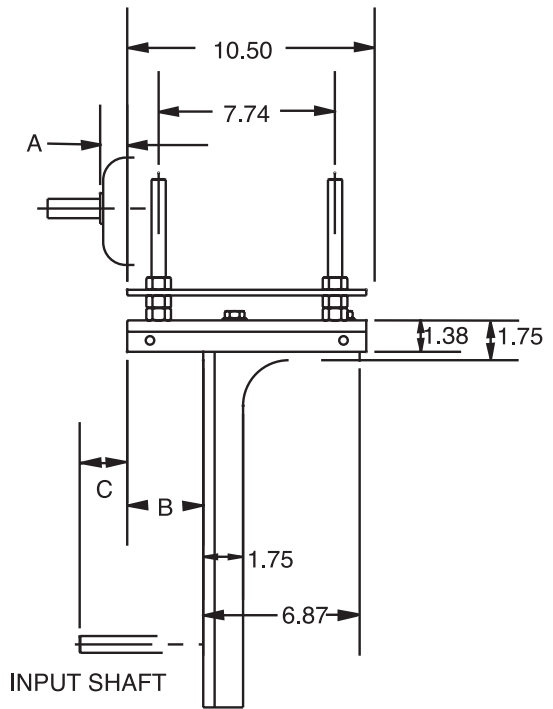
TORQUE-ARM

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POSITION B



POSITION D



SELECTION/DIMENSIONS

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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers	
						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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers	
						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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA0107L, Position A & C

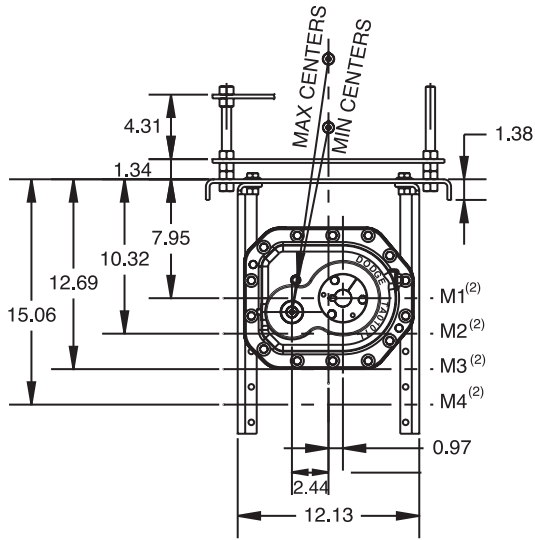
Gearing Reference Guide

TORQUE-ARM II

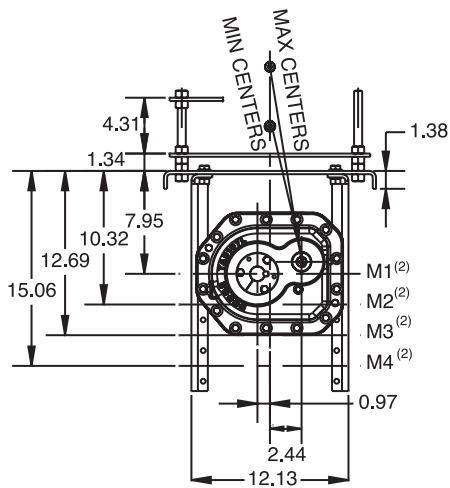
TORQUE-ARM

MAXUM

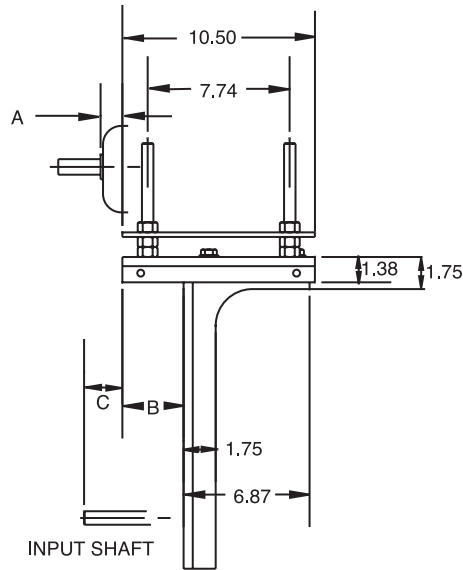
TIGEAR-2



POSITION A



POSITION C





SELECTION/DIMENSIONS

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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers			
						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
					M3							19.1	22.9
					M4							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
					M3							17.3	21.1
					M4							19.6	23.4

Mounting	Lateral Adjustment				Motor Mount Height ⁽²⁾	Motor Frame							
						182T & 184T			213T & 215T				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers			
						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
					M3							20.1	23.9
					M4							22.5	26.2
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
					M3							18.3	22.1
					M4							20.6	24.4

Note:

Minimum centers contain 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⁾

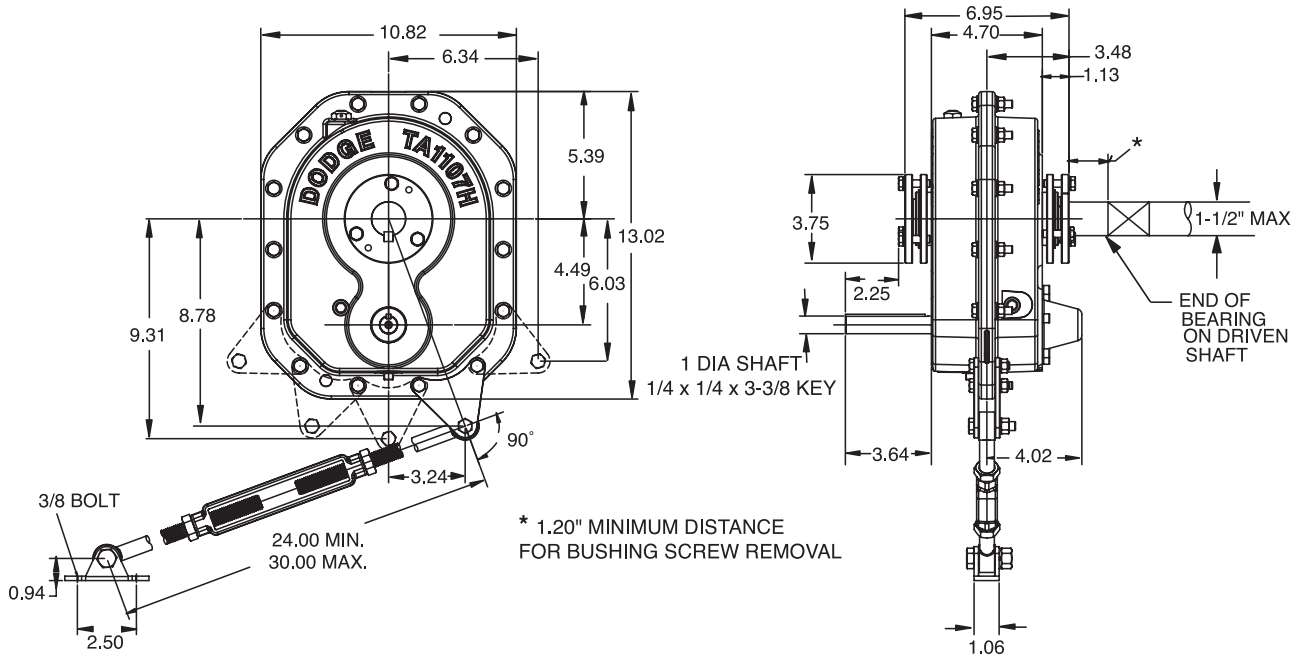
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	***	M4	M4	M3	M2	M2	M2
18	12.13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



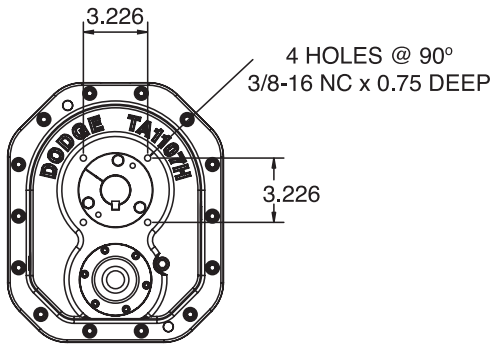
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers Tapered Bushed Reducers - TA1107H, Single And Double Reduction



REDUCER WITH BACKSTOP

FLANGE MOUNTING DIMENSIONS





SELECTION/DIMENSIONS

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 G1-122 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 - Vertical Breather Kit	900112	2.0
TA1107H - V-Ring Kit	901249	0.1
Filter Breather Plug	430048	0.2
TA1107H Lube Kit	LUBEKITA1107	4.6

- (2) See page G1-128 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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers
 Screw Conveyor Drive - Ta1107h, Single And Double Reduction

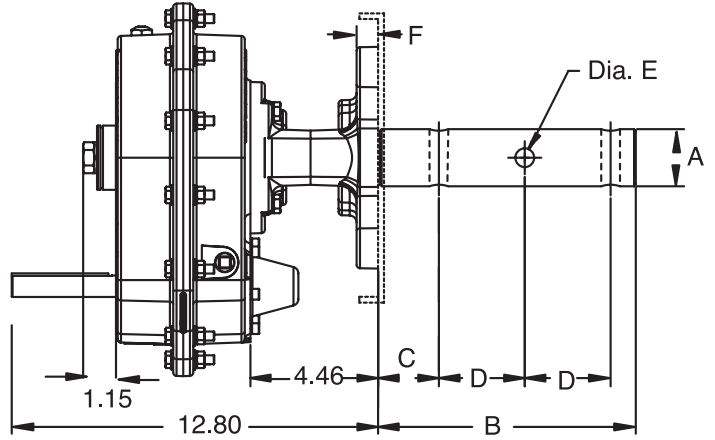
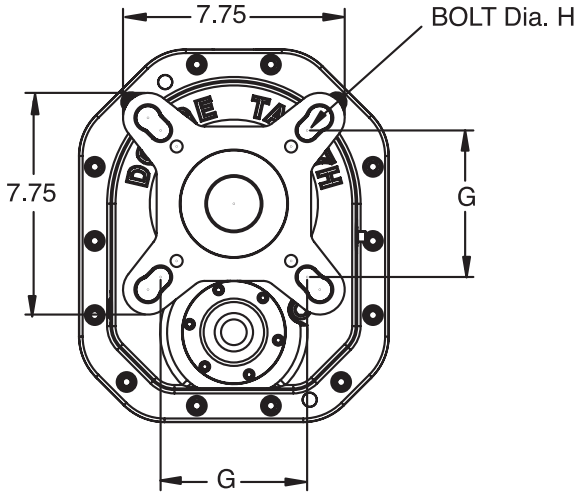
Gearing Reference Guide

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SELECTION/DIMENSIONS

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	1/2-13
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

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

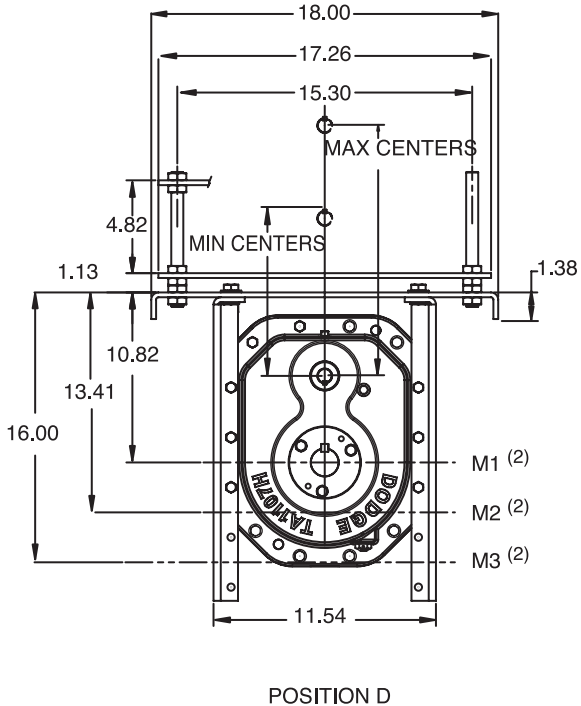
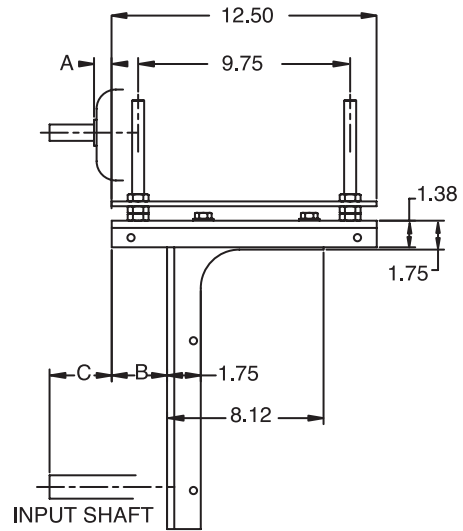
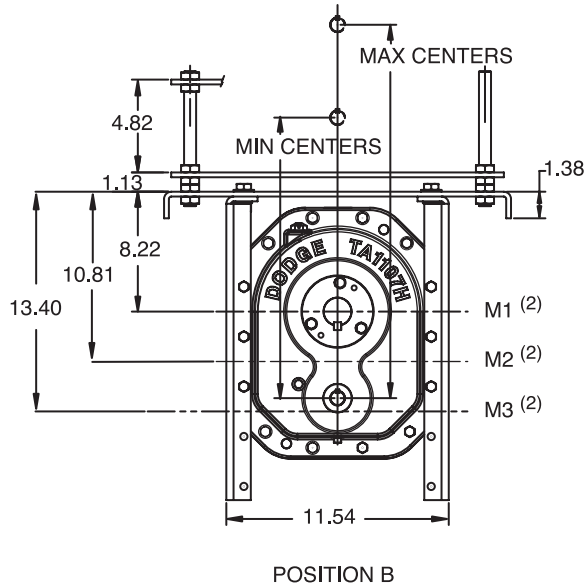
- (1) See page G1-43 for Belt Guard for Screw Conveyor Drive applications
- (2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
- (3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
- (4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
- (5) A complete TA II Screw Conveyor Drive includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA1107H, Position B & D





SELECTION/DIMENSIONS

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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers	
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

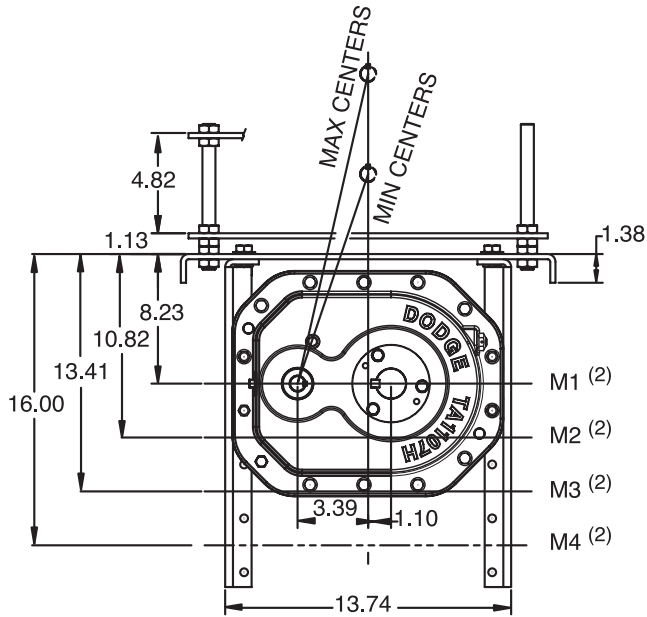
(2) M1, M2, M3 go through output shaft centerline



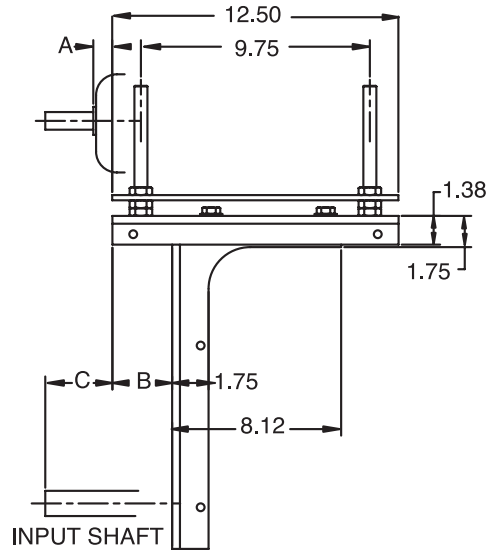
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

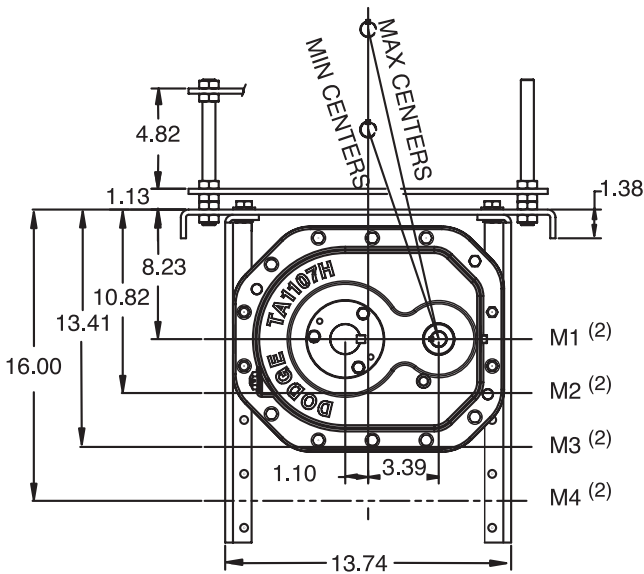
Motor Mount Dimensions - TA1107H, Position A & C



POSITION A



POSITION C



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SELECTION/DIMENSIONS

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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers	
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⁾

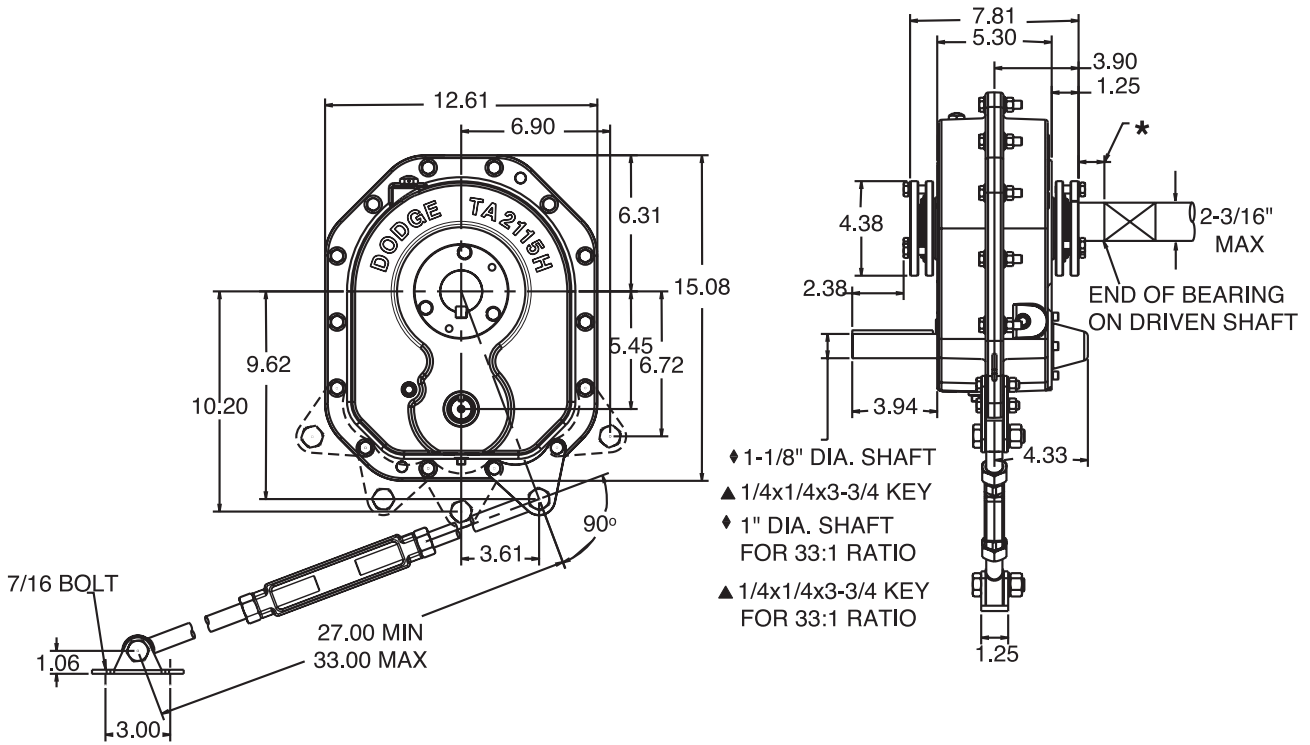
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	***	M4	M4	M3	M2	M2	M2
18	12.13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



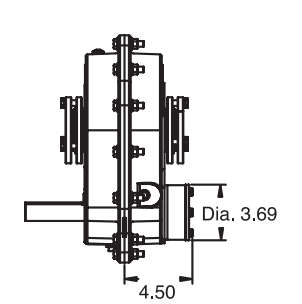
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers Taper Bushed Reducer - TA2115H, Single And Double Reduction

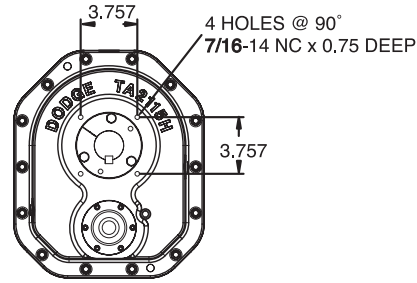


- ◆ 1-1/8" DIA. SHAFT
- ▲ 1/4x1/4x3-3/4 KEY
- ◆ 1" DIA. SHAFT FOR 33:1 RATIO
- ▲ 1/4x1/4x3-3/4 KEY FOR 33:1 RATIO

* 1.20" MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS



SELECTION/DIMENSIONS

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 shown 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 Vertical Breather Kit	900112	2.0
TA2115H V-Ring Kit	902249	0.2
Filter Breather Plug	430048	0.2
TA2115H Lube Kit	LUBEKITTA2115	8.1

(2) See page G1-128 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	Bushing Size	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
			Required (9) (10)	Short Shaft Bushing Kit ⁽⁸⁾			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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA2115H, Single And Double Reduction

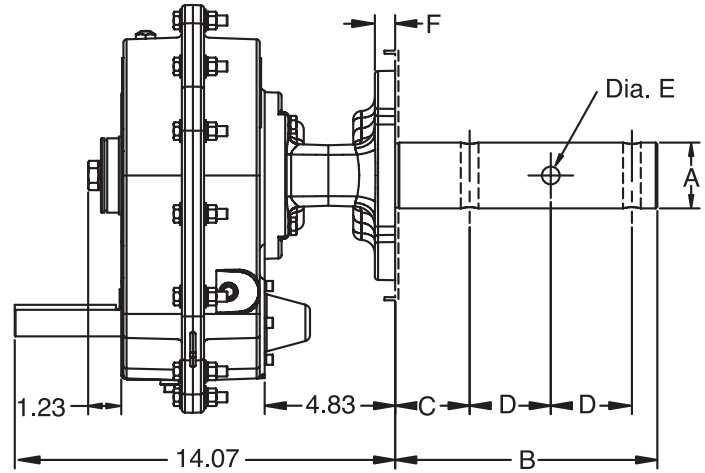
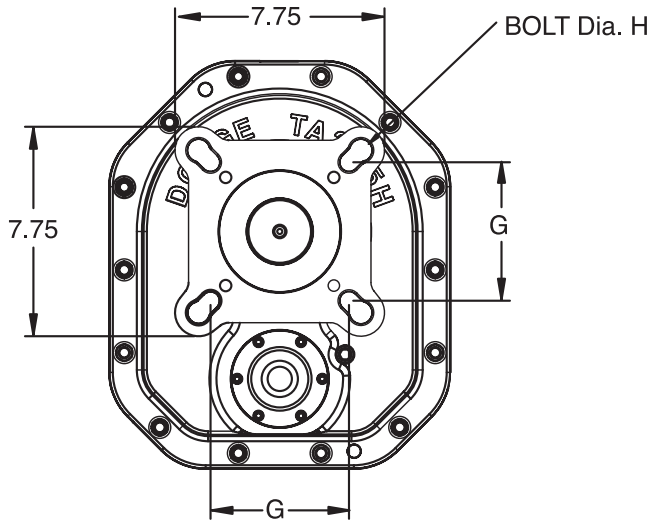
Gearing Reference Guide

TORQUE-ARM II

TORQUE-ARM

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SELECTION/DIMENSIONS

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	1/2-13
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

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

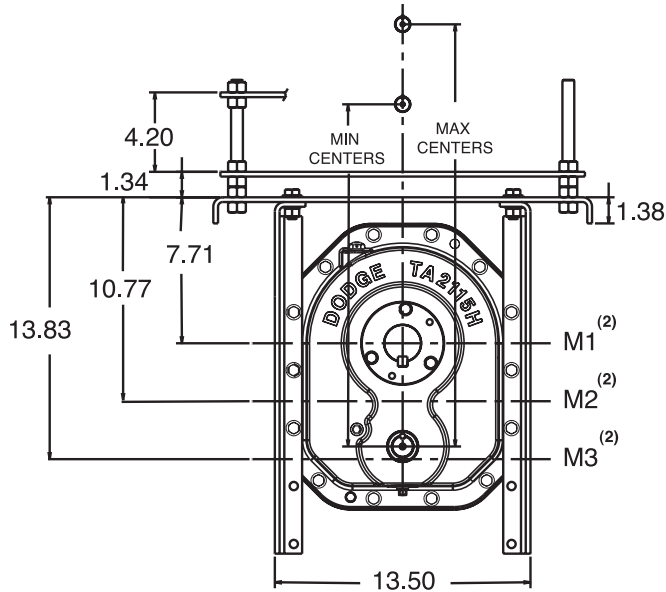
- (1) See page G1-51 for Belt Guard for Screw Conveyor Drive applications
- (2) SCA Adapter & Hardware Kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
- (3) SCP Adjustable Packing Kit consists of flange, mounting hardware and braided packing seals
- (4) SCS Drive Shaft is a shaft only. Hardware is stocked with the adapter & hardware kit
- (5) A complete TA II Screw Conveyor Drive includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.



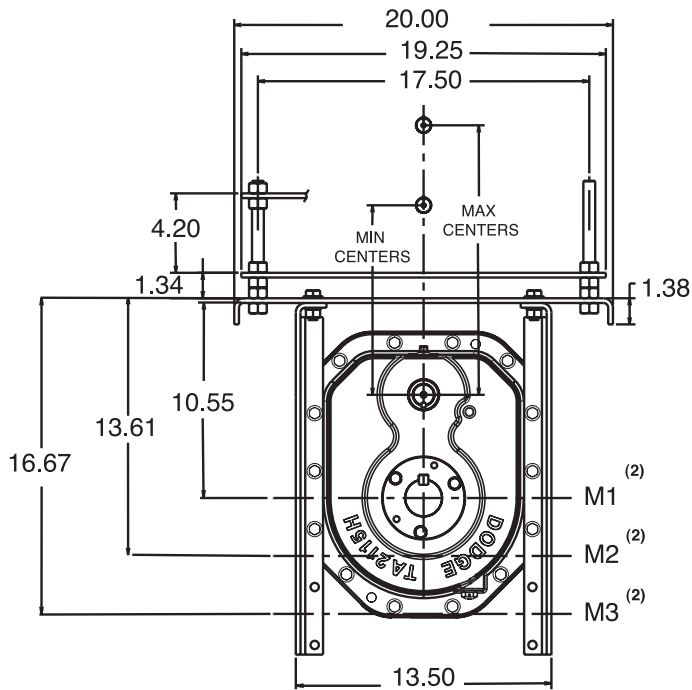
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

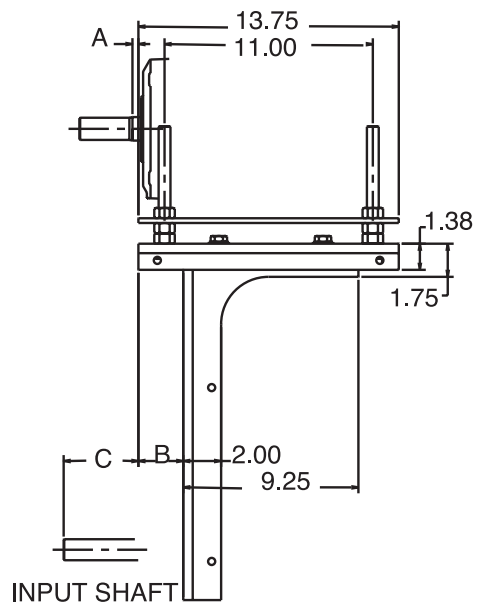
Motor Mount Dimensions - TA2115H, Position B & D



POSITION B



POSITION D



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SELECTION/DIMENSIONS

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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers	
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 contain 0.5" to allow for belt assembly

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

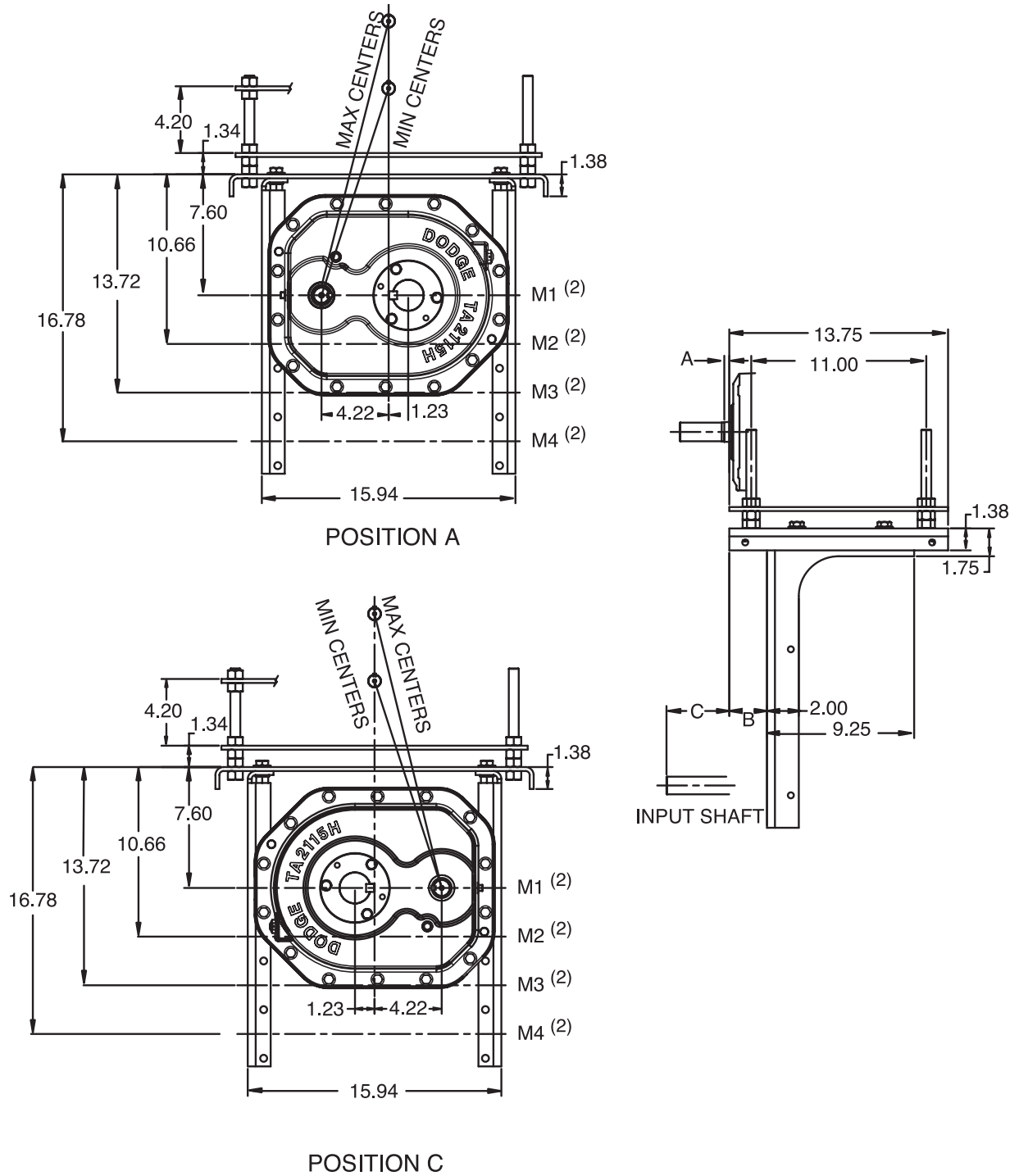
(2) M1, M2, M3 go through output shaft centerline



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA2115H, Position A & C





SELECTION/DIMENSIONS

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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers	
						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 contain 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⁾

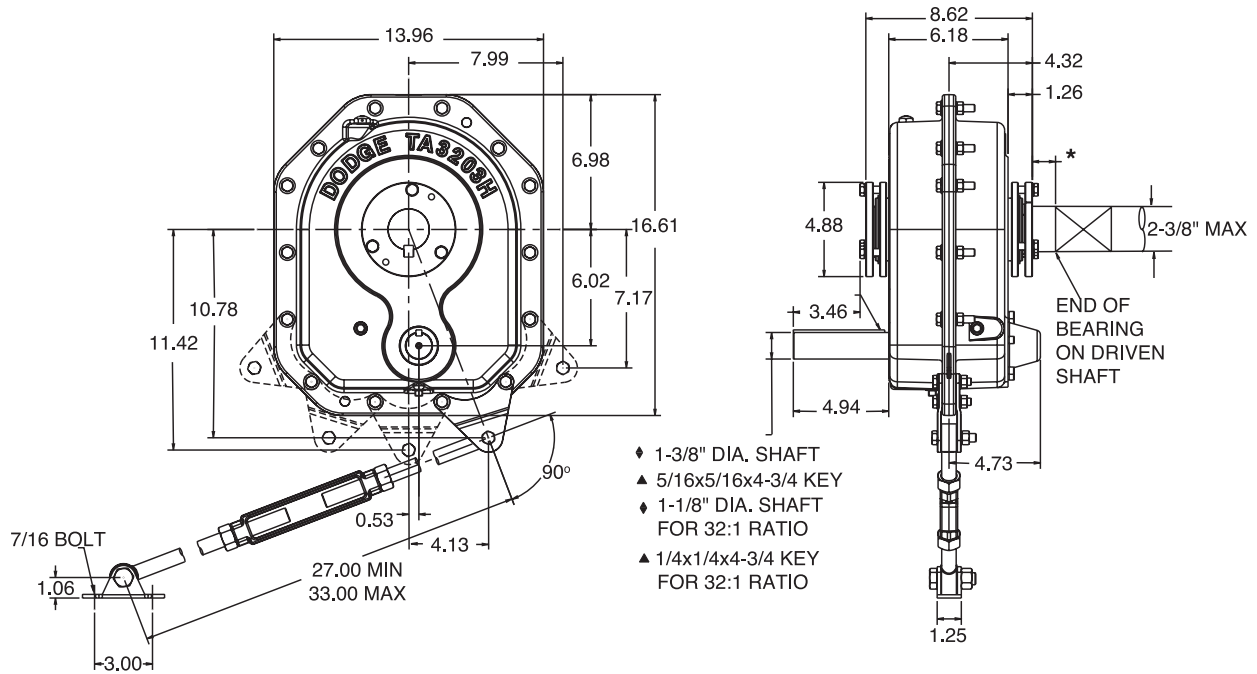
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	***	M4	M4	M3	M2	M2	M2
18	12.13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

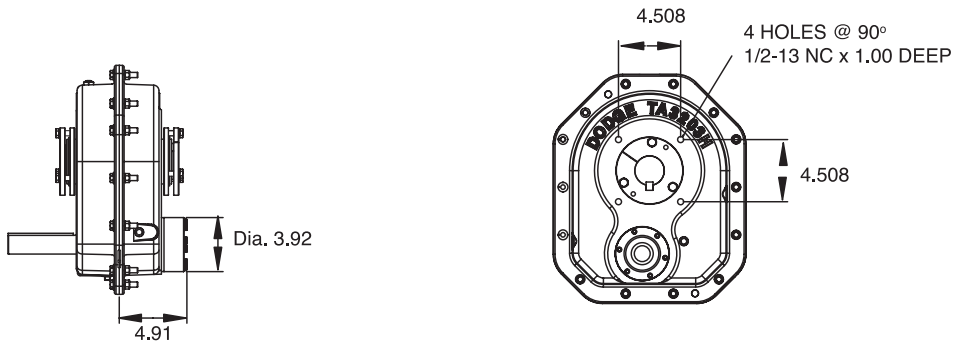


SELECTION/DIMENSIONS

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



SELECTION/DIMENSIONS

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 G1-122 for Maximum Bore Straight Bore TA II Reducers

+ Rod Assembly mounting locations are limited to positions shown 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 Vertical Breather Kit	900112	2.0
TA3203H V-Ring Kit	903249	0.2
Filter Breather Plug	430048	0.2
TA3203H Lube Kit	LUBEKITTA3203	10.4

(2) See page G1-128 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	TA3203TBS 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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA3203H, Single And Double Reduction

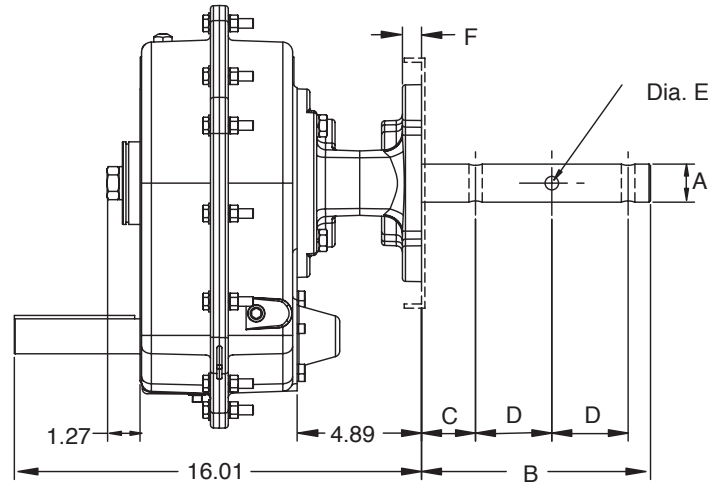
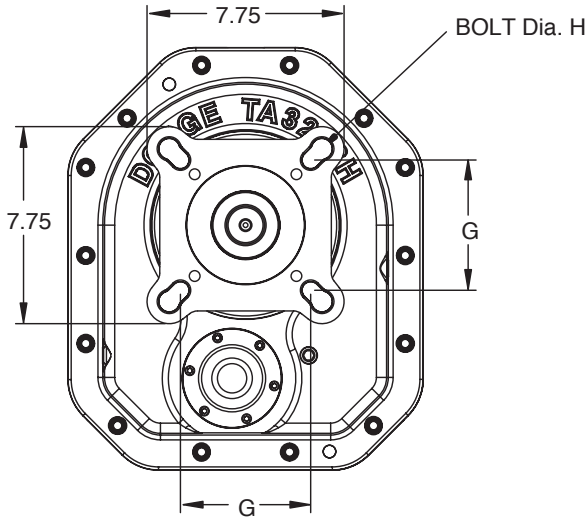
Gearing Reference Guide

TORQUE-ARM II

TORQUE-ARM

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SELECTION/DIMENSIONS

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	1/2-13
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	.75	6.75	3/4

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 G1-59 for 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 includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA3203H, Position B & D

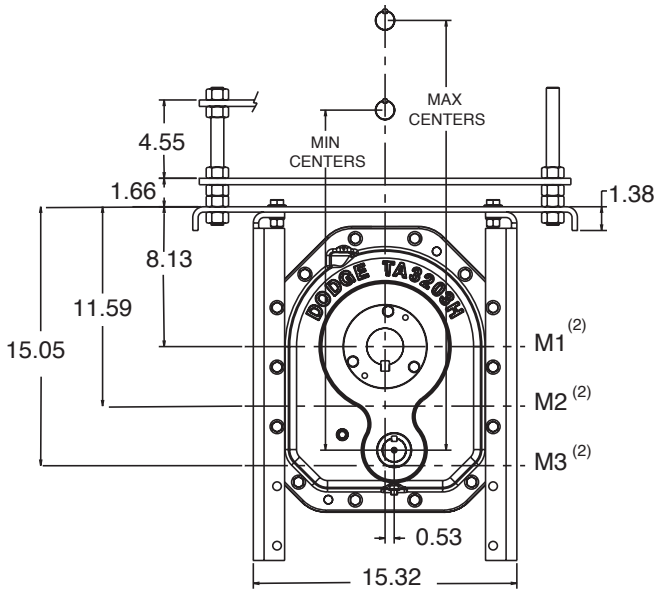
Gearing Reference Guide

TORQUE-ARM II

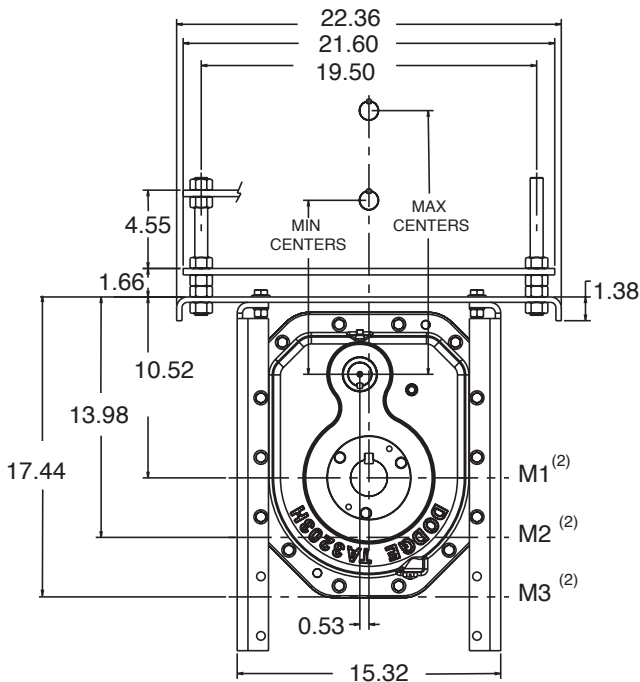
TORQUE-ARM

MAXUM

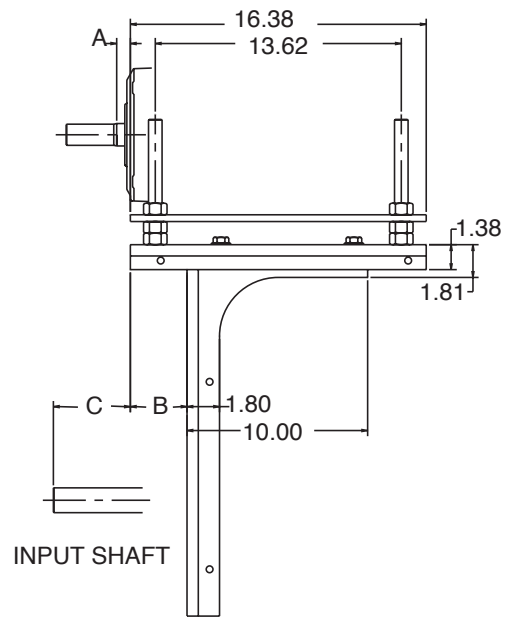
TIGEAR-2



POSITION B



POSITION D



INPUT SHAFT



SELECTION/DIMENSIONS

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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers	
						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 contain 0.5" to allow for belt assembly

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

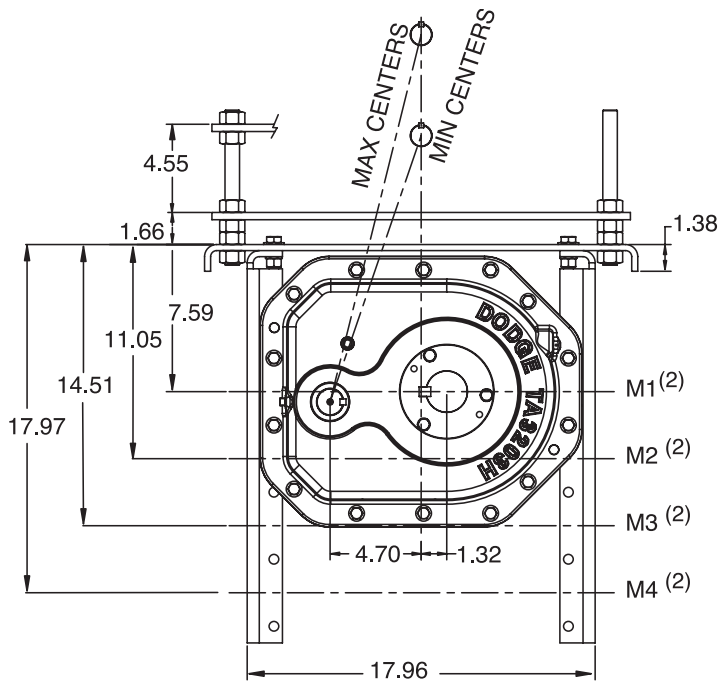
(2) M1, M2, M3 go through output shaft centerline



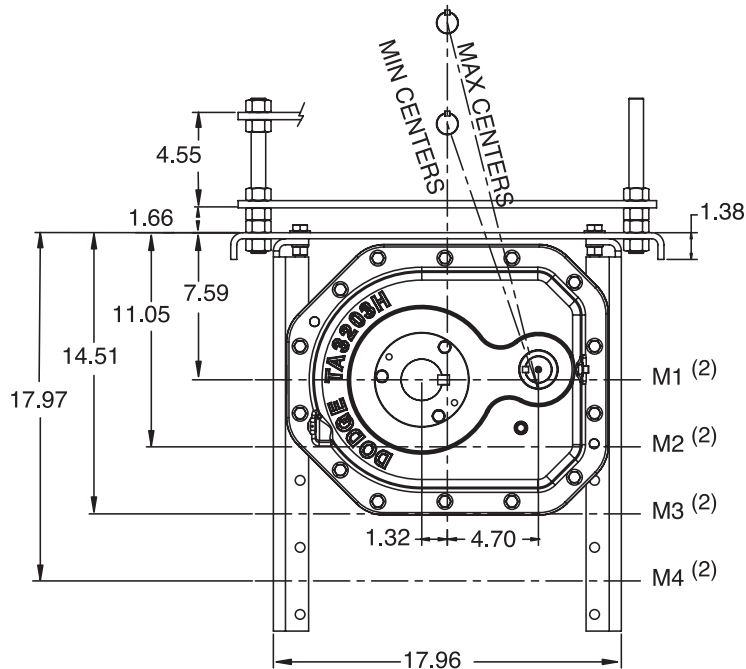
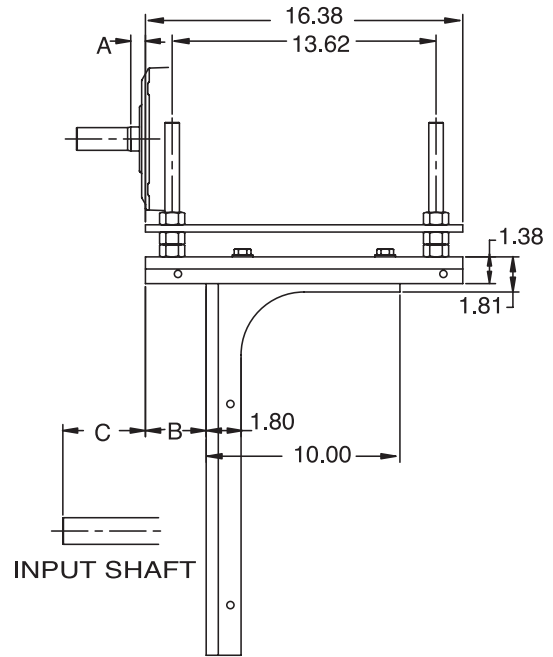
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA3203H, Position A & C



POSITION A



POSITION C



SELECTION/DIMENSIONS

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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers	
						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 contain 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⁾

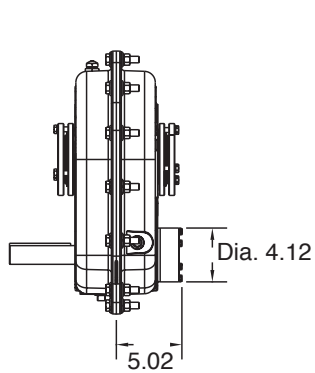
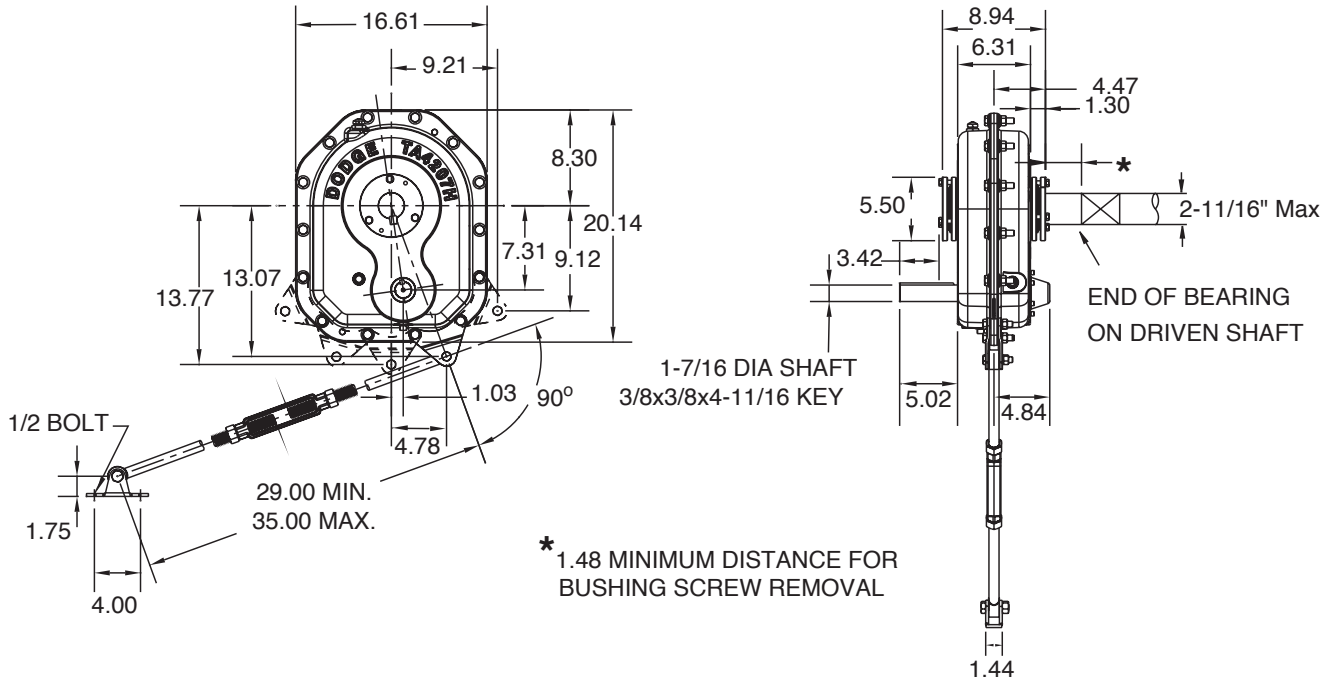
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	***	M4	M4	M3	M2	M2	M2
18	12.13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

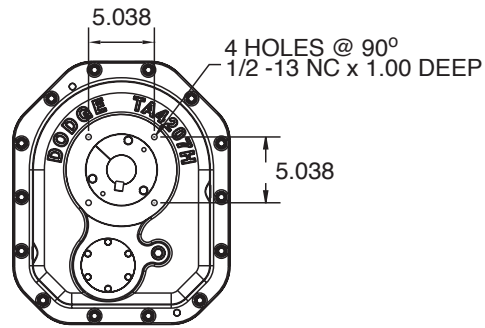


SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers Taper Bushed Reducers - TA4207H, Single And Double Reduction



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS



SELECTION/DIMENSIONS

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 G1-122 for Maximum Bore Straight Bore TA II Reducers

+ Rod Assembly mounting locations are limited to positions shown in drawing

TA4207H Accessories

Description	Part Number	Weight lbs.
TA4207RA Rod Assembly ⁽¹⁾ +	904109	10.6
TA4207BS Backstop Assembly ⁽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 Fan Assembly ●	904106	2.0
TA4-TA12 Vertical Breather Kit	904112	3.0
TA4207H V-Ring Kit	904249	0.3
Filter Breather Assy	430049	0.2
TA4207H Lube Kit	LUBEKITA4207	16.2

(2) See page G1-128 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 G1-120 for cooling fan dimensions

TA4207H Tapered Bushing Kits ⁽⁵⁾ (6)

Bushing Size Standard Shaft Bushing Kit	Part Number (7)	Weight lbs.	Shaft Keyseat Required (9) (10)	Bushing Size	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
				Short Shaft Bushing Kit ⁽⁸⁾			
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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA4207H, Single And Double Reduction

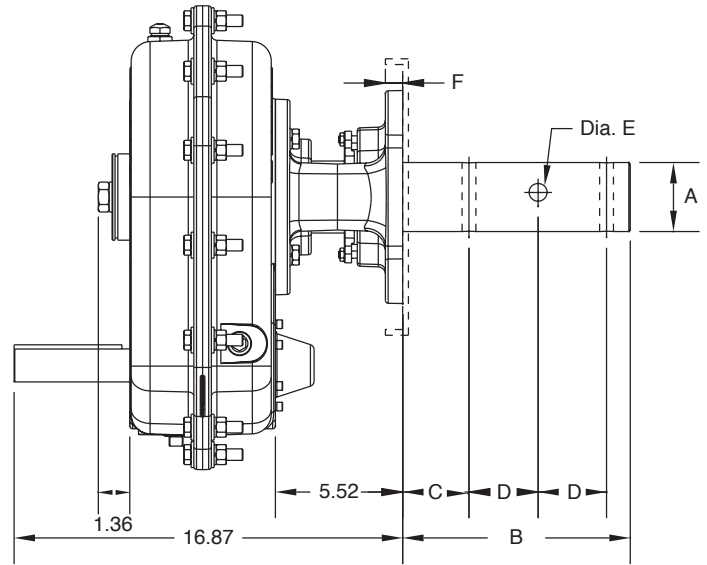
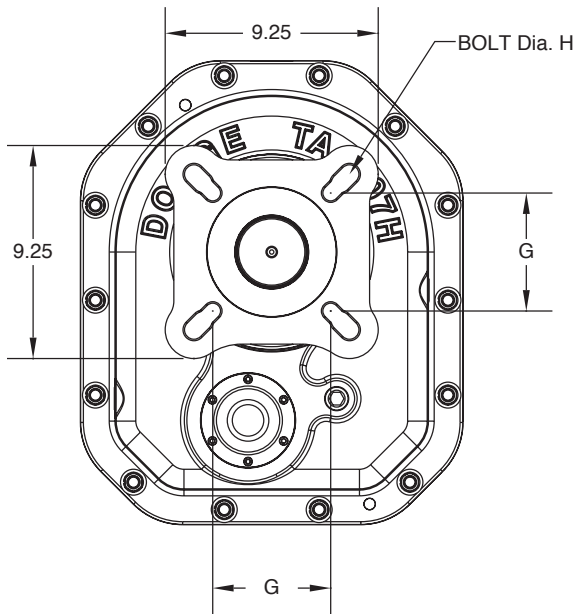
Gearing Reference Guide

TORQUE-ARM II

TORQUE-ARM

MAXUM

TIGEAR-2





SELECTION/DIMENSIONS

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	3/4

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 G1-67 for 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 includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA4207H, Position B & D

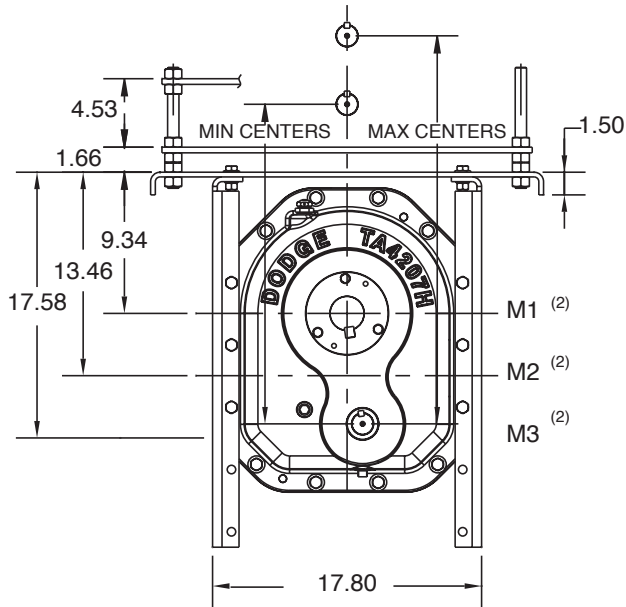
Gearing Reference Guide

TORQUE-ARM II

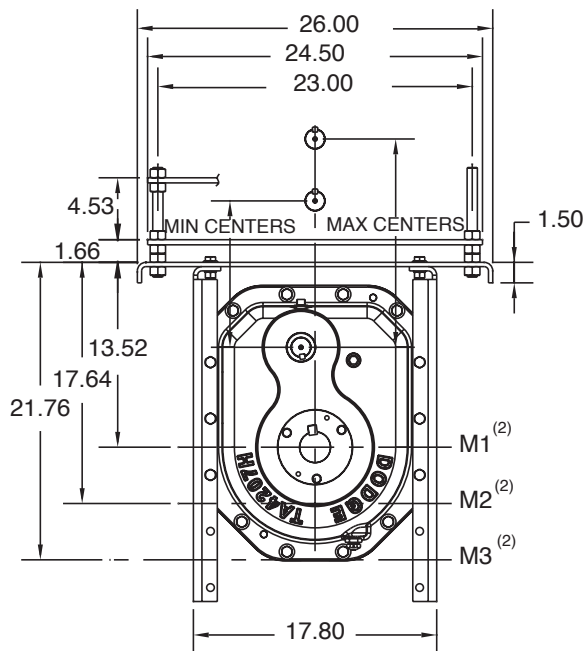
TORQUE-ARM

MAXUM

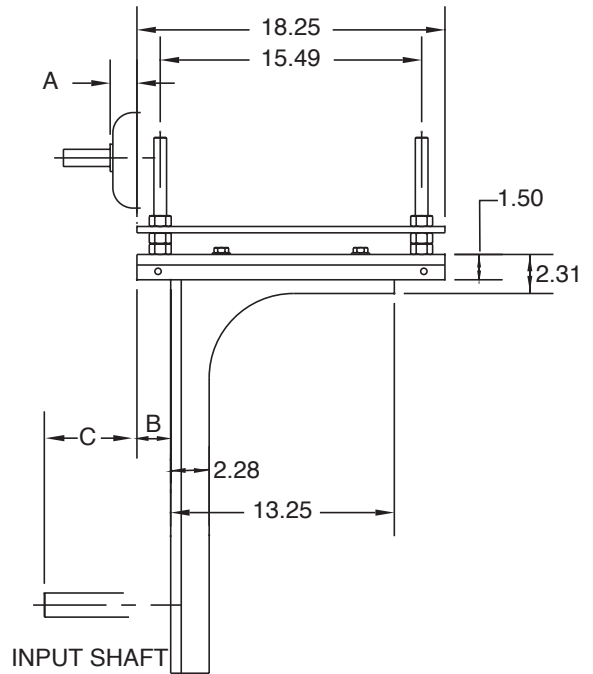
TIGEAR-2



POSITION B



POSITION D





SELECTION/DIMENSIONS

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			
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
							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			
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
							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

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

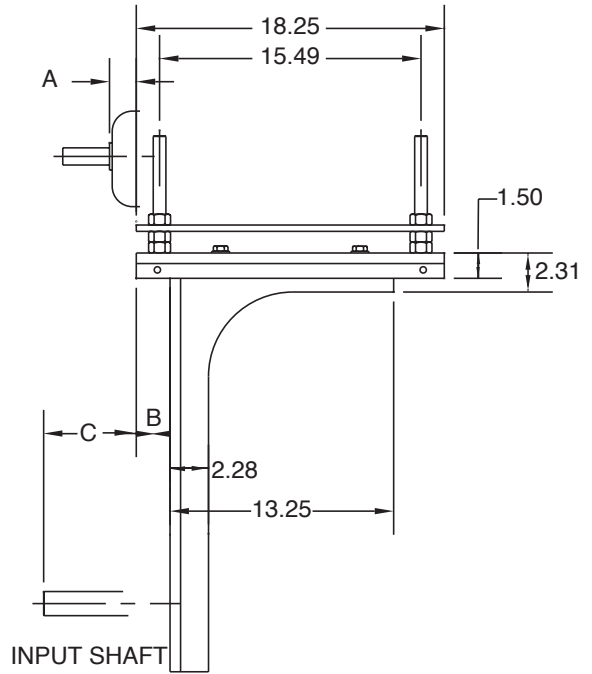
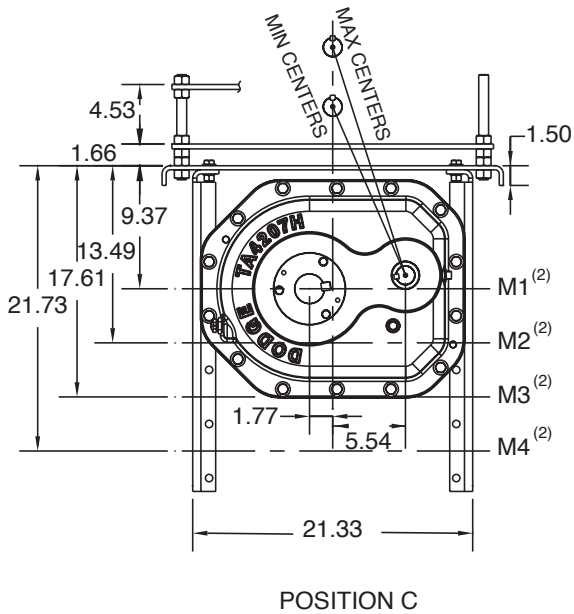
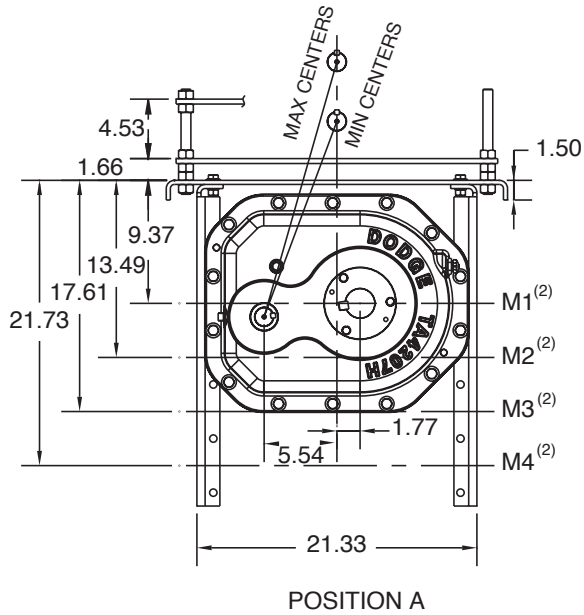
(2) M1, M2, M3 go through output shaft centerline



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA4207H, Position A & C





SELECTION/DIMENSIONS

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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
					Min	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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
					Min	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			

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	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

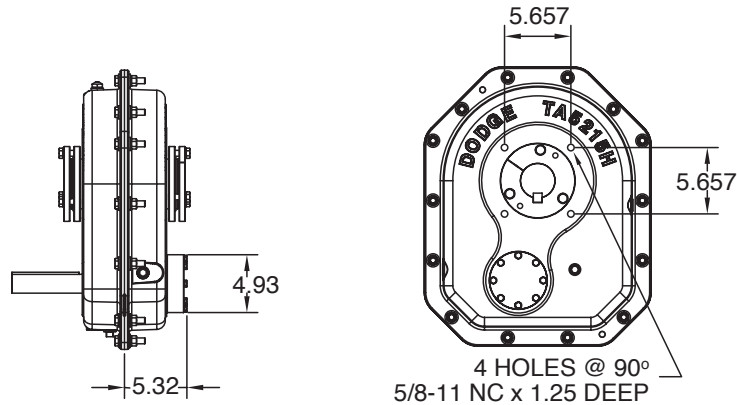
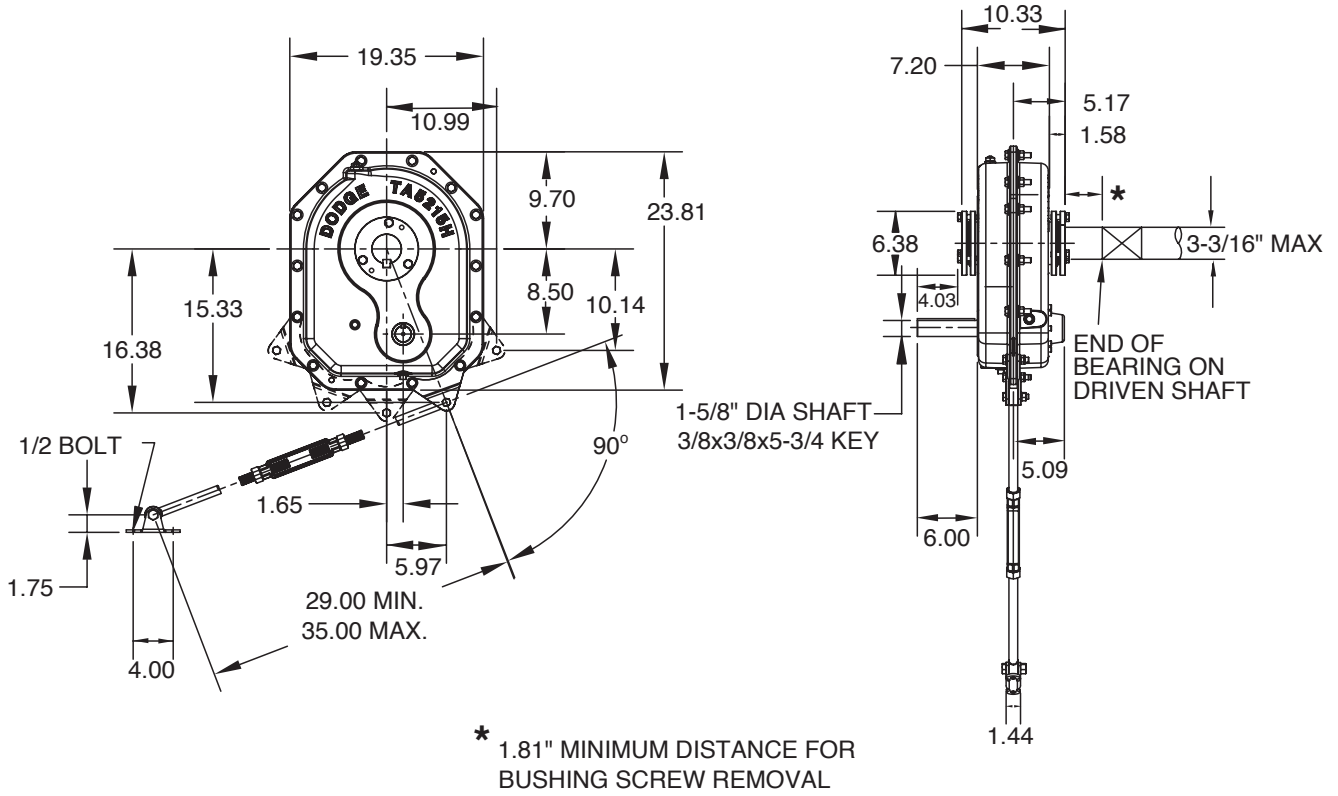
(1) For U Or Flared Trough Ends Per CEMA 300-014



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Taper Bushed Reducers - TA5215H, Single And Double Reduction



REDUCER WITH BACKSTOP

FLANGE MOUNTING DIMENSIONS



SELECTION/DIMENSIONS

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 G1-122 for Maximum Bore Straight Bore TA II Reducers

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

TA5215H Accessories

Description	Part Number	Weight lbs.
TA5215RA Rod Assembly ⁽¹⁾ +	905109	11.0
TA5215BS Backstop Assembly ⁽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-TA12 Vertical Breather Kit	904112	3.0
TA5215H V-Ring Kit	905249	0.3
Filter Breather Kit	430049	0.2
TA5215H Lube Kit	LUBEKITA5215	28.9

(2) See page G1-128 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 G1-120 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	Part Number	Weight lbs.	Shaft Keyseat Required (9) (10)
				Short Shaft Bushing Kit (8)			
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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA5215H, Single And Double Reduction

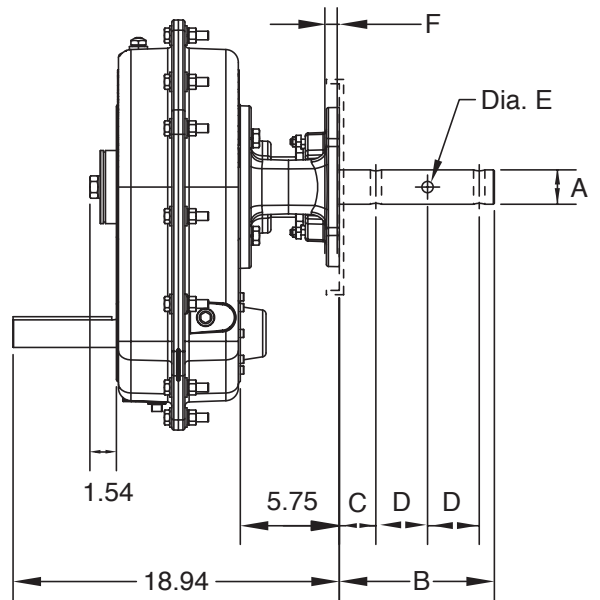
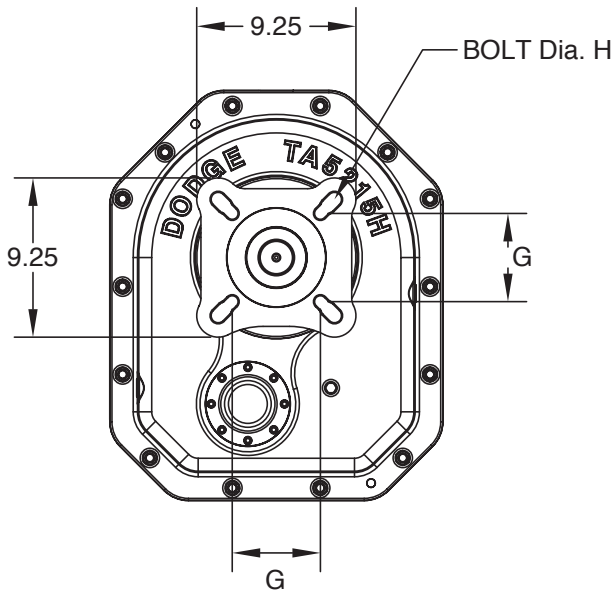
Gearing Reference Guide

TORQUE-ARM II

TORQUE-ARM

MAXUM

TIGEAR-2





SELECTION/DIMENSIONS

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	3/4

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 3-7/16 Drive 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 G1-75 for 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 includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA5215H, Position B & D

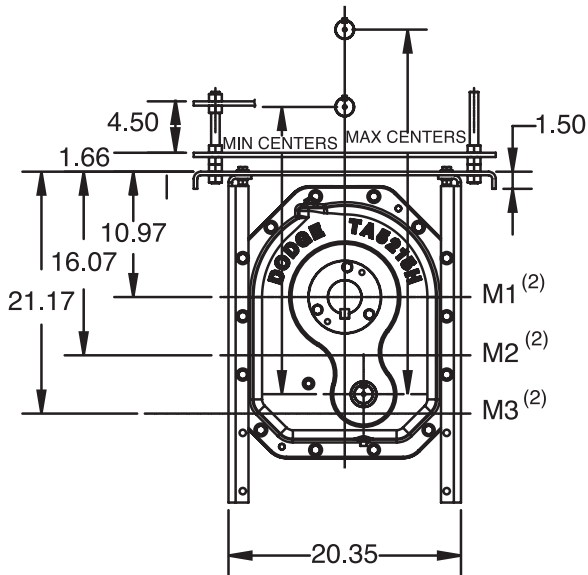
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TORQUE-ARM II

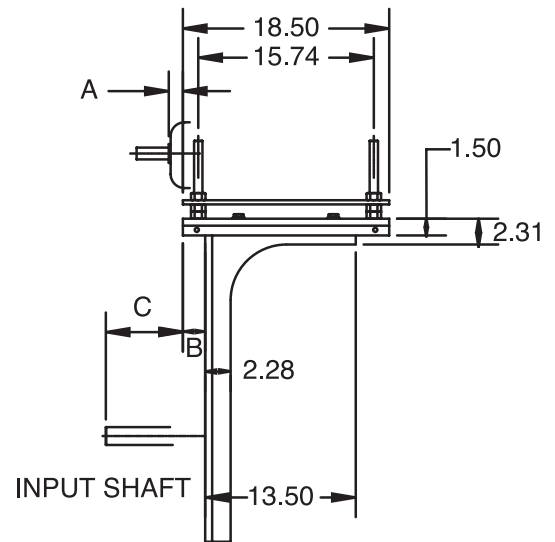
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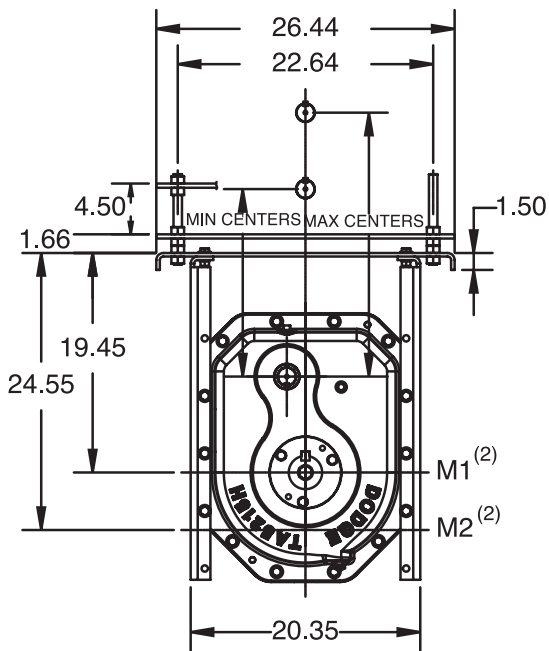
TIGEAR-2



POSITION B



POSITION D





SELECTION/DIMENSIONS

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			
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
							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			
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
							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

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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA5215H, Position A & C

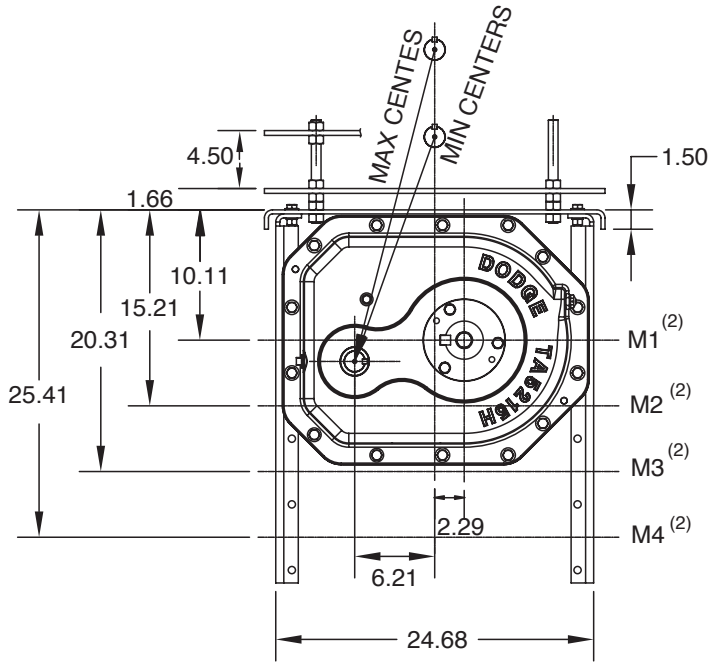
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TORQUE-ARM II

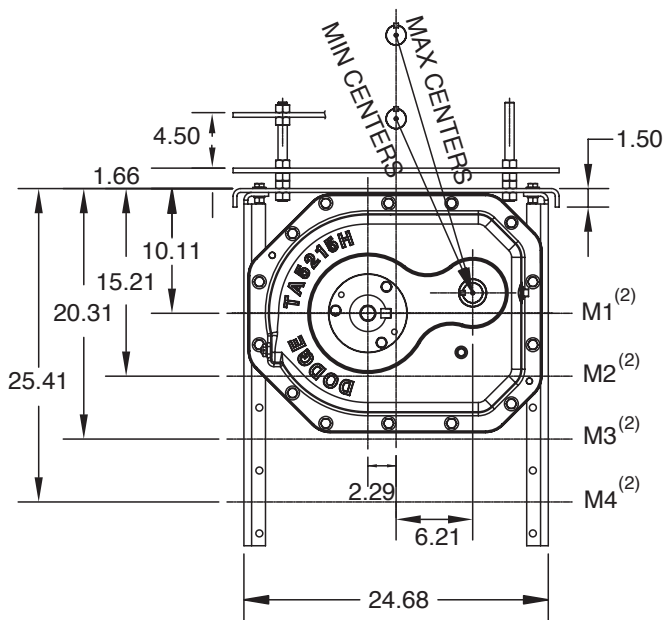
TORQUE-ARM

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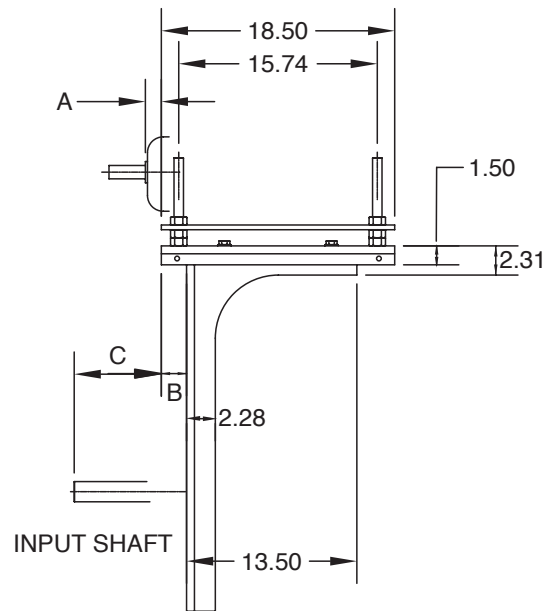
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POSITION A



POSITION C





SELECTION/DIMENSIONS

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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
						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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
						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

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	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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers
 Taper Bushed Reducers - TA6307H, Single And Double Reduction

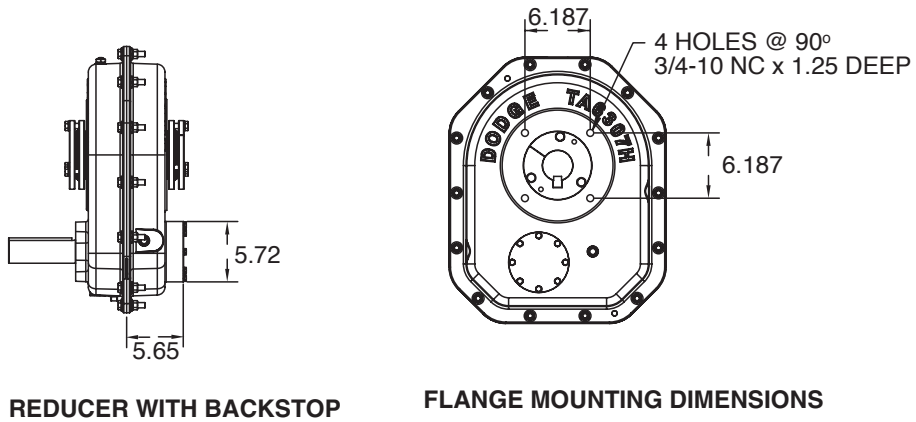
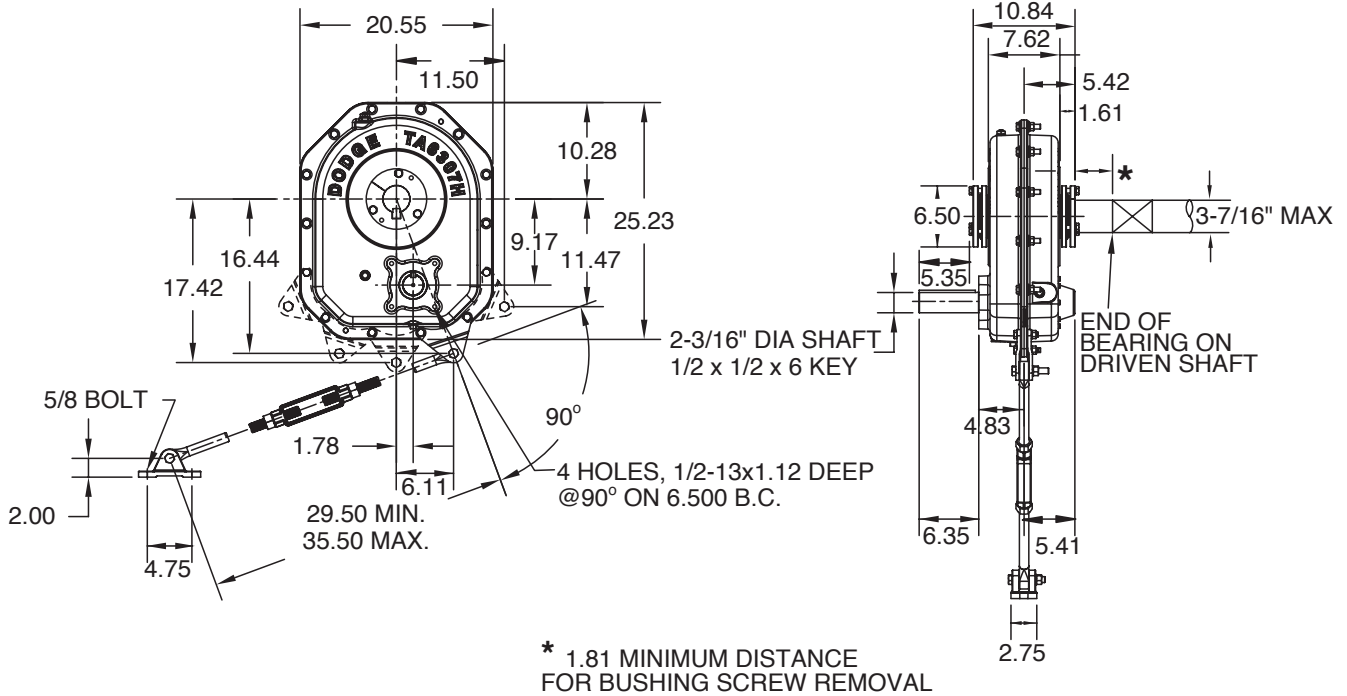
Gearing Reference Guide

TORQUE-ARM II

TORQUE-ARM

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SELECTION/DIMENSIONS

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 G1-122 for Maximum Bore Straight Bore TA II Reducers
- + Rod Assembly mounting locations are limited to positions shown in drawing.

TA6307H Accessories

Description	Part Number	Weight lbs.
TA6307RA Rod Assembly ⁽¹⁾ +	906109	19.9
TA6307BS Backstop Assembly ⁽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-TA12 Vertical Breather Kit	904112	3.0
TA6307H V-Ring Kit	906249	0.4
Filter Breather Kit	430049	0.2
TA6307H Lube Kit	LUBEKITTA6307	34.7

- (2) See page G1-128 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 G1-120 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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA6307H, Single And Double Reduction

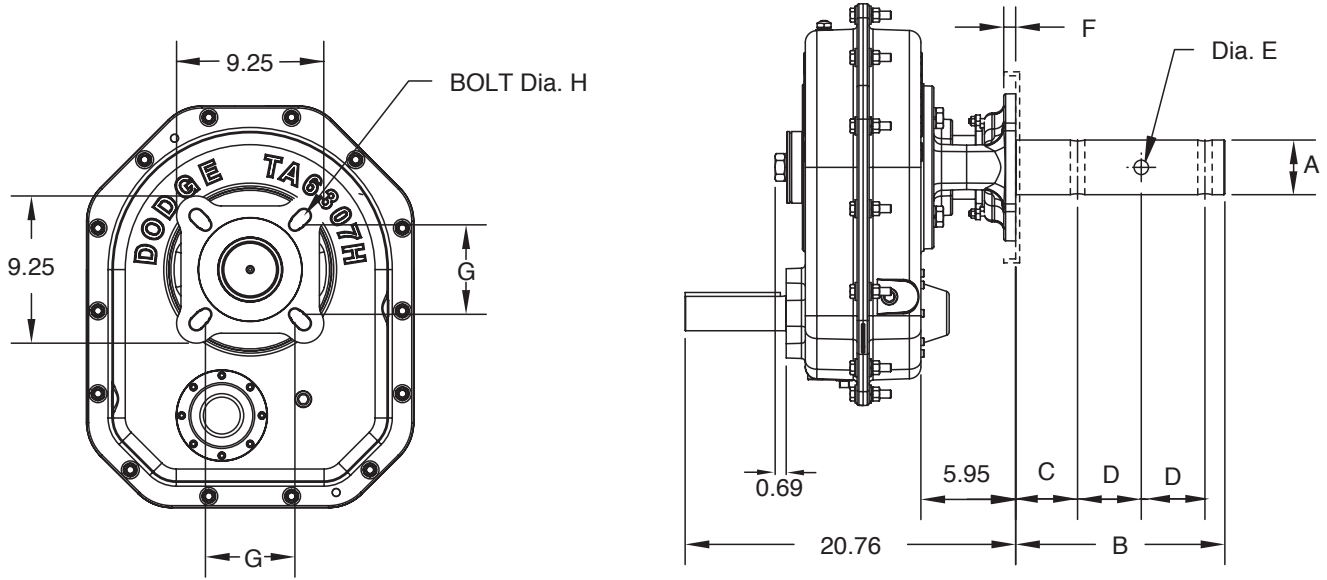
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SELECTION/DIMENSIONS

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	3/4

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 G1-83 for 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 includes a TA II Reducer, SCA Adapter & Hardware Kit and SCS Drive Shaft. The SCP Adjustable Packing Kit is an optional accessory.



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA6307H, Position B & D

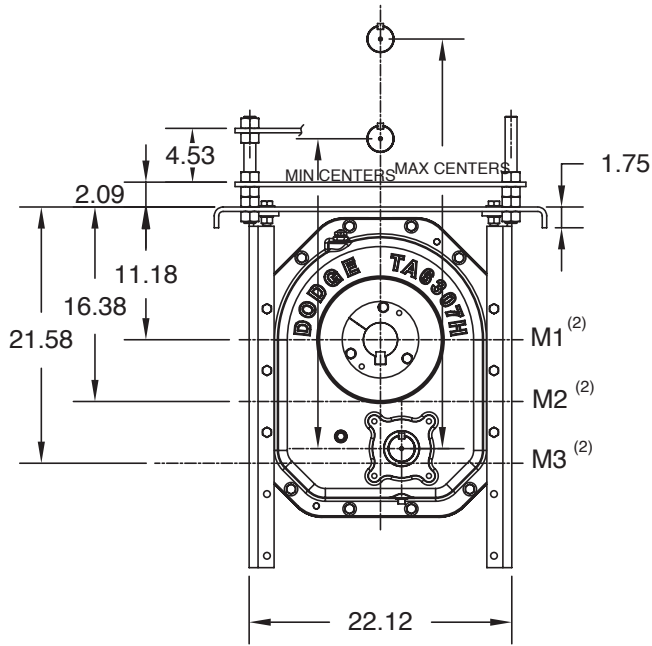
Gearing Reference Guide

TORQUE-ARM II

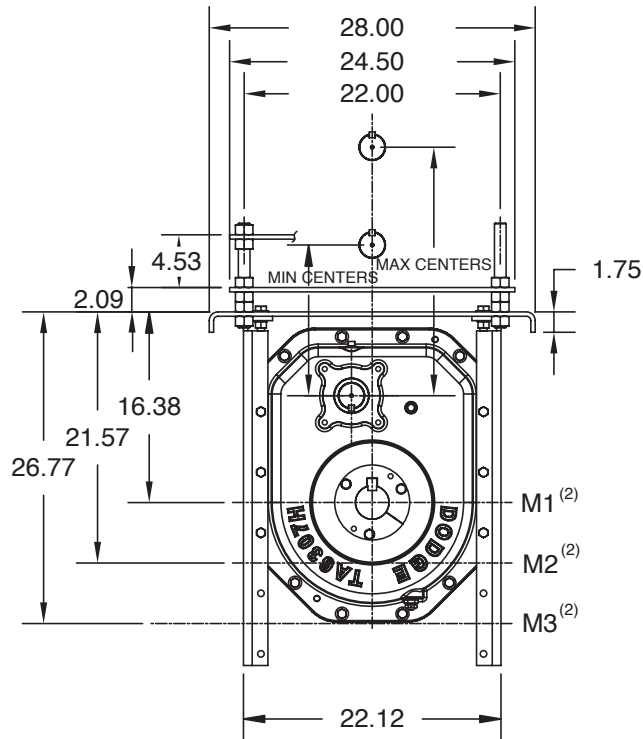
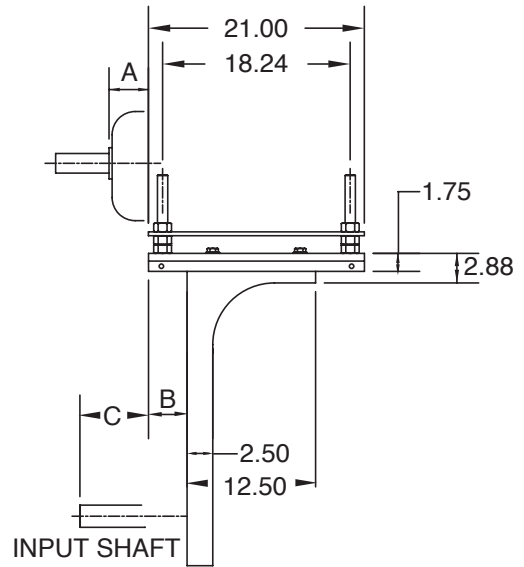
TORQUE-ARM

MAXUM

TIGEAR-2



POSITION B



POSITION D



SELECTION/DIMENSIONS

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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers		A	Centers	
							Min	Max		Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	4.51	8.83	M1	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	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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
							Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	4.51	8.83	M1	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	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	

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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA6307H, Position A & C

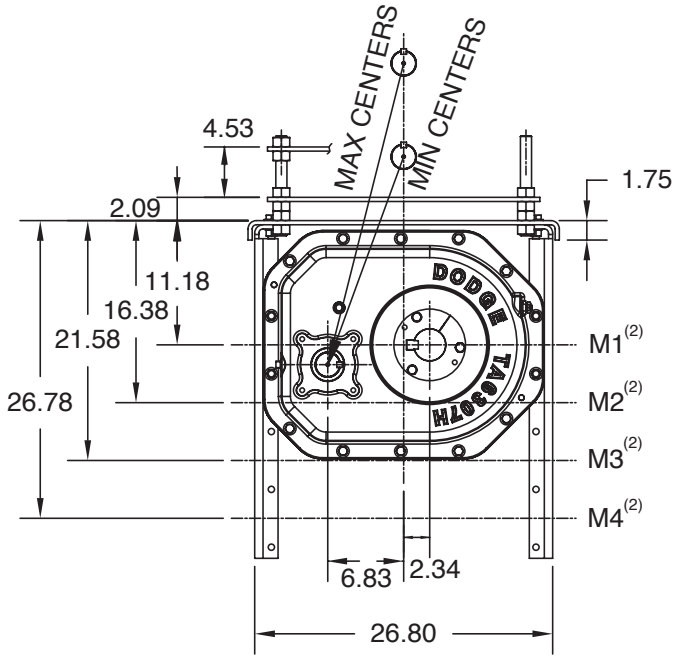
Gearing Reference Guide

TORQUE-ARM II

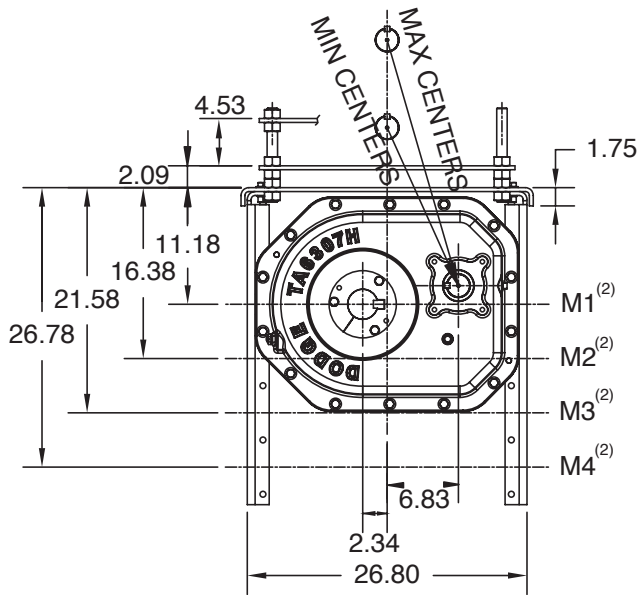
TORQUE-ARM

MAXUM

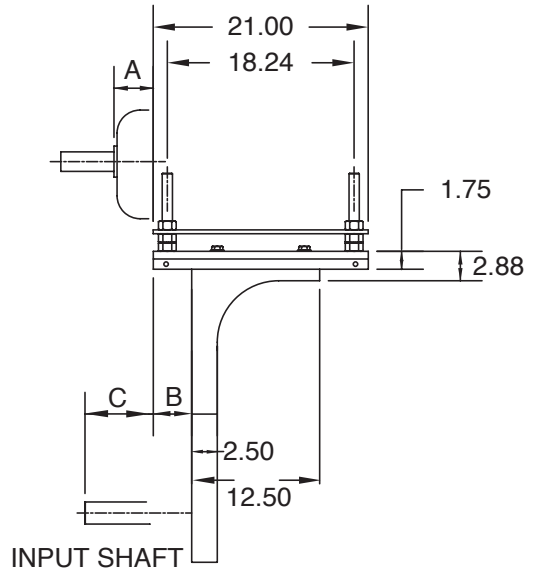
TIGEAR-2



POSITION A



POSITION C





SELECTION/DIMENSIONS

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		
	B Min	B Min	C Min	C Min		A	Centers		A	Centers		A	Centers		A	Centers	
							Min	Max		Min	Max		Min	Max		Min	Max
Position A	1.59	5.91	5.65	9.97	M1	21.2	25.0	1.37	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	17.9	21.6	1.37	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					
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers				
							Min	Max		Min	Max		Min	Max			
Position A	1.59	5.91	5.65	9.97	M1	24.5	28.4	0.38	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	21.1	25.0	0.38	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			

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⁾

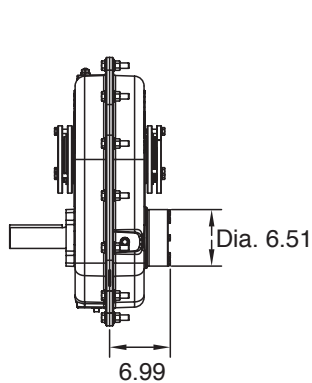
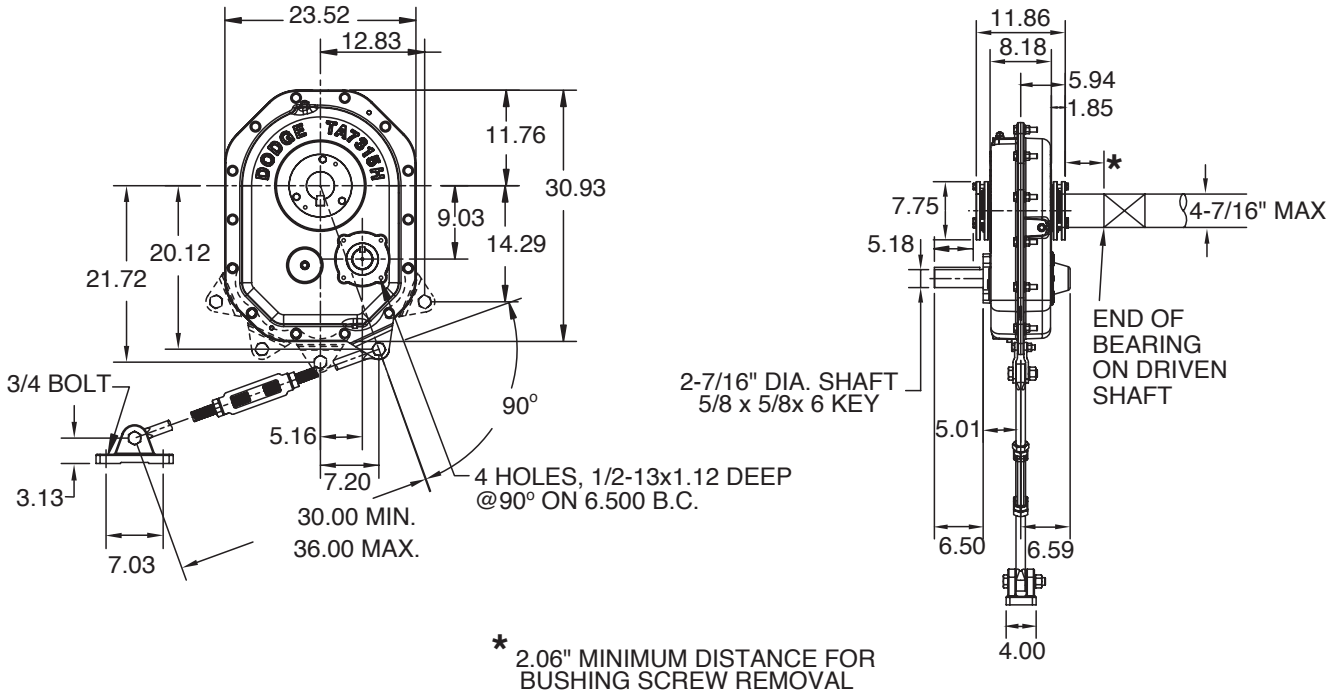
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	***	M4	M4	M3	M2	M2	M2
18	12.13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

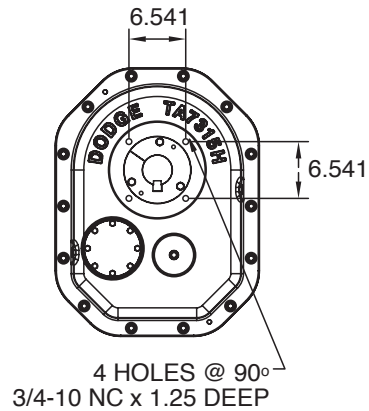


SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers Taper Bushed Reducers - TA7315H, Single And Double Reduction



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS



SELECTION/DIMENSIONS

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

(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 shown in drawing.

TA7315H Accessories

Description	Part Number	Weight lbs.
TA7315/8407RA Rod Assembly ⁽¹⁾ +	907109	43.2
TA7315BS Backstop Assembly ⁽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-TA12 Vertical Breather Kit	904112	3.0
TA7315/8407H V-Ring Kit	907249	0.4
Filter Breather Kit	430049	0.2
TA7315H Lube Kit	LUBEKITA7315	53.2

(2) See page G1-128 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 G1-120 for cooling fan dimensions

TA7315H Tapered Bushing Kits ⁽⁵⁾ ⁽⁶⁾

Bushing Size	Part Number ⁽⁷⁾	Weight lbs.	Shaft Keyseat Required ⁽¹⁰⁾	Bushing Size	Part Number	Weight lbs.	Shaft
Standard Shaft Bushing Kit				Short Shaft Bushing Kit ⁽⁸⁾			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 backup plates and snap rings; hardware and one key

(8) Short Shaft Bushing Kit includes one standard bushing; one long bushing with mounting wedge; two backup plates with snap rings; hardware and one 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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Screw Conveyor Drive - TA7315H, Single And Double Reduction

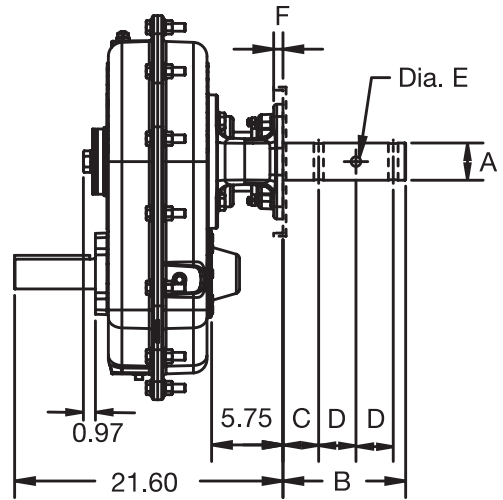
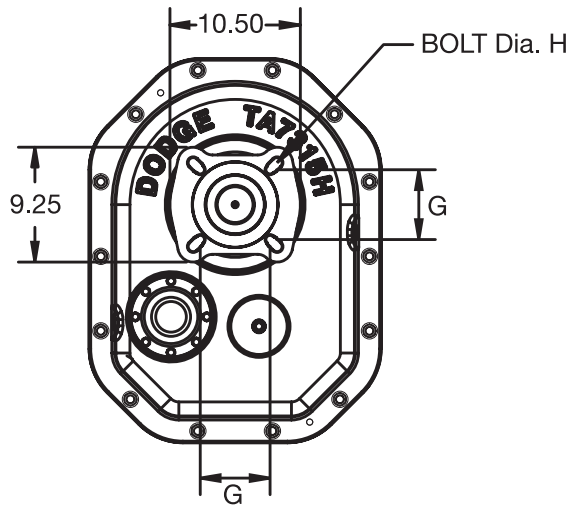
Gearing Reference Guide

TORQUE-ARM II

TORQUE-ARM

MAXUM

TIGEAR-2





SELECTION/DIMENSIONS

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	3/4

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 3-7/16 Drive 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 G1-91 for 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 includes a TA II Reducer, SCA Adapter & Hardware Kit, and SCS Drive Shaft. The SCP Adjustable Packing kit is an optional accessory



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA7315H, Position B & D

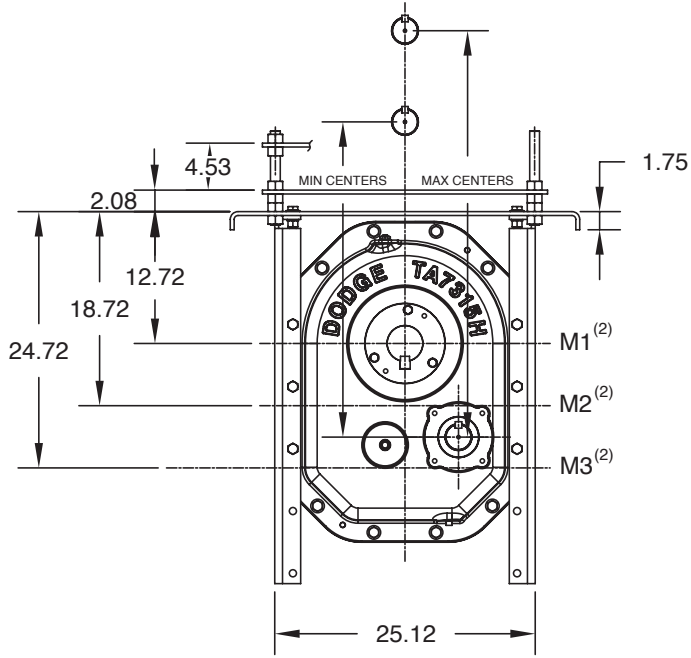
Gearing Reference Guide

TORQUE-ARM II

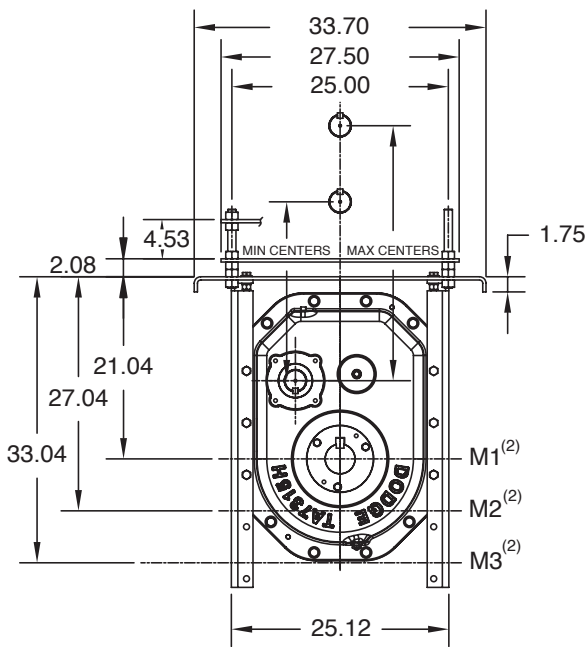
TORQUE-ARM

MAXUM

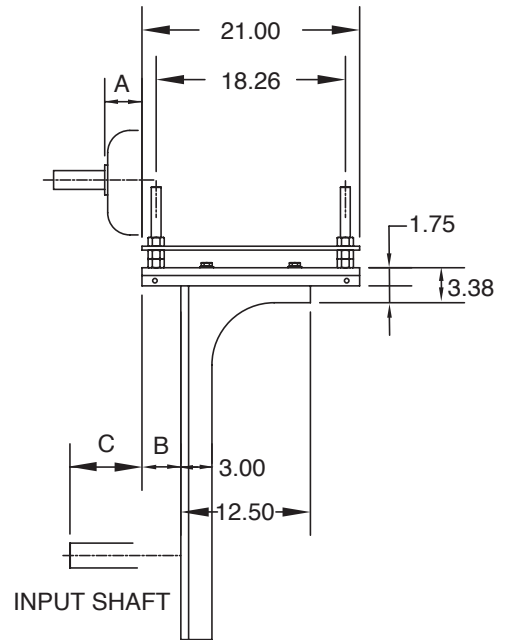
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POSITION B



POSITION D



INPUT SHAFT



SELECTION/DIMENSIONS

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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
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

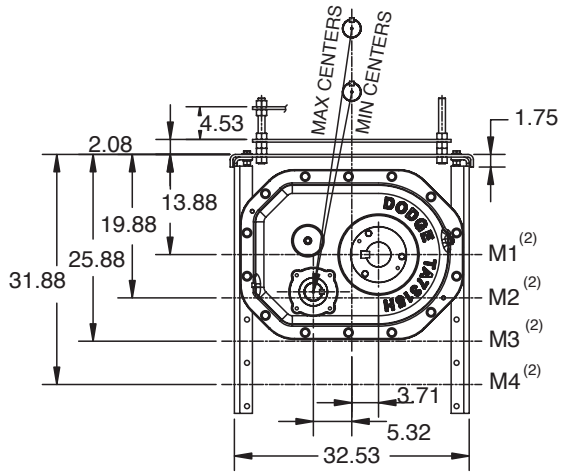
(2) M1, M2, M3 go through output shaft centerline



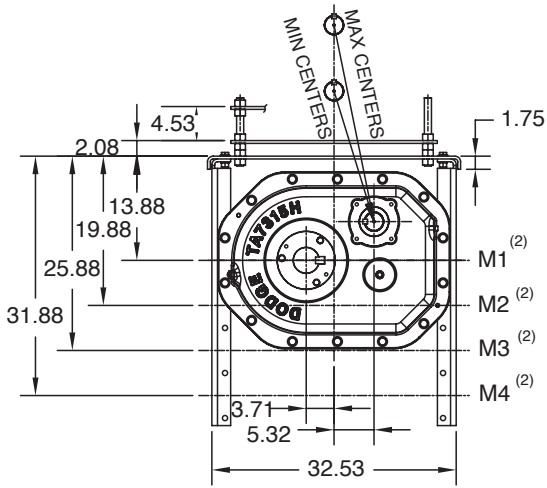
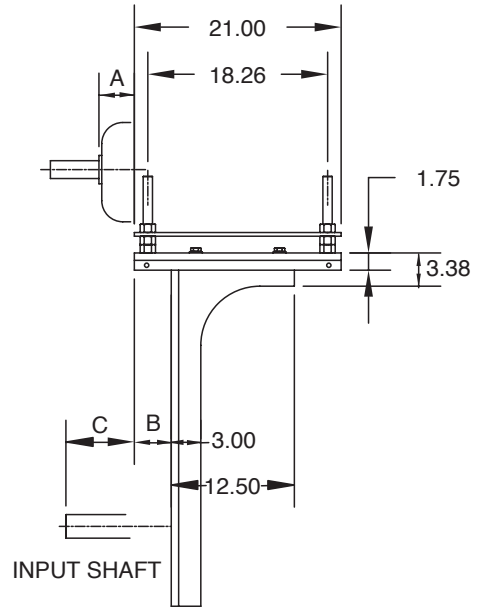
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA7315H, Position A & C



POSITION A



POSITION C



SELECTION/DIMENSIONS

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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
						Min	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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
						Min	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⁾

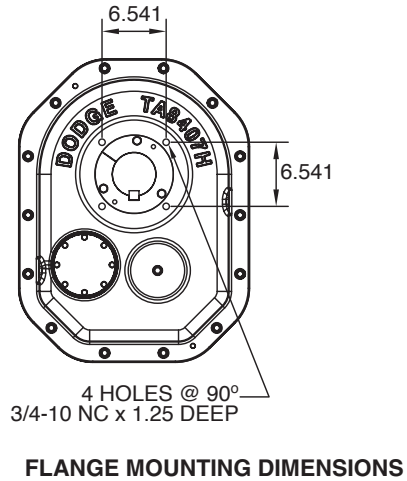
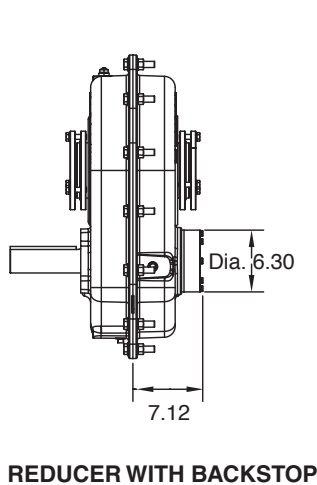
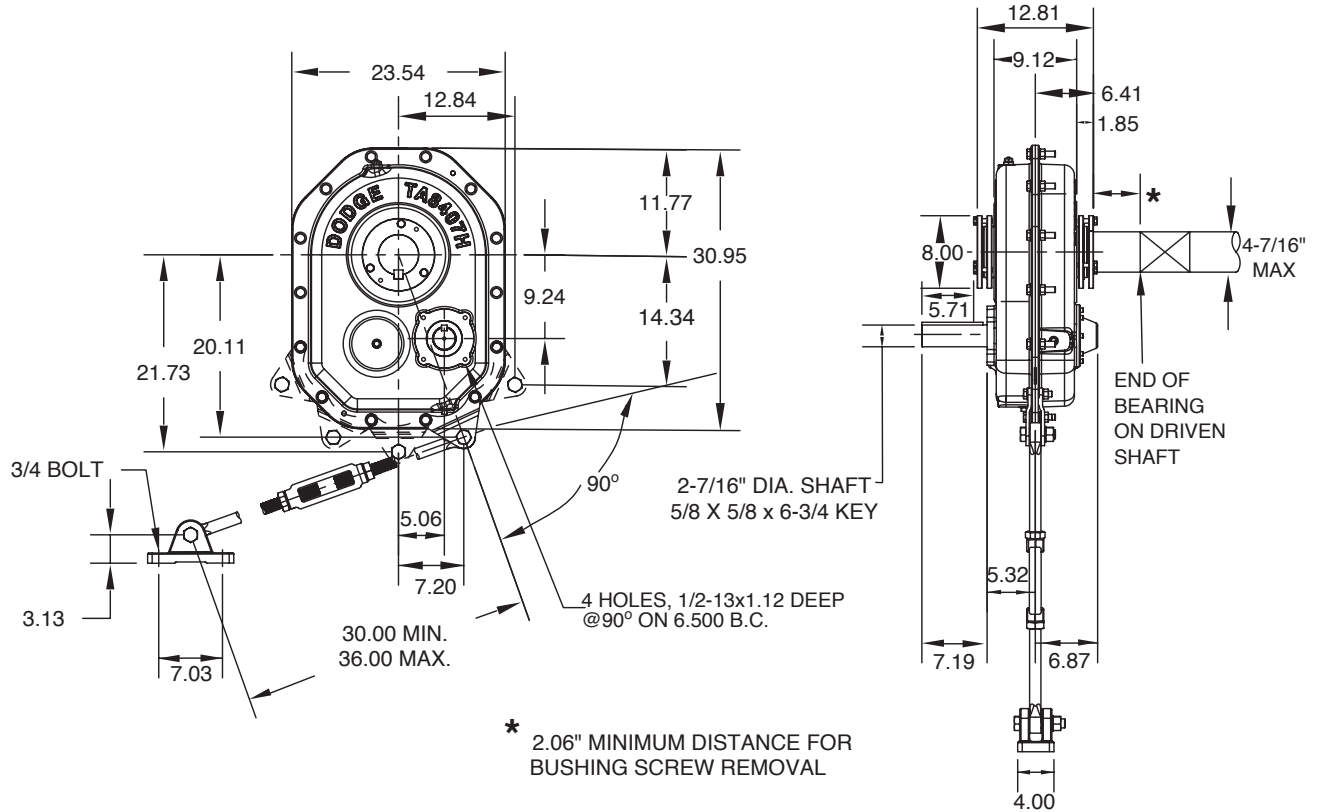
Nominal Screw Dia	Trough Height Dim	Minimum Mounting Position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	***	M4	M4	M3	M2	M2	M2
18	12.13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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers Taper Bushed Reducers - TA8407H, Double Reduction





SELECTION/DIMENSIONS

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 shown in drawing.

TA8407H Accessories

Description	Part Number	Weight lbs.
TA7315/8407RA Rod Assembly ⁽¹⁾ +	907109	43.2
TA8407BS Backstop Assembly ⁽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
TA8407SCA Adapter & Hardware Kit ◆	908070	55.0
TA4-TA12 Vertical Breather Kit	904112	3.0
TA7315/8407H V-Ring Kit	907249	0.4
Filter Breather Kit	430049	0.2
TA8407H Lube Kit	LUBEKITA8407	53.2

(2) See page G1-128 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 G1-120 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	Part Number	Weight lbs.	Shaft Keyseat Required ⁽⁸⁾ ⁽⁹⁾
				Short Shaft Bushing Kit ⁽⁷⁾			
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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA8407H, Position B & D

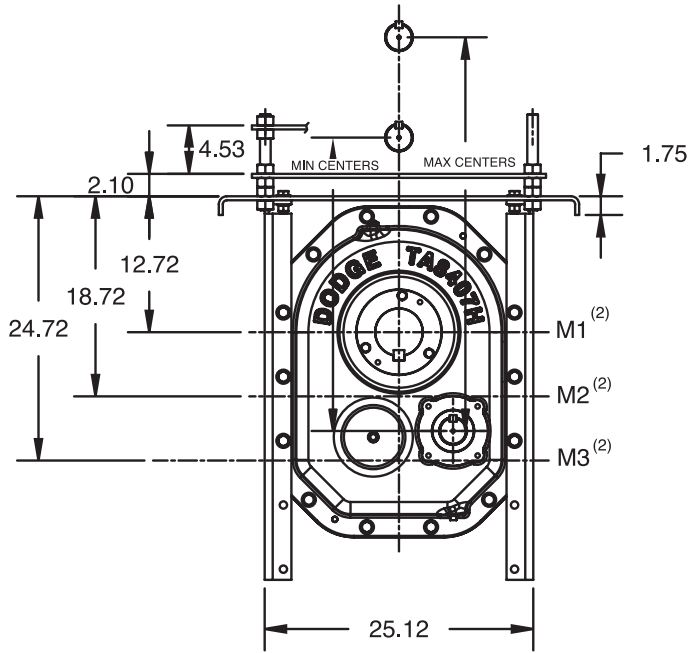
Gearing Reference Guide

TORQUE-ARM II

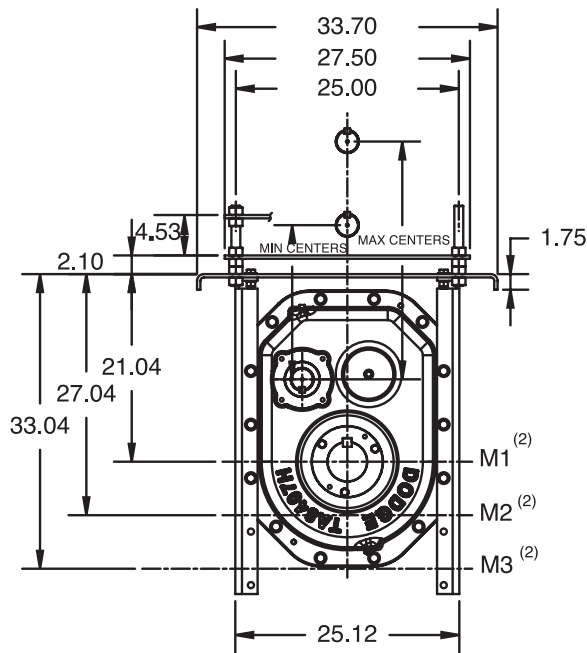
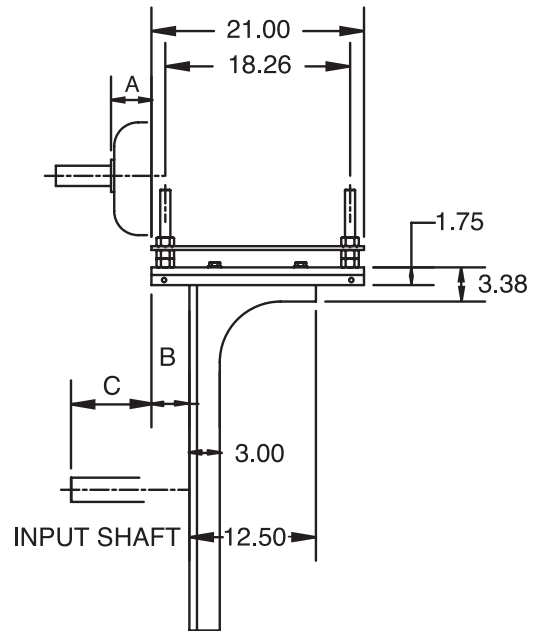
TORQUE-ARM

MAXUM

TIGEAR-2



POSITION B



POSITION D



SELECTION/DIMENSIONS

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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
						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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
						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

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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA8407H, Position A & C

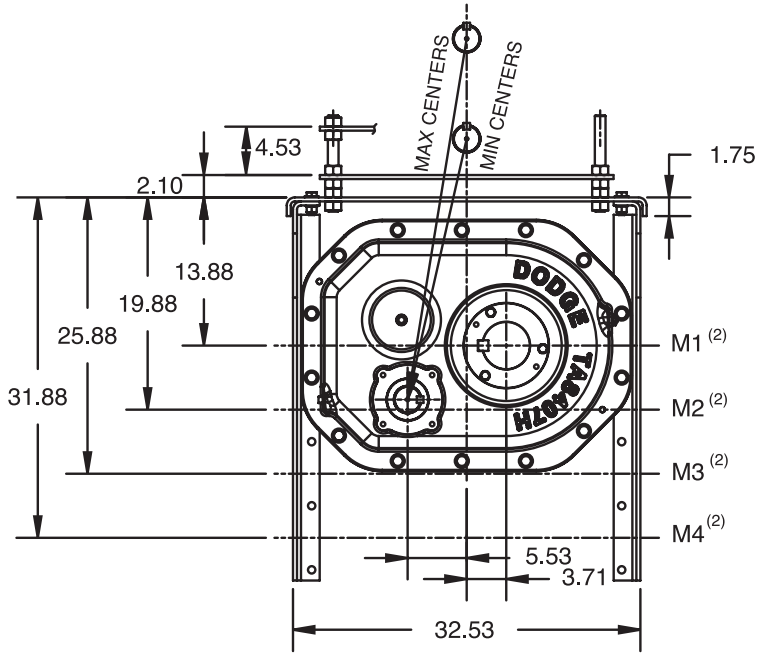
Gearing Reference Guide

TORQUE-ARM II

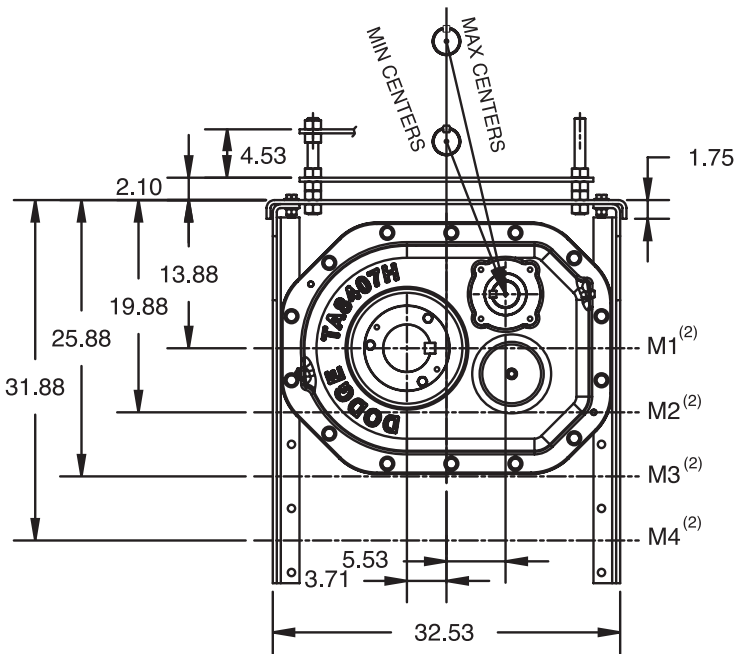
TORQUE-ARM

MAXUM

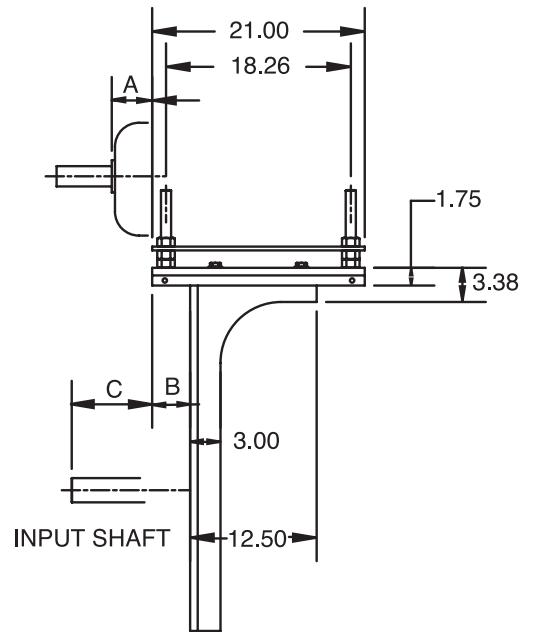
TIGEAR-2



POSITION A



POSITION C





SELECTION/DIMENSIONS

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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
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

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

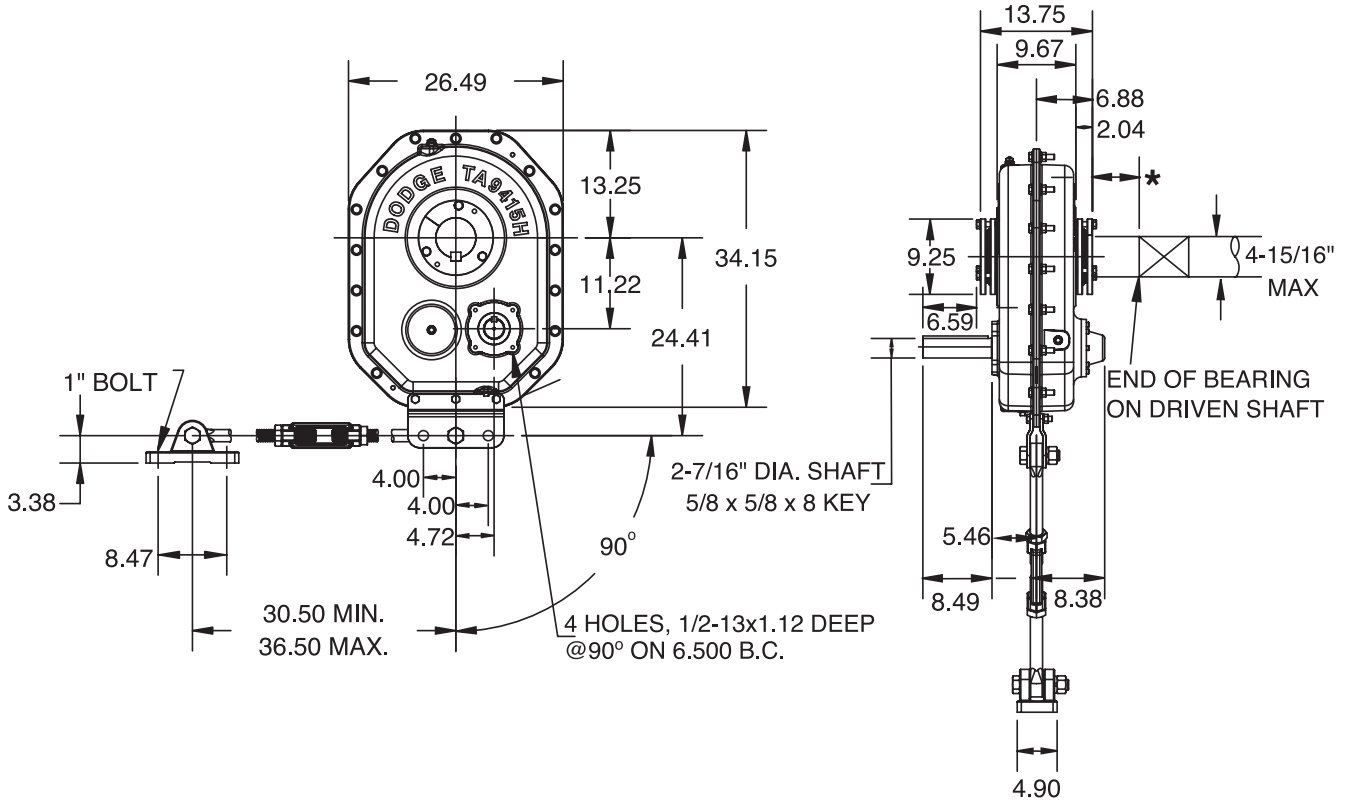
(2) M1, M2, M3 go through output shaft centerline



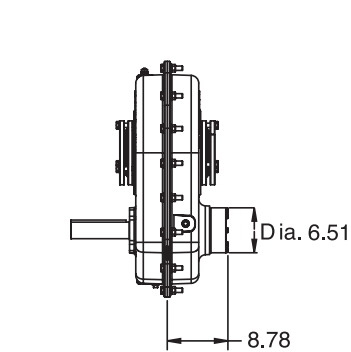
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

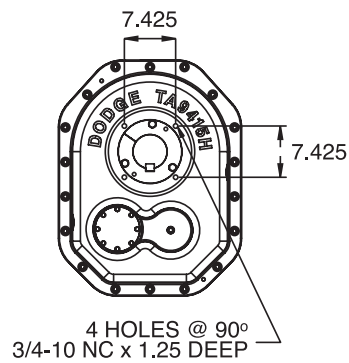
Taper Bushed Reducers - TA9415H, Double Reduction



* 2.39" MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS



SELECTION/DIMENSIONS

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 shown in drawing.

TA9415H Accessories

Description	Part Number	Weight lbs.
TA9415RA Rod Assembly ⁽¹⁾ +	909109	76.8
TA9415BS Backstop Assembly ⁽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-TA12 Vertical Breather Kit	904112	3.0
TA9415H V-Ring Kit	909249	0.5
Filter Breather Kit	430049	0.2
TA9415H Lube Kit	LUBEKITA9415	79.8

(2) See page G1-128 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 G1-120 for cooling fan dimensions

TA9415H Tapered Bushing Kits ⁽⁴⁾

Bushing Size	Part Number ⁽⁵⁾	Weight lbs.	Shaft Keyseat Required ^{(7) (8)}	Bushing Size	Part Number	Weight lbs.	Shaft Keyseat Required ^{(7) (8)}
Standard Shaft Bushing Kit				Short Shaft Bushing Kit ⁽⁶⁾			
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

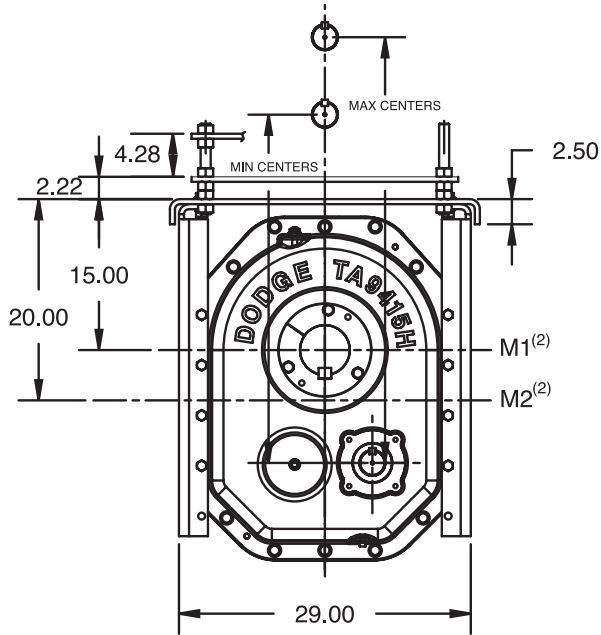
(8) Always check the driven shaft and key for strength



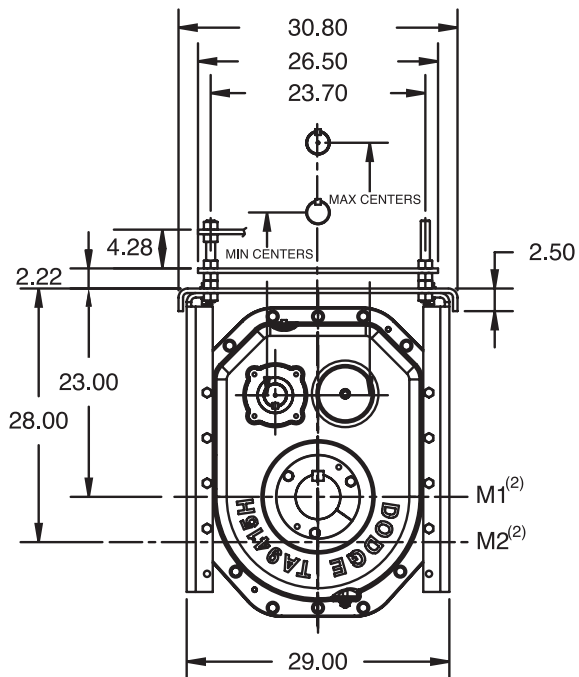
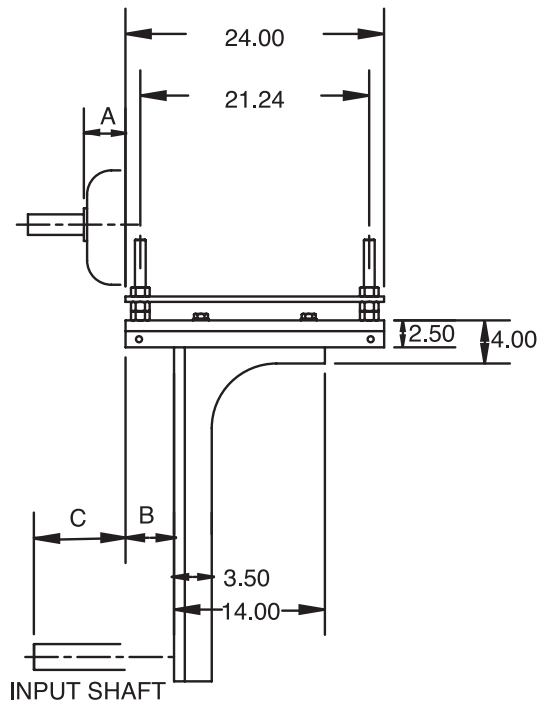
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA9415H, Position B & D



POSITION B



POSITION D



SELECTION/DIMENSIONS

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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
						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				
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
						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

Note:

Minimum centers contains 0.5" to allow for belt assembly

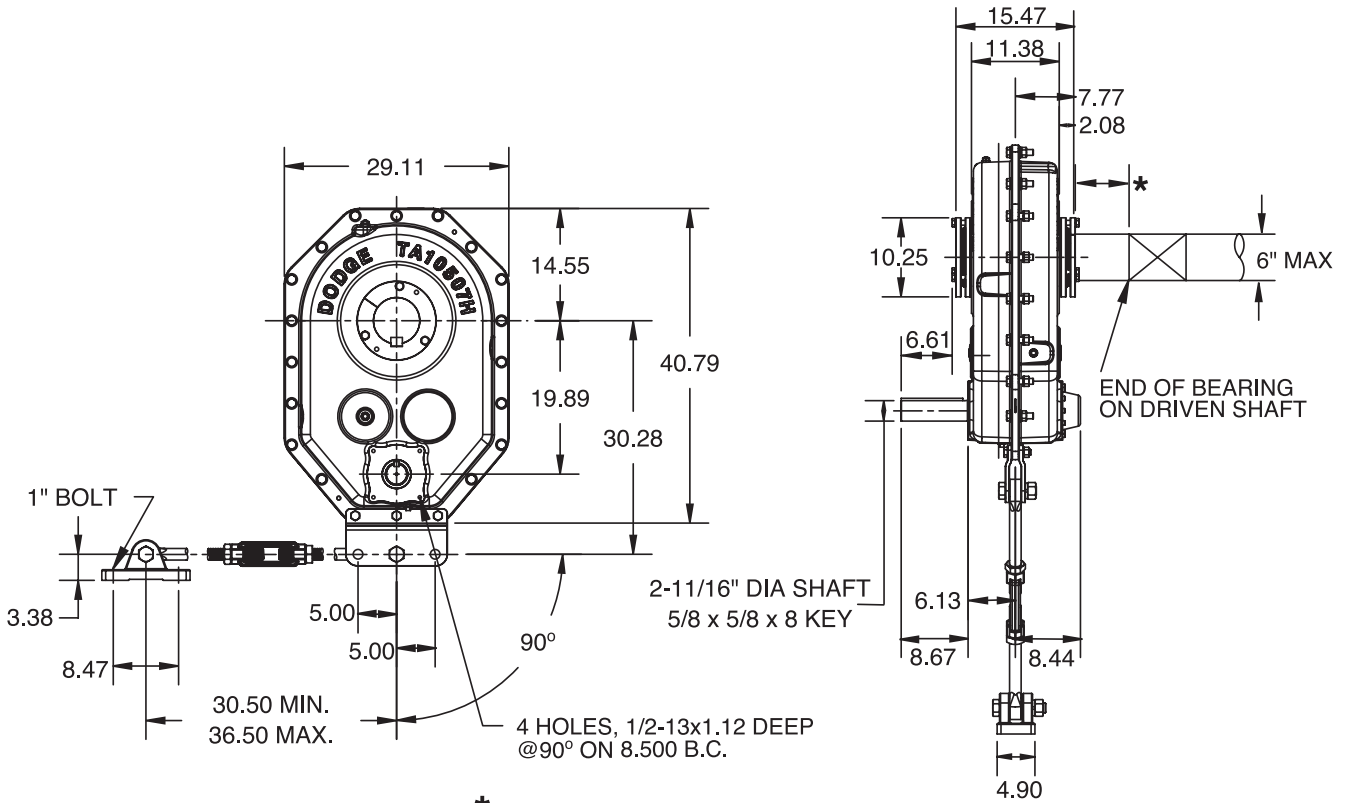
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions

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

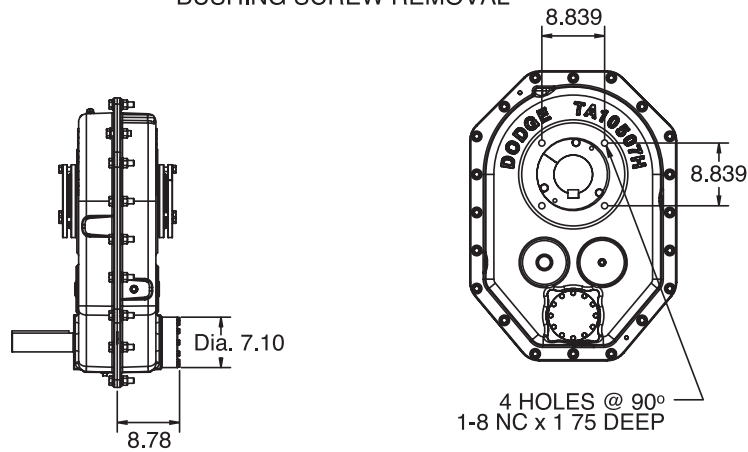


SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers Taper Bushed Reducers - TA10507H, Double Reduction



* 2.39 MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP

FLANGE MOUNTING DIMENSIONS



SELECTION/DIMENSIONS

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 shown in drawing.

TA10507H Accessories

Description	Part Number	Weight lbs.
TA10507RA Rod Assembly ⁽¹⁾ +	910109	87.0
TA10507BS Backstop Assembly ⁽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
TA4-TA12 Vertical Breather Kit	904112	3.0
TA10507H V-Ring Kit	910249	0.8
Filter Breather Kit	430049	0.2
TA10507H Lube Kit	LUBEKITA10507	121.5

(2) See page G1-128 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 G1-120 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	Part Number	Weight lbs.	Shaft Keyseat Required ^{(7) (8)}
				Short Shaft Bushing Kit ⁽⁶⁾			
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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Motor Mount Dimensions - TA10507H, Position B & D

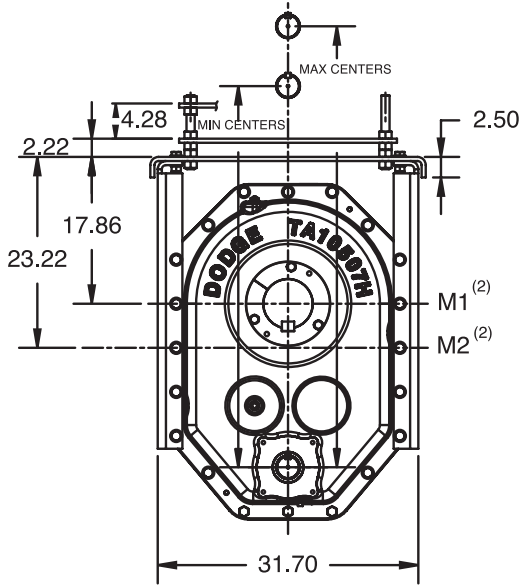
Gearing Reference Guide

TORQUE-ARM II

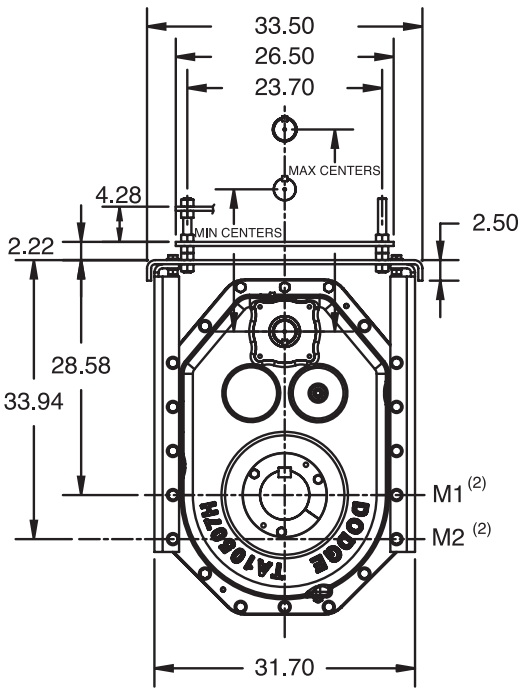
TORQUE-ARM

MAXUM

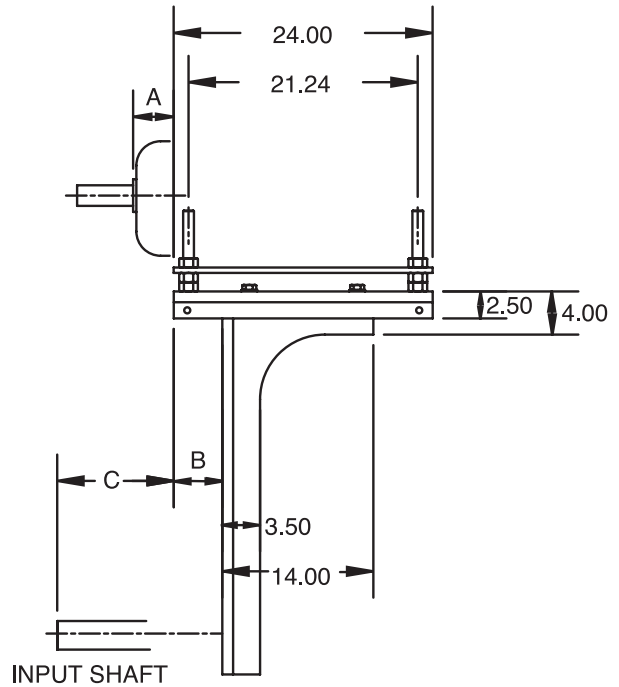
TIGEAR-2



POSITION B



POSITION D





SELECTION/DIMENSIONS

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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
							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		
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
							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

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

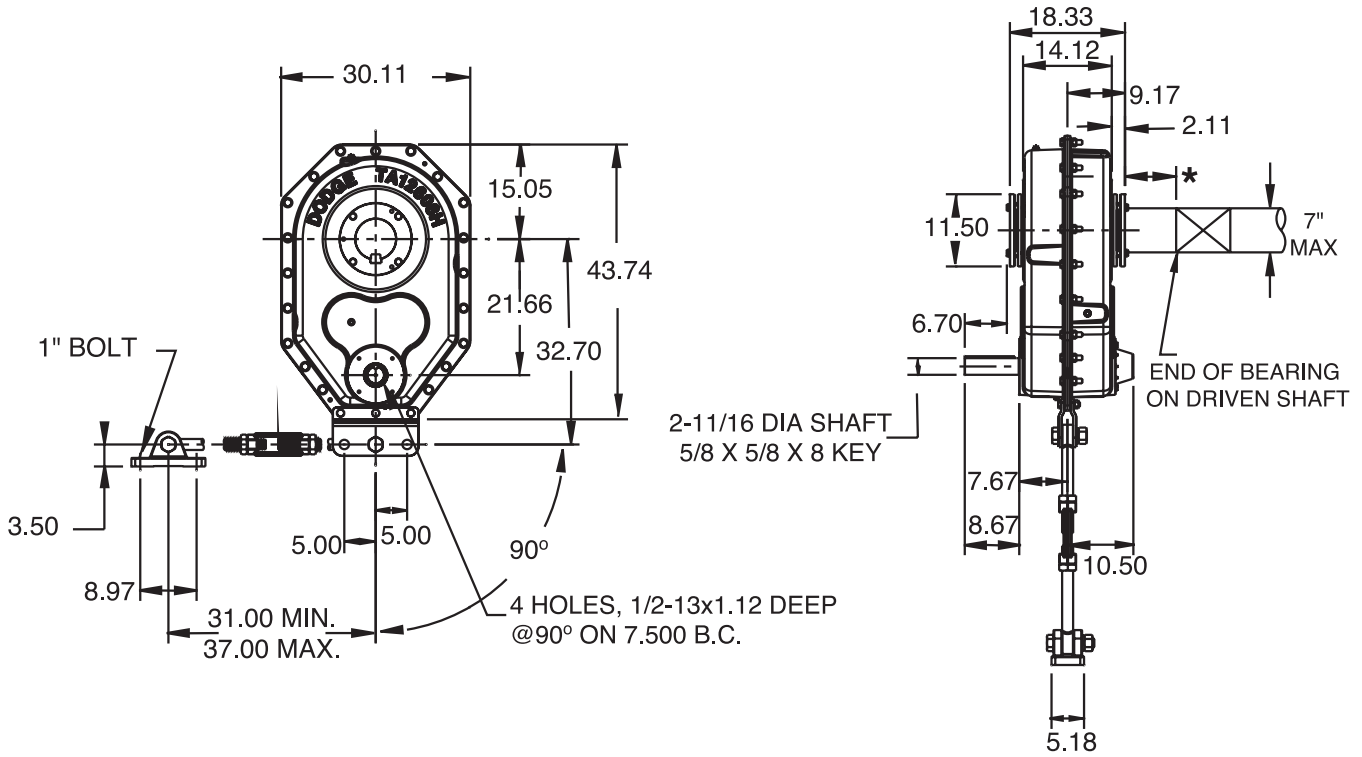
(2) M1, M2, M3 go through output shaft centerline



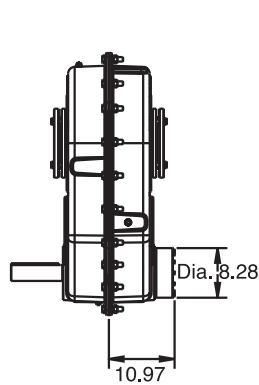
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

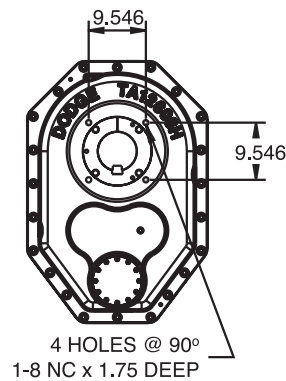
Taper Bushed Reducers - TA12608H, Double Reduction



* 2.39" MINIMUM DISTANCE FOR BUSHING SCREW REMOVAL



REDUCER WITH BACKSTOP



FLANGE MOUNTING DIMENSIONS



SELECTION/DIMENSIONS

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 shown in drawing.

TA12608H Accessories

Description	Part Number	Weight lbs.
TA12608RA Rod Assembly ⁽¹⁾ +	912109	106.4
TA12608BS Backstop Assembly ⁽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
TA4-TA12 Vertical Breather Kit	904112	3.0
TA12608H V-Ring Kit	912249	.08
Filter Breather Kit	430049	0.2
TA12608H Lube Kit	LUBEKITA12608	170.1

(2) See page G1-128 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 G1-120 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	Part Number	Weight lbs.	Shaft Keyseat Required ^{(7) (8)}
				Short Shaft Bushing Kit ⁽⁶⁾			
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

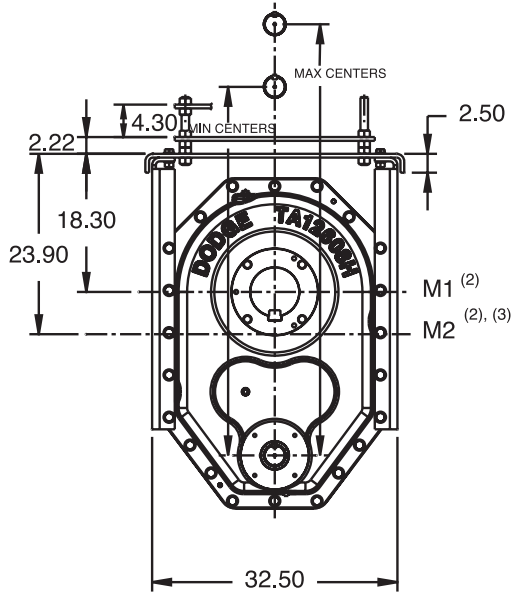
(8) Always check the driven shaft and key for strength



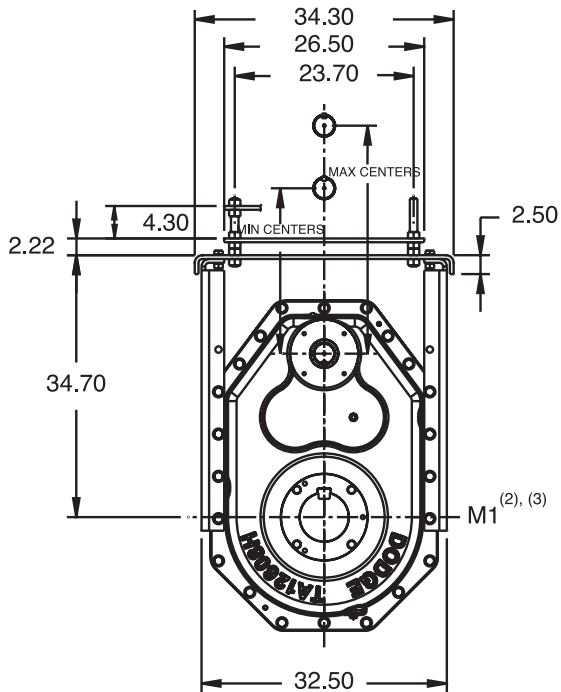
SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

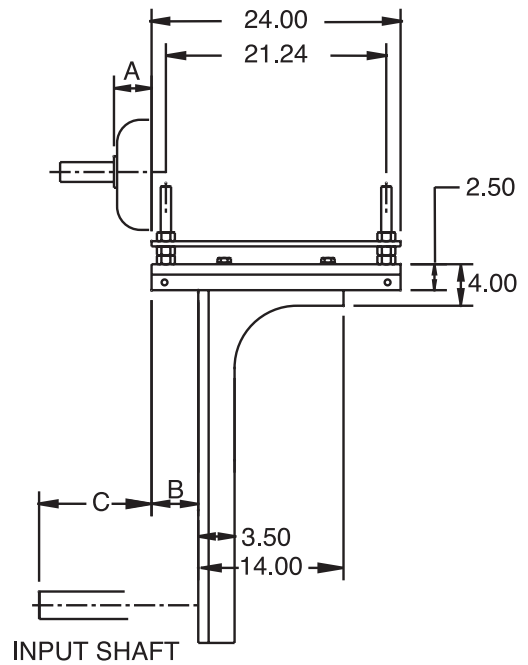
Motor Mount Dimensions - TA12608H, Position B & D



POSITION B



POSITION D



INPUT SHAFT



SELECTION/DIMENSIONS

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			
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
						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			
	B Min	B Max	C Min	C Max		A	Centers		A	Centers		A	Centers	
						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

Note:

Minimum centers contains 0.5" to allow for belt assembly

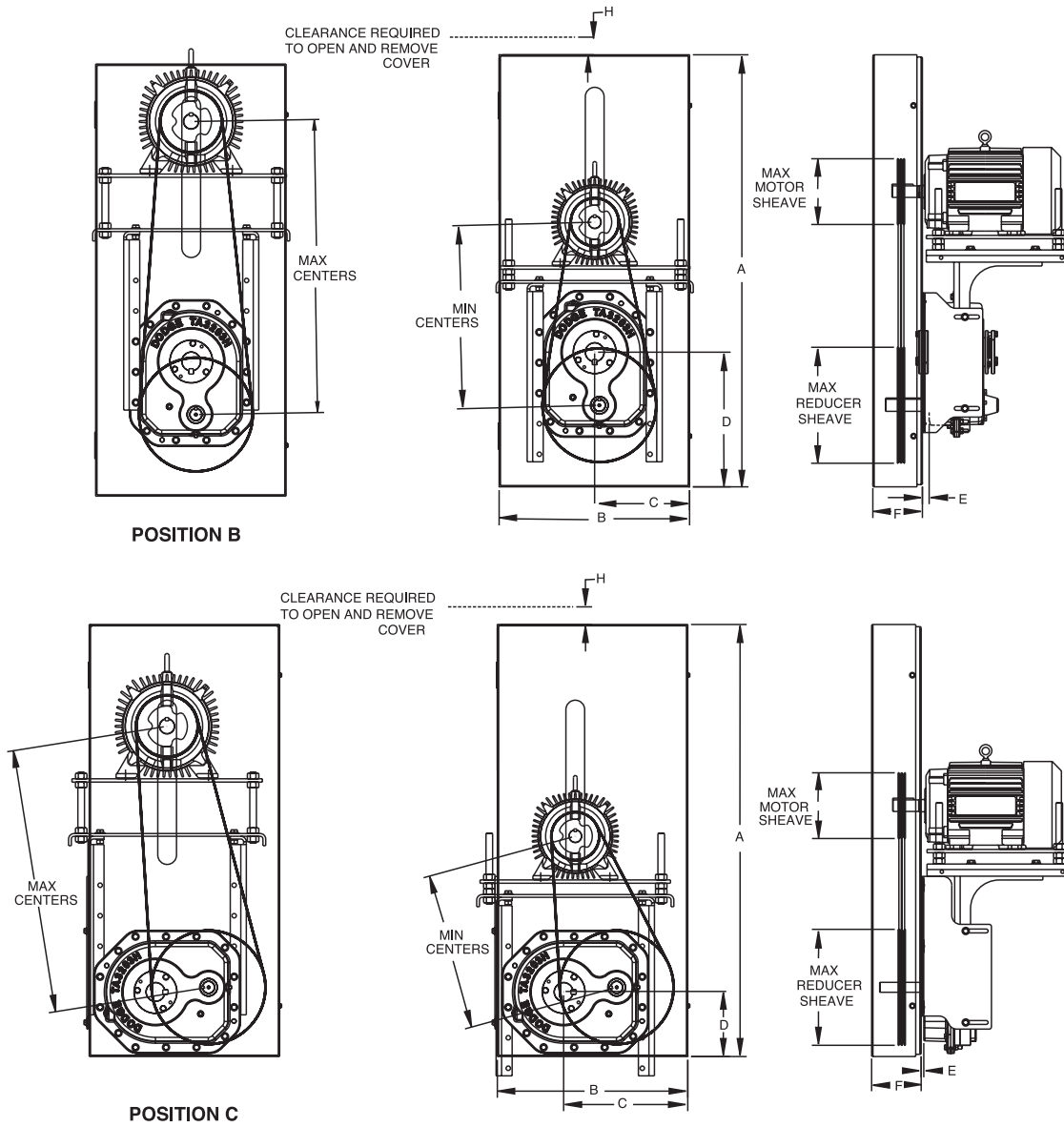
(1) Motor mount will fit NEMA and IEC frame motors; hardware are inch dimensions

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



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers Belt Guard Dimensions, TA0107L - TA5215H





SELECTION/DIMENSIONS

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:

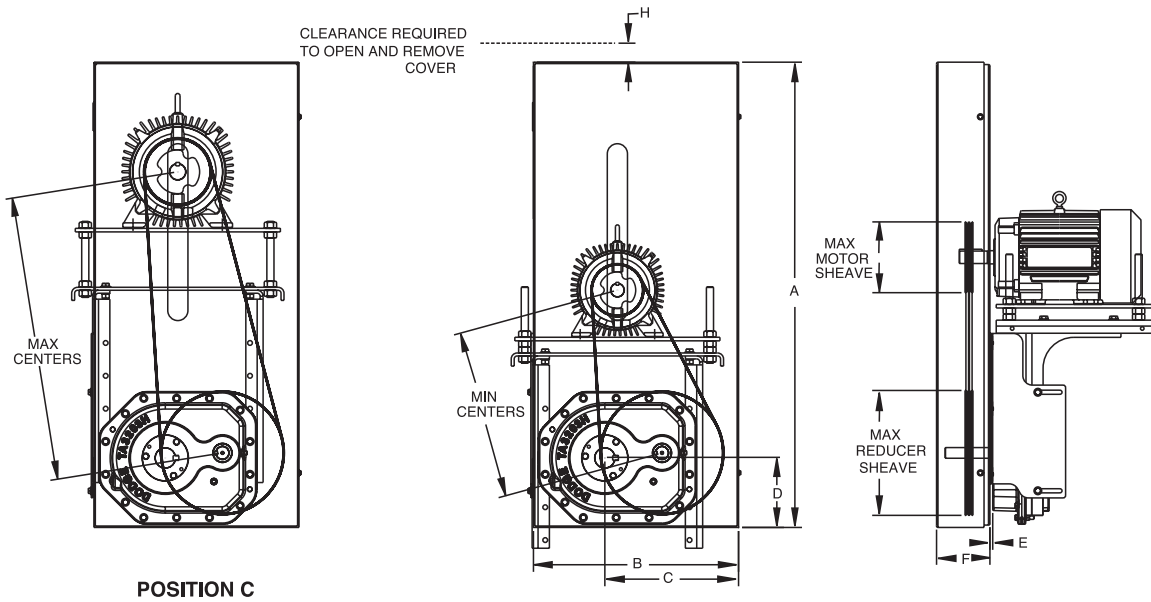
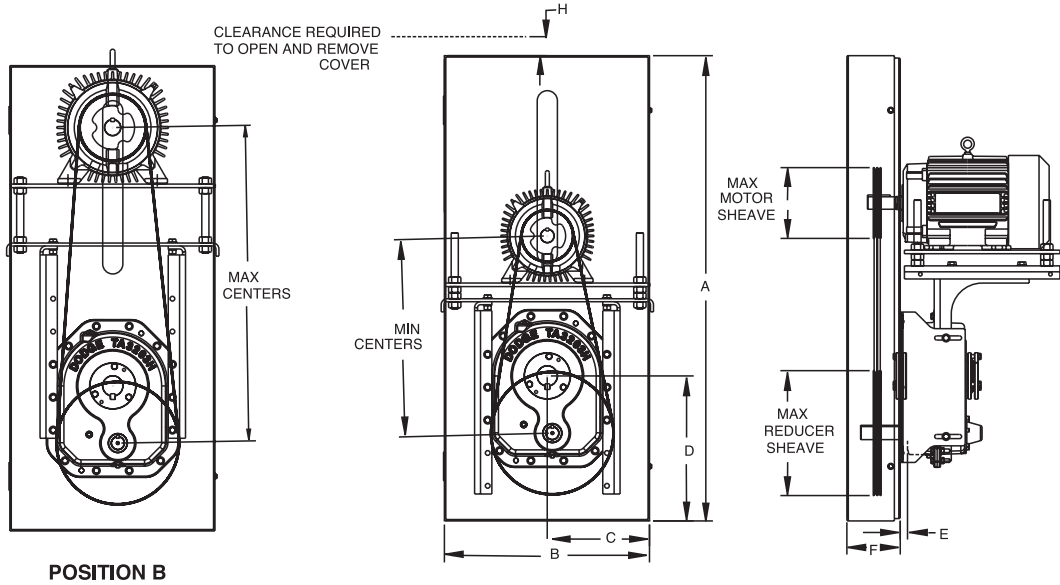
1. Minimum centers allow 0.5" for belt assembly
2. Maximum sheave diameters allow 0.5" clearance for belt assembly
3. Range of center distances on belt guard may be less than the full range of center distances available on the motor mount
4. Belt guard cover is lift-off cover construction
5. Belt guard 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.



SELECTION/DIMENSIONS

TORQUE-ARM II Shaft Mount Speed Reducers

Belt Guard Dimensions, TA6307H - TA12608H





SELECTION/DIMENSIONS

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.



SELECTION/DIMENSIONS

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 G1-127 for maximum input shaft speeds.

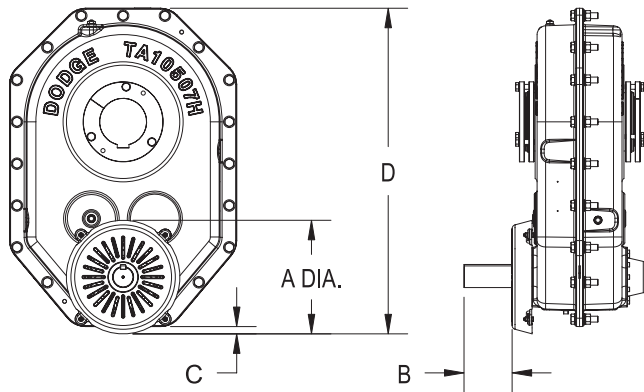


Figure 1 - Cooling Fan Assembly

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

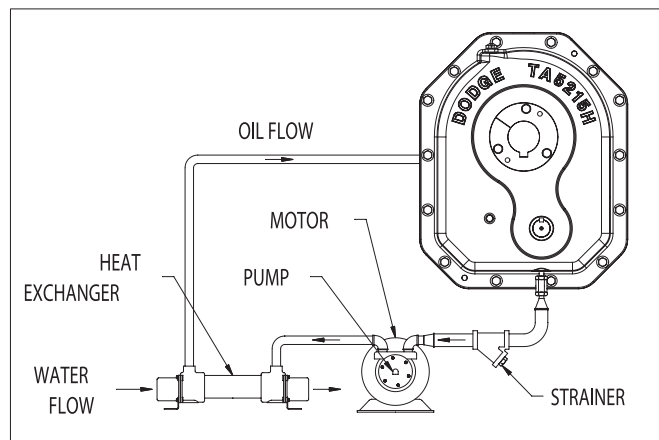
● See individual reducer pages for cooling fan part numbers

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 014148





RELATED PRODUCTS

TORQUE-ARM II Shaft Mount Speed Reducers Harsh Duty Accessories

XT Safety & Sealing And XT Hostile Environment Metal End Covers (1) (2)

Reducer Size	End Cover Part Numbers			Weight
	Closed	Weight	Split	
TA0107L	900114	0.3	900115	0.3
TA1107H	901114	0.5	901115	0.4
TA2115H	902114	0.6	902115	0.5
TA3203H	903114	1.0	903115	0.6
TA4207H	904114	1.2	904115	1.0
TA5215H	905114	1.3	905115	1.3
TA6307H	906114	1.0	906115	1.5
TA7315H	907114	1.2	907115	1.5
TA8407H	908114	2.5	908115	2.5
TA9415H	909114	4.0	909115	1.7
TA10507H	910114	4.6	910115	3.9
TA12608H	912114	4.8	912115	4.1

- (1) End covers fit both the input side and back stop side of TA II reducer. See Drawing A and Table 3 for dimensions.
- (2) If a TA II Belt Guard is used, an end cover for the input side of the reducer is not needed and will not fit.

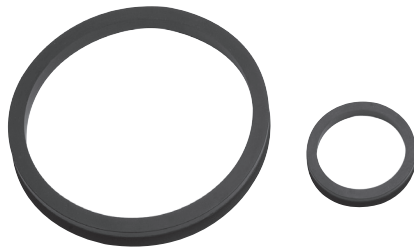
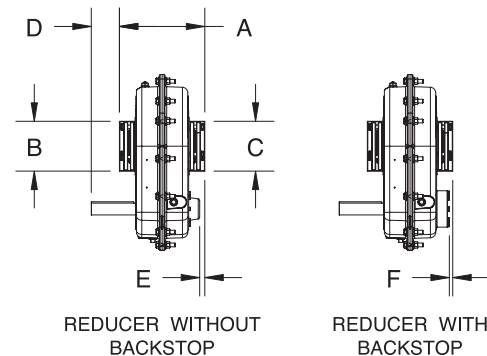


Table 3

Reducer Size	A	B	C	D	E	F
TA0107L	7.77	3.63	3.63	2.14	0.22	0.05
TA1107H	7.95	4.13	4.13	2.02	-0.05	-0.22
TA2115H	8.80	4.75	4.75	2.19	0.07	-0.10
TA3203H	9.68	5.25	5.25	3.19	0.08	-0.10
TA4207H	9.95	5.88	5.88	3.21	0.14	-0.04
TA5215H	11.57	6.75	6.75	3.81	0.70	0.46
TA6307H	12.12	6.88	6.88	5.12	0.66	0.41
TA7315H	13.18	8.13	8.13	4.92	0.00	-0.41
TA8407H	14.12	8.38	8.38	5.45	0.19	-0.06
TA9415H	15.17	9.63	9.63	6.37	-0.79	-1.20
TA10507H	16.88	10.63	10.63	6.36	0.00	-0.34
TA12608H	19.75	11.88	11.88	6.47	-0.63	-1.09

Drawing A - Metal End Cover



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.

Metal End Covers



RELATED PRODUCTS

DODGE®


TORQUE-ARM II Shaft Mount Speed Reducers Harsh Duty Accessories



Enclosed Breather Chamber

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

Filter Breather (1)

Reducer Size	Part Number
TA0-TA3	430048
TA4-TA12	430049

(1) 40 micron mesh opening in filter allows reducer to breathe, yet keep dust out, and extreme conditions.



Filter Breather



Oil Sump Heater

Oil Sump Immersion Heaters (2)

Reducer Size	Part Number
TA0 - TA3	Not Available
TA4	241103 (3)
TA5-TA6	241103
TA7-TA9	241105
TA10 - TA12	Consult DODGE

- (2) 120 volt single phase, AC cartridge heater, threads into tapped housing hole. Provides for approximately 70 degrees (F) temperature rise in one hour for cold climates. Simple time phased on/off construction without thermostat.
- (3) Reducer has to be factory modified to allow installation of sump heater. Reducer mounting position will determine modification requirement. Consult DODGE.

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
- TA II has the highest average HP ratings per case size in its class
- Meets or exceeds AGMA standards
- 36 / 18 month warranty



RELATED PRODUCTS

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

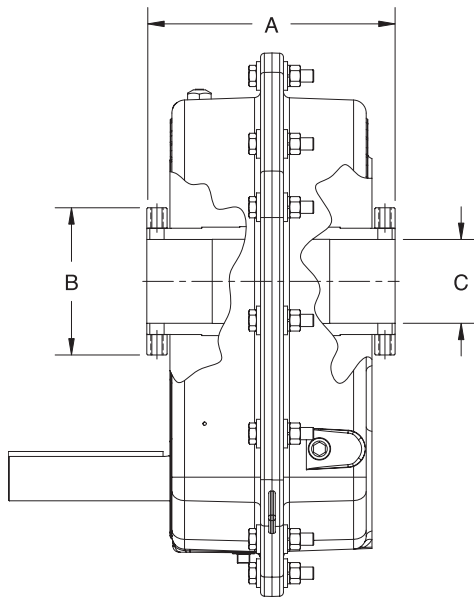


Table 4 ⁽⁴⁾

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



RELATED PRODUCTS

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



RENEWAL 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 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 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 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.



RENEWAL 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.

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
TA3203H	5:1	9031355	TA10507H	40:1	90913740
	9:1	9031369		15:1	91013615
	15:1	90313615	25:1	91013625	
	25:1	90313625	40:1	91013740	
	40:1	90313740	TA12608H	15:1	91213615
5:1	9041355	25:1		91213625	
	9:1	9041369		40:1	91213740
TA4207H	15:1	90413615	(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.		
	25:1	90413625			
	40:1	90413740			
	TA5215H	5:1			
9:1		9051369			
15:1		90513615			
25:1		90513725			
40:1	90513840				



ENGINEERING/TECHNICAL

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

+ Energy Efficient (TEFC-XE) Frame

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.



ENGINEERING/TECHNICAL

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



ENGINEERING/TECHNICAL

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



ENGINEERING/TECHNICAL

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 in Table 3 on page G1-134, showing oil level plug location, must be maintained at all times. Approximate oil quantities are shown in Table 4 on page G1-135. 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.



ENGINEERING/TECHNICAL

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:

- Assumes auxiliary cooling where recommended in the catalog.
- Pour point of lubricant selected should be at least 10°F lower than expected minimum ambient starting temperature.
- 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.
- 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.
- 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.
- Mobil SHC630 Series oil is recommended for high ambient temperatures.



ENGINEERING/TECHNICAL

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

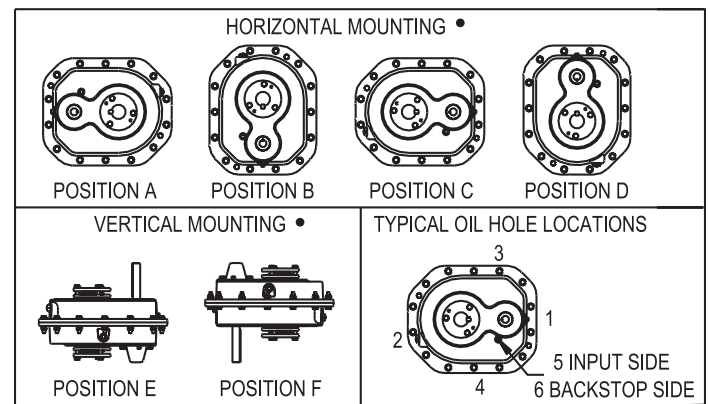
Horizontal Installations - Install the magnetic drain plug in the hole closest to the bottom of the reducer. Throw away the tape that covers the filter/ventilation plug in shipment and install plug in topmost hole. Of the 2 remaining plugs on the sides of the reducer, the lowest one is the minimum oil 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.



ENGINEERING/TECHNICAL

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 G1-133)

Mounting Position	Output Speed Above 15 RPM						Output Speed 15 RPM and Below ●					
	Vent and Plug Locations						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 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	150
220		220		EP	220
320		320			320
UNICAL					
150	Turbine Oil	150		Extra Duty HL	141
220		220		Gear Lube	207
320		320			300
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			630
320					632
TEXACO					
150	Regal Oil R&O	150		Meropa	150
220		220			220
320		320			320
SHELL					
150	Morlina Oil	150		Omala	150
220		220			220
320		320			320

+ Partial list. Consult DODGE or a lubricant manufacturer for further options



ENGINEERING/TECHNICAL

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

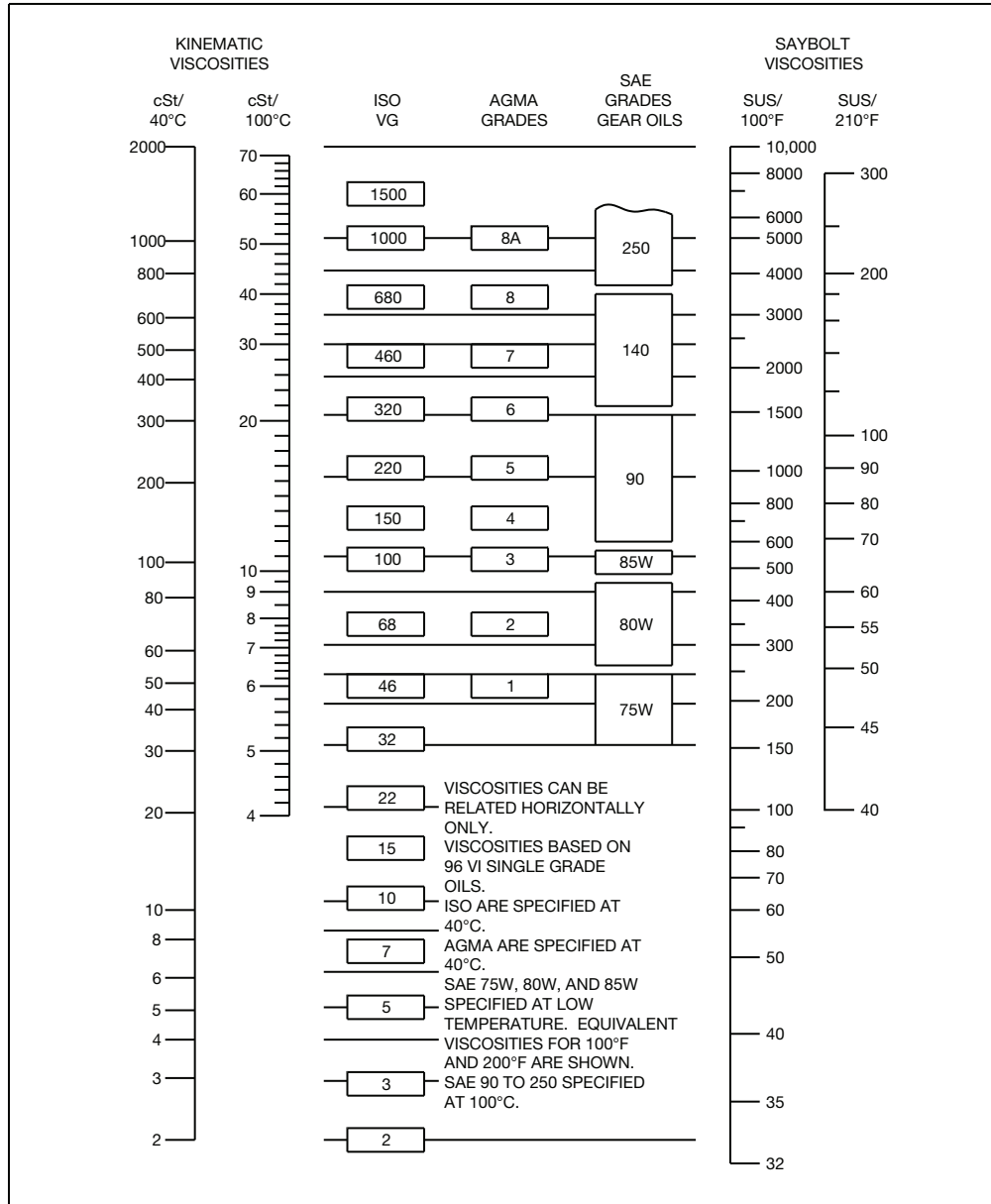
● Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug. If reducer position is to vary from those shown in Figure 1, either more or less oil may be required. Consult DODGE.



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 1005F is known can be determined by using the following conversion formula:

$$\text{SUS @ 100°F} \div 5 = \text{cSt @ 40°C}$$

ENGINEERING/TECHNICAL



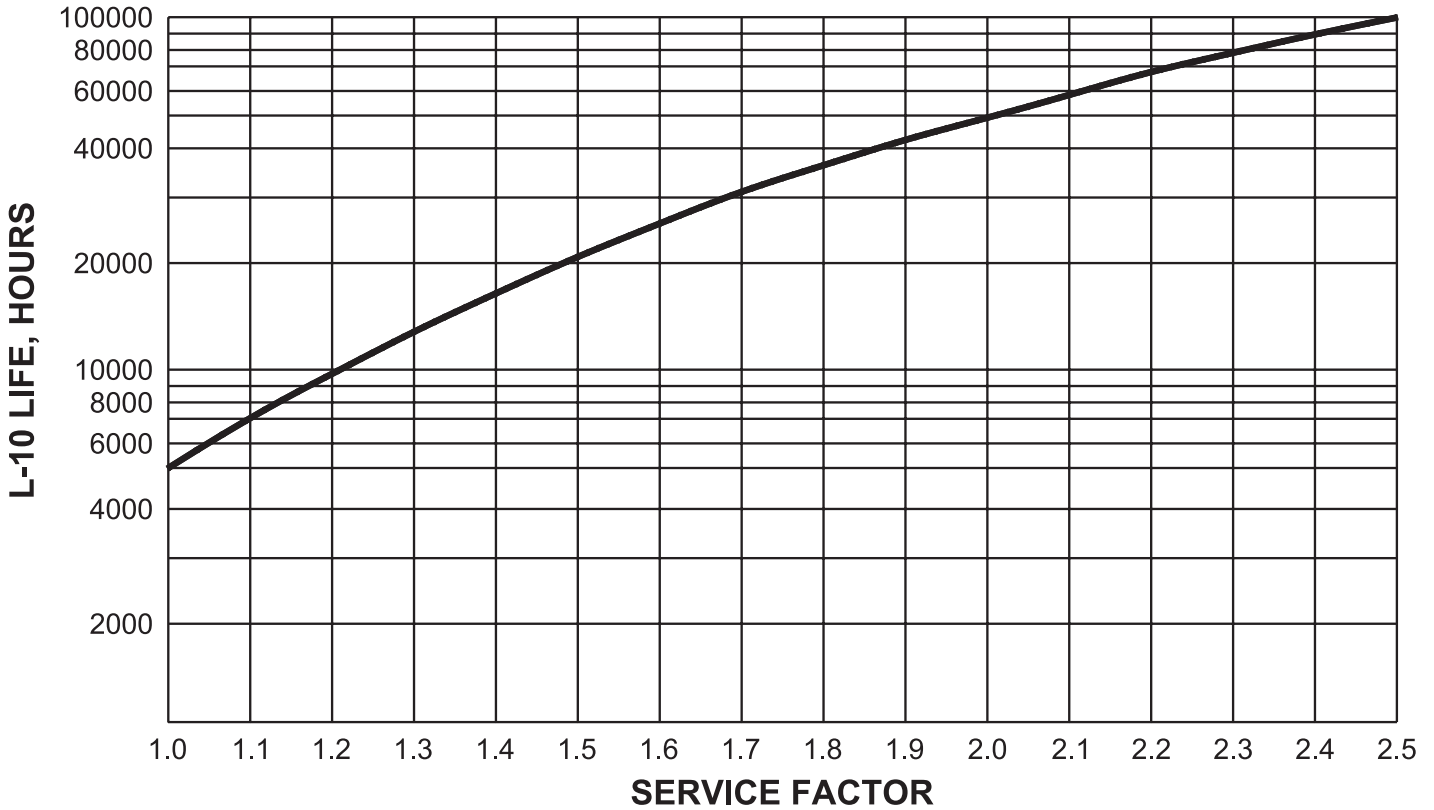
TORQUE-ARM II Shaft Mount Speed Reducers

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