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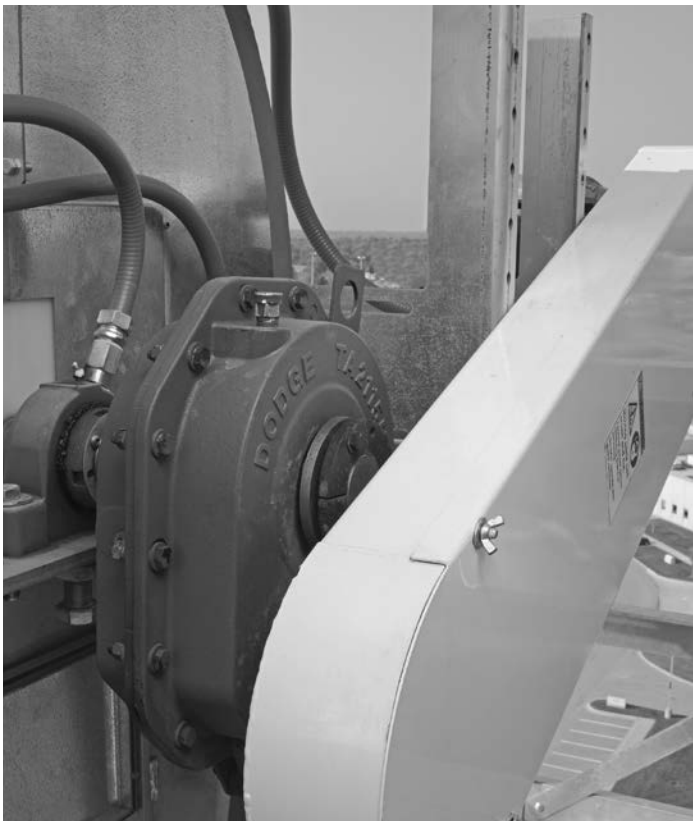
Dodge® Torque-Arm II

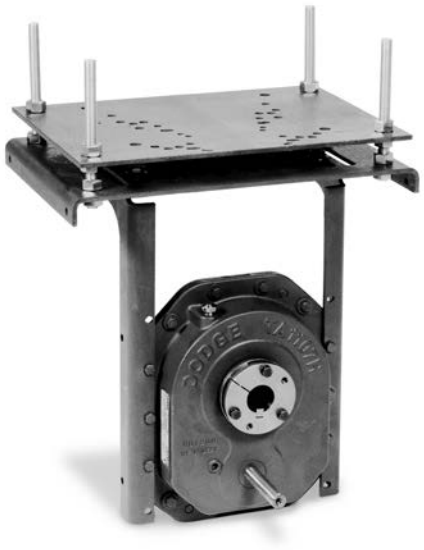
Torque-Arm II shaft mount speed reducers
Features and benefits

Since 1949, **Dodge® Torque-Arm** products have proven dependability with 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 latest generation in shaft mounted speed reducers – Torque-Arm II – offering patented innovations, heavy duty features, plus class leading torque and horsepower ratings.

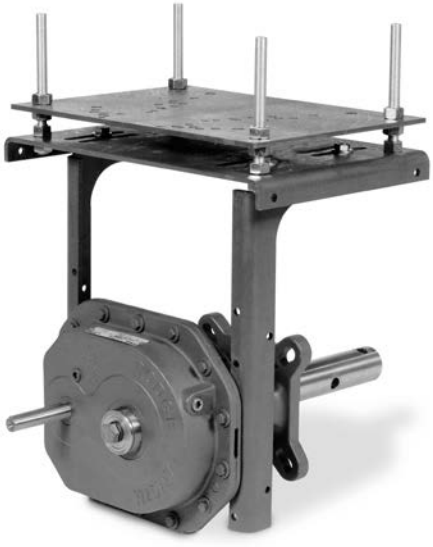


Features and Benefits

Torque-Arm II shaft mount speed reducers



Shaft mounted reducer with twin tapered



Screw conveyor drive with adapter, drive

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 (Hp) – offers unparalleled torque ratings and is quickly becoming the new industry standard.

Improved features and capabilities include:

- Twelve reducer sizes with modular accessories
- Meets or exceeds AGMA design standards including 5,000 hour L-10 bearing life, 25,000 average life
- Conformance to ATEX directive 94//9/EC guidelines
- The only backstop that works with EP additives
- Patented harsh duty sealing system with filter breather
- Single steel motor mount that works for all positions and motor heights
- 40:1 ratio added to expand standard product offering of 5, 9, 15, and 25:1
- Patented twin tapered bushing systems to accommodate shafts from 1 inch through 7 inches
- Complete Metric TA II product line available with metric reducers and bushings
- All reducers can be shaft mounted, screw conveyor, vertical and flange mounted

The class leading ratings of the Torque-Arm II line are the result of the extended gear centers, larger diameter gears, and optimized gear tooth geometry. The backstop design features centrifugal lift-off sprags for extended life and can be used with lubricantscontaining EP additives.

In addition, the Torque-Arm II line has a patented, harsh duty, premium sealing system that uses a harsh duty oil seal protected by a metal excluder seal with rubbing lip. A perfect fit for today's harsh duty industries such as aggregates, mining, cement, asphalt, mixing & milling, grain, 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, while allowing the replacement of straight bore or single bushed reducers.

Features and Benefits

Torque-Arm II shaft mount speed reducers

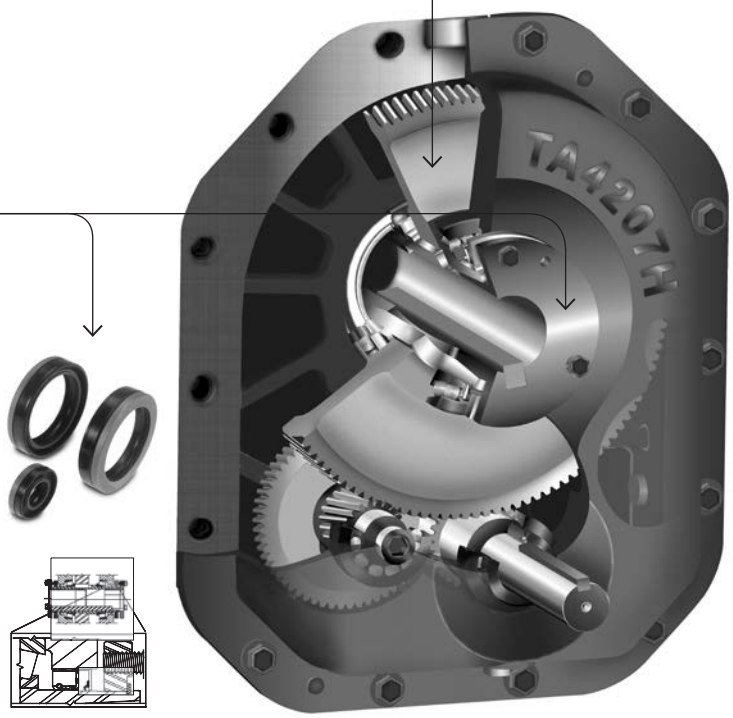
Rugged heavy duty design

Engineered for extended operating life

- AGMA standard design providing minimum average bearing life (L50) of 25,000 hours at 1.0 service factor
- Manufactured with heavy duty tapered roller bearings to withstand heavy shock loads
- Heavy duty gearing ensures high efficiency and 200% overload starting capacity at 1.0 service factor

Harsh duty seals to withstand any environment

- Dual sealing systems on all shafts consist of metal reinforced oil seals that are protected by an external metal shield and excluder lip
- Oil seals have an operating temperature range of -40°F to 300°F / -40°C to 150°C
- Compatible with both mineral and synthetic lubricants
- Easy to install, optional v-ring seals available for severe applications

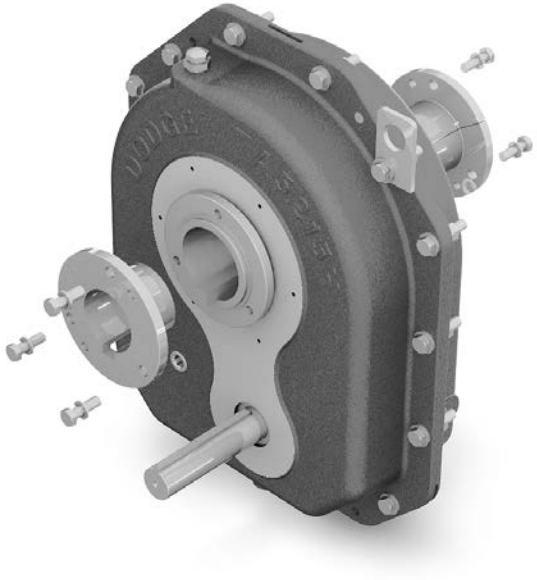


Engineered for extended operating life

- Manufactured with tapered roller bearings to withstand high shock loads
- Designed to exceed AGMA standards, the Torque-Arm II has twice the bearing life compared to most competitors
- 200% overload starting capacity ensures high efficiency and reliability

Dodge twin tapered bushings for easy installation and removal

- System features two fully split, ductile iron, 8° taper bushings that provide sturdy concentric grip on the shaft
- Eliminates fretting corrosion, which can cause difficult removal
- No special tools required for installation or removal
- Full length key ensures maximum torque transmission
- Available in standard and short shaft designs to allow for easy replacement of straight bore and single bushed reducers



Features and Benefits

Shaft mount speed reducer accessories

Belt guard package

Allows for multiple height adjustments, featuring a lift-off cover construction. Optional - New full featured Position B-M2 belt guards offer enhanced safety and maintenance features.

Motor mount

Provides stable mounting between motor and reducer to minimize overhung load and withstand heavy shock loading.

Hydra-lock breather

To be used in humid or dusty environments, this optional breather's check valve system prevents ambient conditions and improves positive maintenance practices.

Twin tapered bushing

Easy on, easy off assembly providing reliable support on both sides of reducer. Available for shorter shafts when replacing a single bushed or straight bore reducer.

Backstop

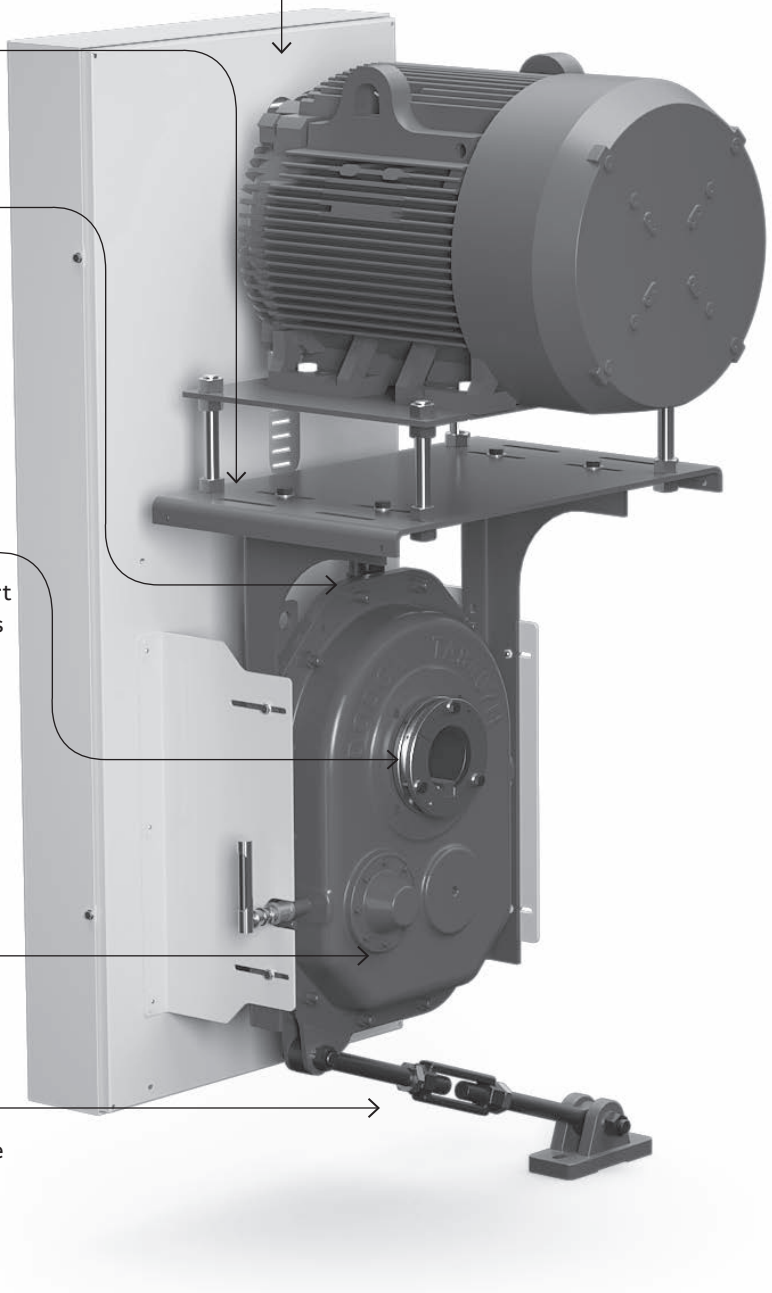
Safety feature that prevents reverse rotation when system stops. Compatible with standard and EP lubricants without requiring external lubrication.

Tie rod kit

Provides a safety link between reducer and structure to prevent system rotation. Standard rods and turnbuckles are now zinc coated for corrosion resistance.

Bushing covers

Reducers are pre-drilled and tapped to accept Dodge ABS polymer covers. Solid and pre-split versions available to accommodate both sides of reducers.



Features and Benefits

Screw conveyor speed reducer accessories

Belt guard package

Allows for multiple height adjustments, featuring a lift-off cover construction.

Motor mount

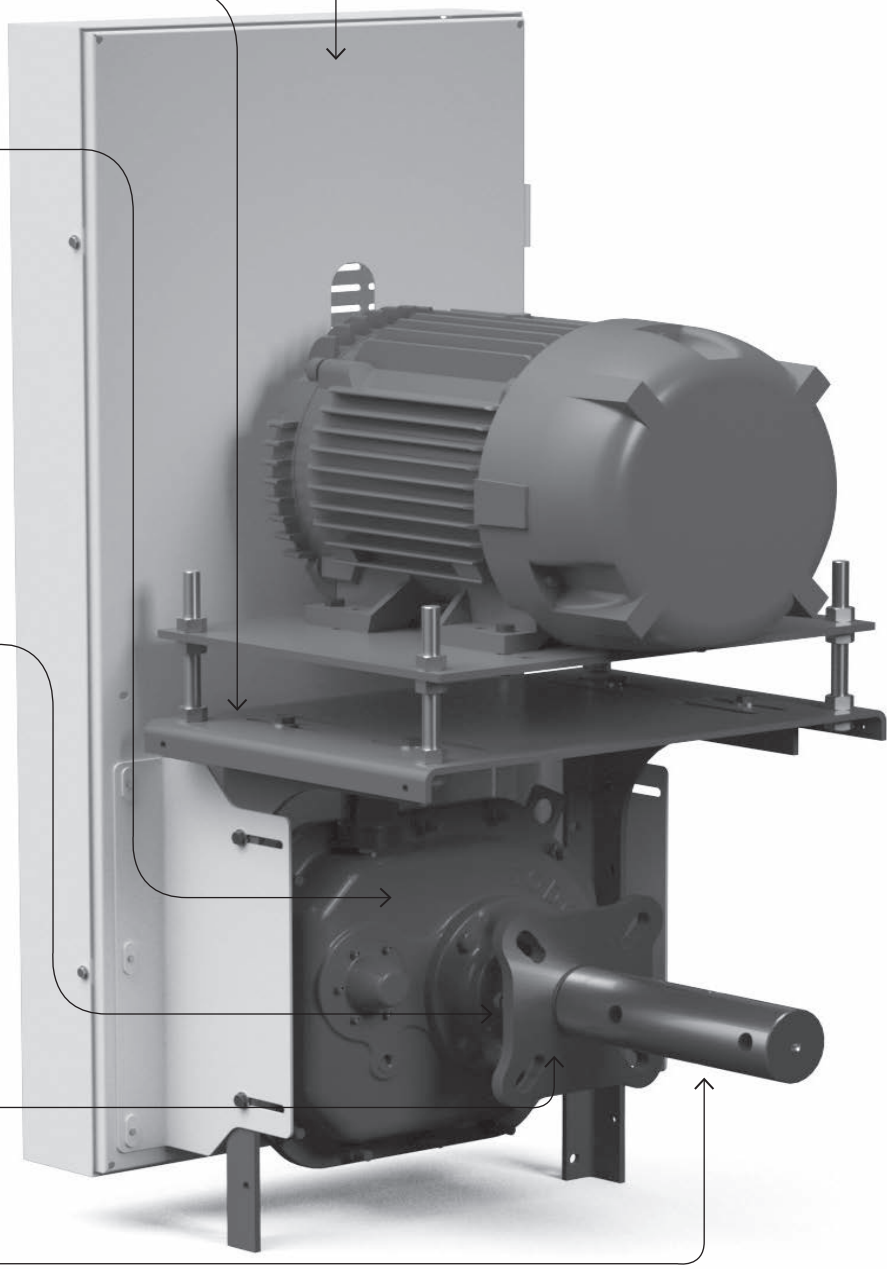
Provides stable mounting between motor and reducer to minimize overhung load and withstand heavy shock loading.

Hydra-lock breather

To be used in humid or dusty environments, this optional breathers check valve system prevents ambient conditions and improves positive maintenance practices.

Adjustable packing kit

Additional kit to bolt on the CEMA adapter in hostile environments. Packing can be retightened & replaced to extend life.



CEMA adapter

Featuring double lip seals on both surfaces. The adapter extends operating life and provides stable mounting to screw conveyor.

CEMA driveshafts

Standard 3-hole screw conveyor drive shafts are the standard for higher torque applications.

Specifications

Torque-Arm II shaft mount speed reducers

Torque-Arm II speed reducers

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

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

All gearing shall be of helical design, case carburized and precision finished to insure a high surface durability with a resilient tooth core for impact resistance and optimum service life. Gears shall be supported between bearings to maintain proper alignment of gear meshes, maximize load carrying capabilities, and to eliminate overhung loads imposed on bearings. Design meets or exceed AGMA standards.
Reducer bearings shall be of the tapered roller type, meet or exceed AGMA standards, and provide a 25,000 hour average life, a 5,000 L-10 AGMA Class I standard.

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

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

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

Screw conveyor drives

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

A standard three-hole drive shaft will be machined from a high quality alloy steel.
The drive shall conform to Conveyor Equipment Manufacturers Association (CEMA) standards.

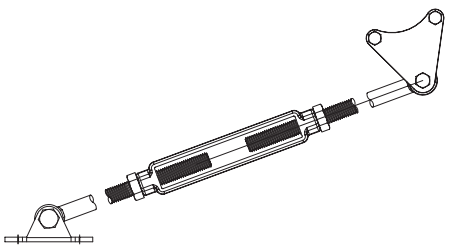
Optional all steel motor mount adjusts to various belt center distances and supports the motor.

Nomenclature

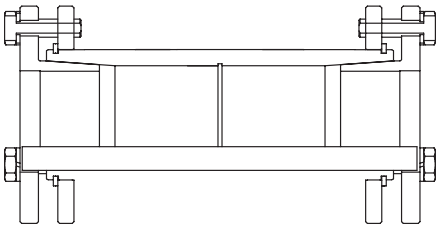
Torque-Arm II shaft mount speed reducers

Shaft mount reducer

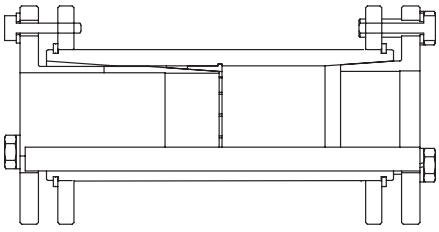
TA1107RA
TA1107 Rod assembly



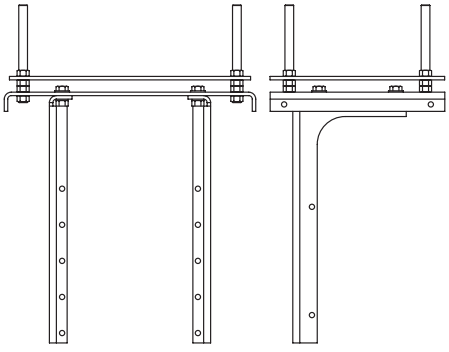
TA1107TB x 1-7/16
TA1107TB x 1-7/16 Twin tapered bushing Kit for Standard length driven shaft



TA1107TBS x 1/7-16
TA1107TB x 1-7/16 Twin tapered bushing Kit for Short driven shaft

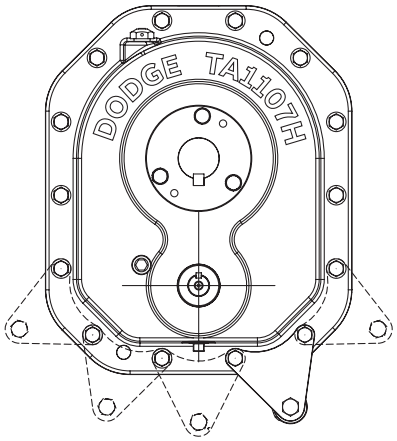


TA1107MM
TA1107MM Motor mount assembly

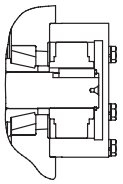


Basic Torque-Arm II reducer

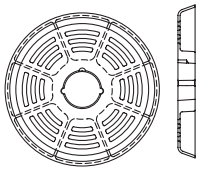
TA – Torque-Arm II ahaft mount reducer
1 – Case size 1
107 – AGMA Code reference & Traditional Bore Size
H – Heavy duty rating and extended bore size



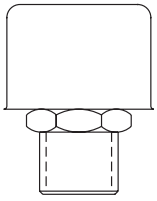
Other accessories
TA1107BS
Backstop assembly



TA4207CF
Cooling fan assembly

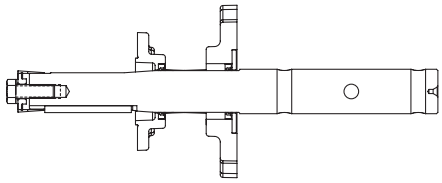


TA1-4 FB kit
Filter breather kit

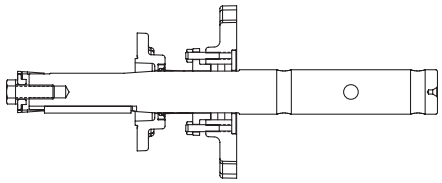


Screw conveyor drive

TA1107SCA
TA1107SCA Screw conveyor
Standard adapter and dardware kit

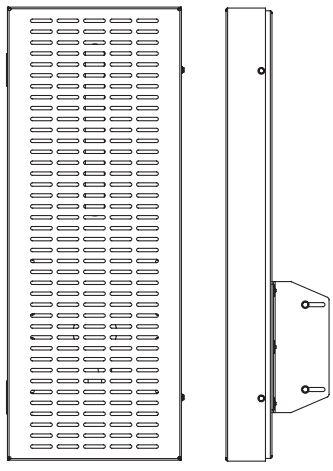


TA1107SCP Kit
TA11070SCP Screw
Adjustable packing kit



TA1107SCS x 1-7/16
TA11070SCS Screw conveyor drive
Shaft x 1-7/17” Diameter

TA1107BG
TA1107BG Belt guard



Easy selection

Torque-Arm II shaft mount speed reducers

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 "Application Classification" table, page G1-6, to determine load classification for applications under normal conditions. Find the type application and duty cycle.

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

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

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

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

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

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

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

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

See "Engineering and 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 and Dimension" pages for reducer dimensions, weights, part numbers and Torque-Arm rod mounting positions. See "Engineering and Technical" pages for reducer mounting positions.

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

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

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

Rod assembly
Bushing kit
Motor mount
Backstop assembly
Belt guard
Cooling fan
Screw Conveyor adapter
Adjustable packing kit
Drive shaft
Harsh duty breathers
Vertical breather kKit

Easy selection

method for electric motors for Torque-Arm II reducer and screw conveyor drive reducer applications

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

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

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

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

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

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

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 the table on page G1-6, locate the appropriate application, “belt conveyors, uniformly loaded or fed” for over 10 hours per day. This load is classified as a Class II application.

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

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

Step 4: Check dimensions and weights -See “Selection and 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 and Technical” pages for information on reducer mounting positions.

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

Step 6: Select accessories - See “Selection and 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

method for electric motors for Torque-Arm II reducer and screw conveyor drive reducer applications

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 the table on page G1-6, locate the appropriate application, “conveyors, general purpose; screw conveyor - heavy duty, not uniformly loaded” for 3 to 10 hours per day. This load is classified as a Class II application.

Step 2: Determine reducer size – From Class II selection table, page G2-22, find the column for 5 Hp and read down to 72 RPM. A TA1107H25 reducer is the correct selection. See “Engineering and Technical” pages to compare input and output speed and overhung load application requirements with reducer ratings.

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

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

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

Step 6: Select accessories – See “Selection and Dimensions” pages to pick out screw conveyor accessories for this application.

TA1107SCA Adapter and hardware kit, to mount reducer to trough end of screw conveyor.

TA1107SCP Adjustable packing kit, to add additional sealing protection to reducer drive.

Selection

Torque-Arm II shaft mount speed reducers

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

Name _____ Company name _____

Phone no. _____ Fax no. _____

Application data

Type of driven equipment _____

Hours of service per day _____ Class of service _____

Type of load Uniform _____ Moderate _____ Shock _____

Motor type Hp _____ RPM _____ Frame size _____ Shaft size _____

RPM of driven equipment _____ Driven shaft size _____

Type of reducer mounting Horizontal _____ Vertical: Input up _____

Input down Incline (degree of) _____

Unusual ambient temperature _____

Other pertinent application characteristics (i.e.,dusty environment, reversing duty, start/stop cycles, etc.) _____

_____

Reducer drive selection

Step 1 – Determine class of service _____

Step 2 – From appropriate service class table, select reducer size and ration that meets application Hp and driven RPM requirements

Twin taper bushed _____ Short shaft twin tapered _____

Step 3 – Select reducer accessories required for application

Motor mount _____ Tie rod _____ Backstop _____

Belt guard _____ Cooling fan _____

Bushing cover _____ Harsh duty breather _____

Other _____

Belt drive specification

Service factor _____ Belt drive ratio needed _____

Belt center distance _____ Type of belt desired _____

Driver: Shaft diameter _____ Driven Shaft diameter _____

Sheave _____ Sheave _____

Bushing _____ Bushing _____

Belts Size _____ Quantity _____

Selection

Screw conveyor shaft mount speed reducers

This is a handy reference sheet for quick selection and specification of Dodge screw conveyor drive reducers.

Use it to identify information needed to make an accurate selection with a step-by-step selection format for choosing reducer, accessories and v-drive.

Use this page to make your own selections or send this form, with application data to Dodge for assistance.

Name _____ Company name _____

Phone no. _____ Fax no. _____

Application data

Type of driven equipment _____

Hours of service per day _____ Class of service _____

Type of load Uniform _____ Moderate _____ Shock _____

Motor type Hp _____ RPM _____ Frame size _____ Shaft size _____

Screw conveyor RPM _____

Drive shaft diameter and type _____

Adapter type _____

Unusual ambient temperature _____

Other pertinent application characteristics (i.e.,dusty environment, reversing duty, start/stop cycles, etc.) _____

Reducer drive selection

Step 1 – Determine class of service

Step 2 – From appropriate service class table, select reducer size and rotation that meets application Hp and driven RPM requirements

_____

Step 3 – Select drive shaft with diameter to fit screw size _____

Determine type of drive shaft needed 3-hole standard _____ 3-hole stainless _____

Step 4 – Select adapter Standard _____

Adjustable packing kit _____

Step 5 – Select accessories required for application

Motor mount _____ Belt guard _____ Cooling fan _____

Bushing cover _____ Harsh duty breather _____ Other _____

V-belt drive specification

Service factor _____ V-belt drive ratio needed _____

Belt center distance _____ Type of belt desired _____

Driver:	Shaft diameter		Driven	Shaft diameter
	Sheave			Sheave
	Bushing			Bushing
Belts	Size		Quantity	

Selection

Application classification and class numbers
Torque-Arm II shaft mount speed reducers

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

Selection

Torque-Arm II shaft mount speed reducers
Class I selections ★, service factor 1.0

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
1/4	4-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1/3	4	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	5-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1/2	4	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	5-7	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	8-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
3/4	4-6	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
3/4 (cont)	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	–
	13-23	TA1107H31	4.9	–
		TA1107H25	6.2	–
		TA1107H15	5.5	–
1-1/2 (cont)	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	–
3	4-6	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	7-10	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–

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

Selection

Torque-Arm II shaft mount speed reducers
Class I selections ★, service factor 1.0

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
3 (cont)	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	–
	47-50	TA1107H31	4.4	–
		TA1107H25	5.4	–
		TA1107H15	4.9	–
	51-80	TA1107H25	5.4	–
		TA1107H15	4.9	–
	81-89	TA1107H15	4.6	–
		TA1107H09	7.7	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	
7-1/2	4	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	5-6	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	7-9	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	10-15	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	16-25	TA4207H40	4.8	–
		TA4207H25	5.4	–
		TA4207H15	7.9	–
	26-39	TA3203H32	4.2	–
		TA3203H25	4.4	–
		TA3203H15	4.4	–
	40-50	TA2115H33	3.2	–
		TA2115H25	3.1	–
		TA2115H15	3.2	–
	51-72	TA2115H25	3.1	–
		TA2115H15	3.6	–
	73-80	TA1107H25	5.2	–
		TA1107H15	4.7	–
	81-89	TA1107H15	4.6	–
		TA1107H09	7.7	–
	90-120	TA1107H15	4.6	–
		TA1107H09	7.5	–
		TA1107H05	12.5	–
	121-145	TA1107H09	7.1	–
		TA1107H05	11.2	–
	146-163	TA0107L09	4.8	–
		TA1107H05	10.3	–
	164-200	TA0107L09	4.7	–
		TA0107L05	7.4	–
	201-400	TA0107L05	6.9	
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	–
10 (cont)	21-32	TA4207H40	4.7	–
		TA4207H25	5.2	–
		TA4207H15	7.7	–
	34-50	TA3203H32	4.1	–
		TA3203H25	4.3	–
		TA3203H15	4.3	–
	51-55	TA3203H25	4.2	–
		TA3203H15	4.2	–
	56-80	TA2115H25	3.1	–
		TA2115H15	3.6	–
	81-89	TA2115H15	3.7	–
		TA2115H09	6.1	–
	90-100	TA2115H15	3.7	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	101	TA1107H15	4.5	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	102-118	TA1107H15	4.5	–
		TA1107H09	7.4	–
		TA2115H05	6.6	–
	119-120	TA1107H15	4.4	–
		TA1107H09	7.1	–
		TA1107H05	11.2	–
	121-200	TA1107H09	7.1	–
		TA1107H05	11.2	–
	201-276	TA1107H05	9.1	–
	277-400	TA0107L05	5.8	–
15	4	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	5-6	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	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	–

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

Selection

Torque-Arm II shaft mount speed reducers
Class I selections ★, service factor 1.0

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
15 (cont)	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	–
	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	–
20 (cont)	106-120	TA4207H15	6.1	–
		TA3203H09	5.6	–
		TA3203H05	8.6	–
	121-141	TA3203H09	5.7	–
		TA3203H05	7.7	–
	142-200	TA2115H09	6.5	–
		TA3203H05	7.2	–
	201-238	TA3203H05	7.0	–
	239-400	TA2115H05	5.7	–
25	4	TDT1425 †	15.0	–
	5	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	6-7	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	8-10	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	11-15	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	16-23	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	24-32	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	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	–
30 (cont)	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	–
	81-89	TA4207H15	6.4	–
		TA4207H09	10.1	–
	90-120	TA4207H15	6.3	–
		TA4207H09	9.9	–
		TA5215H05	13.9	–
	121-132	TA4207H09	9.3	–
		TA5215H05	11.8	–
	133-200	TA4207H09	9.1	–
		TA4207H05	9.2	–
	201-215	TA4207H05	9.3	–
	216-400	TA3203H05	7.0	–
40	4	TDT1530 †	15.0	–
	5-6	TDT1425 †	15.0	–
	7	TA12608H40	17.2	–
		TDT1425 †	15.0	–
	8	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	9-12	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	13-17	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.5	–
	18-25	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–

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

Selection

Torque-Arm II shaft mount speed reducers
Class I selections ★, service factor 1.0

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
40 (cont)	26-38	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	39-50	TA6307H40	6.2	–
		TA6307H25	6.2	–
		TA6307H15	6.2	–
	51-54	TA6307H25	6.2	–
		TA6307H15	6.2	–
	55-80	TA5215H25	5.4	–
		TA5215H15	6.3	–
	81-89	TA5215H15	6.0	–
		TA5215H09	9.1	–
	90-102	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA5215H05	13.9	–
	103-107	TA4207H15	6.1	–
		TA5215H09	8.6	–
		TA5215H05	12.9	–
	108-120	TA4207H15	6.0	–
		TA4207H09	9.5	–
		TA5215H05	12.6	–
	121-182	TA4207H09	9.3	–
		TA5215H05	11.8	–
	183-185	TA4207H09	8.1	–
		TA4207H05	9.1	–
	186-200	TA4207H09	8.0	–
		TA4207H05	9.2	–
	201-400	TA4207H05	9.8	–
50	4-5	TDT1530 †	15.0	–
	6-8	TDT1425 †	15.0	–
	9-10	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	11-15	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	16-17	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.5	–
	18-21	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.7	–
	22-27	TA8407H40	6.2	Fan
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	28-32	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	33-49	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
50 (cont)	50	TA6307H40	6.2	Fan
		TA6307H25	6.2	–
		TA6307H15	6.2	–
	51-69	TA6307H25	6.2	–
		TA6307H15	6.2	–
	70-80	TA5215H25	5.3	Fan
		TA5215H15	6.1	–
	81-89	TA5215H15	6.0	–
		TA5215H09	9.1	–
	90-93	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA6307H05	15.1	–
	94-120	TA5215H15	5.6	–
		TA5215H09	8.8	–
		TA5215H05	13.6	–
	121-144	TA5215H09	8.3	–
		TA5215H05	11.8	–
	145-200	TA4207H09	8.9	–
		TA5215H05	11.2	–
	201-242	TA5215H05	9.9	–
	243-400	TA4207H05	9.7	–
60	4-6	TDT1530 †	15.0	–
	7-10	TDT1425 †	15.0	–
	11-13	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.9	–
	14-18	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	19	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.7	–
	20-26	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	27-30	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA8407H15	6.2	–
	31-39	TA8407H40	6.2	Fan
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	40-50	TA7315H40	6.2	Fan
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	51-60	TA7315H25	6.2	–
		TA7315H15	6.2	–
	61-80	TA6307H25	6.2	–
		TA6307H15	6.2	–
	81-88	TA6307H15	6.3	–
		TA6307H09	9.9	–
	89	TA5215H15	5.7	Fan
		TA6307H09	9.9	–
60 (cont)	90-93	TA5215H15	5.7	–
		TA6307H09	10.1	–
		TA6307H05	15.1	–
	94-115	TA5215H15	5.6	–
		TA5215H09	8.8	–
	116-120	TA5215H15	5.1	Fan
		TA5215H09	8.4	–
	121-131	TA5215H09	8.3	–
		TA6307H05	14.5	–
	132-200	TA5215H09	7.9	–
		TA5215H05	11.4	–
	201-400	TA5215H05	9.9	–
75	5-8	TDT1530 †	15.0	–
	9-13	TDT1425 †	15.0	–
	14-16	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.2	–
	17-23	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	24-33	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.8	–
	34-37	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA8407H15	6.2	Fan
	38-49	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA8407H15	6.2	–
	50	TA7315H40	6.2	Fan
		TA7315H25	6.2	Fan
		TA7315H15	6.2	–
	51-77	TA7315H25	6.2	Fan
		TA7315H15	6.2	–
	78-80	TA6307H25	6.2	Fan
		TA6307H15	6.2	Fan
	81-89	TA6307H15	6.3	Fan
		TA6307H09	9.9	Fan
	90-101	TA6307H15	6.5	Fan
		TA6307H09	10.3	Fan
		TA7315H05	14.8	–
	102-120	TA6307H15	6.7	Fan
		TA6307H09	10.8	Fan
		TA6307H05	15.1	–
	121-129	TA6307H09	10.8	Fan
		TA6307H05	14.5	–
	130-196	TA5215H09	7.9	–
		TA6307H05	14.4	–
	197-200	TA5215H09	5.9	Fan
		TA6307H05	13.9	–
	201-208	TA6307H05	13.8	–

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

Selection

Torque-Arm II shaft mount speed reducers
Class I selections ★, service factor 1.0

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
100	209-400	TA5215H05	9.7	–
	6-11	TDT1530 †	15.0	–
	12-17	TDT1425 †	15.0	–
	18-19	TA12608H40	17.1	Fan
		TA12608H25	9.5	–
		TA12608H15	14.4	–
	20-22	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.6	–
	23-26	TA10507H40	8.5	Fan
		TA10507H25	8.5	Fan
		TA10507H15	10.7	–
	27-31	TA10507H40	8.5	Fan
		TA10507H25	8.5	–
		TA10507H15	10.6	–
	32-46	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.8	Fan
	47-50	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA8407H15	6.2	Fan
	51-68	TA8407H25	6.2	Fan
		TA8407H15	7.0	Fan
	69-80	TA7315H25	6.2	Fan
		TA7315H15	6.2	Fan
	81-110	TA7315H15	6.2	Fan
		TA7315H09	8.5	Fan
	111	TA6307H15	6.6	Fan
		TA6307H09	10.5	Fan
	112-120	TA6307H15	6.7	Fan
		TA6307H09	10.8	Fan
		TA7315H05	13.2	–
	121-157	TA6307H09	10.9	Fan
		TA7315H05	12.8	–
	158-200	TA6307H09	10.9	Fan
		TA6307H05	14.2	–
	201-400	TA6307H05	13.8	–
125	8-14	TDT1530 †	15.0	–
	15-21	TDT1425 †	15.0	–
	22-26	TA12608H40	17.1	Fan
		TA12608H25	9.5	Fan
		TA12608H15	14.8	Fan
	27-28	TA12608H40	17.1	Fan
		TA12608H25	9.5	Fan
		TA12608H15	14.9	–
	29	TA10507H40	8.5	Fan
		TA12608H25	9.5	Fan
		TA12608H15	14.9	–
	30-40	TA10507H40	8.5	Fan
		TA10507H25	8.5	Fan
		TA10507H15	10.8	Fan
125 (cont)	41-50	TA9415H40	8.0	P&C
		TA9415H25	8.0	P&C
		TA9415H15	10.8	Fan
	51-59	TA9415H25	8.0	P&C
		TA9415H15	10.8	Fan
	60-80	TA8407H25	6.2	P&C
		TA8407H15	7.5	Fan
	81-88	TA8407H15	7.8	Fan
	89-90	TA7315H15	6.2	Fan
	91-120	TA7315H15	6.2	Fan
		TA7315H09	8.5	Fan
	121-149	TA7315H09	8.6	Fan
	150-160	TA6307H09	10.9	Fan
	161-200	TA6307H09	10.8	Fan
		TA7315H05	11.9	–
	201-225	TA7315H05	11.7	–
	226-368	TA6307H05	12.8	–
	369-400	TA6307H05	10.9	Fan
150	9-17	TDT1530 †	15.0	–
	18-26	TDT1425 †	15.0	–
	27	TA12608H40	17.1	P&C
	28-34	TA12608H40	17.1	Fan
		TA12608H25	9.5	Fan
		TA12608H15	15.1	Fan
	35-36	TA10507H40	8.5	P&C
		TA12608H25	9.5	Fan
		TA12608H15	15.2	Fan
	37-49	TA10507H40	8.5	P&C
		TA10507H25	8.5	Fan
		TA10507H15	11.3	–
	50	TA9415H40	8.0	P&C
		TA9415H25	8.0	P&C
		TA9415H15	10.8	Fan
	51-72	TA9415H25	8.0	P&C
		TA9415H15	10.8	Fan
	73-80	TA8407H25	6.2	P&C
		TA8407H15	7.5	Fan
	81-112	TA8407H15	8.6	Fan
	113	TA7315H15	6.2	Fan
	114-120	TA7315H15	6.2	Fan
		TA7315H09	8.5	Fan
	121-200	TA7315H09	8.6	Fan
	213-400	TA7315H05	11.5	–
200	12-23	TDT1530 †	15.0	–
	24-35	TDT1425 †	15.0	–
	36-47	TA12608H40	17.1	P&C
		TA12608H25	9.5	Fan
		TA12608H15	15.6	Fan
	48-50	TA10507H40	8.5	P&C
		TA12608H25	9.5	P&C
		TA12608H15	15.7	Fan
200 (cont)	52-67	TA12608H25	9.6	Fan
		TA12608H15	15.7	Fan
		TA10507H25	8.8	P&C
		TA10507H15	12.4	Fan
	68	TA9415H25	8.0	P&C
		TA10507H15	12.5	Fan
	69-80	TA9415H25	8.0	P&C
		TA9415H15	10.7	P&C
	81-100	TA9415H15	10.5	P&C
	101-120	TA8407H15	8.7	P&C
	172-200	TA7315H09	8.4	P&C
	331-400	TA7315H05	10.8	Fan
250	16-30	TDT1530 †	15.0	–
	31-43	TDT1425 †	15.0	Fan
	44-50	TA12608H40	17.1	P&C
		TA12608H25	9.5	P&C
		TA12608H15	15.7	P&C
	51-67	TA12608H25	10.4	P&C
		TA12608H15	16.1	P&C
	68-75	TA10507H25	9.2	P&C
		TA10507H15	13.0	P&C
	76-80	TA10507H25	9.4	P&C
		TA10507H15	13.4	P&C
	81-90	TA10507H15	13.6	P&C
	91-120	TA9415H15	10.3	P&C
300	19-36	TDT1530 †	15.0	–
	37-52	TDT1425 †	15.0	P&C
	53-80	TA12608H25	10.7	P&C
		TA12608H15	16.1	P&C
	81-83	TA12608H15	15.6	P&C
	84-115	TA10507H15	13.6	P&C
	116-120	TA9415H15	10.2	P&C
350	23-42	TDT1530 †	15.0	Fan
	43-61	TDT1425 †	15.0	P&C
	62-80	TA12608H25	10.7	P&C
		TA12608H15	16.1	P&C
	81-103	TA12608H15	15.6	P&C
	104-120	TA10507H15	13.5	P&C
400	27-50	TDT1530 †	15.0	Fan
	51-70	TDT1425 †	15.0	P&C
	71-80	TA12608H25	10.7	P&C
		TA12608H15	16.1	P&C
	81-120	TA12608H15	15.6	P&C
450	30-31	TDT1530 †	15.0	P&C
	32-57	TDT1530 †	15.0	Fan
	59-75	TDT1425 †	15.0	P&C
	84-120	TA12608H15	15.5	P&C
500	34-57	TDT1530 †	15.0	P&C
	66-75	TDT1425 †	15.0	P&C
	97-120	TA12608H15	15.1	P&C
600	41-57	TDT1530 †	15.0	P&C
700	50-57	TDT1530 †	15.0	P&C

★ See Page G2-132 for lubrication for 15 RPM and slower † See page G3-70 and G3-71 for information on TDT1425 and TDT1530 reducers
P&C (Pump & Coolers) - Use the Dodge speed reducer auxiliary cooling package, part number 273933

Selection

Torque-Arm II shaft mount speed reducers
Class II selections ★, service factor 1.4

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
1/4	4-5	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	6-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1/3	4-6	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	7-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1/2	4-5	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	6-10	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	11-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
3/4	4-5	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	6-8	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
3/4 (cont)	9-16	TA1107H31	5.0	–
		TA1107H25	6.4	–
		TA1107H15	5.5	–
	17-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1	4	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	5-7	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	8-11	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	12-21	TA1107H31	4.9	–
		TA1107H25	6.3	–
		TA1107H15	5.5	–
	22-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
1-1/2	4	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	5-7	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	8-10	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	11-17	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	18-34	TA1107H31	4.8	–
		TA1107H25	5.9	–
		TA1107H15	5.3	–
1-1/2 (cont)	35-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
2	4-5	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	6-9	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	10-14	TA3203H32	4.6	–
		TA3203H25	4.6	–
		TA3203H15	4.6	–
	15-24	TA2115H33	3.7	–
		TA2115H25	3.3	–
		TA2115H15	3.3	–
	25-46	TA1107H31	4.7	–
		TA1107H25	5.7	–
		TA1107H15	5.2	–
	47-50	TA0107L31	4.0	–
		TA0107L25	4.0	–
		TA0107L15	4.0	–
	51-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
3	4-5	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	6-8	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	9-14	TA4207H40	5.0	–
		TA4207H25	5.5	–
		TA4207H15	8.1	–
	15-21	TA3203H32	4.5	–
		TA3203H25	4.5	–
		TA3203H15	4.5	–
	22-38	TA2115H33	3.6	–
		TA2115H25	3.3	–
		TA2115H15	3.2	–

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

Selection

Torque-Arm II shaft mount speed reducers
Class II selections ★, service factor 1.4

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
3 (cont)	39-50	TA1107H31	4.5	–
		TA1107H25	5.5	–
		TA1107H15	5.0	–
	51-73	TA1107H25	5.4	–
		TA1107H15	4.9	–
	74-80	TA0107L25	4.0	–
		TA0107L15	4.0	–
	81-89	TA0107L15	4.0	–
		TA0107L09	5.3	–
	90-120	TA0107L15	4.0	–
		TA0107L09	5.2	–
		TA0107L05	9.2	–
	121-200	TA0107L09	5.0	–
		TA0107L05	8.3	–
	201-400	TA0107L05	6.9	–
5	4	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	5-6	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	7-8	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	9-14	TA5215H40	6.8	–
		TA5215H25	6.1	–
		TA5215H15	7.1	–
	15-23	TA4207H40	4.9	–
		TA4207H25	5.4	–
		TA4207H15	7.9	–
	24-36	TA3203H32	4.3	–
		TA3203H25	4.4	–
		TA3203H15	4.4	–
	37-50	TA2115H33	3.3	–
		TA2115H25	3.1	–
		TA2115H15	3.2	–
	51-67	TA2115H25	3.1	–
		TA2115H15	3.5	–
	68-80	TA1107H25	5.2	–
		TA1107H15	4.7	–
	81-89	TA1107H15	4.6	–
		TA1107H09	7.7	–
	90-120	TA1107H15	4.6	–
		TA1107H09	7.5	–
		TA1107H05	12.5	–
	121-131	TA1107H09	7.1	–
		TA1107H05	11.2	–
	132-146	TA0107L09	5.0	–
		TA1107H05	10.8	–
	147-200	TA0107L09	4.8	–
		TA0107L05	7.7	–
	201-400	TA0107L05	6.9	–
7-1/2	4	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
7-1/2 (cont)	5-6	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	7-9	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	10-13	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.4	–
	14-21	TA5215H40	6.7	–
		TA5215H25	6.0	–
		TA5215H15	7.0	–
	22-35	TA4207H40	4.7	–
		TA4207H25	5.2	–
		TA4207H15	7.7	–
	36-50	TA3203H32	4.1	–
		TA3203H25	4.3	–
		TA3203H15	4.3	–
	51-58	TA3203H25	4.2	–
		TA3203H15	4.2	–
	59-80	TA2115H25	3.1	–
		TA2115H15	3.6	–
	81-89	TA2115H15	3.7	–
		TA2115H09	6.1	–
	90-105	TA2115H15	3.7	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	106-108	TA1107H15	4.5	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	109-120	TA1107H15	4.5	–
		TA1107H09	7.3	–
		TA2115H05	6.6	–
	121-127	TA1107H09	7.1	–
		TA2115H05	6.6	–
	128-200	TA1107H09	7.0	–
		TA1107H05	10.9	–
	201-306	TA1107H05	9.1	–
	307-400	TA0107L05	5.5	–
10	4	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	5	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	6-8	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	9-12	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	13-17	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	18-29	TA5215H40	6.6	–
		TA5215H25	5.9	–
		TA5215H15	6.8	–
10 (cont)	30-49	TA4207H40	4.5	–
		TA4207H25	5.0	–
		TA4207H15	7.4	–
	50	TA3203H32	4.0	–
		TA3203H25	4.2	–
		TA3203H15	4.2	–
	51-80	TA3203H25	4.2	–
		TA3203H15	4.2	–
	81-84	TA3203H15	4.0	–
		TA3203H09	5.1	–
	85-89	TA2115H15	3.7	–
		TA2115H09	6.1	–
	90-120	TA2115H15	3.7	–
		TA2115H09	6.2	–
		TA3203H05	11.0	–
	121-127	TA2115H09	6.1	–
		TA3203H05	7.7	–
	128-162	TA2115H09	6.2	–
		TA2115H05	6.5	–
	163-200	TA1107H09	6.5	–
		TA2115H05	6.3	–
	201-209	TA2115H05	6.0	–
	210-400	TA1107H05	8.9	–
15	4	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	5-6	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	7-8	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	9-12	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	13-19	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	20-26	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	27-47	TA5215H40	6.4	–
		TA5215H25	5.7	–
		TA5215H15	6.6	–
	48-50	TA4207H40	4.2	–
		TA4207H25	4.7	–
		TA4207H15	6.9	–
	51-80	TA4207H25	4.7	–
		TA4207H15	6.8	–
	81	TA3203H15	4.0	–
		TA4207H09	10.1	–
	82-89	TA3203H15	4.0	–
		TA3203H09	5.2	–
	90-92	TA3203H15	4.0	–
		TA3203H09	5.3	–
		TA5215H05	13.9	–

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

Selection

Torque-Arm II shaft mount speed reducers
Class II selections ★, service factor 1.4

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
15 (cont)	93-118	TA3203H15	4.0	–
		TA3203H09	5.5	–
		TA4207H05	9.8	–
	119-120	TA3203H15	4.0	–
		TA3203H09	5.6	–
		TA3203H05	7.7	–
	121-149	TA3203H09	5.7	–
		TA3203H05	7.7	–
	150-200	TA2115H09	6.5	–
		TA3203H05	7.0	–
	201-260	TA3203H05	7.0	–
	261-400	TA2115H05	5.6	–
20	4	TDT1425 †	15.0	–
	5	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	6-8	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	9-11	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.3	–
	12-17	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	18-26	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	27-36	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	37-50	TA5215H40	6.2	–
		TA5215H25	5.6	–
		TA5215H15	6.5	–
	51-67	TA5215H25	5.4	–
		TA5215H15	6.3	–
	68-80	TA4207H25	4.5	–
		TA4207H15	6.6	–
	81-89	TA4207H15	6.4	–
		TA4207H09	10.1	–
	90-115	TA4207H15	6.3	–
		TA4207H09	9.9	–
		TA5215H05	13.9	–
	116-120	TA4207H15	5.9	–
		TA3203H09	5.6	–
		TA5215H05	12.1	–
	121-123	TA3203H09	5.6	–
		TA5215H05	11.8	–
	124-194	TA3203H09	5.7	–
		TA4207H05	9.3	–
	195-200	TA3203H09	5.5	–
		TA3203H05	7.0	–
	201-400	TA3203H05	7.0	–
25	4-6	TDT1425 †	15.0	–
	7	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
25 (cont)	8-10	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	11-14	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.4	–
	15-21	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	22-33	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	34-46	TA6307H40	6.2	–
		TA6307H25	6.2	–
		TA6307H15	6.2	–
	47-50	TA5215H40	6.1	–
		TA5215H25	5.5	–
		TA5215H15	6.3	–
	51-80	TA5215H25	5.4	–
		TA5215H15	6.3	–
	81-87	TA5215H15	6.0	–
		TA5215H09	9.1	–
	88-89	TA4207H15	6.3	–
		TA5215H09	8.9	–
	90-91	TA4207H15	6.3	–
		TA5215H09	8.9	–
		TA5215H05	13.9	–
	92-120	TA4207H15	6.3	–
		TA4207H09	9.8	–
		TA5215H05	13.7	–
	121-154	TA4207H09	9.3	–
		TA5215H05	11.8	–
	155-200	TA4207H09	8.7	–
		TA4207H05	9.2	–
	201-269	TA4207H05	9.8	–
	270-400	TA3203H05	7.0	–
30	4	TDT1530 †	15.0	–
	5-7	TDT1425 †	15.0	–
	8	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	9-12	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	13-18	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.6	–
	19-26	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	27-41	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	42-50	TA6307H40	6.2	–
		TA6307H25	6.2	–
		TA6307H15	6.2	–
30 (cont)	51-56	TA6307H25	6.2	–
		TA6307H15	6.2	–
	57-80	TA5215H25	5.4	–
		TA5215H15	6.2	–
	81-89	TA5215H15	6.0	–
		TA5215H09	9.1	–
	90-110	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA5215H05	13.9	–
	111-114	TA4207H15	6.0	–
		TA5215H09	8.5	–
		TA5215H05	12.4	–
	115-120	TA4207H15	5.9	–
		TA4207H09	9.4	–
		TA5215H05	12.1	–
	121-195	TA4207H09	9.3	–
		TA5215H05	11.8	–
	196-200	TA4207H09	7.8	–
		TA4207H05	9.2	–
	201-348	TA4207H05	9.8	–
	349-400	TA3203H05	7.0	–
40	4-6	TDT1530 †	15.0	–
	7-9	TDT1425 †	15.0	–
	10-12	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.9	–
	13-17	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	18-24	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.7	–
	25-36	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	37-50	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	51-56	TA7315H25	6.2	–
		TA7315H15	6.2	–
	57-78	TA6307H25	6.2	–
		TA6307H15	6.2	–
	79-80	TA5215H25	5.2	–
		TA5215H15	6.0	–
	81-85	TA5215H15	6.0	–
		TA6307H09	9.8	–
	86-89	TA5215H15	5.8	–
		TA5215H09	9.0	–
	90-112	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA6307H05	15.1	–
	113-120	TA5215H15	5.1	–
		TA5215H09	8.4	–
		TA5215H05	12.3	–
	121-173	TA5215H09	8.3	–
		TA5215H05	11.8	–

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

Selection

Torque-Arm II shaft mount speed reducers
Class II selections ★, service factor 1.4

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
40 (cont)	174-200	TA4207H09	8.2	–
		TA5215H05	10.4	–
	201-299	TA5215H05	9.9	–
	300-400	TA4207H05	8.8	–
50	5-8	TDT1530 †	15.0	–
	9-12	TDT1425 †	15.0	–
	13-15	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.1	–
	16-21	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	22-31	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	32-43	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	44-46	TA8407H40	6.2	Fan
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	47-50	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	51-71	TA7315H25	6.2	–
		TA7315H15	6.2	–
	72-80	TA6307H25	6.2	–
		TA6307H15	6.2	–
	81-89	TA6307H15	6.3	–
		TA6307H09	9.9	–
	90-91	TA6307H15	6.3	–
		TA6307H09	10.0	–
		TA7315H05	14.8	–
	92-114	TA6307H15	6.6	–
		TA6307H09	10.6	–
		TA6307H05	15.1	–
	115-116	TA6307H15	6.7	–
		TA5215H09	8.4	–
		TA6307H05	14.7	–
	117-120	TA5215H15	5.1	–
		TA5215H09	8.4	–
		TA6307H05	14.6	–
	121-177	TA5215H09	8.3	–
		TA6307H05	14.5	–
	178-200	TA5215H09	6.3	–
		TA5215H05	10.4	–
	201-400	TA5215H05	9.9	–
60	5-9	TDT1530 †	15.0	–
	10-14	TDT1425 †	15.0	–
	15-18	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.3	–
	19-26	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
60 (cont)	27-38	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	39-50	TA8407H40	6.2	Fan
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	51-56	TA8407H25	6.2	–
		TA8407H15	6.5	–
	57-80	TA7315H25	6.2	–
		TA7315H15	6.2	–
	81-89	TA7315H15	6.2	–
		TA7315H09	8.1	–
	90-120	TA6307H15	6.7	–
		TA6307H09	10.8	–
		TA7315H05	14.8	–
	121	TA6307H09	10.8	–
		TA7315H05	12.8	–
	122-195	TA6307H09	10.9	–
		TA6307H05	14.5	–
	196-199	TA6307H09	10.1	Fan
		TA6307H05	13.9	–
	200	TA5215H09	5.8	–
		TA6307H05	13.8	–
	201-282	TA6307H05	13.8	–
	283-400	TA5215H05	8.4	–
75	7-12	TDT1530 †	15.0	–
	13-18	TDT1425 †	15.0	–
	19-23	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.6	–
	24	TA10507H40	8.5	–
		TA12608H25	9.5	–
		TA12608H15	14.7	–
	25-33	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.7	–
	34-48	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.8	–
	49	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA9415H15	10.8	–
	50	TA8407H40	6.2	Fan
		TA8407H25	6.2	Fan
		TA8407H15	6.2	–
	51-72	TA8407H25	6.2	Fan
		TA8407H15	7.2	–
	73-80	TA7315H25	6.2	Fan
		TA7315H15	6.2	–
	81-111	TA7315H15	6.2	–
		TA7315H09	8.5	–
	112-117	TA7315H15	6.2	–
		TA7315H09	8.5	–
	118-120	TA6307H15	6.7	Fan
		TA6307H09	10.8	Fan
	121-169	TA6307H09	10.9	Fan
		TA7315H05	12.8	–
75 (cont)	170-200	TA6307H09	10.7	Fan
		TA6307H05	14.0	–
	201-400	TA6307H05	13.8	–
100	8-16	TDT1530 †	15.0	–
	17-24	TDT1425 †	15.0	–
	25-32	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	15.1	–
	33	TA10507H40	8.5	Fan
		TA12608H25	9.5	–
		TA12608H15	15.1	–
	34-45	TA10507H40	8.5	Fan
		TA10507H25	8.5	–
		TA10507H15	11.1	–
	46-50	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.8	Fan
	51-67	TA9415H25	8.0	Fan
		TA9415H15	10.8	Fan
	68-80	TA8407H25	6.2	Fan
		TA8407H15	7.5	Fan
	81-102	TA8407H15	8.3	Fan
	103	TA7315H15	6.2	Fan
	104-120	TA7315H15	6.2	Fan
		TA7315H09	8.5	Fan
	121-180	TA7315H09	8.6	Fan
	181-190	TA6307H09	10.4	Fan
	191-200	TA6307H09	10.2	Fan
		TA7315H05	11.7	–
	201-274	TA7315H05	11.7	–
	275-400	TA6307H05	12.0	–
125	11-20	TDT1530 †	15.0	–
	21-30	TDT1425 †	15.0	–
	31-41	TA12608H40	17.1	Fan
		TA12608H25	9.5	–
		TA12608H15	15.4	–
	42-43	TA10507H40	8.5	Fan
		TA12608H25	9.5	–
		TA12608H15	15.5	–
	44-50	TA10507H40	8.5	Fan
		TA10507H25	8.5	Fan
		TA10507H15	11.3	Fan
	51-58	TA10507H25	8.5	Fan
		TA10507H15	11.8	Fan
	59-80	TA9415H25	8.0	Fan
		TA9415H15	10.8	Fan
	81-85	TA9415H15	10.5	Fan
	86-120	TA8407H15	8.7	Fan
	141-200	TA7315H09	8.6	Fan
	272-400	TA7315H05	10.9	–
150	13-25	TDT1530 †	15.0	–
	26-36	TDT1425 †	15.0	–
	37-50	TA12608H40	17.1	Fan
		TA12608H25	9.5	Fan
		TA12608H15	15.7	Fan
	51-54	TA12608H25	9.6	Fan
		TA12608H15	15.8	Fan

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

Selection

Torque-Arm II shaft mount speed reducers
Class II selections ★, service factor 1.4

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
150 (cont)	55-71	TA10507H25	9.0	Fan
		TA10507H15	12.7	Fan
	72	TA9415H25	8.0	P&C
		TA10507H15	12.8	Fan
	73-80	TA9415H25	8.0	P&C
		TA9415H15	10.6	Fan
	81-105	TA9415H15	10.5	Fan
	106-120	TA8407H15	8.7	Fan
	189-200	TA7315H09	8.2	Fan
	368-400	TA7315H05	10.1	–
200	18-33	TDT1530 †	15.0	–
	34-49	TDT1425 †	15.0	Fan
	50	TA12608H40	17.1	P&C
		TA12608H25	9.5	Fan
		TA12608H15	15.7	Fan
	51-76	TA12608H25	10.7	Fan
		TA12608H15	16.1	Fan
	77-80	TA10507H25	9.4	P&C
		TA10507H15	13.4	Fan
	81-105	TA10507H15	13.6	Fan
	106-120	TA9415H15	10.2	P&C
250	23-42	TDT1530 †	15.0	–
	43-61	TDT1425 †	15.0	P&C
	62-80	TA12608H25	10.7	P&C
		TA12608H15	16.1	P&C
	81-103	TA12608H15	15.6	P&C
	104-120	TA10507H15	13.5	P&C
300	28-53	TDT1530 †	15.0	–
	54-75	TDT1425 †	15.0	P&C
	76-80	TA12608H25	10.7	P&C
		TA12608H15	15.8	P&C
	81-120	TA12608H15	15.6	P&C
350	33-57	TDT1530 †	15.0	–
	66-75	TDT1425 †	15.0	P&C
	94-120	TA12608H15	15.2	P&C
400	38-57	TDT1530 †	15.0	Fan
	114-120	TA12608H15	15.1	P&C
450	43-57	TDT1530 †	15.0	Fan
500	50-57	TDT1530 †	15.0	Fan

★ See Page G2-132 for lubrication for 15 RPM and slower † See page G3-70 and G3-71 for information on TDT1425 and TDT1530 reducers
P&C (Pump & Coolers) - Use the Dodge speed reducer auxiliary cooling package, part number 273933

Selection

Torque-Arm II shaft mount speed reducers
Class III selections ★, service factor 2.0

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

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

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

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

Selection

Torque-Arm II shaft mount speed reducers
Class III selections ★, service factor 2.0

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
3 (cont)	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	–
	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	–

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
5 (cont)	56-80	TA2115H25	3.1	–
		TA2115H15	3.6	–
	81-89	TA2115H15	3.7	–
		TA2115H09	6.1	–
	90-100	TA2115H15	3.7	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	101	TA1107H15	4.5	–
		TA2115H09	6.2	–
		TA2115H05	6.5	–
	102-118	TA1107H15	4.5	–
		TA1107H09	7.4	–
		TA2115H05	6.6	–
	119-120	TA1107H15	4.4	–
		TA1107H09	7.1	–
		TA1107H05	11.2	–
	121-200	TA1107H09	7.1	–
		TA1107H05	11.2	–
	201-276	TA1107H05	9.1	–
	277-400	TA0107L05	5.8	–
7-1/2	4	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	5-6	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	7-8	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	9-13	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	14-18	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	19-32	TA5215H40	6.5	–
		TA5215H25	5.9	–
		TA5215H15	6.8	–
	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	–

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
7-1/2 (cont)	182-200	TA1107H09	6.2	–
		TA2115H05	6.2	–
	201-237	TA2115H05	6.0	–
	238-400	TA1107H05	8.4	–
10	4	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	5-6	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	7-8	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.2	–
	9-11	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	12-18	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	19-25	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	26-45	TA5215H40	6.4	–
		TA5215H25	5.7	–
		TA5215H15	6.7	–
	46-50	TA4207H40	4.3	–
		TA4207H25	4.7	–
		TA4207H15	7.0	–
	51-75	TA4207H25	4.7	–
		TA4207H15	6.8	–
	76-80	TA3203H25	4.0	–
		TA3203H15	4.1	–
	81-89	TA3203H15	4.0	–
		TA3203H09	5.2	–
	90-105	TA3203H15	4.0	–
		TA3203H09	5.4	–
		TA4207H05	9.9	–
	106-120	TA3203H15	4.0	–
		TA3203H09	5.6	–
		TA3203H05	8.6	–
	121-141	TA3203H09	5.7	–
		TA3203H05	7.7	–
	142-200	TA2115H09	6.5	–
		TA3203H05	7.2	–
	201-238	TA3203H05	7.0	–
	239-400	TA2115H05	5.7	–
15	4-5	TDT1425 †	15.0	–
	6	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	7-9	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	10-12	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.3	–

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

Selection

Torque-Arm II shaft mount speed reducers
Class III selections ★, service factor 2.0

Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
15 (cont)	13-18	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	19-28	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	29-39	TA6307H40	6.3	–
		TA6307H25	6.3	–
		TA6307H15	6.3	–
	40-50	TA5215H40	6.2	–
		TA5215H25	5.5	–
		TA5215H15	6.4	–
	51-72	TA5215H25	5.4	–
		TA5215H15	6.3	–
	73-80	TA4207H25	4.4	–
		TA4207H15	6.5	–
	81-89	TA4207H15	6.4	–
		TA4207H09	10.1	–
	90-120	TA4207H15	6.3	–
		TA4207H09	9.9	–
		TA5215H05	13.9	–
	121-125	TA4207H09	9.3	–
		TA5215H05	11.8	–
	126-132	TA3203H09	5.7	–
		TA5215H05	11.6	–
	133-200	TA3203H09	5.7	–
		TA4207H05	9.2	–
	201-215	TA4207H05	9.3	–
	216-400	TA3203H05	7.0	–
20	4	TDT1530 †	15.0	–
	5-6	TDT1425 †	15.0	–
	7	TA12608H40	17.2	–
		TDT1425 †	15.0	–
	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	–
20 (cont)	90-102	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA5215H05	13.9	–
	103-107	TA4207H15	6.1	–
		TA5215H09	8.6	–
		TA5215H05	12.9	–
	108-120	TA4207H15	6.0	–
		TA4207H09	9.5	–
		TA5215H05	12.6	–
	121-182	TA4207H09	9.3	–
		TA5215H05	11.8	–
	183-200	TA4207H09	8.1	–
		TA4207H05	9.2	–
	201-324	TA4207H05	9.8	–
	325-400	TA3203H05	7.0	–
25	4-5	TDT1530 †	15.0	–
	6-8	TDT1425 †	15.0	–
	9-10	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.7	–
	11-15	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	16-21	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.7	–
	22-32	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	33-49	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	50	TA6307H40	6.2	–
		TA6307H25	6.2	–
		TA6307H15	6.2	–
	51-69	TA6307H25	6.2	–
		TA6307H15	6.2	–
	70-80	TA5215H25	5.3	–
		TA5215H15	6.1	–
	81-89	TA5215H15	6.0	–
		TA5215H09	9.1	–
	90-93	TA5215H15	5.7	–
		TA5215H09	8.9	–
		TA6307H05	15.1	–
	94-120	TA5215H15	5.6	–
		TA5215H09	8.8	–
		TA5215H05	13.6	–
	121-144	TA5215H09	8.3	–
		TA5215H05	11.8	–
	145-200	TA4207H09	8.9	–
		TA5215H05	11.2	–
	201-242	TA5215H05	9.9	–
	243-400	TA4207H05	9.7	–
30	4-6	TDT1530 †	15.0	–
	7-10	TDT1425 †	15.0	–
	11-13	TA12608H40	17.2	–
		TA12608H25	9.5	–
		TA12608H15	13.9	–
30 (cont)	14-18	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	19-26	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	27-39	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	40-50	TA7315H40	6.2	–
		TA7315H25	6.2	–
		TA7315H15	6.2	–
	51-60	TA7315H25	6.2	–
		TA7315H15	6.2	–
	61-80	TA6307H25	6.2	–
		TA6307H15	6.2	–
	81-88	TA6307H15	6.3	–
		TA6307H09	9.9	–
	89	TA5215H15	5.7	–
		TA6307H09	9.9	–
	90-93	TA5215H15	5.7	–
		TA6307H09	10.1	–
		TA6307H05	15.1	–
	94-120	TA5215H15	5.6	–
		TA5215H09	8.8	–
		TA6307H05	15.1	–
	121-131	TA5215H09	8.3	–
		TA6307H05	14.5	–
	132-196	TA5215H09	7.9	–
		TA5215H05	11.4	–
	197-200	TA4207H09	7.8	–
		TA5215H05	10.0	–
	201-344	TA5215H05	9.9	–
	345-400	TA4207H05	8.2	–
40	5-9	TDT1530 †	15.0	–
	10-13	TDT1425 †	15.0	–
	14	TA12608H40	17.1	–
		TDT1425 †	15.0	–
	15-17	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.3	–
	18-25	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.8	–
	26-36	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	37-50	TA8407H40	6.2	–
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	51-53	TA8407H25	6.2	–
		TA8407H15	6.3	–
	54-80	TA7315H25	6.2	–
		TA7315H15	6.2	–
	81-84	TA7315H15	6.2	–
		TA7315H09	8.0	–
	85-89	TA6307H15	6.3	–
		TA6307H09	9.9	–

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

Selection

Torque-Arm II shaft mount speed reducers
Class III selections ★, service factor 2.0

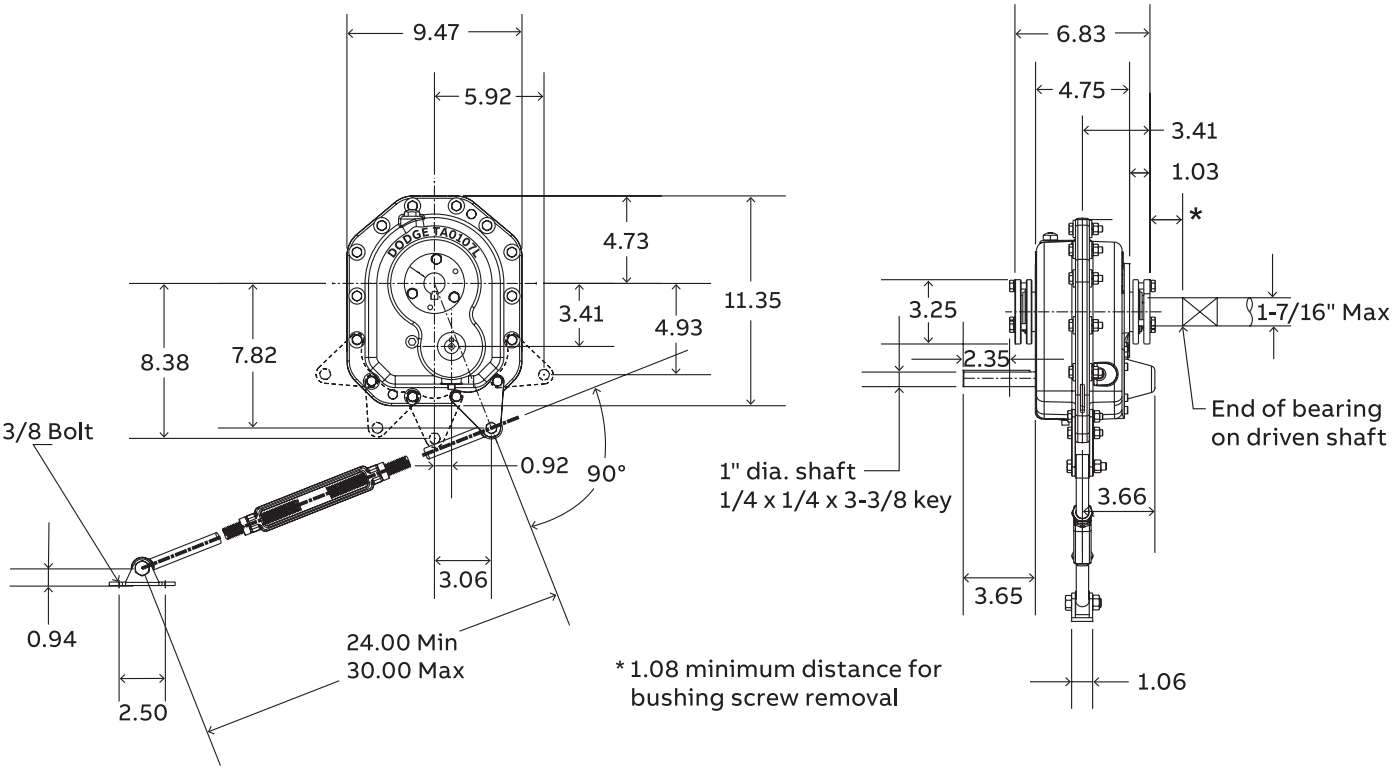
Motor Hp	Output RPM	Reducer selection	Min. sheave dia. P.D.	Cooling method
40 (cont)	90-112	TA6307H15	6.6	–
		TA6307H09	10.6	–
		TA7315H05	14.8	–
	113-120	TA6307H15	6.7	–
		TA6307H09	10.8	–
		TA6307H05	14.7	–
	121-160	TA6307H09	10.9	–
		TA6307H05	14.5	–
	161-200	TA5215H09	6.8	–
		TA6307H05	14.1	–
	201-246	TA6307H05	13.8	–
	247-400	TA5215H05	9.0	–
50	6-11	TDT1530 †	15.0	–
	12-17	TDT1425 †	15.0	–
	18-22	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.6	–
	23-31	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.7	–
	32-37	TA9415H40	8.0	–
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	38-46	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	47-50	TA8407H40	6.2	Fan
		TA8407H25	6.2	–
		TA8407H15	6.2	–
	51-68	TA8407H25	6.2	–
		TA8407H15	7.0	–
	69-80	TA7315H25	6.2	–
		TA7315H15	6.2	–
	81-110	TA7315H15	6.2	–
		TA7315H09	8.5	–
	111	TA6307H15	6.6	–
		TA6307H09	10.5	–
	112-120	TA6307H15	6.7	–
		TA6307H09	10.8	–
		TA7315H05	13.2	–
	121-157	TA6307H09	10.9	–
		TA7315H05	12.8	–
	158-200	TA6307H09	10.9	–
		TA6307H05	14.2	–
	201-400	TA6307H05	13.8	–
60	7-14	TDT1530 †	15.0	–
	15-20	TDT1425 †	15.0	–
	21	TA12608H40	17.1	–
		TDT1425 †	15.0	–
	22-27	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	14.8	–
	28	TA10507H40	8.5	–
		TA12608H25	9.5	–
		TA12608H15	14.9	–
	29-38	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	10.7	–
60 (cont)	39-45	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	46-50	TA9415H40	8.0	Fan
		TA9415H25	8.0	–
		TA9415H15	10.8	–
	51-56	TA9415H25	8.0	–
		TA9415H15	10.8	–
	57-71	TA8407H25	6.2	–
		TA8407H15	7.1	–
	72-80	TA8407H25	6.2	Fan
		TA8407H15	7.5	–
	81-83	TA8407H15	7.7	–
	84-85	TA7315H15	6.2	–
	86-120	TA7315H15	6.2	–
		TA7315H09	8.5	–
	121-141	TA7315H09	8.6	–
	142-150	TA6307H09	10.9	–
	151-195	TA6307H09	10.9	–
		TA7315H05	12.1	–
	196-200	TA6307H09	10.1	Fan
		TA7315H05	11.7	–
	201-208	TA7315H05	11.7	–
	209-400	TA6307H05	13.5	–
75	9-17	TDT1530 †	15.0	–
	18-26	TDT1425 †	15.0	–
	27-34	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	15.1	–
	35-36	TA10507H40	8.5	–
		TA12608H25	9.5	–
		TA12608H15	15.2	–
	37-49	TA10507H40	8.5	–
		TA10507H25	8.5	–
		TA10507H15	11.3	–
	50	TA9415H40	8.0	Fan
		TA9415H25	8.0	Fan
		TA9415H15	10.8	–
	51-72	TA9415H25	8.0	Fan
		TA9415H15	10.8	–
	73-80	TA8407H25	6.2	Fan
		TA8407H15	7.5	–
	81-112	TA8407H15	8.6	–
	113	TA7315H15	6.2	–
	114-120	TA7315H15	6.2	–
		TA7315H09	8.5	–
	121-156	TA7315H09	8.6	–
	157- 200	TA7315H09	8.5	Fan
	213-306	TA7315H05	11.5	–
	307-400	TA6307H05	11.7	–
100	12-23	TDT1530 †	15.0	–
	24-35	TDT1425 †	15.0	–
	36-47	TA12608H40	17.1	–
		TA12608H25	9.5	–
		TA12608H15	15.6	–
	48-50	TA10507H40	8.5	Fan
		TA12608H25	9.5	–
		TA12608H15	15.7	–
100 (cont)	51	TA12608H25	9.6	–
		TA12608H15	15.7	–
	52-56	TA10507H25	8.5	–
		TA10507H15	11.8	–
	57-67	TA10507H25	8.8	Fan
		TA10507H15	12.4	–
	68	TA9415H25	8.0	Fan
		TA10507H15	12.5	–
	69-80	TA9415H25	8.0	Fan
		TA9415H15	10.7	Fan
	81-100	TA9415H15	10.5	Fan
	101-120	TA8407H15	8.7	Fan
	172-200	TA7315H09	8.4	Fan
	331-400	TA7315H05	10.8	–
125	16-30	TDT1530 †	15.0	–
	31-43	TDT1425 †	15.0	–
	44-50	TA12608H40	17.1	Fan
		TA12608H25	9.5	–
		TA12608H15	15.7	–
	51-58	TA12608H25	9.6	–
		TA12608H15	15.9	–
	59-67	TA12608H25	10.4	Fan
		TA12608H15	16.1	–
	68-80	TA10507H25	9.4	Fan
		TA10507H15	13.4	Fan
	81-90	TA10507H15	13.6	Fan
	91-120	TA9415H15	10.3	Fan
150	19-36	TDT1530 †	15.0	–
	37-41	TDT1425 †	15.0	–
	42-52	TDT1425 †	15.0	Fan
	53-80	TA12608H25	10.7	Fan
		TA12608H15	16.1	Fan
	81-83	TA12608H15	15.6	Fan
	84-115	TA10507H15	13.6	Fan
	116-120	TA9415H15	10.2	Fan
200	27-50	TDT1530 †	15.0	–
	51-70	TDT1425 †	15.0	P&C
	71-80	TA12608H25	10.7	P&C
		TA12608H15	16.1	Fan
	81-98	TA12608H15	15.6	Fan
	99-120	TA12608H15	15.1	P&C
250	34-57	TDT1530 †	15.0	–
	66-75	TDT1425 †	15.0	P&C
	97-120	TA12608H15	15.1	P&C
300	41-57	TDT1530 †	15.0	–
350	50-57	TDT1530 †	15.0	–

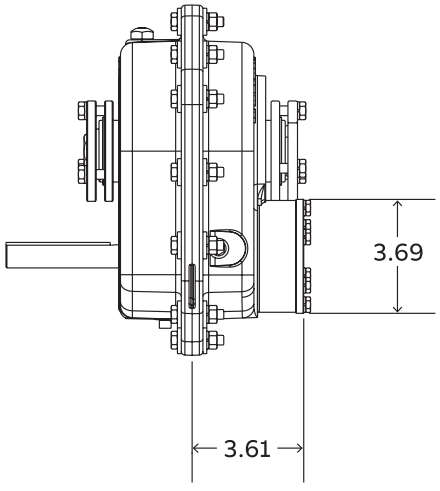
★ See Page G2-132 for lubrication for 15 RPM and slower † See page G3-70 and G3-71 for information on TDT1425 and TDT1530 reducers
P&C (Pump & Coolers) - Use the Dodge speed reducer auxiliary cooling package, part number 273933

Selection and dimensions

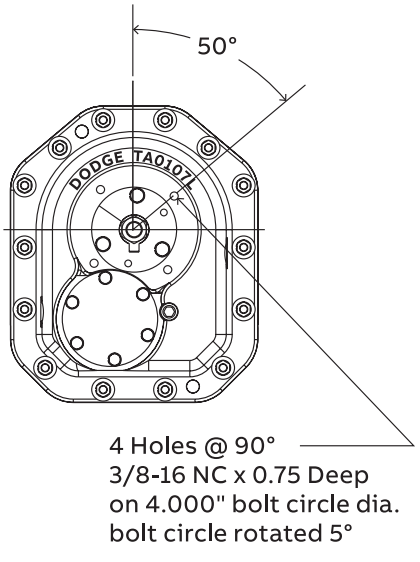
Torque-Arm II shaft mount speed reducers

Taper bushed reducers – TA0107L, single and double reductions





Reducer with backstop



Flange mounting dimensions

All dimensions are in inches.

Selection and 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, must 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
TA0107, 1107, 2115 Belt guard assembly Pos. B M2	900101	37.0
TA0107BG Belt guard - Pos. C (56-215T) (4)	900097	42.2
TA0107BG Belt guard - Pos. D (56-215T)	900099	39.0
TA0-TA3 Hydra-Lock dessicant breather Kit HLO	964372	2.0
XT Enclosed breather system, TA0-9	240050	2.0
TA0-TA3 Vertical breather kit	900112	2.0
TA0107L V-Ring kit	900249	0.1
TA0107L Lube kit	LUBEKITTA0107	4.6
Dodge ability sensor	750000	0.5

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off.

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

TA2115H Tapered bushing kits (5) (6)

Bushing size standard shaft (7) bushing kit	Part number (7)	Weigh lbs.	Shaft keyseat required (9) (10)
TA0107TB x 1-7/16 ▲	900020	1.5	3/8 x 3/16 x 6.83
TA0107TB x 1-3/8	900021	1.6	5/16 x 5/32 x 6.83
TA0107TB x 1-5/16	900022	1.8	5/16 x 5/32 x 6.83
TA0107TB x 1-1/4	900023	1.9	1/4 x 1/8 x 6.83
TA0107TB x 1-3/16	900024	2.0	1/4 x 1/8 x 6.83
TA0107TB x 1-1/8	900025	2.1	1/4 x 1/8 x 6.83

TA2115H Short shaft tapered bushing kits

Bushing Size short shaft bushing kit	Part number (8)	Weight lbs.	Shaft keyseat required (9)(10)
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
TA0107TBS x 1-3/16	900027	2.1	1/4 x 1/8 x 4.35
TA0107TBS x 1-1/8	900028	2.3	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 screw conveyor drive shaft in a screw conveyor application

(7) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key

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

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

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

Bushing and safety end covers

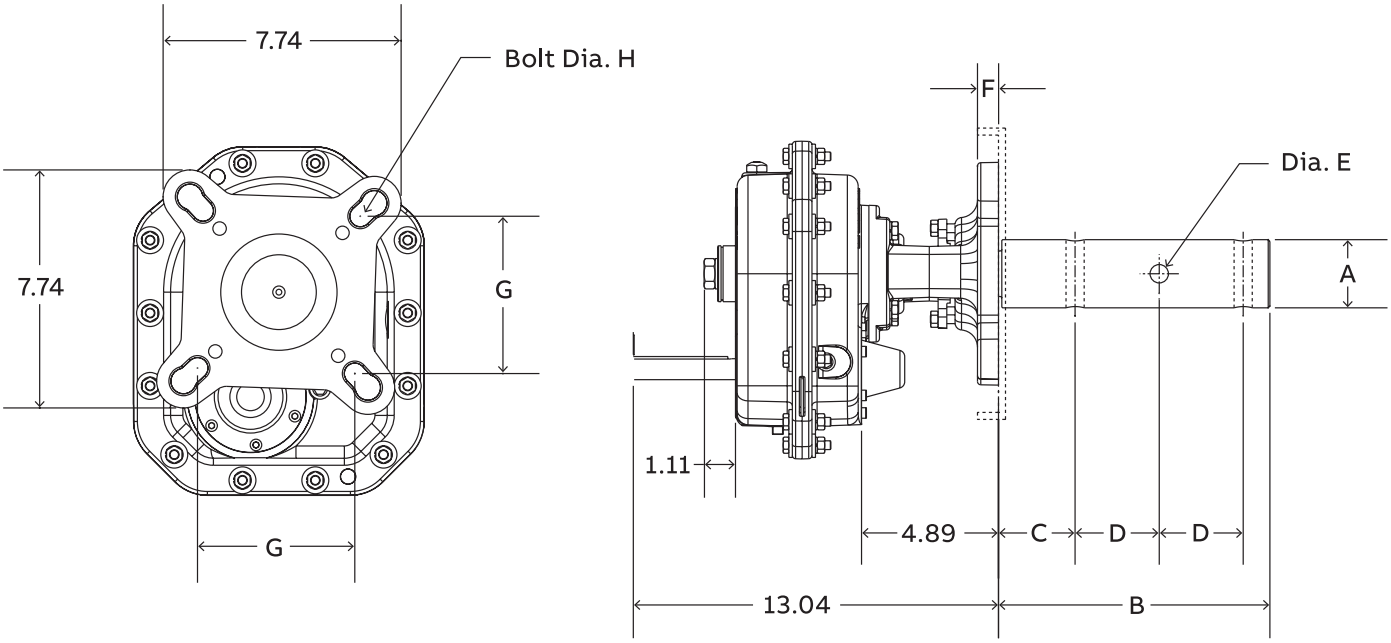
Reducer size	Description	Part number	Weight
TA0107L	ABS Polymer closed (12)	900142	0.3
TA0107L	ABS Polymer split (12)	900143	0.3

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

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

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA0107L, single and double reductions



All dimensions are in inches.

Selection and 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
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

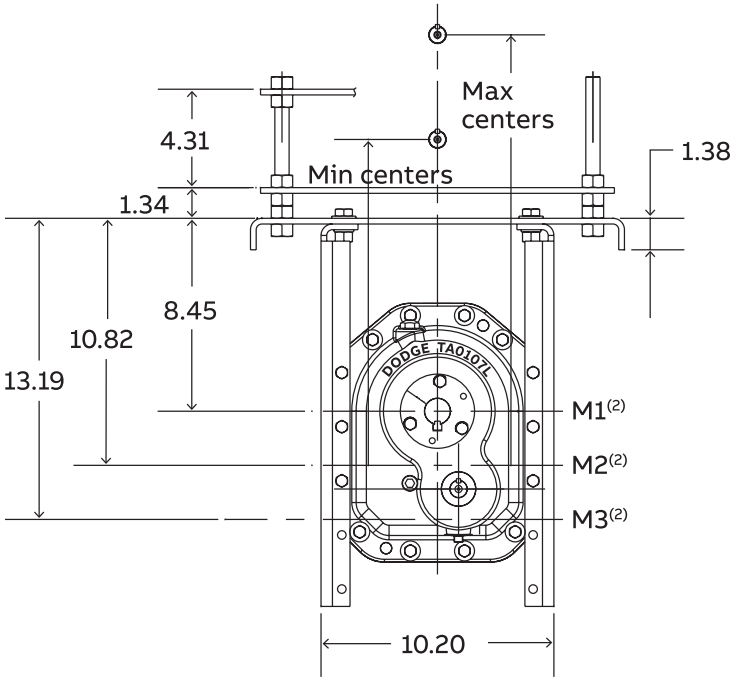
TA0107L Accessories for screw conveyor drives [1] [4] [5]

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
TA0107MM Motor mount assembly (56-215T)	900090	35.4
TA0107BG Belt guard - Pos. C (56-215T) [1]	900097	42.2
TA0-TA3 Hydra-Lock dessicant breather Kit HLO	964372	2.0
XT Enclosed breather system, TA0-9	240050	2.0
Dodge ability sensor	750000	0.5

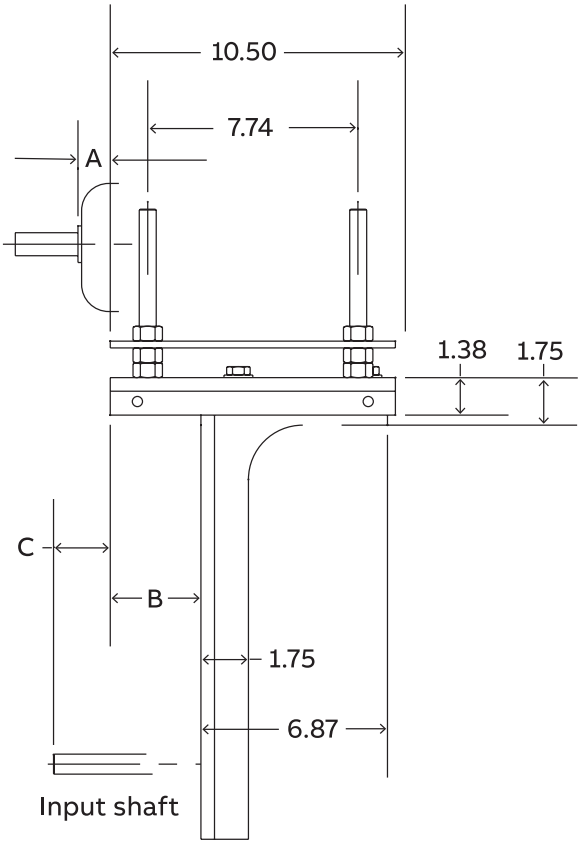
(1) Pos “C” belt guard most popular for screw conveyor drive applications
(2) SCA Adapter & hardware kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable packing kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive shaft is a shaft only. Hardware is stocked with the adapter & hardware kit.
(5) A complete TA II Screw conveyor drive, order a TA II reducer, SCA adapter & hardware kit, and SCS drive shaft. The SCP Adjustable packing kit is an optional accessory.

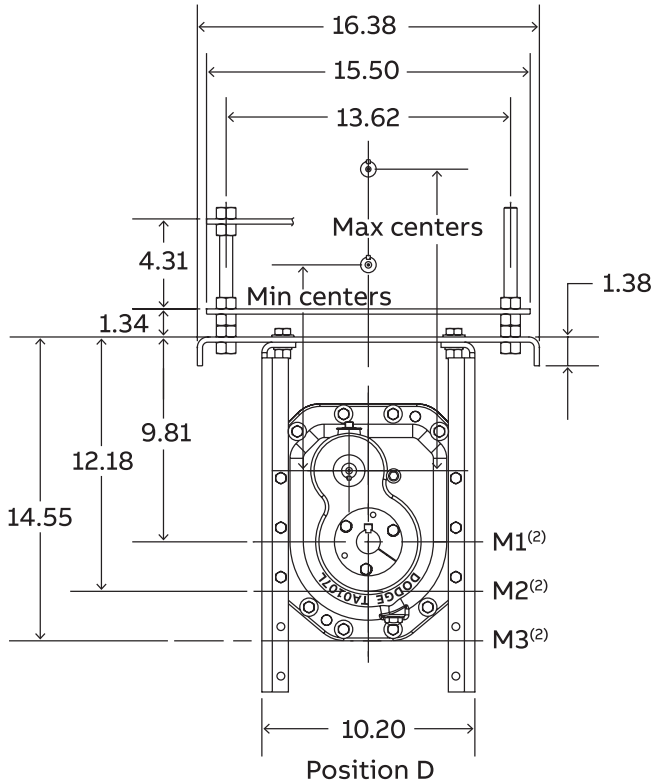
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA0107L, position B & D



Position B





Position D

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA0107L, position B & D (1)

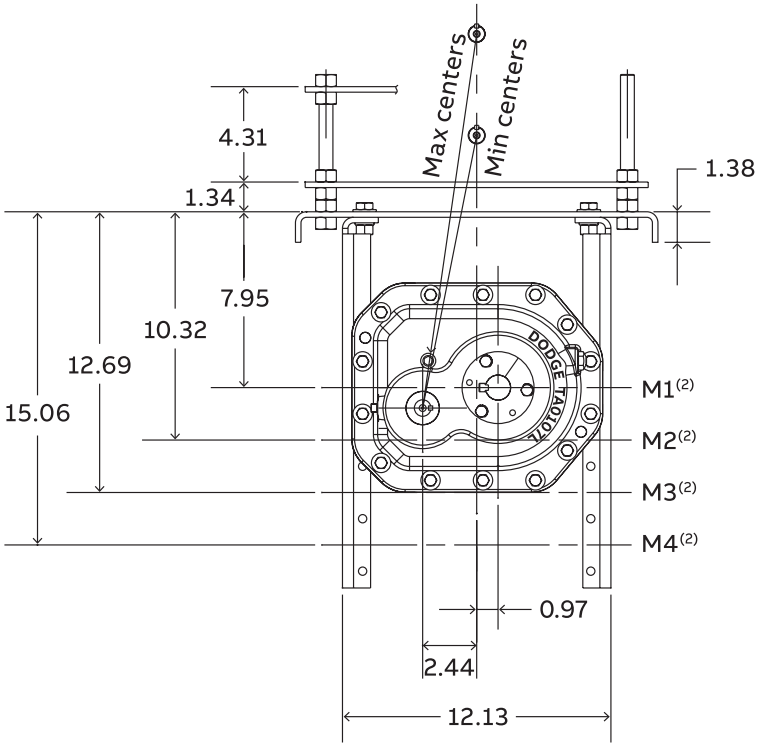
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 56			Motor frame 143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position B	-0.09	3.33	2.10	5.52	M1	0.78	17.2	21.0	1.22	17.2	21.0
					M2		19.6	23.4		19.6	23.4
					M3		22.0	25.8		22.0	25.8
Position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

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

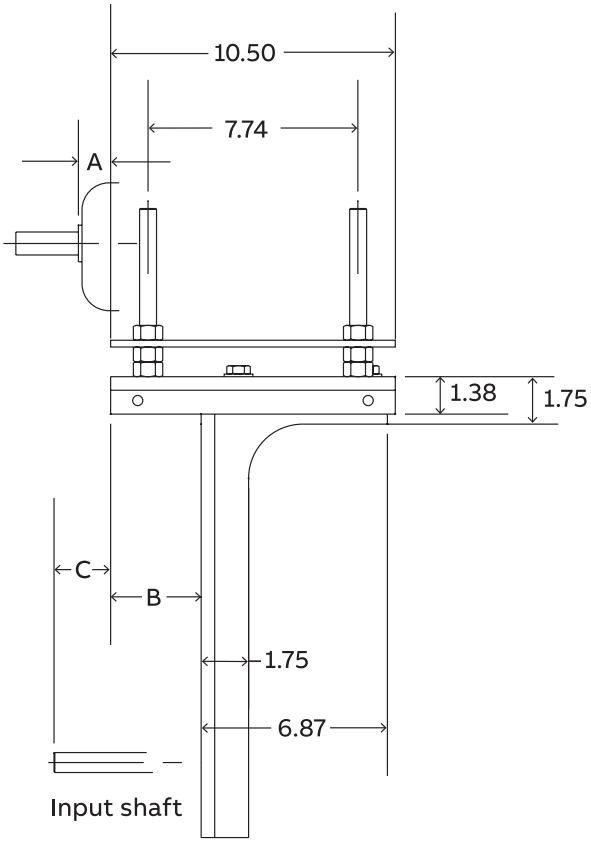
Notes:
Minimum centers contains 0.5” to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however motor mount hardware are inch dimensions.
(2) M1, M2, M3 go through output shaft centerline

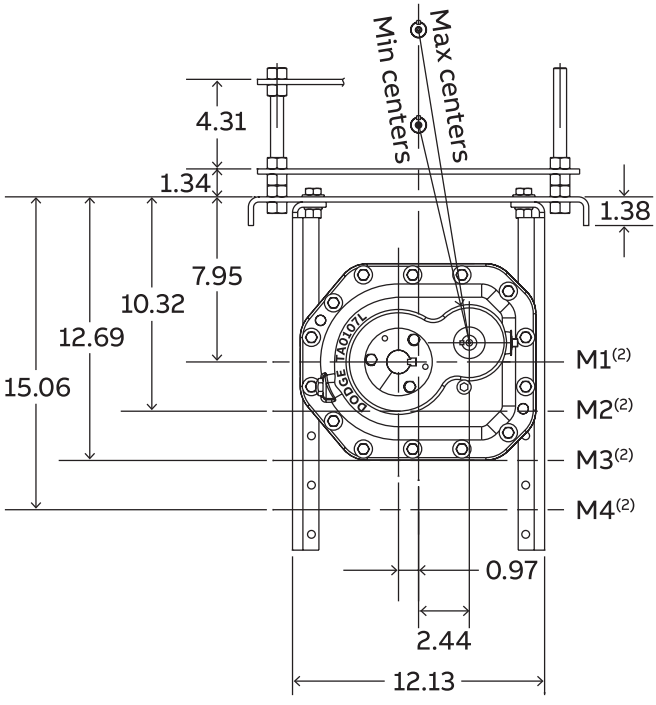
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA0107L, position A & C



Position A





Position C
Most Common

All dimensions are in inches.

Selection and 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			Motor frame 143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position A	-0.09	3.33	3.05	6.47	M1	0.78	14.4	18.2	1.22	14.4	18.2
					M2		16.8	20.5		16.8	20.5
					M3		19.1	22.9		19.1	22.9
					M4		21.5	25.2		21.5	25.2
Position C	-0.09	3.33	3.05	6.47	M1	0.78	12.6	16.4	1.22	12.6	16.4
					M2		14.9	18.7		14.9	18.7
					M3		17.3	21.1		17.3	21.1
					M4		19.6	23.4		19.6	23.4

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

Table A – Screw conveyor motor mount minimum "M" mounting positions [1]

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

Notes:

Minimum centers contains 0.5" to allow for belt assembly

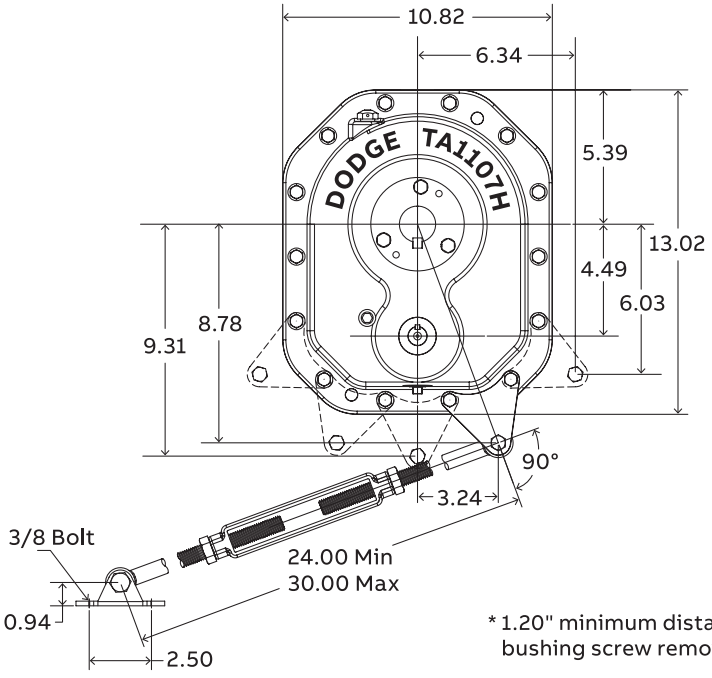
(1) Motor Mount will fit NEMA and IEC frame motors; however motor mount hardware are inch dimensions.

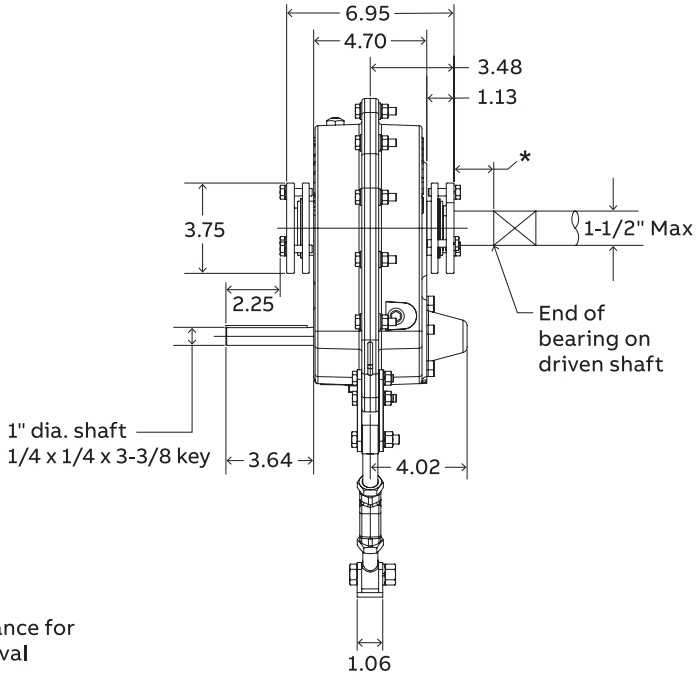
(2) M1, M2, M3, M4 go through output shaft centerline

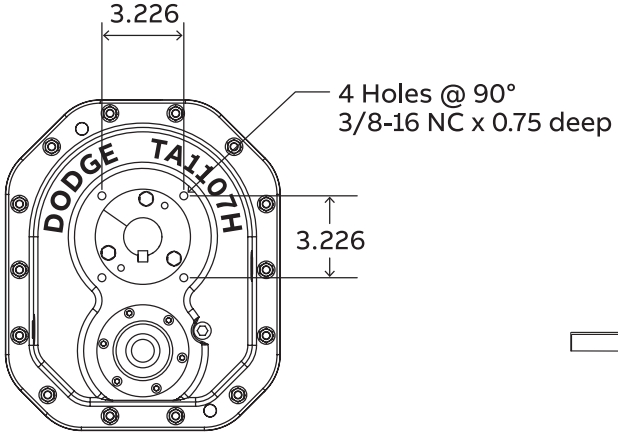
(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

Selection and dimensions

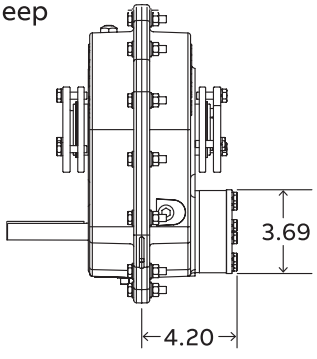
Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA1107H, single and double reductions







Flange mounting dimensions



Reducer with backstop

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA1107H, single and double reductions

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, must order as a separate part number.

● TA1107H Reducer – Heavy duty, extended value

■ See page G2-121 for maximum bore straight bore TA II reducers

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

TA1107H Accessories

Description	Part number	Weight lbs.
TA1107RA Rod assembly (1) +	901109	4.5
TA1107H/0107L BS Backstop assembly (2)	901102	3.9
TA1107MM Motor mount assembly (56-254T) (3)	901090	39.5
TA1107BG Belt guard - Pos. B (56-254T)	901096	40.6
TA0107, 1107, 2115 Belt guard assembly – Pos. B, M2	900101	37.0
TA1107BG Belt guard - Pos D (56-254T)	901099	43.0
TA0-TA3 Hydra-Lock dessicant breather kit HL0	964372	2.0
XT Enclosed breather system, TA0-9	240050	2.0
TA0-TA3 - Vertical breather kit	900112	2.0
TA1107H - V-Ring kit	901249	0.1
TA1107H Lube kit	LUBEKITTA1107	4.6
Dodge ability sensor	750000	0.5

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however, motor mount 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 screw conveyor drive shaft in a screw conveyor application
(7) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short shaft bushing kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

Bushing covers

Reducer size	Description	Part number	Weight
TA1107H	ABS Polymer closed (12)	901142	0.5
TA1107H	ABS Polymer split (12)	901143	0.4

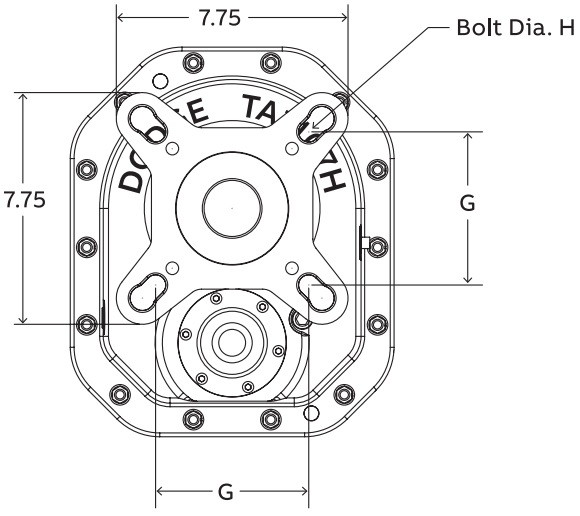
Closed bushing covers may not be compatible with belt guards or large sheave installations

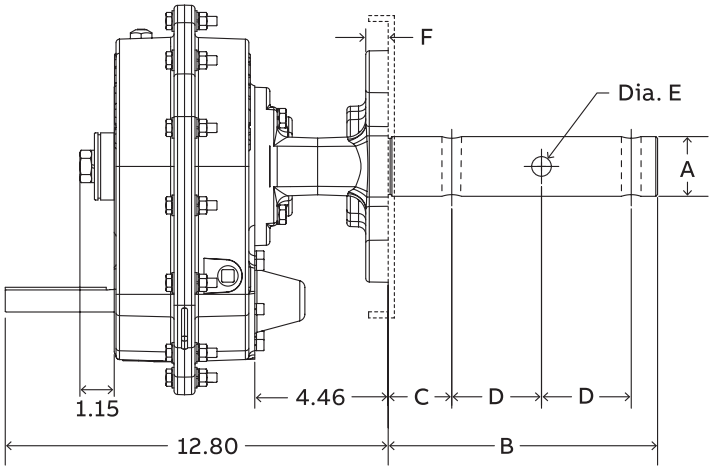
Split bushing covers are designed for use on “driven machine” side of reducer with shaft through

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

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA1107H, single and double reductions





All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA1107H, single and double reductions

TA1107H Screw conveyor drive dimensions

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

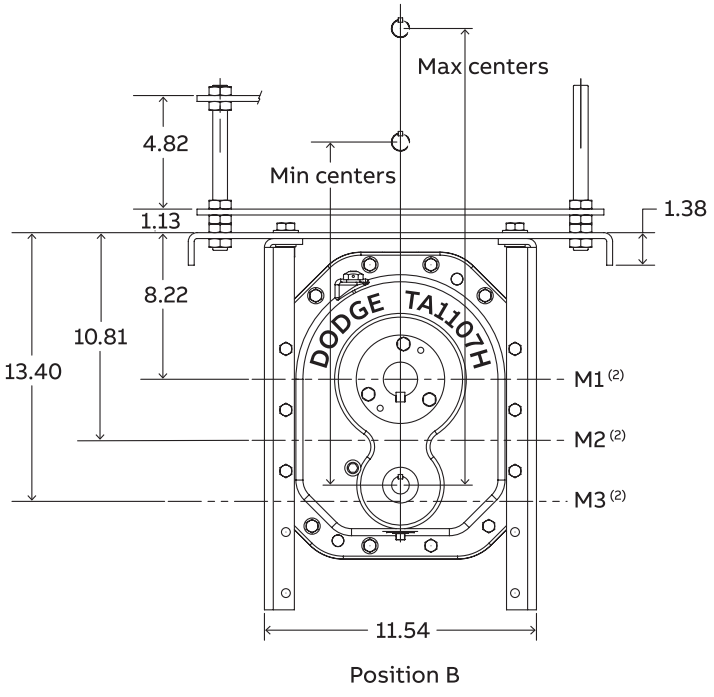
TA1107H Accessories for screw conveyor drives (1) (4) (5)

Description	Part number	Weight lbs.
TA1107SCA Adapter & hardware kit (2)	901070	15.2
TA1107SCP Adjustable packing kit (3)	901071	0.8
TA1107SCS x 1-1/2 Drive shaft	901072	10.3
TA1107SCS x 2 Drive shaft	901073	13.5
TA1107SCS x 2-7/16 Drive shaft	901074	18.1
TA1107SCS x 3 Drive shaft	901075	24.4
TA1107SCS x 1-1/2 Stainless steel drive shaft	901080	10.3
TA1107SCS x 2 Stainless steel drive shaft	901081	13.5
TA1107SCS x 2-7/16 Stainless steel drive shaft	901082	18.1
TA1107SCS x 3 Stainless steel drive shaft	901083	24.4
TA1107MM Motor mount assembly (56-254T)	901090	39.5
TA1107BG Belt guard - Pos. C (56-254T) (1)	901097	47.2
TA0-TA3 Hydra-Lock dessicant breather Kit HLO	964372	2.0
XT Enclosed breather system, TA0-9	240050	2.0
Dodge ability sensor	750000	0.5

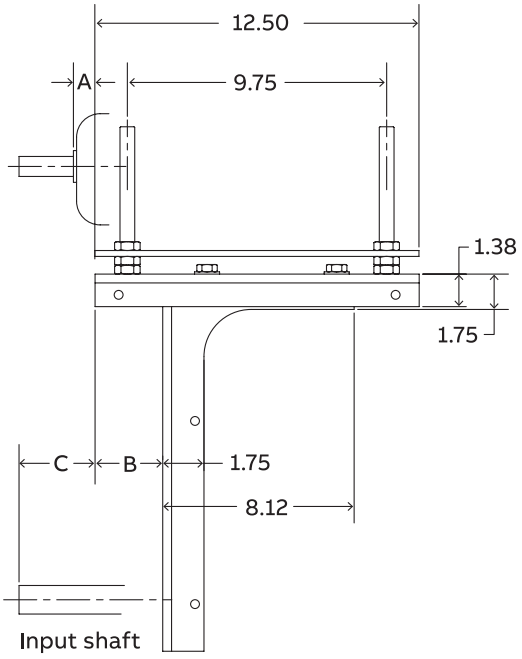
(1) Pos “C” Belt guard most popular for screw conveyor drive applications
(2) SCA Adapter & hardware kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable packing kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive shaft is a shaft only. Hardware is stocked with the adapter & hardware kit.
(5) A complete TA II screw conveyor drive, order a TA II reducer, SCA adapter & hardware kit, and SCS drive shaft. The SCP adjustable packing kit is an optional accessory.

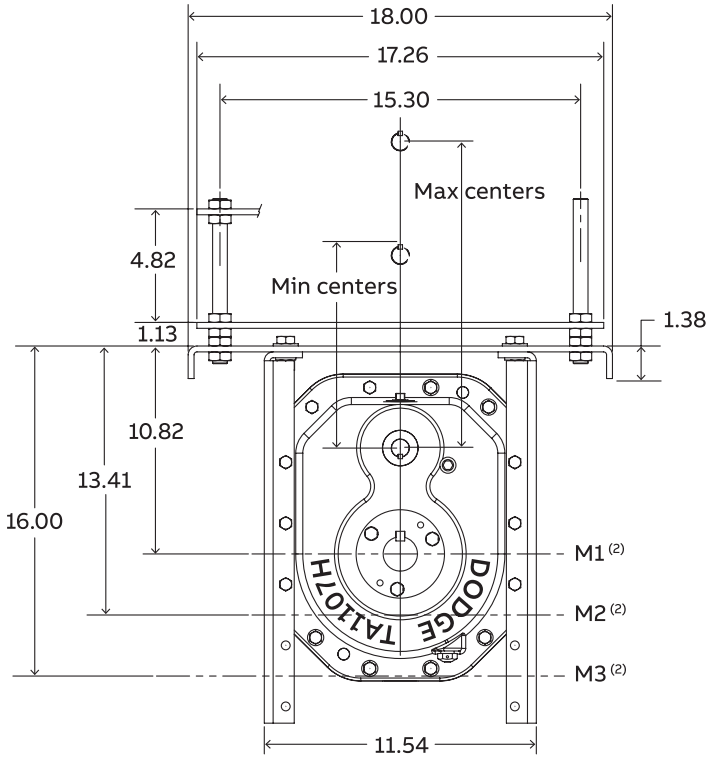
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA1107H, position B & D



Position B





Position D

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA1107H, position B & D (1)

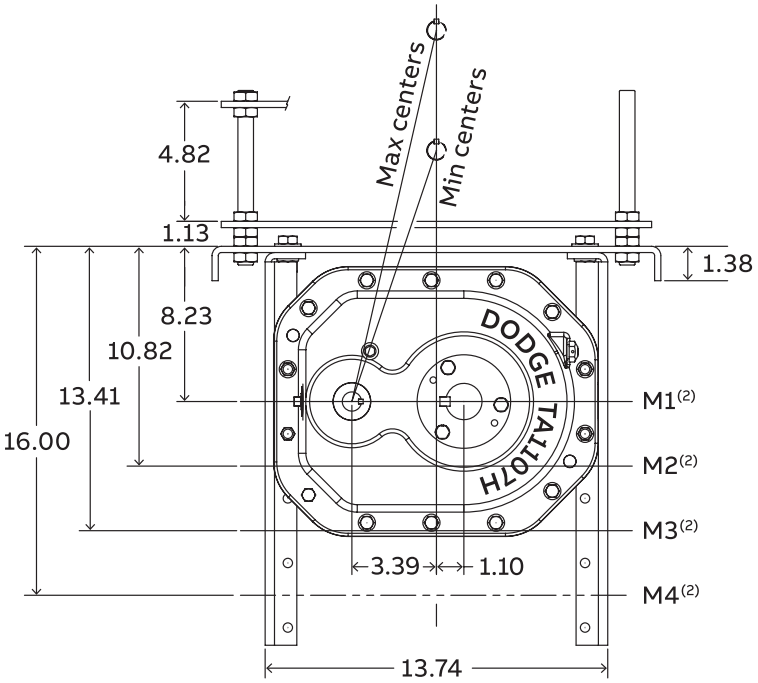
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 56			Motor frame 143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position B	-0.09	3.33	2.10	5.48	M1	0.78	17.7	22.0	1.22	17.7	22.0
					M2		20.3	24.6		20.3	24.6
					M3		22.9	27.2		22.9	27.2
Position D	-0.09	3.33	2.10	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			Motor frame 213T & 215T			Motor frame 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

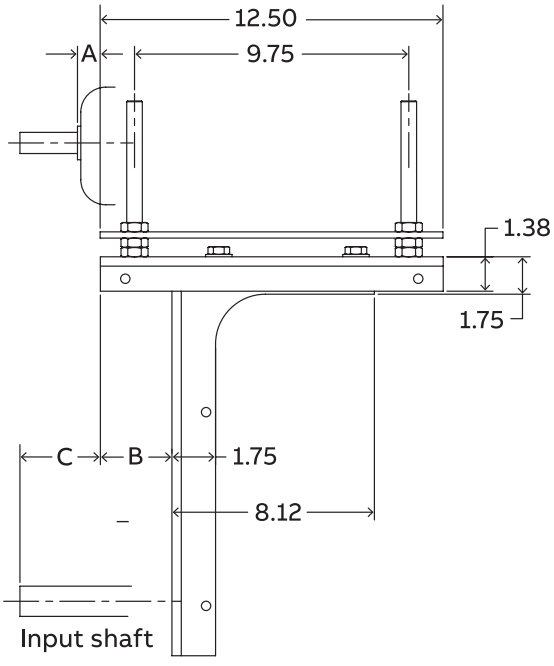
Notes:
Minimum centers contains 0.5” to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however motor mount hardware are inch dimensions.
(2) M1, M2, M3 go through output shaft centerline

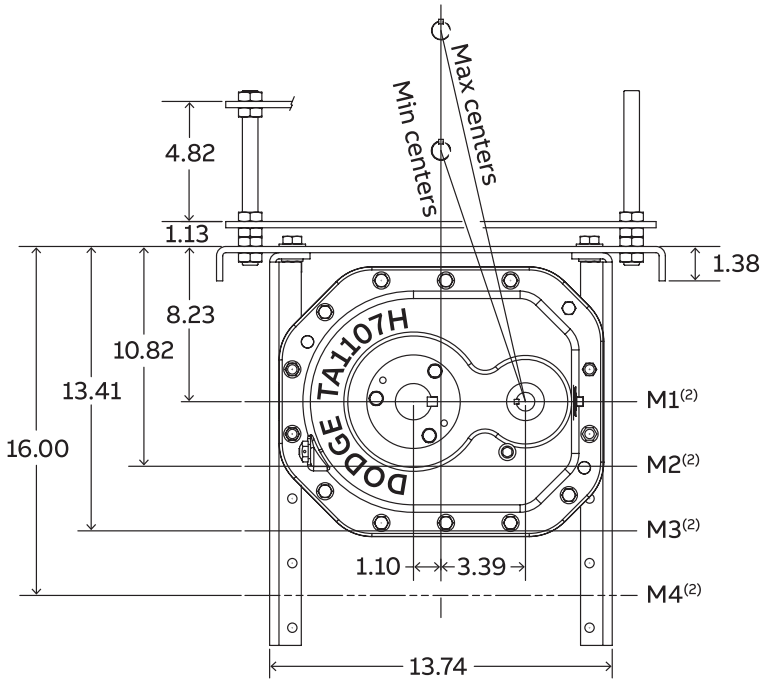
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA1107H, position A & C



Position A





Position C

All dimensions are in inches.

Selection and 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			Motor frame 143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position A	-0.09	3.33	3.01	6.43	M1	0.78	13.8	17.9	1.22	13.8	17.9
					M2		16.2	20.5		16.2	20.5
					M3		18.8	23.0		18.8	23.0
					M4		21.3	25.6		21.3	25.6
Position C	-0.09	3.33	3.01	6.43	M1	0.78	13.8	17.9	1.22	13.8	17.9
					M2		16.2	20.5		16.2	20.5
					M3		18.8	23.0		18.8	23.0
					M4		21.3	25.6		21.3	25.6

Mounting	Motor mount height (2)	182T & 184T			213T & 215T			Motor frame 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

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

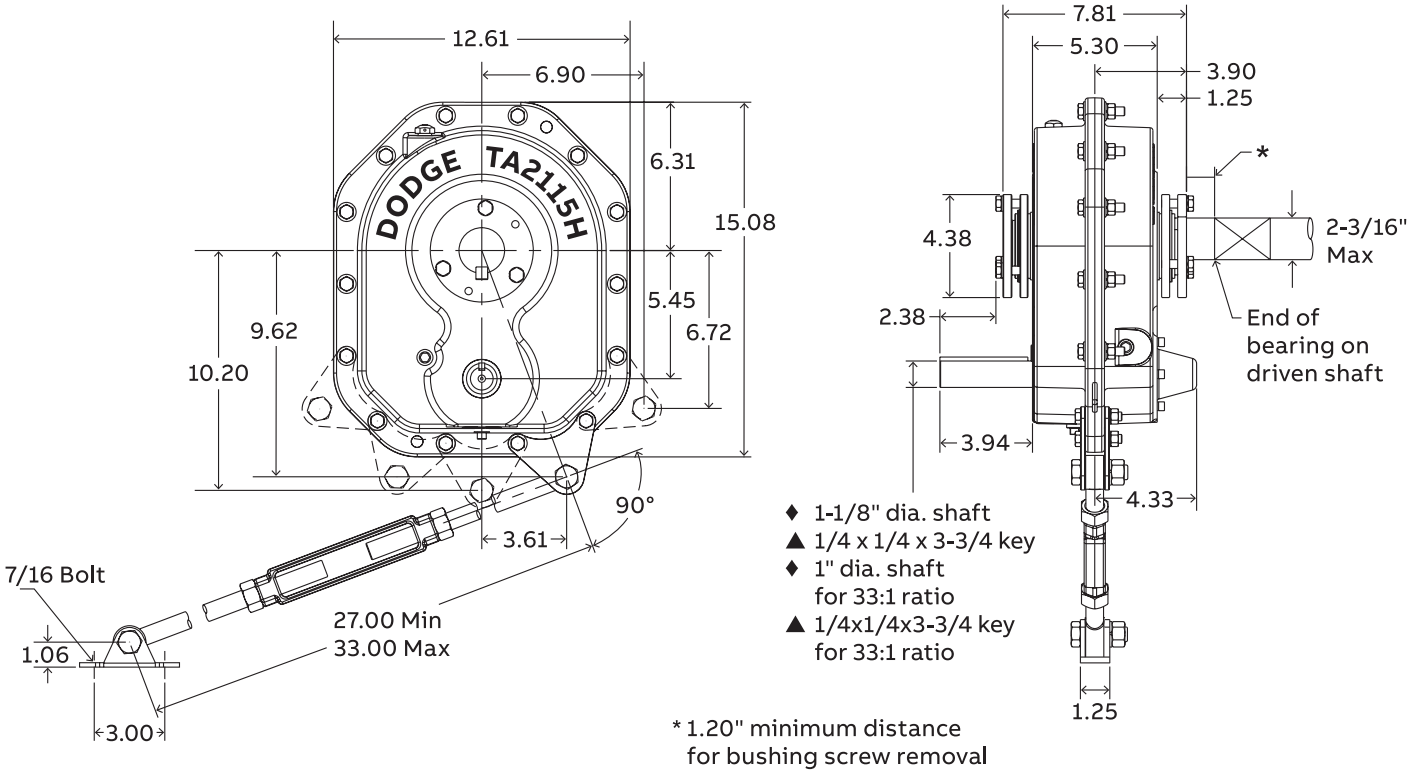
Table A – Screw conveyor motor mount minimum “M” mounting positions [1]

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

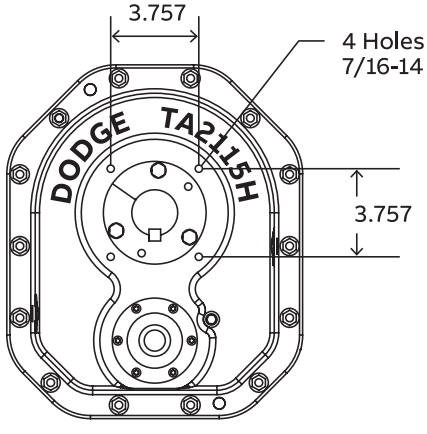
Note:
(1) For U or flared trough ends per CEMA 300-014

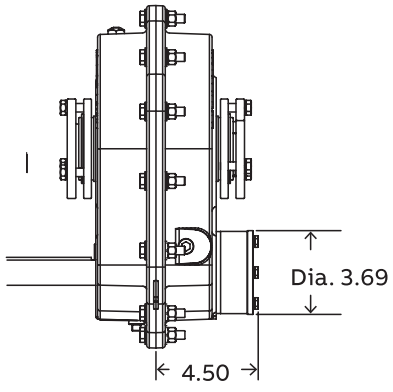
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA2115H, single and double reductions



Flange mounting dimensions





Reducer with backstop

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA2115H, single and double reductions

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, must order as a separate part number.

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

TA2115H Accessories

Description	Part number	Weight lbs.
TA2115RA Rod assembly (1) +	902109	6.9
TA2115BS Backstop assembly (2)	902102	3.9
TA2115MM Motor mount assembly (56-256T) (3)	902090	52.6
TA2115BG Belt guard - Pos. B (56-256T)	902096	47.7
TA0107, 1107, 2115 Belt guard assembly – Pos. B, M2	900101	37.0
TA2115BG Belt guard - Pos. C (56-256T) (4)	902097	52.1
TA2115BG Belt guard - Pos. D (56-256T)	902099	51.0
TA0-TA3 Hydra-Lock dessicant breather kit HL0	964372	2.0
XT Enclosed breather system, TA0-9	240050	2.0
TA0-TA3 Vertical breather kit	900112	2.0
TA2115H V-Ring kit	902249	0.2
TA2115H Lube kit	LUBEKITTA2115	8.1
Dodge ability sensor	750000	0.5

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off
(3) Motor Mount will fit NEMA and IEC frame motors; however, motor mount 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 (7)	Part number	Weight lbs.	Shaft keyseat required (9) (10)
TA2115TB x 2-3/16	902020	4.7	1/2 x 1/4 x 7.80
TA2115TB x 2	902022	5.2	1/2 x 1/4 x 7.80
TA2115TB x 1-15/16 ▲	902023	5.4	1/2 x 1/4 x 7.80
TA2115TB x 1-7/8	902024	5.6	1/2 x 1/4 x 7.80
TA2115TB x 1-3/4	902025	5.8	3/8 x 3/16 x 7.80
TA2115TB x 1-11/16	902026	6.1	3/8 x 3/16 x 7.80
TA2115TB x 1-5/8	902027	6.0	3/8 x 3/16 x 7.80
TA2115TB x 1-1/2	902028	6.4	3/8 x 3/16 x 7.80
TA2115TB x 1-7/16	902029	6.4	3/8 x 3/16 x 7.80
TA2115TB x 1-3/8	902060	6.5	5/16 x 5/32 x 7.80
TA2115TB x 1-5/16	902061	6.7	5/16 x 5/32 x 7.80

Bushing size Short shaft bushing kit (8)	Part number	Weight lbs.	Shaft keyseat required (9) (10)
–	–	–	–
–	–	–	–
TA2115TBS x 1-15/16	902030	5.6	1/2 x 1/4 x 4.80
TA2115TBS x 1-7/8	902031	5.9	1/2 x 1/4 x 4.80
TA2115TBS x 1-3/4	902032	6	3/8 x 3/16 x 4.80
TA2115TBS x 1-11/16	902033	6.6	3/8 x 3/16 x 4.80
TA2115TBS x 1-5/8	902034	6.8	3/8 x 3/16 x 4.80
TA2115TBS x 1-1/2	902035	7.3	3/8 x 3/16 x 4.80
TA2115TBS x 1-7/16	902036	7.4	3/8 x 3/16 x 4.80
TA2115TBS x 1-3/8	902037	7.6	5/16 x 5/32 x 4.80
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 screw conveyor drive shaft in a screw conveyor application
(7) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short shaft bushing kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

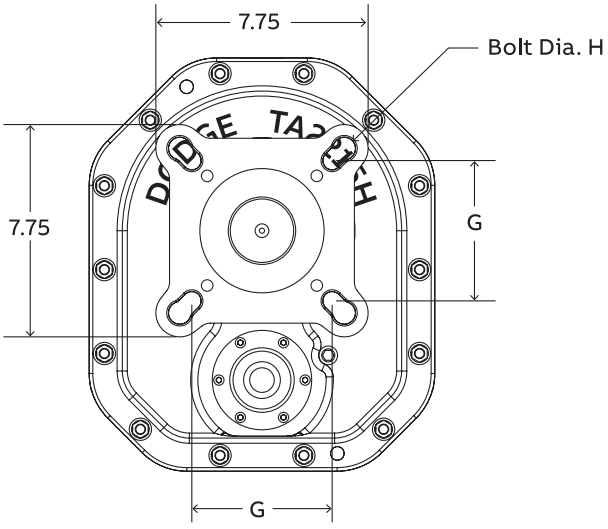
Bushing covers

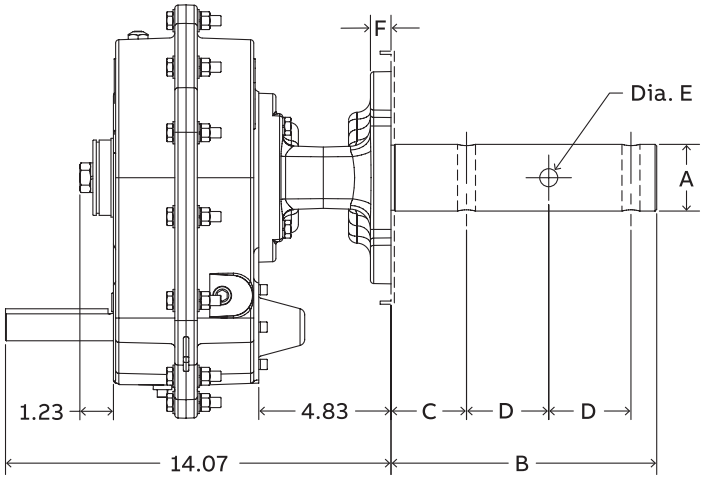
Reducer size	Description	Part number	Weight
TA2115H	ABS Polymer closed (12)	902142	0.6
TA2115H	ABS Polymer split (12)	902143	0.5

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

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA2115H, single and double reductions





All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA2115H, single and double reductions

TA2115H Screw conveyor drive dimensions

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

TA2115H Accessories for screw conveyor drives [1] [4] [5]

Description	Part number	Weight lbs.
TA2115SCA Adapter & hardware kit [2]	902070	19.2
TA2115SCP Adjustable packing kit [3]	902071	1.2
TA2115SCS x 1-1/2 Drive shaft	902072	15.4
TA2115SCS x 2 Drive shaft	902073	18.6
TA2115SCS x 2-7/16 Drive shaft	902074	23.3
TA2115SCS x 3 Drive shaft	902075	29.5
TA2115SCS x 1-1/2 Stainless steel drive shaft	902080	15.4
TA2115SCS x 2 Stainless Steel drive shaft	902081	18.6
TA2115SCS x 2-7/16 Stainless steel drive shaft	902082	23.3
TA2115SCS x 3 Stainless steel drive shaft	902083	29.5
TA2115MM Motor mount assembly (56-256T)	902090	56.5
TA2115BG Belt guard - Pos. C (56-256T) [1]	902097	47.7
TA0-TA3 Hydra-Lock dessicant breather Kit HLO	964372	2.0
XT Enclosed breather system, TA0-9	240050	2.0
Dodge ability sensor	750000	0.5

(1) Pos “C” Belt guard most popularfor screw conveyor drive applications

(2) SCA Adapter & hardware kit includes adapter, mounting wedge, keeper plate, key, seals and hardware

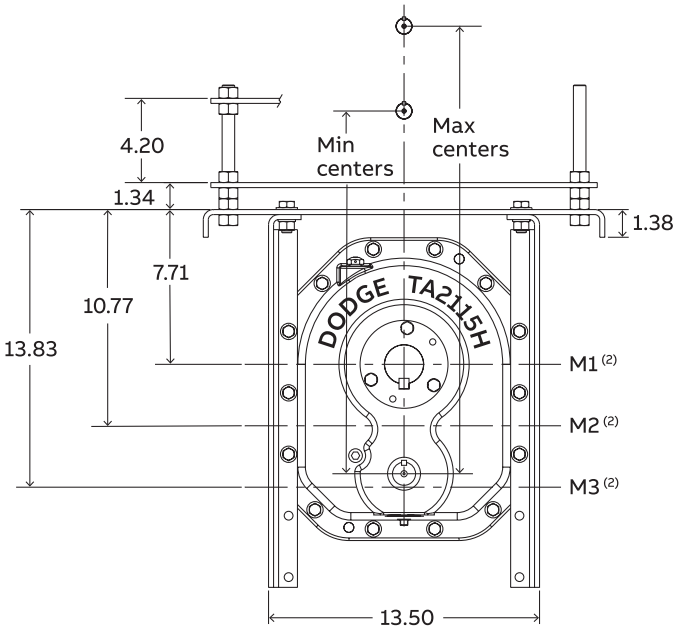
(3) SCP Adjustable packing kit consists of flange, mounting hardware and braided packing seals

(4) SCS Drive shaft is a shaft only. Hardware is stocked with the adapter & hardware kit.

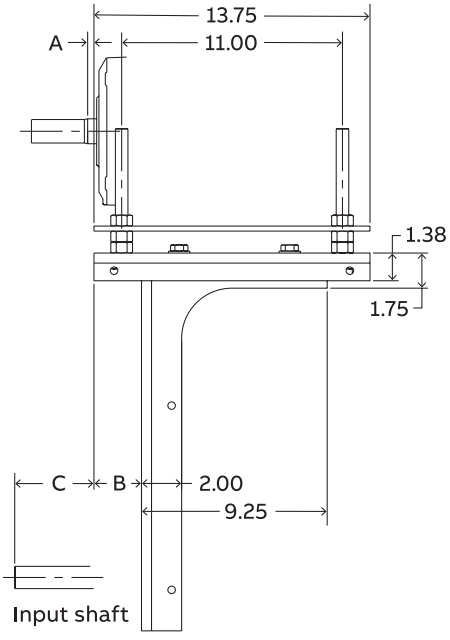
(5) A complete TA II screw conveyor drive, order a TA II reducer, SCA adapter & hardware kit, and SCS drive shaft. The SCP adjustable packing kit is an optional accessory.

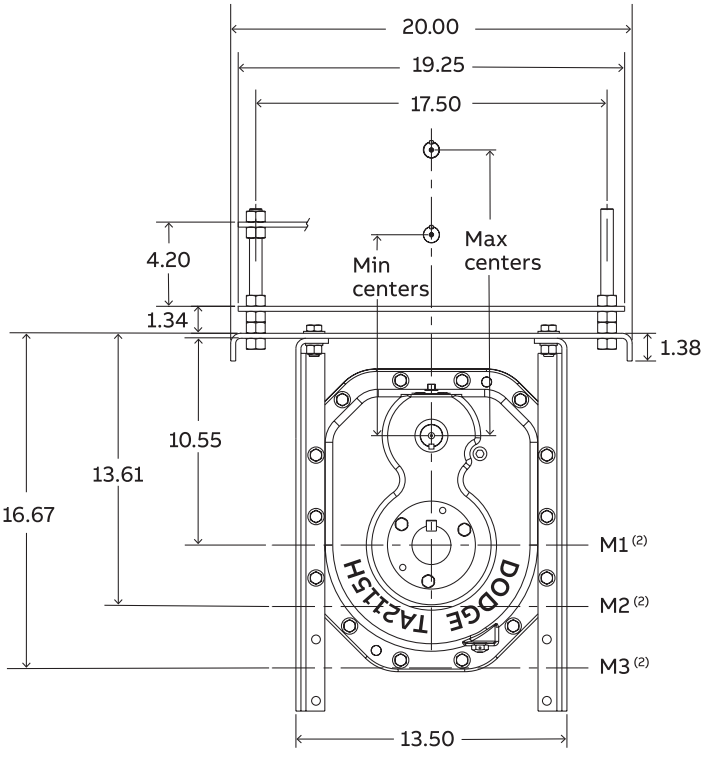
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA2115H, position B & D



Position B





Position D

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA2115H, position B & D (1)

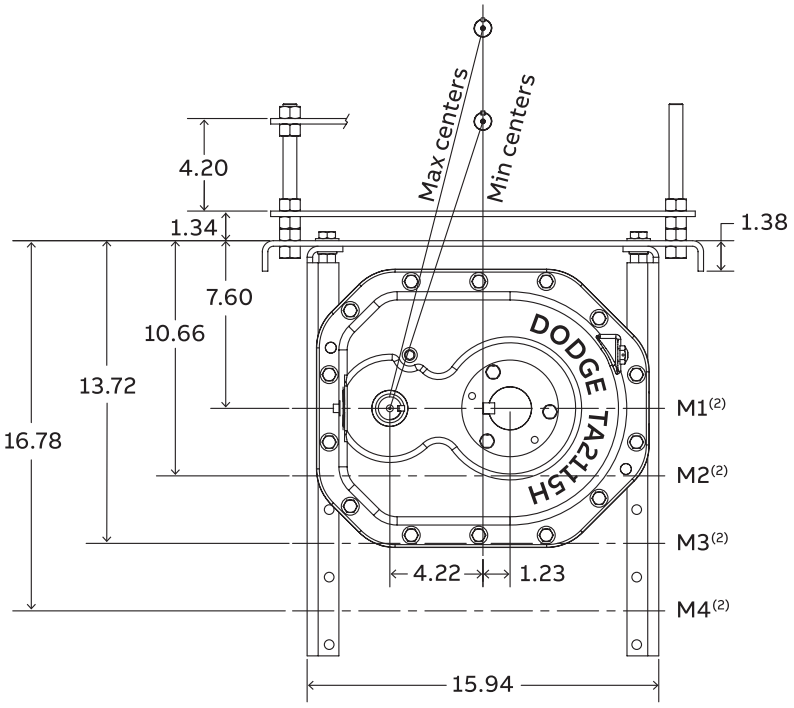
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 56			Motor frame 143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position B	0.19	3.61	2.32	5.74	M1	0.78	18.5	22.2	1.22	18.5	22.2
					M2		21.6	25.3		21.6	25.3
					M3		24.6	28.3		24.6	28.3
Position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

Mounting	Motor mount height (2)	182T & 184T			213T & 215T			Motor frame 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

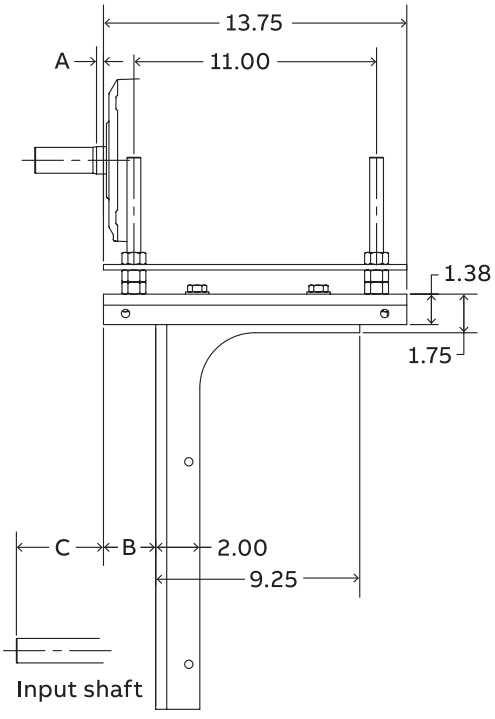
Notes:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.
(2) M1, M2, M3 go through output shaft centerline

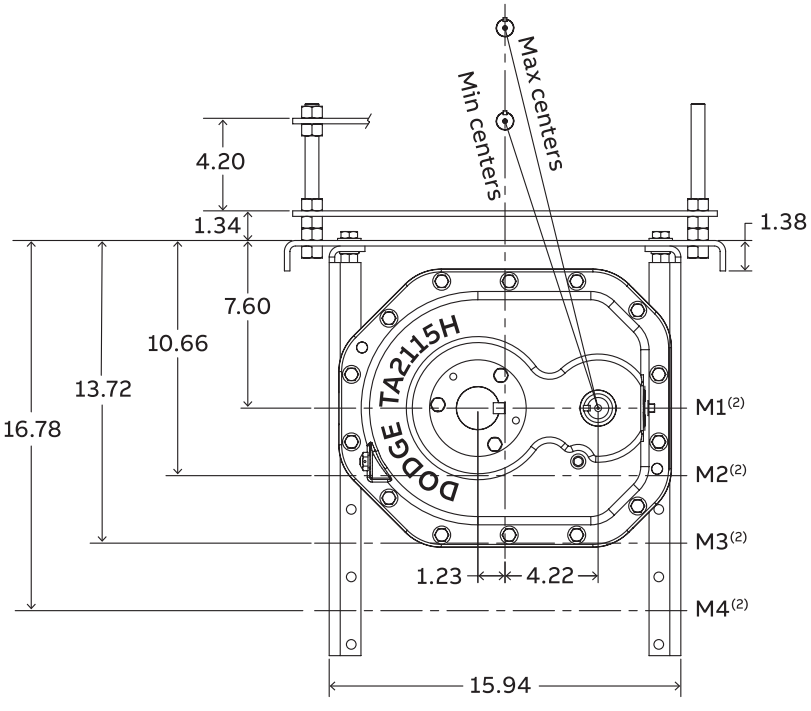
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA2115H, position A & C



Position A





Position C

All dimensions are in inches.

Selection and 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			Motor frame 143T & 145T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position A	0.19	3.61	3.39	6.81	M1	0.78	13.6	17.2	1.22	13.6	17.2
					M2		16.6	20.1		16.6	20.1
					M3		19.5	23.1		19.5	23.1
					M4		22.5	26.2		22.5	26.2
Position C	0.19	3.61	3.39	6.81	M1	0.78	13.6	17.2	1.22	13.6	17.2
					M2		16.6	20.1		16.6	20.1
					M3		19.5	23.1		19.5	23.1
					M4		22.5	26.2		22.5	26.2

Mounting	Motor mount height (2)	182T & 184T			213T & 215T			Motor frame 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

Notes:

Minimum centers contains 0.5” to allow for belt assembly

(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.

(2) M1, M2, M3, M4 go through output shaft centerline

(3) See Table A, below, for minimum “M” mounting position required for specific screw diameter and reducer size

Table A – Screw conveyor motor mount minimum “M” mounting positions [1]

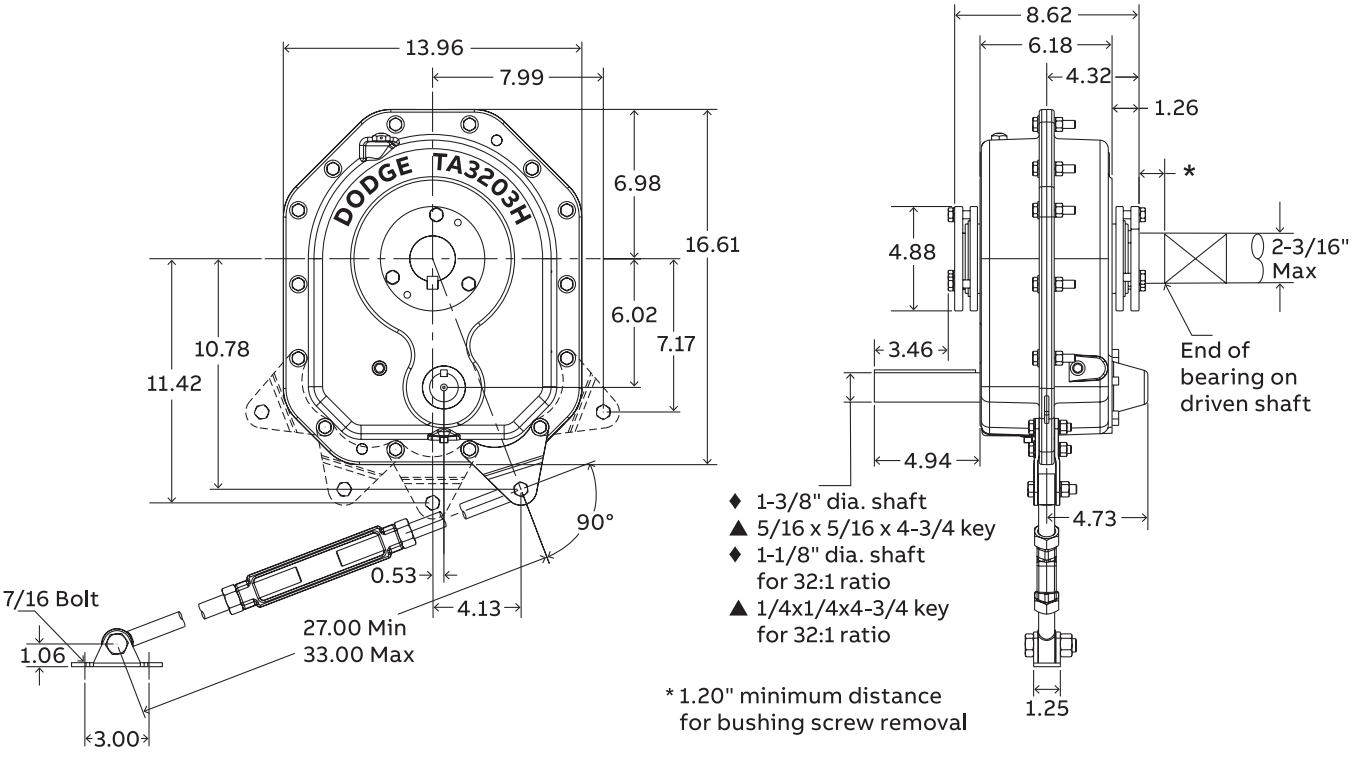
Nominal screw Dia	Trough height Dim	Minimum mounting position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13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

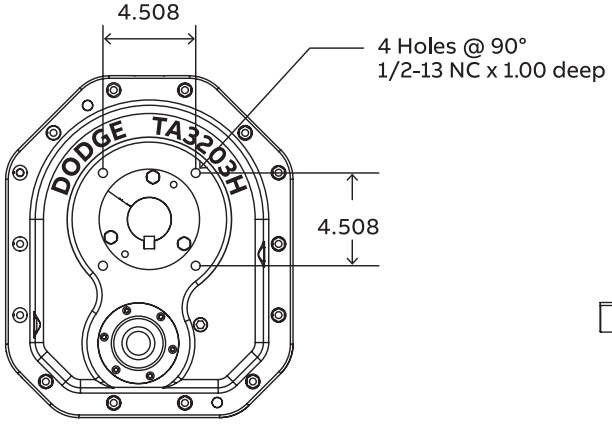
Note:

(1) For U or flared trough ends per CEMA 300-014

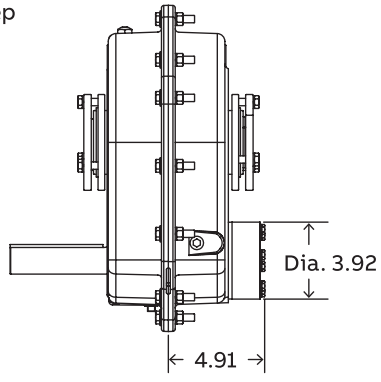
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA3203H, single and double reductions





Flange mounting dimensions



Reducer with backstop

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA3203H, single and double reductions

TA3203H 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, must order as a separate part number.

■ See page G2-121 for maximum bore straight bore TA II reducers

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

TA3203H Accessories

Description	Part number	Weight lbs.
TA3203RA Rod assembly (1) +	903109	6.9
TA3203BS Backstop assembly (2)	903102	4.7
TA3203MM Motor mount assembly (143-286T) (3)	903090	86.7
TA3203BG Belt guard - Pos. B (143-286T)	903096	65.5
TA3203 Belt guard assembly – Pos. B, M2	903101	55.0
TA3203BG Belt guard - Pos. C (143-286T) (4)	903097	67.9
TA3203BG Belt guard - Pos. D (143-286T)	903099	67.0
TA0-TA3 Hydra-Lock dessicant breather kit HL0	964372	2.0
XT Enclosed breather system, TA0-9	240050	2.0
TA0-TA3 Vertical breather kit	900112	2.0
TA3203H V-Ring kit	903249	0.2
TA3203H Lube kit	LUBEKITTA3203	10.4
Dodge ability sensor	750000	0.5

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off

(3) Motor Mount will fit NEMA and IEC frame motors; however, motor mount 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)
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
TA3203TB x 2-1/8	903023	7.0	1/2 x 1/4 x 8.55
TA3203TB x 2	903024	7.5	1/2 x 1/4 x 8.55
TA3203TB x 1-15/16	903025	7.8	1/2 x 1/4 x 8.55
TA3203TB x 1-7/8	903026	8.0	1/2 x 1/4 x 8.55
TA3203TB x 1-3/4	903027	8.0	3/8 x 3/16 x 8.55
TA3203TB x 1-11/16	903028	8.2	3/8 x 3/16 x 8.55
TA3203TB x 1-5/8	903029	8.4	3/8 x 3/16 x 8.55
TA3203TB x 1-1/2	903060	8.8	3/8 x 3/16 x 8.55
TA3203TB x 1-7/16	903061	8.8	3/8 x 3/16 x 8.55

Bushing size Short shaft bushing kit (8)	Part number	Weight lbs.	Shaft keyseat required (9) (10)
–	–	–	–
–	–	–	–
TA3203TBS x 2-3/16	903030	7.0	1/2 x 1/4 x 5.46
TA3203TBS x 2-1/8	903031	7.4	1/2 x 1/4 x 5.46
TA3203TBS x 2	903032	8.0	1/2 x 1/4 x 5.46
TA3203TBS x 1-15/16	903033	8.4	1/2 x 1/4 x 5.46
TA3203TBS x 1-7/8	903034	8.7	1/2 x 1/4 x 5.46
TA3203TBS x 1-3/4	903035	9.0	3/8 x 3/16 x 5.46
TA3203TBS x 1-11/16	903036	9.3	3/8 x 3/16 x 5.46
TA3023TBS x 1-5/8	903037	9.6	3/8 x 3/16 x 5.46
TA3203TBS x 1-1/2	903038	9.9	3/8 x 3/16 x 5.46
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 screw conveyor drive shaft in a screw conveyor application

(7) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key.

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

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

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

Bushing covers

Reducer size	Description	Part number	Weight
TA2115H	ABS Polymer closed (12)	902142	0.6
TA2115H	ABS Polymer split (12)	902143	0.5

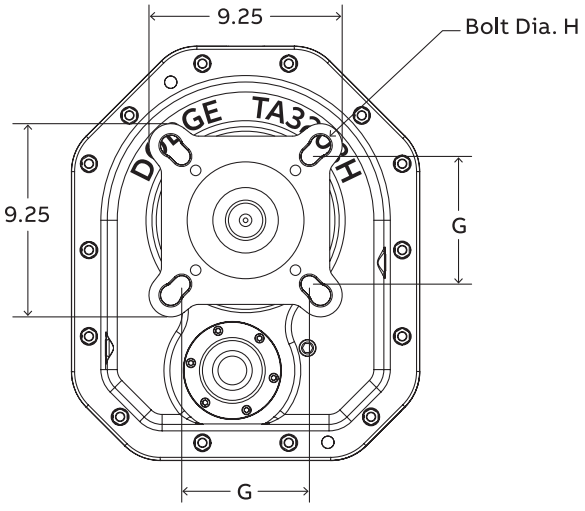
Closed bushing covers may not be compatible with belt guards or large sheave installations

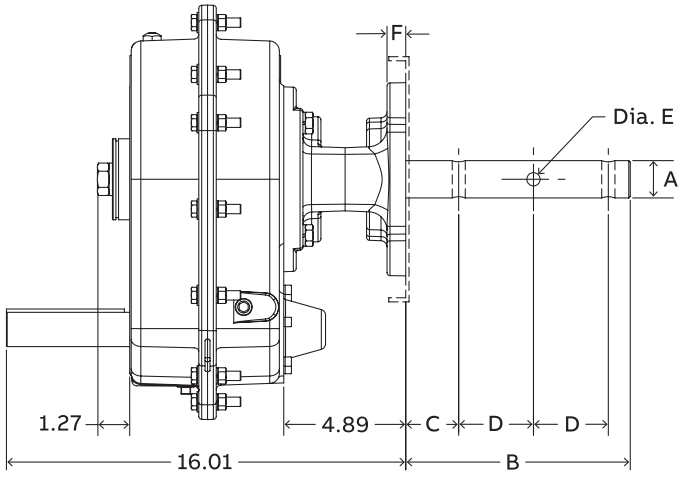
Split bushing covers are designed for use on “driven machine” side of reducer with shaft through

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

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA3203H, single and double reductions





All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA3203H, single and double reductions

TA3203H Screw conveyor drive dimensions

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

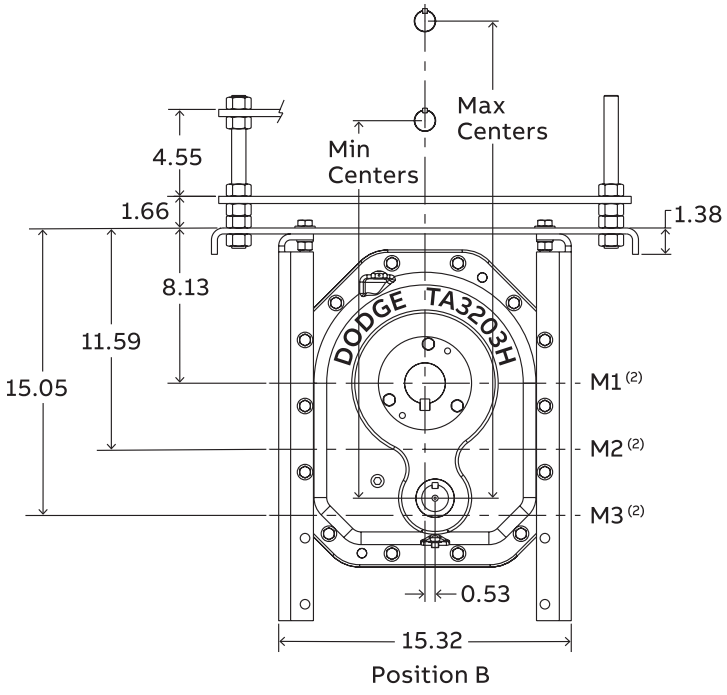
TA3203H Accessories for screw conveyor drives (1) (4) (5)

Description	Part number	Weight lbs.
TA3203SCA Adapter & hardware kit (2)	903070	22.0
TA3203SCP Adjustable packing kit (3)	903071	1.4
TA3203SCS x 1-1/2 Drive shaft	903072	19.3
TA3203SCS x 2 Drive shaft	903073	22.6
TA3203SCS x 2-7/16 Drive shaft	903074	27.2
TA3203SCS x 3 Drive shaft	903075	33.6
TA3203SCS x 3-7/16 Drive shaft	903076	44.8
TA3203SCS x 1-1/2 Stainless Steel drive shaft	903080	19.3
TA3203SCS x 2 Stainless Steel drive shaft	903081	22.6
TA3203SCS x 2-7/16 Stainless steel drive shaft	903082	27.2
TA3203SCS x 3 Stainless Steel drive shaft	903083	33.6
TA3203SCS x 3-7/16 Stainless steel drive shaft	903084	44.8
TA3203MM Motor mount assembly (56-286T)	902090	86.7
TA3203BG Belt guard - Pos. C (56-286T) (1)	902097	67.9
TA0-TA3 Hydra-Lock dessicant breather Kit HLO	964372	2.0
XT Enclosed breather system, TA0-9	240050	2.0
Dodge ability sensor	750000	0.5

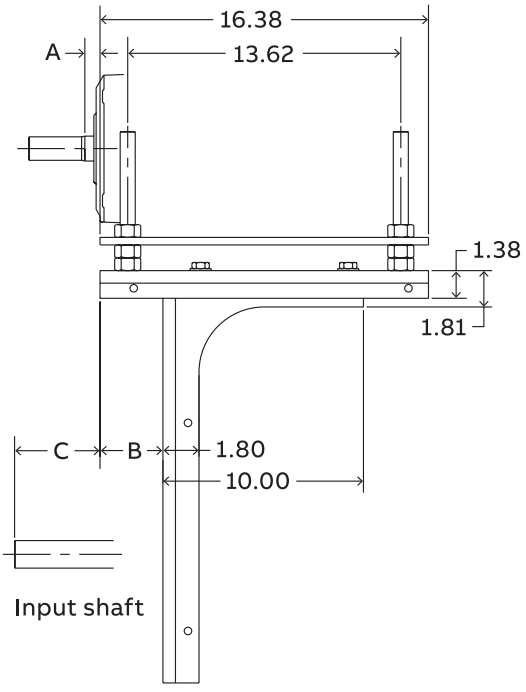
(1) Pos “C” Belt guard most popular for screw conveyor drive applications
(2) SCA Adapter & hardware kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable packing kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive shaft is a shaft only. Hardware is stocked with the adapter & hardware kit.
(5) A complete TA II screw conveyor drive, order a TA II reducer, SCA adapter & hardware kit, and SCS drive shaft. The SCP adjustable packing kit is an optional accessory.

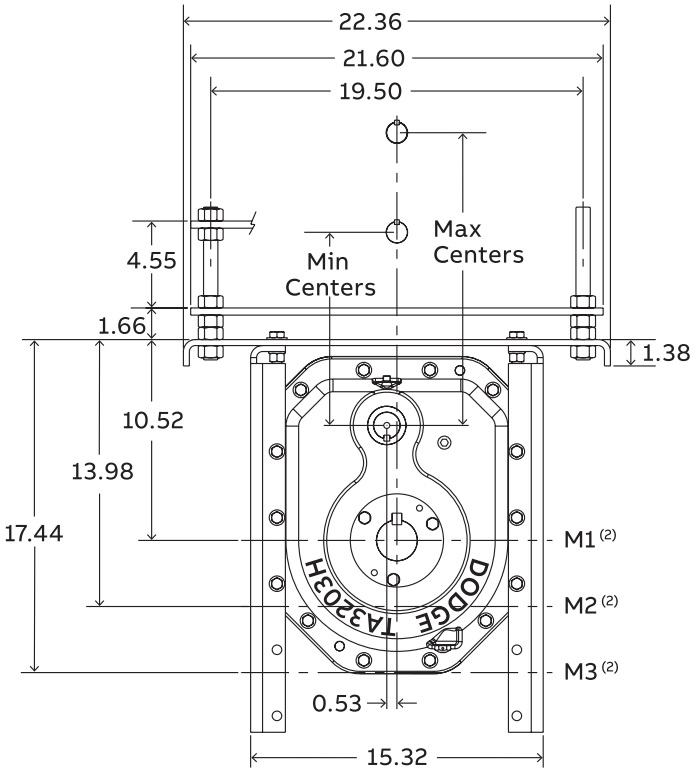
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA3203H, position B & D



Position B





Position D

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA3203H, position B & D (1)

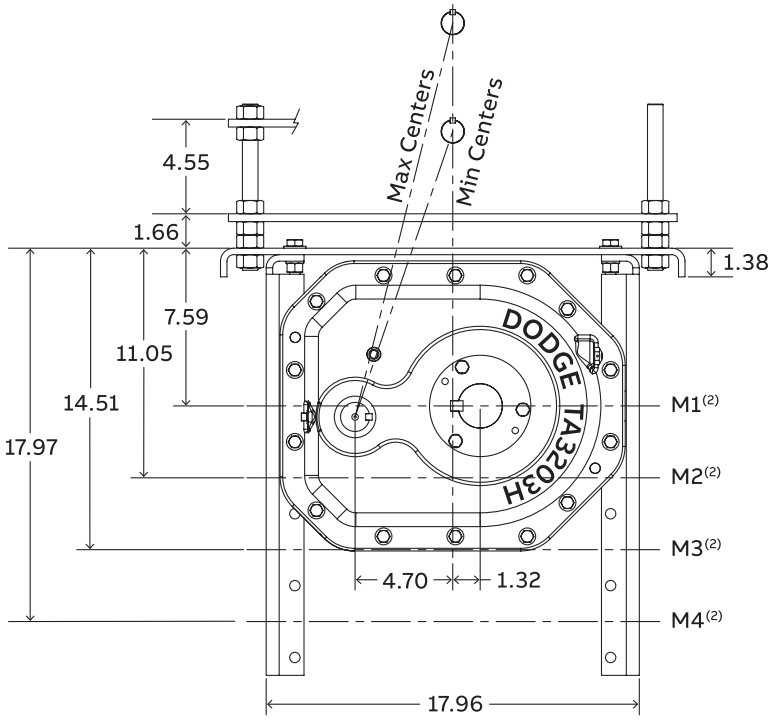
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 143T & 145T			Motor frame 182T & 184T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position A	0.04	5.34	2.06	7.36	M1	1.22	19.8	23.9	1.37	20.8	24.9
					M2		23.3	27.3		24.3	28.3
					M3		26.7	30.8		27.7	31.8
Position C	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)	213T & 215T			254T & 256T			Motor frame 284T & 286T		
		A	Centers		A	Centers		A	Centers	
			Min	Max		Min	Max		Min	Max
Position A	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 C	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

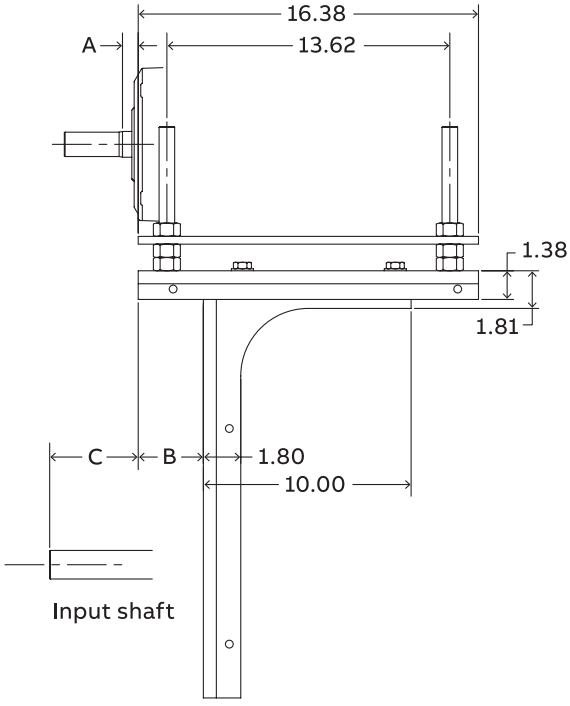
Notes:
Minimum centers contains 0.5” to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.
(2) M1, M2, M3, M4 go through output shaft centerline

Selection and dimensions

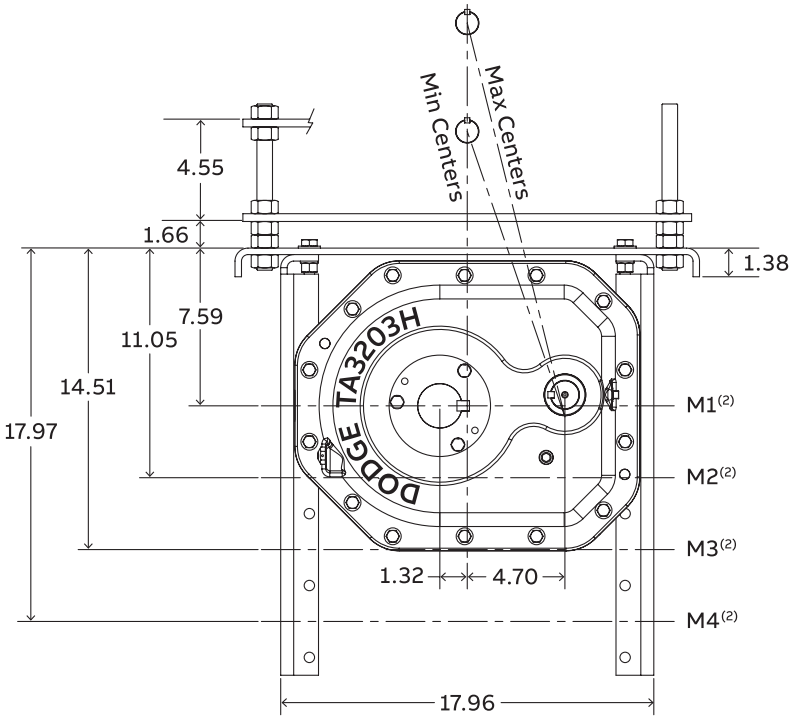
Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA3203H, position A & C



Position A



Input shaft



Position C

All dimensions are in inches.

Selection and 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			Motor frame 182T & 184T		
						A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max
Position A	0.04	5.34	3.07	8.37	M1	1.22	14.6	18.4	1.37	15.5	19.4
					M2		17.9	21.8		18.9	22.8
					M3		21.2	25.2		22.2	26.2
					M4		24.6	28.6		25.6	29.6
Position C	0.04	5.34	3.07	8.37	M1	1.22	13.6	17.4	1.37	14.5	18.4
					M2		16.9	20.8		17.8	21.7
					M3		20.2	24.2		21.2	25.1
					M4		23.6	27.6		24.6	28.5

Mounting	Motor mount height (2)	213T & 215T			254T & 256T			Motor frame 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

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

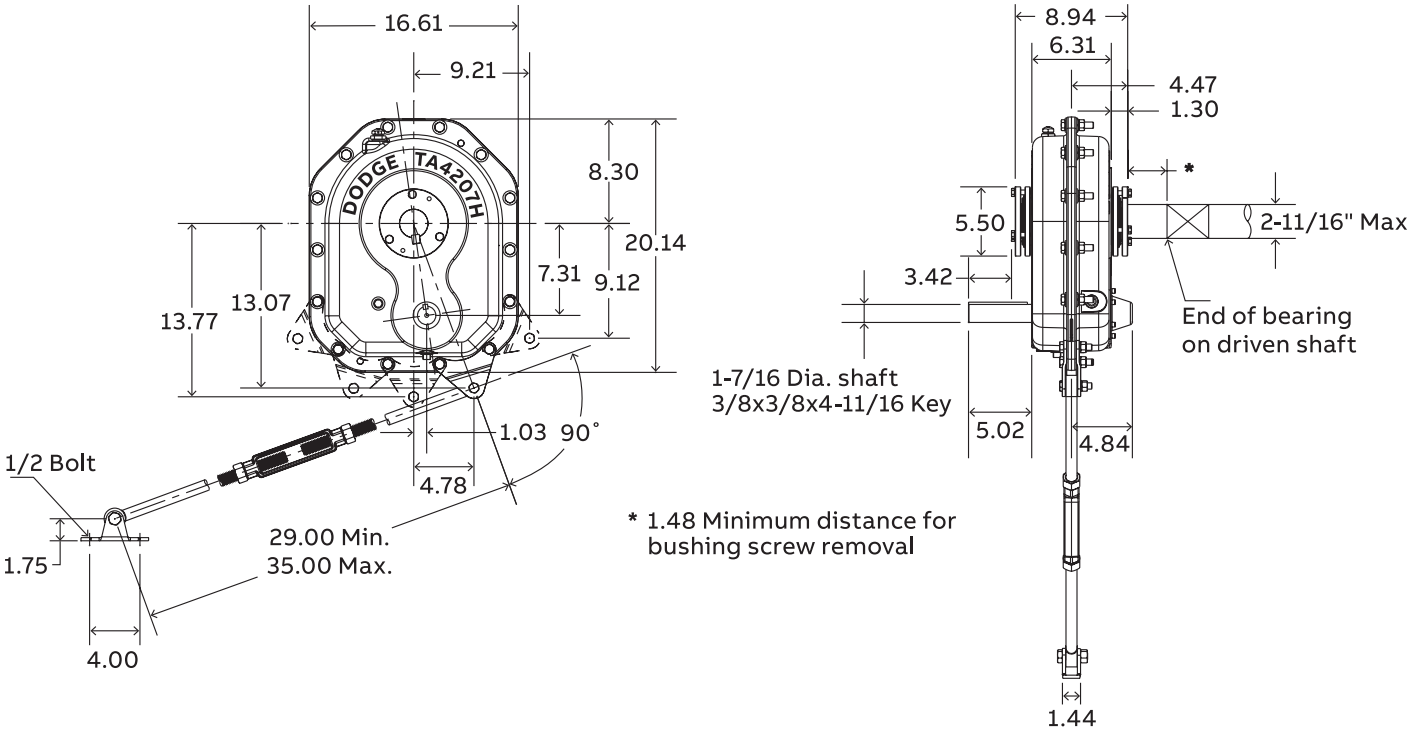
Table A – Screw conveyor motor mount minimum “M” mounting positions (1)

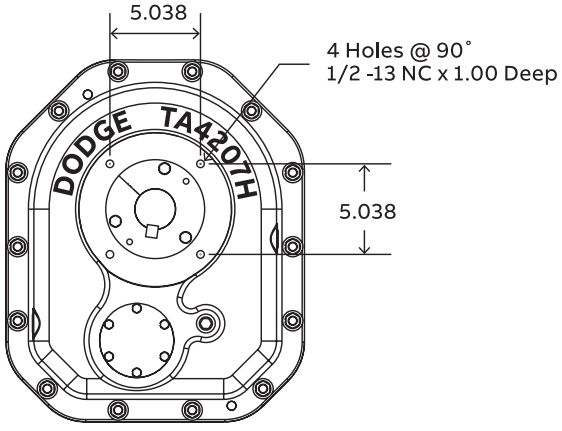
Nominal screw Dia	Trough height Dim	Minimum mounting position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13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

Note:
(1) For U or flared trough ends per CEMA 300-014

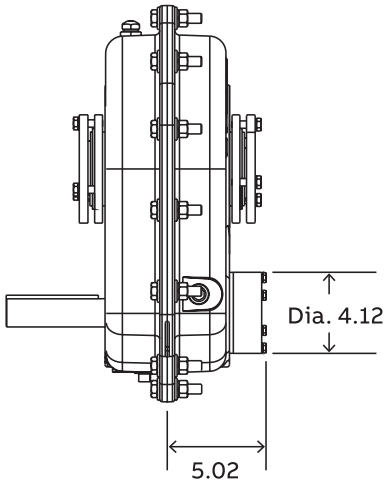
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA4207H, single and double reductions





Flange mounting dimensions



Reducer with backstop

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA4207H, single and double reductions

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, must order as a separate part number.

■ See page G2-121 for maximum bore straight bore TA II reducers

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

TA4207H Accessories

Description	Part number	Weight lbs.
TA4207RA Rod Assembly [1] +	904109	10.6
TA4207BS Backstop Assembly (5, 9, 15, 25:1) [2]	904102	5.2
TA4207BS 40:1 Backstop Assembly [2]	904103	5.2
TA4207MM Motor Mount Assembly (143-326T) [3]	904090	114.3
TA4207BG Belt Guard - Pos. B (143-326T)	904096	79.6
TA4207 Belt guard assembly Pos. B M2	904101	64.0
TA4207BG Belt Guard - Pos. C (143-326T) [4]	904097	82.7
TA4207BG Belt Guard - Pos. D (143-326T)	904099	80.6
TA4207CF Cooling Assembly ●	904106	2.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit HL1	964364	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA4207H V-Ring Kit	904249	0.3
TA4207H Lube Kit	LUBEKITTA4207	16.2
Dodge ability sensor	750000	0.5

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

TA4207H Tapered bushing kits [5] [6]

Bushing size Standard shaft bushing kit	Part number (7)	Weight lbs.	Shaft keyseat required (9) (10)
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
TA4207TB x 2-3/8	904023	11.3	5/8 x 5/16 x 8.93
TA4207TB x 2-1/4	904024	11.5	1/2 x 1/4 x 8.93
TA4207TB x 2-3/16	904025	11.8	1/2 x 1/4 x 8.93
TA4207TB x 2-1/8	904026	12.2	1/2 x 1/4 x 8.93
TA4207TB x 2	904027	12.6	1/2 x 1/4 x 8.93
TA4207TB x 1-15/16	904028	13.0	1/2 x 1/4 x 8.93
TA4207TB x 1-7/8	904029	13.2	1/2 x 1/4 x 8.93
TA4207TB x 1-3/4	904030	13.3	3/8 x 3/16 x 8.93
TA4207TB x 1-11/16	904031	13.5	3/8 x 3/16 x 8.93

Bushing size Short shaft bushing kit (8)	Part number	Weight lbs.	Shaft keyseat required (9) (10)
–	–	–	–
–	–	–	–
TA4207TBS x 2-7/16	904032	11.3	5/8 x 5/16 x 5.65
TA4207TBS x 2-3/8	904033	11.8	5/8 x 5/16 x 5.65
TA4207TBS x 2-1/4	904034	12.4	1/2 x 1/4 x 5.65
TA4207TBS x 2-3/16	904035	10.8	1/2 x 1/4 x 5.65
TA4207TBS x 2-1/8	904036	13.3	1/2 x 1/4 x 5.65
TA4207TBS x 2	904037	13.9	1/2 x 1/4 x 5.65
TA4207TBS x 1-15/16	904038	14.3	1/2 x 1/4 x 5.65
TA4207TBS x 1-7/8	904039	14.6	1/2 x 1/4 x 5.65
TA4207TBS x 1-3/4	904040	15.0	3/8 x 3/16 x 5.65
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 screw conveyor drive shaft in a screw conveyor application
(7) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short shaft bushing kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

Bushing covers

Reducer size	Description	Part number	Weight
TA4207H	ABS Polymer closed [12]	904142	0.6
TA4207H	ABS Polymer split [12]	904143	0.5

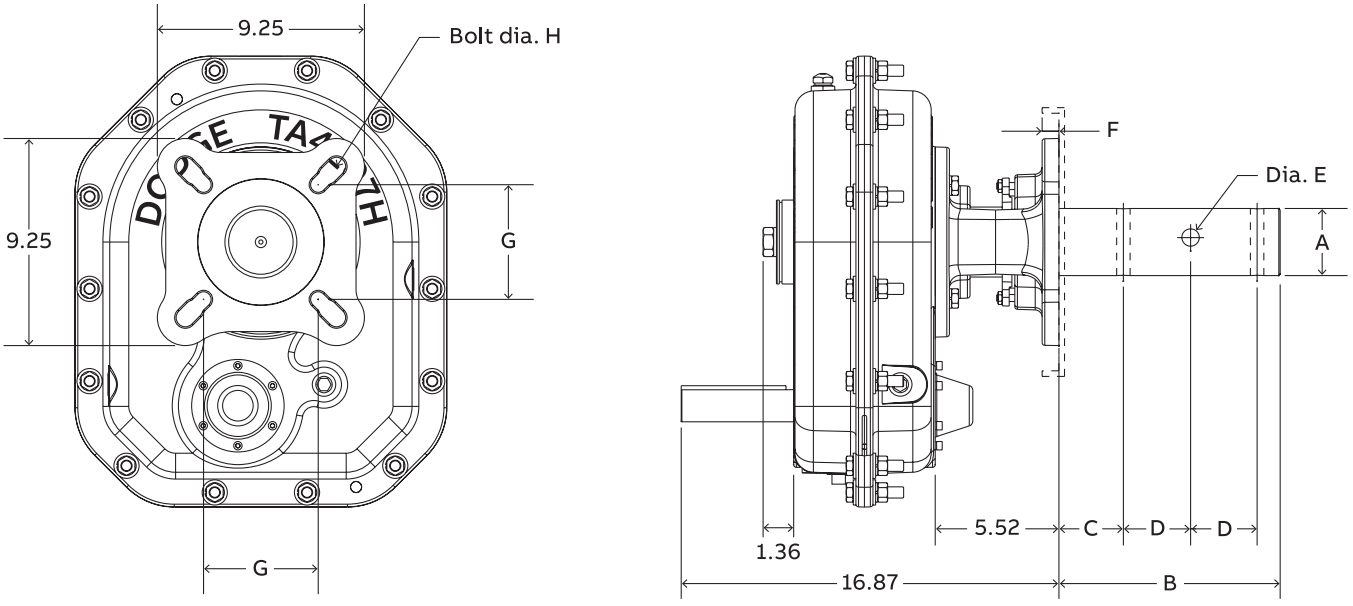
Closed bushing covers may not be compatible with belt guards or large sheave installations

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

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

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA4207H, single and double reductions



All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA4207H, single and double reductions

TA4207H Screw conveyor drive dimensions

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

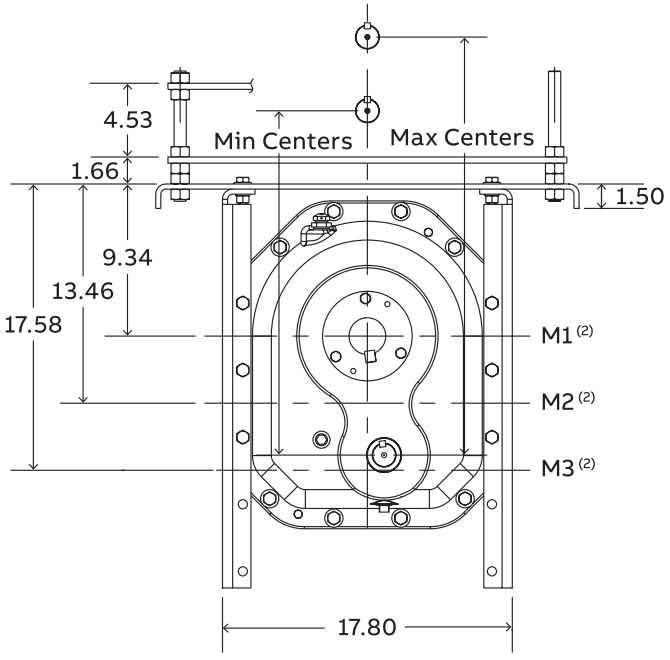
TA4207H Accessories for screw conveyor drives (1) (4) (5)

Description	Part number	Weight lbs.
TA4207SCA Adapter & hardware kit (2)	904070	33.6
TA4207SCP Adjustable packing kit (3)	904071	2.1
TA4207SCS x 2 Drive shaft	904073	29.8
TA4207SCS x 2-7/16 Drive shaft	904074	34.5
TA4207SCS x 3 Drive shaft	904075	40.9
TA4207SCS x 3-7/16 Drive shaft	904076	54.7
TA4207SCS x 2 Stainless steel drive shaft	904081	29.8
TA4207SCS x 2-7/16 Stainless steel drive Shaft	904082	34.5
TA4207SCS x 3 Stainless steel drive shaft	904083	40.9
TA4207SCS x 3-7/16 Stainless steel drive shaft	904084	54.7
TA4207MM Motor mount assembly (143-326T)	904090	114.3
TA4207BG Belt guard - Pos. C (143-326T) š1ť	904097	82.7
TA4-TA9 Hydra-Lock dessicant breather kit HL1	964364	2.0
XT Enclosed breather system, TA0-9	240050	2.0
Dodge ability sensor	750000	0.5

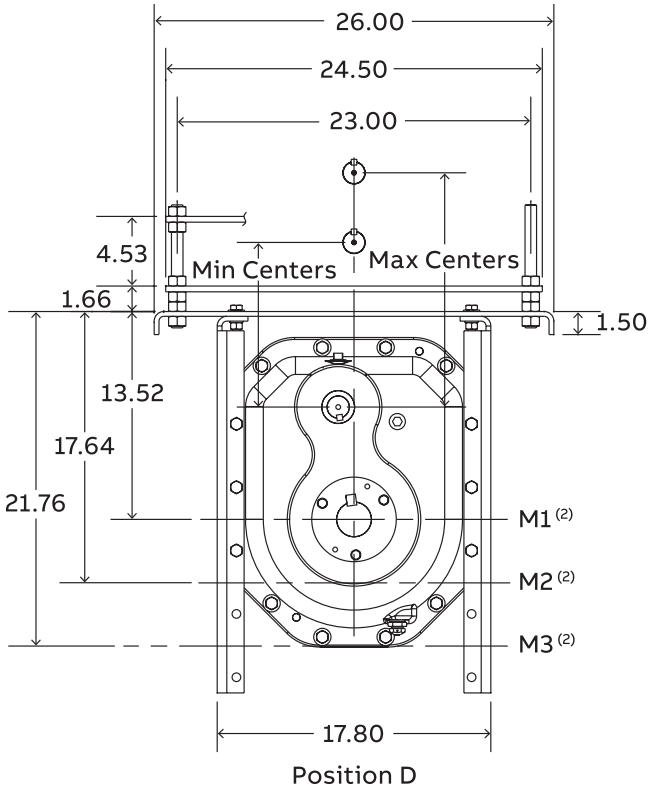
(1) Pos “C” Belt guard most popular for screw conveyor drive applications
(2) SCA Adapter & hardware kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable packing kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive shaft is a shaft only. Hardware is stocked with the adapter & hardware kit.
(5) A complete TA II screw conveyor drive, order a TA II reducer, SCA adapter & hardware kit, and SCS drive shaft. The SCP adjustable packing kit is an optional accessory.

Selection and dimensions

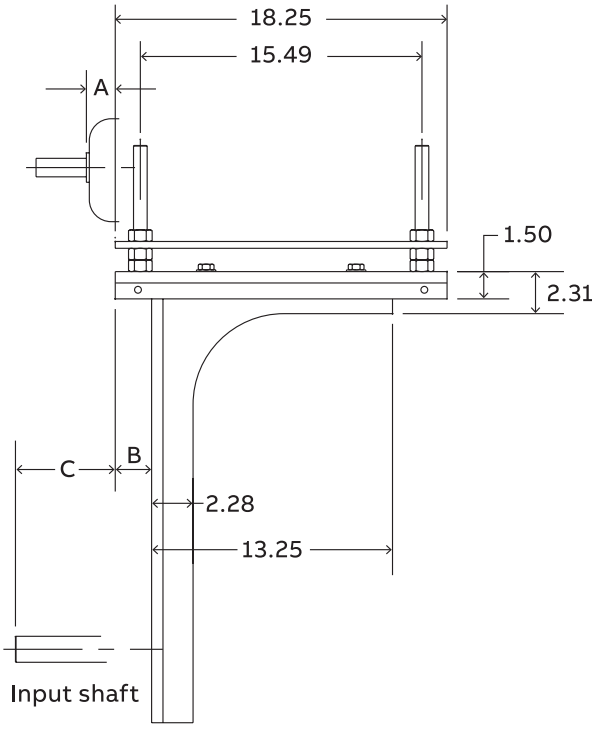
Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA4207H, position B & D



Position B



Position D



All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA4207H, position B & D (1)

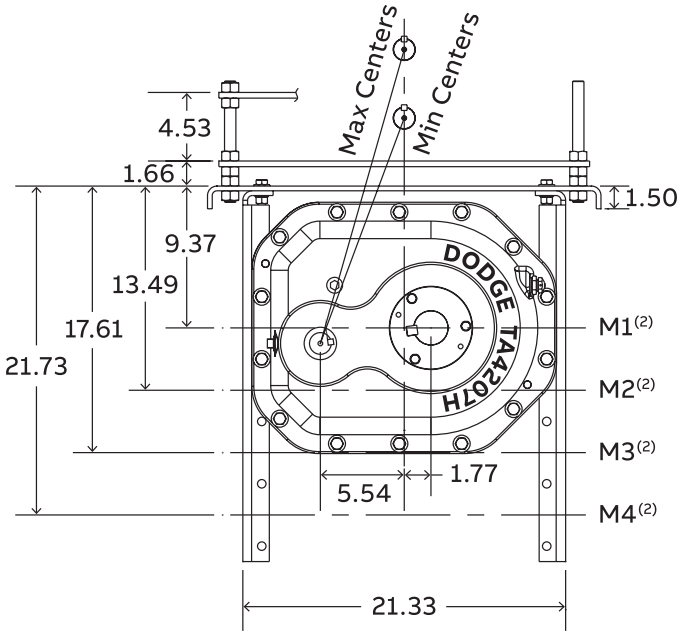
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 143T & 145T			182T & 184T			213T & 215T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	-0.21	4.21	3.28	7.70	M1	1.22	22.6	26.7	1.37	23.6	27.7	1.55	24.4	28.4
					M2		26.8	30.8		27.8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

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

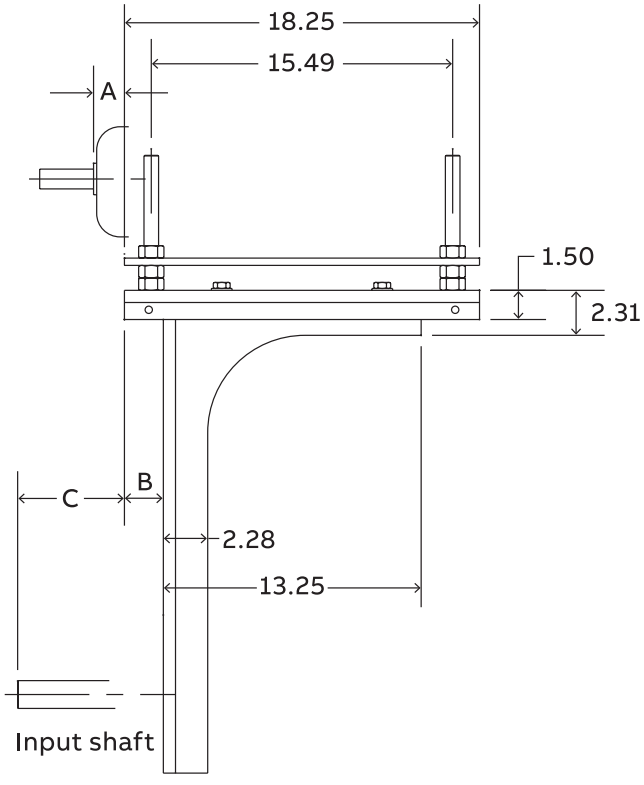
Notes:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.
(2) M1, M2, M3 go through output shaft centerline

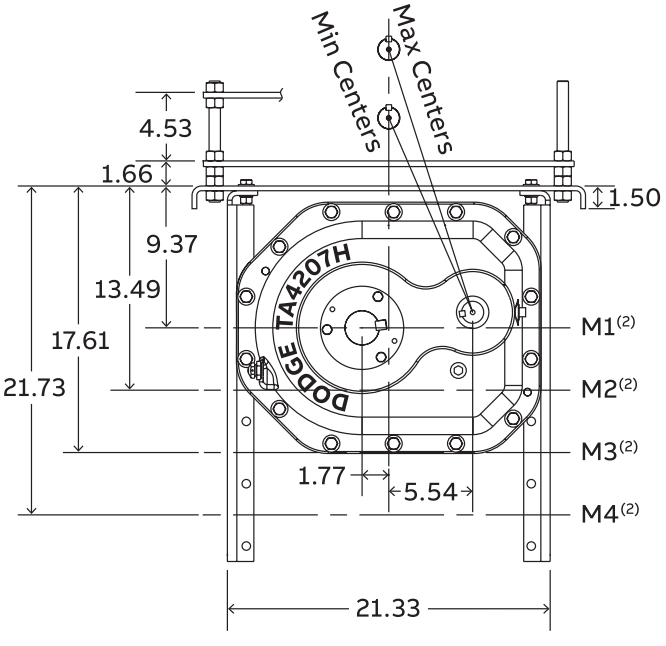
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA4207H, position A & C



Position A





Position C

All dimensions are in inches.

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

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

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

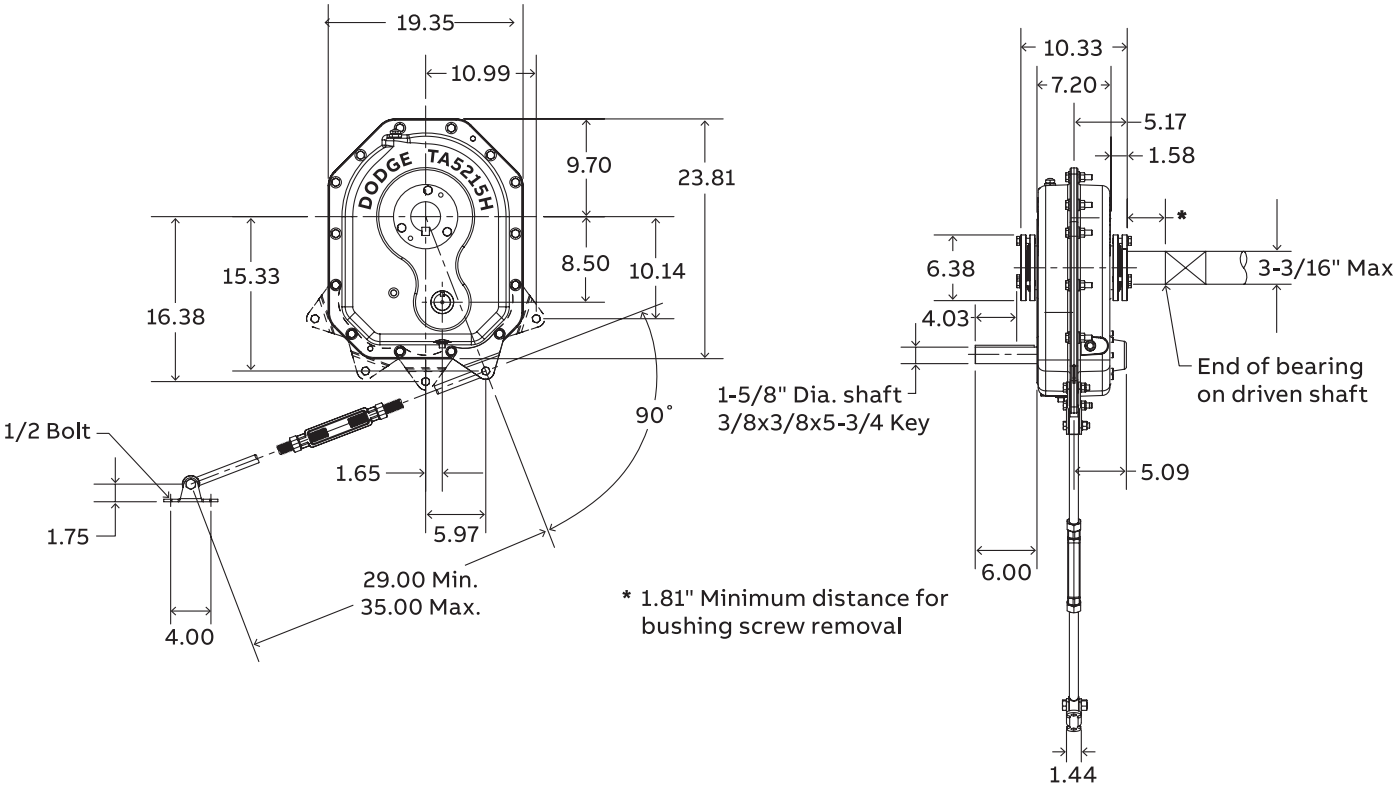
Table A – Screw conveyor motor mount minimum “M” mounting positions (1)

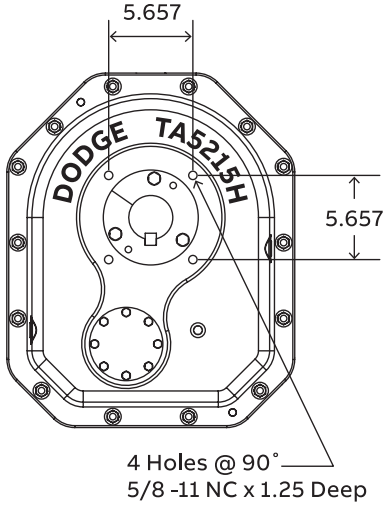
Nominal screw Dia	Trough height Dim	Minimum mounting position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13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

Note:
(1) For U or flared trough ends per CEMA 300-014

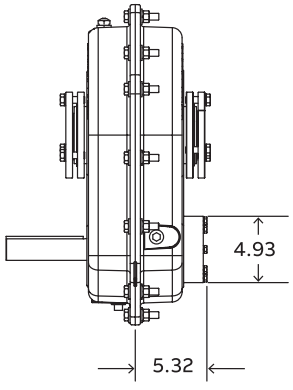
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA5215H, single and double reductions





Flange mounting dimensions



Reducer with backstop

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA5215H, single and double reductions

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, must order as a separate part number.

■ See page G2-121 for maximum bore straight bore TA II reducers

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

TA5215H Accessories

Description	Part number	Weight lbs.
TA5215RA Rod Assembly (1) +	905109	11.0
TA5215BS Backstop Assembly (5, 9, 15, 25:1) (2)	905102	8.3
TA521BS 40:1 Backstop Assembly (2)	905103	8.3
TA5215MM Motor Mount Assembly (182-365T) (3)	905090	124.8
TA5215BG Belt Guard - Pos. B (182-365T)	905096	101.5
TA5215 Belt guard assembly Pos. B M2	905101	90.0
TA5215BG Belt Guard - Pos. C (182-365T) (4)	905097	105.5
TA5215BG Belt Guard - Pos. D (182-365T)	905099	105.0
TA5215CF Cooling Fan Assembly ●	905106	3.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit HL1	964364	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA5215H V-Ring Kit	905249	0.3
TA5215H Lube Kit	LUBEKITTA5215	28.9
Dodge ability sensor	750000	0.5

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off

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

(4) Use Position-C belt guard for TA II reducer in screw conveyor drive applications

● See page G2-118 for cooling fan dimensions

TA5215H Tapered Bushing Kits (5) (6)

Bushing size Standard shaft bushing kit	Part number (7)	Weight lbs.	Shaft keyseat required (9) (10)
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
TA5215TB x 2-7/8	905023	16.1	3/4 x 3/8 x 10.34
TA5215TB x 2-11/16	905024	16.7	5/8 x 5/16 x 10.34
TA5215TB x 2-1/2	905025	17.9	5/8 x 5/16 x 10.34
TA5215TB x 2-7/16	905026	18.1	5/8 x 5/16 x 10.34
TA5215TB x 2-3/8	905027	18.3	5/8 x 5/16 x 10.34
TA5215TB x 2-1/4	905028	18.9	1/2 x 1/4 x 10.34
TA5215TB x 2-3/16	905029	19.1	1/2 x 1/4 x 10.34
TA5215TB x 2-1/8	905030	19.3	1/2 x 1/4 x 10.34
TA5215TB x 2	905031	19.9	1/2 x 1/4 x 10.34
TA5215TB x 1-15/16	905032	20.1	1/2 x 1/4 x 10.34

Bushing size Short shaft bushing kit (8)	Part number	Weight lbs.	Shaft keyseat required (9) (10)
–	–	–	–
–	–	–	–
TA5215TBS x 2-15/16	905033	16.2	3/4 x 3/8 x 6.36
TA5215TBS x 2-7/8	905034	16.9	3/4 x 3/8 x 6.36
TA5215TBS x 2-11/16	905035	18.1	5/8 x 5/16 x 6.36
TA5215TBS x 2-1/2	905036	19.7	5/8 x 5/16 x 6.36
TA5215TBS x 2-7/16	905037	20.1	5/8 x 5/16 x 6.36
TA5215TBS x 2-3/8	905038	20.5	5/8 x 5/16 x 6.36
TA5215TBS x 2-1/4	905039	21.4	1/2 x 1/4 x 6.36
TA5215TBS x 2-3/16	905040	21.8	1/2 x 1/4 x 6.36
TA5215TBS x 2-1/8	905041	22.2	1/2 x 1/4 x 6.36
TA5215TBS x 2	905042	23.0	1/2 x 1/4 x 6.36
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 screw conveyor drive shaft in a screw conveyor application

(7) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key.

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

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

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

Bushing covers

Reducer size	Description	Part number	Weight
TA5215H	ABS Polymer closed (12)	905142	1.5
TA5215H	ABS Polymer split (12)	905143	1.3

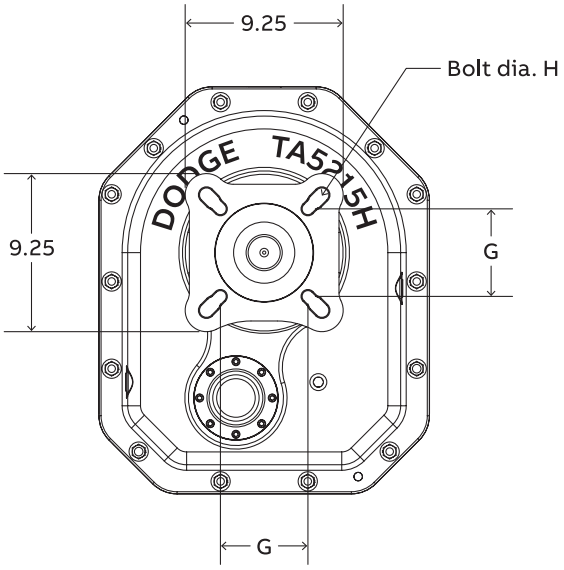
Closed bushing covers may not be compatible with belt guards or large sheave installations

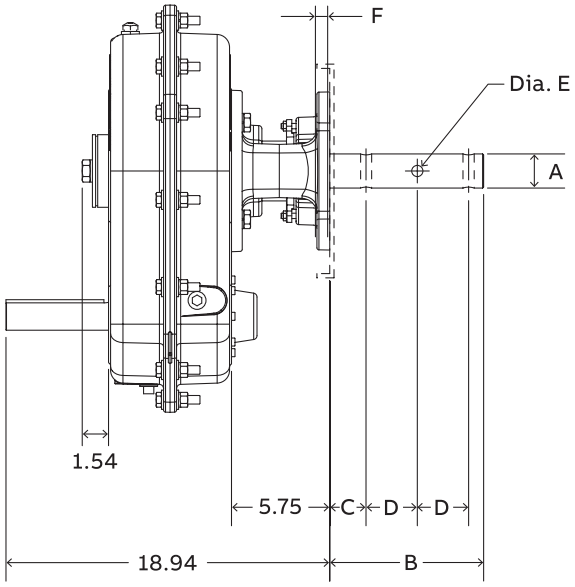
Split bushing covers are designed for use on “driven machine” side of reducer with shaft through

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

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA5215H, single and double reductions





All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA5215H, single and double reductions

TA5215H Screw conveyor drive dimensions

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

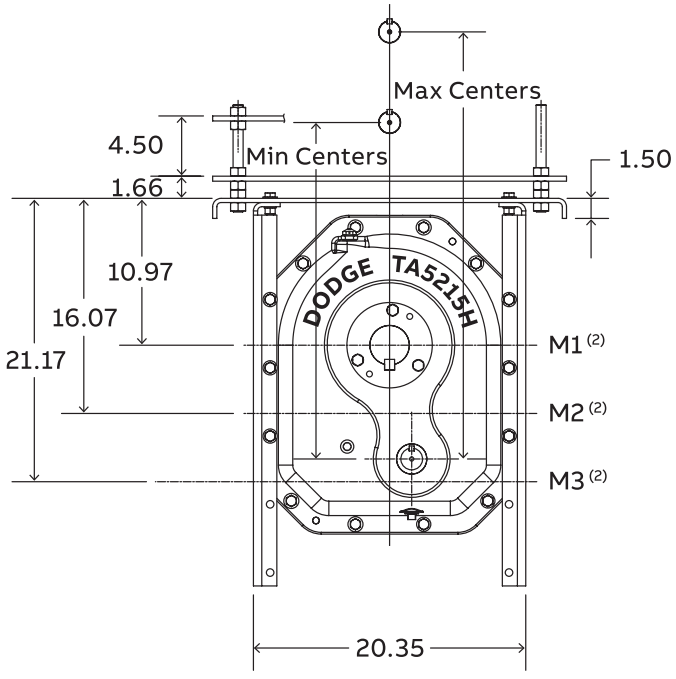
TA5215H Accessories for screw conveyor drives (1) (4) (5)

Description	Part number	Weight lbs.
TA5215SCA Adapter & Hardware Kit (2)	905070	38.4
TA5215SCP Adjustable Packing Kit (3)	905071	2.1
TA5215SCS x 2 Drive Shaft	905073	39.0
TA5215SCS x 2-7/16 Drive Shaft	905074	43.6
TA5215SCS x 3 Drive Shaft	905075	50.0
TA5215SCS x 3-7/16Drive Shaft	905076	63.9
TA5215SCS x 2 Stainless Steel Drive Shaft	905081	39.0
TA5215SCS x 2-7/16 Stainless Steel Drive Shaft	905082	43.6
TA5215SCS x 3 Stainless Steel Drive Shaft	905083	50.0
TA5215SCS x 3 -7/16 Stainless Steel Drive Shaft	905084	63.9
TA5215MM Motor mount assembly (1852-365T)	905090	124.8
TA5215BG Belt guard - Pos. C (182-365T) (1)	905097	105.5
TA4-TA9 Hydra-Lock dessicant breather kit HL1	964364	2.0
XT Enclosed breather system, TA0-9	240050	2.0
Dodge ability sensor	750000	0.5

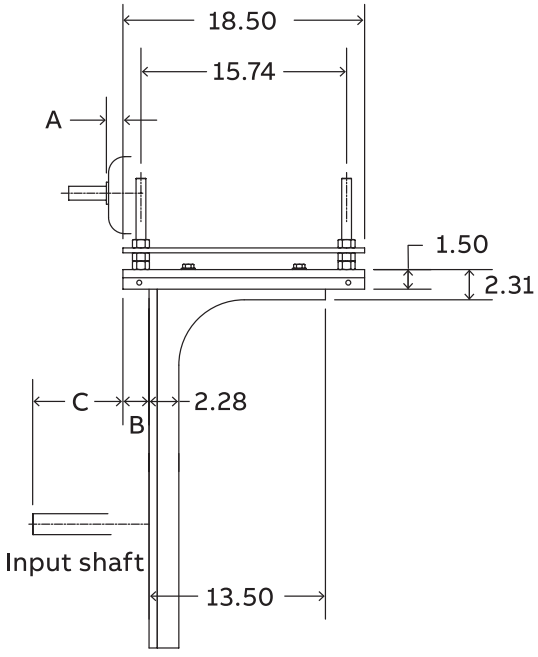
(1) Pos “C” Belt guard most popular for screw conveyor drive applications
(2) SCA Adapter & hardware kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable packing kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive shaft is a shaft only. Hardware is stocked with the adapter & hardware kit.
(5) A complete TA II screw conveyor drive, order a TA II reducer, SCA adapter & hardware kit, and SCS drive shaft. The SCP adjustable packing kit is an optional accessory.

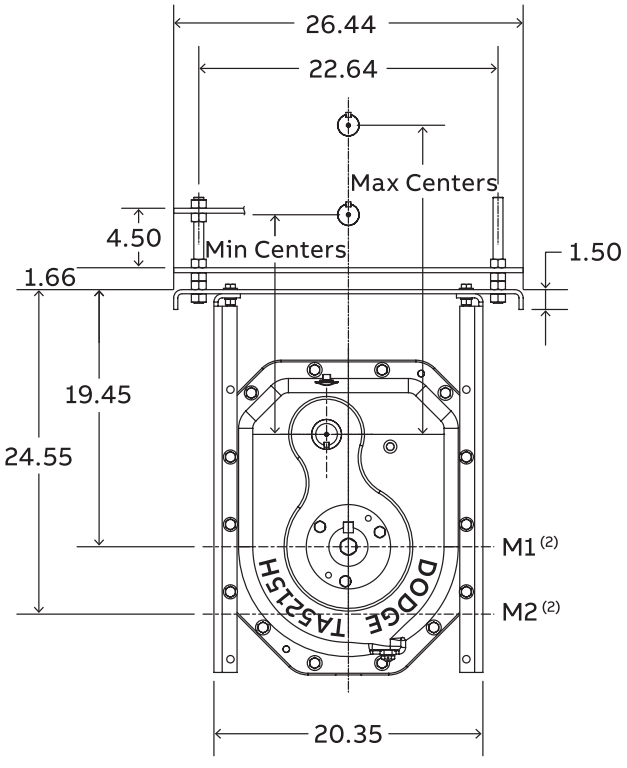
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA5215H, position B & D



Position B





Position D

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA5215H, position B & D (1)

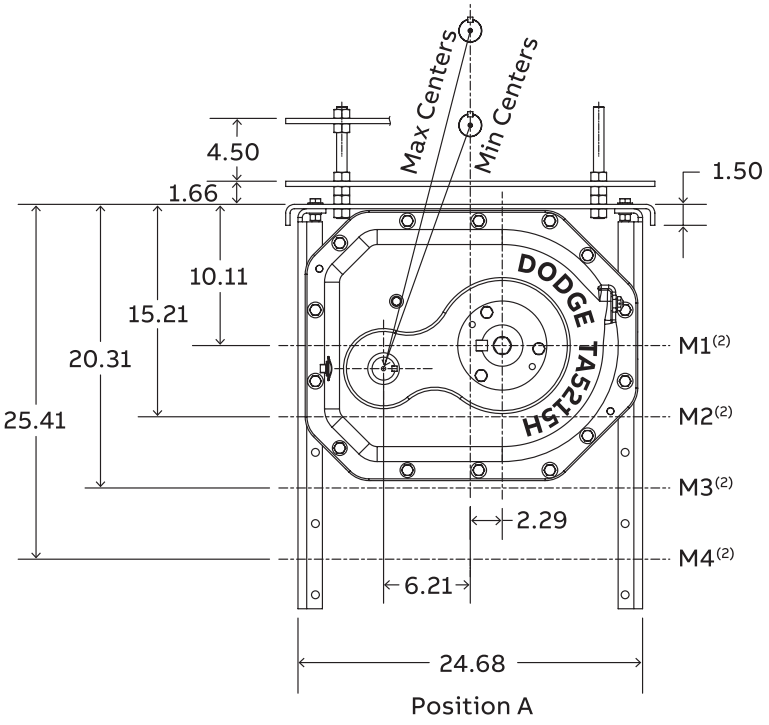
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 143T & 145T			Motor frame 182T & 184T			Motor frame 213T & 215T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	-0.21	4.21	4.70	9.12	M1	1.37	26.2	30.3	1.55	26.9	31.1	1.56	27.9	32.1
					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 254T & 256T			Motor frame 284T & 286T			Motor frame 324T & 326T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	-0.21	4.21	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

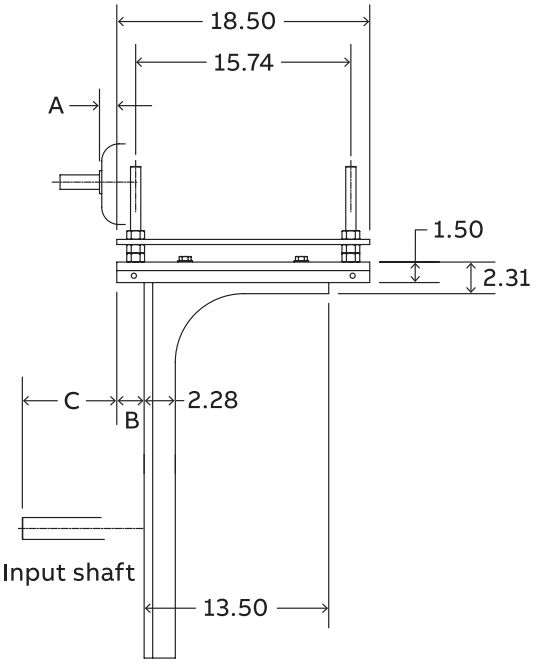
Notes:
Minimum centers contains 0.5” to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.
(2) M1, M2, M3 go through output shaft centerline

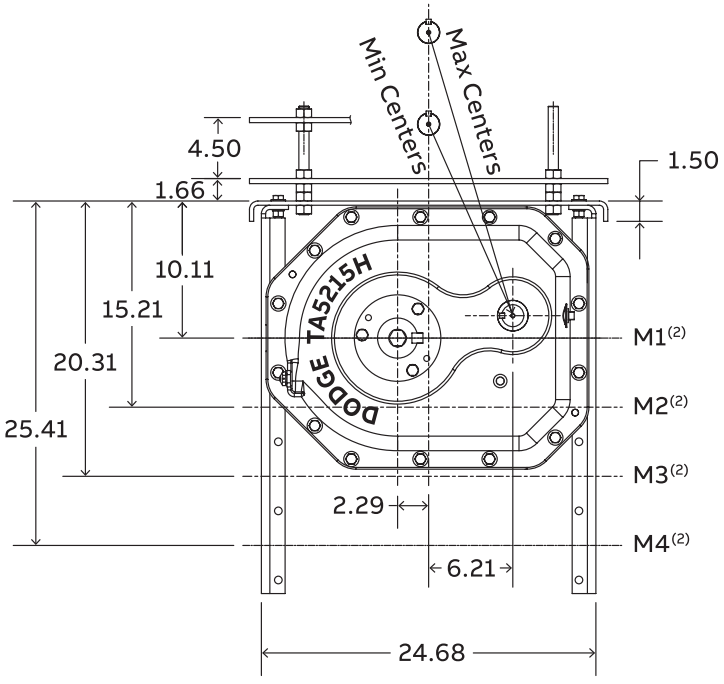
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA5215H, position A & C



Position A





Position C

All dimensions are in inches.

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

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

Notes:

Minimum centers contains 0.5” to allow for belt assembly

(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.

(2) M1, M2, M3, M4 go through output shaft centerline

(3) See Table A, below, for minimum “M” mounting position required for specific screw diameter and reducer size

Table A – Screw conveyor motor mount minimum “M” mounting positions [1]

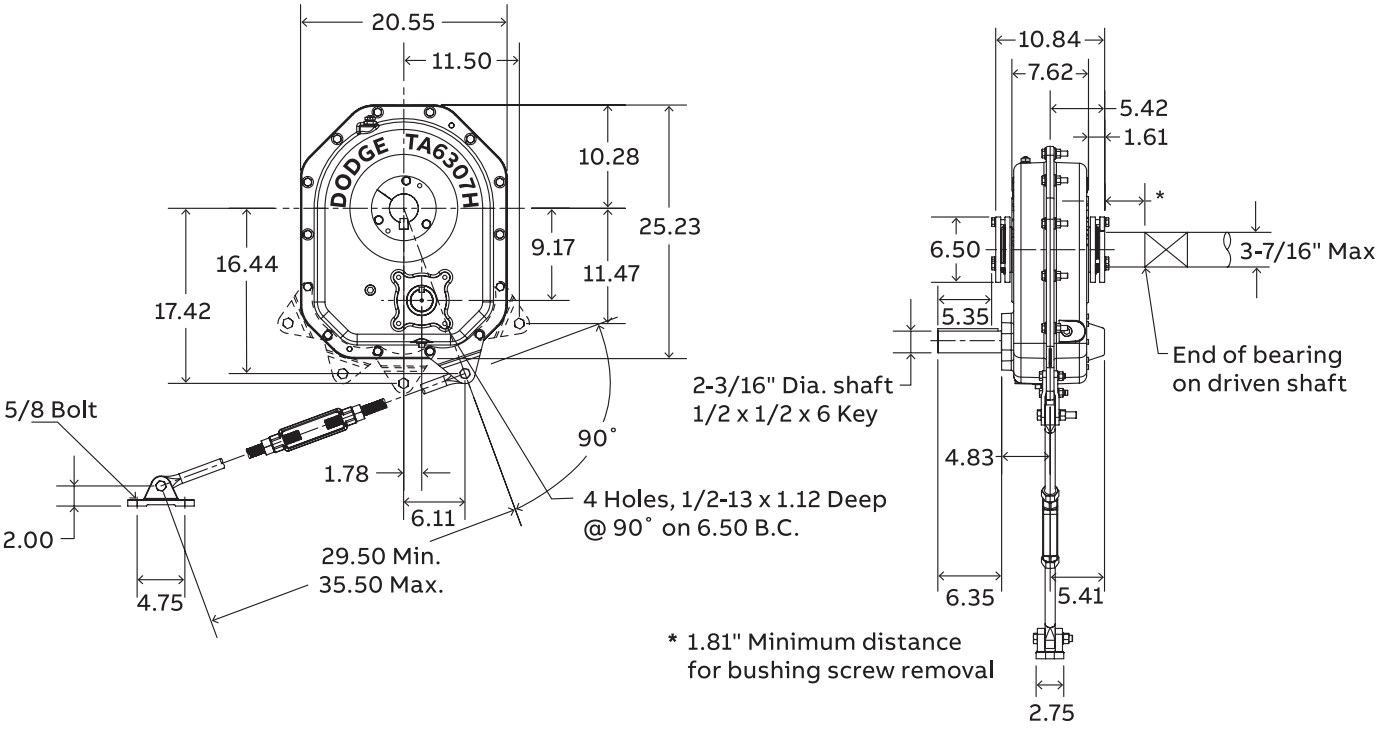
Nominal screw Dia	Trough height Dim	Minimum mounting position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13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

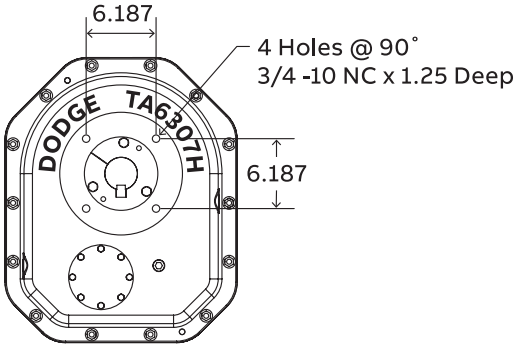
Note:

(1) For U or flared trough ends per CEMA 300-014

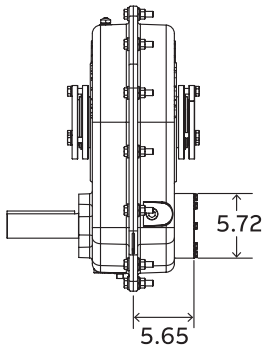
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA6307H, single and double reductions





Flange mounting dimensions



Reducer with backstop

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA6307H, single and double reductions

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, must order as a separate part number.

■ See page G2-121 for maximum bore straight bore TA II reducers

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

TA6307H Accessories

Description	Part number	Weight lbs.
TA6307RA Rod assembly (1) +	906109	19.9
TA6307BS Backstop assembly (5, 9, 15:1) (2)	906102	11.1
TA6307BS 25:1 & 40:1 Backstop assembly (2)	906103	11.1
TA6307MM Motor mount assembly (182-405T) (3)	906090	156.7
TA6307BG Belt Guard - Pos. B (182-405T)	906096	121.2
TA6307 Belt guard assembly Pos. B M2	906101	119.0
TA6307BG Belt guard - Pos. C (182-405T) (4)	906097	129.4
TA6307BG Belt guard - Pos. D (182-405T)	906099	122.2
TA6307CF Cooling fan assembly ●	906106	10.0
TA4-TA9 Hydra-Lock dessicant breather kit HL1	964364	2.0
XT Enclosed breather system, TA0-9	240050	2.0
TA4-TA12 Vertical breather kit	904112	3.0
TA6307H V-Ring kit	906249	0.4
TA6307H Lube kit	LUBEKITTA6307	34.7
Dodge ability sensor	750000	0.5

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off

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

(4) Use Position-C belt guard for TA II reducer in screw conveyor drive applications

● See page G2-118 for cooling fan dimensions

TA6307H Tapered Bushing Kits (5) (6)

Bushing size Standard shaft bushing kit	Part number (7)	Weight lbs.	Shaft keyseat required (9) (10)
TA6307TB x 3-7/16 ▲	906020	16.7	7/8 x 7/16 x 10.82
TA6307TB x 3-3/16	906021	17.7	3/4 x 3/8 x 10.82
TA6307TB x 3	906022	19.1	3/4 x 3/8 x 10.82
TA6307TB x 2-15/16	906023	19.6	3/4 x 3/8 x 10.82
TA6307TB x 2-7/8	906024	20.1	3/4 x 3/8 x 10.82
TA6307TB x 2-11/16	906025	20.9	5/8 x 5/16 x 10.82
TA6307TB x 2-1/2	906026	22.1	5/8 x 5/16 x 10.82
TA6307TB x 2-7/16	906027	22.3	5/8 x 5/16 x 10.82
TA6307TB x 2-3/8	906028	22.7	5/8 x 5/16 x 10.82
TA6307TB x 2-1/4	906029	23.1	1/2 x 1/4 x 10.82
TA6307TB x 2-3/16	906030	23.3	1/2 x 1/4 x 10.82

Bushing size Short shaft bushing kit (8)	Part number	Weight lbs.	Shaft keyseat required (9) (10)
TA6307TBS x 3-7/16	906031	16.5	7/8 x 7/16 x 6.72
TA6307TBS x 3-3/16	906032	19.0	3/4 x 3/8 x 6.72
TA6307TBS x 3	906033	20.9	3/4 x 3/8 x 6.72
TA6307TBS x 2-15/16	906034	21.6	3/4 x 3/8 x 6.72
TA6307TBS x 2-7/8	906035	22.3	3/4 x 3/8 x 6.72
TA6307TBS x 2-11/16	906036	23.7	5/8 x 5/16 x 6.72
TA6307TBS x 2-1/2	906037	25.3	5/8 x 5/16 x 6.72
TA6307TBS x 2-7/16	906038	25.8	5/8 x 5/16 x 6.72
TA6307TBS x 2-3/8	906039	26.3	5/8 x 5/16 x 6.72
TA6307TBS x 2-1/4	906040	26.7	1/2 x 1/4 x 6.72
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 screw conveyor drive shaft in a screw conveyor application

(7) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key.

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

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

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

Bushing covers

Reducer size	Description	Part number	Weight
TA6307H	ABS Polymer closed (12)	905142	1.5
TA6307H	ABS Polymer split (12)	905143	1.3

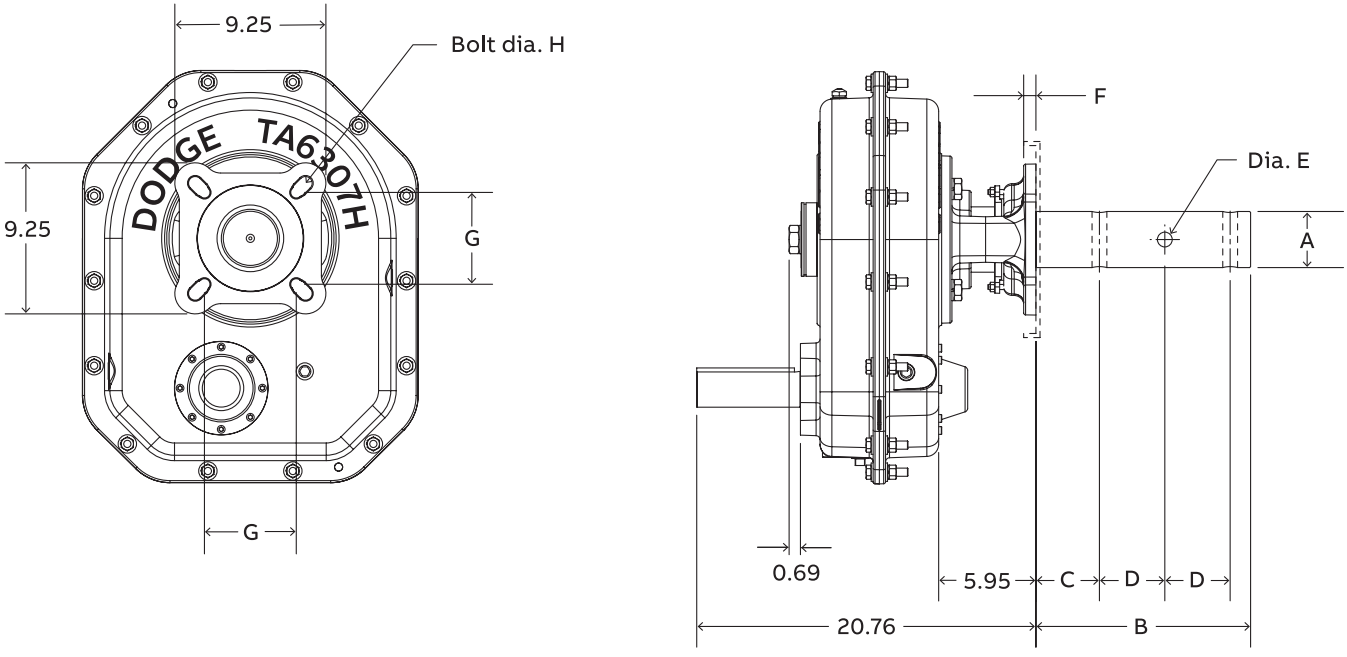
Closed bushing covers may not be compatible with belt guards or large sheave installations

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

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

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA6307H, single and double reductions



All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA6307H, single and double reductions

TA6307H Screw conveyor drive dimensions

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

TA6307H Accessories for screw conveyor drives (1) (4) (5)

Description	Part number	Weight lbs.
TA6307SCA Adapter & hardware kit (2)	906070	40.0
TA6307SCP Adjustable packing kit (3)	906071	2.4
TA6307SCS x 2-7/16 Drive shaft	906074	54.6
TA6307SCS x 3 Drive shaft	906075	61.0
TA6307SCS x 3-7/16 Drive shaft	906076	74.9
TA6307SCS x 2-7/16 Stainless steel drive shaft	906082	54.6
TA6307SCS x 3 Stainless steel drive shaft	906083	61.0
TA6307SCS x 3-7/16 Stainless steel drive shaft	906084	74.9
TA6307MM Motor mount assembly (182-405T)	906090	156.7
TA6307BG Belt guard - Pos. C (182-405T) (1)	902097	129.4
TA4-TA9 Hydra-Lock dessicant breather kit HL1	964364	2.0
XT Enclosed breather system, TA0-9	240050	2.0
Dodge ability sensor	750000	0.5

(1) Pos “C” Belt guard most popular for screw conveyor drive applications

(2) SCA Adapter & hardware kit includes adapter, mounting wedge, keeper plate, key, seals and hardware

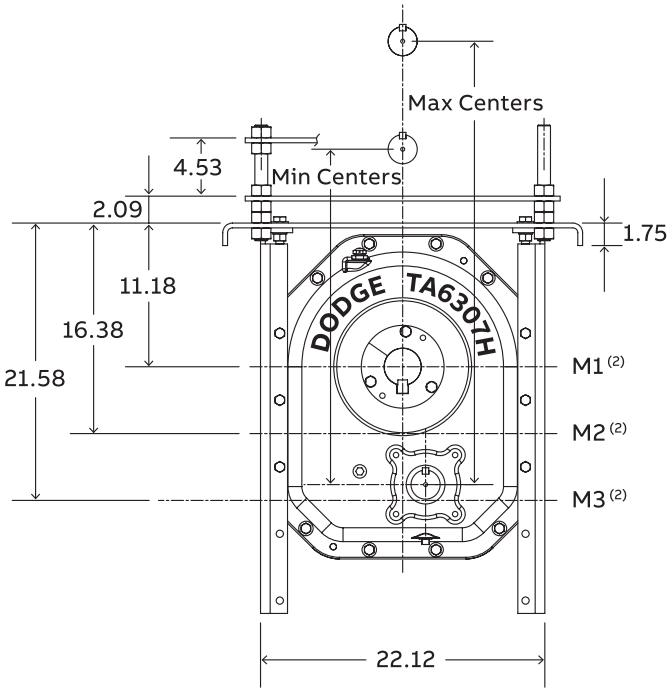
(3) SCP Adjustable packing kit consists of flange, mounting hardware and braided packing seals

(4) SCS Drive shaft is a shaft only. Hardware is stocked with the adapter & hardware kit.

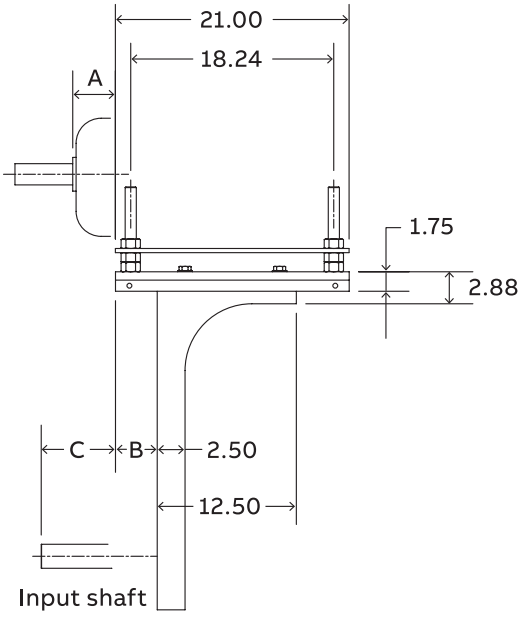
(5) A complete TA II screw conveyor drive, order a TA II reducer, SCA adapter & hardware kit, and SCS drive shaft. The SCP adjustable packing kit is an optional accessory.

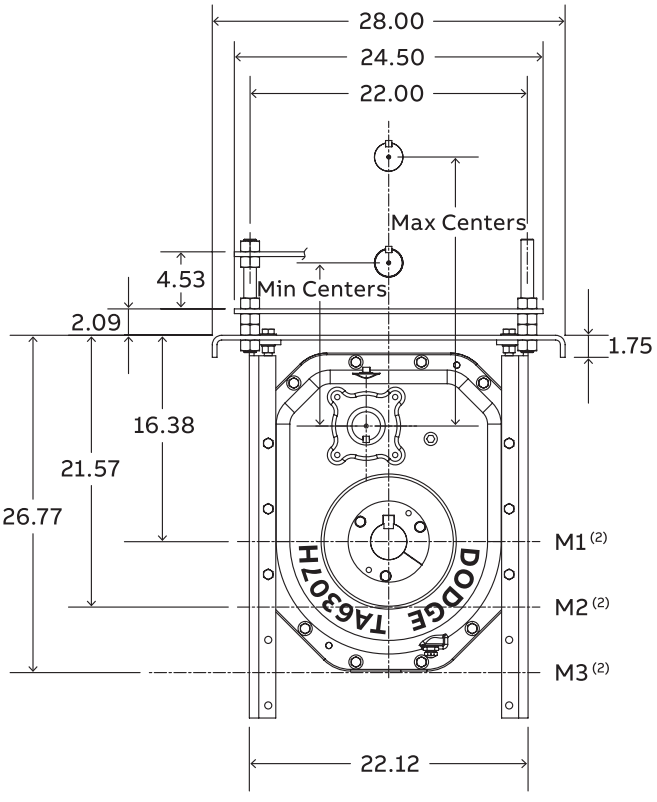
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA6307H, position B & D



Position B





Position D

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA6307H, position B & D (1)

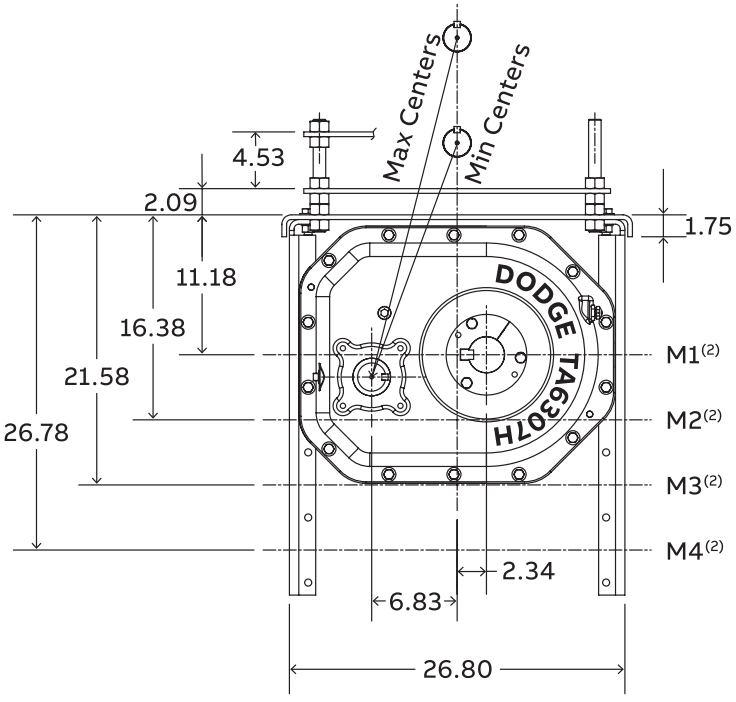
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 182T & 184T			213T & 215T			254T & 256T			284T & 286T		
						A	Centers		A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	4.51	8.83	M1	1.37	27.5	31.5	1.55	28.2	32.3	1.56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

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

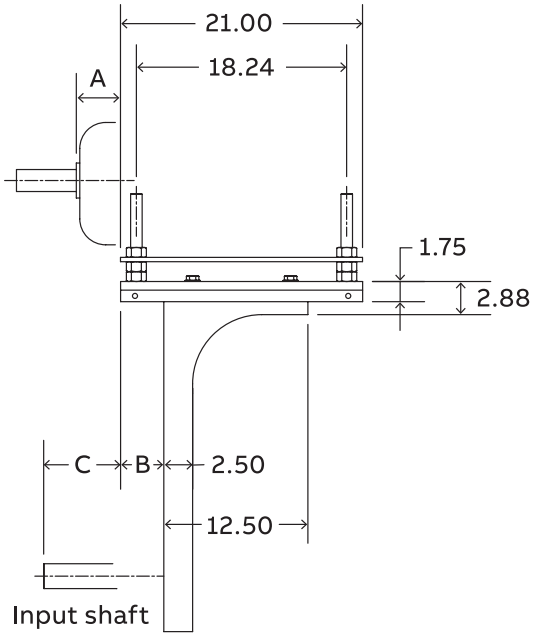
Notes:
Minimum centers contains 0.5" to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.
(2) M1, M2, M3 go through output shaft centerline

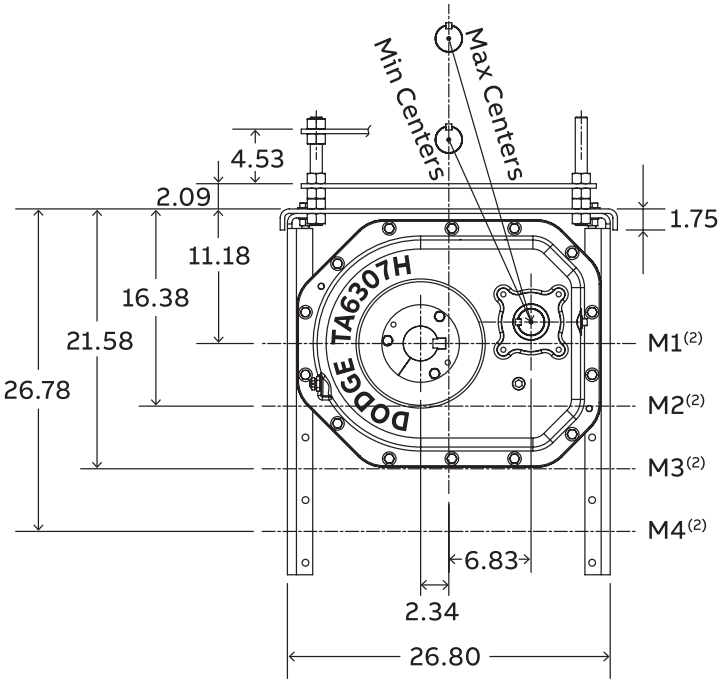
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA6307H, position A & C



Position A





Position C

All dimensions are in inches.

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

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

Notes:

Minimum centers contains 0.5" to allow for belt assembly

(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.

(2) M1, M2, M3, M4 go through output shaft centerline

(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

Table A – Screw conveyor motor mount minimum "M" mounting positions [1]

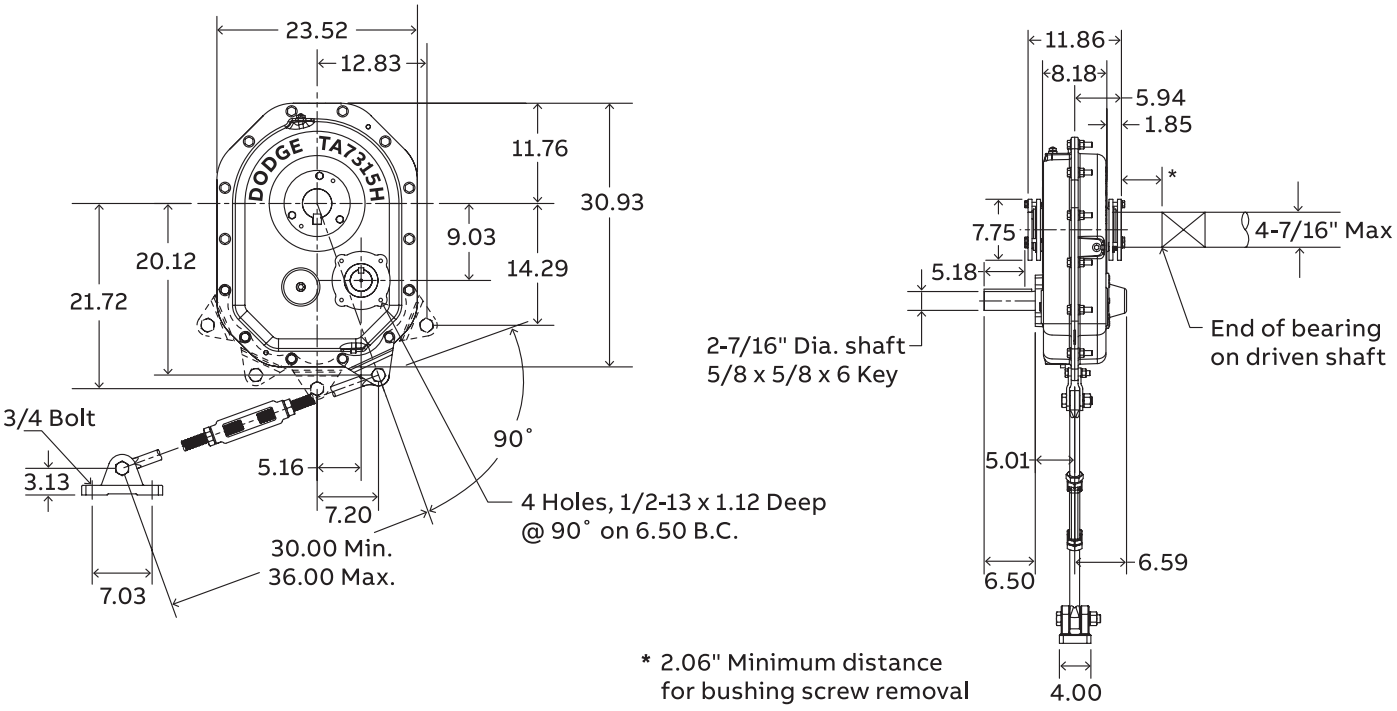
Nominal screw Dia	Trough height Dim	Minimum mounting position TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13	–	–	M4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

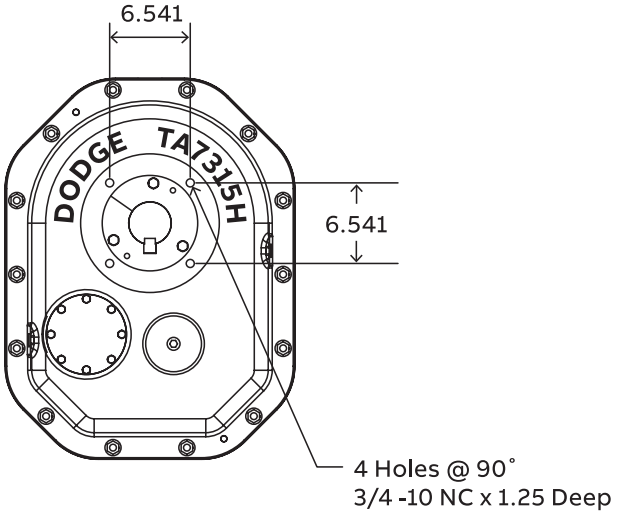
Note:

(1) For U or flared trough ends per CEMA 300-014

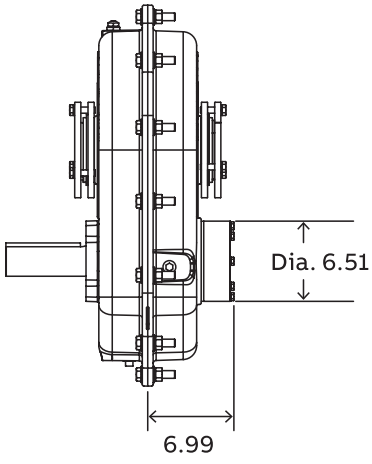
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA7315H, single and double reductions





Flange mounting dimensions



Reducer with backstop

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA7315H, single and double reductions

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, must order as a separate part number.

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

TA7315H Accessories

Description	Part number	Weight lbs.
TA7315/8407RA Rod assembly (1) +	907109	43.2
TA7315BS Backstop assembly (5, 9, 15, 25:1) (2)	907102	20.0
TA7315/9415BS 40:1 Backstop assembly (2)	907103	21.0
TA7315/8407MM Motor mount assembly (213-405T) (3)	907090	183.3
TA7315/8407BG Belt guard - Pos. B (213-405T)	907096	147.2
TA7315, 8407 Belt guard assembly Pos. B M2	907101	161.0
TA7315/8407BG Belt guard - Pos. C (213-405T) (4)	907097	152.7
TA7315/8407BG Belt guard - Pos. D (213-405T)	907099	148.2
TA7315/8407CF Cooling fan assembly ●	907106	10.0
TA4-TA9 Hydra-Lock dessicant breather kit HL1	964364	2.0
XT Enclosed breather system, TA0-9	240050	2.0
TA4-TA12 Vertical breather kit	904112	2.0
TA7315/8407H V-Ring kit	907249	0.4
TA7315H Lube kit	LUBEKITTA7315	53.2
Dodge ability sensor	750000	0.5

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

TA7315H Tapered Bushing Kits (5) (6)

Bushing size Standard shaft bushing kit (7)	Part number	Weight lbs.	Shaft keyseat required (9) (10)
TA7315TB x 4-7/16	907019	20.5	1 x 1/2 x 11.87
TA7315TB x 4-3/16	907021	23.5	1 x 1/2 x 11.87
TA7315TB x 3-15/16 ▲	907022	26.3	1 x 1/2 x 11.87
TA7315TB x 3-7/16	907023	30.9	7/8 x 7/16 x 11.87
TA7315TB x 3-3/16	907024	32.6	3/4 x 3/8 x 11.87
TA7315TB x 3	907025	34.0	3/4 x 3/8 x 11.87
TA7315TB x 2-15/16	907026	34.6	3/4 x 3/8 x 11.87
TA7315TB x 2-7/8	907027	35.0	3/4 x 3/8 x 11.87
TA7315TB x 2-11/16	907028	35.8	5/8 x 5/16 x 11.87
TA7315TB x 2-1/2	907029	37.2	5/8 x 5/16 x 11.87
TA7315TB x 2-7/16	907030	37.4	5/8 x 5/16 x 11.87

Bushing size Short shaft bushing kit (8)	Part number	Weight lbs.	Shaft keyseat required (9) (10)
–	–	–	–
–	–	–	–
TA7315TBS x 3-15/16	907031	26.7	1 x 1/2 x 7.62
TA7315TBS x 3-7/16	907032	34.2	7/8 x 7/16 x 7.62
TA7315TBS x 3-3/16	907033	36.7	3/4 x 3/8 x 7.62
TA7315TBS x 3	907034	38.8	3/4 x 3/8 x 7.62
TA7315TBS x 2-15/16	907035	39.6	3/4 x 3/8 x 7.62
TA7315TBS x 2-7/8	907036	40.2	3/4 x 3/8 x 7.62
TA7315TBS x 2-11/16	907037	41.7	5/8 x 5/16 x 7.62
TA7315TBS x 2-1/2	907038	43.6	5/8 x 5/16 x 7.62
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 screw conveyor drive shaft in a screw conveyor application
(7) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(8) Short shaft bushing kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(9) Minimum keyseat and shaft length required to mount reducer with bushing kit
(10) Always check the driven shaft and key for strength

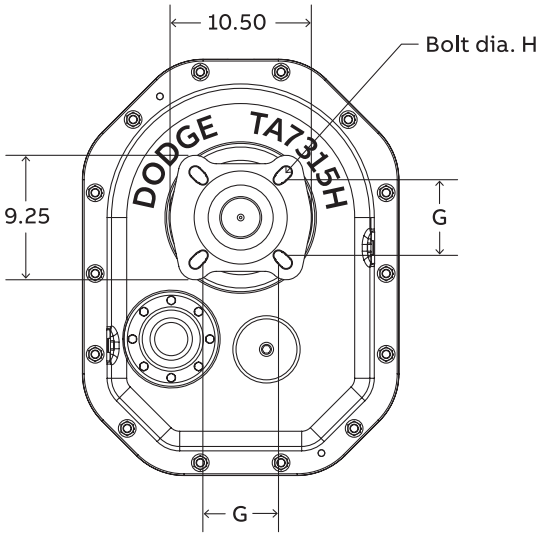
Bushing covers

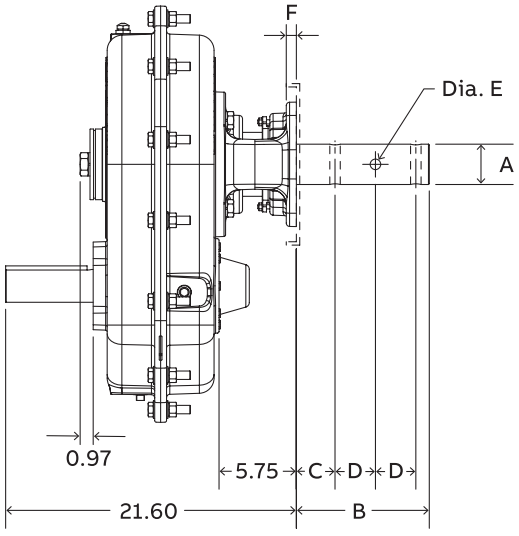
Reducer size	Description	Part number	Weight
TA7315H	ABS Polymer closed (12)	907142	1.6
TA7315H	ABS Polymer split (12)	907143	1.5

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

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA7315H, single and double reductions





All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Screw conveyor drive – TA7315H, single and double reductions

TA7315H Screw conveyor drive dimensions

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

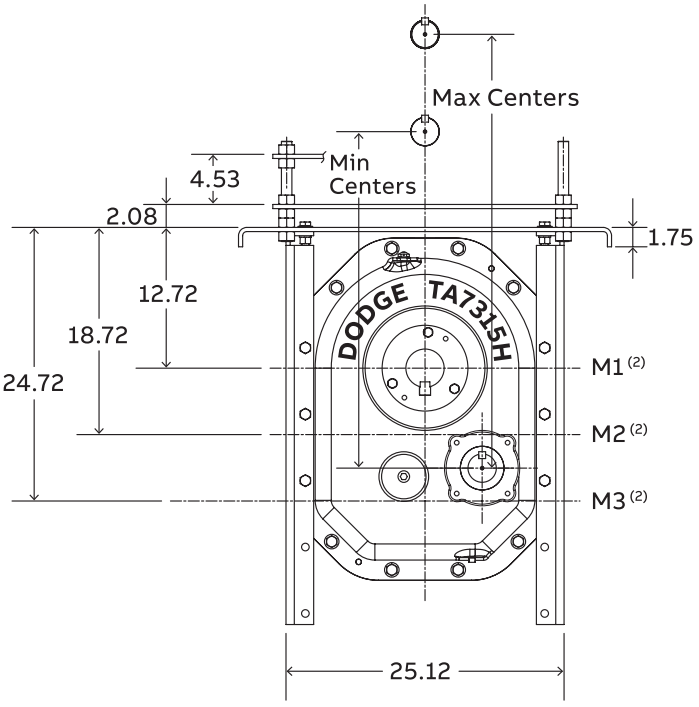
TA7315H Accessories for screw conveyor drives (1) (4) (5)

Description	Part number	Weight lbs.
TA7315SCA Adapter & Hardware Kit (2)	907070	50.1
TA7315SCP Adjustable Packing Kit (3)	907071	2.5
TA7315SCS x 2-7/16 Drive Shaft	907074	77.0
TA7315SCS x 3 Drive Shaft	907075	83.4
TA7315SCS x 3-7/16Drive Shaft	907076	97.3
TA7315SCS x 2-7/16 Stainless Steel Drive Shaft	907082	77.0
TA7315SCS x 3 Stainless Steel Drive Shaft	907083	83.4
TA7315SCS x 3-7/16 Stainless Steel Drive Shaft	907084	97.3
TA7315/8407MM Motor mount assembly (213-405T)	907090	183.7
TA7315/8407BG Belt guard - Pos. C (213-405T)	907097	152.7
TA4-TA9 Hydra-Lock dessicant breather kit HL1	964364	2.0
XT Enclosed breather system, TA0-9	240050	2.0
Dodge ability sensor	750000	0.5

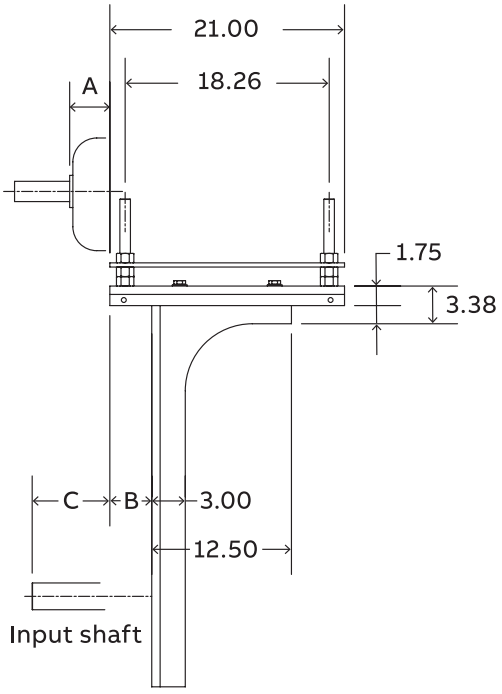
(1) Pos “C” Belt guard most popular for screw conveyor drive applications
(2) SCA Adapter & hardware kit includes adapter, mounting wedge, keeper plate, key, seals and hardware
(3) SCP Adjustable packing kit consists of flange, mounting hardware and braided packing seals
(4) SCS Drive shaft is a shaft only. Hardware is stocked with the adapter & hardware kit.
(5) A complete TA II screw conveyor drive, order a TA II reducer, SCA adapter & hardware kit, and SCS drive shaft. The SCP adjustable packing kit is an optional accessory.

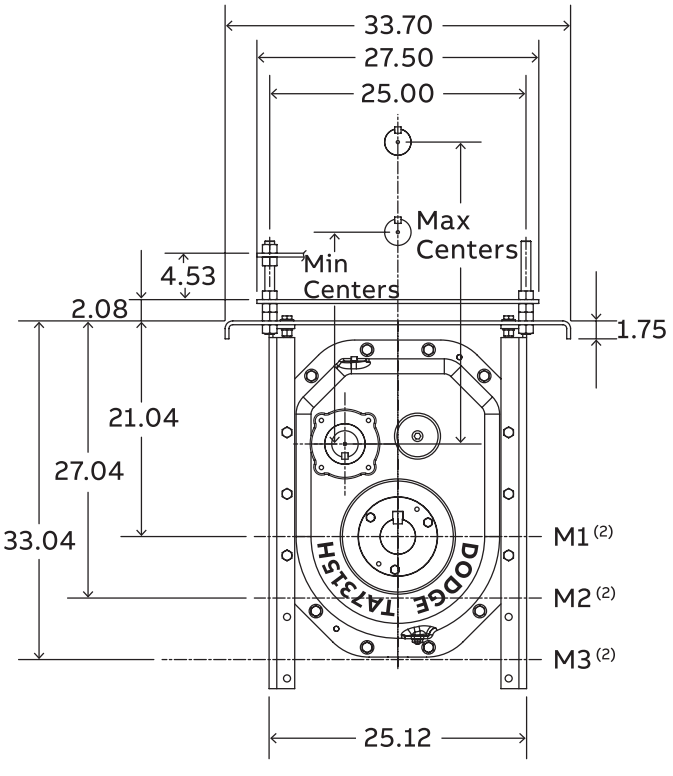
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA7315H, position B & D



Position B





Position D

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA7315H, position B & D (1)

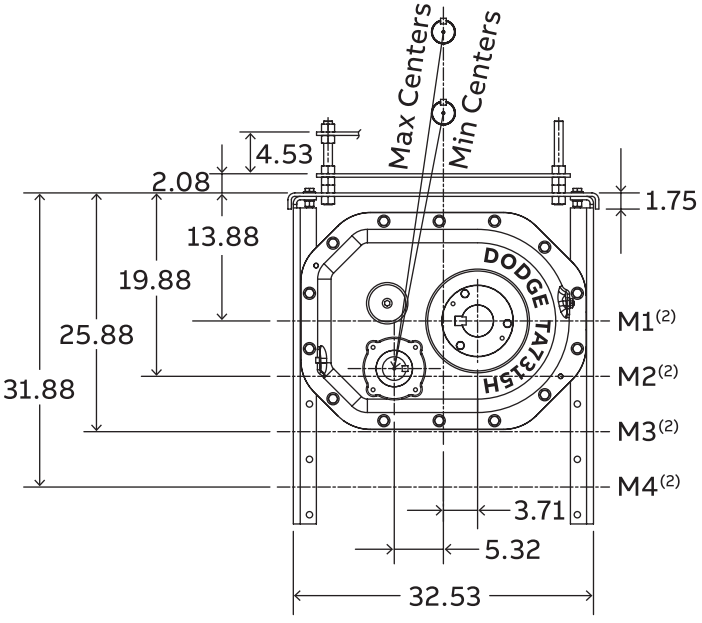
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 213T & 215T			Motor frame 254T & 256T			Motor frame 284T & 286T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	4.78	9.10	M1	1.55	30.0	34.0	1.56	31.0	35.0	1.16	31.8	35.7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

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

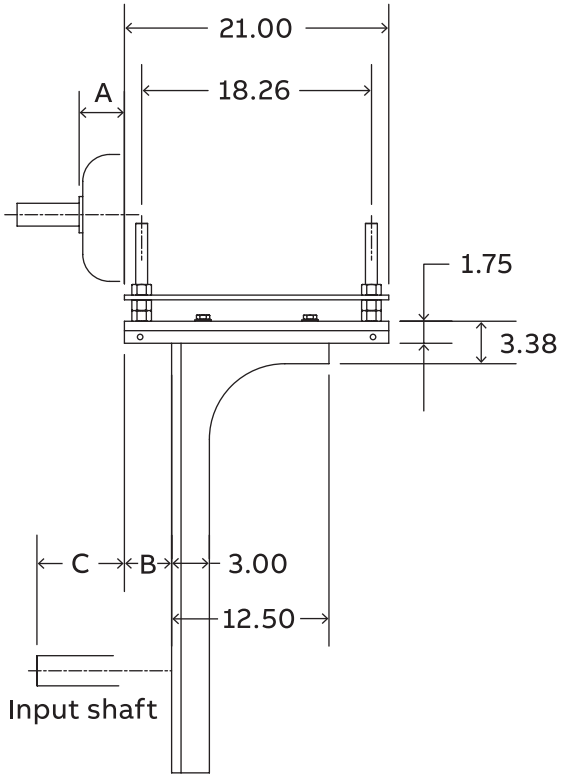
Notes:
Minimum centers contains 0.5” to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.
(2) M1, M2, M3 go through output shaft centerline

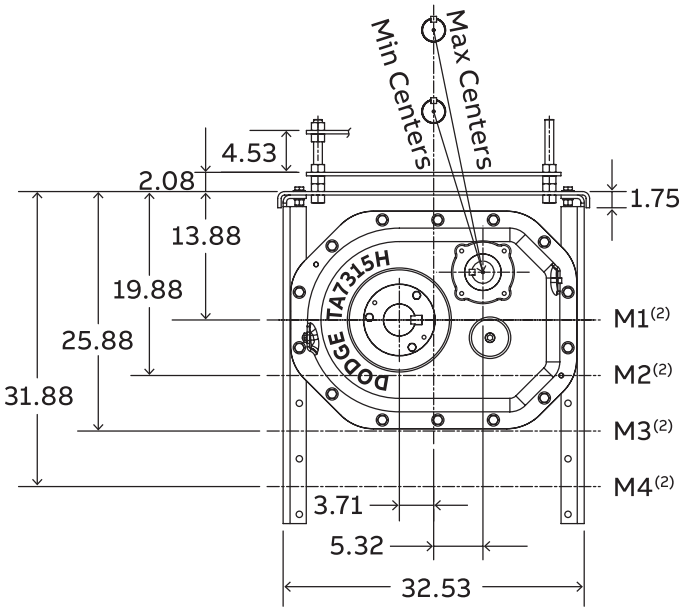
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA7315H, position A & C



Position A





Position C

All dimensions are in inches.

Selection and 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			Motor frame 254T & 256T			Motor frame 284T & 286T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	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 D	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			Motor frame 364T & 365T			Motor frame 404T & 405T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	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 D	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; however, motor mount hardware are inch dimensions.

(2) M1, M2, M3, M4 go through output shaft centerline

(3) See Table A, below, for minimum "M" mounting position required for specific screw diameter and reducer size

Table A – Screw conveyor motor mount minimum "M" mounting positions (1)

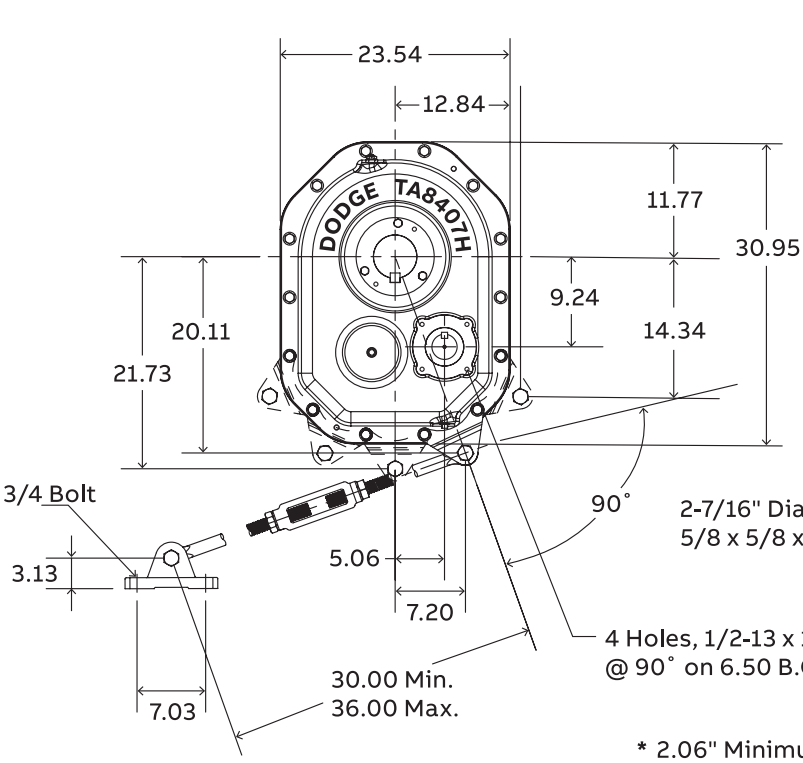
Nominal screw Dia	Trough height Dim	Minimum mounting position							
		TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H
6	7.00	M2	M3	M2	M2	M2	M1	M1	M1
9	9.00	M3	M4	M3	M3	M2	M2	M2	M1
12	10.00	M4	M4	M3	M3	M2	M2	M2	M1
14	11.00	M4	M4	M4	M3	M3	M2	M2	M2
16	11.50	M4	M4	M4	M4	M3	M2	M2	M2
18	12.13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

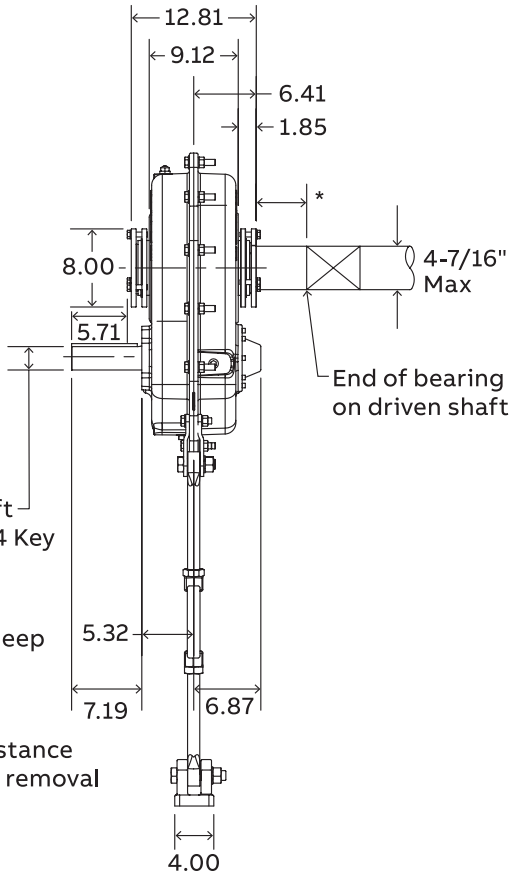
Note:

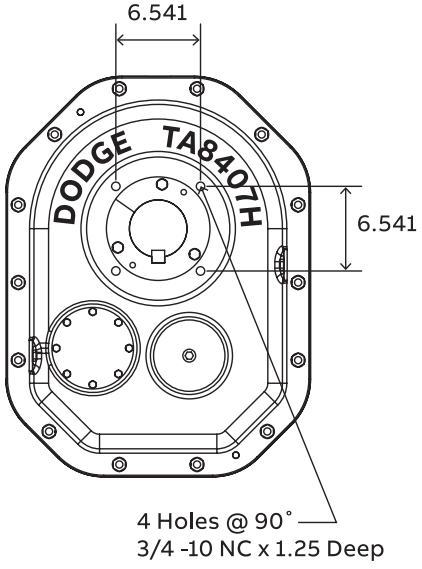
(1) For U or flared trough ends per CEMA 300-014

Selection and dimensions

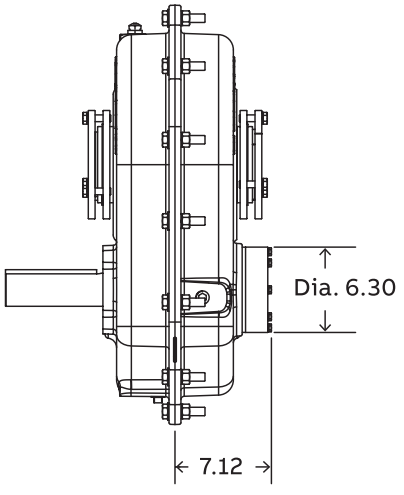
Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA8407H, double reductions







Flange mounting dimensions



Reducer with backstop

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA8407H, double reductions

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, must order as a separate part number.

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

TA8407H Accessories

Description	Part number	Weight lbs.
TA7315/8407RA Rod Assembly (1) +	907109	43.2
TA8407BS Backstop Assembly (15, 25:1) (2)	908102	15.0
TA8407BS 40:1 Backstop Assembly (2)	908103	15.7
TA7315/8407MM Motor Mount Assembly (213-405T) (3)	907090	183.3
TA7315/8407BG Belt Guard - Pos. B (213-405T)	907096	147.2
TA7315, 8407 Belt guard assembly Pos. B M2	907101	161.0
TA7315/8407BG Belt Guard - Pos. C (213-405T)	907097	152.7
TA7315/8407BG Belt Guard - Pos. D (213-405T)	907099	148.2
TA7315/8407CF Cooling Fan Assembly ●	907106	10.0
TA4-TA9 Hydra-Lock Dessicant Breather Kit HL1	964364	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA7315/8407H V-Ring Kit	907249	0.4
TA8407H Lube Kit	LUBEKITTA8407	53.2
Dodge ability sensor	750000	0.5

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

TA8407H Tapered Bushing Kits (4) (5)

Bushing size Standard shaft bushing kit (6)	Part number	Weight lbs.	Shaft keyseat required (8) (9)
TA8407TB x 4-7/16 ▲	908020	26.0	1 x 1/2 x 12.82
TA8407TB x 4-3/16	908021	29.0	1 x 1/2 x 12.82
TA8407TB x 3-15/16	908022	32.1	1 x 1/2 x 12.82
TA8407TB x 3-7/16	908023	36.7	7/8 x 7/16 x 12.82
TA8407TB x 3-3/16	908024	38.4	3/4 x 3/8 x 12.82
TA8407TB x 3	908025	39.8	3/4 x 3/8 x 12.82
TA8407TB x 2-15/16	908026	40.4	3/4 x 3/8 x 12.82

Bushing size Short shaft bushing kit (7)	Part number	Weight lbs.	Shaft keyseat required (8) (9)
TA8407TBS x 4-7/16	908027	26.9	1 x 1/2 x 8.10
TA8407TBS x 4-3/16	908028	31.3	1 x 1/2 x 8.10
TA8407TBS x 3-15/16	908029	35.6	1 x 1/2 x 8.10
TA8407TBS x 3-7/16	908030	42.4	7/8 x 7/16 x 8.10
TA8407TBS x 3-3/16	908031	45.3	3/4 x 3/8 x 8.10
TA8407TBS x 3	908032	47.5	3/4 x 3/8 x 8.10
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 screw conveyor drive shaft in a screw conveyor application
(6) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key.
(7) Short shaft bushing kit includes one standard bushing, one long bushing with insertable wedge; two back-up plates with snap rings; hardware and key. This is an optional bushing for after market, short shaft mounting.
(8) Minimum keyseat and shaft length required to mount reducer with bushing kit
(9) Always check the driven shaft and key for strength

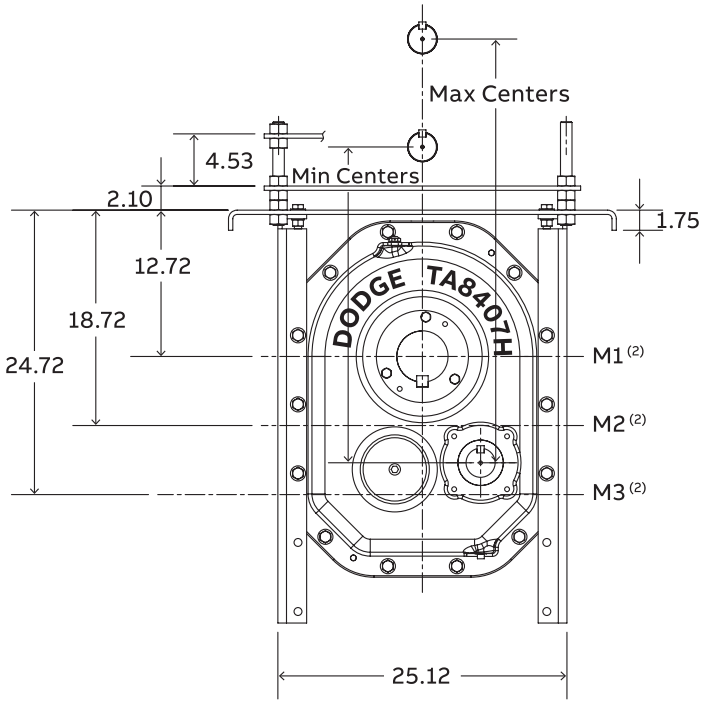
Bushing covers

Reducer size	Description	Part number	Weight
TA8407H	ABS Polymer closed (12)	908142	1.7
TA8407H	ABS Polymer split (12)	908143	1.6

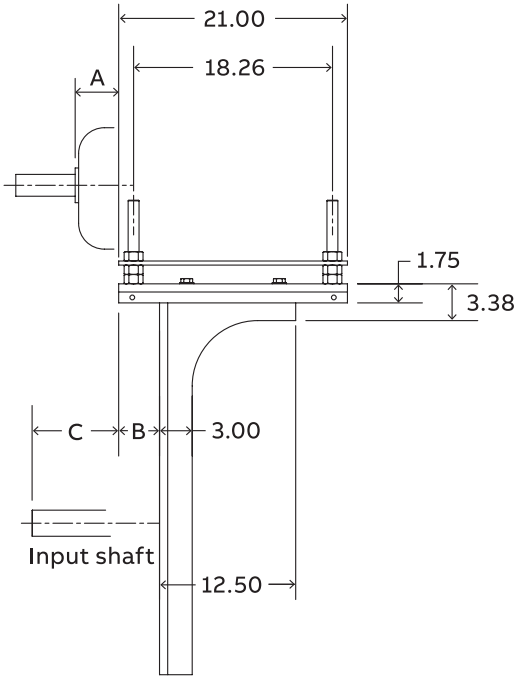
Closed bushing covers may not be compatible with belt guards or large sheave installations
Split bushing covers are designed for use on “driven machine” side of reducer with shaft through
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping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

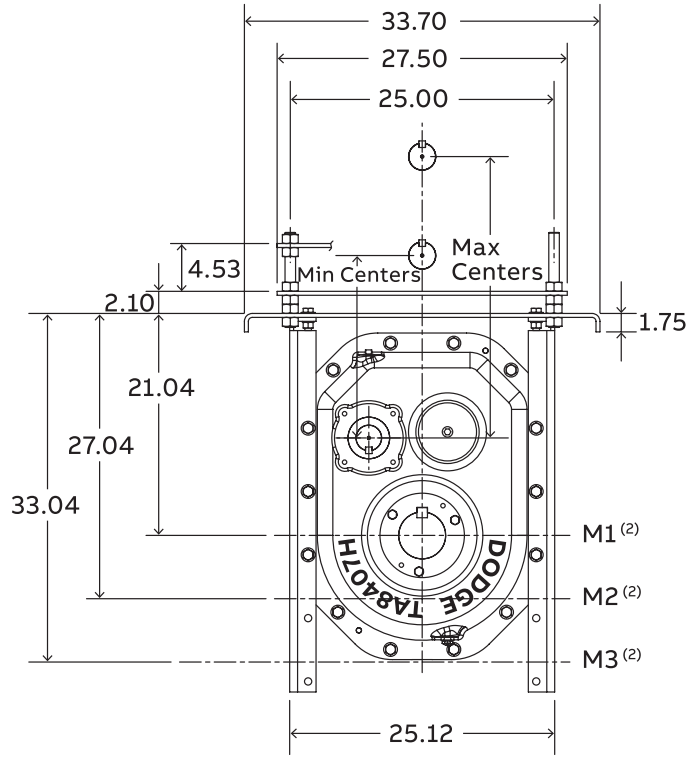
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA8407H, position B & D



Position B





Position D

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA8407H, position B & D (1)

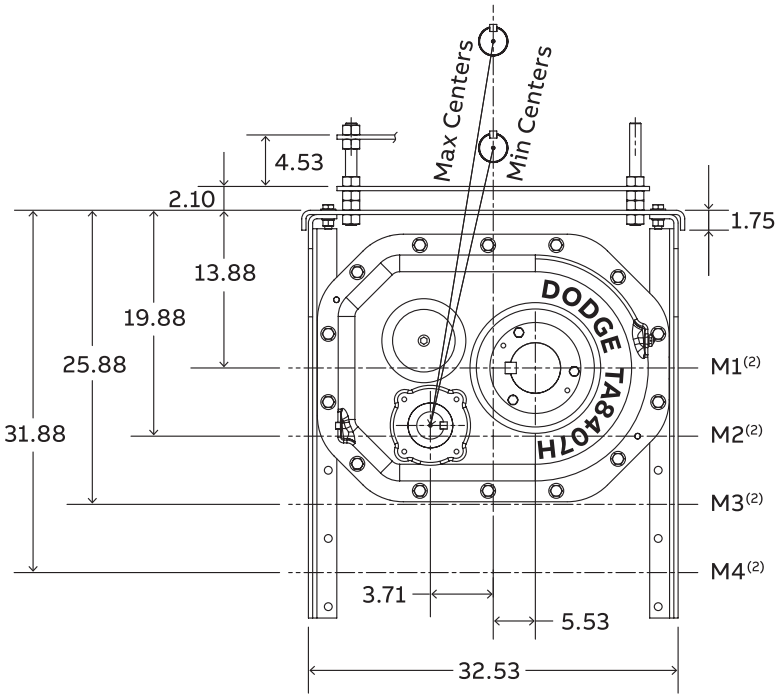
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 213T & 215T			Motor frame 254T & 256T			Motor frame 284T & 286T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	5.78	10.10	M1	1.55	30.2	34.2	1.56	31.2	35.2	1.16	32.0	35.9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

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

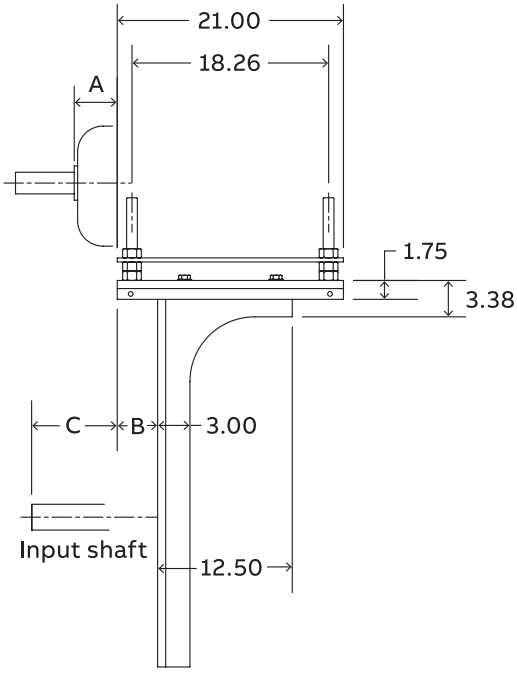
Notes:
Minimum centers contains 0.5” to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.
(2) M1, M2, M3 go through output shaft centerline

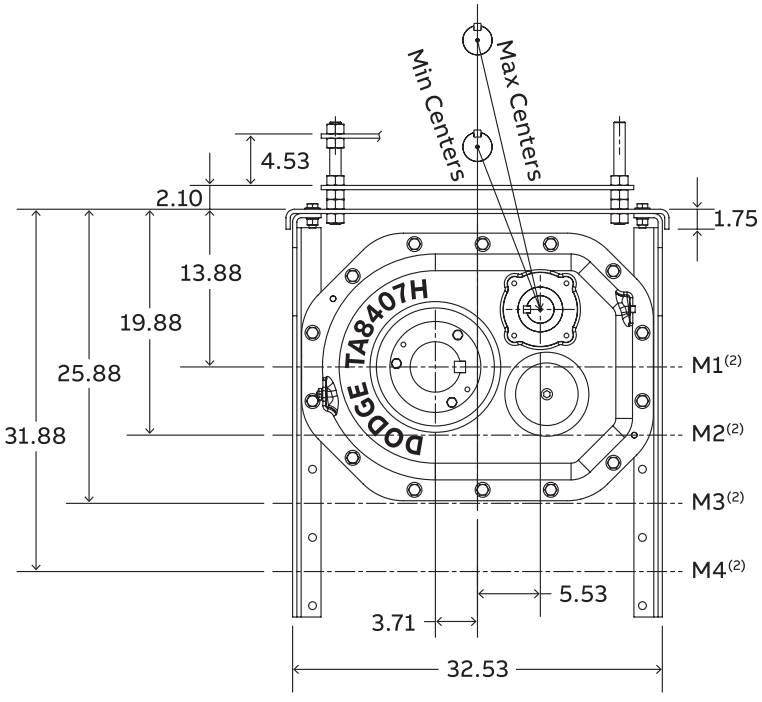
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA8407H, position A & C



Position A





Position C

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA8407H, position A & C(1)

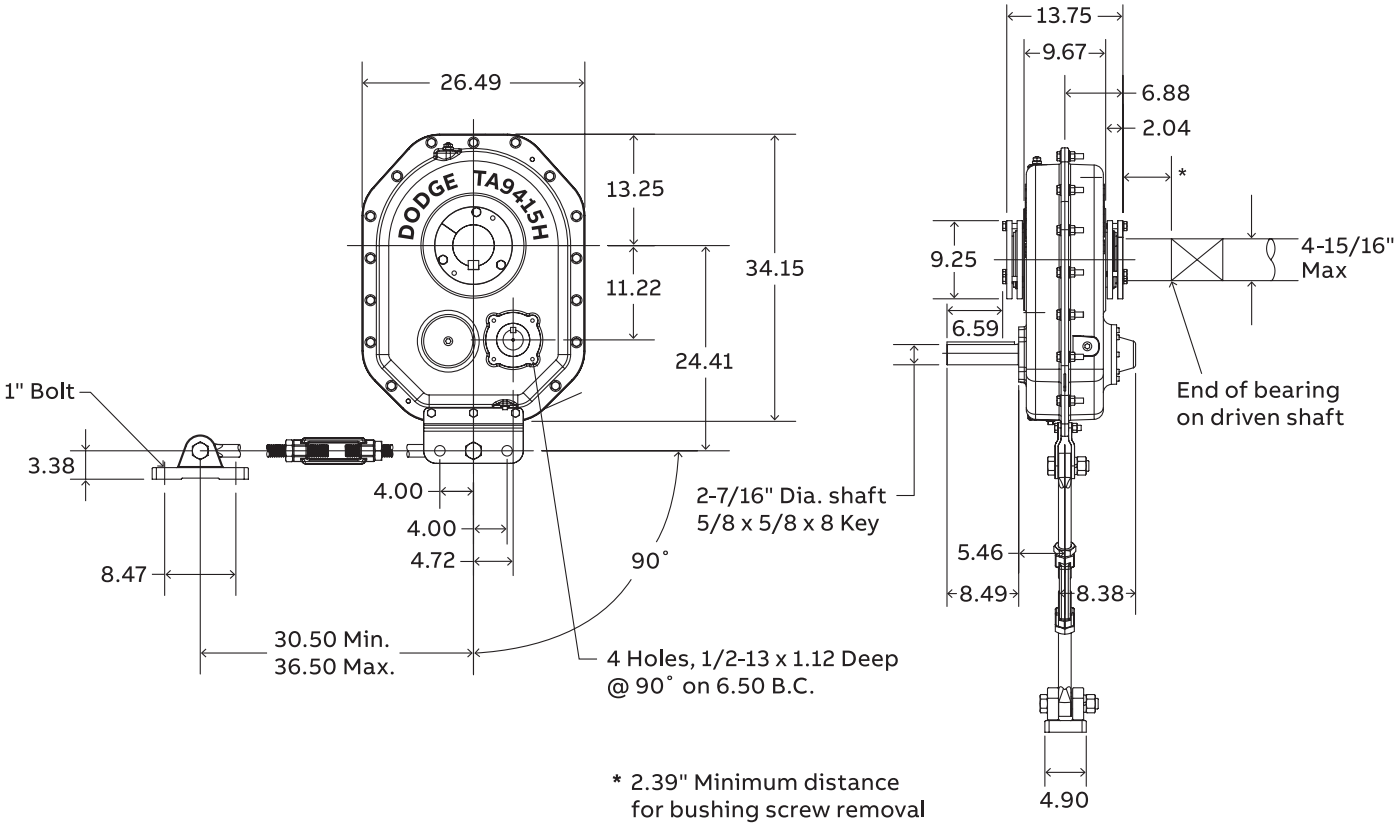
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 213T & 215T			Motor frame 254T & 256T			Motor frame 284T & 286T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	7.04	11.36	M1	1.55	27.4	31.3	1.56	28.3	32.3	1.16	29.1	33.0
					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 D	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

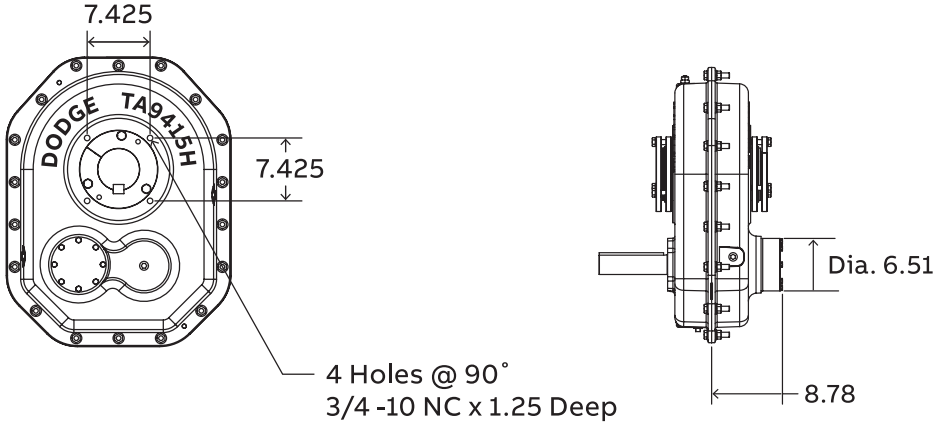
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 324T & 326T			Motor frame 364T & 365T			Motor frame 404T & 405T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.59	5.91	7.04	11.36	M1	0.38	30.1	34.0	1.01	31.0	35.0	0.75	32.0	36.0
					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 D	1.59	5.91	7.04	11.36	M1	0.38	20.2	24.1	1.01	21.2	25.1	0.75	22.1	26.0
					M2		26.0	30.0		27.0	30.9		28.0	31.9
					M3		31.9	35.9		32.9	36.9		33.9	37.8
					M4		37.8	41.8		38.8	42.8		39.8	43.8

Notes:
Minimum centers contains 0.5” to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount 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

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA9415H, double reductions





Flange mounting dimensions **Reducer with backstop**

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA9415H, double reductions

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, must order as a separate part number.

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

TA9415H Accessories

Description	Part number	Weight lbs.
TA9415RA Rod Assembly (1) +	909109	76.8
TA9415BS Backstop Assembly (15, 25:1) (2)	909102	20.0
TA7315/9415BS 40:1 Backstop Assembly (2)	907103	21.0
TA9415MM Motor Mount Assembly (254-445T) (3)	909090	273.7
TA9415BG Belt Guard - Pos. B (254-445T)	909096	158.1
TA9415 Belt guard assembly Pos. B M2	909101	190.0
TA9415BG Belt Guard - Pos. D (254-445T)	909099	159.1
TA9415CF Cooling Fan Assembly ●	909106	12.4
TA4-TA9 Hydra-Lock Dessicant Breather Kit HL1	964364	2.0
XT Enclosed Breather System, TA0-9	240050	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA9415H V-Ring Kit	909249	0.5
TA9415H Lube Kit	LUBEKITTA9415	79.8
Dodge ability sensor	750000	0.5

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

TA9415H Tapered Bushing Kits (4)

Bushing size Standard shaft bushing kit	Part number (5)	Weight lbs.	Shaft keyseat required (7) (8)
TA9415TB x 4-15/16 ▲	909020	38.4	1-1/4 x 5/8 x 13.74
TA9415TB x 4-7/16	909021	43.4	1 x 1/2 x 13.74
TA9415TB x 4-3/16	909022	46.4	1 x 1/2 x 13.74
TA9415TB x 3-15/16	909023	49.2	1 x 1/2 x 13.74
TA9415TB x 3-7/16	909024	53.1	7/8 x 7/16 x 13.74

Bushing size Short shaft bushing kit (6)	Part number	Weight lbs.	Shaft keyseat required (7) (8)
TA9415TBS x 4-15/16	909025	40.2	1-1/4 x 5/8 x 8.56
TA9415TBS x 4-7/16	909026	48.8	1 x 1/2 x 8.56
TA9415TBS x 4-3/16	909027	53.4	1 x 1/2 x 8.56
TA9415TBS x 3-15/16	909028	57.7	1 x 1/2 x 8.56
TA9415TBS x 3-7/16	909029	64.4	7/8 x 7/16 x 8.56

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

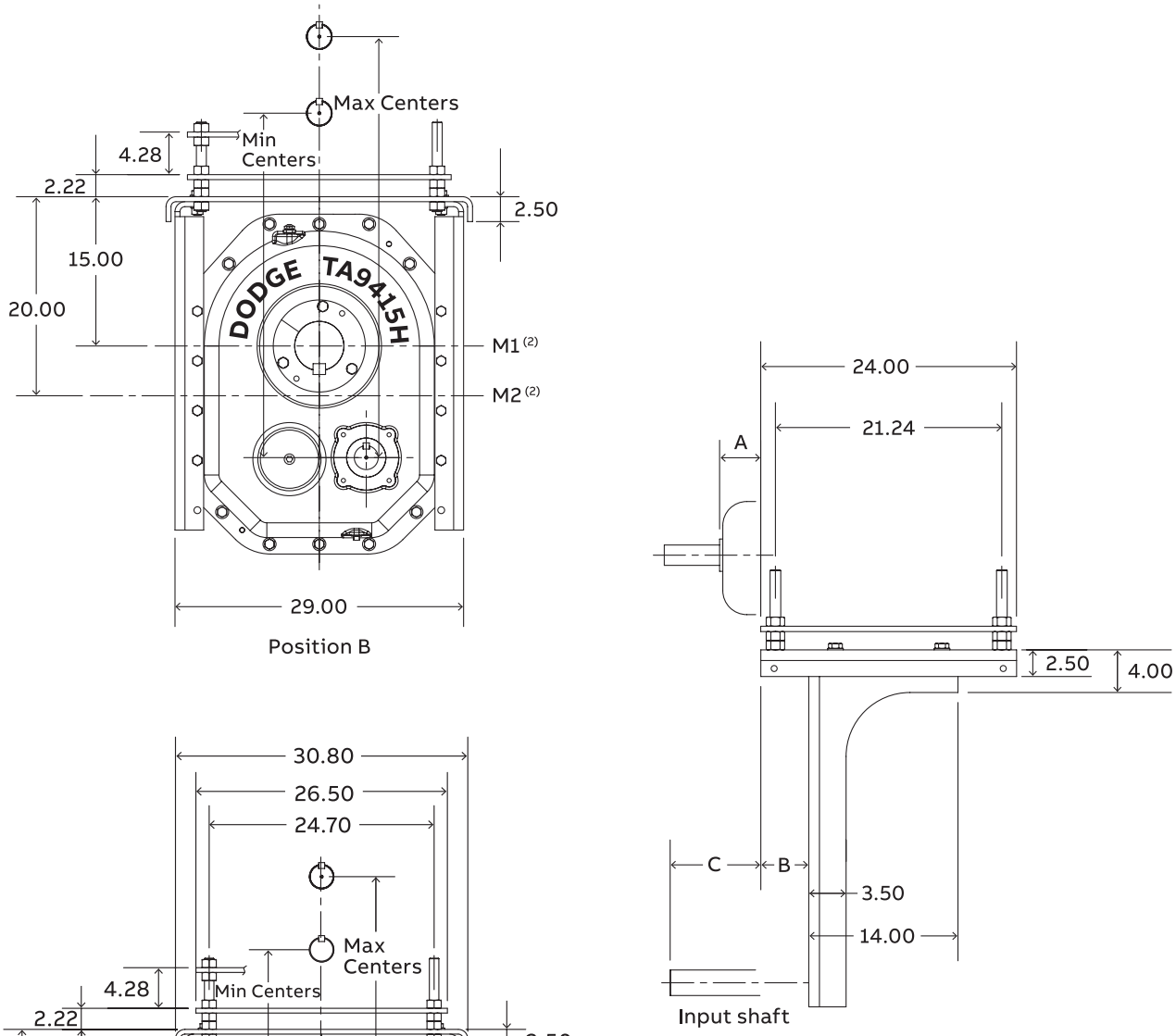
Bushing covers

Reducer size	Description	Part number	Weight
TA9415H	ABS Polymer closed (12)	909142	2.0
TA9415H	ABS Polymer split (12)	909143	1.8

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

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA9415H, position B & D



All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA9415H, position B & D (1)

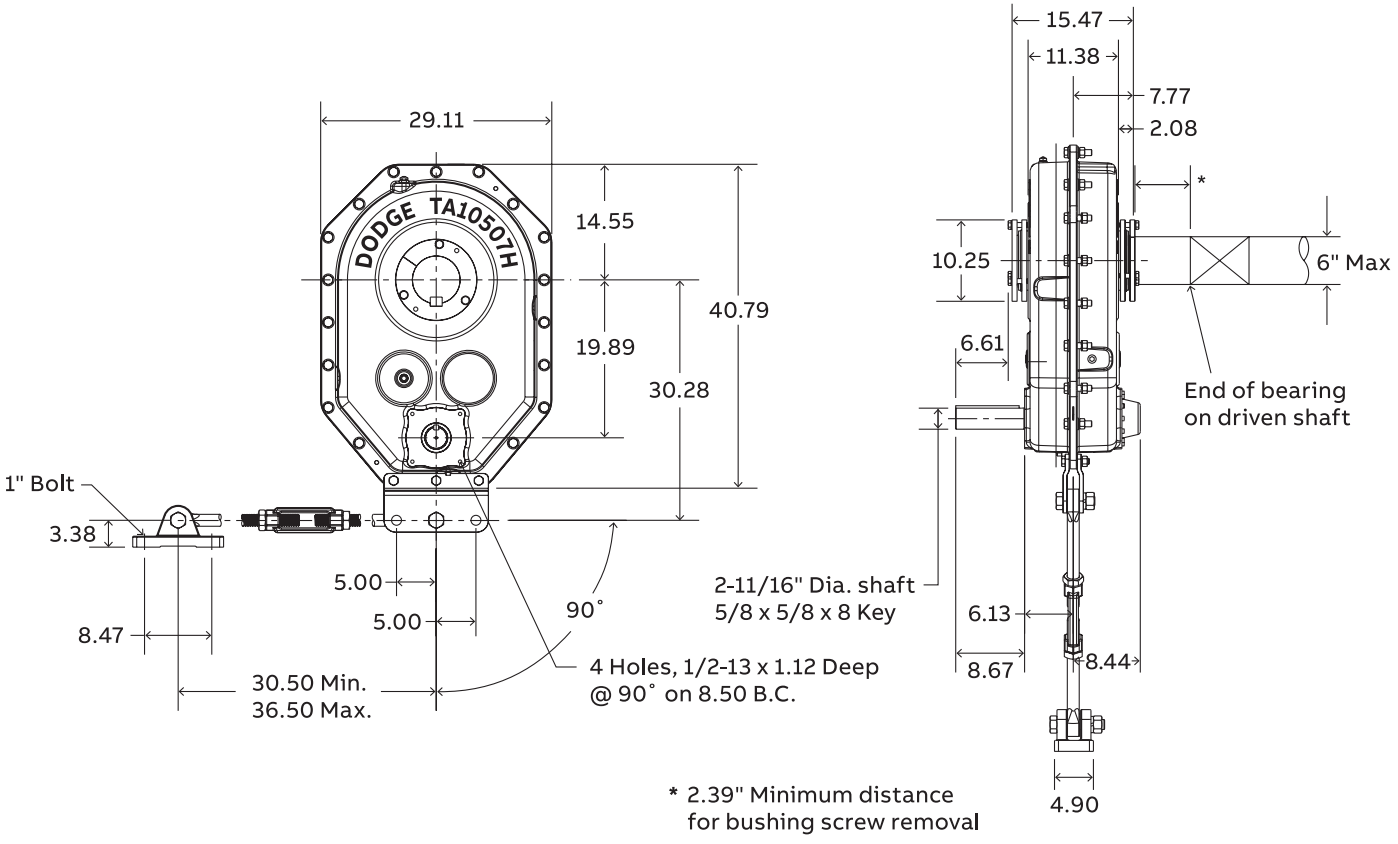
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 254T & 256T			Motor frame 284T & 286T			Motor frame 324T & 326T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	2.18	6.82	6.26	10.90	M1	1.56	35.5	39.2	1.16	36.2	40.0	0.38	37.2	41.0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

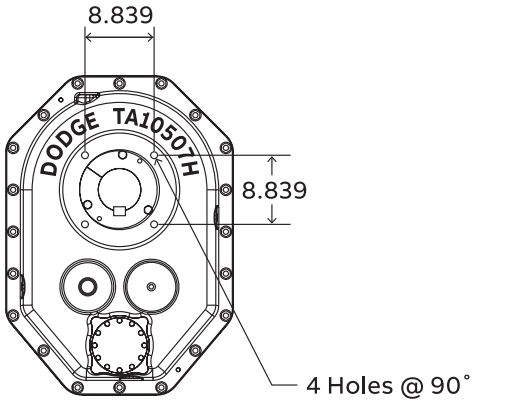
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 364T & 365T			Motor frame 404T & 405T			Motor frame 444T & 445T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	2.18	6.82	6.26	10.90	M1	1.01	38.2	42.0	0.75	39.2	43.0	1.62	40.2	44.0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

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

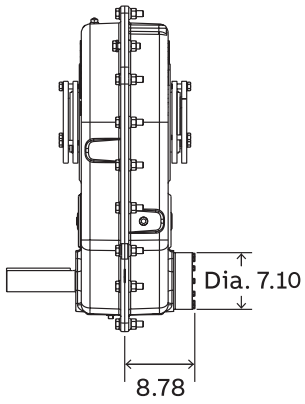
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA10507H, double reductions





Flange mounting dimensions



Reducer with backstop

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA10507H, double reductions

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, must order as a separate part number.

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

TA10507H Accessories

Description	Part number	Weight lbs.
TA10507RA Rod Assembly [1] +	910109	87.0
TA10507BS Backstop Assembly (15, 25:1) [2]	910102	23.5
TA10507BS 40:1 Backstop Assembly [2]	910103	25.0
TA10507MM Motor Mount Assembly (254-445T) [3]	910090	286.7
TA10507BG Belt Guard - Pos. B (254-445T)	910096	158.1
TA10507 Belt guard assembly Pos. B M2	910101	218.0
TA10507BG Belt Guard - Pos. D (254-445T)	910099	175.0
TA10507CF Cooling Fan Assembly ●	910106	12.4
TA10-TA12 Hydra-Lock Dessicent Breather Kit HL2	964366	2.0
XT Enclosed Breather System, TA10-2	240051	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA10507H V-Ring Kit	910249	0.8
TA10507H Lube Kit	LUBEKITTA10507	121.5
Dodge ability sensor	750000	0.5

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off

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

● See page G2-118 for cooling fan dimensions

TA10507H Tapered Bushing Kits [4]

Bushing size Standard shaft bushing kit (5)	Part number	Weight lbs.	Shaft keyseat required (7) (8)
TA10507TB x 6	910020	40.8	1-1/2 x 3/4 x 15.46
TA10507TB x 5-15/16	910021	43.2	1-1/2 x 3/4 x 15.46
TA10507TB x 5-7/16 ▲	910022	50.0	1-1/4 x 5/8 x 15.46
TA10507TB x 4-15/16	910023	57.8	1-1/4 x 5/8 x 15.46
TA10507TB x 4-7/16	910024	52.8	1 x 1/2 x 15.46
TA10507TB x 4-3/16	910025	65.6	1 x 1/2 x 15.46
TA10507TB x 3-15/16	910026	68.4	1 x 1/2 x 15.46

Bushing size Short shaft bushing kit (6)	Part number	Weight lbs.	Shaft keyseat required (7) (8)
–	–	–	–
–	–	–	–
TA10507TBS x 5-7/16	910027	47.2	1-1/4 x 5/8 x 9.67
TA10507TBS x 4-15/16	910028	66.9	1-1/4 x 5/8 x 9.67
TA10507TBS x 4-7/16	910029	75.7	1 x 1/2 x 9.67
TA10507TBS x 4-3/16	910030	80.5	1 x 1/2 x 9.67
TA10507TBS x 3-15/16	910031	85.2	1 x 1/2 x 9.67

▲ AGMA maximum bore size

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

(5) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key.

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

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

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

Bushing covers

Reducer size	Description	Part number	Weight
TA10507H	ABS Polymer closed [12]	910142	3.0
TA10507H	ABS Polymer split [12]	910143	2.8

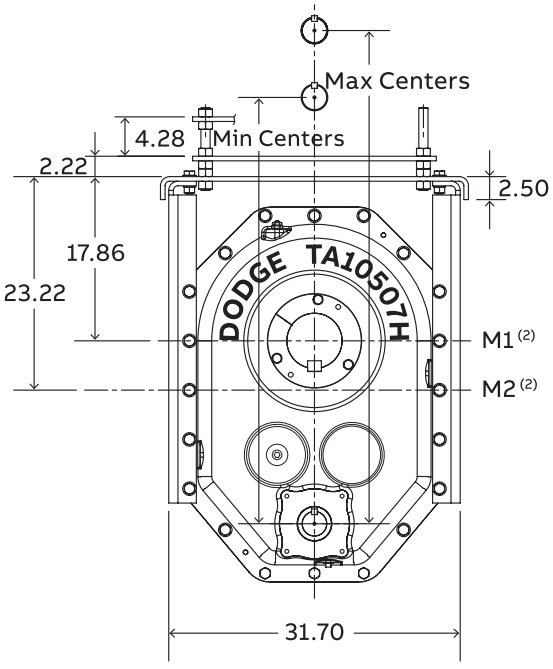
Closed bushing covers may not be compatible with belt guards or large sheave installations

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

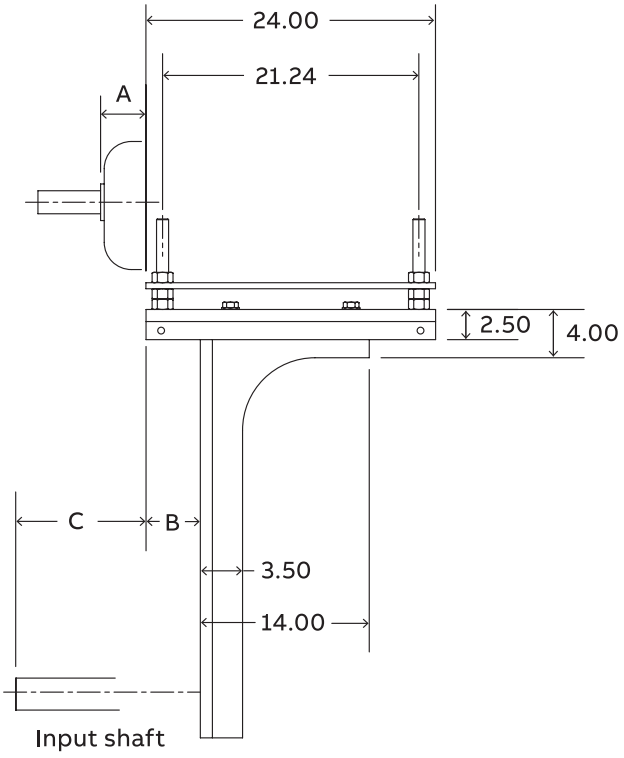
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer

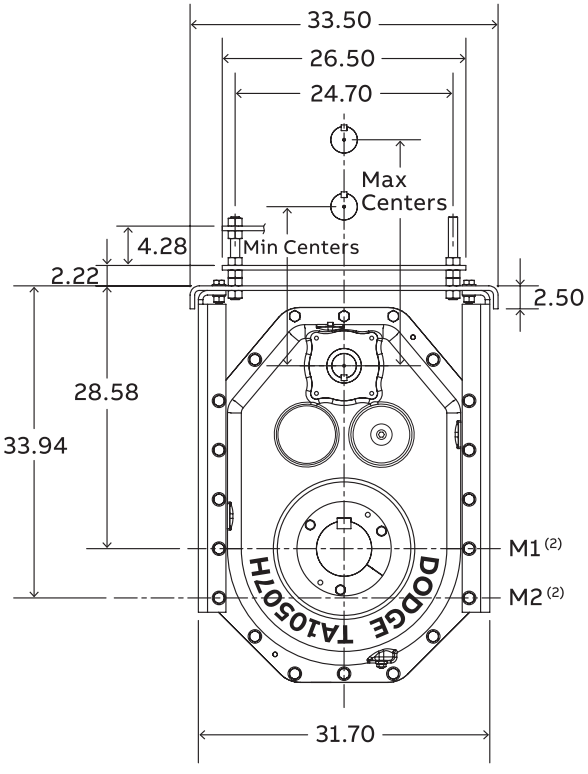
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA10507H, position B & D



Position B





Position D

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA10507H, position B & D (1)

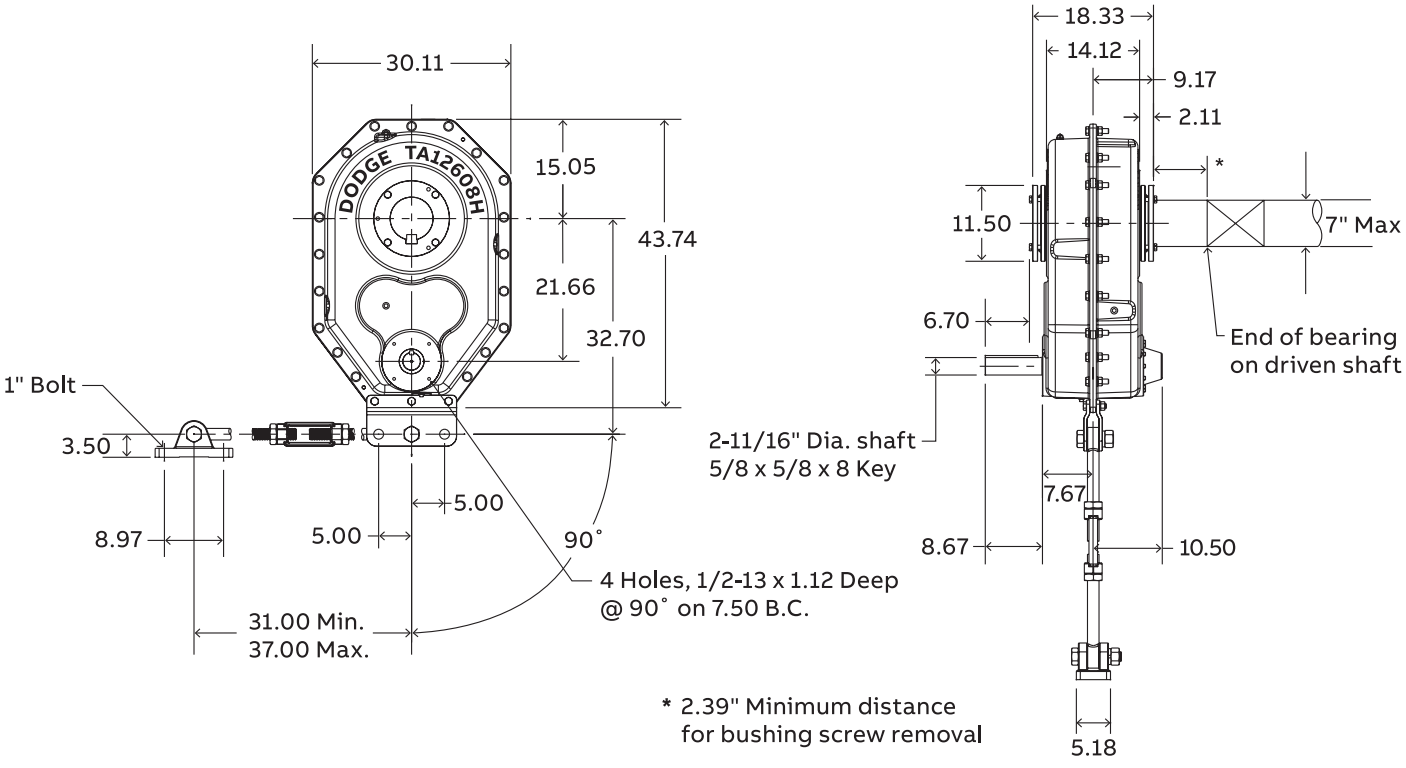
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 254T & 256T			Motor frame 284T & 286T			Motor frame 324T & 326T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	2.18	6.82	6.98	11.62	M1	1.56	46.7	50.5	1.16	47.5	51.2	0.38	48.5	52.2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

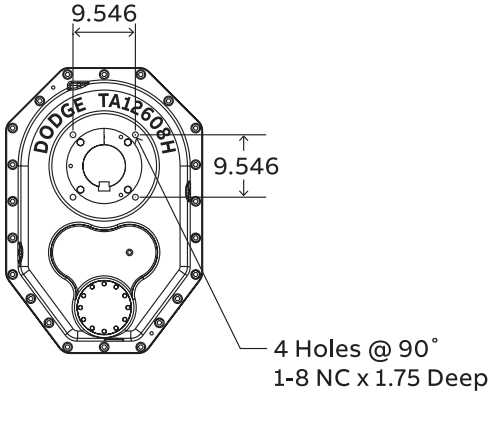
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 364T & 365T			Motor frame 404T & 405T			Motor frame 444T & 445T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	2.18	6.82	6.98	11.62	M1	1.01	49.5	53.2	0.75	50.5	54.2	1.62	51.5	55.2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

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

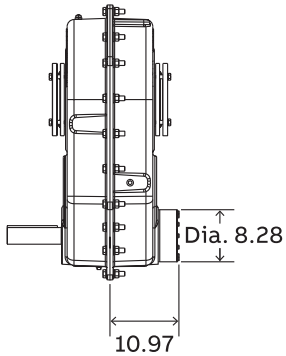
Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA12608H, double reductions





Flange mounting dimensions



Reducer with backstop

All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Taper bushed reducers – TA12608H, double reductions

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 and must be ordered as a separate part number.

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

TA12608H Accessories

Description	Part number	Weight lbs.
TA12608RA Rod Assembly [1] +	912109	106.4
TA12608BS Backstop Assembly (15, 25:1) [2]	912102	40.0
TA12608BS 40:1 Backstop Assembly [2]	912103	41.1
TA12608MM Motor Mount Assembly (254-445T) [3]	912090	289.6
TA12608BG Belt Guard - Pos. B (254-445T)	912096	190.5
TA12608 Belt guard assembly Pos. B M2	912101	227.0
TA12608BG Belt Guard - Pos. D (254-445T)	912099	181.0
TA12608CF Cooling Fan Assembly ●	912106	13.7
TA10-TA12 Hydra-Lock Dessicant Breather Kit HL2	964366	2.0
XT Enclosed Breather System, TA 10-12	240051	2.0
TA4-TA12 Vertical Breather Kit	904112	2.0
TA12608H V-Ring Kit	912249	0.8
TA12608H Lube Kit	LUBEKITTA12608	170.1
Dodge ability sensor	750000	0.5

(2) See page G2-127 for input shaft speed necessary for backstop sprag lift-off

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

● See page G2-118 for cooling fan dimensions

TA12608H Tapered Bushing Kits [4]

Bushing size Standard shaft bushing kit (5)	Part number	Weight lbs.	Shaft keyseat required (7) (8)
TA12608TB x 7	912020	58.2	1-3/4 x 3/4 x 18.32
TA12608TB x 6-1/2 ▲	912021	67.8	1-1/2 x 3/4 x 18.32
TA12608TB x 6-7/16	912022	69.1	1-1/2 x 3/4 x 18.32
TA12608TB x 6	912023	78.1	1-1/2 x 3/4 x 18.32
TA12608TB x 5-15/16	912024	79.4	1-1/2 x 3/4 x 18.32
TA12608TB x 5-7/16	912025	86.7	1-1/4 x 5/8 x 18.32
TA12608TB x 4-15/16	912026	94.6	1-1/4 x 5/8 x 18.32

Bushing size Short shaft bushing kit (6)	Part number	Weight lbs.	Shaft keyseat required (7) (8)
–	–	–	–
TA12608TBS x 6-1/2	912027	73.5	1-1/2 x 3/4 x 11.60
TA12608TBS x 6-7/16	912028	75.7	1-1/2 x 3/4 x 11.60
TA12608TBS x 6	912029	90.5	1-1/2 x 3/4 x 11.60
TA12608TBS x 5-15/16	912030	92.6	1-1/2 x 3/4 x 11.60
TA12608TBS x 5-7/16	912031	106.1	1-1/4 x 5/8 x 11.60
TA12608TBS x 4-15/16	912032	119.3	1-1/4 x 5/8 x 11.60

▲ AGMA maximum bore size

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

(5) Standard shaft bushing kit includes two standard bushings with back-up plates and snap rings; hardware, and key.

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

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

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

Bushing covers

Reducer size	Description	Part number	Weight
TA12608H	ABS Polymer closed [12]	912142	3.0
TA12608H	ABS Polymer split [12]	912143	2.8

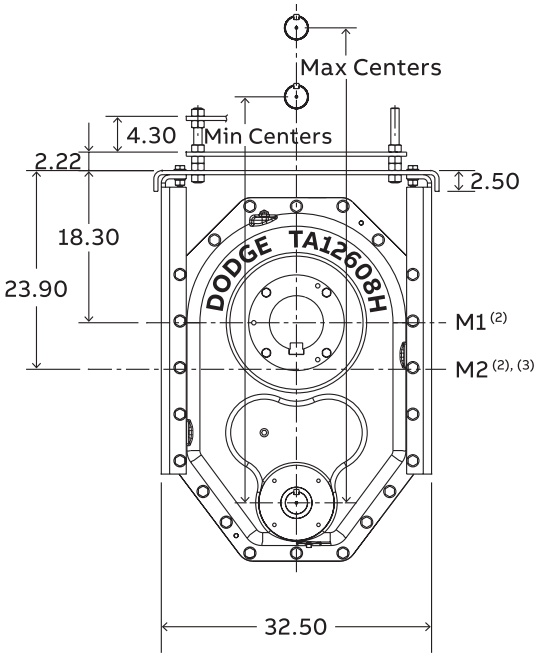
Closed bushing covers may not be compatible with belt guards or large sheave installations

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

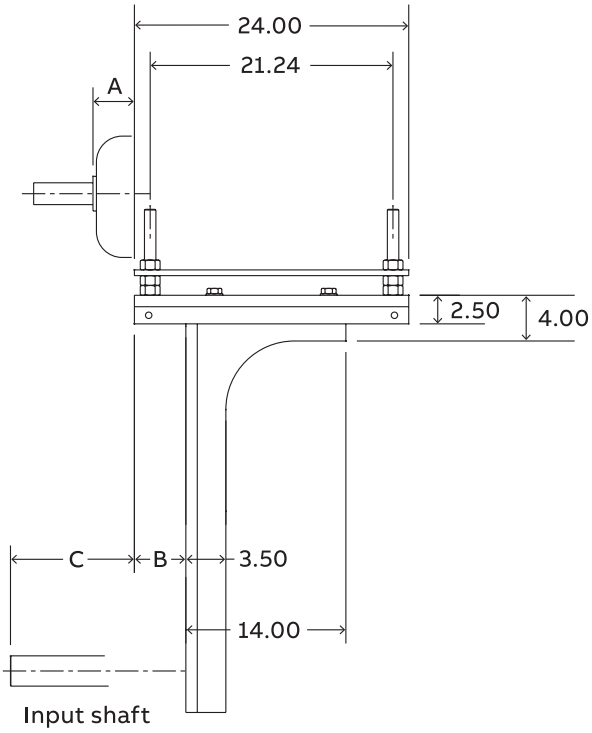
(12) ABS Polymer covers are designed with bolts for tapped reducers, non tapped reducers will require self tapping screws and customer modification of reducer

Selection and dimensions

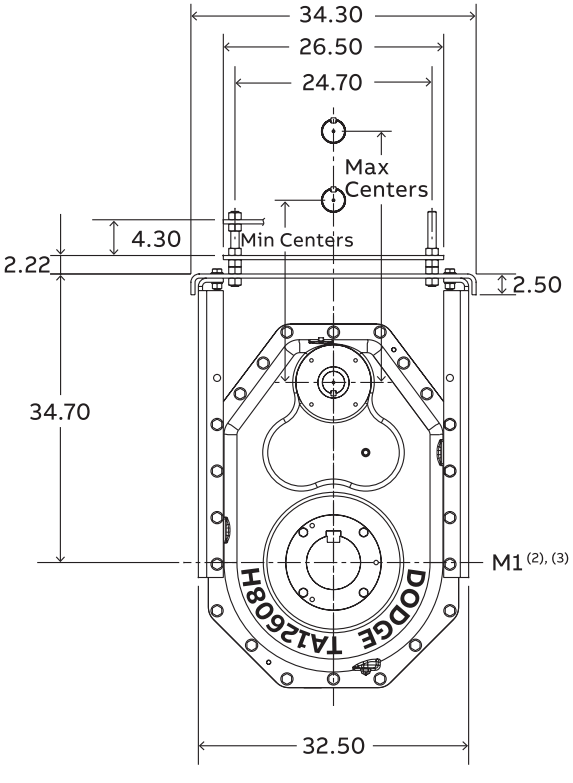
Torque-Arm II shaft mount speed reducers
Motor mount dimensions – TA12608H, position B & D



Position B



Input shaft



Position D

All dimensions are in inches.

Selection and 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		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.68	7.32	8.02	13.66	M1	1.56	48.9	52.7	1.16	49.7	53.5	0.38	50.7	54.5
					M2		54.5	58.3		55.3	59.1		56.3	60.1
Position D	1.68	7.32	8.02	13.66	M1	1.56	22.0	25.8	1.16	22.8	26.6	0.38	23.8	27.6

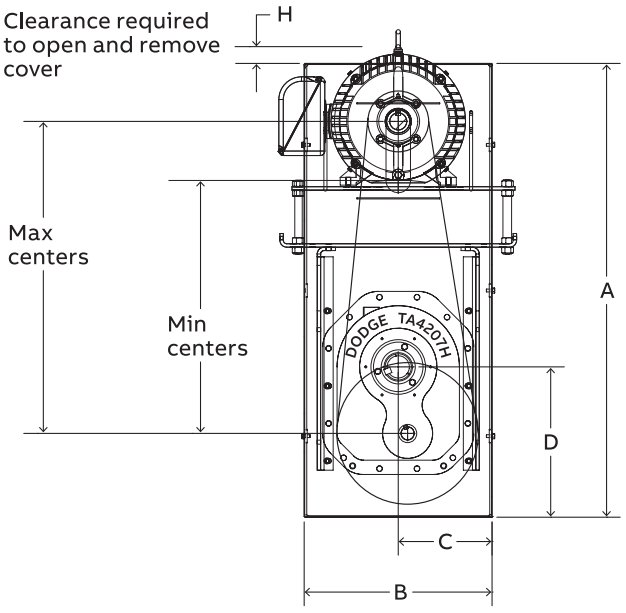
Mounting	Lateral adjustment				Motor mount height (2)	Motor frame 364T & 365T			404T & 405T			444T & 445T		
						A	Centers		A	Centers		A	Centers	
	B Min	B Max	C Min	C Max			Min	Max		Min	Max		Min	Max
Position B	1.68	7.32	8.02	13.66	M1	1.01	51.7	55.5	0.75	52.7	56.5	1.62	53.7	57.5
					M2		57.3	61.1	–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

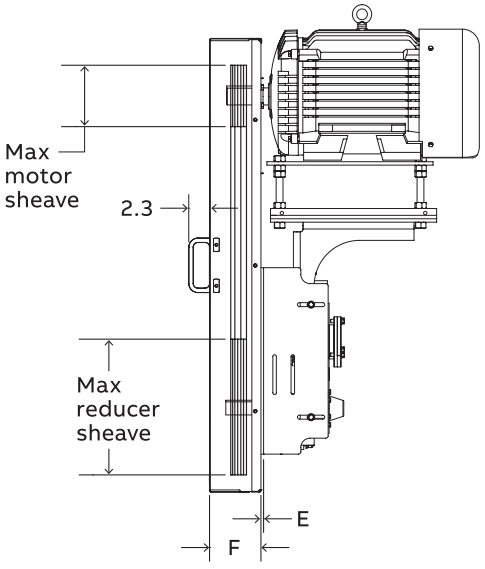
Notes:
Minimum centers contains 0.5” to allow for belt assembly
(1) Motor Mount will fit NEMA and IEC frame motors; however, motor mount hardware are inch dimensions.
(2) M1, M2, M3 go through output shaft centerline

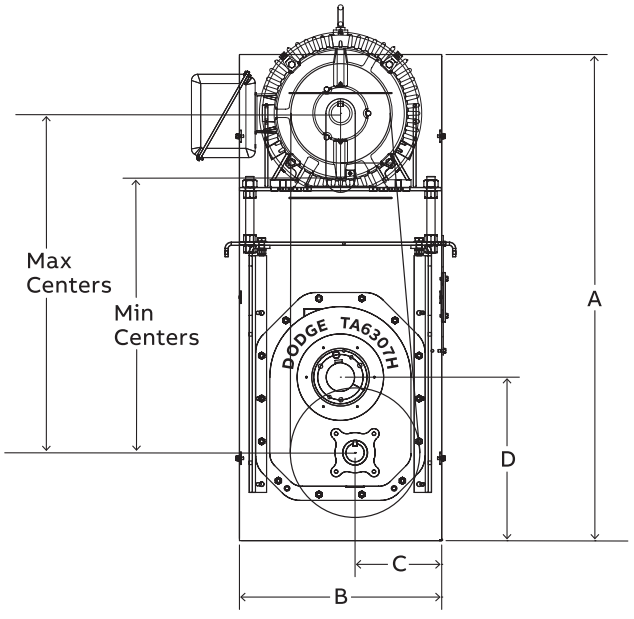
Selection and dimensions

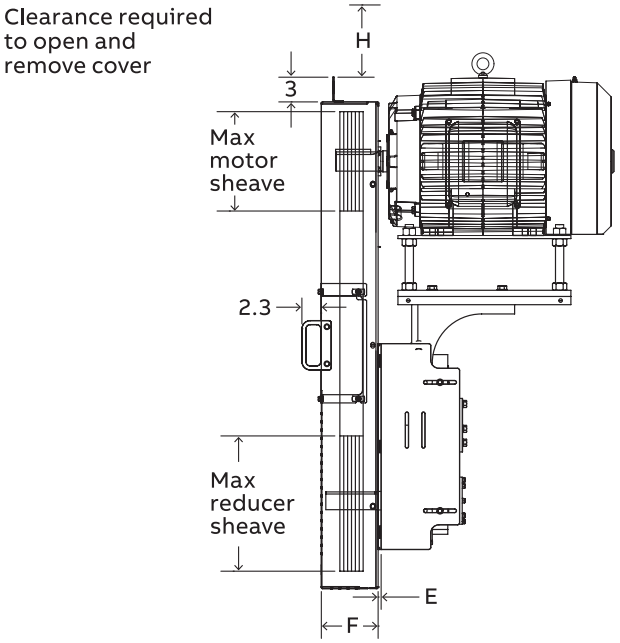
Torque-Arm II shaft mount speed reducers
Full featured Position B – M2 belt guard dimensions, TA0107L – TA12608H

This belt guard offers enhanced safety and maintenance features.









Selection and dimensions

Torque-Arm II shaft mount speed reducers
Full featured Position B – M2 belt guard dimensions, TA0107L – TA12608H

Case size	Mounting position	Centers		Max sheave diameter		A	B	C
		Min	Max	Motor	Reducer			
TA0107L	B	19.6	24.5	11	11.4	38.73	14.85	7.43
		24.6	27	8.5				
TA1107H	B	19.6	25.5	11	11.4	38.73	14.85	7.43
		25.6	27	8.5				
TA2115H	B	19.6	25.5	8.5	13	38.73	14.85	7.43
		25.6	27	11				
TA3203H	B	24.3	30.1	11	17	45.59	19.47	9.72
TA4207H	B	27.8	34.3	11.2	17	49.85	20.64	10.31
TA5215H	B	31.9	38.8	12.5	17	55.36	21.70	10.81
TA6307H	B	33.4	41.2	13	19.9	59.10	24.87	12.40
TA7315H	B	37	44.9	15	25.5	66.70	29.80	18.90
TA8407H	B	37	44.9	15	25.5	66.70	29.80	18.90
TA9415H	B	41.2	48.9	15.5	28	72.43	31.56	19.47
TA10507H	B	59.1	60.6	17	30	89.50	32.50	16.25
		53.8	59	24				
TA12608H	B	59.1	60.6	17	30	89.50	32.50	16.25
		53.8	59	24				

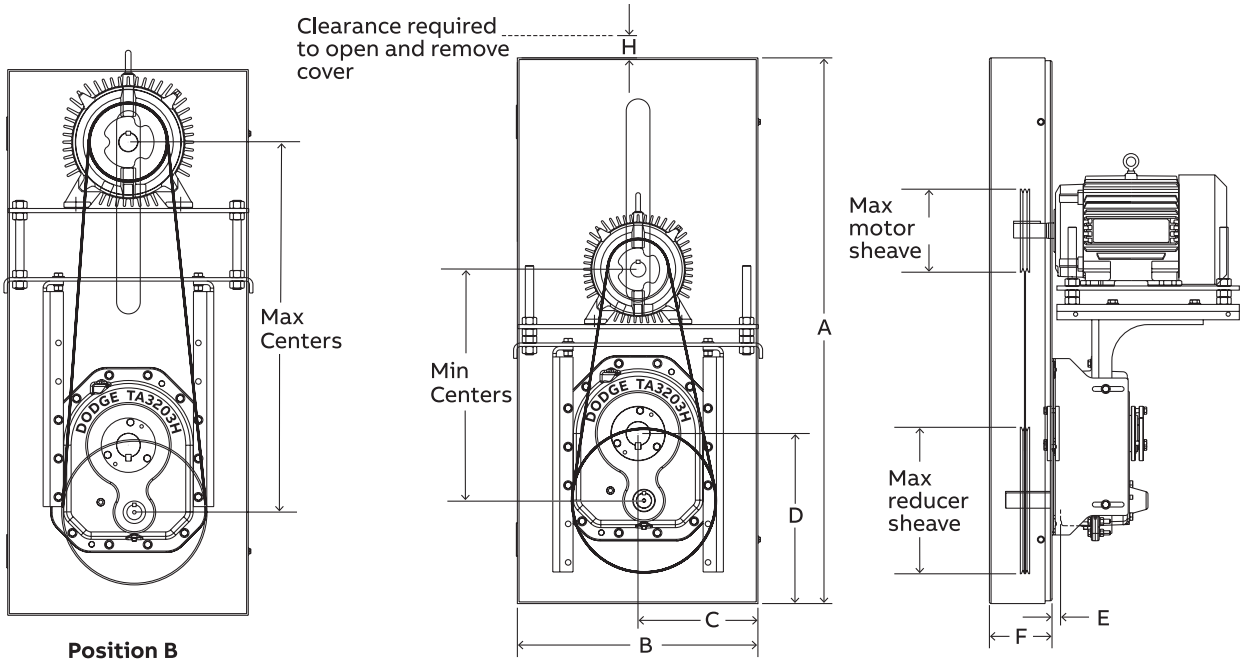
Case size	Mounting position	D	E		F	G[1]	H	A + H	Lifting tab height
			Min	Max					
TA0107L	B	11.64	0.00	1.79	4.28	???	2.00	–	–
TA1107H	B	11.52	0.03	1.83	4.28	???	2.00	–	–
TA2115H	B	13.80	0.00	1.45	4.28	???	2.00	–	–
TA3203H	B	15.26	0.00	2.72	5.65	???	2.00	–	–
TA4207H	B	16.51	0.00	2.70	5.65	???	2.00	–	–
TA5215H	B	18.00	0.00	2.60	6.40	???	2.00	58.63	3.00
TA6307H	B	19.89	0.00	3.55	6.90	???	2.00	62.1	3.00
TA7315H	B	22.66	0.00	4.53	7.40	???	2.00	69.69	3.00
TA8407H	B	22.66	0.00	4.24	7.40	???	2.00	69.69	3.00
TA9415H	B	26.22	0.40	5.00	8.90	???	2.00	75.43	3.00
TA10507H	B	36.07	0.30	3.86	9.15	???	2.00	92.5	3.00
TA12608H	B	37.84	0.30	3.86	9.15	???	2.00	92.5	3.00

1. G = Maximum sheave face width

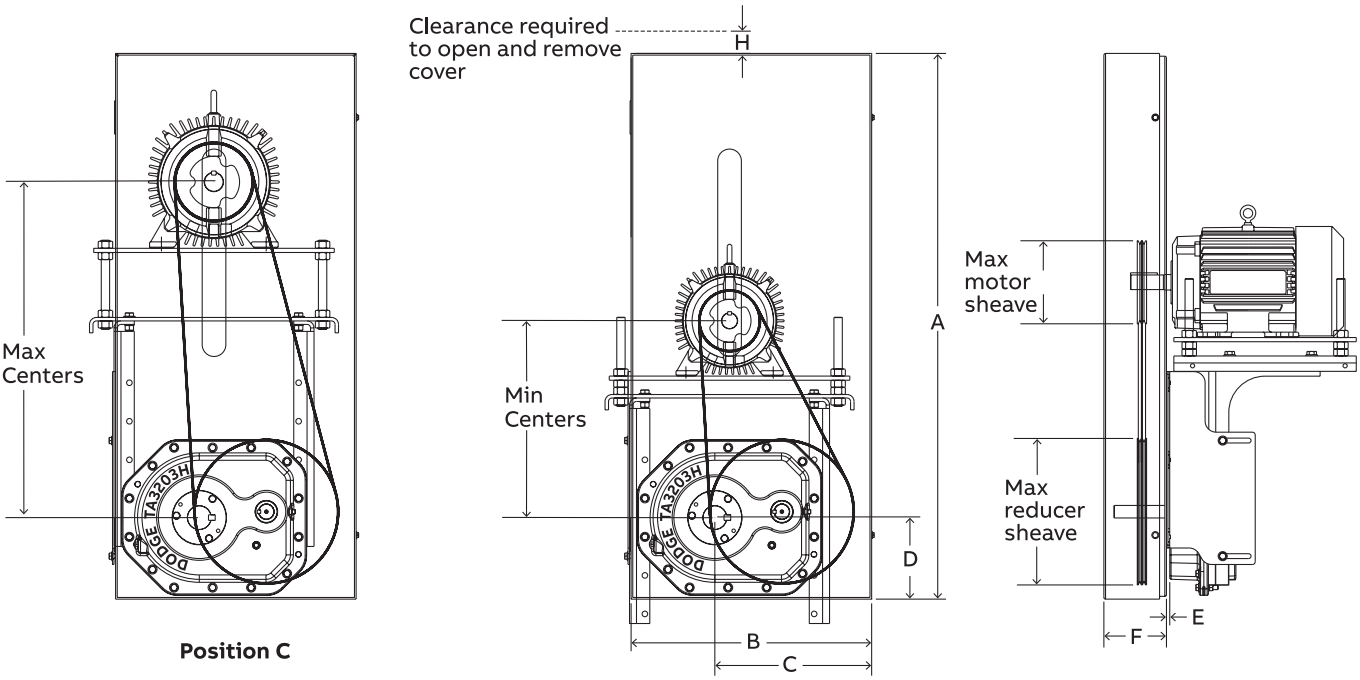
All dimensions are in inches.

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Standard belt guard dimensions, TA0107L – TA12608H



Position B



Position C

Selection and dimensions

Torque-Arm II shaft mount speed reducers
Standard belt guard dimensions, TA0107L – TA12608H

Case size	Mounting position	Centers Min	Centers Max	Max sheave diameter Motor	Max sheave diameter Reducer	A	B	C
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 Min	E Max	F	G[9]	H	J
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

Case size	Mounting position	Centers Min	Centers Max	Max sheave diameter Motor	Max sheave diameter Reducer	A	B	C
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 Min	E Max	F	G[9]	H	J
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.
(9) G = maximum sheave face width

All dimensions are in inches.

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

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

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

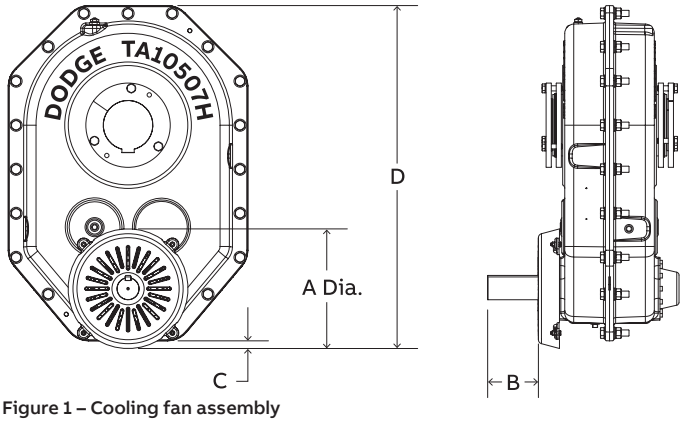


Figure 1 – Cooling fan assembly

Table 1 - Cooling fan installation dimensions

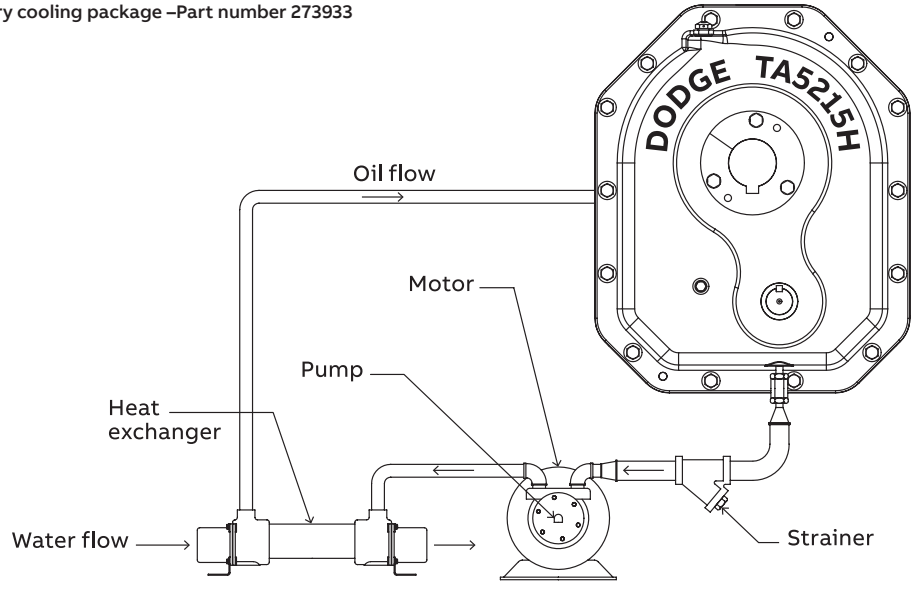
Reducer	Part Number	A Dia.	B	C	D
TA4207H	904106	9.00	3.77	–	–
TA5215H	905106	10.75	4.63	–	–
TA6307H	906106	11.85	4.00	0.14	25.37
TA7315H	907106	11.85	4.10	–	–
TA8407H	907106	11.85	4.79	–	–
TA9415H	909106	14.55	5.98	–	–
TA10507H	910106	14.55	6.16	0.93	41.72
TA12608H	912106	14.55	6.16	0.25	43.98

Reducer pump and auxiliary cooling package

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

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

Figure 2 – Pump and auxiliary cooling package –Part number 273933



Related products

Torque-Arm II shaft mount speed reducers
Harsh duty accessories

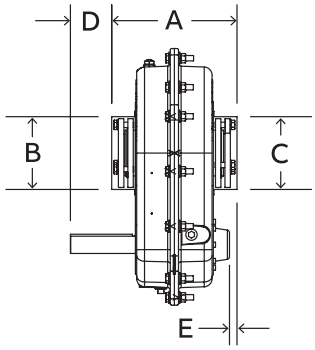
ABS Polymer bushing covers

Reducer size	Bushing cover part numbers			
	Closed	Weight	Split	Weight
TA0107L	900142	0.3	900143	0.3
TA1107H	901142	0.5	901143	0.4
TA2115H	902142	0.6	902143	0.5
TA3203H	903142	0.6	903143	0.5
TA4207H	904142	1.2	904143	1.0
TA5215H	905142	1.5	905143	1.3
TA6307H	905142	1.5	905143	1.3
TA7315H	907142	1.6	907143	1.5
TA8407H	908142	1.7	908143	1.6
TA9415H	909142	2.0	909143	1.8
TA10507H	910142	3.0	910143	2.8
TA12608H	912142	4.0	912143	3.8

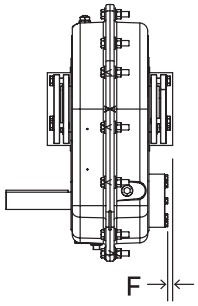
Dimensions					
A	B	C	D	E	F
8.01	3.75	3.75	2.02	0.35	0.40
8.20	4.25	4.25	1.89	0.08	-0.10
8.80	4.88	4.88	2.19	0.07	-0.10
10.48	5.56	5.56	2.79	0.48	0.30
10.62	6.11	6.11	2.87	0.47	0.29
11.98	7.00	7.00	3.61	0.90	0.67
12.40	7.00	7.00	4.98	0.80	0.56
13.43	8.50	8.50	4.80	0.12	-0.28
14.50	8.75	8.75	5.26	0.38	0.13
15.42	9.75	9.75	6.25	-0.67	-1.07
17.13	10.75	10.75	6.24	0.13	-0.21
20.00	12.00	12.00	6.34	-0.50	-0.97

ABS covers

Drawing A – end cover



Reducer without backstop



Reducer with backstop

Optional V-ring flinger seal kit for harsh duty environments (1)

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

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

V-ring kit

Related products

Torque-Arm II shaft mount speed reducers
Harsh duty accessories

Hydra-Lock breathers

Enclosed chamber breather

Oil sump heater

Hydra-Lock breather system

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

Enclosed chamber breather

Reducer Size	Part Number
TA0-TA8	240050
TA9-TA12	240051

Oil sump immersion heaters [2] [3]

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

(2) 110 volt, single phase, AC cartridge heater, threads into special tapped housing hole.
Provides for approximately 70 degrees (F) temperature rise in one hour for cold climates. Simple time phased on-off constructions without thermostat.
(3) All TA II reducers have to be factory modified to allow installation of sump heater. Reducer mounting position will determine modification requirement. Consult Dodge.

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

Oil sight glasses

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

Oil sight tubes

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

Related products

Torque-Arm II shaft mount speed reducers
Maximum bore straight bore TAII 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

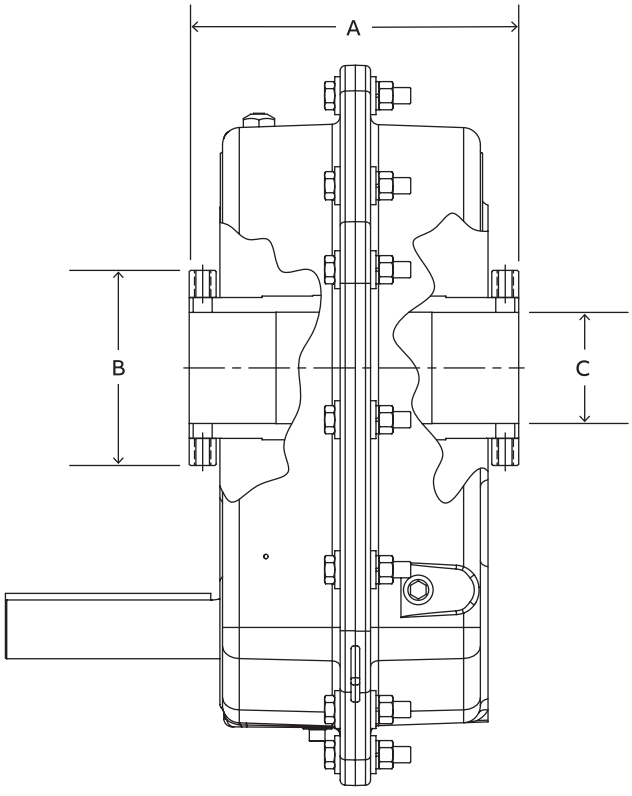


Table 4 (4)

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 – 5:1, 9:1, 15:1

Reducer output	5:1 Nominal reducer ratio			Reducer output	9:1 Nominal reducer ratios			Reducer output	15:1 Nominal reducer ratio		
	Motor speed				Motor speed				Motor speed		
RPM	1750	1450	1170	RPM	1750	1450	1170	RPM	1750	1450	1170
400	**1.14**	**1.38**	**1.71**	200	**1.03**	**1.24**	**1.54**	120	**1.03**	**1.24**	**1.54**
395	**1.13**	**1.36**	**1.69**	198	**1.02**	**1.23**	**1.52**	118	**1.01**	**1.22**	**1.51**
390	**1.11**	**1.34**	**1.67**	196	**1.01**	**1.22**	**1.51**	116	1.01	**1.20**	**1.49**
385	**1.10**	**1.33**	**1.65**	194	1.00	**1.20**	**1.49**	114	1.02	**1.18**	**1.46**
380	**1.09**	**1.31**	**1.62**	192	1.01	**1.19**	**1.48**	112	1.04	**1.16**	**1.44**
375	**1.07**	**1.29**	**1.60**	190	1.02	**1.18**	**1.46**	110	1.06	**1.14**	**1.41**
370	**1.06**	**1.28**	**1.58**	188	1.03	**1.17**	**1.45**	108	1.08	**1.12**	**1.38**
365	**1.04**	**1.26**	**1.56**	186	1.05	**1.15**	**1.43**	106	1.10	**1.10**	**1.36**
360	**1.03**	**1.24**	**1.54**	184	1.06	**1.14**	**1.42**	104	1.12	**1.08**	**1.33**
355	**1.01**	**1.22**	**1.52**	182	1.07	**1.13**	**1.40**	102	1.14	**1.06**	**1.31**
350	1.00	**1.21**	**1.50**	180	1.08	**1.12**	**1.38**	100	1.17	**1.03**	**1.28**
345	1.01	**1.19**	**1.47**	178	1.09	**1.10**	**1.37**	98	1.19	**1.01**	**1.26**
340	1.03	**1.17**	**1.45**	176	1.10	**1.09**	**1.35**	96	1.22	1.01	**1.23**
335	1.04	**1.16**	**1.43**	174	1.12	**1.08**	**1.34**	94	1.24	1.03	**1.21**
330	1.06	**1.14**	**1.41**	172	1.13	**1.07**	**1.32**	92	1.27	1.05	**1.18**
325	1.08	**1.12**	**1.39**	170	1.14	**1.06**	**1.31**	90	1.30	1.07	**1.15**
320	1.09	**1.10**	**1.37**	168	1.16	**1.04**	**1.29**	88	1.33	1.10	**1.13**
315	1.11	**1.09**	**1.35**	166	1.17	**1.03**	**1.28**	86	1.36	1.12	**1.10**
310	1.13	**1.07**	**1.32**	164	1.19	**1.02**	**1.26**	84	1.39	1.15	**1.08**
305	1.15	**1.05**	**1.30**	162	1.20	**1.01**	**1.25**	82	1.42	1.18	**1.05**
300	1.17	**1.03**	**1.28**	160	1.22	1.01	**1.23**	80	1.46	1.21	**1.03**
295	1.19	**1.02**	**1.26**	158	1.23	1.02	**1.22**	78	1.50	1.24	1.00
290	1.21	1.00	**1.24**	156	1.25	1.03	**1.20**	76	1.54	1.27	1.03
285	1.23	1.02	**1.22**	154	1.26	1.05	**1.18**	74	1.58	1.31	1.05
280	1.25	1.04	**1.20**	152	1.28	1.06	**1.17**	72	1.62	1.34	1.08
275	1.27	1.05	**1.18**	150	1.30	1.07	**1.15**	70	1.67	1.38	1.11
270	1.30	1.07	**1.15**	148	1.31	1.09	**1.14**	68	1.72	1.42	1.15
265	1.32	1.09	**1.13**	146	1.33	1.10	**1.12**	66	1.77	1.46	1.18
260	1.35	1.12	**1.11**	144	1.35	1.12	**1.11**	64	1.82	1.51	1.22
255	1.37	1.14	**1.09**	142	1.37	1.13	**1.09**	62	1.88	1.56	1.26
250	1.40	1.16	**1.07**	140	1.39	1.15	**1.08**	60	1.94	1.61	1.30
245	1.43	1.18	**1.05**	138	1.41	1.17	**1.06**	58	2.01	1.67	1.34
240	1.46	1.21	**1.03**	136	1.43	1.18	**1.05**	56	2.08	1.73	1.39
235	1.49	1.23	1.00	134	1.45	1.20	**1.03**	54	2.16	1.79	1.44
230	1.52	1.26	1.02	132	1.47	1.22	**1.02**	52	2.24	1.86	1.50
225	1.56	1.29	1.04	130	1.50	1.24	1.00	50	2.33	1.93	1.56
220	1.59	1.32	1.06	128	1.52	1.26	1.02	48	2.43	2.01	1.63
215	1.63	1.35	1.09	126	1.54	1.28	1.03	46	2.54	2.10	1.70
210	1.67	1.38	1.11	124	1.57	1.30	1.05	44	2.65	2.20	1.77
205	1.71	1.41	1.14	122	1.59	1.32	1.07	42	2.78	2.30	1.86
200	1.75	1.45	1.17	120	1.62	1.34	1.08	40	2.92	2.42	1.95
195	1.79	1.49	1.20	118	1.65	1.37	1.10	38	3.07	2.54	2.05
190	1.84	1.53	1.23	116	1.68	1.39	1.12	36	3.24	2.69	2.17
185	1.89	1.57	1.26	114	1.71	1.41	1.14	34	3.43	2.84	2.29
180	1.94	1.61	1.30	112	1.74	1.44	1.16	32	3.65	3.02	2.44
175	2.00	1.66	1.34	110	1.77	1.46	1.18	30	3.89	3.22	2.60
170	2.06	1.71	1.38	108	1.80	1.49	1.20	28	4.17	3.45	2.79
165	2.12	1.76	1.42	106	1.83	1.52	1.23	26	4.49	3.72	3.00
160	2.19	1.81	1.46	104	1.87	1.55	1.25	24	4.86	4.03	3.25
155	2.26	1.87	1.51	102	1.91	1.58	1.27	22	5.30	4.39	3.55
150	2.33	1.93	1.56	100	1.94	1.61	1.30	20	5.83	4.83	3.90
145	2.41	2.00	1.61	–	–	–	–	18	6.48	5.37	4.33
140	2.50	2.07	1.67	–	–	–	–	16	7.29	6.04	4.88
135	2.59	2.15	1.73	–	–	–	–	14	8.33	6.90	5.57
130	2.69	2.23	1.80	–	–	–	–	12	9.72	8.06	6.50
125	2.80	2.32	1.87	–	–	–	–	10	11.67	9.67	7.80
120	2.92	2.42	1.95	–	–	–	–	–	–	–	–
115	3.04	2.52	2.03	–	–	–	–	–	–	–	–
110	3.18	2.64	2.13	–	–	–	–	–	–	–	–
105	3.33	2.76	2.23	–	–	–	–	–	–	–	–
100	3.50	2.90	2.34	–	–	–	–	–	–	–	–

Note: Speed increase ratios are shown in bold type

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 ratio			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

Related products

Torque-Arm II shaft mount speed reducers
Nominal sheave speed (RPM) at input for Dodge reducers – 1750 motor

5:1		9:1		15:1		25:1		31:1, 32:1 & 33:1		40:1	
Reducer output RPM	Nominal reducer ratio	Reducer output RPM	Nominal reducer ratio	Reducer output RPM	Nominal reducer ratio	Reducer output RPM	Nominal reducer ratio	Reducer output RPM	Nominal reducer ratio	Reducer output RPM	Nominal reducer ratio
400	2000	200	1800	120	1800	80	2000	50	1600	50	2000
395	1975	198	1782	118	1770	78	1950	48	1536	48	1920
390	1950	196	1764	116	1740	76	1900	46	1472	46	1840
385	1925	194	1746	114	1710	74	1850	44	1408	44	1760
380	1900	192	1728	112	1680	72	1800	42	1344	42	1680
375	1875	190	1710	110	1650	70	1750	40	1280	40	1600
370	1850	188	1692	108	1620	68	1700	38	1216	38	1520
365	1825	186	1674	106	1590	66	1650	36	1152	36	1440
360	1800	184	1656	104	1560	64	1600	34	1088	34	1360
355	1775	182	1638	102	1530	62	1550	32	1024	32	1280
350	1750	180	1620	100	1500	60	1500	30	960	30	1200
345	1725	178	1602	98	1470	58	1450	28	896	28	1120
340	1700	176	1584	96	1440	56	1400	26	832	26	1040
335	1675	174	1566	94	1410	54	1350	24	768	24	960
330	1650	172	1548	92	1380	52	1300	22	704	22	880
325	1625	170	1530	90	1350	50	1250	20	640	20	800
320	1600	168	1512	88	1320	48	1200	18	576	18	720
315	1575	166	1494	86	1290	46	1150	16	512	16	640
310	1550	164	1476	84	1260	44	1100	14	448	14	560
305	1525	162	1458	82	1230	42	1050	12	384	12	480
300	1500	160	1440	80	1200	40	1000	10	320	10	400
295	1475	158	1422	78	1170	38	950	8	256	8	320
290	1450	156	1404	76	1140	36	900	6	192	6	240
285	1425	154	1386	74	1110	34	850	–	–	–	–
280	1400	152	1368	72	1080	32	800	–	–	–	–
275	1375	150	1350	70	1050	30	750	–	–	–	–
270	1350	148	1332	68	1020	28	700	–	–	–	–
265	1325	146	1314	66	990	26	650	–	–	–	–
260	1300	144	1296	64	960	24	600	–	–	–	–
255	1275	142	1278	62	930	22	550	–	–	–	–
250	1250	140	1260	60	900	20	500	–	–	–	–
245	1225	138	1242	58	870	18	450	–	–	–	–
240	1200	136	1224	56	840	16	400	–	–	–	–
235	1175	134	1206	54	810	14	350	–	–	–	–
230	1150	132	1188	52	780	12	300	–	–	–	–
225	1125	130	1170	50	750	10	250	–	–	–	–
220	1100	128	1152	48	720	8	200	–	–	–	–
215	1075	126	1134	46	690	6	150	–	–	–	–
210	1050	124	1116	44	660	–	–	–	–	–	–
205	1025	122	1098	42	630	–	–	–	–	–	–
200	1000	120	1080	40	600	–	–	–	–	–	–
195	975	118	1062	38	570	–	–	–	–	–	–
190	950	116	1044	36	540	–	–	–	–	–	–
185	925	114	1026	34	510	–	–	–	–	–	–
180	900	112	1008	32	480	–	–	–	–	–	–
175	875	110	990	30	450	–	–	–	–	–	–
170	850	108	972	28	420	–	–	–	–	–	–
165	825	106	954	26	390	–	–	–	–	–	–
160	800	104	936	24	360	–	–	–	–	–	–
155	775	102	918	22	330	–	–	–	–	–	–
150	750	100	900	20	300	–	–	–	–	–	–
145	725	–	–	18	270	–	–	–	–	–	–
140	700	–	–	16	240	–	–	–	–	–	–
135	675	–	–	14	210	–	–	–	–	–	–
130	650	–	–	12	180	–	–	–	–	–	–
125	625	–	–	10	150	–	–	–	–	–	–
120	600	–	–	–	–	–	–	–	–	–	–
115	575	–	–	–	–	–	–	–	–	–	–
110	550	–	–	–	–	–	–	–	–	–	–
105	525	–	–	–	–	–	–	–	–	–	–
100	500	–	–	–	–	–	–	–	–	–	–

Related products

Torque-Arm II shaft mount speed reducers
Renewal parts for Torque-Arm II reducers

Torque-Arm II bearing kits (1)

Size	Ratio	Kit P/N	Size	Ratio	Kit P/N
TA0107L	5:1	900128	TA6307H	5:1	906128
TA0107L	9:1 - 40:1	900129	TA6307H	9:1 - 15:1	906129
TA1107H	5:1	901128	TA6307H	25:1 - 40:1	906130
TA1107H	9:1 - 15:1	901129	TA7315H	5:1	907128
TA1107H	25:1 - 40:1	901130	TA7315H	9:1 - 25:1	907129
TA2115H	5:1	902128	TA7315H	40:1	907130
TA2115H	9:1 - 25:1	902129	TA8407H	15:1 - 25:1	908129
TA2115H	40:1	902130	TA8407H	40:1	908130
TA3203H	5:1	903128	TA9415H	15:1 - 25:1	909129
TA3203H	9:1 - 25:1	903129	TA9415H	40:1	909130
TA3203H	40:1	903130	TA10507H	15:1 - 25:1	910129
TA4207H	5:1	904128	TA10507H	40:1	910130
TA4207H	9:1 - 25:1	904129	TA12608H	15:1 - 25:1	912129
TA4207H	40:1	904130	TA12608H	40:1	912130
TA5215H	5:1	905128	–	–	–
TA5215H	9:1 - 15:1	905129	–	–	–
TA5215H	25:1	905130	–	–	–
TA5215H	40:1	905131	–	–	–

(1) Kit contains complete set of bearings for reducer size and ratio indicated.

Torque-Arm II seal kits (2)

Size	Ratio	Kit P/N
TA0107L	All	900126
TA1107H	All	901126
TA2115H	5:1 - 25:1	902126
TA2115H	40:1	902127
TA3203H	5:1-25:1	903126
TA3203H	40:1	903127
TA4207H	All	904126
TA5215H	All	905126
TA6307H	All	906126
TA7315H	All	907126
TA8407H	All	908126
TA9415H	All	909126
TA10507	All	910126
TA12608	All	912126

(2) Kit includes input & output seals, backstop cover gasket and RTV sealant for reducer size and ratio indicated

Torque-Arm II Level 1 rebuild kits (3)

Size	Ratio	Kit P/N	Size	Ratio	Kit P/N
TA0107L	5:1	900135	TA6307H	5:1	906135
TA0107L	9:1 - 40:1	900136	TA6307H	9:1 - 15:1	906136
TA1107H	5:1	901135	TA6307H	25:1 - 40:1	906137
TA1107H	9:1 - 15:1	901136	TA7315H	5:1	907135
TA1107H	25:1 - 40:1	901137	TA7315H	9:1 - 25:1	907136
TA2115H	5:1	902135	TA7315H	40:1	907137
TA2115H	9:1 - 25:1	902136	TA8407H	15:1 - 25:1	908136
TA2115H	40:1	902137	TA8407H	40:1	908137
TA3203H	5:1	903135	TA9415H	15:1 - 25:1	909136
TA3203H	9:1 - 25:1	903136	TA9415H	40:1	909137
TA3203H	40:1	903137	TA10507H	15:1 - 25:1	910136
TA4207H	5:1	904135	TA10507H	40:1	910137
TA4207H	9:1 - 25:1	904136	TA12608H	15:1 - 25:1	912136
TA4207H	40:1	904137	TA12608H	40:1	912137
TA5215H	5:1	905135	–	–	–
TA5215H	9:1 - 15:1	905136	–	–	–
TA5215H	25:1	905137	–	–	–
TA5215H	40:1	905138	–	–	–

(3) Level 1 Rebuild Kit includes input & output seals, all bearings, shims and sealant for reducer size and ratio indicated. See Instruction Manual # MN1601 for gearing part numbers.

Torque-Arm II complete 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.

Related products

Torque-Arm II shaft mount speed reducers
Renewal parts for Torque-Arm II reducers

Torque-Arm II lube kits (5)

Size	Kit P/N
TA0107L	LUBEKITTA0107
TA1107H	LUBEKITTA1107
TA2115H	LUBEKITTA2115
TA3203H	LUBEKITTA3203
TA4207H	LUBEKITTA4207
TA5215H	LUBEKITTA5215
TA6307H	LUBEKITTA6307
TA7315H	LUBEKITTA7315
TA8407H	LUBEKITTA8407
TA9415H	LUBEKITTA9415
TA10507H	LUBEKITTA10507
TA12608H	LUBEKITTA12608

(5) Kit contains factory recommended mineral oil ISO220 in volumes sufficient for all recommended mounting positions.

Lubricant:

It is important that a rebuilt reducer be refilled with fresh lubricant of the proper viscosity group.

To make this an easy selection we have prepackaged the required volume of factory standard lubricant which may be ordered along with the rebuild kit. See Accessory table for kit part numbers.

Torque-Arm II Level 2 rebuild kits (6)

Size	Ratio	Kit P/N
TA0107L	5:1	9001355
	9:1	9001369
	15:1	90013615
	25:1	90013625
	40:1	90013640
TA1107H	5:1	9011355
	9:1	9011369
	15:1	90113615
	25:1	90113725
	40:1	90113740
TA2115H	5:1	9021355
	9:1	9021369
	15:1	90213615
	25:1	90213625
	40:1	90213740
TA3203H	5:1	9031355
	9:1	9031369
	15:1	90313615
	25:1	90313625
	40:1	90313740
TA4207H	5:1	9041355
	9:1	9041369
	15:1	90413615
	25:1	90413625
	40:1	90413740
TA5215H	5:1	9051355
	9:1	9051369
	15:1	90513615
	25:1	90513725
	40:1	90513840

Size	Ratio	Kit P/N
TA6307H	5:1	9061355
	9:1	9061369
	15:1	90613615
	25:1	90613725
	40:1	90613740
TA7315H	5:1	9071355
	9:1	9071369
	15:1	90713615
	25:1	90713625
	40:1	90713740
TA8407H	15:1	90813615
	25:1	90813625
	40:1	90814740
TA9415H	15:1	90913615
	25:1	90913625
	40:1	90913740
TA10507H	15:1	91013615
	25:1	91013625
	40:1	91013740
TA12608H	15:1	91213615
	25:1	91213625
	40:1	91213740

(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.

Engineering and Technical

Torque-Arm II shaft mount speed reducers
NEMA motor and Torque-Arm II reducer information, backstop lift-off speed

Table 1: NEMA motor information (1750 RPM)

Horsepower	NEMA motor frame	Shaft diameter
1	143T	7/8
1-1/2	145T	7/8
2	145T	7/8
3	182T	1-1/8
5	184T	1-1/8
7-1/2	213T	1-3/8
10	215T	1-3/8
15	254T	1-5/8
20	256T	1-5/8
25	284T	1-7/8
30	286T	1-7/8
40	324T	2-1/8
50	326T	2-1/8
60	364T	2-3/8
75	365T	2-3/8
100	405T	2-7/8
125	444T	3-3/8
150	445T	3-3/8
200	447T	3-3/8

Table 2: Torque-Arm II reducer information

TA II reducer	Ratio	Input shaft diameter	Minimum sheave diameter
TA0107L	All	1”	See Class I, II and III Selection tables, starting on page G-15, 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 and technical

Torque-Arm II shaft mount speed reducers
Maximum input and output speeds

Maximum input speed - RPM

Case size	Nominal ratio				
	5:1	9:1	15:1	25:1	32:1 & 40:1
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				
	5:1	9:1	15:1	25:1	32:1 & 40:1
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 and technical

Torque-Arm II shaft mount speed reducers
Thrust capacity for screw conveyor drives

Thrust capacity for screw conveyor drives (pounds)

Case size	Output speed (RPM) Single reduction reducers (5:1)						
	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 (9:1 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 and 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 on page 132 & 133, showing oil level plug location, must be maintained at all times. Approximate oil quantities are shown on page 134. Frequent inspections with the unit not running and allowing sufficient time for the oil to cool and the entrapped air to settle out of the oil should be made by removing the level plug to see that the level is being maintained. If low, add the proper type and viscosity of lubricant through one of the upper openings until it comes out of the oil level hole. Replace the oil level plug securely. Refer to Tables 1 and 2 for viscosity recommendations.

After an initial operation of about two weeks, the oil should be changed. If desired, this oil may be filtered and reused. Very often, small metal particles will show up in the oil due to the wearing process. After the initial break in period, the lubricant should be drained, magnetic drain plug cleaned, gear case flushed and refilled every 2500 hours of operation under average industrial operating conditions.

Caution: Too much oil will cause overheating and too little will result in gear failure. Check oil level regularly.

More frequent oil changes are recommended when operating continuously or at high temperatures or under conditions of extreme dirt or dust. Use only recommended grades of lubricant listed on next page, or equivalent. Special attention should be given to checking of lubricants when any of the following conditions exist:

- High operating temperatures resulting from heavy intermittent loads causes the temperature of the gear case to rise rapidly and then cool
- Unusual ambient conditions, which may tend to cause condensation on the inside of the gearcase thereby contaminating the oil
- Operating temperatures that would cause oil to approach 200°F continually
- Subjection of reducer to unusual vapors or moist atmosphere
- Subjection of reducer to extremely dusty or dirty environment
- Under these extreme operating conditions, the oil should be changed every 1 to 3 months depending on severity of conditions.

Operating temperatures

Heating is a natural characteristic of enclosed gearing, and a maximum gear case temperature approaching 200°F is not uncommon for some units operating in normal ambient temperatures (80°F). When operating at rated capacity, no damage will result from this temperature as this was taken into consideration in the design of the gear case and in the selection of the lubricants.

Engineering and technical

Torque-Arm II shaft mount speed reducers
Lubrication of Torque-Arm II reducers

Table 1 – Oil recommendations

ISO Grades for ambient temperatures of 50°F to 125°F

Output	Torque-Arm II Reducer Size											
RPM	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	Torque-Arm II Reducer Size											
RPM	TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H	TA6307H	TA7315H	TA8407H	TA9415H	TA10507H	TA12608H
301 – 400	220	220	220	150	150	150	150	150	150	150	150	150
201 – 300	220	220	220	150	150	150	150	150	150	150	150	150
151 – 200	220	220	220	150	150	150	150	150	150	150	150	150
126 – 150	220	220	220	150	150	150	150	150	150	150	150	150
101 – 125	220	220	220	220	150	150	150	150	150	150	150	150
81 – 100	220	220	220	220	220	150	150	150	150	150	150	150
41 – 80	220	220	220	220	220	150	150	150	150	150	150	150
11 – 40	220	220	220	220	220	220	220	220	220	220	150	150
1 – 10	220	220	220	220	220	220	220	220	220	220	220	220

Notes:
(1) Assumes auxiliary cooling where recommended in the catalog.
(2) Pour point of lubricant selected should be at least 10°F lower than expected minimum ambient starting temperature.
(3) Extreme pressure (EP) lubricates are not necessary for average operating conditions. When properly selected for specific applications, Torque-Arm II backstops are suitable for use with EP lubricants.
(4) Special lubricants may be required for food and drug industry applications where contact with the product being manufactured may occur. Consult a lubrication manufacturer's representative for his recommendations.
(5) For reducers operating in ambient temperatures between -22°F (-30°C) and 20°F (–6.6°C) use a synthetic hydrocarbon lubricant, 100 ISO grade or AGMA 3 grade (for example, Mobil SHC627). Above 125°F (51°C), consult Dodge Gear Application Engineering (864) 284-5700 for lubrication recommendation.
(6) Mobil SHC630 Series oil is recommended for high ambient temperatures.

Engineering and technical

Torque-Arm II shaft mount speed reducers
Lubrication of Torque-Arm II reducers

Lubricant grade equivalents*

ISO	AGMA
150	4
220	5
320	6

* See page G1-135 for complete lubricant interchange chart

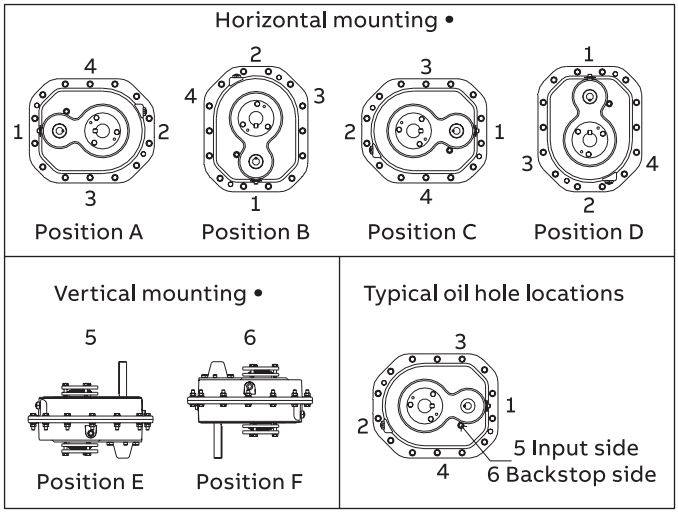
Installation

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 and technical

Torque-Arm II shaft mount speed reducers
Lubrication of Torque-Arm II reducers

Table 3 - Vent and plug locations (see Figure 1, page G2-130)

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	Sensor	Plug	Level	Drain	Vent	Plug	Sensor
Position B	Drain	Vent	Level	Plug	Plug	Sensor	Drain	Vent	Plug	Level	Plug	Sensor
Position C	Plug	Level	Vent	Drain	Plug	Sensor	Level	Plug	Vent	Drain	Plug	Sensor
Position D	Vent	Drain	Level	Plug	Plug	Sensor	Vent	Drain	Level	Plug	Plug	Sensor
Position E	Level	* Plug	Plug	Drain	Vent	Sensor	Level	* Plug	Plug	Drain	Vent	Sensor
Position F	Plug	Drain	Level	* Plug	Sensor	Vent	Plug	Drain	Level	* Plug	Sensor	Vent

* Where space constraints prevent installing the breather in vent locations 5 or 6, install vent in this location and order a vertical breather kit

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

Recommended lubricants for Motorized Torque Arm II & Torque-Arm II reducers

Recommended lubricants for Torque-Arm reducers +

	Standard oils		EP oils	
EXXON				
150	Teresstic	150	Spartan EP	150
220	Teresstic	220	Spartan EP	220
320	Teresstic	320	Spartan EP	320
CHEVRON				
150	Machine	150	Gear Compound EP	150
220	Machine	220	Gear Compound EP	220
320	Machine	320	Gear Compound EP	320
UNICAL				
150	Turbine Oil	150	Extra Duty HL Gear Lube	141
220	Turbine Oil	220	Extra Duty HL Gear Lube	207
320	Turbine Oil	320	Extra Duty HL Gear Lube	300
KLUBER SYNTHETIC				
150	GEM4	150N	–	–
220	GEM4	220N	–	–
320	GEM4	320N	–	–
KLUBER				
150	GEM1	150N	–	–
220	GEM1	220N	–	–
320	GEM1	320N	–	–
MOBIL SYNTHETIC				
150	SHC	629	SHC XMP	150
220	SHC	630	SHC XMP	220
320	SHC	632	SHC XMP	320
MOBIL				
150	Mobil DTE	Extra Heavy	MobilGear 600 XP	150
220	Mobil DTE	BB	MobilGear 600 XP	220
320	Mobil DTE	AA	MobilGear 600 XP	320
TEXACO				
150	Regal Oil R&O	150	Meropa	150
220	Regal Oil R&O	220	Meropa	220
320	Regal Oil R&O	320	Meropa	320
SHELL SYNTHETIC				
150	Morlina S4 B	150	–	–
220	Morlina S4 B	220	–	–
320	Morlina S4 B	320	–	–
SHELL				
150	Morlina Oil S2 B & S3 B	150	Omala S2 G	150
220	Morlina Oil S2 B & S3 B	220	Omala S2 G	220
320	Morlina Oil S2 B & S3 B	320	Omala S2 G	320

For further lubrication information, refer to Dodge Torque-Arm lubrication manual MN1682 or individual product manuals.

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

Engineering and technical

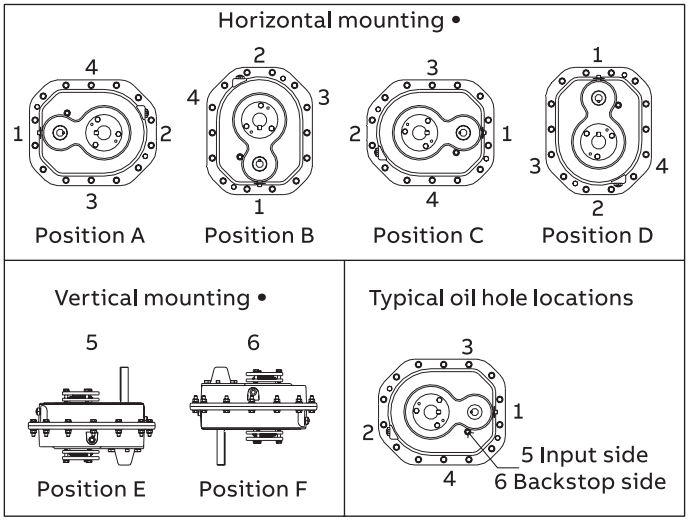
Torque-Arm II shaft mount speed reducers
Lubrication of Torque-Arm II reducers

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
	Double	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
	Double	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
	Double	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
	Double	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
	Double	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
	Double	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
	Double	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
	Double	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	Double	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	Double	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	Double	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	Double	53.0	41.5	37.1	70.7	72.2	80.4	50.2	39.3	35.1	66.9	68.3	76.1

■ Oil quantity is approximate. Service with lubricant until oil runs out of oil level hole
† Refer to Figure 1 for mounting positions
▲ US measure: 1 quart = 32 fluid ounces =.94646 liters
● Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug. If reducer position is to vary from those shown in Figure 1, either more or less oil may be required. Consult Dodge.

Figure 1

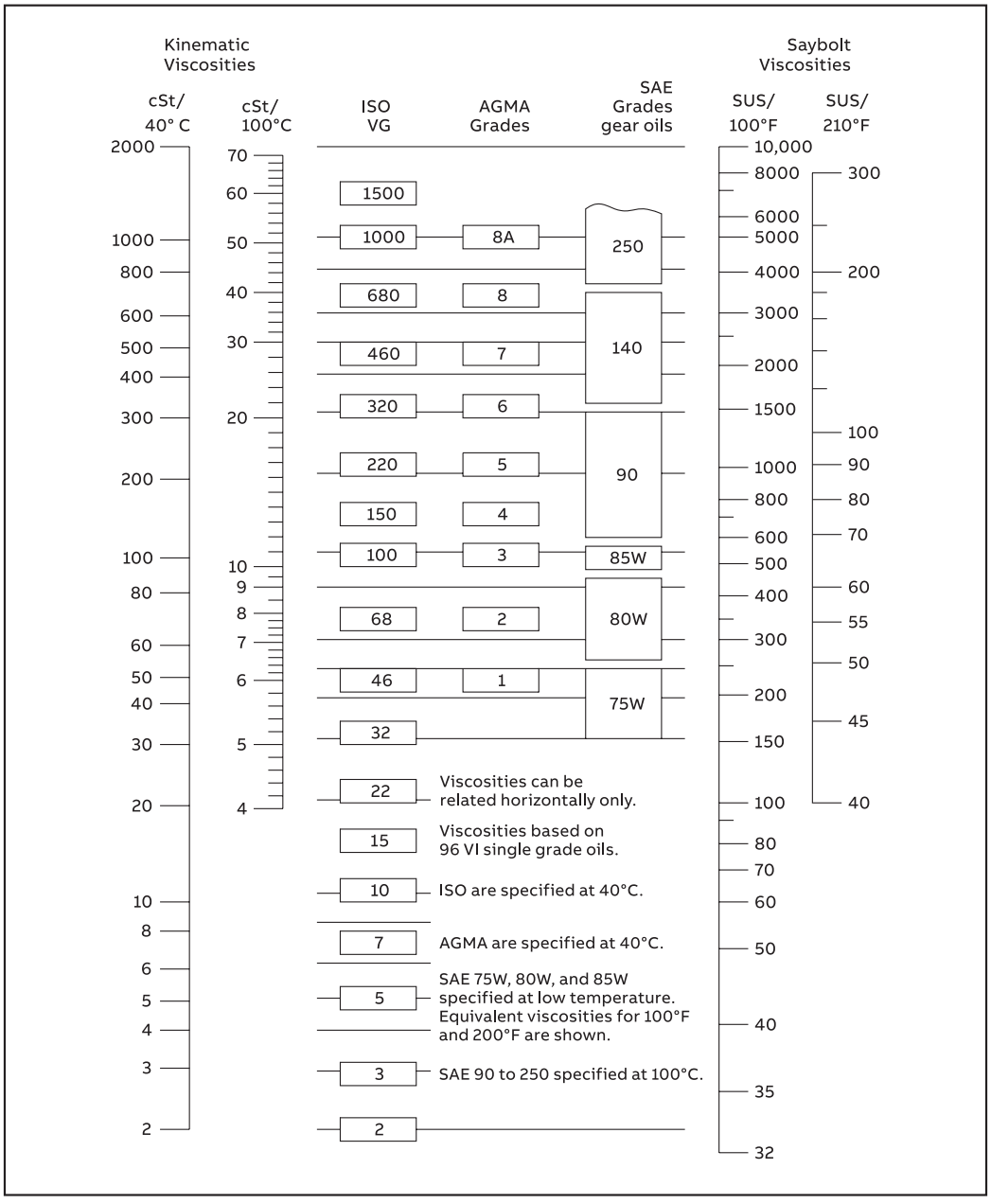


• Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug. If reducer position is to vary from those shown in Figure 1, either more or less oil may be required. Consult Dodge.

Engineering and technical

Torque-Arm II shaft mount speed reducers
Viscosity classification equivalents

Oil viscosity equivalency chart



ISO Viscosity Classification System

All industrial oils are graded according to the ISO Viscosity Classification System, approved by the International Standards Organizations (ISO). Each ISO viscosity grade number corresponds to the mid-point of viscosity range expressed in centistokes (cSt) at 40C. For example, a lubricant with an ISO grade of 32 has a viscosity within the range of 28.80-35.2, the midpoint of which is 32.

Rule-of-Thumb: The comparable ISO grade of a competitive product whose viscosity in SUS at 100°F is known can be determined by using the following conversion formula:

SUS @ 100ºF ÷ 5 = cSt @ 40°C

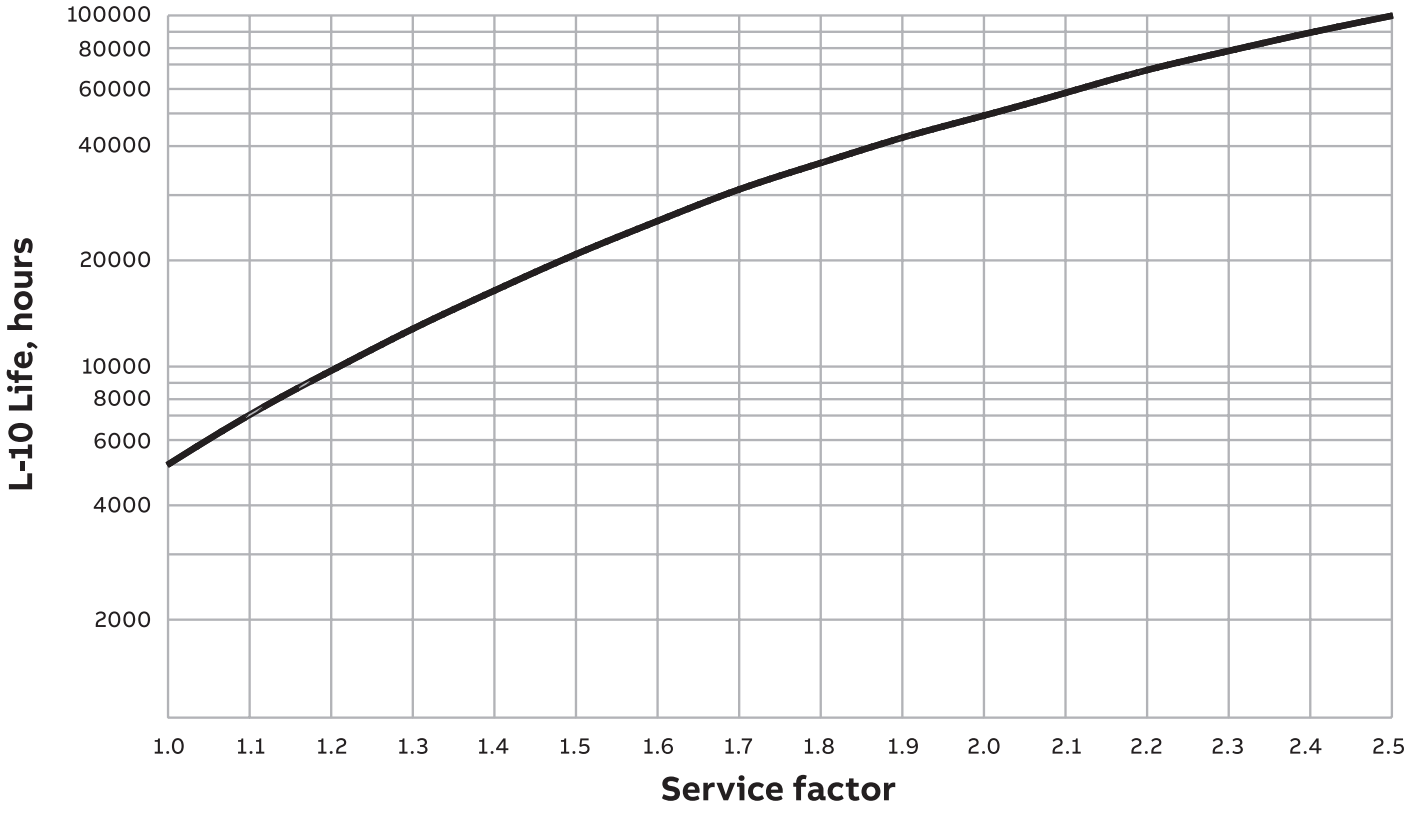
Engineering and technical

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

Notes

Notes