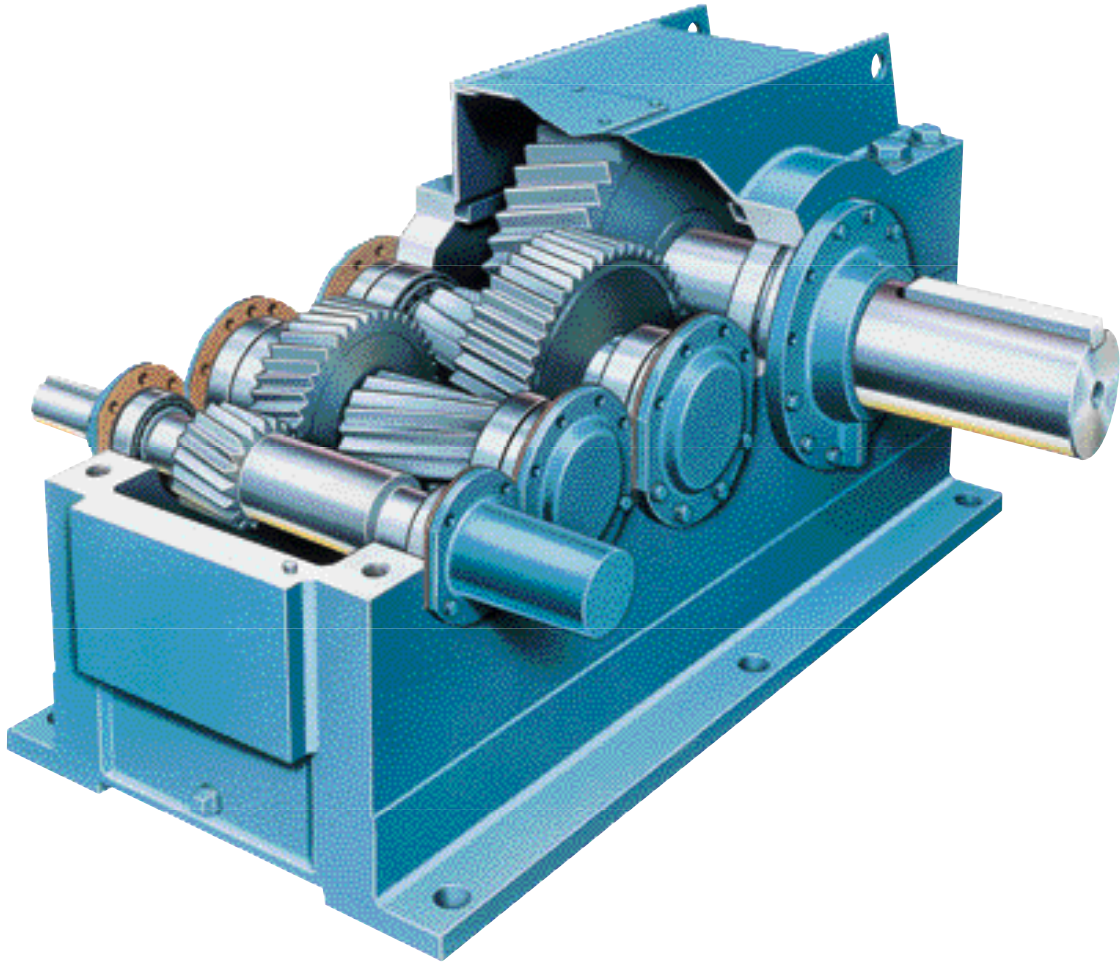




# Falk™ A-Plus™ Parallel & Right-Angle Shaft Drives (INCH)



# Falk A-Plus Parallel & Right-Angle Shaft Drives



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To learn more about the Falk™ A-Plus™ Parallel & Right-Angle Shaft Drives,  
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# Falk A-Plus Parallel & Right-Angle Shaft Drives Basic Information

## Safety Notes

**Falk Gear Drives** — The Falk and Rexnord name on the gear drive is the purchaser's assurance that the drive was engineered, rated and manufactured to sound design practices.

The power supplied to the geared drive must be equal to or less than the power for which the drive was selected using the appropriate service factor for the application. The customer must assume the responsibility of isolating the geared drive from any vibratory or transient load induced by the driven equipment.

Install and operate Rexnord products in conformance with applicable local and national safety codes and per Rexnord installation manuals which are shipped with gear drives and are also available upon request. Suitable guards for rotating members may be purchased from Rexnord as optional accessories. Consult your local Rexnord district office for complete details.

**People Conveying Equipment** — Selection of Rexnord gear drives for applications whose primary purpose is the transportation of people is not approved. This includes such applications as freight or passenger elevators, escalators, man-lift platforms and ski tows and ski lifts.

If the primary purpose of the application is material conveyance and occasionally people are transported, the Rexnord warranty may remain in effect, provided the design load conditions are not exceeded and certification to the appropriate safety codes and load conditions has been obtained by the system designer or end user from the appropriate enforcement authorities.

## Gear Drive Ratings

All gear drive ratings in this catalog allow 100% overload for starting loads and momentary overloads for electric-motor-driven applications operating 10 hours per day under uniform conditions (unity Service Factor). For other conditions, compute an equivalent power by multiplying the actual power required for the application by the appropriate Service Factor.

**Power and Torque** — Gear drive mechanical power and torque ratings are tabulated in the catalog to permit selections for specific application requirements. When the required input speed falls between two tabulated input speeds of a drive with the same number of gear reductions, interpolate to determine drive rating.

**Thermal Ratings** must be considered when selecting a gear drive. Refer to [page <?>](#) for more information.



**Stored and Inactive Drives** — Each gear drive is spin-tested with a rust-preventive oil that will protect parts against rust for a period of four months in an outdoor shelter or 12 months in a dry building after shipment from the Factory.

Periodically inspect stored or inactive drives and spray internal parts with rust inhibitor every six months or more often, if necessary. Drain oil before adding rust inhibitor. Indoor dry storage is recommended.

Drives ordered for extended storage can be treated at the Factory with a special preservative and sealed to rust-proof parts for periods longer than those cited above, if specified on the order.

Refer to appropriate service manual for extended storage of gear drives which have been in service.

**Drawing Symbols** — The following symbols are used throughout the dimensioned drawings.

-  = OIL DIPSTICK
-  = BREATHER
-  = OIL FILL
-  = OIL DRAIN

**Factory Warranty** — Falk products generally carry a limited, one-year warranty against defects in materials or workmanship; but for an actual statement of the Factory Warranty, ask your local Rexnord representative or Rexnord distributor for our Standard Conditions of Sale.

# Conditions Affecting Selection

## Non-Standard Application Procedures

The following conditions may affect the gear drive selection procedure, drive size and auxiliary equipment being furnished.

**Excessive Overloads** — The maximum momentary or starting load must not exceed 200% of rated load (100% overload). Rated load is defined as gear drive rating with a Service Factor of 1.0. If the maximum starting or momentary load exceeds the above conditions, compute a second equivalent horsepower by dividing the peak load by two. The gear drive selected must have capacity equal to, or in excess of, the larger equivalent horsepower.

**Reversing Service** — Applications involving either more than 20 reversals per 10 hour period, or less than 20 reversals per 10 hour period with peak torques greater than 200% of normal load must be referred to the Factory.

**Brake-Equipped Applications** — When a gear drive is equipped with a “working” brake that is used to decelerate the motion of the system and the brake is located between the prime mover and the gear drive, select the drive based on the brake rating or the highest equivalent input power, whichever is greater. If the brake is used for holding only and is applied after the motion of the system has come to rest, the brake rating must be less than 200% of the catalog rating of the gear drive selected for the application. If the brake rating is greater than 200% of the gear drive catalog rating, refer the application to the Factory. Also refer to the Factory all applications in which the brake is located on the output shaft of the gear drive.

**Oversize Prime Movers** — Published Service Factors do not cover applications that require oversize prime movers for high-energy or peak loads. Refer such applications to the Factory for selection of suitable drives.

**Speed Variation or Multi-Speed Applications** — The gear drives offered in this catalog (except Types AXV & ABX) are designed to operate with splash lubrication on any single-speed application and any ratio shown in the catalog unless otherwise noted. It is essential that all orders indicate the desired operating speed and ratio so that the proper internal oil distribution accessories can be supplied for the specific speed. Types AXV and ABX use a separate motor-driven oil pump to provide lubrication.

These drives are assembled with a variety of standard internal lubrication components such as oil pans and oil troughs to ensure proper splash lubrication. In addition, different oil levels are necessary for various drive sizes, speeds and ratios. Consequently, to operate an existing drive at different speeds from those shown on the nameplate, full application and nameplate information must be referred to the Factory for review of the lubrication system.

All variable or multi-speed applications will be referred to the Engineering Department to specify lubrication components for adequate lubrication at the slowest speed, without excessive heating or churning at the highest speed. It is essential that all orders indicate minimum and maximum speeds, as well as the speed duration cycles. A separate motor-driven oil pump (at an extra charge) may be required.

When selecting gear drives for multi-speed or variable speed applications, determine the speed which develops the greatest torque and select the drive on this basis. If the speed is not listed in the selection table, use the next lower speed.

**Application-Adjusted Thermal Rating, page <?>** — The Application-Adjusted Thermal Rating is the actual power rating without service factor that a gear drive will transmit continually for three hours or more without overheating. The Application-Adjusted Thermal Rating considers the environmental factors of the application which will affect the ability of the drive to dissipate heat. These factors include ambient temperature, air velocity, altitude (thin air does not remove heat effectively), inlet water temperature and duty cycle (percentage of an hour that the drive operates). Factors for these conditions must be used to modify the Basic Thermal Rating when determining the Application-Adjusted Thermal Rating.

Checking the thermal rating is extremely important. If a gear drive creates heat faster than it can be dissipated, severe damage may occur.

If the gear drive operates for three hours or more per day and the run time equals or exceeds the shutdown time, or if the continuous operating time exceeds three hours, selection must be made on the basis of adequate thermal rating using the Application-Adjusted Thermal Rating. The duty cycle factor considers an increase in the Basic Thermal Rating for gear drives that operate less than 100% of any one hour time period. If a drive operates for more than three hours and operates continuously for any given hour of the day, then the duty cycle must be considered 100%.

**Effects of Solar Energy** — If a drive operates in the sun at ambient temperatures over 100°F (38°C), then special measures must be taken to protect the drive from solar energy. This protection can consist of a canopy over the drive or reflective paint on the drive. If neither is possible, a heat exchanger or other cooling device may be required.

**Overhung Loads and Thrust Loads** — The overhung load and thrust load ratings published in this catalog are based on a service factor of unity and a combination of the most unfavorable conditions of rotation, speed, direction of applied load and drive loading. If the calculated load exceeds the published value, or if an overhung load and thrust load are applied simultaneously to a shaft, refer complete application details to Rexnord. For more information, refer to tables and guidelines on pages <?>-<?> and pages <?>-<?>.

**Product Modifications** — Rexnord can supply special product modifications to suit your application needs. Contact Rexnord for housing modifications, special ratios, special shafts, special mounting conditions, accessory modifications and other special application requirements.

**Seal Housing Grease** — All drives (and backstops if required) will be shipped with NLGI #2 grease in the seal housing cavities. Where this grease could contaminate a product, such as in the food and drug industries, clearly indicate on your purchase order that “Gear drive seal housing cavities must not contain grease.”

**Oil-Pump-Equipped Application** — When a drive is equipped with an external motor-driven oil pump, such as an AXV or ABX, and the ambient temperature falls below 50°F (10°C), or the oil viscosity is in excess of 8000 SSU, an oil heater may be required to maintain a satisfactory flow rate at start-up to prevent bearing failure. Refer to your local Rexnord district office.

# Service Factors

**Table 1 — Service Factor Conversions**

Table 2 or 3 3 to 10 Hour Service Factor	3 to 10 Hours per Day	Over 10 Hours per Day	Intermittent - Up to 3 Hours per Day ①	
	Multi-Cyl. Engine ②	Multi-Cyl. Engine ②	Motor	Multi-Cyl. Engine ②
1.00	1.25	1.50	1.00	1.00
1.25	1.50	1.75	1.00	1.25
1.50	1.75	2.00	1.25	1.50
1.75	2.00	2.25	1.50	1.75
2.00	2.25	2.50	1.75	2.00

- ① For applications operating one half hour or less per day and applications driven by single-cylinder engines, refer to Factory.
- ② These service factors are based on the assumption that the system is free from serious critical and torsional vibrations and that maximum momentary or starting loads do not exceed 200% of the normal load.

### Occasional and Intermittent Service or Engine-Driven Applications

For multi-cylinder engine-driven applications and all applications operating intermittently up to 3 hours per day, refer to **Table 2** or **Table 3** for the Service Factor of the same application operating 3 to 10 hours per day. Next, in the first column of **Table 1**, find this same Service Factor. Then, to the right, under the desired hours service and prime mover, locate the converted Service Factor.

For example, from **Table 3**, the Service Factor is 1.25 for a uniformly-loaded belt conveyor. From **Table 1**, for the same application the following are the Service Factors for various conditions.

1. Engine-driven 3 to 10 hours per day; use 1.50 Service Factor.
2. Engine-driven up to 3 hours intermittently; use 1.25 Service Factor.
3. Motor-driven up to 3 hours intermittently; use 1.00 Service Factor.

**Table 2 — Service Factors Listed by Industry**

(For electric motor, steam turbine or hydraulic motor drives ... recommendations are MINIMUM and normal conditions are assumed.)

Industry	Service		Industry	Service	
	3 to 10 Hour	Over 10 Hour		3 to 10 Hour	Over 10 Hour
<b>BOTTLING AND BREWING</b>					
Bottling Machinery.....	1.00	1.25	Extruder.....	—	1.50
Brew Kettles, Continuous Duty.....	1.25	1.25	Fourdrinier Rolls— Lumpbreaker, Wire Turning Dandy & Return Rolls.....	—	1.25
Can Filling Machines.....	1.00	1.25	Jordan.....	—	1.50
Cookers — Continuous Duty.....	1.25	1.25	Kiln Drive.....	—	1.50
Mash Tubs — Continuous Duty.....	1.25	1.25	Mt. Hope & Paper Rolls.....	—	1.25
Scale Hoppers — Frequent Starts.....	1.25	1.50	Platter.....	—	1.50
<b>CLAY WORKING INDUSTRY</b>					
Brick Press.....	1.75	2.00	Presses (Felt & Suction).....	—	1.25
Briquette Machines.....	1.75	2.00	Pulper (Continuous).....	—	2.00
Clay Working Machinery.....	1.25	1.50	Repulper (Heavy Shock).....	—	2.00
Pug Mills.....	1.25	1.50	Reel (Surface Type).....	—	1.25
<b>DISTILLING</b>					
See Brewing.....	See Brewing		Screens.....	—	
<b>DREDGES</b>					
Cable Reels, Conveyors.....	1.25	1.50	Chip & Rotary.....	—	1.50
Cutter Head, Jig Drives & Pumps.....	2.00	2.00	Vibrating.....	—	2.00
Maneuvering Winches.....	1.75	2.00	Size Press.....	—	1.25
Screen Drives.....	1.75	2.00	Super Calenders ③.....	—	1.25
Stackers, Utility Winches.....	1.25	1.50	Thickener & Washer.....	—	
<b>FOOD INDUSTRY</b>					
Beet Slicers.....	1.25	1.50	AC Motor.....	—	1.50
Bottling, Can Filling Machine.....	1.00	1.25	DC Motor.....	—	1.25
Cereal Cookers.....	1.00	1.25	Vacuum Pumps.....	—	1.50
Dough Mixers, Meat Grinders.....	1.25	1.50	Wind & Unwind Stand.....	—	1.25
<b>LUMBER INDUSTRY</b>					
Barkers — Spindle Feed.....	1.25	1.50	Winders (Surface Type).....	—	1.25
Barkers — Main Drive.....	1.75	1.75	④ Yankee Dryers.....	—	1.25
Carriage Drive.....	Refer to Factory		<b>PLASTIC INDUSTRY</b>		
Conveyors.....			Batch Drop Mill, 2 smooth rolls.....	1.25	1.25
Burner.....	1.25	1.50	Calenders.....	1.50	1.50
Main or Heavy-Duty.....	1.50	1.50	Compounding Mills.....	1.25	1.25
Main Log.....	1.75	2.00	Continuous Feed, Holding & Blend Mill.....	1.25	1.25
Re-Saw Merry-Go-Round.....	1.25	1.50	Extruders.....	1.50	1.50
Slab.....	1.75	2.00	Variable Speed Drive.....	1.50	1.50
Transfer.....	1.25	1.50	Fixed Speed Drive.....	1.75	1.75
Chains — Floor.....	1.50	1.50	Intensive Internal Mixers		
Chains — Green.....	1.50	1.75	Batch Mixers.....	1.75	1.75
Cut-Off Saws — Chain & Drag.....	1.50	1.75	Continuous Mixers.....	1.50	1.50
Debarking Drums.....	1.75	2.00	<b>RUBBER INDUSTRY</b>		
Feeds — Edger.....	1.25	1.50	Batch Drop Mill, 2 smooth rolls.....	1.50	1.50
Feeds — Gang.....	1.75	1.75	Calenders.....	1.50	1.50
Feeds — Trimmer.....	1.25	1.50	Cracker, 2 corrugated rolls.....	2.00	2.00
Log Deck.....	1.75	1.75	Cracker Warmer —		
Log Hauls — Incline, Well Type.....	1.75	1.75	2 roll, 1 corrugated roll.....	1.75	1.75
Log Turning Devices.....	1.75	1.75	Extruders		
Planer Feed.....	1.25	1.50	Continuous Screw Operation.....	1.75	1.75
Planer Tilting Hoists.....	1.50	1.50	Intermittent Screw Operation.....	1.75	1.75
Rolls — Live — Off Bearing — Roll Cases.....	1.75	1.75	Holding, Feed & Blend Mill — 2 Roll....	1.25	1.25
Sorting Table, Tipple Hoist.....	1.25	1.50	Intensive Internal Mixers		
Transfers — Chain & Craneway.....	1.50	1.75	Batch Mixers.....	1.75	1.75
Tray Drives.....	1.25	1.50	Continuous Mixers.....	1.50	1.50
Veneer Lathe Drives.....	Refer to Factory		Mixing Mill — 2 smooth rolls (if corrugated rolls are used, use Cracker Warmer service factors).....		
<b>OIL INDUSTRY</b>					
Chillers.....	1.25	1.50	Refiner — 2 roll.....	1.50	1.50
Oil Well Pumping.....	Refer to Factory		<b>SEWAGE DISPOSAL</b>		
Paraffin Filter Press.....	1.25	1.50	Bar Screens.....	1.25	1.25
Rotary Kilns.....	1.25	1.50	Chemical Feeders.....	1.25	1.25
<b>PAPER MILLS ③</b>					
Agitator (Mixer).....	—	1.50	Collectors.....	1.25	1.25
Agitator for Pure Liquids.....	—	1.25	Dewatering Screens.....	1.50	1.50
Barking Drums, Barkers — Mech.....	—	2.00	Scum Breakers.....	1.50	1.50
Beater.....	—	1.50	Slow or Rapid Mixers.....	1.50	1.50
Breaker Stack.....	—	1.25	Thickeners.....	1.50	1.50
④ Calender.....	—	1.25	Vacuum Filters.....	1.50	1.50
Chipper.....	—	2.00	<b>SUGAR INDUSTRY</b>		
Chip Feeder.....	—	1.50	Cane Knives, Crushers.....	—	1.75
Coating Rolls.....	—	1.25	Mills (low-speed end).....	—	1.75
Conveyors—			<b>TEXTILE INDUSTRY</b>		
Chip, Bark, Chemical.....	—	1.25	Batchers, Calenders.....	1.25	1.50
Log (incl. Slab).....	—	2.00	Card Machines.....	1.25	1.50
Couch Rolls.....	—	1.25	Dry Cans, Dryers.....	1.25	1.50
Cutter.....	—	2.00	Dyeing Machinery.....	1.25	1.50
Cylinder molds.....	—	1.25	Knitting Machinery.....	Refer to Factory	
④ Dryers —			Looms, Mangles, Nappers, Pads.....	1.25	1.50
Paper Mach. & Conveyor Type.....	—	1.25	Range Drives.....	Refer to Factory	
Embossers.....	—	1.25	Slashers, Soapers, Spinners, Tenter Frames, Washers, Winders.....	1.25	1.50
			<b>WINDLASS</b>		
			Refer to Factory		

- ③ Service Factors for paper mill applications are applied to the nameplate rating of the electric drive motor at the motor-rated base speed and are consistent with those shown in TAPPI standards.
- ④ Anti-friction bearings only.
- ⑤ A service factor of 1.00 may be applied at base speed of a super calender operating over a speed range of part constant power and part constant torque, where the constant power speed range is greater than 1.5 to 1. A service factor of 1.25 is applicable to super calenders operating at constant torque over the entire speed range or where the constant power speed range is less than 1.5 to 1.

# Service Factors

**Table 3 — Service Factors Listed by Application**

(For electric motor, steam turbine or hydraulic motor drives ... recommendations are MINIMUM and normal conditions are assumed.)

Application	Service		Application	Service		Application	Service		Application	Service	
	3 to 10 Hour	Over 10 Hour		3 to 10 Hour	Over 10 Hour		3 to 10 Hour	Over 10 Hour		3 to 10 Hour	Over 10 Hour
<b>AGITATORS</b>			<b>ⓄCONVEYORS — Uniformly-Loaded or Fed</b>			<b>ⓄHOISTS</b>			<b>PUMPS</b>		
Pure Liquids.....	1.00 Ⓞ	1.25 Ⓞ	Apron or Bucket.....	1.25	1.50	Heavy-Duty.....	1.75	2.00	Centrifugal.....	1.25	1.25
Liquids & Solids.....	1.25 Ⓞ	1.50 Ⓞ	Assembly, Belt, Chain, Flight, Oven, Screw.....	1.25	1.25	Medium Duty.....	1.25	1.50	Proportioning.....	1.25	1.50
Liquids-Variable Density.....	1.25 Ⓞ	1.50 Ⓞ	<b>ⓄCONVEYORS — Heavy-Duty, Not Uniformly Fed</b>			Skip Hoist.....	1.25	1.50	Reciprocating.....		
<b>APRON CONVEYORS</b>			Apron, Assembly, Belt, Bucket, Chain, Flight, Oven, Screw.....	1.25	1.50	<b>INDUCED DRAFT FANS</b> .....	1.50	1.50	Single-Act., 3 or more Cyl.....	1.25	1.50
Uniformly-Loaded or Fed.....	1.25	1.50	<b>CONVEYORS — Severe Duty</b>			See Mills, Rotary.....	1.50	2.00	Double-Act., 2 or more Cyl.....	1.25	1.50
Heavy-Duty.....	1.25	1.50	Dry Dock Cranes, Main Hoist, Bridge and Trolley Travel.....	Refer to	Factory	<b>LAUNDRY WASHERS</b> .....	1.50	2.00	Single-Act., 1 or 2 Cyl.....	Refer to	Factory
<b>APRON FEEDERS</b> .....	1.25	1.50	Reciprocating Shaker.....	1.75	2.00	<b>LAUNDRY TUMBLERS</b> .....	1.25	1.50	Double-Acting, 1 Cyl.....	Refer to	Factory
<b>ASSEMBLY CONVEYORS</b>			<b>COOKERS (Brewing &amp; Distilling), (Food)</b> .....	1.25	1.25	<b>LINE SHAFTS</b>			Rotary: Gear, Lobe, Vane.....	1.00	1.25
Uniformly-Loaded or Fed.....	1.25	1.25	<b>COOLING TOWER FANS</b> .....	Refer to	Factory	Driving Processing Equipment.....	1.25	1.50	<b>PUNCH PRESSES (Gear-Driven)</b> .....	1.75	2.00
Heavy-Duty.....	1.25	1.50	<b>ⓄCRANES</b>			Other Line Shafts, Light.....	1.00	1.25	<b>RECIPROCATING CONVEYORS &amp; FEEDERS</b> .....	1.75	2.00
<b>BALL MILLS</b> .....	See Mills, Rotary		Dry Dock Cranes, Main Hoist, Bridge and Trolley Travel.....	Refer to	Factory	<b>LIVE ROLL CONVEYORS</b> .....	Refer to	Factory	<b>RECIPROCATING COMPRESSORS</b>		
<b>BARGE HAUL PULLERS</b> .....	1.75	2.00	<b>CRUSHERS</b>			<b>LOBE BLOWERS OR COMPRESSORS</b> .....	1.25	1.50	Conveyors & Feeders.....	1.75	2.00
<b>BARKING</b>			Ore or Stone.....	1.75	2.00	<b>LOG HAULS (Lumber)</b>			<b>RECIPROCATING COMPRESSORS</b>		
Drums (Coupling Connected).....	—	2.00	Sugar.....	—	1.75	Incline-Well Type.....	1.75	1.75	Multi-Cylinder.....	1.50	1.75
Mechanical.....	—	2.00	<b>DEWATERING SCREENS (Sewage)</b> .....	1.50	1.50	<b>LOOMS (Textile)</b> .....	1.25	1.50	Single-Cylinder.....	1.75	2.00
<b>BAR SCREENS (Sewage)</b> .....	1.25	1.25	<b>DISC FEEDERS</b> .....	1.00	1.25	<b>LUMBER INDUSTRY</b> .....	See Table 2		<b>ROD MILLS</b> .....	See Mills, Rotary	
<b>BATCHERS (Textile)</b> .....	1.25	1.50	<b>DISTILLING</b> .....	See Table 2		<b>MACHINE TOOLS</b>			<b>ROTARY PUMPS</b> .....	1.00	1.25
<b>BELT CONVEYORS</b>			<b>DOUBLE ACTING PUMPS</b>			Auxiliary Drives.....	1.00	1.25	Screens (Sand or Gravel).....	1.25	1.50
Uniformly-Loaded or Fed.....	1.25	1.25	2 or more Cylinders.....	1.25	1.50	Bending Rolls.....	1.25	1.50	<b>RUBBER &amp; PLASTICS INDUSTRIES SAND MULLERS</b> .....	See Table 2	
Heavy-Duty.....	1.25	1.50	Single-Cylinder.....	Refer to	Factory	Main Drives.....	1.25	1.50	<b>SCREENS</b>		
<b>BELT FEEDERS</b> .....	1.25	1.50	<b>DOUGH MIXER (Food)</b> .....	1.25	1.50	Notching Press (Belted).....	Refer to	Factory	Air Washing.....	1.00	1.25
<b>BENDING ROLLS (Machine)</b> .....	1.25	1.50	<b>DRAW BENCH (Metal Mills)</b>			Plate Planers.....	1.75	2.00	Punch Press (Geared).....	1.25	1.50
<b>BLOWERS</b>			Carriage & Main Drive.....	1.25	1.50	Tapping Machines.....	1.75	2.00	Traveling Water Intake.....	1.00	1.25
Centrifugal.....	1.25	1.25	<b>DREDGES</b> .....	See Table 2		<b>MANGLE (Textile)</b> .....	1.25	1.50	<b>SCREW CONVEYORS</b>		
Lobe.....	1.25	1.50	<b>DRY DOCK CRANES</b> .....	Refer to	Factory	<b>MASH TUBS (Brewing &amp; Distilling)</b>	1.25	1.25	Uniform.....	1.25	1.25
Vane.....	1.25	1.50	<b>DRYERS &amp; COOLERS (Mills, Rotary)</b> .....	—	1.50	<b>MEAT GRINDERS (Food)</b> .....	1.25	1.50	Heavy-Duty or Feeder.....	1.25	1.50
<b>BOTTLING MACHINERY</b>			<b>DYEING MACHINERY (Textile)</b> .....	1.25	1.50	<b>METAL MILLS</b>			<b>SCUM BREAKERS (Sewage)</b> .....	1.50	1.50
<b>BREWING</b> .....	See Table 2		Bucket-Uniform Load.....	1.25	1.50	Draw Bench Carriages & Main Drives.....	1.25	1.50	<b>SEWAGE DISPOSAL</b> .....	See Table 2	
<b>BRICK PRESS (Clay Working)</b> .....	1.75	2.00	Bucket-Heavy-Duty.....	1.25	1.50	Pinch, Dryer & Scrubber Rolls, Reversing.....	Refer to	Factory	<b>SHAKER CONVEYORS</b> .....	1.75	2.00
<b>BRIQUETTE MACHINES (Clay Working)</b> .....	1.75	2.00	Bucket-Continuous.....	1.25	1.50	Slitters.....	1.25	1.50	<b>SHEETERS (Rubber)</b> .....	—	1.50
<b>BUCKET</b>			Centrifugal Discharge.....	1.25	1.25	Table Conveyors			<b>SINGLE-ACTING PUMP</b>		
Conveyors Uniform.....	1.25	1.50	ⓄEscalators.....	Not Approved		Non-Reversing Group Drives.....	1.50	1.50	1 or 2 Cylinders.....	Refer to	Factory
Conveyors Heavy-Duty.....	1.25	1.50	ⓄFreight.....	Not Approved		Non-Reversing Individual Drives.....	2.00	2.00	3 or more Cylinders.....	1.25	1.50
Elevators Continuous.....	1.25	1.50	Gravity Discharge.....	1.00	1.25	Reversing.....	Refer to	Factory	<b>ⓄSKI TOWS &amp; LIFTS</b> .....	Not Approved	
Elevators Uniform.....	1.25	1.50	ⓄMan Lifts, Passenger.....	Not Approved		Wire Drawing & Flattening Machines.....	1.25	1.50	<b>ⓄSKIP HOIST</b> .....	1.25	1.50
Elevators Heavy-Duty.....	1.25	1.50	<b>EXTRUDERS (Plastic &amp; Rubber)</b> .....	See Table 2		Wire Winding Machines.....	1.50	1.50	<b>SLAB PUSHERS</b> .....	1.50	1.50
<b>CALENDERS</b>			<b>FANS</b>			<b>MILLS, ROTARY</b>			<b>SLITTERS (Metal)</b> .....	1.25	1.50
Rubber and Plastic.....	See Table 2		Centrifugal.....	1.25	1.25	Ball and Rod Mills			<b>SLUDGE COLLECTORS (Sewage)...</b>	1.25	1.25
Textile.....	1.25	1.50	Cooling Towers.....	Refer to	Factory	with Spur Ring Gear.....	—	2.00	<b>SOAPERS (Textile)</b> .....	1.25	1.50
<b>CANE KNIVES</b> .....	—	1.75	Forced Draft.....	—	1.25	with Helical Ring Gear.....	—	1.50	<b>SPINNERS (Textile)</b> .....	1.25	1.50
<b>CAN FILLING MACHINES</b> .....	1.00	1.25	Induced Draft.....	1.50	1.50	Direct Connected.....	—	2.00	<b>STEERING GEARS</b> .....	Refer to	Factory
<b>CARD MACHINES (Textile)</b> .....	1.25	1.50	Large (Mine, etc.).....	1.50	1.50	Cement Kilns, Dryers & Coolers, Pebble, Plain & Wedge Bar Mills.....	—	1.50	<b>STOKERS</b> .....	1.00	1.25
<b>CARD DUMPERS</b> .....	1.75	2.00	Large Industrial.....	1.50	1.50	Tumbling Barrels.....	1.75	2.00	<b>STONE CRUSHERS</b> .....	1.75	2.00
<b>CAR PULLERS</b> .....	1.25	1.50	Light (Small Diameter).....	1.00	1.25	<b>MIXER (Also see Agitators)</b>			<b>SUGAR INDUSTRY</b> .....	See Table 2	
<b>CEMENT KILNS</b> .....	See Mills, Rotary		<b>FEEDERS</b>			Concrete, Cont. & Int.....	1.25	1.50 Ⓞ	<b>TABLE CONVEYORS (Non-Reversing)</b>		
<b>CENTRIFUGAL</b>			Apron, Belt.....	1.25	1.50	Constant Density.....	1.25	1.50 Ⓞ	Group Drives.....	1.50	1.50
Blowers, Compressors, Discharge Elevators, Fans or Pumps.....	1.25	1.25	Disc.....	1.00	1.25	Variable Density.....	1.25	1.50 Ⓞ	Individual Drives.....	2.00	2.00
<b>CHAIN CONVEYORS</b>			Reciprocating.....	1.75	2.00	<b>NAPPERS (Textile)</b> .....	1.25	1.50	Reversing.....	Refer to	Factory
Uniformly-Loaded or Fed.....	1.25	1.25	Screw.....	1.25	1.50	<b>OIL INDUSTRY</b> .....	See Table 2		<b>ENTER FRAMES (Textile)</b> .....	1.25	1.50
Heavy-Duty.....	1.25	1.50	<b>FLIGHT CONVEYORS</b>			<b>ORE CRUSHERS</b> .....	1.75	2.00	<b>TEXTILE INDUSTRY</b> .....	See Table 2	
<b>CHEMICAL FEEDERS (Sewage)</b> .....	1.25	1.25	Uniform.....	1.25	1.25	<b>OVEN CONVEYORS</b>			<b>THICKENERS (Sewage)</b> .....	1.50	1.50
<b>CLARIFIERS</b> .....	1.00	1.25	Heavy.....	1.25	1.50	Uniform.....	1.25	1.25	<b>TUMBLING BARRELS</b> .....	1.75	2.00
<b>CLASSIFIERS</b> .....	1.25	1.50	<b>FOOD INDUSTRY</b> .....	See Table 2		Heavy-Duty.....	1.25	1.50	<b>VACUUM FILTERS (Sewage)</b> .....	1.50	1.50
<b>CLAY WORKING</b> .....	See Table 2		<b>GENERATORS (Not Welding)</b> .....	1.00	1.25	<b>PAPER MILLS</b> .....	See Table 2		<b>VANE BLOWERS</b> .....	1.25	1.50
<b>COLLECTORS (Sewage)</b> .....	1.25	1.25	<b>GRAVITY DISCHARGE ELEVATORS</b> .....	1.00	1.25	<b>ⓄPASSENGER ELEVATORS</b> .....	Not Approved		<b>WINCHES (Dredges)</b> .....	1.25	1.50
<b>COMPRESSORS</b>			<b>HAMMER MILLS</b> .....	1.75	2.00	<b>PEBBLE MILLS</b> .....	—	1.50	<b>WINDERS (Textile)</b> .....	1.25	1.50
Centrifugal.....	1.25	1.25				<b>PLATE PLANERS</b> .....	1.75	2.00	<b>WINDLASS</b> .....	Refer to	Factory
Lobe.....	1.25	1.50				<b>PRINTING PRESSES</b> .....	Refer to	Factory	<b>WIRE</b>		
Reciprocating.....						<b>PROPORTIONING PUMPS</b> .....	1.25	1.50	Drawing Machines.....	1.25	1.50
Multi-Cylinder.....	1.50	1.75				<b>PUG MILLS (Clay)</b> .....	1.25	1.50	Winding Machines.....	1.50	1.50
Single-Cylinder.....	1.75	2.00				<b>PULLERS (Barge Haul)</b> .....	1.75	2.00			
<b>CONCRETE MIXERS</b>											
Continuous.....	1.25	1.50 Ⓞ									
Intermittent.....	1.25	1.50 Ⓞ									

- ① Selection of Rexnord products for applications whose primary purpose is the transportation of people is not approved. This includes such applications as freight or passenger elevators, escalators, man lifts, work lift platforms and ski tows and ski lifts. If the primary purpose of the application is material conveyance and occasionally people are transported, the Factory warranty may remain in effect provided the design load conditions are not exceeded and certification to the appropriate safety codes and load conditions has been obtained by the system designer or end user from the appropriate enforcement authorities.
- Ⓞ Contact Rexnord for proper selection of a Falk RAM mixer drive.

# How to Select an A-Plus Drive

Before making a selection, please refer to Basic Information and Conditions Affecting Selections on **pages 5 and 6**, and note in particular the paragraphs referring to Gear Drive Ratings, Application-Adjusted Thermal Rating and Speed Variation.

## Information Required

The following basic information is required to select an A-Plus gear drive for your application.

### Prime Mover

- Type – electric or hydraulic motor or engine
- Power rating in hp or kW
- Speed – constant or variable
- Mounting position – if inclined
- Dimensions – if Rexnord will furnish motor mounting accessory or coupling

### Driven Machine

- Type – conveyor, kiln, etc.
- Power load, brake hp, or required torque
- Speed
- Service – Hours per day; reversals per minute if reversing; minutes per hour (duty cycle) if not continuous

### Gear Drive

- Type – parallel shaft or right angle
- Horizontal or vertical output shaft
- Ambient temperature at drive location
- Altitude above sea level
- Ambient air velocity at drive location

### Shaft Connections

- Shaft diameters and key sizes
- Overhung loads – diameter and type of sheave, sprocket or pinion
- Thrust load and direction

## General Selection Procedure

The general selection procedure consists of the following steps:

1. Select the type of drive – parallel shaft, right-angle, horizontal or vertical output shaft.
2. Determine drive size using either the horsepower selection method or the torque selection method.
3. Check thermal rating of the selected drive to determine if it is sufficient for the application. If necessary, select a cooling device (fan, cooling tubes, etc.) or a larger drive with sufficient thermal capacity.
4. If there are external shaft loads (overhung load and thrust), check to determine if they are within the drive ratings.

## Horsepower Selection Method

Selection with the horsepower selection method is based on the power rating of the prime mover. The procedure is:

1. Determine the Service Factor for the application from **Table 2** or **Table 3** on **pages 7 and 8**. These tables apply for electric-motor-driven applications operating between 3 and 10 hours or over 10 hours per day. For occasional and intermittent service, or for engine-driven applications, refer to **Table 1, page 7**.
2. Calculate equivalent horsepower by multiplying the prime mover horsepower by the Service Factor determined in step 1. If momentary or peak load will exceed 200% of the rated load, refer to the paragraph Excessive Overloads under Conditions Affecting Selection on **page 6**.
3. Determine the gear drive ratio by dividing the high-speed shaft rpm by the low-speed shaft rpm.
4. Select the size and nearest standard ratio from the Horsepower Rating Table for parallel shaft drives, **pages <?>-<?>**, or for right-angle drives, **pages <?>-<?>**. Opposite the high-speed shaft rpm, and the desired ratio and output speed, trace right to a horsepower rating that equals or exceeds the equivalent horsepower calculated in Step 2. Read the size of the gear drive at the top of the column. For ratings at speeds higher than 1750 rpm, contact your local Rexnord district office. For ratings at speeds below 580 rpm, reduce the rating proportionately.

## Torque Selection Method

Simply follow the steps outlined in the horsepower method, substituting torque values for horsepower values.

To check thermal capacity, convert the actual required torque to horsepower and check against the thermal rating. To convert, use the torque (lb-in) and speed (rpm) at low-speed shaft of the drive in the following formula:

$$HP = \frac{\text{Torque (lb-in)} \times \text{Output Speed (RPM)}}{63,000}$$

# How to Select an A-Plus Drive

## Checking Thermal Rating

Checking the thermal rating is extremely important. If the drive creates heat faster than it can be dissipated, it will overheat, and severe damage may occur.

The thermal rating of a drive is the actual power in horsepower (without Service Factor) that a drive can transmit continually for three hours or more without overheating.

Thermal ratings must be considered when the continuous operating period exceeds three hours, or if operation exceeds three hours and the running time is greater than the shutdown time.

## Application-Adjusted Thermal Rating

The application-adjusted thermal rating must be greater than the actual power transmitted through the gear drive (frequently the power rating of the driving motor is used rather than the actual power transmitted). To determine the application-adjusted thermal rating, look up the basic thermal rating for the drive size and ratio selected, **pages <?>-<?>** for parallel shaft drives and **pages <?>-<?>** for right-angle drives. Determine the application-adjusted thermal rating by using the appropriate correction factors (**Table 4 through Table 8**). Compare the actual power rating required (without Service Factor) with the application-adjusted thermal rating. If the actual power rating exceeds the application-adjusted thermal rating, shaft fans, electric fans or cooling tubes may be added, an optional heat exchanger package may be added, or a larger drive may be selected. Review all the footnotes for the basic thermal rating to be certain which cooling accessories are available for the selected drive.

Application-adjusted thermal rating is determined using the following:

$$P_{TA} = B_1 \times B_2 \times B_3 \times B_4 \times B_5 \times P_T \text{ where:}$$

$P_{TA}$  = application-adjusted thermal rating

$P_T$  = Basic thermal rating from the tables in this catalog

$B_1$  = Ambient temperature factor from **Table 4**

$B_2$  = Altitude factor from **Table 5** (used only for air cooling)

$B_3$  = Ambient air velocity factor from **Table 6** (used only if no auxiliary cooling is used)

$B_4$  = Inlet water temperature factor from **Table 7** (used only when cooling tubes are selected)

$B_5$  = Duty cycle factor from **Table 8**

**Table 4 — Ambient Temperature Factor –  $B_1$  (For all cooling methods)**

Ambient Temperature ①	Factor with or without Shaft or Electric Fan	Factor with Cooling Tubes
50°F	1.19	1.06
60°F	1.13	1.04
70°F	1.07	1.02
80°F	1.00	1.00
90°F	0.93	0.98
100°F	0.85	0.96
110°F	0.78	0.94
120°F	0.69	0.91

① Factors for other ambient temperatures can be interpolated.

**Table 5 — Altitude Factor –  $B_2$  (For air cooling only, no cooling tubes)**

Altitude — ft, Sea Level = 0	Factor with or without Auxiliary Cooling
0 to 2,500	1.00
2,500	0.95
5,000	0.90
7,500	0.85
10,000	0.81
12,500	0.76
15,000	0.72
17,500	0.68

**Table 6 — Ambient Air Velocity Factor –  $B_3$  (For no auxiliary cooling only)**

Sustained Ambient Air Velocity ② – fpm	Installed Environment	Factor without Shaft or Electric Fan or Cooling Tubes
Less than 100 fpm (1 mph)	Small Confined Space	0.75
Between 100 fpm & 275 fpm (1 to 3 mph)	Large Indoor Room	1.00
Between 275 fpm & 725 fpm (3 to 8 mph)	Large Indoor Room	1.40
Greater than 725 fpm (8 mph)	Outdoors	1.90

② The sustained ambient air velocity must be a continuous flow of air directly onto the gear drive. If the airflow cannot be counted on to be continuous, an ambient air velocity factor of 1.00 must be used.

**Table 7 — Inlet Water Temperature Factor –  $B_4$  (For drives with cooling tubes only)**

Inlet Water Temperature	Factor with Cooling Tubes Only
50°F	1.11
60°F	1.05
70°F	1.00
80°F	0.94
90°F	0.88
100°F	0.83

**Table 8 — Duty Cycle Factor ③ –  $B_5$  (For all cooling methods)**

% Operating Time Per Hour	Factor with or without Auxiliary Cooling
100%	1.00
80%	1.05
60%	1.15
40%	1.35
20%	1.80

③ The duty cycle factor must be based on the percentage of each hour that the drive is operating. For example: a gear drive operating for 48 minutes and resting for 12 minutes every hour of the day has an 80% duty cycle, but a drive operating for four hours and resting for four hours has a 100% duty cycle. Where % run time per hour falls between values shown above, use next higher % run time.

# How to Select an A-Plus Drive

## Shaft Ratings

High-speed and low-speed shaft ratings should be checked if the application involves an applied bending moment, for example a sheave, sprocket, pinion or some type of rigid coupling on either shaft. In addition, drives with vertical low-speed shafts should be checked to determine if any thrust that could be applied to the shaft is within the limits of the shaft.

Shaft ratings for parallel shaft drives are found on **pages <?>-<?>**. Right-angle drive shaft ratings are found on **pages <?>-<?>**. Instructions for using these ratings are also found on these pages.

## Horsepower Selection Example

A draw bench requiring 135 brake hp operates 10 hours per day at 30 rpm, and is driven by a 150 hp, 1170 rpm electric motor. Ambient temperature at the draw bench never exceeds 90°F. The draw bench is located in a large indoor room, but airflow in the area is only 200 fpm. The high-speed and low-speed shafts will be connected to the drive and driven equipment with flexible shaft couplings. Select a parallel shaft gear drive for this application.

1. The Service Factor is 1.25 for a draw bench drive operating 10 hours per day from **page 8, Table 3**.
2. The equivalent hp =  $1.25 \times 135 = 169$  hp.
3. The required ratio is  $1170 \div 30 = 39$ . The closest standard ratio is 38.44 from the Triple Reduction Selection Table on **page <?>**.
4. Using the Triple Reduction Selection Table on **page <?>**, in the 1170 rpm high-speed shaft section opposite the 38.44:1 ratio and 30 rpm, trace right to 181 (nearest hp exceeding the equivalent hp of 169) and read the drive size 425 at the top of the column.
5. The basic thermal capacity for a 425A3, 38.44:1, at 1170 rpm with no auxiliary cooling from the Basic Thermal Rating Table on **page <?>** is 120 hp.
6. The ambient temperature factor ( $B_1$ ) is 0.93 from **Table 4**, and the altitude factor ( $B_2$ ) and ambient air velocity factor ( $B_3$ ) are 1.0 from **Table 5 and Table 6**. The duty cycle factor ( $B_4$ ) is 1.0 from **Table 8**.
7. The application-adjusted thermal capacity is  $120 \times 0.93 \times 1 \times 1 \times 1 = 111.6$  hp. This is not adequate because the actual brake hp is 135 hp.
8. The basic thermal capacity for a 425A3, 38.44:1 with two shaft fans is 170 hp. This is adequate since 158.1 ( $170 \times 0.93 \times 1 \times 1$ ) is greater than the 135 hp required. Note that the ambient air factor ( $B_3$ ) is no longer used in the calculation of application-adjusted thermal capacity because the drive is now fan-cooled.
9. Shaft ratings do not need to be checked because the drive is connected by flexible couplings at both the high-speed and low-speed shafts. Refer to Factory coupling catalogs for coupling selections.

## Torque Selection Example

A dredge requires 190,000 lb-in torque at its output shaft, and operates at 13 rpm. The winch is in service 10 hours per day and is driven by a flexible coupling-connected 50 hp, 1170 rpm electric motor. The ambient temperature never exceeds 100°F. Although the dredge operates outdoors, the average sustained wind velocity is only 5 mph. The dredge operates on the Great Lakes which can be considered to be near sea level. The winch never operates more than 45 minutes in any given hour. The space available is best suited to a right-angle gear drive. Select a gear drive for this application.

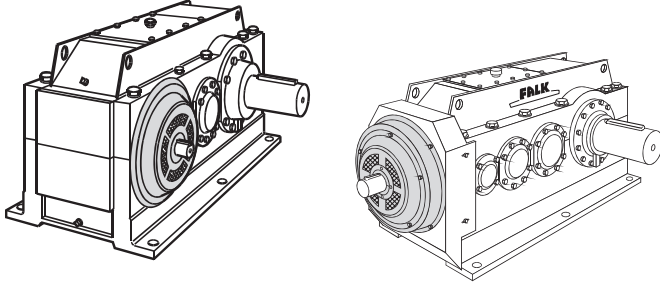
1. The Service Factor is 1.25 for a dredge winch drive operating 10 hours per day from **page 8, Table 3** under Winches (Dredges).
2. The equivalent torque is  $1.25 \times 190,000 = 237,500$  lb-in.
3. The required ratio is  $1170 \div 13 = 90$ . The closest standard ratio is 86.5 from the Quadruple Reduction Selection Table on **page <?>**.
4. Using the Quadruple Reduction Table on **page <?>**, in the 1170 rpm high-speed shaft section opposite 85.60:1 ratio and 13.5 rpm, trace right to 253 ( $\times 1000$ , nearest torque exceeding the equivalent torque of 237,500 lb-in) and read the drive size 405 at the top of the column.
5. The basic thermal capacity with no auxiliary cooling for a 405, 86.50:1 at 1170 rpm from the table on **page <?>** is 56.2 hp. The ambient temperature factor ( $B_1$ ) from **Table 4, page 10**, is 0.85. The altitude correction factor ( $B_2$ ) is 1.0 from **Table 5, page 10**. The ambient air velocity factor ( $B_3$ ) is 1.4 from **Table 6, page 10**. The duty cycle is 75% (45 min/60 min), so the duty cycle factor is 1.05 from **Table 8, page 10**.
6. The application-adjusted thermal capacity is  $56.2 \times 0.85 \times 1.0 \times 1.4 \times 1.05 = 70.2$  hp which exceeds the hp rating of the motor (50 hp). Therefore, no additional cooling is required.
7. Shaft ratings do not need to be checked because the drive is connected by flexible couplings at both the high-speed and low-speed shafts. Refer to Rexnord coupling catalogs for coupling selections.

# Accessory & Option Information

## Cooling Accessories

### Shaft-Driven Cooling Fans

Shaft-driven cooling fans have been successfully used on electric motors and other related machinery for many years. They eliminate the need for water or electrically powered cooling, pumps, external piping or wiring. Less than 0.25% of cataloged power rating is required to drive the fans. Shaft-driven fans are available for use with A and AR parallel shaft drives and AB, ABR and ABX right-angle drives. Mounting locations and dimensions are shown on **pages <?>-<?>**.



### Electric Cooling Fans

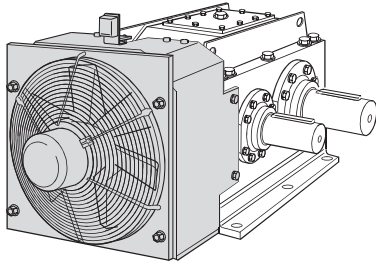
Electric fans achieve greater thermal capacities than shaft-driven fans and include a temperature switch to turn off the fan when it is not required. Mounting locations and dimensions are shown on **pages <?>-<?>**. The following electric fan motor packages are available for all sizes and reductions:

- 60 Hz, 3-Phase, 220/380 VAC
- 60 Hz, 3-Phase, 265/460 VAC
- 50 Hz, 3-Phase, 220/380 VAC

Pre-selected fan motor packages at 60 Hz, Single Phase, 110 VAC or 220 VAC may also be available, see Electric Cooling Fan Selection Guide 131-320 for details.

Electric fan motor packages not conforming to the above are also available, but must be specially selected. Consult Rexnord for price and delivery.

The electric fan motor starter is not included in electric fan motor packages offered by Rexnord.

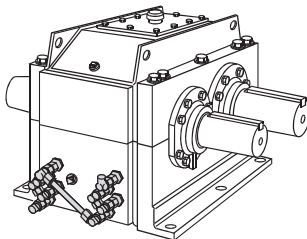


### Cooling Tubes

Falk cooling tubes are an economical alternative for thermal requirements that are beyond the capability of fans. A series of straight, finned tubes are provided directly in the oil sump of the drive. Water is circulated through these tubes to cool the oil. Since there are no joints or connections inside the drive, leakage of water into the oil sump is eliminated. The thermal ratings shown in this catalog are for 70°F (21°C) inlet water temperature. Refer to **Table 7 on page 10** for determining thermal ratings with other cooling water temperatures. Dimensions are shown on **pages <?>-<?>**.

Water flow rates to attain cooling tube basic thermal ratings as shown on **pages <?>-<?>**, and **pages <?>-<?>** are as follows:

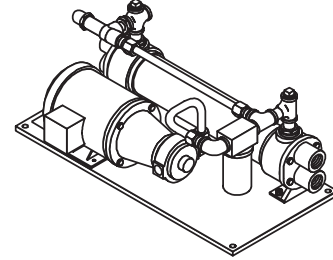
- Sizes 305 through 535 = 2 gallons per minute
- Sizes 545 through 585 = 5 gallons per minute



## Pump & Cooler Assemblies

Rexnord offers Pump & Cooler Assemblies when requirements exceed the thermal capacity of shaft fans, electric fans or cooling tubes. For detailed information, refer to the following Selection Guides:

- 131-310, Type PC Pump & Cooler Assemblies (Water/Oil)
- 131-315, Type PA Pump & Cooler Assemblies (Air/Oil)



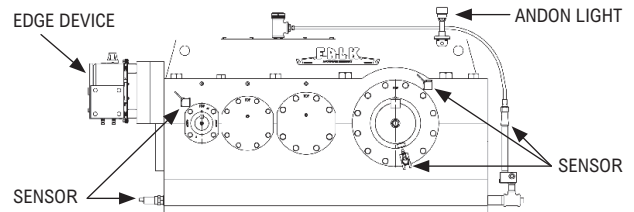
## Smart Condition Monitoring Package (SCMS)

This digitally-connected solution not only monitors traditional measurements such as oil and bearing temperatures and vibration, but it also analyzes oil health in real-time and detects load, speed, location, ambient temperature and throughput, saving hours of manual effort and wait time.

The internet-connected edge device has the capacity to translate product performance data and analytics into alerts and recommended actions - and become a fully predictive model for optimal asset management.

Andon Lights provide visual status of equipment health and need for scheduled maintenance to local & remote personnel.

See catalog SS1-001 for dimensional information and additional required ordering details for this option.



## Smart Condition Monitoring System — Series 1000

UPGRADE

	Model 1010	Model 1020	Model 1050	Model 1150
<b>Measurements/Alarms</b>				
Oil — relative humidity, oxidation, aging, life remaining, oil level	—	X	X	X
Oil sump temperature	X	X	X	X
Vibration	X*	—	X	X
Speed	—	X	X	X
Motor current	—	—	X	X
<b>Notifications/Communications</b>				
Local status indication	X	X	X	X
LAN connectivity to PLC/DCS	X	X	X	X
Enterprise-wide data access via Rexnord Connect Portal				
• System updates	—	—	—	X
• Email notifications				
• System monitoring				

\* Overall vibration

# How to Select an A-Plus Drive

## Motor Attachment Accessories

### Motor Brackets

Motor brackets provide an economical option for mounting electric motors to gear drives. Due to the large variation in motor sizes/weights/starting torques/ & mounting positions (determined by coupling types), some motor bracket installations may deflect and vibrate beyond levels considered satisfactory to the end user.

When a motor bracket is purchased as the motor mounting structure, it becomes the customer's responsibility to support the motor bracket as necessary to diminish motor bracket deflection and vibration to satisfactory levels as determined by the end user. This may be accomplished with jacking screws or by adding other structural supports in the field.

Motor plates or special bedplates are recommended for applications subjected to high system vibration, torque fluctuations, impact loads, or other installations that require rigidly mounted machinery

For detailed information on motor brackets, see motor bracket dimension sheets as follows:

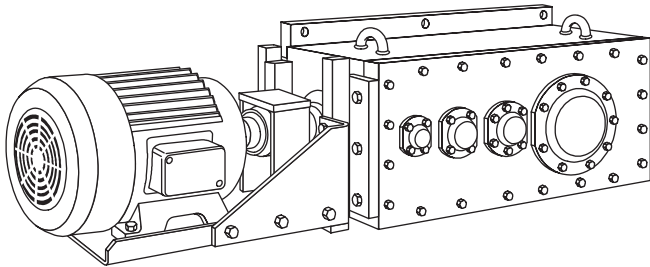
Type A, Engineering 137-650

Type AR, Dimensions 135-554 & 135-556

Type AXV, Dimensions 135-564 & 135-566

Type ABR, Dimensions 235-672 & 235-674

Type ABX, Dimensions 235-676 & 235-678



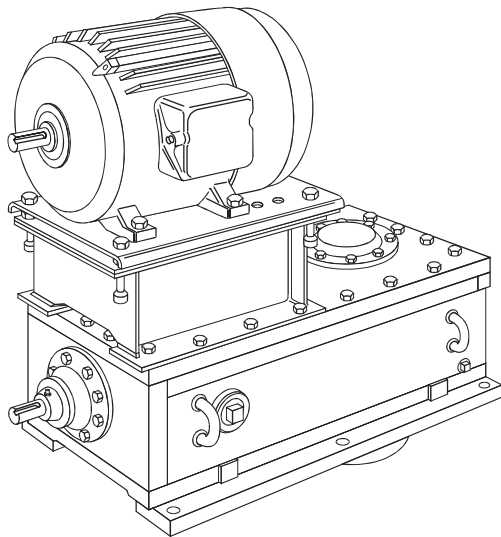
### Motor Mounts

Falk motor mounts are selectively pre-designed for Types ABR and ABX drives. Motor mounts provide a convenient drive support for the motor when the drive is belt- or chain-driven.

For detailed information on motor mounts, see motor mount dimension sheets as follows:

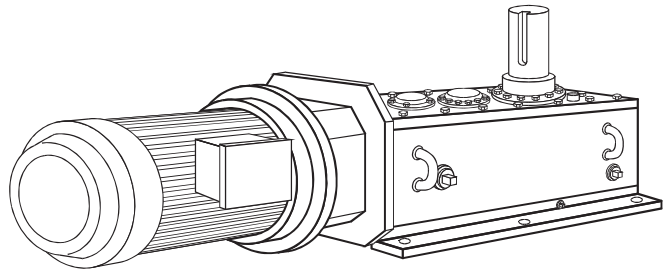
Type ABR, Dimensions 235-652 & 235-654

Type ABX, Dimensions 235-662



## Flanged Motor Adapters

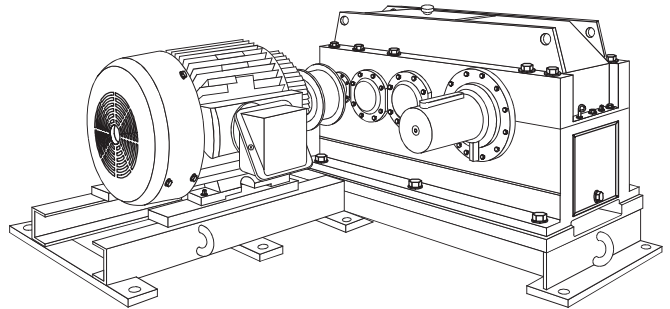
Falk flanged motor adapters are available for Types AR, AXV, ABR and ABX drives. This adapter allows a flange-mounted motor to be directly mounted to the high-speed side of the drive. Contact Rexnord for further details on this accessory.



## Bedplates

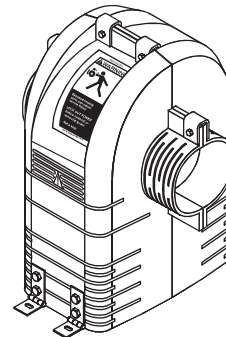
A bedplate is recommended to ensure proper alignment of the drive with the motor. Rexnord offers a complete line of fabricated steel bedplates for all popular sizes of standard Type A and AB drives. These bedplates accommodate standard NEMA and IEC motors within the power range of the drive and many of the larger non-NEMA motors. Special bedplates can be designed and manufactured for unique motor and special accessory combinations.

Versatile welded steel construction permits rapid modification of standard bedplates by addition or deletion. Supports for tachometers, brakes, timing devices, foot-mounted fluid couplings or other accessories can also be added. Contact Rexnord for further details on this accessory.



## Orange Peel® Guards

Orange Peel guard's patented trim-and-fit design revolutionizes equipment guard convenience and value, so you can get the job-site safety you want without the expense and long lead times of custom engineered guards.



# Accessory & Option Information

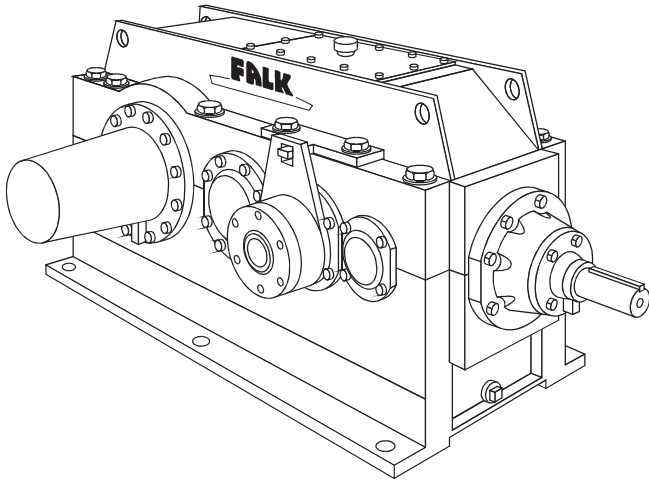
## Backstops

Backstops prevent reverse rotation or backrun without backlash for conveyors, elevator head shafts and similar applications. Rexnord offers a standard line of accessory backstops for use on Type A, AR, AB and ABR drives.

These accessory backstops are mounted externally on an extension of either the high-speed (A and AR) or an intermediate shaft (AB and ABR). When Type A parallel shaft drives are equipped with accessory backstop mounted at the high-speed shaft, only one shaft-driven fan can be mounted; the two shaft fan option is not available.

See Falk Backstop Selection Guide (136-610) for availability, selection and dimensions of Falk accessory backstops for Type A and AR parallel shaft gear drives. For dimensions of pre-selected accessory backstops for Type AB right-angle shaft gear drives, see dimension sheet 235-610. For heavy-duty backstopping requirements, refer to Falk NRT Low-Speed Backstop Selection Guide (561-110).

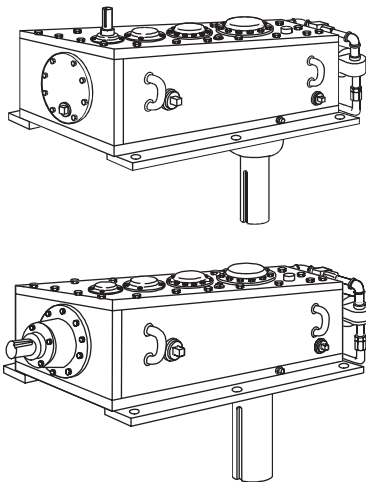
When specifying accessory backstops, the overrunning direction of rotation is defined as clockwise or counterclockwise when facing the rotating end of the low-speed shaft extension.



## Dry Well Feature

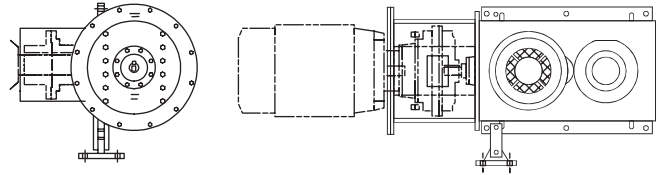
(Types AXVD, AXVQ, ABXD & ABXQ)

For vertical low-speed shaft types listed above, a dry well at the low-speed shaft is incorporated as standard. In this case the lower bearing is grease-lubricated, and the low-speed seal does not retain a head of oil.



## Alignment-Free Drive Package

The Alignment-Free Drive is a standard packaged drive developed by Rexnord to meet the demands of surface and underground belt conveyor applications. The drive comprises a unitized motor, coupling (fluid or flexible) and right-angle gear drive that mounts directly to the conveyor drive shaft and is supported by a single torque arm. It is simple to install, eliminates the cost of expensive mounting pads, and offers the mobility required for today's conveyor systems. For more information about the Alignment-Free Drive refer to the Falk Alignment-Free Drives Selection Guide (231-210).



## Airmax® Breather & Sealed Dipstick

A Falk exclusive, the Airmax is specially designed to allow the drive to breathe, while excluding airborne particles and moisture. For the full benefit of the Airmax, also specify the sealed dipstick feature. For further details, see Selection Guide 111-210.



## Magnetic Drain Plug

The magnetic drain plug attracts harmful metal particles and provides early warning of abnormal wear. Magnetic drain plugs are furnished as standard for Drive Types A, AR, AXV, AB, ABR & ABX as follows:

Drive Sizes 305-345 = 1.00"-11.5 NPT Drain Plug

Drive Sizes 365-585 = 1.25"-11.5 NPT Drain Plug

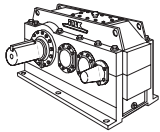
# Gear Drive Nomenclature

425	AR		J			4	C	G		413.7
Drive Size	Type ①		Mounting			Reduction	Model	Variations		Ratio
305	A	= Parallel Shaft, Horizontal	+ Foot-Mounted, Solid LSS				A, B, C, etc.	A =	With Backstop	Exact ratio
325	AM	= Parallel Shaft, Horizontal	+ Shaft-Mounted, Solid LSS, Moment Connection, Torque Arm					B =	With Fan(s)	expressed
345	AR	= Parallel Shaft, Horizontal	+ Flange-Mounted, Solid LSS					C =	With Backstop & Fan(s)	to four
365	ARM	= Parallel Shaft, Horizontal	+ Shaft-Mounted, Solid LSS, Moment Connection, Torque Arm					D =	With Double-Ended LSS	digits.
385	ARJ	= Parallel Shaft, Horizontal	+ Shaft-Mounted, Hollow LSS w/Shrink Disc, Torque Arm					E =	With Single-Ended HSS	
405	AXVQ	= Parallel Shaft, Vertical	+ Foot-Mounted, Hollow LSS w/Keeper Plate					F =	With Flanged Motor Adapter	
425	AXVD	= Parallel Shaft, Vertical	+ Foot-Mounted, Solid LSS (Down)					G =	With Motor Mount	
445	AXVU	= Parallel Shaft, Vertical	+ Foot-Mounted, Solid LSS (Up)					H =	With Tie Rod	
465	AB	= Right-Angle, Horizontal	+ Foot-Mounted, Solid LSS					R =	With Any Combination of Variations	
485	ABM	= Right-Angle, Horizontal	+ Shaft-Mounted, Solid LSS, Moment Connection, Bedplate & Torque Arm					S =	Special Features	
505								T =	With Cooling Tubes	
525	ABR	= Right-Angle, Horizontal	+ Flange-Mounted, Solid LSS					Z =	With Motor Bracket	
535	ABRM	= Right-Angle, Horizontal	+ Shaft-Mounted, Solid LSS, Moment Connection, Torque Arm							
545	ABRJ	= Right-Angle, Horizontal	+ Shaft-Mounted, Hollow LSS w/Shrink Disc, Torque Arm							
555	ABXQ	= Right-Angle, Vertical	+ Foot-Mounted, Hollow LSS w/Keeper Plate							
565	ABXD	= Right-Angle, Vertical	+ Foot-Mounted, Solid LSS (Down)							
585	ABXU	= Right-Angle, Vertical	+ Foot-Mounted, Solid LSS (Up)							

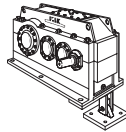
① See Availability Table below for availability of drive types.

## Parallel Shaft Gear Drives

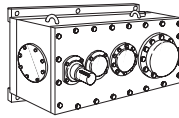
A - Foot-Mounted Solid Shaft



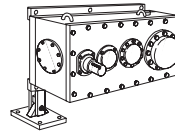
AM - Shaft-Mounted Solid Shaft with Moment Connection



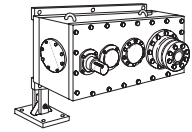
AR - Flange-Mounted Solid Shaft



ARM - Shaft-Mounted Solid Shaft with Moment Connection



ARJ - Shaft-Mounted Hollow Shaft with Shrink Disc



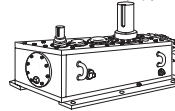
AXVQ - Foot-Mounted Hollow Shaft with Keeper Plate



AXVD - Foot-Mounted Solid Shaft (Down)

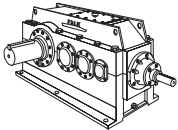


AXVU - Foot-Mounted Solid Shaft (Up)

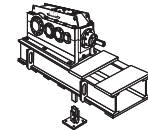


## Right Angle Shaft Gear Drives

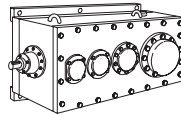
AB - Foot-Mounted Solid Shaft



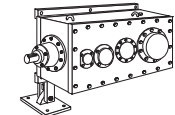
ABM - Shaft-Mounted Bedplate/Solid Shaft with Moment Connection



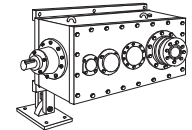
ABR - Flange-Mounted Solid Shaft



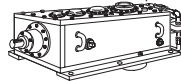
ABRM - Shaft-Mounted Solid Shaft with Moment Connection



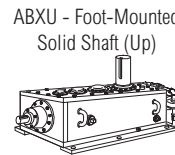
ABRJ - Shaft-Mounted Hollow Shaft with Shrink Disc



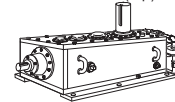
ABXQ - Foot-Mounted Hollow Shaft with Keeper Plate



ABXD - Foot-Mounted Solid Shaft (Down)



ABXU - Foot-Mounted Solid Shaft (Up)



## Availability Table (by Type and Reduction)

(An "X" indicates that the gear drive type and reduction are available for a given size.)

Drive Size	Type and Reduction																
	A1	A2	A3	A4	AR2	AR3	AR4	AXV2	AXV3	AXV4	AB2	AB3	AB4	ABR3	ABR4	ABX3	ABX4
305	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
325	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
345	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
365	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
385	X	X	X	X	-	-	-	-	-	-	X	X	X	-	-	-	-
405	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
445	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
465	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
485	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
505	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
525	X	X	X	X	-	-	-	-	-	-	X	X	X	-	-	-	-
535	-	-	-	-	X	X	X	X	X	X	-	-	-	X	X	X	X
545	-	X	X	-	-	-	-	-	-	-	-	X	X	-	-	-	-
555	-	-	-	-	X	X	X	X	X	X	-	-	-	X	X	X	X
565	-	X	X	-	-	-	-	-	-	-	-	X	X	-	-	-	-
585	-	X	X	-	-	-	-	-	-	-	-	X	X	-	-	-	-

# How to Order an A-Plus Drive

The following information is required to order an A-Plus drive to meet your requirements. Much of the information is also used to make a selection and is repeated here in case a selection will be made by a Rexnord district office. Note that it is not necessary to specify nomenclature, as described on **page <?>**, when ordering an A-plus drive.

## Drive

- Size, type and ratio.
- Input and output speed (rpm).
- Service Factor for application.
- External shaft loads – thrust and overhung load.
- Factors affecting thermal performance – ambient temperature, altitude, ambient air velocity, duty cycle and inlet water temperature (if cooling water is to be used).
- Auxiliary equipment required – couplings, backstops, etc.
- Mounting position and shaft assembly number (see **page <?>** for parallel shaft drives and **page <?>** for right-angle drives).

## Motor – Prime Mover

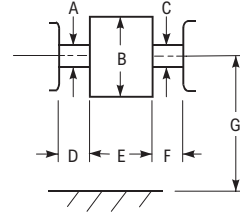
- Type – motor or engine.
- Power rating – hp or kW.
- Speed – rpm.
- Frame size – dimension prints if Rexnord is to furnish mounting surface and/or mount the equipment.
- Motor – type, class, weight or any special characteristics (such as brakemotor, explosion-proof, etc.).
- Identify if motor is to be furnished or installed by Rexnord.

## Driven Machine

- Required power or torque.
- Speed – rpm.
- Application description – belt conveyor, agitator, etc.
- Service – duty cycle, hours per day, reversals per minute if reversing.
- Ambient temperature and operating conditions – outdoor, taconite dust, etc.

## Auxiliary Equipment

- Motors – if Rexnord is to furnish, provide complete specifications.
- Bedplates – supply drawing of motor and any auxiliary equipment not supplied by Rexnord.
- Flanged motor adapters or motor brackets – supply drawing of motor.
- Motor mount – supply drawing of motor and the required belt centers and mounting arrangement.
- Backstops – specify direction of rotation of the low-speed shaft (CW or CCW) when looking toward the drive from the low-speed end.
- Electric fan position.
- Couplings – specify size, type, drive and driven hub bores and keyways.



**B & E = Max. Coupling Dimensions**  
**D & F = Exposed Shaft**

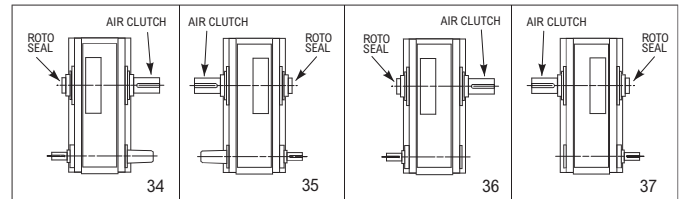
- Coupling guards – furnish description of couplings and/or other equipment to be guarded, and all dimensions A through G above.

## Special or Specification Requirements

Advise Rexnord of any special project-related specifications such as: noise level specifications, bearing L<sub>10</sub> requirements, etc.

## Type A Assemblies

Drives with Rifle-Drilled Low-Speed Shaft for Air Clutch



# Shaft Assemblies & Rotations

## Type A, AR, ARJ & AXV

Drives with rifle-drilled low-speed shaft for air clutch — See Page 16.

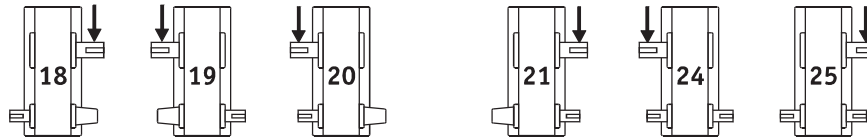
Please specify from the views below, the desired assembly number. High-speed shaft overhung load capacities published on pages <?>-<?> apply to either high-speed shaft extension. The low-speed shaft overhung load capacities published on pages <?> and <?> apply to the low-speed shaft extensions below with heavy arrows. Published overhung load capacities may be increased when an outboard bearing is used. Consult Rexnord for overhung load capacities of low-speed shaft extensions without the heavy arrow, as they are less than the heavy arrow extensions.

Contact Rexnord for inclined, wall-mounted, or other non-standard orientations.

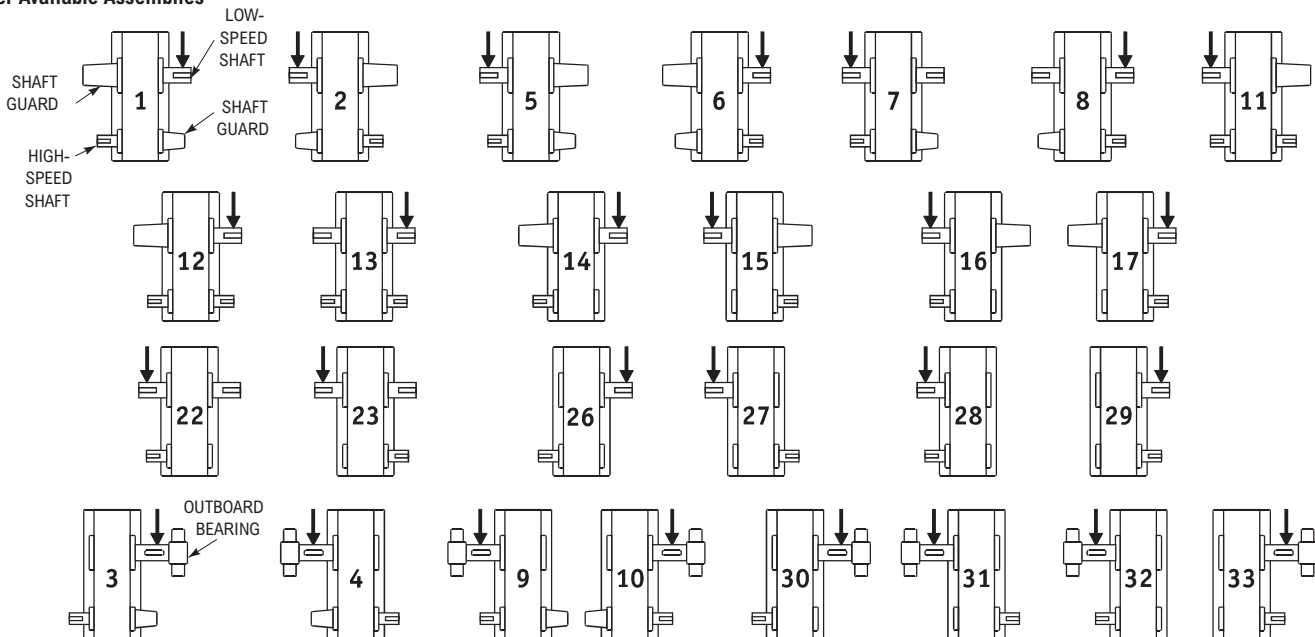
**CAUTION:** All (A1) single reduction gear drive selections — Due to the narrow centers dimensions (distance between H.S. shaft centerline and L.S. shaft centerline) associated with single reduction gear drives, check for possible interference of H.S. shaft and H.S. shaft accessories with L.S. shaft and L.S. shaft accessories.

### Type A Assemblies

#### Standard Assemblies



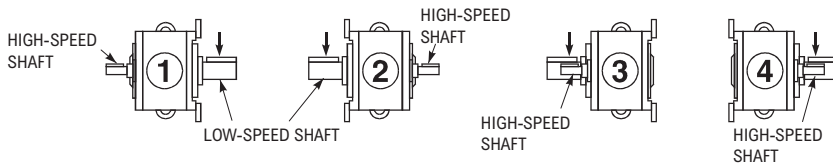
#### Other Available Assemblies



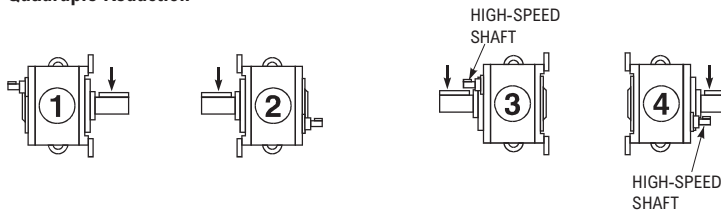
### Type AR Assemblies

(Viewed from H.S. end)

#### Double and Triple Reduction

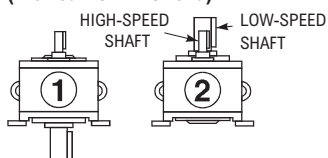


#### Quadruple Reduction



### Type AXV Assemblies

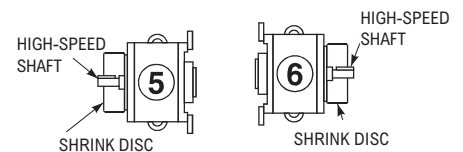
(Viewed from H.S. end)



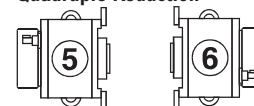
### Type ARJ Assemblies

(Viewed from H.S. end)

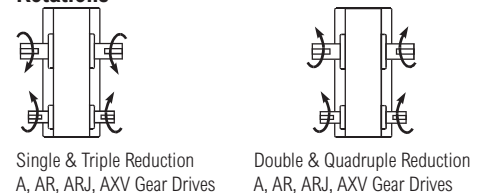
#### Double and Triple Reduction



#### Quadruple Reduction



### Rotations



# Horsepower & Torque Ratings/Single Reduction

## Horsepower Ratings

### Type A Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±3%	Approx. Low-Speed Shaft RPM	Drive Size											
			305	325	345	365	385	405	425	445	465	485	505	525
1750	1.84	950	579	688	1082	1375	1785	2893	4503	5093	7437	10689	13594	18755 ①
	2.03	860	568	661	1040	1272	1631	2748	3822	4471	6843	9659	12051	17817 ①
	2.25	780	517	609	958	1166	1768	2459	3917	4248	6545	9712	12034	17712 ①①
	2.49	700	491	582	917	1114	1533	2238	3584	3660	5530	9511	12090	16869 ①
	2.76	640	465	530	834	1009	1443	2170	3094	3845	5446	8590	11254	14074 ①
	3.05	575	414	503	792	956	1314	1958	2913	3653	4543	7831	9472	12831 ①
	3.38	520	379	451	709	903	1263	2073	2731	3208	4276	7516	8842	12514 ①
	3.74	470	362	424	668	797	1160	1873	2549	2965	4008	7366	9547	11731 ①
	4.13	420	328	398	531	744	1046	1506	2219	2780	3475	6048	8355	11569 ①
	4.57	380	276	370	494	691	960	1396	1991	2505	3670	5848	7500	10435 ①
	5.06	350	217	318	498	653	802	1149	1673	2244	3319	5242	7285	9247 ①
5.60	310	193	293	444	608	—	—	—	—	—	—	—	—	
1430	1.84	780	502	597	906	1194	1549	2511	3910	4422	6457	9280	11802	16283 ①
	2.03	700	493	574	903	1104	1416	2386	3318	3882	5941	8386	10462	15468 ①
	2.25	640	449	529	832	1013	1535	2135	3400	3688	5682	8432	10448	15377 ①
	2.49	575	426	506	796	967	1331	1943	3112	3177	4801	8257	10496	14646 ①
	2.76	520	404	460	724	876	1253	1884	2686	3338	4728	7457	9770	12219 ①
	3.05	470	359	437	673	830	1141	1700	2529	3171	3944	6799	8224	11140 ①
	3.38	420	329	391	616	784	1096	1773	2371	2785	3712	6526	7676	10864 ①
	3.74	380	315	368	580	692	1007	1585	2213	2574	3480	6395	8288	10185 ①
	4.13	350	285	345	461	646	864	1230	1814	2414	3017	5251	7253	10044 ①
	4.57	310	229	321	428	600	798	1144	1627	2175	3186	5077	6511	9060 ①
	5.06	280	180	265	415	567	668	949	1367	1833	2882	4433	5953	7556 ①
5.60	255	160	243	370	518	—	—	—	—	—	—	—	—	
1170	1.84	640	436	519	741	1037	1346	2182	3397	3842	5611	8064	10255	14149
	2.03	575	429	499	741	959	1231	2073	2883	3373	5162	7287	9091	13441
	2.25	520	390	459	723	880	1334	1855	2955	3205	4938	7327	9079	13362
	2.49	470	371	439	691	840	1157	1688	2704	2761	4172	7175	9120	12727
	2.76	420	351	400	629	761	1088	1637	2334	2901	4108	6480	8490	10618
	3.05	380	312	380	552	721	991	1477	2197	2756	3427	5908	7146	9680
	3.38	350	286	340	535	681	953	1450	2060	2420	3226	5670	6670	9441
	3.74	310	272	320	504	601	875	1306	1886	2237	3024	5486	7202	8850
	4.13	280	239	300	401	561	720	1024	1493	2097	2621	4563	6303	8375
	4.57	255	190	271	372	521	664	954	1349	1890	2769	4299	5638	7504
	5.06	230	149	220	345	485	555	790	1141	1511	2504	3627	4871	6182
5.60	210	132	201	307	431	—	—	—	—	—	—	—	—	

① Gear drives at 1750 RPM require jet lubrication and special labyrinth seals; gear drives at 1430 RPM require jet lubrication, refer to Factory.

# Horsepower & Torque Ratings/Single Reduction

## Torque Ratings

### Type A Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±3%	Approx. Low-Speed Shaft RPM	Drive Size ①											
			305	325	345	365	385	405	425	445	465	485	505	525
1750	1.84	950	39.0	46.7	73.4	90.0	121	187	296	333	482	696	912	1249 ②
	2.03	860	41.8	48.5	76.4	94.0	121	198	282	330	503	714	893	1317 ②
	2.25	780	42.8	49.6	78.0	97.0	141	203	317	338	525	783	1003	1457 ②
	2.49	700	43.7	51.4	81.0	99.0	140	201	312	333	488	839	1088	1488 ②
	2.76	640	45.6	53.4	82.6	101	146	214	314	388	526	859	1096	1436 ②
	3.05	575	46.6	55.3	87.0	105	147	211	315	395	500	846	1068	1386 ②
	3.38	520	46.4	55.4	87.1	107	149	243	328	401	510	917	1091	1464 ②
	3.74	470	48.4	56.3	88.7	109	153	243	334	400	529	967	1267	1520 ②
	4.13	420	48.1	58.3	79.2	111	155	220	336	407	529	914	1289	1692 ②
	4.57	380	45.0	60.3	82.1	115	154	221	328	399	586	962	1267	1653 ②
	5.06	350	39.6	59.5	92.2	119	140	199	301	415	574	944	1349	1602 ②
5.60	310	38.9	60.3	89.8	121	–	–	–	–	–	–	–	–	
1430	1.84	780	41.3	49.6	75.2	95.0	128	199	315	354	512	740	969	1327 ②
	2.03	700	44.4	51.6	81.2	99.0	129	210	299	351	535	758	949	1399 ②
	2.25	640	45.5	52.7	82.9	103	149	216	337	359	558	831	1066	1548 ②
	2.49	575	46.4	54.7	86.1	105	148	214	332	354	518	891	1156	1581 ②
	2.76	520	48.5	56.7	87.7	108	155	227	334	412	559	913	1165	1525 ②
	3.05	470	49.4	58.8	90.5	112	157	225	334	419	531	899	1135	1472 ②
	3.38	420	49.3	58.8	92.6	114	159	254	348	426	542	974	1159	1556 ②
	3.74	380	51.5	59.8	94.2	116	163	251	355	425	562	1028	1346	1615 ②
	4.13	350	51.2	61.8	84.1	118	157	220	336	432	562	972	1369	1798 ②
	4.57	310	45.7	64.1	87.0	122	157	222	328	424	623	1022	1346	1756 ②
	5.06	280	40.2	60.7	94.0	127	143	201	301	415	609	976	1349	1602 ②
5.60	255	39.5	61.2	91.5	126	–	–	–	–	–	–	–	–	
1170	1.84	640	43.9	52.7	75.2	101	136	211	334	376	544	786	1029	1409
	2.03	575	47.2	54.8	81.4	105	137	223	318	372	568	805	1008	1486
	2.25	520	48.3	55.9	88.0	110	159	229	358	381	592	883	1132	1645
	2.49	470	49.4	58.0	91.3	112	158	227	353	376	550	947	1228	1679
	2.76	420	51.4	60.3	93.1	114	165	241	355	437	594	969	1237	1620
	3.05	380	52.5	62.5	90.7	119	166	239	355	445	564	954	1206	1564
	3.38	350	52.4	62.5	98.3	121	169	254	370	452	575	1035	1231	1652
	3.74	310	54.4	63.5	100	123	173	253	370	452	597	1077	1430	1716
	4.13	280	52.5	65.7	89.5	125	160	224	338	459	597	1032	1455	1832
	4.57	255	46.4	66.1	92.4	129	160	226	332	451	662	1058	1425	1778
	5.06	230	40.7	61.6	95.5	132	145	205	307	418	647	976	1349	1602
5.60	210	39.8	61.8	92.8	129	–	–	–	–	–	–	–	–	

① Pound-inches at low-speed shaft ... multiply values listed by 1000.

② Gear drives at 1750 RPM require jet lubrication and special labyrinth seals; gear drives at 1430 RPM require jet lubrication and special labyrinth seals; refer to Factory.

# Horsepower & Torque Ratings/Single Reduction

## Horsepower Ratings

### Type A Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±3%	Approx. Low-Speed Shaft RPM	Drive Size											
			305	325	345	365	385	405	425	445	465	485	505	525
870	1.84	470	324	389	551	821	1094	1773	2761	3123	4560	6554	8335	11499
	2.03	430	324	389	551	780	1000	1685	2343	2741	4196	5922	7388	10924
	2.25	390	317	373	551	715	1084	1508	2401	2605	4013	5955	7379	10860
	2.49	350	301	357	551	683	940	1372	2198	2244	3391	5831	7412	10343
	2.76	320	282	325	511	618	885	1331	1897	2357	3339	5266	6900	8629
	3.05	290	250	308	422	586	806	1201	1786	2240	2785	4801	5808	7867
	3.38	260	226	276	435	553	774	1108	1609	1967	2622	4319	5421	7672
	3.74	235	206	260	408	489	685	997	1436	1818	2458	4080	5853	7193
	4.13	210	181	241	326	456	546	779	1140	1705	2130	3480	5067	6228
	4.57	190	143	205	298	424	503	725	1028	1536	2094	3203	4193	5580
	5.06	175	112	166	261	368	420	600	868	1153	1899	2724	3636	4597
5.60	155	99.5	152	232	327	–	–	–	–	–	–	–	–	
720	1.84	390	268	322	456	679	958	1553	2303	2715	3994	5741	7301	10072
	2.03	350	268	322	456	679	876	1476	2052	2401	3675	5188	6472	9568
	2.25	320	268	322	456	626	949	1321	2004	2281	3515	5216	6463	9512
	2.49	290	264	313	456	598	823	1202	1902	1966	2970	5108	6493	9060
	2.76	260	236	285	425	542	775	1140	1659	2065	2925	4613	6044	7559
	3.05	235	209	258	354	513	681	1052	1517	1962	2440	4206	5087	6891
	3.38	210	189	242	371	485	665	930	1353	1723	2296	3574	4748	6721
	3.74	190	172	228	342	428	573	836	1206	1593	2153	3386	4878	6300
	4.13	175	151	202	281	400	456	652	956	1442	1866	2922	4228	5154
	4.57	155	120	171	249	359	420	607	861	1326	1762	2701	3523	4629
	5.06	140	93.6	138	218	307	351	501	726	967	1596	2293	3065	3843
5.60	130	82.9	126	193	273	–	–	–	–	–	–	–	–	
580	1.84	320	216	259	367	547	824	1335	1855	2187	3433	4819	6013	8658
	2.03	290	216	259	367	547	753	1268	1764	2064	3159	4459	5563	8225
	2.25	260	216	259	367	538	813	1135	1647	1961	3012	4483	5555	8157
	2.49	235	215	259	367	514	708	1033	1561	1689	2553	4382	5581	7681
	2.76	210	192	243	343	466	660	932	1358	1740	2514	3965	5195	6497
	3.05	190	170	210	289	441	555	859	1241	1639	2097	3615	4373	5923
	3.38	175	153	208	303	417	542	759	1106	1434	1974	2933	4081	5777
	3.74	155	139	192	278	368	466	681	984	1318	1850	2785	3998	5327
	4.13	140	122	164	229	343	371	531	779	1178	1604	2397	3473	4226
	4.57	130	97.0	139	202	292	341	494	701	1083	1442	2213	2890	3808
	5.06	115	75.8	112	177	250	285	408	591	788	1304	1877	2510	3156
5.60	105	67.2	103	157	222	–	–	–	–	–	–	–	–	

① Gear drives at 1750 RPM require jet lubrication and special labyrinth seals; gear drives at 1430 RPM require jet lubrication, refer to Factory.

# Horsepower & Torque Ratings/Single Reduction

## Torque Ratings

### Type A Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±3%	Approx. Low-Speed Shaft RPM	Drive Size ②											
			305	325	345	365	385	405	425	445	465	485	505	525
870	1.84	470	43.9	53.1	75.2	107	149	231	365	411	594	859	1125	1540
	2.03	430	48.0	57.5	81.4	115	149	244	347	407	621	880	1101	1624
	2.25	390	52.8	61.1	90.2	120	174	251	391	417	647	965	1237	1798
	2.49	350	53.9	63.5	97.9	122	172	248	385	411	602	1034	1342	1835
	2.76	320	55.6	65.9	102	125	180	263	388	478	649	1059	1352	1770
	3.05	290	56.6	68.1	93.3	130	182	261	388	487	617	1043	1318	1709
	3.38	260	55.6	68.2	107	132	184	261	388	494	629	1060	1346	1806
	3.74	235	55.4	69.4	109	135	182	260	379	494	653	1078	1563	1875
	4.13	210	53.4	71.0	97.8	137	163	229	347	502	653	1058	1573	1832
	4.57	190	46.9	67.2	99.6	142	163	231	340	493	673	1060	1425	1778
	5.06	175	41.1	62.5	97.2	135	148	209	314	429	660	986	1354	1602
5.60	155	40.3	62.9	94.3	131	–	–	–	–	–	–	–	–	
720	1.84	390	43.8	53.1	75.2	107	158	245	368	432	629	909	1191	1630
	2.03	350	48.0	57.5	81.4	121	158	258	368	431	657	932	1166	1718
	2.25	320	53.9	63.7	90.2	127	184	265	395	441	685	1021	1310	1902
	2.49	290	57.1	67.2	97.9	130	182	263	403	435	637	1095	1420	1942
	2.76	260	56.2	69.8	102	132	191	273	410	506	687	1121	1431	1874
	3.05	235	57.1	68.9	94.6	137	186	276	398	515	653	1104	1395	1809
	3.38	210	56.2	72.2	111	140	191	264	395	523	665	1060	1424	1911
	3.74	190	55.9	73.6	110	142	184	263	384	523	691	1081	1574	1984
	4.13	175	53.9	71.9	102	145	165	232	351	513	691	1074	1585	1832
	4.57	155	47.6	67.8	101	145	164	234	344	514	684	1080	1446	1782
	5.06	140	41.5	62.8	98.1	136	149	211	318	434	670	1003	1379	1618
5.60	130	40.6	63.0	94.8	132	–	–	–	–	–	–	–	–	
580	1.84	320	43.9	53.0	75.1	107	168	261	368	432	671	947	1217	1740
	2.03	290	48.0	57.4	81.3	121	169	275	392	460	701	994	1244	1834
	2.25	260	54.0	63.6	90.1	135	195	283	403	471	729	1090	1397	2025
	2.49	235	57.8	69.1	97.8	138	195	281	411	464	679	1166	1516	2044
	2.76	210	56.8	73.9	102	141	202	277	416	529	733	1196	1527	2000
	3.05	190	57.7	69.6	95.8	146	188	280	404	534	697	1178	1488	1930
	3.38	175	56.5	77.1	112	149	193	268	400	541	710	1080	1520	2039
	3.74	155	56.1	76.9	111	152	186	266	389	537	737	1103	1601	2083
	4.13	140	54.0	72.4	103	154	166	234	355	520	737	1094	1617	1865
	4.57	130	47.8	68.4	101	146	165	236	348	521	695	1099	1473	1820
	5.06	115	41.8	63.3	98.9	138	150	213	321	439	680	1019	1402	1650
5.60	105	40.9	63.9	95.8	134	–	–	–	–	–	–	–	–	

① Pound-inches at low-speed shaft ... multiply values listed by 1000.

# Horsepower & Torque Ratings/Double Reduction

## Horsepower Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size																	
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585	
1750	5.60	310	—	—	—	—	628	919	1215	1668	2453	3688	5080	6976	7245	9010	9217	11022	15272	
	6.20	280	159	242	408	505	624	920	1215	1496	2323	3533	4766	6676	6965	8190	8948	10135	14232	
	6.86	255	159	228	389	455	577	883	1215	1442	2179	3363	5004	6036	6394	7868	7922	9559	14541	
	7.59	230	159	214	348	429	561	815	1054	1365	1965	3074	4240	5777	6027	7142	7766	8875	11969	
	8.40	210	159	215	324	402	512	769	1054	1296	1843	2925	4386	5087	5385	7001	6806	8273	12331	
	9.30	190	135	175	308	375	484	716	924	1226	1740	2625	3899	4807	5364	6179	6706	7987	11974	
	10.29	170	120	179	275	351	426	669	924	1099	1632	2498	3756	4231	5087	6055	6292	7453	10900	
	11.39	155	119	154	216	338	401	632	896	1039	1433	2346	3336	4436	4807	5373	5844	6779	10316	
	12.61	140	113	146	216	304	384	550	781	991	1404	2232	3240	4151	4231	5264	5469	6403	9944	
	13.95	125	91.8	137	216	286	322	524	739	937	1237	1975	2742	3831	4151	4724	5190	6019	8148	
	15.44	115	94.4	136	191	268	309	441	592	852	1186	1882	2876	3439	3439	4625	4760	5575	8401	
	17.09	100	75.8	110	168	253	279	419	633	805	1045	1661	2577	3242	3439	4307	4474	5050	8090	
	18.91	90	70.6	109	159	201	267	370	579	729	1101	1609	2365	2973	3242	4014	4230	4805	7645	
	20.93	84	59.9	88.3	140	201	214	323	463	635	999	1448	2204	2690	3030	3819	3956	4295	6597	
	23.16	75	56.2	87.0	131	191	—	—	Consult Factory				—	—	—	—	—	—	—	—
	25.63	68	51.1	72.7	119	164	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	60	45.4	66.5	106	157	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	31.39	56	36.9	61.7	94.4	136	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	34.74	50	36.4	56.5	88.5	121	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1430	5.60	255	—	—	—	—	513	798	1055	1448	2130	3202	4411	6057	6290	7822	8002	9569	13259
6.20		230	130	210	348	439	510	798	1055	1299	2017	3067	4137	5796	6047	7110	7768	8799	12356	
6.86		210	130	198	337	395	485	767	1055	1252	1892	2920	4345	5240	5551	6831	6878	8299	12624	
7.59		190	130	186	303	372	458	708	915	1185	1706	2669	3681	5015	5232	6201	6742	7705	10391	
8.40		170	130	187	282	349	419	667	915	1125	1600	2540	3808	4417	4675	6078	5909	7183	10705	
9.30		155	111	152	254	325	395	621	803	1064	1511	2279	3385	4174	4657	5364	5822	6934	10395	
10.29		140	98.7	148	227	305	348	552	790	954	1417	2169	3261	3673	4416	5257	5462	6470	9463	
11.39		125	97.5	127	179	288	328	527	732	902	1244	2036	2896	3851	4173	4665	5073	5886	8956	
12.61		115	92.0	127	179	264	314	458	653	860	1219	1937	2813	3604	3673	4570	4748	5559	8634	
13.95		100	75.4	119	178	249	263	431	604	813	1074	1715	2381	3326	3604	4101	4506	5226	7074	
15.44		90	77.2	112	157	233	252	366	484	740	1029	1634	2497	2985	2985	4016	4133	4840	7293	
17.09		84	62.2	90.7	138	220	228	345	517	699	907	1442	2237	2776	2985	3739	3884	4385	7023	
18.91		75	58.3	89.2	131	167	218	304	473	633	956	1397	1972	2462	2758	3485	3672	4171	6637	
20.93		68	49.1	72.5	115	167	175	266	379	522	868	1231	1817	2219	2503	3316	3435 ①	3545	5447	
23.16		60	46.3	71.9	109	157	—	—	Consult Factory				—	—	—	—	—	—	—	—
25.63		56	41.8	59.6	97.7	134	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28.36		50	37.2	54.5	87.0	130	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31.39		45	30.4	50.6	77.9	111	—	—	—	—	—	—	—	—	—	—	—	—	—	—
34.74		40	29.8	46.3	72.5	98.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1170		5.60	210	—	—	—	—	423	694	917	1258	1851	2782	3833	5263	5466	6797	6953	8315	11521
	6.20	190	106	182	284	381	417	694	917	1129	1753	2665	3595	5037	5254	6178	6750	7646	10737	
	6.86	170	106	172	284	343	397	666	917	1088	1644	2537	3775	4554	4824	5935	5977	7212	10970	
	7.59	155	106	162	263	323	375	615	795	1030	1482	2319	3198	4358	4547	5388	5859	6695	9029	
	8.40	140	106	162	239	304	343	580	779	978	1390	2207	3309	3838	4062	5281	5135	6241	9302	
	9.30	125	91.4	132	210	283	323	516	675	925	1313	1980	2942	3627	4047	4662	5059	6026	9033	
	10.29	115	81.3	122	187	260	285	456	646	829	1231	1884	2834	3192	3838	4568	4746	5623	8223	
	11.39	100	79.8	104	149	236	268	435	599	784	1081	1770	2516	3347	3626	4054	4408	5114	7783	
	12.61	90	75.3	104	149	229	257	381	534	748	1060	1684	2445	3132	3192	3971	4126	4831	7502	
	13.95	84	62.0	103	146	216	216	355	494	707	933	1490	2069	2890	3132	3564	3916	4541	6147	
	15.44	75	63.1	91.7	129	197	206	304	396	643	895	1420	2170	2594	2594	3489	3591	4206	6338	
	17.09	68	51.1	74.5	113	187	186	283	423	607	788	1253	1944	2293	2594	3249	3375 ①	3810	6103	
	18.91	60	48.1	73.2	107	138	178	250	387	550	798	1194	1626	2031	2277	3028	3191 ①	3625	5673	
	20.93	56	40.3	59.5	94.2	138	143	218	310	429	722	1014	1498	1829	2066	2790	2917 ①	2928	4500	
	23.16	50	38.2	59.3	89.8	129	—	—	Consult Factory				—	—	—	—	—	—	—	—
	25.63	45	34.3	48.8	80.2	110	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	40	30.5	44.7	71.4	106	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	31.39	37	25.0	41.4	64.3	91.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	34.74	34	24.5	37.9	59.4	81.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—

① For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

High-Speed Shaft RPM	Type	Availability of Types A / AR / AXV Double and Triple Reduction																	
		305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585	
All	A	X	X	X	X	X	X	X	X	X	X	X	X	X	—	X	—	X	X
	AR	—	—	—	—	—	—	X	X	X	X	X	X	—	X	—	X	—	—
	AXV	—	—	—	—	—	—	X	X	X	X	X	X	—	X	—	X	—	—

# Horsepower & Torque Ratings/Double Reduction

## Torque Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size ①																		
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585		
1750	5.60	310	—	—	—	—	133	185	245	339	486	727	1042	1356	1487	1797	1872	2218	3178		
	6.20	280	35.4	55.2	92.3	112	139	201	272	352	499	787	1070	1406	1540	1778	1967	2337	3223		
	6.86	255	38.7	56.2	95.1	116	143	213	297	366	518	806	1208	1452	1623	1941	1990	2391	3589		
	7.59	230	42.4	58.2	95.6	120	157	222	286	377	538	844	1157	1505	1649	1918	2112	2543	3349		
	8.40	210	47.2	65.1	99.2	125	151	226	313	387	558	864	1287	1598	1648	2055	2122	2575	3760		
	9.30	190	44.8	60.8	105	128	160	237	309	397	567	904	1330	1672	1768	2060	2264	2674	4003		
	10.29	170	44.0	68.4	102	131	154	240	338	417	589	926	1396	1640	1813	2206	2349	2710	4120		
	11.39	155	47.3	63.4	92.0	136	163	250	378	428	597	954	1441	1741	1889	2185	2406	2876	4275		
	12.61	140	49.9	65.0	99.4	141	169	238	352	440	602	977	1493	1782	1861	2339	2491	2951	4312		
	13.95	125	45.4	67.2	112	145	166	255	384	451	612	995	1376	1856	2013	2381	2578	3025	4052		
	15.44	115	50.7	74.4	110	149	173	240	335	474	636	1032	1540	1886	1931	2547	2687	3013	4553		
	17.09	100	45.6	69.0	108	154	168	257	390	486	647	1055	1617	2006	2130	2655	2754	3172	4807		
	18.91	90	48.2	74.9	111	139	174	246	391	479	715	1112	1625	2087	2253	2693	2834	3305	4920		
	20.93	84	45.8	69.7	109	152	152	235	340	484	701	1095	1649	2045	2277	2803	2955	3289	5105		
	23.16	75	45.2	73.0	107	161	—	Consult Factory					—	—	—	—	—	—	—	—	
	25.63	68	46.0	70.0	109	152	—	Consult Factory					—	—	—	—	—	—	—	—	—
	28.36	60	45.1	70.4	106	160	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	31.39	56	41.5	70.1	104	153	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	34.74	50	45.2	70.6	106	148	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	1430	5.60	255	—	—	—	—	132	197	260	360	517	773	1107	1441	1580	1910	1989	2357	3377	
6.20		230	35.4	58.6	96.4	119	139	213	289	374	530	836	1136	1494	1636	1889	2090	2483	3424		
6.86		210	38.7	59.7	101	124	147	227	316	389	550	857	1283	1543	1725	2063	2114	2540	3813		
7.59		190	42.5	61.9	102	127	156	236	304	401	571	897	1229	1599	1752	2038	2244	2702	3558		
8.40		170	47.2	69.3	106	133	151	239	332	411	593	918	1368	1698	1751	2183	2254	2736	3995		
9.30		155	45.1	64.7	106	136	160	252	329	421	603	961	1413	1777	1879	2188	2405	2841	4252		
10.29		140	44.3	69.2	103	139	154	242	354	443	626	984	1483	1742	1926	2344	2495	2879	4377		
11.39		125	47.4	64.0	93.3	142	163	255	378	455	634	1013	1531	1850	2007	2322	2556	3056	4542		
12.61		115	49.7	69.2	101	150	169	242	360	467	640	1037	1586	1893	1977	2486	2646	3135	4581		
13.95		100	45.6	71.5	113	155	166	257	384	479	651	1058	1463	1972	2139	2529	2739	3214	4305		
15.44		90	50.8	74.9	111	159	172	244	335	504	675	1097	1636	2003	2052	2707	2855	3201	4837		
17.09		84	45.8	69.7	108	164	168	259	389	517	687	1121	1718	2102	2263	2821	2926	3371	5106		
18.91		75	48.8	75.0	112	142	174	248	390	509	759	1182	1658	2115	2345	2861	3011	3511	5227		
20.93		68	45.9	70.0	109	155	152	237	341	487	746	1139	1663	2065	2302	2978	3140 ②	3322	5158		
23.16		60	45.6	73.8	109	162	—	Consult Factory					—	—	—	—	—	—	—	—	
25.63		56	46.0	70.2	109	152	—	Consult Factory					—	—	—	—	—	—	—	—	—
28.36		50	45.2	70.6	106	162	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
31.39		45	41.8	70.4	105	152	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
34.74		40	45.2	70.8	106	148	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1170		5.60	210	—	—	—	—	133	209	276	383	549	821	1176	1530	1678	2028	2112	2503	3586	
	6.20	190	35.3	62.1	96.1	126	139	226	307	397	563	888	1207	1587	1737	2007	2220	2638	3637		
	6.86	170	38.5	63.4	104	131	147	241	335	414	584	910	1363	1638	1832	2190	2246	2698	4050		
	7.59	155	42.3	65.9	108	135	157	251	323	425	606	952	1305	1699	1861	2164	2383	2870	3778		
	8.40	140	47.0	73.4	109	141	151	254	346	437	630	975	1452	1803	1859	2318	2395	2905	4243		
	9.30	125	45.4	68.6	107	144	160	255	338	448	640	1020	1501	1887	1996	2324	2554	3018	4516		
	10.29	115	44.6	69.7	104	145	154	245	353	471	664	1045	1576	1850	2046	2489	2650	3059	4649		
	11.39	100	47.4	64.1	94.9	142	163	257	378	483	673	1077	1626	1965	2131	2466	2715	3245	4824		
	12.61	90	49.7	69.2	103	159	169	246	360	496	680	1102	1685	2011	2099	2640	2811	3330	4865		
	13.95	84	45.8	75.6	113	164	167	259	384	509	691	1123	1553	2094	2272	2687	2909	3413	4572		
	15.44	75	50.7	75.0	111	164	172	248	335	536	718	1165	1738	2127	2179	2874	3032	3400	5138		
	17.09	68	46.0	69.9	108	170	168	260	389	548	729	1190	1824	2122	2403	2996	3108 ②	3580	5424		
	18.91	60	49.2	75.2	111	143	174	249	390	541	775	1234	1671	2133	2376	3039	3198 ②	3729	5460		
	20.93	56	46.1	70.2	109	156	152	237	340	489	758	1147	1676	2080	2322	3062	3259 ②	3354	5209		
	23.16	50	46.0	74.4	110	163	—	Consult Factory					—	—	—	—	—	—	—	—	
	25.63	45	46.2	70.3	109	152	—	Consult Factory					—	—	—	—	—	—	—	—	—
	28.36	40	45.3	70.7	106	162	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	31.39	37	42.0	70.4	106	153	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	34.74	34	45.5	70.8	106	149	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

① Pound-inches at low-speed shaft ... multiply values listed by 1000.

② For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

High-Speed Shaft RPM	Type	Availability of Types A / AR / AXV Double and Triple Reduction																	
		305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585	
All	A	X	X	X	X	X	X	X	X	X	X	X	X	X	—	X	—	X	X
	AR	—	—	—	—	—	X	X	X	X	X	X	—	X	—	X	—	—	—
	AXV	—	—	—	—	—	X	X	X	X	X	X	—	X	—	X	—	—	—

# Horsepower & Torque Ratings/Double Reduction

## Horsepower Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
870	5.60	155	—	—	—	—	317	564	745	1023	1504	2261	3115	4277	4442	5524	5651	6758	9020
	6.20	140	79.1	137	211	310	310	552	716	917	1424	2166	2922	4093	4270	5021	5486	6214	8726
	6.86	130	79.1	137	211	279	295	529	687	884	1336	2062	3068	3701	3920	4824	4857	5861	8916
	7.59	115	79.1	131	202	263	279	468	604	837	1205	1885	2599	3542	3695	4379	4761	5441	7338
	8.40	105	79.1	122	179	247	255	447	580	795	1130	1794	2689	3119	3302	4292	4173	5073	7560
	9.30	95	68.4	99.4	157	219	240	388	502	751	1067	1609	2391	2947	3289	3788	4112	4897	7341
	10.29	85	60.8	91.1	140	195	212	342	480	674	1001	1532	2303	2594	3119	3712	3857	4569	6683
	11.39	77	59.3	77.2	112	175	199	326	445	637	878	1438	2045	2668	2947	3294	3583	4157	6325
	12.61	70	56.0	77.2	112	175	191	288	397	608	861	1368	1954	2545	2594	3227	3353	3926	5909
	13.95	62	46.3	77.2	109	168	160	266	367	574	758	1211	1664	2182	2545	2812	3182 ①	3691	4996
	15.44	55	46.9	68.5	96.6	146	153	229	295	513	727	1121	1710	2108	2108	2671	2918 ①	3418	4797
	17.09	50	38.1	55.6	84.7	140	139	212	315	479	641	970	1466	1723	2108	2450	2743 ①	3056	4560
	18.91	45	36.1	54.7	80.2	104	133	186	288	441	598	896	1220	1524	1711	2265	2593 ①	2802	4219
	20.93	42	30.1	44.4	70.3	104	106	163	230	321	541	760	1123	1372	1551	2074	2197 ①	2204	3390
	23.16	38	28.6	44.6	67.6	96.0	—	—	—	—	—	—	—	—	—	—	—	—	—
	25.63	34	25.6	36.4	59.8	82.3	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	31	22.7	33.3	53.2	79.4	—	—	—	—	—	—	—	—	—	—	—	—	—
	31.39	28	18.8	30.9	48.3	68.1	—	—	—	—	—	—	—	—	—	—	—	—	—
	34.74	25	18.2	28.3	44.3	60.5	—	—	—	—	—	—	—	—	—	—	—	—	—
	720	5.60	130	—	—	—	—	263	473	619	896	1317	1981	2728	3747	3891	4839	4950	5919
6.20		115	65.4	113	175	261	257	457	592	804	1248	1897	2559	3585	3741	4398	4806	5443	7465
6.86		105	65.4	113	175	244	244	438	569	775	1170	1806	2688	3242	3434	4225	4255	5134	7465
7.59		95	65.4	109	168	230	231	390	500	733	1055	1651	2277	3102	3237	3836	4171	4766	6428
8.40		85	65.4	102	149	212	211	370	480	696	990	1571	2356	2732	2892	3760	3655	4443	6622
9.30		77	56.8	82.6	131	182	199	322	415	658	934	1410	2094	2582	2881	3318	3602	4289	6431
10.29		70	50.5	75.6	117	162	175	284	398	590	876	1342	1974	2272	2732	3252	3379	4003	5541
11.39		62	49.1	63.9	93.6	145	165	271	369	558	769	1239	1753	2227	2582	2845	3138 ①	3585	5274
12.61		55	46.3	63.9	93.6	145	158	241	329	532	754	1175	1617	2229	2272	2706	2937 ①	3429	4890
13.95		50	38.4	63.9	90.6	139	133	221	304	498	664	1011	1398	1818	2230	2327	2787 ①	3157	4376
15.44		45	38.9	56.8	80.1	121	127	191	244	429	616	933	1423	1811	1847	2211	2556 ①	2944	3970
17.09		42	31.6	46.1	70.3	116	115	176	260	398	561	807	1220	1433	1780	2028	2389 ①	2549	3774
18.91		38	30.1	45.3	66.5	86.8	110	155	238	365	497	744	1014	1267	1424	1875	2202 ①	2336	3491
20.93		34	24.9	36.8	58.3	86.8	87.9	135	191	267	449	631	933	1141	1290	1717	1831 ①	1837	2827
23.16		31	23.8	37.1	56.2	79.6	—	—	—	—	—	—	—	—	—	—	—	—	—
25.63		28	21.2	30.2	49.6	68.3	—	—	—	—	—	—	—	—	—	—	—	—	—
28.36		25	18.8	27.6	44.1	65.8	—	—	—	—	—	—	—	—	—	—	—	—	—
31.39		22	15.6	25.6	40.2	56.4	—	—	—	—	—	—	—	—	—	—	—	—	—
34.74		21	15.1	23.4	36.7	50.1	—	—	—	—	—	—	—	—	—	—	—	—	—
580		5.60	105	—	—	—	—	211	381	499	770	1132	1702	2345	3220	3345	4159	4255	5088
	6.20	95	52.7	91.1	141	210	207	368	477	691	1072	1631	2200	3082	3215	3781	4131	4679	6013
	6.86	85	52.7	91.1	141	206	197	353	458	666	1006	1553	2310	2786	2952	3494	3657	4413	6013
	7.59	77	52.7	88.2	136	197	186	316	403	630	907	1419	1957	2667	2782	3297	3585	4097	5525
	8.40	70	52.7	82.2	121	172	170	298	386	598	851	1350	1959	2348	2486	3200	3020	3819	5449
	9.30	62	45.9	66.8	106	148	160	261	334	566	803	1180	1787	2219	2476	2760	3020	3602	5192
	10.29	55	40.8	61.1	94.3	131	141	230	320	507	753	1119	1590	1953	2348	2628	2904 ①	3440	4463
	11.39	50	39.5	51.5	75.9	117	133	219	297	469	661	1004	1421	1808	2219	2292	2697 ①	2888	4248
	12.61	45	37.3	51.5	75.9	117	127	196	265	450	647	952	1303	1862	1953	2180	2525 ①	2762	3939
	13.95	42	31.0	51.5	73.2	112	107	178	245	402	566	819	1143	1474	1830	1874	2385 ①	2558	3661
	15.44	38	31.3	45.9	64.7	97.5	102	155	196	349	501	755	1153	1467	1583	1781	2197 ①	2391	3198
	17.09	34	25.5	37.2	56.7	93.9	92.4	142	210	322	455	652	987	1160	1442	1633	1940 ①	2070	3040
	18.91	31	24.3	36.6	53.7	70.4	88.4	125	192	294	402	602	819	1025	1153	1510	1788 ①	1897	2812
	20.93	28	20.1	29.7	47.0	70.4	70.8	109	154	215	363	510	753	923	1044	1383	1486 ①	1491	2295
	23.16	25	19.2	30.0	45.5	64.2	—	—	—	—	—	—	—	—	—	—	—	—	—
	25.63	22	17.1	24.3	40.0	55.1	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	21	15.2	22.3	35.6	53.1	—	—	—	—	—	—	—	—	—	—	—	—	—
	31.39	18	12.6	20.6	32.5	45.5	—	—	—	—	—	—	—	—	—	—	—	—	—
	34.74	17	12.2	18.9	29.6	40.4	—	—	—	—	—	—	—	—	—	—	—	—	—

① For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

High-Speed Shaft RPM	Type	Availability of Types A / AR / AXV Double and Triple Reduction																
		305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
All	A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	AR	—	—	—	—	—	—	X	X	X	X	X	X	—	—	—	—	—
	AXV	—	—	—	—	—	—	X	X	X	X	X	X	—	X	—	X	—

# Horsepower & Torque Ratings/Double Reduction

## Torque Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size ①																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
870	5.60	155	—	—	—	—	135	228	302	418	600	897	1285	1672	1833	2217	2309	2736	3776
	6.20	140	35.4	62.9	96.0	138	139	242	322	434	615	971	1319	1734	1899	2193	2426	2883	3975
	6.86	130	38.7	67.9	104	144	147	257	338	452	639	994	1490	1791	2002	2394	2454	2949	4426
	7.59	115	42.5	71.6	112	148	157	257	330	465	663	1041	1426	1857	2033	2366	2604	3136	4130
	8.40	105	47.2	74.3	110	154	151	264	346	477	688	1066	1587	1970	2032	2534	2617	3176	4637
	9.30	95	45.7	69.5	108	150	160	258	338	489	700	1115	1640	2062	2181	2540	2792	3298	4936
	10.29	85	44.8	70.0	105	146	154	247	353	515	726	1142	1722	2022	2236	2720	2896	3342	5081
	11.39	77	47.4	64.0	95.9	142	163	260	378	528	735	1176	1777	2107	2329	2695	2968	3548	5272
	12.61	70	49.7	69.1	104	164	169	250	360	542	743	1204	1811	2198	2294	2885	3072	3639	5154
	13.95	62	46.0	76.2	113	171	166	261	384	555	755	1228	1680	2126	2483	2851	3179 ②	3731	4997
	15.44	55	50.7	75.3	112	164	172	251	336	575	784	1237	1842	2325	2381	2959	3313 ②	3716	5230
	17.09	50	46.1	70.2	109	171	169	262	390	582	798	1239	1850	2144	2626	3038	3397 ②	3861	5450
	18.91	45	49.6	75.6	112	145	175	249	391	583	781	1246	1686	2152	2392	3057	3495 ②	3876	5461
	20.93	42	46.3	70.5	110	158	151	239	340	492	764	1156	1690	2098	2344	3061	3301 ②	3395	5277
	23.16	38	46.3	75.2	111	163	—	—	—	—	—	—	—	—	—	—	—	—	—
	25.63	34	46.3	70.5	110	153	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	31	45.4	70.9	107	163	—	—	—	—	—	—	—	—	—	—	—	—	—
31.39	28	42.5	70.6	107	154	—	—	—	—	—	—	—	—	—	—	—	—	—	
34.74	25	45.4	71.1	107	149	—	—	—	—	—	—	—	—	—	—	—	—	—	
720	5.60	130	—	—	—	—	135	231	303	443	634	950	1360	1770	1941	2346	2443	2896	3776
	6.20	115	35.4	62.6	96.2	141	139	242	322	460	651	1027	1396	1835	2010	2321	2568	3051	4109
	6.86	105	38.6	67.7	104	152	147	257	338	479	676	1052	1577	1895	2119	2534	2598	3121	4478
	7.59	95	42.4	72.0	112	156	157	258	330	492	702	1102	1510	1965	2152	2504	2757	3320	4371
	8.40	85	47.2	75.1	111	160	151	264	346	505	729	1128	1680	2085	2151	2682	2770	3361	4908
	9.30	77	45.8	69.8	109	151	160	259	338	518	740	1181	1736	2183	2309	2688	2955	3491	5225
	10.29	70	45.0	70.2	106	147	154	247	354	544	768	1209	1783	2140	2366	2879	3066	3538	5091
	11.39	62	47.4	64.0	96.9	142	163	261	378	558	778	1225	1841	2125	2466	2812	3140 ②	3697	5312
	12.61	55	49.7	69.1	105	164	169	253	360	574	786	1250	1811	2326	2428	2923	3251 ②	3840	5153
	13.95	50	46.1	76.2	114	171	167	262	384	582	799	1238	1706	2141	2628	2851	3365 ②	3856	5289
	15.44	45	50.8	75.5	112	164	172	253	335	581	803	1244	1852	2414	2521	2960	3507 ②	3867	5230
	17.09	42	46.2	70.3	110	171	168	263	389	584	844	1246	1860	2155	2680	3038	3575 ②	3892	5450
	18.91	38	50.0	75.7	112	146	174	251	390	583	784	1250	1693	2162	2405	3058	3586 ②	3905	5460
	20.93	34	46.3	70.6	110	160	152	239	341	495	766	1159	1696	2109	2356	3063	3324 ②	3419	5317
	23.16	31	46.5	75.6	112	163	—	—	—	—	—	—	—	—	—	—	—	—	—
	25.63	28	46.4	70.7	110	154	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	25	45.4	71.0	107	163	—	—	—	—	—	—	—	—	—	—	—	—	—
31.39	22	42.6	70.7	107	154	—	—	—	—	—	—	—	—	—	—	—	—	—	
34.74	21	45.5	71.0	107	149	—	—	—	—	—	—	—	—	—	—	—	—	—	
580	5.60	105	—	—	—	—	134	231	303	472	677	1013	1451	1889	2071	2503	2607	3090	3776
	6.20	95	35.4	62.7	96.3	140	139	242	322	490	694	1096	1490	1958	2145	2477	2740	3256	4108
	6.86	85	38.7	67.8	104	159	148	257	338	511	721	1123	1682	2022	2262	2601	2772	3330	4478
	7.59	77	42.4	72.4	113	166	157	260	330	525	749	1175	1611	2097	2296	2672	2941	3543	4664
	8.40	70	47.2	75.1	112	161	151	264	346	538	778	1203	1735	2225	2295	2834	2841	3586	5014
	9.30	62	46.0	70.1	109	152	160	261	337	553	790	1226	1839	2329	2463	2776	3075	3639	5237
	10.29	55	45.1	70.4	106	147	154	249	353	581	820	1252	1783	2284	2524	2889	3271 ②	3775	5090
	11.39	50	47.3	64.0	97.5	142	163	261	378	583	830	1232	1852	2142	2631	2812	3351 ②	3697	5311
	12.61	45	49.7	69.2	105	164	169	255	360	602	837	1257	1811	2412	2591	2923	3470 ②	3840	5153
	13.95	42	46.2	76.3	114	171	167	262	384	583	845	1245	1731	2155	2678	2850	3574 ②	3879	5493
	15.44	38	50.8	75.7	112	164	172	255	335	586	811	1250	1863	2427	2683	2960	3742 ②	3899	5230
	17.09	34	46.3	70.5	110	172	168	263	390	587	849	1249	1868	2166	2695	3037	3603 ②	3923	5450
	18.91	31	50.1	75.9	113	147	174	251	391	583	787	1255	1698	2171	2417	3057	3615 ②	3937	5460
	20.93	28	46.4	70.7	110	161	152	239	341	495	769	1163	1700	2117	2367	3062	3349 ②	3445	5359
	23.16	25	46.6	75.9	112	163	—	—	—	—	—	—	—	—	—	—	—	—	—
	25.63	22	46.4	70.6	110	154	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	21	45.6	71.2	107	164	—	—	—	—	—	—	—	—	—	—	—	—	—
31.39	18	42.7	70.6	108	154	—	—	—	—	—	—	—	—	—	—	—	—	—	
34.74	17	45.7	71.2	107	149	—	—	—	—	—	—	—	—	—	—	—	—	—	

① Pound-inches at low-speed shaft ... multiply values listed by 1000.

② For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

High-Speed Shaft RPM	Type	Availability of Types A / AR / AXV Double and Triple Reduction																	
		305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585	
All	A	X	X	X	X	X	X	X	X	X	X	X	X	X	—	X	—	X	X
	AR	—	—	—	—	—	—	X	X	X	X	X	X	—	X	—	X	—	—
	AXV	—	—	—	—	—	—	X	X	X	X	X	X	—	X	—	X	—	—

# Horsepower & Torque Ratings/Triple Reduction

## Horsepower Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size ①																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
1750	23.16	75.0	—	—	—	—	192	281	397	639	908	1226	1760	2567	2881	3112	3212	4119	5159
	25.63	68.0	—	—	—	—	181	296	354	606	800	1226	1553	2440	2567	3084	3212	3870	4538
	28.36	60.0	—	—	—	—	158	255	354	559	793	1196	1760	2306	2490	2832	3112 ②	3656	4073
	31.39	56.0	—	—	—	—	145	234	332	529	698	1108	1464	2124	2191	2470	2843 ②	3246	4073
	34.74	50.0	—	—	—	—	127	202	292	494	685	1023	1505	1986	2124	2232	2660 ②	3105	3720
	38.44	45.0	31.2	49.8	66.4	95.6	120	186	270	427	603	877	1254	1684	1952	1993	2465 ②	2631	3515
	42.54	40.0	29.4	49.9	66.4	95.6	115	171	216	408	569	809	1209	1565	1684	1895	2289 ②	2376	3515
	47.08	37.0	27.6	40.9	54.1	95.6	94.3	155	231	358	498	753	1072	1442	1442	1701	2149 ②	2222	2970
	52.11	34.0	23.6	34.4	54.1	88.8	90.2	142	213	317	442	695	1000	1331	1442	1617	2049 ②	1970	2800
	57.66	30.0	22.9	34.7	52.0	76.2	81.5	129	182	292	400	600	917	1158	1308	1391	1790 ②	1825	2570
	63.82	27.0	19.5	32.4	49.2	67.7	77.2	118	146	266	353	553	844	1060	1088	1321	1705 ②	1705	2423
	70.62	25.0	18.0	25.5	43.1	61.4	66.7	90.9	156	232	320	479	736	838	1028	1176	1454 ②	1503	2168
	78.16	22.0	15.9	24.3	38.8	54.1	62.5	91.9	143	211	270	442	677	800	995	1100	1331 ②	1413	1911
	86.50	20.0	14.7	18.2	34.0	50.5	53.6	80.3	120	196	244	407	559	706	878	960	1161 ②	1306	1768
	95.73	18.0	13.6	18.2	33.0	40.4	43.2	68.6	100	167	220	376	513	623	701	759	1069 ②	1038	1597
	105.9	16.5	12.5	17.8	28.9	39.8	—	63.1	91.4	132	204	319	472	560	669	698	888 ②	951	1464
	117.2	15.0	11.1	16.3	25.7	35.3	—	—	—	—	—	—	—	—	—	—	—	—	—
	129.7	13.5	9.24	15.1	23.5	32.9	—	—	—	—	—	—	—	—	—	—	—	—	—
	143.6	12.0	8.91	13.8	21.4	29.2	—	—	—	—	—	—	—	—	—	—	—	—	—
	158.9	11.0	8.01	8.48	19.7	26.5	—	—	—	—	—	—	—	—	—	—	—	—	—
175.9	10.0	7.47	8.48	17.5	23.5	—	—	—	—	—	—	—	—	—	—	—	—	—	
194.6	9.0	6.41	8.48	16.1	20.5	—	—	—	—	—	—	—	—	—	—	—	—	—	
215.4	8.1	5.99	8.48	14.6	19.9	—	—	—	—	—	—	—	—	—	—	—	—	—	
1430	23.16	60.0	—	—	—	—	157	232	345	555	789	1064	1528	2228	2502	2666	2788	3435	4479
	25.63	56.0	—	—	—	—	148	243	306	526	694	1064	1349	2088	2228	2557	2788	3197	3940
	28.36	50.0	—	—	—	—	129	210	293	486	688	983	1524	1965	2162	2314	2702 ②	3058	3537
	31.39	45.0	—	—	—	—	119	192	271	438	606	911	1250	1770	1842	2018	2468 ②	2653	3537
	34.74	40.0	—	—	—	—	104	166	238	411	573	840	1237	1632	1765	1824	2309 ②	2537	3230
	38.44	37.0	25.8	40.8	55.1	79.3	97.7	152	221	350	502	719	1024	1394	1604	1628	2140 ②	2150	3051
	42.54	34.0	24.0	41.0	55.1	79.3	93.6	140	177	335	467	664	988	1285	1394	1548	1987 ②	1942	2933
	47.08	30.0	22.6	33.5	44.8	79.3	77.0	127	189	294	409	617	879	1191	1191	1390	1866 ②	1816	2579
	52.11	27.0	19.5	28.4	44.8	72.7	73.7	117	174	260	364	569	820	1091	1191	1321	1726 ②	1610	2408
	57.66	25.0	18.7	28.4	42.6	62.4	66.6	105	149	239	328	492	752	949	1073	1136	1472 ②	1491	2134
	63.82	22.0	15.9	26.6	40.3	55.4	63.1	96.7	119	218	289	453	691	869	945	1080	1398 ②	1394	1980
	70.62	20.0	14.7	21.1	35.3	50.2	54.5	74.3	127	190	277	393	603	687	854	961	1196 ②	1228	1772
	78.16	18.0	13.0	19.9	31.7	44.8	51.2	75.2	117	173	221	362	555	655	815	899	1094 ②	1155	1561
	86.50	16.5	12.0	15.0	27.8	41.3	43.9	65.7	98.5	160	199	333	457	578	719	784	954 ②	1067	1445
	95.73	15.0	11.1	15.0	27.0	33.3	35.3	56.1	81.7	136	180	308	419	510	574	621	878 ②	853	1313
	105.9	13.5	10.2	14.6	23.6	32.5	—	51.6	74.7	108	167	261	386	459	548	571	729 ②	781	1203
	117.2	12.0	9.09	13.3	21.0	28.9	—	—	—	—	—	—	—	—	—	—	—	—	—
	129.7	11.0	7.56	12.4	19.3	26.9	—	—	—	—	—	—	—	—	—	—	—	—	—
	143.6	10.0	7.28	11.3	17.5	23.9	—	—	—	—	—	—	—	—	—	—	—	—	—
	158.9	9.0	6.54	6.97	16.1	21.7	—	—	—	—	—	—	—	—	—	—	—	—	—
175.9	8.1	6.11	6.97	14.3	19.2	—	—	—	—	—	—	—	—	—	—	—	—	—	
194.6	7.5	5.24	6.97	13.2	16.9	—	—	—	—	—	—	—	—	—	—	—	—	—	
215.4	6.6	4.89	6.97	11.9	16.3	—	—	—	—	—	—	—	—	—	—	—	—	—	
1170	23.16	50.0	—	—	—	—	128	193	284	482	685	925	1328	1868	2174	2181	2423	2811	3892
	25.63	45.0	—	—	—	—	121	199	251	435	603	876	1172	1737	1868	2092	2423 ②	2616	3423
	28.36	40.0	—	—	—	—	106	173	240	402	578	808	1254	1617	1813	1893	2348 ②	2502	3073
	31.39	37.0	—	—	—	—	97.2	157	222	359	506	748	1023	1448	1507	1651	2145 ②	2170	2961
	34.74	34.0	—	—	—	—	85.0	137	195	337	471	690	1016	1341	1444	1492	2007 ②	2076	2806
	38.44	30.0	21.3	33.4	45.6	65.7	80.0	125	181	287	412	591	838	1152	1318	1332	1859 ②	1759	2652
	42.54	27.0	19.7	33.7	45.6	65.7	76.6	115	145	274	383	545	809	1055	1152	1267	1656 ②	1589	2399
	47.08	25.0	18.5	27.4	37.1	65.7	63.0	104	155	241	335	507	721	978	983	1137	1541 ②	1486	2182
	52.11	22.0	16.1	23.5	37.1	59.6	60.3	95.5	142	214	299	467	673	896	975	1081	1417 ②	1317	1970
	57.66	20.0	15.3	23.3	34.9	51.1	54.5	86.2	122	196	269	403	617	776	880	930	1212 ②	1220	1746
	63.82	18.0	13.0	21.8	33.0	45.4	51.6	79.2	97.6	178	237	372	567	713	774	883	1147 ②	1140	1620
	70.62	16.5	12.1	17.4	28.9	41.1	44.6	60.9	104	156	227	322	495	563	701	786	984 ②	1005	1449
	78.16	15.0	10.6	16.3	26.0	37.1	42.0	61.6	95.3	141	181	297	455	537	668	735	900 ②	945	1278
	86.50	13.5	9.86	12.4	22.8	33.8	36.0	53.8	80.9	131	163	273	374	474	589	642	784 ②	873	1182
	95.73	12.0	9.12	12.4	22.1	27.5	28.9	46.0	66.9	112	148	252	343	418	471	509	722 ②	702	1080
	105.9	11.0	8.38	11.9	19.3	26.6	—	42.2	61.1	88.6	137	214	315	376	449	468	600 ②	642	989
	117.2	10.0	7.44	10.9	17.2	23.7	—	—	—	—	—	—	—	—	—	—	—	—	—
	129.7	9.0	6.20	10.1	15.8	22.0	—	—	—	—	—	—	—	—	—	—	—	—	—
	143.6	8.1	5.96	9.25	14.3	19.5	—	—	—	—	—	—	—	—	—	—	—	—	—
	158.9	7.5	5.36	5.73	13.2	17.7	—	—	—	—	—	—	—	—	—	—	—	—	—
175.9	6.6	5.00	5.73	11.7	15.7	—	—	—	—	—	—	—	—	—	—	—	—	—	
194.6	6.0	4.29	5.73	10.8	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	
215.4	5.4	4.01	5.73	9.74	13.3	—	—	—	—	—	—	—	—	—	—	—	—	—	

① See page 22 for availability of Type A, AR, AXV triple reduction.

② For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

# Horsepower & Torque Ratings/Triple Reduction

## Torque Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size ①④																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
1750	23.16	75.0	–	–	–	–	154	226	336	528	726	1010	1501	2066	2313	2570	2588	3397	4343
	25.63	68.0	–	–	–	–	163	260	325	543	738	1163	1467	2206	2350	2772	2863	3657	4224
	28.36	60.0	–	–	–	–	154	252	355	561	770	1235	1744	2309	2464	2889	3133 ③	3752	4349
	31.39	56.0	–	–	–	–	166	261	384	576	782	1234	1644	2324	2517	2813	3210 ③	3697	4740
	34.74	50.0	–	–	–	–	157	252	360	593	820	1241	1849	2407	2637	2789	3392 ③	3841	4525
	38.44	45.0	42.9	70.3	92.9	131	167	262	384	584	833	1243	1746	2354	2673	2813	3449 ③	3698	4632
	42.54	40.0	44.0	74.9	103	146	173	262	334	603	839	1248	1810	2423	2670	2923	3618 ③	3696	5048
	47.08	37.0	46.2	70.5	92.1	157	166	263	389	585	847	1247	1866	2379	2498	2813	3656 ③	3718	4999
	52.11	34.0	42.7	65.9	103	163	172	262	385	588	815	1253	1868	2433	2700	2922	3795 ③	3841	5220
	57.66	30.0	46.4	70.6	110	153	168	264	384	588	851	1252	1870	2407	2701	2851	3616 ③	3880	5407
	63.82	27.0	44.9	75.7	113	149	172	263	335	583	788	1256	1874	2441	2566	2959	3914 ③	3899	5397
	70.62	25.0	46.4	67.8	110	154	174	240	390	588	806	1255	1876	2178	2674	3003	3640 ③	3899	5450
	78.16	22.0	44.8	71.0	113	150	174	251	392	583	772	1260	1879	2181	2715	3023	3652 ③	3939	5450
	86.50	20.0	46.4	59.2	110	154	175	240	368	586	792	1263	1699	2184	2719	3038	3669 ③	3938	5461
	95.73	18.0	45.1	63.0	113	143	153	240	340	587	772	1262	1696	2187	2436	2688	3677 ③	3485	5424
	105.9	16.5	46.4	70.7	110	154	–	241	340	497	776	1171	1699	2129	2438	2690	3405 ③	3496	5438
	117.2	15.0	45.5	71.1	107	149	–	–	–	–	–	–	–	–	–	–	–	–	–
	129.7	13.5	42.8	70.8	108	155	–	–	–	–	–	–	–	–	–	–	–	–	–
	143.6	12.0	45.6	71.1	107	150	–	–	–	–	–	–	–	–	–	–	–	–	–
	158.9	11.0	45.6	50.2	111	155	–	–	–	–	–	–	–	–	–	–	–	–	–
	175.9	10.0	45.6	55.1	107	150	–	–	–	–	–	–	–	–	–	–	–	–	–
194.6	9.0	45.6	59.2	109	141	–	–	–	–	–	–	–	–	–	–	–	–	–	
215.4	8.1	45.6	65.1	108	150	–	–	–	–	–	–	–	–	–	–	–	–	–	
1430	23.16	60.0	–	–	–	–	154	228	358	561	772	1073	1595	2195	2459	2695	–	3467	4615
	25.63	56.0	–	–	–	–	163	261	344	577	783	1235	1559	2310	2496	2813	3041	3697	4488
	28.36	50.0	–	–	–	–	154	254	360	597	817	1242	1848	2408	2618	2888	3329 ③	3841	4622
	31.39	45.0	–	–	–	–	167	262	384	584	831	1242	1718	2370	2590	2812	3410 ③	3698	5038
	34.74	40.0	–	–	–	–	157	253	359	604	839	1247	1860	2421	2682	2789	3604 ③	3840	4808
	38.44	37.0	43.5	70.5	94.3	133	166	262	385	585	848	1247	1745	2384	2688	2812	3665 ③	3698	4920
	42.54	34.0	44.0	75.3	105	148	172	262	335	606	843	1254	1810	2435	2705	2922	3844 ③	3697	5155
	47.08	30.0	46.3	70.6	93.4	160	166	264	390	588	852	1250	1872	2405	2525	2813	3885 ③	3718	5312
	52.11	27.0	43.2	66.5	104	163	172	264	384	591	821	1255	1874	2440	2729	2922	3912 ③	3841	5494
	57.66	25.0	46.4	70.7	110	154	168	263	385	589	854	1256	1877	2414	2711	2849	3639 ③	3879	5494
	63.82	22.0	44.8	76.0	113	149	173	264	334	585	789	1259	1878	2449	2728	2960	3927 ③	3901	5397
	70.62	20.0	46.3	68.6	110	154	174	240	388	590	854	1260	1881	2185	2719	3003	3664 ③	3899	5451
	78.16	18.0	44.8	71.1	113	152	175	252	392	585	773	1263	1885	2185	2721	3023	3674 ③	3940	5448
	86.50	16.5	46.3	59.7	110	154	175	241	370	586	790	1265	1700	2188	2725	3036	3689 ③	3937	5462
	95.73	15.0	45.1	63.5	113	144	153	240	340	585	773	1265	1695	2191	2441	2691	3696 ③	3505	5457
	105.9	13.5	46.3	71.0	110	154	–	241	340	497	777	1173	1701	2135	2444	2693	3421 ③	3513	5468
	117.2	12.0	45.6	71.0	107	150	–	–	–	–	–	–	–	–	–	–	–	–	–
	129.7	11.0	42.9	71.1	109	155	–	–	–	–	–	–	–	–	–	–	–	–	–
	143.6	10.0	45.6	71.2	107	150	–	–	–	–	–	–	–	–	–	–	–	–	–
	158.9	9.0	45.6	50.4	111	155	–	–	–	–	–	–	–	–	–	–	–	–	–
	175.9	8.1	45.6	55.4	107	150	–	–	–	–	–	–	–	–	–	–	–	–	–
194.6	7.5	45.6	59.6	109	143	–	–	–	–	–	–	–	–	–	–	–	–	–	
215.4	6.6	45.6	65.4	107	150	–	–	–	–	–	–	–	–	–	–	–	–	–	
1170	23.16	50.0	–	–	–	–	153	232	360	596	819	1140	1694	2249	2611	2694	2920	3468	4901
	25.63	45.0	–	–	–	–	163	261	345	583	832	1243	1656	2348	2558	2813	3230 ③	3698	4766
	28.36	40.0	–	–	–	–	154	256	360	604	839	1248	1859	2422	2683	2888	3536 ③	3841	4908
	31.39	37.0	–	–	–	–	166	262	384	585	848	1246	1719	2370	2589	2812	3622 ③	3696	5154
	34.74	34.0	–	–	–	–	157	256	360	605	843	1251	1867	2431	2682	2788	3828 ③	3841	5105
	38.44	30.0	43.8	70.5	95.4	135	166	263	385	587	851	1253	1745	2408	2699	2812	3891 ③	3698	5227
	42.54	27.0	44.1	75.6	106	150	173	264	336	606	845	1258	1812	2443	2732	2923	3915 ③	3697	5154
	47.08	25.0	46.4	70.6	94.5	162	166	264	391	589	853	1256	1877	2414	2547	2812	3921 ③	3719	5493
	52.11	22.0	43.6	67.3	105	163	172	264	383	594	824	1259	1880	2449	2730	2922	3926 ③	3840	5493
	57.66	20.0	46.4	70.9	110	154	168	264	385	590	856	1258	1882	2413	2718	2851	3662 ③	3880	5494
	63.82	18.0	44.8	76.2	113	149	172	264	335	584	791	1264	1883	2456	2731	2958	3938 ③	3899	5397
	70.62	16.5	46.6	69.2	110	154	174	240	389	592	855	1262	1887	2188	2728	3002	3685 ③	3900	5448
	78.16	15.0	44.7	71.2	113	154	175	252	390	583	774	1267	1889	2189	2726	3021	3694 ③	3940	5451
	86.50	13.5	46.5	60.4	111	154	176	241	371	586	791	1267	1700	2193	2728	3039	3706 ③	3937	5461
	95.73	12.0	45.3	64.2	113	145	153	241	340	589	777	1265	1696	2194	2448	2696	3714 ③	3525	5486
	105.9	11.0	46.5	70.7	110	154	–	241	340	499	779	1175	1696	2138	2447	2698	3441 ③	3530	5495
	117.2	10.0	45.6	71.1	107	150	–	–	–	–	–	–	–	–	–	–	–	–	–
	129.7	9.0	43.0	70.8	109	155	–	–	–	–	–	–	–	–	–	–	–	–	–
	143.6	8.1	45.6	71.3	107	150	–	–	–	–	–	–	–	–	–	–	–	–	–
	158.9	7.5	45.7	50.7	111	154	–	–	–	–	–	–	–	–	–	–	–	–	–
	175.9	6.6	45.6	55.7	107	150	–	–	–	–	–	–	–	–	–	–	–	–	–
194.6	6.0	45.6	59.8	109	143	–	–	–	–	–	–	–	–	–	–	–	–	–	
215.4	5.4	45.7	65.8	107	150	–	–	–	–	–	–	–	–	–	–	–	–	–	

① Pound-inches at low-speed shaft ... multiply values listed by 1000.

② See page 22 for availability of Type A, AR, AXV triple reduction.

③ For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

# Horsepower & Torque Ratings/Triple Reduction

## Horsepower Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios $\pm 4\%$	Approx. Low-Speed Shaft RPM	Drive Size ①																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
870	23.16	38.0	-	-	-	-	95.5	147	211	364	523	713	1033	1389	1651	1622	1969 ②	2090	3006
	25.63	34.0	-	-	-	-	90.0	149	186	325	458	655	891	1316	1389	1555	1969 ②	1945	2782
	28.36	31.0	-	-	-	-	78.5	130	178	300	432	604	938	1210	1348	1408	1908 ②	1860	2498
	31.39	28.0	-	-	-	-	72.3	117	165	268	378	559	760	1077	1120	1228	1704 ②	1614	2201
	34.74	25.0	-	-	-	-	63.2	103	145	252	351	516	759	1002	1074	1109	1529 ②	1544	2245
	38.44	22.0	16.0	24.9	34.4	49.5	59.5	93.2	134	214	307	441	623	859	985	991	1395 ②	1308	2073
	42.54	21.0	14.6	25.2	34.4	49.5	56.9	85.6	108	205	286	407	601	787	856	942	1237 ②	1181	1784
	47.08	18.0	13.8	20.4	27.9	49.5	46.9	77.4	115	179	250	378	538	727	738	845	1151 ②	1105	1623
	52.11	17.0	12.1	17.6	27.9	44.4	44.9	71.1	106	160	224	348	502	668	725	804	1058 ②	979	1465
	57.66	15.0	11.4	17.3	26.0	38.1	40.5	64.2	90.5	146	200	301	460	577	657	691	909 ②	907	1298
	63.82	14.0	9.68	16.2	24.6	33.8	38.4	59.0	72.6	132	177	277	423	531	576	657	856 ②	848	1204
	70.62	12.5	8.98	13.0	21.5	30.6	33.2	45.3	77.5	116	169	240	369	420	522	585	737 ②	747	1078
	78.16	11.0	7.90	12.1	19.3	27.9	31.4	45.9	70.9	105	135	221	339	400	498	547	674 ②	702	950
	86.50	10.0	7.34	9.26	16.9	25.2	26.9	40.0	60.3	97.5	122	203	278	353	439	477	587 ②	649	879
	95.73	9.1	6.78	9.26	16.4	20.7	21.5	34.2	49.7	82.9	110	188	255	311	351	379	540 ②	525	804
	105.9	8.3	6.24	8.88	14.4	19.8	-	31.4	45.4	65.9	102	159	235	280	334	349	449 ②	481	735
	117.2	7.5	5.54	8.12	12.8	17.6	-	-	-	-	-	-	-	-	-	-	-	-	-
	129.7	6.8	4.62	7.53	11.8	16.4	-	-	-	-	-	-	-	-	-	-	-	-	-
	143.6	6.1	4.43	6.88	10.6	14.5	-	-	-	-	-	-	-	-	-	-	-	-	-
	158.9	5.5	3.98	4.29	9.80	13.2	-	-	-	-	-	-	-	-	-	-	-	-	-
	175.9	5.0	3.72	4.29	8.71	11.7	-	-	-	-	-	-	-	-	-	-	-	-	-
194.6	4.5	3.19	4.29	8.03	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	
215.4	4.1	2.98	4.29	7.25	9.90	-	-	-	-	-	-	-	-	-	-	-	-	-	
720	23.16	31.0	-	-	-	-	79.0	123	175	302	434	590	855	1149	1366	1342	1715 ②	1730	2488
	25.63	28.0	-	-	-	-	74.5	123	154	270	380	544	737	1099	1149	1287	1715 ②	1610	2428
	28.36	25.0	-	-	-	-	65.0	108	148	249	358	501	779	1004	1115	1165	1601 ②	1539	2117
	31.39	22.0	-	-	-	-	59.8	97.1	137	222	313	464	629	891	927	1016	1410 ②	1336	1822
	34.74	21.0	-	-	-	-	52.3	85.1	120	209	291	428	630	832	889	918	1269 ②	1277	1858
	38.44	18.0	13.3	20.6	28.7	41.3	49.2	77.2	111	178	255	366	516	711	818	820	1158 ②	1082	1715
	42.54	17.0	12.1	20.9	28.7	41.3	47.1	70.9	89.1	170	237	337	498	653	709	780	1027 ②	978	1477
	47.08	15.0	11.4	16.9	23.2	41.3	38.8	64.1	95.2	149	207	313	446	602	614	700	955 ②	914	1343
	52.11	14.0	10.0	14.7	23.2	36.8	37.1	58.9	87.5	133	186	289	416	554	600	665	878 ②	810	1212
	57.66	12.5	9.45	14.3	21.5	31.5	33.5	53.2	74.9	121	166	249	381	478	545	572	756 ②	751	1074
	63.82	11.0	8.01	13.4	20.3	28.0	31.7	48.8	60.1	110	146	230	350	440	476	544	709 ②	702	997
	70.62	10.0	7.44	10.8	17.8	25.4	27.4	37.5	64.2	96.0	140	199	305	348	433	484	613 ②	618	892
	78.16	9.1	6.54	10.0	16.0	23.2	26.0	38.0	58.7	87.0	112	183	281	332	413	452	560 ②	581	786
	86.50	8.3	6.08	7.69	14.0	20.9	22.2	33.1	50.0	80.7	101	168	230	292	364	395	488 ②	537	727
	95.73	7.5	5.61	7.69	13.6	17.2	17.8	28.3	41.1	68.6	91.1	156	211	258	291	314	449 ②	436	666
	105.9	6.8	5.16	7.35	11.9	16.4	-	26.0	37.6	54.6	84.2	132	194	232	277	289	373 ②	399	608
	117.2	6.1	4.58	6.73	10.6	14.6	-	-	-	-	-	-	-	-	-	-	-	-	-
	129.7	5.5	3.82	6.23	9.76	13.6	-	-	-	-	-	-	-	-	-	-	-	-	-
	143.6	5.0	3.67	5.70	8.81	12.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	158.9	4.5	3.30	3.56	8.11	10.9	-	-	-	-	-	-	-	-	-	-	-	-	-
	175.9	4.1	3.08	3.56	7.21	9.70	-	-	-	-	-	-	-	-	-	-	-	-	-
194.6	3.8	2.64	3.56	6.65	8.66	-	-	-	-	-	-	-	-	-	-	-	-	-	
215.4	3.3	2.47	3.56	6.00	8.19	-	-	-	-	-	-	-	-	-	-	-	-	-	
580	23.16	25.0	-	-	-	-	63.7	99.7	141	244	351	476	689	926	1101	1081	1382 ②	1393	2004
	25.63	22.0	-	-	-	-	60.0	99.6	124	218	307	439	594	885	926	1037	1382 ②	1297	1956
	28.36	21.0	-	-	-	-	52.4	87.1	119	201	289	405	629	811	899	939	1294 ②	1240	1705
	31.39	18.0	-	-	-	-	48.2	78.3	110	180	253	375	507	718	747	819	1136 ②	1076	1468
	34.74	17.0	-	-	-	-	42.1	68.8	96.7	168	235	345	509	672	716	740	1025 ②	1029	1497
	38.44	15.0	10.8	16.6	23.2	33.5	39.6	62.2	89.5	143	206	295	416	572	660	660	935 ②	872	1382
	42.54	14.0	9.74	16.8	23.2	33.5	37.9	57.2	71.7	137	191	272	401	527	571	628	829 ②	788	1189
	47.08	12.5	9.21	13.6	18.8	33.5	31.2	51.7	76.7	120	167	253	360	485	497	564	771 ②	737	1082
	52.11	11.0	8.06	11.9	18.8	29.7	29.9	47.5	70.5	107	150	233	336	447	484	536	708 ②	653	977
	57.66	10.0	7.62	11.6	17.3	25.4	27.0	42.8	60.3	97.4	134	201	308	385	439	461	612 ②	605	865
	63.82	9.1	6.45	10.8	16.4	22.6	25.6	39.4	48.4	88.3	118	185	283	355	384	438	572 ②	565	803
	70.62	8.3	5.99	8.77	14.4	20.4	22.1	30.3	51.7	77.4	113	160	246	281	349	390	496 ②	498	719
	78.16	7.5	5.27	8.09	12.9	18.8	20.9	30.6	47.3	70.1	90.2	148	226	268	333	364	453 ②	468	633
	86.50	6.8	4.90	6.22	11.3	16.8	17.9	26.7	40.4	65.0	81.3	136	185	236	294	318	395 ②	433	586
	95.73	6.1	4.52	6.22	11.0	13.9	14.3	22.8	33.1	55.3	73.5	125	170	208	234	253	363 ②	353	536
	105.9	5.5	4.16	5.93	9.60	13.2	-	21.0	30.3	44.0	67.8	106	156	187	223	233	301 ②	323	490
	117.2	5.0	3.69	5.42	8.54	11.7	-	-	-	-	-	-	-	-	-	-	-	-	-
	129.7	4.5	3.08	5.02	7.87	10.9	-	-	-	-	-	-	-	-	-	-	-	-	-
	143.6	4.1	2.96	4.59	7.10	9.70	-	-	-	-	-	-	-	-	-	-	-	-	-
	158.9	3.8	2.66	2.87	6.54	8.80	-	-	-	-	-	-	-	-	-	-	-	-	-
	175.9	3.3	2.48	2.87	5.81	7.81	-	-	-	-	-	-	-	-	-	-	-	-	-
194.6	3.0	2.13	2.87	5.36	7.00	-	-	-	-	-	-	-	-	-	-	-	-	-	
215.4	2.7	1.99	2.87	4.83	6.60	-	-	-	-	-	-	-	-	-	-	-	-	-	

① See page 22 for availability of Type A, AR, AXV triple reduction.

② For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

# Horsepower & Torque Ratings/Triple Reduction

## Torque Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size ①②																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
870	23.16	38.0	—	—	—	—	154	238	360	605	841	1181	1772	2249	2667	2695	3191 ③	3467	5091
	25.63	34.0	—	—	—	—	163	263	344	586	850	1250	1693	2393	2558	2812	3530 ③	3697	5209
	28.36	31.0	—	—	—	—	154	259	360	606	844	1255	1870	2437	2683	2889	3864 ③	3840	5365
	31.39	28.0	—	—	—	—	166	263	384	587	852	1253	1717	2371	2588	2813	3870 ③	3697	5153
	34.74	25.0	—	—	—	—	157	258	360	608	845	1259	1875	2443	2682	2787	3922 ③	3841	5493
	38.44	22.0	44.3	70.7	96.8	137	166	264	383	588	853	1257	1745	2415	2713	2813	3927 ③	3698	5495
	42.54	21.0	44.0	76.1	108	152	172	264	336	610	848	1263	1810	2451	2730	2923	3933 ③	3696	5154
	47.08	18.0	46.5	70.7	95.6	164	166	264	390	588	856	1259	1883	2413	2571	2811	3939 ③	3719	5494
	52.11	17.0	44.1	67.8	106	164	173	264	385	597	831	1262	1886	2456	2730	2923	3942 ③	3839	5494
	57.66	15.0	46.5	70.8	111	154	168	264	384	591	856	1263	1887	2413	2728	2849	3693 ③	3879	5493
	63.82	14.0	44.8	76.1	113	150	173	264	335	582	794	1265	1889	2460	2733	2960	3953 ③	3900	5395
	70.62	12.5	46.5	69.5	110	154	174	241	390	592	856	1265	1892	2195	2731	3004	3711 ③	3898	5451
	78.16	11.0	44.8	71.1	113	156	176	253	390	583	776	1267	1893	2193	2733	3023	3720 ③	3936	5450
	86.50	10.0	46.6	60.6	110	155	177	241	372	587	796	1267	1699	2197	2735	3036	3731 ③	3936	5461
	95.73	9.1	45.2	64.4	113	147	153	241	340	586	777	1270	1696	2196	2453	2700	3736 ③	3545	5492
	105.9	8.3	46.6	70.9	111	154	—	241	340	499	780	1174	1702	2141	2448	2706	3463 ③	3556	5492
	117.2	7.5	45.7	71.3	107	150	—	—	—	—	—	—	—	—	—	—	—	—	—
	129.7	6.8	43.1	71.0	109	155	—	—	—	—	—	—	—	—	—	—	—	—	—
	143.6	6.1	45.6	71.3	107	150	—	—	—	—	—	—	—	—	—	—	—	—	—
	158.9	5.5	45.6	51.0	111	155	—	—	—	—	—	—	—	—	—	—	—	—	—
	175.9	5.0	45.7	56.1	107	150	—	—	—	—	—	—	—	—	—	—	—	—	—
194.6	4.5	45.6	60.2	109	144	—	—	—	—	—	—	—	—	—	—	—	—	—	
215.4	4.1	45.7	66.2	108	150	—	—	—	—	—	—	—	—	—	—	—	—	—	
720	23.16	31.0	—	—	—	—	154	240	360	607	843	1181	1772	2248	2666	2694	3359 ③	3468	5091
	25.63	28.0	—	—	—	—	163	262	344	588	852	1254	1692	2415	2556	2812	3715 ③	3698	5494
	28.36	25.0	—	—	—	—	154	260	361	608	845	1257	1876	2443	2681	2888	3918 ③	3839	5494
	31.39	22.0	—	—	—	—	166	264	385	587	852	1256	1717	2370	2588	2812	3869 ③	3698	5154
	34.74	21.0	—	—	—	—	157	258	360	610	846	1261	1881	2451	2683	2788	3934 ③	3839	5493
	38.44	18.0	44.5	70.7	97.6	138	166	264	384	591	856	1261	1746	2415	2722	2813	3939 ③	3696	5493
	42.54	17.0	44.0	76.2	109	153	172	264	335	611	849	1264	1812	2457	2733	2924	3946 ③	3698	5156
	47.08	15.0	46.4	70.8	96.0	165	166	264	390	592	856	1260	1886	2414	2585	2814	3949 ③	3717	5494
	52.11	14.0	44.0	68.4	107	164	172	264	384	600	833	1266	1888	2461	2730	2921	3953 ③	3838	5492
	57.66	12.5	46.5	70.7	110	154	168	265	384	592	858	1263	1888	2415	2735	2850	3712 ③	3881	5492
	63.82	11.0	44.8	76.1	113	150	172	264	335	586	792	1270	1889	2463	2729	2962	3956 ③	3902	5398
	70.62	10.0	46.6	69.8	110	155	174	241	390	592	857	1267	1890	2198	2738	3004	3730 ③	3897	5450
	78.16	9.1	44.8	71.0	113	157	176	253	391	584	778	1268	1896	2200	2739	3019	3735 ③	3936	5448
	86.50	8.3	46.6	60.8	110	155	176	241	373	587	797	1267	1699	2196	2740	3038	3748 ③	3935	5458
	95.73	7.5	45.2	64.7	113	148	153	241	339	586	777	1273	1695	2201	2457	2703	3754 ③	3558	5497
	105.9	6.8	46.6	70.9	111	155	—	241	340	499	778	1178	1698	2144	2454	2707	3476 ③	3565	5489
	117.2	6.1	45.6	71.4	107	150	—	—	—	—	—	—	—	—	—	—	—	—	—
	129.7	5.5	43.0	71.0	109	155	—	—	—	—	—	—	—	—	—	—	—	—	—
	143.6	5.0	45.6	71.4	107	150	—	—	—	—	—	—	—	—	—	—	—	—	—
	158.9	4.5	45.7	51.2	111	155	—	—	—	—	—	—	—	—	—	—	—	—	—
	175.9	4.1	45.7	56.2	107	150	—	—	—	—	—	—	—	—	—	—	—	—	—
194.6	3.8	45.6	60.4	109	145	—	—	—	—	—	—	—	—	—	—	—	—	—	
215.4	3.3	45.8	66.4	108	150	—	—	—	—	—	—	—	—	—	—	—	—	—	
580	23.16	25.0	—	—	—	—	154	242	361	609	847	1183	1773	2249	2668	2694	3360 ③	3466	5091
	25.63	22.0	—	—	—	—	163	264	344	590	855	1257	1693	2414	2558	2813	3716 ③	3698	5494
	28.36	21.0	—	—	—	—	154	260	361	609	847	1262	1881	2450	2684	2890	3931 ③	3840	5493
	31.39	18.0	—	—	—	—	166	264	384	591	855	1261	1718	2371	2589	2814	3870 ③	3697	5155
	34.74	17.0	—	—	—	—	157	259	360	608	849	1262	1887	2458	2682	2790	3944 ③	3840	5494
	38.44	15.0	44.8	70.7	97.9	139	166	264	384	590	858	1262	1747	2412	2727	2811	3948 ③	3698	5495
	42.54	14.0	44.0	76.1	109	155	172	264	335	611	850	1266	1812	2462	2732	2923	3954 ③	3699	5153
	47.08	12.5	46.6	70.7	96.6	166	166	265	390	592	857	1264	1890	2415	2597	2814	3957 ③	3721	5494
	52.11	11.0	44.0	68.7	108	164	172	265	384	599	834	1267	1893	2465	2734	2923	3957 ③	3841	5496
	57.66	10.0	46.6	71.2	110	154	168	264	384	592	860	1265	1895	2415	2735	2851	3730 ③	3881	5491
	63.82	9.1	44.8	76.1	113	150	173	265	335	584	794	1268	1896	2467	2733	2960	3962 ③	3898	5397
	70.62	8.3	46.5	70.3	111	154	174	241	390	592	859	1265	1892	2203	2739	3004	3747 ③	3898	5453
	78.16	7.5	44.8	71.3	113	157	176	253	391	584	778	1273	1893	2204	2741	3018	3751 ③	3936	5447
	86.50	6.8	46.6	61.1	111	155	176	241	374	587	796	1273	1696	2203	2747	3036	3766 ③	3939	5461
	95.73	6.1	45.2	64.9	114	148	153	241	339	587	778	1266	1696	2203	2453	2703	3767 ③	3576	5492
	105.9	5.5	46.6	71.1	111	154	—	242	340	500	778	1174	1695	2145	2452	2710	3482 ③	3582	5492
	117.2	5.0	45.6	71.4	108	149	—	—	—	—	—	—	—	—	—	—	—	—	—
	129.7	4.5	43.1	71.0	109	154	—	—	—	—	—	—	—	—	—	—	—	—	—
	143.6	4.1	45.7	71.4	108	150	—	—	—	—	—	—	—	—	—	—	—	—	—
	158.9	3.8	45.7	51.2	111	155	—	—	—	—	—	—	—	—	—	—	—	—	—
	175.9	3.3	45.7	56.3	107	150	—	—	—	—	—	—	—	—	—	—	—	—	—
194.6	3.0	45.7	60.5	109	146	—	—	—	—	—	—	—	—	—	—	—	—	—	
215.4	2.7	45.8	66.4	107	150	—	—	—	—	—	—	—	—	—	—	—	—	—	

① Pound-inches at low-speed shaft ... multiply values listed by 1000.

② See page 22 for availability of Type A, AR, AXV triple reduction.

③ For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

# Horsepower & Torque Ratings/Quadruple Reduction

## Horsepower Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±5%	Approx. Low-Speed Shaft RPM	Drive Size									
			385	405	425	445	465	485	505	525	535	555
1750	105.9	16.5	42.6	—	—	—	—	—	—	—	—	—
	117.2	15.0	40.8	56.5	80.3	139	211	303	462	570	594	812 ①
	129.7	13.5	36.9	58.4	85.8	133	184	282	387	524	594	812 ①
	143.6	12.0	35.3	47.3	78.9	117	166	260	347	483	523	765 ①
	158.9	11.0	28.6	41.7	67.5	106	147	224	333	416	475	706 ①
	175.9	10.0	28.6	38.4	54.1	96.5	130	206	299	384	415	610 ①
	194.6	9.0	23.2	32.9	57.9	84.5	125	179	266	291	377	531 ①
	215.4	8.1	22.2	30.8	52.9	76.6	112	165	235	289	360	507 ①
	238.4	7.5	20.0	31.8	45.1	71.6	99.6	145	228	285	291	454 ①
	263.8	6.6	19.2	25.7	37.1	64.8	87.8	133	210	264	284	395 ①
	291.9	6.0	15.6	22.4	39.0	56.9	84.1	115	183	208	259	365 ①
	323.1	5.4	15.5	20.9	35.6	51.4	67.1	106	168	184	247	303 ①
	357.5	5.0	13.3	18.2	30.5	47.7	60.5	97.6	137	167	218	279 ①
395.7	4.4	10.6	16.9	25.0	40.6	54.7	90.2	116	154	174	241 ①	
437.9	4.0	—	15.6	22.8	32.3	50.5	82.9	111	139	153	222 ①	
1430	105.9	13.5	34.8	—	—	—	—	—	—	—	—	—
	117.2	12.0	33.4	46.2	65.6	114	172	248	378	466	485	705 ①
	129.7	11.0	30.1	47.8	70.1	109	151	231	316	429	485	674 ①
	143.6	10.0	28.8	38.7	64.5	95.9	136	212	283	395	427	626 ①
	158.9	9.0	23.4	34.1	55.2	87.0	121	183	272	340	389	578 ①
	175.9	8.1	23.3	31.4	44.2	78.8	106	169	244	314	339	501 ①
	194.6	7.5	18.9	27.2	47.3	69.1	102	146	218	242	309	436 ①
	215.4	6.6	18.1	25.1	43.2	62.6	91.8	135	192	237	294	418 ①
	238.4	6.0	16.4	26.0	36.9	58.5	81.4	118	187	233	242	372 ①
	263.8	5.4	15.7	21.0	30.3	53.0	71.8	109	171	216	232	324 ①
	291.9	5.0	12.7	18.3	31.9	46.5	68.8	94.2	149	170	212	299 ①
	323.1	4.4	12.7	17.0	29.1	42.0	54.8	86.8	137	150	202	248 ①
	357.5	4.0	10.8	14.9	24.9	39.0	49.4	79.8	112	136	178	228 ①
395.7	3.6	8.68	13.8	20.4	33.2	44.7	73.7	94.7	126	142	197 ①	
437.9	3.2	—	12.7	18.7	26.4	41.3	67.8	90.3	113	125	182 ①	
1170	105.9	11.0	28.5	—	—	—	—	—	—	—	—	—
	117.2	10.0	27.3	37.8	53.7	93.1	141	203	310	382	402	586 ①
	129.7	9.0	24.7	39.1	57.4	89.4	123	189	259	351	402	552 ①
	143.6	8.1	23.6	31.6	52.8	78.6	111	174	232	324	350	513 ①
	158.9	7.5	19.1	27.9	45.2	71.3	98.7	150	223	278	318	473 ①
	175.9	6.6	19.1	25.7	36.2	64.5	87.1	138	200	257	278	411 ①
	194.6	6.0	15.5	22.4	38.7	56.6	83.4	120	178	201	253	358 ①
	215.4	5.4	14.8	20.6	35.4	51.2	75.2	110	157	194	241	348 ①
	238.4	5.0	13.4	21.3	30.3	47.9	66.6	96.8	153	191	201	306 ①
	263.8	4.4	12.8	17.2	24.8	43.3	58.8	89.2	140	176	190	266 ①
	291.9	4.0	10.4	15.0	26.1	38.0	56.3	77.1	122	139	173	245 ①
	323.1	3.6	10.4	13.9	23.8	34.4	44.9	71.0	112	123	165	204 ①
	357.5	3.2	8.87	12.2	20.4	31.9	40.4	65.3	91.8	112	146	187 ①
395.7	2.9	7.10	11.3	16.7	27.1	36.6	60.4	77.5	103	116	162 ①	
437.9	2.7	—	10.4	15.3	21.6	33.8	55.5	73.9	92.8	103	149 ①	

① For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

High-Speed Shaft RPM	Type	Availability of Types A / AR / AXV Quadruple Reduction										
		385	405	425	445	465	485	505	525	535	555	
All	A	X	X	X	X	X	X	X	X	X	—	—
	AR	—	X	X	X	X	X	X	X	—	X	X
	AXV	—	X	X	X	X	X	X	X	—	X	X

# Horsepower & Torque Ratings/Quadruple Reduction

## Torque Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±5%	Approx. Low-Speed Shaft RPM	Drive Size ①									
			385	405	425	445	465	485	505	525	535	555
1750	105.9	16.5	166	—	—	—	—	—	—	—	—	—
	117.2	15.0	172	240	335	568	852	1265	1886	2462	2429	3526 ②
	129.7	13.5	168	264	390	589	857	1264	1761	2412	2678	3901 ②
	143.6	12.0	174	252	384	600	837	1268	1812	2462	2731	3955 ②
	158.9	11.0	163	252	384	589	856	1265	1894	2413	2736	3958 ②
	175.9	10.0	176	253	335	584	794	1266	1829	2467	2731	3730 ②
	194.6	9.0	167	236	390	592	862	1269	1891	2136	2736	3739 ②
	215.4	8.1	173	241	390	584	838	1273	1828	2197	2740	3844 ②
	238.4	7.5	168	265	373	593	860	1271	1893	2412	2446	3754 ②
	263.8	6.6	175	253	340	584	795	1269	1899	2475	2728	3761 ②
	291.9	6.0	164	241	390	593	860	1265	1899	2201	2743	3769 ②
	323.1	5.4	176	253	390	584	778	1269	1899	2209	2744	3488 ②
	357.5	5.0	177	241	374	587	797	1272	1695	2206	2749	3496 ②
395.7	4.4	153	241	340	587	779	1272	1700	2201	2461	3502 ②	
437.9	4.0	—	242	340	500	779	1272	1724	2151	2456	3511 ②	
1430	105.9	13.5	166	—	—	—	—	—	—	—	—	—
	117.2	12.0	173	241	335	570	850	1267	1889	2463	2427	3747 ②
	129.7	11.0	168	265	390	591	861	1267	1760	2416	2676	3962 ②
	143.6	10.0	174	253	384	602	840	1265	1808	2464	2729	3960 ②
	158.9	9.0	163	252	384	592	862	1264	1893	2413	2742	3966 ②
	175.9	8.1	176	253	335	584	792	1271	1827	2468	2730	3749 ②
	194.6	7.5	166	239	390	592	861	1266	1897	2174	2744	3757 ②
	215.4	6.6	172	241	390	584	841	1275	1828	2205	2738	3879 ②
	238.4	6.0	168	265	374	592	860	1266	1900	2414	2489	3764 ②
	263.8	5.4	175	253	340	585	796	1272	1892	2478	2727	3776 ②
	291.9	5.0	163	241	390	593	861	1268	1892	2201	2748	3779 ②
	323.1	4.4	177	252	390	584	778	1272	1895	2204	2746	3494 ②
	357.5	4.0	176	242	374	587	796	1273	1696	2199	2747	3496 ②
395.7	3.6	153	241	339	587	779	1272	1699	2204	2458	3503 ②	
437.9	3.2	—	241	341	500	780	1273	1717	2140	2455	3523 ②	
1170	105.9	11.0	166	—	—	—	—	—	—	—	—	—
	117.2	10.0	172	241	335	569	851	1268	1893	2467	2458	3806 ②
	129.7	9.0	168	265	390	592	857	1267	1763	2416	2711	3966 ②
	143.6	8.1	174	252	384	603	838	1269	1812	2471	2734	3967 ②
	158.9	7.5	163	252	384	593	859	1267	1897	2411	2739	3966 ②
	175.9	6.6	176	253	335	584	795	1268	1830	2469	2736	3759 ②
	194.6	6.0	167	240	390	593	860	1272	1893	2207	2746	3770 ②
	215.4	5.4	172	241	391	584	842	1269	1827	2206	2744	3947 ②
	238.4	5.0	168	266	375	593	860	1269	1900	2418	2527	3785 ②
	263.8	4.4	174	253	340	584	796	1273	1893	2468	2729	3789 ②
	291.9	4.0	163	241	390	593	861	1269	1894	2200	2741	3784 ②
	323.1	3.6	177	252	390	584	779	1272	1893	2208	2742	3512 ②
	357.5	3.2	176	242	375	587	796	1273	1699	2213	2753	3504 ②
395.7	2.9	153	241	340	586	780	1274	1699	2202	2454	3521 ②	
437.9	2.7	—	241	341	500	780	1274	1717	2148	2473	3525 ②	

① Pound-inches at low-speed shaft ... multiply values listed by 1000.

② For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

High-Speed Shaft RPM	Type	Availability of Types A / AR / AXV Quadruple Reduction										
		385	405	425	445	465	485	505	525	535	555	
All	A	X	X	X	X	X	X	X	X	X	—	—
	AR	—	X	X	X	X	X	X	X	—	X	X
	AXV	—	X	X	X	X	X	X	X	—	X	X

# Horsepower & Torque Ratings/Quadruple Reduction

## Horsepower Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±5%	Approx. Low-Speed Shaft RPM	Drive Size									
			385	405	425	445	465	485	505	525	535	555
870	105.9	8.3	21.2	—	—	—	—	—	—	—	—	—
	117.2	7.5	20.3	28.2	39.9	69.2	105	151	231	284	307	435 ①
	129.7	6.8	18.3	29.1	42.7	66.5	91.8	141	192	261	302	411 ①
	143.6	6.1	17.5	23.5	39.2	58.6	82.9	130	172	241	260	382 ①
	158.9	5.5	14.3	20.8	33.6	53.0	73.5	112	166	207	237	352 ①
	175.9	5.0	14.2	19.1	26.9	48.0	64.8	103	148	191	206	307 ①
	194.6	4.5	11.5	16.8	28.8	42.1	62.1	89.0	133	152	188	267 ①
	215.4	4.1	11.0	15.3	26.3	38.1	56.0	82.0	117	144	179	261 ①
	238.4	3.8	9.95	15.8	22.5	35.6	49.6	72.0	114	142	152	228 ①
	263.8	3.3	9.52	12.8	18.4	32.2	43.7	66.3	104	131	141	199 ①
	291.9	3.0	7.76	11.2	19.4	28.3	41.9	57.4	91.0	104	129	183 ①
	323.1	2.7	7.71	10.4	17.7	25.6	33.4	52.9	83.6	91.4	123	152 ①
	357.5	2.5	6.60	9.05	15.2	23.7	30.1	48.6	68.3	83.1	108	140 ①
395.7	2.2	5.28	8.42	12.4	20.2	27.2	44.9	57.6	76.8	86.5	121 ①	
437.9	2.0	—	7.74	11.4	16.1	25.1	41.3	55.0	69.0	76.3	111 ①	
720	105.9	6.8	17.5	—	—	—	—	—	—	—	—	—
	117.2	6.1	16.8	23.3	33.0	57.3	87.0	125	191	236	257	360 ①
	129.7	5.5	15.2	24.1	35.3	55.1	76.0	116	159	216	250	340 ①
	143.6	5.0	14.5	19.5	32.5	48.5	68.7	107	143	200	215	316 ①
	158.9	4.5	11.8	17.2	27.8	43.9	60.8	92.4	137	171	196	292 ①
	175.9	4.1	11.8	15.8	22.3	39.7	53.7	85.2	123	159	171	255 ①
	194.6	3.8	9.53	14.0	23.8	34.9	51.4	73.7	110	127	156	222 ①
	215.4	3.3	9.12	12.7	21.8	31.5	46.4	67.9	96.8	119	149	216 ①
	238.4	3.0	8.24	13.1	18.7	29.5	41.0	59.6	94.2	117	127	189 ①
	263.8	2.7	7.88	10.6	15.3	26.7	36.2	54.9	86.5	109	117	165 ①
	291.9	2.5	6.42	9.24	16.0	23.4	34.7	47.5	75.3	85.8	107	152 ①
	323.1	2.2	6.38	8.59	14.7	21.2	27.6	43.8	69.2	75.7	102	126 ①
	357.5	2.0	5.46	7.49	12.6	19.6	24.9	40.2	56.5	68.8	89.8	116 ①
395.7	1.8	4.37	6.97	10.3	16.7	22.5	37.2	47.7	63.6	71.6	100 ①	
437.9	1.6	—	6.40	9.40	13.3	20.8	34.1	45.5	57.1	63.1	92.1 ①	
580	105.9	5.5	14.1	—	—	—	—	—	—	—	—	—
	117.2	5.0	13.5	18.8	26.6	46.1	70.1	101	154	190	209	290 ①
	129.7	4.5	12.2	19.4	28.4	44.4	61.3	93.8	128	174	202	274 ①
	143.6	4.1	11.7	15.7	26.2	39.1	55.4	86.4	115	161	173	255 ①
	158.9	3.8	9.52	13.9	22.4	35.4	49.0	74.5	111	138	158	235 ①
	175.9	3.3	9.47	12.7	17.9	32.0	43.2	68.6	99.0	128	138	206 ①
	194.6	3.0	7.67	11.3	19.2	28.1	41.4	59.4	88.6	103	126	179 ①
	215.4	2.7	7.34	10.2	17.5	25.4	37.4	54.7	78.0	96.2	120	174 ①
	238.4	2.5	6.64	10.5	15.0	23.8	33.1	48.0	75.9	94.5	103	153 ①
	263.8	2.2	6.35	8.53	12.3	21.5	29.2	44.2	69.7	87.6	94.3	133 ①
	291.9	2.0	5.18	7.45	12.9	18.9	27.9	38.3	60.7	69.2	86.1	123 ①
	323.1	1.8	5.14	6.92	11.8	17.0	22.3	35.3	55.8	61.0	82.1	102 ①
	357.5	1.6	4.40	6.04	10.1	15.8	20.1	32.4	45.5	55.4	72.3	93.6 ①
395.7	1.5	3.52	5.61	8.29	13.4	18.1	29.9	38.4	51.2	57.7	80.8 ①	
437.9	1.3	—	5.16	7.57	10.7	16.7	27.5	36.6	46.0	50.9	74.3 ①	

① For Size 555ARJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page <?> for instructions.

High-Speed Shaft RPM	Type	Availability of Types A / AR / AXV Quadruple Reduction										
		385	405	425	445	465	485	505	525	535	555	
All	A	X	X	X	X	X	X	X	X	X	—	—
	AR	—	X	X	X	X	X	X	X	—	X	X
	AXV	—	X	X	X	X	X	X	X	—	X	X

# Horsepower & Torque Ratings/Quadruple Reduction

## Torque Ratings

### Type A, AR & AXV Parallel Shaft

High-Speed Shaft RPM	Nominal Ratios ±5%	Approx. Low-Speed Shaft RPM	Drive Size ①										
			385	405	425	445	465	485	505	525	535	555	
870	105.9	8.3	166	—	—	—	—	—	—	—	—	—	—
	117.2	7.5	172	241	335	568	852	1268	1897	2467	2525	3800 ②	
	129.7	6.8	168	265	390	592	860	1271	1757	2416	2739	3971 ②	
	143.6	6.1	174	252	384	604	841	1275	1806	2472	2731	3972 ②	
	158.9	5.5	164	253	384	593	861	1272	1899	2415	2746	3969 ②	
	175.9	5.0	176	253	335	585	796	1273	1821	2468	2727	3776 ②	
	194.6	4.5	166	242	390	593	861	1269	1902	2244	2744	3781 ②	
	215.4	4.1	172	241	390	585	843	1273	1831	2202	2740	3801 ②	
	238.4	3.8	168	265	374	593	861	1269	1904	2418	2570	3792 ②	
	263.8	3.3	174	253	339	584	796	1272	1891	2471	2724	3812 ②	
	291.9	3.0	164	242	390	594	862	1270	1900	2213	2748	3801 ②	
	323.1	2.7	176	254	390	585	779	1274	1900	2207	2749	3520 ②	
	357.5	2.5	176	241	375	586	797	1274	1700	2208	2739	3528 ②	
395.7	2.2	153	241	339	587	779	1273	1698	2208	2461	3537 ②		
437.9	2.0	—	242	342	501	779	1275	1719	2148	2463	3531 ②		
720	105.9	6.8	166	—	—	—	—	—	—	—	—	—	
	117.2	6.1	172	241	335	569	853	1268	1895	2477	2554	3800 ②	
	129.7	5.5	168	265	390	593	860	1263	1759	2416	2740	3970 ②	
	143.6	5.0	174	253	384	604	842	1268	1815	2478	2729	3971 ②	
	158.9	4.5	163	253	384	593	860	1268	1894	2410	2744	3979 ②	
	175.9	4.1	177	253	335	584	797	1273	1829	2483	2735	3789 ②	
	194.6	3.8	166	244	390	594	861	1270	1901	2266	2751	3799 ②	
	215.4	3.3	172	242	391	584	844	1273	1830	2199	2756	3981 ②	
	238.4	3.0	168	265	376	593	860	1269	1901	2407	2595	3799 ②	
	263.8	2.7	174	253	341	585	797	1273	1901	2484	2731	3819 ②	
	291.9	2.5	164	241	389	593	862	1270	1899	2206	2755	3815 ②	
	323.1	2.2	176	253	391	585	778	1275	1901	2209	2754	3525 ②	
	357.5	2.0	176	241	376	586	797	1274	1699	2209	2752	3533 ②	
395.7	1.8	153	242	340	587	779	1275	1699	2209	2462	3532 ②		
437.9	1.6	—	241	340	500	780	1272	1718	2148	2461	3540 ②		
580	105.9	5.5	166	—	—	—	—	—	—	—	—	—	
	117.2	5.0	172	241	335	568	854	1272	1897	2476	2578	3800 ②	
	129.7	4.5	168	265	389	593	861	1268	1757	2416	2748	3971 ②	
	143.6	4.1	174	253	385	605	843	1271	1812	2477	2726	3978 ②	
	158.9	3.8	164	254	384	594	861	1269	1905	2415	2746	3975 ②	
	175.9	3.3	176	252	334	585	796	1272	1827	2481	2740	3800 ②	
	194.6	3.0	166	244	390	594	861	1270	1901	2281	2759	3803 ②	
	215.4	2.7	172	241	390	585	844	1273	1831	2207	2756	3981 ②	
	238.4	2.5	168	264	374	594	862	1269	1901	2413	2612	3817 ②	
	263.8	2.2	174	253	340	585	798	1272	1901	2478	2733	3821 ②	
	291.9	2.0	164	242	389	595	861	1271	1901	2209	2751	3832 ②	
	323.1	1.8	176	253	390	582	781	1275	1903	2209	2752	3543 ②	
	357.5	1.6	176	242	374	586	799	1274	1699	2208	2751	3538 ②	
395.7	1.5	153	241	340	584	778	1272	1698	2208	2463	3542 ②		
437.9	1.3	—	242	340	500	777	1273	1715	2148	2465	3546 ②		

① Pound-inches at low-speed shaft ... multiply values listed by 1000.

② For the Size 555ARJ gear drive (hollow low-speed shaft with shrink disc connection), the maximum output torque rating is limited to 3,100,000 lb-in by the shrink disc, and this shrink disc torque rating supersedes any higher torque ratings for the 555ARJ that may be shown on torque pages 23, 25, 27, 29, <?> and <?>. In those cases where your 555ARJ is selected at a High-Speed Shaft RPM and Nominal Ratio where the torque rating of the gear drive is limited by the shrink disc (3,100,000 lb-in), you must calculate an Equivalent Power Rating (HP) for the 555ARJ gear drive using the formula below:

$$\frac{3,100,000 \text{ lb-in}}{\text{Torque Rating (lb-in) from pages 23, 25, 27, 29, <?> or <?>}} \times \text{Power Rating (HP) from pages 22, 24, 26, 28, 30 or <?>} = \text{Equivalent Power Rating (HP)}$$

High-Speed Shaft RPM	Type	Availability of Types A / AR / AXV Quadruple Reduction										
		385	405	425	445	465	485	505	525	535	555	
All	A	X	X	X	X	X	X	X	X	X	—	—
	AR	—	X	X	X	X	X	X	X	—	X	X
	AXV	—	X	X	X	X	X	X	X	—	X	X

# Basic Thermal Horsepower Ratings

## Single Reduction

### Type A Basic Thermal Horsepower Ratings ①

Nominal Ratios	High-Speed Shaft RPM	Auxiliary Cooling	Drive Size												
			305	325	345	365	385	405	425	445	465	485	505	525	
1.84 Thru 3.05 Sizes 305 thru 525	1750	None	131	194	268	322	③	③	③	③	③	③	③	③	
		2 Shaft Fans	262	420	563	763	③	③	③	③	③	③	③	③	
		Cooling Tubes	597	814	1137	1317	1357	1699	3069	3793	4715	6401	7112	7164 ②	
	1430	None	136	200	275	341	③	③	③	③	③	③	③	③	
		2 Shaft Fans	239	380	509	691	③	③	③	③	③	③	③	③	
		Cooling Tubes	556	757	1064	1246	1254	1594	2871	3569	4504	6137	6927	7191 ②	
	1170	None	136	200	277	348	③	③	③	③	③	③	③	③	
		2 Shaft Fans	217	344	463	627	③	③	③	③	③	③	③	③	
		Cooling Tubes	515	701	989	1166	1168	1501	2700	3398	4320	5927	6783	7230	
	870	None	133	196	270	347	③	③	③	③	③	③	③	③	
		2 Shaft Fans	192	299	405	547	③	③	③	③	③	③	③	③	
		Cooling Tubes	454	623	881	1047	1018	1317	2371	3016	3859	5334	6190	6717	
	720	None	129	191	264	339	③	③	③	③	③	③	③	③	
		2 Shaft Fans	177	275	373	503	③	③	③	③	③	③	③	③	
		Cooling Tubes	419	574	814	972	944	1226	2199	2818	3635	5044	5874	6466	
	580	None	124	184	254	329	③	③	③	③	③	③	③	③	
		2 Shaft Fans	163	250	340	459	③	③	③	③	③	③	③	③	
		Cooling Tubes	380	522	742	891	874	1136	2051	2632	3420	4765	5594	6234	
	3.38 Thru 5.60 Sizes 305 Thru 365	1750	None	108	150	196	250	③	③	③	③	③	③	③	
			2 Shaft Fans	198	295	380	534	③	③	③	③	③	③	③	
			Cooling Tubes	394	515	701	847	1009	1212	1976	2450	3227	4478	5018	5874 ②
		1430	None	106	146	194	250	③	③	③	③	③	③	③	③
			2 Shaft Fans	177	262	339	476	③	③	③	③	③	③	③	③
			Cooling Tubes	362	474	648	789	931	1122	1831	2278	3029	4214	4794	5742 ②
1170		None	103	142	188	246	③	③	③	③	③	③	③	③	
		2 Shaft Fans	159	235	304	426	③	③	③	③	③	③	③	③	
		Cooling Tubes	332	436	598	732	869	1051	1712	2134	2871	4004	4596	5637	
870	None	97.0	134	178	236	③	③	③	③	③	③	③	③		
	2 Shaft Fans	137	200	262	365	③	③	③	③	③	③	③	③		
	Cooling Tubes	291	383	525	649	778	915	1488	1883	2542	3556	4109	5149		
720	None	93.0	128	171	228	③	③	③	③	③	③	③	③		
	2 Shaft Fans	126	182	239	332	③	③	③	③	③	③	③	③		
	Cooling Tubes	266	350	483	601	734	847	1370	1752	2384	3332	3859	4912		
580	None	86.1	122	163	218	③	③	③	③	③	③	③	③		
	2 Shaft Fans	111	164	216	300	③	③	③	③	③	③	③	③		
	Cooling Tubes	240	318	440	546	692	784	1272	1622	2221	3126	3625	4090		

- ① Basic thermal ratings in HP are shown for an ambient temperature of 80°F (27°C) and at an altitude of sea level to 2500 feet. For other ambient temperatures, other altitudes, or special air velocity / inlet water temperature / duty cycle considerations, use thermal factors on **page <?>** to determine an application-adjusted thermal rating which can then be compared to the actual power transmitted. Thermal ratings for cooling tubes are based on water inlet temperature of 70°F (21°C), and water flow rates as shown on **page <?>**. For cooling capacity exceeding the methods listed for the gear drive size, ratio and high-speed shaft RPM that you have selected, consult your Rexnord representative for an external heat exchanger package.
- ② Gear drives at 1750 RPM require jet lubrication and special labyrinth seals; gear drives at 1430 RPM require jet lubrication, refer to Factory.
- ③ No auxiliary cooling (None) and 2 shaft fans are not offered. Use electric fan or cooling tubes.  
For basic thermal ratings with electric fan, see **page 18**.  
For cooling beyond the range of values listed, see oil-to-air cooler selections, **page <?>**.

### Basic Thermal Horsepower Rating with One Shaft Fan

Calculate thermal rating for gear drives with one shaft fan as follows: Average the thermal rating without auxiliary cooling and the thermal rating with 2 shaft fans.

Example: Size 425A2, 17.09:1 ratio at 1750 rpm

Thermal Rating without Auxiliary Cooling (**page 33**) = 187

Thermal Rating with 2 Shaft Fans (**page 33**) = 449

$$\frac{187 + 449}{2} = 318 \text{ Thermal Rating with One Shaft Fan}$$

# Basic Thermal Horsepower Ratings

## Basic Electric Fan/Single Reduction

### Type A Basic Electric Fan Thermal Ratings ①

High-Speed Shaft RPM	Nominal Ratios ±3%	Approx. L.S. Shaft RPM	Drive Size							
			385	405	425	445	465	485	505	525
1750	1.84	950	278	309	—	—	—	—	—	—
	2.03	860	299	350	—	—	—	—	—	—
	2.25	780	355	416	388	—	—	—	—	—
	2.49	700	385	441	443	587	—	—	—	—
	2.76	640	381	463	532	853	—	—	—	—
	3.05	575	462	474	576	935	630	—	—	—
	3.38	520	391	565	590	1053	780	—	—	—
	3.74	470	441	544	604	1086	913	—	—	—
	4.13	420	478	622	716	1107	1058	734	—	—
	4.57	380	462	592	705	1069	1293	854	947	—
5.06	350	313	646	686	1234	1307	951	1245	—	
1430	1.84	780	409	560	655	807	—	—	—	—
	2.03	700	412	562	718	940	771	—	—	—
	2.25	640	469	591	738	998	911	—	—	—
	2.49	575	473	588	751	1100	1111	—	—	—
	2.76	520	449	587	761	1368	1211	—	—	—
	3.05	470	526	573	783	1382	1342	820	810	—
	3.38	420	438	663	749	1372	1385	1127	1035	—
	3.74	380	350	616	732	1347	1389	1237	1358	—
	4.13	350	395	684	821	1316	1393	1366	1571	—
	4.57	310	390	477	787	1226	1643	1360	1665	—
5.06	280	382	540	550	1352	1584	1346	1875	—	
1170	1.84	640	477	702	937	1300	1540	—	—	—
	2.03	575	468	677	954	1359	1648	911	—	—
	2.25	520	524	681	936	1365	1659	1205	1242	—
	2.49	470	514	662	920	1385	1746	1300	1400	—
	2.76	420	364	646	880	1643	1736	1469	1580	1552
	3.05	380	440	618	888	1614	1728	1512	1713	1723
	3.38	350	367	706	825	1527	1702	1711	1783	1887
	3.74	310	415	511	790	1468	1629	1733	2091	1967
	4.13	280	448	585	682	1408	1551	1705	2060	2360
	4.57	255	432	555	669	1290	1806	1623	2044	2348
5.06	230	414	609	649	1269	1708	1542	2194	2634	
870	1.84	470	426	786	1120	1633	2287	1771	2456	2185
	2.03	430	416	739	1100	1626	2241	1831	2085	2223
	2.25	390	466	596	1050	1589	2148	2105	2534	2825
	2.49	350	459	582	1013	1545	2139	2037	2505	2860
	2.76	320	427	570	767	1791	2048	2035	2515	2817
	3.05	290	499	549	780	1730	1939	1973	2333	2844
	3.38	260	408	632	729	1431	1864	2073	2266	2828
	3.74	235	448	580	702	1387	1737	2028	2546	2676
	4.13	210	471	641	782	1341	1478	1887	2330	2945
	4.57	190	447	595	744	1235	1756	1544	2238	2800
5.06	175	422	640	702	1354	1667	1478	1961	3022	
720	1.84	390	454	687	1151	1694	2451	2078	3000	2917
	2.03	350	440	648	945	1668	2359	2069	2456	2813
	2.25	320	489	640	906	1618	2235	2326	2867	3397
	2.49	290	474	616	881	1381	2200	2207	2776	3348
	2.76	260	435	596	825	1647	2086	2152	2730	3142
	3.05	235	506	566	830	1608	1788	2059	2454	3121
	3.38	210	410	648	762	1504	1736	2128	2347	3048
	3.74	190	447	587	725	1439	1632	1864	2612	2824
	4.13	175	467	643	795	1372	1537	1778	2026	3050
	4.57	155	440	592	750	1238	1804	1665	1972	2438
5.06	140	413	635	701	1324	1682	1561	2089	2675	
580	1.84	320	460	717	1027	1688	2481	2205	3248	3292
	2.03	290	442	669	1006	1513	2364	2154	2608	3099
	2.25	260	490	652	951	1477	2224	2396	2987	3658
	2.49	235	470	622	916	1441	2065	2248	2859	3558
	2.76	210	428	596	842	1700	1967	1993	2781	3256
	3.05	190	496	562	841	1644	1854	1919	2148	3208
	3.38	175	399	640	763	1495	1780	2022	2070	3100
	3.74	155	434	575	719	1409	1647	1975	2321	2498
	4.13	140	451	627	783	1326	1506	1821	2109	2736
	4.57	130	424	575	734	1191	1748	1669	2020	2592
5.06	115	396	615	683	1274	1626	1535	2114	2798	

① Basis thermal capacities listed are for an ambient temperature of 80°F at an elevation from sea level to 2500 feet. Application-adjusted thermal capacity must be determined by using the modification factors before comparing to the required load.

# Basic Thermal Horsepower Ratings

## 600PA Integrated Cooler Selections

Max. Ambient Temperature = 120°F

Min. Service Factor = 1.25

Max. Altitude = 10,000 ft

For input speeds below 1170 rpm, use 1170 rpm selection.

### Type A Oil-to-Air Coolers — Drive Mounted

Input RPM	Nominal Ratios	Drive Size								
		385	405	425	445	465	485	505	525	
1750	1.84									
	2.03				620PA		630PA			
	2.25							640PA		
	2.49									
	2.76									
	3.05									
	3.38									
	3.74									
	4.13									
	4.57									
	5.06									
1430	1.84									
	2.03									
	2.25							630PA		
	2.49									
	2.76									
	3.05	605PA								
	3.38									
	3.74									
	4.13									
	4.57									
	5.06									
1170	1.84									
	2.03									
	2.25									
	2.49									
	2.76									
	3.05									
	3.38									
	3.74									
	4.13									
	4.57									
	5.06							620PA		630PA

# Basic Thermal Horsepower Ratings

## Double Reduction

### Type A, AR & AXV Basic Thermal Horsepower Ratings ①

Nominal Ratios	High-Speed Shaft RPM	Auxiliary Cooling	Drive Size																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
6.20 thru 13.95 Sizes 305 thru 365	1750	None ②	54.7	87.0	110	161	153	179	233	290	358	405	436	465	495	544	578	597	—
		2 Shaft Fans ③	81.6	124	163	252	328	430	597	795	1086	1211	1463 ④	1792	—	—	—	—	—
		Electric Fan	178	274	351	527	531	645	876	1193	1542	1872	3071 ④	4218	—	3466	—	3796	—
	1430	Cooling Tubes	153	225	294	375	487	594	1241	1554	1989	2976	3345 ④	3688	—	6466	—	7783	—
		None ②	53.1	80.3	105	150	150	177	229	291	366	428	485	543	577	679	721	791	—
		2 Shaft Fans ③	74.2	110	148	223	287	376	522	696	950	1073	1310 ④	1608	—	—	—	—	—
	1170	Electric Fan	166	252	328	489	500	605	826	1127	1463	1792	2926 ④	4020	—	3387	—	3769	—
		Cooling Tubes	145	211	270	363	446	548	1137	1422	1844	2766	3148 ④	3530	—	6071	—	7362	—
		None ②	51.0	77.2	98.2	145	148	174	228	291	372	447	525	606	644	758	805	909	1160
5.60 thru 10.29 Sizes 385 thru 585	870	2 Shaft Fans ③	67.7	101	131	202	254	332	461	617	838	962	1181 ④	1450	—	—	—	—	—
		Electric Fan	156	236	304	457	471	569	780	1064	1384	1713	2781 ④	3835	—	3295	—	3690	4150
		Cooling Tubes	132	194	249	335	414	510	1052	1330	1725	2608	3003 ④	3411	—	5650	—	6901	7900
	720	None ②	47.6	72.2	92.4	131	136	162	214	275	360	438	521	616	655	812	863	995	1275
		2 Shaft Fans ③	59.6	88.8	117	171	215	278	384	514	701	815	1000 ④	1236	—	—	—	—	—
		Electric Fan	141	215	277	411	431	522	717	981	1284	1608	2583 ④	3559	—	3124	—	3532	4020
	580	Cooling Tubes	116	170	219	303	360	444	907	1154	1501	2305	2687 ④	3069	—	5044	—	6216	7178
		None ②	45.5	68.8	88.3	125	131	157	206	268	353	432	519	621	660	817	869	1011	1298
		2 Shaft Fans ③	55.1	82.4	108	159	195	250	344	463	631	741	909 ④	1127	—	—	—	—	—
5.44 thru 34.74 Sizes 305 thru 365	1750	Electric Fan	132	203	261	389	407	493	680	931	1226	1529	2465 ④	3400	—	3005	—	3414	3901
		Cooling Tubes	106	155	202	279	332	410	835	1064	1396	2134	2515 ④	2884	—	4754	—	5847	6717
		None ②	44.2	65.2	83.8	119	125	152	199	261	348	428	518	626	665	815	867	1014	1291
	1430	2 Shaft Fans ③	50.0	75.7	99.2	146	177	225	308	416	567	672	825 ④	1027	—	—	—	—	—
		Electric Fan	123	188	245	364	383	463	639	877	1155	1450	2331 ④	3210	—	2876	—	3281	3741
		Cooling Tubes	100	141	183	254	307	378	767	984	1293	1992	2356 ④	2715	—	4345	—	5371	6331
	1170	None ②	41.5	61.9	78.2	111	108	154	187	244	316	358	410	477	507	608	646	710	—
		2 Shaft Fans ③	60.1	87.1	115	170	223	355	449	623	870	948	1152 ④	1463	—	—	—	—	—
		Electric Fan	126	188	243	349	402	526	655	937	1235	1437	2425 ④	3348	—	2768	—	3005	—
870	Cooling Tubes	79.5	115	148	180	304	444	809	1062	1409	2015	2305 ④	2700	—	4544	—	5334	—	
	None ②	39.4	58.7	74.3	101	105	149	181	236	308	357	414	497	528	648	688	768	—	
	2 Shaft Fans ③	53.9	78.4	104	149	194	307	390	540	751	826	1006 ④	1289	—	—	—	—	—	
720	Electric Fan	117	175	224	322	377	492	613	880	1160	1358	2293 ④	3163	—	2662	—	2900	—	
	Cooling Tubes	72.8	105	136	180	275	407	734	973	1288	1870	2147 ④	2529	—	4214	—	4978	—	
	None ②	37.0	55.1	70.2	96.5	101	144	175	229	301	356	416	513	545	658	699	786	1120	
580	2 Shaft Fans ③	48.6	70.8	93.2	133	170	270	341	472	654	728	887 ④	1143	—	—	—	—	—	
	Electric Fan	109	162	210	299	353	461	576	828	1094	1288	2162 ④	2979	—	2544	—	2781	3640	
	Cooling Tubes	67.7	98.5	127	167	253	377	674	902	1187	1752	2028 ④	2410	—	4017	—	4754	5840	
11.39 thru 20.93 Sizes 385 thru 585	1750	None ②	34.0	50.6	64.8	88.8	92.9	133	161	214	286	337	399	498	529	662	703	796	1112
		2 Shaft Fans ③	42.2	61.8	81.2	115	144	225	281	390	543	609	742 ④	961	—	—	—	—	—
		Electric Fan	99.0	146	188	270	323	420	525	758	1006	1190	1990 ④	2755	—	2372	—	2610	3255
	1430	Cooling Tubes	59.5	86.9	112	149	223	335	598	790	1031	1515	1765 ④	2120	—	3556	—	4228	5439
		None ②	32.2	47.8	61.6	84.4	88.3	128	153	204	277	327	390	490	521	646	687	779	1102
		2 Shaft Fans ③	38.9	56.9	74.7	106	130	203	250	348	486	550	668 ④	869	—	—	—	—	—
	1170	Electric Fan	92.0	138	178	254	303	397	496	717	954	1130	1898 ④	2610	—	2267	—	2504	3137
		Cooling Tubes	54.8	80.1	104	138	208	312	560	735	952	1396	1646 ④	1989	—	3398	—	4070	5057
		None ②	30.1	44.9	57.8	79.4	84.2	123	146	197	270	318	382	484	515	632	671	765	1065
870	2 Shaft Fans ③	35.3	52.0	68.2	96.2	118	183	223	311	435	494	601 ④	784	—	—	—	—	—	
	Electric Fan	85.9	128	166	236	285	372	464	673	898	1065	1784 ④	2452	—	2150	—	2381	2981	
	Cooling Tubes	50.8	73.0	94.7	127	193	293	524	683	880	1285	1516 ④	1851	—	3091	—	3712	4849	

- ① Basic thermal ratings in HP are shown for an ambient temperature of 80°F (27°C) and at an altitude of sea level to 2500 feet. For other ambient temperatures, other altitudes, or special air velocity / inlet water temperature / duty cycle considerations, use thermal factors on [page <?>](#) to determine an application-adjusted thermal rating which can then be compared to the actual power transmitted. Thermal ratings for cooling tubes are based on water inlet temperature of 70°F (21°C), and water flow rates as shown on [page <?>](#). For cooling capacity exceeding the methods listed for the gear drive size, ratio and high-speed shaft RPM that you have selected, consult your Rexnord representative for an external heat exchanger package.
- ② For Type AXV, apply a multiplier of 0.8 to thermal ratings with no auxiliary cooling.
- ③ Type A gear drives with backstop at high-speed shaft are only available with one shaft fan. See instructions on [page 34](#) to calculate thermal rating with one shaft fan. Type AR gear drives are only available with one shaft fan. See instructions on [page 34](#) to calculate thermal rating with one shaft fan. Type AXV gear drives are not available with shaft fans.
- ④ Size 505 ratings for Shaft Fans, Electric Fans, and Cooling Tubes apply only to Type A. Consult Rexnord for Type AR and AXV ratings.

# Basic Thermal Horsepower Ratings

## Triple Reduction

### Type A, AR & AXV Basic Thermal Horsepower Ratings ①

Nominal Ratios	High-Speed Shaft RPM	Auxiliary Cooling	Drive Size																	
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585	
38.44 thru 86.50 Sizes 305 thru 365	1750	None②	26.2	37.7	49.3	67.0	89.4	109	134	177	231	286	345	415	442	540	574	623	838	
		2 Shaft Fans③	—	—	—	—	133	177	214	298	414	554	672 ④	812	—	1318	—	1503	1885	
		Electric Fan	78.9	114	152	208	275	347	452	631	837	1075	1977 ④	2399	—	1964	—	2175	2451	
		Cooling Tubes	—	—	—	—	242	303	558	728	951	1475	1699 ④	1976	—	3767	—	4675	5387	
	1430	None②	24.8	35.6	46.9	63.0	83.2	100	126	166	220	279	340	410	436	546	580	651	863	
		2 Shaft Fans③	—	—	—	—	118	156	190	264	365	492	597 ④	726	—	1169	—	1344	1700	
		Electric Fan	73.0	106	141	192	256	323	418	584	784	1011	1858 ④	2254	—	1872	—	2082	2359	
		Cooling Tubes	—	—	—	—	227	286	523	682	890	1343	1567 ④	1831	—	3477	—	4359	5044	
	1170	None②	23.3	33.5	44.4	59.2	78.3	93.3	120	159	211	274	335	405	431	542	576	659	869	
		2 Shaft Fans③	—	—	—	—	106	137	170	236	327	442	535 ④	656	—	1041	—	1217	1542	
		Electric Fan	67.7	98.2	131	179	237	302	393	550	730	952	1740 ④	2122	—	1779	—	1990	2267	
		Cooling Tubes	—	—	—	—	215	271	494	644	842	1246	1462 ④	1712	—	3200	—	4043	4689	
870	None②	21.2	30.7	40.7	54.0	71.8	86.9	109	145	194	249	307	378	402	507	539	650	851		
	2 Shaft Fans③	—	—	—	—	91.6	118	146	202	278	372	453 ④	561	—	871	—	1054	1344		
	Electric Fan	61.0	88.0	118	161	216	273	353	501	667	866	1582 ④	1924	—	1634	—	1858	2122		
	Cooling Tubes	—	—	—	—	184	234	439	572	749	1144	1330 ④	1528	—	2950	—	3582	4188		
23.16 thru 47.08 Sizes 385 thru 585	720	None②	20.0	28.9	38.4	50.5	68.7	83.7	105	138	185	236	294	364	388	497	529	625	817	
		2 Shaft Fans③	—	—	—	—	84.6	109	134	185	254	336	414 ④	513	—	795	—	954	1217	
		Electric Fan	56.8	82.8	110	150	203	257	333	468	623	820	1489 ④	1832	—	1555	—	1766	2017	
		Cooling Tubes	—	—	—	—	170	216	410	536	703	1100	1256 ④	1436	—	2726	—	3424	4030	
	580	None②	18.7	27.0	36.0	47.3	65.6	80.7	100	132	177	225	281	352	374	481	511	608	793	
		2 Shaft Fans③	—	—	—	—	78.1	100	123	168	231	304	376 ④	468	—	718	—	869	1112	
		Electric Fan	52.8	76.9	103	139	190	241	314	440	586	763	1390 ④	1717	—	1475	—	1676	1921	
		Cooling Tubes	—	—	—	—	155	198	383	502	660	1050	1193 ④	1350	—	2472	—	3123	3689	
	95.73 thru 215.4 Sizes 305 thru 365	1750	None②	20.6	28.3	38.0	50.3	67.0	80.5	106	138	186	223	274	349	371	476	505	560	739
			2 Shaft Fans③	—	—	—	—	100	131	166	228	323	415	511 ④	645	—	1085	—	1243	1542
			Electric Fan	60.4	83.0	113	154	212	269	347	503	654	847	1503 ④	1858	—	1595	—	1766	1977
			Cooling Tubes	—	—	—	—	180	223	408	531	698	1038	1193 ④	1383	—	2779	—	3516	3951
1430		None②	19.2	26.5	35.7	47.2	63.5	76.4	98.2	130	174	214	262	327	347	443	471	560	731	
		2 Shaft Fans③	—	—	—	—	89.4	117	146	202	283	366	449 ④	561	—	929	—	1104	1371	
		Electric Fan	55.8	76.7	105	142	198	250	319	464	608	793	1410 ④	1727	—	1476	—	1674	1872	
		Cooling Tubes	—	—	—	—	163	204	387	498	655	946	1112 ④	1317	—	2660	—	3253	3674	
1170		None②	17.9	24.6	33.2	43.9	60.8	73.1	92.0	122	163	206	253	308	328	435	462	540	701	
		2 Shaft Fans③	—	—	—	—	80.9	105	131	179	252	327	399 ④	494	—	825	—	975	1217	
		Electric Fan	51.5	70.9	97.0	131	185	233	299	435	564	742	1315 ④	1608	—	1397	—	1582	1766	
		Cooling Tubes	—	—	—	—	148	190	369	470	620	872	1047 ④	1264	—	2436	—	3095	3516	
870	None②	16.2	22.3	30.3	39.9	55.1	67.2	84.6	112	150	188	231	286	303	401	426	523	673		
	2 Shaft Fans③	—	—	—	—	69.7	90.4	113	154	215	275	339 ④	420	—	684	—	838	1046		
	Electric Fan	46.1	63.5	87.1	118	166	212	270	395	514	671	1189 ④	1463	—	1275	—	1463	1648		
	Cooling Tubes	—	—	—	—	127	165	313	403	533	774	932 ④	1123	—	2265	—	2739	3121		
720	None②	15.3	20.8	28.5	37.2	52.2	64.3	81.1	108	145	179	220	274	292	391	416	498	639		
	2 Shaft Fans③	—	—	—	—	64.1	83.0	103	141	196	249	308 ④	384	—	622	—	754	945		
	Electric Fan	43.1	59.3	81.5	110	156	199	254	373	484	634	1122 ④	1384	—	1213	—	1384	1555		
	Cooling Tubes	—	—	—	—	117	150	286	369	490	726	874 ④	1054	—	2081	—	2621	3016		
580	None②	14.2	19.5	26.6	34.7	49.5	61.6	77.6	103	139	171	210	264	281	378	401	481	616		
	2 Shaft Fans③	—	—	—	—	58.9	76.1	95.1	130	180	226	280 ④	349	—	561	—	684	859		
	Electric Fan	39.9	55.1	75.6	102	146	186	239	348	453	593	1049 ④	1295	—	1145	—	1312	1474		
	Cooling Tubes	—	—	—	—	107	138	260	337	449	680	820 ④	988	—	1881	—	2385	2747		

- ① Basic thermal ratings in HP are shown for an ambient temperature of 80°F (27°C) and at an altitude of sea level to 2500 feet. For other ambient temperatures, other altitudes, or special air velocity / inlet water temperature / duty cycle considerations, use thermal factors on [page <?>](#) to determine an application-adjusted thermal rating which can then be compared to the actual power transmitted. Thermal ratings for cooling tubes are based on water inlet temperature of 70°F (21°C), and water flow rates as shown on [page <?>](#). For cooling capacity exceeding the methods listed for the gear drive size, ratio and high-speed shaft RPM that you have selected, consult your Rexnord representative for an external heat exchanger package.
- ② For Type AXV, apply a multiplier of 0.8 to thermal ratings with no auxiliary cooling.
- ③ Type A gear drives with backstop at high-speed shaft are only available with one shaft fan. See instructions on [page 34](#) to calculate thermal rating with one shaft fan. Type AR gear drives are only available with one shaft fan. See instructions on [page 34](#) to calculate thermal rating with one shaft fan. Type AXV gear drives are not available with shaft fans.
- ④ Size 505 ratings for Shaft Fans, Electric Fans, and Cooling Tubes apply only to Type A. Consult Rexnord for Type AR and AXV ratings.

# Basic Thermal Horsepower Ratings

## Quadruple Reduction

### Type A, AR & AXV Basic Thermal Horsepower Ratings ①

Nominal Ratios	High-Speed Shaft RPM	Auxiliary Cooling	Drive Size									
			385	405	425	445	465	485	505	525	535	555
117.2 thru 215.4	1750	None②	46.7	57.6	75.0	94.6	130	156	192	236	251	317
		2 Shaft Fans③	—	—	—	127	165	217	289④	386	—	—
		Electric Fan	148	187	248	341	448	576	1021④	1314	—	—
		Cooling Tubes	—	—	—	274	360	462	576④	711	—	—
	1430	None②	44.3	54.7	71.7	91.9	124	153	190	237	252	319
		2 Shaft Fans③	—	—	—	117	152	202	268④	356	—	—
		Electric Fan	137	175	231	318	419	540	956④	1231	—	—
		Cooling Tubes	—	—	—	252	328	425	531④	661	—	—
	1170	None②	42.4	52.3	68.9	89.5	120	150	188	239	253	320
		2 Shaft Fans③	—	—	—	109	141	188	252④	332	—	—
		Electric Fan	128	162	216	298	391	507	895④	1152	—	—
		Cooling Tubes	—	—	—	232	303	395	494④	620	—	—
	870	None②	38.5	47.8	63.0	82.6	110	140	177	224	238	302
		2 Shaft Fans③	—	—	—	97.0	125	167	223④	293	—	—
		Electric Fan	116	146	195	270	355	463	815④	1046	—	—
		Cooling Tubes	—	—	—	202	262	344	432④	544	—	—
	720	None②	36.6	45.6	60.1	79.1	105	134	171	217	232	293
		2 Shaft Fans③	—	—	—	90.8	117	157	207④	273	—	—
		Electric Fan	109	138	183	253	333	436	767④	986	—	—
		Cooling Tubes	—	—	—	184	241	317	402④	506	—	—
	580	None②	35.4	43.5	57.4	75.9	99.9	129	166	212	225	284
		2 Shaft Fans③	—	—	—	84.9	110	147	193④	254	—	—
		Electric Fan	102	128	171	236	311	408	715④	921	—	—
		Cooling Tubes	—	—	—	170	222	294	373④	470	—	—
238.4 thru 437.9	1750	None②	38.6	47.4	61.8	79.1	112	140	174	215	228	288
		2 Shaft Fans③	—	—	—	105	141	190	254④	337	—	—
		Electric Fan	117	149	196	286	370	481	847④	1104	—	—
		Cooling Tubes	—	—	—	213	287	369	469④	570	—	—
	1430	None②	36.1	44.4	58.4	75.9	106	134	169	210	223	282
		2 Shaft Fans③	—	—	—	96.0	129	173	233④	306	—	—
		Electric Fan	109	138	182	265	345	449	789④	1031	—	—
		Cooling Tubes	—	—	—	195	261	337	432④	528	—	—
	1170	None②	34.1	42.0	55.6	73.4	101	130	165	207	219	278
		2 Shaft Fans③	—	—	—	89.4	119	161	216④	282	—	—
		Electric Fan	101	128	170	248	322	420	737④	961	—	—
		Cooling Tubes	—	—	—	180	240	312	400④	493	—	—
	870	None②	30.6	38.0	50.5	67.2	91.7	119	152	191	203	257
		2 Shaft Fans③	—	—	—	78.8	105	140	190④	246	—	—
		Electric Fan	91.0	116	153	223	291	381	666④	871	—	—
		Cooling Tubes	—	—	—	155	207	270	348④	432	—	—
	720	None②	29.0	35.8	47.8	64.1	87.0	113	146	183	195	247
		2 Shaft Fans③	—	—	—	73.5	97.7	130	177④	228	—	—
		Electric Fan	85.0	109	144	210	273	358	625④	817	—	—
		Cooling Tubes	—	—	—	142	190	249	321④	400	—	—
	580	None②	27.4	34.0	45.4	61.2	82.7	108	140	177	188	238
		2 Shaft Fans③	—	—	—	68.7	90.9	121	164④	212	—	—
		Electric Fan	79.2	101	133	195	254	335	581④	763	—	—
		Cooling Tubes	—	—	—	130	174	230	296④	371	—	—

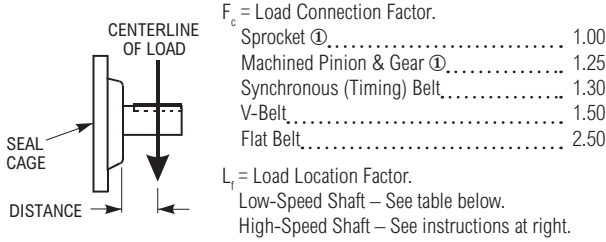
- ① Basic thermal ratings in HP are shown for an ambient temperature of 80°F (27°C) and at an altitude of sea level to 2500 feet. For other ambient temperatures, other altitudes, or special air velocity / inlet water temperature / duty cycle considerations, use thermal factors on [page <?>](#) to determine an application-adjusted thermal rating which can then be compared to the actual power transmitted. Thermal ratings for cooling tubes are based on water inlet temperature of 70°F (21°C), and water flow rates as shown on [page <?>](#). For cooling capacity exceeding the methods listed for the gear drive size, ratio and high-speed shaft RPM that you have selected, consult your Rexnord representative for an external heat exchanger package.
- ② For Type AXV, apply a multiplier of 0.8 to thermal ratings with no auxiliary cooling.
- ③ Type A gear drives with backstop at high-speed shaft are only available with one shaft fan. See instructions on [page 34](#) to calculate thermal rating with one shaft fan. Type AR gear drives are only available with one shaft fan. See instructions on [page 34](#) to calculate thermal rating with one shaft fan. Type AXV gear drives are not available with shaft fans.
- ④ Size 505 ratings for Shaft Fans, Electric Fans, and Cooling Tubes apply only to Type A. Consult Rexnord for Type AR and AXV ratings.

# Overhung Loads

## Type A, AR & AXV

### High & Low-Speed Shaft

$$\text{Overhung Load (lb)} = \frac{126,000 \times \text{HP} \times F_c \times L_l}{\text{Pitch Dia (in)} \times \text{RPM}} = 8453 \text{ pounds}$$



**Overhung Loads** — Overhung load is imposed upon a shaft when a pinion, sprocket or sheave is used as a power take-off. The magnitude of the load varies with the type of take-off and its proximity to the shaft bearing. Calculate the load (including minimum required service factor) and check the result against the tabulated overhung load rating. The above overhung load formula considers the transmitted power rating, without service factor. This is appropriate for applications where starting loads, momentary overloads and brake capacities do not exceed 200% of drive rating (100% overload). For other conditions, compute the equivalent power by multiplying the transmitted power by the appropriate service factor.

Locate the centerline of the load as close to the gear drive seal cage as practical to minimize the effect of the overhung load and increase bearing life.

**Consult Factory for Higher Overhung Load Ratings** — In many cases, overhung load capacity in excess of that published is available. If the actual load should exceed the published capacity, refer full details to the Factory; provide complete application information (see page <?>), as well as direction of rotation, location and direction of applied load.

## Low-Speed Shaft

Calculate low-speed shaft overhung load using the formula and F<sub>c</sub> values at left. The L<sub>l</sub> load location factors tabulated below are based on the distance from the centerline of the load to the gear drive seal cage.

**Low speed shaft overhung load example** — An application requiring 115 hp is driven by a 385A2 drive with 100 rpm output. An 18" pitch diameter single-chain sprocket is mounted on the low-speed shaft and the centerline of the load is 5 inches from the seal cage. Calculate the overhung load:

$$\text{Overhung Load} = \frac{126,000 \times 115 \times 1.0 \times 1.05}{18 \times 100} = 8453 \text{ pounds}$$

Refer to the Type A2 table on page <?> and note that the overhung load capacity for a 385A2 at 100 rpm is 12,500 pounds (12.5 x 1000) and is satisfactory for this selection.

## High-Speed Shaft

High-speed shaft overhung load ratings published on pages 26-<?> are for normal conditions where the centerline of the load is one shaft diameter from the seal cage, and for speeds of 1170 rpm or lower. Where the centerline of the load is one shaft diameter or closer, calculate the high-speed shaft overhung load using L<sub>l</sub> = 1 in the formula above left. Check the result against the rating on pages 26-<?>. Higher overhung load capacities are available when the full gear drive torque rating is not utilized. Refer to the Factory for higher ratings for these conditions, or if the calculated load (using L<sub>l</sub> = 1) exceeds the published value, or if the load is applied at a distance greater than one shaft diameter from the high-speed shaft seal cage.

## Type A, AR & AXV

### L<sub>l</sub> Load Location Factors ② Low-Speed Shaft

Based on distance from centerline of load to gear drive seal cage.

Distance (in)	Single Reduction Drive Size											Double, Triple & Quadruple Reduction Drive Size																												
	305	325	345	365	385	405	425	445	465	485	505	525	305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585											
2	0.94	0.93	0.90	0.89	0.89	0.87	0.86	0.86	0.85	0.81	0.81	0.80	0.94	0.92	0.90	0.88	0.87	0.86	0.84	0.83	0.82	0.81	0.81	0.80	0.77	0.80	0.81	0.81	0.81											
2.5	0.98	0.96	0.93	0.91	0.91	0.90	0.88	0.87	0.86	0.83	0.82	0.81	0.98	0.96	0.93	0.91	0.90	0.88	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.81	0.82	0.82	0.82											
3	1.04	1.00	0.94	0.94	0.93	0.92	0.90	0.89	0.87	0.84	0.84	0.82	1.02	1.00	0.96	0.94	0.92	0.91	0.88	0.87	0.86	0.84	0.84	0.82	0.80	0.82	0.83	0.83	0.83											
3.5	1.12	1.08	0.97	0.97	0.96	0.94	0.91	0.90	0.89	0.86	0.85	0.83	1.06	1.04	1.00	0.97	0.95	0.93	0.91	0.89	0.87	0.86	0.85	0.83	0.81	0.83	0.84	0.84	0.84											
4	1.20	1.15	1.00	1.00	0.98	0.96	0.93	0.92	0.90	0.87	0.86	0.85	1.10	1.08	1.03	1.00	0.97	0.95	0.93	0.91	0.89	0.87	0.86	0.85	0.83	0.84	0.85	0.84	0.85											
4.5	—	1.23	1.07	1.06	1.00	0.98	0.95	0.94	0.92	0.88	0.88	0.86	—	1.11	1.06	1.03	1.00	0.98	0.95	0.92	0.91	0.88	0.88	0.86	0.84	0.83	0.86	0.85	0.86											
5	—	—	1.13	1.13	1.05	1.00	0.97	0.95	0.93	0.90	0.89	0.87	—	—	1.10	1.06	1.05	1.00	0.97	0.94	0.92	0.90	0.89	0.87	0.85	0.86	0.87	0.86	0.87											
5.5	—	—	1.20	1.19	1.11	1.05	0.99	0.97	0.95	0.91	0.90	0.88	—	—	1.09	1.11	1.05	0.99	0.96	0.94	0.91	0.90	0.88	0.87	0.87	0.88	0.88	0.87	0.87											
6	—	—	—	1.25	1.16	1.10	1.02	0.98	0.96	0.93	0.92	0.89	—	—	—	1.12	1.16	1.10	1.02	0.98	0.96	0.93	0.92	0.89	0.88	0.88	0.89	0.88	0.88											
6.5	—	—	—	—	1.22	1.15	1.07	1.00	0.98	0.94	0.93	0.90	—	—	—	—	1.22	1.15	1.07	1.00	0.97	0.94	0.93	0.90	0.89	0.89	0.90	0.89	0.89											
7	—	—	—	—	1.27	1.20	1.12	1.04	0.99	0.96	0.94	0.92	—	—	—	—	1.27	1.20	1.12	1.04	0.99	0.96	0.94	0.92	0.91	0.90	0.91	0.90	0.90											
7.5	—	—	—	—	1.33	1.26	1.16	1.09	1.02	0.97	0.95	0.93	—	—	—	—	1.33	1.26	1.16	1.09	1.02	0.97	0.95	0.93	0.92	0.91	0.92	0.91	0.89											
8	—	—	—	—	—	1.31	1.21	1.13	1.06	0.99	0.97	0.94	—	—	—	—	1.31	1.21	1.13	1.06	0.99	0.97	0.94	0.93	0.92	0.93	0.92	0.92	0.92											
8.5	—	—	—	—	—	1.36	1.25	1.17	1.10	1.00	0.98	0.95	—	—	—	—	1.36	1.26	1.17	1.10	1.00	0.98	0.95	0.95	0.93	0.94	0.93	0.92	0.92											
9	—	—	—	—	—	—	1.30	1.22	1.14	1.04	0.99	0.96	—	—	—	—	—	1.30	1.22	1.14	1.04	0.99	0.96	0.96	0.94	0.95	0.94	0.93	0.93											
10	—	—	—	—	—	—	1.39	1.30	1.22	1.11	1.05	0.99	—	—	—	—	—	1.40	1.30	1.22	1.11	1.05	0.99	0.99	0.96	0.97	0.96	0.95	0.95											
11	—	—	—	—	—	—	—	1.39	1.30	1.18	1.12	1.03	—	—	—	—	—	—	1.39	1.30	1.18	1.12	1.03	1.03	0.99	0.99	0.98	0.97	0.97											
12	—	—	—	—	—	—	—	—	1.38	1.25	1.18	1.09	—	—	—	—	—	—	—	1.38	1.25	1.18	1.09	1.09	1.02	1.03	1.00	0.98	0.98											
13	—	—	—	—	—	—	—	—	—	1.32	1.25	1.15	—	—	—	—	—	—	—	—	1.32	1.25	1.15	1.15	1.10	1.07	1.08	1.04	1.00											
14	—	—	—	—	—	—	—	—	—	—	1.39	1.32	1.21	—	—	—	—	—	—	—	—	1.39	1.32	1.21	1.20	1.13	1.13	1.09	1.05											
15	Centerline of load is beyond end of standard low-speed shaft. Consult Factory for special shaft.											Centerline of load is beyond end of standard low-speed shaft. Consult Factory for special shaft.																												
16												—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
17												—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18												—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

① Refer all multiple chain sprocket and pinion-mounted applications to the Factory for deflection analysis.

② Interpolate for intermediate values.

# Overhung Loads

## High-Speed Shaft

### Type A, AR & AXV Overhung Loads (lb) ①

High-Speed Shaft RPM	Nominal Ratio ±4%	Approx. Low-Speed Shaft RPM	Double Reduction																
			Drive Size																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
1170	5.60	210	—	—	—	—	1300	②	②	950	3000	3500	2050	1110	②	740	②	②	②
	6.20	190	1530	590	210	460	1300	②	②	2500	3000	3500	3510	2360	3690	3670	3080	3040	3300
	6.86	170	1530	680	210	880	1300	360	②	2500	3000	3500	2410	1740	170	230	②	②	2320
	7.59	155	1530	760	510	1100	1300	970	②	2500	3000	3500	2910	2960	4700	3250	2070	2700	5190
	8.40	140	1530	760	840	1310	1300	②	180	2500	3000	3500	1840	2490	②	3840	②	5080	3880
	9.30	125	1550	1010	1250	1550	1300	1210	300	2500	3000	3500	4000	4010	480	3080	1700	2590	5170
	10.29	115	1550	1090	1570	1800	1300	1600	700	2500	3000	3500	1770	②	4700	3680	5600	4940	2690
	11.39	100	1500	1060	1490	720	1300	1600	1340	2500	3000	3500	4000	4700	4700	3390	2560	1730	5150
	12.61	90	1500	1060	1490	840	1300	1430	890	2500	3000	3500	1500	1660	②	3990	5600	3720	1530
	13.95	84	1500	1080	1550	1050	1300	1600	1530	2500	3000	2870	2540	4700	2280	1460	5600	5770	3660
	15.44	75	1500	1330	1900	880	1300	1600	2000	2500	3000	3500	4000	②	②	2530	990	6800	2270
	17.09	68	1500	1670	2230	1070	1300	1600	1690	2500	3000	2750	3930	4700	②	4630	5600	6430	3980
	18.91	60	1160	1390	2070	1590	1300	1600	1840	2500	3000	3500	4000	4700	4700	4650	5600	5740	4460
	20.93	56	1160	1670	2370	1590	1300	1600	2000	2500	3000	3500	4000	4700	4700	4950	5600	6800	8100
	23.16	50	1160	1500	2180	1790	—	—	—	—	—	—	—	—	—	—	—	—	—
	25.63	45	1160	1670	2410	2220	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	40	1160	1670	2410	1820	—	—	—	—	—	—	—	—	—	—	—	—	—
31.39	37	1160	1670	2310	2220	—	—	—	—	—	—	—	—	—	—	—	—	—	
34.74	34	1160	1670	2320	2490	—	—	—	—	—	—	—	—	—	—	—	—	—	
870	5.60	155	—	—	—	—	1300	②	②	1010	3000	3500	2250	1220	②	810	②	②	1940
	6.20	140	1550	580	220	490	1300	220	400	2500	3000	3500	3830	2580	4030	4020	3360	3320	3610
	6.86	130	1550	580	220	950	1300	590	810	2500	3000	3500	2630	1900	200	240	②	②	2530
	7.59	115	1550	640	380	1130	1300	1580	670	2500	3000	3500	3180	3230	4700	3550	2280	2950	5670
	8.40	105	1550	740	820	1440	1300	800	1060	2500	3000	3500	2020	2730	②	4190	②	5550	4240
	9.30	95	1550	990	1230	1860	1300	1600	1180	2500	3000	3500	4000	4390	520	3370	1840	2830	5650
	10.29	85	1550	1080	1550	2210	1300	1600	1590	2500	3000	3500	1930	②	4700	4030	5600	5400	2940
	11.39	77	1500	1370	1880	1170	1300	1600	2000	2500	3000	3500	4000	4700	4700	3710	2780	1880	5630
	12.61	70	1500	1370	1880	1170	1300	1600	1770	2500	3000	3500	2070	1830	②	4370	5600	4070	3260
	13.95	62	1500	1370	1960	1320	1300	1600	2000	2500	3000	3140	3040	4700	2510	3040	5600	6300	4000
	15.44	55	1500	1630	2310	1330	1300	1600	2000	2500	3000	3500	4000	②	②	4700	1110	6800	5960
	17.09	50	1500	1670	2410	1480	1300	1600	2000	2500	3000	3500	4000	4700	②	5600	5600	6800	8100
	18.91	45	1160	1670	2410	1990	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	20.93	42	1160	1670	2410	1990	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	23.16	38	1160	1670	2410	2230	—	—	—	—	—	—	—	—	—	—	—	—	—
	25.63	34	1160	1670	2410	2640	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	31	1160	1670	2410	2240	—	—	—	—	—	—	—	—	—	—	—	—	—
31.39	28	1160	1670	2310	2650	—	—	—	—	—	—	—	—	—	—	—	—	—	
34.74	25	1160	1670	2320	2920	—	—	—	—	—	—	—	—	—	—	—	—	—	

① Overhung load values listed are for loads applied one shaft diameter from the seal cage with a service factor of unity. Where overhung load is proportional to torque (i.e., pinion, sprocket or sheave applications) an appropriate service factor must be considered in the overhung load calculation. Published ratings are based on a combination of the most unfavorable conditions of loading. Values shown apply to high-speed shaft extensions on either side of the gear drive. Consult Factory for ratings of drives with fans and for speeds higher than 1170 RPM.

② Consult Factory for overhung load ratings.

# Overhung Loads

## High-Speed Shaft

### Type A, AR & AXV Overhung Loads (lb) ①

High-Speed Shaft RPM	Nominal Ratio ±4%	Approx. Low-Speed Shaft RPM	Double Reduction																
			Drive Size																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
720	5.60	130	--	--	--	--	1300	430	560	1080	3000	3500	2380	1290	②	850	②	②	5050
	6.20	115	1550	580	210	710	1300	750	1020	2500	3000	3500	4000	2740	4240	4250	3540	3510	5050
	6.86	105	1550	580	210	950	1300	1120	1400	2500	3000	3500	2780	2010	200	260	②	②	5050
	7.59	95	1550	630	370	1130	1300	1600	1270	2500	3000	3500	3360	3430	4700	3750	2400	3130	6000
	8.40	85	1550	730	800	1600	1300	1340	1660	2500	3000	3500	2120	2890	②	4430	②	5880	4490
	9.30	77	1550	990	1210	2140	1300	1600	1800	2500	3000	3500	4000	4640	550	3570	1940	3000	5980
	10.29	70	1550	1080	1520	2500	1300	1600	2000	2500	3000	3500	2640	②	4700	4260	5600	5710	5950
	11.39	62	1500	1580	2120	1460	1300	1600	2000	2500	3000	3500	4000	4700	4700	4400	2960	2630	8100
	12.61	55	1500	1580	2120	1460	1300	1600	2000	2500	3000	3500	3700	1950	②	5600	5600	4420	6360
	13.95	50	1500	1580	2230	1620	1300	1600	2000	2500	3000	3500	4000	4700	2610	5150	5600	6800	4240
	15.44	45	1500	1670	2410	1600	1300	1600	2000	2500	3000	3500	4000	1960	②	5600	1170	6800	8100
	17.09	42	1500	1670	2410	1730	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	18.91	38	1160	1670	2410	2140	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	20.93	34	1160	1670	2410	2140	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	23.16	31	1160	1670	2410	2410	--	--	--	--	--	--	--	--	--	--	--	--	--
	25.63	28	1160	1670	2410	2820	--	--	--	--	--	--	--	--	--	--	--	--	--
	28.36	25	1160	1670	2410	2360	--	--	--	--	--	--	--	--	--	--	--	--	--
31.39	22	1160	1670	2310	2780	--	--	--	--	--	--	--	--	--	--	--	--	--	
34.74	21	1160	1670	2320	3060	--	--	--	--	--	--	--	--	--	--	--	--	--	
580	5.60	105	--	--	--	--	1300	1090	1290	1160	3000	3500	2540	1380	②	910	②	②	8100
	6.20	95	1550	580	210	860	1300	1400	1750	2500	3000	3500	4000	2920	4550	4530	3770	3740	8100
	6.86	85	1550	580	210	950	1300	1600	2000	2500	3000	3500	2970	2150	200	1810	②	②	8100
	7.59	77	1550	630	350	1130	1300	1600	2000	2500	3000	3500	3590	3650	4700	4010	2560	3330	6410
	8.40	70	1550	730	770	1660	1300	1600	2000	2500	3000	3500	3560	3080	②	5090	5220	6270	7140
	9.30	62	1550	980	1190	2160	1300	1600	2000	2500	3000	3500	4000	4700	610	5000	5220	4200	8100
	10.29	55	1550	1080	1520	2520	1300	1600	2000	2500	3000	3500	4000	②	4700	5600	5600	6100	8100
	11.39	50	1500	1670	2120	1460	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	3170	5560	8100
	12.61	45	1500	1670	2120	1460	1300	1600	2000	2500	3000	3500	4000	4700	②	5600	5600	6800	8100
	13.95	42	1500	1670	2230	1620	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	6000
	15.44	38	1500	1670	2410	1600	1300	1600	2000	2500	3000	3500	4000	4700	430	5600	1250	6800	8100
	17.09	34	1500	1670	2410	1730	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	18.91	31	1160	1670	2410	2140	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	20.93	28	1160	1670	2410	2140	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	23.16	25	1160	1670	2410	2410	--	--	--	--	--	--	--	--	--	--	--	--	--
	25.63	22	1160	1670	2410	2820	--	--	--	--	--	--	--	--	--	--	--	--	--
	28.36	21	1160	1670	2410	2360	--	--	--	--	--	--	--	--	--	--	--	--	--
31.39	18	1160	1670	2300	2780	--	--	--	--	--	--	--	--	--	--	--	--	--	
34.74	17	1160	1670	2320	3060	--	--	--	--	--	--	--	--	--	--	--	--	--	

① Overhung load values listed are for loads applied one shaft diameter from the seal cage with a service factor of unity. Where overhung load is proportional to torque (i.e., pinion, sprocket or sheave applications) an appropriate service factor must be considered in the overhung load calculation. Published ratings are based on a combination of the most unfavorable conditions of loading. Values shown apply to high-speed shaft extensions on either side of the gear drive. Consult Factory for ratings of drives with fans and for speeds higher than 1170 RPM.

② Consult Factory for overhung load ratings.

# Overhung Loads

## High-Speed Shaft

### Type A, AR & AXV Overhung Loads (lb) ①

High-Speed Shaft RPM	Nominal Ratio ±4%	Approx. Low-Speed Shaft RPM	Double Reduction Drive Size																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
1170	5.60	210	—	—	—	—	1300	②	②	950	3000	3500	2050	1110	②	740	②	②	②
	6.20	190	1530	590	210	460	1300	②	②	2500	3000	3500	3510	2360	3690	3670	3080	3040	3300
	6.86	170	1530	680	210	880	1300	360	②	2500	3000	3500	2410	1740	170	230	②	②	2320
	7.59	155	1530	760	510	1100	1300	970	②	2500	3000	3500	2910	2960	4700	3250	2070	2700	5190
	8.40	140	1530	760	840	1310	1300	②	180	2500	3000	3500	1840	2490	②	3840	②	5080	3880
	9.30	125	1550	1010	1250	1550	1300	1210	300	2500	3000	3500	4000	4010	480	3080	1700	2590	5170
	10.29	115	1550	1090	1570	1800	1300	1600	700	2500	3000	3500	1770	②	4700	3680	5600	4940	2690
	11.39	100	1500	1060	1490	720	1300	1600	1340	2500	3000	3500	4000	4700	4700	3390	2560	1730	5150
	12.61	90	1500	1060	1490	840	1300	1430	890	2500	3000	3500	1500	1660	②	3990	5600	3720	1530
	13.95	84	1500	1080	1550	1050	1300	1600	1530	2500	3000	2870	2540	4700	2280	1460	5600	5770	3660
	15.44	75	1500	1330	1900	880	1300	1600	2000	2500	3000	3500	4000	②	②	2530	990	6800	2270
	17.09	68	1500	1670	2230	1070	1300	1600	1690	2500	3000	2750	3930	4700	②	4630	5600	6430	3980
	18.91	60	1160	1390	2070	1590	1300	1600	1840	2500	3000	3500	4000	4700	4700	4650	5600	5740	4460
	20.93	56	1160	1670	2370	1590	1300	1600	2000	2500	3000	3500	4000	4700	4700	4950	5600	6800	8100
	23.16	50	1160	1500	2180	1790	—	—	—	—	—	—	—	—	—	—	—	—	—
	25.63	45	1160	1670	2410	2220	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	40	1160	1670	2410	1820	—	—	—	—	—	—	—	—	—	—	—	—	—
31.39	37	1160	1670	2310	2220	—	—	—	—	—	—	—	—	—	—	—	—	—	
34.74	34	1160	1670	2320	2490	—	—	—	—	—	—	—	—	—	—	—	—	—	
870	5.60	155	—	—	—	—	1300	②	②	1010	3000	3500	2250	1220	②	810	②	②	1940
	6.20	140	1550	580	220	490	1300	220	400	2500	3000	3500	3830	2580	4030	4020	3360	3320	3610
	6.86	130	1550	580	220	950	1300	590	810	2500	3000	3500	2630	1900	200	240	②	②	2530
	7.59	115	1550	640	380	1130	1300	1580	670	2500	3000	3500	3180	3230	4700	3550	2280	2950	5670
	8.40	105	1550	740	820	1440	1300	800	1060	2500	3000	3500	2020	2730	②	4190	②	5550	4240
	9.30	95	1550	990	1230	1860	1300	1600	1180	2500	3000	3500	4000	4390	520	3370	1840	2830	5650
	10.29	85	1550	1080	1550	2210	1300	1600	1590	2500	3000	3500	1930	②	4700	4030	5600	5400	2940
	11.39	77	1500	1370	1880	1170	1300	1600	2000	2500	3000	3500	4000	4700	4700	3710	2780	1880	5630
	12.61	70	1500	1370	1880	1170	1300	1600	1770	2500	3000	3500	2070	1830	②	4370	5600	4070	3260
	13.95	62	1500	1370	1960	1320	1300	1600	2000	2500	3000	3140	3040	4700	2510	3040	5600	6300	4000
	15.44	55	1500	1630	2310	1330	1300	1600	2000	2500	3000	3500	4000	②	②	4700	1110	6800	5960
	17.09	50	1500	1670	2410	1480	1300	1600	2000	2500	3000	3500	4000	4700	②	5600	5600	6800	8100
	18.91	45	1160	1670	2410	1990	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	20.93	42	1160	1670	2410	1990	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	23.16	38	1160	1670	2410	2230	—	—	—	—	—	—	—	—	—	—	—	—	—
	25.63	34	1160	1670	2410	2640	—	—	—	—	—	—	—	—	—	—	—	—	—
	28.36	31	1160	1670	2410	2240	—	—	—	—	—	—	—	—	—	—	—	—	—
31.39	28	1160	1670	2310	2650	—	—	—	—	—	—	—	—	—	—	—	—	—	
34.74	25	1160	1670	2320	2920	—	—	—	—	—	—	—	—	—	—	—	—	—	

① Overhung load values listed are for loads applied one shaft diameter from the seal cage with a service factor of unity. Where overhung load is proportional to torque (i.e., pinion, sprocket or sheave applications) an appropriate service factor must be considered in the overhung load calculation. Published ratings are based on a combination of the most unfavorable conditions of loading. Values shown apply to high-speed shaft extensions on either side of the gear drive. Consult Factory for ratings of drives with fans and for speeds higher than 1170 RPM.

② Consult Factory for overhung load ratings.

# Overhung Loads

## High-Speed Shaft

### Type A, AR & AXV Overhung Loads (lb) ①

High-Speed Shaft RPM	Nominal Ratio ±4%	Approx. Low-Speed Shaft RPM	Double Reduction																
			Drive Size																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
720	5.60	130	–	–	–	–	1300	430	560	1080	3000	3500	2380	1290	②	850	②	②	5050
	6.20	115	1550	580	210	710	1300	750	1020	2500	3000	3500	4000	2740	4240	4250	3540	3510	5050
	6.86	105	1550	580	210	950	1300	1120	1400	2500	3000	3500	2780	2010	200	260	②	②	5050
	7.59	95	1550	630	370	1130	1300	1600	1270	2500	3000	3500	3360	3430	4700	3750	2400	3130	6000
	8.40	85	1550	730	800	1600	1300	1340	1660	2500	3000	3500	2120	2890	②	4430	②	5880	4490
	9.30	77	1550	990	1210	2140	1300	1600	1800	2500	3000	3500	4000	4640	550	3570	1940	3000	5980
	10.29	70	1550	1080	1520	2500	1300	1600	2000	2500	3000	3500	2640	②	4700	4260	5600	5710	5950
	11.39	62	1500	1580	2120	1460	1300	1600	2000	2500	3000	3500	4000	4700	4700	4400	2960	2630	8100
	12.61	55	1500	1580	2120	1460	1300	1600	2000	2500	3000	3500	3700	1950	②	5600	5600	4420	6360
	13.95	50	1500	1580	2230	1620	1300	1600	2000	2500	3000	3500	4000	4700	2610	5150	5600	6800	4240
	15.44	45	1500	1670	2410	1600	1300	1600	2000	2500	3000	3500	4000	1960	②	5600	1170	6800	8100
	17.09	42	1500	1670	2410	1730	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	18.91	38	1160	1670	2410	2140	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	20.93	34	1160	1670	2410	2140	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	23.16	31	1160	1670	2410	2410	–	–	–	–	–	–	–	–	–	–	–	–	–
	25.63	28	1160	1670	2410	2820	–	–	–	–	–	–	–	–	–	–	–	–	–
	28.36	25	1160	1670	2410	2360	–	–	–	–	–	–	–	–	–	–	–	–	–
31.39	22	1160	1670	2310	2780	–	–	–	–	–	–	–	–	–	–	–	–	–	
34.74	21	1160	1670	2320	3060	–	–	–	–	–	–	–	–	–	–	–	–	–	
580	5.60	105	–	–	–	–	1300	1090	1290	1160	3000	3500	2540	1380	②	910	②	②	8100
	6.20	95	1550	580	210	860	1300	1400	1750	2500	3000	3500	4000	2920	4550	4530	3770	3740	8100
	6.86	85	1550	580	210	950	1300	1600	2000	2500	3000	3500	2970	2150	200	1810	②	②	8100
	7.59	77	1550	630	350	1130	1300	1600	2000	2500	3000	3500	3590	3650	4700	4010	2560	3330	6410
	8.40	70	1550	730	770	1660	1300	1600	2000	2500	3000	3500	3560	3080	②	5090	5220	6270	7140
	9.30	62	1550	980	1190	2160	1300	1600	2000	2500	3000	3500	4000	4700	610	5000	5220	4200	8100
	10.29	55	1550	1080	1520	2520	1300	1600	2000	2500	3000	3500	4000	②	4700	5600	5600	6100	8100
	11.39	50	1500	1670	2120	1460	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	3170	5560	8100
	12.61	45	1500	1670	2120	1460	1300	1600	2000	2500	3000	3500	4000	4700	②	5600	5600	6800	8100
	13.95	42	1500	1670	2230	1620	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	6000
	15.44	38	1500	1670	2410	1600	1300	1600	2000	2500	3000	3500	4000	4700	430	5600	1250	6800	8100
	17.09	34	1500	1670	2410	1730	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	18.91	31	1160	1670	2410	2140	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	20.93	28	1160	1670	2410	2140	1300	1600	2000	2500	3000	3500	4000	4700	4700	5600	5600	6800	8100
	23.16	25	1160	1670	2410	2410	–	–	–	–	–	–	–	–	–	–	–	–	–
	25.63	22	1160	1670	2410	2820	–	–	–	–	–	–	–	–	–	–	–	–	–
	28.36	21	1160	1670	2410	2360	–	–	–	–	–	–	–	–	–	–	–	–	–
31.39	18	1160	1670	2300	2780	–	–	–	–	–	–	–	–	–	–	–	–	–	
34.74	17	1160	1670	2320	3060	–	–	–	–	–	–	–	–	–	–	–	–	–	

① Overhung load values listed are for loads applied one shaft diameter from the seal cage with a service factor of unity. Where overhung load is proportional to torque (i.e., pinion, sprocket or sheave applications) an appropriate service factor must be considered in the overhung load calculation. Published ratings are based on a combination of the most unfavorable conditions of loading. Values shown apply to high-speed shaft extensions on either side of the gear drive. Consult Factory for ratings of drives with fans and for speeds higher than 1170 RPM.

② Consult Factory for overhung load ratings.

# Overhung Loads

## High-Speed Shaft

### Type A, AR & AXV Overhung Loads (lb) ①

High-Speed Shaft RPM	Nominal Ratio $\pm 4\%$	Approx. Low-Speed Shaft RPM	Triple Reduction Drive Size																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
1170	23.16	50	–	–	–	–	900	1200	1600	2000	2500	2840	②	4000	3090	4800	1780	5700	6800
	25.63	45	–	–	–	–	900	1200	1600	2000	2500	3000	②	4000	3340	4800	1780	5700	6800
	28.36	40	–	–	–	–	900	1200	1600	2000	2500	3000	2410	4000	3860	4800	2390	5700	6800
	31.39	37	–	–	–	–	900	1200	1600	2000	2500	3000	2040	4000	4000	4800	770	5700	6800
	34.74	34	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	2100	5700	6800
	38.44	30	920	930	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	430	5700	6800
	42.54	27	920	930	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	2720	5700	6800
	47.08	25	920	940	1590	1210	900	1200	1600	2000	2500	3000	2940	4000	4000	4800	4030	5700	6800
	52.11	22	930	880	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	3330	5700	6800
	57.66	20	930	940	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	63.82	18	930	880	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	70.62	16.5	940	900	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	78.16	15.0	940	900	1590	1590	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	86.50	13.5	940	910	1590	1590	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	95.73	12.0	940	910	1590	1620	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	105.9	11.0	940	910	1590	1620	–	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	117.2	10.0	940	910	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	129.7	9.0	950	910	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	143.6	8.1	950	920	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	158.9	7.5	940	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–
175.9	6.6	940	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	
194.6	6.0	950	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	
215.4	5.4	950	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	
870	23.16	38	–	–	–	–	900	1200	1600	2000	2500	3000	2030	4000	4000	4800	1950	5700	6800
	25.63	34	–	–	–	–	900	1200	1600	2000	2500	3000	2970	4000	4000	4800	1950	5700	6800
	28.36	31	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	2620	5700	6800
	31.39	28	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	1350	5700	6800
	34.74	25	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	3620	5700	6800
	38.44	22	920	930	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	2230	5700	6800
	42.54	21	920	930	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4630	5700	6800
	47.08	18	920	940	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	52.11	17	930	880	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	57.66	15	930	940	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	63.82	14	930	880	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	70.62	12.5	940	900	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	78.16	11.0	930	910	1590	1590	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	86.50	10.0	940	910	1590	1590	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	95.73	9.1	940	910	1590	1620	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	105.9	8.3	940	910	1590	1620	–	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	117.2	7.5	940	910	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	129.7	6.8	950	910	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	143.6	6.1	950	920	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	158.9	5.5	940	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–
175.9	5.0	940	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	
194.6	4.5	950	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	
215.4	4.1	950	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	

① Overhung load values listed are for loads applied one shaft diameter from the seal cage with a service factor of unity. Where overhung load is proportional to torque (i.e., pinion, sprocket or sheave applications) an appropriate service factor must be considered in the overhung load calculation. Published ratings are based on a combination of the most unfavorable conditions of loading. Values shown apply to high-speed shaft extensions on either side of the gear drive. Consult Factory for ratings of drives with fans and for speeds higher than 1170 RPM.

② Consult Factory for overhung load ratings.

# Overhung Loads

## High-Speed Shaft

### Type A, AR & AXV Overhung Loads (lb) ①

High-Speed Shaft RPM	Nominal Ratio $\pm 4\%$	Approx. Low-Speed Shaft RPM	Triple Reduction Drive Size																
			305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
720	23.16	31	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	2190	5700	6800
	25.63	28	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	2190	5700	6800
	28.36	25	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	3700	5700	6800
	31.39	22	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	2730	5700	6800
	34.74	21	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	38.44	18	920	930	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	3540	5700	6800
	42.54	17	920	930	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	47.08	15	920	940	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	52.11	14	930	880	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	57.66	12.5	930	940	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	63.82	11.0	930	880	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	70.62	10.0	940	900	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	78.16	9.1	930	910	1590	1590	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	86.50	8.3	940	910	1590	1590	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	95.73	7.5	940	910	1590	1620	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	105.9	6.8	940	910	1590	1620	–	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	117.2	6.1	940	910	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	129.7	5.5	950	910	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	143.6	5.0	950	920	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	158.9	4.5	940	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–
175.9	4.1	940	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	
194.6	3.8	950	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	
215.4	3.3	950	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	
580	23.16	25	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	3850	5700	6800
	25.63	22	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	3850	5700	6800
	28.36	21	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	31.39	18	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4390	5700	6800
	34.74	17	–	–	–	–	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	38.44	15	920	930	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	42.54	14	920	930	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	47.08	12.5	920	940	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	52.11	11.0	930	880	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	57.66	10.0	930	940	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	63.82	9.1	930	880	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	70.62	8.3	940	900	1590	1210	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	78.16	7.5	930	900	1590	1590	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	86.50	6.8	940	910	1590	1590	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	95.73	6.1	940	910	1590	1620	900	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	105.9	5.5	940	910	1590	1620	–	1200	1600	2000	2500	3000	3500	4000	4000	4800	4800	5700	6800
	117.2	5.0	940	910	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	129.7	4.5	950	910	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	143.6	4.1	950	920	1590	1620	–	–	–	–	–	–	–	–	–	–	–	–	–
	158.9	3.8	940	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–
175.9	3.3	940	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	
194.6	3.0	950	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	
215.4	2.7	950	920	1590	1590	–	–	–	–	–	–	–	–	–	–	–	–	–	

① Overhung load values listed are for loads applied one shaft diameter from the seal cage with a service factor of unity. Where overhung load is proportional to torque (i.e., pinion, sprocket or sheave applications) an appropriate service factor must be considered in the overhung load calculation. Published ratings are based on a combination of the most unfavorable conditions of loading. Values shown apply to high-speed shaft extensions on either side of the gear drive. Consult Factory for ratings of drives with fans and for speeds higher than 1170 RPM.

# Overhung Loads

## High-Speed Shaft

### Type A, AR & AXV Overhung Loads (lb) ①

High-Speed Shaft RPM	Nominal Ratio ±5%	Approx. Low-Speed Shaft RPM	Quadruple Reduction											
			Drive Size											
			385	405	425	445	465	485	505	525	535	555		
1170	105.9	11.0	600	—	—	—	—	—	—	—	—	—	—	—
	117.2	10.0	600	800	1000	1200	1500	1700	2000	2300	2300	2300	1850	
	129.7 or Higher	9.0 or Lower	600	800	1000	1200	1500	1700	2000	2300	2300	2300	3000	
870	105.9	8.3	600	—	—	—	—	—	—	—	—	—	—	
	117.2 or Higher	7.5 or Lower	600	800	1000	1200	1500	1700	2000	2300	2300	2300	3000	

## Low-Speed Shaft

### Type A Overhung Load Ratings (lb) ②

High-Speed Shaft RPM	Nominal Ratio ±3%	Approx. Low-Speed Shaft RPM	Single Reduction											
			Drive Size ③											
			305	325	345	365	385	405	425	445	465	485	505	525
1750	1.84	950	3.21	5.64	5.72	7.98	12.5	6.08	④	10.00	2.45	④	④	7.18
	2.03	860	3.15	5.82	5.94	8.34	12.5	6.60	2.74	11.6	5.91	④	④	9.31
	2.25	780	3.17	6.04	6.15	8.74	12.5	7.24	3.88	12.8	8.51	④	④	12.0
	2.49	700	3.17	6.25	6.38	8.96	12.5	7.96	5.24	14.6	10.6	④	④	13.5
	2.76	640	3.15	6.56	6.63	9.32	12.5	8.14	6.50	17.0	11.9	3.88	④	15.9
	3.05	575	3.17	6.79	6.98	9.68	12.5	8.93	6.79	17.5	12.9	6.81	2.88	16.7
	3.38	520	3.21	7.03	7.22	9.95	12.5	8.45	7.44	18.8	13.8	11.6	7.11	18.8
	3.74	470	3.17	7.24	7.44	10.4	12.5	9.40	7.97	19.6	15.1	14.4	12.7	21.3
	4.13	420	3.21	7.53	7.72	10.8	12.5	11.6	9.27	20.3	16.8	20.1	19.8	25.0
	4.57	380	3.33	7.89	8.07	11.3	12.5	12.2	10.3	21.2	18.0	23.6	24.0	26.6
	5.06	350	3.52	7.96	8.70	11.7	12.5	13.9	12.1	22.7	18.8	25.0	29.5	37.0
5.60	310	3.56	7.96	9.11	12.1	—	—	—	—	—	—	—	—	
1170	1.84	640	3.02	6.36	6.75	9.00	12.5	6.86	④	11.3	2.75	④	④	8.10
	2.03	575	2.95	6.57	6.88	9.41	12.5	7.45	3.10	13.1	6.67	④	④	10.5
	2.25	520	2.98	6.82	6.93	9.86	12.5	8.17	4.38	14.5	9.60	④	④	13.6
	2.49	470	2.97	7.05	7.20	10.1	12.5	8.99	5.91	16.5	12.0	④	④	15.2
	2.76	420	2.95	7.40	7.49	10.5	12.5	9.18	7.33	19.2	13.5	4.38	④	17.9
	3.05	380	2.98	7.66	8.13	10.9	12.5	10.1	7.67	19.8	14.5	7.68	3.25	18.8
	3.38	350	3.01	7.75	8.14	11.2	12.5	10.5	8.40	21.2	15.6	13.1	8.04	21.2
	3.74	310	2.98	7.75	8.39	11.8	12.5	11.5	9.28	22.1	17.0	18.1	14.3	24.0
	4.13	280	3.07	7.73	8.71	12.1	12.5	14.1	12.0	22.9	19.0	22.7	22.4	30.9
	4.57	255	3.29	7.75	9.11	12.1	12.5	14.7	13.1	23.9	20.3	28.0	27.5	33.2
	5.06	230	3.49	7.90	10.1	12.0	12.5	15.0	14.9	25.0	21.2	31.6	38.7	48.5
5.60	210	3.54	7.92	10.5	12.1	—	—	—	—	—	—	—	—	
580	1.84	320	3.02	7.74	9.02	11.7	10.8	8.47	6.84	18.2	3.41	3.72	8.06	10.0
	2.03	290	2.92	7.65	9.20	11.7	11.3	9.20	3.82	16.2	8.22	④	④	13.0
	2.25	260	2.77	7.52	9.25	11.5	9.86	10.1	7.93	17.8	12.2	④	④	17.0
	2.49	235	2.68	7.41	9.42	11.5	10.3	11.1	8.40	20.4	14.8	④	④	19.9
	2.76	210	2.77	7.34	9.69	11.5	10.4	12.4	9.96	24.0	16.6	5.41	④	22.1
	3.05	190	2.81	7.51	10.6	11.5	11.7	13.1	10.9	24.8	17.9	9.48	3.98	23.3
	3.38	175	2.88	7.35	10.4	11.5	11.4	15.0	12.6	25.0	19.2	34.2	9.94	26.2
	3.74	155	2.92	7.40	10.8	11.5	12.4	15.0	14.1	25.0	21.0	37.8	34.1	31.0
	4.13	140	3.02	7.55	11.0	11.5	12.5	15.0	17.2	25.0	23.4	37.7	38.5	52.2
	4.57	130	3.25	7.69	11.5	11.7	12.5	15.0	18.0	25.0	30.7	40.0	44.2	54.6
	5.06	115	3.46	7.86	11.6	11.9	12.5	15.0	18.0	25.0	31.9	40.0	50.0	60.0
5.60	105	3.50	7.87	11.7	12.1	—	—	—	—	—	—	—	—	

- ① Overhung load values listed are for loads applied one shaft diameter from the seal cage with a service factor of unity. Where overhung load is proportional to torque (i.e., pinion, sprocket or sheave applications) an appropriate service factor must be considered in the overhung load calculation. Published ratings are based on a combination of the most unfavorable conditions of loading. Values shown apply to high-speed shaft extensions on either side of the gear drive. Consult Factory for ratings of drives with fans.
- ② Published ratings are for standard assemblies with shaft extensions as shown on page <?> and are based on the most unfavorable conditions of loading. Interpolate for speeds between those shown. For speeds below 580 RPM use ratings for 580 RPM.
- ③ Multiply values below by 1000.
- ④ Consult Factory for overhung load ratings.

# Overhung Loads

## Low-Speed Shaft

### Type A Overhung Load Ratings (lb) ①

Approx. Low-Speed Shaft RPM	Double, Triple & Quadruple Reduction														
	Drive Size ②														
	305	325	345	365	385	405	425	445	465	485	505	525	545	565	585
310	—	—	—	—	12.5	15.0	15.6	20.8	20.6	32.1	29.4	41.6	49.0	70.9	68.4
280	3.16	7.45	9.09	11.2	12.5	15.0	15.8	21.8	21.4	34.9	30.1	45.4	50.6	69.0	68.6
255	3.16	7.45	9.17	11.2	12.5	15.0	15.9	22.1	21.8	34.1	30.2	44.1	51.3	75.1	72.7
230	3.16	7.45	9.25	11.2	12.5	15.0	16.8	22.9	22.8	36.9	31.0	48.1	53.2	72.3	72.9
210	3.16	7.45	9.55	11.2	12.5	15.0	16.9	23.4	23.2	36.2	32.1	46.9	54.5	74.4	77.2
190	3.16	7.45	9.82	11.2	12.5	15.0	17.8	24.1	24.2	39.2	32.9	51.1	56.3	75.4	77.4
170	3.16	7.45	10.2	11.2	12.5	15.0	17.9	25.0	24.6	38.3	33.9	49.8	57.9	77.6	83.8
155	3.16	7.45	10.4	11.2	12.5	15.0	18.0	25.0	25.4	39.6	35.0	51.3	59.8	80.2	81.9
140	3.16	7.45	10.8	11.2	12.5	15.0	18.0	25.0	26.4	40.0	37.2	57.0	61.3	92.1	84.6
125	3.16	7.45	11.2	11.2	12.5	15.0	18.0	25.0	26.9	40.0	37.0	57.5	62.0	85.1	87.7
110	3.16	7.45	11.2	11.2	12.5	15.0	18.0	25.0	28.0	40.0	38.2	57.5	65.6	86.0	92.3
100	3.16	7.45	11.2	11.2	12.5	15.0	18.0	25.0	28.7	40.0	39.6	60.0	65.9	86.0	93.1
93	3.16	7.45	11.2	11.2	12.5	15.0	18.0	25.0	29.9	40.0	40.4	60.0	69.4	86.0	98.0
84	3.16	7.45	11.2	11.2	12.5	15.0	18.0	25.0	31.8	40.0	42.6	60.0	70.0	86.0	98.9
77	3.16	7.45	11.2	11.2	12.5	15.0	18.0	25.0	31.6	40.0	43.1	60.0	72.0	86.0	100
70	3.16	7.45	11.2	11.2	12.5	15.0	18.0	25.0	33.0	40.0	45.0	60.0	72.0	86.0	100
62	3.16	7.45	11.2	11.2	12.5	15.0	18.0	25.0	33.0	40.0	47.3	60.0	72.0	86.0	100
57 or Lower	3.16	7.45	11.2	11.2	12.5	15.0	18.0	25.0	33.0	40.0	50.0	60.0	72.0	86.0	100

- ① Published ratings are for standard assemblies with shaft extensions as shown on page <?> and are based on the most unfavorable conditions of loading. Ratings are for a maximum input speed of 1750 RPM. Overhung load values listed are for loads applied one shaft diameter from the seal cage with a service factor of unity. Where overhung load is proportional to torque (i.e., pinion, sprocket or sheave applications) an appropriate service factor must be considered in the overhung load calculation.
- ② Multiply values below by 1000.

### Low-Speed Shaft Overhung Load

#### Type AXVU – Shaft Up (lb) ③

Approx. Low-Speed Shaft RPM	Drive Size ②							
	405	425	445	465	485	505	535	555
310	10.2	9.85	14.2	18.0	20.9	27.8	37.5	57.3
280	10.4	9.73	15.0	18.8	21.9	29.3	38.1	58.2
255	10.7	9.36	15.1	19.2	22.2	29.1	39.0	60.9
230	11.0	10.3	15.8	19.9	23.1	30.3	40.5	61.7
210	11.4	9.94	16.0	20.3	23.5	30.6	41.4	64.7
190	11.7	10.8	16.8	21.2	24.5	32.2	42.2	65.5
170	12.1	10.4	17.3	21.5	24.9	32.4	44.0	68.9
155	12.4	10.4	17.5	22.2	25.7	34.2	44.8	69.5
140	12.8	10.2	18.2	23.1	27.0	34.5	46.5	72.0
125	13.5	11.3	18.5	23.5	27.2	36.8	47.6	72.0
110	13.9	11.7	19.3	24.5	28.5	36.6	49.8	72.0
100	14.8	12.9	20.1	25.1	29.1	39.0	50.3	72.0
93	15.0	13.0	20.5	26.1	30.1	39.6	52.0	72.0
84	15.0	13.9	21.3	27.7	30.8	40.0	54.3	72.0
77	15.0	15.0	21.5	27.7	31.0	42.2	55.0	72.0
70	15.0	15.9	22.4	29.4	33.3	43.4	57.6	72.0
62	15.0	17.1	23.1	29.5	33.5	45.9	58.7	72.0
57	15.0	18.0	23.4	31.3	36.1	47.6	60.0	72.0
50	15.0	18.0	24.3	33.0	39.2	50.0	60.0	72.0
46 or Lower	15.0	18.0	25.0	33.0	40.0	50.0	60.0	72.0

### Low-Speed Shaft Overhung Load

#### Type AXVU – Shaft Down (lb) ③

Approx. Low-Speed Shaft RPM	Drive Size ②							
	405	425	445	465	485	505	535	555
310	15.0	15.6	20.8	26.2	32.4	42.2	35.2	72.0
280	15.0	15.8	21.8	27.0	33.9	43.7	33.9	72.0
255	15.0	15.9	22.1	27.0	34.4	44.9	36.3	72.0
230	15.0	16.8	22.9	28.7	36.0	45.9	35.8	72.0
210	15.0	16.9	23.4	29.6	36.5	47.6	38.5	72.0
190	15.0	17.8	24.1	30.4	38.2	48.8	37.1	72.0
170	15.0	17.9	25.0	31.3	38.6	50.0	40.9	72.0
155	15.0	18.0	25.0	32.2	39.9	50.0	39.4	72.0
140	15.0	18.0	25.0	33.0	40.0	50.0	41.8	72.0
125	15.0	18.0	25.0	33.0	40.0	50.0	41.8	72.0
110	15.0	18.0	25.0	33.0	40.0	50.0	44.2	72.0
100	15.0	18.0	25.0	33.0	40.0	50.0	44.3	72.0
93	15.0	18.0	25.0	33.0	40.0	50.0	45.7	72.0
84	15.0	18.0	25.0	33.0	40.0	50.0	50.5	72.0
77	15.0	18.0	25.0	33.0	40.0	50.0	48.4	72.0
70	15.0	18.0	25.0	33.0	40.0	50.0	52.1	72.0
62	15.0	18.0	25.0	33.0	40.0	50.0	51.6	72.0
57	15.0	18.0	25.0	33.0	40.0	50.0	55.4	72.0
50	15.0	18.0	25.0	33.0	40.0	50.0	59.6	72.0
46 or Lower	15.0	18.0	25.0	33.0	40.0	50.0	60.0	72.0

- ③ Overhung load values listed are for loads applied one shaft diameter from the seal cage with a service factor of unity. Where overhung load is proportional to torque (i.e., pinion, sprocket or sheave applications) an appropriate service factor must be considered in the overhung load calculation. Published ratings are for shaft extension as shown and are based on the most unfavorable conditions of loading. Ratings are for a maximum input speed of 1750 RPM.

# Low-Speed Shaft Thrust Capacity

## Type AXV – Shaft Up or Down

### Thrust Up (lb) ①

Approx. Low-Speed Shaft RPM	Drive Size ②							
	405	425	445	465	485	505	535	555
310	11.5	13.0	13.5	16.8	20.4	25.4	28.8	60.0
280	11.5	12.9	14.1	17.5	22.2	26.9	27.9	60.0
255	11.5	12.5	14.3	17.8	21.6	27.0	29.5	60.0
230	11.5	13.7	14.8	18.6	23.5	27.7	29.6	60.0
210	11.5	13.3	15.0	18.9	23.0	28.7	31.4	60.0
190	11.5	14.4	15.6	19.8	24.9	29.4	30.5	60.0
170	11.5	14.0	16.0	20.0	24.3	33.5	33.3	60.0
155	11.5	14.4	16.6	20.7	23.1	31.3	32.4	60.0
140	11.5	15.2	16.7	21.6	27.4	33.2	34.5	60.0
125	11.5	16.4	17.4	21.9	26.6	33.7	34.4	60.0
110	11.5	16.5	17.8	22.9	28.4	34.2	36.5	60.0
100	11.5	16.5	18.5	23.6	29.6	35.8	36.4	60.0
93	11.5	16.5	18.9	24.4	30.0	36.2	37.6	60.0
84	11.5	16.5	19.6	25.0	30.0	38.0	41.1	60.0
77	11.5	16.5	20.0	25.0	30.0	38.6	39.8	60.0
70	11.5	16.5	20.6	25.0	30.0	40.0	43.1	60.0
62	11.5	16.5	21.0	25.0	30.0	40.0	42.5	60.0
57	11.5	16.5	21.0	25.0	30.0	40.0	45.8	60.0
50	11.5	16.5	21.0	25.0	30.0	40.0	49.0	60.0
46 or Lower	11.5	16.5	21.0	25.0	30.0	40.0	50.0	60.0

### Thrust Down (lb) ①

Approx. Low-Speed Shaft RPM	Drive Size ②							
	405	425	445	465	485	505	535	555
310	11.2	12.6	13.1	16.3	19.7	24.6	50.0	57.4
280	11.5	12.4	13.7	17.1	21.5	26.1	50.0	58.4
255	11.5	12.0	13.9	17.3	20.9	26.1	50.0	60.0
230	11.5	13.2	14.3	18.1	22.7	26.8	50.0	60.0
210	11.5	12.7	14.6	18.4	24.7	27.7	50.0	60.0
190	11.5	13.9	15.2	19.2	24.1	28.5	50.0	60.0
170	11.5	15.3	15.5	19.5	23.5	32.3	50.0	60.0
155	11.5	13.8	16.1	20.1	24.3	30.3	50.0	60.0
140	11.5	14.5	16.3	21.7	26.5	32.2	50.0	60.0
125	11.5	15.7	17.0	21.3	25.7	32.1	50.0	60.0
110	11.5	16.5	17.2	22.3	28.0	33.1	50.0	60.0
100	11.5	16.5	18.0	23.0	27.4	34.7	50.0	60.0
93	11.5	16.5	18.3	23.7	29.6	35.0	50.0	60.0
84	11.5	16.5	19.0	25.0	30.0	36.9	50.0	60.0
77	11.5	16.5	19.4	25.0	30.0	37.4	50.0	60.0
70	11.5	16.5	20.0	25.0	30.0	40.0	50.0	60.0
62	11.5	16.5	20.6	25.0	30.0	40.0	50.0	60.0
57 or Lower	11.5	16.5	21.0	25.0	30.0	40.0	50.0	60.0

① Multiply values below by 1000.

② Published ratings are based on a combination of the most unfavorable conditions of loading. For higher ratings, refer full data to the Factory. Consult the Factory for combined radial and thrust loads. Ratings are for a maximum input speed of 1750 RPM.

# Exact Ratios/Parallel Shaft Gear Drives

## Single Reduction Exact Ratios (Type A)

Nominal Ratio ①	Drive Size											
	305	325	345	365	385	405	425	445	465	485	505	525
1.84	1.870	1.885	1.885	1.808	1.882	1.800	1.826	1.818	1.800	1.810	1.864	1.850
2.03	2.045	2.040	2.040	2.042	2.062	2.000	2.048	2.050	2.043	2.053	2.059	2.053
2.25	2.300	2.261	2.261	2.318	2.211	2.294	2.250	2.211	2.227	2.238	2.316	2.286
2.49	2.474	2.455	2.455	2.476	2.529	2.500	2.421	2.529	2.450	2.450	2.500	2.450
2.76	2.722	2.800	2.750	2.789	2.812	2.733	2.824	2.800	2.684	2.778	2.706	2.833
3.05	3.125	3.053	3.053	3.056	3.118	3.000	3.000	3.000	3.059	3.000	3.133	3.000
3.38	3.400	3.412	3.412	3.294	3.286	3.250 ①	3.333	3.471	3.312	3.389	3.429	3.250 ①
3.74	3.714	3.687	3.687	3.800	3.667	3.600 ①	3.643	3.750	3.667	3.647	3.687	3.600 ①
4.13	4.077	4.067	4.143	4.143	4.125	4.062	4.200	4.067	4.231	4.200	4.286 ①	4.062
4.57	4.533	4.529	4.615	4.615	4.467	4.400 ①	4.571	4.429 ①	4.437	4.571	4.692	4.400 ①
5.06	5.071	5.200	5.143	5.071	4.857 ①	4.812 ①	5.000	5.133	4.800 ①	5.000	5.143	4.812 ①
5.60	5.600	5.714	5.615	5.538	–	–	–	–	–	–	–	–

① Except where noted with a footnote (①), exact ratios are within ±3% of the nominal ratios.

## Double Reduction Exact Ratios (Type A, AR & AXV)

Nominal Ratio ②	Drive Size																
	305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
5.60	–	–	–	–	5.861 ②	5.591	5.591	5.647	5.506	5.478	5.697	5.400	5.700	5.542	5.641	5.591	5.781
6.20	6.182	6.336	6.285	6.159	6.177	6.057	6.212	6.533 ②	5.962	6.188	6.234	5.850 ②	6.141	6.032	6.107	6.406	6.290
6.86	6.753	6.848	6.793	7.104	6.893	6.709	6.789	7.059	6.600	6.660	6.705	6.682	7.053	6.854	6.978	6.947	6.856
7.59	7.413	7.552	7.632	7.745	7.755	7.571	7.544	7.672	7.599	7.625	7.579	7.239 ②	7.599	7.460	7.554	7.961 ②	7.771
8.40	8.242	8.412	8.502	8.629	8.167	8.147	8.244	8.289	8.412	8.206	8.151	8.724	8.500	8.153	8.660	8.646	8.471
9.30	9.221	9.657	9.474	9.481	9.187	9.194	9.298	8.989	9.054	9.569	9.474	9.663	9.158	9.259	9.375	9.301	9.286
10.29	10.18	10.61	10.34	10.35	10.04	9.958	10.16	10.55	10.02	10.30	10.32	10.77 ②	9.898	10.12	10.37	10.10	10.50
11.39	11.03	11.44	11.83	11.20	11.29	10.99	11.72	11.44	11.56	11.30	12.00 ②	10.90 ②	10.92 ②	11.30	11.44	11.79	11.51
12.61	12.27	12.36	12.78	12.92	12.22	12.00 ②	12.52	12.32	11.92 ②	12.16	12.80	11.92 ②	12.21	12.35	12.65	12.80	12.04 ②
13.95	13.72	13.64	14.36	14.09	14.33	13.54	14.44	13.36 ②	13.75	14.00	13.94	13.46	13.47	14.00	13.80	13.96	13.81
15.44	14.93	15.19	16.00	15.49	15.52	15.12	15.71	15.47	14.90	15.24	14.87	15.23	15.60	15.30	15.68	15.01	15.06
17.09	16.71	17.44	17.83	16.89	16.74	17.06	17.10	16.77	17.19	17.64	17.43	17.19	17.21	17.12	17.10	17.45	16.50
18.91	18.98	19.09	19.33	19.27	18.13 ②	18.48	18.74	18.27	18.03 ②	19.20	19.08	19.50	19.30	18.64	18.61	19.10	17.87 ②
20.93	21.24	21.91	21.54	21.01	19.71 ②	20.21	20.40	21.17	19.50 ②	21.00	20.78	21.12	20.87	20.38	20.75	21.27	21.50
23.16	22.34	23.29	22.75	23.41	–	–	–	–	–	–	–	–	–	–	–	–	–
25.63	24.99	26.74	25.35	25.72	–	–	–	–	–	–	–	–	–	–	–	–	–
28.36	27.60	29.39	27.68	28.35	–	–	–	–	–	–	–	–	–	–	–	–	–
31.39	31.21	31.57	30.49	31.15	–	–	–	–	–	–	–	–	–	–	–	–	–
34.74	34.46	34.69	33.29	34.02	–	–	–	–	–	–	–	–	–	–	–	–	–

② Except where noted with a footnote (②), exact ratios are within ±4% of the nominal ratios.

## Availability of Types A / AR / AXV Double Reduction

Type	305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
A	X	X	X	X	X	X	X	X	X	X	X	X	–	X	–	X	X
AR	–	–	–	–	–	X	X	X	X	X	X	–	X	–	X	–	–
AXV	–	–	–	–	–	X	X	X	X	X	X	–	X	–	X	–	–

# Exact Ratios/Parallel Shaft Gear Drives

## Triple Reduction Exact Ratios (Type A, AR & AXV)

Nominal Ratio ①	Drive Size																
	305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
23.16	–	–	–	–	22.25	22.32	23.54	22.96	22.21 ①	22.88	23.69	22.36	22.31	22.94	22.38	22.91	23.39
25.63	–	–	–	–	25.03	24.37 ①	25.52	24.90	25.62	26.35	26.24	25.11	25.43	24.97	24.76	26.25	25.86
28.36	–	–	–	–	27.05 ①	27.50	27.89	27.89	26.97 ①	28.68	27.53	27.81	27.48	28.33	27.97	28.51	29.66 ①
31.39	–	–	–	–	31.77	31.03	32.16	30.24	31.12	30.95	31.20	30.40	31.91	31.63	31.36	31.64	32.33
34.74	–	–	–	–	34.33	34.65	34.27	33.34 ①	33.24 ①	33.68	34.12	33.67	34.49	34.71	35.43	34.36	33.79
38.44	38.23	39.22	38.86	38.11	38.63	39.10	39.51	37.96	38.36	39.37	38.67	38.82	38.04	39.20	38.87	39.04	36.60 ①
42.54	41.60	41.68	43.29	42.46	41.83	42.56	43.01	41.07	40.96	42.86	41.59	43.00	44.05	42.85	43.91	43.21	39.90 ①
47.08	46.54	47.86	47.31	45.70	49.02 ①	47.12	46.80	45.39	47.27	46.00	48.34	45.83	48.11	45.94	47.25	46.48	46.75
52.11	50.30	53.17	52.71	50.92	53.08	51.29	50.15	51.56	51.20	50.07	51.88	50.77	52.00	50.20	51.45	54.15	51.78
57.66	56.27	56.50	58.73	55.95	57.28	56.87	58.60	55.92	59.08	57.96	56.64	57.75	57.35	56.93	56.11	59.06	58.44
63.82	63.94	64.89	63.67	61.10	62.06	61.90	63.78	60.89 ①	61.97	63.09	61.68	63.97	65.52	62.22	63.77	63.52	61.87
70.62	71.53	73.82	70.94	69.59	72.52	73.33	69.41	70.45	69.98	72.76	70.80	72.19	72.26	70.92	69.54	72.06	69.82
78.16	78.31	81.12	80.93	77.10	77.49	75.97	76.06	76.72	79.39	79.20	77.10	75.71	75.79	76.33	76.22	77.43	79.22
86.50	87.60	90.40	90.18	84.72	90.61 ①	83.10	85.24	83.08	90.14 ①	86.20	84.42	85.94	83.06	87.90	87.78	83.76	85.80
95.73	92.16	96.09	95.25	98.02	98.53	97.27	94.39	97.67	97.50	93.26	91.83 ①	97.50	96.51	98.37	95.54	93.26	94.34
105.9	103.1	110.3	106.1	107.7	–	105.9	103.4	104.6	105.6	102.0	100.0 ①	105.6	101.2 ①	107.1	106.5	102.1	103.2
117.2	113.8	121.2	115.9	117.6	–	–	–	–	–	–	–	–	–	–	–	–	–
129.7	128.7	130.2	127.7	130.5	–	–	–	–	–	–	–	–	–	–	–	–	–
143.6	142.2	143.1	139.4	142.5	–	–	–	–	–	–	–	–	–	–	–	–	–
158.9	158.2	164.3	156.0	162.0	–	–	–	–	–	–	–	–	–	–	–	–	–
175.9	169.5	180.5	170.3	176.9	–	–	–	–	–	–	–	–	–	–	–	–	–
194.6	197.6	193.9	187.6	191.7	–	–	–	–	–	–	–	–	–	–	–	–	–
215.4	211.7	213.1	204.9 ①	209.4	–	–	–	–	–	–	–	–	–	–	–	–	–

① Except where noted with a footnote (①), exact ratios are within ±4% of the nominal ratios.

## Availability of Types A / AR / AXV Triple Reduction

Type	305	325	345	365	385	405	425	445	465	485	505	525	535	545	555	565	585
A	X	X	X	X	X	X	X	X	X	X	X	X	–	X	–	X	X
AR	–	–	–	–	–	X	X	X	X	X	X	–	X	–	X	–	–
AXV	–	–	–	–	–	X	X	X	X	X	X	–	X	–	X	–	–

## Quadruple Reduction Exact Ratios (Type A, AR & AXV)

Nominal Ratio ②	Drive Size									
	385	405	425	445	465	485	505	525	535	555
105.9	108.4	–	–	–	–	–	–	–	–	–
117.2	117.3	118.2	115.9	–	113.4	112.1	116.0	113.4	120.0	113.6
129.7	126.6	125.7	126.2	123.0 ②	129.4	124.5	126.4	127.9	125.3	133.4
143.6	137.1	148.2	135.2 ②	142.4	140.1	135.5 ②	145.0	141.6	145.1	143.6
158.9	158.2	167.9 ②	158.0	154.4	161.7	156.8	158.0	161.1	160.0	155.7
175.9	171.3	182.8	171.9	168.2	169.6	170.7	169.9	178.4	182.8	169.8
194.6	199.6	199.0	187.1	194.6	191.5	196.9	197.5	203.9	201.6	195.6
215.4	216.1	217.7	205.0	211.9	207.8	214.3	216.1	211.2	211.4	210.6
238.4	233.2	231.6	229.8	229.9	239.8	243.4	230.6	235.1	233.5	229.7
263.8	252.5	273.0	254.4	250.3 ②	251.5	265.0	251.1	260.4	266.8	264.5
291.9	291.4	298.6	277.6	289.6	284.0	305.6	288.3	293.9	294.2	286.9
323.1	315.5	336.7	304.2 ②	315.4	322.2	332.6	313.9	333.4	308.6	319.8
357.5	368.9	368.2	340.9	341.6	365.8	362.1	343.7	367.0	350.2	348.0
395.7	401.2	396.0	377.6	401.5	395.7	391.7	407.2	397.0	393.0	403.6
437.9	–	431.1	413.7 ②	429.8	428.6	426.3	431.5	429.9	445.8	439.3

② Except where noted with a footnote (②), exact ratios are within ±5% of the nominal ratios.

## Availability of Types A / AR / AXV Quadruple Reduction

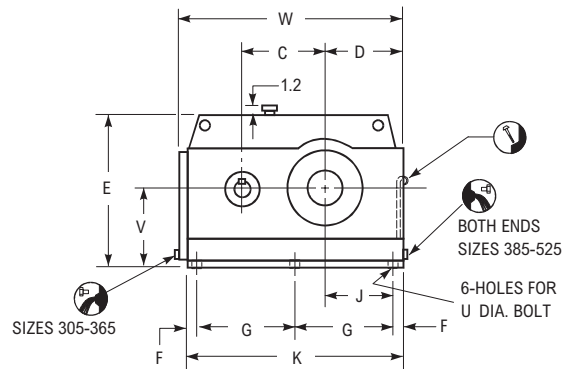
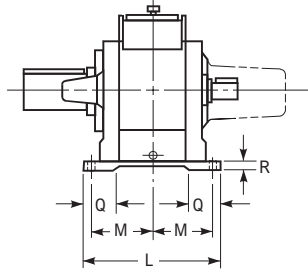
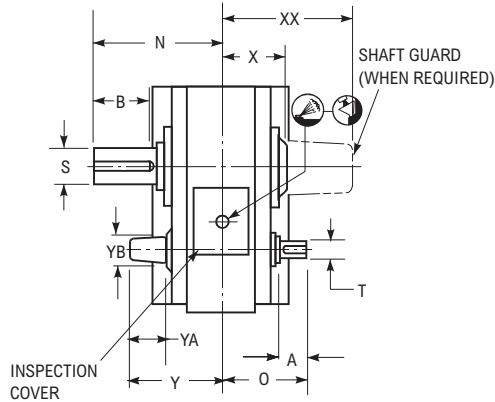
Type	385	405	425	445	465	485	505	525	535	555
A	X	X	X	X	X	X	X	X	–	–
AR	–	X	X	X	X	X	X	–	X	X
AXV	–	X	X	X	X	X	X	–	X	X

# Type A Single Reduction

## Sizes 305-525

**CAUTION:** All (A1) Single reduction drive selections — check for possible interference between the low-speed shaft connection and either the high-speed shaft extension or the guard for the second high-speed shaft extension.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



### Dimensions (in)

Drive Size ①	A	B	C	D	E	F	G	J	K	L	M	N	O	Q	R	Low-Speed Shaft ④	
	S	Key															
305	3.06	4.00	7.500	8.50	15.75	2.50	9.25	6.00	23.50	11.50	4.88	11.00	9.87	2.75	0.62	2.750	0.625 x 0.625 x 4.000
325	3.38	4.81	8.500	9.50	17.75	2.50	10.88	7.00	26.76	12.25	5.25	12.00	10.75	3.12	0.63	3.000	0.750 x 0.750 x 4.500
345	3.87	5.37	9.750	10.62	20.12	3.00	12.13	7.62	30.26	14.00	5.88	13.50	11.87	3.00	0.75	3.500	0.875 x 0.875 x 5.000
365	4.12	6.44	11.000	12.13	22.50	3.00	14.50	9.13	35.00	15.50	6.63	15.13	13.00	3.75	0.75	4.000	1.000 x 1.000 x 6.000
385	7.00	7.88	9.300	10.06	20.06	1.62	12.50	8.44	28.24	23.76	10.50	19.10	18.20	5.00	0.94	4.500	1.000 x 1.000 x 6.500
405	8.00	8.66	10.500	11.20	23.00	2.00	14.00	9.20	32.00	25.30	11.25	20.60	19.60	5.50	1.06	5.000	1.250 x 1.250 x 7.500
425	8.50	10.06	12.000	12.74	25.00	1.62	15.75	11.12	34.74	27.50	12.25	22.90	21.20	6.00	1.06	5.750	1.500 x 1.500 x 8.000
445	9.00	11.38	14.000	14.50	27.70	2.50	17.50	12.00	40.00	32.20	14.60	26.30	23.70	7.00	1.20	6.500	1.500 x 1.500 x 10.000
465	11.00	12.68	16.000	16.50	31.00	2.50	20.50	14.00	46.00	33.00	15.00	28.60	26.20	7.00	1.26	7.250	1.750 x 1.500 x 11.000
485	12.00	14.88	18.000	19.00	35.00	2.50	22.25	16.00	49.50	35.00	15.40	30.70	27.10	9.00	1.50	8.500	2.000 x 1.500 x 13.000
505	13.00	16.18	19.500	20.50	38.00	2.75	24.00	17.25	53.50	39.50	17.25	33.60	29.80	10.26	1.75	9.250	2.500 x 1.750 x 14.000
525	15.00	18.38	21.000	22.50	41.00	2.50	27.25	20.00	59.50	42.00	18.50	37.20	33.20	10.50	2.10	10.500	2.500 x 1.750 x 16.000

Drive Size ①	Wt (lb)	High-Speed Shaft ④		U ②	V	W	X	XX ③	Y	YA	YB
		T	Key								
305	440	2.000	0.500 x 0.500 x 3.000	0.750	8.00	24.00	6.12	12.31	10.91	5.72	3.12
325	560	2.125	0.500 x 0.500 x 3.500	0.750	9.00	27.13	6.75	14.17	11.34	5.72	3.12
345	780	2.375	0.625 x 0.625 x 3.750	1.000	10.25	30.62	7.37	14.62	12.75	6.58	3.75
365	1000	2.750	0.625 x 0.625 x 4.000	1.000	11.50	35.37	8.13	15.75	14.00	7.09	4.00
385	1340	3.500	0.875 x 0.875 x 6.000	1.125	9.80	28.80	9.96	21.10	19.04	9.88	5.88
405	1915	4.000	1.000 x 1.000 x 7.000	1.125	11.12	32.64	10.56	21.58	20.66	10.91	6.56
425	2640	4.250	1.000 x 1.000 x 7.500	1.250	12.50	36.00	11.78	23.78	22.60	11.82	7.28
445	3680	4.500	1.000 x 1.000 x 8.000	1.500	14.50	41.6	13.78	27.18	24.60	11.82	7.28
465	4780	5.500	1.250 x 1.250 x 10.000	1.500	16.00	47.00	14.24	29.66	27.64	14.20	9.75
485	6430	6.000	1.500 x 1.500 x 11.000	2.000	18.00	52.50	14.36	31.24	28.26	14.80	9.31
505	8440	6.500	1.500 x 1.500 x 12.000	2.250	19.75	56.50	15.90	34.60	30.80	15.14	10.40
525	11100	7.500	1.750 x 1.500 x 13.000	2.250	21.10	62.50	17.56	38.12	34.00	16.24	11.88

① Drawings are representative of this series of drives and do not agree in exact detail for all sizes. Gear drives are for horizontal floor-mounted operation unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and subject to change without notice unless certified.

② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.

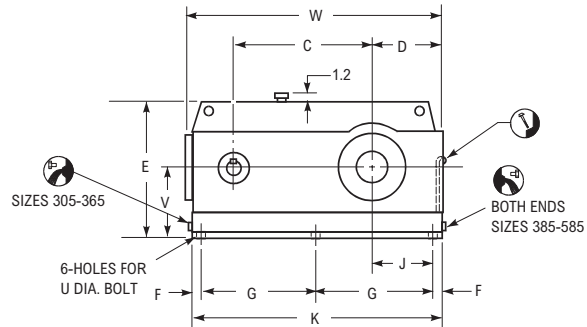
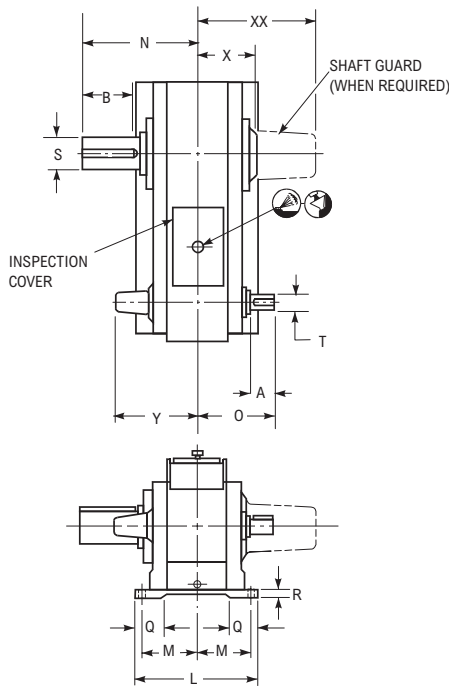
③ Single low-speed shaft extension is standard; double extension, as indicated with dimension XX, is an extra charge option.

④ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

# Type A Double Reduction

Sizes 305-585

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	B	C	D	E	F	G	J	K	L	M	N	O	Q	R	Low-Speed Shaft ④	
																S	Key
305	2.25	4.00	12.187	8.50	15.75	2.50	9.25	6.00	23.50	11.50	4.88	11.00	9.12	2.75	0.62	2.750	0.625 x 0.625 x 4.000
325	2.63	4.81	14.125	9.50	17.75	2.50	10.88	7.00	26.76	12.25	5.25	12.00	9.88	3.12	0.63	3.000	0.750 x 0.750 x 4.500
345	3.06	5.37	16.000	10.62	20.12	3.00	12.13	7.62	30.26	14.00	5.88	13.50	10.87	3.00	0.75	3.500	0.875 x 0.875 x 5.000
365	3.38	6.44	18.500	12.13	22.50	3.00	14.50	9.13	35.00	15.50	6.63	15.13	12.12	3.75	0.75	4.000	1.000 x 1.000 x 6.000
385	4.50	7.88	15.800	10.24	18.96	1.80	16.50	8.44	36.60	21.00	9.10	17.80	14.10	5.00	0.94	4.500	1.000 x 1.000 x 6.500
405	5.00	8.66	17.700	11.20	21.32	2.00	18.40	9.20	40.80	22.80	10.00	19.40	15.20	5.50	1.06	5.000	1.250 x 1.250 x 7.500
425	6.00	10.06	20.200	12.74	24.00	2.75	20.00	10.00	45.50	24.80	11.00	21.60	17.20	6.00	1.06	5.750	1.500 x 1.500 x 8.000
445	7.00	11.38	23.300	14.50	27.70	2.50	23.25	12.00	51.50	27.40	12.20	23.90	19.30	7.00	1.20	6.500	1.500 x 1.500 x 10.000
465	8.00	12.68	26.500	16.50	31.00	2.50	26.50	14.00	58.00	29.00	13.00	26.60	21.20	7.00	1.26	7.250	1.750 x 1.500 x 11.000
485	9.00	14.88	30.000	19.00	35.00	3.50 ⑤	30.00 ⑤	15.00	58.50	33.00	14.40	30.70	23.00	8.00	1.50	8.500	2.000 x 1.500 x 13.000
505	10.00	16.18	33.500	20.50	38.00	2.50	34.50 ⑤	17.50	65.00	37.00	16.00	33.60	25.60	8.80	1.75	9.250	2.500 x 1.750 x 14.000
525	11.00	18.38	37.000	22.50	41.00	3.00	35.50 ⑤	19.50	71.00	39.00	17.00	37.20	27.40	9.00	2.10	10.500	2.500 x 1.750 x 16.000
545	12.00	20.12	41.000	24.50	45.00	3.00	36.75	21.50	79.50	44.00	19.50	41.90	32.60	9.15	2.10	11.500	3.000 x 2.000 x 17.000
565	13.00	21.44	44.500	25.50	48.00	3.00	39.50	22.50	85.00	52.00	23.20	45.40	35.70	11.50	2.35	12.250	3.000 x 2.000 x 19.000
585	13.00	22.76	49.000	29.00	54.60	3.00	44.50	26.00	95.00	56.40	25.40	49.80	38.60	11.50	2.35	13.000	3.000 x 2.000 x 21.000

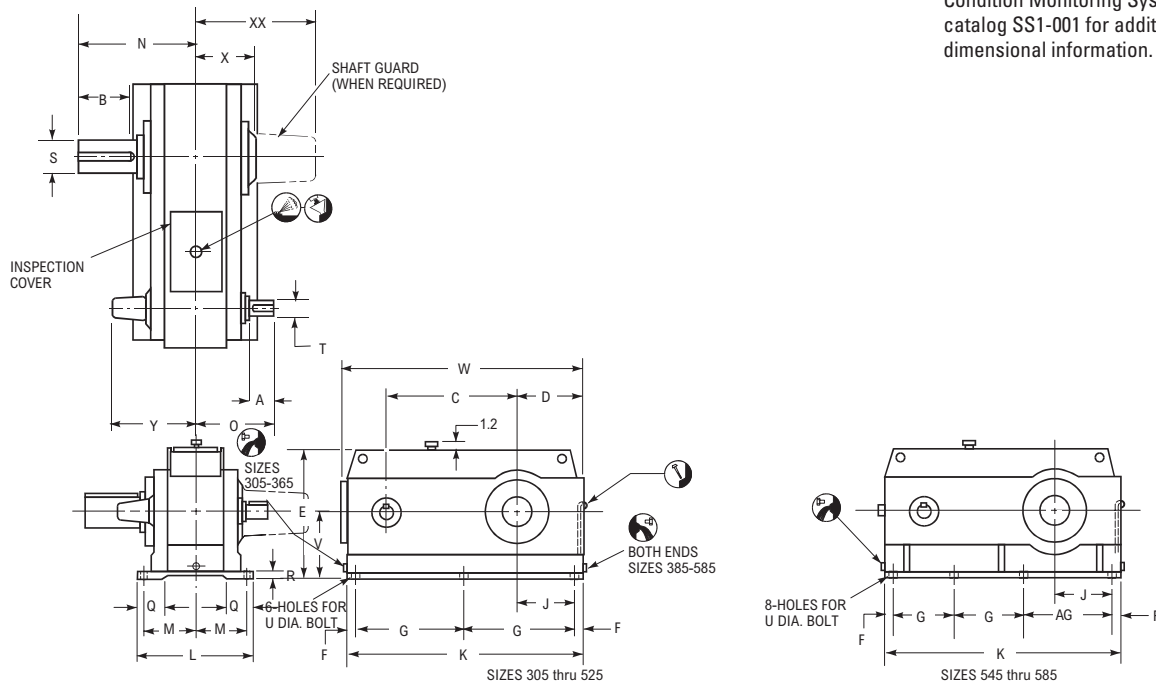
Drive Size ①	Wt (lb)	High-Speed Shaft ④		U ②	V	W	X	XX ③	Y
		T	Key						
305	450	1.250	0.250 x 0.250 x 2.500	0.750	8.00	24.00	6.12	12.31	9.90
325	580	1.500	0.375 x 0.375 x 2.750	0.750	9.00	27.13	6.75	14.17	10.28
345	810	1.750	0.375 x 0.375 x 3.000	1.000	10.25	30.62	7.37	14.62	11.75
365	1090	2.000	0.500 x 0.500 x 3.500	1.000	11.50	35.37	8.13	15.75	12.50
385	1510	2.250	0.500 x 0.500 x 4.000	1.125	9.80	37.52	8.60	19.75	15.31
405	1850	2.500	0.625 x 0.625 x 4.000	1.125	11.12	41.20	9.32	20.34	16.00
425	2660	3.000	0.750 x 0.750 x 5.000	1.250	12.50	46.70	10.54	22.54	17.98
445	4030	3.500	0.875 x 0.875 x 6.000	1.500	14.50	53.00	11.38	24.78	20.14
465	5100	4.000	1.000 x 1.000 x 7.000	1.500	16.00	59.50	12.24	27.64	22.02
485	6300	4.500	1.000 x 1.000 x 8.000	2.000	18.00	61.12	14.36	31.24	23.90
505	9450	5.000	1.250 x 1.250 x 9.000	2.250	19.75	67.62	15.90	34.46	26.40
525	12140	5.500	1.250 x 1.250 x 10.000	2.250	21.10	73.38	17.56	38.12	28.84
545	17800	6.000	1.500 x 1.500 x 11.000	2.250	23.00	81.88	20.10	43.00	33.64
565	22800	6.500	1.500 x 1.500 x 12.000	2.500	25.00	87.38	22.25	46.00	36.73
585	31300	6.500	1.500 x 1.500 x 12.000	2.500	28.00	97.38	25.15	50.90	39.44

- ① Drawings are representative of this series of drives and do not agree in exact detail for all sizes. Gear drives are for horizontal floor-mounted operation unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.
- ③ Single low-speed shaft extension is standard; double extension, as indicated with dimension XX, is an extra charge option.
- ④ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ⑤ Size 485: high-speed end of drive Dimension G = 22.50", F = 2.50". Size 505: high-speed end of drive Dimension G = 25.50". Size 525: high-speed end of drive Dimension G = 29.50".

# Type A Triple Reduction

Sizes 305-585

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	B	C	D	E	F	G	J	K	L	M	N	O	Q	R	Low-Speed Shaft ④			
																S	Key		AG
305	2.06	4.00	12.187	8.50	15.75	2.50	9.25	6.00	23.50	11.50	4.88	11.00	8.75	2.75	0.62	2.750	0.625 x 0.625 x 4.000	—	
325	2.06	4.81	14.125	9.50	17.75	2.50	10.88	7.00	26.76	12.25	5.25	12.00	9.12	3.12	0.63	3.000	0.750 x 0.750 x 4.500	—	
345	2.44	5.37	16.000	10.62	20.12	3.00	12.13	7.62	30.26	14.00	5.88	13.50	10.12	3.00	0.75	3.500	0.875 x 0.875 x 5.000	—	
365	2.44	6.44	18.500	12.13	22.50	3.00	14.50	9.13	35.00	15.50	6.63	15.13	10.87	3.75	0.75	4.000	1.000 x 1.000 x 6.000	—	
385	3.50	7.88	21.300	10.24	18.96	1.80	16.50	8.44	36.60	21.00	9.10	17.80	12.80	5.00	0.94	4.500	1.000 x 1.000 x 6.500	—	
405	3.50	8.66	23.700	11.20	21.32	2.00	18.40	9.20	40.80	22.80	10.00	19.40	13.60	5.50	1.06	5.000	1.250 x 1.250 x 7.500	—	
425	4.00	10.06	26.700	12.74	24.00	2.75	20.00	10.00	45.50	24.80	11.00	21.60	15.10	6.00	1.06	5.750	1.500 x 1.500 x 8.000	—	
445	4.50	11.38	30.500	14.50	27.70	2.50	23.25	12.00	51.50	27.40	12.20	23.90	16.60	7.00	1.20	6.500	1.500 x 1.500 x 10.000	—	
465	5.00	12.68	34.700	16.50	31.00	2.50	26.50	14.00	58.00	29.00	13.00	26.60	17.80	7.00	1.26	7.250	1.750 x 1.500 x 11.000	—	
485	6.00	14.88	39.300	19.00	35.00	3.50 ⑤	30.00	15.00	66.00	33.00	14.40	30.70	19.80	8.00	1.50	8.500	2.000 x 1.500 x 13.000	—	
505	7.00	16.18	44.000	20.50	38.00	2.50 ⑤	34.50	17.50	74.30	37.00	16.00	33.60	22.30	8.80	1.75	9.250	2.500 x 1.750 x 14.000	—	
525	8.00	18.38	49.000	22.50	41.00	3.00	37.25	19.50	80.50	39.00	17.00	37.20	24.20	9.00	2.10	10.500	2.500 x 1.750 x 16.000	—	
545	9.00	20.12	55.000	24.50	45.00	3.00	41.90	21.50	89.50	44.00	19.50	41.90	29.40	9.15	2.10	11.500	3.000 x 2.000 x 17.000	36.50	
565	10.00	21.44	60.500	25.50	48.00	3.00	45.40	22.50	99.50	52.00	23.20	45.40	33.00	11.50	2.35	12.250	3.000 x 2.000 x 19.000	40.50	
585	11.00	22.76	65.000	29.00	54.60	3.00	49.80	26.00	108.00	56.40	25.40	49.80	36.20	11.50	2.35	13.000	3.000 x 2.000 x 21.000	46.00	

Drive Size ①	Wt (lb)	High-Speed Shaft ④		U ②	V	W	X	XX ③	Y
		T	Key						
305	450	1.125	0.250 x 0.250 x 2.250	0.750	8.00	24.00	6.12	12.31	9.90
325	580	1.125	0.250 x 0.250 x 2.250	0.750	9.00	27.13	6.75	14.17	10.28
345	820	1.250	0.250 x 0.250 x 2.500	1.000	10.25	30.62	7.37	14.62	11.75
365	1100	1.250	0.250 x 0.250 x 2.500	1.000	11.50	35.37	8.13	15.75	12.50
385	1520	1.750	0.375 x 0.375 x 3.000	1.125	9.80	37.52	8.60	19.75	13.38
405	1880	1.750	0.375 x 0.375 x 3.000	1.125	11.12	41.20	9.32	20.34	14.30
425	2460	2.000	0.500 x 0.500 x 3.250	1.250	12.50	46.70	10.54	22.54	15.86
445	4070	2.250	0.500 x 0.500 x 4.000	1.500	14.50	53.00	11.38	24.78	17.34
465	5200	2.500	0.625 x 0.625 x 4.500	1.500	16.00	59.50	12.24	27.64	18.62
485	7500	3.000	0.750 x 0.750 x 5.500	2.000	18.00	68.62	14.36	31.24	20.54
505	10100	3.500	0.875 x 0.875 x 6.000	2.250	19.75	76.92	15.90	34.46	23.16
525	13070	4.000	1.000 x 1.000 x 7.000	2.250	21.10	82.88	17.56	38.12	25.22
545	19300	4.500	1.000 x 1.000 x 8.000	2.250	23.00	91.88	20.10	43.00	30.33
565	25900	5.000	1.250 x 1.250 x 9.000	2.500	25.00	101.88	22.25	46.00	35.00
585	33400	5.500	1.250 x 1.250 x 10.000	2.500	28.00	110.38	25.15	50.90	37.72

① Drawings are representative of this series of drives and do not agree in exact detail for all sizes. Gear drives are for horizontal floor-mounted operation unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and subject to change without notice unless certified.

② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.

③ Single low-speed shaft extension is standard; double extension, as indicated with dimension XX, is an extra charge option.

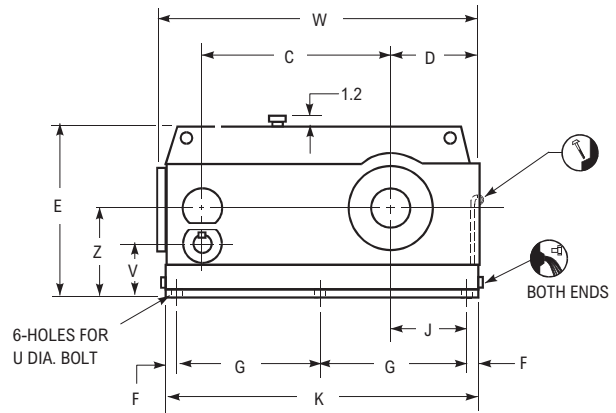
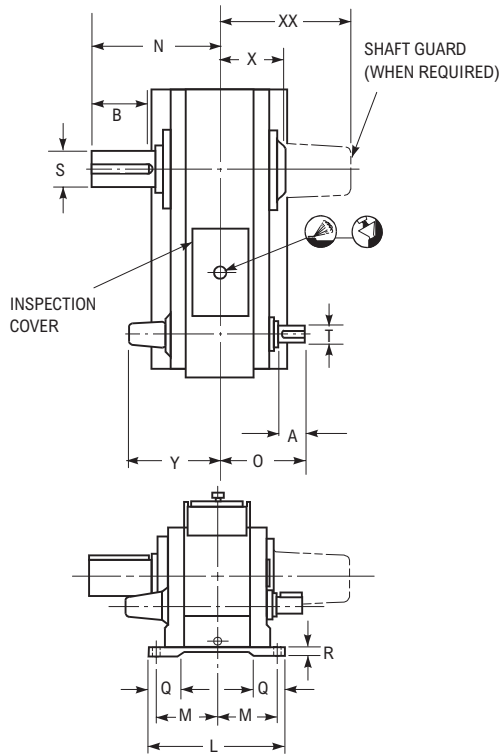
④ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

⑤ Size 485: high-speed end of drive Dimension F = 2.50". Size 505: high-speed end of drive Dimension F = 2.80".

# Type A Quadruple Reduction

Sizes 385-525

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	B	C	D	E	F	G	J	K	L	M	N	O	Q	R	Low-Speed Shaft ④	
																S	Key
385	3.00	7.88	21.300	10.24	18.96	1.80	16.50	8.44	36.60	21.00	9.10	17.80	12.30	5.00	0.94	4.500	1.000 x 1.000 x 6.500
405	3.00	8.66	23.700	11.20	21.32	2.00	18.40	9.20	40.80	22.80	10.00	19.40	13.00	5.50	1.06	5.000	1.250 x 1.250 x 7.500
425	3.00	10.06	26.700	12.74	24.00	2.75	20.00	10.00	45.50	24.80	11.00	21.60	13.90	6.00	1.06	5.750	1.500 x 1.500 x 8.000
445	3.50	11.38	30.500	14.50	27.70	2.50	23.25	12.00	51.50	27.40	12.20	23.90	15.40	7.00	1.20	6.500	1.500 x 1.500 x 10.000
465	3.50	12.68	34.700	16.50	31.00	2.50	26.50	14.00	58.00	29.00	13.00	26.60	16.30	7.00	1.26	7.250	1.750 x 1.500 x 11.000
485	4.50	14.88	39.300	19.00	35.00	3.50 ⑤	30.00	15.00	66.00	33.00	14.40	30.70	18.30	8.00	1.50	8.500	2.000 x 1.500 x 13.000
505	5.50	16.18	44.000	20.50	38.00	2.50 ⑤	34.50	17.50	74.30	37.00	16.00	33.60	20.50	8.80	1.75	9.250	2.500 x 1.750 x 14.000
525	6.00	18.38	49.000	22.50	41.00	3.00	37.25	19.50	80.50	39.00	17.00	37.20	22.10	9.00	2.10	10.500	2.500 x 1.750 x 16.000

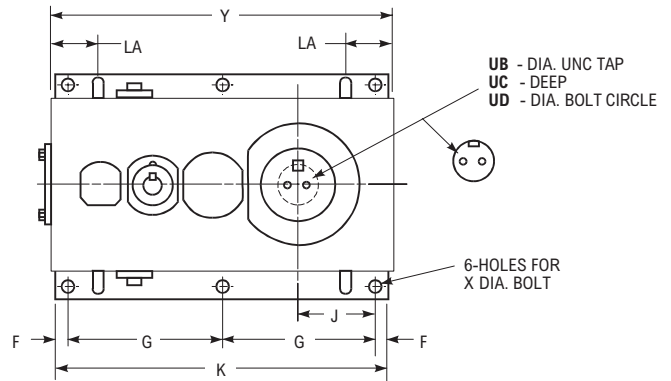
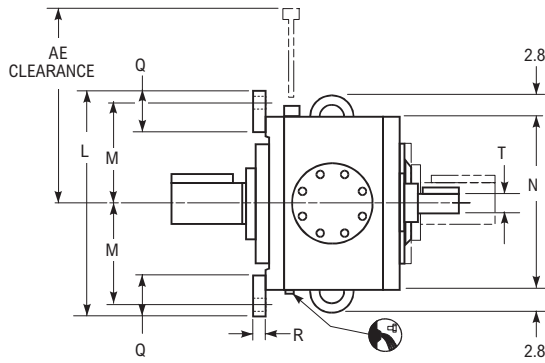
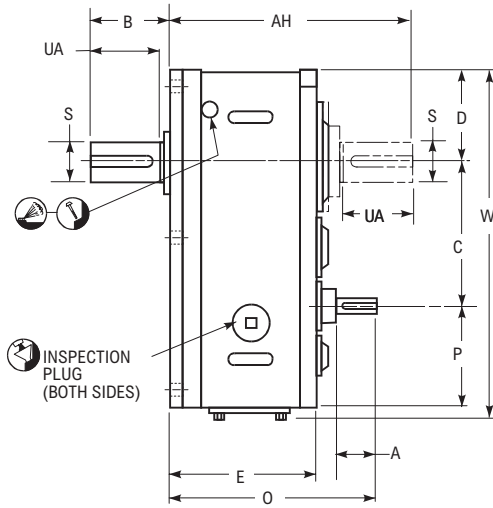
Drive Size ①	Wt (lb)	High-Speed Shaft ④		U ②	V	W	X	XX ③	Y	Z
		T	Key							
385	1560	1.500	0.375 x 0.375 x 2.500	1.125	5.30	37.52	8.60	19.75	13.38	9.80
405	1900	1.500	0.375 x 0.375 x 2.750	1.125	6.62	41.20	9.32	20.34	14.08	11.12
425	2760	1.500	0.375 x 0.375 x 2.500	1.250	7.00	46.70	10.54	22.54	14.98	12.50
445	4120	1.750	0.375 x 0.375 x 3.000	1.500	8.50	53.00	11.38	24.78	16.04	14.50
465	5300	1.750	0.375 x 0.375 x 3.000	1.500	9.50	59.50	12.24	27.64	17.56	16.00
485	7600	2.250	0.500 x 0.500 x 4.000	2.000	10.80	68.62	14.36	31.24	19.04	18.00
505	10250	2.750	0.625 x 0.625 x 4.500	2.250	11.56	76.92	15.90	34.46	21.84	19.75
525	13260	3.000	0.750 x 0.750 x 5.000	2.250	12.90	82.88	17.56	38.12	22.90	21.10

- ① Drawings are representative of this series of drives and do not agree in exact detail for all sizes. Gear drives are for horizontal floor-mounted operation unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.
- ③ Single low-speed shaft extension is standard; double extension, as indicated with dimension XX, is an extra charge option.
- ④ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ⑤ Size 485: high-speed end of drive Dimension F = 2.50". Size 505: high-speed end of drive Dimension F = 2.80".

# Type AR Double Reduction

Sizes 405-485

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	B	C	D	E	F	G	J	K	L	M	N	O	P	Q	R
405	5.00	9.70	17.700	11.31	17.65	1.50	18.50	9.20	40.00	27.75	12.50	21.62	24.90	12.11	5.00	1.50
425	6.00	11.00	20.200	12.31	19.45	1.50	21.00	10.25	45.00	31.80	14.50	24.62	27.80	13.50	6.00	1.60
445	7.00	12.20	23.300	14.62	21.41	1.75	24.00	12.25	51.50	37.00	16.75	29.25	31.00	14.75	7.00	1.81
465	8.00	14.00	26.500	16.62	23.16	1.95 ④	27.20	14.10	58.25	41.00	18.75	33.25	33.80	16.31	7.00	1.79
485	9.00	15.90	30.000	18.50	25.00	2.29	26.90	15.60	58.38	46.50	21.00	37.00	36.60	11.00	8.00	2.00

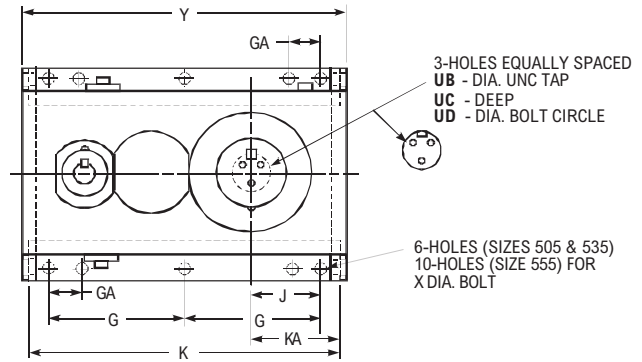
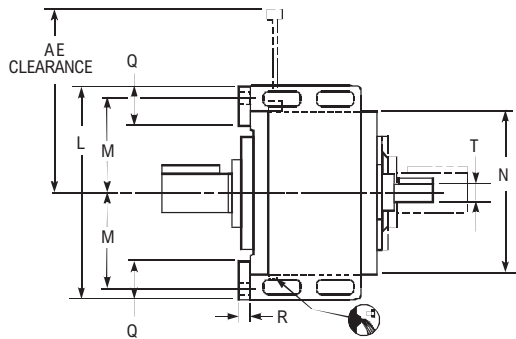
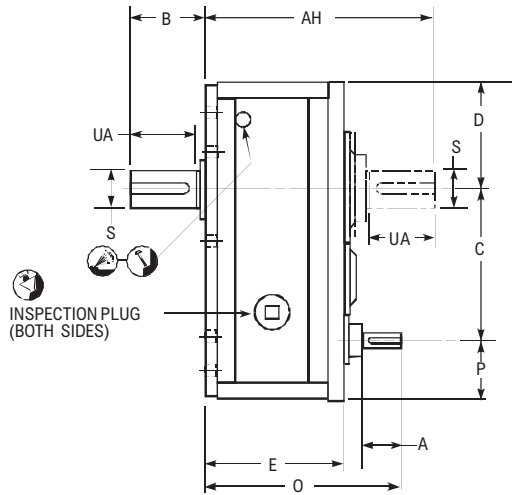
Drive Size ①	Low-Speed Shaft ③						High-Speed Shaft ③			W	X ②	Y	AE	AH	LA	Wt (lb)
	S	Key	UA	UB	UC	UD	T	Key								
405	5.000	1.250 x 1.250 x 7.500	8.66	0.750	1.88	3.50	2.500	0.625 x 0.625 x 4.000	42.45	1.125	41.12	25.4	29.10	5.7	2360	
425	5.750	1.500 x 1.500 x 8.000	10.06	1.125	2.25	3.50	3.000	0.750 x 0.750 x 5.000	47.22	1.250	46.01	28.2	32.20	6.6 ⑤	3094	
445	6.500	1.500 x 1.500 x 10.000	11.38	1.250	2.50	4.00	3.500	0.875 x 0.875 x 6.000	53.75	1.500	52.67	32.9	35.60	6.7	4334	
465	7.250	1.750 x 1.500 x 11.000	12.68	1.250	2.50	4.75	4.000	1.000 x 1.000 x 7.000	61.11	1.500	59.43	37.4	39.20	7.7	6500	
485	8.000	2.000 x 1.500 x 12.000	14.00	1.500	3.00	5.00	4.500	1.000 x 1.000 x 8.000	60.81	2.000	59.50	40.7	43.10	9.4 ⑤	8093	

- ① Gear drives are for horizontal output shaft operation with housing side walls horizontal unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.
- ③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ④ Size 465 low-speed end of drive Dimension F = 1.90.
- ⑤ Size 425 low-speed end of drive Dimension LA = 6.7.  
Size 485 low-speed end of drive Dimension LA = 9.5.

# Type AR Double Reduction

Sizes 505-555

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AE	AH	B	C	D	E	G	GA	J	K	KA	L	M	N
505 ④	10.00	43.7	47.62	17.32	33.500	19.62	27.87	27.00	—	13.50	64.62	18.88	50.50	22.75	39.25
535	11.00	52.2	52.00	19.50	39.000	22.62	30.00	31.75	—	16.50	74.25	21.75	56.50	25.75	45.25
555	12.00	56.4	59.30	21.80	43.000	24.62	34.95	35.00	10.00	18.00	81.75	23.75	61.50	28.25	49.25

Drive Size ①	O	P	Q	R	Low-Speed Shaft ③						High-Speed Shaft ③		X ②	Y	Wt (lb)
					S	Key	UA	UB	UC	UD	T	Key			
505 ④	40.76	13.12	10.50	2.25	9.250	2.500 x 1.750 x 14.00	16.18	1.500	3.00	6.00	5.000	1.250 x 1.250 x 9.00	2.250	66.25	11,850
535	43.65	14.60	10.50	2.25	10.500	2.500 x 1.750 x 16.00	18.38	1.500	3.00	7.50	5.500	1.250 x 1.250 x 10.00	2.250	76.22	16,100
555	49.70	16.00	12.00	2.31	11.500	3.000 x 2.000 x 17.00	20.12	1.750	3.50	8.00	6.000	1.500 x 1.500 x 11.00	2.250	83.62	22,650

① Gear drives are for horizontal output shaft operation with housing side walls horizontal unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.

② Use ASTM A-354 Grade BC fasteners.

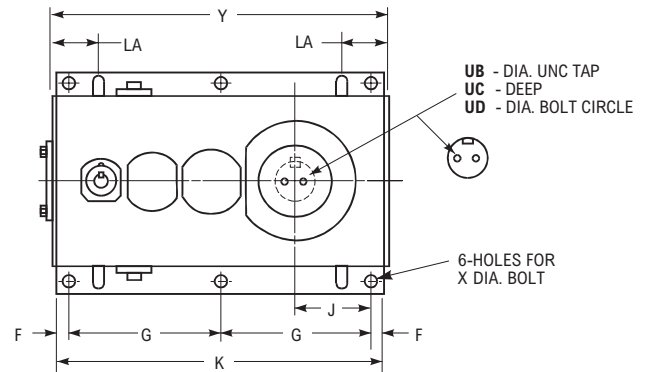
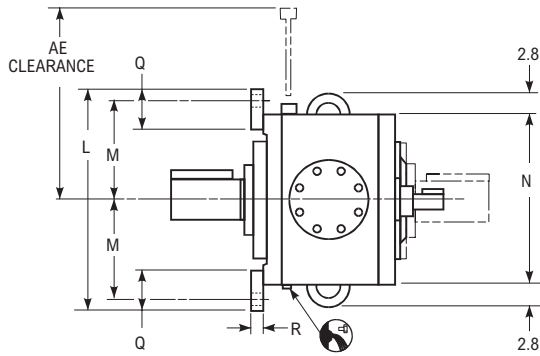
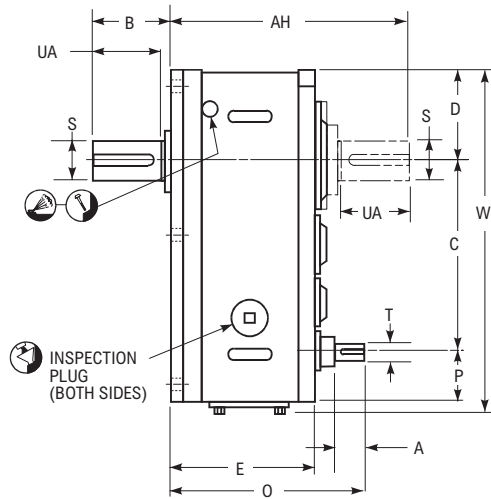
③ Shaft diameters are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

④ Add 1.00" to dimensions K, KA, Y & D for Size 505ARJ drive.

# Type AR Triple Reduction

Sizes 405-485

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	B	C	D	E	F	G	J	K	L	M	N	O	P	Q	R
405	3.50	9.70	23.700	11.31	17.65	1.50	18.50	9.20	40.00	27.75	12.50	21.62	23.30	6.11	5.00	1.50
425	4.00	11.00	26.700	12.31	19.45	1.50	21.00	10.25	45.00	31.80	14.50	24.62	25.70	7.00	6.00	1.60
445	4.50	12.20	30.500	14.62	21.41	1.75	24.00	12.25	51.50	37.00	16.75	29.25	28.30	7.55	7.00	1.81
465	5.00	14.00	34.700	16.62	23.16	1.95 ④	27.20	14.10	58.25	41.00	18.75	33.25	30.40	8.11	7.00	1.79
485	6.00	15.90	39.300	18.50	25.00	2.41 ④	30.60	15.60	65.90	46.50	21.00	37.00	33.40	9.24	8.00	2.00

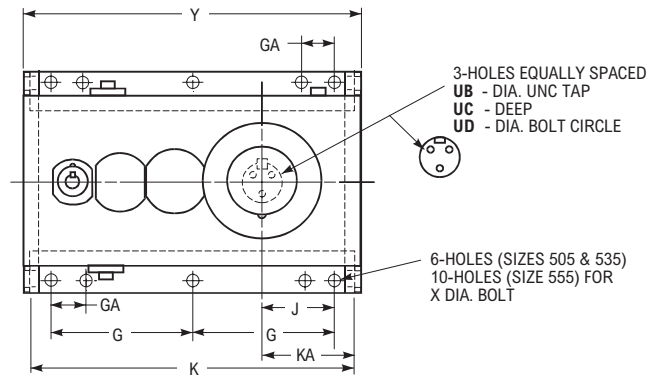
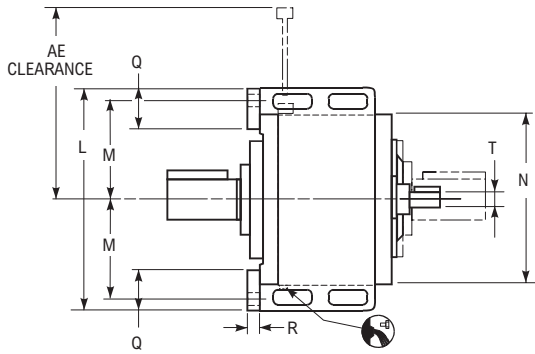
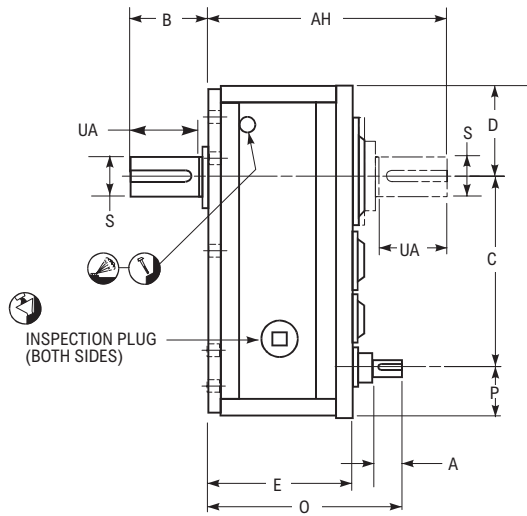
Drive Size ①	Low-Speed Shaft ③						High-Speed Shaft ③			W	X ②	Y	AE	AH	LA	Wt (lb)
	S	Key	UA	UB	UC	UD	T	Key								
405	5.000	1.250 x 1.250 x 7.500	8.66	.750	1.88	3.50	1.750	0.375 x 0.375 x 3.000	42.45	1.125	41.12	25.4	29.10	5.7	2393	
425	5.750	1.500 x 1.500 x 8.000	10.06	1.125	2.25	3.50	2.000	0.500 x 0.500 x 3.250	47.22	1.250	46.01	28.2	32.20	6.6 ⑤	3159	
445	6.500	1.500 x 1.500 x 10.000	11.38	1.250	2.50	4.00	2.250	0.500 x 0.500 x 4.000	53.75	1.500	52.67	32.9	35.60	6.7	4424	
465	7.250	1.750 x 1.500 x 11.000	12.68	1.250	2.50	4.75	2.500	0.625 x 0.625 x 4.500	61.11	1.500	59.43	37.4	39.20	7.7	6597	
485	8.000	2.000 x 1.500 x 12.000	14.00	1.500	3.00	5.00	3.000	0.750 x 0.750 x 5.500	68.02	2.000	67.04	40.7	43.10	9.4 ⑤	8820	

- ① Gear drives are for horizontal output shaft operation with housing side walls horizontal unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.
- ③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ④ Size 465 low-speed end of drive Dimension F = 1.90.  
Size 485 low-speed end of drive Dimension F = 2.29.
- ⑤ Size 425 low-speed end of drive Dimension LA = 6.7.  
Size 485 low-speed end of drive Dimension LA = 9.5.

# Type AR Triple Reduction

Sizes 505-555

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AE	AH	B	C	D	E	G	GA	J	K	KA	L	M	N
505 ④	7.00	43.7	47.62	17.32	44.000	19.62	27.87	31.00	—	13.50	72.90	18.88	50.50	22.75	39.25
535	8.00	51.0	52.00	19.50	51.000	22.62	30.00	35.75	—	16.50	82.25	21.75	56.50	25.75	45.25
555	9.00	55.1	59.30	21.80	57.000	24.62	34.95	40.00	10.00	18.00	92.75	23.75	61.50	28.25	49.25

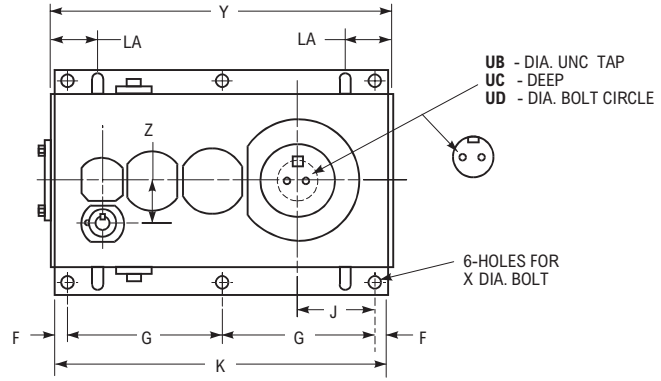
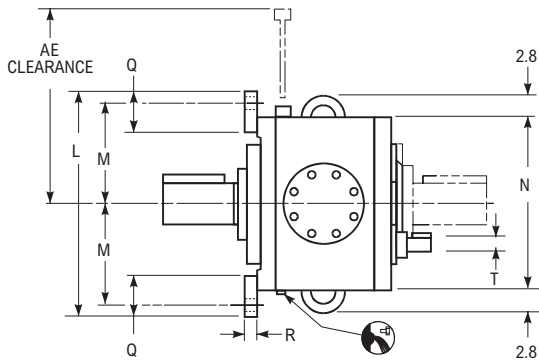
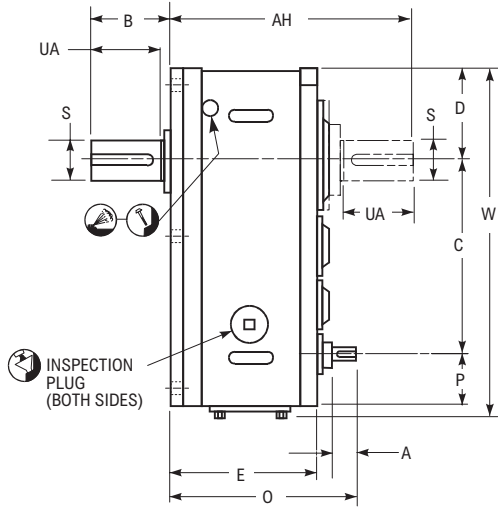
Drive Size ①	O	P	Q	R	Low-Speed Shaft ③						High-Speed Shaft ③		X ②	Y	Wt (lb)
					S	Key	UA	UB	UC	UD	T	Key			
505 ④	37.46	10.90	10.50	2.25	9.250	2.500 x 1.750 x 14.00	16.18	1.500	3.00	6.00	3.500	0.875 x 0.875 x 6.00	2.250	74.53	12,850
535	40.45	10.98	10.50	2.25	10.500	2.500 x 1.750 x 16.00	18.38	1.500	3.00	7.50	4.000	1.000 x 1.000 x 7.00	2.250	84.60	18,050
555	46.54	13.00	12.00	2.31	11.500	3.000 x 2.000 x 17.00	20.12	1.750	3.50	8.00	4.500	1.000 x 1.000 x 8.00	2.250	94.62	24,200

- ① Gear drives are for horizontal output shaft operation with housing side walls horizontal unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use ASTM A-354 Grade BC fasteners.
- ③ Shaft diameters are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ④ Add 1.00" to dimensions K, KA, Y & D for Size 505ARJ drive.

# Type AR Quadruple Reduction

Sizes 405-485

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	B	C	D	E	F	G	J	K	L	M	N	O	P	Q	R
405	3.00	9.70	23.700	11.31	17.65	1.50	18.50	9.20	40.00	27.75	12.50	21.62	22.70	6.11	5.00	1.50
425	3.00	11.00	26.700	12.31	19.45	1.50	21.00	10.25	45.00	31.80	14.50	24.62	24.50	7.00	6.00	1.60
445	3.50	12.20	30.500	14.62	21.41	1.75	24.00	12.25	51.50	37.00	16.75	29.25	27.10	7.55	7.00	1.81
465	3.50	14.00	34.700	16.62	23.16	1.95 ④	27.20	14.10	58.25	41.00	18.75	33.25	28.90	8.11	7.00	1.79
485	4.50	15.90	39.300	18.50	25.00	2.41 ④	30.60	15.60	65.90	46.50	21.00	37.00	31.90	9.24	8.00	2.00

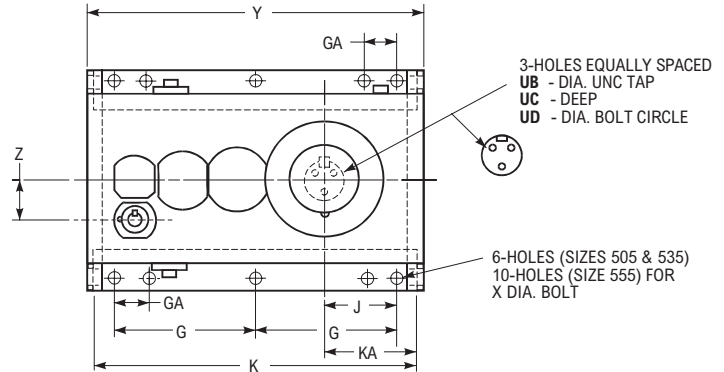
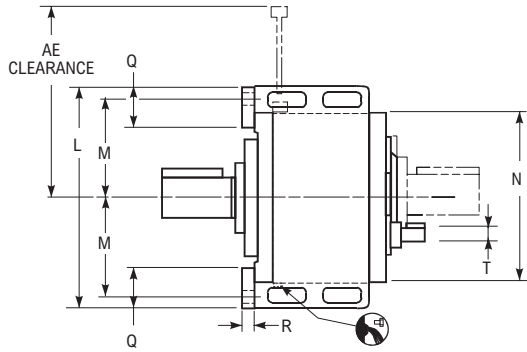
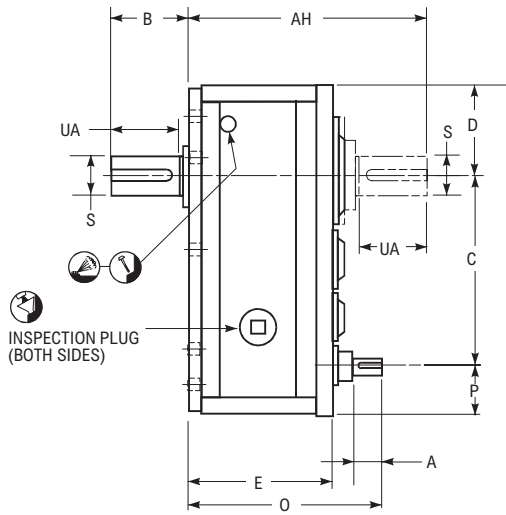
Drive Size ①	Low-Speed Shaft ③						High-Speed Shaft ③				AE		AH	LA	Wt (lb)		
	S	Key	UA	UB	UC	UD	T	Key	W	X ②	Y	Z				Assy's 1, 3 & 5	Assy's 2, 4 & 6
405	5.000	1.250 x 1.250 x 7.500	8.66	0.750	1.88	3.50	1.500	0.375 x .0375 x 2.750	42.45	1.125	41.12	4.500	21.5	25.4	29.10	5.7	2375
425	5.750	1.500 x 1.500 x 8.000	10.06	1.125	2.25	3.50	1.500	0.375 x 0.375 x 2.500	47.22	1.250	46.01	5.500	23.1	28.2	32.20	6.6 ⑤	3159
445	6.500	1.500 x 1.500 x 10.000	11.38	1.250	2.50	4.00	1.750	0.375 x 0.375 x 3.000	53.75	1.500	52.67	6.000	26.8	32.9	35.60	6.7	4495
465	7.250	1.750 x 1.500 x 11.000	12.68	1.250	2.50	4.75	1.750	0.375 x 0.375 x 3.000	61.11	1.500	59.43	6.500	30.9	37.4	39.20	7.7	6752
485	8.000	2.000 x 1.500 x 12.000	14.00	1.500	3.00	5.00	2.250	0.500 x 0.500 x 4.000	68.02	2.000	67.04	7.200	33.3	40.7	43.10	9.4 ⑤	8960

- ① Gear drives are for horizontal output shaft operation with housing side walls horizontal unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.
- ③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ④ Size 465 low-speed end of drive Dimension F = 1.90.  
Size 485 low-speed end of drive Dimension F = 2.29.
- ⑤ Size 425 low-speed end of drive Dimension LA = 6.7.  
Size 485 low-speed end of drive Dimension LA = 9.5.

# Type AR Quadruple Reduction

Sizes 505-555

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AE ⑤		AH	B	C	D	E	G	GA	J	K	KA	L	M	N
		Assy's 1, 3 & 5	Assy's 2, 4 & 6													
505 ④	5.38	35.6	43.7	47.62	17.32	44.000	19.62	27.87	31.00	—	13.50	72.90	18.88	50.50	22.75	39.25
535	6.00	42.0	50.4	52.00	19.50	51.000	22.62	30.00	35.75	—	16.50	82.25	21.75	56.50	25.75	45.25
555	6.00	44.8	55.1	59.30	21.80	57.000	24.62	34.95	40.00	10.00	18.00	92.75	23.75	61.50	28.25	49.25

Drive Size ①	O	P	Q	R	Low-Speed Shaft ③						High-Speed Shaft ③		X ②	Y	Z	Wt (lb)
					S	Key	UA	UB	UC	UD	T	Key				
505 ④	35.66	10.90	10.50	2.25	9.250	2.500 x 1.750 x 14.00	16.18	1.500	3.00	6.00	2.750	0.625 x 0.625 x 4.50	2.250	74.53	8.20	13,000
535	38.35	10.98	10.50	2.25	10.500	2.500 x 1.750 x 16.00	18.38	1.500	3.00	7.50	3.000	0.750 x 0.750 x 5.00	2.250	84.60	8.20	18,200
555	43.33	13.00	12.00	2.31	11.500	3.000 x 2.000 x 17.00	20.12	1.750	3.50	8.00	3.000	0.750 x 0.750 x 5.00	2.250	94.62	9.30	23,950

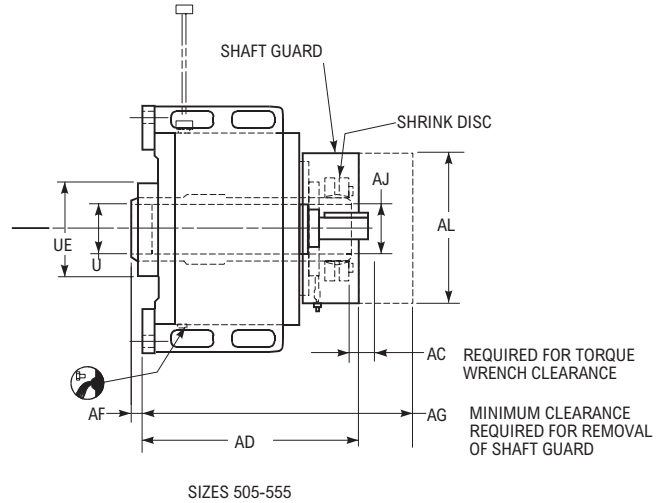
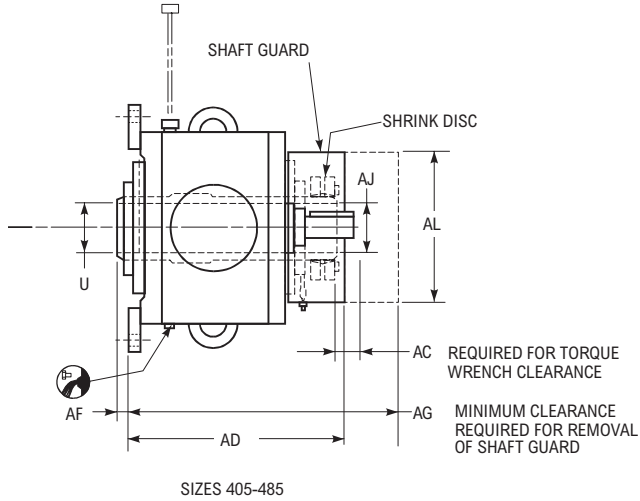
- ① Gear drives are for horizontal output shaft operation with housing side walls horizontal unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use ASTM A-354 Grade BC fasteners.
- ③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ④ Add 1.00" to dimensions K, KA, Y & D for Size 505ARJ drive.
- ⑤ For assemblies 1, 3 & 5, high-speed shaft is above centerline of drive.

# Type ARJ Double, Triple & Quadruple Reduction

## Hollow Low-Speed Shaft – Shrink Disc Mounted

Refer to pages 40-49 for basic gear drive dimensions. Refer to page <?> for hollow low-speed shaft dimensions and driven shaft recommendations and dimensions.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



### Dimensions (in)

Drive Size ①	U +.002 -.000	UE	AJ ②	AC	AD	AF	AG	AL	Wt (lb)		
									Double	Triple	Quad
405	5.500	—	5.2505	4.00	26.51	1.20	31.96	16.72	2,360	2,390	2,375
425	6.250	—	6.0005	4.00	29.91	1.70	37.95	17.96	3,095	3,160	3,160
445	6.750	—	6.5005	5.00	33.33	1.50	42.27	19.83	4,330	4,420	4,495
465	7.500	—	7.2505	5.00	35.60	1.50	45.16	21.33	6,500	6,595	6,750
485	8.750	—	8.5005	5.00	38.89	1.40	49.94	24.62	8,073	8,800	8,940
505	10.000	24.12	9.7505	5.00	42.55	4.17	56.10	24.33	11,650	12,800	12,950
535	10.750	24.12	10.5005	5.00	45.80	1.12	59.90	55.58	15,850	17,850	17,950
555	11.750	26.25	11.4005	5.50	52.00	2.20	67.00	27.58	22,000	23,500	23,250

① Dimensions are for reference only and are subject to change without notice unless certified.

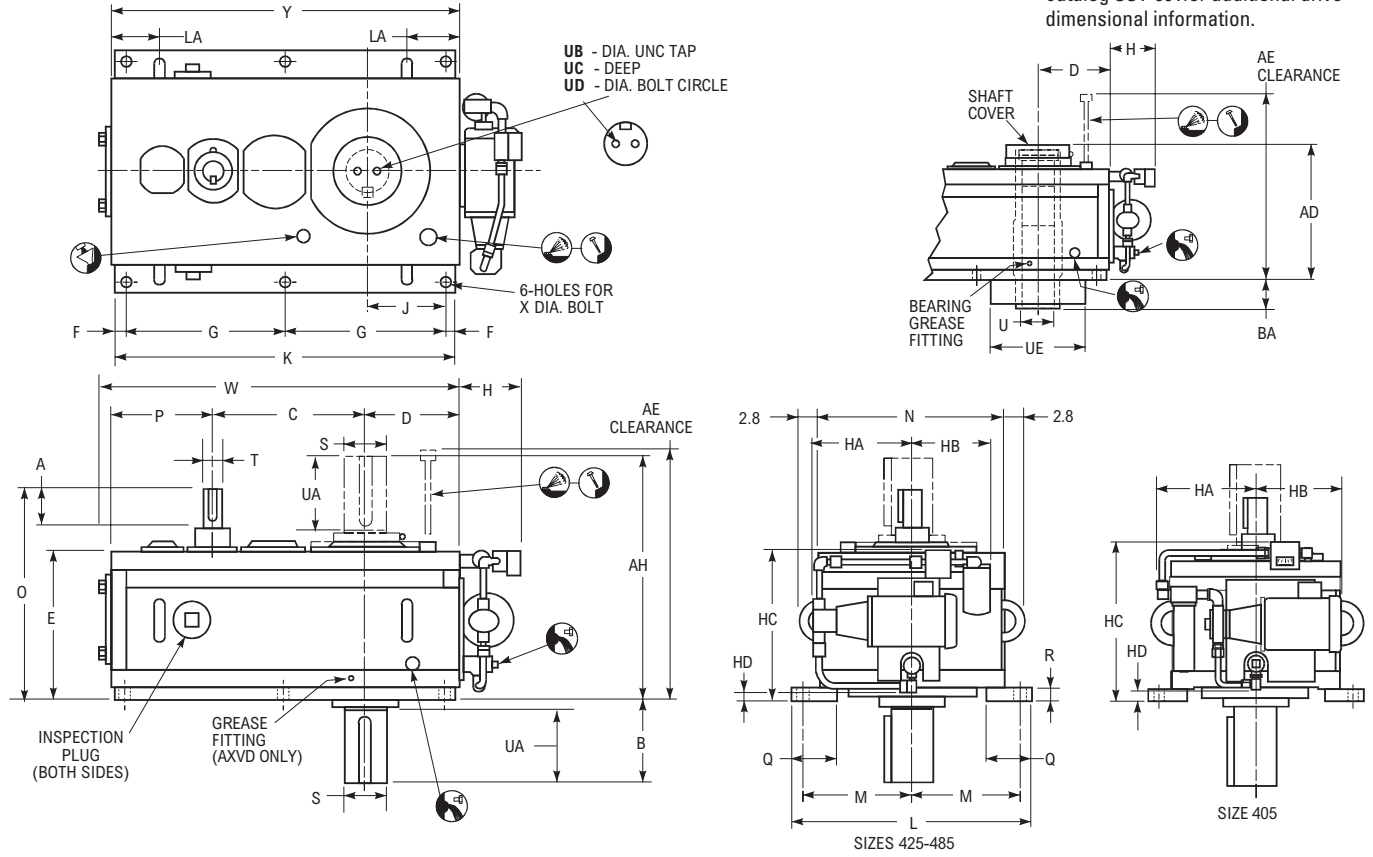
② Sizes 405-465, tolerance is +.0016, -.0000; Size 485, tolerance is +.0020, -.0000.

# Type AXV & AXVQ Double Reduction

## Sizes 405-485

Type AXVQ – Refer to [page <?>](#) for dimensions of Hollow Low-Speed Shaft with Keeper Plate.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



### Dimensions (in)

Drive Size ①	A	B	C	D	E	F	G	Lubrication System					J	K	L	M	N	O	P	Q	R
								H	HA	HB	HC	HD									
405	5.00	9.70	17.700	11.31	17.65	1.50	18.50	7.47	12.71	10.88	19.99	1.25	9.20	40.00	27.75	12.50	21.62	24.90	12.11	5.00	1.50
425	6.00	11.00	20.200	12.31	19.45	1.50	21.00	7.65	13.19	10.03	19.57	1.35	10.25	45.00	31.80	14.50	24.62	27.80	13.50	6.00	1.60
445	7.00	12.20	23.300	14.62	21.41	1.75	24.00	9.92	16.88	12.09	21.42	1.18	12.25	51.50	37.00	16.75	29.25	31.00	14.50	7.00	1.81
465	8.00	14.00	26.500	16.62	23.16	1.95 ④	27.20	9.92	18.88	13.34	23.20	1.42	14.10	58.25	41.00	18.75	33.25	33.80	16.31	7.00	1.79
485	9.00	15.90	30.000	18.50	25.00	2.29	26.90	9.92	18.88	15.09	24.97	1.87	15.60	58.38	46.50	21.00	37.00	36.60	11.00	8.00	2.00

Drive Size ①	Low-Speed Shaft ③						Hollow Low-Speed Shaft			High-Speed Shaft ③				W	X ②	Y	AD	AE	AH	BA	LA	Wt (lb)
	S	Key	UA	UB	UC	UD	U + .002 - .000	UE + .000 - .005	Keyway	T	Key											
405	5.000	1.250 x 1.250 x 7.500	8.66	0.750	1.88	3.50	5.375	15.249	1.000 x 0.312	2.500	0.625 x 0.625 x 4.000	42.45	1.125	41.12	21.34	30.6	29.10	4.50	5.7	2460		
425	5.750	1.500 x 1.500 x 8.000	10.06	1.125	2.25	3.50	6.000	15.749	1.500 x 0.265	3.000	0.750 x 0.750 x 5.000	47.22	1.250	46.01	23.50	33.5	32.20	4.00	6.6 ⑤	3191		
445	6.500	1.500 x 1.500 x 10.000	11.38	1.250	2.50	4.00	6.750	18.499	1.500 x 0.510	3.500	0.875 x 0.875 x 6.000	53.75	1.500	52.67	25.50	36.4	35.60	4.60	6.7	4455		
465	7.250	1.750 x 1.500 x 11.000	12.68	1.250	2.50	4.75	7.500	20.999	1.500 x 0.510	4.000	1.000 x 1.000 x 7.000	61.11	1.500	59.43	27.23	39.2	39.20	4.60	7.7	6627		
485	8.000	2.000 x 1.500 x 12.000	14.00	1.500	3.00	5.00	8.500	23.749	1.500 x 0.510	4.500	1.000 x 1.000 x 8.000	60.81	2.000	59.50	29.18	41.9	43.10	5.40	9.4 ⑤	8220		

① Gear drives are for horizontal floor-mounted operation only (output shaft vertical) unless specifically stated otherwise. Consult factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.

② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.

③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

④ Size 465 low-speed end of drive Dimension F = 1.90.

⑤ Size 425 low-speed end of drive Dimension LA = 6.7.

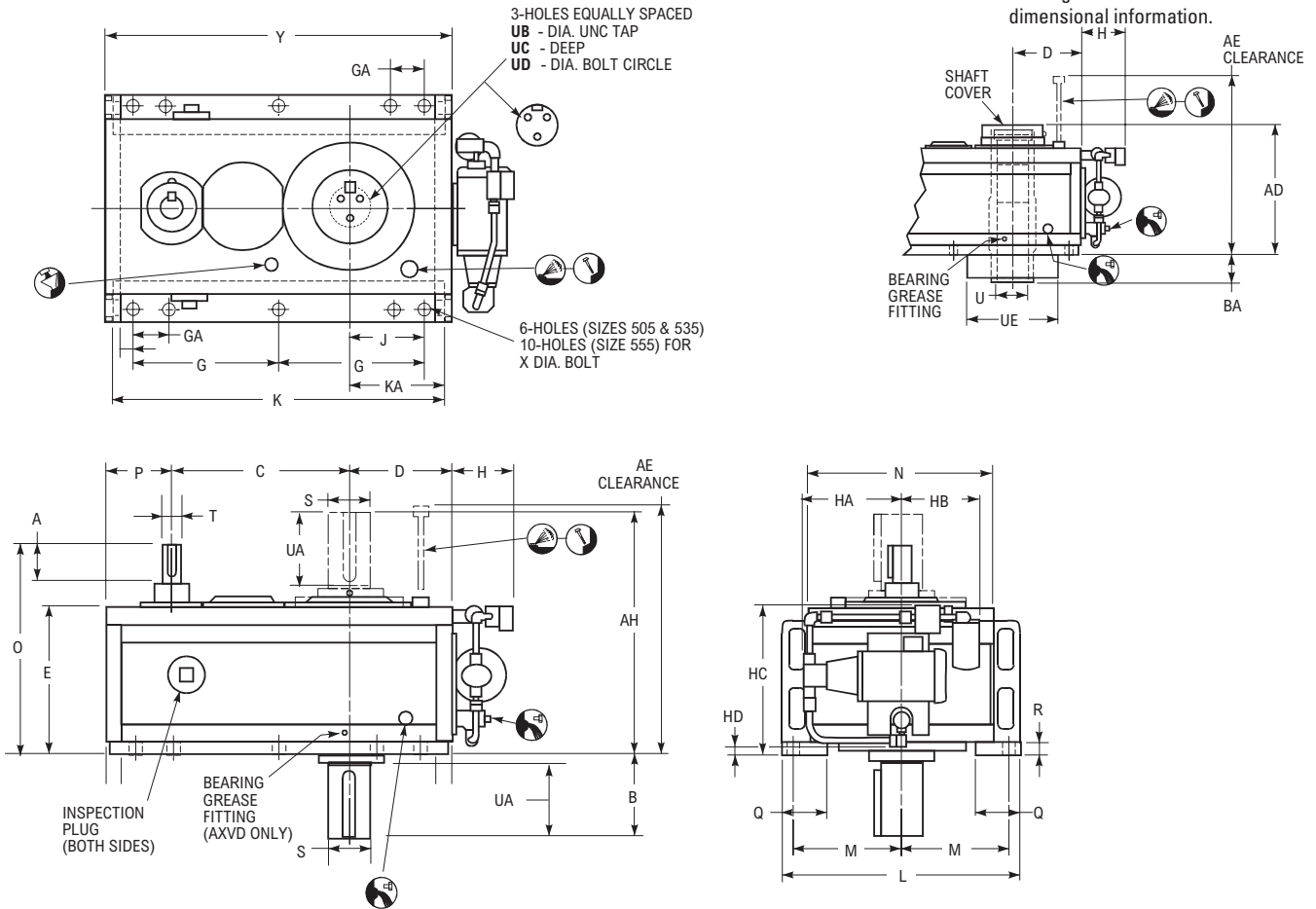
Size 485 low-speed end of drive Dimension LA = 9.5.

# Type AXV & AXVQ Double Reduction

## Sizes 505-555

Type AXVQ – Refer to [page <?>](#) for dimensions of Hollow Low-Speed Shaft with Keeper Plate.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AD	AE	AH	B	BA	C	D	E	G	GA	Lubrication System					J	K	KA	L	M
												H	HA	HB	HC	HD					
505	10.00	33.06	47.1	47.62	17.32	6.80	33.500	19.62	27.87	27.00	–	9.91	16.82	16.34	27.67	2.80	13.50	64.62	18.88	50.50	22.75
535	11.00	35.18	50.8	52.00	19.50	6.80	39.000	22.62	30.00	31.75	–	9.91	20.00	18.84	29.68	3.05	16.50	74.25	21.75	56.50	25.75
555	12.00	40.39	58.5	59.30	21.80	6.60	43.000	24.62	34.95	35.00	10.00	9.91	20.00	20.84	34.51	3.41	18.00	81.75	23.75	61.50	28.25

Drive Size ①	N	O	P	Q	R	Low-Speed Shaft ③					Keyed Hollow Low-Speed Shaft			High-Speed Shaft ③			X ②	Y	Wt (lb)	
						S	Key	UA	UB	UC	UD	U +.002 -.000	UE +.000 -.005	Keyway	T	Key			AXV	AXVQ
505	39.25	40.76	13.12	10.50	2.25	9.250	2.500 x 1.750 x 14.00	16.18	1.500	3.00	6.00	9.001	24.999	2.000 x 0.510	5.000	1.250 x 1.250 x 9.00	2.250	66.25	11,900	11,950
535	45.25	43.65	14.60	10.50	2.25	10.500	2.500 x 1.750 x 16.00	18.38	1.500	3.00	7.50	10.501	27.999	2.500 x 0.760	5.500	1.250 x 1.250 x 10.00	2.250	76.22	16,200	16,100
555	49.25	49.70	16.00	12.00	2.31	11.500	3.000 x 2.000 x 17.00	20.12	1.750	3.50	8.00	11.501	28.999	3.000 x 0.760	6.000	1.500 x 1.500 x 11.00	2.250	83.62	22,800	22,400

① Gear drives are for horizontal floor-mounted operation only (output shaft vertical) unless specifically stated otherwise. Consult factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.

② Use ASTM A-354 Grade BC fasteners.

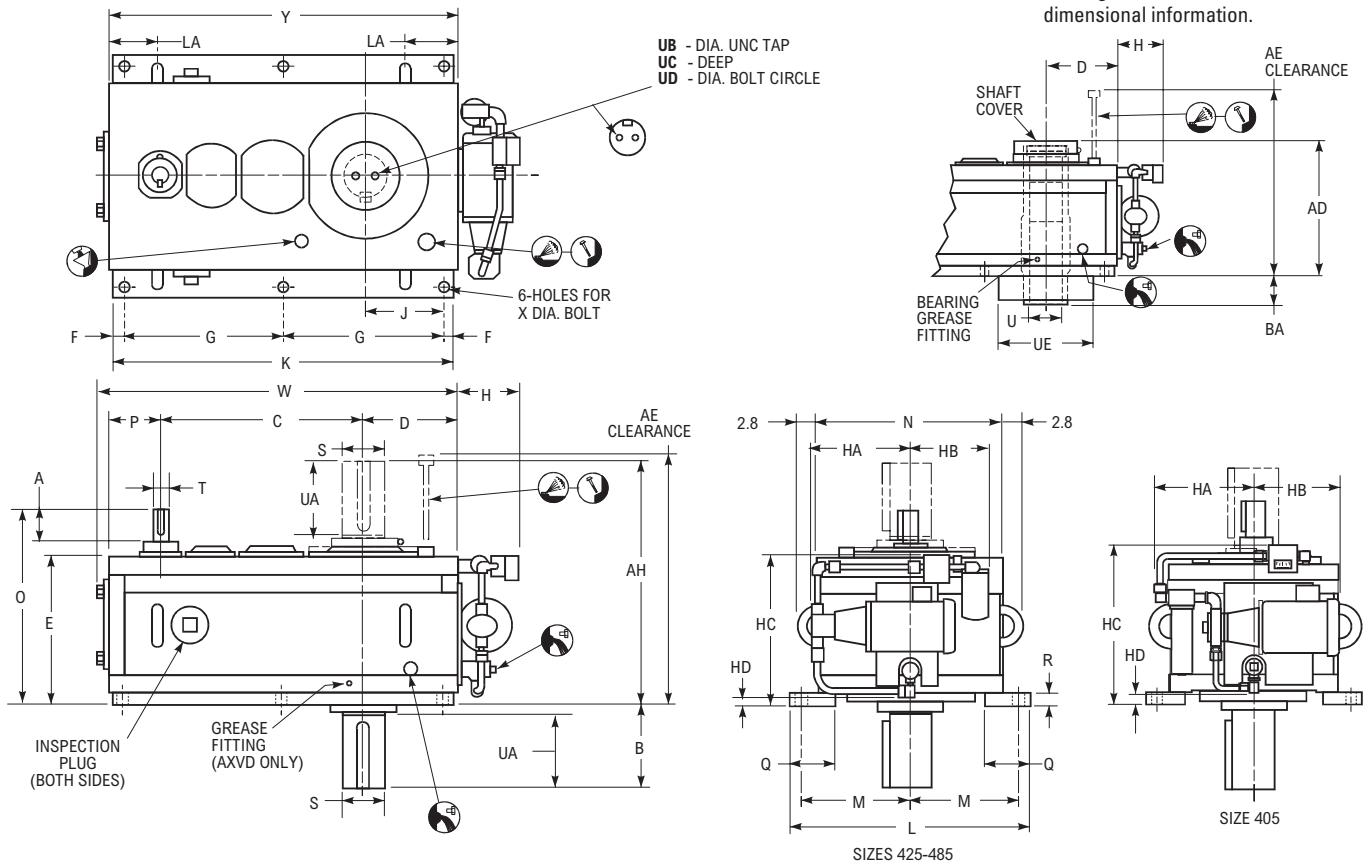
③ Shaft diameters are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

# Type AXV & AXVQ Triple Reduction

## Sizes 405-485

Type AXVQ – Refer to **page <?>** for dimensions of Hollow Low-Speed Shaft with Keeper Plate.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	B	C	D	E	F	G	Lubrication System					J	K	L	M	N	O	P	Q	R
								H	HA	HB	HC	HD									
405	3.50	9.70	23.700	11.31	17.65	1.50	18.50	7.47	12.71	10.88	19.99	1.25	9.20	40.00	27.75	12.50	21.62	23.30	6.11	5.00	1.50
425	4.00	11.00	26.700	12.31	19.45	1.50	21.00	7.65	13.19	10.03	19.57	1.35	10.25	45.00	31.80	14.50	24.62	25.70	7.00	6.00	1.60
445	4.50	12.20	30.500	14.62	21.41	1.75	24.00	9.92	16.88	12.09	21.42	1.18	12.25	51.50	37.00	16.75	29.25	28.30	7.55	7.00	1.81
465	5.00	14.00	34.700	16.62	23.16	1.95 ④	27.20	9.92	18.88	13.34	23.20	1.42	14.10	58.25	41.00	18.75	33.25	30.40	8.11	7.00	1.79
485	6.00	15.90	39.300	18.50	25.00	2.41 ④	30.60	9.92	18.88	15.09	24.97	1.87	15.60	65.90	46.50	21.00	37.00	33.40	9.24	8.00	2.00

Drive Size ①	Low-Speed Shaft ③			Hollow Low-Speed Shaft				High-Speed Shaft ③				W	X ②	Y	AD	AE	AH	BA	LA	Wt (lb)
	S	Key	UA	UB	UC	UD	U +0.002 -0.000	UE +0.000 -0.005	Keyway	T	Key									
405	5.000	1.250 x 1.250 x 7.500	8.66	0.750	1.88	3.50	5.375	15.249	1.000 x 0.312	1.750	0.375 x 0.375 x 3.000	42.45	1.125	41.12	21.34	30.6	29.10	4.50	5.7	2493
425	5.750	1.500 x 1.500 x 8.000	10.06	1.125	2.25	3.50	6.000	15.749	1.500 x 0.265	2.000	0.500 x 0.500 x 3.250	47.22	1.250	46.01	23.50	33.5	32.20	4.00	6.6 ⑤	3256
445	6.500	1.500 x 1.500 x 10.000	11.38	1.250	2.50	4.00	6.750	18.499	1.500 x 0.510	2.250	0.500 x 0.500 x 4.000	53.75	1.500	52.67	25.50	36.4	35.60	4.60	6.7	4545
465	7.250	1.750 x 1.500 x 11.000	12.68	1.250	2.50	4.75	7.500	20.999	1.500 x 0.510	2.500	0.625 x 0.625 x 4.500	61.11	1.500	59.43	27.23	39.2	39.20	4.60	7.7	6724
485	8.000	2.000 x 1.500 x 12.000	14.00	1.500	3.00	5.00	8.500	23.749	1.500 x 0.510	3.000	0.750 x 0.750 x 5.500	68.02	2.000	67.04	29.18	41.9	43.10	5.40	9.4 ⑤	8947

① Gear drives are for horizontal floor-mounted operation only (output shaft vertical) unless specifically stated otherwise. Consult factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.

② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.

③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

④ Size 465 low-speed end of drive Dimension F = 1.90.

Size 485 low-speed end of drive Dimension F = 2.29.

⑤ Size 425 low-speed end of drive Dimension LA = 6.7.

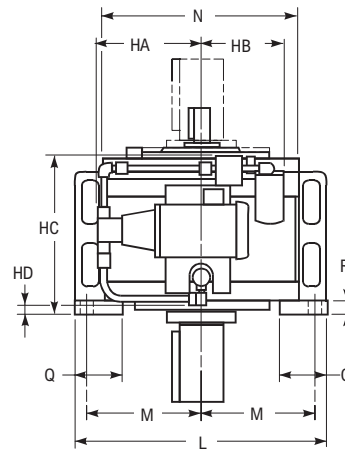
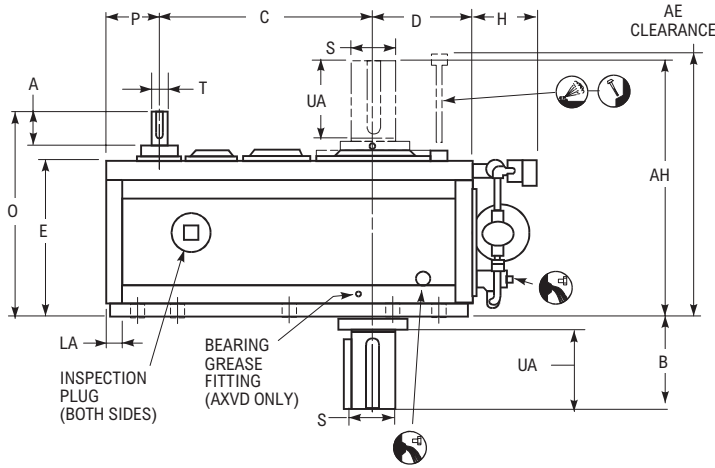
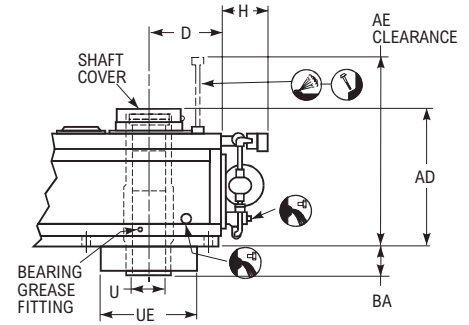
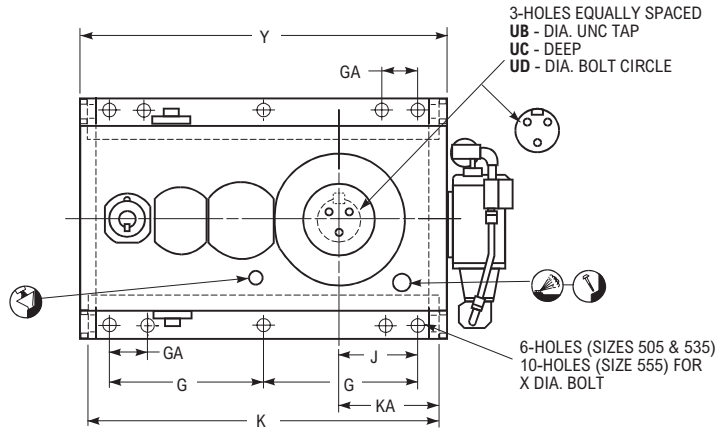
Size 485 low-speed end of drive Dimension LA = 9.5.

# Type AXV & AXVQ Triple Reduction

## Sizes 505-555

Type AXVQ – Refer to [page <?>](#) for dimensions of Hollow Low-Speed Shaft with Keeper Plate.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



### Dimensions (in)

Drive Size ①	A	AD	AE	AH	B	BA	C	D	E	G	GA	Lubrication System					J	K	KA	L	M
												H	HA	HB	HC	HD					
505	7.00	33.06	47.1	47.62	17.32	6.80	44.000	19.62	27.87	31.00	–	9.91	16.82	16.34	27.67	2.80	13.50	72.90	18.88	50.50	22.75
535	8.00	35.18	50.8	52.00	19.50	6.80	51.000	22.62	30.00	35.75	–	9.91	20.00	18.84	29.68	3.05	16.50	82.25	21.75	56.50	25.75
555	9.00	40.39	58.5	59.30	21.80	6.60	57.000	24.62	34.95	40.00	10.00	9.91	20.00	20.84	34.51	3.41	18.00	92.75	23.75	61.50	28.25

Drive Size ①	N	O	P	Q	R	Low-Speed Shaft ③					Keyed Hollow Low-Speed Shaft			High-Speed Shaft ③			X ②	Y	Wt (lb)	
						S	Key	UA	UB	UC	UD	U +.002 -.000	UE +.000 -.005	Keyway	T	Key			AXV	AXVQ
505	39.25	37.46	10.90	10.50	2.25	9.250	2.500 x 1.750 x 14.00	16.18	1.500	3.00	6.00	9.001	24.999	2.000 x 0.510	3.500	0.875 x 0.875 x 6.00	2.250	74.53	12,950	13,000
535	45.25	40.45	10.98	10.50	2.25	10.500	2.500 x 1.750 x 16.00	18.38	1.500	3.00	7.50	10.501	27.999	2.500 x 0.760	4.000	1.000 x 1.000 x 7.00	2.250	84.60	18,200	18,050
555	49.25	46.54	13.00	12.00	2.31	11.500	3.000 x 2.000 x 17.00	20.12	1.750	3.50	8.00	11.501	28.999	3.000 x 0.760	4.500	1.000 x 1.000 x 8.00	2.250	94.62	24,350	23,950

① Gear drives are for horizontal floor-mounted operation only (output shaft vertical) unless specifically stated otherwise. Consult factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.

② Use ASTM A-354 Grade BC fasteners.

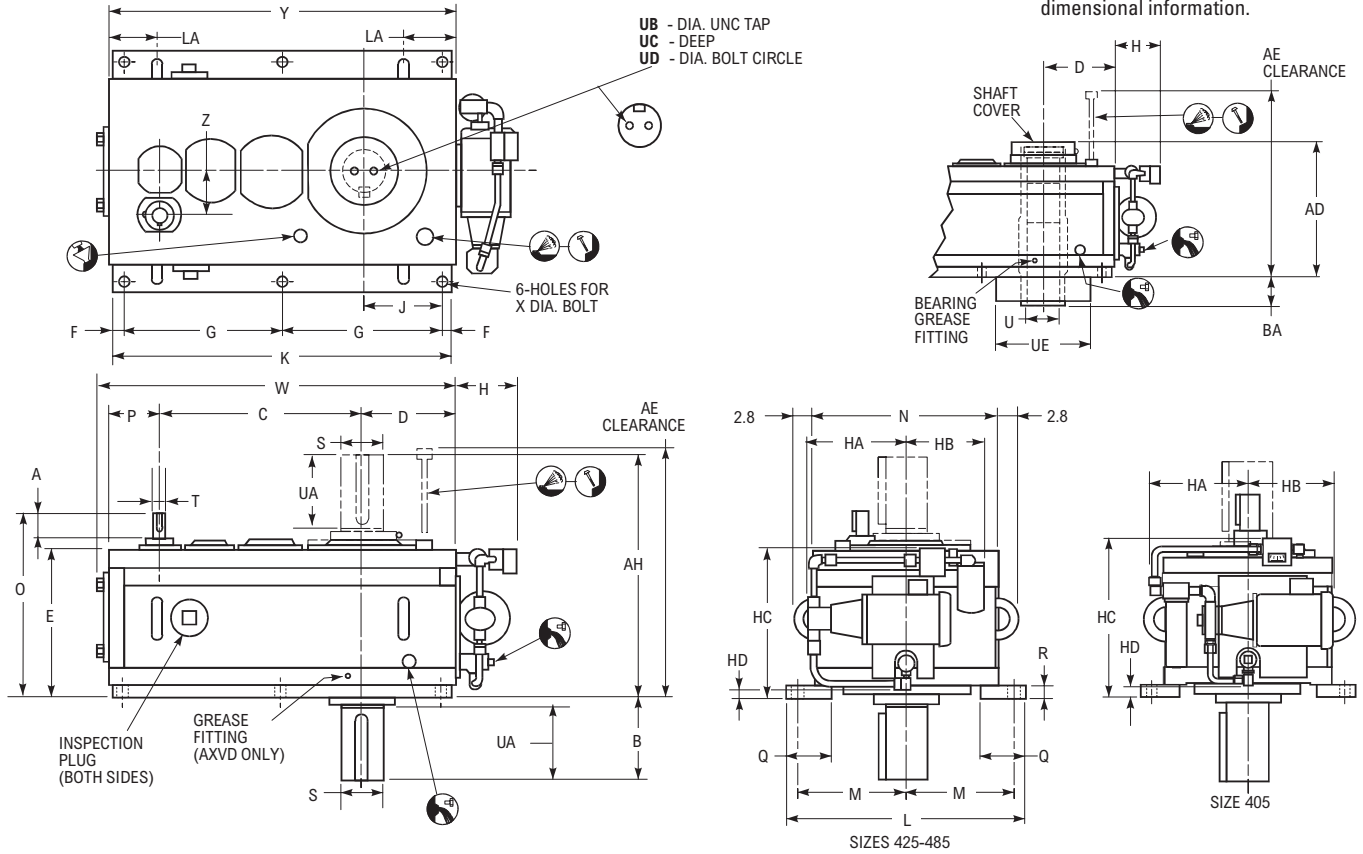
③ Shaft diameters are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

# Type AXV & AXVQ Quadruple Reduction

## Sizes 405-485

Type AXVQ – Refer to **page <?>** for dimensions of Hollow Low-Speed Shaft with Keeper Plate.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	B	C	D	E	F	G	Lubrication System					J	K	L	M	N	O	P	Q	R
								H	HA	HB	HC	HD									
405	3.00	9.70	23.700	11.31	17.65	1.50	18.50	7.47	12.71	10.88	19.99	1.25	9.20	40.00	27.75	12.50	21.62	22.70	6.11	5.00	1.50
425	3.00	11.00	26.700	12.31	19.45	1.50	21.00	7.65	13.19	10.03	19.57	1.35	10.25	45.00	31.80	14.50	24.62	24.50	7.00	6.00	1.60
445	3.50	12.20	30.500	14.62	21.41	1.75	24.00	9.92	16.88	12.09	21.42	1.18	12.25	51.50	37.00	16.75	29.25	27.10	7.55	7.00	1.81
465	3.50	14.00	34.700	16.62	23.16	1.95 ④	27.20	9.92	18.88	13.34	23.20	1.42	14.10	58.25	41.00	18.75	33.25	28.90	8.11	7.00	1.79
485	4.50	15.90	39.300	18.50	25.00	2.41 ④	30.60	9.92	18.88	15.09	24.97	1.87	15.60	65.90	46.50	21.00	37.00	31.90	9.24	8.00	2.00

Drive Size ①	Low-Speed Shaft ③				Hollow Low-Speed Shaft				High-Speed Shaft ③				W	X ②	Y	Z	AD	AE	AH	BA	LA	Wt (lb)
	S	Key	UA	UB	UC	UD	U +.002 -.000	UE +.000 -.005	Keyway	T	Key											
405	5.000	1.250 x 1.250 x 7.500	8.66	0.750	1.88	3.50	5.375	15.249	1.000 x 0.312	1.500	0.375 x 0.375 x 2.750	42.45	1.125	41.12	4.500	21.34	30.6	29.10	4.50	5.7	2475	
425	5.750	1.500 x 1.500 x 8.000	10.06	1.125	2.25	3.50	6.000	15.749	1.500 x 0.265	1.500	0.375 x 0.375 x 2.500	47.22	1.250	46.01	5.500	23.50	33.5	32.20	4.00	6.6 ⑤	3256	
445	6.500	1.500 x 1.500 x 10.000	11.38	1.250	2.50	4.00	6.750	18.499	1.500 x 0.510	1.750	0.375 x 0.375 x 3.000	53.75	1.500	52.67	6.000	25.50	36.4	35.60	4.60	6.7	4616	
465	7.250	1.750 x 1.500 x 11.000	12.68	1.250	2.50	4.75	7.500	20.999	1.500 x 0.510	1.750	0.375 x 0.375 x 3.000	61.11	1.500	59.43	6.500	27.23	39.2	39.20	4.60	7.7	6879	
485	8.000	2.000 x 1.500 x 12.000	14.00	1.500	3.00	5.00	8.500	23.749	1.500 x 0.510	2.250	0.500 x 0.500 x 4.000	68.02	2.000	67.04	7.200	29.18	41.9	43.10	5.40	9.4 ⑤	9087	

① Gear drives are for horizontal floor-mounted operation only (output shaft vertical) unless specifically stated otherwise. Consult factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.

② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.

③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

④ Size 465 low-speed end of drive Dimension F = 1.90.

Size 485 low-speed end of drive Dimension F = 2.29.

⑤ Size 425 low-speed end of drive Dimension LA = 6.7.

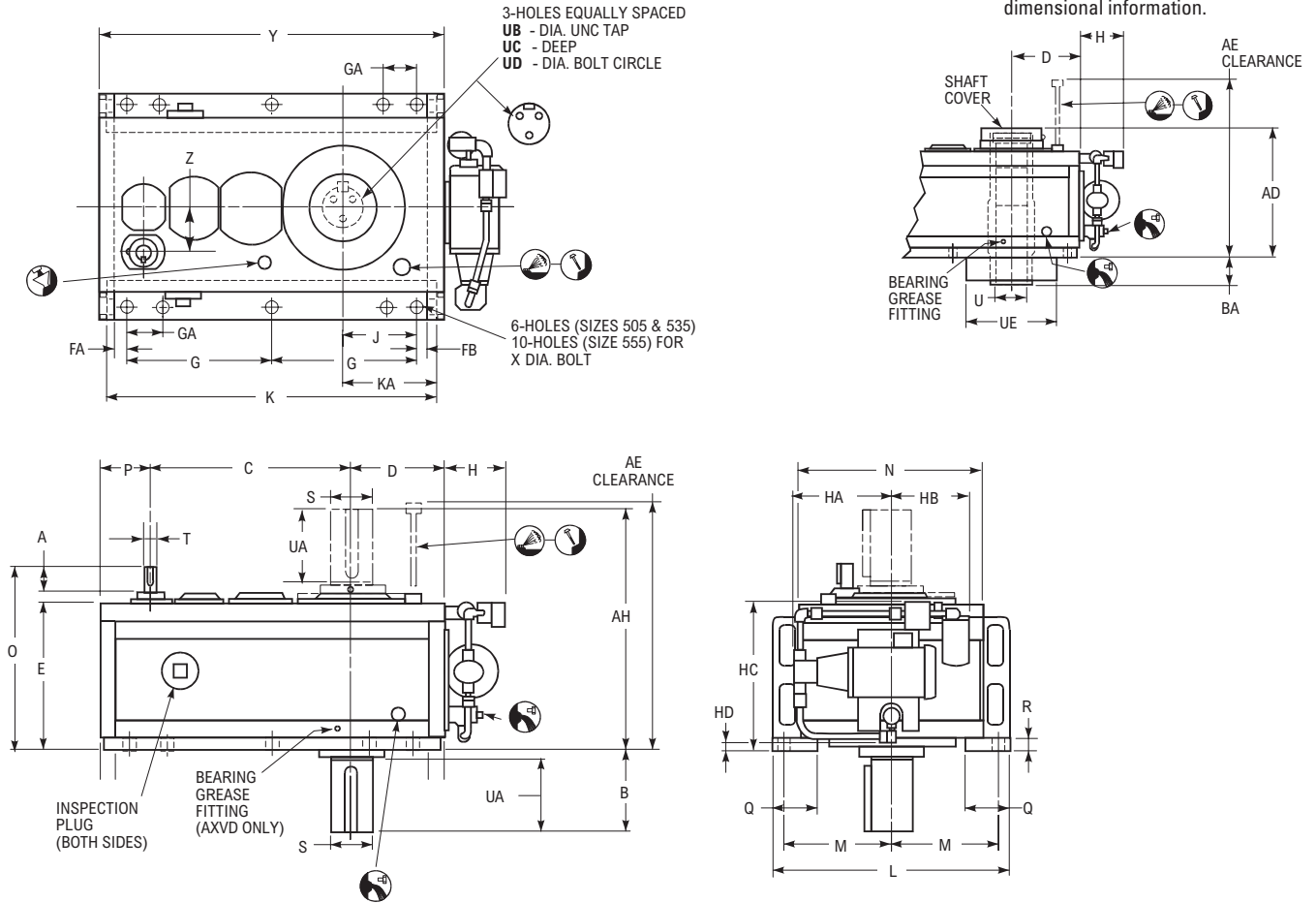
Size 485 low-speed end of drive Dimension LA = 9.5.

# Type AXV & AXVQ Quadruple Reduction

## Sizes 505-555

Type AXVQ – Refer to [page <?>](#) for dimensions of Hollow Low-Speed Shaft with Keeper Plate.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



### Dimensions (in)

Drive Size ①	A	AD	AE	AH	B	BA	C	D	E	FA	FB	G	GA	Lubrication System					J	K	KA	L	M
														H	HA	HB	HC	HD					
505	5.38	33.06	47.1	47.62	17.32	6.80	44.000	19.62	27.87	3.40	3.50	31.00	—	9.91	16.82	16.34	27.67	2.80	13.50	72.90	18.88	50.50	22.75
535	6.00	35.18	50.8	52.00	19.50	6.80	51.000	22.62	30.00	3.73	3.50	35.75	—	9.91	20.00	18.84	29.68	3.05	16.50	82.25	21.75	56.50	25.75
555	6.00	40.39	58.5	59.30	21.80	6.60	57.000	24.62	34.95	4.50	3.50	40.00	10.00	9.91	20.00	20.84	34.51	3.41	18.00	92.75	23.75	61.50	28.25

Drive Size ①	N	O	P	Q	R	Low-Speed Shaft ③					Keyed Hollow Low-Speed Shaft			High-Speed Shaft ③		X ②	Y	Z	Wt (lb)		
						S	Key	UA	UB	UC	UD	U + .002 - .000	UE + .000 - .005	Keyway	T				Key	AXV	AXVQ
505	39.25	35.66	10.90	10.50	2.25	9.250	2.500 x 1.750 x 14.00	16.18	1.500	3.00	6.00	9.001	24.999	2.000 x 0.510	2.750	0.625 x 0.625 x 4.50	2.250	74.53	8.20	13,050	13,100
535	45.25	38.35	10.98	10.50	2.25	10.500	2.500 x 1.750 x 16.00	18.38	1.500	3.00	7.50	10.501	27.999	2.500 x 0.760	3.000	0.750 x 0.750 x 5.00	2.250	84.60	8.20	18,350	18,200
555	49.25	43.33	13.00	12.00	2.31	11.500	3.000 x 2.000 x 17.00	20.12	1.750	3.50	8.00	11.501	28.999	3.000 x 0.760	3.000	0.750 x 0.750 x 5.00	2.250	94.62	9.30	24,700	24,250

① Gear drives are for horizontal floor-mounted operation only (output shaft vertical) unless specifically stated otherwise. Consult factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.

② Use ASTM A-354 Grade BC fasteners.

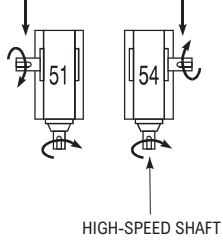
③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

# Shaft Assemblies & Rotations

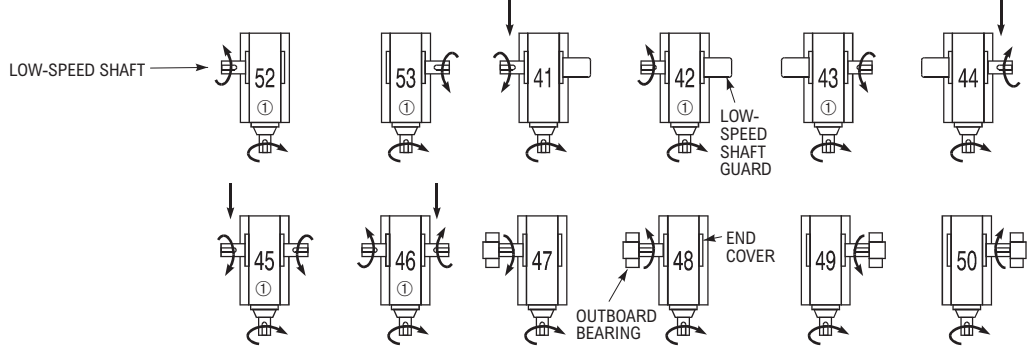
## Type AB

Please specify from the views below, the desired assembly number. The Type AB low-speed shaft overhung load capacities published on **page <?>** apply to the low-speed shaft extensions below with heavy arrows. Published overhung load capacities may be increased when an outboard bearing is used. Consult Rexnord for overhung load capacities of low-speed shaft extensions without the heavy arrow, as they are less than the heavy arrow extensions. Contact Rexnord for inclined, wall-mounted or other non-standard orientations.

### Standard Assemblies

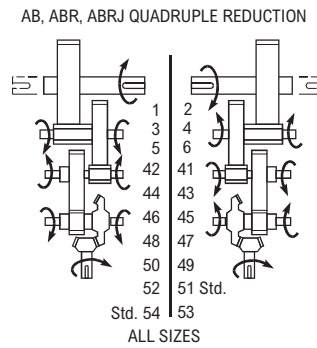
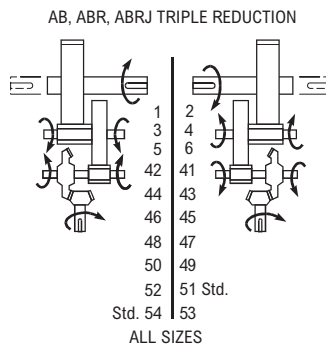
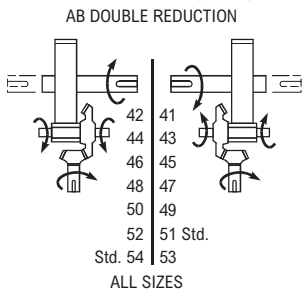


### Other Available Assemblies



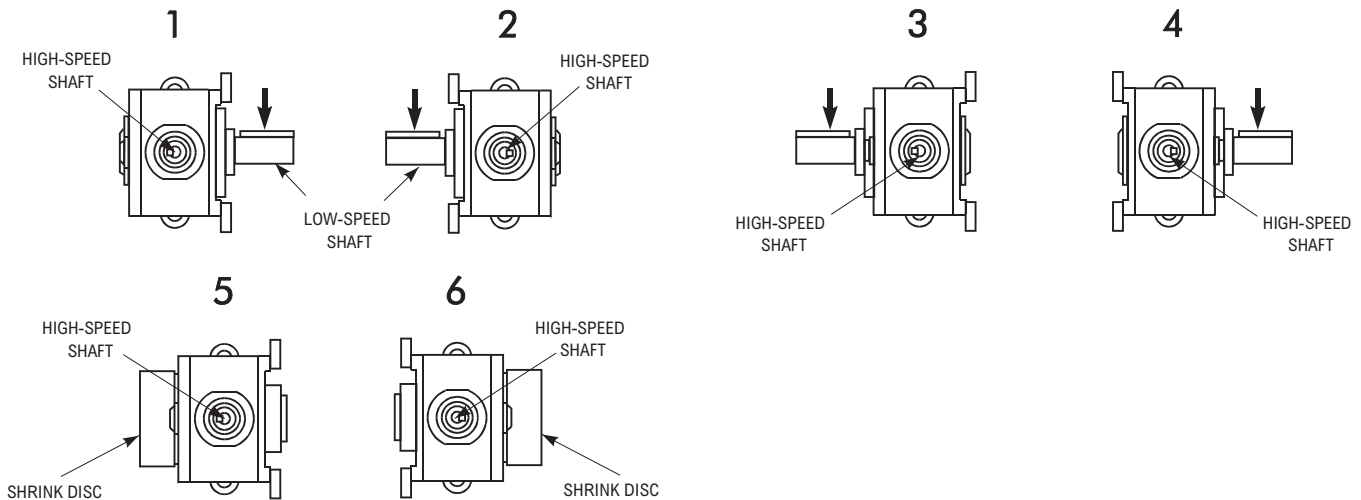
① Refer to Rexnord for overhung load ratings for low-speed shafts without the heavy arrows and without outboard bearings. They are less than those published.

## Shaft Rotations for AB, ABR, ABRJ Assemblies



## Types ABR & ABRJ

Please specify from the views below, the desired assembly number. The Type ABR and ABRJ low-speed shaft overhung load capacities published on **page <?>** apply to the low-speed shaft extensions below with heavy arrows. Contact Rexnord for inclined or other non-standard orientations. For rotations of ABR and ABRJ assemblies, see shaft rotation schematic above.



# Horsepower & Torque Ratings/Double Reduction

## Type AB Right-Angle Shaft ①

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Horsepower								Torque							
			Drive Size								Drive Size							
			385	405	425	445	465	485	505	525	385	405	425	445	465	485	505	525
1750	5.06	350	727	995	1369	2055	2450	–	–	–	127	178	243	391	432	–	–	–
	5.60	310	709	995	1369	1938	2450	–	–	–	138	197	266	398	479	–	–	–
	6.20	280	671	995	1369	1834	2384	–	–	–	147	222	306	409	537	–	–	–
	6.86	255	636	995	1369	1674	2450	–	–	–	151	241	333	406	579	–	–	–
	7.59	230	600	850	1259	1595	2279	2608	–	–	155	225	335	449	583	712	–	–
	8.40	210	435	602	814	1333	1834	2608	–	–	127	173	239	408	548	766	–	–
	9.30	190	435	602	814	1268	1647	2608	–	–	143	195	275	421	568	883	–	–
	10.29	170	435	572	809	1166	1716	2608	–	–	155	219	298	421	620	961	–	–
	11.39	155	419	340	762	1125	1579	2518	–	–	162	134	307	471	618	1014	–	–
	12.61	140	251	340	481	792	1187	1583	–	–	111	148	212	360	535	698	–	–
	13.95	125	251	340	481	792	1163	1583	–	–	125	167	245	390	605	804	–	–
	15.44	115	251	340	481	792	1187	1562	–	–	136	181	266	425	648	863	–	–
17.09	100	251	340	481	774	1118	1583	–	–	148	198	291	481	660	957	–	–	
1430	5.06	280	611	839	1162	1784	2107	–	–	–	131	183	253	415	455	–	–	–
	5.60	255	611	839	1162	1683	2107	–	–	–	146	203	276	423	504	–	–	–
	6.20	230	582	839	1162	1592	2070	–	–	–	156	229	318	434	571	–	–	–
	6.86	210	552	839	1162	1453	2107	–	–	–	160	248	346	431	610	–	–	–
	7.59	190	509	705	1046	1350	1979	2219	2766	3516	161	228	341	465	619	741	931	1148
	8.40	170	362	502	681	1158	1593	2219	2766	3516	129	176	244	434	582	798	1001	1271
	9.30	155	362	502	681	1101	1429	2219	2766	3516	146	199	282	447	603	919	1163	1435
	10.29	140	362	495	681	1012	1490	2219	2766	3516	158	232	307	448	659	1000	1274	1554
	11.39	125	345	282	661	930	1371	2186	2766	3479	163	136	325	477	656	1078	1396	1682
	12.61	115	207	282	399	659	992	1327	1741	2277	112	150	215	366	548	716	937	1241
	13.95	100	207	282	399	659	992	1327	1741	2277	127	170	248	397	632	824	1089	1401
	15.44	90	207	282	399	659	992	1327	1741	2277	137	184	270	432	663	897	1192	1517
17.09	84	207	282	399	638	971	1327	1741	2277	149	201	296	485	702	981	1307	1660	
1170	5.06	230	512	704	980	1551	1794	–	–	–	134	188	260	441	474	–	–	–
	5.60	210	512	704	980	1462	1794	–	–	–	149	208	285	449	524	–	–	–
	6.20	190	494	704	980	1384	1794	–	–	–	162	235	328	461	605	–	–	–
	6.86	170	479	703	980	1263	1794	–	–	–	170	254	357	458	634	–	–	–
	7.59	155	420	583	867	1121	1720	1874	2344	2992	162	231	345	472	658	765	964	1194
	8.40	140	301	418	568	972	1384	1874	2344	2992	132	179	249	445	618	824	1037	1322
	9.30	125	301	418	568	957	1242	1874	2344	2992	148	202	287	475	640	949	1205	1492
	10.29	115	301	408	568	880	1294	1874	2344	2992	160	234	313	476	700	1032	1319	1616
	11.39	100	285	233	568	769	1191	1814	2344	2992	165	137	342	482	697	1093	1446	1768
	12.61	90	171	233	331	548	826	1108	1456	1909	114	152	218	372	557	730	958	1272
	13.95	84	171	233	331	548	826	1108	1456	1909	128	171	252	404	643	841	1113	1435
	15.44	75	171	233	331	548	826	1108	1456	1909	138	186	274	440	674	916	1219	1555
17.09	68	171	233	331	525	826	1108	1456	1870	150	203	300	488	729	1001	1336	1666	

① Torque is in pound-inches at low-speed shaft ... multiply values listed by 1000.

# Horsepower & Torque Ratings/Double Reduction

## Type AB Right-Angle Shaft ①

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Horsepower								Torque							
			Drive Size								Drive Size							
			385	405	425	445	465	485	505	525	385	405	425	445	465	485	505	525
870	5.06	175	390	538	754	1212	1394	–	–	–	137	193	269	464	495	–	–	–
	5.60	155	383	538	754	1188	1394	–	–	–	150	214	294	491	548	–	–	–
	6.20	140	367	538	754	1125	1394	–	–	–	162	242	339	504	632	–	–	–
	6.86	130	356	530	750	1026	1394	–	–	–	170	258	367	501	663	–	–	–
	7.59	115	316	439	654	847	1394	1444	1813	2324	164	234	350	479	717	793	1003	1247
	8.40	105	227	316	432	742	1100	1444	1813	2324	133	182	255	457	661	854	1078	1381
	9.30	95	227	316	432	742	1010	1444	1813	2324	150	206	294	495	700	983	1253	1559
	10.29	85	227	306	432	715	1041	1444	1813	2324	163	236	320	520	757	1070	1372	1688
	11.39	77	213	175	432	578	943	1349	1813	2236	166	139	350	487	742	1093	1504	1777
	12.61	70	129	175	249	414	627	843	1111	1459	115	153	221	378	569	747	983	1307
	13.95	62	129	175	249	414	627	843	1111	1459	130	173	255	410	656	861	1142	1475
	15.44	55	129	175	249	414	627	843	1111	1459	140	188	277	447	688	937	1250	1598
17.09	50	129	175	249	393	627	843	1111	1391	153	205	303	491	745	1025	1371	1666	
720	5.06	140	327	451	634	1023	1178	–	–	–	139	196	274	473	505	–	–	–
	5.60	130	317	451	634	1023	1159	–	–	–	150	217	299	511	550	–	–	–
	6.20	115	304	451	634	985	1178	–	–	–	162	245	345	533	645	–	–	–
	6.86	105	295	442	621	899	1178	–	–	–	170	260	368	530	677	–	–	–
	7.59	95	263	366	545	707	1178	1216	1529	1964	165	235	353	483	732	807	1022	1273
	8.40	85	190	264	361	622	924	1216	1529	1964	135	184	257	463	671	868	1099	1411
	9.30	77	190	264	361	622	884	1216	1529	1964	152	208	297	502	741	1000	1277	1592
	10.29	70	190	255	361	622	868	1216	1529	1964	164	238	323	546	763	1089	1398	1724
	11.39	62	177	146	361	481	786	1116	1529	1850	167	140	353	490	747	1093	1532	1776
	12.61	55	107	146	208	346	524	705	931	1224	115	155	223	382	574	755	995	1325
	13.95	50	107	146	208	346	524	705	931	1224	130	175	257	414	663	870	1156	1496
	15.44	45	107	146	208	346	524	705	931	1224	141	189	280	451	695	947	1266	1620
17.09	42	107	146	208	327	524	705	931	1151	153	207	306	494	752	1035	1388	1666	
580	5.06	115	265	368	519	839	959	–	–	–	140	198	278	481	511	–	–	–
	5.60	105	255	368	519	839	933	–	–	–	150	220	304	520	550	–	–	–
	6.20	95	245	368	518	839	968	–	–	–	162	248	350	564	658	–	–	–
	6.86	85	237	358	500	773	968	–	–	–	170	261	367	566	691	–	–	–
	7.59	77	213	296	442	574	961	995	1253	1613	166	236	355	487	742	820	1039	1298
	8.40	70	154	215	294	507	755	995	1253	1613	136	186	260	468	681	882	1118	1438
	9.30	62	154	215	294	507	755	995	1253	1613	153	210	300	508	785	1016	1299	1623
	10.29	55	154	206	294	507	704	995	1253	1607	165	238	326	553	768	1106	1422	1751
	11.39	50	143	118	294	389	637	899	1253	1491	167	140	357	492	752	1093	1559	1777
	12.61	45	86.7	118	168	281	426	574	758	998	116	155	224	385	580	763	1006	1341
	13.95	42	86.7	118	168	281	426	574	758	998	131	175	258	418	669	879	1169	1514
	15.44	38	86.7	118	168	281	426	574	758	996	141	190	281	455	702	957	1280	1636
17.09	34	86.7	118	168	264	425	574	758	927	154	207	307	495	757	1047	1403	1666	

① Torque is in pound-inches at low-speed shaft ... multiply values listed by 1000.

# Horsepower & Torque Ratings/Triple Reduction

## Horsepower Ratings

### Type AB, ABR & ABX Right-Angle Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size ①												
			385	405	425	445	465	485	505	525	535	545	555	565	585
1750	13.95	125	—	314 ③	536 ③	727 ③	995 ③	1369 ③	2154 ③	—	2450	3436	—	—	—
	15.44	115	—	314 ③	536 ③	727 ③	995 ③	1369 ③	2154 ③	—	2450	3436	3436	—	—
	17.09	100	—	314 ③	536 ③	727 ③	970 ③	1369 ③	2154 ③	—	2450	3436	3436	—	—
	18.91	90	230	294	467	727	970	1369	2154	2450	2450	3436	3436	—	—
	20.93	84	218	314	467	675	920	1369	2044	2450	2450	3212	3436	—	—
	23.16	75	209	294	462	651	859	1369	2154	2450	2450	3212	3436	—	—
	25.63	68	189	286	418	614	777	1223	1921	2316	2450	3212	3426	—	—
	28.36	60	145	254	390	526	773	1207	1769	2087	2301	2608	3205 ②	—	—
	31.39	56	141	213	326	436	647	1112	1379	1755	2087	2246	2977 ②	—	—
	34.74	50	141	175	290	435	602	943	1379	1755	1935	2246	2608 ②	—	—
	38.44	45	126	175	284	435	599	814	1305	1537	1755	2202	2546 ②	—	—
	42.54	40	96.5	171	259	371	478	808	1201	1383	1526	2036	2151 ②	—	—
	47.08	37	95.5	145	240	293	434	743	999	1187	1383	1583	1982 ②	—	—
	52.11	34	95.5	127	186	271	340	630	792	1187	1187	1583	1583	—	—
	57.66	30	76.4	98.2	177	251	340	481	792	1027	1187	1468	1583 ②	—	—
	63.82	27	64.8	98.2	167	250	329	481	792	980	1020	1357	1455 ②	—	—
	70.62	25	64.7	97.6	158	194	298	481	675	816	924	1061	1341 ②	—	—
	78.16	22	64.7	—	—	—	—	—	—	—	—	—	—	—	—
1430	13.95	100	—	262 ③	466 ③	611 ③	839 ③	1162 ③	1845 ③	—	2107	2985	—	3790	4673
	15.44	90	—	262 ③	466 ③	611 ③	839 ③	1162 ③	1845 ③	—	2107	2985	2985	3790	4673
	17.09	84	—	262 ③	466 ③	611 ③	839 ③	1162 ③	1845 ③	—	2107	2985	2985	3790	4673
	18.91	75	190	243	406	611	839	1162	1845	2107	2107	2985	2985	3790	4673
	20.93	68	178	261	406	586	798	1162	1775	2107	2107	2789	2985	3790	4673
	23.16	60	171	244	377	565	746	1162	1784	2107	2107	2789	2985	3672	4156
	25.63	56	154	236	348	532	675	1062	1580	1907	2107	2750	2974 ②	3326	4156
	28.36	50	118	208	318	453	635	992	1455	1718	1894	2219	2661 ②	3090	3384
	31.39	45	116	176	270	358	531	913	1160	1524	1717	1950	2454 ②	2766	3212
	34.74	40	116	145	251	362	497	775	1160	1524	1591	1950	2177 ②	2485	3212
	38.44	37	103	145	232	358	502	681	1072	1262	1524	1799	2130 ②	2283	3025
	42.54	34	78.9	145	212	304	408	663	986	1136	1253	1663	1771 ②	2092	2913
	47.08	30	78.5	119	196	240	369	610	819	992	1136	1327	1632 ②	1741	2277
	52.11	27	78.5	104	153	222	282	517	659	992	992	1308	1327	1671	2255
	57.66	25	62.9	80.6	153	207	282	399	659	842	992	1200	1327 ②	1547	2180
	63.82	22	52.9	80.6	140	207	270	399	659	803	836	1109	1197 ②	1415	1961
	70.62	20	53.1	79.9	129	159	244	399	552	669	757	870	1102 ②	1109	1815
	78.16	18	53.1	—	—	—	—	—	—	—	—	—	—	—	—
1170	13.95	84	—	217 ③	400 ③	512 ③	704 ③	980 ③	1566 ③	—	1794	2560	—	3266	4058
	15.44	75	—	217 ③	400 ③	512 ③	704 ③	980 ③	1566 ③	—	1794	2560	2560	3266	4058
	17.09	68	—	217 ③	400 ③	509 ③	704 ③	962 ③	1566 ③	—	1794	2560	2560	3266	4058
	18.91	60	155	199	353	509	704	962	1566	1794	1794	2560	2560	3266	4058
	20.93	56	146	214	333	503	694	962	1486	1792	1794	2423	2560	3266	4058
	23.16	50	140	199	309	470	648	962	1486	1755	1755	2423	2560	3191	3611
	25.63	45	126	194	285	437	586	884	1300	1570	1755	2250	2560 ②	2781	3611
	28.36	40	96.8	171	261	372	522	816	1196	1414	1560	1874	2196 ②	2549	2940
	31.39	37	95.7	145	222	294	436	751	972	1324	1413	1689	2024 ②	2317	2791
	34.74	34	95.7	120	206	301	408	637	972	1298	1309	1605	1795 ②	2033	2791
	38.44	30	84.2	120	190	293	415	568	880	1037	1288	1472	1756 ②	1881	2628
	42.54	27	64.5	119	173	249	335	544	809	933	1030	1361	1459 ②	1722	2402
	47.08	25	64.5	97.3	161	197	302	500	670	826	933	1108	1344 ②	1456	1909
	52.11	22	64.5	84.9	126	182	233	424	548	826	826	1070	1108	1367	1909
	57.66	20	51.8	66.2	125	171	233	331	548	691	826	981	1108 ②	1265	1784
	63.82	18	43.3	66.2	114	171	221	331	548	659	686	907	985 ②	1158	1615
	70.62	16.5	43.6	65.4	106	130	200	331	451	548	621	713	907 ②	913	1494
	78.16	15.0	43.6	—	—	—	—	—	—	—	—	—	—	—	—

① Torque is in pound-inches at low-speed shaft ... multiply values listed by 1000.

② For Size 555ABRJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page 49 for instructions.

③ Triple reduction ratios and ratings are offered for Types ABR and ABX only.

### Availability of Types AB / ABR / ABX Triple & Quadruple Reduction

High-Speed Shaft RPM	Type	385	405	425	445	465	485	505	525	535	545	555	565	585
All	AB	X	X	X	X	X	X	X	X	—	X	—	X	X
	ABR	—	X	X	X	X	X	X	—	X	—	X	—	—
	ABX	—	X	X	X	X	X	X	—	X	—	X	—	—

# Horsepower & Torque Ratings/Triple Reduction

## Torque Ratings

### Type AB, ABR & ABX Right-Angle Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size ①												
			385	405	425	445	465	485	505	525	535	545	555	565	585
1750	13.95	125	—	163 ③	264 ③	377 ③	495 ③	698 ③	1133 ③	—	1292	1664	—	—	—
	15.44	115	—	181 ③	289 ③	407 ③	548 ③	751 ③	1218 ③	—	1425	1811	1834	—	—
	17.09	100	—	200 ③	333 ③	441 ③	574 ③	824 ③	1404 ③	—	1599	2046	2029	—	—
	18.91	90	156	197	310	476	635	887	1510	1757	1758	2236	2292	—	—
	20.93	84	166	245	358	522	695	1021	1561	1903	1973	2370	2499	—	—
	23.16	75	172	236	385	535	703	1111	1770	1988	2036	2591	2786	—	—
	25.63	68	168	259	379	547	734	1149	1834	2121	2246	2899	3088	—	—
	28.36	60	152	249	388	553	766	1235	1839	2070	2366	2594	3220 ②	—	—
	31.39	56	157	246	375	491	751	1238	1569	1966	2321	2533	3256 ②	—	—
	34.74	50	170	211	363	536	749	1148	1687	2178	2383	2769	3232 ②	—	—
	38.44	45	168	238	387	582	821	1155	1856	2152	2460	3038	3508 ②	—	—
	42.54	40	152	253	387	585	744	1248	1860	2098	2400	3057	3304 ②	—	—
	47.08	37	159	251	390	495	731	1249	1694	2008	2352	2678	3313 ②	—	—
	52.11	34	172	241	354	495	613	1159	1438	2224	2207	2927	2943	—	—
	57.66	30	165	207	367	510	708	1027	1671	2171	2512	3038	3272 ②	—	—
	63.82	27	152	234	379	553	778	1118	1820	2173	2422	3057	3352 ②	—	—
	70.62	25	161	252	390	497	762	1217	1698	2120	2372	2674	3362 ②	—	—
78.16	22	174	—	—	—	—	—	—	—	—	—	—	—	—	
1430	13.95	100	—	166 ③	281 ③	388 ③	511 ③	725 ③	1187 ③	—	1360	1769	—	2305	2868
	15.44	90	—	185 ③	307 ③	419 ③	565 ③	780 ③	1277 ③	—	1500	1926	1950	2548	3120
	17.09	84	—	204 ③	354 ③	453 ③	607 ③	856 ③	1472 ③	—	1682	2175	2157	2920	3380
	18.91	75	157	199	330	490	672	921	1583	1849	1851	2377	2436	3171	3684
	20.93	68	166	249	381	555	738	1061	1659	2002	2076	2519	2657	3459	4038
	23.16	60	173	240	385	568	747	1155	1794	2092	2143	2753	2962	3604	4095
	25.63	56	168	262	386	580	780	1221	1846	2137	2364	3038	3281 ②	3794	4490
	28.36	50	151	250	387	583	770	1242	1851	2085	2384	2701	3272 ②	3859	4094
	31.39	45	158	249	380	493	754	1244	1615	2089	2337	2692	3284 ②	3789	4304
	34.74	40	171	214	385	546	756	1155	1737	2314	2397	2942	3301 ②	3901	4719
	38.44	37	168	241	387	586	842	1183	1866	2163	2614	3037	3591 ②	3909	5015
	42.54	34	152	263	388	587	777	1254	1869	2108	2412	3056	3329 ②	3922	5310
	47.08	30	160	252	390	496	760	1255	1700	2053	2364	2748	3339 ②	3547	4553
	52.11	27	173	241	356	497	622	1164	1464	2274	2257	2960	3019	3902	4994
	57.66	25	166	208	388	515	718	1043	1702	2178	2569	3039	3356 ②	3939	5449
	63.82	22	152	235	389	560	781	1135	1853	2179	2429	3057	3375 ②	3945	5389
	70.62	20	161	252	390	499	764	1236	1700	2127	2378	2684	3382 ②	3443	5402
78.16	18	175	—	—	—	—	—	—	—	—	—	—	—	—	
1170	13.95	84	—	168 ③	295 ③	397 ③	524 ③	747 ③	1232 ③	—	1415	1854	—	2427	3043
	15.44	75	—	187 ③	323 ③	429 ③	580 ③	804 ③	1325 ③	—	1561	2018	2044	2684	3311
	17.09	68	—	207 ③	372 ③	461 ③	623 ③	866 ③	1527 ③	—	1751	2280	2261	3076	3587
	18.91	60	157	199	351	499	689	932	1642	1924	1926	2492	2554	3340	3910
	20.93	56	166	249	382	582	784	1073	1698	2081	2161	2675	2785	3643	4286
	23.16	50	173	239	385	578	793	1168	1826	2130	2182	2923	3104	3828	4349
	25.63	45	168	263	387	583	828	1243	1857	2150	2406	3038	3452 ②	3877	4768
	28.36	40	152	251	388	585	773	1249	1860	2098	2400	2788	3300 ②	3891	4347
	31.39	37	159	250	382	495	757	1251	1654	2219	2350	2850	3311 ②	3879	4571
	34.74	34	172	216	386	555	759	1160	1779	2409	2411	2959	3327 ②	3901	5011
	38.44	30	168	244	387	586	850	1206	1872	2172	2700	3038	3619 ②	3936	5325
	42.54	27	152	263	387	587	780	1257	1874	2117	2423	3057	3352 ②	3945	5351
	47.08	25	161	252	392	497	760	1258	1699	2089	2373	2804	3360 ②	3625	4665
	52.11	22	174	241	359	498	629	1166	1488	2315	2297	2959	3081	3901	5168
	57.66	20	167	209	387	520	725	1058	1730	2185	2615	3037	3425 ②	3937	5450
	63.82	18	152	236	387	566	782	1151	1884	2186	2436	3056	3394 ②	3946	5424
	70.62	16.5	162	252	392	499	765	1253	1697	2129	2385	2688	3402 ②	3464	5435
78.16	15.0	175	—	—	—	—	—	—	—	—	—	—	—	—	

① Torque is in pound-inches at low-speed shaft ... multiply values listed by 1000.

② For Size 555ABRJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page 49 for instructions.

③ Triple reduction ratios and ratings are offered for Types ABR and ABX only.

### Availability of Types AB / ABR / ABX Triple & Quadruple Reduction

High-Speed Shaft RPM	Type	385	405	425	445	465	485	505	525	535	545	555	565	585
All	AB	X	X	X	X	X	X	X	X	—	X	—	X	X
	ABR	—	X	X	X	X	X	X	—	X	—	X	—	—
	ABX	—	X	X	X	X	X	X	—	X	—	X	—	—

# Horsepower & Torque Ratings/Triple Reduction

## Horsepower Ratings

### Type AB, ABR & ABX Right-Angle Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size												
			385	405	425	445	465	485	505	525	535	545	555	565	585
870	13.95	62	—	165 ②	305 ②	390 ②	538 ②	753 ②	1212 ②	—	1394	2005	—	2571	3218
	15.44	55	—	161 ②	305 ②	390 ②	538 ②	753 ②	1212 ②	—	1394	2005	2005	2571	3218
	17.09	50	—	161 ②	300 ②	379 ②	538 ②	716 ②	1212 ②	—	1394	2005	2005	2571	3218
	18.91	45	115	148	268	379	538	716	1212	1394	1394	2005	2005	2571	3218
	20.93	42	109	160	247	376	538	716	1128	1344	1394	1920	2005	2571	3218
	23.16	38	104	148	230	349	494	716	1105	1305	1305	1824	2005 ①	2417	2935
	25.63	34	93.9	145	212	327	447	658	973	1176	1305	1673	1986 ①	2092	2935
	28.36	31	72.0	127	194	278	390	610	895	1058	1168	1444	1651 ①	1917	2324
	31.39	28	71.8	108	165	219	326	561	742	1071	1058	1256	1521 ①	1723	2268
	34.74	25	71.8	90.2	153	227	304	476	742	970	979	1193	1348 ①	1512	2235
	38.44	22	62.6	90.2	141	219	310	432	657	774	963	1095	1318 ①	1399	2000
	42.54	21	48.0	88.9	129	186	250	406	604	697	769	1012	1095 ①	1281	1804
	47.08	18	48.2	72.5	120	147	226	373	498	627	696	838	1009 ①	1111	1459
	52.11	17	48.2	63.3	94.9	136	175	316	414	627	627	796	843 ①	1017	1459
	57.66	15	38.8	49.4	92.9	129	175	249	414	515	627	730	843 ①	941	1327
	63.82	14	32.2	49.4	84.9	129	165	249	409	491	512	675	738 ①	861	1211
	70.62	12.5	32.5	48.7	78.7	96.9	149	249	336	409	463	532	680 ①	684	1120
	78.16	11.0	32.5	—	—	—	—	—	—	—	—	—	—	—	—
720	13.95	50	—	137 ②	255 ②	327 ②	451 ②	623 ②	1023 ②	—	1178	1701	—	2186	2746
	15.44	45	—	133 ②	255 ②	327 ②	451 ②	623 ②	1023 ②	—	1178	1701	1701	2186	2746
	17.09	42	—	133 ②	248 ②	313 ②	451 ②	592 ②	1023 ②	—	1178	1701	1701	2186	2746
	18.91	38	95.5	122	221	313	451	592	1023	1174	1175	1701	1701	2186	2746
	20.93	34	89.9	133	205	312	451	592	943	1117	1175	1589	1701	2140	2746
	23.16	31	86.0	123	190	289	412	592	915	1080	1080	1510	1692 ①	2000	2571
	25.63	28	77.7	120	175	271	371	544	808	977	1080	1385	1655 ①	1738	2540
	28.36	25	59.6	105	160	230	324	506	743	879	970	1209	1375 ①	1591	1964
	31.39	22	59.6	89.8	136	182	270	465	622	887	878	1040	1267 ①	1426	1945
	34.74	21	59.6	75.1	126	190	252	394	614	805	812	988	1123 ①	1251	1849
	38.44	18	51.8	75.1	117	181	257	361	545	642	799	906	1097 ①	1158	1655
	42.54	17	39.7	73.6	107	154	207	337	501	578	638	838	911 ①	1060	1501
	47.08	15	40.0	60.0	98.9	122	187	309	412	524	578	693	839 ①	931	1224
	52.11	14	40.0	52.4	78.9	112	146	262	346	524	524	658	705 ①	841	1224
	57.66	12.5	32.2	41.0	76.9	107	146	208	346	427	524	604	705 ①	779	1098
	63.82	11.0	26.6	41.0	70.2	107	137	208	339	407	424	558	614 ①	713	1006
	70.62	10.0	26.9	40.3	65.1	80.2	123	206	278	339	384	441	565 ①	569	929
	78.16	9.1	26.9	—	—	—	—	—	—	—	—	—	—	—	—
580	13.95	42	—	112 ②	207 ②	266 ②	368 ②	502 ②	839 ②	—	968	1401	—	1805	2275
	15.44	38	—	107 ②	207 ②	266 ②	368 ②	502 ②	839 ②	—	968	1401	1401	1805	2275
	17.09	34	—	107 ②	200 ②	252 ②	368 ②	477 ②	839 ②	—	968	1401	1401	1805	2275
	18.91	31	76.9	98.6	178	252	368	477	839	946	946	1401	1401	1805	2275
	20.93	28	72.4	107	165	252	368	477	764	904	946	1280	1401	1724	2275
	23.16	25	69.3	98.9	153	233	334	477	737	870	870	1216	1373 ①	1611	2153
	25.63	22	62.6	96.7	141	219	300	438	653	789	870	1115	1342 ①	1400	2046
	28.36	21	48.0	85.1	129	186	261	409	600	710	784	974	1115 ①	1282	1613
	31.39	18	48.2	72.5	110	147	218	376	507	714	710	838	1027 ①	1149	1567
	34.74	17	48.2	60.8	102	154	204	318	495	650	656	796	910 ①	1008	1490
	38.44	15	41.7	60.8	94.1	146	207	294	440	519	645	730	889 ①	933	1333
	42.54	14	32.0	59.4	86.0	124	167	272	404	466	515	675	738 ①	854	1217
	47.08	12.5	32.3	48.4	79.7	98.1	151	250	332	426	466	558	680 ①	758	998
	52.11	11.0	32.3	42.3	63.9	90.6	118	212	281	426	426	530	574 ①	678	988
	57.66	10.0	26.0	33.1	61.9	86.7	118	168	281	345	426	487	574 ①	627	884
	63.82	9.1	21.5	33.1	56.6	86.7	110	168	273	329	342	450	497 ①	574	811
	70.62	8.3	21.7	32.5	52.5	64.7	99.5	166	224	273	310	356	457 ①	460	749
	78.16	7.5	21.7	—	—	—	—	—	—	—	—	—	—	—	—

① For Size 555ABRJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page 49 for instructions.

② Triple reduction ratios and ratings are offered for Types ABR and ABX only.

### Availability of Types AB / ABR / ABX Triple & Quadruple Reduction

High-Speed Shaft RPM	Type	385	405	425	445	465	485	505	525	535	545	555	565	585
All	AB	X	X	X	X	X	X	X	X	—	X	—	X	X
	ABR	—	X	X	X	X	X	X	—	X	—	X	—	—
	ABX	—	X	X	X	X	X	X	—	X	—	X	—	—

# Horsepower & Torque Ratings/Triple Reduction

## Torque Ratings

### Type AB, ABR & ABX Right-Angle Shaft

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size ①												
			385	405	425	445	465	485	505	525	535	545	555	565	585
870	13.95	62	—	172 ③	303 ③	407 ③	538 ③	772 ③	1282 ③	—	1479	1953	—	2570	3246
	15.44	55	—	186 ③	331 ③	440 ③	596 ③	831 ③	1379 ③	—	1631	2126	2153	2842	3531
	17.09	50	—	207 ③	375 ③	462 ③	640 ③	867 ③	1589 ③	—	1830	2402	2381	3256	3826
	18.91	45	157	199	358	499	709	933	1709	2010	2013	2625	2690	3536	4170
	20.93	42	167	251	381	585	818	1074	1733	2099	2258	2850	2933	3856	4571
	23.16	38	172	239	386	577	813	1169	1826	2130	2182	2959	3270 ②	3899	4754
	25.63	34	168	264	387	586	849	1244	1869	2166	2406	3038	3601 ②	3922	5211
	28.36	31	152	251	388	588	777	1255	1872	2111	2416	2889	3337 ②	3935	4621
	31.39	28	161	251	382	496	761	1256	1698	2413	2367	2850	3346 ②	3879	4996
	34.74	25	174	219	386	563	760	1166	1826	2421	2425	2958	3360 ②	3902	5397
	38.44	22	168	247	387	589	854	1233	1879	2180	2715	3039	3653 ②	3937	5450
	42.54	21	152	265	388	590	783	1262	1882	2126	2433	3057	3383 ②	3947	5405
	47.08	18	162	253	392	499	765	1262	1699	2133	2381	2852	3393 ②	3720	4795
	52.11	17	175	241	363	500	635	1169	1512	2363	2344	2961	3152 ②	3903	5311
	57.66	15	168	210	387	527	733	1070	1757	2190	2669	3039	3504 ②	3939	5452
	63.82	14	152	237	387	574	785	1164	1891	2190	2445	3058	3420 ②	3946	5470
	70.62	12.5	162	253	391	500	766	1267	1701	2137	2391	2697	3430 ②	3490	5479
78.16	11.0	176	—	—	—	—	—	—	—	—	—	—	—	—	
720	13.95	50	—	172 ③	306 ③	412 ③	545 ③	772 ③	1308 ③	—	1510	2002	—	2640	3347
	15.44	45	—	186 ③	334 ③	445 ③	604 ③	831 ③	1406 ③	—	1665	2179	2207	2919	3641
	17.09	42	—	206 ③	375 ③	461 ③	648 ③	866 ③	1621 ③	—	1868	2462	2441	3345	3945
	18.91	38	157	199	357	498	718	932	1743	2046	2050	2691	2757	3633	4300
	20.93	34	166	252	382	586	828	1073	1751	2108	2300	2850	3007	3879	4713
	23.16	31	172	240	385	577	820	1168	1827	2130	2182	2960	3334 ②	3899	5032
	25.63	28	168	264	386	587	852	1243	1875	2175	2406	3039	3626 ②	3938	5450
	28.36	25	152	251	387	588	780	1258	1878	2119	2425	2923	3358 ②	3946	4719
	31.39	22	161	252	380	498	762	1258	1720	2415	2373	2851	3368 ②	3879	5177
	34.74	21	174	220	384	569	762	1166	1826	2428	2430	2960	3382 ②	3901	5395
	38.44	18	168	248	388	588	856	1246	1884	2185	2722	3038	3674 ②	3938	5449
	42.54	17	152	265	388	590	783	1266	1886	2131	2439	3059	3401 ②	3947	5434
	47.08	15	162	253	391	501	765	1263	1698	2154	2389	2850	3409 ②	3767	4861
	52.11	14	176	241	365	498	640	1171	1527	2386	2368	2957	3185 ②	3900	5384
	57.66	12.5	169	210	387	528	739	1080	1775	2194	2695	3038	3541 ②	3940	5451
	63.82	11.0	151	237	387	575	787	1175	1894	2193	2447	3055	3438 ②	3948	5491
	70.62	10.0	162	253	391	500	765	1267	1700	2140	2396	2702	3443 ②	3508	5492
78.16	9.1	176	—	—	—	—	—	—	—	—	—	—	—	—	
580	13.95	42	—	175 ③	308 ③	416 ③	552 ③	772 ③	1331 ③	—	1540	2047	—	2706	3442
	15.44	38	—	186 ③	337 ③	450 ③	611 ③	831 ③	1432 ③	—	1699	2228	2256	2992	3745
	17.09	34	—	206 ③	375 ③	461 ③	657 ③	866 ③	1650 ③	—	1906	2517	2496	3429	4057
	18.91	31	157	199	357	498	727	932	1775	2047	2049	2751	2819	3724	4422
	20.93	28	166	252	381	588	839	1074	1761	2118	2298	2850	3075	3879	4847
	23.16	25	172	240	385	578	825	1168	1827	2130	2182	2959	3359 ②	3898	5231
	25.63	22	168	265	386	589	855	1242	1881	2180	2406	3037	3650 ②	3937	5449
	28.36	21	152	252	387	590	780	1262	1882	2125	2433	2923	3380 ②	3948	4811
	31.39	18	162	253	382	499	763	1263	1740	2413	2382	2852	3389 ②	3880	5177
	34.74	17	175	221	386	573	765	1168	1828	2434	2437	2961	3402 ②	3902	5397
	38.44	15	168	250	387	589	856	1259	1888	2193	2728	3039	3696 ②	3939	5448
	42.54	14	152	265	388	590	784	1268	1888	2132	2444	3058	3420 ②	3947	5469
	47.08	12.5	163	253	391	500	767	1269	1699	2174	2391	2849	3430 ②	3807	4920
	52.11	11.0	176	242	367	500	642	1177	1540	2408	2389	2957	3219 ②	3903	5395
	57.66	10.0	169	211	387	531	741	1083	1789	2201	2720	3041	3579 ②	3936	5447
	63.82	9.1	152	238	387	579	785	1179	1893	2201	2450	3058	3455 ②	3946	5495
	70.62	8.3	163	253	391	501	768	1267	1701	2140	2401	2708	3457 ②	3521	5496
78.16	7.5	176	—	—	—	—	—	—	—	—	—	—	—	—	

① Torque is in pound-inches at low-speed shaft ... multiply values listed by 1000.

② For Size 555ABRJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page 49 for instructions.

③ Triple reduction ratios and ratings are offered for Types ABR and ABX only.

### Availability of Types AB / ABR / ABX Triple & Quadruple Reduction

High-Speed Shaft RPM	Type	385	405	425	445	465	485	505	525	535	545	555	565	585
All	AB	X	X	X	X	X	X	X	X	—	X	—	X	X
	ABR	—	X	X	X	X	X	X	—	X	—	X	—	—
	ABX	—	X	X	X	X	X	X	—	X	—	X	—	—

# Horsepower & Torque Ratings/Quadruple Reduction

## Horsepower Ratings

### Type AB, ABR & ABX Right-Angle Shaft

High-Speed Shaft RPM	Nominal Ratios ±5%	Approx. Low-Speed Shaft RPM	Drive Size												
			385	405	425	445	465	485	505	525	535	545	555	565	585
1750	78.16	22.0	—	82.4	143	218	305	416	660	846	858	1147	1289 ①	1379	1848
	86.50	20.0	53.0	79.8	122	198	268	408	605	694	858	1045	1192 ①	1244	1690
	95.73	18.0	50.8	73.6	112	168	232	377	556	692	759	895	1047 ①	1152	1532
	105.9	16.5	42.6	64.8	104	153	227	326	485	552	687	821	968 ①	1031	1367
	117.2	15.0	40.7	56.6	95.4	146	205	301	446	527	655	759	804 ①	930	1235
	129.7	13.5	36.8	58.5	81.7	133	182	273	418	480	597	685	740 ①	814	1132
	143.6	12.0	35.2	49.5	75.8	122	162	252	384	478	523	601	710 ①	756	1023
	158.9	11.0	28.5	43.6	69.9	105	150	218	335	382	475	551	656 ①	675	936
	175.9	10.0	28.5	38.0	63.9	98.7	135	201	308	337	419	510	545 ①	624	845
	194.6	9.0	24.7	39.3	54.8	89.1	120	180	276	317	340	462	501 ①	554	773
	215.4	8.1	23.6	31.8	50.8	75.6	105	166	254	279	340	403	483 ①	500	677
	238.4	7.5	19.2	27.8	46.9	70.8	101	144	221	252	313	371	446 ①	447	620
	263.8	6.6	19.1	28.1	42.9	65.0	79.9	132	203	240	299	343	370 ①	414	560
	291.9	6.0	16.4	22.5	37.9	55.3	72.0	122	187	200	238	294	341 ①	382	513
	323.1	5.4	13.1	20.9	34.8	51.1	65.1	113	172	181	210	272	294 ①	309	473
	357.5	5.0	—	19.2	31.8	40.3	60.1	103	143	168	185	209	271 ①	283	433
1430	78.16	18.0	—	70.8	117	179	250	362	540	692	701	938	1060 ①	1127	1529
	86.50	16.5	43.3	65.2	100	162	223	334	495	568	701	856	980 ①	1017	1381
	95.73	15.0	41.5	60.2	91.8	137	201	308	455	566	620	731	860 ①	942	1259
	105.9	13.5	34.8	53.0	84.7	125	186	267	397	452	562	671	795 ①	843	1117
	117.2	12.0	33.3	46.3	77.9	120	168	246	365	431	536	620	660 ①	760	1009
	129.7	11.0	30.1	47.8	66.8	108	149	224	342	393	489	560	608 ①	665	925
	143.6	10.0	28.8	40.5	61.9	99.6	140	206	314	391	427	491	583 ①	617	836
	158.9	9.0	23.3	35.6	57.1	86.2	123	178	274	312	389	450	539 ①	551	765
	175.9	8.1	23.3	31.1	52.2	80.8	111	164	252	275	343	416	447 ①	510	690
	194.6	7.5	20.2	32.1	44.8	72.9	98.2	147	226	259	282	377	411 ①	453	632
	215.4	6.6	19.3	26.0	41.5	61.8	85.6	136	207	229	282	329	396 ①	409	553
	238.4	6.0	15.7	22.7	38.3	57.9	82.9	118	181	206	256	303	366 ①	365	506
	263.8	5.4	15.6	22.9	35.0	53.2	65.3	108	166	196	244	281	303 ①	338	457
	291.9	5.0	13.4	18.4	31.0	45.2	58.9	99.9	153	163	195	240	279 ①	312	419
	323.1	4.4	10.7	17.1	28.5	41.8	53.2	92.0	140	148	172	222	241 ①	254	387
	357.5	4.0	—	15.7	26.0	33.0	49.1	84.6	117	137	152	171	222 ①	232	354
1170	78.16	15.0	—	57.9	95.7	147	205	314	443	566	574	767	872 ①	922	1251
	86.50	13.5	35.4	53.4	81.9	133	183	274	406	466	574	702	806 ①	832	1130
	95.73	12.0	33.9	49.3	75.1	112	174	253	373	464	507	598	707 ①	770	1036
	105.9	11.0	28.5	43.4	69.3	102	152	219	325	370	461	549	654 ①	690	914
	117.2	10.0	27.2	37.9	63.8	98.3	138	201	299	353	439	508	543 ①	622	826
	129.7	9.0	24.6	39.2	54.6	88.8	122	183	280	322	400	458	499 ①	544	757
	143.6	8.1	23.5	33.1	50.7	81.6	115	169	258	321	350	402	479 ①	505	684
	158.9	7.5	19.1	29.2	46.7	70.5	100	146	225	256	318	368	442 ①	451	626
	175.9	6.6	19.1	25.4	42.7	66.2	90.9	135	206	225	281	341	367 ①	417	565
	194.6	6.0	16.5	26.3	36.6	59.7	80.4	121	185	212	233	309	338 ①	370	517
	215.4	5.4	15.8	21.3	34.0	50.6	70.1	111	170	187	233	269	325 ①	335	453
	238.4	5.0	12.9	18.6	31.4	47.4	67.9	96.2	148	169	210	248	300 ①	299	414
	263.8	4.4	12.8	18.8	28.7	43.5	53.5	88.7	136	161	200	230	249 ①	276	374
	291.9	4.0	10.9	15.1	25.4	37.0	48.2	81.8	125	134	160	197	229 ①	256	343
	323.1	3.6	8.76	14.0	23.3	34.2	43.6	75.3	115	121	141	182	198 ①	208	317
	357.5	3.2	—	12.9	21.3	27.0	40.2	69.2	95.8	112	124	140	182 ①	190	289

① For Size 555ABRJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page 49 for instructions.

### Availability of Types AB / ABR / ABX Triple & Quadruple Reduction

High-Speed Shaft RPM	Type	385	405	425	445	465	485	505	525	535	545	555	565	585
All	AB	X	X	X	X	X	X	X	X	—	X	—	X	X
	ABR	—	X	X	X	X	X	X	—	X	—	X	—	—
	ABX	—	X	X	X	X	X	X	—	X	—	X	—	—

# Horsepower & Torque Ratings/Quadruple Reduction

## Torque Ratings

### Type AB, ABR & ABX Right-Angle Shaft

High-Speed Shaft RPM	Nominal Ratios ±5%	Approx. Low-Speed Shaft RPM	Drive Size												
			385	405	425	445	465	485	505	525	535	545	555	565	585
1750	78.16	22.0	—	241	381	597	829	1113	1881	2360	2452	3131	3654 ①	3894	5383
	86.50	20.0	163	252	380	588	840	1257	1883	2185	2704	3192	3664 ①	3860	5449
	95.73	18.0	169	265	384	550	758	1264	1884	2432	2733	3051	3678 ①	3899	5431
	105.9	16.5	166	253	388	592	855	1261	1887	2190	2728	3132	3688 ①	3900	5396
	117.2	15.0	172	241	381	600	837	1267	1890	2192	2728	3151	3414 ①	3878	5396
	129.7	13.5	168	265	387	593	857	1261	1887	2192	2729	3117	3420 ①	3863	5461
	143.6	12.0	174	265	391	592	804	1267	1888	2437	2732	3051	3715 ①	3941	5463
	158.9	11.0	163	253	387	590	859	1264	1891	2198	2736	3131	3722 ①	3905	5495
	175.9	10.0	176	241	387	605	837	1269	1893	2200	2738	3154	3447 ①	3936	5461
	194.6	9.0	168	266	381	592	859	1263	1893	2199	2361	3119	3449 ①	3939	5493
	215.4	8.1	174	253	385	592	788	1268	1897	2196	2679	3133	3750 ①	3935	5458
	238.4	7.5	163	242	387	593	856	1269	1895	2203	2739	3128	3756 ①	3904	5495
	263.8	6.6	176	254	388	592	768	1266	1895	2200	2744	3148	3473 ①	3943	5464
	291.9	6.0	177	242	384	593	786	1266	1899	2148	2451	3129	3484 ①	3935	5496
	323.1	5.4	153	242	390	593	769	1276	1902	2140	2454	3151	3484 ①	3544	5488
	357.5	5.0	—	241	391	501	769	1266	1833	2148	2453	2710	3495 ①	3554	5495
	1430	78.16	18.0	—	253	382	600	831	1185	1884	2362	2451	3133	3677 ①	3895
86.50		16.5	163	252	381	589	855	1259	1885	2188	2703	3200	3686 ①	3862	5449
95.73		15.0	169	265	385	549	803	1264	1887	2435	2732	3049	3697 ①	3901	5462
105.9		13.5	166	253	387	591	858	1264	1890	2194	2731	3132	3706 ①	3903	5395
117.2		12.0	172	242	381	604	839	1267	1892	2194	2732	3150	3430 ①	3879	5395
129.7		11.0	168	265	387	589	859	1267	1890	2196	2736	3118	3439 ①	3862	5461
143.6		10.0	174	266	390	592	850	1268	1889	2440	2729	3051	3733 ①	3936	5463
158.9		9.0	163	253	387	592	862	1264	1893	2197	2742	3129	3743 ①	3901	5497
175.9		8.1	176	242	387	606	842	1267	1895	2197	2743	3149	3460 ①	3937	5457
194.6		7.5	168	265	382	593	860	1263	1897	2199	2397	3115	3463 ①	3941	5496
215.4		6.6	174	253	385	592	786	1271	1892	2206	2719	3131	3763 ①	3939	5456
238.4		6.0	163	242	386	593	860	1272	1899	2204	2741	3127	3772 ①	3901	5489
263.8		5.4	176	253	387	593	768	1268	1897	2199	2740	3156	3481 ①	3939	5456
291.9		5.0	177	242	384	593	787	1268	1902	2143	2457	3126	3488 ①	3933	5493
323.1		4.4	153	242	391	594	769	1271	1895	2141	2460	3147	3495 ①	3566	5495
357.5		4.0	—	242	391	502	768	1273	1836	2144	2466	2713	3504 ①	3566	5498
1170		78.16	15.0	—	253	381	602	833	1256	1889	2362	2453	3131	3697 ①	3894
	86.50	13.5	163	253	381	591	858	1262	1890	2194	2705	3207	3706 ①	3862	5449
	95.73	12.0	169	265	385	548	850	1269	1891	2439	2730	3049	3715 ①	3898	5493
	105.9	11.0	167	253	387	590	857	1267	1891	2195	2738	3132	3727 ①	3904	5396
	117.2	10.0	172	242	381	604	843	1265	1895	2197	2735	3155	3449 ①	3880	5398
	129.7	9.0	168	266	387	592	859	1265	1891	2200	2735	3117	3450 ①	3861	5462
	143.6	8.1	174	265	391	592	853	1271	1897	2448	2734	3053	3749 ①	3937	5463
	158.9	7.5	163	254	386	592	856	1267	1899	2203	2740	3128	3751 ①	3902	5497
	175.9	6.6	176	241	387	607	843	1275	1894	2197	2747	3154	3472 ①	3935	5461
	194.6	6.0	168	266	381	593	860	1270	1898	2200	2420	3121	3481 ①	3934	5495
	215.4	5.4	174	254	385	593	787	1268	1899	2201	2746	3128	3775 ①	3943	5462
	238.4	5.0	164	242	387	593	861	1268	1898	2210	2748	3128	3778 ①	3906	5489
	263.8	4.4	176	254	388	593	769	1272	1899	2208	2745	3157	3496 ①	3932	5458
	291.9	4.0	175	243	385	593	787	1269	1899	2153	2464	3136	3499 ①	3945	5496
	323.1	3.6	153	242	391	594	770	1272	1902	2139	2465	3154	3509 ①	3569	5502
	357.5	3.2	—	243	391	502	769	1272	1837	2142	2459	2715	3511 ①	3569	5486

① For Size 555ABRJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page 49 for instructions.

### Availability of Types AB / ABR / ABX Triple & Quadruple Reduction

High-Speed Shaft RPM	Type	385	405	425	445	465	485	505	525	535	545	555	565	585
All	AB	X	X	X	X	X	X	X	X	—	X	—	X	X
	ABR	—	X	X	X	X	X	X	—	X	—	X	—	—
	ABX	—	X	X	X	X	X	X	—	X	—	X	—	—

# Horsepower & Torque Ratings/Quadruple Reduction

## Horsepower Ratings

### Type AB, ABR & ABX Right-Angle Shaft

High-Speed Shaft RPM	Nominal Ratios ±5%	Approx. Low-Speed Shaft RPM	Drive Size													
			385	405	425	445	465	485	505	525	535	545	555	565	585	
870	78.16	11.0	—	43.1	71.1	110	153	236	330	421	427	570	653 ①	686	930	
	86.50	10.0	26.3	39.8	60.9	99.0	136	204	302	347	427	523	603 ①	619	840	
	95.73	9.1	25.2	36.7	55.8	83.4	130	188	278	346	377	445	529 ①	573	770	
	105.9	8.3	21.2	32.3	51.5	76.2	113	163	242	276	343	408	489 ①	513	680	
	117.2	7.5	20.3	28.2	47.4	73.3	103	150	222	263	327	377	406 ①	462	614	
	129.7	6.8	18.3	29.1	40.6	66.1	90.8	136	209	240	298	341	374 ①	405	563	
	143.6	6.1	17.5	24.6	37.7	60.7	85.5	126	192	239	260	299	358 ①	376	508	
	158.9	5.5	14.2	21.7	34.8	52.5	74.7	109	167	190	237	274	331 ①	335	465	
	175.9	5.0	14.2	18.9	31.8	49.3	67.7	100	154	168	209	253	274 ①	310	420	
	194.6	4.5	12.3	19.6	27.2	44.4	59.8	89.9	138	158	175	230	252 ①	275	384	
	215.4	4.1	11.7	15.8	25.3	37.7	52.1	82.8	126	139	173	200	243 ①	249	337	
	238.4	3.8	9.57	13.8	23.3	35.2	50.5	71.6	110	125	156	185	224 ①	222	308	
	263.8	3.3	9.51	14.0	21.3	32.4	39.8	66.0	101	120	149	171	186 ①	206	278	
	291.9	3.0	8.14	11.2	18.9	27.5	35.9	60.8	93.0	99.4	119	146	171 ①	190	255	
	323.1	2.7	6.51	10.4	17.3	25.4	32.4	56.0	85.4	90.3	105	135	148 ①	155	235	
	357.5	2.5	—	9.57	15.8	20.1	29.9	51.5	71.4	83.5	92.3	104	136 ①	142	215	
	720	78.16	9.1	—	35.6	58.9	90.8	127	196	273	348	353	472	543 ①	567	770
		86.50	8.3	21.8	32.9	50.4	82.0	113	169	250	287	353	433	501 ①	512	695
95.73		7.5	20.9	30.4	46.2	69.0	107	156	230	286	312	368	440 ①	474	638	
105.9		6.8	17.5	26.7	42.7	63.1	93.9	135	201	228	284	338	406 ①	424	562	
117.2		6.1	16.8	23.3	39.2	60.7	85.0	124	184	218	271	312	337 ①	383	508	
129.7		5.5	15.1	24.1	33.6	54.7	75.2	113	173	198	247	282	310 ①	335	466	
143.6		5.0	14.5	20.4	31.2	50.3	70.8	104	159	198	215	247	297 ①	311	421	
158.9		4.5	11.8	18.0	28.8	43.5	61.9	90.0	138	158	196	227	275 ①	278	385	
175.9		4.1	11.7	15.7	26.3	40.8	56.1	82.9	127	139	173	210	228 ①	257	348	
194.6		3.8	10.2	16.2	22.5	36.7	49.5	74.4	114	131	146	190	210 ①	228	318	
215.4		3.3	9.72	13.1	20.9	31.2	43.2	68.5	105	115	144	166	201 ①	206	279	
238.4		3.0	7.92	11.4	19.3	29.2	41.8	59.3	91.2	104	129	153	186 ①	184	255	
263.8		2.7	7.87	11.6	17.6	26.8	32.9	54.6	83.7	99.0	123	141	154 ①	170	230	
291.9		2.5	6.73	9.27	15.6	22.8	29.7	50.4	77.0	82.3	98.3	121	142 ①	157	211	
323.1		2.2	5.39	8.62	14.3	21.1	26.8	46.4	70.7	74.8	86.7	112	123 ①	129	195	
357.5		2.0	—	7.92	13.1	16.6	24.8	42.6	59.1	69.1	76.4	86.2	113 ①	118	178	
580		78.16	7.5	—	28.7	47.4	73.3	103	158	220	281	284	380	439 ①	457	620
		86.5	6.8	17.6	26.5	40.6	66.1	90.9	136	202	232	284	348	406 ①	412	560
	95.73	6.1	16.8	24.5	37.2	55.6	86.6	126	185	231	251	297	356 ①	382	514	
	105.9	5.5	14.1	21.6	34.4	50.8	75.7	109	162	184	229	272	328 ①	342	453	
	117.2	5.0	13.5	18.8	31.6	49.0	68.6	100	148	176	219	252	273 ①	308	409	
	129.7	4.5	12.2	19.4	27.1	44.1	60.6	91.0	139	160	199	227	251 ①	270	375	
	143.6	4.1	11.7	16.4	25.1	40.5	57.1	83.8	128	159	173	199	240 ①	250	339	
	158.9	3.8	9.50	14.5	23.2	35.0	49.9	72.5	112	127	158	183	222 ①	224	310	
	175.9	3.3	9.45	12.6	21.2	32.9	45.2	66.8	102	112	139	169	184 ①	207	280	
	194.6	3.0	8.19	13.0	18.2	29.6	39.9	59.9	91.8	105	118	153	169 ①	184	256	
	215.4	2.7	7.83	10.6	16.8	25.1	34.8	55.2	84.3	92.9	116	133	163 ①	166	224	
	238.4	2.5	6.38	9.21	15.5	23.5	33.7	47.8	73.5	83.7	104	123	150 ①	148	205	
	263.8	2.2	6.34	9.31	14.2	21.6	26.5	44.0	67.5	79.8	99.3	114	125 ①	137	185	
	291.9	2.0	5.43	7.47	12.6	18.4	23.9	40.6	62.0	66.3	79.3	97.5	115 ①	127	170	
	323.1	1.8	4.34	6.94	11.5	17.0	21.6	37.4	57.0	60.3	69.8	90.2	98.9 ①	104	157	
	357.5	1.6	—	6.38	10.5	13.4	20.0	34.3	47.7	55.7	61.6	69.4	91.0 ①	94.9	143	

① For Size 555ABRJ (hollow low-speed shaft with shrink disc) the HP rating and torque rating are limited by the shrink disc, see page 49 for instructions.

### Availability of Types AB / ABR / ABX Triple & Quadruple Reduction

High-Speed Shaft RPM	Type	385	405	425	445	465	485	505	525	535	545	555	565	585
All	AB	X	X	X	X	X	X	X	X	—	X	—	X	X
	ABR	—	X	X	X	X	X	X	—	X	—	X	—	—
	ABX	—	X	X	X	X	X	X	—	X	—	X	—	—

# Horsepower & Torque Ratings/Quadruple Reduction

## Torque Ratings

### Type AB, ABR & ABX Right-Angle Shaft

High-Speed Shaft RPM	Nominal Ratios ±5%	Approx. Low-Speed Shaft RPM	Drive Size ①												
			385	405	425	445	465	485	505	525	535	545	555	565	585
870	78.16	11.0	—	253	381	606	836	1270	1892	2362	2454	3129	3723 ②	3897	5449
	86.50	10.0	163	253	381	592	857	1264	1891	2197	2707	3213	3728 ②	3864	5448
	95.73	9.1	169	266	385	549	854	1268	1895	2446	2730	3051	3738 ②	3901	5491
	105.9	8.3	167	253	386	593	856	1268	1894	2202	2739	3131	3747 ②	3904	5399
	117.2	7.5	173	242	381	606	846	1270	1892	2201	2739	3149	3468 ②	3875	5396
	129.7	6.8	168	265	387	593	860	1264	1898	2205	2740	3121	3477 ②	3866	5463
	143.6	6.1	174	265	391	593	853	1275	1899	2451	2732	3054	3768 ②	3942	5457
	158.9	5.5	163	254	387	593	860	1272	1896	2199	2746	3132	3778 ②	3898	5492
	175.9	5.0	176	242	388	607	844	1270	1904	2206	2747	3147	3486 ②	3934	5460
	194.6	4.5	168	266	381	593	861	1269	1904	2205	2445	3124	3490 ②	3933	5488
	215.4	4.1	173	253	386	594	786	1272	1893	2201	2742	3128	3795 ②	3942	5465
	238.4	3.8	164	242	386	593	861	1269	1897	2198	2746	3138	3794 ②	3900	5491
	263.8	3.3	176	254	387	594	770	1273	1897	2213	2751	3157	3512 ②	3946	5456
	291.9	3.0	176	242	385	593	788	1269	1900	2148	2465	3126	3514 ②	3937	5495
	323.1	2.7	153	242	390	593	769	1272	1900	2147	2468	3146	3527 ②	3576	5485
357.5	2.5	—	242	391	502	769	1273	1841	2148	2462	2712	3528 ②	3587	5489	
720	78.16	9.1	—	253	382	605	839	1274	1891	2360	2452	3131	3741 ②	3892	5451
	86.50	8.3	163	253	381	592	861	1265	1891	2196	2704	3215	3743 ②	3862	5446
	95.73	7.5	169	266	385	549	849	1271	1895	2443	2730	3049	3757 ②	3899	5497
	105.9	6.8	166	253	387	593	860	1269	1901	2198	2741	3134	3759 ②	3898	5392
	117.2	6.1	173	241	381	606	843	1269	1895	2204	2743	3149	3478 ②	3882	5395
	129.7	5.5	168	266	387	593	861	1269	1899	2198	2745	3119	3483 ②	3864	5464
	143.6	5.0	174	266	391	593	854	1271	1900	2454	2729	3048	3777 ②	3940	5464
	158.9	4.5	164	254	387	594	861	1269	1893	2210	2744	3135	3793 ②	3909	5494
	175.9	4.1	176	242	388	607	845	1272	1897	2206	2748	3157	3505 ②	3941	5466
	194.6	3.8	169	266	381	593	861	1269	1900	2209	2464	3118	3514 ②	3940	5492
	215.4	3.3	174	254	385	594	788	1272	1906	2200	2758	3137	3794 ②	3940	5467
	238.4	3.0	164	241	387	594	861	1270	1900	2210	2744	3136	3807 ②	3906	5494
	263.8	2.7	176	254	387	594	769	1273	1899	2206	2744	3145	3513 ②	3935	5454
	291.9	2.5	176	242	384	594	788	1271	1901	2149	2460	3130	3526 ②	3931	5494
	323.1	2.2	153	242	390	595	769	1274	1901	2149	2463	3154	3542 ②	3597	5499
357.5	2.0	—	242	391	501	771	1273	1842	2148	2462	2716	3542 ②	3602	5491	
580	78.16	7.5	—	253	381	606	844	1275	1892	2365	2449	3129	3755 ②	3894	5449
	86.50	6.8	163	253	381	593	860	1264	1897	2204	2700	3207	3765 ②	3858	5448
	95.73	6.1	169	266	385	549	853	1275	1892	2450	2727	3054	3773 ②	3901	5498
	105.9	5.5	166	254	387	593	861	1272	1902	2202	2743	3131	3770 ②	3904	5395
	117.2	5.0	172	242	381	608	845	1270	1892	2209	2752	3157	3498 ②	3875	5392
	129.7	4.5	168	265	387	593	861	1269	1894	2205	2745	3116	3500 ②	3866	5458
	143.6	4.1	175	265	390	593	855	1272	1899	2446	2726	3048	3789 ②	3932	5462
	158.9	3.8	164	254	387	593	862	1269	1907	2205	2746	3137	3801 ②	3910	5492
	175.9	3.3	176	242	388	608	846	1272	1892	2206	2741	3154	3512 ②	3940	5460
	194.6	3.0	168	265	382	593	861	1268	1900	2198	2473	3117	3511 ②	3947	5488
	215.4	2.7	174	255	384	593	788	1272	1900	2206	2758	3120	3819 ②	3942	5449
	238.4	2.5	164	242	386	593	862	1271	1901	2208	2746	3129	3811 ②	3900	5482
	263.8	2.2	176	254	387	594	769	1273	1902	2208	2750	3157	3540 ②	3937	5446
	291.9	2.0	176	242	385	595	787	1271	1900	2149	2464	3131	3545 ②	3948	5495
	323.1	1.8	153	242	389	595	769	1274	1902	2151	2461	3153	3536 ②	3599	5497
357.5	1.6	—	242	389	502	772	1272	1845	2149	2464	2715	3541 ②	3596	5476	

① Torque is in pound-inches at low-speed shaft ... multiply values listed by 1000.

② For Size 555ABRJ drives (hollow low-speed shaft with shrink disc connection), the maximum output torque rating is limited to 3,100,000 lb-in by the shrink disc, and this shrink disc torque rating supersedes any higher torque ratings for the 555 that may be shown on torque pages 38, 75, 34 and 49. In those cases where your 555ABRJ is selected at a High-Speed Shaft RPM and Nominal Ratio where the torque rating of the gear drive is limited by the shrink disc (3,100,000 lb-in), you must calculate an Equivalent Power Rating (HP) for the 555ABRJ gear drive using the formula below:

3,100,000 lb-in

Torque Rating (lb-in) from pages 38, 75, 34 or 49

x Power Rating (HP) from pages 72, 74, 18 or 33 = Equivalent Power Rating (HP)

### Availability of Types AB / ABR / ABX Triple & Quadruple Reduction

High-Speed Shaft RPM	Type	385	405	425	445	465	485	505	525	535	545	555	565	585
All	AB	X	X	X	X	X	X	X	X	—	X	—	X	X
	ABR	—	X	X	X	X	X	X	—	X	—	X	—	—
	ABX	—	X	X	X	X	X	X	—	X	—	X	—	—

# Basic Thermal Horsepower Ratings

## Double Reduction

### Type AB Basic Thermal Horsepower Ratings ①

Nominal Ratios	High-Speed Shaft RPM	Auxiliary Cooling	Drive Size							
			385	405	425	445	465	485	505	525
5.06 thru 6.86	1750	None	103	130	119	212	257	—	—	—
		Shaft Fan	210	290	365	605	670	—	—	—
		Electric Fan	472	641	786	1209	2146	—	—	—
		Cooling Tubes	523	854	1140	2109	2568	—	—	—
	1430	None	114	149	155	256	315	—	—	—
		Shaft Fan	201	277	353	573	654	—	—	—
		Electric Fan	456	621	772	1181	2071	—	—	—
		Cooling Tubes	493	803	1082	1986	2450	—	—	—
	1170	None	120	158	177	283	347	—	—	—
		Shaft Fan	191	261	336	538	628	—	—	—
		Electric Fan	438	598	751	1144	1990	—	—	—
		Cooling Tubes	461	750	1018	1863	2309	—	—	—
	870	None	123	163	192	299	370	—	—	—
		Shaft Fan	174	239	310	487	582	—	—	—
		Electric Fan	410	561	713	1082	1867	—	—	—
		Cooling Tubes	414	671	917	1669	2104	—	—	—
	720	None	122	162	195	301	373	—	—	—
		Shaft Fan	163	225	293	456	550	—	—	—
		Electric Fan	392	538	686	1040	1815	—	—	—
		Cooling Tubes	385	622	853	1551	1963	—	—	—
	580	None	120	159	195	298	371	—	—	—
		Shaft Fan	153	209	273	422	515	—	—	—
		Electric Fan	371	510	656	991	1702	—	—	—
		Cooling Tubes	353	569	783	1416	1810	—	—	—
7.59 thru 10.29	1750	None	98.8	128	126	215	263	201	—	—
		Shaft Fan	192	266	335	542	647	665	—	—
		Electric Fan	409	553	675	1010	1843	1942	—	—
		Cooling Tubes	434	702	927	1622	2121	2145	—	—
	1430	None	105	137	148	238	298	264	280	426
		Shaft Fan	180	249	316	499	608	637	794	1120
		Electric Fan	393	531	656	973	1764	1887	2126	2963
		Cooling Tubes	407	652	867	1475	2004	2057	2298	3443
	1170	None	108	142	160	249	316	301	336	488
		Shaft Fan	168	230	295	459	570	604	752	1054
		Electric Fan	375	507	633	934	1685	1823	2065	2872
		Cooling Tubes	378	605	817	1410	1874	1945	2192	3308
	870	None	107	142	168	253	325	329	380	537
		Shaft Fan	151	208	266	407	514	553	686	955
		Electric Fan	349	472	596	874	1571	1724	1962	2724
		Cooling Tubes	338	538	731	1256	1692	1775	2015	3067
	720	None	106	140	167	250	324	336	392	549
		Shaft Fan	141	193	249	377	480	521	645	895
		Electric Fan	332	450	572	835	1499	1658	1891	2627
		Cooling Tubes	313	497	678	1159	1575	1669	1898	2897
	580	None	102	136	164	245	318	337	396	552
		Shaft Fan	131	178	230	346	443	485	599	831
		Electric Fan	314	425	543	792	1421	1584	1809	2514
		Cooling Tubes	287	453	621	1058	1440	1534	1763	2703
11.39 thru 17.09	1750	None	86.2	114	117	192	250	192	—	—
		Shaft Fan	160	226	278	450	576	557	—	—
		Electric Fan	326	450	529	803	1490	1531	—	—
		Cooling Tubes	326	536	679	1206	1639	1622	—	—
	1430	None	88.5	118	127	202	266	229	273	401
		Shaft Fan	148	208	256	408	527	522	710	989
		Electric Fan	310	429	508	768	1415	1476	1814	2503
		Cooling Tubes	303	497	634	1115	1528	1540	1874	2820
	1170	None	88.5	119	132	205	271	251	309	441
		Shaft Fan	136	191	235	371	482	488	662	917
		Electric Fan	294	407	487	731	1343	1418	1751	2411
		Cooling Tubes	281	460	589	1037	1422	1445	1780	2685
	870	None	86.1	116	133	204	266	269	335	467
		Shaft Fan	121	169	209	323	424	439	594	818
		Electric Fan	271	376	453	679	1241	1330	1653	2272
		Cooling Tubes	249	405	524	915	1265	1310	1628	2497
	720	None	83.7	113	131	199	264	267	340	472
		Shaft Fan	112	156	193	297	392	410	554	761
		Electric Fan	258	358	433	646	1180	1275	1588	2183
		Cooling Tubes	230	374	483	843	1176	1225	1522	2321
	580	None	80.6	109	127	192	256	264	339	469
		Shaft Fan	101	143	177	271	358	379	511	701
		Electric Fan	243	338	410	610	1115	1213	1515	2083
		Cooling Tubes	218	340	441	765	1066	1124	1410	2162

① Basic thermal ratings in HP are shown for an ambient temperature of 80°F (27°C) and at an altitude of sea level to 2500 feet. For other ambient temperatures, other altitudes, or special air velocity / inlet water temperature / duty cycle considerations, use thermal factors on [page <?>](#) to determine an application-adjusted thermal rating which can then be compared to the actual power transmitted. Thermal ratings for cooling tubes are based on water inlet temperature of 70°F (21°C), and water flow rates as shown on [page <?>](#). For cooling capacity exceeding the methods listed for the gear drive size, ratio and high-speed shaft RPM that you have selected, consult your Rexnord representative for an external heat exchanger package.

# Basic Thermal Horsepower Ratings

## Triple Reduction

### Type AB, ABR & ABX Basic Thermal Horsepower Ratings ①

Nominal Ratios	High-Speed Shaft RPM	Auxiliary Cooling	Drive Size												
			385	405	425	445	465	485	505	525	535	545	555	565	585
13.95 ⑥ thru 17.09	1750	None ②	—	125 ⑤	140 ⑤	210 ⑤	235 ⑤	257 ⑤	298 ⑤	—	414	485	515	—	—
		Shaft Fan ③	—	188 ⑤	236 ⑤	363 ⑤	446 ⑤	560 ⑤							
		Electric Fan	—	404 ⑤	529 ⑤	787 ⑤	984 ⑤	1199 ⑤							
		Cooling Tubes	—	354 ⑤	757 ⑤	1026 ⑤	1269 ⑤	1910 ⑤							
	1430	None ②	—	122 ⑤	142 ⑤	209 ⑤	243 ⑤	284 ⑤	333 ⑤	—	454	531	565	636	811
		Shaft Fan ③	—	173 ⑤	219 ⑤	332 ⑤	412 ⑤	520 ⑤							
		Electric Fan	—	385 ⑤	504 ⑤	748 ⑤	930 ⑤	1152 ⑤							
		Cooling Tubes	—	311 ⑤	708 ⑤	960 ⑤	1181 ⑤	1804 ⑤							
	1170	None ②	—	116 ⑤	142 ⑤	208 ⑤	245 ⑤	293 ⑤	352 ⑤	—	473	553	589	662	845
		Shaft Fan ③	—	156 ⑤	204 ⑤	308 ⑤	380 ⑤	484 ⑤							
		Electric Fan	—	359 ⑤	477 ⑤	705 ⑤	885 ⑤	1104 ⑤							
		Cooling Tubes	—	288 ⑤	651 ⑤	878 ⑤	1082 ⑤	1645 ⑤							
	870	None ②	—	101 ⑤	137 ⑤	201 ⑤	244 ⑤	299 ⑤	360 ⑤	—	477	559	594	669	854
		Shaft Fan ③	—	130 ⑤	183 ⑤	270 ⑤	338 ⑤	432 ⑤							
		Electric Fan	—	321 ⑤	436 ⑤	650 ⑤	819 ⑤	1029 ⑤							
		Cooling Tubes	—	292 ⑤	555 ⑤	762 ⑤	951 ⑤	1469 ⑤							
	720	None ②	—	97.7 ⑤	123 ⑤	193 ⑤	235 ⑤	296 ⑤	358 ⑤	—	473	553	589	662	845
		Shaft Fan ③	—	121 ⑤	160 ⑤	250 ⑤	314 ⑤	405 ⑤							
		Electric Fan	—	305 ⑤	406 ⑤	611 ⑤	776 ⑤	972 ⑤							
		Cooling Tubes	—	270 ⑤	570 ⑤	695 ⑤	878 ⑤	1375 ⑤							
	580	None ②	—	94.8 ⑤	122 ⑤	174 ⑤	209 ⑤	284 ⑤	351 ⑤	—	461	540	573	646	825
		Shaft Fan ③	—	113 ⑤	147 ⑤	222 ⑤	274 ⑤	378 ⑤							
		Electric Fan	—	287 ⑤	385 ⑤	572 ⑤	724 ⑤	937 ⑤							
		Cooling Tubes	—	250 ⑤	517 ⑤	717 ⑤	894 ⑤	1257 ⑤							
18.91 thru 38.44	1750	None ②	85.4	112	126	187	213	242	291	388	412	483	514	—	—
		Shaft Fan ③	128	166	207	316	388	491	631 ④	823					
		Electric Fan	278	357	454	670	831	1026	1802 ④	2313					
		Cooling Tubes	234	294	624	837	1026	1551	1839 ④	2162					
	1430	None ②	79.0	103	125	185	215	254	311	409	435	509	541	609	777
		Shaft Fan ③	113	146	189	287	354	452	581 ④	754					
		Electric Fan	257	329	428	632	787	980	1712 ④	2193					
		Cooling Tubes	224	284	572	769	948	1445	1722 ④	2045					
	1170	None ②	76.6	99.5	118	180	214	258	319	416	442	517	550	619	790
		Shaft Fan ③	104	133	169	261	325	415	535 ④	693					
		Electric Fan	242	308	400	595	774	934	1624 ④	2078					
		Cooling Tubes	206	260	544	703	874	1343	1616 ④	1910					
	870	None ②	69.0	89.5	115	166	199	243	318	412	438	512	545	613	782
		Shaft Fan ③	88.3	114	151	225	279	357	474 ④	611					
		Electric Fan	219	278	368	540	680	856	1501 ④	1918					
		Cooling Tubes	194	246	475	643	802	1243	1444 ④	1722					
	720	None ②	67.3	86.6	106	161	195	241	302	404	429	502	534	601	767
		Shaft Fan ③	83.1	106	136	208	260	334	430 ④	566					
		Electric Fan	207	263	345	511	646	818	1418 ④	1822					
		Cooling Tubes	179	227	462	590	740	1152	1392 ④	1604					
	580	None ②	64.9	82.5	104	149	181	236	29	380	404	473	503	566	722
		Shaft Fan ③	77.2	98.3	127	187	232	309	398 ④	509					
		Electric Fan	194	247	325	476	603	775	1340 ④	1708					
		Cooling Tubes	163	206	417	571	714	1051	1280 ④	1540					
2.54 thru 78.16	1750	None ②	60.8	85.4	95.9	139	180	207	256	354	376	440	468	—	—
		Shaft Fan ③	90.7	126	155	235	309	386	498 ④	683					
		Electric Fan	197	270	338	497	639	771	1331 ④	1814					
		Cooling Tubes	162	221	444	599	720	1065	1256 ④	1610					
	1430	None ②	56.2	77.8	94.8	137	165	190	256	352	374	438	466	524	669
		Shaft Fan ③	79.6	109	142	214	268	333	449 ④	614					
		Electric Fan	181	248	318	467	591	715	1251 ④	1705					
		Cooling Tubes	156	216	406	549	687	1020	1162 ④	1498					
	1170	None ②	53.8	74.9	87.8	135	162	191	238	325	346	405	431	484	618
		Shaft Fan ③	73.1	101	126	194	245	305	392 ④	536					
		Electric Fan	170	232	295	439	558	678	1165 ④	1586					
		Cooling Tubes	143	198	388	502	631	944	1116 ④	1434					
	870	None ②	51.5	70.2	84.8	123	150	177	233	319	339	397	423	476	607
		Shaft Fan ③	64.4	88.9	112	166	209	259	345 ④	470					
		Electric Fan	154	211	271	397	506	617	1070 ④	1457					
		Cooling Tubes	126	173	339	461	581	877	993 ④	1294					
	720	None s	49.1	67.3	82.5	119	147	175	219	311	331	387	412	463	591
		Shaft Fan I	60.3	81.9	104	154	194	242	309 ④	434					
		Electric Fan	146	199	256	376	480	589	1005 ④	1381					
		Cooling Tubes	115	159	310	422	535	810	962 ④	1200					
	580	None ②	46.2	63.8	79.0	113	141	170	214	290	308	360	383	431	550
		Shaft Fan ③	55.0	74.9	95.9	142	178	223	285 ④	387					
		Electric Fan	136	186	241	352	451	556	946 ④	1289					
		Cooling Tubes	105	143	280	381	485	739	880 ④	1155					

① Basic thermal ratings in HP are shown for an ambient temperature of 80°F (27°C) and at an altitude of sea level to 2500 feet. For other ambient temperatures, other altitudes, or special air velocity / inlet water temperature / duty cycle considerations, use thermal factors on **page <?>** to determine an application-adjusted thermal rating which can then be compared to the actual power transmitted. Thermal ratings for cooling tubes are based on water inlet temperature of 70°F (21°C), and water flow rates as shown on **page <?>**. For cooling capacity exceeding the methods listed for the gear drive size, ratio and high-speed shaft RPM that you have selected, consult your Rexnord representative for an external heat exchanger package.

② For Type ABX, apply a multiplier of 0.8 to thermal ratings with no auxiliary cooling.

③ For Type ABX, apply a multiplier of 0.9 to thermal ratings with shaft fan.

④ Ratings shown for shaft fan, electric fan and cooling tubes apply to Size 505AB only. Consult Factory for 505ABR and 505ABX.

⑤ Triple reduction sizes and ratios are offered for Types ABR and ABX only.

⑥ 13.95 is not available for Size 555.

# Basic Thermal Horsepower Ratings

## Quadruple Reduction

### Type AB, ABR & ABX Basic Thermal Horsepower Ratings ①

Nominal Ratios	High-Speed Shaft RPM	Auxiliary Cooling	Drive Size												
			385	405	425	445	465	485	505	525	535	545	555	565	585
78.16 thru 158.9	1750	None ②	48.6	60.8	81.3	111	129	161	242	290	307	363	380	442	550
		Shaft Fan ③	—	—	120	163	204	273	398 ④	480					
		Electric Fan	156	192	278	385	484	644	1181 ④	1429					
		Cooling Tubes	—	—	—	313	387	504	628 ④	729					
	1430	None ②	46.8	58.5	79.6	108	129	164	209	253	270	317	333	386	481
		Shaft Fan ③	—	—	111	150	188	253	335 ④	407					
		Electric Fan	146	180	261	361	456	610	1080 ④	1310					
		Cooling Tubes	—	—	—	289	359	472	606 ④	697					
	1170	None ②	45.0	56.2	77.2	105	127	164	210	255	271	319	336	389	484
		Shaft Fan ③	—	—	101	137	174	235	309 ④	376					
		Electric Fan	136	167	245	339	428	577	1015 ④	1234					
		Cooling Tubes	—	—	—	266	331	440	566 ④	654					
	870	None ②	41.5	51.5	72.5	98.9	121	159	205	249	264	311	327	379	472
		Shaft Fan ③	—	—	90.0	122	154	209	276 ④	335					
		Electric Fan	123	151	223	309	391	531	926 ④	1128					
		Cooling Tubes	—	—	—	234	293	394	506 ④	588					
	720	None ②	39.8	48.6	69.6	94.2	116	155	198	241	257	302	318	368	458
		Shaft Fan ③	—	—	84.0	113	143	195	256 ④	312					
		Electric Fan	116	142	209	291	369	503	873 ④	1065					
		Cooling Tubes	—	—	—	216	270	365	469 ④	548					
	580	None ②	37.4	45.6	65.5	88.9	111	148	190	232	246	290	305	353	440
		Shaft Fan ③	—	—	77.0	104	131	181	235 ④	288					
		Electric Fan	108	132	196	272	345	472	817 ④	999					
		Cooling Tubes	—	—	—	197	246	334	430 ④	504					
175.9 thru 357.5	1750	None ②	38.6	49.1	62.6	87.8	106	139	185	223	239	280	296	341	424
		Shaft Fan ③	—	—	89.5	125	160	222	308 ④	371					
		Electric Fan	122	150	201	285	367	498	916 ④	1103					
		Cooling Tubes	—	—	—	215	269	364	487 ④	559					
	1430	None ②	37.4	46.2	60.3	83.1	103	136	182	220	234	275	289	335	418
		Shaft Fan ③	—	—	81.3	113	146	202	278 ④	337					
		Electric Fan	113	140	187	266	342	467	854 ④	1029					
		Cooling Tubes	—	—	—	197	248	338	452 ④	521					
	1170	None ②	35.1	43.9	56.7	79.6	98.3	132	177	214	228	267	281	326	405
		Shaft Fan ③	—	—	73.7	102	133	184	253 ④	307					
		Electric Fan	105	129	175	249	321	439	798 ④	962					
		Cooling Tubes	—	—	—	181	228	313	418 ④	482					
	870	None ②	32.2	40.4	52.7	73.1	91.8	125	167	202	215	253	266	308	383
		Shaft Fan ③	—	—	64.9	90.7	116	161	221 ④	268					
		Electric Fan	95.4	116	158	225	290	400	723 ④	873					
		Cooling Tubes	—	—	—	159	201	277	370 ④	430					
	720	None ②	31.0	37.4	50.3	69.6	87.2	120	159	192	205	241	253	294	365
		Shaft Fan ③	—	—	60.0	83.0	108	150	204 ④	247					
		Electric Fan	89.5	109	148	211	273	377	679 ④	823					
		Cooling Tubes	—	—	—	146	185	256	343 ④	398					
	580	None ②	28.7	35.1	47.4	65.5	83.1	113	152	183	194	229	240	278	347
		Shaft Fan ③	—	—	54.4	76.6	100	137	186 ④	226					
		Electric Fan	83.1	101	138	197	254	352	633 ④	768					
		Cooling Tubes	—	—	—	133	167	233	312 ④	364					

① Basic thermal ratings in HP are shown for an ambient temperature of 80°F (27°C) and at an altitude of sea level to 2500 feet. For other ambient temperatures, other altitudes, or special air velocity / inlet water temperature / duty cycle considerations, use thermal factors on [page <?>](#) to determine an application-adjusted thermal rating which can then be compared to the actual power transmitted. Thermal ratings for cooling tubes are based on water inlet temperature of 70°F (21°C), and water flow rates as shown on [page <?>](#). For cooling capacity exceeding the methods listed for the gear drive size, ratio and high-speed shaft RPM that you have selected, consult your Rexnord representative for an external heat exchanger package.

② For Type ABX, apply a multiplier of 0.8 to thermal ratings with no auxiliary cooling.

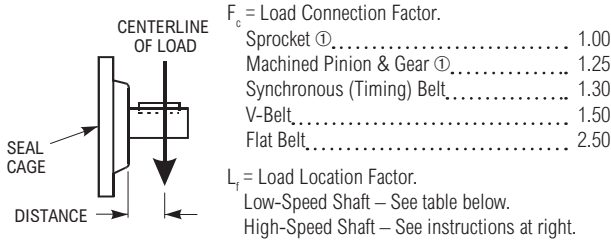
③ For Type ABX, apply a multiplier of 0.9 to thermal ratings with shaft fan.

④ Ratings shown for shaft fan, electric fan and cooling tubes apply to Size 505AB only. Consult Factory for 505ABR and 505ABX.

# Overhung Loads

## Type AB, ABR & ABX High & Low-Speed Shaft

$$\text{Overhung Load (lb)} = \frac{126,000 \text{ HP} \times F_c \times L_f}{\text{Pitch Dia (in)} \times \text{RPM}}$$



① Refer all multiple chain sprocket and pinion-mounted applications to the Factory for deflection analysis.

**Overhung Loads** — Overhung load is imposed upon a shaft when a pinion, sprocket or sheave is used as a power take-off. The magnitude of the load varies with the type of take-off and its proximity to the shaft bearing. Calculate the load (including minimum required service factor) and check the result against the tabulated overhung load rating. The above overhung load formula considers the transmitted power rating, without service factor. This is appropriate for applications where starting loads, momentary overloads and brake capacities do not exceed 200% of drive rating (100% overload). For other conditions, compute the equivalent power by multiplying the transmitted power by the appropriate service factor.

Locate the centerline of the load as close to the gear drive seal cage as practical to minimize the effect of the overhung load and increase bearing life.

## Type AB $L_f$ Load Location Factors ② Low-Speed Shaft

Based on distance from centerline of load to gear drive seal cage.

Distance (in)	Double Reduction										
	Drive Size										
	385	405	425	445	465	485	505	525			
2	0.89	0.87	0.86	0.86	0.85	0.81	0.81	0.80			
2.5	0.91	0.90	0.88	0.87	0.86	0.83	0.82	0.81			
3	0.93	0.92	0.90	0.89	0.87	0.84	0.84	0.82			
3.5	0.96	0.94	0.91	0.90	0.89	0.86	0.85	0.83			
4	0.98	0.96	0.93	0.92	0.90	0.87	0.86	0.85			
4.5	1.00	0.98	0.95	0.94	0.92	0.88	0.88	0.86			
5	1.05	1.00	0.97	0.95	0.93	0.90	0.89	0.87			
5.5	1.11	1.05	0.99	0.97	0.95	0.91	0.90	0.88			
6	1.16	1.10	1.02	0.98	0.96	0.93	0.92	0.89			
6.5	1.22	1.15	1.07	1.00	0.98	0.94	0.93	0.90			
7	1.27	1.20	1.12	1.04	0.99	0.96	0.94	0.92			
7.5	1.33	1.26	1.16	1.09	1.02	0.97	0.95	0.93			
8	—	1.31	1.21	1.13	1.06	0.99	0.97	0.94			
8.5	—	1.36	1.25	1.17	1.10	1.00	0.98	0.95			
9	—	—	1.30	1.22	1.14	1.04	0.99	0.96			
10	—	—	1.39	1.30	1.22	1.11	1.05	0.99			
11	—	—	—	1.39	1.30	1.18	1.12	1.03			
12	—	—	—	—	1.38	1.25	1.18	1.09			
13	—	—	—	—	—	1.32	1.25	1.15			
14	—	—	—	—	—	1.39	1.32	1.21			
15	—	—	—	—	—	—	1.39	1.27			
16	Centerline of load is beyond end of standard low-speed shaft. Consult Factory for special shaft.				—	—	1.45	1.33			
17					—	—	—	1.39			
18					—	—	—	—	1.45		
19					—	—	—	—	—	1.45	1.34
20	Centerline of load is beyond end of standard low-speed shaft. Consult Factory for special shaft.				—	—	—	1.45	1.44	1.40	1.34
21					—	—	—	—	1.45	1.39	
22					—	—	—	—	—	1.44	
23					—	—	—	—	—	—	1.48

② Interpolate for intermediate values. For example,  $L_f$  is 0.96 for a Size 425AB2 when the distance is 4.75 inches.

**Consult Factory for Higher Overhung Load Ratings** — In many cases, overhung load capacity in excess of that published is available. If the actual load should exceed the published capacity, refer full details to the Factory; provide complete application information (see page <?>), as well as direction of rotation, location and direction of applied load.

## Low-Speed Shaft

Calculate low-speed shaft overhung load using the formula and  $F_c$  values at left. The  $L_f$  load location factors tabulated below are based on the distance from the centerline of the load to the gear drive seal cage.

**Low speed shaft overhung load example** — An application requiring 115 hp is driven by a 385AB2 drive with 100 rpm output. An 18" pitch diameter single-chain sprocket is mounted on the low-speed shaft and the centerline of the load is 5 inches from the seal cage. Calculate the overhung load:

$$\text{Overhung Load} = \frac{126,000 \times 115 \times 1.0 \times 1.05}{18 \times 100} = 8453 \text{ pounds}$$

Refer to the Type AB2 table on page 38 and note that the overhung load capacity for a 385AB2 at 100 rpm is 12,500 pounds (12.5 x 1000) and is satisfactory for this selection.

## High-Speed Shaft

High-speed shaft overhung load ratings published on pages 75 and 72 are for normal conditions where the centerline of the load is one shaft diameter from the seal cage, and for speeds of 1170 rpm or lower. Where the centerline of the load is one shaft diameter or closer, calculate the high-speed shaft overhung load using  $L_f = 1$  in the formula above left. Check the result against the rating on pages 75 and 72.

Higher overhung load capacities are available when the full gear drive torque rating is not utilized. Refer to the Factory for higher ratings for these conditions or if the calculated load (using  $L_f = 1$ ) exceeds the published value or if the load is applied at a distance greater than one shaft diameter from the high-speed shaft seal cage.

## Type AB, ABR & ABX $L_f$ Load Location Factors ③ Low-Speed Shaft

Based on distance from centerline of load to gear drive seal cage.

Distance (in)	Triple & Quadruple Reduction													
	Drive Size													
	385	405	425	445	465	485	505	525	535	545	555	565	585	
2	0.87	0.86	0.84	0.83	0.82	0.82	0.81	0.80	0.77	0.80	0.81	0.81	0.81	
2.5	0.90	0.88	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.81	0.82	0.82	0.82	
3	0.92	0.91	0.88	0.87	0.85	0.85	0.84	0.82	0.80	0.82	0.83	0.83	0.83	
3.5	0.95	0.93	0.91	0.89	0.87	0.86	0.85	0.83	0.81	0.83	0.84	0.84	0.84	
4	0.97	0.95	0.93	0.91	0.89	0.88	0.86	0.85	0.83	0.84	0.85	0.84	0.85	
4.5	1.00	0.98	0.95	0.92	0.91	0.89	0.88	0.86	0.84	0.85	0.86	0.85	0.86	
5	1.05	1.00	0.97	0.94	0.92	0.91	0.89	0.87	0.85	0.86	0.87	0.86	0.87	
5.5	1.11	1.05	0.99	0.96	0.94	0.92	0.90	0.88	0.87	0.87	0.88	0.87	0.87	
6	1.16	1.10	1.02	0.98	0.96	0.94	0.92	0.89	0.88	0.88	0.89	0.88	0.88	
6.5	1.22	1.15	1.07	1.00	0.97	0.95	0.93	0.90	0.89	0.89	0.89	0.88	0.89	
7	1.27	1.20	1.12	1.04	0.99	0.97	0.94	0.92	0.91	0.90	0.91	0.90	0.90	
7.5	1.33	1.26	1.16	1.09	1.02	0.98	0.95	0.93	0.92	0.91	0.92	0.91	0.91	
8	—	1.31	1.21	1.13	1.06	1.00	0.97	0.94	0.93	0.92	0.93	0.92	0.92	
8.5	—	1.36	1.26	1.17	1.10	1.03	0.98	0.95	0.95	0.93	0.94	0.93	0.92	
9	—	—	1.30	1.22	1.14	1.07	0.99	0.96	0.96	0.94	0.95	0.94	0.93	
10	—	—	1.40	1.30	1.22	1.14	1.05	0.99	0.99	0.96	0.97	0.96	0.95	
11	—	—	—	1.39	1.30	1.21	1.12	1.03	1.03	0.99	0.99	0.98	0.97	
12	—	—	—	—	1.38	1.27	1.18	1.09	1.09	1.02	1.03	1.00	0.98	
13	—	—	—	—	—	1.34	1.25	1.15	1.15	1.07	1.08	1.04	1.00	
14	—	—	—	—	—	1.41	1.32	1.21	1.20	1.13	1.13	1.09	1.05	
15	—	—	—	—	—	—	1.39	1.27	1.26	1.18	1.18	1.14	1.10	
16	—	—	—	—	—	—	1.45	1.33	1.32	1.24	1.23	1.19	1.15	
17	—	—	—	—	—	—	—	1.39	1.38	1.29	1.28	1.25	1.19	
18	—	—	—	—	—	—	—	1.45	1.44	1.34	1.33	1.30	1.24	
19	—	—	—	—	—	—	—	—	1.40	1.39	1.35	1.29	1.29	
20	Centerline of load is beyond end of standard low-speed shaft. Consult Factory for special shaft.				—	—	—	1.45	1.44	1.40	1.34			
21					—	—	—	—	1.45	1.39				
22					—	—	—	—	—	1.44				
23					—	—	—	—	—	—	1.48			

③ Interpolate for intermediate values. For example,  $L_f$  is 0.99 for a Size 405AB3 when the distance is 4.75 inches. Consult Factory for Type ABXQ.

# Overhung Loads

## High-Speed Shaft

### Type AB Overhung Loads – Double Reduction (lbs) ①

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size							
			385	405	425	445	465	485	505	525
1170	5.06	230	1600	2000	2500	3000	1450	–	–	–
	5.60	210	1600	2000	2500	3000	1450	–	–	–
	6.20	190	1600	2000	2500	3000	1450	–	–	–
	6.86	170	1600	2000	2500	3000	1450	–	–	–
	7.59	155	1600	2000	2500	3000	1790	4000	4700	5400
	8.40	140	1600	2000	2500	3000	2620	4000	4700	5400
	9.30	125	1600	2000	2500	3000	3340	4000	4700	5400
	10.29	115	1600	2000	2500	3000	3080	4000	4700	5400
	11.39	100	1600	2000	2500	3000	3500	4000	4700	5400
870	5.06	175	1600	2000	2500	3000	1980	–	–	–
	5.60	155	1600	2000	2500	3000	1980	–	–	–
	6.20	140	1600	2000	2500	3000	1980	–	–	–
	6.86	130	1600	2000	2500	3000	1980	–	–	–
	7.59	115	1600	2000	2500	3000	1980	4000	4700	5400
	8.40	105	1600	2000	2500	3000	3030	4000	4700	5400
	9.30	95	1600	2000	2500	3000	3500	4000	4700	5400
	10.29	85	1600	2000	2500	3000	3430	4000	4700	5400
	11.39	77	1600	2000	2500	3000	3500	4000	4700	5400
720	5.06	140	1600	2000	2500	3000	2420	–	–	–
	5.60	130	1600	2000	2500	3000	2580	–	–	–
	6.20	115	1600	2000	2500	3000	2420	–	–	–
	6.86	105	1600	2000	2500	3000	2420	–	–	–
	7.59	95	1600	2000	2500	3000	2420	4000	4700	5400
	8.40	85	1600	2000	2500	3000	3500	4000	4700	5400
	9.30	77	1600	2000	2500	3000	3500	4000	4700	5400
580	5.06	115	1600	2000	2500	3000	3100	–	–	–
	5.60	105	1600	2000	2500	3000	3340	–	–	–
	6.20	95	1600	2000	2500	3000	3010	–	–	–
	6.86	85	1600	2000	2500	3000	3010	–	–	–
	7.59	77	1600	2000	2500	3000	3080	4000	4700	5400
	8.40	70	1600	2000	2500	3000	3500	4000	4700	5400

### Type AB, ABR & ABX Overhung Loads – Quadruple Reduction (lbs) ①

High-Speed Shaft RPM	Nominal Ratios ±5%	Approx. Low-Speed Shaft RPM	Drive Size												
			385	405	425	445	465	485	505	525	535	545	555	565	585
1170	78.16	15.0	1300 ②	910	1300	1600	2000	2500	3000	3500	3500	4000	4000	4700	3950
	86.50	13.5	700	980	1300	1600	2000	2500	3000	3500	3500	4000	4000	4700	4500
	95.73	12.0	700	1000	1300	1600	2000	2500	3000	3500	3500	4000	4000	4700	4700
870	78.16	11.0	1300 ②	1000	1300	1600	2000	2500	3000	3500	3500	4000	4000	4700	4700
	86.50	10.0	700	1000	1300	1600	2000	2500	3000	3500	3500	4000	4000	4700	4700
720	78.16	9.1	1300 ②	1000	1300	1600	2000	2500	3000	3500	3500	4000	4000	4700	4700
	86.50	8.3	700	1000	1300	1600	2000	2500	3000	3500	3500	4000	4000	4700	4700
580	78.16	7.5	1300 ②	1000	1300	1600	2000	2500	3000	3500	3500	4000	4000	4700	4700
	86.50	6.8	700	1000	1300	1600	2000	2500	3000	3500	3500	4000	4000	4700	4700

① For loads applied one shaft diameter from seal cage and speeds of 1170 RPM or lower. In each High-Speed Shaft RPM section, the last overhung load value applies to all of the higher ratios of that gear reduction. Published ratings are based on a combination of the most unfavorable conditions of loading. Consult Factory for ratings of drives with fans.

② Size 385 rating at 78.16:1 is for triple reduction.

# Overhung Loads

## High-Speed Shaft

### Type AB, ABR & ABX Overhung Loads – Triple Reduction (lbs) ①

High-Speed Shaft RPM	Nominal Ratios ±4%	Approx. Low-Speed Shaft RPM	Drive Size												
			385	405	425	445	465	485	505	525	535	545	555	565	585
1170	13.95	84	—	1450	2000	2500	3000	2650	3410	—	1450	5400	—	1990	6000
	15.44	75	—	1450	2000	2500	3000	2650	3410	—	1450	5400	5400	1990	6000
	17.09	68	—	1450	2000	2500	3000	2730	3410	—	1450	5400	5400	1990	6000
	18.91	60	1300	1590	2000	2500	3000	2730	3410	1450	1450	5400	5400	1990	6000
	20.93	56	1300	1470	2000	2500	3000	2730	3730	1460	1450	5400	5400	1990	6000
	23.16	50	1300	1590	2000	2500	3000	2730	3730	1630	1630	5400	5400	3840	6000
	25.63	45	1300	1600	2000	2500	3000	3060	4000	2500	1630	5400	5400	6000	6000
	28.36	40	1300	1600	2000	2500	3000	3340	4000	3210	2540	5400	5400	6000	6000
	31.39	37	1300	1600	2000	2500	3000	3500	4000	2920	3210	5400	5400	6000	4760
	34.74	34	1300	1510	2000	2160	3000	3500	4000	3060	3000	5400	5400	6000	4760
	38.44	30	1300	1510	2000	2500	3000	3350	4000	4380	3110	5400	5400	6000	6000
	42.54	27	1300	1590	2000	2500	3000	3500	4000	4700	4410	5400	5400	6000	6000
	47.08	25	1300	1600	2000	2500	3000	3500	4000	3710	4700	5400	5400	6000	5690
	52.11	22	1300	1600	2000	2500	3000	3500	4000	3710	3710	5400	5400	6000	5690
	57.66	20	1300	1600	2000	2500	3000	3500	4000	4670	3710	5400	5400	6000	6000
63.82	18.0	1300	1600	2000	2500	3000	3500	4000	4700	4700	5400	5400	6000	6000	
870	13.95	62	—	1600	2000	2500	3000	3150	4000	—	1980	5400	—	4940	6000
	15.44	55	—	1600	2000	2500	3000	3150	4000	—	1980	5400	5400	4940	6000
	17.09	50	—	1600	2000	2500	3000	3360	4000	—	1980	5400	5400	4940	6000
	18.91	45	1300	1600	2000	2500	3000	3360	4000	1980	1980	5400	5400	4940	6000
	20.93	42	1300	1600	2000	2500	3000	3360	4000	2290	1980	5400	5400	4940	6000
	23.16	38	1300	1600	2000	2500	3000	3360	4000	2550	2550	5400	5400	6000	6000
	25.63	34	1300	1600	2000	2500	3000	3500	4000	3340	2550	5400	5400	6000	6000
	28.36	31	1300	1600	2000	2500	3000	3500	4000	4060	3390	5400	5400	6000	6000
	31.39	28	1300	1600	2000	2500	3000	3500	4000	3230	4060	5400	5400	6000	5220
	34.74	25	1300	1410	2000	1880	3000	3500	4000	3920	3860	5400	5400	6000	6000
	38.44	22	1300	1410	2000	2500	3000	3500	4000	4700	3970	5400	5400	6000	6000
	42.54	21	1300	1550	2000	2500	3000	3500	4000	4700	4700	5400	5400	6000	6000
	47.08	18.0	1300	1600	2000	2500	3000	3500	4000	4480	4700	5400	5400	6000	5690
	52.11	17.0	1300	1600	2000	2500	3000	3500	4000	4480	4480	5400	5400	6000	5690
	57.66	15.0	1300	1600	2000	2500	3000	3500	4000	4700	4480	5400	5400	6000	6000
63.82	14.0	1300	1600	2000	2500	3000	3500	4000	4700	4700	5400	5400	6000	6000	
720	13.95	50	—	1600	2000	2500	3000	3500	4000	—	2420	5400	—	6000	6000
	15.44	45	—	1600	2000	2500	3000	3500	4000	—	2420	5400	5400	6000	6000
	17.09	42	—	1600	2000	2500	3000	3500	4000	—	2420	5400	5400	6000	6000
	18.91	38	1300	1600	2000	2500	3000	3500	4000	2450	2440	5400	5400	6000	6000
	20.93	34	1300	1600	2000	2500	3000	3500	4000	2890	2440	5400	5400	6000	6000
	23.16	31	1300	1600	2000	2500	3000	3500	4000	3170	3170	5400	5400	6000	6000
	25.63	28	1300	1600	2000	2500	3000	3500	4000	3930	3170	5400	5400	6000	6000
	28.36	25	1300	1600	2000	2500	3000	3500	4000	4650	3980	5400	5400	6000	6000
	31.39	22	1300	1600	2000	2500	3000	3500	4000	3840	4660	5400	5400	6000	6000
	34.74	21	1300	1350	2000	1650	3000	3500	4000	4520	4460	5400	5400	6000	6000
	38.44	18.0	1300	1350	2000	2500	3000	3500	4000	4700	4560	5400	5400	6000	6000
	42.54	17.0	1300	1540	2000	2500	3000	3500	4000	4700	4700	5400	5400	6000	6000
	47.08	15.0	1300	1600	2000	2500	3000	3500	4000	4220	4700	5400	5400	6000	6000
	52.11	14.0	1300	1600	2000	2500	3000	3500	4000	4220	4220	5400	5400	6000	6000
	57.66	12.5	1300	1600	2000	2500	3000	3500	4000	4700	4220	5400	5400	6000	6000
63.82	11.0	1300	1600	2000	2500	3000	3500	4000	4700	4700	5400	5400	6000	6000	
580	13.95	42	—	1600	2000	2500	3000	3500	4000	—	3010	5400	—	6000	6000
	15.44	38	—	1600	2000	2500	3000	3500	4000	—	3010	5400	5400	6000	6000
	17.09	34	—	1600	2000	2500	3000	3500	4000	—	3010	5400	5400	6000	6000
	18.91	31	1300	1600	2000	2500	3000	3500	4000	3220	3220	5400	5400	6000	6000
	20.93	28	1300	1600	2000	2500	3000	3500	4000	3610	3220	5400	5400	6000	6000
	23.16	25	1300	1600	2000	2500	3000	3500	4000	3920	3920	5400	5400	6000	6000
	25.63	22	1300	1600	2000	2500	3000	3500	4000	4660	3920	5400	5400	6000	6000
	28.36	21	1300	1600	2000	2500	3000	3500	4000	4700	4700	5400	5400	6000	6000
	31.39	18.0	1300	1600	2000	2500	3000	3500	4000	4590	4700	5400	5400	6000	6000
	34.74	17.0	1300	1300	2000	1520	3000	3500	4000	4700	4700	5400	5400	6000	6000
	38.44	15.0	1300	1300	2000	2500	3000	3500	4000	4700	4700	5400	5400	6000	6000
	42.54	14.0	1300	1530	2000	2500	3000	3500	4000	4700	4700	5400	5400	6000	6000
	47.08	12.5	1300	1600	2000	2500	3000	3500	4000	3860	4700	5400	5400	6000	6000
	52.11	11.0	1300	1600	2000	2500	3000	3500	4000	3860	3860	5400	5400	6000	6000
	57.66	10.0	1300	1600	2000	2500	3000	3500	4000	4700	3860	5400	5400	6000	6000
63.82	9.1	1300	1600	2000	2500	3000	3500	4000	4700	4700	5400	5400	6000	6000	

① For loads applied one shaft diameter from seal cage and speeds of 1170 RPM or lower. In each High-Speed Shaft RPM section, the last overhung load value applies to all of the higher ratios of that gear reduction. Published ratings are based on a combination of the most unfavorable conditions of loading. Consult Factory for ratings of drives with fans.

# Overhung Loads

## Low-Speed Shaft

### Type AB Overhung Loads – Double, Triple & Quadruple Reduction (lbs) ①

Approx. Low-Speed Shaft RPM	Drive Size ③										
	385	405	425	445	465	485	505	525	545	565	585
350	12.5	15.0	17.3	22.8	23.4	–	–	–	–	–	–
310	12.5	15.0	17.5	23.4	23.2	–	–	–	–	–	–
280	12.5	15.0	17.8	24.1	22.2	–	–	–	–	–	–
255	12.5	15.0	17.9	25.0	24.2	–	–	–	–	–	–
230	12.5	15.0	18.0	25.0	23.6	40.0	42.6	60.0	–	–	–
210	12.5	15.0	18.0	25.0	25.3	38.4	48.9	60.0	–	–	–
190	12.5	15.0	18.0	25.0	25.1	39.6	45.9	60.0	–	–	–
170	12.5	15.0	18.0	25.0	26.9	38.2	44.9	60.0	–	–	–
155	12.5	15.0	18.0	25.0	27.4	40.0	49.4	60.0	–	–	–
140	12.5	15.0	18.0	25.0	28.6	40.0	50.0	60.0	–	–	–
125	12.5	15.0	18.0	25.0	29.1	40.0	50.0	60.0	72.0	–	–
110	12.5	15.0	18.0	25.0	30.1	40.0	50.0	60.0	72.0	–	–
100	12.5	15.0	18.0	25.0	32.8	40.0	50.0	60.0	72.0	86.0	100
93	12.5	15.0	18.0	25.0	33.0	40.0	50.0	60.0	72.0	86.0	100
84	12.5	15.0	18.0	25.0	33.0	40.0	42.8	60.0	72.0	86.0	100
77	12.5	15.0	18.0	25.0	33.0	40.0	49.9	60.0	72.0	86.0	100
70	12.5	15.0	18.0	25.0	33.0	40.0	45.4	60.0	72.0	86.0	100
62 or Lower	12.5	15.0	18.0	25.0	33.0	40.0	50.0	60.0	72.0	86.0	100

### Type ABXU — Shaft Up (lbs) ② Low-Speed Shaft Overhung Load

Approx. Low-Speed Shaft RPM	Drive Size ③							
	405	425	445	465	485	505	535	555
125	15.0	16.3	22.4	29.6	38.3	45.7	60.0	–
110	15.0	16.1	22.3	29.9	38.4	47.6	60.0	72.0
100	15.0	15.1	21.6	29.2	37.3	42.5	60.0	72.0
93	15.0	17.1	21.3	29.4	37.3	44.5	60.0	72.0
84	15.0	16.7	21.9	29.3	35.7	41.7	60.0	72.0
77	15.0	16.5	21.7	30.6	35.3	41.2	60.0	72.0
70	15.0	17.4	22.6	31.1	36.5	44.2	60.0	72.0
62	15.0	18.0	23.0	32.5	36.4	46.3	60.0	72.0
57	15.0	18.0	24.1	33.0	38.3	49.1	60.0	72.0
50 or Lower	15.0	18.0	25.0	33.0	40.0	50.0	60.0	72.0

### Type ABX — Shaft Up or Down (lbs) ④ Low-Speed Shaft Thrust Capacity (Thrust Up)

Approx. Low-Speed Shaft RPM	Drive Size ③							
	405	425	445	465	485	505	535	555
125	11.5	16.5	21.0	25.0	30.0	40.0	50.0	–
110	11.5	16.5	20.7	25.0	38.4	40.0	50.0	60.0
100	11.5	16.5	20.3	25.0	37.3	39.5	50.0	60.0
93	11.5	16.5	19.6	25.0	37.3	40.0	50.0	60.0
84	11.5	16.5	19.5	25.0	35.7	38.2	50.0	60.0
77	11.5	16.5	19.9	25.0	35.3	40.0	50.0	60.0
70	11.5	16.5	20.7	25.0	36.5	40.0	50.0	60.0
62	11.5	16.5	21.0	25.0	36.4	40.0	50.0	60.0
57	11.5	16.5	21.0	25.0	38.3	40.0	50.0	60.0
50 or Lower	11.5	16.5	21.0	25.0	40.0	40.0	50.0	60.0

### Type ABXD — Shaft Down (lbs) ② Low-Speed Shaft Overhung Load

Approx. Low-Speed Shaft RPM	Drive Size ③							
	405	425	445	465	485	505	535	555
125	15.0	18	25	33	40	50	60	–
115 or Lower	15.0	18	25	33	40	50	60	72

### Type ABX — Shaft Up or Down (lbs) ④ Low-Speed Shaft Thrust Capacity (Thrust Down)

Approx. Low-Speed Shaft RPM	Drive Size ③							
	405	425	445	465	485	505	535	555
125	11.5	16.5	20.7	25.0	30.0	40.0	50.0	–
110	11.5	16.5	20.2	25.0	30.0	40.0	50.0	60.0
100	11.5	16.5	19.8	25.0	30.0	38.4	50.0	60.0
93	11.5	16.5	19.1	25.0	30.0	40.0	50.0	60.0
84	11.5	16.5	19.0	25.0	30.0	37.1	50.0	60.0
77	11.5	16.5	19.3	25.0	30.0	40.0	50.0	60.0
70	11.5	16.5	20.1	25.0	30.0	39.4	50.0	60.0
62	11.5	16.5	20.5	25.0	30.0	40.0	50.0	60.0
57 or Lower	11.5	16.5	21.0	25.0	30.0	40.0	50.0	60.0

① Published ratings are for standard assemblies with shaft extensions as shown on page <?> and are based on the most unfavorable conditions of loading.

② Refer to Factory for higher overhung load capacities and capacities at unlisted speeds. Furnish complete application information. Published ratings are for standard assemblies with shaft extension as shown on page <?> and are based on the most unfavorable conditions of loading. For higher ratings and ratings for the second shaft extension, refer full data to the Factory. Consult Factory for Type ABXQ.

③ Multiply values below by 1000.

④ Published ratings are based on a combination of the most unfavorable conditions of loading. For higher ratings, refer full data to the Factory. Consult the Factory for combined radial and thrust loads. Consult Factory for Type ABXQ.

# Exact Ratios/Right-Angle Shaft Gear Drives

## Double Reduction Exact Ratios (Type AB)

Nominal Ratio ①	Drive Size							
	385	405	425	445	465	485	505	525
5.06	4.850 ①	4.961	4.933	5.281 ①	4.902	—	—	—
5.60	5.413	5.495	5.391	5.707	5.427	—	—	—
6.20	6.089	6.201	6.216	6.188	6.261	—	—	—
6.86	6.594	6.716	6.766	6.739	6.567 ①	—	—	—
7.59	7.170 ①	7.345	7.400	7.812	7.104 ①	7.585	7.636	7.410
8.40	8.119	7.971 ①	8.143	8.500	8.298	8.162	8.213	8.208
9.30	9.134	8.996	9.388	9.218	9.575	9.400	9.545	9.262
10.29	9.890	10.66	10.22	10.04	10.04	10.23	10.45	10.03
11.39	10.76 ①	10.93 ①	11.18	11.64	10.86 ①	11.19	11.45	10.97
12.61	12.33	12.11	12.25	12.61	12.53	12.24	12.21	12.37
13.95	13.87	13.66	14.13	13.68	14.46	14.10	14.20	13.96
15.44	15.02	14.80 ①	15.38	14.90	15.16	15.35	15.54	15.12
17.09	16.34 ①	16.19 ①	16.82	17.27	16.40 ①	16.79	17.04	16.54

① Except where noted with a footnote (①), exact ratios are within ±4% of the nominal ratios.

## Triple Reduction Exact Ratios (Type AB, ABR & ABX)

Nominal Ratio ②	Drive Size												
	385	405	425	445	465	485	505	525	535	545	555	565	585
13.95	—	14.38 ③	13.70 ③	14.41 ③	13.82 ③	14.16 ③	14.61 ② ③	—	14.65 ②	13.45	—	13.80	13.93
15.44	—	15.99 ③	14.98 ③	15.57 ③	15.30 ③	15.24 ③	15.71 ③	—	16.16 ②	14.64	14.83	15.26	15.15
17.09	—	17.71 ③	17.27 ③	16.83 ③	16.43 ③	16.72 ③	18.11 ② ③	—	18.13 ②	16.54	16.40	17.49	16.42
18.91	18.80	18.60	18.45	18.19	18.19	17.99 ②	19.47	19.92 ②	19.94 ②	18.08 ②	18.53	18.99	17.89
20.93	21.15	21.65	21.28	21.48	20.99	20.72	21.22	21.57	22.37 ②	20.50	20.20	20.71	19.62
23.16	22.90	22.32	23.16	22.83	22.74	22.55	22.82	22.54	23.09	22.40	22.52	22.28	22.37
25.63	24.72	25.19	25.20	24.76	26.23	26.11	26.52	25.44	25.46	25.07	25.04	25.89	24.52
28.36	29.10	27.28	27.61	29.20	27.52	28.42	28.88	27.55	28.57	27.63	27.91	28.35	27.46
31.39	30.88	32.07	31.97	31.26	32.24	30.93	31.60	31.12	30.89	31.33	30.38	31.09	30.42
34.74	33.44	33.48	34.80	34.25	34.54	33.83	33.99	34.47	34.20	34.24	34.42	35.64	33.34
38.44	37.07	37.78	37.86	37.14	38.06	39.43	39.50	38.90	38.94	38.32	38.27	38.86	37.63
42.54	43.65	41.12	41.49	43.80	43.23	42.92	43.02	42.13	43.69	41.71	42.66	42.55	41.37
47.08	46.32	48.11	45.16 ②	46.89	46.77	46.71	47.10	46.98	47.24	47.00	46.43	46.24	45.39
52.11	50.16	52.62	52.86	50.77	50.10	51.09	50.44	52.04	51.64	51.36	51.63	53.00	50.27
57.66	59.83	58.66	57.52	56.42	57.81	59.33	58.62	58.72	58.78	57.48	57.41	57.80	56.73
63.82	65.06	66.19	63.03	61.45	65.67	64.58	63.84	61.59	65.95	62.57	63.99	63.28	62.38
70.62	69.03	71.69	68.60	71.22	71.04	70.29	69.90	72.16	71.31	70.02	69.65	70.46	67.56
78.16	74.75 ②	—	—	—	—	—	—	—	—	—	—	—	—

② Except where noted with a footnote (②), exact ratios are within ±4% of the nominal ratios.

③ Triple reduction ratios are offered for Types ABR and ABX only.

## Quadruple Reduction Exact Ratios (Type AB, ABR & ABX)

Nominal Ratio ④	Drive Size												
	385	405	425	445	465	485	505	525	535	545	555	565	585
70.62	—	—	—	—	—	—	—	—	—	—	—	—	71.70
78.16	—	81.14	74.03 ④	76.12	75.46	74.30	79.18	77.49	79.37	75.82	78.74	78.44	80.91
86.50	85.52	87.88	86.50	82.54	87.07	85.56	86.45	87.45	87.53	84.85	85.39	86.20	89.56
95.73	92.60	99.95	95.23	90.94	90.70 ④	93.13	94.15	97.64	100.0	94.68	97.58	94.01	98.47
105.9	108.5	108.3	103.6	107.4	104.7	107.4	108.1	110.2	110.3	106.0	105.8	105.1	109.6
117.2	117.5	118.4	111.0 ④	114.2	113.4	116.9	117.7	115.6	115.7	115.3	118.0	115.8	121.4
129.7	126.8	125.9	131.5	123.8	130.8	128.3	125.4	126.9	127.0	126.4	128.4	131.8	134.0
143.6	137.3	149.0	143.2	134.8 ④	137.8	139.7	136.6	141.6	145.1	141.0	145.3	144.8	148.3
158.9	158.5	161.3	153.7	156.0	159.0	161.1	156.8	159.8	160.0	157.8	157.6	160.7	163.1
175.9	171.6	176.5	168.4	170.2	172.2	175.4	170.7	181.3	181.5	171.8	175.7	175.2	179.5
194.6	189.0	187.7	193.4	184.5 ④	198.7	195.0	190.5	192.7	192.9	187.5	191.2	197.5	197.4
215.4	204.7	221.3	210.5	217.6	208.4	212.2	207.5	218.6	218.9	216.0	215.7	218.6	223.9
238.4	236.2	242.0	229.0	232.5	235.4	244.8	238.2	242.8	243.1	234.2	233.9	242.6	246.2
263.8	255.7	250.7	251.0	253.2	267.0	266.4	259.4	254.7	254.9	254.9	260.7	264.6	271.0
291.9	299.0	298.5	281.3	297.7	303.2	288.2	282.1	298.4	286.0	295.7	283.8	286.2	297.6
323.1	325.2	321.0	311.5	322.3	328.0	313.7	307.2	328.4	324.6	321.8	329.1	318.6	322.3
357.5	—	349.4	341.3	345.0	355.2	341.4	356.1	355.2	368.3	360.1	358.2	348.9	352.5

④ Except where noted with a footnote (④), exact ratios are within ±5% of the nominal ratios.

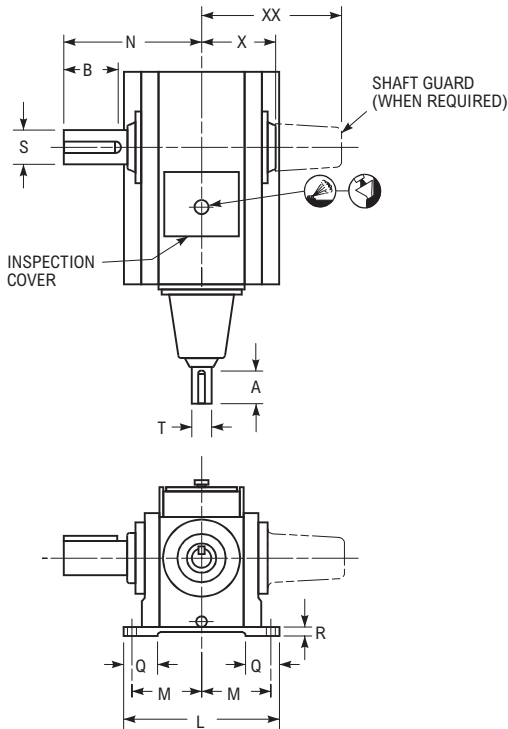
## Availability of Types AB / ABR / ABX Triple & Quadruple Reduction

Type	385	405	425	445	465	485	505	525	535	545	555	565	585
AB	X	X	X	X	X	X	X	X	—	X	—	X	X
ABR	—	X	X	X	X	X	X	—	X	—	X	—	—
ABX	—	X	X	X	X	X	X	—	X	—	X	—	—

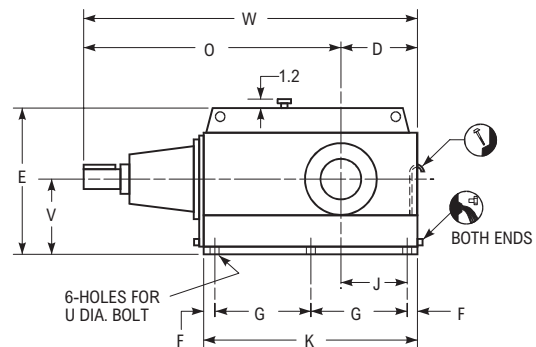
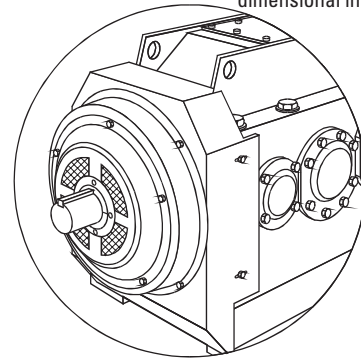
# Type AB Double Reduction

Sizes 385-525

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



DRIVE WITH COOLING FAN



## Dimensions (in)

Drive Size ①	A		B	D	E	F	G	J	K	L	M	N	O	Q	R	Low-Speed Shaft ④	
	W/O Fan	With Fan														S	Key
385	5.00	3.06	7.88	10.06	20.06	1.62	12.50	8.44	28.24	23.76	10.50	19.10	34.60	5.00	0.94	4.500	1.000 x 1.000 x 6.500
405	5.50	3.26	8.66	11.20	23.00	2.00	14.00	9.20	32.00	25.30	11.25	20.60	38.50	5.50	1.06	5.000	1.250 x 1.250 x 7.500
425	7.00	4.12	10.06	12.74	25.00	1.62	15.75	11.12	34.74	27.50	12.25	22.90	44.60	6.00	1.06	5.750	1.500 x 1.500 x 8.000
445	7.50	4.38	11.38	14.50	27.70	2.50	17.50	12.00	40.00	32.20	14.60	26.30	51.18	7.00	1.20	6.500	1.500 x 1.500 x 10.000
465	7.50	4.38	12.68	16.50	31.00	2.50	20.50	14.00	46.00	33.00	15.00	28.60	54.82	7.00	1.26	7.250	1.750 x 1.500 x 11.000
485	9.00	5.56	14.88	19.00	35.00	2.50	22.25	16.00	49.50	35.00	15.40	30.70	62.40	9.00	1.50	8.500	2.000 x 1.500 x 13.000
505	10.00	6.32	16.18	20.50	38.00	2.75	24.00	17.25	53.50	39.50	17.25	33.60	67.10	10.26	1.75	9.250	2.500 x 1.750 x 14.000
525	11.24	7.32	18.38	22.50	41.00	2.50	27.25	20.00	59.50	42.00	18.50	37.20	71.32	10.50	2.10	10.500	2.500 x 1.750 x 16.000

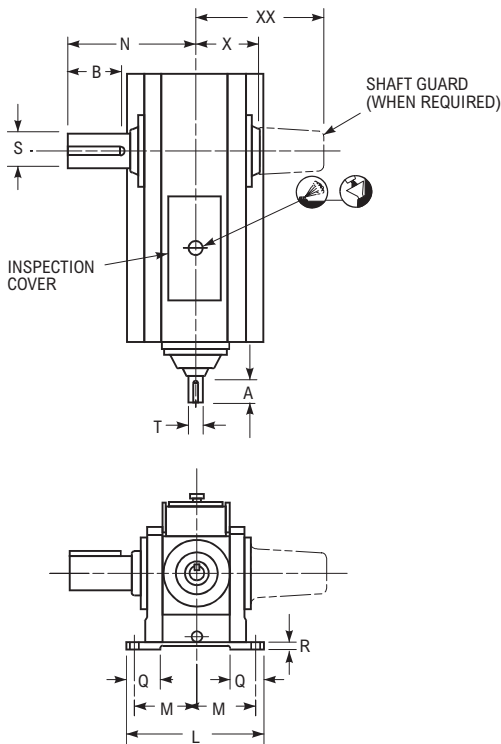
Drive Size ①	Wt (lb)	High-Speed Shaft ④		U ②	V	W	X	XX ③
		T	Key					
385	1530	2.500	0.625 x 0.625 x 4.500	1.125	9.80	44.60	9.96	21.10
405	2020	2.750	0.625 x 0.625 x 5.000	1.125	11.12	49.70	10.56	21.58
425	2810	3.500	0.875 x 0.875 x 6.000	1.250	12.50	57.34	11.78	23.78
445	4320	3.750	0.875 x 0.875 x 6.500	1.500	14.50	65.68	13.78	27.18
465	5400	3.750	0.875 x 0.875 x 6.500	1.500	16.00	71.32	14.24	29.66
485	6990	4.500	1.000 x 1.000 x 8.000	2.000	18.00	81.40	14.36	31.24
505	10300	5.000	1.250 x 1.250 x 9.000	2.250	19.75	87.60	15.90	34.60
525	12810	5.500	1.250 x 1.250 x 10.000	2.250	21.10	93.82	17.56	38.12

- ① Drives are for horizontal floor-mounted operation unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.
- ③ Single low-speed shaft extension is standard; double extension, as indicated with dimension XX, is an extra charge option.
- ④ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

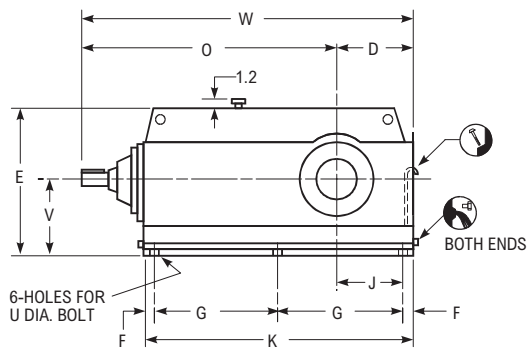
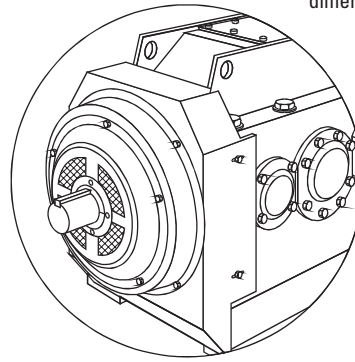
# Type AB Triple Reduction

Sizes 385-585

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



DRIVE WITH COOLING FAN



## Dimensions (in)

Drive Size ①	A		B	D	E	F	G	J	K	L	M	N	O	Q	R	Low-Speed Shaft ④	
	W/O Fan	With Fan														S	Key
385	3.50	1.88	7.88	10.24	18.96	1.80	16.50	8.44	36.60	21.00	9.10	17.80	34.92	5.00	0.94	4.500	1.000 x 1.000 x 6.500
405	3.50	1.88	8.66	11.20	21.32	2.00	18.40	9.20	40.80	22.80	10.00	19.40	37.10	5.50	1.06	5.000	1.250 x 1.250 x 7.500
425	4.50	2.56	10.06	12.74	24.00	2.75	20.00	10.00	45.50	24.80	11.00	21.60	43.71	6.00	1.06	5.750	1.500 x 1.500 x 8.000
445	5.00	2.76	11.38	14.50	27.70	2.50	23.25	12.00	51.50	27.40	12.20	23.90	48.60	7.00	1.20	6.500	1.500 x 1.500 x 10.000
465	5.50	2.88	12.68	16.50	31.00	2.50	26.50	14.00	58.00	29.00	13.00	26.60	54.50	7.00	1.26	7.250	1.750 x 1.500 x 11.000
485	7.00	4.12	14.88	19.00	35.00	3.50 ⑤	30.00 ⑤	15.00	58.50	33.00	14.40	30.70	62.60	8.00	1.50	8.500	2.000 x 1.500 x 13.000
505	7.50	4.38	16.18	20.50	38.00	2.50	34.50 ⑤	17.50	65.00	37.00	16.00	33.60	70.70	8.80	1.75	9.250	2.500 x 1.750 x 14.000
525	7.50	4.38	18.38	22.50	41.00	3.00	35.50 ⑤	19.50	71.00	39.00	17.00	37.20	75.80	9.00	2.10	10.500	2.500 x 1.750 x 16.000
545	9.00	-	20.12	24.50	45.00	3.00	36.75	21.50	79.50	44.00	19.50	41.90	85.40	9.15	2.10	11.500	3.000 x 2.000 x 17.000
565	10.00	-	21.44	25.50	48.00	3.00	39.50	22.50	85.00	52.00	23.20	45.40	92.10	11.50	2.35	12.250	3.000 x 2.000 x 19.000
585	11.24	-	22.76	29.00	54.60	3.00	44.50	26.00	95.00	56.40	25.40	49.80	99.30	11.50	2.35	13.000	3.000 x 2.000 x 21.000

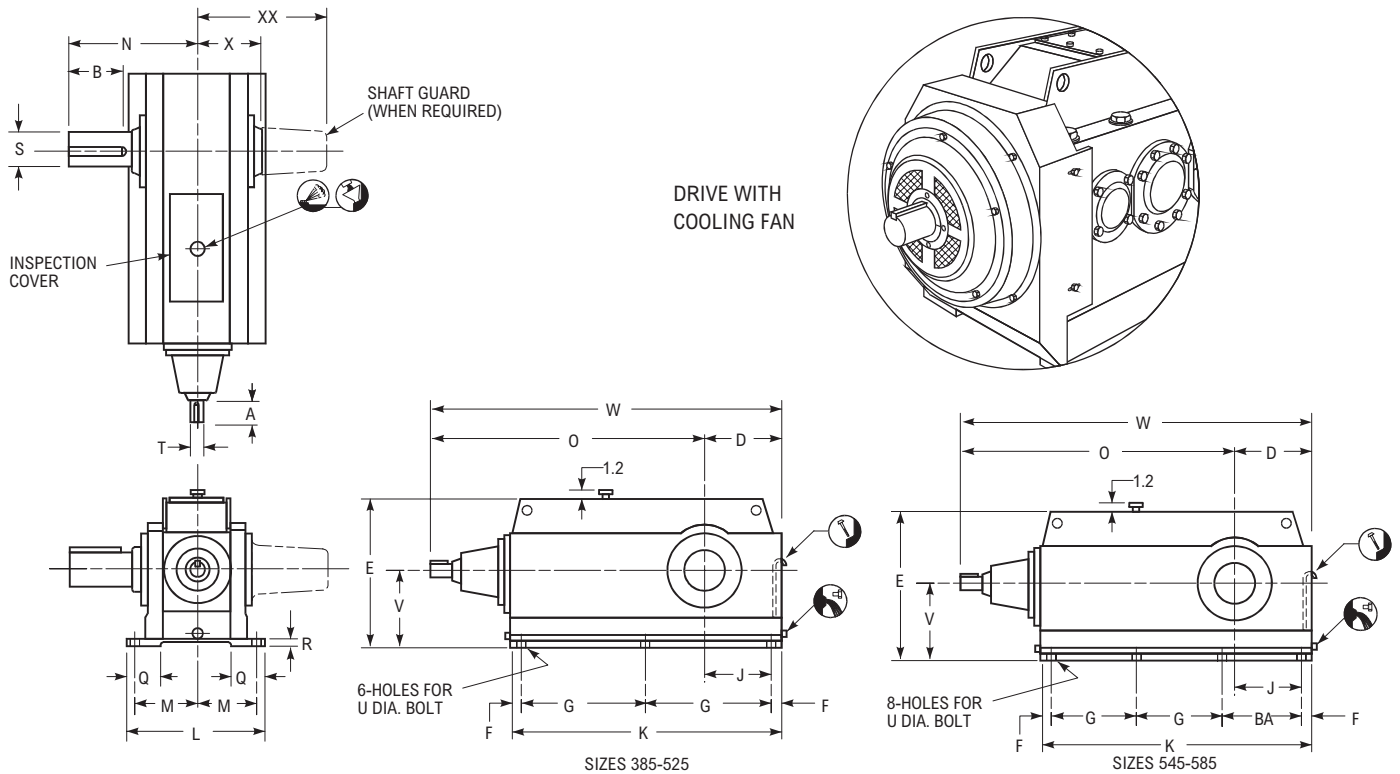
Drive Size ①	Wt (lb)	High-Speed Shaft ④		U ②	V	W	X	XX ③
		T	Key					
385	1600	1.750	0.375 x 0.375 x 3.000	1.125	9.80	45.16	8.60	19.75
405	1960	1.750	0.375 x 0.375 x 3.000	1.125	11.12	48.30	9.32	20.34
425	2860	2.250	0.500 x 0.500 x 4.000	1.250	12.50	56.45	10.54	22.54
445	4380	2.500	0.625 x 0.625 x 4.500	1.500	14.50	63.10	11.38	24.78
465	5380	2.750	0.625 x 0.625 x 5.000	1.500	16.00	71.00	12.24	27.64
485	7450	3.500	0.875 x 0.875 x 6.000	2.000	18.00	81.60	14.36	31.24
505	9900	3.750	0.875 x 0.875 x 6.500	2.250	19.75	91.20	15.90	34.46
525	12900	3.750	0.875 x 0.875 x 6.500	2.250	21.10	98.30	17.56	38.12
545	18700	4.500	1.000 x 1.000 x 8.000	2.250	23.00	109.90	20.10	43.00
565	26050	5.000	1.250 x 1.250 x 9.000	2.500	25.00	117.60	22.25	46.10
585	33400	5.500	1.250 x 1.250 x 10.000	2.500	28.00	128.30	25.28	50.90

- ① Drives are for horizontal floor-mounted operation unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.
- ③ Single low-speed shaft extension is standard; double extension, as indicated with dimension XX, is an extra charge option.
- ④ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ⑤ Size 485: high-speed end of drive Dimension G = 22.50", F = 2.50".  
Size 505: high-speed end of drive Dimension G = 25.50".  
Size 525: high-speed end of drive Dimension G = 29.50".

# Type AB Quadruple Reduction

Sizes 385-585

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A		B	D	E	F	G	J	K	L	M	N	O	Q	R	Low-Speed Shaft ④	
	W/O Fan	With Fan														S	Key
385	3.00	—	7.88	10.24	18.96	1.80	16.50	8.44	36.60	21.00	9.10	17.80	37.20	5.00	0.94	4.500	1.000 x 1.000 x 6.500
405	3.00	—	8.66	11.20	21.32	2.00	18.40	9.20	40.80	22.80	10.00	19.40	39.60	5.50	1.06	5.000	1.250 x 1.250 x 7.500
425	3.50	1.88	10.06	12.74	24.00	2.75	20.00	10.00	45.50	24.80	11.00	21.60	45.80	6.00	1.06	5.750	1.500 x 1.500 x 8.000
445	3.50	1.88	11.38	14.50	27.70	2.50	23.25	12.00	51.50	27.40	12.20	23.90	49.89	7.00	1.20	6.500	1.500 x 1.500 x 10.000
465	4.50	2.56	12.68	16.50	31.00	2.50	26.50	14.00	58.00	29.00	13.00	26.60	58.20	7.00	1.26	7.250	1.750 x 1.500 x 11.000
485	5.00	2.76	14.88	19.00	35.00	3.50 ⑤	30.00	15.00	66.00	33.00	14.40	30.70	64.60	8.00	1.50	8.500	2.000 x 1.500 x 13.000
505	5.50	2.88	16.18	20.50	38.00	2.50 ⑤	34.50	17.50	74.30	37.00	16.00	33.60	72.00	8.80	1.75	9.250	2.500 x 1.750 x 14.000
525	5.50	2.88	18.38	22.50	41.00	3.00	37.25	19.50	80.50	39.00	17.00	37.20	77.00	9.00	2.10	10.500	2.500 x 1.750 x 16.000
545	7.50	—	20.12	24.50	45.00	3.00 ⑤	23.50	21.50	91.00	44.00	19.50	41.90	92.21	9.15	2.10	11.500	3.000 x 2.000 x 17.000
565	7.50	—	21.44	25.50	48.00	3.00	26.50	22.50	99.50	52.00	23.20	45.40	99.31	11.50	2.35	12.250	3.000 x 2.000 x 19.000
585	7.50	—	22.76	29.00	54.60	3.00	28.00	26.00	108.00	56.40	25.40	49.80	103.81	11.50	2.35	13.000	3.000 x 2.000 x 21.000

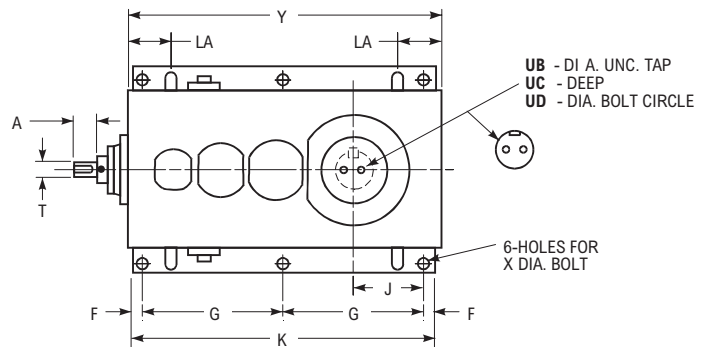
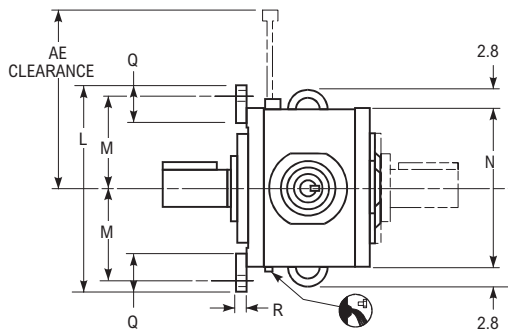
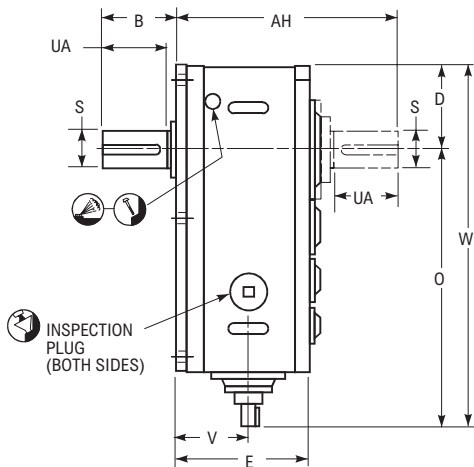
Drive Size ①	Wt (lb)	High-Speed Shaft ④		BA	U ②	V	W	X	XX ③
		T	Key						
385	1580	1.500	0.375 x 0.375 x 2.500	—	1.125	9.80	47.44	8.60	19.75
405	1960	1.500	0.375 x 0.375 x 2.500	—	1.125	11.12	50.80	9.32	20.34
425	2870	1.750	0.375 x 0.375 x 3.000	—	1.250	12.50	58.54	10.54	22.54
445	4430	1.750	0.375 x 0.375 x 3.000	—	1.500	14.50	64.39	11.38	24.78
465	5410	2.250	0.500 x 0.500 x 4.000	—	1.500	16.00	74.70	12.24	27.64
485	7870	2.500	0.625 x 0.625 x 4.500	—	2.000	18.00	83.60	14.36	31.24
505	10560	2.750	0.625 x 0.625 x 5.000	—	2.250	19.75	92.50	15.90	34.46
525	13600	2.750	0.625 x 0.625 x 5.000	—	2.250	21.10	99.50	17.56	38.12
545	20600	3.750	0.875 x 0.875 x 6.500	36.50	2.250	23.00	116.71	20.10	43.00
565	27600	3.750	0.875 x 0.875 x 6.500	40.50	2.500	25.00	124.81	22.25	46.10
585	35100	3.750	0.875 x 0.875 x 6.500	46.00	2.500	28.00	132.81	25.28	50.90

- ① Drives are for horizontal floor-mounted operation unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.
- ③ Single low-speed shaft extension is standard; double extension, as indicated with dimension XX, is an extra charge option.
- ④ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ⑤ Size 485: high-speed end of drive Dimension F = 2.50".  
Size 505: high-speed end of drive Dimension F = 2.80".  
Size 525: high-speed end of drive Dimension F = 4.50".

# Type ABR Triple Reduction

Sizes 405-485

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AE	AH	B	D	E	F	G	J	K	L	LA	M	N	O	Q	R
405	3.50	25.4	29.10	9.70	11.31	17.65	1.50	18.50	9.20	40.00	27.75	5.7	12.50	21.62	37.10	5.00	1.50
425	4.50	28.2	32.20	11.00	12.31	19.45	1.50	21.00	10.25	45.00	31.80	6.6 ⑤	14.50	24.62	43.71	6.00	1.60
445	5.00	32.9	35.60	12.20	14.62	21.41	1.75	24.00	12.25	51.50	37.00	6.7	16.75	29.25	48.60	7.00	1.81
465	5.50	37.4	39.20	14.00	16.62	23.16	1.95 ④	27.20	14.10	58.25	41.00	7.7	18.75	33.25	54.50	7.00	1.79
485	7.00	40.7	43.10	15.90	18.50	25.00	2.29	26.90	15.60	58.38	46.50	9.4 ⑤	21.00	37.00	62.60	8.00	2.00

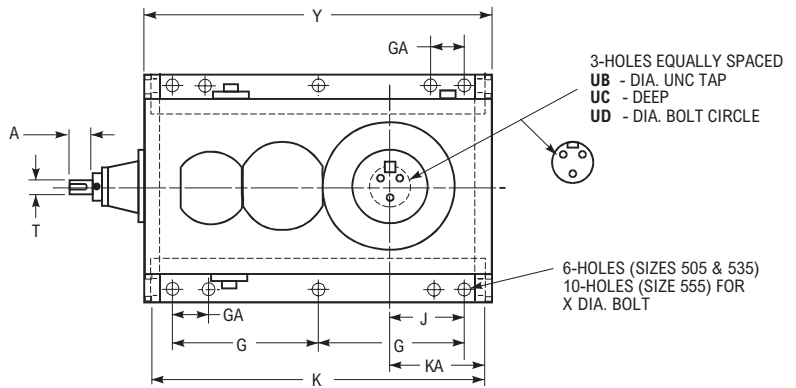
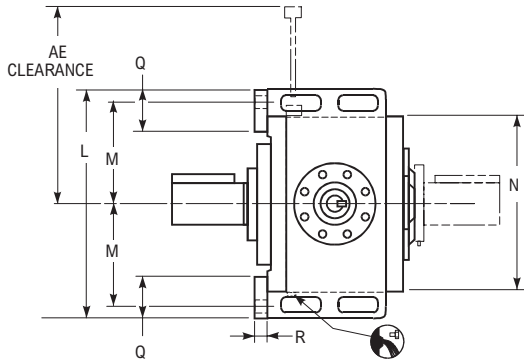
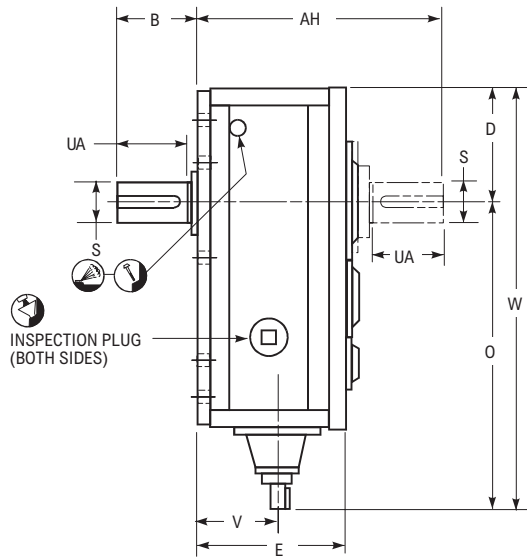
Drive Size ①	Low-Speed Shaft ③						High-Speed Shaft ③			V	W	X ②	Y	Wt (lb)
	S	Key	UA	UB	UC	UD	T	Key						
405	5.000	1.250 x 1.250 x 7.500	8.66	0.750	1.88	3.50	1.750	0.375 x 0.375 x 3.000	9.70	48.41	1.125	41.12	2310	
425	5.750	1.500 x 1.500 x 8.000	10.06	1.125	2.25	3.50	2.250	0.500 x 0.500 x 4.000	10.60	56.02	1.250	46.01	3282	
445	6.500	1.500 x 1.500 x 10.000	11.38	1.250	2.50	4.00	2.500	0.625 x 0.625 x 4.500	11.70	63.22	1.500	52.67	4576	
465	7.250	1.750 x 1.500 x 11.000	12.68	1.250	2.50	4.75	2.750	0.625 x 0.625 x 5.000	12.60	71.12	1.500	59.43	6806	
485	8.000	2.000 x 1.500 x 12.000	14.00	1.500	3.00	5.00	3.500	0.875 x 0.875 x 6.000	13.60	81.10	2.000	59.50	8576	

- ① Drives are for horizontal output shaft operation with a maximum momentary tilt of 2° unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.
- ③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ④ Size 465: low-speed end of drive Dimension F = 1.90".
- ⑤ Size 425: low-speed end of drive Dimension LA = 6.7".  
Size 485: low-speed end of drive Dimension LA = 9.5".

# Type ABR Triple Reduction

Sizes 505-555

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AE	AH	B	D	E	G	GA	J	K	KA	L	M	N
505 ④	7.50	43.7	47.62	17.32	19.62	27.87	27.00	—	13.50	64.62	18.88	50.50	22.75	39.25
535	7.50	50.8	52.00	19.50	22.62	30.00	31.75	—	16.50	74.25	21.75	56.50	25.75	45.25
555	9.00	55.6	59.30	21.80	24.62	34.95	35.00	10.00	18.00	81.75	23.75	61.50	28.25	49.25

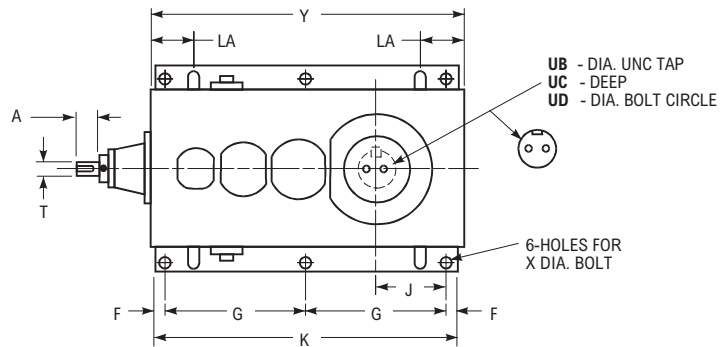
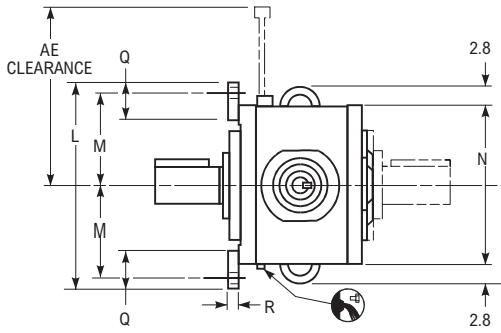
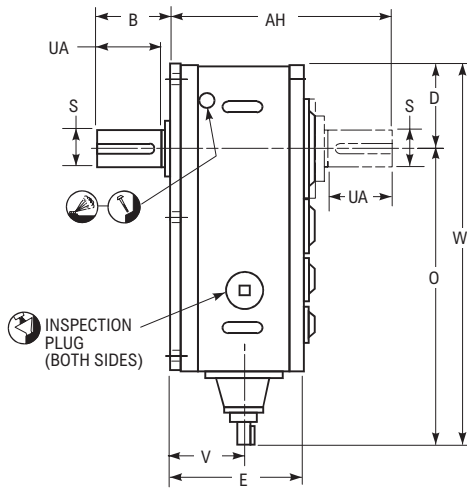
Drive Size ①	O	Q	R	Low-Speed Shaft ③						High-Speed Shaft ③			V	W	X ②	Y	Wt (lb)
				S	Key	UA	UB	UC	UD	T	Key						
505 ④	70.71	10.50	2.25	9.250	2.500 x 1.750 x 14.00	16.18	1.500	3.00	6.00	3.750	0.875 x 0.875 x 6.50	15.16	90.33	2.250	65.83	12,250	
535	77.80	10.50	2.25	10.500	2.500 x 1.750 x 16.00	18.38	1.500	3.00	7.50	3.750	0.875 x 0.875 x 6.50	16.25	100.42	2.250	75.92	16,650	
555	87.40	12.00	2.31	11.500	3.000 x 2.000 x 17.00	20.12	1.750	3.50	8.00	4.500	1.000 x 1.000 x 8.50	18.75	112.02	2.250	83.32	23,100	

- ① Gear drives are for horizontal output shaft operation with a maximum momentary tilt of 2° unless specifically stated otherwise. Consult factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use ASTM A-354 Grade BC fasteners.
- ③ Shaft diameters are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ④ Add 1.00" to dimensions K, KA, D, W & Y for Size 505ABRJ drive.

# Type ABR Quadruple Reduction

Sizes 405-485

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AE	AH	B	D	E	F	G	J	K	L	LA	M	N	O	Q	R
405	3.00	25.4	29.10	9.70	11.31	17.65	1.50	18.50	9.20	40.00	27.75	5.7	12.50	21.62	39.60	5.00	1.50
425	3.50	28.2	32.20	11.00	12.31	19.45	1.50	21.00	10.25	45.00	31.80	6.6 ⑤	14.50	24.62	45.80	6.00	1.60
445	3.50	32.9	35.60	12.20	14.62	21.41	1.75	24.00	12.25	51.50	37.00	6.7	16.75	29.25	49.89	7.00	1.81
465	4.50	37.4	39.20	14.00	16.62	23.16	1.95 ④	27.20	14.10	58.25	41.00	7.7	18.75	33.25	58.20	7.00	1.79
485	5.00	40.7	43.10	15.90	18.50	25.00	2.41 ④	30.60	15.60	56.90	46.50	9.4 ⑤	21.00	37.00	64.60	8.00	2.00

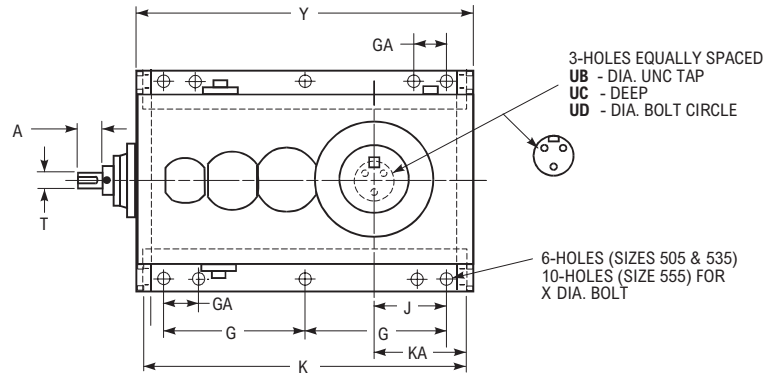
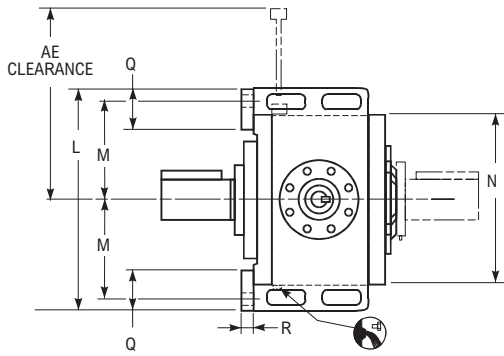
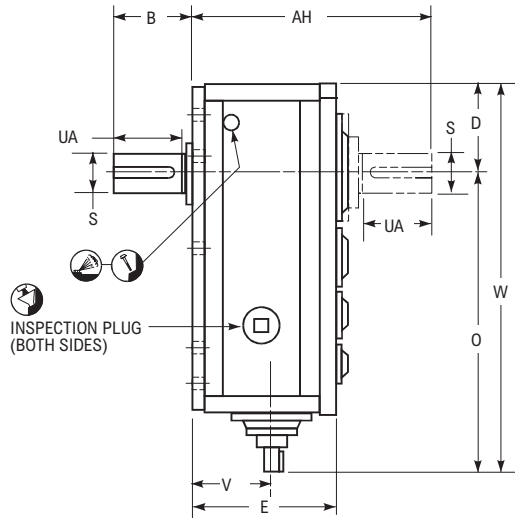
Drive Size ①	Low-Speed Shaft ③						High-Speed Shaft ③			V	W	X ②	Y	Wt (lb)
	S	Key	UA	UB	UC	UD	T	Key						
405	5.000	1.250 x 1.250 x 7.500	8.66	0.750	1.88	3.50	1.500	0.375 x 0.375 x 2.500	9.70	50.91	1.125	41.12	2458	
425	5.750	1.500 x 1.500 x 8.000	10.06	1.125	2.25	3.50	1.750	0.375 x 0.375 x 3.000	10.60	58.11	1.250	46.01	3286	
445	6.500	1.500 x 1.500 x 10.000	11.38	1.250	2.50	4.00	1.750	0.375 x 0.375 x 3.000	11.70	64.51	1.500	52.67	4543	
465	7.250	1.750 x 1.500 x 11.000	12.68	1.250	2.50	4.75	2.250	0.500 x 0.500 x 4.000	12.60	74.82	1.500	59.43	6863	
485	8.000	2.000 x 1.500 x 12.000	14.00	1.500	3.00	5.00	2.500	0.625 x 0.625 x 4.500	13.60	83.10	2.000	67.04	9057	

- ① Drives are for horizontal output shaft operation with a maximum momentary tilt of 2° unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.
- ③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ④ Size 465: low-speed end of drive Dimension F = 1.90".  
Size 485: low-speed end of drive Dimension F = 2.29".
- ⑤ Size 425: low-speed end of drive Dimension LA = 6.7".  
Size 485: low-speed end of drive Dimension LA = 9.5".

# Type ABR Quadruple Reduction

Sizes 505-555

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AE	AH	B	D	E	G	GA	J	K	KA	L	M	N
505 ④	5.50	43.7	47.62	17.32	19.62	27.87	31.00	—	13.50	72.90	18.88	50.50	22.75	39.25
535	5.50	50.3	52.00	19.50	22.62	30.00	35.75	—	16.50	82.25	21.75	56.50	25.75	45.25
555	7.50	54.0	59.30	21.80	24.62	34.95	40.00	8.00	18.00	92.75	23.75	61.50	28.25	49.25

Drive Size ①	O	Q	R	Low-Speed Shaft ③						High-Speed Shaft ③			V	W	X ②	Y	Wt (lb)
				S	Key	UA	UB	UC	UD	T	Key						
505 ④	72.02	10.50	2.25	9.250	2.500 x 1.750 x 14.00	16.18	1.500	3.00	6.00	2.750	0.625 x 0.625 x 5.00	15.16	91.64	2.250	74.28	13,050	
535	79.02	10.50	2.25	10.500	2.500 x 1.750 x 16.00	18.38	1.500	3.00	7.50	2.750	0.625 x 0.625 x 5.00	16.25	101.64	2.250	84.28	18,300	
555	94.21	12.00	2.31	11.500	3.000 x 2.000 x 17.00	20.12	1.750	3.50	8.00	3.750	0.875 x 0.875 x 6.50	18.75	118.83	2.250	94.32	24,250	

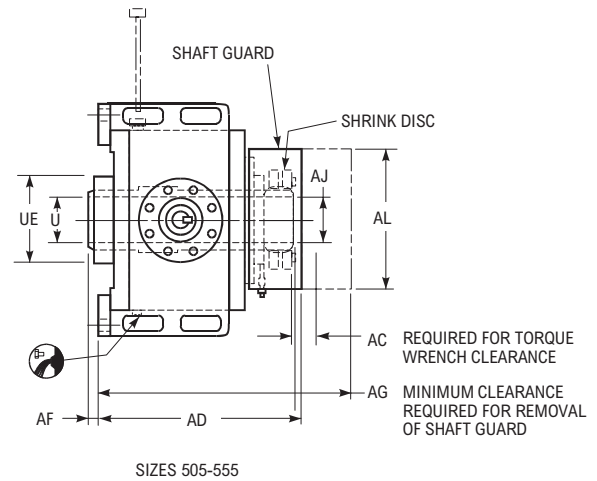
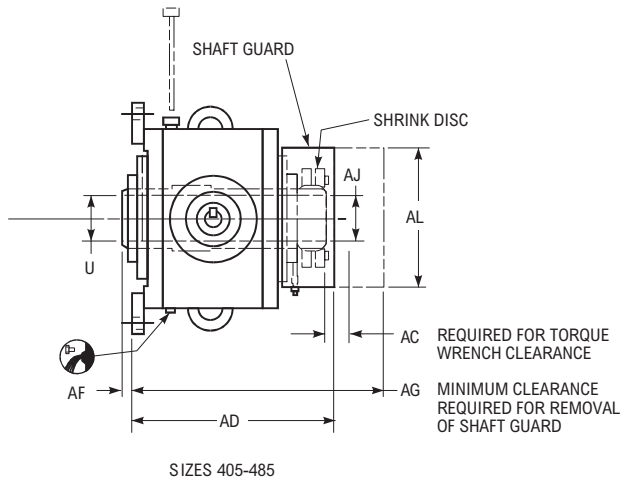
- ① Gear drives are for horizontal output shaft operation with a maximum momentary tilt of 2° unless specifically stated otherwise. Consult factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use ASTM A-354 Grade BC fasteners.
- ③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ④ Add 1.00" to dimensions K, KA, D, W & Y for Size 505ABRJ drive.

# Type ABRJ Triple and Quadruple Reduction

## Hollow Low-Speed Shaft – Shrink Disc Mounted

Refer to pages 40-49 for basic drive dimensions. Refer to page <?> for hollow low-speed shaft and driven shaft recommendations and dimensions.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



### Dimensions (in)

Drive Size ①	AC	AD	AF	AG	AL	AJ ②	U +0.002 -0.000	U <sub>E</sub>	Wt (lb)	
									Triple	Quadruple
405	4.00	26.51	1.20	31.96	16.72	5.2505	5.500	–	2,310	2,455
425	4.00	29.91	1.70	37.95	17.96	6.0005	6.250	–	3,280	3,285
445	5.00	33.33	1.50	42.27	19.83	6.5005	6.750	–	4,575	4,540
465	5.00	35.60	1.50	45.16	21.33	7.2505	7.500	–	6,805	6,860
485	5.00	38.89	1.40	49.94	24.62	8.5005	8.750	–	8,575	9,055
505	5.00	42.55	4.17	56.1	24.33	9.7505	10.000	24.12	12,200	12,950
535	5.00	45.80	1.12	59.9	25.58	10.5005	10.750	24.12	16,450	18,150
555	5.50	52.00	2.20	67.0	27.58	11.4005	11.750	26.25	22,650	23,750

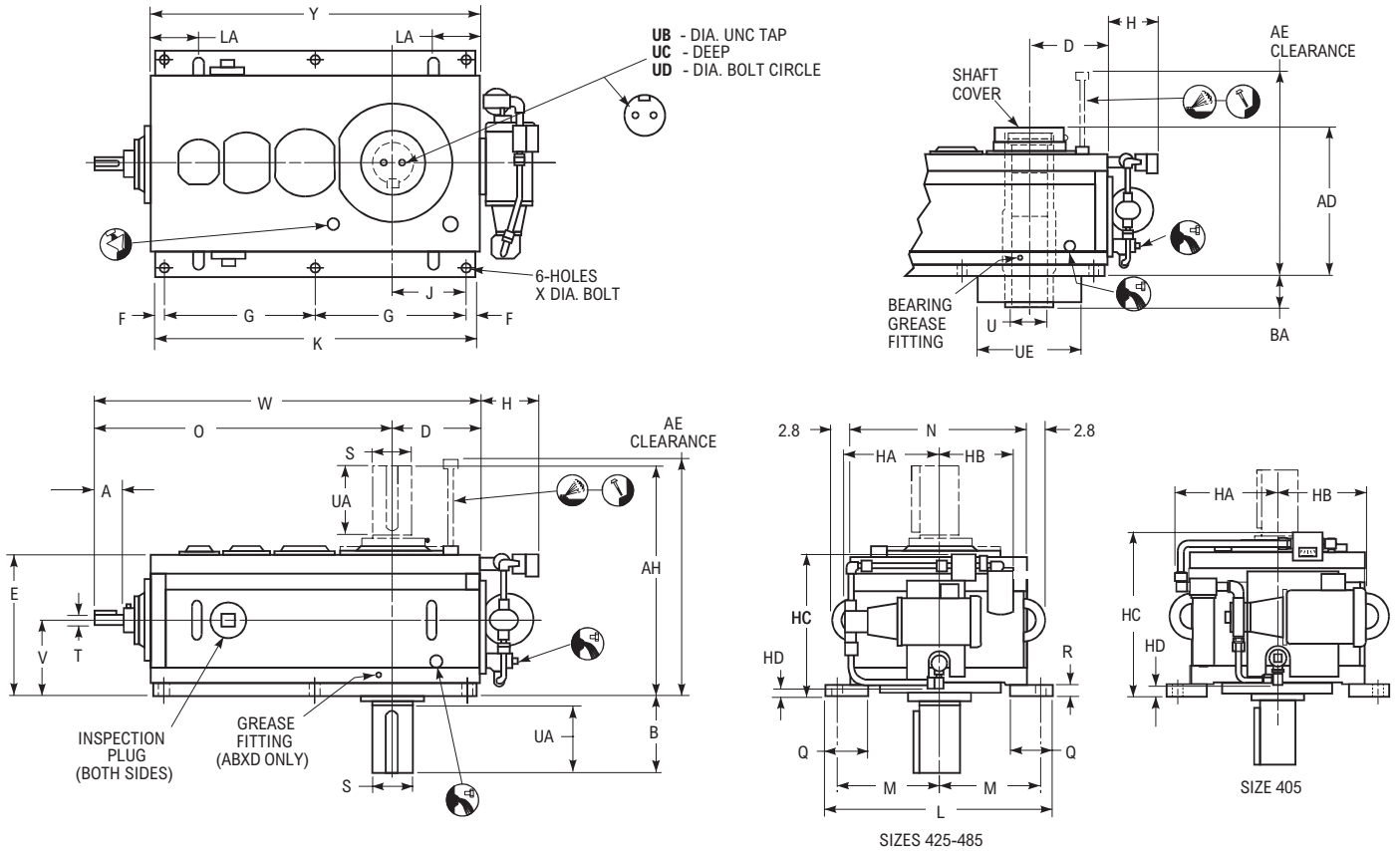
① Dimensions are for reference only and are subject to change without notice unless certified.  
 ② Sizes 405 thru 465, tolerance is +.0016, -.0000; Size 485 thru 555 tolerance is +.0020, -.0000.

# Type ABX & ABXQ Triple Reduction

## Sizes 405-485

Type ABXQ – Refer to **page <?>** for dimensions of Hollow Low-Speed Shaft with Keeper Plate.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AD	AE	AH	B	BA	D	E	F	G	Lubrication System					J	K	L	LA	M	N	O	Q	R
											H	HA	HB	HC	HD									
405	3.50	21.34	30.6	29.10	9.70	4.50	11.31	17.65	1.50	18.50	7.47	12.71	10.88	19.99	1.25	9.20	40.00	27.75	5.7	12.50	21.62	37.10	5.00	1.50
425	4.50	23.50	33.5	32.20	11.00	4.00	12.31	19.45	1.50	21.00	7.65	13.19	10.03	19.57	1.35	10.25	45.00	31.80	6.6 ⑤	14.50	24.62	43.71	6.00	1.60
445	5.00	25.50	36.4	35.60	12.20	4.60	14.62	21.41	1.75	24.00	9.92	16.88	12.09	21.42	1.18	12.25	51.50	37.00	6.7	16.75	29.25	48.60	7.00	1.81
465	5.50	27.23	39.2	39.20	14.00	4.60	16.62	23.16	1.95 ④	27.20	9.92	18.88	13.34	23.20	1.42	14.10	58.25	41.00	7.7	18.75	33.25	54.50	7.00	1.79
485	7.00	29.18	41.9	43.10	15.90	5.40	18.50	25.00	2.29	26.90	9.92	18.88	15.09	24.97	1.87	15.60	58.38	46.50	9.4 ⑤	21.00	37.00	62.60	8.00	2.00

Drive Size ①	Low-Speed Shaft ③						Keyed Hollow Low-Speed Shaft			High-Speed Shaft ③		V	W	X ②	Y	Wt (lb)
	S	Key	UA	UB	UC	UD	U + .002 - .000	UE + .000 - .005	Keyway	T	Key					
405	5.000	1.250 x 1.250 x 7.500	8.66	0.750	1.88	3.50	5.375	15.249	1.000 x 0.312	1.750	0.375 x 0.375 x 3.000	9.70	48.41	1.125	41.12	2410
425	5.750	1.500 x 1.500 x 8.000	10.06	1.125	2.25	3.50	6.000	15.749	1.500 x 0.265	2.250	0.500 x 0.500 x 4.000	10.60	56.02	1.250	46.01	3379
445	6.500	1.500 x 1.500 x 10.000	11.38	1.250	2.50	4.00	6.750	18.499	1.500 x 0.510	2.500	0.625 x 0.625 x 4.500	11.70	63.22	1.500	52.67	4697
465	7.250	1.750 x 1.500 x 11.000	12.68	1.250	2.50	4.75	7.500	20.999	1.500 x 0.510	2.750	0.625 x 0.625 x 5.000	12.60	71.12	1.500	59.43	6933
485	8.000	2.000 x 1.500 x 12.000	14.00	1.500	3.00	5.00	8.500	23.749	1.500 x 0.510	3.500	0.875 x 0.875 x 6.000	13.60	81.10	2.000	59.50	8703

① Gear drives are for horizontal floor-mounted operation with a maximum momentary tilt of 2° unless specifically stated otherwise. Dimensions are for reference only and are subject to change without notice unless certified.

② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC fasteners.

③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

④ Dimension shown is for high-speed end of drive. Low speed end of drive is 1.90".

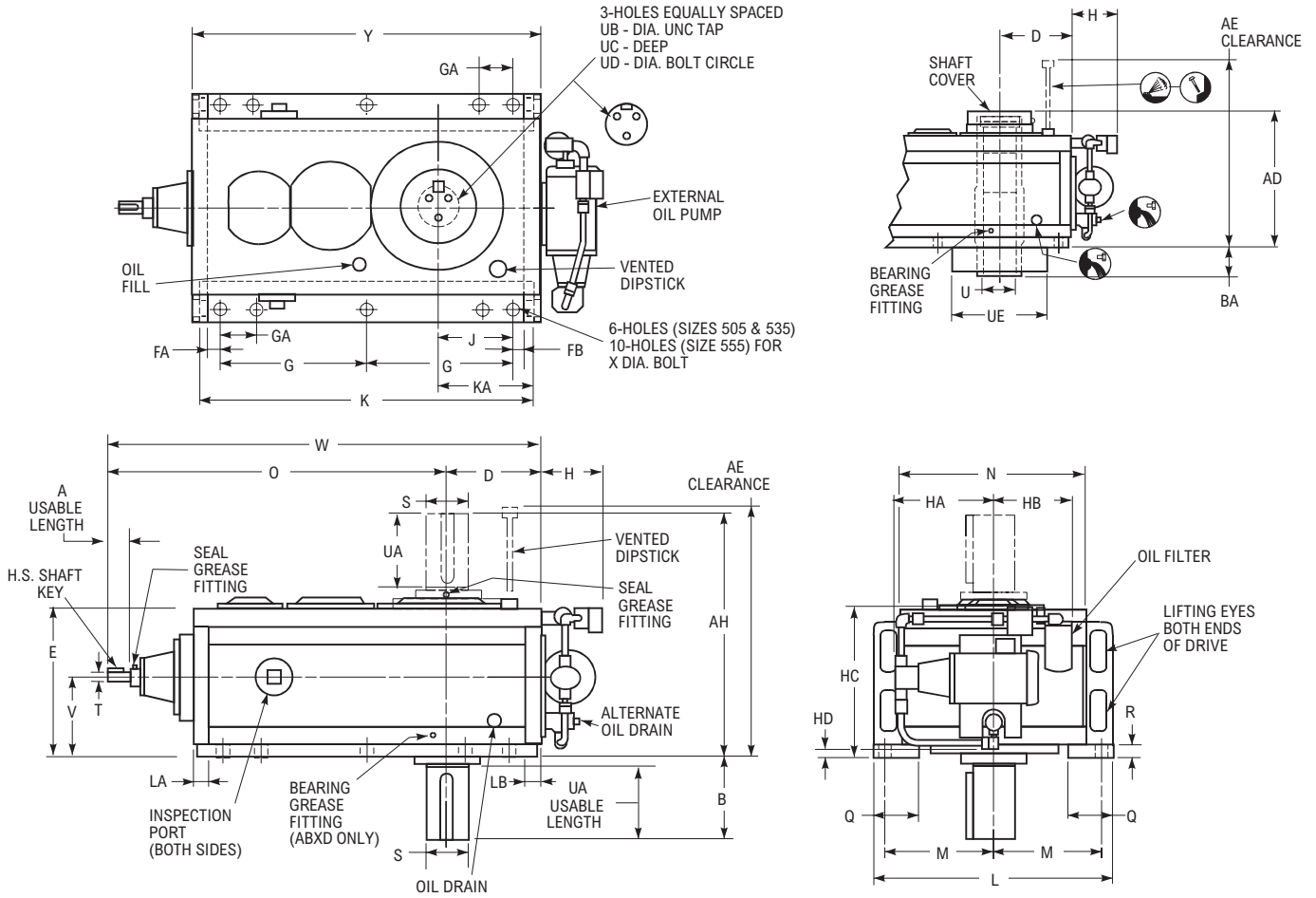
⑤ Dimension shown for Size 425 is for high-speed end of drive. Low speed end is 6.7".  
Dimension shown for Size 485 is for high-speed end of drive. Low speed end is 9.5".

# Type ABX & ABXQ Triple Reduction

## Sizes 505-555

Type ABXQ – Refer to page <?> for dimensions of Hollow Low-Speed Shaft with Keeper Plate.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AD	AE	AH	B	BA	D	E	G	GA	Lubrication System									
											H	HA	HB	HC	HD	J	K	KA	L	M
505	7.50	33.06	47.1	47.62	17.32	6.80	19.62	27.87	27.00	—	9.91	16.82	16.34	27.67	2.80	13.50	64.62	18.88	50.50	22.75
535	7.50	35.18	50.8	52.00	19.50	6.80	22.62	30.00	31.75	—	9.91	20.00	18.84	29.68	3.05	16.50	74.25	21.75	56.50	25.75
555	9.00	40.39	58.5	59.30	21.80	6.60	24.62	34.95	35.00	10.00	9.91	20.00	20.84	34.51	3.41	18.00	81.75	23.75	61.50	28.25

Drive Size ①	N	O	Q	R	Low-Speed Shaft ③					Keyed Hollow Low-Speed Shaft			High-Speed Shaft ③				Wt (lb)				
					S	Key	UA	UB	UC	UD	U +0.002 -0.000	UE +0.000 -0.005	Keyway	T	Key	V	W	X ②	Y	AXV	AXVQ
505	39.25	70.71	10.50	2.25	9.250	2.500 x 1.750 x 14.00	16.18	1.500	3.00	6.00	9.001	24.999	2.000 x 0.510	3.750	0.875 x 0.875 x 6.50	15.16	90.33	2.250	65.83	12,450	12,500
535	45.25	77.80	10.50	2.25	10.500	2.500 x 1.750 x 16.00	18.38	1.500	3.00	7.50	10.501	27.999	2.500 x 0.760	3.750	0.875 x 0.875 x 6.50	16.25	100.42	2.250	75.92	16,500	16,650
555	49.25	87.40	12.00	2.31	11.500	3.000 x 2.000 x 17.00	20.12	1.750	3.50	8.00	11.502	28.999	3.000 x 0.760	4.500	1.000 x 1.000 x 8.50	18.75	112.02	2.250	83.32	23,500	23,050

① Gear drives are for horizontal floor-mounted operation only (output shaft vertical) unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.

② Use ASTM A-354 Grade BC fasteners.

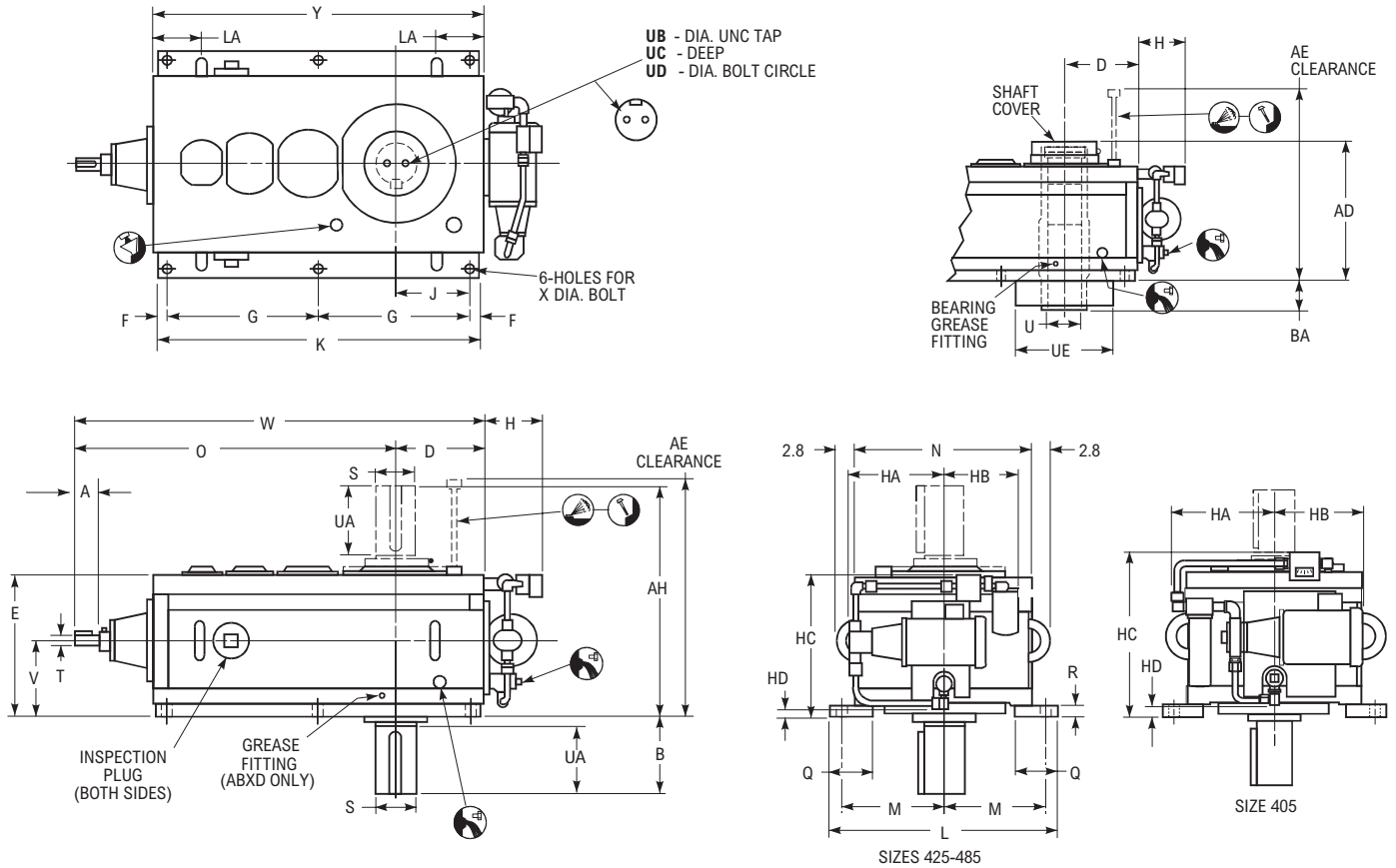
③ Shaft diameters are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

# Type ABX & ABXQ Quadruple Reduction

## Sizes 405-485

Type ABXQ – Refer to **page <?>** for dimensions of Hollow Low-Speed Shaft with Keeper Plate.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AD	AE	AH	B	BA	D	E	F	G	Lubrication System					J	K	L	LA	M	N	O	Q	R
											H	HA	HB	HC	HD									
405	3.00	21.34	30.6	29.10	9.70	4.50	11.31	17.65	1.50	18.50	7.47	12.71	10.88	19.99	1.25	9.20	40.00	27.75	5.7	12.50	21.62	39.60	5.00	1.50
425	3.50	23.50	33.5	32.20	11.00	4.00	12.31	19.45	1.50	21.00	7.65	13.19	10.03	19.57	1.35	10.25	45.00	31.80	6.6 ⑤	14.50	24.62	45.80	6.00	1.60
445	3.50	25.50	36.4	35.60	12.20	4.60	14.62	21.41	1.75	24.00	9.92	16.88	12.09	21.42	1.18	12.25	51.50	37.00	6.7	16.75	29.25	49.89	7.00	1.81
465	4.50	27.23	39.2	39.20	14.00	4.60	16.62	23.16	1.95 ④	27.20	9.92	18.88	13.34	23.20	1.42	14.10	58.25	41.00	7.7	18.75	33.25	58.20	7.00	1.79
485	5.00	29.18	41.9	43.10	15.90	5.40	18.50	25.00	2.41 ④	30.60	9.92	18.88	15.09	24.97	1.87	15.60	56.90	46.50	9.4 ⑤	21.00	37.00	64.60	8.00	2.00

Drive Size ①	Low-Speed Shaft ③				Keyed Hollow Low-Speed Shaft			High-Speed Shaft ③				V	W	X ②	Y	Wt (lb)
	S	Key	UA	UB	UC	UD	U + .002 - .000	UE + .000 - .005	Keyway	T	Key					
405	5.000	1.250 x 1.250 x 7.500	8.66	0.750	1.88	3.50	5.375	15.249	1.000 x 0.312	1.500	0.375 x 0.375 x 2.500	9.70	50.91	1.125	41.12	2558
425	5.750	1.500 x 1.500 x 8.000	10.06	1.125	2.25	3.50	6.000	15.749	1.500 x 0.265	1.750	0.375 x 0.375 x 3.000	10.60	58.11	1.250	46.01	3383
445	6.500	1.500 x 1.500 x 10.000	11.38	1.250	2.50	4.00	6.750	18.499	1.500 x 0.510	1.750	0.375 x 0.375 x 3.000	11.70	64.51	1.500	52.67	4664
465	7.250	1.750 x 1.500 x 11.000	12.68	1.250	2.50	4.75	7.500	20.999	1.500 x 0.510	2.250	0.500 x 0.500 x 4.000	12.60	74.82	1.500	59.43	6990
485	8.000	2.000 x 1.500 x 12.000	14.00	1.500	3.00	5.00	8.500	23.749	1.500 x 0.510	2.500	0.625 x 0.625 x 4.500	13.60	83.10	2.000	67.04	9184

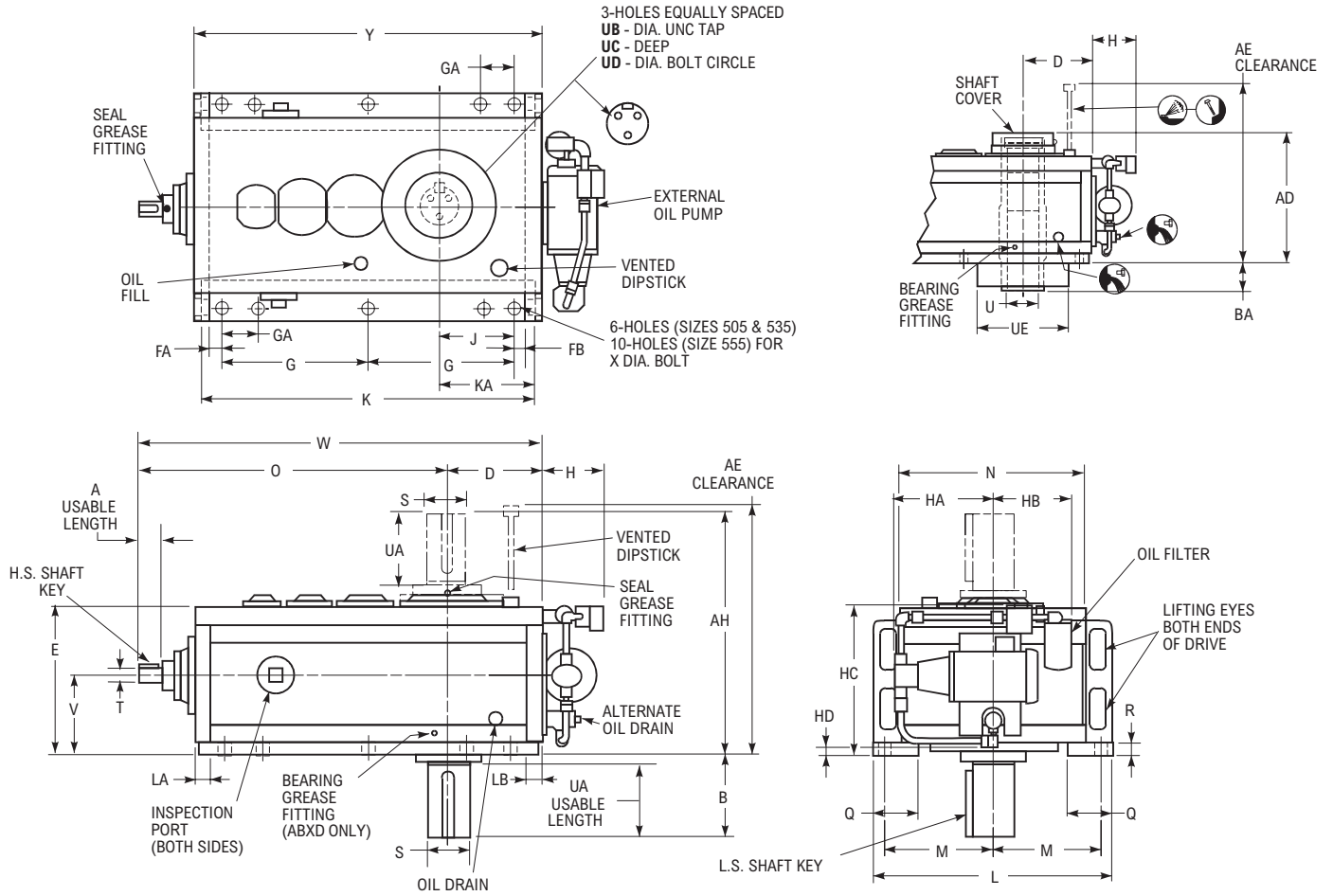
- ① Gear drives are for horizontal floor-mounted operation with a maximum momentary tilt of 2° unless specifically stated otherwise. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC fasteners.
- ③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
- ④ Dimension shown for Size 465 is for high-speed end of drive. Low speed end is 1.90".  
Dimension shown for Size 485 is for high-speed end of drive. Low speed end is 2.29".
- ⑤ Dimension shown for Size 425 is for high-speed end of drive. Low speed end is 6.7".  
Dimension shown for Size 485 is for high-speed end of drive. Low speed end is 9.5".

# Type ABX & ABXQ Quadruple Reduction

## Sizes 505-555

Type ABXQ – Refer to [page <?>](#) for dimensions of Hollow Low-Speed Shaft with Keeper Plate.

For drives outfitted with a Smart Condition Monitoring System see catalog SS1-001 for additional drive dimensional information.



## Dimensions (in)

Drive Size ①	A	AD	AE	AH	B	BA	D	E	G	GA	Lubrication System					J	K	KA	L	M
											H	HA	HB	HC	HD					
505	5.50	33.06	47.1	47.62	17.32	6.80	19.62	27.87	31.00	—	9.91	16.82	16.34	27.67	2.80	13.50	72.90	18.88	50.50	22.75
535	5.50	35.18	50.8	52.00	19.50	6.80	22.62	30.00	35.75	—	9.91	20.00	18.84	29.68	3.05	16.50	82.25	21.75	56.50	25.75
555	7.50	40.39	58.5	59.30	21.80	6.60	24.62	34.95	40.00	10.00	9.91	20.00	20.84	34.51	3.41	18.00	92.75	23.75	61.50	28.25

Drive Size ①	N	O	Q	R	Low-Speed Shaft ③					Keyed Hollow Low-Speed Shaft			High-Speed Shaft ③				Wt (lb)				
					S	Key	UA	UB	UC	UD	U + .002 - .000	UE + .000 - .005	Keyway	T	Key	V	W	X ②	Y	AXV	AXVQ
505	39.25	72.02	10.50	2.25	9.250	2.500 x 1.750 x 14.00	16.18	1.500	3.00	6.00	9.001	24.999	2.000 x 0.510	2.750	0.625 x 0.625 x 5.00	15.16	91.64	2.250	74.28	13,200	13,250
535	45.25	79.02	10.50	2.25	10.500	2.500 x 1.750 x 16.00	18.38	1.500	3.00	7.50	10.501	27.999	2.500 x 0.760	2.750	0.625 x 0.625 x 5.00	16.25	101.64	2.250	84.28	18,550	18,400
555	49.25	94.21	12.00	2.31	11.500	3.000 x 2.000 x 17.00	20.12	1.750	3.50	8.00	11.502	28.999	3.000 x 0.760	3.750	0.875 x 0.875 x 6.50	18.75	118.83	2.250	94.32	24,600	22,950

① Gear drives are for horizontal floor-mounted operation only (output shaft vertical) unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.

② Use ASTM A-354 Grade BC fasteners.

③ Shaft diameters under 3" are held to limits of +.0000", -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

# Availability & Compatibility of Accessories

## Type AR & AXV

Type AR	Electric Fan High-Speed End	Electric Fan Low-Speed End ④	Shaft Fan	Cooling Tubes ⑤	Pump & Cooler	Flange Motor Adapter ③	Motor Mount ⑥	Motor Bracket ⑥	Backstop	Torque Arm
Electric Fan, High-Speed End	–	–	–	–	–	②	–	②	–	–
Electric Fan, Low-Speed End	–	–	–	–	–	OK	OK	OK	OK	OK
Shaft Fan	–	–	–	–	–	–	①	–	OK	OK
Cooling Tubes	–	–	–	–	–	OK	–	OK	OK	OK
Pump & Cooler	–	–	–	–	–	OK	OK	OK	OK	OK
Flange Motor Adapter ③	②	OK	–	OK	OK	–	–	–	OK	OK
Motor Mount	–	OK	①	–	OK	–	–	–	OK	OK
Motor Bracket	②	OK	–	OK	OK	–	–	–	OK	OK
Backstop	–	OK	OK	OK	OK	OK	OK	OK	–	OK
Torque Arm	–	OK	OK	OK	OK	OK	OK	OK	OK	–

Type AXV	Electric Fan High-Speed End	Electric Fan Low-Speed End ④	Cooling Tubes ⑤	Pump & Cooler	Flange Motor Adapter ③	Motor Mount ⑥	Motor Bracket ⑥
Electric Fan, High-Speed End	–	–	–	–	②	–	②
Electric Fan, Low-Speed End ④	–	–	–	–	OK	OK	OK
Cooling Tubes	–	–	–	–	OK	–	OK
Pump & Cooler	–	–	–	–	OK	OK	OK
Flange Motor Adapter ③	②	OK	OK	OK	–	–	–
Motor Mount	–	OK	–	OK	–	–	–
Motor Bracket	②	OK	OK	OK	–	–	–

- ① Check usable shaft length and potential interference between fan and motor mount.
- ② Double reduction only.
- ③ Will be developed upon receipt of order.
- ④ External lubrication pump is mounted in the alternate location, refer to **page 26**.
- ⑤ Cooling tubes not available for Sizes 505, 535 & 555.
- ⑥ All motor accessories for Sizes 505, 535 & 555 will be developed upon receipt of order.

# Availability & Compatibility of Accessories

## Type ABR & ABX

Type ABR	Electric Fan Low-Speed End	Shaft Fan	Cooling Tubes ③	Pump & Cooler	Flange Motor Adapter ④	Motor Mount ④	Motor Bracket ④	Backstop	Torque Arm
Electric Fan, Low-Speed End	–	–	–	–	OK	OK	OK	OK	OK
Shaft Fan	–	–	–	–	–	①	–	①	–
Cooling Tubes	–	–	–	–	–	OK	–	OK	OK
Pump & Cooler	–	–	–	–	OK	OK	OK	OK	OK
Flange Motor Adapter	OK	–	–	OK	①	–	–	OK	OK
Motor Mount	OK	①	OK	OK	–	–	–	–	OK
Motor Bracket	OK	–	–	OK	–	–	–	OK	OK
Backstop	OK	①	OK	OK	OK	–	OK	–	OK
Torque Arm	OK	OK	OK	OK	OK	OK	OK	OK	–

Type ABX	Electric Fan High-Speed End ②	Shaft Fan	Cooling Tubes ③	Pump & Cooler	Flange Motor Adapter ①	Motor Mount ④	Motor Bracket ④
Electric Fan, Low-Speed End ②	①	–	–	–	OK	①	OK
Shaft Fan	–	–	–	–	–	①	–
Cooling Tubes	–	–	–	–	–	OK	–
Pump & Cooler	–	–	–	–	OK	OK	OK
Flange Motor Adapter ①	OK	–	–	OK	–	–	–
Motor Mount	①	①	OK	OK	–	–	–
Motor Bracket	OK	–	–	OK	–	–	–

① Will be developed upon receipt of order.

② External lubrication pump is mounted in the alternate location, refer to **page 26**.

③ Cooling tubes not available for Sizes 505, 535 & 555. Sizes 405 & 425 require alternate pump location.

④ All motor accessories for Sizes 505, 535 & 555 will be developed upon receipt of order.

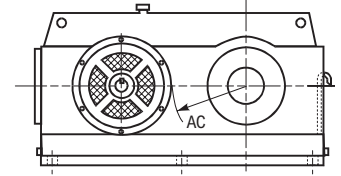
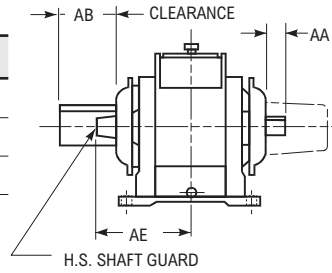
# Shaft-Driven Fan Clearance

## Type A

### Single Reduction – Dimensions (in) ①

Drive Size ①	AA	AB	AC	AE
305	2.15	3.44	2.88	10.44
325	2.25	3.75	3.13	11.81
345	2.75	4.62	4.38	12.44
365	3.06	5.31	4.00	14.25

① Sizes 385 thru 525A1 are not available with shaft driven fans



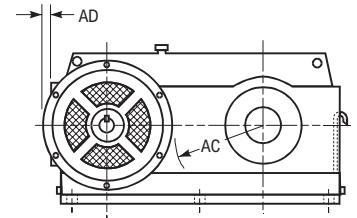
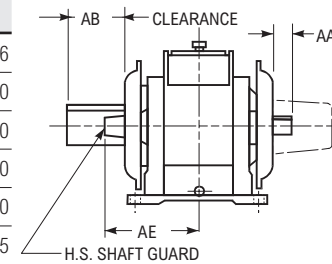
### Double Reduction – Dimensions (in) ②

Drive Size ④	AA	AB	AC	AD ③	AE	Drive Size ④	AA	AB	AC	AD ③	AE
305	1.44	3.44	7.63	1.31	10.00	425	3.50	8.00	9.50	-	18.06
325	1.81	4.06	9.56	1.12	10.38	445	4.12	8.82	11.42	-	20.60
345	2.19	4.81	11.38	0.68	11.44	465	5.12	10.60	13.62	-	23.00
365	2.25	5.25	13.19	0.62	13.25	485	5.82	13.62	17.12	0.76	24.10
385	2.62	6.40	7.06	-	14.90	505	6.26	14.40	18.50	1.38	27.70
405	2.82	7.06	8.06	-	16.32	525	7.38	17.50	22.00	1.12	28.25

② Dimensions are for reference only and are subject to change without notice unless certified.

③ Where there is no dimension shown, fan does not extend beyond housing.

④ Sizes 545 thru 585A2 are not available with shaft driven fans.



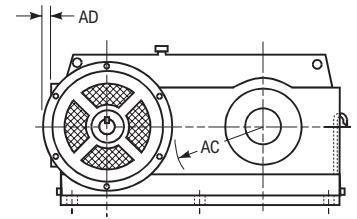
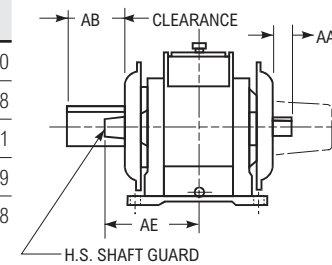
### Triple Reduction – Dimensions (in) ⑤

Drive Size ⑦	AA	AB	AC	AD ⑥	AE	Drive Size ⑦	AA	AB	AC	AD ⑥	AE
385	2.06	7.12	14.76	0.76	13.68	505	4.18	15.53	32.12	-	23.60
405	1.88	7.76	16.02	1.38	14.65	525	5.00	18.08	37.12	0.50	25.38
425	2.38	8.94	19.02	0.42	15.66	545	5.50	18.25	42.25	0.37	30.71
445	2.68	10.00	21.76	0.98	17.40	565	6.25	19.31	45.60	-	34.59
465	2.75	11.68	25.08	1.32	18.92	585	6.75	21.04	50.10	-	37.18
485	3.58	14.58	28.56	0.42	20.62						

⑤ Dimensions are for reference only and are subject to change without notice unless certified.

⑥ Where there is no dimension shown, fan does not extend beyond housing.

⑦ Sizes 305 thru 365A3 are not available with shaft driven fans.

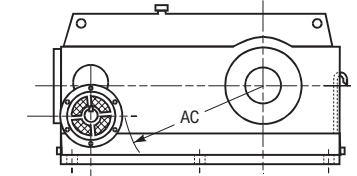
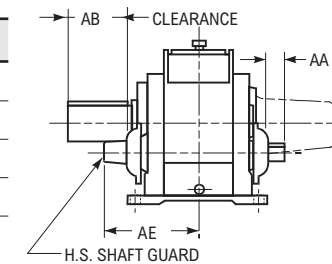


### Quadruple Reduction – Dimensions (in) ⑧

Drive Size ⑨	AA	AB	AC	AE
445	2.32	10.88	24.58	16.00
465	2.32	12.68	28.75	16.92
485	2.98	15.41	32.37	19.30
505	3.50	16.74	35.26	21.36
525	3.82	19.00	39.38	23.00

⑧ Dimensions are for reference only and are subject to change without notice unless certified.

⑨ Fan assemblies must be removed from drive to install foundation bolts. Sizes 385 thru 425A4 are not available with shaft fans.

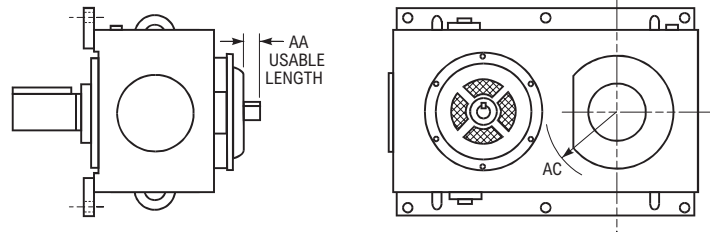


# Shaft-Driven Fan Clearance

## Type AR, ARJ & AXV

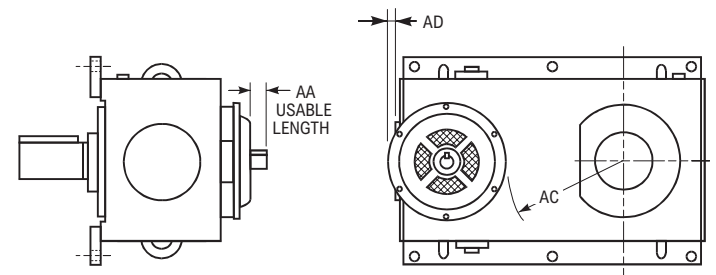
### Double Reduction – Dimensions (in)

Drive Size ②	AA	AC	AD ①
405	2.82	8.06	–
425	3.50	9.50	–
445	4.12	11.42	–
465	5.12	13.62	–
485	5.82	17.12	0.44



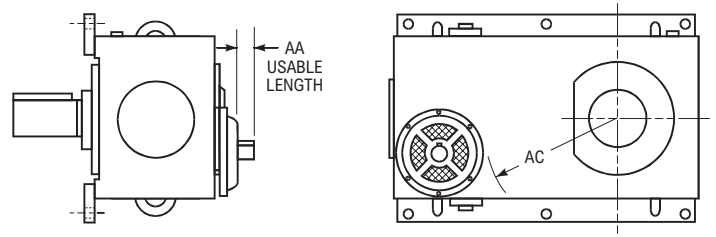
### Triple Reduction – Dimensions (in)

Drive Size ②	AA	AC	AD ①
405	1.88	16.02	0.12
425	2.38	19.02	–
445	2.68	21.76	0.02
465	2.75	25.08	–
485	3.58	28.56	0.43



### Quadruple Reduction – Dimensions (in)

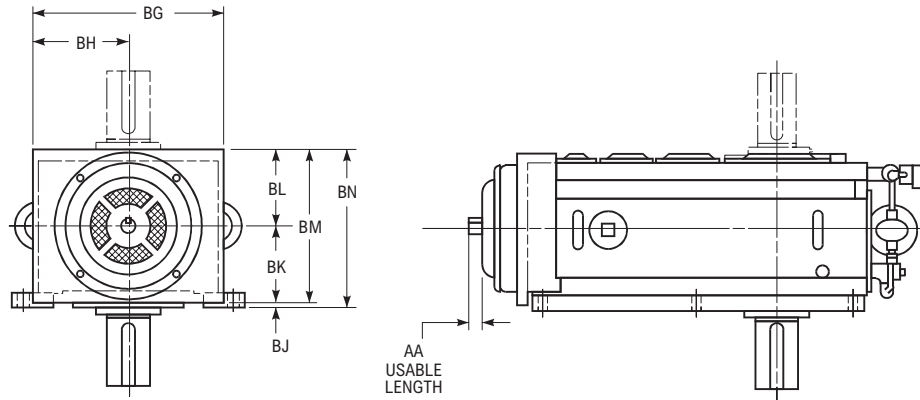
Drive Size ②	AA	AC
445	2.32	24.58
465	2.32	28.75
485	2.98	32.37



- ① Where dimensions are not shown, fan does not extend beyond housing.  
 ② Dimensions are for reference only and are subject to change without notice unless certified.

# Shaft-Driven Fan Clearance

## Type ABR & ABX Triple & Quadruple Reduction



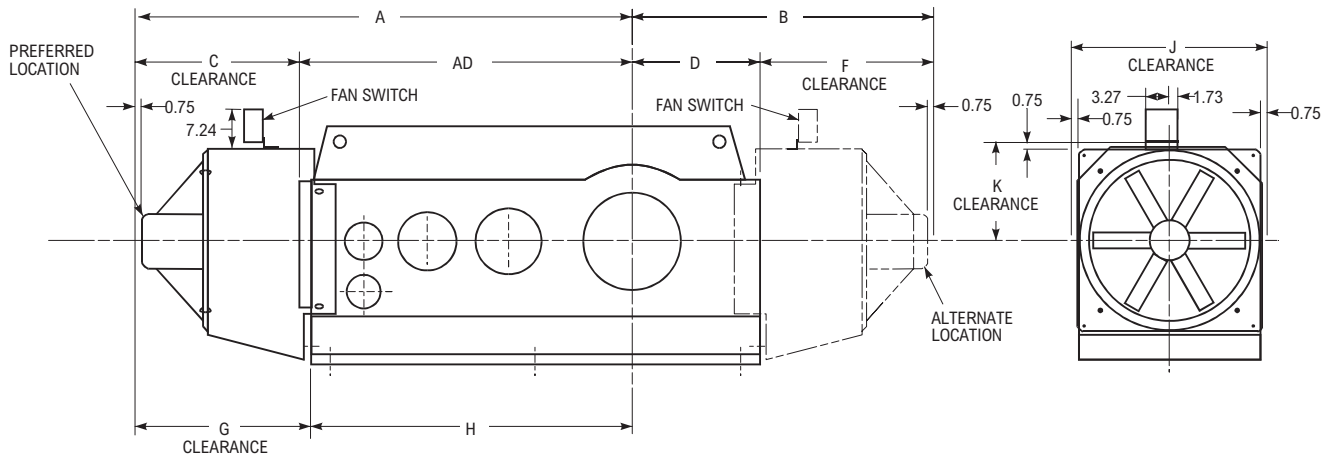
### Dimensions (in)

Drive Size ①	AA		BG	BH	BJ	BK	BL	BM	BN
	Triple Reduction	Quadruple Reduction							
405	1.88	—	23.05	11.52	0.63	9.07	9.07	18.14	18.77
425	2.56	1.88	26.05	13.02	0.53	10.07	10.07	20.14	20.67
445	2.76	1.88	30.55	15.27	0.76	10.94	10.94	21.88	22.64
465	2.88	2.56	34.55	17.27	0.40	12.20	12.20	24.40	24.80
485	4.12	2.76	38.30	19.15	0.53	13.07	13.07	26.14	26.67

① Dimensions are for reference only and are subject to change without notice unless certified.

# Electric Fan Clearance

## Type A



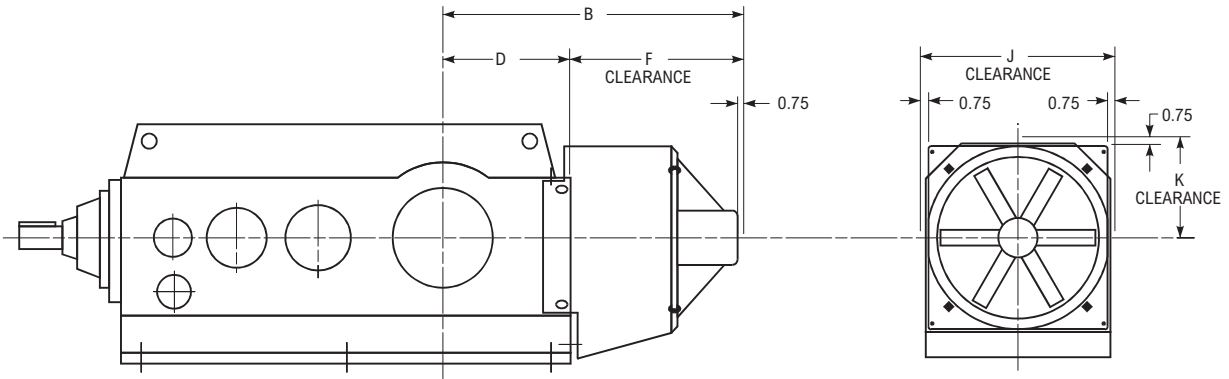
### Dimensions (in)

Drive Size ①	Reduction	Fan Diameter	A	B	C	AD	D	F	G	H	J	K
305	1, 2 & 3	12	33.1	26.6	17.62	15.50	8.50	18.12	18.12	15.00	17.5	9.5
325	1, 2 & 3	12	35.3	27.5	17.62	17.63	9.50	18.00	18.00	17.25	17.5	9.5
345	1, 2 & 3	12	37.6	28.6	17.62	20.00	16.62	18.00	18.00	19.62	17.5	9.5
365	1, 2 & 3	14	40.9	30.1	17.62	23.25	12.13	18.00	18.00	22.87	19.1	10.6
385	1	16	36.2	28.1	17.43	18.74	10.06	17.99	17.99	18.18	21.5	10.9
	2, 3 & 4	14	44.9	28.8	17.60	27.28	10.24	18.52	18.52	26.36	19.5	10.6
405	1	18	39.6	30.0	18.14	21.44	11.20	18.78	18.78	20.80	23.0	11.9
	2, 3 & 4	14	47.5	29.1	17.49	30.00	11.20	17.89	17.89	29.60	19.5	9.9
425	1	20	42.2	32.9	18.86	23.26	12.74	20.12	20.12	22.00	28.0	14.1
	2, 3 & 4	16	53.9	33.9	19.94	33.96	12.74	21.14	21.14	32.76	21.5	10.9
445	1	22	50.3	39.3	23.11	27.14	14.50	24.75	24.75	25.50	30.0	14.9
	2, 3 & 4	18	57.9	35.4	19.40	38.50	14.50	20.90	20.90	37.00	23.0	11.9
465	1	24	55.4	42.4	24.82	30.50	16.50	25.82	25.82	29.50	30.5	15.4
	2, 3 & 4	20	63.7	38.7	20.70	43.00	16.50	22.20	22.20	41.50	26.3	14.1
485	1	24	61.6	49.6	28.08	33.50	19.00	30.58	30.58	31.00	30.5	15.4
	2	22	62.2	41.2	20.00	42.12	19.00	22.12	22.12	40.00	28.0	14.1
505	3 & 4	22	69.7	41.2	20.00	49.62	19.00	22.12	22.12	47.50	28.0	14.1
	1	28	63.9	50.9	27.90	36.00	20.50	30.40	30.40	33.50	34.2	17.3
525	2	24	70.7	46.2	23.57	47.12	20.50	25.69	25.69	45.00	30.5	15.4
	3 & 4	24	80.0	46.2	23.57	56.42	20.50	25.69	25.69	54.30	30.5	15.4
	1	28	66.9	52.4	26.90	40.00	22.50	29.90	29.90	37.00	34.2	17.3
545	2	24	75.4	50.4	25.52	50.88	22.50	27.90	27.90	48.50	30.5	15.4
	3 & 4	24	85.9	50.4	25.52	60.38	22.50	27.90	27.90	58.00	30.5	15.4
	2	28	86.8	54.8	29.37	57.38	24.50	30.25	31.75	55.00	42.5	24.0
565	3	28	95.3	54.8	27.87	67.38	24.50	30.25	30.25	65.00	42.5	24.0
	2	28	89.3	56.8	27.87	61.88	25.50	31.25	30.25	59.50	46.7	21.6
585	3	28	104.3	56.8	27.87	76.38	25.50	31.25	30.25	74.00	46.7	21.6
	2	28	96.3	59.3	27.87	68.38	29.00	30.25	30.25	66.00	52.0	21.6
585	3	28	109.3	59.3	27.87	71.38	29.00	30.25	30.25	79.00	52.0	21.6

① Drawings are representative of this series of drives and may not agree in exact detail for all drive sizes. Dimensions are for reference only and are subject to change without notice unless certified.

# Electric Fan Clearance

## Type AB All Reductions



### Dimensions (in)

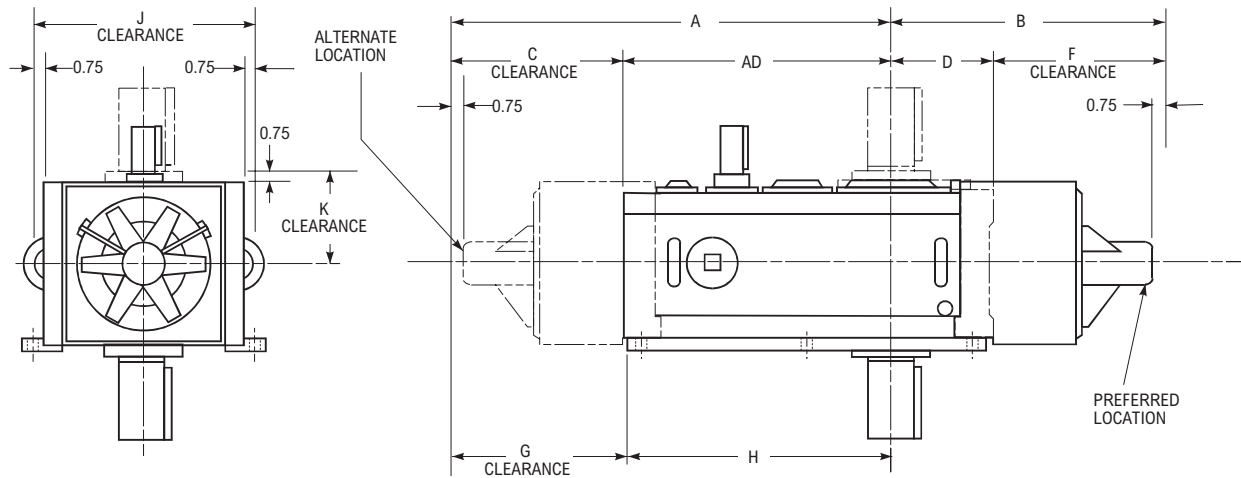
Drive Size ①	Reduction	Fan Diameter	B	D	F	J	K
385	AB2	16	28.1	10.06	17.99	21.5	10.9
	AB3 & AB4	14	28.8	10.24	18.52	19.5	10.6
405	AB2	18	30.0	11.20	18.78	23.0	11.9
	AB3 & AB4	14	29.1	11.20	17.89	19.5	9.9
425	AB2	20	32.9	12.74	20.12	28.0	14.1
	AB3 & AB4	16	33.9	12.74	21.14	21.5	10.9
445	AB2	22	39.3	14.50	24.75	30.0	14.9
	AB3 & AB4	18	35.4	14.50	20.90	23.0	11.9
465	AB2	24	42.4	16.50	25.82	30.5	15.4
	AB3 & AB4	20	38.7	16.50	22.20	26.3	14.1
485	AB2	24	49.6	18.50	30.58	30.5	15.4
	AB3	22	41.2	18.50	22.12	28.0	14.1
	AB4	22	41.2	18.50	22.12	28.0	14.1
505	AB2	28	50.9	20.00	30.40	34.2	17.3
	AB3	24	46.2	20.00	25.69	30.5	15.4
	AB4	24	46.2	20.00	25.69	30.5	15.4
525	AB2	28	52.4	22.50	29.90	34.2	17.3
	AB3	24	50.4	22.50	27.90	30.5	15.4
	AB4	24	50.4	22.50	27.90	30.5	15.4

① Drawings are representative of this series of drives and may not agree in exact detail for all drive sizes. Dimensions are for reference only and are subject to change without notice unless certified.

# Electric Fan Clearance

## Type AR & AXV

When Type AXV gear drives are furnished with electric fan, the external pump is mounted in the alternate location. Refer to **page 26**.

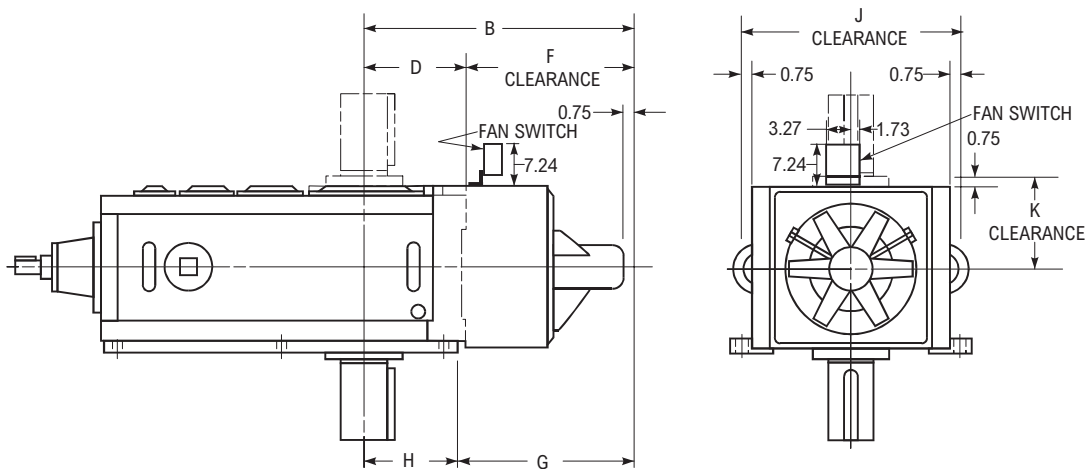


### Dimensions (in)

Drive Size ①	Reduction	Fan Diameter	A	B	C	AD	D	F	G	H	J	K
405	All	14.0	49.15	30.55	19.34	29.81	11.31	19.24	19.85	29.30	24.55	9.82
425	All	16.0	54.15	32.69	20.45	33.70	12.31	20.38	20.90	33.25	27.55	10.82
445	All	18.0	58.62	35.06	20.57	38.05	14.62	20.44	21.12	37.50	32.05	11.69
465	All	20.0	64.74	38.43	21.93	42.81	16.62	21.81	22.49	42.25	36.05	12.95
485	2	22.0	65.44	42.78	24.44	41.00	18.50	24.28	24.95	40.49	39.80	13.82
485	3 & 4	22.0	72.96	42.78	24.42	48.54	18.50	24.48	24.95	48.01	39.80	13.82

① Dimensions are for reference only and are subject to change without notice unless certified.

## Type ABR & ABX



### Dimensions (in)

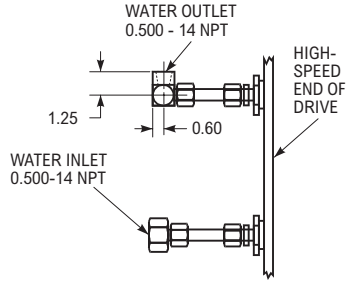
Drive Size ②	Reduction	Fan Diameter	B	D	F	G	H	J	K
405	3 & 4	14	30.55	11.31	19.24	19.85	10.70	24.55	9.82
425	3 & 4	16	32.69	12.31	20.38	20.94	11.75	27.55	10.82
445	3 & 4	18	35.06	14.62	20.44	21.06	14.00	32.05	11.69
465	3 & 4	20	38.43	16.62	21.81	22.43	16.00	36.05	12.95
485	3 & 4	22	42.78	18.50	24.28	24.89	17.89	39.80	13.82

② Dimensions are for reference only and are subject to change without notice unless certified.

# Cooling Tube Clearance

## Type A

### Water Inlet and Outlet Connections (All Drive Sizes and Reductions)



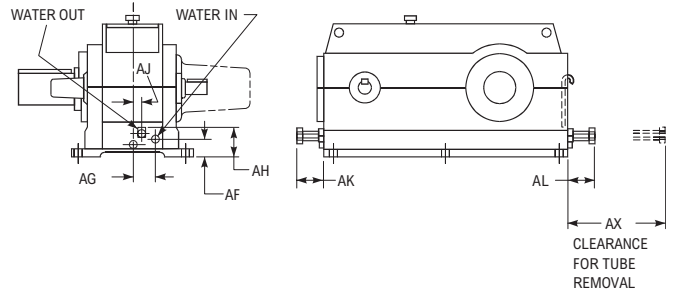
### Provide Clearance for Water Connections – Dimensions (in)

Drive Size ①	Reduction	AF	AG	AH	AJ	AK	AL	AX	Std No. of Tubes
385	1	3.00	4.20	6.50	4.20	5.3	6.7	41.0	4
	2 & 3	2.50	3.76	4.25	1.50	5.8	5.5	48.0	2
405	1	3.00	5.40	6.75	5.40	5.3	6.0	44.0	4
	2 & 3	3.00	4.05	4.75	1.79	5.8	6.5	54.0	2
425	1	2.50	4.10	7.15	4.10	5.3	6.5	47.0	6
	2 & 3	2.20	4.75	5.55	1.59	7.3	7.3	61.0	4
445	1	3.20	7.30	7.71	2.78	5.3	5.9	52.0	6
	2 & 3	2.70	4.90	5.95	1.54	5.3	5.3	63.0	4
	4	3.30	3.80	5.05	1.54	5.3	5.3	63.0	2
465	1	3.20	7.25	7.68	2.74	5.5	7.3	59.0	6
	2 & 3	3.00	4.75	7.00	2.50	6.5	6.5	71.0	4
485	1	3.20	6.56	9.48	4.30	5.8	6.3	62.0	8
	2	3.50	6.60	8.00	2.08	6.5	6.3	72.0	6
	3	3.50	6.60	8.00	2.08	5.5	5.8	78.0	6
	4	3.50	4.30	5.25	2.04	5.5	5.8	78.0	2
505	1	3.70	7.46	9.98	2.94	5.5	5.4	65.0	8
	2	3.40	8.76	7.90	4.24	6.3	6.0	78.0	6
	3	3.40	8.76	7.90	4.24	5.5	5.5	86.0	6
	4	3.70	6.46	5.45	4.20	5.5	5.5	86.0	2
525	1	4.00	8.25	10.35	6.74	5.6	5.6	71.0	8
	2	4.10	8.25	7.60	3.74	5.5	5.3	82.0	6
	3	4.10	8.25	7.60	3.74	5.5	5.8	92.0	6
	4	4.10	5.75	5.85	3.50	5.5	5.8	92.0	2
545	2	3.85	9.81	7.40	2.00	5.9	5.9	87.5	8
	3	3.85	9.81	7.40	2.00	5.6	5.6	97.5	8
565	2	4.85	10.65	8.40	3.40	5.6	5.6	93.0	8
	3	4.85	10.65	8.40	3.40	5.6	5.6	107.0	8
585	2	4.85	11.90	8.40	4.10	5.9	5.9	104.0	8
	3	4.85	11.90	8.40	4.10	5.9	5.9	116.0	8

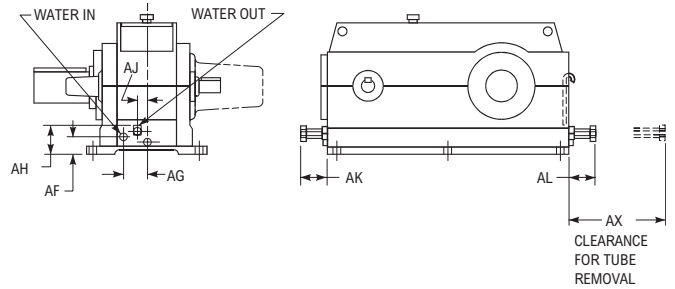
① Drawings are representative of this series of drives and do not agree in exact detail for all drive sizes. Dimensions are for reference only and are subject to change without notice unless certified. Sizes 305 thru 365, consult Factory.

A minimum flow rate of 2 gallons per minute of clean water is required to prevent tube fouling. Flow rates in excess of 5 gallons per minute may prompt tube erosion. Thermal horsepower ratings are based on a water temperature of 70°F (21°C) with 2 gallons per minute for Sizes 385 – 525 and 5 gallons per minute for Sizes 545 – 585.

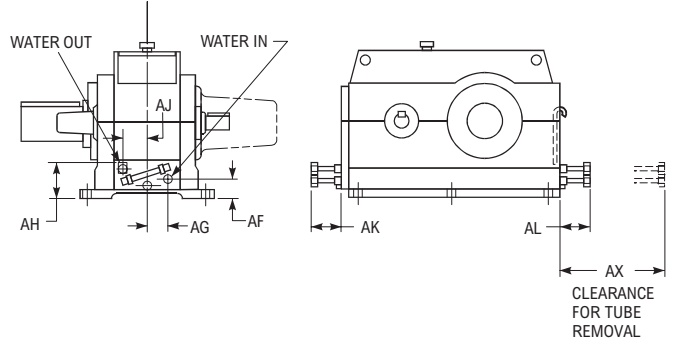
### All Drive Sizes and Reductions (Except 385A1, 405A1, 425A1 & 525A1) ①



### All Drive Sizes and Reductions (Except 385A1, 405A1, 425A1 & 525A1) ①



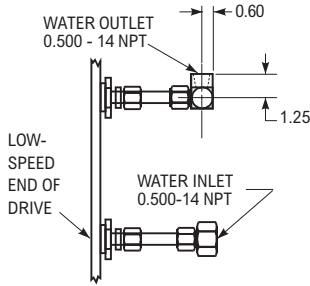
### Drive Sizes 385A1, 405A1, 425A1 & 525A1 ① Assemblies: All



# Cooling Tube Clearance

## Type AB

### Water Inlet and Outlet Connections (All Drive Sizes and Reductions)



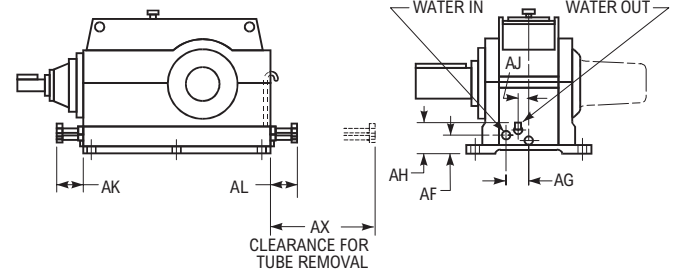
### Provide Clearance for Water Connections – Dimensions (in)

Drive Size ①	Reduction	AF	AG	AH	AJ	AK	AL	AX	Std No. of Tubes
385	AB2	1.88	—	4.38 ②	4.40 ②	5.8	6.6	41.0	3
	AB3	2.50	3.75	4.25	1.50	5.4	5.6	48.0	2
405	AB2	2.00	—	4.95	5.70	6.1	5.6	44.0	4
	AB3	3.00	4.05	4.75	1.80	5.5	6.3	53.0	2
425	AB2	2.40	2.05	5.45	6.10	6.5	6.3	48.0	4
	AB3	2.20	4.75	5.55	1.60	7.1	7.1	60.0	4
445	AB2	2.80	7.50	5.85	0.50	6.8	5.8	63.0	6
	AB3	2.70	4.90	5.95	1.54	5.1	5.1	62.0	4
	AB4	3.30	3.80	5.05	1.54	5.1	5.1	62.0	2
465	AB2	2.50	7.60	5.75	1.85	6.5	7.1	60.0	6
	AB3	3.00	4.75	7.00	2.50	6.3	6.3	71.0	4
	AB4	3.20	4.75	4.95	2.50	6.3	6.3	71.0	2
485	AB2	3.25	6.75	6.75	2.25	6.4	5.6	62.0	6
	AB3	3.50	6.60	8.00	2.08	6.1	5.9	71.0	6
	AB4	3.50	4.30	5.25	2.04	5.1	5.4	77.0	2
505	AB2	3.25	7.46	6.75	2.96	5.9	5.1	65.0	6
	AB3	3.40	8.75	7.90	4.25	5.9	5.6	77.0	6
	AB4	3.70	6.46	5.45	4.20	5.1	5.1	85.0	2
525	AB2	3.50	9.00	7.00	2.25	6.2	4.9	71.0	8
	AB3	4.10	8.25	7.60	3.75	4.9	4.7	81.0	6
	AB4	4.10	5.75	5.85	3.50	4.9	5.1	91.0	2

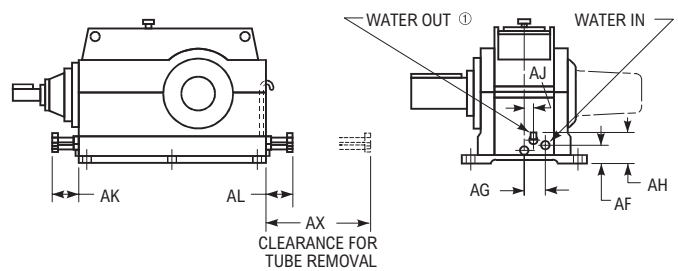
① Drawings are representative of this series of drives and do not agree in exact detail for all drive sizes or assemblies. Dimensions are for reference only and are subject to change without notice unless certified.

② Size 385AB2 only, water outlet is on high-speed end of drive.

### All Drive Sizes and Reductions ① Assemblies: 42, 44, 46, 48, 50, 52 & 54



### All Drive Sizes and Reductions ① Assemblies: 41, 43, 45, 47, 49, 51 & 53

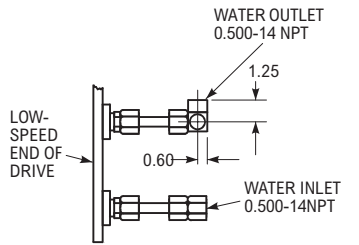


A minimum flow rate of 2 gallons per minute of clean water is required to prevent tube fouling. Flow rates in excess of 5 gallons per minute may prompt tube erosion. Thermal horsepower ratings are based on a water temperature of 70°F (21°C).

# Cooling Tube Clearance

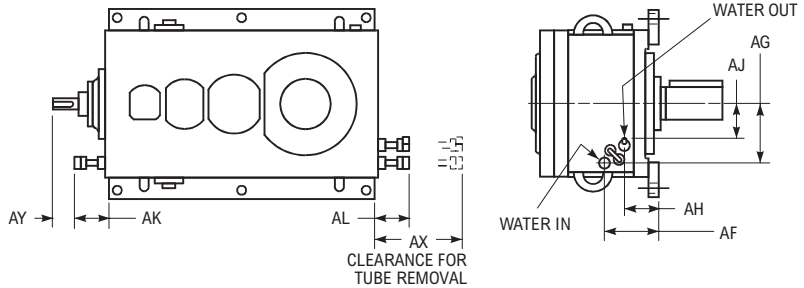
## Type AR & ABR

### Water Inlet and Outlet Connections (All Drive Sizes and Reductions)

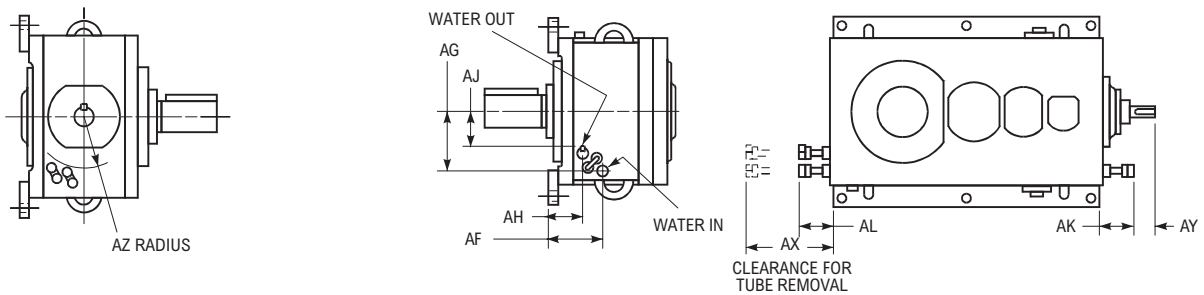


Provide Clearance for Water Connections

### Assemblies 2, 4 or 6



### Assemblies 1, 3 or 5



### Dimensions (in)

Drive Size ①	Reduction	AF	AG	AH	AJ	AK	AL	AX	AY	AZ	Std No. of Tubes
405	2 & 3	7.48	8.08	5.25	6.27	5.7	6.6	50.3	2.1	7.75	2
425	2 & 3	8.69	10.20	5.24	6.96	7.1	7.2	57.3	3.4	7.75	4
445	2 & 3	8.86	11.75	5.81	7.94	5.7	8.0	63.1	—	—	4
	4	6.59	11.35	5.81	7.94	5.7	8.0	63.1	—	—	2
465	2 & 3	9.04	13.63	6.22	9.56	5.9	6.1	68.1	—	—	4
	4	6.82	13.03	6.22	9.56	5.9	6.1	68.1	—	—	2
485	2	11.53	14.95	6.50	10.29	6.0	5.9	68.0	—	—	6
	3	11.53	14.95	6.50	10.29	6.0	6.4	76.0	—	—	6
	4	9.31	14.36	8.72	10.89	6.0	6.4	76.0	—	—	2

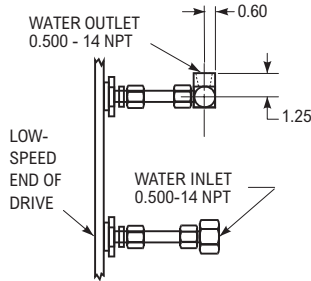
① Drawings are representative of this series of drives and do not agree in exact detail for all drive sizes. Dimensions are for reference only and are subject to change without notice unless certified.

A minimum flow rate of 2 gallons per minute of clean water is required to prevent tube fouling. Flow rates in excess of 5 gallons per minute may prompt tube erosion. Thermal horsepower ratings are based on a water temperature of 70°F (21°C).

# Cooling Tube Clearance

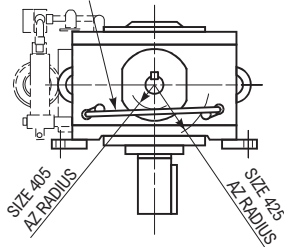
## Type AXV & ABX

### Water Inlet and Outlet Connections (All Drive Sizes and Reductions)

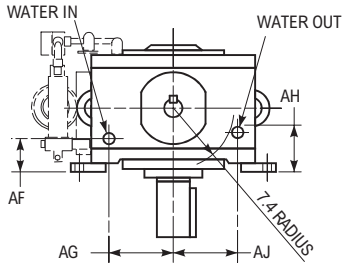


Provide Clearance for Water Connections

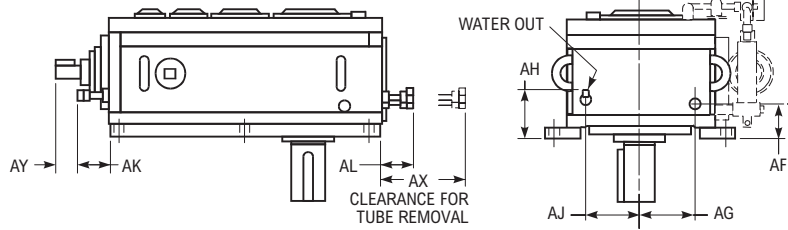
THIS TUBE ON 405 ABX ONLY  
(WITH INLET & OUTLET ON L.S. END)



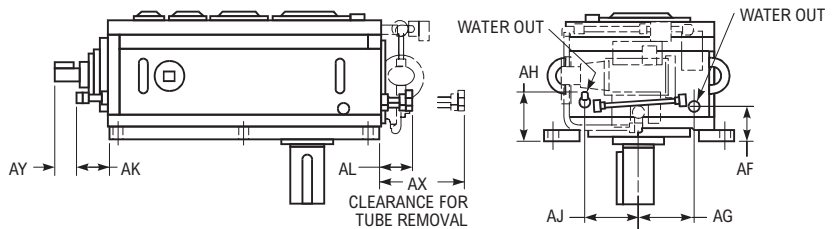
405 ABX - OPTIONAL LOCATION OF  
WATER CONNECTIONS ON H.S. END



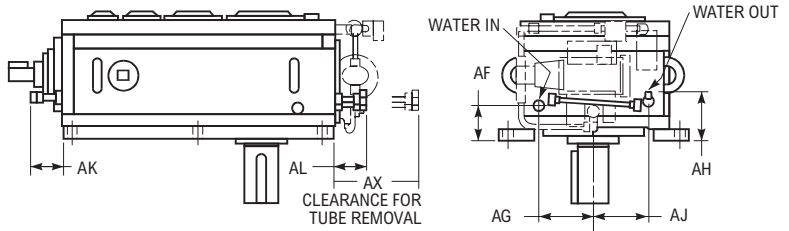
DRIVE SIZES 405 & 425 AXV2, AXV3 & ABX3



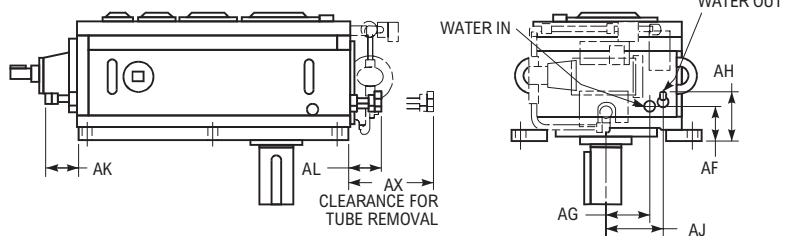
DRIVE SIZES 445 AXV2, AXV3 & ABX3



DRIVE SIZES 465 & 485 AXV2 AXV3 & ABX3



DRIVE SIZES 445, 465 & 485 AXV4 & ABX4



## Dimensions (in)

Drive Size ①	Red	AF	AG	AH	AJ	AK	AL	AX	AY	AZ	Std No. of Tubes
405 ②	2 & 3	5.50	8.50	7.00	7.60	5.7	6.6	50.3	2.1	3.7	2
425 ②	2 & 3	5.33	10.20	7.73	10.20	7.1	7.2	57.3	3.4	8.5	4
445	2 & 3	6.31	11.50	8.88	11.19	5.7	8.0	63.1	—	—	4
	4	6.31	11.50	8.88	9.62	5.7	8.0	63.1	—	—	2
465	2 & 3	6.54	12.99	8.95	12.99	5.9	6.1	68.1	—	—	4
	4	6.54	11.00	8.95	12.99	5.9	6.1	68.1	—	—	2
485	2	7.00	13.50	9.76	15.94	6.0	5.9	68.0	—	—	6
	3	7.00	13.50	9.76	15.94	6.0	6.4	76.0	—	—	6
	4	6.75	14.46	9.76	12.99	6.0	6.4	76.0	—	—	2

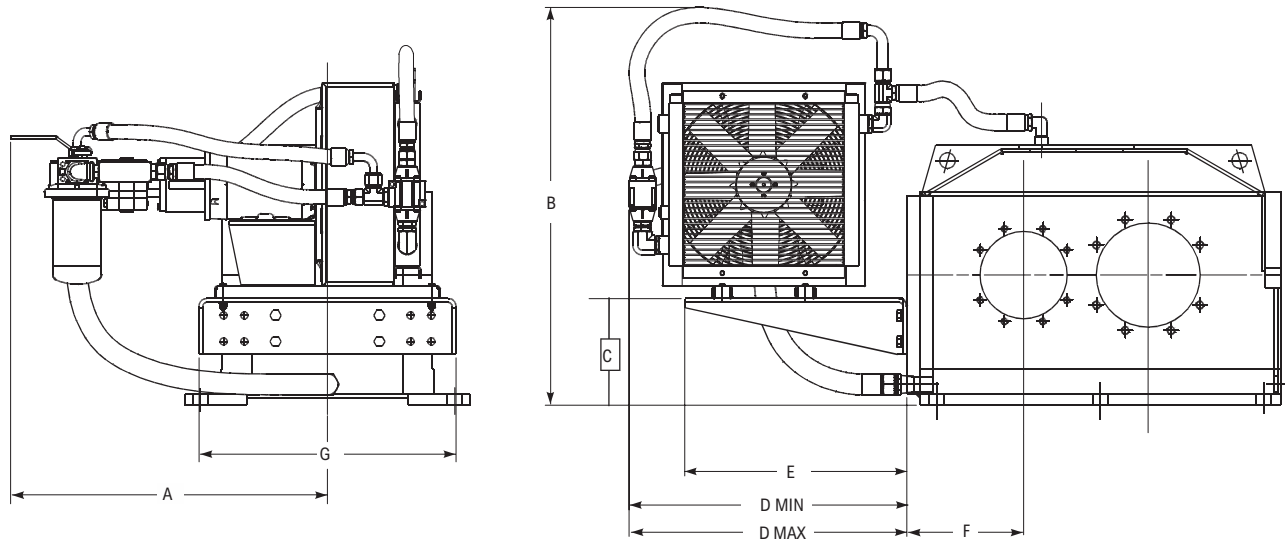
① Drawings shown are for Type ABX. Drawings are representative of this series of drives and do not agree in exact detail for all drive sizes or assemblies. Dimensions are for reference only and are subject to change without notice unless certified.

② Sizes 405 & 425 with cooling tubes will use alternate pump location.

A minimum flow rate of 2 gallons per minute of clean water is required to prevent tube fouling. Flow rates in excess of 5 gallons per minute may prompt tube erosion. Thermal horsepower ratings are based on a water temperature of 70°F (21°C).

# 600 Series Shaft Mount Cooler

## Type A



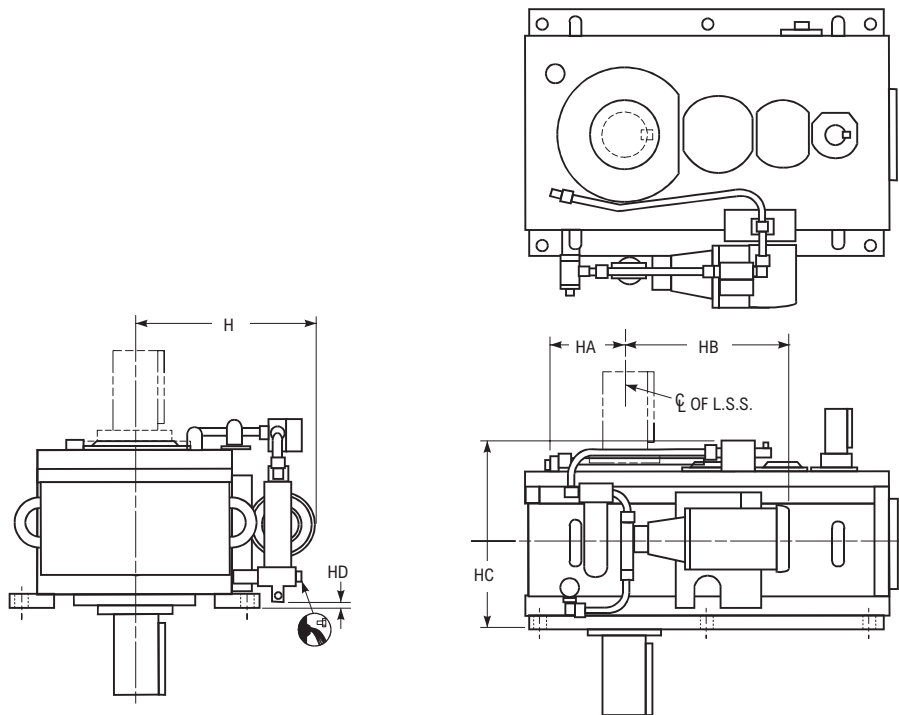
### Dimensions (in)

Drive Size	PA Model	A	B	C	D Min	D Max	E	F	G
385A1	605	29.38	31.91	8.3	24.75	29.61	21.38	9.48	24.75
405A1	605	29.38	32.49	8.88	24.75	29.61	21.38	10.94	24.75
425A1	610	30.51	38.2	10.25	22.75	27.75	21.38	11.26	24.75
445A1	610	30.51	39.2	11.25	22.75	26.75	21.38	12.9	24.75
	620 ①	30.28 ①	38.79 ①	11.25 ①	26.9 ①	31.88 ①	26.38 ①	12.9 ①	27.25 ①
465A1	620	30.28	40.29	12.75	26.9	31.88	26.38	14.5	27.25
	630 ②	27.67 ②	44.93 ②	12.75 ②	32.78 ②	37.76 ②	30.38 ②	14.5 ③	28.75 ③
485A1	620 ③	30.28 ③	42.29 ③	14.38 ③	26.9 ③	31.88 ③	26.38 ③	13.5 ③	27.25 ③
	630 ④	27.67 ④	47.05 ④	14.75 ④	32.78 ④	37.76 ④	30.38 ④	13.5 ④	28.75 ④
505A1	630	27.67	48.38	16.5	32.78	37.76	30.38	14.5	28.75
	640 ⑤	33.02 ⑤	62.69 ⑤	17 ⑤	46.17 ⑤	51.15 ⑤	40.5 ⑤	14.5 ⑤	40 ⑤
525A1	630 ⑥	27.67 ⑥	49.4 ⑥	17.13 ⑥	32.78 ⑥	37.76 ⑥	30.38 ⑥	16.5 ⑥	28.75 ⑥
	640 ⑦	33.02 ⑦	63.35 ⑦	17.63 ⑦	46.17 ⑦	51.15 ⑦	40.5 ⑦	16.5 ⑦	40 ⑦

- ① Only used with RPM 1750 and higher, and 2.25 ratio and lower.
- ② Only used with RPM 1750 and higher, and 2.76 ratio and lower.
- ③ Only used with RPM below 1200.
- ④ Only used with RPM above 1200.
- ⑤ Only used with RPM 1750 and higher, and 2.76 ratio and lower.
- ⑥ Only used with RPM below 1200.
- ⑦ Only used with RPM above 1200.

# Alternate Pump Location

Type AXV & ABX



## Dimensions (in)

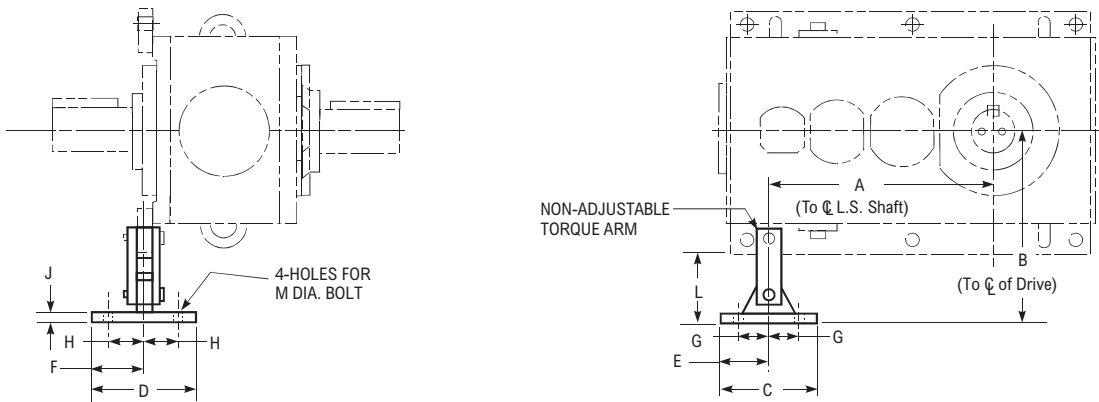
Drive Size ①	H	HA	HB	HC	HD
405	19.6	7.70	20.13	21.00	1.24
425	19.8	8.25	18.28	22.79	1.35
445	23.3	10.00	27.30	24.02	2.50
465	25.3	11.81	26.75	25.80	2.75
485	26.0 ②	13.50	26.75	27.40	3.00

① Dimensions are for reference only and are subject to change without notice unless certified.

② For 485AXV2 and 485ABX3, Dimension H = 27.2.

# Torque Arm

Type AR, ARJ, ABR & ABRJ



## Dimensions (in)

Drive Size ①	A	B ③		C	D	E	F	G	H	J	L	M ④
		Standard	Maximum									
405	25.50	22.00	45.50	11.00	12.00	5.50	6.00	3.50	4.00	1.25	8.13	1.25
425	29.00	24.00	47.50	11.00	12.00	5.50	6.00	3.50	4.00	1.25	8.10	1.25
445	33.00	27.50	62.00	12.00	13.50	6.00	6.75	4.00	4.75	1.50	9.00	1.50
465	37.50	29.50	66.50	12.00	13.50	6.00	6.75	4.00	4.75	1.50	9.00	1.50
485	42.00 ②	33.00	70.00	14.50	15.50	7.25	7.75	5.00	5.50	1.75	9.75	1.75

① Drawings are representative of this series of drives and do not agree in exact detail for all drive sizes or assemblies. Dimensions are for reference only and are subject to change without notice unless certified. Torque arms for Sizes 505 thru 555 will be developed upon receipt of order.

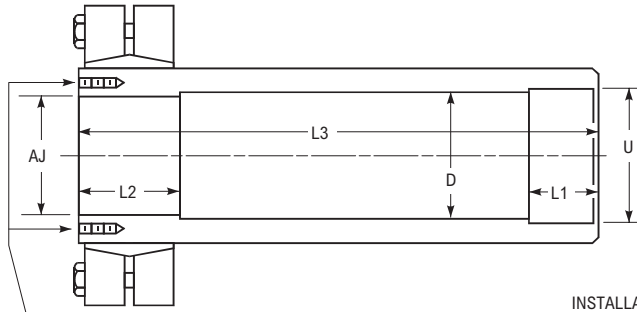
② Dimension shown is for Size 485AR3, AR4 and ABR4; Size 485AR2 and ABR3 Dimension A is 34.60".

③ Dimension B lengths other than standard are available up to the maximum for an additional charge.

④ Use Grade 5 fasteners for diameters through 1.50". For larger diameter fasteners, use ASTM A-354 Grade BC.

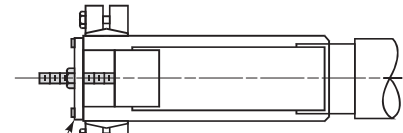
# Hollow Low-Speed Shaft — Shrink Disc Mounted

Type AR3 & ABR3

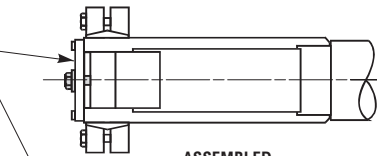


Z - QUANTITY  
 ZA - DIA. UNC TAPPED HOLES IN HOLLOW SHAFT  
 ZB - DEEP  
 Y - DIA. BOLT CIRCLE - EQUALLY SPACED HOLES FOR KEEPER PLATE RETENTION

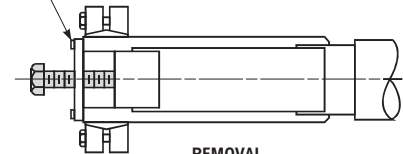
INSTALLATION AND REMOVAL CAN BE ASSISTED THROUGH THE USE OF ADDITIONAL HARDWARE ITEMS SHOWN SHADED (CUSTOMER SUPPLIED)



**INSTALLATION**  
 A THREADED ROD IS INSERTED THROUGH THE KEEPER PLATE CENTER HOLE AND INTO THE TAPPED HOLE IN THE END OF THE DRIVEN SHAFT. THE THREADED ROD, WITH NUT AS SHOWN, ARE USED TO AID ASSEMBLY.



ASSEMBLED



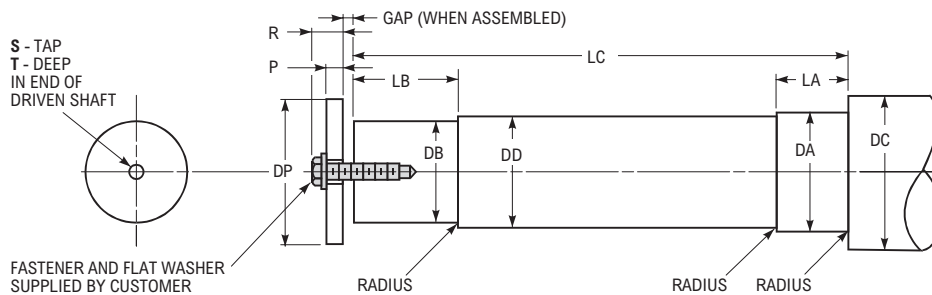
**REMOVAL**  
 A FASTENER (LARGER DIA THAN THE THREADED ROD) IS THREADED INTO THE TAPPED CENTER HOLE OF THE KEEPER PLATE AND IS USED TO SEPARATE THE DRIVEN SHAFT FROM THE HOLLOW LOW-SPEED SHAFT OF THE GEAR DRIVE.

## Hollow Low-Speed Shaft — Dimensions (in)

Drive Size ①	AJ ② +.0016 -.0000	D	L1	L2	L3	U +.002 -.000	Z	ZA	ZB	Y
405	5.2505	5.400	2.50	3.50	24.70	5.500	8	0.375-16	0.75	6.00
425	6.0005	6.100	3.50	5.00	29.10	6.250	8	0.375-16	0.75	6.75
445	6.5005	6.600	3.50	6.00	31.80	6.750	6	0.500-13	1.00	7.50
465	7.2505	7.400	3.50	6.50	34.10	7.500	6	0.500-13	1.00	8.25
485	8.5005	8.625	5.00	8.00	37.30	8.750	6	0.500-13	1.00	9.75
505	9.7505	9.880	4.00	8.20	43.37	10.000	6	0.625-11	1.25	11.25
535	10.5005	10.600	4.00	9.37	43.24	10.750	8	0.625-11	1.25	12.00
555	11.4005	11.450	4.50	9.40	50.27	11.750	12	0.625-11	1.25	12.90

① Dimensions are for reference only and are subject to change without notice unless certified.

② AJ tolerance for Size 485 is +.0020, -.0000.



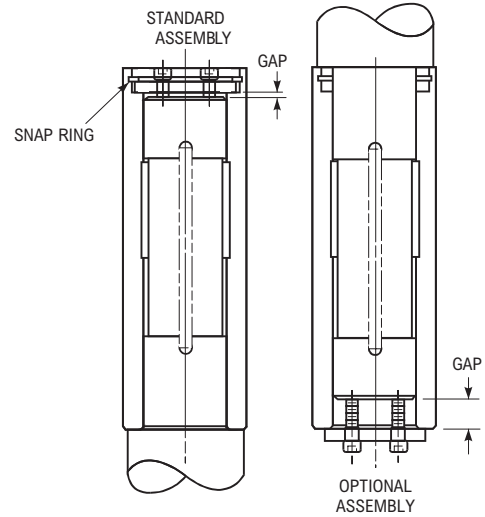
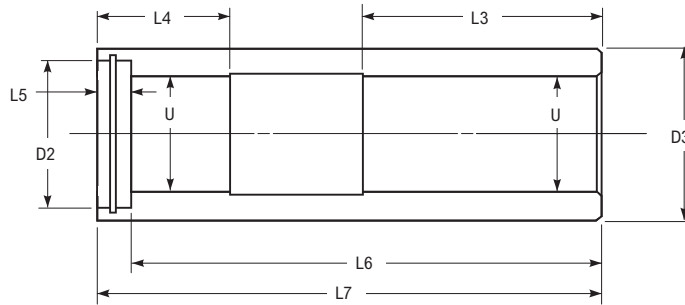
## Driven Shaft Recommended — Dimensions (in)

Drive Size ③	DA +.0000 -.0015	DB +.000 -.001	DC Min	DD +.010 -.010	Radius Max	LA	LB	LC	DP	P	R	S	T	Fastener Length	Tapped Hole in Center of Keeper Plate	Gap
405	5.500	5.250	6.00	5.312	0.125	2.38	3.75	24.58	6.88	0.75	1.76	1.250-7	2.50	2.50	1.750-5	0.12
425	6.250	6.000	6.75	6.062	0.125	3.38	5.25	28.98	7.62	0.75	1.76	1.250-7	2.50	2.50	1.750-5	0.12
445	6.750	6.500	7.25	6.531	0.125	3.38	6.25	31.68	8.62	1.00	2.18	1.500-6	3.00	3.00	2.000-4.5	0.12
465	7.500	7.250	8.25	7.312	0.125	3.38	6.75	33.98	9.38	1.00	2.18	1.500-6	3.00	3.00	2.000-4.5	0.12
485	8.750	8.500	9.50	8.562	0.125	4.88	8.25	37.18	10.88	1.00	2.18	1.500-6	3.00	3.00	2.000-4.5	0.12
505	10.000	9.750	10.75	9.800	0.125	3.88	8.40	43.20	12.75	1.25	2.42	1.500-6	3.00	3.25	2.000-4.5	0.17
535	10.750	10.500	11.50	10.520	0.125	3.88	9.60	43.00	13.50	1.25	2.75	2.000-4.5	4.00	4.00	2.500-4	0.24
555	11.750	11.400	12.50	11.370	0.125	4.38	9.60	50.00	14.30	1.50	3.00	2.000-4.5	4.00	4.00	2.500-4	0.27

③ Dimensions are for reference only and are subject to change without notice unless certified.

# Hollow Low-Speed Shaft with Keeper Plate

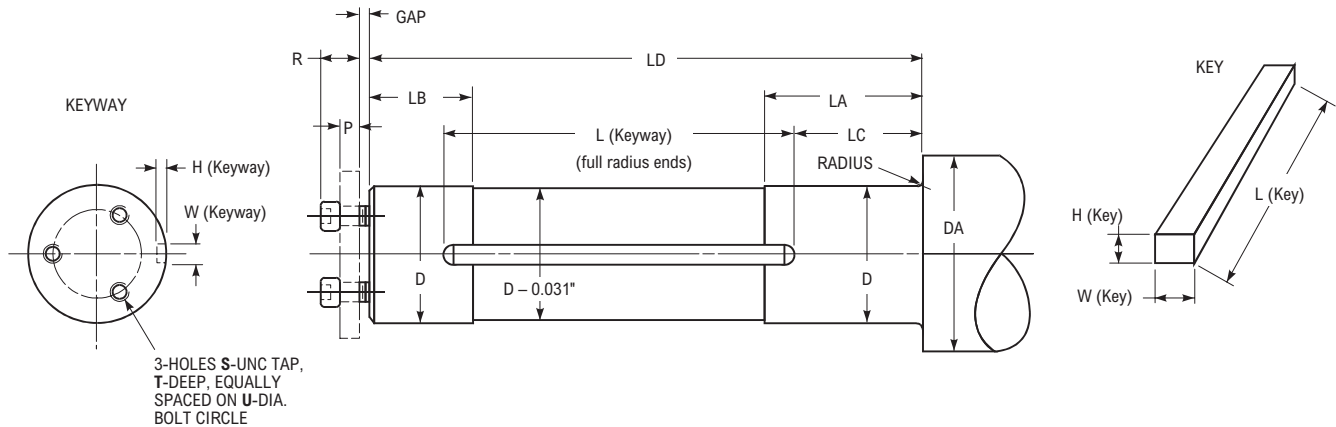
Type AXVQ & ABXQ



Hollow Low-Speed Shaft — Dimensions (in)

Drive Size ①	Shaft-Diameters ②			L3	L4	L5	L6	L7	Gap Between Shaft & Plate	
	U +.002 -.000	D2 +.010 -.000	D3						Std Assy	Opt Assy
405	5.375	6.000	7.00	13.06	5.87	1.875	23.435	25.310	0.14	2.01
425	6.000	6.750	7.75	13.20	6.50	2.100	24.800	26.900	0.10	2.20
445	6.750	7.750	9.00	15.00	6.90	2.200	27.200	29.400	0.10	2.30
465	7.500	8.750	10.00	15.65	7.25	2.500	28.800	31.300	0.10	2.60
485	8.500	9.750	11.50	17.30	7.10	2.750	31.250	34.000	0.15	2.90
505	9.001	10.500	12.25	19.70	8.10	3.250	35.550	38.800	0.15	3.40
535	10.501	11.750	13.50	21.00	8.45	3.250	37.700	40.950	0.20	3.45
555	11.501	13.000	15.00	23.40	9.41	3.310	42.690	46.000	0.19	3.50

- ① Dimensions are for reference only and are subject to change without notice unless certified.
- ② Before drive assembly.



Driven Shaft Recommended — Dimensions (in)

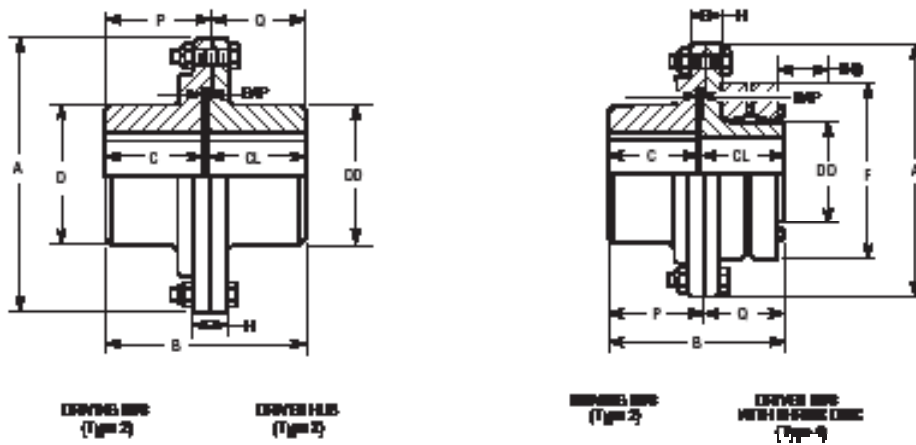
Drive Size ③	Shaft		Radius ± .010	LD	LA	LB	LC	P +.000 -.005	R ⑤	Keeper Plate				Keyway			Key				
	DA +.0000 -.0015	DA Min								Snap Ring ④ (Low-Speed Shaft Down Only)	S	U	T	Fastener Length		W ⑥	H	L ⑦	W	H +.010 -.000	L
														Shaft Down	Shaft Up						
405	5.373	6.500	0.125	23.300	5.61	3.64	4.64	0.870	1.62	600	.750-10	3.500	1.560	2.25	4.00	1.000	0.453	16.000	1.000	.750	15.000
425	5.998	7.250	0.125	24.700	6.24	4.04	4.70	1.000	2.13	675	1.125-7	3.500	2.250	2.75	4.75	1.500	0.750	17.500	1.500	1.000	16.000
445	6.748	8.250	0.125	27.100	6.64	4.34	5.45	1.000	2.25	775	1.250-7	4.000	2.500	3.00	5.00	1.500	0.500	18.500	1.500	1.000	17.000
465	7.498	9.250	0.125	28.700	6.99	4.39	5.90	1.250	2.50	875	1.250-7	4.750	2.500	3.25	5.50	1.500	0.500	19.500	1.500	1.000	18.000
485	8.498	10.250	0.125	31.100	6.84	3.99	5.73	1.490	2.99	975	1.500-6	5.000	3.000	4.00	6.50	1.500	0.500	22.500	1.500	1.000	21.000
505	8.999	11.100	0.125	35.400	8.00	4.80	3.00	1.750	3.12	1050	1.500-6	6.000	3.000	4.50	7.50	2.000	1.000	30.000	2.000	1.500	28.000
535	10.499	12.350	0.125	37.500	8.20	5.00	6.00	1.750	3.12	1175	1.500-6	7.500	3.000	4.50	7.50	2.500	1.000	26.500	2.500	1.750	24.000
555	11.499	13.600	0.125	42.500	9.30	6.00	4.00	1.750	3.28	1300	1.750-5	8.000	3.500	5.00	8.00	3.000	1.250	35.000	3.000	2.000	32.000

- ③ Dimensions are for reference only and are subject to change without notice unless certified.
- ④ For Sizes 405-485, TRUARC® N5000 Series snap ring; for Sizes 505-555, Spirolox® RRN or equivalent.
- ⑤ For Sizes 505-555, hex head fastener with helical spring lock washer.
- ⑥ Sizes 405-425, +.0035", -.0000", Sizes 445-485, +.0040", -.0000".
- ⑦ Full radius keyway ends.

# 3000 Series MCF Couplings — Flange Connection

**WARNING:** Drive system analysis must be performed by Rexnord Application Engineering. The driven equipment shaft stresses and bearing loads require analysis and review by a mechanical engineer. Improper installation and maintenance of this coupling may result in injury.

**NOTE:** The 3000 Series MCF Couplings are backwards compatible with the 1000 Series MCF Couplings.



## Dimensions (in)

Drive Size	Cplg Size ①	Hub Type				Min/Max Bore ③		Cplg Wt (lb) ④	A	B	C	CL	D	DD	H	P	Q	R ②	S ②	Gap
		Driving Hub	Type ⑤	Driven Hub	Type ⑤	Driving Hub	Driven Hub													
405	3045	RSB	2	RSB	2	3.000 - 7.000	3.000 - 7.000	490	19.68	14.12	7.00	7.00	10.00	10.00	2.50	7.62	6.50	-	-	0.12
		RSB	2	175SD	4	3.000 - 7.000	4.921 - 5.315	456	19.68	12.74	7.00	5.62	10.00	6.89	2.50	7.62	5.12	-	4.00	0.12
		RSB	2	185SD	4	3.000 - 7.000	5.315 - 5.709	500	19.68	13.68	7.00	6.56	10.00	7.28	2.50	7.62	6.06	-	4.00	0.12
		RSB	2	200SD	4	3.000 - 7.000	5.709 - 6.102	514	19.68	13.68	7.00	6.56	10.00	7.87	2.50	7.62	6.06	-	4.00	0.12
		175SD	4	RSB	2	4.921 - 5.315	3.000 - 7.000	456	19.68	12.74	5.62	7.00	6.89	10.00	2.50	6.24	6.50	4.00	-	0.12
		175SD	4	175SD	4	4.921 - 5.315	4.921 - 5.315	421	19.68	11.36	5.62	5.62	6.89	6.89	2.50	6.24	5.12	4.00	4.00	0.12
		175SD	4	185SD	4	4.921 - 5.315	5.315 - 5.709	465	19.68	12.30	5.62	6.56	6.89	7.28	2.50	6.24	6.06	4.00	4.00	0.12
425	3055	175SD	4	200SD	4	4.921 - 5.315	5.709 - 6.102	479	19.68	12.30	5.62	6.56	6.89	7.87	2.50	6.24	6.06	4.00	4.00	0.12
		RSB	2	RSB	2	3.500 - 8.000	3.500 - 8.000	663	21.84	15.56	7.44	8.00	11.50	11.50	2.50	8.06	7.50	-	-	0.12
		RSB	2	200SD	4	3.500 - 8.000	5.709 - 6.102	626	21.84	14.12	7.44	6.56	11.50	7.87	2.50	8.06	6.06	-	4.00	0.12
		RSB	2	220SD	4	3.500 - 8.000	6.299 - 6.693	668	21.84	15.00	7.44	7.44	11.50	8.66	2.50	8.06	6.94	-	4.00	0.12
		RSB	2	240SD	4	3.500 - 8.000	6.693 - 7.500	728	21.84	15.56	7.44	8.00	11.50	9.45	2.50	8.06	7.50	-	4.50	0.12
		200SD	4	RSB	2	5.709 - 6.102	3.500 - 8.000	637	21.84	14.68	6.56	8.00	7.87	11.50	2.50	7.18	7.50	4.00	-	0.12
		200SD	4	200SD	4	5.709 - 6.102	5.709 - 6.102	603	21.84	13.24	6.56	6.56	7.87	7.87	2.50	7.18	6.06	4.00	4.00	0.12
445	3060	200SD	4	220SD	4	5.709 - 6.102	6.299 - 6.693	649	21.84	14.12	6.56	7.44	7.87	8.66	2.50	7.18	6.94	4.00	4.00	0.12
		200SD	4	240SD	4	5.709 - 6.102	6.693 - 7.500	714	21.84	14.68	6.56	8.00	7.87	9.45	2.50	7.18	7.50	4.00	4.50	0.12
		RSB	2	RSB	2	4.000 - 9.000	4.000 - 9.000	928	23.25	17.87	8.75	9.00	13.00	13.00	3.00	9.37	8.50	-	-	0.12
		RSB	2	220SD	4	4.000 - 9.000	6.299 - 6.693	860	23.25	16.56	8.75	7.69	13.00	8.66	3.00	9.37	7.19	-	4.00	0.12
		RSB	2	240SD	4	4.000 - 9.000	6.693 - 7.500	920	23.25	17.06	8.75	8.19	13.00	9.45	3.00	9.37	7.69	-	4.50	0.12
		RSB	2	260SD	4	4.000 - 9.000	7.480 - 8.268	959	23.25	17.87	8.75	9.00	13.00	10.23	3.00	9.37	8.50	-	4.50	0.12
		220SD	4	RSB	2	6.299 - 6.693	4.000 - 9.000	867	23.25	16.81	7.69	9.00	8.66	13.00	3.00	8.31	8.50	4.00	-	0.12
445	3060	220SD	4	220SD	4	6.299 - 6.693	6.299 - 6.693	807	23.25	15.50	7.69	7.69	8.66	8.66	3.00	8.31	7.19	4.00	4.00	0.12
		220SD	4	240SD	4	6.299 - 6.693	6.693 - 7.500	872	23.25	16.00	7.69	8.19	8.66	9.45	3.00	8.31	7.69	4.00	4.50	0.12
		220SD	4	260SD	4	6.299 - 6.693	7.480 - 8.268	914	23.25	16.81	7.69	9.00	8.66	10.23	3.00	8.31	8.50	4.00	4.50	0.12

① Dimensions are for reference only and are subject to change without notice unless certified. Refer to factory for drive sizes 505-585. Applications above 100 RPM require a balanced system as well as proper alignment and installation per the 3000MCF installation and maintenance manual. Rexnord/Falk defers the responsibility of this to the purchaser.

② Distance required for torque wrench clearance to tighten the shrink disc fasteners.

③ Driven shaft tolerance is expected to be: +0.0000/-0.0005 inches for inch shafts under 3 inches, +0.000/-0.001 inches for inch shafts 3 inches and over, or m6 for metric shafts.

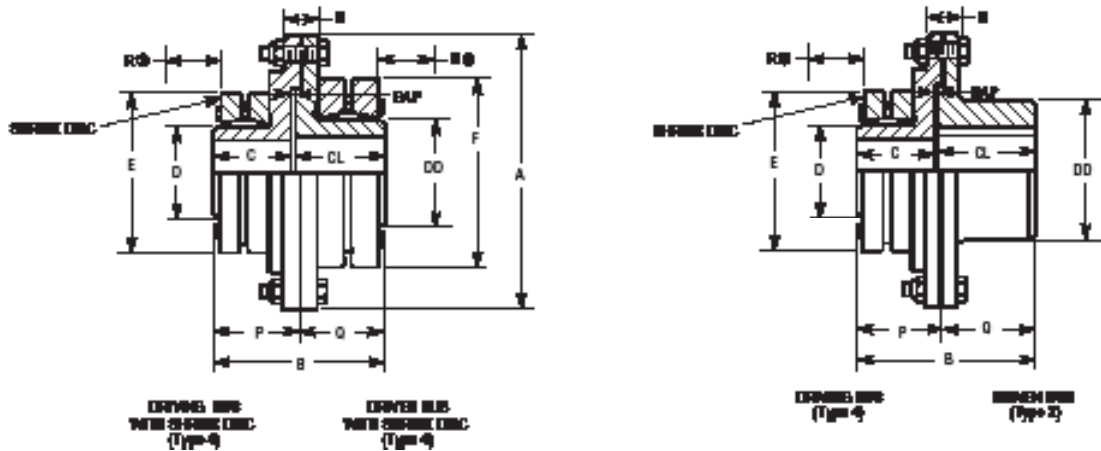
④ Coupling weights are for hubs with no bore and include shrink disc(s).

⑤ Type 2 hub is straight bored without shrink disc. Type 4 hub is straight bored with shrink disc. Refer to factory when selecting MCF couplings.

# 3000 Series MCF Couplings — Flange Connection

**WARNING:** Drive system analysis must be performed by Rexnord Application Engineering. The driven equipment shaft stresses and bearing loads require analysis and review by a mechanical engineer. Improper installation and maintenance of this coupling may result in injury.

**NOTE:** The 3000 Series MCF Couplings are backwards compatible with the 1000 Series MCF Couplings.



Dimensions (in)

Drive Size	Cplg Size ①	Hub Type				Hub Type Min/Max Bore ③		Cplg ④ Wt (lb)	A	B	C	CL	D	DD	H	P	Q	R ②	S ②	Gap
		Driving Hub	No. ⑤	Driven Hub	No. ⑥	Driving Hub	Driven Hub													
465	3065	RSB	2	RSB	2	5.000 - 10.000	5.000 - 10.000	1165	24.50	20.12	10.00	10.00	14.00	14.00	3.50	10.62	9.50	-	-	0.12
		RSB	2	240SD	4	5.000 - 10.000	6.693 - 7.500	1100	24.50	18.56	10.00	8.44	14.00	9.45	3.50	10.62	7.94	-	4.50	0.12
		RSB	2	260SD	4	5.000 - 10.000	7.480 - 8.268	1137	24.50	19.18	10.00	9.06	14.00	10.23	3.50	10.62	8.56	-	4.50	0.12
		RSB	2	280SD	4	5.000 - 10.000	8.268 - 9.055	1206	24.50	19.65	10.00	9.53	14.00	11.02	3.50	10.62	9.03	-	4.50	0.12
		RSB	2	300SD	4	5.000 - 10.000	9.055 - 9.646	1241	24.50	19.81	10.00	9.69	14.00	11.81	3.50	10.62	9.19	-	4.50	0.12
		240SD	4	RSB	2	6.693 - 7.500	5.000 - 10.000	1102	24.50	18.56	8.44	10.00	9.45	14.00	3.50	9.06	9.50	4.50	-	0.12
		240SD	4	240SD	4	6.693 - 7.500	6.693 - 7.500	1052	24.50	17.00	8.44	8.44	9.45	9.45	3.50	9.06	7.94	4.50	4.50	0.12
		240SD	4	260SD	4	6.693 - 7.500	7.480 - 8.268	1092	24.50	17.62	8.44	9.06	9.45	10.23	3.50	9.06	8.56	4.50	4.50	0.12
		240SD	4	280SD	4	6.693 - 7.500	8.268 - 9.055	1149	24.50	18.09	8.44	9.53	9.45	11.02	3.50	9.06	9.03	4.50	4.50	0.12
		240SD	4	300SD	4	6.693 - 7.500	9.055 - 9.646	1185	24.50	18.25	8.44	9.69	9.45	11.81	3.50	9.06	9.19	4.50	4.50	0.12
485	3075	RSB	2	RSB	2	6.000 - 11.500	6.000 - 11.500	1704	27.50	23.12	11.50	11.50	16.00	16.00	4.00	12.12	11.00	-	-	0.12
		RSB	2	280SD	4	6.000 - 11.500	8.268 - 9.055	1600	27.50	21.40	11.50	9.78	16.00	11.02	4.00	12.12	9.28	-	4.50	0.12
		RSB	2	300SD	4	6.000 - 11.500	9.055 - 9.646	1618	27.50	21.56	11.50	9.94	16.00	11.81	4.00	12.12	9.44	-	4.50	0.12
		RSB	2	320SD	4	6.000 - 11.500	9.449 - 10.250	1714	27.50	21.87	11.50	10.25	16.00	12.60	4.00	12.12	9.75	-	4.50	0.12
		280SD	4	RSB	2	8.268 - 9.055	6.000 - 11.500	1600	27.50	21.44	9.82	11.50	11.02	16.00	4.00	10.44	11.00	4.50	-	0.12
		280SD	4	280SD	4	8.268 - 9.055	8.268 - 9.055	1496	27.50	19.72	9.82	9.78	11.02	11.02	4.00	10.44	9.28	4.50	4.50	0.12
		280SD	4	300SD	4	8.268 - 9.055	9.055 - 9.646	1515	27.50	19.88	9.82	9.94	11.02	11.81	4.00	10.44	9.44	4.50	4.50	0.12
		280SD	4	320SD	4	8.268 - 9.055	9.449 - 10.250	1610	27.50	20.19	9.82	10.25	11.02	12.60	4.00	10.44	9.75	4.50	4.50	0.12

① Dimensions are for reference only and are subject to change without notice unless certified. Refer to factory for drive sizes 505-585. Applications above 100 RPM require a balanced system as well as proper alignment and installation per the 3000MCF installation and maintenance manual. Rexnord/Falk defers the responsibility of this to the purchaser.

② Distance required for torque wrench clearance to tighten the shrink disc fasteners.

③ Driven shaft tolerance is expected to be: +0.0000/-0.0005 inches for inch shafts under 3 inches, +0.000/-0.001 inches for inch shafts 3 inches and over, or m6 for metric shafts.

④ Coupling weights are for hubs with no bore and include shrink disc(s).

⑤ Type 2 hub is straight bored without shrink disc. Type 4 hub is straight bored with shrink disc. Refer to factory when selecting MCF couplings.

⑥ Not available on Types AR or ABR.

# Conversion Factors

## U.S. Units to SI Metric Units

(Conversion values listed are for reference only.

DO NOT use these values to convert or compare inch and metric selection guides.)

Description	U.S. Units	Multiply by to Obtain	SI Metric Units
Force	pound force (lbf)	4.448	newton (N)
Length	inch (in)	25.4	millimeter (mm)
	foot (ft)	0.3048	meter (m)
Mass	pound mass (lbm)	0.4536	kilogram (kg)
Power	horsepower (HP)	0.7457	kilowatt (kW)
Rotational Inertia	pound-inch <sup>2</sup> (lb-in <sup>2</sup> )	0.0002926	kilogram-meter <sup>2</sup> (kg-m <sup>2</sup> )
Rotational Speed	revolutions per minute (RPM)	1	1/min
Temperature	°F	°C = (°F - 32)/1.8	°C
Torque	pound-inch (lb-in)	0.113	newton-meter (Nm)
	pound-foot (lb-ft)	1.356	newton-meter (Nm)
Velocity	feet per minute (ft/min)	0.00508	meters per second (m/s)
	miles per hour (mph)	1.609	kilometers per hour (km/h)
Volume	gallon (gal)	3.785	liter (L)
Volumetric Flow	gallons per minute (gal/min)	0.06308	liters per second (L/s)

## SI Metric Units to U.S. Units

(Conversion values listed are for reference only.

DO NOT use these values to convert or compare inch and metric selection guides.)

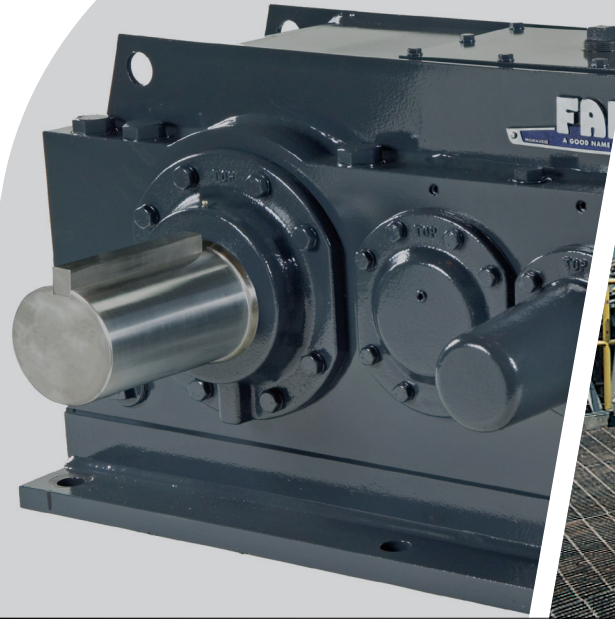
Description	SI Metric Units	Multiply by to Obtain	U.S. Units
Force	newton (N)	0.2248	pound force (lbf)
Length	millimeter (mm)	0.03937	inch (in)
	meter (m)	3.2808	foot (ft)
Mass	kilogram (kg)	2.2046	pound mass (lbm)
Power	kilowatt (kW)	1.341	horsepower (HP)
Rotational Inertia	kilogram-meter <sup>2</sup> (kg-m <sup>2</sup> )	3417.6	pound-inch <sup>2</sup> (lb-in <sup>2</sup> )
Rotational Speed	1/min	1	revolutions per minute (RPM)
Temperature	°C	°F = 1.8 (°C) + 32	°F
Torque	newton-meter (Nm)	8.850	pound-inch (lb-in)
	newton-meter (Nm)	0.7376	pound-foot (lb-ft)
Velocity	meters per second (m/s)	196.85	feet per minute (ft/min)
	kilometers per hour (km/h)	0.6124	miles per hour (mph)
Volume	liter (L)	0.2642	gallon (gal)
Volumetric Flow	liters per second (L/s)	15.85	gallons per minute (gal/min)

### Equation:

$$\text{Torque (Nm)} = \frac{9550 \times P}{n} \quad \text{Torque (lb-in)} = \frac{63,000 \times \text{HP}}{n}$$

Where: P = Power (kW); n = shaft speed (RPM)





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