

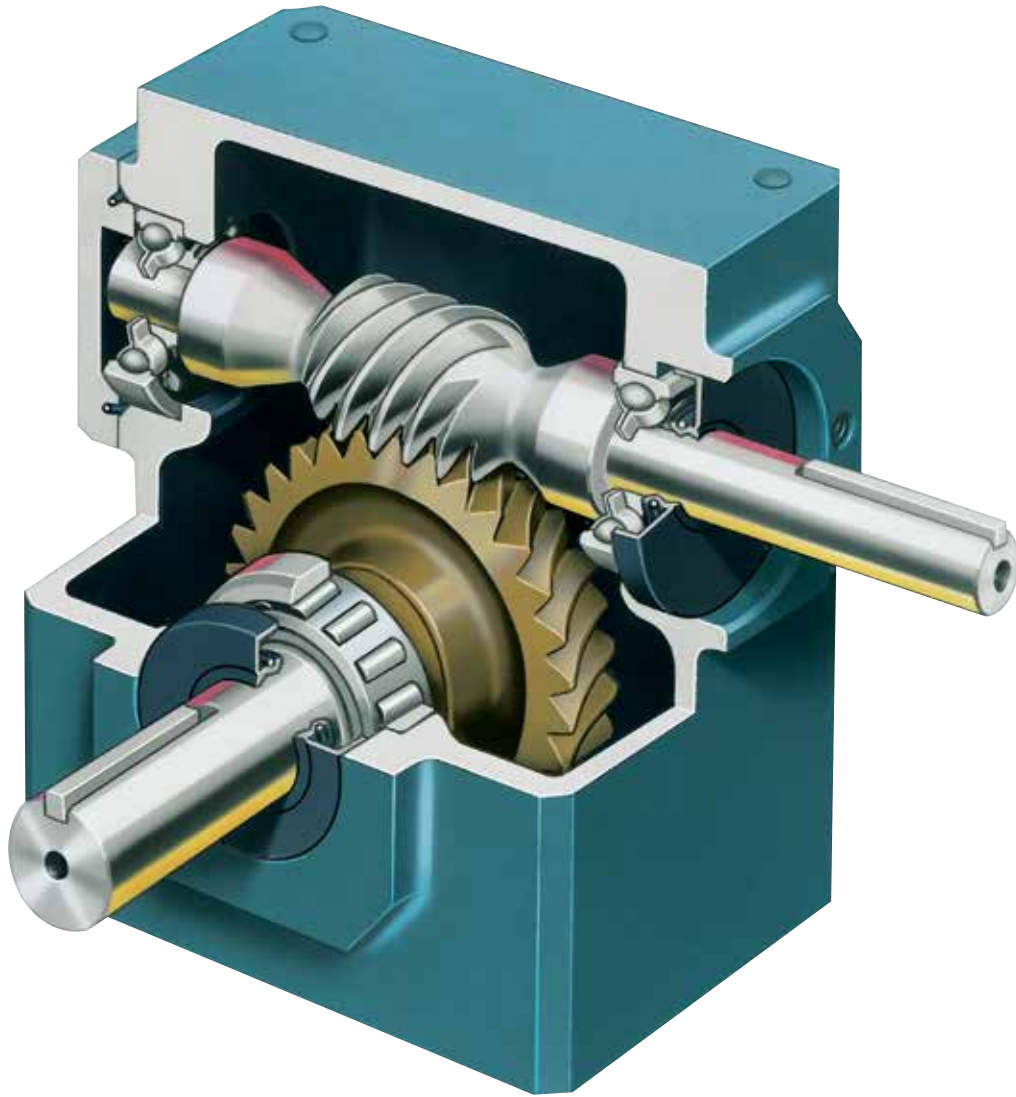


Falk Omnibox Worm Gear Drive

(Inch)



Falk Omnibox Worm Gear Drives _____



To learn more about the Falk® Omnibox® Worm Gear Drive,
go to www.rexnord.com, where you'll find:

Product information • Brochures • Catalogs • Manuals

866-REXNORD/866-739-6673 (toll-free within the U.S.) or 414-643-2366 (Outside the U.S.)



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Falk Omnibox Worm Gear Drive 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 also 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 Representative 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 and 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.

Conditions Affecting Selection

Non-Standard Application Procedures

The following conditions may affect the Omnibox 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 power rating by dividing the peak load by two. The gear drive selected must have capacity equal to, or in excess of, the larger equivalent power rating.

Reversing Service — Applications involving either more than 20 reversals per ten hour period, or less than 20 reversals per ten hour period with peak torques greater than 200% of normal load must be referred to 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 power rating, 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, so refer the application to Factory. Also refer to Factory all applications in which the brake is located on the output shaft of the gear drive.

Oversized Prime Mover — Published service factors do not cover applications that require oversize prime movers for high-energy or peak loads. Refer such applications to Factory for selection of suitable drives.

Speed Variation — Gear drives offered in this catalog are designed to operate with splash lubrication at all speeds for which they are cataloged, provided the appropriate amount of lubricant is present based on the drive-mounting position. (Refer to Manual 278-109 for oil quantity associated with each gear drive mounting position.) Variation of speed between cataloged speeds, or at speeds falling between cataloged speeds, is permissible.

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 Rexnord for review of the lubrication system.

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 ten 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.

Gear Drive Identification — Tables in this catalog identify gear drives by size, type and ratio. See Drive Nomenclature **page 6**.

Horsepower & Torque — Drive mechanical horsepower and torque ratings are tabulated in the selection guide to permit selections for specific application requirements. Refer to the tables in each product group for selection guidelines.

NOTE: Drives may be selected using the Quick Selection Tables under most circumstances.

Stored & Inactive Gear Drive — Each drive is protected with rust preventive that will protect parts against rust for a period of six months in an indoor dry shelter.

Sizes 1133 through 1600 — If a drive is to be stored, or is inactive after installation beyond the above periods, drain oil from housing and spray all internal parts with a rust preventive oil that is soluble in lubricating oil or add "Motorstor" J vapor phase rust inhibitor at the rate of one ounce per cubic foot of internal drive space (or 5% of sump capacity) and rotate the shafts several times by hand. Before operating, drives which have been stored or inactive must be filled to the proper level with oil meeting the specifications given in Manual 278-109.

Periodically inspect stored or inactive gear drives and spray or add rust inhibitor every six months, or more often if necessary. 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 previously.

Factory Warranty — Falk products generally carry a limited, 1.5 year warranty against defects in materials or workmanship; but, for an actual statement of the Factory Warranty, or a Rexnord distributor for our Standard Conditions of Sale, refer to the Factory.

Lubrication of Sizes 1133 to 1600 — These sizes are furnished filled with a quantity of oil. Quantity of oil furnished is based on the customer-identified drive-mounting position stated at the time of order. Standard drive-mounting positions are shown on the Dimensions pages of this catalog. Standard oil furnished with the gear drive is a petroleum-based lubricant conforming to AGMA Viscosity Grade 7C, ISO Viscosity Grade 460, and no further lubrication of the gear drive is required upon start-up unless otherwise specified.

Lubrication of Sizes 1700 to 11000 — These sizes are furnished without oil. Customer oil fill is required. These sizes are furnished with oil fill plug, oil drain plug and vent plug. Lubricant quantity, lubricant specifications, location of plugs and recommended oil change frequency are stated in the Installation & Maintenance Guide 278-109.

For Quadrive primaries, refer to Manual 378-101 for lubricant recommendations. Refer to Manual 278-109 for secondary lubricant recommendations.

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, additional cooling may be required, such as shaft fans, electric fans, cooling tubes or heat exchangers.

Overhung Loads & 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 information to Factory.

How to Select and Order

Quick Selection Method

1. Determine Service Factor — **pages 7 and 8.**
2. Determine Required Input Horsepower — Calculate the equivalent hp by multiplying the motor hp by the Service Factor.
3. Determine Driver Output Speed and Ratio.
4. Select Drive Type and Size — Refer to the Selection Guide at the front of the section and select the desired drive configuration. Then refer to the Quick Selection Tables in the section and select the drive size. Locate the table containing required ratio, low speed shaft rpm and select the drive size with a mechanical rating equal to or exceeding the equivalent hp requirement.
5. Check Overhung Load — Refer to tables on **pages 97 and 98** that provide the overhung load capacities of the gear drives. If an overhung load is present (input or output), calculate the value of the load per instructions on **page 97**. Sprockets or other power takeoff devices mounted on the input or output shaft of the gear drive should be sized and positioned so the overhung load capacities are not exceeded. If applied overhung loads exceed the capacity of the initial gear drive selected, a larger gear drive with adequate capacity must be selected.
6. Check External Thrust Load — Allowable thrust loads are provided on **page 98**. If thrust and overhung loads are provided simultaneously, or if loads exceed allowable thrust capacities, consult Factory.
7. Check Gear Drive Dimensions — **pages 22-39** (Single Reduction), **pages 54-71** (Double Reduction, Worm-Worm), or **pages 78-85** (Double Reduction, Helical-Worm).

Example

Application: Belt conveyor, heavy-duty, head shaft speed is approximately 58 rpm, gear drive is to be flange-mounted with hollow input shaft.

Duty Cycle: 16 hours per day.

Driver: 2 hp electric motor, 1750 rpm.

Output: 3" pitch diameter sprocket with a 2:1 chain drive. Sprocket is mounted 1.5" from drive seal cage.

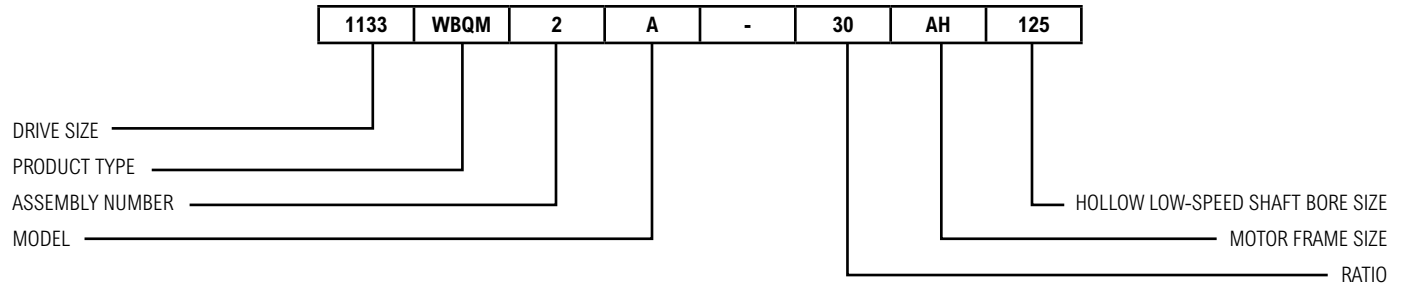
1. Service Factor from **page 7** is 1.50.
2. Motor Horsepower is 2 hp.
3. The head shaft speed must be multiplied by the chain drive ratio to obtain the gear drive output rpm (58 rpm x 2 = 116 rpm).
4. From **page 10**, the desired configuration is a Type WOM. From **page 15**, in the 1.50 Service Factor Table, the correct selection is a Size 1262, 15:1 ratio drive.
5. Overhung Load Check — The allowable overhung loads are listed in the table on **page 98**. The output shaft allowable OHL is 1625 lbs. The actual output shaft OHL must be calculated using the following formula:

$$\frac{126,000 \times 2.0 \times 3.216 \times 1.00 \times 1.12}{3.00 \times 3.614 \times 116} = 721 \text{ lbs.}$$

The actual OHL of 721 lbs is less than the allowable of 1625 lbs and therefore is acceptable.

6. Check External Thrust Load Capacity on **page 98**. For this example there is no external thrust.
7. Check Gear Drive Dimensions on **pages 24-25**.

Drive Nomenclature



Drive Size (Shaft Centers)

1133 = 1.33	1262 = 2.62	1525 = 5.25
1154 = 1.54	1300 = 3.00	1600 = 6.00
1175 = 1.75	1325 = 3.25	1700 = 7.00
1206 = 2.06	1326 = 3.26	1800 = 8.00
1238 = 2.38	1425 = 4.25	11000 = 10.00

Product Type ①

Expressed in 2 to 5 letters, including Primary Type, Output Shaft and Motor Flange, as required

- WB — Basic drive without Feet (Single Reduction)
- WU — Worm Under (Horizontal LSS)
- WO — Worm Over (Horizontal LSS)
- WX — Vertical Low-Speed Shaft
- WJ — Vertical High-Speed Shaft (Horizontal LSS)
- WL — Flange-Mounted drive
- WR — Extended Output Shaft

Primary/Type

- H — Helical drives (Double Reduction)
- W — Worm drives (Double Reduction)

Output Shaft

- Q — Hollow Low-Speed Shaft

Motor Flange

- F — Flange-Mounted Electric Motor with Coupling
- M — Flange-Mounted Electric Motor without Coupling (Hollow Input Shaft)

Assembly Number

See individual dimension pages

Model

A, B, C, etc.

- S — Modified or Special

Models A 1700, 1800, 11000 (Single Reduction Only)

Ratio

Nominal ratio, expressed in 1 to 4 digits, as required

① Refer to **page 94** for Omnibox Non-Preferred Mounting Positions.

Motor Frame Size

NEMA Frame Sizes

- AH — 48C
- AA — 56C
- AB — 140TC
- AC — 180TC
- AD — 210TC
- AE — 250TC

IEC Frame Sizes

- GA — 63D
- GB — 71D
- GD — 80D
- GF — 90D
- GH — 100LD
- GK — 112D
- GM — 132D

Hollow Low-Speed Shaft Bore Size

For all “bored-to-size” option, Output Shaft = “Q” drives only (decimal omitted)

Service Factors

Service Factors

A gear drive is rated to a specific application by the use of Service Factor. Each application has its conditions and operating requirements. These have been analyzed and cataloged. Numerical values, based on field experience, have been assigned to these classifications for intermittent service of 3 to 10 hours per day and for service over 10 hours per day and also for the type of prime mover ... electric motor or engine. Values for most applications are listed by application on **page 8, Table 3** and by industry at right, **Table 2**. Refer unlisted applications to Factory.

Since most industrial applications are electric-motor-driven, Service Factors are based on the use of electric motors. These factors can be easily converted to engine-drive factors as outlined in **Table 1** below.

Service Factors are based on the assumption that the system is free of dynamic vibrations, as explained in the Basic Information section, and that maximum momentary or starting loads do not exceed 200% of the rated load. Refer applications subject to repetitive shocks and applications where exceedingly high energy load must be absorbed, as when stalling, to Factory for special considerations.

Occasional & Intermittent Service or Engine-Driven Applications

Engine-driven applications and applications operating up to 3 hours per day, continuously or intermittently, require adjusted Service Factors. Determine normal Service Factor for the application from the 3 to 10 hours per day column in **Table 2** or **Table 3**. Next, in the first column of **Table 1** below, find this same Service Factor in the first column. Then, to the right, under the desired hours of 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 (multi-cylinder): 3 to 10 hours per day, use 1.50.
2. Engine-driven (multi-cylinder): over 10 hours per day, use 1.75.
3. Motor-driven (electric): up to 3 hours intermittently, use 1.00.

Table 1 — Service Factor Conversions

Table 2 or Table 3 3 to 10 Hour Service Factor	3 to 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.
- 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 hp and part constant torque, where the constant hp 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 hp speed range is less than 1.5 to 1.

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

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

- 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.
- ② Contact Rexnord for proper selection of a Falk RAM mixer drive.

NOTES:

Selection Guide
Solid Output Shaft Type Single Reduction Worm

Stock Types

Modified Stock Types

Using off-the-shelf accessories, stock types WBM, WBF and WB can be field or factory-modified into a wide range of styles. See **page 91** for details.

MOTORIZED C-FLANGE QUILL INPUT

WBM

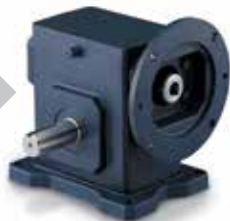


Ratings: **pages 17-20**
 Dimensions: **pages 22-23**



Horizontal Base Worm Over

WOM



Ratings: **pages 17-20**
 Dimensions: **pages 24-25**

Horizontal Base Worm Under

WUM ①



Ratings: **pages 17-20**
 Dimensions: **pages 26-27**

Vertical Input Shaft

WJM



Ratings: **pages 17-20**
 Dimensions: **pages 28-29**

MOTORIZED C-FLANGE FLEXIBLE COUPLING INPUT

WBF



Ratings: **pages 17-20**
 Dimensions: **pages 22-23**



WOF



Ratings: **pages 17-20**
 Dimensions: **pages 24-25**

WUF ①



Ratings: **pages 17-20**
 Dimensions: **pages 26-27**

WJF



Ratings: **pages 17-20**
 Dimensions: **pages 28-29**

NON-FLANGED INPUT

WB



Ratings: **pages 17-20**
 Dimensions: **pages 22-23**



WO



Ratings: **pages 17-20**
 Dimensions: **pages 24-25**

WU ①



Ratings: **pages 17-20**
 Dimensions: **pages 26-27**

WJ



Ratings: **pages 17-20**
 Dimensions: **pages 28-29**

① Not a recommended mounting style. Contact Rexnord for selection assistance. **Additional accessories, options and assembly services are available. Contact Rexnord for details.**

Selection Guide
Solid Output Shaft Type Single Reduction Worm

**Vertical
Output Shaft
Low Base**

WXM ②



Ratings: **pages 17-20**
 Dimensions: **pages 30-31**

**Vertical
Output Shaft
High Base**

WXM ②



Ratings: **pages 17-20**
 Dimensions: **pages 30-31**

**Flange
Mounted
Output Shaft**

WLM



Ratings: **pages 17-20**
 Dimensions: **pages 32-33**

**Extended Flange
Mounted
Output Shaft**

WRM



Ratings: **pages 17-20**
 Dimensions: **pages 38-39**

WXF ②



Ratings: **pages 17-20**
 Dimensions: **pages 30-31**

WXF ②



Ratings: **pages 17-20**
 Dimensions: **pages 30-31**

WLF



Ratings: **pages 17-20**
 Dimensions: **pages 32-33**

WRF



Ratings: **pages 17-20**
 Dimensions: **pages 38-39**

WX ②



Ratings: **pages 17-20**
 Dimensions: **pages 30-31**

WX ②



Ratings: **pages 17-20**
 Dimensions: **pages 30-31**

WL



Ratings: **pages 17-20**
 Dimensions: **pages 32-33**

WR



Ratings: **pages 17-20**
 Dimensions: **pages 38-39**

② Specify shaft up or down for these types.

Selection Guide
Hollow Output Shaft Type Single Reduction Worm

Stock Types

Modified Stock Styles

Using off-the-shelf accessories, stock types WBQM, WBQF and WBQ can be field or factory-modified into a wide range of styles. See **page 91** for details.

**MOTORIZED
 C-FLANGE
 QUILL INPUT**

WBQM



Ratings: **pages 17-20**
 Dimensions: **pages 34-35**

**Vertical
 Input Shaft
 WJQM**



Ratings: **pages 17-20**
 Dimensions: **Contact Factory**



**MOTORIZED C-FLANGE
 FLEXIBLE COUPLING INPUT**

WBQF



Ratings: **pages 17-20**
 Dimensions: **pages 34-35**

WJQF



Ratings: **pages 17-20**
 Dimensions: **Contact Factory**



**NON-FLANGED
 INPUT**

WBQ



Ratings: **pages 17-20**
 Dimensions: **pages 34-35**

WJQ



Ratings: **pages 17-20**
 Dimensions: **Contact Factory**



Additional accessories, options and assembly services are available. Contact Rexnord for details.

Selection Guide
Hollow Output Shaft Type Single Reduction Worm

**Vertical
Output Shaft
Low Base**

WXQM



Ratings: **pages 17-20**
Dimensions: Contact Factory

**Vertical
Output Shaft
High Base**

WXQM



Ratings: **pages 17-20**
Dimensions: Contact Factory

**Flange
Mounted
Output Shaft**

WLQM



Ratings: **pages 17-20**
Dimensions: **pages 36-37**

WXQF



Ratings: **pages 17-20**
Dimensions: Contact Factory

WXQF



Ratings: **pages 17-20**
Dimensions: Contact Factory

WLQF



Ratings: **pages 17-20**
Dimensions: **pages 36-37**

WXQ



Ratings: **pages 17-20**
Dimensions: Contact Factory

WXQ



Ratings: **pages 17-20**
Dimensions: Contact Factory

WLQ



Ratings: **pages 17-20**
Dimensions: **pages 36-37**

Single Reduction Worm Quick Selection Tables

How to Use

Based on required output rpm and input motor horsepower, read across table for the appropriate reducer size. As a rule of thumb, use 1.00 service factor table for applications having uniform loads with up to 10 hours service duration per day. Use 1.25 service factor table for longer service or shock loading. These tables are to be considered as guides only. Refer to **page 8** or contact Rexnord with specific application information.

1.00 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM																			
		1/6	1/4	1/3	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15	20	25	30	40	50	60	75
5	350	1133	1133	1133	1133	1133	1133	1154	1175	1206	1238	1300	1325	1425	1525	1525	1600	1700	1800	11000	11000
7.5	233	1133	1133	1133	1133	1133	1133	1175	1206	1238	1262	1325	1425	1425	1525	1525	1600	1700	1800	11000	11000
10	175	1133	1133	1133	1133	1133	1154	1175	1206	1238	1300	1325	1425	1425	1525	1600	1700	1800	11000	11000	
15	117	1133	1133	1133	1133	1154	1154	1206	1238	1262	1325	1425	1425	1525	1700	1700	1800	11000	11000		
20	88	1133	1133	1133	1133	1154	1175	1206	1238	1262	1325	1425	1525	1600	1700	1800	11000	11000			
25	70	1133	1133	1133	1154	1154	1206	1238	1262	1300	1425	1425	1525	1700	1800	11000	11000				
30	58	1133	1133	1133	1154	1206	1206	1238	1262	1325	1425	1525	1525	1800	11000	11000					
40	44	1133	1133	1133	1154	1206	1238	1262	1300	1425	1425	1525	1700	11000	11000						
50	35	1133	1133	1154	1175	1206	1238	1300	1325	1425	1525	1700	1800	11000							
60	29	1133	1133	1154	1206	1238	1262	1300	1325	1425	1525	1800	11000								
70	25	—	—	—	—	—	—	—	—	—	1700	1800	11000								
80	22	1154	1206	1238	1262	1300	1325	1425	1525	1600											
100	18	1206	1238	1262	1300	1425	1425	1525	1525												

1.25 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM																			
		1/6	1/4	1/3	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15	20	25	30	40	50	60	75
5	350	1133	1133	1133	1133	1133	1133	1154	1206	1238	1262	1325	1425	1525	1525	1700	1700	1800	11000	11000	
7.5	233	1133	1133	1133	1133	1133	1154	1175	1206	1238	1300	1425	1425	1525	1525	1700	1700	1800	11000	11000	
10	175	1133	1133	1133	1133	1154	1154	1206	1238	1262	1325	1425	1425	1525	1600	1700	1800	11000	11000		
15	117	1133	1133	1133	1133	1154	1175	1206	1238	1300	1425	1425	1525	1600	1700	1800	11000	11000			
20	88	1133	1133	1133	1154	1175	1206	1238	1262	1300	1425	1425	1525	1700	1800	11000	11000				
25	70	1133	1133	1133	1154	1206	1206	1238	1262	1325	1425	1525	1600	1800	11000	11000					
30	58	1133	1133	1154	1154	1206	1238	1262	1300	1425	1425	1525	1700	11000	11000						
40	44	1133	1133	1154	1206	1238	1238	1300	1325	1425	1525	1700	1800	11000							
50	35	1133	1154	1154	1206	1238	1262	1300	1425	1425	1525	1800	11000								
60	29	1133	1154	1175	1206	1238	1300	1325	1425	1525	1700	11000	11000								
70	25	—	—	—	—	—	—	—	—	—	1700	1800	11000								
80	22	1154	1206	1238	1300	1325	1425	1525	1525												
100	18	1154	1238	1300	1325	1425	1525	1525	1600												

① Refer to **page 16** for exact ratio of single reduction worm gear reducers.

█ indicates a selection where a smaller reducer (1 case size) can be used with redesigned product due to rating increase.

█ indicates a selection where a smaller reducer (2 case sizes) can be used with redesigned product due to rating increase.

NOTE: This table is meant as a guide for reducer selections at specific motor horsepower. Actual service factor may be greater than indicated. For actual service factors and maximum worm reducer ratings, refer to **pages 7-8** and **pages 17-20**.

Single Reduction Worm Quick Selection Tables

1.50 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM																		
		1/6	1/4	1/3	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15	20	25	30	40	50	60
5	350	1133	1133	1133	1133	1133	1154	1175	1206	1238	1300	1325	1425	1525	1525	1700	1700	1800	11000	11000
7.5	233	1133	1133	1133	1133	1154	1154	1206	1238	1262	1325	1425	1425	1525	1600	1700	1800	11000	11000	
10	175	1133	1133	1133	1133	1154	1175	1206	1238	1262	1325	1425	1525	1525	1700	1800	11000	11000		
15	117	1133	1133	1133	1154	1175	1206	1238	1262	1300	1425	1525	1525	1700	1800	11000	11000			
20	88	1133	1133	1133	1154	1206	1206	1238	1262	1325	1425	1525	1600	1800	11000	11000				
25	70	1133	1133	1154	1154	1206	1238	1262	1300	1425	1425	1525	1700	11000	11000					
30	58	1133	1133	1154	1206	1206	1238	1300	1325	1425	1525	1700	1800	11000						
40	44	1133	1154	1154	1206	1238	1262	1300	1325	1425	1525	1800	11000							
50	35	1133	1154	1175	1206	1238	1300	1325	1425	1525	1700	1800	11000							
60	29	1133	1154	1206	1238	1262	1300	1425	1425	1525	1800	11000								
70	25	—	—	—	—	—	—	—	—	1700	1800	11000								
80	22	1206	1238	1262	1300	1425	1425	1525	1600											
100	18	1238	1262	1300	1425	1425	1525	1600												

1.75 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM																		
		1/6	1/4	1/3	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15	20	25	30	40	50	60
5	350	1133	1133	1133	1133	1154	1154	1175	1206	1238	1300	1425	1425	1525	1600	1700	1800	11000	11000	11000
7.5	233	1133	1133	1133	1133	1154	1175	1206	1238	1300	1325	1425	1525	1525	1700	1800	1800	11000	11000	
10	175	1133	1133	1133	1154	1175	1206	1238	1262	1300	1425	1425	1525	1700	1700	1800	11000			
15	117	1133	1133	1133	1154	1206	1206	1238	1262	1325	1425	1525	1525	1700	11000	11000				
20	88	1133	1133	1154	1154	1206	1238	1262	1300	1425	1425	1525	1700	11000	11000					
25	70	1133	1133	1154	1175	1206	1238	1300	1325	1425	1525	1700	1800	11000						
30	58	1133	1154	1154	1206	1238	1262	1300	1325	1425	1525	1700	1800	11000						
40	44	1133	1154	1175	1206	1238	1300	1325	1425	1425	1600	1800	11000							
50	35	1133	1154	1206	1238	1262	1300	1425	1425	1525	1700	11000	11000							
60	29	1154	1175	1206	1238	1300	1325	1425	1425	1525	1800	11000								
70	25	—	—	—	—	—	—	—	—	1700	11000									
80	22	1206	1238	1262	1300	1425	1425	1525	1600											
100	18	1238	1300	1300	1425	1525	1525													

2.00 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM																		
		1/6	1/4	1/3	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15	20	25	30	40	50	
5	350	1133	1133	1133	1133	1154	1175	1206	1238	1262	1325	1425	1525	1525	1700	1700	1800	11000	11000	
7.5	233	1133	1133	1133	1133	1154	1206	1238	1238	1300	1425	1425	1525	1600	1700	1800	11000	11000		
10	175	1133	1133	1133	1154	1175	1206	1238	1262	1300	1425	1525	1525	1700	1800	11000	11000			
15	117	1133	1133	1154	1154	1206	1238	1262	1300	1325	1425	1525	1525	1700	1800	11000	11000			
20	88	1133	1133	1154	1175	1206	1238	1262	1325	1425	1525	1600	1800	11000	11000					
25	70	1133	1154	1154	1206	1238	1238	1300	1325	1425	1525	1700	1800	11000						
30	58	1133	1154	1175	1206	1238	1262	1325	1425	1425	1525	1800	11000							
40	44	1133	1154	1206	1238	1262	1300	1425	1425	1525	1700	11000	11000							
50	35	1154	1175	1206	1238	1300	1325	1425	1425	1525	1800	11000								
60	29	1154	1206	1206	1262	1300	1325	1425	1525	1600	11000									
70	25	—	—	—	—	—	—	1700	1700	1800	11000									
80	22	1238	1262	1300	1325	1425	1525	1600												
100	18	1262	1300	1325	1425	1525	1525													

① Refer to page 16 for exact ratio of single reduction worm gear reducers.

█ indicates a selection where a smaller reducer (1 case size) can be used with redesigned product due to rating increase.

█ indicates a selection where a smaller reducer (2 case sizes) can be used with redesigned product due to rating increase.

NOTE: This table is meant as a guide for reducer selections at specific motor horsepowers. Actual service factor may be greater than indicated. For actual service factors and maximum worm reducer ratings, refer to pages 7-8 and pages 17-20.

Exact Ratios and Hollow Shaft Bore Sizes

Single Reduction Exact Ratios

Nominal Total Rating	Gear Reducer Size													
	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000
5	5.0	5.0	5.0	5.0	5.0	5.17	5.0	5.17	5.17	5.13	5.0	5.13	5.13	5.13
7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.33
10	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.75	9.75	9.75
15	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	14.67	14.67	14.67
20	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.5	20.5	20.5
25	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	24.5	24.5	24.5
30	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	29.5	29.5	29.5
40	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
50	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
60	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
70	—	—	—	—	—	—	—	—	—	—	—	70.0	70.0	70.0
80	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	—	—	—
100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	—	—	—

Hollow Shaft Bore Sizes (in) ①

Fraction Size	Decimal Size	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000	Keyway②
5/8	0.625															3/16 x 3/32
11/16	0.688															3/16 x 3/32
3/4	0.750															3/16 x 3/32
7/8	0.875															3/16 x 3/32
1	1.000															1/4 x 1/8
1-1/8	1.125															1/4 x 1/8
1-3/16	1.188															1/4 x 1/8
1-1/4	1.250															1/4 x 1/8
1-7/16	1.438															3/8 x 3/16
1-1/2	1.500															3/8 x 3/16
1-5/8	1.625															3/8 x 3/16
1-11/16	1.688															3/8 x 3/16
1-3/4	1.750															3/8 x 3/16
1-7/8	1.875															1/2 x 1/4
1-15/16	1.938															1/2 x 1/4
2	2.000															1/2 x 1/4
2-3/16	2.188															1/2 x 1/4
2-1/4	2.250															1/2 x 1/4
2-7/16	2.438															5/8 x 5/16
2-1/2	2.500															5/8 x 5/16
2-11/16	2.688															5/8 x 5/16
2-15/16	2.938															3/4 x 3/8
3	3.000															3/4 x 3/8
3-3/16	3.188															3/4 x 3/8
3-7/16	3.438															7/8 x 7/16
3-15/16	3.938															1 x 1/2
4-3/16	4.188															1 x 1/2
4-7/16	4.438															1 x 1/2
4-15/16	4.938															1-1/4 x 5/8
5-7/16	5.438															1-1/4 x 5/8

Stock Bore Sizes.

① Other bore sizes are available. Contact Rexnord for sizes and availability.

② Dimensions refer to customer-driven shaft.

NOTE: Specify the required bore size when ordering. The suffix "XX" can be substituted with the bore code from table above.

Single Reduction Worm Horsepower and Torque Ratings

Nominal Ratio	Speed (RPM)		Size 1133			Size 1154			Size 1175			Size 1206		
	Input	Output	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)
			Input	Output		Input	Output		Input	Output		Input	Output	
5	2500	500.0	1.528	1.429	180	2.310	2.151	271	3.095	2.900	366	4.305	4.043	510
	1750	350.0	1.248	1.158	209	1.939	1.794	323	2.600	2.422	436	3.653	3.410	614
	1170	234.0	0.952	0.872	235	1.537	1.408	379	2.066	1.906	513	2.873	2.657	716
	870	174.0	0.764	0.692	251	1.260	1.142	414	1.694	1.549	561	2.344	2.146	777
7.5	2500	333.3	1.281	1.178	223	1.785	1.619	306	2.307	2.127	402	3.300	3.051	577
	1750	233.3	1.025	0.933	252	1.522	1.368	370	1.909	1.745	471	2.793	2.562	692
	1170	156.0	0.770	0.689	278	1.205	1.068	431	1.473	1.328	537	2.194	1.989	804
	870	116.0	0.615	0.540	293	0.988	0.863	469	1.191	1.059	576	1.790	1.604	871
10	2500	250.0	1.016	0.912	230	1.500	1.324	334	1.996	1.820	459	2.973	2.722	686
	1750	175.0	0.823	0.729	263	1.279	1.116	402	1.625	1.466	528	2.464	2.235	805
	1170	117.0	0.626	0.543	293	1.014	0.869	468	1.239	1.099	592	1.905	1.702	917
	870	87.0	0.504	0.428	310	0.834	0.702	509	0.997	0.869	629	1.542	1.358	984
15	2500	166.7	0.790	0.678	257	1.174	0.982	371	1.485	1.301	492	2.284	2.035	769
	1750	116.7	0.642	0.541	292	1.003	0.826	446	1.224	1.058	571	1.887	1.661	897
	1170	78.0	0.491	0.402	325	0.800	0.643	519	0.945	0.799	645	1.459	1.259	1017
	870	58.0	0.397	0.317	344	0.662	0.519	563	0.767	0.634	689	1.183	1.002	1088
20	2500	125.0	0.681	0.562	283	1.077	0.860	434	1.283	1.093	551	1.914	1.642	828
	1750	87.5	0.551	0.445	320	0.919	0.719	518	1.046	0.875	630	1.584	1.338	964
	1170	58.5	0.422	0.328	354	0.734	0.557	600	0.803	0.652	702	1.229	1.012	1090
	870	43.5	0.343	0.258	373	0.609	0.448	649	0.651	0.514	744	1.002	0.804	1165
25	2500	100.0	0.544	0.431	272	0.881	0.670	422	1.088	0.900	567	1.623	1.359	857
	1750	70.0	0.445	0.344	309	0.752	0.559	503	0.884	0.715	644	1.333	1.094	985
	1170	46.8	0.344	0.255	344	0.602	0.431	580	0.678	0.530	713	1.030	0.820	1104
	870	34.8	0.282	0.201	364	0.502	0.346	627	0.551	0.416	753	0.839	0.648	1174
30	2500	83.3	0.481	0.364	276	0.729	0.526	398	0.892	0.702	531	1.359	1.102	833
	1750	58.3	0.395	0.290	314	0.630	0.442	478	0.741	0.569	614	1.129	0.896	968
	1170	39.0	0.308	0.215	348	0.510	0.344	555	0.580	0.428	692	0.882	0.677	1095
	870	29.0	0.254	0.169	368	0.428	0.277	602	0.478	0.340	738	0.724	0.538	1169
40	2500	62.5	0.400	0.283	285	0.649	0.432	435	0.739	0.551	556	1.096	0.829	836
	1750	43.8	0.329	0.223	322	0.560	0.361	520	0.609	0.440	634	0.916	0.674	971
	1170	29.3	0.258	0.165	355	0.456	0.279	601	0.476	0.328	706	0.722	0.509	1097
	870	21.8	0.214	0.129	375	0.385	0.225	651	0.393	0.258	748	0.598	0.404	1172
50	2500	50.0	0.346	0.232	292	0.536	0.329	415	0.625	0.444	559	0.925	0.670	845
	1750	35.0	0.285	0.182	327	0.464	0.274	494	0.515	0.352	634	0.769	0.539	970
	1170	23.4	0.224	0.133	359	0.379	0.211	569	0.404	0.260	701	0.606	0.403	1086
	870	17.4	0.187	0.104	377	0.322	0.170	615	0.335	0.204	740	0.503	0.319	1154
60	2500	41.7	0.297	0.184	279	0.451	0.257	389	0.542	0.363	550	0.799	0.535	809
	1750	29.2	0.246	0.145	313	0.391	0.214	462	0.449	0.288	623	0.674	0.435	940
	1170	19.5	0.195	0.107	345	0.321	0.165	532	0.354	0.213	689	0.539	0.328	1061
	870	14.5	0.164	0.083	362	0.275	0.132	574	0.296	0.167	728	0.452	0.261	1133
80	2500	31.3	0.144	0.081	163	0.219	0.109	220	0.247	0.156	314	0.357	0.236	476
	1750	21.9	0.121	0.064	183	0.204	0.093	269	0.208	0.124	356	0.304	0.190	547
	1170	14.6	0.096	0.047	201	0.176	0.073	314	0.164	0.091	392	0.241	0.141	609
	870	10.9	0.079	0.036	210	0.152	0.059	340	0.134	0.071	413	0.198	0.111	644
100	2500	25.0	0.100	0.051	128	0.155	0.069	175	0.167	0.097	245	0.251	0.150	379
	1750	17.5	0.084	0.040	143	0.145	0.059	213	0.141	0.077	277	0.217	0.122	439
	1170	11.7	0.067	0.029	156	0.126	0.046	248	0.111	0.057	304	0.175	0.091	491
	870	8.7	0.055	0.023	164	0.109	0.037	268	0.092	0.044	319	0.146	0.072	521
	100	1.0	0.010	0.003	184	0.024	0.005	328	0.016	0.006	362	0.026	0.010	605

Single Reduction Worm Horsepower and Torque Ratings

Nominal Ratio	Speed (RPM)		Size 1238			Size 1262			Size 1300			Size 1325		
	Input	Output	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)
			Input	Output		Input	Output		Input	Output		Input	Output	
5 Ⓣ	2500	500.0	6.322	5.950	750	7.946	7.486	944	10.661	10.091	1272	13.94	13.24	1669
	1750	350.0	5.323	4.985	898	6.693	6.276	1130	9.093	8.573	1544	11.92	11.29	2033
	1170	234.0	4.280	3.976	1071	5.439	5.061	1363	7.434	6.966	1876	9.790	9.220	2483
	870	174.0	3.533	3.254	1179	4.515	4.169	1510	6.249	5.818	2108	8.287	7.761	2811
7.5	100	20.0	0.655	0.489	1540	0.844	0.638	2010	1.177	0.928	2925	1.567	1.267	3994
	2500	333.3	4.739	4.401	832	5.877	5.453	1031	8.178	7.669	1450	10.36	9.695	1833
	1750	233.3	3.992	3.685	995	4.956	4.571	1235	6.879	6.421	1734	8.863	8.264	2232
	1170	156.0	3.204	2.929	1183	4.018	3.671	1483	5.668	5.251	2122	7.286	6.747	2726
10	870	116.0	2.644	2.393	1300	3.334	3.017	1639	4.742	4.360	2369	6.174	5.676	3084
	100	13.3	0.502	0.357	1689	0.640	0.458	2166	0.898	0.683	3228	1.201	0.926	4375
	2500	250.0	4.199	3.862	974	5.338	4.904	1236	7.293	6.745	1701	9.601	8.943	2254
	1750	175.0	3.564	3.253	1172	4.492	4.097	1475	6.151	5.655	2037	8.092	7.497	2700
15	1170	117.0	2.808	2.531	1364	3.579	3.226	1738	4.989	4.541	2446	6.604	6.066	3268
	870	87.0	2.296	2.044	1480	2.944	2.622	1900	4.141	3.732	2703	5.498	5.006	3626
	100	10.0	0.442	0.295	1857	0.572	0.386	2431	0.799	0.567	3573	1.048	0.770	4853
	2500	166.7	3.268	2.913	1102	4.316	3.881	1468	5.734	5.149	1947	7.258	6.582	2489
20	1750	116.7	2.765	2.439	1318	3.614	3.216	1737	4.843	4.311	2329	6.127	5.516	2980
	1170	78.0	2.178	1.888	1526	2.821	2.468	1994	3.903	3.426	2768	5.031	4.478	3618
	870	58.0	1.784	1.520	1652	2.298	1.978	2149	3.234	2.799	3041	4.208	3.702	4023
	100	6.7	0.369	0.217	2056	0.467	0.279	2637	0.663	0.418	3949	0.853	0.573	5413
25	2500	125.0	2.750	2.365	1192	3.503	3.050	1538	4.662	4.067	2051	6.122	5.412	2729
	1750	87.5	2.326	1.972	1421	2.965	2.549	1836	3.947	3.407	2454	5.180	4.536	3267
	1170	58.5	1.835	1.522	1640	2.339	1.970	2123	3.198	2.713	2923	4.215	3.636	3917
	870	43.5	1.508	1.223	1772	1.921	1.585	2296	2.661	2.219	3215	3.513	2.984	4323
30	100	5.0	0.337	0.174	2193	0.419	0.226	2849	0.579	0.332	4189	0.746	0.452	5695
	2500	100.0	2.335	1.949	1228	2.955	2.505	1579	3.957	3.355	2114	5.162	4.457	2809
	1750	70.0	1.967	1.615	1454	2.487	2.076	1869	3.355	2.807	2527	4.373	3.732	3360
	1170	46.8	1.551	1.239	1669	1.957	1.594	2146	2.713	2.223	2993	3.543	2.968	3996
40	870	34.8	1.276	0.993	1798	1.608	1.277	2312	2.259	1.812	3282	2.949	2.425	4392
	100	4.0	0.302	0.140	2205	0.370	0.180	2837	0.519	0.269	4238	0.655	0.362	5710
	2500	83.3	1.945	1.579	1194	2.556	2.115	1600	3.389	2.787	2108	4.262	3.562	2694
	1750	58.3	1.653	1.317	1423	2.145	1.743	1883	2.879	2.332	2519	3.619	2.986	3226
50	1170	39.0	1.314	1.016	1642	1.687	1.332	2152	2.335	1.845	2982	2.987	2.415	3902
	870	29.0	1.088	0.817	1775	1.387	1.064	2312	1.950	1.504	3269	2.515	1.992	4329
	100	3.3	0.270	0.116	2197	0.335	0.149	2816	0.472	0.223	4217	0.593	0.306	5787
	2500	62.5	1.574	1.195	1205	1.989	1.545	1558	2.639	2.054	2071	3.434	2.736	2759
60	1750	43.8	1.342	0.994	1433	1.695	1.287	1854	2.251	1.720	2477	2.926	2.293	3303
	1170	29.3	1.074	0.766	1650	1.354	0.993	2139	1.843	1.366	2944	2.402	1.833	3950
	870	21.8	0.895	0.615	1782	1.126	0.797	2311	1.551	1.116	3234	2.022	1.502	4353
	100	2.5	0.245	0.087	2198	0.299	0.113	2857	0.407	0.167	4200	0.513	0.227	5710
80	2500	50.0	1.335	0.961	1211	1.672	1.237	1560	2.238	1.654	2084	2.883	2.199	2772
	1750	35.0	1.137	0.795	1432	1.420	1.023	1843	1.915	1.383	2490	2.462	1.841	3315
	1170	23.4	0.911	0.609	1641	1.135	0.784	2112	1.569	1.094	2945	2.018	1.461	3935
	870	17.4	0.762	0.488	1767	0.947	0.628	2274	1.324	0.891	3227	1.700	1.193	4321
100	100	2.0	0.224	0.069	2163	0.269	0.088	2783	0.372	0.132	4156	0.458	0.178	5601
	2500	41.7	1.149	0.806	1219	1.433	1.015	1536	1.907	1.336	2020	2.471	1.812	2741
	1750	29.2	0.967	0.656	1418	1.216	0.835	1805	1.637	1.117	2413	2.114	1.515	3274
	1170	19.5	0.770	0.496	1604	0.973	0.637	2060	1.348	0.883	2854	1.733	1.197	3869
125	870	14.5	0.644	0.394	1714	0.814	0.509	2213	1.143	0.719	3126	1.462	0.975	4236
	100	1.7	0.197	0.054	2054	0.245	0.071	2689	0.341	0.106	4026	0.414	0.144	5448
	2500	31.3	0.520	0.348	701	0.659	0.456	919	0.972	0.671	1352	1.122	0.796	1605
	1750	21.9	0.455	0.288	830	0.577	0.379	1092	0.895	0.585	1684	1.030	0.695	2000
150	1170	14.6	0.370	0.219	946	0.469	0.289	1247	0.757	0.463	1996	0.869	0.551	2371
	870	10.9	0.309	0.175	1011	0.391	0.231	1335	0.646	0.376	2179	0.740	0.447	2590
	100	1.3	0.056	0.024	1202	0.070	0.032	1593	0.126	0.054	2731	0.143	0.064	3246
	2500	25.0	0.351	0.219	551	0.441	0.286	721	0.656	0.424	1069	0.754	0.503	1268
200	1750	17.5	0.307	0.180	648	0.386	0.236	851	0.603	0.367	1321	0.691	0.435	1567
	1170	11.7	0.251	0.136	735	0.314	0.179	966	0.511	0.289	1554	0.584	0.343	1846
	870	8.7	0.210	0.108	784	0.262	0.143	1032	0.437	0.234	1691	0.498	0.277	2009
	100	1.0	0.039	0.015	926	0.048	0.019	1222	0.087	0.033	2100	0.097	0.040	2496

Ⓣ For Size 1262, 5.17 actual. For Size 1325, 5.167 actual.

Single Reduction Worm Horsepower and Torque Ratings

Nominal Ratio	Speed (RPM)		Size 1425			Size 1525			Size 1600		
	Input	Output	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)
			Input	Output		Input	Output		Input	Output	
5 ①	2500	500.0	20.79	19.87	2589	37.08	35.61	4601	39.83	38.29	4827
	1750	350.0	18.08	17.25	3209	32.51	31.17	5753	35.10	33.70	6068
	1170	234.0	15.18	14.43	4016	27.55	26.35	7276	29.94	28.69	7726
	870	174.0	13.13	12.44	4654	24.11	23.00	8538	26.32	25.16	9115
7.5	100	20.0	2.751	2.376	7738	5.390	4.794	15484	6.203	5.581	17587
	2500	333.3	18.84	17.83	3372	32.21	30.68	5800	34.20	32.60	6163
	1750	233.3	16.27	15.36	4148	28.10	26.70	7213	29.98	28.52	7704
	1170	156.0	13.42	12.61	5094	23.67	22.42	9058	25.41	24.11	9740
10	870	116.0	11.66	10.90	5922	20.47	19.32	10497	21.86	20.67	11230
	100	13.3	2.342	1.931	9126	4.442	3.821	18062	5.018	4.371	20662
	2500	250.0	17.39	16.37	4127	26.55	24.99	6300	28.53	26.90	6782
	1750	175.0	14.93	14.00	5042	23.15	21.73	7827	24.99	23.51	8467
15	1170	117.0	12.31	11.47	6180	19.50	18.23	9818	21.17	19.84	10687
	870	87.0	10.51	9.74	7053	16.88	15.71	11381	18.25	17.04	12345
	100	10.0	2.051	1.629	10629	3.701	3.073	19367	4.198	3.542	22324
	2500	166.7	12.94	11.92	4507	20.77	19.05	7204	21.95	20.17	7628
20	1750	116.7	11.13	10.20	5508	18.11	16.55	8941	19.23	17.61	9515
	1170	78.0	9.193	8.357	6752	15.26	13.86	11201	16.30	14.85	11996
	870	58.0	7.869	7.095	7710	13.24	11.95	12984	14.09	12.77	13872
	100	6.7	1.608	1.190	11245	2.997	2.309	21826	3.337	2.623	24797
25	2500	125.0	11.02	9.91	4999	16.69	14.95	7538	17.93	16.11	8123
	1750	87.5	9.462	8.458	6092	14.56	12.98	9351	15.71	14.06	10127
	1170	58.5	7.816	6.913	7447	12.29	10.87	11709	13.32	11.84	12758
	870	43.5	6.661	5.828	8444	10.68	9.37	13573	11.54	10.188	14761
30	100	5.0	1.407	0.956	12056	2.499	1.802	22716	2.805	2.078	26194
	2500	100.0	9.256	8.164	5145	13.95	12.18	7674	14.89	13.04	8219
	1750	70.0	7.940	6.946	6254	12.19	10.57	9517	13.06	11.378	10245
	1170	46.8	6.551	5.658	7619	10.298	8.848	11915	11.094	9.582	12903
40	870	34.8	5.563	4.741	8587	8.963	7.626	13811	9.628	8.245	14932
	100	4.0	1.210	0.764	12038	2.176	1.464	23068	2.418	1.678	26436
	2500	83.3	7.517	6.455	4882	12.056	10.264	7763	12.73	10.87	8222
	1750	58.3	6.481	5.517	5960	10.538	8.910	9627	11.177	9.486	10249
50	1170	39.0	5.384	4.518	7300	8.918	7.457	12051	9.507	7.989	12911
	870	29.0	4.626	3.825	8314	7.774	6.427	13968	8.262	6.874	14939
	100	3.3	1.066	0.636	12026	1.949	1.233	23305	2.143	1.400	26480
	2500	62.5	6.101	5.013	5055	9.258	7.533	7596	9.922	8.119	8187
60	1750	43.8	5.262	4.274	6156	8.105	6.538	9419	8.722	7.083	10203
	1170	29.3	4.379	3.490	7520	6.878	5.471	11789	7.433	5.963	12848
	870	21.8	3.756	2.938	8512	6.012	4.716	13664	6.477	5.132	14870
	100	2.5	0.920	0.480	12090	1.592	0.903	22772	1.761	1.042	26260
80	2500	50.0	5.088	4.029	5078	7.727	5.990	7550	8.226	6.417	8088
	1750	35.0	4.389	3.426	6170	6.777	5.199	9362	7.242	5.597	10079
	1170	23.4	3.655	2.788	7510	5.766	4.350	11717	6.188	4.712	12691
	870	17.4	3.130	2.334	8454	5.055	3.749	13581	5.406	4.055	14689
100	100	2.0	0.804	0.375	11809	1.411	0.718	22622	1.544	0.823	25925
	2500	41.7	4.333	3.317	5017	6.621	4.912	7429	6.977	5.202	7869
	1750	29.2	3.681	2.772	5989	5.816	4.263	9212	6.152	4.539	9808
	1170	19.5	3.116	2.285	7386	4.961	3.567	11528	5.269	3.822	12352
120	870	14.5	2.668	1.906	8283	4.359	3.074	13362	4.613	3.289	14294
	100	1.7	0.715	0.302	11439	1.270	0.588	22251	1.376	0.669	25283
	2500	31.3	2.019	1.486	2995	3.226	2.217	4469	4.130	2.939	5962
	1750	21.9	1.760	1.257	3620	2.906	1.902	5478	3.702	2.522	7264
150	1170	14.6	1.585	1.049	4519	2.618	1.600	6894	3.315	2.122	9142
	870	10.9	1.385	0.875	5068	2.419	1.396	8090	3.037	1.843	10679
	100	1.3	0.290	0.135	6804	0.744	0.280	14089	0.950	0.382	19249
	2500	25.0	1.341	0.933	2351	2.285	1.504	3790	2.849	1.905	4802
200	1750	17.5	1.201	0.792	2852	2.072	1.291	4646	2.571	1.635	5886
	1170	11.7	1.062	0.655	3527	1.820	1.052	5663	2.323	1.376	7408
	870	8.7	0.928	0.544	3937	1.748	0.950	6879	2.147	1.198	8674
	100	1.0	0.197	0.083	5219	0.515	0.180	11331	0.686	0.244	15389

① For Size 1425, 5.17 actual. For Size 1525, 5.13 actual.

Single Reduction Worm Horsepower and Torque Ratings

Nominal Ratio	Speed (RPM)		Size 1700			Size 1800			Size 11000		
	Input	Output	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)
			Input	Output		Input	Output		Input	Output	
5 ①	1750	350.0	51.17	49.12	9062	66.88	64.31	11866	104.65	100.92	18619
	1170	234.0	43.35	41.32	11404	56.62	54.11	14932	88.50	84.91	23431
	870	174.0	38.43	36.39	13506	50.16	47.65	17685	78.33	74.77	27750
	100	20.0	9.25	8.18	26416	13.93	12.42	36447	22.12	19.80	63935
7.5 ②	1750	233.3	41.55	39.68	10572	54.37	52.05	13867	84.41	81.11	21413
	1170	156.0	35.25	33.39	13304	46.09	43.80	17451	71.47	68.24	26947
	870	116.0	30.76	28.92	15499	40.87	38.57	20668	63.32	60.10	31914
	100	13.3	6.97	6.09	28388	9.72	8.54	39793	16.55	14.66	67727
10 ③	1750	175.0	35.74	33.88	11893	43.32	41.16	14447	67.12	64.01	22466
	1170	117.0	30.37	28.51	14967	36.77	34.63	18181	56.89	53.85	28273
	870	87.0	26.47	24.63	17391	32.65	30.50	21532	50.46	47.43	33484
	100	10.0	6.15	5.26	32282	7.96	6.83	41958	13.68	11.84	72712
15 ④	1750	116.7	25.98	24.29	12827	33.82	31.75	16766	52.79	49.83	26308
	1170	78.0	22.14	20.44	16143	28.79	26.72	21099	44.86	41.92	33107
	870	58.0	19.58	17.88	18991	25.30	23.23	24672	39.88	36.92	39209
	100	6.7	4.16	3.44	31744	5.75	4.82	44195	9.95	8.37	77295
20 ⑤	1750	87.5	19.92	18.20	13431	25.93	23.82	15755	40.43	37.39	27597
	1170	58.5	17.05	15.31	16903	22.16	20.04	22118	34.48	31.46	34730
	870	43.5	15.13	13.39	19880	19.51	17.39	25815	30.75	27.71	41131
	100	5.0	3.35	2.60	33520	4.63	3.62	46792	8.01	6.35	82011
25 ⑥	1750	70.0	16.91	15.26	13462	21.94	19.93	17578	34.20	31.31	27618
	1170	46.8	14.06	12.44	16417	18.79	16.77	22122	29.22	26.35	34756
	870	34.8	12.91	11.23	19931	16.65	14.62	25946	26.10	23.20	41163
	100	4.0	2.82	2.12	32790	3.86	2.94	45421	6.70	5.18	79871
30 ⑦	1750	58.3	14.11	12.58	13356	17.93	16.16	17166	28.53	25.83	27433
	1170	39.0	11.91	10.38	16491	14.99	13.26	21058	24.44	21.73	34523
	870	29.0	10.79	9.23	19725	13.67	11.89	25398	21.27	18.62	39769
	100	3.3	2.30	1.68	31233	2.94	2.21	41088	5.49	4.12	76598
40	1750	43.8	10.88	9.31	13399	14.08	12.16	17507	21.82	19.08	27471
	1170	29.3	9.18	7.62	16416	12.17	10.23	22032	18.80	16.05	34571
	870	21.8	8.45	6.85	19828	10.88	8.93	25875	16.91	14.14	40943
	100	2.5	1.94	1.28	32194	2.64	1.77	44687	4.54	3.11	78246
50	1750	35.0	8.74	7.23	13011	11.32	9.46	17028	17.48	14.84	26703
	1170	23.4	7.43	5.93	15966	9.84	7.96	21429	15.13	12.48	33605
	870	17.4	6.86	5.32	19250	8.84	6.95	25166	13.20	10.62	38444
	100	2.0	1.62	0.99	31109	2.22	1.38	43469	3.79	2.41	75935
60	1750	29.2	7.00	5.66	12220	9.05	7.40	15982	13.98	11.62	25107
	1170	19.5	6.03	4.69	15143	7.63	6.01	19430	12.15	9.78	31597
	870	14.5	5.51	4.15	18014	7.13	5.45	23663	10.76	8.42	36566
	100	1.7	1.27	0.74	28131	1.75	1.04	39244	3.01	1.83	69119
70	1750	21.9	5.74	4.48	11300	7.37	5.85	14743	11.43	9.22	23235
	1170	14.6	4.96	3.71	13979	6.24	4.76	17921	9.98	7.76	29240
	870	10.9	4.57	3.29	16676	5.85	4.31	21829	8.85	6.66	33736
	100	1.3	1.09	0.60	26222	1.48	0.82	36215	2.59	1.46	64584

- ① 5.13 actual.
- ② 7.33 actual.
- ③ 9.75 actual.
- ④ 14.67 actual.
- ⑤ 20.50 actual.
- ⑥ 24.50 actual.
- ⑦ 29.50 actual.

Weights

Single Reduction Approximate Weights^① (lb)

Reducer Type	Reducer Size													
	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000
Solid Output Shaft														
WBM	17	21	24	29	45	56	68	75	146	247	331	—	—	—
WBF	22	23	26	30	47	57	69	76	154	254	336	429	612	—
WB	17	18	20	25	40	52	64	71	136	232	321	399	582	904
WOM & WUM	19	24	27	33	49	62	74	84	160	267	362	—	—	—
WOF & WUF	24	26	29	34	51	63	75	85	168	274	367	470	660	—
WO & WU	19	21	23	29	44	58	70	80	150	252	352	440	630	980
WJM	18	22	26	32	48	61	74	81	156	262	—	—	—	—
WJF	23	24	28	33	50	62	75	82	164	269	—	—	—	—
WJ	18	19	22	28	43	57	70	77	146	247	—	—	—	—
WXM	19	24	27	36	52	65	78	88	166	272	367	—	—	—
WXF	24	26	29	37	54	66	79	89	174	279	372	500	690	—
WX	19	21	23	32	47	61	74	84	156	257	357	470	660	1060
WLM	18	22	25	32	48	60	78	85	161	277	369	—	—	—
WLF	23	24	27	33	50	61	79	86	169	284	374	489	630	—
WL	18	19	21	28	43	56	74	81	151	262	359	459	600	925
WRM	—	—	—	—	—	—	78	85	176	278	373	—	—	—
WRF	—	—	—	—	—	—	79	86	184	285	378	590	810	—
WR	—	—	—	—	—	—	74	71	166	263	363	560	780	1180
Hollow Output Shaft														
WBQM	18	21	25	30	47	55	69	77	149	247	331	—	—	—
WBQF	22	23	27	31	49	56	70	78	157	254	336	429	612	—
WBQ	18	19	21	26	42	51	65	73	139	232	321	399	582	904
WLQM	19	22	27	33	50	59	79	87	164	277	369	—	—	—
WLQF	23	24	29	34	51	60	80	88	172	284	374	444	630	—
WLQ	19	20	23	29	45	55	75	83	154	262	359	414	600	925

① Weights include oil.

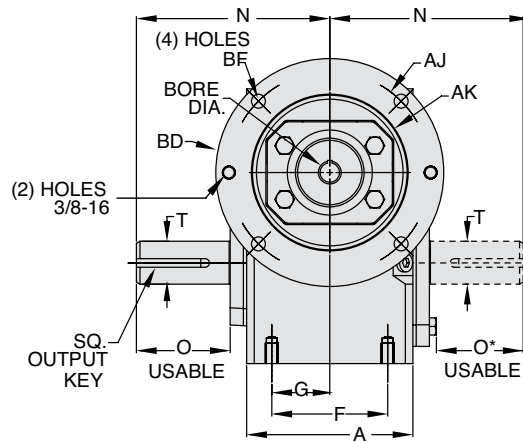
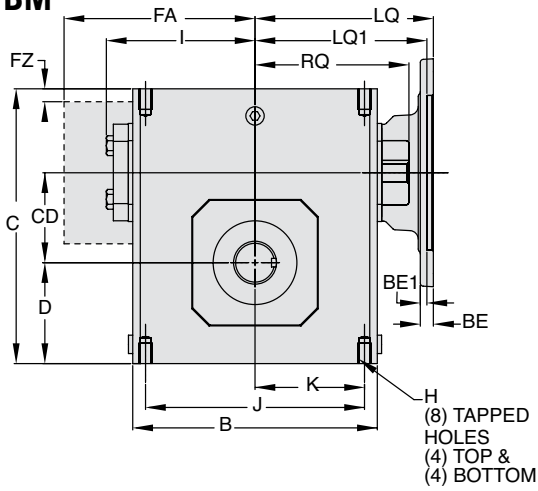
Accessories Approximate Weights (lb)

Accessory	Reducer Size													
	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000
HOFK	2	3	3	4	4	6	6	9	14	20	31	41	48	76
VIFK	1	1	2	3	3	5	6	6	10	15	—	—	—	—
VOFK	2	3	3	7	7	9	10	13	20	25	36	②	②	②
OFK	1	1	2	3	3	4	10	10	15	30	38	②	②	②
RB	—	7	7	9	9	12	15	31	24	15	—	—	—	—
TRK	5	5	5	5	5	5	5	5	5	8	8	—	—	—
Coupling Input C-Flange Kits														
48CZ, 56C, 140TC	7	7	7	7	8	8	11	11	14	16	—	—	—	—
180TC-210TC	—	—	—	—	11	11	11	11	16	18	22	30	30	—
250TC	—	—	—	—	—	—	—	28	30	30	32	34	36	—

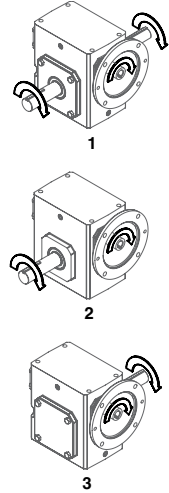
② This accessory must be assembled at the Factory. It is not available as a kit for field installation.

Type WBM, WBF, WB Single Reduction Worm

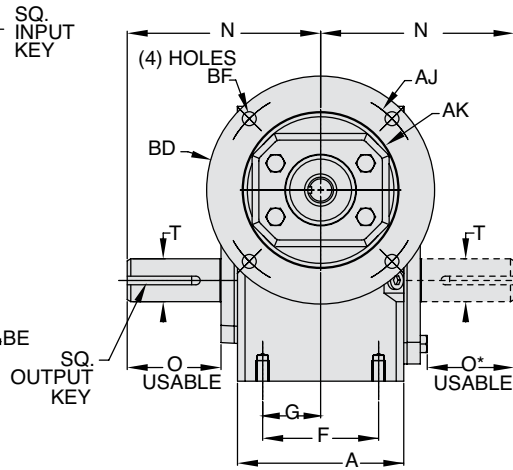
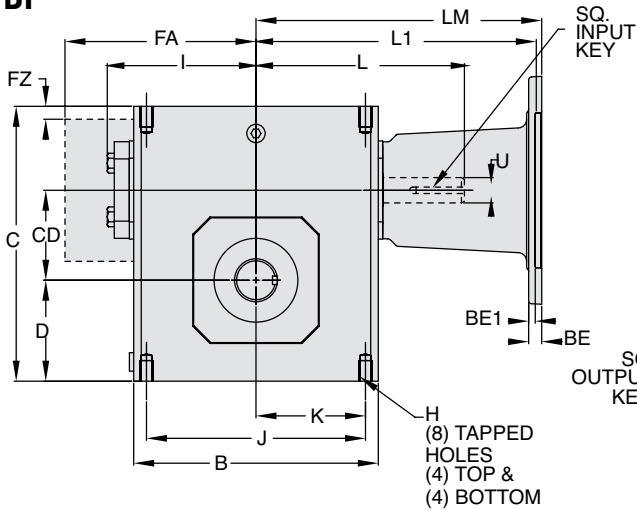
Type WBM



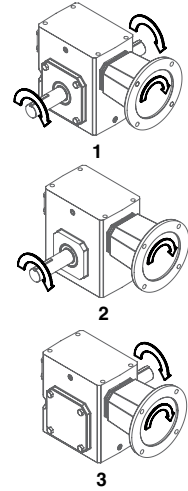
Assemblies ①



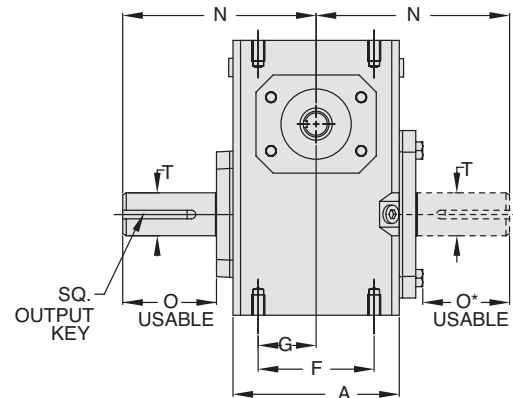
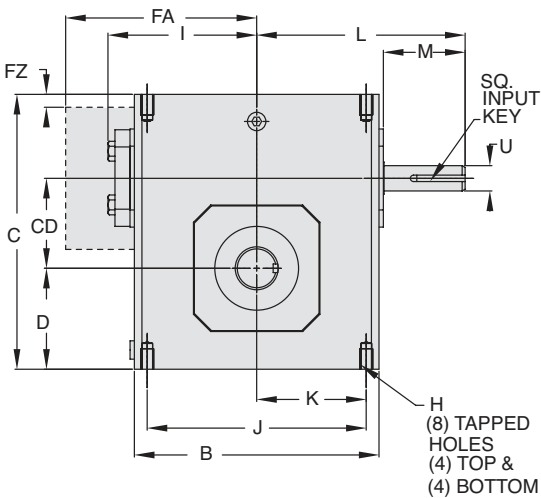
Type WBF



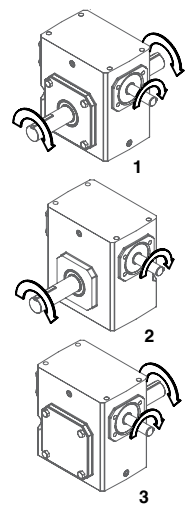
Assemblies ①



Type WB



Assemblies ①



① Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Type WBM, WBF, WB Single Reduction Worm

Dimensions (in)

Size	A	B	C	D	CD	F	FA ^①	FZ ^②	G	H		I	J	K	L	M	N	O	O ^②	T +.000 -.0015	U +.000 -.0015	Input Key ^③	Output Key
										Tap Size	Depth												
1133	2.82	3.80	4.66	1.72	1.33	2.00	—	—	1.00	5/16-18 UNC	0.50	2.61	3.25	1.63	3.82	1.76	4.00	2.16	1.94	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	3.44	4.88	5.38	1.91	1.54	2.75	—	—	1.38	5/16-18 UNC	0.63	3.14	4.19	2.09	4.35	1.76	4.31	2.11	1.90	0.750	0.625	3/16 x 1.38	3/16 x 1.50
1175	3.56	5.06	5.75	2.06	1.75	2.75	—	—	1.38	5/16-18 UNC	0.63	3.24	4.19	2.09	4.45	1.76	4.31	2.05	1.84	0.875	0.625	3/16 x 1.38	3/16 x 1.38
1206	3.81	5.80	6.38	2.28	2.06	3.00	—	—	1.44	5/16-18 UNC	0.63	3.61	4.75	2.50	4.82	1.76	4.68	2.29	2.08	1.000	0.625	3/16 x 1.38	1/4 x 1.44
1238	4.06	6.12	6.94	2.50	2.38	2.88	—	—	1.44	3/8-16 UNC	0.69	3.77	5.00	2.50	5.51	2.38	5.14	2.66	2.44	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1262	4.84	7.12	8.00	2.94	2.63	3.38	—	—	1.69	3/8-16 UNC	0.69	4.34	6.38	3.19	6.07	2.38	5.63	2.73	2.52	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1300	5.25	8.12	8.88	3.25	3.00	4.00	—	—	2.00	7/16-14 UNC	0.88	4.84	7.00	3.50	6.57	2.38	6.75	3.60	3.36	1.250	0.875	3/16 x 1.63	1/4 x 1.75
1325	5.75	8.50	9.38	3.50	3.25	4.00	—	—	2.00	7/16-14 UNC	0.88	5.02	7.50	3.75	6.76	2.38	7.06	3.66	3.42	1.375	0.875	3/16 x 1.63	5/16 x 2.63
1425	6.13	10.25	11.38	4.44	4.25	5.00	—	—	2.50	5/8-11 UNC	1.00	6.10	8.50	4.25	9.57	3.47	8.12	4.50	4.21	1.875	1.250	1/4 x 2.50	1/2 x 3.06
1525	7.19	13.00	14.00	5.12	5.25	5.81	—	—	2.91	5/8-11 UNC	1.25	7.50	11.00	5.50	10.88	3.38	9.06	4.78	4.53	2.000	1.250	1/4 x 3.00	1/2 x 3.50
1600	8.13	14.25	16.50	6.50	6.00	6.38	11.13	0.33	3.19	5/8-11 UNC	1.00	—	12.75	6.38	11.78	3.41	10.00	4.65	4.65	2.250	1.500	3/8 x 3.00	5/8 x 4.00
1700	7.63	14.88	18.91	7.59	7.00	5.50	11.37	0.35	2.75	1-8 UNC	1.56	—	12.50	6.25	11.50	2.97	11.76	5.65	5.65	2.750	1.625	3/8 x 2.87 ^④	5/8 x 4.00 ^④
1800	8.63	17.00	20.96	8.86	8.00	6.50	12.52	0.57	3.25	1-8 UNC	1.66	—	14.25	7.13	12.50	2.84	12.25	5.98	5.98	3.000	1.875	1/2 x 2.81 ^④	3/4 x 4.50 ^④
11000	9.53	20.88	25.47	10.36	10.00	6.88	14.69	0.51	3.44	1-1/4 -7 UNC	2.04	—	17.75	8.88	15.50	3.76	14.75	6.76	6.76	3.750	2.250	1/2 x 3.69 ^④	7/8 x 5.00 ^④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1154	6.16	6.60	—	—	3.99	—	—	—	3.62	—	—	—
1175	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1206	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—	—
1238	—	7.76	8.76	—	4.63 ^⑤	5.06	—	—	4.09 ^⑤	4.56	—	—
1262	—	8.32	9.32	—	5.19 ^⑤	5.62	—	—	4.82 ^⑤	5.13	—	—
1300	—	8.82	9.82	—	5.95 ^⑤	6.15	6.56	—	5.32 ^⑤	5.63	6.06	—
1325	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	6.25	—
1425	—	11.81	12.90	13.46	6.45 ^⑤	7.21	7.21	7.77	6.04 ^⑤	6.68	6.68	7.24
1525	—	13.21	14.30	14.86	7.85 ^⑤	8.61	8.61	9.17	7.35 ^⑤	7.98	7.98	8.54
1600	—	—	15.88	16.50	10.45 ^⑤	9.33	9.33	9.94	10.01 ^⑤	8.69	8.69	8.69
1700	—	—	15.50	15.50	—	—	—	—	—	—	—	—
1800	—	—	16.58 ^⑥	16.58	—	—	—	—	—	—	—	—

NEMA Dimensions (in)

Frame	AJ ^⑧	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑦	BF ^⑧
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑨

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1154	3.15	3.18	3.42	—	—	—	2.98	3.00	3.24	—	—	—
1175	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1206	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	—
1238	—	3.72	4.34	—	—	—	—	3.46	3.71	—	—	—
1262	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07	—
1300	—	4.78	5.41	5.41	5.88	—	—	4.59	5.22	5.22	5.57	—
1325	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1425	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.14	6.93
1525	—	—	—	7.78	7.78	8.57	—	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^⑦	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

① Sizes 1600-11000 are supplied with a fan. Dimensions refer to fan guard location.

② Applies to double output shaft.

③ Type WB and WBF only.

④ Key not provided with gear reducer. Keyway dimension shown.

⑤ 48CZ not available.

⑥ 180TC not available.

⑦ Keyway width by depth.

⑧ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WBF with frame sizes 180TC-250TC.

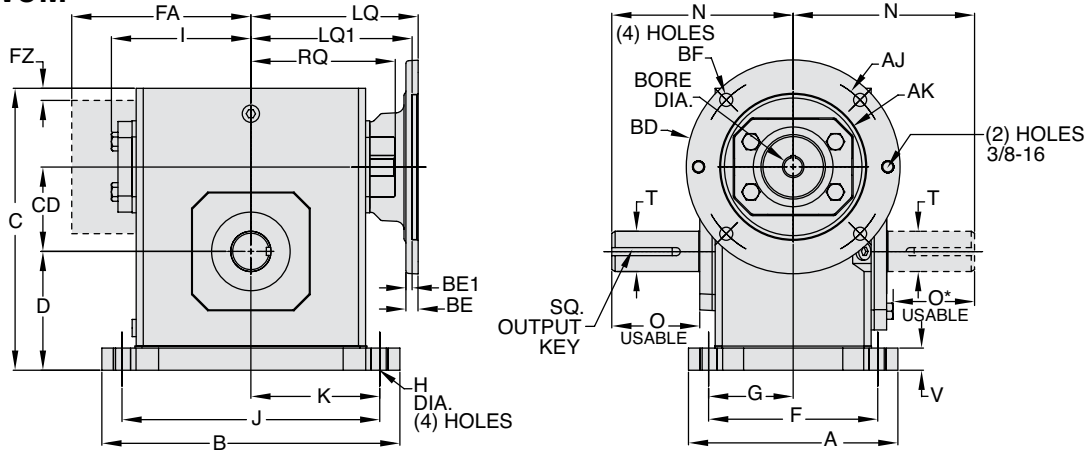
⑨ Metric IEC B5 input flange options are available only on quill input styles.



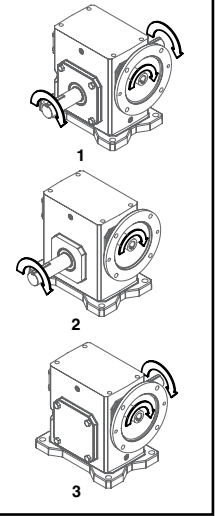
For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WOM, WOF, WO Single Reduction Worm Over

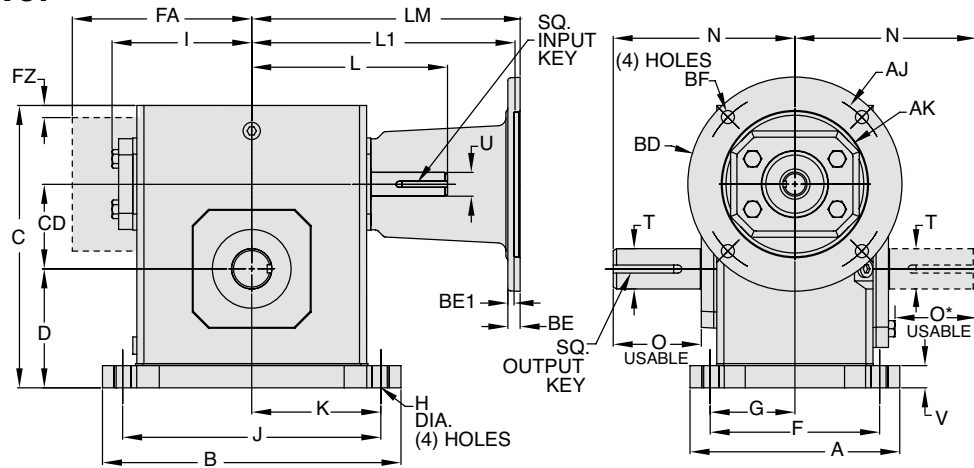
Type WOM



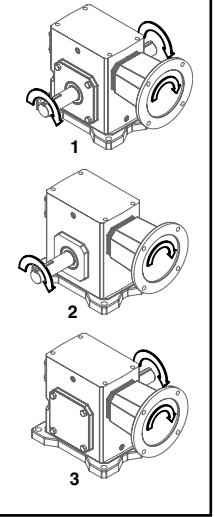
Assemblies ①



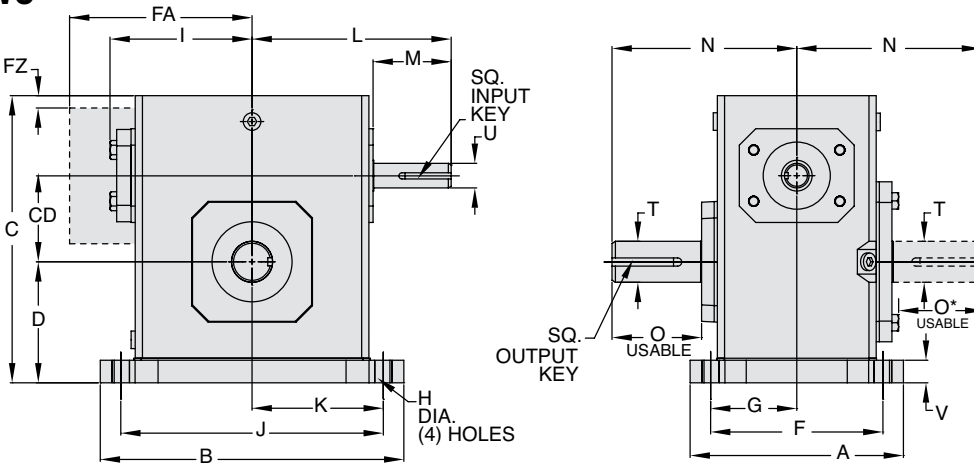
Type WOF



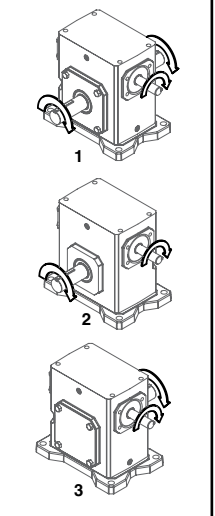
Assemblies ①



Type WO



Assemblies ①



① Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Type WOM, WOF, WO Single Reduction Worm Over

Dimensions (in)

Size	A	B	C	D	CD	F	FA ^①	FZ ^①	G	H	I	J	K	L	M	N	O	O ^②	V	T +.000 -.0015	U +.000 -.0015	Input Key ^③	Output Key
1133	5.38	5.37	5.19	2.25	1.33	3.31	—	—	1.66	0.34	2.61	4.37	2.19	3.82	1.76	4.00	2.16	1.94	0.53	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	5.56	6.50	5.97	2.50	1.54	4.31	—	—	2.16	0.41	3.14	5.25	2.63	4.35	1.76	4.31	2.11	1.90	0.59	0.750	0.625	3/16 x 1.38	3/16 x 1.50
1175	5.75	6.99	6.44	2.75	1.75	4.50	—	—	2.25	0.41	3.24	5.75	2.88	4.45	1.76	4.31	2.05	1.84	0.69	0.875	0.625	3/16 x 1.38	3/16 x 1.38
1206	6.00	7.69	7.09	3.00	2.06	4.69	—	—	2.34	0.47	3.61	6.38	3.19	4.82	1.76	4.68	2.29	2.08	0.72	1.000	0.625	3/16 x 1.38	1/4 x 1.44
1238	6.19	8.37	7.69	3.25	2.38	4.88	—	—	2.44	0.49	3.77	7.06	3.53	5.51	2.38	5.14	2.66	2.44	0.75	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1262	6.50	9.25	8.75	3.69	2.63	5.25	—	—	2.63	0.53	4.34	8.00	4.00	6.07	2.38	5.63	2.73	2.52	0.75	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1300	7.50	10.00	9.63	4.00	3.00	5.88	—	—	2.94	0.53	4.84	8.44	4.22	6.57	2.38	6.75	3.60	3.36	0.75	1.250	0.875	3/16 x 1.63	1/4 x 1.75
1325	7.75	11.12	10.25	4.38	3.25	6.13	—	—	3.06	0.53	5.02	9.50	4.75	6.76	2.38	7.06	3.66	3.42	0.81	1.375	0.875	3/16 x 1.63	5/16 x 2.63
1425	9.75	13.24	12.38	5.44	4.25	7.63	—	—	3.81	0.66	6.10	11.12	5.56	9.57	3.47	8.12	4.50	4.21	1.00	1.875	1.250	1/4 x 2.50	1/2 x 3.06
1525	10.50	16.24	15.13	6.25	5.25	8.38	—	—	4.19	0.78	7.50	14.12	7.06	10.88	3.38	9.06	4.78	4.53	1.13	2.000	1.250	1/4 x 3.00	1/2 x 3.50
1600	12.00	18.99	17.75	7.75	6.00	9.50	11.13	0.33	4.75	0.91	—	16.49	8.25	11.78	3.41	10.00	4.65	4.65	1.25	2.250	1.500	3/8 x 3.00	5/8 x 4.00
1700	13.38	15.38	20.33	9.00	7.00	11.25	11.37	0.35	5.63	1.13	—	13.00	6.50	11.50	2.97	11.76	5.65	5.65	1.42	2.750	1.625	3/8 x 2.87 ^④	5/8 x 4.00 ^④
1800	13.50	17.37	22.61	10.50	8.00	11.50	12.52	0.57	5.75	1.13	—	14.75	7.38	12.50	2.84	12.25	5.98	5.98	1.65	3.000	1.875	1/2 x 2.81 ^④	3/4 x 4.50 ^④
11000	16.88	21.14	27.12	12.00	10.00	14.00	14.69	0.51	7.00	1.44	—	17.00	8.50	15.50	3.76	14.75	6.76	6.76	1.65	3.750	2.250	1/2 x 3.69 ^④	7/8 x 5.00 ^④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ		
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—
1154	6.16	6.60	—	—	3.99	—	—	—	3.62	—	—
1175	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—
1206	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—
1238	—	7.76	8.76	—	4.63 ^⑤	5.06	—	—	4.09 ^⑤	4.56	—
1262	—	8.32	9.32	—	5.19 ^⑤	5.62	—	—	4.82 ^⑤	5.13	—
1300	—	8.82	9.82	—	5.95 ^⑤	6.15	6.56	—	5.32 ^⑤	5.63	—
1325	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	—
1425	—	11.81	12.90	13.46	6.45 ^⑤	7.21	7.21	7.77	6.04 ^⑤	6.68	7.24
1525	—	13.21	14.30	14.86	7.85 ^⑤	8.61	8.61	9.17	7.35 ^⑤	7.98	8.54
1600	—	—	15.88	16.50	10.45 ^⑤	9.33	9.33	9.94	10.01 ^⑤	8.69	8.69
1700	—	—	15.50	15.50	—	—	—	—	—	—	—
1800	—	—	16.58 ^⑥	16.58	—	—	—	—	—	—	—

NEMA Dimensions (in)

Frame	AJ ^⑧	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑦	BF ^⑧
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑨

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1154	3.15	3.18	3.42	—	—	—	2.98	3.00	3.24	—	—	—
1175	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1206	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	—
1238	—	3.72	4.34	—	—	—	—	3.46	3.71	—	—	—
1262	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07	—
1300	—	4.78	5.41	5.41	5.88	—	—	4.59	5.22	5.22	5.57	—
1325	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1425	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.14	6.93
1525	—	—	—	7.78	7.78	8.57	—	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^⑦	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 are supplied with a fan. Dimensions refer to fan guard location.
- ② Applies to double output shaft.
- ③ Type WO and WOF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ 180TC not available.
- ⑦ Keyway width by depth.

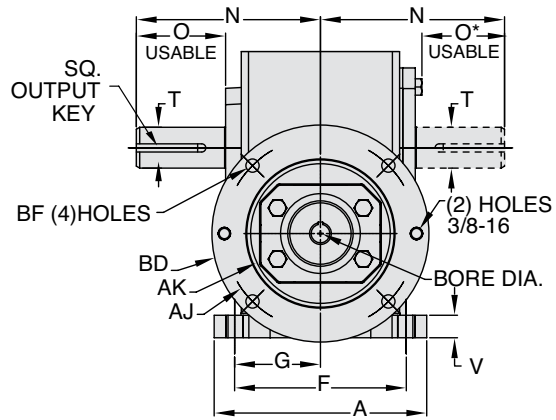
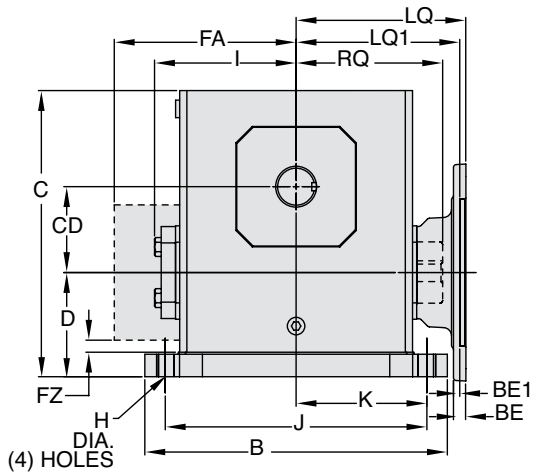
- ⑧ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WOF with frame sizes 180TC-250TC.
- ⑨ Metric IEC B5 input flange options are available only on quill input styles.



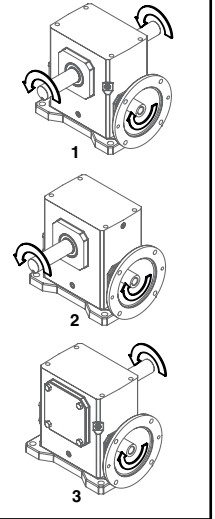
WARNING For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WUM, WUF, WU Single Reduction Worm Under

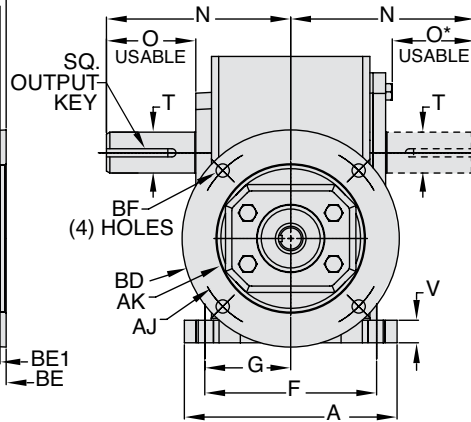
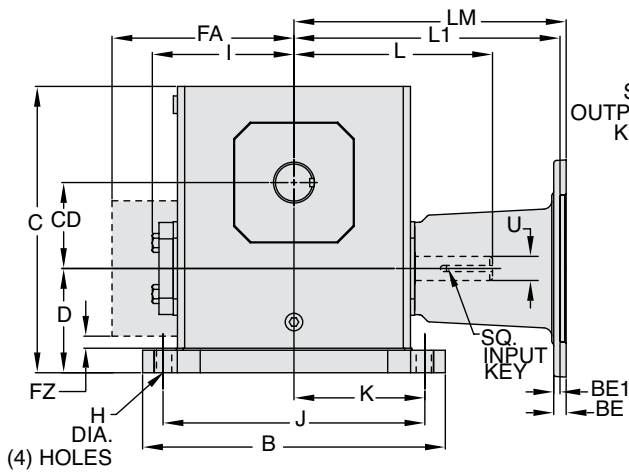
Type WUM



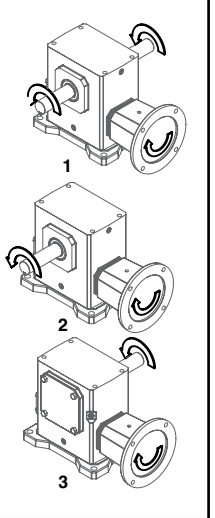
Assemblies ①



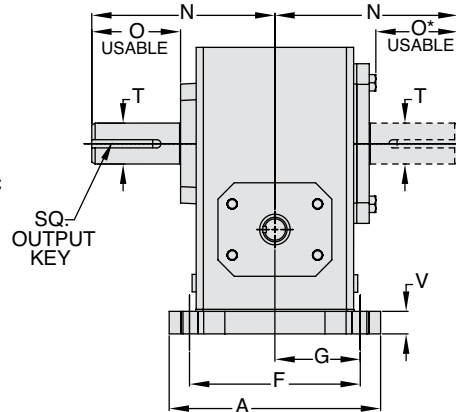
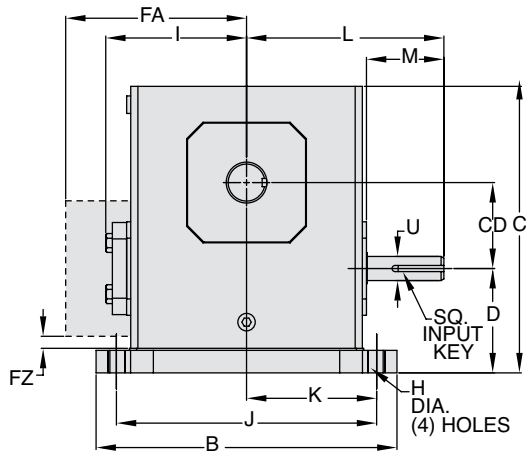
Type WUF



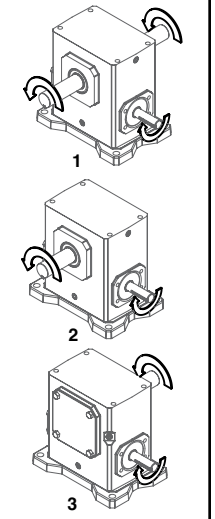
Assemblies ①



Type WU



Assemblies ①



① Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Type WUM, WUF, WU Single Reduction Worm Under

Dimensions (in)

Size	A	B	C	D	CD	F	FA ^①	FZ ^①	G	H	I	J	K	L	M	N	O	O ^②	V	T +.000 -.0015	U +.000 -.0015	Input Key ^③	Output Key
1133	4.24	5.37	5.19	2.14	1.33	3.31	—	—	1.66	0.34	2.61	4.37	2.19	3.82	1.76	4.00	2.16	1.94	0.53	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	5.56	6.50	5.97	2.52	1.54	4.31	—	—	2.16	0.41	3.14	5.25	2.63	4.35	1.76	4.31	2.11	1.90	0.59	0.750	0.625	3/16 x 1.38	3/16 x 1.50
1175	5.75	6.99	6.44	2.63	1.75	4.50	—	—	2.25	0.41	3.24	5.75	2.88	4.45	1.76	4.31	2.05	1.84	0.69	0.875	0.625	3/16 x 1.38	3/16 x 1.38
1206	6.00	7.69	7.09	2.75	2.06	4.69	—	—	2.34	0.47	3.61	6.38	3.19	4.82	1.76	4.68	2.29	2.08	0.72	1.000	0.625	3/16 x 1.38	1/4 x 1.44
1238	6.19	8.37	7.69	2.81	2.38	4.88	—	—	2.44	0.49	3.77	7.06	3.53	5.51	2.38	5.14	2.66	2.44	0.75	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1262	6.50	9.25	8.75	3.19	2.63	5.25	—	—	2.63	0.53	4.34	8.00	4.00	6.07	2.38	5.63	2.73	2.52	0.75	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1300	7.50	10.00	9.63	3.38	3.00	5.88	—	—	2.94	0.53	4.84	8.44	4.22	6.57	2.38	6.75	3.60	3.36	0.75	1.250	0.875	3/16 x 1.63	1/4 x 1.75
1325	7.75	11.12	10.25	3.50	3.25	6.13	—	—	3.06	0.53	5.02	9.50	4.75	6.76	2.38	7.06	3.66	3.42	0.81	1.375	0.875	3/16 x 1.63	5/16 x 2.63
1425	9.75	13.24	12.38	3.69	4.25	7.63	—	—	3.81	0.66	6.10	11.12	5.56	9.57	3.47	8.12	4.50	4.21	1.00	1.875	1.250	1/4 x 2.50	1/2 x 3.06
1525	10.50	16.24	15.13	4.76	5.25	8.38	—	—	4.19	0.78	7.50	14.12	7.06	10.88	3.38	9.06	4.78	4.53	1.13	2.000	1.250	1/4 x 3.00	1/2 x 3.50
1600	12.00	18.99	17.75	5.25	6.00	9.50	11.13	0.33	4.75	0.91	—	16.49	8.25	11.78	3.41	10.00	4.65	4.65	1.25	2.250	1.500	3/8 x 3.00	5/8 x 4.00
1700	13.38	15.38	20.33	5.74	7.00	11.25	11.37	0.35	5.63	1.13	—	13.00	6.50	11.50	2.97	11.76	5.65	5.65	1.42	2.750	1.625	3/8 x 2.87 ^④	5/8 x 4.00 ^④
1800	13.50	17.37	22.61	5.75	8.00	11.50	12.52	0.57	5.75	1.13	—	14.75	7.38	12.50	2.84	12.25	5.98	5.98	1.65	3.000	1.875	1/2 x 2.81 ^④	3/4 x 4.50 ^④
11000	16.88	21.14	27.12	6.76	10.00	14.00	14.69	0.51	7.00	1.44	—	17.00	8.50	15.50	3.76	14.75	6.76	6.76	1.65	3.750	2.250	1/2 x 3.69 ^④	7/8 x 5.00 ^④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ		
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—
1154	6.16	6.60	—	—	3.99	—	—	—	3.62	—	—
1175	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—
1206	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—
1238	—	7.76	8.76	—	4.63 ^⑤	5.06	—	—	4.09 ^⑤	4.56	—
1262	—	8.32	9.32	—	5.19 ^⑤	5.62	—	—	4.82 ^⑤	5.13	—
1300	—	8.82	9.82	—	5.95 ^⑤	6.15	6.56	—	5.32 ^⑤	5.63	—
1325	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	—
1425	—	11.81	12.90	13.46	6.45 ^⑤	7.21	7.21	7.77	6.04 ^⑤	6.68	7.24
1525	—	13.21	14.30	14.86	7.85 ^⑤	8.61	8.61	9.17	7.35 ^⑤	7.98	8.54
1600	—	—	15.88	16.50	10.45 ^⑤	9.33	9.33	9.94	10.01 ^⑤	8.69	8.69
1700	—	—	15.50	15.50	—	—	—	—	—	—	—
1800	—	—	16.58 ^⑥	16.58	—	—	—	—	—	—	—

NEMA Dimensions (in)

Frame	AJ ^⑧	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑦	BF ^⑧
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

- ① Sizes 1600-11000 are supplied with a fan. Dimensions refer to fan guard location.
- ② Applies to double output shaft.
- ③ Type WU and WUF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ 180TC not available.
- ⑦ Keyway width by depth.
- ⑧ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WUF with frame sizes 180TC-250TC.

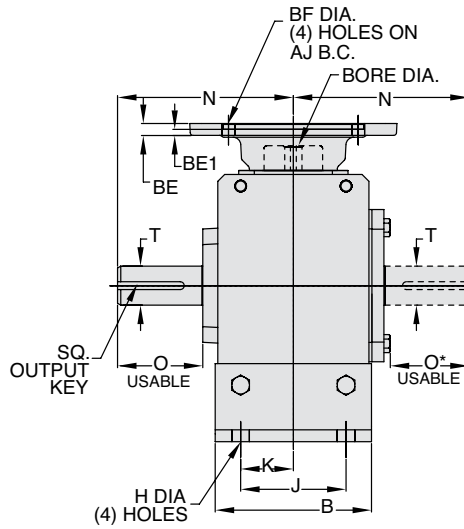
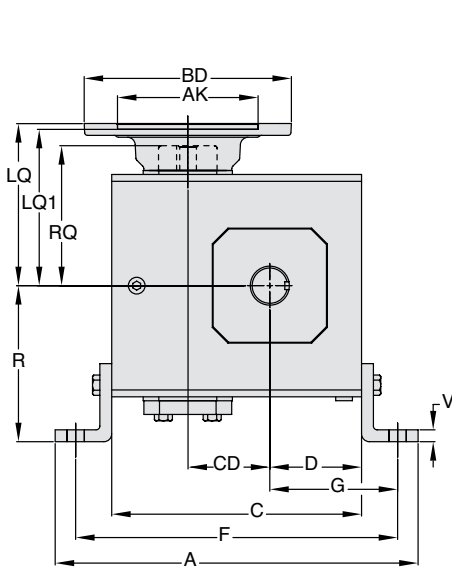


For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

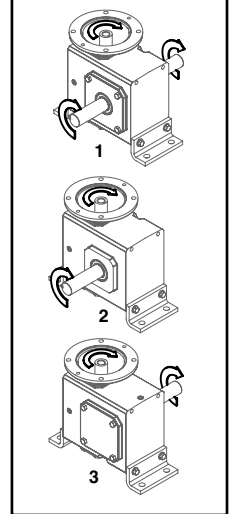
NOTE: Types WUM, WUF and WU are worm under mounting assemblies and not recommended due to increased potential for high speed shaft seal leakage and potential mounting interference. Motor flange may extend below base. Riser blocks are available upon request (see **page 91**). Contact Rexnord for selection assistance.

Type WJM, WJF, WJ Single Reduction Worm/Vertical Input

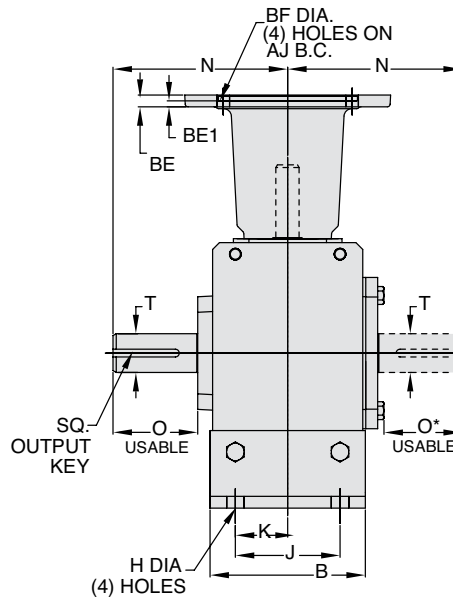
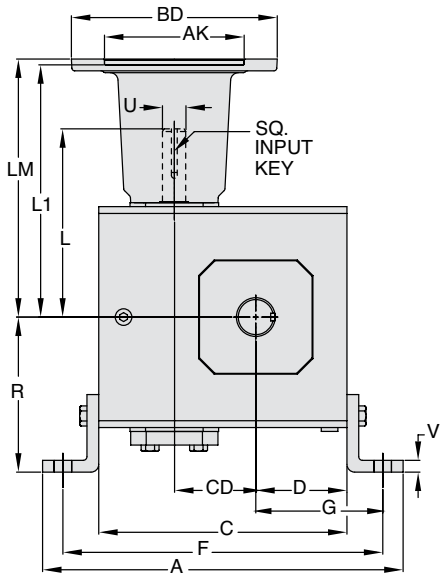
Type WJM



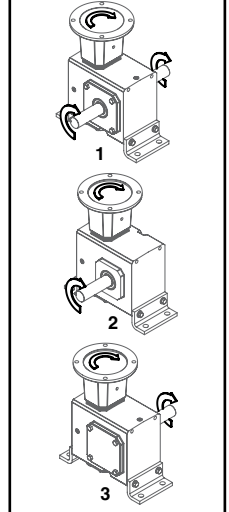
Assemblies ①



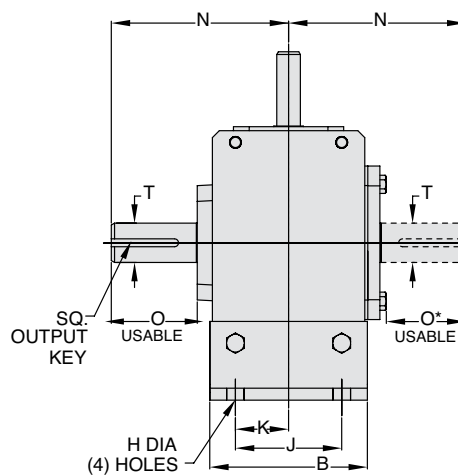
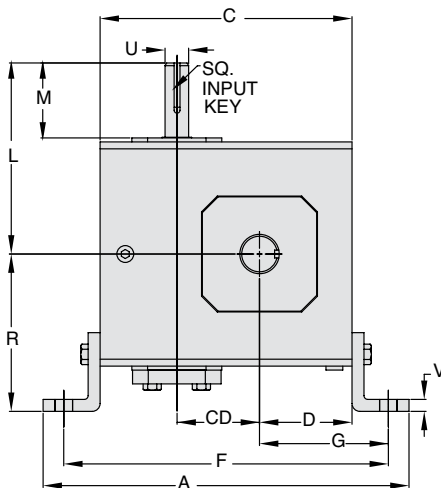
Type WJF



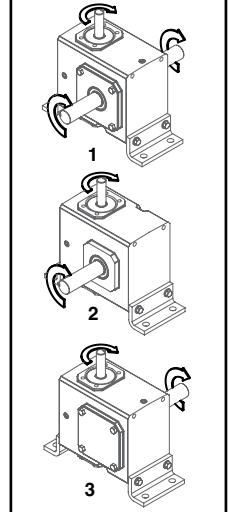
Assemblies ①



Type WJ



Assemblies ①



① Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Type WJM, WJF, WJ Single Reduction Worm/Vertical Input

Dimensions (in)

Size	A	B	C	D	CD	F	G	H	J	K	L	M	N	O	O ^①	R	V	T +.000 -.0015	U +.000 -.0015	Input Key ^②	Output Key
1133	7.42	2.75	4.66	1.72	1.33	6.42	2.60	0.38	2.00	1.00	3.82	1.76	4.00	2.16	1.94	2.94	0.25	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	8.14	3.50	5.38	1.91	1.54	7.08	2.76	0.44	2.75	1.38	4.35	1.76	4.31	2.11	1.90	3.50	0.25	0.750	0.625	3/16 x 1.38	3/16 x 1.50
1175	8.51	3.50	5.75	2.06	1.75	7.45 - 7.63	3.00	0.44 slot	2.50-2.75	1.25-1.38	4.45	1.76	4.31	2.05	1.84	3.50	0.25	0.875	0.625	3/16 x 1.38	3/16 x 1.38
1206	9.76	4.00	6.38	2.28	2.06	8.63	3.40	0.56 slot	2.63-2.75	1.31-1.38	4.82	1.76	4.68	2.29	2.08	4.01	0.38	1.000	0.625	3/16 x 1.38	1/4 x 1.44
1238	10.31	4.00	6.94	2.50	2.38	9.19	3.63	0.69	2.88	1.44	5.51	2.38	5.14	2.66	2.44	4.06	0.38	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1262	11.62	5.00	8.00	2.94	2.63	10.38	4.13	0.56	3.38	1.69	6.07	2.38	5.63	2.73	2.52	5.00	0.38	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1300	12.64	6.00	8.88	3.25	3.00	11.38	4.50	0.56	3.88	1.94	6.57	2.38	6.75	3.60	3.36	5.62	0.38	1.250	0.875	3/16 x 1.63	1/4 x 1.75
1325	13.14	6.00	9.38	3.50	3.25	11.88	4.75	0.56	3.88	1.94	6.76	2.38	7.06	3.66	3.42	5.63	0.38	1.375	0.875	3/16 x 1.63	5/16 x 2.63
1425	16.38	7.00	11.38	4.44	4.25	14.88	6.19	0.69	5.00	2.50	9.57	3.47	8.12	4.50	4.21	6.50	0.50	1.875	1.250	1/4 x 2.50	1/2 x 3.06
1525	19.00	7.00	14.00	5.12	5.25	17.50	6.87	0.69	5.81	2.91	10.88	3.38	9.06	4.78	4.53	7.75	0.50	2.000	1.250	1/4 x 3.00	1/2 x 3.50

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ	
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—
1154	6.16	6.60	—	—	3.99	—	—	—	3.62	—
1175	6.26	6.70	—	—	4.09	—	—	—	3.59	—
1206	6.63	7.07	—	—	4.46	—	—	—	4.06	—
1238	—	7.76	8.76	—	4.63 ^③	5.06	—	—	4.09	4.56
1262	—	8.32	9.32	—	5.19 ^③	5.62	—	—	4.82 ^③	5.13
1300	—	8.82	9.82	—	5.95 ^③	6.15	6.56	—	5.32 ^③	5.63
1325	—	9.01	10.01	—	6.14 ^③	6.34	6.75	—	5.51 ^③	5.81
1425	—	11.81	12.90	13.46	6.45 ^③	7.21	7.21	7.77	6.04 ^③	6.68
1525	—	13.21	14.30	14.86	7.85 ^③	8.61	8.61	9.17	7.35 ^③	7.98

NEMA Dimensions (in)

Frame	AJ ^④	AK	BD	BE	BE1	Bore Dia.	Keyway ^④	BF
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	8.50	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	8.50	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	8.50	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑤

Size	LQ1						RQ			
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—
1154	3.15	3.18	3.42	—	—	—	2.98	3.00	3.24	—
1175	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—
1206	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—
1238	—	3.72	4.34	—	—	—	—	3.46	3.71	—
1262	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72
1300	—	4.78	5.41	5.41	5.88	—	—	4.59	5.22	5.22
1325	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41
1425	—	—	—	6.38	6.39	7.17	—	—	—	6.16
1525	—	—	—	7.78	7.78	8.57	—	—	—	7.46

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^④	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

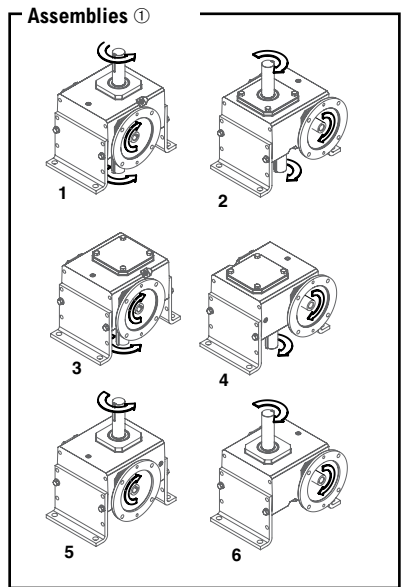
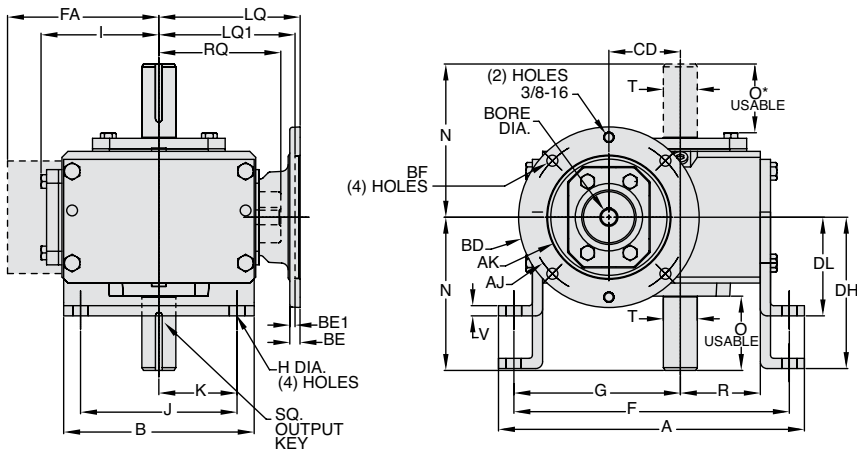
- ① Applies to double output shaft.
- ② Type WJ and WJF only.
- ③ 48CZ not available.
- ④ Keyway width by depth.
- ⑤ Metric IEC B5 input flange options are available only on quill input styles.



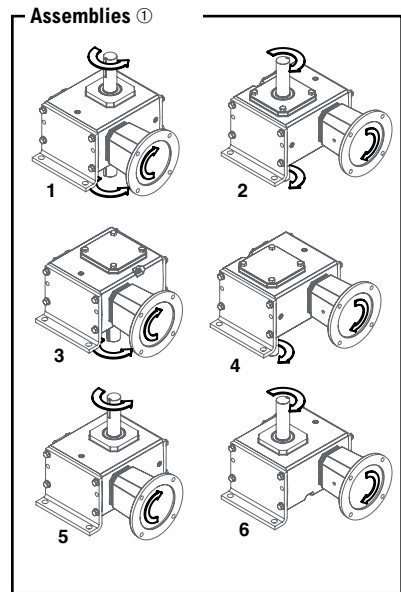
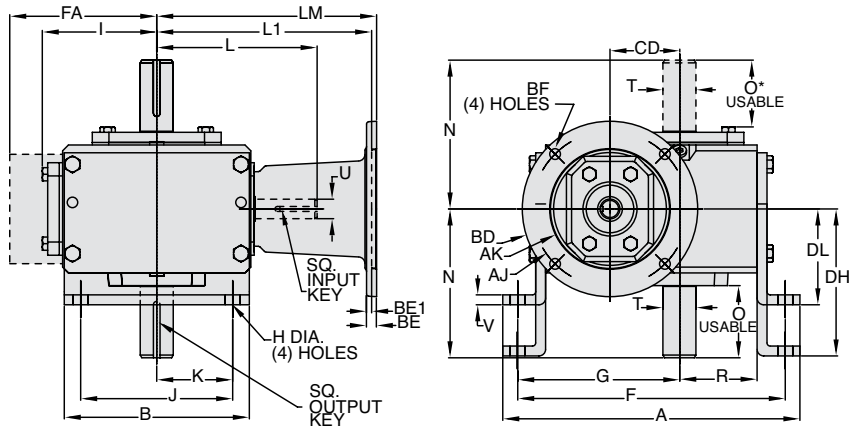
For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WXM, WXF, WX Single Reduction Worm/Vertical Output

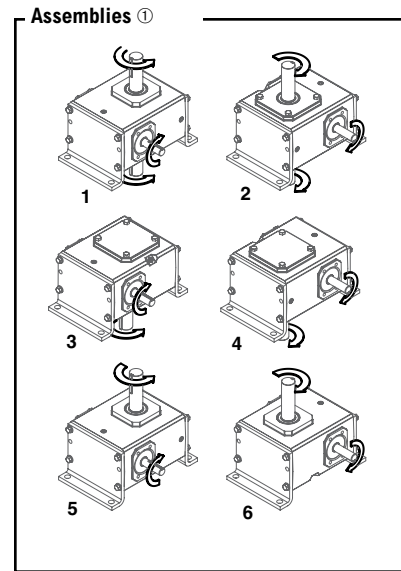
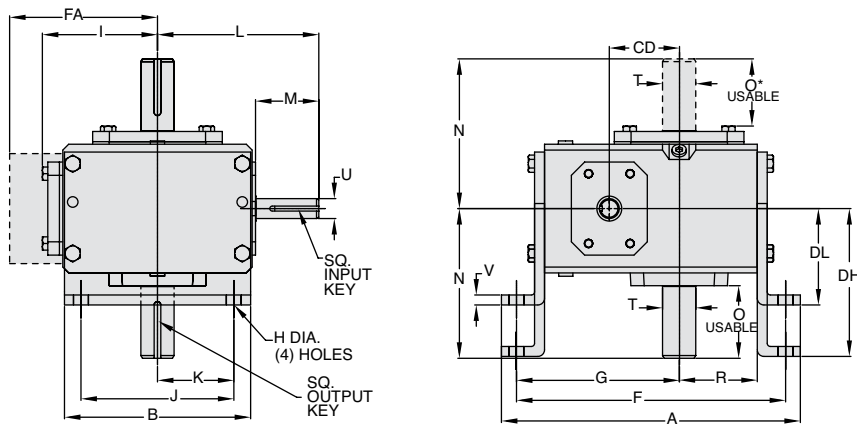
Type WXM



Type WXF



Type WX



① Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Type WXM, WXF, WX Single Reduction Worm/Vertical Output

Dimensions (in)

Size	A	B	CD	DL	DH	F	FA ^①	FZ ^①	G	H	I	J	K	L	M	N	O	O ^②	R	V	T +0.000 -0.0015	U +0.000 -0.0015	Input Key ^③	Output Key
1133	7.26	4.00	1.33	2.63	3.56	6.50	—	—	3.86	0.38	2.61	3.00	1.50	3.82	1.76	4.00	2.16	1.94	1.72	0.25	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	7.88	5.00	1.54	3.00	4.38	7.00	—	—	4.28	0.44	3.14	4.00	2.00	4.35	1.76	4.31	2.11	1.90	1.91	0.25	0.750	0.625	3/16 x 1.38	3/16 x 1.50
1175	8.25	5.00	1.75	3.00	4.38	7.37	—	—	4.50	0.44	3.24	4.00	2.00	4.45	1.76	4.31	2.05	1.84	2.06	0.25	0.875	0.625	3/16 x 1.38	3/16 x 1.38
1206	9.38	6.00	2.06	3.13	4.88	8.38	—	—	5.09	0.50	3.61	4.88	2.44	4.82	1.76	4.68	2.29	2.08	2.28	0.38	1.000	0.625	3/16 x 1.38	1/4 x 1.44
1238	9.94	6.00	2.38	3.38	5.25	8.81	—	—	5.44	0.50	3.77	4.88	2.44	5.51	2.38	5.14	2.66	2.44	2.50	0.38	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1262	11.24	7.00	2.63	3.63	5.56	10.12	—	—	6.12	0.56	4.34	5.75	2.88	6.07	2.38	5.63	2.73	2.52	2.94	0.38	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1300	12.50	8.00	3.00	3.94	5.88	11.13	—	—	6.75	0.56	4.84	6.00	3.00	6.57	2.38	6.75	3.60	3.36	3.25	0.38	1.250	0.875	3/16 x 1.63	1/4 x 1.75
1325	13.00	8.50	3.25	4.69	6.25	11.88	—	—	7.13	0.56	5.02	6.13	3.06	6.76	2.38	7.06	3.66	3.42	3.50	0.38	1.375	0.875	3/16 x 1.63	5/16 x 2.63
1425	16.26	10.00	4.25	5.00	7.50	14.88	—	—	8.69	0.69	6.10	7.88	3.94	9.57	3.47	8.12	4.50	4.21	4.44	0.50	1.875	1.250	1/4 x 2.50	1/2 x 3.06
1525	19.62	13.00	5.25	5.16	9.16	18.00	—	—	10.88	0.78	7.50	10.00	5.00	10.88	3.38	9.06	4.78	4.53	5.12	0.50	2.000	1.250	1/4 x 3.00	1/2 x 3.50
1600	23.26	14.75	6.00	7.31	9.63	20.88	11.13	0.33	12.19	0.91	—	11.76	5.88	11.78	3.41	10.00	4.65	4.65	6.50	0.50	2.250	1.500	3/8 x 3.00	5/8 x 4.00
1700	26.91	14.88	7.00	7.00	—	23.99	11.37	0.35	13.87	1.13	—	12.50	6.25	11.50	2.97	11.76	5.65	5.65	7.59	0.75	2.750	1.625	3/8 x 2.87 ^④	5/8 x 4.00 ^④
1800	28.96	17.00	8.00	8.00	—	25.50	12.52	0.57	14.38	1.13	—	14.00	7.00	12.50	2.84	12.25	5.98	5.98	8.86	0.75	3.000	1.875	1/2 x 2.81 ^④	3/4 x 4.50 ^④
11000	37.47	20.88	10.00	9.00	—	30.75	14.69	0.51	17.76	1.44	—	17.75	8.88	15.50	3.76	14.75	6.76	6.76	10.36	1.00	3.750	2.250	1/2 x 3.69 ^④	7/8 x 5.00 ^④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ		
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—
1154	6.16	6.60	—	—	3.99	—	—	—	3.62	—	—
1175	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—
1206	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—
1238	—	7.76	8.76	—	4.63 ^⑤	5.06	—	—	4.09 ^⑤	4.56	—
1262	—	8.32	9.32	—	5.19 ^⑤	5.62	—	—	4.82 ^⑤	5.13	—
1300	—	8.82	9.82	—	5.95 ^⑤	6.15	6.56	—	5.32 ^⑤	5.63	—
1325	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	—
1425	—	11.81	12.90	13.46	6.45 ^⑤	7.21	7.21	7.77	6.04 ^⑤	6.68	7.24
1525	—	13.21	14.30	14.86	7.85 ^⑤	8.61	8.61	9.17	7.35 ^⑤	7.98	8.54
1600	—	—	15.88	16.50	10.45 ^⑤	9.33	9.33	9.94	10.01 ^⑤	8.69	8.69
1700	—	—	15.50	15.50	—	—	—	—	—	—	—
1800	—	—	16.58 ^⑥	16.58	—	—	—	—	—	—	—

IEC B5 & B3/B5 Metric Dimensions (in) ^⑨

Size	LQ1						RQ				
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—
1154	3.15	3.18	3.42	—	—	—	2.98	3.00	3.24	—	—
1175	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—
1206	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—
1238	—	3.72	4.34	—	—	—	—	3.46	3.71	—	—
1262	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	—
1300	—	4.78	5.41	5.41	5.88	—	—	4.59	5.22	5.22	—
1325	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	—
1425	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.93
1525	—	—	—	7.78	7.78	8.57	—	—	—	7.46	8.24

- ① Sizes 1600-11000 are supplied with a fan. Dimensions refer to fan guard location.
- ② Applies to double output shaft.
- ③ Type WX and WXF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ 180TC not available.
- ⑦ Keyway width by depth.

NEMA Dimensions (in)

Frame	AJ ^⑧	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑦	BF ^⑧
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	8.50	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	8.50	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	8.50	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^⑦	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ⑧ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WXF with frame sizes 180TC-250TC.

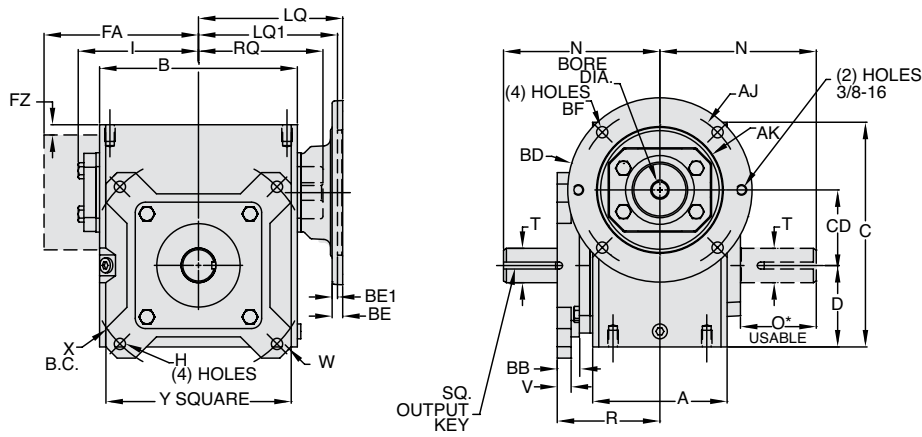
- ⑨ Metric IEC B5 input flange options are available only on quill input styles.



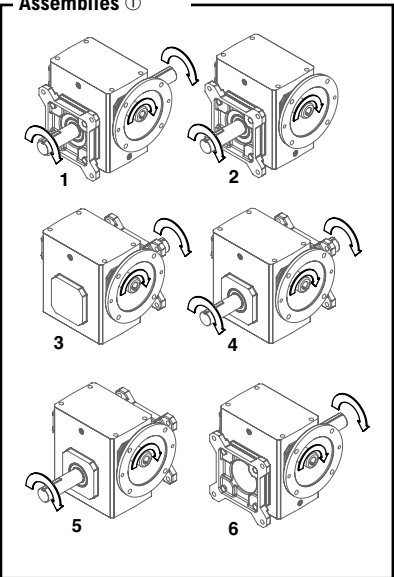
WARNING For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WLM, WLF, WL Single Reduction Worm/Flanged Output

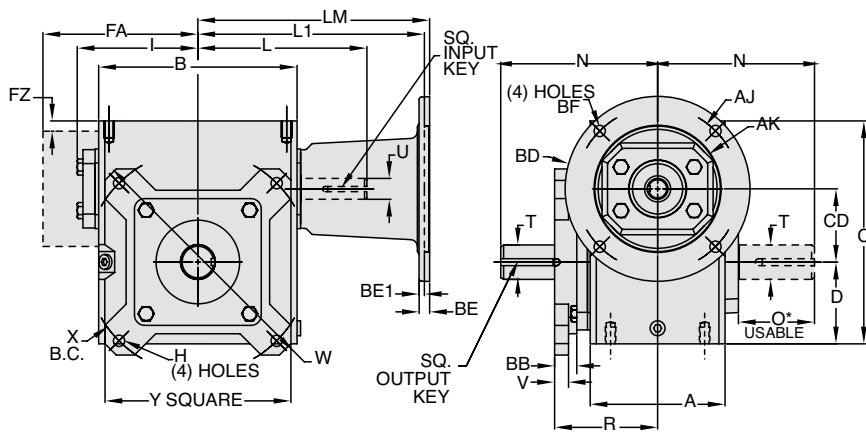
Type WLM



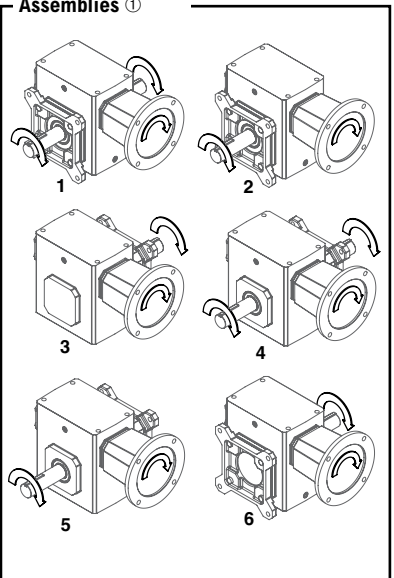
Assemblies ①



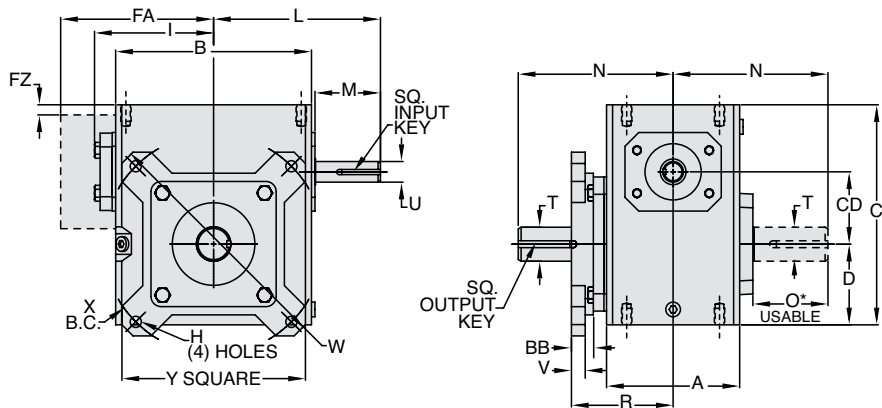
Type WLF



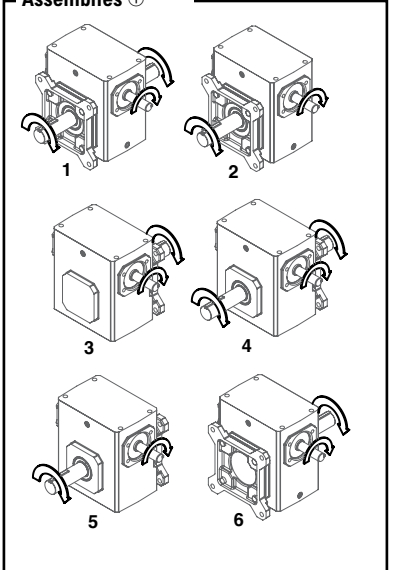
Assemblies ①



Type WL



Assemblies ①



NOTE: Sizes 1133-11000 output flange must be mounted at Factory on Types WLM, WLF, WL.

① Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Type WLM, WLF, WL Single Reduction Worm/Flanged Output

Dimensions (in)

Size	A	B	C	D	CD	FA①	FZ①	H	I	L	M	N	O②	R	V	W	X	Y	T +0.000 -0.0015	U +0.000 -0.0015	Input Key③	Output Key
1133	2.82	3.80	4.66	1.72	1.33	—	—	0.34	2.61	3.82	1.76	4.00	1.94	2.52	0.38	5.92	5.00	4.50	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	3.44	4.88	5.38	1.91	1.54	—	—	0.34	3.14	4.35	1.76	4.31	1.90	2.87	0.38	5.88	5.00	4.50	0.750	0.625	3/16 x 1.38	3/16 x 1.50
1175	3.56	5.06	5.75	2.06	1.75	—	—	0.34	3.24	4.45	1.76	4.31	1.84	3.18	0.38	6.64	5.88	5.00	0.875	0.625	3/16 x 1.38	3/16 x 1.38
1206	3.81	5.80	6.38	2.28	2.06	—	—	0.41	3.61	4.82	1.76	4.68	2.08	3.69	0.44	7.88	7.00	5.99	1.000	0.625	3/16 x 1.38	1/4 x 1.44
1238	4.06	6.12	6.94	2.50	2.38	—	—	0.41	3.77	5.51	2.38	5.14	2.44	3.73	0.44	8.39	7.50	6.27	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1262	4.84	7.12	8.00	2.94	2.63	—	—	0.41	4.34	6.07	2.38	5.63	2.52	3.70	0.50	8.88	8.00	6.67	1.125	0.750	3/16 x 1.63	1/4 x 1.75
1300	5.25	8.12	8.88	3.25	3.00	—	—	0.41	4.84	6.57	2.38	6.75	3.36	3.78	0.50	9.89	9.00	7.37	1.250	0.875	3/16 x 1.63	1/4 x 1.75
1325	5.75	8.50	9.38	3.50	3.25	—	—	0.41	5.02	6.76	2.38	7.06	3.42	4.03	0.50	9.89	9.00	7.37	1.375	0.875	3/16 x 1.63	5/16 x 2.63
1425	6.13	10.25	11.38	4.44	4.25	—	—	0.56	6.10	9.57	3.47	8.12	4.21	4.56	0.62	12.95	11.50	9.65	1.875	1.250	1/4 x 2.50	1/2 x 3.06
1525	7.19	13.00	14.00	5.12	5.25	—	—	0.69	7.50	10.88	3.38	9.06	4.53	5.62	0.75	15.50	14.00	11.75	2.000	1.250	1/4 x 3.00	1/2 x 3.50
1600	8.13	14.25	16.50	6.50	6.00	11.13	0.33	0.69	—	11.78	3.41	10.00	4.65	7.26	0.75	18.00	15.63	14.00	2.250	1.500	3/8 x 3.00	5/8 x 4.00
1700	7.63	14.88	18.91	7.59	7.00	11.37	0.35	0.78	—	11.50	2.97	11.76	5.65	7.45	0.75	21.00	18.38	15.63	2.750	1.625	3/8 x 2.87④	5/8 x 4.00④
1800	8.63	17.00	20.96	8.86	8.00	12.52	0.57	1.03	—	12.50	2.84	12.25	5.98	8.34	0.75	24.00	21.00	17.88	3.000	1.875	1/2 x 2.81④	3/4 x 4.50④
11000	9.53	20.88	25.47	10.36	10.00	14.69	0.51	1.03	—	15.50	3.76	14.75	6.76	9.07	1.00	29.00	25.00	21.19	3.750	2.250	1/2 x 3.69④	7/8 x 5.00④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ		
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—
1154	6.16	6.60	—	—	3.99	—	—	—	3.62	—	—
1175	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—
1206	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—
1238	—	7.76	8.76	—	4.63⑤	5.06	—	—	4.09⑤	4.56	—
1262	—	8.32	9.32	—	5.19⑤	5.62	—	—	4.82⑤	5.13	—
1300	—	8.82	9.82	—	5.95⑤	6.15	6.56	—	5.32⑤	5.63	—
1325	—	9.01	10.01	—	6.14⑤	6.34	6.75	—	5.51⑤	5.81	—
1425	—	11.81	12.90	13.46	6.45⑤	7.21	7.21	7.77	6.04⑤	6.68	7.24
1525	—	13.21	14.30	14.86	7.85⑤	8.61	8.61	9.17	7.35⑤	7.98	8.54
1600	—	—	15.88	16.50	10.45⑤	9.33	9.33	9.94	10.01⑤	8.69	8.69
1700	—	—	15.50	15.50	—	—	—	—	—	—	—
1800	—	—	16.58⑥	16.58	—	—	—	—	—	—	—

NEMA Dimensions (in)

Frame	AJ⑧	AK	BD	BE	BE1	Bore Dia.	Keyway⑦	BF⑧
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ⑨

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D132D	
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	
1154	3.15	3.18	3.42	—	—	—	2.98	3.00	3.24	—	—	
1175	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	
1206	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	
1238	—	3.72	4.34	—	—	—	—	3.46	3.71	—	—	
1262	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	—	
1300	—	4.78	5.41	5.41	5.88	—	—	4.59	5.22	5.22	—	
1325	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	—	
1425	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.93	
1525	—	—	—	7.78	7.78	8.57	—	—	—	7.46	8.24	

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway⑦	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

① Sizes 1600-11000 are supplied with a fan. Dimensions refer to fan guard location.

② Applies to double output shaft.

③ Type WL and WLF only.

④ Key not provided with gear reducer. Keyway dimension shown.

⑤ 48CZ not available.

⑥ 180TC not available.

⑦ Keyway width by depth.

⑧ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WLF with frame sizes 180TC-250TC.

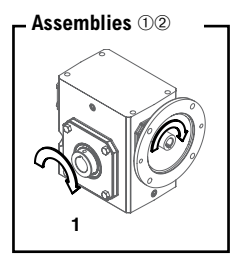
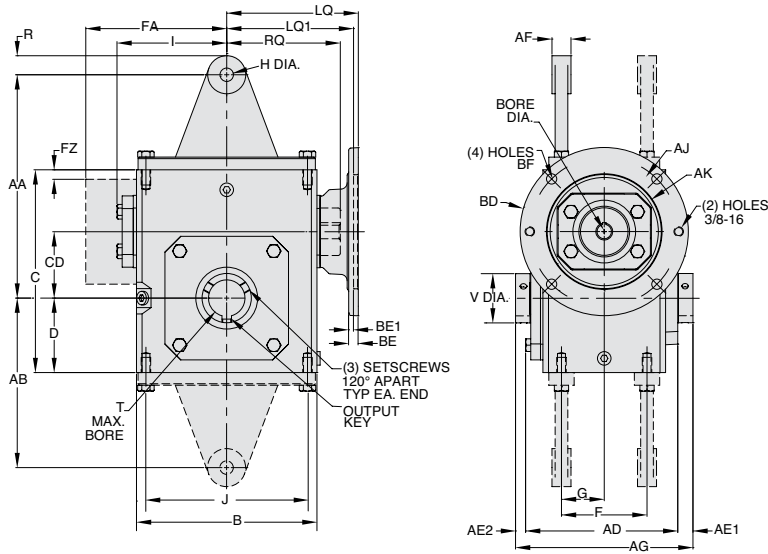
⑨ Metric IEC B5 input flange options are available only on quill input styles.



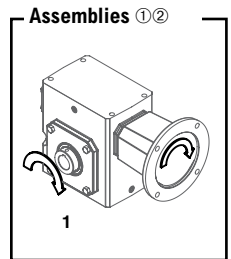
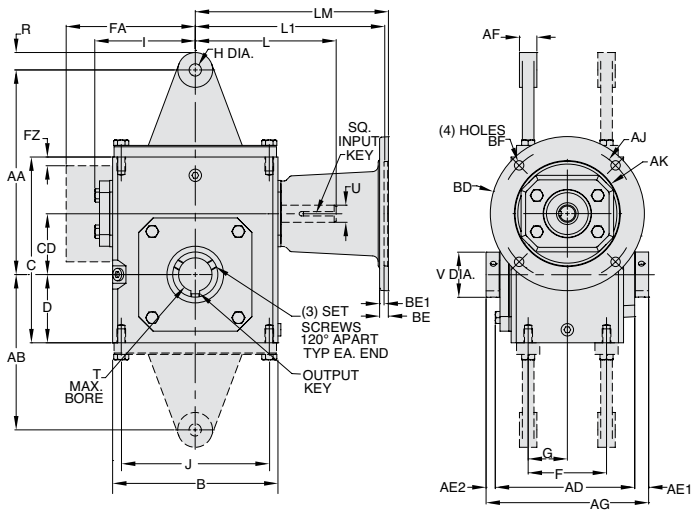
WARNING For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WBQM, WBQF, WBQ Single Reduction Worm/Hollow Shaft

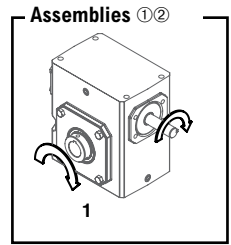
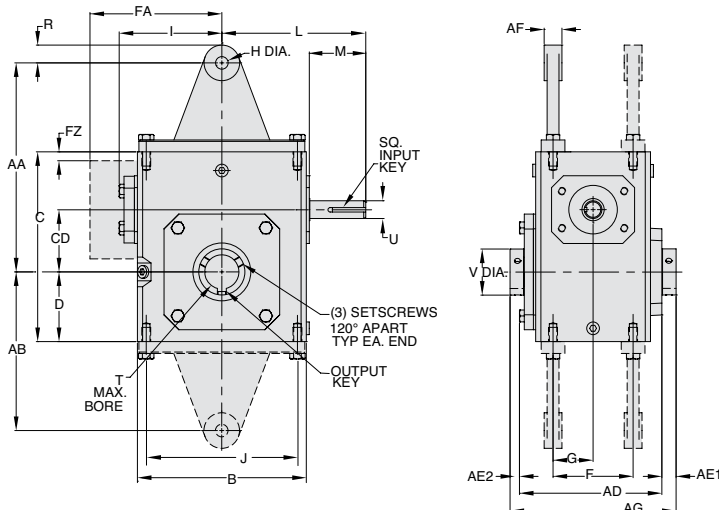
Type WBQM



Type WBQF



Type WBQ



- ① Supplied as standard unless specified.
- ② Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Type WBQM, WBQF, WBQ Single Reduction Worm/Hollow Shaft

Dimensions (in)

Size	AA	AB	AD	AE1	AE2	AF	AG	B	C	D	CD	F	FA①	FZ①	G	H	I	J	L	M	R	V	T Max ② +.000 -.0025	U +.000 -.0015	Input Key③	Output Key ②
1133	4.19	2.97	3.90	0.53	0.32	0.75	4.75	3.80	4.66	1.72	1.33	2.00	—	—	1.00	0.53	2.61	3.25	3.82	1.76	0.50	1.00	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	5.97	4.41	4.61	0.51	0.30	0.75	5.42	5.19	5.38	1.91	1.54	2.75	—	—	1.38	0.53	3.14	4.19	4.35	1.76	0.75	1.00	0.625	0.625	3/16 x 1.38	3/16 x 1.50
1175	6.19	4.56	4.73	0.49	0.28	0.75	5.50	5.19	5.75	2.06	1.75	2.75	—	—	1.38	0.53	3.24	4.19	4.45	1.76	0.75	1.44	1.000	0.625	3/16 x 1.38	1/4 x 3.00
1206	7.24	5.43	4.99	0.61	0.40	0.75	6.00	5.80	6.38	2.28	2.06	3.00	—	—	1.44	0.53	3.61	4.75	4.82	1.76	0.75	1.94	1.500	0.625	3/16 x 1.38	3/8 x 3.00
1238	7.69	5.75	5.18	0.51	0.31	0.75	6.00	6.12	6.94	2.50	2.38	2.88	—	—	1.44	0.53	3.77	5.00	5.51	2.38	0.75	1.94	1.500	0.750	3/16 x 1.63	3/8 x 3.00
1262	8.81	6.69	6.01	0.60	0.39	0.75	7.00	7.38	8.00	2.94	2.63	3.38	—	—	1.69	0.53	4.34	6.38	6.07	2.38	0.75	1.94	1.500	0.750	3/16 x 1.63	3/8 x 3.00
1300	10.63	8.25	6.53	0.60	0.36	0.75	7.50	8.12	8.88	3.25	3.00	4.00	—	—	2.00	0.53	4.84	7.00	6.57	2.38	0.88	2.51	2.188	0.875	3/16 x 1.63	1/2 x 3.00
1325	10.88	8.50	7.04	0.54	0.29	0.75	7.88	8.75	9.38	3.50	3.25	4.00	—	—	2.00	0.53	5.02	7.50	6.76	2.38	0.88	2.51	2.188	0.875	3/16 x 1.63	1/2 x 3.00
1425	11.94	9.44	7.53	0.63	0.34	0.75	8.50	10.25	11.38	4.44	4.25	5.00	—	—	2.50	0.53	6.10	8.50	9.57	3.47	0.75	2.75	2.188	1.250	1/4 x 2.50	1/2 x 3.00
1525	13.88	10.12	8.85	0.97	0.68	1.00	10.50	13.00	14.00	5.12	5.25	5.81	—	—	2.91	0.66	7.50	11.00	10.88	3.38	1.00	4.26	3.438	1.250	1/4 x 3.00	7/8 x 3.44
1600	15.00	11.50	10.52	0.52	0.52	0.38	11.50	14.50	16.50	6.50	6.00	6.38	11.13	0.33	3.19	0.66	—	12.75	11.78	3.41	0.69	4.18	3.438	1.500	3/8 x 3.00	7/8 x 3.44
1700	—	—	11.36	1.09	1.09	—	13.50	14.88	18.91	7.59	7.00	5.50	11.37	0.35	2.75	—	—	12.50	11.50	2.97	—	4.92	3.938	1.625	3/8 x 2.87④	1 x 1/2④
1800	—	—	12.48	1.03	1.03	—	14.50	17.00	20.96	8.86	8.00	6.50	12.52	0.57	3.25	—	—	14.25	12.50	2.84	—	5.55	4.438	1.875	1/2 x 2.81④	1 x 1/2④
11000	—	—	15.78	1.39	1.39	—	18.50	20.88	25.47	10.36	10.00	6.88	14.69	0.51	3.44	—	—	14.75	15.50	3.76	—	6.67	5.438	2.250	1/2 x 3.69④	1-1/4 x 5/8④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1154	6.16	6.60	—	—	3.99	—	—	—	3.62	—	—	—
1175	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1206	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—	—
1238	—	7.76	8.76	—	4.63⑤	5.06	—	—	4.09⑤	4.56	—	—
1262	—	8.32	9.32	—	5.19⑤	5.62	—	—	4.82⑤	5.13	—	—
1300	—	8.82	9.82	—	5.95⑤	6.15	6.56	—	5.32⑤	5.63	6.06	—
1325	—	9.01	10.01	—	6.14⑤	6.34	6.75	—	5.51⑤	5.81	6.25	—
1425	—	11.81	12.90	13.46	6.45⑤	7.21	7.21	7.77	6.04⑤	6.68	6.68	7.24
1525	—	13.21	14.30	14.86	7.85⑤	8.61	8.61	9.17	7.35⑤	7.98	7.98	8.54
1600	—	—	15.88	16.50	10.45⑤	9.33	9.33	9.94	10.01⑤	8.69	8.69	8.69
1700	—	—	15.50	15.50	—	—	—	—	—	—	—	—
1800	—	—	16.58⑥	16.58	—	—	—	—	—	—	—	—

NEMA Dimensions (in)

Frame	AJ⑧	AK	BD	BE	BE1	Bore Dia.	Keyway⑦	BF⑧
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ⑨

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1154	3.15	3.18	3.42	—	—	—	2.98	3.00	3.24	—	—	—
1175	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1206	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	—
1238	—	3.72	4.34	—	—	—	—	3.46	3.71	—	—	—
1262	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07	—
1300	—	4.78	5.41	5.41	5.88	—	—	4.59	5.22	5.22	5.57	—
1325	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1425	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.14	6.93
1525	—	—	—	7.78	7.78	8.57	—	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway⑦	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 are supplied with a fan. Dimensions refer to fan guard location.
- ② Max bore dimensions shown. For additional bores available, refer to **page 16**.
- ③ Type WBQ and WBQF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ 180TC not available.
- ⑦ Keyway width by depth.
- ⑧ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WBQF with frame sizes 180TC-250TC.
- ⑨ Metric IEC B5 input flange options are available only on quill input styles.

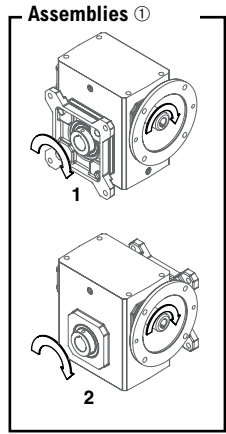
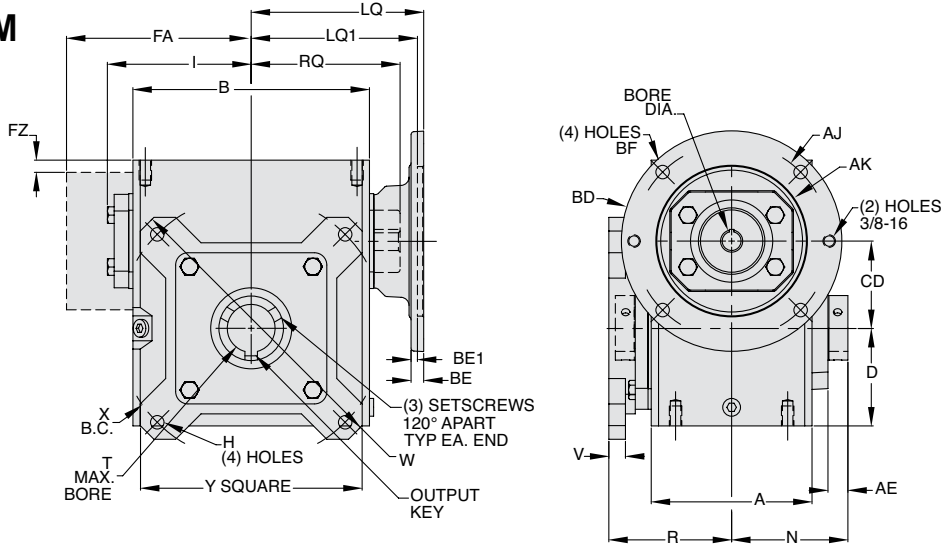


For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

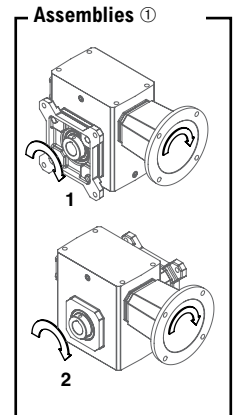
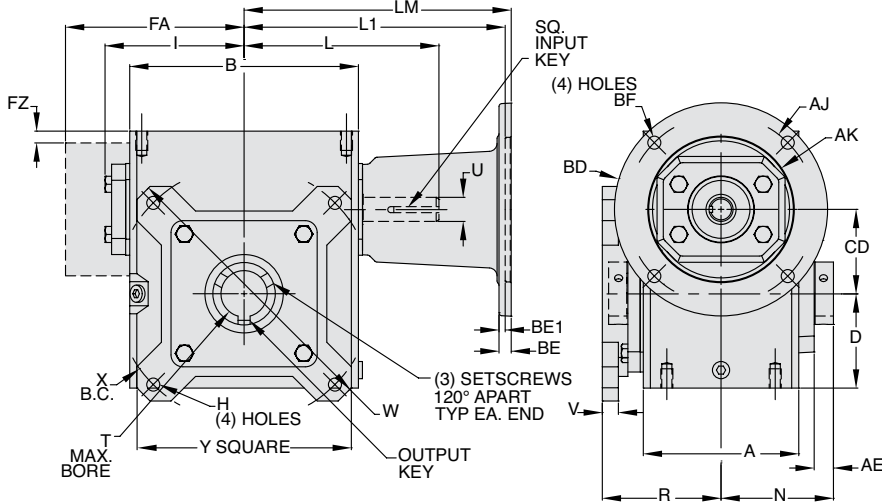
NOTE: Torque arm bracket available separately. Refer to **page 91** for kits. If a special bracket is required, refer to Type WBM dimensions for mounting pad dimensions on top/bottom of reducer.

Type WLQM, WLQF, WLQ Single Reduction Worm/Hollow Shaft/Flanged Output

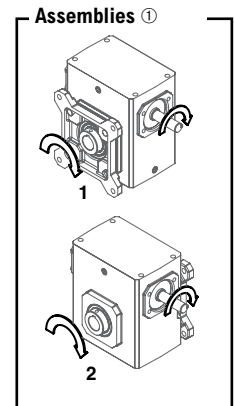
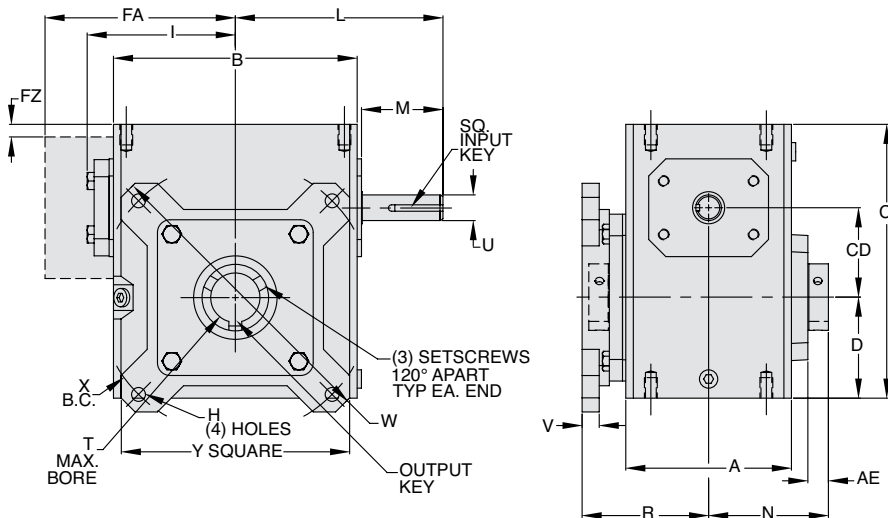
Type WLQM



Type WLQF



Type WLQ



① Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Type WLQM, WLQF, WLQ Single Reduction Worm/Hollow Shaft/Flanged Output

Dimensions (in)

Size	A	AE	B	C	D	CD	FA ^①	FZ ^①	H	I	L	M	N	R	V	W	X	Y	T Max ^② +0.000 -0.0025	U +0.000 -0.0015	Input Key ^③	Output Key ^②
1133	2.82	0.53	3.80	4.66	1.72	1.33	—	—	0.34	2.61	3.82	1.76	2.38	2.52	0.38	5.92	5.00	4.50	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	3.44	0.51	5.19	5.38	1.91	1.54	—	—	0.34	3.14	4.35	1.76	2.71	2.87	0.38	5.88	5.00	4.50	0.625	0.625	3/16 x 1.38	3/16 x 1.50
1175	3.56	0.49	5.19	5.75	2.06	1.75	—	—	0.34	3.24	4.45	1.76	2.75	3.18	0.38	6.64	5.88	5.00	1.000	0.625	3/16 x 1.38	1/4 x 3.00
1206	3.81	0.61	5.80	6.38	2.28	2.06	—	—	0.41	3.61	4.82	1.76	3.00	3.69	0.44	7.88	7.00	5.99	1.500	0.625	3/16 x 1.38	3/8 x 3.00
1238	4.06	0.51	6.12	6.94	2.50	2.38	—	—	0.41	3.77	5.51	2.38	3.00	3.73	0.44	8.39	7.50	6.27	1.500	0.750	3/16 x 1.63	3/8 x 3.00
1262	4.84	0.60	7.38	8.00	2.94	2.63	—	—	0.41	4.34	6.07	2.38	3.50	3.70	0.50	8.88	8.00	6.67	1.500	0.750	3/16 x 1.63	3/8 x 3.00
1300	5.25	0.60	8.12	8.88	3.25	3.00	—	—	0.41	4.84	6.57	2.38	3.75	3.78	0.50	9.89	9.00	7.37	2.188	0.875	3/16 x 1.63	1/2 x 3.00
1325	5.75	0.54	8.75	9.38	3.50	3.25	—	—	0.41	5.02	6.76	2.38	3.94	4.03	0.50	9.89	9.00	7.37	2.188	0.875	3/16 x 1.63	1/2 x 3.00
1425	6.13	0.63	10.25	11.38	4.44	4.25	—	—	0.56	6.10	9.57	3.47	4.25	4.56	0.62	12.95	11.50	9.65	2.188	1.250	1/4 x 2.50	1/2 x 3.00
1525	7.19	0.97	13.00	14.00	5.12	5.25	—	—	0.69	7.50	10.88	3.38	5.25	5.62	0.75	15.50	14.00	11.75	3.438	1.250	1/4 x 3.00	7/8 x 3.44
1600	8.13	0.52	14.50	16.50	6.50	6.00	11.13	0.33	0.69	—	11.78	3.41	5.75	7.26	0.75	18.00	15.63	14.00	3.438	1.500	3/8 x 3.00	7/8 x 3.44
1700	7.63	1.09	14.88	18.91	7.59	7.00	11.37	0.35	0.78	—	11.50	2.97	6.75	7.45	0.75	21.00	18.38	15.63	3.938	1.625	3/8 x 2.87 ^④	1 x 1/2 ^④
1800	8.63	1.03	17.00	20.96	8.86	8.00	12.52	0.57	1.03	—	12.50	2.84	7.25	8.34	0.75	24.00	21.00	17.88	4.438	1.875	1/2 x 2.81 ^④	1 x 1/2 ^④
11000	9.53	1.39	20.88	25.47	10.36	10.00	14.69	0.51	1.03	—	15.50	3.76	9.25	9.07	1.00	29.00	25.00	21.19	5.438	2.250	1/2 x 3.69 ^④	1-1/4 x 5/8 ^④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1154	6.16	6.60	—	—	3.99	—	—	—	3.62	—	—	—
1175	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1206	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—	—
1238	—	7.76	8.76	—	4.63 ^⑤	5.06	—	—	4.09 ^⑤	4.56	—	—
1262	—	8.32	9.32	—	5.19 ^⑤	5.62	—	—	4.82 ^⑤	5.13	—	—
1300	—	8.82	9.82	—	5.95 ^⑤	6.15	6.56	—	5.32 ^⑤	5.63	6.06	—
1325	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	6.25	—
1425	—	11.81	12.90	13.46	6.45 ^⑤	7.21	7.21	7.77	6.04 ^⑤	6.68	6.68	7.24
1525	—	13.21	14.30	14.86	7.85 ^⑤	8.61	8.61	9.17	7.35 ^⑤	7.98	7.98	8.54
1600	—	—	15.88	16.50	10.45 ^⑤	9.33	9.33	9.94	10.01 ^⑤	8.69	8.69	8.69
1700	—	—	15.50	15.50	—	—	—	—	—	—	—	—
1800	—	—	16.58 ^⑥	16.58	—	—	—	—	—	—	—	—

NEMA Dimensions (in)

Frame	AJ ^⑧	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑦	BF ^⑧
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑨

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1154	3.15	3.18	3.42	—	—	—	2.98	3.00	3.24	—	—	—
1175	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1206	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	—
1238	—	3.72	4.34	—	—	—	—	3.46	3.71	—	—	—
1262	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07	—
1300	—	4.78	5.41	5.41	5.88	—	—	4.59	5.22	5.22	5.57	—
1325	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1425	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.14	6.93
1525	—	—	—	7.78	7.78	8.57	—	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^⑦	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 are supplied with a fan. Dimensions refer to fan guard location.
- ② Max bore dimensions shown. For additional bores available, refer to **page 16**.
- ③ Type WLQ and WLQF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ 180TC not available.
- ⑦ Keyway width by depth.

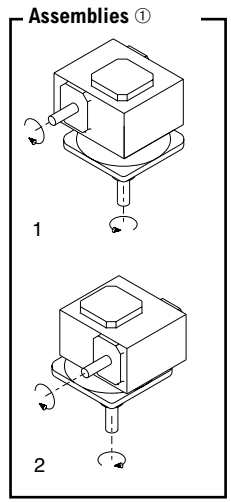
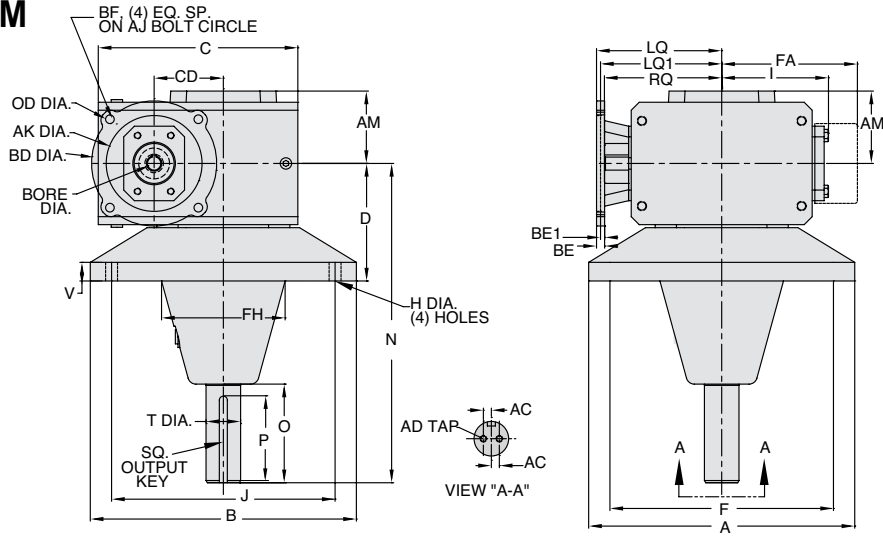
- ⑧ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WLQF with frame sizes 180TC-250TC.
- ⑨ Metric IEC B5 input flange options are available only on quill input styles.



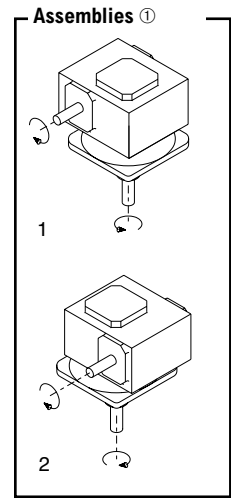
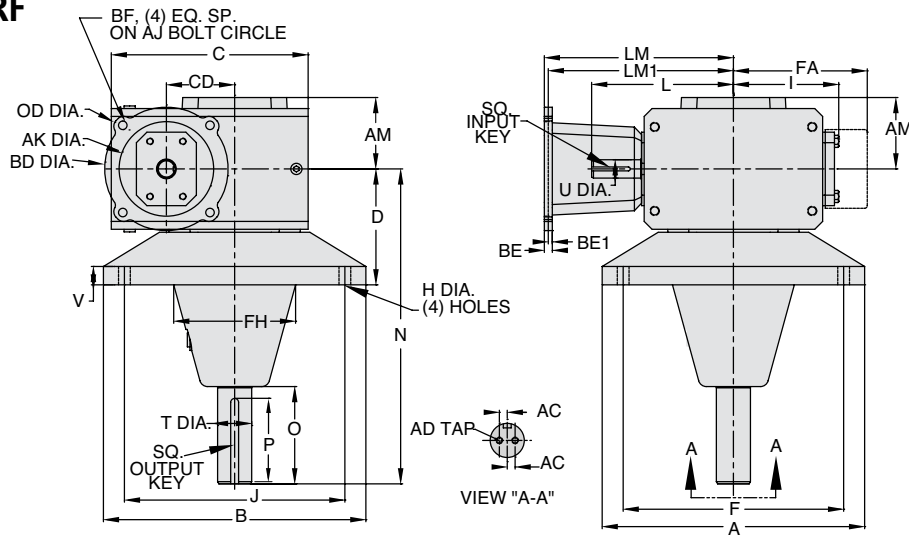
WARNING For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WRM, WRF, WR Single Reduction Worm/Extended Flanged Output

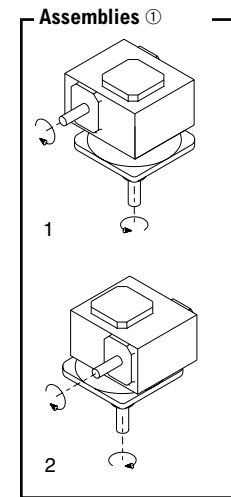
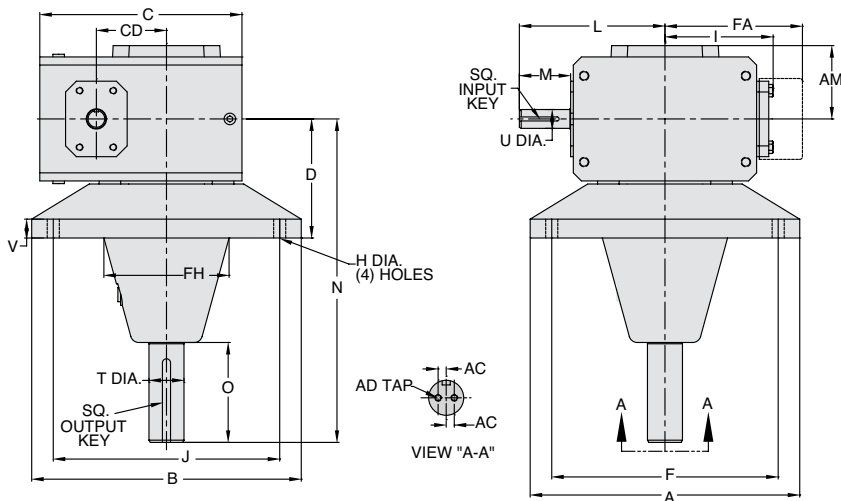
Type WRM



Type WRF



Type WR



① Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Type WRM, WRF, WR Single Reduction Worm/Extended Flanged Output

Dimensions (in)

Size	A	AC	AD	AM	B	D	CD	F	FA ^①	FH	H	I	J	L	M	N	O ^②	V	T +0.000 -0.0015	U +0.000 -0.0015	Input Key ^③	P
1300	11.00	0.375	0.31-18 UNC x 1.00 DP	3.15	11.00	4.60	3.00	9.00	—	5.12	0.56	4.84	9.00	6.57	2.38	14.38	4.96	0.78	1.438	0.875	3/16 x 1.63	3/8 x 3.88
1325	12.50	0.375	0.31-18 UNC x 1.00 DP	3.40	12.50	5.52	3.25	10.50	—	5.75	0.56	5.02	10.50	6.76	2.38	15.00	4.63	0.88	1.625	0.875	3/16 x 1.63	3/8 x 3.69
1425	14.00	0.500	0.38-16 UNC x 1.00 DP	3.62	14.00	5.74	4.25	12.00	—	6.75	0.69	6.10	12.00	9.57	3.47	16.50	5.91	1.00	1.688	1.250	1/4 x 2.50	3/8 x 4.68
1525	16.00	0.750	0.38-16 UNC x 1.00 DP	4.28	16.00	6.00	5.25	14.00	—	8.00	0.81	7.50	14.00	10.88	3.38	16.50	5.62	1.25	2.188	1.250	1/4 x 3.00	1/2 x 4.63
1600	19.50	0.750	0.38-16 UNC x 1.00 DP	5.28	19.50	7.00	6.00	17.00	11.13	9.50	0.88	—	17.00	11.78	3.41	22.50	7.63	1.50	2.438	1.500	3/8 x 3.00	5/8 x 6.50
1700	22.00	1.000	0.38-16 UNC x 1.00 DP	6.06	22.00	8.50	7.00	19.00	11.37	10.75	1.13	—	19.00	11.50	2.97	24.00	7.63	1.75	2.937	1.625	3/8 x 2.87 ^④	3/4 x 6.44
1800	28.00	1.062	0.62-11 UNC x 1.50 DP	6.22	28.00	10.00	8.00	24.00	12.52	13.75	1.31	—	24.00	12.50	2.84	27.06	9.25	2.00	3.438	1.875	1/2 x 2.81 ^④	7/8 x 8.00
11000	32.00	1.118	0.62-11 UNC x 1.50 DP	7.94	32.00	12.50	10.00	28.00	14.69	17.00	1.31	—	28.00	15.50	3.76	29.50	9.43	2.25	3.938	2.250	1/2 x 3.69 ^④	1 x 7.75

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM 56C/ 140TC	L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
		180TC/ 210TC	250TC		180TC	210TC	250TC	56C/140TC	180TC	210TC	250TC
1300	8.82	9.82	—	5.95	6.15	6.56	—	5.32	5.63	6.06	—
1325	9.01	10.01	—	6.14	6.34	6.75	—	5.51	5.81	6.25	—
1425	11.81	12.90	13.46	6.45	7.21	7.21	7.77	6.04	6.68	6.68	7.24
1525	13.21	14.30	14.86	7.85	8.61	8.61	9.17	7.35	7.98	7.98	8.54
1600	—	15.88	16.50	10.45	9.33	9.33	9.94	10.01	8.69	8.69	8.69
1700	—	15.50	15.50	—	—	—	—	—	—	—	—
1800	—	16.58 ^⑤	16.58	—	—	—	—	—	—	—	—

NEMA Dimensions (in)

Frame	AJ ^⑦	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑥	BF ^⑦
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑧

Size	LQ1					RQ				
	D71D	D80D	D90D	D100LD/ D112MD	D132D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1300	4.78	5.41	5.41	5.88	—	4.59	5.22	5.22	5.57	—
1325	4.97	5.59	5.59	6.07	—	4.78	5.41	5.41	5.76	—
1425	—	—	6.38	6.39	7.17	—	—	6.16	6.14	6.93
1525	—	—	7.78	7.78	8.57	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^⑥	BF TAP	OD
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 are supplied with a fan. Dimensions refer to fan guard location.
- ② Applies to double output shaft.
- ③ Type WR and WRF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 180TC not available.
- ⑥ Keyway width by depth.
- ⑦ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WRF with frame sizes 180TC-250TC.

- ⑧ Metric IEC B5 input flange options are available only on quill input styles.



For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Selection Guide
Solid Output Shaft Type Double Reduction Worm-Worm

Stock Types

Modified Stock Types

Using off-the-shelf accessories, stock types WBWM, WBWF and WBW can be field or factory-modified into a wide range of styles. See **page 91** for details.

**MOTORIZED
C-FLANGE
QUILL
INPUT**

Type WBWM



Ratings: **pages 45-49**
 Dimensions: **pages 54-55**

**Horizontal Base
Worm Over**

Type WOWM



Ratings: **pages 45-49**
 Dimensions: **pages 56-57**

**Horizontal Base
Worm Under**

Type WUWM ①



Ratings: **pages 45-49**
 Dimensions: **pages 58-59**

**MOTORIZED
C-FLANGE
FLEXIBLE
COUPLING INPUT**

Type WBWF



Ratings: **pages 45-49**
 Dimensions: **pages 54-55**

Type WOWF



Ratings: **pages 45-49**
 Dimensions: **pages 56-57**

Type WUWF ①



Ratings: **pages 45-49**
 Dimensions: **pages 58-59**

Type WBW



Ratings: **pages 45-49**
 Dimensions: **pages 54-55**

Type WOW



Ratings: **pages 45-49**
 Dimensions: **pages 56-57**

Type WUW ①



Ratings: **pages 45-49**
 Dimensions: **pages 58-59**

Additional accessories, options and assembly services are available. Contact Rexnord for details.

① Not a recommended mounting style. Contact Rexnord for selection assistance.

Selection Guide
Solid Output Shaft Type Double Reduction Worm-Worm

**Vertical
Input Shaft**

Type WJWM



Ratings: **pages 45-49**
 Dimensions: **pages 60-61**

**Vertical Output Shaft
High/Low Base**

Type WXWM ②



Ratings: **pages 45-49**
 Dimensions: **pages 62-63**

**Flange Mounted
Output Shaft**

Type WLWM



Ratings: **pages 45-49**
 Dimensions: **pages 64-65**

**Drop Bearing
Output Flange**

Type WRWM



Ratings: **pages 45-49**
 Dimensions: **pages 70-71**

Type WJWF



Ratings: **pages 45-49**
 Dimensions: **pages 60-61**

Type WXWF ②



Ratings: **pages 45-49**
 Dimensions: **pages 62-63**

Type WLWF



Ratings: **pages 45-49**
 Dimensions: **pages 64-65**

Type WRWF



Ratings: **pages 45-49**
 Dimensions: **pages 70-71**

Type WJW



Ratings: **pages 45-49**
 Dimensions: **pages 60-61**

Type WXW ②



Ratings: **pages 45-49**
 Dimensions: **pages 62-63**

Type WLW



Ratings: **pages 45-49**
 Dimensions: **pages 64-65**

Type WRW



Ratings: **pages 45-49**
 Dimensions: **pages 70-71**

② Specify shaft up or down for these types.

Selection Guide
Hollow Output Shaft Type Double Reduction Worm-Worm

Stock Types

Modified Stock Types

Using off-the-shelf accessories, stock types WBWQM, WBWQF and WBWQ can be field or factory-modified into a wide range of styles. See **page 91** for details.

**MOTORIZED
C-FLANGE
QUILL
INPUT**

Type WBWQM



Ratings: **pages 45-49**
 Dimensions: **pages 66-67**



**Flange Mounted
Output Shaft
Type WLWQM**



Ratings: **pages 45-49**
 Dimensions: **pages 68-69**

**MOTORIZED
C-FLANGE
FLEXIBLE
COUPLING INPUT**

Type WBWQF



Ratings: **pages 45-49**
 Dimensions: **pages 66-67**



Type WLWQF



Ratings: **pages 45-49**
 Dimensions: **pages 68-69**

**NON-FLANGED
INPUT**

Type WBWQ



Ratings: **pages 45-49**
 Dimensions: **pages 66-67**



Type WLWQ



Ratings: **pages 45-49**
 Dimensions: **pages 68-69**

Double Reduction/Worm-Worm Quick Selection Tables

How to Use

Based on required output rpm and input motor horsepower, read across table for the appropriate reducer size. As a rule of thumb, use 1.00 service factor table for applications having uniform loads with up to 10 hours service duration per day. Use 1.25 service factor table for longer service or shock loading. These tables are to be considered as guides only. Refer to **page 8** or contact Rexnord with specific application information.


1.00 Service Factor


Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM															
		1/8	1/6	1/4	1/3	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15	20	25
75	23.3	1133	1133	1154	1154	1206	1238	1262	1300	1325	1425	1525	1600	1800	1800	11000	11000
100	17.5	1133	1133	1154	1154	1206	1238	1262	1300	1425	1425	1525	1600	1800	11000	11000	
150	11.7	1133	1154	1206	1206	1238	1262	1300	1325	1425	1525	1525	1800	11000	11000		
200	8.75	1154	1154	1206	1238	1262	1300	1325	1425	1425	1525	1700	1800	11000			
250	7.00	1154	1175	1206	1238	1262	1300	1325	1425	1525	1525	1800	11000	11000			
300	5.83	1154	1206	1238	1238	1300	1325	1425	1425	1525	1525	1800	11000	11000			
400	4.38	1206	1206	1238	1262	1300	1425	1425	1525	1525	1600	11000	11000				
500	3.50	1206	1238	1262	1300	1325	1425	1425	1525	1525	1800	11000					
600	2.92	1206	1238	1262	1300	1325	1425	1525	1525	1600	1800	11000					
750	2.33	1238	1238	1300	1300	1425	1425	1525	1525	1700	11000	11000					
900	1.94	1238	1262	1300	1325	1425	1425	1525	1525	1800	11000						
1000	1.75	1238	1300	1300	1325	1425	1425	1525	1600	1800	11000						
1200	1.46	1238	1300	1300	1325	1425	1525	1525	1700	1800	11000						
1500	1.17	1300	1300	1325	1425	1425	1525	1600	1800	11000	11000						
1800	0.972	1300	1300	1325	1425	1525	1525	1600	11000	11000							
2400	0.729	1300	1300	1425	1425	1525	1525	1800	11000	11000							
3000	0.583	1300	1300	1425	1425	1525	1525	1800	11000								
3600	0.486	1300	1325	1425	1525	1525	1800	11000									

1.25 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM															
		1/8	1/6	1/4	1/3	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15	20	
75	23.3	1133	1133	1154	1175	1206	1238	1300	1325	1425	1425	1525	1800	1800	11000	11000	
100	17.5	1133	1154	1154	1206	1238	1262	1300	1325	1425	1425	1525	1800	1800	11000		
150	11.7	1154	1154	1206	1238	1262	1300	1325	1425	1425	1525	1700	1800	11000			
200	8.75	1154	1206	1238	1238	1300	1325	1425	1425	1525	1525	1800	11000	11000			
250	7.00	1154	1206	1238	1262	1300	1325	1425	1425	1525	1525	1800	11000				
300	5.83	1175	1206	1238	1262	1300	1425	1425	1525	1525	1700	11000	11000				
400	4.38	1206	1238	1262	1300	1325	1425	1425	1525	1525	1800	11000					
500	3.50	1238	1238	1300	1300	1425	1425	1525	1525	1600	1800	11000					
600	2.92	1238	1238	1300	1325	1425	1425	1525	1525	1700	11000						
750	2.33	1238	1262	1300	1325	1425	1525	1525	1600	1800	11000						
900	1.94	1238	1300	1300	1325	1425	1525	1525	1800	1800	11000						
1000	1.75	1262	1300	1300	1425	1425	1525	1525	1800	11000	11000						
1200	1.46	1300	1300	1325	1425	1425	1525	1525	1800	11000	11000						
1500	1.17	1300	1300	1425	1425	1525	1525	1800	11000	11000							
1800	0.972	1300	1325	1425	1425	1525	1525	1600	1800	11000	11000						
2400	0.729	1300	1425	1425	1525	1525	1800	11000	11000								
3000	0.583	1300	1425	1425	1525	1525	1800	11000									
3600	0.486	1325	1425	1425	1525	1525	11000	11000									

① Actual ratio combinations may vary from above depending on application and manufacturing requirements. Refer to **page 50** for exact ratio of double reduction worm-worm gear reducers.

 indicates a selection where a smaller reducer (1 case size) can be used with redesigned product due to rating increase.

 indicates a selection where a smaller reducer (2 case sizes) can be used with redesigned product due to rating increase.

NOTE: This table is meant as a guide for reducer selections at specific motor horsepower. Actual service factor may be greater than indicated. For actual service factors and maximum worm reducer ratings, refer to **pages 7-8** and **pages 45-49**.

Double Reduction/Worm-Worm Quick Selection Tables

1.50 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM													
		1/8	1/6	1/4	1/3	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15
75	23.3	1133	1154	1154	1206	1238	1262	1300	1425	1425	1525	1600	1800	1800	11000
100	17.5	1154	1154	1206	1206	1238	1300	1300	1425	1425	1525	1600	1800	11000	
150	11.7	1154	1206	1206	1238	1262	1325	1325	1425	1525	1525	1800	11000	11000	
200	8.75	1154	1206	1238	1262	1300	1325	1425	1425	1525	1525	1600	1800	11000	
250	7.00	1206	1206	1238	1262	1300	1425	1425	1525	1525	1700	11000	11000		
300	5.83	1206	1238	1262	1300	1325	1425	1425	1525	1525	1800	11000			
400	4.38	1238	1238	1300	1300	1425	1425	1525	1525	1600	1800	11000			
500	3.50	1238	1262	1300	1300	1325	1425	1425	1525	1525	1800	11000			
600	2.92	1238	1262	1300	1325	1425	1525	1525	1700	1800	11000				
750	2.33	1262	1300	1325	1425	1425	1525	1525	1800	11000	11000				
900	1.94	1262	1300	1325	1425	1425	1525	1525	1800	11000					
1000	1.75	1300	1300	1325	1425	1425	1525	1525	1600	1800	11000				
1200	1.46	1300	1300	1325	1425	1525	1525	1700	11000	11000					
1500	1.17	1300	1325	1425	1425	1525	1600	1800	11000	11000					
1800	0.972	1300	1425	1425	1525	1525	1800	11000	11000						
2400	0.729	1425	1425	1525	1525	1525	1800	11000							
3000	0.583	1425	1425	1525	1525	1525	11000	11000							
3600	0.486	1425	1425	1525	1525	1800	11000								

1.75 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM													
		1/8	1/6	1/4	1/3	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15
75	23.3	1133	1154	1206	1206	1238	1300	1300	1425	1425	1525	1600	1800	11000	11000
100	17.5	1154	1154	1206	1238	1262	1300	1325	1425	1425	1525	1700	11000	11000	
150	11.7	1154	1206	1238	1262	1300	1325	1425	1425	1525	1525	1800	11000		
200	8.75	1206	1206	1238	1262	1300	1325	1425	1425	1525	1525	1700	11000	11000	
250	7.00	1206	1238	1262	1300	1325	1425	1425	1525	1525	1800	11000			
300	5.83	1206	1238	1262	1300	1325	1425	1525	1525	1600	1800	11000			
400	4.38	1238	1262	1300	1325	1425	1425	1525	1525	1800	11000				
500	3.50	1238	1262	1300	1325	1425	1525	1525	1700	1800	11000				
600	2.92	1262	1300	1325	1425	1425	1525	1525	1800	11000	11000				
750	2.33	1262	1300	1325	1425	1425	1525	1600	1800	11000					
900	1.94	1300	1300	1325	1425	1525	1525	1800	11000	11000					
1000	1.75	1300	1300	1425	1425	1525	1525	1800	11000	11000					
1200	1.46	1300	1325	1425	1425	1525	1525	1800	11000	11000					
1500	1.17	1325	1425	1425	1525	1525	1800	11000	11000						
1800	0.972	1325	1425	1425	1525	1525	11000	11000							
2400	0.729	1425	1425	1525	1525	1525	1700	11000	11000						
3000	0.583	1425	1425	1525	1525	1800	11000	11000							
3600	0.486	1425	1425	1525	1525	11000	11000								

2.00 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM													
		1/8	1/6	1/4	1/3	1/2	3/4	1	1-1/2	2	3	5	7-1/2	10	15
75	23.3	1154	1154	1206	1238	1262	1300	1325	1425	1525	1525	1800	1800	11000	11000
100	17.5	1154	1154	1206	1238	1262	1300	1425	1425	1525	1525	1800	11000	11000	
150	11.7	1206	1206	1238	1262	1300	1325	1425	1525	1525	1700	11000	11000		
200	8.75	1206	1238	1262	1300	1325	1425	1425	1525	1525	1800	11000			
250	7.00	1206	1238	1262	1300	1325	1425	1525	1525	1600	1800	11000			
300	5.83	1238	1238	1300	1325	1425	1425	1525	1525	1700	11000	11000			
400	4.38	1238	1262	1300	1325	1425	1525	1525	1600	1800	11000				
500	3.50	1262	1300	1325	1425	1425	1525	1525	1800	11000	11000				
600	2.92	1262	1300	1325	1425	1525	1525	1525	1600	1800	11000	11000			
750	2.33	1300	1300	1425	1425	1525	1525	1700	11000	11000					
900	1.94	1300	1325	1425	1425	1525	1525	1800	11000	11000					
1000	1.75	1300	1325	1425	1425	1525	1600	1800	11000	11000					
1200	1.46	1300	1325	1425	1425	1525	1700	1800	11000						
1500	1.17	1325	1425	1425	1525	1600	1800	11000	11000						
1800	0.972	1425	1425	1525	1525	1600	11000	11000							
2400	0.729	1425	1425	1525	1525	1800	11000	11000							
3000	0.583	1425	1425	1525	1525	1800	11000								
3600	0.486	1425	1525	1525	1525	11000									

① Actual ratio combinations may vary from above depending on application and manufacturing requirements. Refer to **page 50** for exact ratio of double reduction worm-worm gear reducers.

■ indicates a selection where a smaller reducer (1 case size) can be used with redesigned product due to rating increase.

■ indicates a selection where a smaller reducer (2 case sizes) can be used with redesigned product due to rating increase.

NOTE: This table is meant as a guide for reducer selections at specific motor horsepowers. Actual service factor may be greater than indicated. For actual service factors and maximum worm reducer ratings, refer to **pages 7-8** and **pages 45-49**.

Double Reduction/Worm-Worm Horsepower and Torque Ratings

Nominal Ratio	Speed (RPM)		Size 1133			Size 1154			Size 1175		
	Input	Output	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)
			Input	Output		Input	Output		Input	Output	
75	1750	23.3	0.215	0.141	381	0.391	0.242	654	0.415	0.287	776
	1170	15.6	0.154	0.097	390	0.286	0.168	678	0.295	0.197	797
	870	11.6	0.119	0.073	395	0.224	0.127	690	0.229	0.149	809
100	1750	17.5	0.183	0.114	411	0.339	0.194	698	0.344	0.230	827
	1170	11.7	0.130	0.078	420	0.249	0.134	721	0.244	0.157	847
	870	8.70	0.103	0.059	425	0.196	0.101	734	0.191	0.118	858
150	1750	11.7	0.122	0.073	395	0.233	0.125	674	0.235	0.150	809
	1170	7.80	0.085	0.050	400	0.166	0.085	690	0.166	0.101	820
	870	5.80	0.067	0.037	402	0.131	0.064	699	0.128	0.076	826
200	1750	8.75	0.104	0.059	425	0.187	0.095	686	0.195	0.119	858
	1170	5.85	0.075	0.040	430	0.136	0.065	698	0.137	0.081	868
	870	4.35	0.058	0.030	432	0.105	0.049	705	0.107	0.060	874
250	1750	7.00	0.090	0.046	417	0.158	0.073	660	0.165	0.096	861
	1170	4.68	0.064	0.031	422	0.113	0.050	671	0.115	0.065	871
	870	3.48	0.051	0.024	424	0.089	0.038	677	0.092	0.049	876
300	1750	5.83	0.084	0.039	422	0.139	0.064	699	0.154	0.080	864
	1170	3.90	0.060	0.026	427	0.099	0.044	706	0.110	0.054	876
	870	2.90	0.046	0.020	430	0.078	0.033	711	0.085	0.041	882
400	1750	4.38	0.062	0.030	432	0.111	0.049	705	0.114	0.061	874
	1170	2.93	0.043	0.020	435	0.081	0.033	711	0.081	0.040	879
	870	2.18	0.033	0.015	436	0.066	0.025	713	0.063	0.031	882
500	1750	3.50	0.053	0.024	424	0.098	0.039	708	0.097	0.049	877
	1170	2.34	0.037	0.016	427	0.069	0.026	713	0.068	0.032	882
	870	1.74	0.029	0.012	428	0.053	0.019	715	0.054	0.024	884
600	1750	2.92	0.048	0.020	430	0.086	0.033	711	0.090	0.041	882
	1170	1.95	0.034	0.013	432	0.065	0.022	714	0.066	0.027	888
	870	1.45	0.027	0.010	434	0.051	0.016	717	0.054	0.021	892
750	1750	2.33	0.040	0.016	427	0.071	0.025	683	0.080	0.032	886
	1170	1.56	0.030	0.011	429	0.055	0.017	686	0.061	0.023	891
	870	1.16	0.027	0.008	429	0.046	0.013	689	0.048	0.017	893
900	1750	1.94	0.036	0.013	432	0.067	0.020	665	0.068	0.027	888
	1170	1.30	0.028	0.009	434	0.048	0.014	668	0.050	0.018	894
	870	0.967	0.024	0.007	435	0.039	0.010	671	0.041	0.014	895
1000	1750	1.75	0.038	0.012	428	0.063	0.020	715	0.064	0.025	884
	1170	1.17	0.029	0.008	429	0.045	0.014	718	0.045	0.017	886
	870	0.870	0.020	0.006	430	0.037	0.010	719	0.035	0.013	887
1200	1750	1.46	0.034	0.010	434	0.052	0.017	717	0.059	0.021	892
	1170	0.975	0.025	0.007	435	0.041	0.011	719	0.043	0.014	895
	870	0.725	0.018	0.005	436	0.031	0.008	720	0.034	0.010	896
1500	1750	1.17	0.030	0.008	429	0.052	0.013	689	0.054	0.017	893
	1170	0.780	0.022	0.005	430	0.038	0.009	691	0.038	0.011	896
	870	0.580	0.018	0.004	431	0.032	0.007	692	0.029	0.009	897
1800	1750	0.972	0.028	0.007	435	0.045	0.010	601	0.048	0.014	895
	1170	0.650	0.018	0.005	436	0.032	0.007	603	0.038	0.010	897
	870	0.483	0.014	0.003	436	0.028	0.005	604	0.026	0.007	898
2400	1750	0.729	0.021	0.005	438	0.039	0.007	644	0.036	0.010	887
	1170	0.488	0.014	0.003	439	0.032	0.005	646	0.030	0.007	889
	870	0.363	0.014	0.003	439	0.027	0.004	647	0.024	0.006	890
3000	1750	0.583	0.021	0.004	437	0.033	0.006	605	0.032	0.008	869
	1170	0.390	0.014	0.003	438	0.028	0.004	607	0.023	0.006	871
	870	0.290	0.017	0.002	438	0.017	0.003	608	0.019	0.004	872
3600	1750	0.486	0.020	0.003	421	0.029	0.004	562	0.027	0.007	854
	1170	0.325	0.009	0.002	422	0.017	0.003	564	0.020	0.004	856
	870	0.242	0.011	0.002	422	0.017	0.002	566	0.020	0.003	857

Double Reduction/Worm-Worm Horsepower and Torque Ratings

Nominal Ratio	Speed (RPM)		Size 1206			Size 1238			Size 1262		
	Input	Output	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)
			Input	Output		Input	Output		Input	Output	
75	1750	23.3	0.631	0.455	1230	0.979	0.707	1910	1.226	0.911	2461
	1170	15.6	0.451	0.313	1266	0.702	0.489	1975	0.872	0.629	2540
	870	11.6	0.349	0.237	1285	0.546	0.370	2011	0.675	0.475	2583
100	1750	17.5	0.537	0.365	1315	0.829	0.567	2041	1.048	0.736	2649
	1170	11.7	0.384	0.251	1352	0.597	0.392	2109	0.755	0.508	2739
	870	8.7	0.299	0.189	1372	0.466	0.296	2146	0.588	0.385	2788
150	1750	11.7	0.366	0.238	1284	0.572	0.373	2010	0.753	0.509	2740
	1170	7.8	0.253	0.161	1303	0.397	0.253	2045	0.532	0.347	2803
	870	5.8	0.195	0.121	1313	0.306	0.190	2064	0.414	0.261	2836
200	1750	8.75	0.305	0.190	1372	0.478	0.298	2145	0.602	0.387	2787
	1170	5.85	0.216	0.129	1392	0.339	0.203	2182	0.426	0.263	2835
	870	4.35	0.167	0.097	1402	0.262	0.152	2201	0.000	0.197	2860
250	1750	7.00	0.252	0.151	1363	0.405	0.240	2160	0.501	0.309	2779
	1170	4.68	0.180	0.103	1381	1.276	0.164	2195	0.356	0.211	2824
	870	3.48	0.137	0.077	1390	0.225	0.123	2213	0.276	0.158	2848
300	1750	5.83	0.222	0.128	1392	0.346	0.201	2182	0.436	0.261	2835
	1170	3.90	0.158	0.087	1405	0.248	0.137	2207	0.312	0.177	2868
	870	2.90	0.121	0.065	1412	0.193	0.102	2220	0.242	0.133	2885
400	1750	4.38	0.179	0.098	1402	0.280	0.154	2201	0.353	0.200	2860
	1170	2.92	0.126	0.065	1412	0.197	0.102	2220	0.249	0.133	2885
	870	2.18	0.099	0.049	1417	0.156	0.078	2230	0.196	0.101	2898
500	1750	3.50	0.154	0.078	1408	0.241	0.123	2212	0.303	0.160	2875
	1170	2.34	0.108	0.052	1416	0.169	0.081	2227	0.215	0.106	2895
	870	1.74	0.085	0.038	1420	0.133	0.060	2235	0.167	0.078	2905
600	1750	2.92	0.134	0.065	1412	0.213	0.101	2205	0.253	0.127	2752
	1170	1.95	0.098	0.044	1419	0.154	0.069	2224	0.171	0.079	2568
	870	1.45	0.078	0.033	1422	0.119	0.051	2234	0.125	0.055	2376
750	1750	2.33	0.114	0.051	1409	0.181	0.081	2217	0.219	0.105	2871
	1170	1.56	0.087	0.036	1417	0.137	0.057	2232	0.166	0.073	2887
	870	1.16	0.068	0.027	1422	0.108	0.043	2240	0.133	0.055	2895
900	1750	1.94	0.100	0.043	1413	0.159	0.067	2224	0.189	0.086	2848
	1170	1.30	0.076	0.029	1420	0.118	0.046	2237	0.141	0.059	2863
	870	0.967	0.062	0.022	1424	0.095	0.035	2244	0.112	0.044	2871
1000	1750	1.75	0.099	0.041	1420	0.152	0.062	2175	0.156	0.066	2309
	1170	1.17	0.072	0.027	1424	0.099	0.038	1989	0.050	0.040	2107
	870	0.870	0.056	0.020	1426	0.075	0.026	1840	0.076	0.028	1960
1200	1750	1.46	0.088	0.034	1418	0.139	0.053	2234	0.125	0.048	2029
	1170	0.975	0.061	0.022	1423	0.100	0.035	2244	0.081	0.029	1882
	870	0.725	0.049	0.016	1426	0.076	0.025	2249	0.057	0.019	1733
1500	1750	1.17	0.076	0.027	1421	0.119	0.043	2240	0.113	0.042	2209
	1170	0.780	0.056	0.018	1426	0.087	0.029	2248	0.077	0.026	2044
	870	0.580	0.042	0.014	1428	0.071	0.021	2252	0.058	0.018	1885
1800	1750	0.972	0.068	0.023	1424	0.111	0.036	2244	0.107	0.038	2365
	1170	0.650	0.053	0.016	1427	0.085	0.025	2250	0.075	0.024	2184
	870	0.483	0.040	0.011	1429	0.066	0.018	2253	0.052	0.016	2010
2400	1750	0.729	0.056	0.016	1425	0.087	0.025	2244	0.096	0.028	2563
	1170	0.488	0.043	0.011	1429	0.069	0.018	2250	0.070	0.019	2336
	870	0.363	0.035	0.009	1431	0.062	0.014	2254	0.053	0.014	2152
3000	1750	0.583	0.053	0.013	1381	0.080	0.021	2206	0.091	0.026	2691
	1170	0.390	0.040	0.009	1384	0.057	0.014	2212	0.061	0.016	2456
	870	0.290	0.028	0.007	1386	0.047	0.011	2215	0.048	0.011	2253
3600	1750	0.486	0.048	0.011	1378	0.064	0.017	2090	0.084	0.022	2741
	1170	0.325	0.034	0.007	1381	0.042	0.010	2095	0.055	0.013	2748
	870	0.242	0.028	0.005	1383	0.037	0.008	2098	0.048	0.010	2752

Double Reduction/Worm-Worm Horsepower and Torque Ratings

Nominal Ratio	Speed (RPM)		Size 1300			Size 1325		
	Input	Output	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)
			Input	Output		Input	Output	
75	1750	23.3	1.811	1.338	3615	2.005	1.482	4002
	1170	15.6	1.312	0.932	3764	1.569	1.109	4481
	870	11.6	1.031	0.708	3846	1.251	0.859	4669
100	1750	17.5	1.528	1.063	3830	1.984	1.405	5059
	1170	11.7	1.108	0.741	3990	1.528	1.038	5592
	870	8.70	0.871	0.563	4078	1.214	0.796	5763
150	1750	11.7	1.075	0.714	3844	1.537	0.973	5243
	1170	7.80	0.766	0.486	3925	1.136	0.679	5485
	870	5.80	0.598	0.365	3968	0.901	0.517	5617
200	1750	8.75	0.904	0.566	4076	1.208	0.768	5534
	1170	5.85	0.649	0.386	4163	0.870	0.525	5658
	870	4.35	0.510	0.291	4210	0.681	0.395	5723
250	1750	7.00	0.770	0.458	4128	1.016	0.617	5557
	1170	4.68	0.557	0.314	4213	0.735	0.423	5675
	870	3.48	0.437	0.236	4258	0.576	0.319	5737
300	1750	5.83	0.638	0.365	3967	0.931	0.517	5615
	1170	3.90	0.462	0.248	4010	0.680	0.356	5747
	870	2.90	0.361	0.186	4032	0.534	0.268	5818
400	1750	4.38	0.549	0.294	4209	0.735	0.399	5722
	1170	2.92	0.389	0.196	4254	0.523	0.266	5786
	870	2.18	0.313	0.149	4278	0.420	0.203	5820
500	1750	3.50	0.466	0.236	4257	0.591	0.302	5440
	1170	2.34	0.330	0.157	4301	0.414	0.197	5400
	870	1.74	0.259	0.117	4324	0.307	0.139	5168
600	1750	2.92	0.409	0.195	4235	0.571	0.268	5817
	1170	1.95	0.297	0.132	4279	0.419	0.182	5886
	870	1.45	0.234	0.099	4302	0.329	0.136	5922
750	1750	2.33	0.359	0.157	4301	0.484	0.214	5858
	1170	1.56	0.274	0.110	4331	0.370	0.150	5914
	870	1.16	0.221	0.083	4347	0.294	0.113	5943
900	1750	1.94	0.315	0.129	4279	0.440	0.177	5886
	1170	1.30	0.234	0.089	4309	0.330	0.122	5933
	870	0.967	0.191	0.067	4324	0.265	0.092	5958
1000	1750	1.75	0.314	0.123	4324	0.411	0.165	5776
	1170	1.17	0.234	0.083	4346	0.301	0.111	5827
	870	0.870	0.187	0.062	4358	0.240	0.084	5854
1200	1750	1.46	0.277	0.102	4302	0.378	0.136	5731
	1170	0.975	0.200	0.067	4324	0.258	0.085	5503
	870	0.725	0.156	0.048	4336	0.192	0.058	5191
1500	1750	1.17	0.206	0.067	3537	0.282	0.093	4905
	1170	0.780	0.148	0.043	3395	0.201	0.059	4684
	870	0.580	0.111	0.031	3223	0.154	0.042	4444
1800	1750	0.972	0.193	0.059	3746	0.221	0.067	4221
	1170	0.650	0.145	0.040	3580	0.169	0.045	4045
	870	0.483	0.105	0.027	3375	0.122	0.030	3822
2400	1750	0.729	0.173	0.046	4136	0.183	0.051	4565
	1170	0.488	0.133	0.031	3900	0.141	0.034	4318
	870	0.363	0.107	0.023	3666	0.116	0.026	4077
3000	1750	0.583	0.168	0.041	4261	0.182	0.046	4823
	1170	0.390	0.149	0.027	4276	0.129	0.029	4553
	870	0.290	0.101	0.020	4284	0.102	0.020	4285
3600	1750	0.486	0.151	0.033	4128	0.174	0.040	5064
	1170	0.325	0.100	0.020	4142	0.112	0.023	4767
	870	0.242	0.090	0.016	4150	0.088	0.017	4465

Double Reduction/Worm-Worm Horsepower and Torque Ratings

Nominal Ratio	Speed (RPM)		Size 1425			Size 1525			Size 1600		
	Input	Output	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)
			Input	Output		Input	Output		Input	Output	
75	1750	23.3	3.845	2.941	7945	7.099	5.472	14782	9.100	7.135	19271
	1170	15.6	3.001	2.215	8949	5.800	4.296	17357	6.941	5.231	21133
	870	11.6	2.413	1.731	9405	4.802	3.446	18723	5.581	4.086	22202
100	1750	17.5	3.820	2.815	10140	7.206	5.269	18977	8.665	5.947	21417
	1170	11.7	2.978	2.099	11307	5.470	3.822	20589	6.123	4.355	23458
	870	8.70	2.377	1.625	11772	4.421	2.968	21503	4.945	3.400	24627
150	1750	11.7	2.870	2.029	10931	5.336	3.724	20059	5.945	4.357	23471
	1170	7.80	2.182	1.479	11950	4.273	2.845	22985	3.283	3.093	24995
	870	5.80	1.715	1.127	12241	3.477	2.234	24280	3.498	2.378	25843
200	1750	8.75	2.347	1.612	11613	4.438	2.983	21487	4.954	3.416	24607
	1170	5.85	1.689	1.109	11953	3.258	2.082	22429	2.728	2.397	25821
	870	4.35	1.309	0.838	12136	2.565	1.583	22940	2.886	1.828	26485
250	1750	7.00	1.960	1.290	11619	3.834	2.424	21825	4.251	2.759	24841
	1170	4.68	1.417	0.890	11941	2.827	1.699	22777	2.354	1.943	26061
	870	3.48	1.104	0.673	12113	2.251	1.294	23294	2.514	1.484	26728
300	1750	5.83	1.704	1.100	11955	3.230	2.065	22434	3.607	2.376	25821
	1170	3.90	1.226	0.754	12191	2.358	1.429	23097	2.627	1.652	26689
	870	2.90	0.949	0.567	12316	1.850	1.079	23452	2.057	1.249	27151
400	1750	4.38	1.376	0.847	12132	2.660	1.601	22932	3.009	1.848	26473
	1170	2.92	0.973	0.567	12313	1.895	1.079	23443	2.138	1.249	27140
	870	2.18	0.770	0.433	12408	1.512	0.828	23715	1.722	0.960	27495
500	1750	3.50	1.149	0.679	12219	2.249	1.290	23238	2.516	1.492	26872
	1170	2.34	0.787	0.441	12092	1.591	0.863	23655	1.801	1.000	27416
	870	1.74	0.577	0.312	11570	1.235	0.644	23875	0.140	0.747	27704
600	1750	2.92	0.936	0.524	11386	1.951	1.079	23447	2.242	1.249	27151
	1170	1.95	0.665	0.348	11241	1.411	0.736	23798	1.629	0.854	27602
	870	1.45	0.490	0.248	10760	1.100	0.552	23982	1.286	0.641	27844
750	1750	2.33	0.873	0.446	12217	1.686	0.869	23807	1.929	0.999	27386
	1170	1.56	0.650	0.314	12369	1.270	0.613	24161	1.458	0.707	27851
	870	1.16	0.512	0.237	12448	1.004	0.464	24348	1.159	0.535	28094
900	1750	1.94	0.766	0.371	12293	1.516	0.725	24049	1.622	0.827	27434
	1170	1.30	0.566	0.256	12420	1.121	0.503	24406	1.218	0.575	27900
	870	0.967	0.446	0.192	12487	0.884	0.379	24594	0.969	0.433	28144
1000	1750	1.75	0.749	0.351	12273	1.467	0.687	24072	1.611	0.792	27737
	1170	1.17	0.538	0.236	12417	1.059	0.463	24342	1.171	0.535	28088
	870	0.870	0.425	0.178	12492	0.841	0.350	24484	0.930	0.404	28269
1200	1750	1.46	0.665	0.295	12389	1.325	0.579	24316	1.403	0.659	27683
	1170	0.975	0.465	0.192	12485	0.931	0.378	24589	1.000	0.433	28138
	870	0.725	0.357	0.139	12535	0.713	0.275	24731	0.770	0.315	28320
1500	1750	1.17	0.538	0.226	11853	0.938	0.393	20658	1.240	0.535	28088
	1170	0.780	0.361	0.141	11117	0.654	0.254	19979	0.903	0.360	28328
	870	0.580	0.271	0.099	10357	0.497	0.180	18904	0.720	0.271	28453
1800	1750	0.972	0.439	0.168	10608	0.915	0.356	22441	1.000	0.401	25273
	1170	0.650	0.320	0.111	10016	0.666	0.238	21472	0.767	0.283	25490
	870	0.483	0.230	0.075	9412	0.480	0.160	20158	0.586	0.203	25602
2400	1750	0.729	0.371	0.129	11595	0.785	0.267	24026	0.839	0.310	27893
	1170	0.488	0.272	0.086	10782	0.618	0.192	24206	0.694	0.223	28130
	870	0.363	0.219	0.064	10044	0.534	0.154	24300	0.594	0.179	28253
3000	1750	0.583	0.360	0.116	12214	0.756	0.227	23866	0.750	0.255	26792
	1170	0.390	0.269	0.078	12271	0.557	0.153	24044	0.602	0.171	27020
	870	0.290	0.220	0.059	12301	0.450	0.115	24137	0.482	0.129	27138
3600	1750	0.486	0.315	0.094	11816	0.688	0.186	23474	0.653	0.183	23067
	1170	0.325	0.213	0.057	11870	0.456	0.113	23649	0.436	0.111	23264
	870	0.242	0.184	0.045	11897	0.400	0.090	23741	0.373	0.089	23366

Double Reduction/Worm-Worm Horsepower and Torque Ratings

Nominal Ratio	Speed (RPM)		Size 1700			Size 1800			Size 11000		
	Input	Output	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)	Horsepower		Output Torque (lb-in)
			Input	Output		Input	Output		Input	Output	
75	1750	23.3	9.13	7.55	20601	15.50	13.00	35507	26.50	22.50	61010
	1170	15.6	7.69	6.16	25161	12.00	9.78	39931	20.40	16.90	68348
	870	11.6	6.80	5.32	29208	9.57	7.61	41787	16.30	13.20	72067
100	1750	17.5	9.13	7.22	27535	12.60	10.10	38575	20.80	17.00	64363
	1170	11.7	7.04	5.37	30607	9.55	7.40	42191	16.20	12.80	72302
	870	8.70	5.61	4.16	31879	7.64	5.76	44192	13.00	10.00	76335
150	1750	11.7	7.25	5.53	30621	9.82	7.62	42212	16.50	13.00	72069
	1170	7.80	5.31	3.90	32270	7.23	5.41	44811	12.30	9.38	77678
	870	5.80	4.18	2.98	33158	5.71	4.15	46217	9.78	7.25	80749
200	1750	8.75	5.81	4.32	31857	7.92	5.98	44158	13.50	10.30	76261
	1170	5.85	4.21	3.00	33136	5.75	4.18	46181	9.93	7.31	80671
	870	4.35	3.29	2.28	33817	4.50	3.18	47264	7.83	5.59	83051
250	1750	7.00	4.90	3.54	31238	6.61	4.88	43010	11.30	8.45	74571
	1170	4.68	3.55	2.46	32432	4.80	3.40	44863	8.31	5.96	78638
	870	3.48	2.77	1.86	33067	3.76	2.58	45852	6.55	4.55	80828
300	1750	5.83	4.27	2.99	33136	5.82	4.17	46181	10.10	7.29	80671
	1170	3.90	3.06	2.05	34024	4.19	2.87	47593	7.29	5.06	83779
	870	2.90	2.39	1.55	34489	3.26	2.17	48334	5.71	3.84	85419
400	1750	4.38	3.41	2.29	33805	4.65	3.20	47245	8.12	5.62	83011
	1170	2.92	2.43	1.56	34477	3.33	2.19	48316	5.85	3.87	85377
	870	2.18	2.10	1.17	34830	2.59	1.65	48879	4.58	2.92	86628
500	1750	3.50	2.86	1.85	34209	3.88	2.60	45835	6.89	4.57	84431
	1170	2.34	2.04	1.26	34752	2.78	1.77	46812	4.96	3.13	86351
	870	1.74	1.59	0.94	35036	2.16	1.33	47326	3.88	2.35	87361
600	1750	2.92	2.53	1.56	34477	3.43	2.18	48316	6.03	3.86	85377
	1170	1.95	1.81	1.06	34936	2.46	1.48	49049	4.34	2.63	87006
	870	1.45	1.42	0.79	35174	1.92	1.11	49429	3.40	1.97	87854
750	1750	2.33	2.13	1.27	33682	2.87	1.77	46812	5.04	3.13	82964
	1170	1.56	1.53	0.86	34109	2.05	1.20	47481	3.63	2.13	84459
	870	1.16	1.20	0.65	34331	1.60	0.90	47827	2.85	1.60	85236
900	1750	1.94	1.73	1.01	32016	2.50	1.47	46627	4.13	2.49	79353
	1170	1.30	1.24	0.68	32391	1.80	0.99	46972	2.97	1.69	80681
	870	0.967	0.97	0.51	32585	1.42	0.74	47150	2.33	1.27	81371
1000	1750	1.75	1.73	0.95	35031	2.34	1.33	49201	4.21	2.37	87344
	1170	1.17	1.24	0.64	35308	1.68	0.90	49644	3.05	1.60	88332
	870	0.870	0.98	0.48	35452	1.32	0.67	49874	2.41	1.20	88847
1200	1750	1.46	1.52	0.79	35168	2.05	1.12	49420	3.73	1.98	87832
	1170	0.975	1.10	0.53	35402	1.48	0.75	49793	2.72	1.34	88666
	870	0.725	0.87	0.40	35522	1.16	0.56	49986	2.15	1.00	89097
1500	1750	1.17	1.28	0.65	34325	1.71	0.90	47819	3.13	1.61	85216
	1170	0.780	0.93	0.44	34542	1.23	0.61	48159	2.28	1.09	85980
	870	0.580	0.74	0.33	34654	0.98	0.45	48334	1.81	0.81	86375
1800	1750	0.972	1.04	0.51	32580	1.29	0.67	42944	2.56	1.28	81353
	1170	0.650	0.76	0.34	32770	0.93	0.45	43207	1.86	0.86	82031
	870	0.483	0.60	0.26	32868	0.74	0.34	43342	1.48	0.64	82381
2400	1750	0.729	0.90	0.39	33661	1.20	0.54	46987	2.17	0.96	83314
	1170	0.488	0.65	0.26	33868	0.87	0.37	47314	1.59	0.65	84037
	870	0.363	0.53	0.20	33975	0.69	0.27	47482	1.26	0.49	84411
3000	1750	0.583	0.76	0.30	32512	1.02	0.42	45708	1.83	0.78	80836
	1170	0.390	0.55	0.20	32710	0.74	0.29	46025	1.35	0.51	81535
	870	0.290	0.45	0.15	32813	0.60	0.21	46189	1.08	0.38	81896
3600	1750	0.486	0.60	0.23	29307	0.80	0.32	41112	1.46	0.57	73284
	1170	0.325	0.44	0.15	29473	0.58	0.21	41376	1.07	0.38	73877
	870	0.242	0.35	0.11	29558	0.47	0.16	41512	0.86	0.29	74183

Exact Ratio Combinations and Hollow Shaft Bore Sizes

Double Reduction (Worm-Worm) Exact Ratio Combinations

Nominal Total Rating	Gear Reducer Size													
	1133		1154		1175		1206		1238		1262		1300	
	Primary 1133	Secondary 1133	Primary 1133	Secondary 1154	Primary 1133	Secondary 1175	Primary 1133	Secondary 1206	Primary 1133	Secondary 1238	Primary 1133	Secondary 1262	Primary 1175	Secondary 1300
75	5	15	5	15	5	15	5	15	5	15	5	15	5	15
100	5	20	5	20	5	20	5	20	5	20	5	20	5	20
150	10	15	7.5	20	10	15	10	15	10	15	7.5	20	10	15
200	10	20	10	20	10	20	10	20	10	20	10	20	10	20
250	10	25	10	25	10	25	10	25	10	25	10	25	10	25
300	10	30	15	20	10	30	15	20	15	20	15	20	20	15
400	20	20	20	20	20	20	20	20	20	20	20	20	20	20
500	20	25	25	20	25	20	25	20	25	20	25	20	20	25
600	20	30	30	20	20	30	30	20	20	30	30	20	20	30
750	30	25	30	25	25	30	25	30	25	30	30	25	30	25
900	30	30	30	30	30	30	30	30	30	30	30	30	30	30
1000	40	25	50	20	50	20	50	20	50	20	50	20	40	25
1200	40	30	60	20	40	30	40	30	40	30	60	20	40	30
1500	60	25	60	25	50	30	50	30	50	30	60	25	60	25
1800	60	30	60	30	60	30	60	30	60	30	60	30	60	30
2400	60	40	60	40	60	40	60	40	60	40	60	40	60	40
3000	60	50	60	50	60	50	60	50	60	50	60	50	60	50
3600	60	60	60	60	60	60	60	60	60	60	60	60	60	60

Double Reduction (Worm-Worm) Exact Ratio Combinations continued

Nominal Total Rating	Gear Reducer Size													
	1325		1425		1525		1600		1700		1800		11000	
	Primary 1175	Secondary 1325	Primary 1206	Secondary 1425	Primary 1262	Secondary 1525	Primary 1325	Secondary 1600	Primary 1325	Secondary 1700	Primary 1425	Secondary 1800	Primary 1525	Secondary 11000
75	5	15	5	15	5.17	15	5.17	15	5.17	14.67	5.17	14.67	5.13	14.67
100	5	20	5	20	5.17	20	5.17	20	5.17	20.5	5.17	20.5	5.13	20.5
150	5	30	7.5	20	7.5	20	10	15	7.5	20.5	7.5	20.5	10	14.67
200	10	20	10	20	10	20	10	20	10	20.5	10	20.5	10	20.5
250	10	25	10	25	10	25	10	25	10	24.5	10	24.5	10	24.5
300	10	30	15	20	15	20	20	15	15	20.5	15	20.5	20	14.67
400	20	20	20	20	20	20	20	20	20	20.5	20	20.5	20	20.5
500	25	20	25	20	25	20	25	20	25	20.5	20	24.5	25	20.5
600	20	30	30	20	30	20	30	20	30	20.5	30	20.5	30	20.5
750	25	30	25	30	30	25	30	25	30	24.5	30	24.5	30	24.5
900	30	30	30	30	30	30	60	15	30	29.5	30	29.5	60	14.67
1000	25	40	25	40	40	25	50	20	50	20.5	40	24.5	50	20.5
1200	40	30	40	30	40	30	60	20	60	20.5	40	29.5	60	20.5
1500	50	30	50	30	60	25	60	25	60	24.5	60	24.5	60	24.5
1800	60	30	60	30	60	30	60	30	60	29.5	60	29.5	60	29.5
2400	60	40	60	40	60	40	60	40	60	40	60	40	60	40
3000	60	50	60	50	60	50	60	50	60	50	60	50	60	50
3600	60	60	60	60	60	60	60	60	60	60	60	60	60	60

NOTE: Exact ratios are listed. Actual ratio combinations supplied may vary from above depending on application and manufacturing requirements. For exact total of double reduction package, multiply primary stage ratio by secondary stage ratio.

Exact Ratio Combinations and Hollow Shaft Bore Sizes

Hollow Shaft Bore Sizes (in) ①

Fraction Size	Decimal Size	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000	Keyway②
5/8	0.625															3/16 x 3/32
11/16	0.688															3/16 x 3/32
3/4	0.750															3/16 x 3/32
7/8	0.875															3/16 x 3/32
1	1.000															1/4 x 1/8
1-1/8	1.125															1/4 x 1/8
1-3/16	1.188															1/4 x 1/8
1-1/4	1.250															1/4 x 1/8
1-7/16	1.438															3/8 x 3/16
1-1/2	1.500															3/8 x 3/16
1-5/8	1.625															3/8 x 3/16
1-11/16	1.688															3/8 x 3/16
1-3/4	1.750															3/8 x 3/16
1-7/8	1.875															1/2 x 1/4
1-15/16	1.938															1/2 x 1/4
2	2.000															1/2 x 1/4
2-3/16	2.188															1/2 x 1/4
2-1/4	2.250															1/2 x 1/4
2-7/16	2.438															5/8 x 5/16
2-1/2	2.500															5/8 x 5/16
2-11/16	2.688															5/8 x 5/16
2-15/16	2.938															3/4 x 3/8
3	3.000															3/4 x 3/8
3-3/16	3.188															3/4 x 3/8
3-7/16	3.438															7/8 x 7/16
3-15/16	3.938															1 x 1/2
4-3/16	4.188															1 x 1/2
4-7/16	4.438															1 x 1/2
4-15/16	4.938															1-1/4 x 5/8
5-7/16	5.438															1-1/4 x 5/8

Stock Bore Sizes.

① Other bore sizes are available. Contact Rexnord for sizes and availability.

② Dimensions refer to customer-driven shaft.

NOTE: Specify the required bore size when ordering. The suffix "XX" can be substituted with the bore code from table above.

Weights

Double Reduction Worm-Worm Approximate Weights^① (lb)

Reducer Type	Reducer Size													
	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000
Solid Output Shaft														
WBWM	34	38	41	46	62	73	89	96	175	303	406	482	728	1151
WBWF	39	43	46	51	67	78	91	98	176	304	407	493	736	1158
WBW	34	38	41	46	62	73	86	93	171	299	402	478	718	1136
WOWM & WUWM	36	41	44	50	66	79	95	105	189	323	437	523	776	1227
WOWF & WUWF	41	46	49	55	71	84	97	107	190	324	438	534	784	1234
WOW & WUW	36	41	44	50	66	79	92	102	185	319	433	519	766	1212
WJWM	35	39	43	49	65	78	95	102	185	318	–	–	–	–
WJWF	40	44	48	54	70	83	97	104	186	319	–	–	–	–
WJW	35	39	43	49	65	78	92	99	181	314	–	–	–	–
WXWM	36	41	44	53	69	82	99	109	195	328	442	553	806	1307
WXWF	41	46	49	58	74	87	101	111	196	329	443	564	814	1314
WXW	36	41	44	53	69	82	96	106	191	324	438	549	796	1292
WLWM	35	39	43	49	65	77	99	106	190	333	444	497	746	1172
WLWF	40	44	48	54	70	82	101	108	191	334	445	508	754	1179
WLW	35	39	43	49	65	77	96	103	186	329	440	493	736	1157
WRWM	–	–	–	–	–	–	99	106	205	334	448	647	930	1431
WRWF	–	–	–	–	–	–	101	108	206	335	449	658	938	1438
WRW	–	–	–	–	–	–	96	103	201	330	444	643	920	1406
Hollow Output Shaft														
WBWQM	35	38	42	47	64	72	90	98	178	303	406	482	728	1151
WBWQF	40	42	46	51	68	76	92	100	179	304	407	493	736	1158
WBWQ	35	38	42	47	64	72	87	95	174	299	402	478	718	1136
WLWQM	36	39	44	50	67	76	100	108	193	333	444	497	746	1172
WLWQF	41	43	48	54	71	80	102	110	194	334	445	508	754	1179
WLWQ	36	39	44	50	67	76	97	105	189	329	440	493	736	1157

① Weights include oil.

Accessories Approximate Weights (lb)

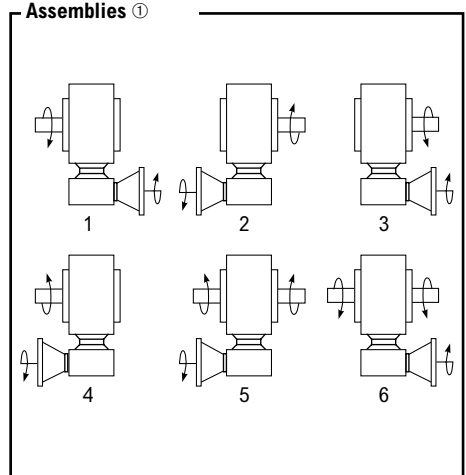
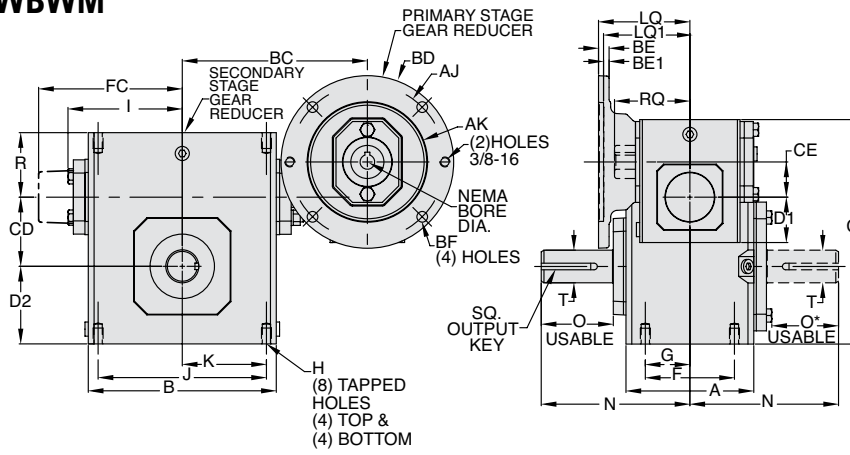
Accessory	Reducer Size													
	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000
HOFK	2	3	3	4	4	6	6	9	14	20	31	41	48	76
VIFK	1	1	2	3	3	5	6	6	10	15	–	–	–	–
VOFK	2	3	3	7	7	9	10	13	20	25	36	②	②	②
OFK	1	1	2	3	3	4	10	10	15	30	38	②	②	②
RB	–	7	7	9	9	12	15	31	24	15	–	–	–	–
TRK	5	5	5	5	5	5	5	5	5	8	8	–	–	–
Coupling Input C-Flange Kits														
48CZ, 56C, 140TC	7	7	7	7	8	8	11	11	14	16	–	–	–	–
180TC-210TC	–	–	–	–	11	11	11	11	16	18	22	30	30	–
250TC	–	–	–	–	–	–	–	28	30	30	32	34	36	–

② This accessory must be assembled at the factory. It is not available as a kit for field installation.

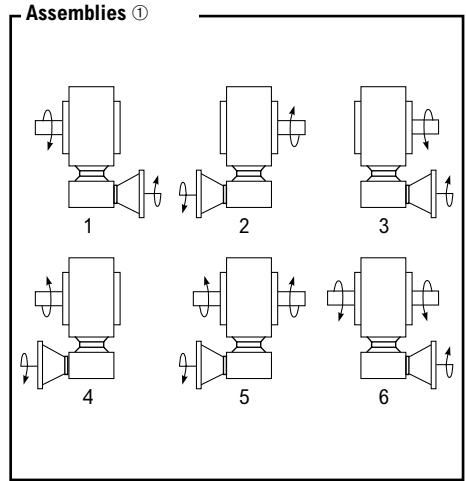
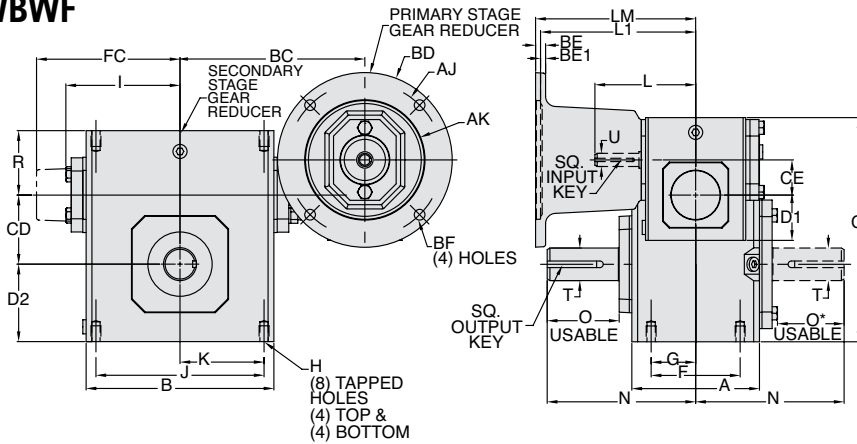
NOTES:

Type WBWM, WBWF, WBW Double Reduction Worm-Worm

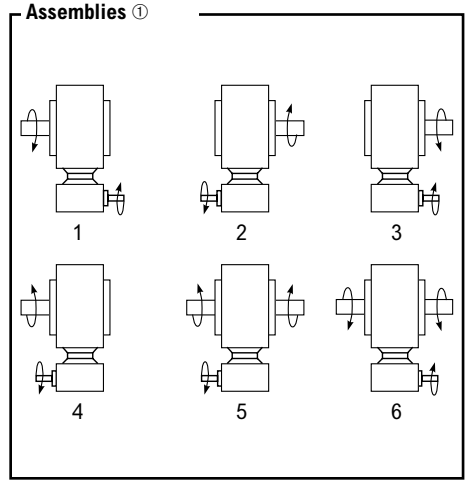
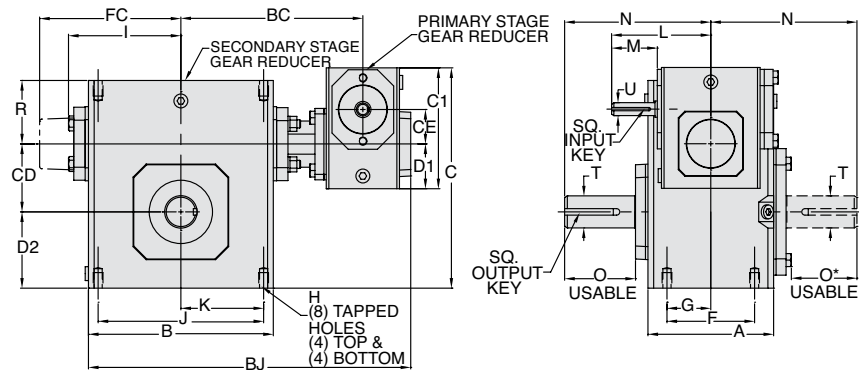
Type WBWM



Type WBWF



Type WBW



① Refer to page 94 for Non-Preferred Mounting Positons.

Type WBWM, WBWF, WBW Double Reduction Worm-Worm

Dimensions (in)

Size	A	B	BC	BJ	C	CD	CE	C1	D1	D2	F	FC①	G	H		I	J	K	L	M	N	O	O②	R	T +0.000 -0.0015	U +0.000 -0.0015	Input Key③	Output Key
														Tap Size	Depth													
1133	2.82	3.80	5.32	9.06	5.99	1.33	1.33	4.66	1.72	1.72	2.00	—	1.00	5/16-18 UNC	0.50	2.61	3.25	1.63	3.82	1.76	4.00	2.16	1.94	1.61	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	3.44	4.88	5.85	10.13	6.38	1.54	1.33	4.66	1.72	1.91	2.75	—	1.38	5/16-18 UNC	0.63	3.14	4.19	2.09	3.82	1.76	4.31	2.11	1.90	1.93	0.750	0.500	1/8 x 1.00	3/16 x 1.50
1175	3.56	5.06	5.94	10.32	6.75	1.75	1.33	4.66	1.72	2.06	2.75	—	1.38	5/16-18 UNC	0.63	3.24	4.19	2.09	3.82	1.76	4.31	2.05	1.84	1.94	0.875	0.500	1/8 x 1.00	3/16 x 1.38
1206	3.81	5.80	6.32	11.06	7.28	2.06	1.33	4.66	1.72	2.28	3.00	—	1.44	3/8-16 UNC	0.63	3.61	4.75	2.50	3.82	1.76	4.68	2.29	2.08	2.03	1.000	0.500	1/8 x 1.00	1/4 x 1.44
1238	4.06	6.12	6.44	11.35	7.81	2.38	1.33	4.66	1.72	2.50	2.88	—	1.44	3/8-16 UNC	0.69	3.77	5.00	2.50	3.82	1.76	5.14	2.66	2.44	2.06	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1262	4.84	7.12	7.01	12.41	8.50	2.63	1.33	4.66	1.72	2.94	3.38	—	1.69	3/8-16 UNC	0.69	4.34	6.38	3.19	3.82	1.76	5.63	2.73	2.52	2.44	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1300	5.25	8.12	7.86	14.12	9.94	3.00	1.75	5.38	2.06	3.25	4.00	—	2.00	7/16-14 UNC	0.88	4.84	7.00	3.50	4.45	1.76	6.75	3.60	3.36	2.63	1.250	0.625	3/16 x 1.38	1/4 x 1.75
1325	5.75	8.50	8.05	14.50	10.44	3.25	1.75	5.38	2.06	3.50	4.00	—	2.00	7/16-14 UNC	0.88	5.02	7.50	3.75	4.45	1.76	7.06	3.66	3.42	2.63	1.375	0.625	3/16 x 1.38	5/16 x 2.63
1425	6.13	10.25	9.18	16.69	12.78	4.25	2.06	6.38	2.28	4.44	5.00	—	2.50	5/8-11 UNC	1.00	6.10	8.50	4.25	4.82	1.76	8.12	4.50	4.21	2.69	1.875	0.625	3/16 x 1.38	1/2 x 3.06
1525	7.19	13.00	11.57	20.97	15.43	5.25	2.63	8.00	2.94	5.12	5.81	—	2.91	5/8-11 UNC	1.25	7.50	11.00	5.50	6.07	2.38	9.06	4.78	4.53	3.63	2.000	0.750	3/16 x 1.63	1/2 x 3.50
1600	8.13	14.25	13.30	23.82	18.38	6.00	3.25	9.38	3.50	6.50	6.38	10.24	3.19	5/8-11 UNC	1.00	—	12.75	6.38	6.76	2.38	10.00	4.65	4.65	4.00	2.250	0.875	3/16 x 1.63	5/8 x 4.00
1700	7.63	14.88	12.96	24.33	20.46	7.00	3.25	9.38	3.50	7.59	5.50	10.63	2.75	1-8 UNC	1.56	—	12.50	6.25	6.76	2.38	11.76	5.65	5.65	4.33	2.750	0.875	3/16 x 1.75④	5/8 x 4.00④
1800	8.63	17.00	13.94	26.69	23.79	8.00	4.25	11.38	4.44	8.86	6.50	11.93	3.25	1-8 UNC	1.66	—	14.25	7.13	9.57	3.47	12.25	5.98	5.98	4.11	3.000	1.250	3/4 x 2.88④	4.50④
11000	9.53	20.88	17.05	32.74	29.24	10.00	5.25	14.00	5.12	10.36	6.88	14.34	3.44	1-1/4 -7 UNC	2.04	—	17.75	8.88	10.88	3.38	14.75	6.76	6.76	5.12	3.750	1.250	1/4 x 3.00④	7/8 x 5.00④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1154	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1175	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1206	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1238	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1262	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1300	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1325	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1425	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—	—
1525	—	8.32	9.32	—	5.19⑤	5.62	—	—	4.82⑤	5.13	—	—
1600	—	9.01	10.01	—	6.14⑤	6.34	6.75	—	5.51⑤	5.81	6.25	—
1700	—	9.01	10.01	—	6.14⑤	6.34	6.75	—	5.51⑤	5.81	6.25	—
1800	—	11.81	12.90	13.46	6.45⑤	7.21	7.21	7.77	6.04⑤	6.68	6.68	7.24
11000	—	13.21	14.30	14.86	7.85⑤	8.61	8.61	9.17	7.35⑤	7.98	7.98	8.54

NEMA Dimensions (in)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway⑥	BF⑦
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ⑧

Size	LQ1					RQ						
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1154	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1175	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1206	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1238	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1262	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1300	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1325	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1425	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	—
1525	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07	—
1600	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1700	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1800	—	—	—	6.38	6.39	7.17	—	—	6.16	6.14	6.93	—
11000	—	—	—	7.78	7.78	8.57	—	—	7.46	7.45	8.24	—

IEC B5 & B3/B5 Metric Dimensions (mm)

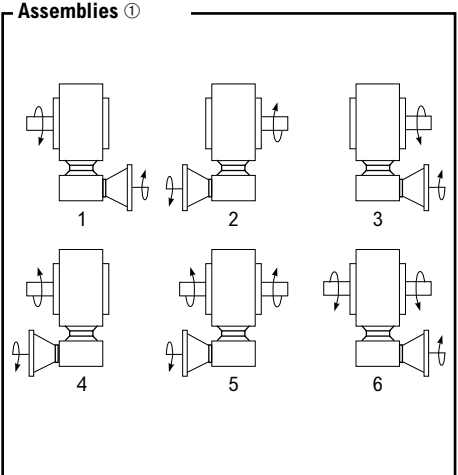
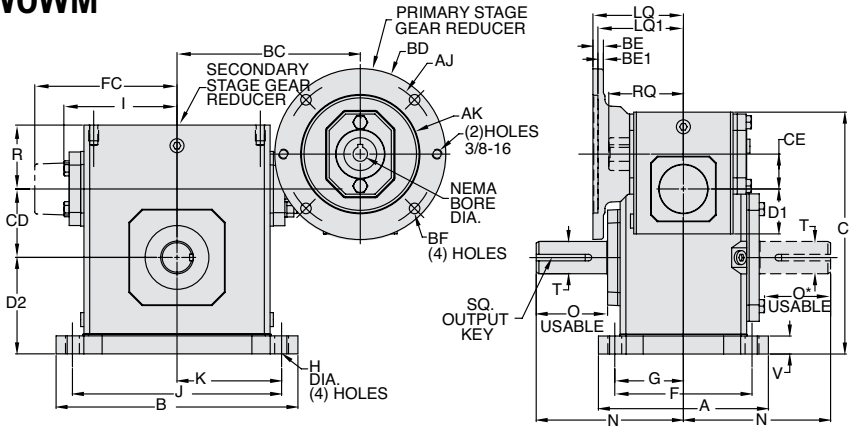
Frame	AJ	AK	BD	BE	Bore Dia.	Keyway⑥	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 have extended cap. Dimensions refer to cap location.
- ② Applies to double output shaft.
- ③ Type WBW and WBWF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ Keyway width by depth.

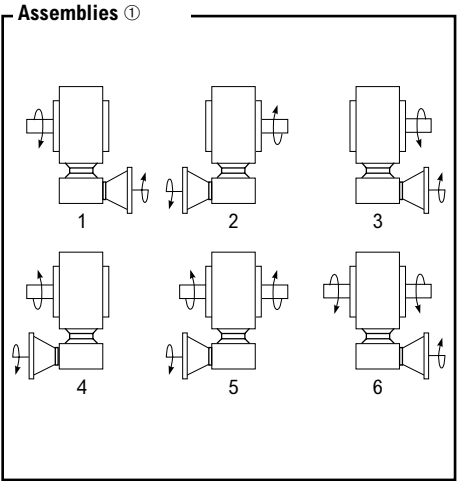
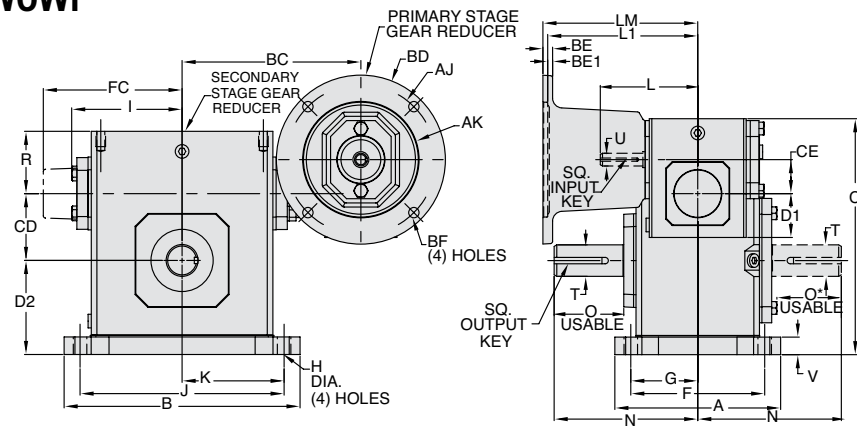
- ⑦ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WBWF with frame sizes 180TC-250TC.
 - ⑧ Metric IEC B5 input flange options are available only on quill input styles.
- ⚠ WARNING**
For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WOWM, WOWF, WOW Double Reduction Worm-Worm/Worm Over

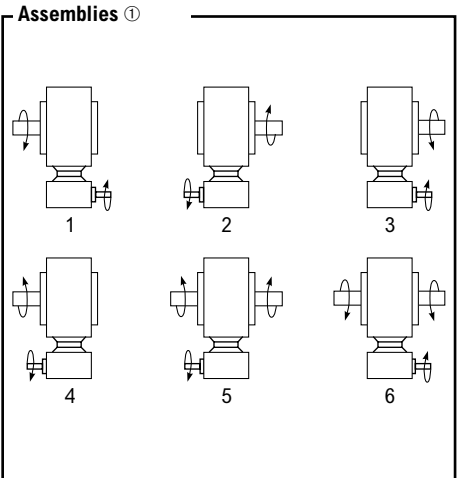
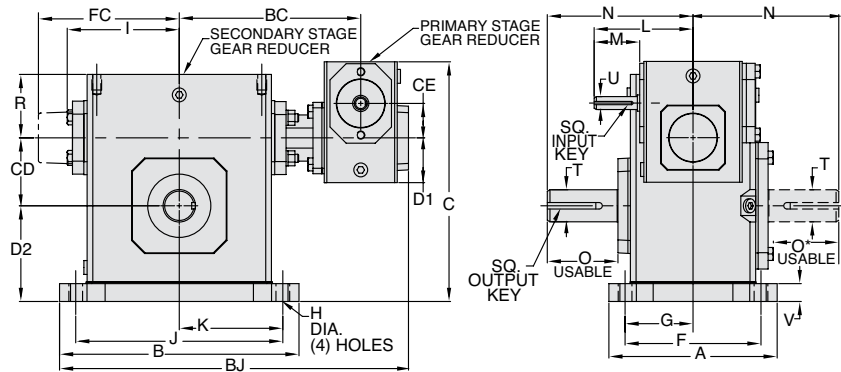
Type WOWM



Type WOWF



Type WOW



① Refer to page 94 for Non-Preferred Mounting Positons.

Type WOWM, WOWF, WOW Double Reduction Worm-Worm/Worm Over

Dimensions (in)

Size	A	B	BC	BJ	C	CD	CE	C1	D1	D2	F	FC ^①	G	H	I	J	K	L	M	N	O	O ^②	R	V	T + .000 - .0015	U + .000 - .0015	Input Key ^③	Output Key
1133	4.24	5.37	5.32	9.85	6.52	1.33	1.33	4.66	1.72	2.25	3.31	—	1.66	0.34	2.61	4.37	2.19	3.82	1.76	4.00	2.16	1.94	1.61	0.53	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	5.56	6.50	5.85	10.94	6.98	1.54	1.33	4.66	1.72	2.50	4.31	—	2.16	0.41	3.14	5.25	2.63	3.82	1.76	4.31	2.11	1.90	1.93	0.59	0.750	0.500	1/8 x 1.00	3/16 x 1.50
1175	5.75	6.99	5.94	11.28	7.44	1.75	1.33	4.66	1.72	2.75	4.50	—	2.25	0.41	3.24	5.75	2.88	3.82	1.76	4.31	2.05	1.84	1.94	0.69	0.875	0.500	1/8 x 1.00	3/16 x 1.38
1206	6.00	7.69	6.32	12.01	8.00	2.06	1.33	4.66	1.72	3.00	4.69	—	2.34	0.47	3.61	6.38	3.19	3.82	1.76	4.68	2.29	2.08	2.03	0.72	1.000	0.500	1/8 x 1.00	1/4 x 1.44
1238	6.19	8.37	6.44	12.48	8.56	2.38	1.33	4.66	1.72	3.25	4.88	—	2.44	0.49	3.77	7.06	3.53	3.82	1.76	5.14	2.66	2.44	2.06	0.75	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1262	6.50	9.25	7.01	13.48	9.25	2.63	1.33	4.66	1.72	3.69	5.25	—	2.63	0.53	4.34	8.00	4.00	3.82	1.76	5.63	2.73	2.52	2.44	0.75	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1300	7.50	10.00	7.86	15.08	9.94	3.00	1.75	5.38	2.06	4.00	5.88	—	2.94	0.53	4.84	8.44	4.22	4.35	1.76	6.75	3.60	3.36	2.63	0.75	1.250	0.625	3/16 x 1.38	1/4 x 1.75
1325	7.75	11.12	8.05	15.81	10.44	3.25	1.75	5.38	2.06	4.38	6.13	—	3.06	0.53	5.02	9.50	4.75	4.35	1.76	7.06	3.66	3.42	2.63	0.81	1.375	0.625	3/16 x 1.38	5/16 x 2.63
1425	9.75	13.24	9.18	18.19	13.78	4.25	2.06	6.38	2.28	5.44	7.63	—	3.81	0.66	6.10	11.12	5.56	4.82	1.76	8.12	4.50	4.21	2.69	1.00	1.875	0.625	3/16 x 1.38	1/2 x 3.06
1525	10.50	16.24	11.57	22.59	16.56	5.25	2.63	8.00	2.94	6.25	8.38	—	4.19	0.78	7.50	14.12	7.06	6.07	2.38	9.06	4.78	4.53	3.63	1.13	2.000	0.750	3/16 x 1.63	1/2 x 3.50
1600	12.00	18.99	13.30	26.19	19.63	6.00	3.25	9.38	3.50	7.75	9.50	10.24	4.75	0.91	—	16.49	8.25	6.76	2.38	10.00	4.65	4.65	4.00	1.25	2.250	0.875	3/16 x 1.63	5/8 x 4.00
1700	13.38	15.38	12.96	24.58	21.88	7.00	3.25	9.38	3.50	9.00	11.25	10.63	5.63	1.13	—	13.00	6.50	6.76	2.38	11.76	5.65	5.65	4.33	1.42	2.750	0.875	3/16 x 1.75 ^④	5/8 x 4.00 ^④
1800	13.50	17.37	13.94	26.88	25.44	8.00	4.25	11.38	4.44	10.50	11.50	11.93	5.75	1.13	—	14.75	7.38	9.57	3.47	12.25	5.98	5.98	4.11	1.65	3.000	1.250	1/4 x 2.88 ^④	3/4 x 4.50 ^④
11000	16.88	21.14	17.05	32.92	30.88	10.00	5.25	14.00	5.12	12.00	14.00	14.34	7.00	1.44	—	17.00	8.50	10.88	3.38	14.75	6.76	6.76	5.12	1.65	3.750	1.250	1/4 x 3.00 ^④	7/8 x 5.00 ^④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM				L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC	180TC	210TC		250TC	48CZ/ 56C/140TC	180TC	210TC	250TC		
1133	5.63	6.07	—	—	—	3.46	—	—	—	—	3.09	—	—	—
1154	5.63	6.07	—	—	—	3.46	—	—	—	—	3.09	—	—	—
1175	5.63	6.07	—	—	—	3.46	—	—	—	—	3.09	—	—	—
1206	5.63	6.07	—	—	—	3.46	—	—	—	—	3.09	—	—	—
1238	5.63	6.07	—	—	—	3.46	—	—	—	—	3.09	—	—	—
1262	5.63	6.07	—	—	—	3.46	—	—	—	—	3.09	—	—	—
1300	6.26	6.70	—	—	—	4.09	—	—	—	—	3.59	—	—	—
1325	6.26	6.70	—	—	—	4.09	—	—	—	—	3.59	—	—	—
1425	6.63	7.07	—	—	—	4.46	—	—	—	—	4.06	—	—	—
1525	—	8.32	9.32	—	—	5.19 ^⑤	5.62	—	—	—	4.82 ^⑤	5.13	—	—
1600	—	9.01	10.01	—	—	6.14 ^⑤	6.34	6.75	—	—	5.51 ^⑤	5.81	6.25	—
1700	—	9.01	10.01	—	—	6.14 ^⑤	6.34	6.75	—	—	5.51 ^⑤	5.81	6.25	—
1800	—	11.81	12.90	13.46	—	6.45 ^⑤	7.21	7.21	7.77	—	6.04 ^⑤	6.68	6.68	7.24
11000	—	13.21	14.30	14.86	—	7.85 ^⑤	8.61	8.61	9.17	—	7.35 ^⑤	7.98	7.98	8.54

NEMA Dimensions (in)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑥	BF ^⑦
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑧

Size	LQ1					RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—
1154	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—
1175	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—
1206	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—
1238	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—
1262	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—
1300	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—
1325	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—
1425	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—
1525	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07
1600	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76
1700	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76
1800	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.14
11000	—	—	—	7.78	7.78	8.57	—	—	—	7.46	7.45

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^⑥	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 have extended cap. Dimensions refer to cap location.
- ② Applies to double output shaft.
- ③ Type WOW and WOWF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ Keyway width by depth.

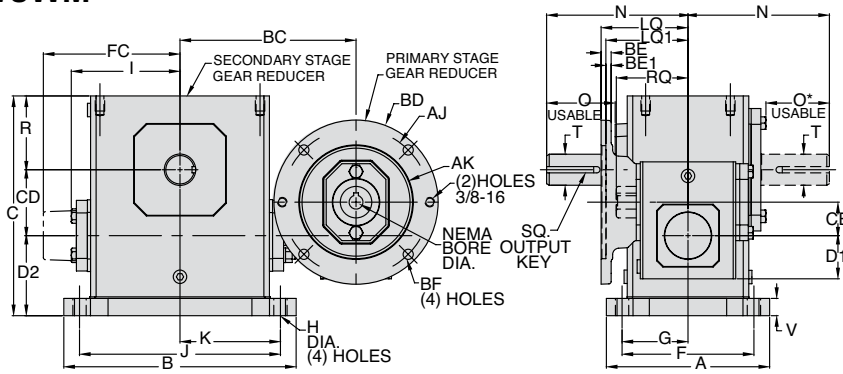
- ⑦ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WOWF with frame sizes 180TC-250TC.
- ⑧ Metric IEC B5 input flange options are available only on quill input styles.



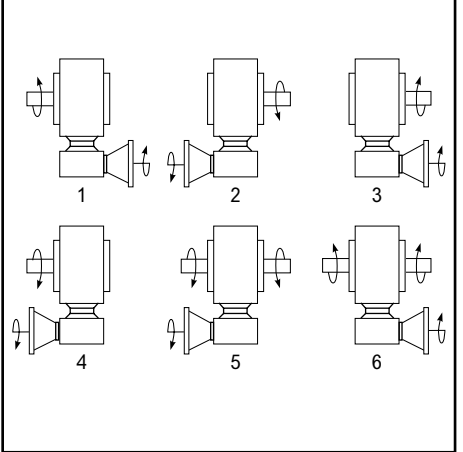
For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WUWM, WUWF, WUW Double Reduction Worm-Worm/Worm Under

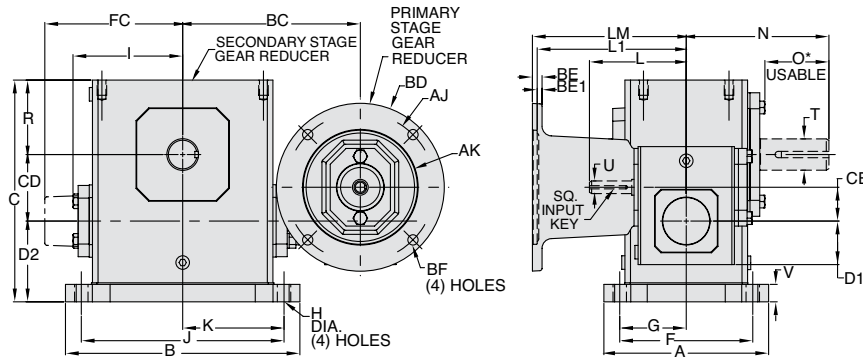
Type WUWM



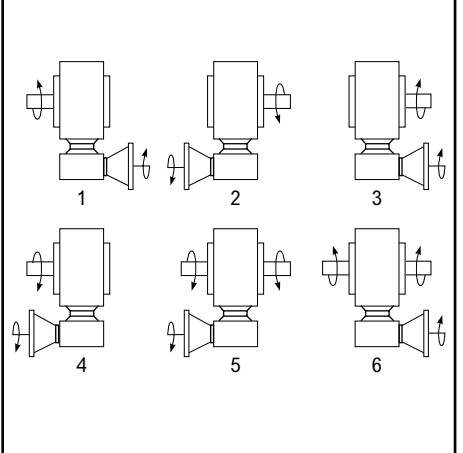
Assemblies ①



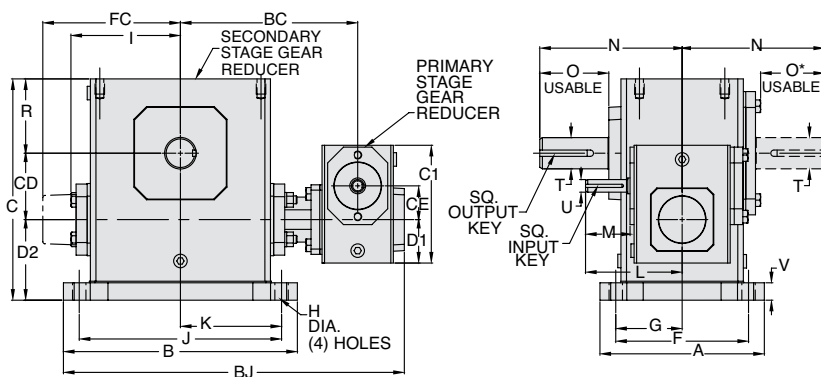
Type WUWF



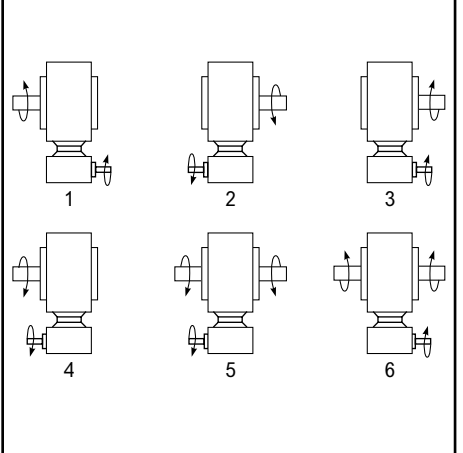
Assemblies ①



Type WUW



Assemblies ①



① Refer to **page 94** for Non-Preferred Mounting Positions.

Type WUWM, WUWF, WUW Double Reduction Worm-Worm/Worm Under

Dimensions (in)

Size	A	B	BC	BJ	C	CD	CE	C1	D1	D2	F	FC ^①	G	H	I	J	K	L	M	N	O	O ^②	R	V	T + .000 - .0015	U + .000 - .0015	Input Key ^③	Output Key
1133	4.24	5.37	5.32	9.85	5.19	1.33	1.33	4.66	1.72	2.14	3.31	—	1.66	0.34	2.61	4.37	2.19	3.82	1.76	4.00	2.16	1.94	1.72	0.53	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	5.56	6.50	5.85	10.94	5.97	1.54	1.33	4.66	1.72	2.52	4.31	—	2.16	0.41	3.14	5.25	2.63	3.82	1.76	4.31	2.11	1.90	1.91	0.59	0.750	0.500	1/8 x 1.00	3/16 x 1.50
1175	5.75	6.99	5.94	11.28	6.44	1.75	1.33	4.66	1.72	2.63	4.50	—	2.25	0.41	3.24	5.75	2.88	3.82	1.76	4.31	2.05	1.84	2.06	0.69	0.875	0.500	1/8 x 1.00	3/16 x 1.38
1206	6.00	7.69	6.32	12.01	7.09	2.06	1.33	4.66	1.72	2.75	4.69	—	2.34	0.47	3.61	6.38	3.19	3.82	1.76	4.68	2.29	2.08	2.28	0.72	1.000	0.500	1/8 x 1.00	1/4 x 1.44
1238	6.19	8.37	6.44	12.48	7.69	2.38	1.33	4.66	1.72	2.81	4.88	—	2.44	0.49	3.77	7.06	3.53	3.82	1.76	5.14	2.66	2.44	2.50	0.75	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1262	6.50	9.25	7.01	13.48	8.75	2.63	1.33	4.66	1.72	3.19	5.25	—	2.63	0.53	4.34	8.00	4.00	3.82	1.76	5.63	2.73	2.52	2.94	0.75	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1300	7.50	10.00	7.86	15.08	9.94	3.00	1.75	5.38	2.06	3.38	5.88	—	2.94	0.53	4.84	8.44	4.22	4.35	1.76	6.75	3.60	3.36	3.25	0.75	1.250	0.625	3/16 x 1.38	1/4 x 1.75
1325	7.75	11.12	8.05	15.81	10.44	3.25	1.75	5.38	2.06	3.50	6.13	—	3.06	0.53	5.02	9.50	4.75	4.35	1.76	7.06	3.66	3.42	3.50	0.81	1.375	0.625	3/16 x 1.38	5/16 x 2.63
1425	9.75	13.24	9.18	18.19	12.38	4.25	2.06	6.38	2.28	3.69	7.63	—	3.81	0.66	6.10	11.12	5.56	4.82	1.76	8.12	4.50	4.21	4.44	1.00	1.875	0.625	3/16 x 1.38	1/2 x 3.06
1525	10.50	16.24	11.57	22.59	15.13	5.25	2.63	8.00	2.94	4.76	8.38	—	4.19	0.78	7.50	14.12	7.06	6.07	2.38	9.06	4.78	4.53	5.12	1.13	2.000	0.750	3/16 x 1.63	1/2 x 3.50
1600	12.00	18.99	13.30	26.19	17.75	6.00	3.25	9.38	3.50	5.25	9.50	10.24	4.75	0.91	—	16.49	8.25	6.76	2.38	10.00	4.65	4.65	6.50	1.25	2.250	0.875	3/16 x 1.63	5/8 x 4.00
1700	13.38	15.38	12.96	24.58	20.33	7.00	3.25	9.38	3.50	5.74	11.25	10.63	5.63	1.13	—	13.00	6.50	6.76	2.38	11.76	5.65	5.65	7.59	1.42	2.750	0.875	3/16 x 1.75 ^④	5/8 x 4.00 ^④
1800	13.50	17.37	13.94	26.88	22.61	8.00	4.25	11.38	4.44	5.75	11.50	11.93	5.75	1.13	—	14.75	7.38	9.57	3.47	12.25	5.98	5.98	8.86	1.65	3.000	1.250	1/4 x 2.88 ^④	3/4 x 4.50 ^④
11000	16.88	21.14	17.05	32.92	27.12	10.00	5.25	14.00	5.12	6.76	14.00	14.34	7.00	1.44	—	17.00	8.50	10.88	3.38	14.75	6.76	6.76	10.36	1.65	3.750	1.250	1/4 x 3.00 ^④	7/8 x 5.00 ^④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM				L1		LQ		LQ1			RQ		
	48CZ	56C/ 140TC	180TC/ 210TC	250TC	48CZ/ 56C/140TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC	
1133	5.63	6.07	—	—	3.46	—	—	—	—	3.09	—	—	—	
1154	5.63	6.07	—	—	3.46	—	—	—	—	3.09	—	—	—	
1175	5.63	6.07	—	—	3.46	—	—	—	—	3.09	—	—	—	
1206	5.63	6.07	—	—	3.46	—	—	—	—	3.09	—	—	—	
1238	5.63	6.07	—	—	3.46	—	—	—	—	3.09	—	—	—	
1262	5.63	6.07	—	—	3.46	—	—	—	—	3.09	—	—	—	
1300	6.26	6.70	—	—	4.09	—	—	—	—	3.59	—	—	—	
1325	6.26	6.70	—	—	4.09	—	—	—	—	3.59	—	—	—	
1425	6.63	7.07	—	—	4.46	—	—	—	—	4.06	—	—	—	
1525	—	8.32	9.32	—	5.19 ^⑤	5.62	—	—	—	4.82 ^⑤	5.13	—	—	
1600	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	—	5.51 ^⑤	5.81	6.25	—	
1700	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	—	5.51 ^⑤	5.81	6.25	—	
1800	—	11.81	12.90	13.46	6.45 ^⑤	7.21	7.21	7.77	—	6.04 ^⑤	6.68	6.68	7.24	
11000	—	13.21	14.30	14.86	7.85 ^⑤	8.61	8.61	9.17	—	7.35 ^⑤	7.98	7.98	8.54	

NEMA Dimensions (in)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway [®]	BF ^⑦
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑧

Size	LQ1					RQ						
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1154	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1175	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1206	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1238	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1262	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1300	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1325	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1425	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	—
1525	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07	—
1600	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1700	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1800	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.14	6.93
11000	—	—	—	7.78	7.78	8.57	—	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway [®]	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 with extended cap. Dimensions refer to cap location.
- ② Applies to double output shaft.
- ③ Type WUW and WUWF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ Keyway width by depth.

- ⑦ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WUWF with frame sizes 180TC-250TC.

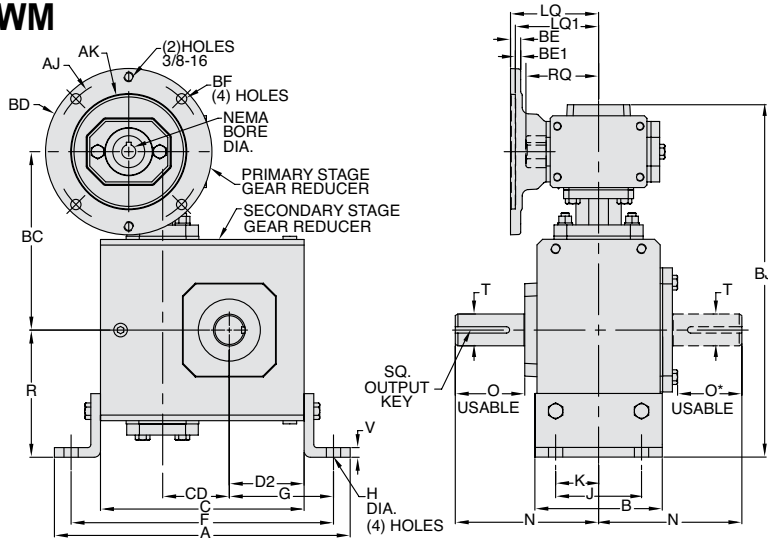
- ⑧ Metric IEC B5 input flange options are available only on quill input styles.



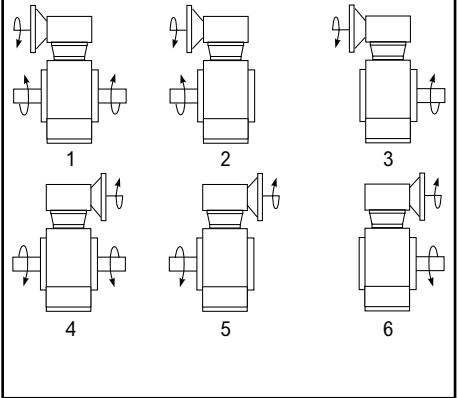
For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WJWM, WJWF, WJW Double Reduction Worm-Worm/Vertical Input

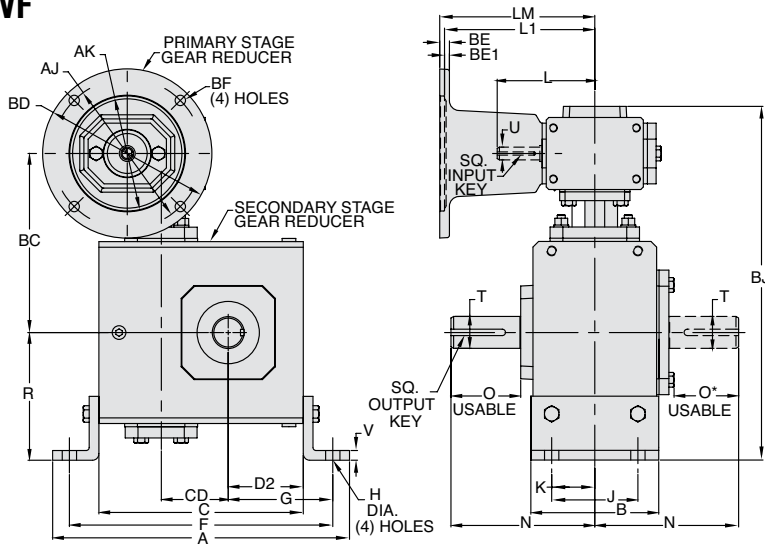
Type WJWM



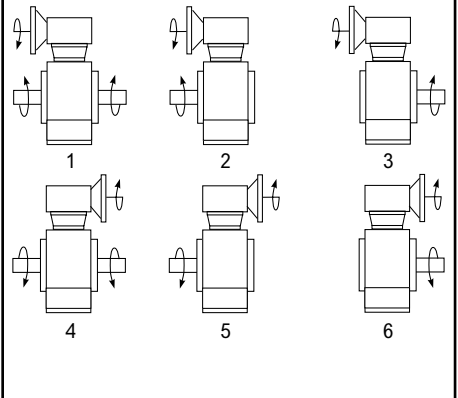
Assemblies ①



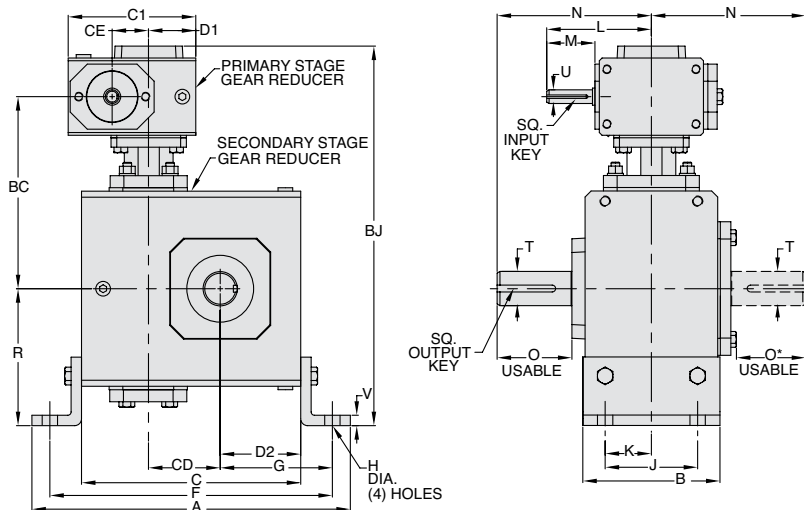
Type WJWF



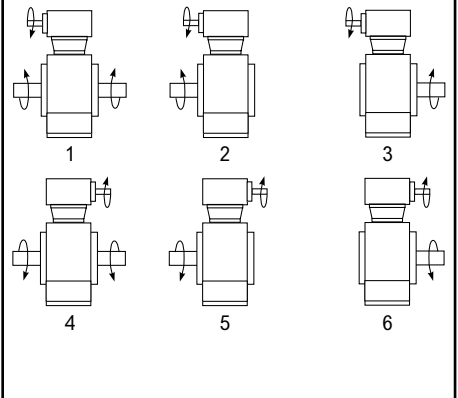
Assemblies ①



Type WJW



Assemblies ①



① Refer to page 94 for Non-Preferred Mounting Positons.

Type WJWM, WJWF, WJW Double Reduction Worm-Worm/Vertical Input

Dimensions (in)

Size	A	B	BC	BJ	C	CD	CE	C1	D1	D2	F	G	H	J	K	L	M	N	O	O ^①	R	V	T + .000 - .0015	U + .000 - .0015	Input Key ^②	Output Key
1133	7.42	2.75	5.32	10.10	4.66	1.33	1.33	4.66	1.72	1.72	6.42	2.60	0.38	2.00	1.00	3.82	1.76	4.00	2.16	1.94	2.94	0.25	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	8.14	3.50	5.85	11.20	5.38	1.54	1.33	4.66	1.72	1.91	7.08	2.76	0.44	2.75	1.38	3.82	1.76	4.31	2.11	1.90	3.50	0.25	0.750	0.500	1/8 x 1.00	3/16 x 1.50
1175	8.51	3.50	5.94	11.29	5.75	1.75	1.33	4.66	1.72	2.06	7.45-7.63	3.00	0.44 slot	2.50-2.75	1.25-1.38	3.82	1.76	4.31	2.05	1.84	3.50	0.25	0.875	0.500	1/8 x 1.00	3/16 x 1.38
1206	9.76	4.00	6.32	12.17	6.38	2.06	1.33	4.66	1.72	2.28	8.63	3.40	0.56 slot	2.63-2.75	1.31-1.38	3.82	1.76	4.68	2.29	2.08	4.01	0.38	1.000	0.500	1/8 x 1.00	1/4 x 1.44
1238	10.31	4.00	6.44	12.35	6.94	2.38	1.33	4.66	1.72	2.50	9.19	3.63	0.69	2.88	1.44	3.82	1.76	5.14	2.66	2.44	4.06	0.38	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1262	11.62	5.00	7.01	13.85	8.00	2.63	1.33	4.66	1.72	2.94	10.38	4.13	0.56	3.38	1.69	3.82	1.76	5.63	2.73	2.52	5.00	0.38	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1300	12.64	6.00	7.86	15.68	9.94	3.00	1.75	5.38	2.06	3.25	11.38	4.50	0.56	3.88	1.94	4.35	1.76	6.75	3.60	3.36	5.62	0.38	1.250	0.625	3/16 x 1.38	1/4 x 1.75
1325	13.14	6.00	8.05	15.88	10.44	3.25	1.75	5.38	2.06	3.50	11.88	4.75	0.56	3.88	1.94	4.35	1.76	7.06	3.66	3.42	5.63	0.38	1.375	0.625	3/16 x 1.38	5/16 x 2.63
1425	16.38	7.00	9.18	18.07	11.38	4.25	2.06	6.38	2.28	4.44	14.88	6.19	0.69	5.00	2.50	4.82	1.76	8.12	4.50	4.21	6.50	0.50	1.875	0.625	1/4 x 2.88 ^③	1/2 x 3.06
1525	19.00	7.00	11.57	22.22	14.00	5.25	2.63	8.00	2.94	5.12	17.50	6.87	0.69	5.81	2.91	6.07	2.38	9.06	4.78	4.53	7.75	0.50	2.000	0.750	1/4 x 3.00 ^③	1/2 x 3.50

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1154	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1175	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1206	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1238	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1262	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1300	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1325	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1425	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—	—
1525	—	8.32	9.32	—	5.19 ^④	5.62	—	—	4.82 ^④	5.13	—	—

NEMA Dimensions (in)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑤	BF ^⑦
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑥

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1154	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1175	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1206	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1238	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1262	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1300	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1325	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1425	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	—
1525	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07	—

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^⑤	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

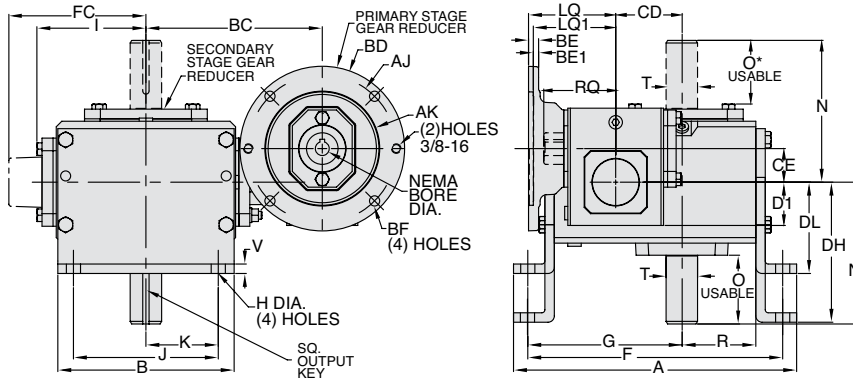
- ① Applies to double output shaft.
- ② Type WJW and WJWF only.
- ③ Key not provided with gear reducer. Keyway dimension shown.
- ④ 48CZ not available.
- ⑤ Keyway width by depth.
- ⑥ Metric IEC B5 input flange options are available only on quill input styles.



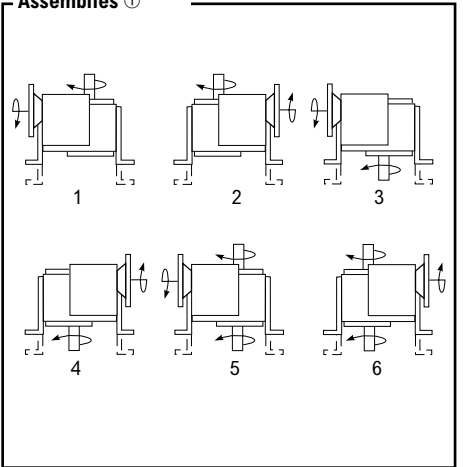
For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WXWM, WXWF, WXW Double Reduction Worm-Worm/Vertical Output

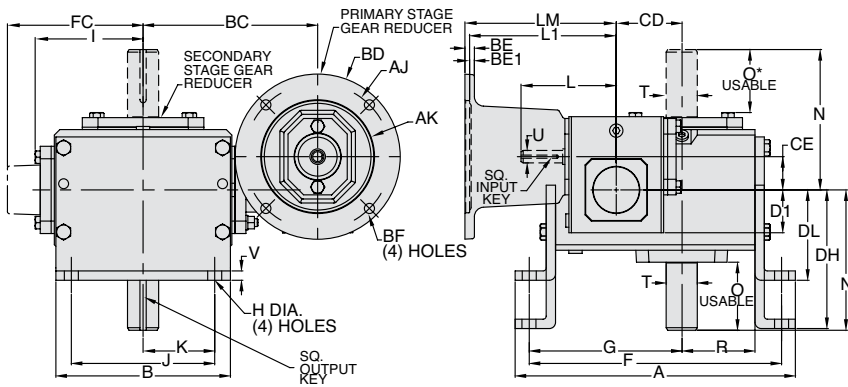
Type WXWM



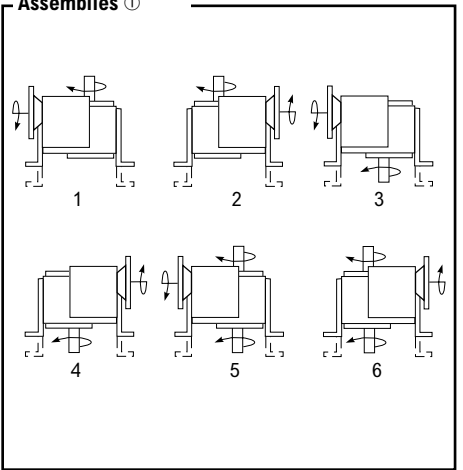
Assemblies ①



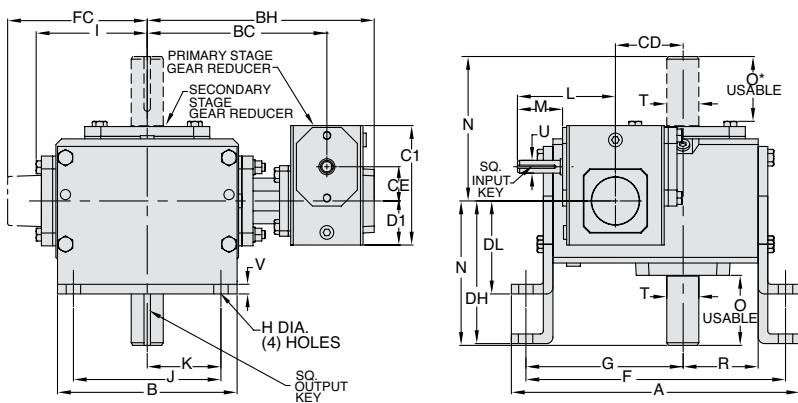
Type WXWF



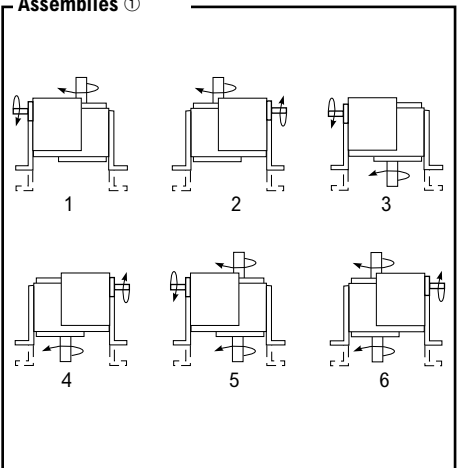
Assemblies ①



Type WXW



Assemblies ①



① Refer to page 94 for Non-Preferred Mounting Positions.

Type WXWM, WXWF, WXW Double Reduction Worm-Worm/Vertical Output

Dimensions (in)

Size	A	B	BC	BH	CD	CE	C1	D1	DL	DH	F	FC①	G	H	I	J	K	L	M	N	O	O②	R	V	T + .000 - .0015	U + .000 - .0015	Input Key③	Output Key
1133	7.26	4.00	5.32	7.16	1.33	1.33	4.66	1.72	2.63	3.56	6.50	—	3.86	0.38	2.61	3.00	1.50	3.82	1.76	4.00	2.16	1.94	1.72	0.25	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	7.88	5.00	5.85	7.69	1.54	1.33	4.66	1.72	3.00	4.38	7.00	—	4.28	0.44	3.14	4.00	2.00	3.82	1.76	4.31	2.11	1.90	1.91	0.25	0.750	0.500	1/8 x 1.00	3/16 x 1.50
1175	8.25	5.00	5.94	7.79	1.75	1.33	4.66	1.72	3.00	4.38	7.37	—	4.50	0.44	3.24	4.00	2.00	3.82	1.76	4.31	2.05	1.84	2.06	0.25	0.875	0.500	1/8 x 1.00	3/16 x 1.38
1206	9.38	6.00	6.32	8.16	2.06	1.33	4.66	1.72	3.13	4.88	8.38	—	5.09	0.50	3.61	4.88	2.44	3.82	1.76	4.68	2.29	2.08	2.28	0.38	1.000	0.500	1/8 x 1.00	1/4 x 1.44
1238	9.94	6.00	6.44	8.29	2.38	1.33	4.66	1.72	3.38	5.25	8.81	—	5.44	0.50	3.77	4.88	2.44	3.82	1.76	5.14	2.66	2.44	2.50	0.38	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1262	11.24	7.00	7.01	8.85	2.63	1.33	4.66	1.72	3.63	5.56	10.12	—	6.12	0.56	4.34	5.75	2.88	3.82	1.76	5.63	2.73	2.52	2.94	0.38	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1300	12.50	8.00	7.86	10.06	3.00	1.75	5.38	2.06	3.94	5.88	11.13	—	6.75	0.56	4.84	6.00	3.00	4.35	1.76	6.75	3.60	3.36	3.25	0.38	1.250	0.625	3/16 x 1.38	1/4 x 1.75
1600	23.26	14.75	13.30	16.70	6.00	3.25	9.38	3.50	7.31	9.63	20.88	10.24	7.13	0.56	5.02	6.13	3.06	4.35	1.76	7.06	3.66	3.42	3.50	0.38	1.375	0.625	3/16 x 1.38	5/16 x 2.63
1425	16.26	10.00	9.18	11.57	4.25	2.06	6.38	2.28	5.00	7.50	14.88	—	8.69	0.69	6.10	7.88	3.94	4.82	1.76	8.12	4.50	4.21	4.44	0.50	1.875	0.625	3/16 x 1.38	1/2 x 3.06
1525	19.62	13.00	11.57	14.47	5.25	2.63	8.00	2.94	5.16	9.16	18.00	—	10.88	0.78	7.50	10.00	5.00	6.07	2.38	9.06	4.78	4.53	5.12	0.50	2.000	0.750	3/16 x 1.63	1/2 x 3.50
1600	23.26	14.75	13.30	16.70	6.00	3.25	9.38	3.50	7.31	9.63	20.88	10.24	12.19	0.91	—	11.76	5.88	6.76	2.38	10.00	4.65	4.65	6.50	0.50	2.250	0.875	3/16 x 1.63	5/8 x 4.00
1700	26.91	14.88	12.96	16.90	7.00	3.25	9.38	3.50	7.00	—	23.99	10.63	13.87	1.13	—	12.50	6.25	6.76	2.38	11.76	5.65	5.65	7.59	0.75	2.750	0.875	3/16 x 1.75④	5/8 x 4.00④
1800	28.96	17.00	13.94	18.19	8.00	4.25	11.38	4.44	8.00	—	25.50	11.93	14.38	1.13	—	14.00	7.00	9.57	3.47	12.25	5.98	5.98	8.86	0.75	3.000	1.250	1/4 x 2.88④	3/4 x 4.50④
11000	37.47	20.88	17.05	22.30	10.00	5.25	14.00	5.12	9.00	—	30.75	14.34	17.76	1.44	—	17.75	8.88	10.88	3.38	14.75	6.76	6.76	10.36	1.00	3.750	1.250	1/4 x 3.00④	7/8 x 5.00④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1154	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1175	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1206	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1238	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1262	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1300	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1325	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1425	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—	—
1525	—	8.32	9.32	—	5.19⑤	5.62	—	—	4.82⑤	5.13	—	—
1600	—	9.01	10.01	—	6.14⑤	6.34	6.75	—	5.51⑤	5.81	6.25	—
1700	—	9.01	10.01	—	6.14⑤	6.34	6.75	—	5.51⑤	5.81	6.25	—
1800	—	11.81	12.90	13.46	6.45⑤	7.21	7.21	7.77	6.04⑤	6.68	6.68	7.24
11000	—	13.21	14.30	14.86	7.85⑤	8.61	8.61	9.17	7.35⑤	7.98	7.98	8.54

NEMA Dimensions (in)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway®	BF⑦
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ⑧

Size	LQ1					RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1154	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1175	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1206	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1238	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1262	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1300	3.25	3.28	3.52	—	—	2.95	2.97	3.21	—	—	—
1325	3.25	3.28	3.52	—	—	2.95	2.97	3.21	—	—	—
1425	3.62	3.65	3.89	—	—	3.43	3.44	3.68	—	—	—
1525	—	4.28	4.90	4.90	5.30	—	4.09	4.72	4.72	5.07	—
1600	—	4.97	5.59	5.59	6.07	—	4.78	5.41	5.41	5.76	—
1700	—	4.97	5.59	5.59	6.07	—	4.78	5.41	5.41	5.76	—
1800	—	—	—	6.38	6.39	7.17	—	—	6.16	6.14	6.93
11000	—	—	—	7.78	7.78	8.57	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway®	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 have extended cap. Dimensions refer to cap location.
- ② Applies to double output shaft.
- ③ Type WXW and WXWF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ Keyway width by depth.

- ⑦ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WXWF with frame sizes 180TC-250TC.

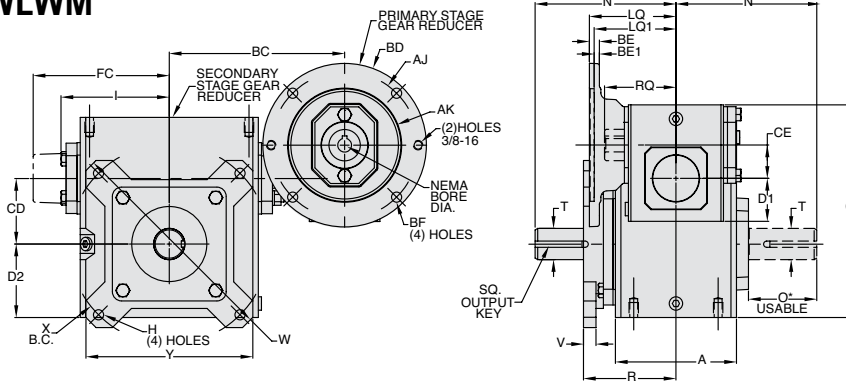
- ⑧ Metric IEC B5 input flange options are available only on quill input styles.



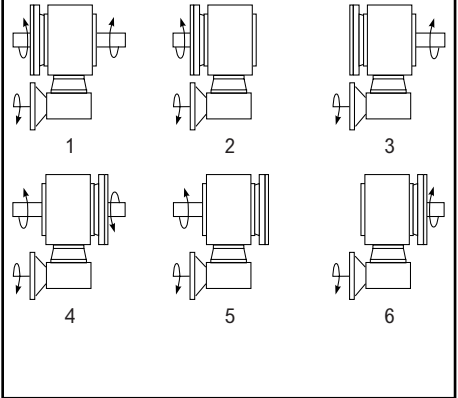
WARNING
For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WLWM, WLWF, WLW Double Reduction Worm-Worm/Flanged Output

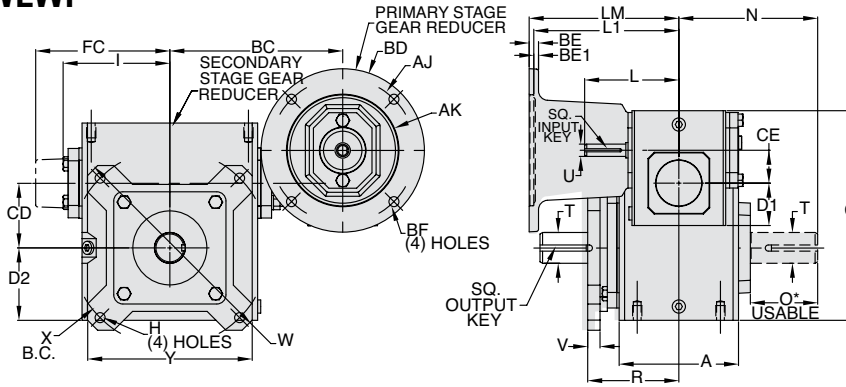
Type WLWM



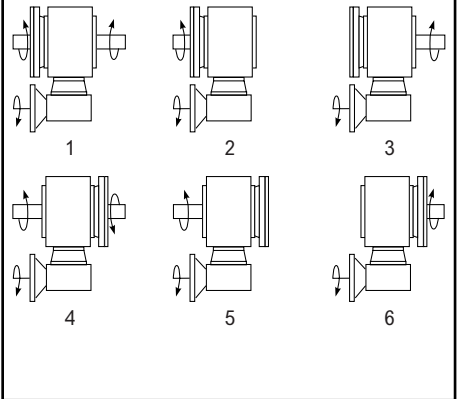
Assemblies ①



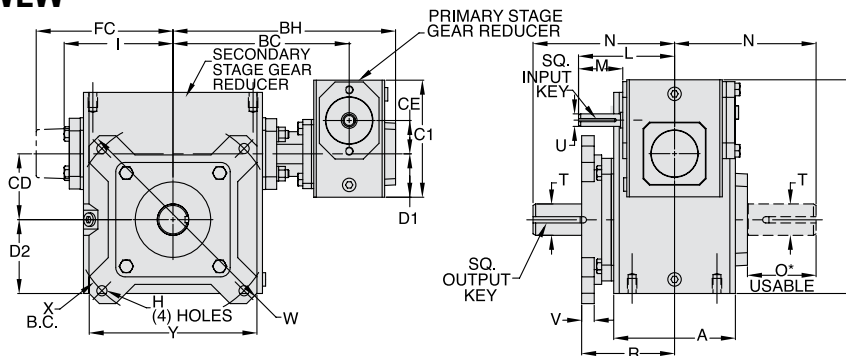
Type WLWF



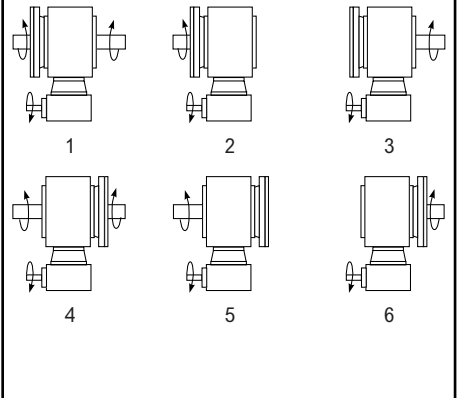
Assemblies ①



Type WLW



Assemblies ①



① Refer to page 94 for Non-Preferred Mounting Positions.

NOTE: Sizes 1154-1525 output flange must be mounted at factory.

Type WLWM, WLWF, WLW Double Reduction Worm-Worm/Flanged Output

Dimensions (in)

Size	A	BC	BH	C	CD	CE	C1	D1	D2	FC ^①	H	I	L	M	N	O ^②	R	V	W	X	Y	T + .000 - .0015	U + .000 - .0015	Input Key ^③	Output Key
1133	2.82	5.32	7.16	5.99	1.33	1.33	4.66	1.72	1.72	—	0.34	2.61	3.82	1.76	4.00	1.94	2.52	0.38	5.92	5.00	4.50	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	3.44	5.85	7.69	6.38	1.54	1.33	4.66	1.72	1.91	—	0.34	3.14	3.82	1.76	4.31	1.90	2.87	0.38	5.88	5.00	4.50	0.750	0.500	1/8 x 1.00	3/16 x 1.50
1175	3.56	5.94	7.79	6.75	1.75	1.33	4.66	1.72	2.06	—	0.34	3.24	3.82	1.76	4.31	1.84	3.18	0.38	6.64	5.88	5.00	0.875	0.500	1/8 x 1.00	3/16 x 1.38
1206	3.81	6.32	8.16	7.28	2.06	1.33	4.66	1.72	2.28	—	0.41	3.61	3.82	1.76	4.68	2.08	3.69	0.44	7.88	7.00	5.99	1.000	0.500	1/8 x 1.00	1/4 x 1.44
1238	4.06	6.44	8.29	7.81	2.38	1.33	4.66	1.72	2.50	—	0.41	3.77	3.82	1.76	5.14	2.44	3.73	0.44	8.39	7.50	6.27	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1262	4.84	7.01	8.85	8.50	2.63	1.33	4.66	1.72	2.94	—	0.41	4.34	3.82	1.76	5.63	2.52	3.70	0.50	8.88	8.00	6.67	1.125	0.500	1/8 x 1.00	1/4 x 1.75
1300	5.25	7.86	10.06	9.94	3.00	1.75	5.38	2.06	3.25	—	0.41	4.84	4.35	1.76	6.75	3.36	3.78	0.50	9.89	9.00	7.37	1.250	0.625	3/16 x 1.38	1/4 x 1.75
1325	5.75	8.05	10.25	10.44	3.25	1.75	5.38	2.06	3.50	—	0.41	5.02	4.35	1.76	7.06	3.42	4.03	0.50	9.89	9.00	7.37	1.375	0.625	3/16 x 1.38	5/16 x 2.63
1425	6.13	9.18	11.57	12.78	4.25	2.06	6.38	2.28	4.44	—	0.56	6.10	4.82	1.76	8.12	4.21	4.56	0.62	12.95	11.50	9.65	1.875	0.625	3/16 x 1.38	1/2 x 3.06
1525	7.19	11.57	14.47	15.43	5.25	2.63	8.00	2.94	5.12	—	0.69	7.50	6.07	2.38	9.06	4.53	5.62	0.75	15.50	14.00	11.75	2.000	0.750	3/16 x 1.63	1/2 x 3.50
1600	8.13	13.30	16.70	18.38	6.00	3.25	9.38	3.50	6.50	10.24	0.69	—	6.76	2.38	10.00	4.65	7.26	0.75	18.00	15.63	14.00	2.250	0.875	3/16 x 1.63	5/8 x 4.00
1700	7.63	12.96	16.90	20.46	7.00	3.25	9.38	3.50	7.59	10.63	0.78	—	6.76	2.38	11.76	5.65	7.45	0.75	21.00	18.38	15.63	2.750	0.875	3/16 x 1.75 ^④	5/8 x 4.00 ^④
1800	8.63	13.94	18.19	23.79	8.00	4.25	11.38	4.44	8.86	11.93	1.03	—	9.57	3.47	12.25	5.98	8.34	0.75	24.00	21.00	17.88	3.000	1.250	1/4 x 2.88 ^④	3/4 x 4.50 ^④
11000	9.53	17.05	22.30	29.24	10.00	5.25	14.00	5.12	10.36	14.34	1.03	—	10.88	3.38	14.75	6.76	9.07	1.00	29.00	25.00	21.19	3.750	1.250	1/4 x 3.00 ^④	7/8 x 5.00 ^④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1154	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1175	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1206	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1238	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1262	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1300	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1325	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1425	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—	—
1525	—	8.32	9.32	—	5.19 ^⑤	5.62	—	—	4.82 ^⑤	5.13	—	—
1600	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	6.25	—
1700	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	6.25	—
1800	—	11.81	12.90	13.46	6.45 ^⑤	7.21	7.21	7.77	6.04 ^⑤	6.68	6.68	7.24
11000	—	13.21	14.30	14.86	7.85 ^⑤	8.61	8.61	9.17	7.35 ^⑤	7.98	7.98	8.54

NEMA Dimensions (in)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑥	BF ^⑦
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑧

Size	LQ1					RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1154	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1175	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1206	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1238	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1262	2.62	2.65	2.89	—	—	2.45	2.47	2.71	—	—	—
1300	3.25	3.28	3.52	—	—	2.95	2.97	3.21	—	—	—
1325	3.25	3.28	3.52	—	—	2.95	2.97	3.21	—	—	—
1425	3.62	3.65	3.89	—	—	3.43	3.44	3.68	—	—	—
1525	—	4.28	4.90	4.90	5.30	—	4.09	4.72	4.72	5.07	—
1600	—	4.97	5.59	5.59	6.07	—	4.78	5.41	5.41	5.76	—
1700	—	4.97	5.59	5.59	6.07	—	4.78	5.41	5.41	5.76	—
1800	—	—	—	6.38	6.39	7.17	—	—	6.16	6.14	6.93
11000	—	—	—	7.78	7.78	8.57	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^⑥	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 have extended cap. Dimensions refer to cap location.
- ② Applies to double output shaft.
- ③ Type WLW and WLWF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ Keyway width by depth.

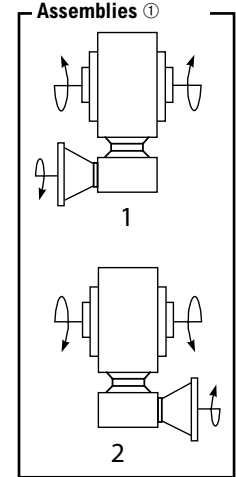
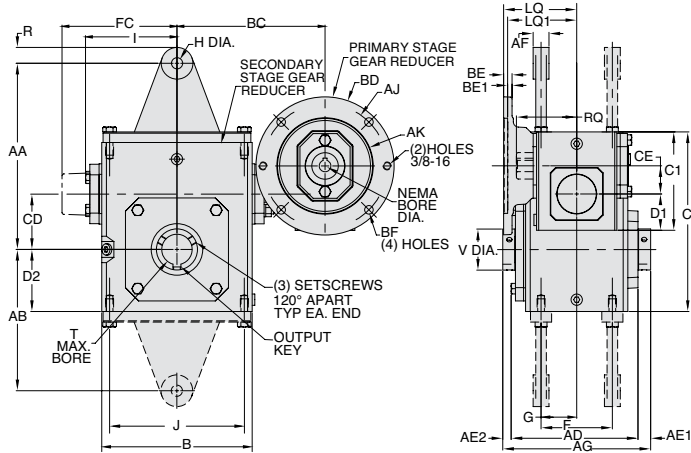
- ⑦ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WLWF with frame sizes 180TC-250TC.
- ⑧ Metric IEC B5 input flange options are available only on quill input styles.



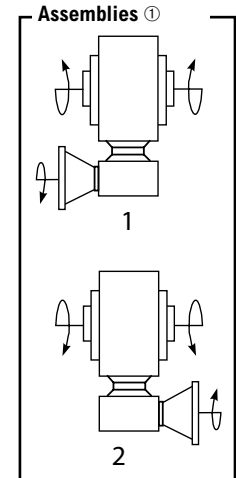
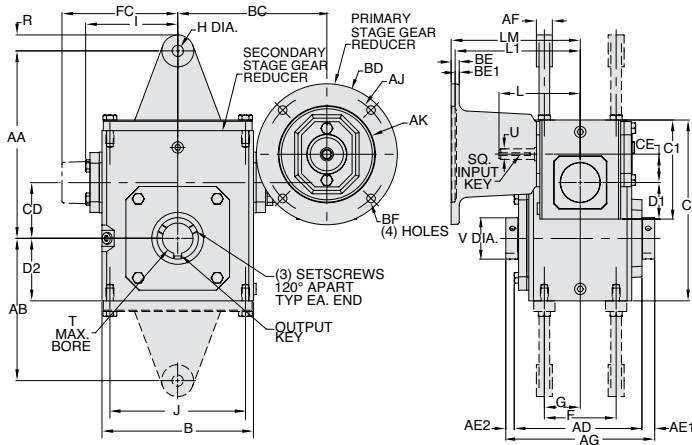
For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WBWQM, WBWQF, WBWQ Double Reduction Worm-Worm/Hollow Shaft

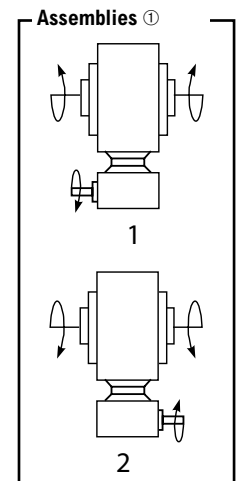
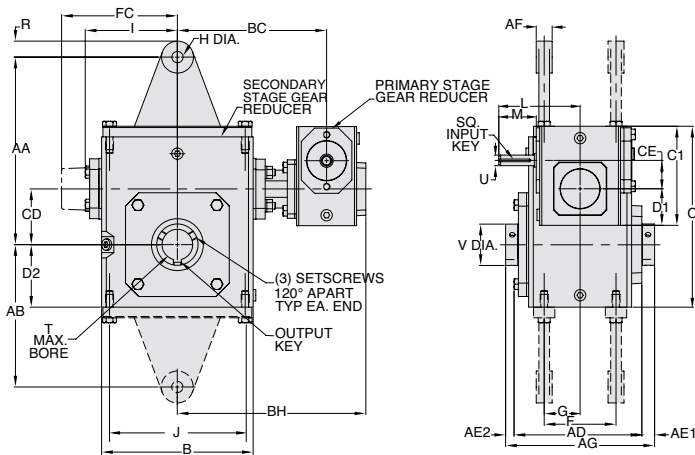
Type WBWQM



Type WBWQF



Type WBWQ



① Refer to **page 94** for Non-Preferred Mounting Positons.

Type WBWQM, WBWQF, WBWQ Double Reduction Worm-Worm/Hollow Shaft

Dimensions (in)

Size	AA	AB	AD	AE1	AE2	AF	AG	B	BC	BH	C	CD	CE	C1	C2	D1	D2	F	FC①	G	H	I	J	L	M	R	V	T MAX ② + .000 - .0025	U + .000 - .0015	Input Key③	Output Key
1133	4.19	2.97	3.90	0.53	0.32	0.75	4.75	3.80	5.32	7.16	5.99	1.33	1.33	4.66	4.66	1.72	1.72	2.00	—	1.00	0.53	2.61	3.25	3.82	1.76	0.50	1.00	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	5.97	4.41	4.61	0.51	0.30	0.75	5.42	5.19	5.85	7.69	6.38	1.54	1.33	4.66	5.38	1.72	1.91	2.75	—	1.38	0.53	3.14	4.19	3.82	1.76	0.75	1.00	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1175	6.19	4.56	4.73	0.49	0.28	0.75	5.50	5.19	5.94	7.79	6.75	1.75	1.33	4.66	5.75	1.72	2.06	2.75	—	1.38	0.53	3.24	4.19	3.82	1.76	0.75	1.44	1.000	0.500	1/8 x 1.00	1/4 x 3.00
1206	7.24	5.43	4.99	0.61	0.40	0.75	6.00	5.80	6.32	8.16	7.28	2.06	1.33	4.66	6.38	1.72	2.28	3.00	—	1.44	0.53	3.61	4.75	3.82	1.76	0.75	1.44	1.500	0.500	1/8 x 1.00	3/8 x 3.00
1238	7.69	5.75	5.18	0.51	0.31	0.75	6.00	6.12	6.44	8.29	7.81	2.38	1.33	4.66	6.94	1.72	2.50	2.88	—	1.44	0.53	3.77	5.00	3.82	1.76	0.75	1.94	1.500	0.500	1/8 x 1.00	3/8 x 3.00
1262	8.81	6.69	6.01	0.60	0.39	0.75	7.00	7.38	7.01	8.85	8.50	2.63	1.33	4.66	8.00	1.72	2.94	3.38	—	1.69	0.53	4.34	6.38	3.82	1.76	0.75	1.94	1.500	0.500	1/8 x 1.00	3/8 x 3.00
1300	10.63	8.25	6.53	0.60	0.36	0.75	7.50	8.12	7.86	10.06	9.94	3.00	1.75	5.38	8.88	2.06	3.25	4.00	—	2.00	0.53	4.84	7.00	4.35	1.76	0.88	2.51	2.188	0.625	3/16 x 1.38	1/2 x 3.00
1325	10.88	8.50	7.04	0.54	0.29	0.75	7.88	8.75	8.05	10.25	10.44	3.25	1.75	5.38	9.38	2.06	3.50	4.00	—	2.00	0.53	5.02	7.50	4.35	1.76	0.88	2.51	2.188	0.625	3/16 x 1.38	1/2 x 3.00
1425	11.94	9.44	7.53	0.63	0.34	0.75	8.50	10.25	9.18	11.57	12.78	4.25	2.06	6.38	11.38	2.28	4.44	5.00	—	2.50	0.53	6.10	8.50	4.82	1.76	0.75	2.75	2.188	0.625	3/16 x 1.38	1/2 x 3.00
1525	13.88	10.12	8.85	0.97	0.68	1.00	10.50	13.00	11.57	14.47	15.43	5.25	2.63	8.00	14.00	2.94	5.12	5.81	—	2.91	0.66	7.50	11.00	6.07	2.38	1.00	4.26	3.438	0.750	3/16 x 1.63	7/8 x 3.44
1600	15.00	11.50	10.52	0.52	0.52	0.38	11.50	14.50	13.30	16.70	18.38	6.00	3.25	9.38	16.50	3.50	6.50	6.38	10.24	3.19	0.66	—	12.75	6.76	2.38	0.69	4.18	3.438	0.875	3/16 x 1.63	7/8 x 3.44
1700	—	—	11.36	1.09	1.09	—	13.50	14.88	12.96	16.90	20.46	7.00	3.25	9.38	18.91	3.50	7.59	5.50	10.63	2.75	—	—	12.50	6.76	2.38	—	4.92	3.938	0.875	3/16 x 1.75④	1 x 1/2④
1800	—	—	12.48	1.03	1.03	—	14.50	17.00	13.94	18.19	23.79	8.00	4.25	11.38	20.96	4.44	8.86	6.50	11.93	3.25	—	—	14.25	9.57	3.47	—	5.55	4.438	1.250	1/4 x 2.88④	1 x 1/2④
11000	—	—	15.78	1.39	1.39	—	18.50	20.88	17.05	22.30	29.24	10.00	5.25	14.00	25.47	5.12	10.36	6.88	14.34	3.44	—	—	17.75	10.88	3.38	—	6.67	5.438	1.250	1/4 x 3.00④	1-1/4 x 5/8④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	—	—	—	—
1154	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1175	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1206	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1238	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1262	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1300	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1325	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1425	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—	—
1525	—	8.32	9.32	—	5.19⑤	5.62	—	—	4.82⑤	5.13	—	—
1600	—	9.01	10.01	—	6.14⑤	6.34	6.75	—	5.51⑤	5.81	6.25	—
1700	—	9.01	10.01	—	6.14⑤	6.34	6.75	—	5.51⑤	5.81	6.25	—
1800	—	11.81	12.90	13.46	6.45⑤	7.21	7.21	7.77	6.04⑤	6.68	6.68	7.24
11000	—	13.21	14.30	14.86	7.85⑤	8.61	8.61	9.17	7.35⑤	7.98	7.98	8.54

NEMA Dimensions (in)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway⑥	BF⑦
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ⑧

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1154	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1175	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1206	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1238	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1262	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1300	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1325	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1425	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	—
1525	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07	—
1600	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1700	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1800	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.14	6.93
11000	—	—	—	7.78	7.78	8.57	—	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

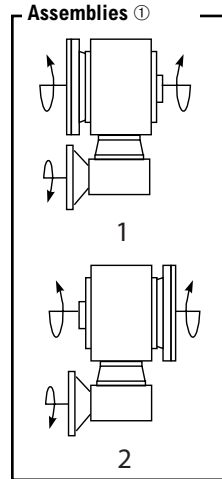
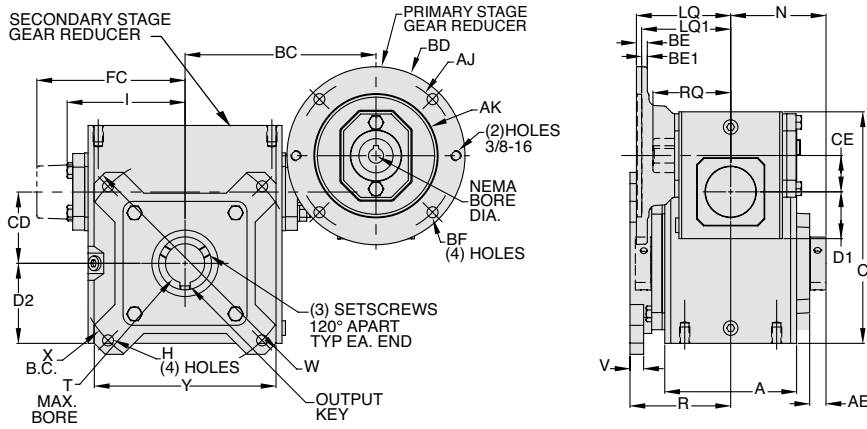
Frame	AJ	AK	BD	BE	Bore Dia.	Keyway⑥	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 have extended cap. Dimensions refer to cap location.
- ② Max bore dimensions shown. For additional bores available, refer to **page 51**.
- ③ Type WBWQ and WBWQF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ Keyway width by depth.

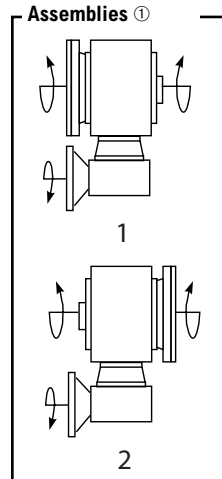
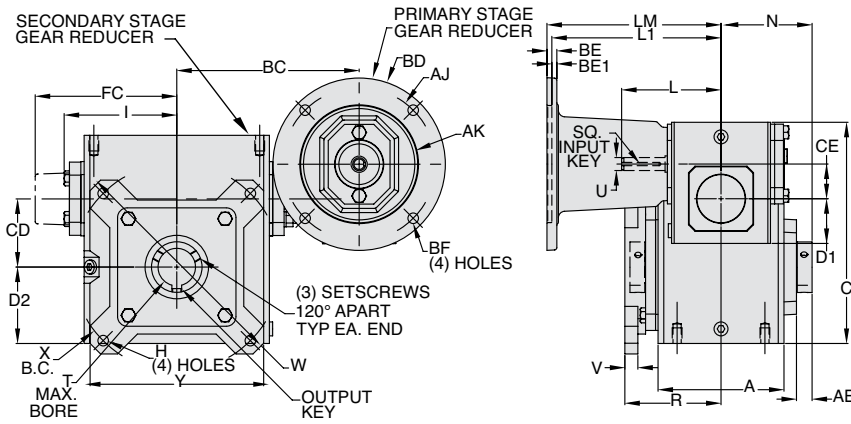
- ⑦ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WBWQF with frame sizes 180TC-250TC.
 - ⑧ Metric IEC B5 input flange options are available only on quill input styles.
- ⚠ WARNING** For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WLWQM, WLWQF, WLWQ Double Reduction Worm-Worm/Hollow Shaft/Flanged Output

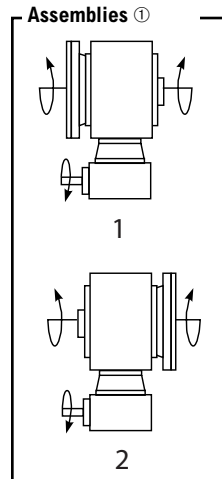
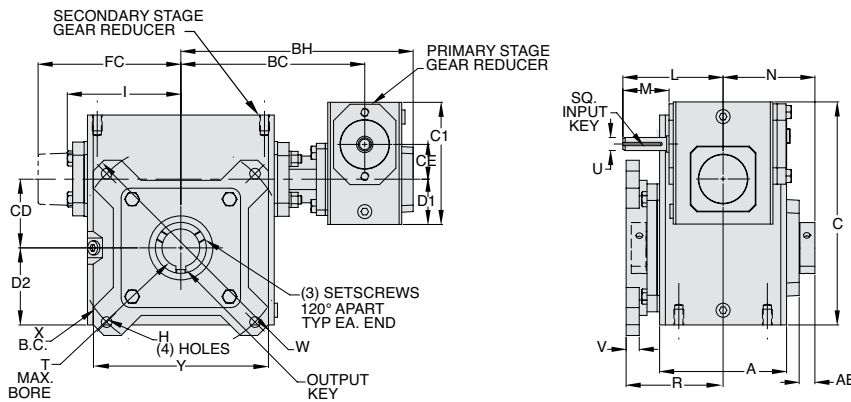
Type WLWQM



Type WLWQF



Type WLWQ



① Refer to **page 94** for Non-Preferred Mounting Positons.

Type WLWQM, WLWQF, WLWQ Double Reduction Worm-Worm/Hollow Shaft/Flanged Output

Dimensions (in)

Size	A	AE	BC	BH	C	CD	CE	C1	D1	D2	FC ^①	H	I	L	M	N	R	V	W	X	Y	T MAX ^②	U	Input Key ^③	Output Key
																						+ .000 - .0025	+ .000 - .0015		
1133	2.82	0.53	5.32	7.16	5.99	1.33	1.33	4.66	1.72	1.72	—	0.34	2.61	3.82	1.76	2.38	2.52	0.38	5.92	5.00	4.50	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1154	3.44	0.51	5.85	7.69	6.38	1.54	1.33	4.66	1.72	1.91	—	0.34	3.14	3.82	1.76	2.71	2.87	0.38	5.88	5.00	4.50	0.625	0.500	1/8 x 1.00	3/16 x 1.50
1175	3.56	0.49	5.94	7.79	6.75	1.75	1.33	4.66	1.72	2.06	—	0.34	3.24	3.82	1.76	2.75	3.18	0.38	6.64	5.88	5.00	1.000	0.500	1/8 x 1.00	1/4 x 3.00
1206	3.81	0.61	6.32	8.16	7.28	2.06	1.33	4.66	1.72	2.28	—	0.41	3.61	3.82	1.76	3.00	3.69	0.44	7.88	7.00	5.99	1.500	0.500	1/8 x 1.00	3/8 x 3.00
1238	4.06	0.51	6.44	8.29	7.81	2.38	1.33	4.66	1.72	2.50	—	0.41	3.77	3.82	1.76	3.00	3.73	0.44	8.39	7.50	6.27	1.500	0.500	1/8 x 1.00	3/8 x 3.00
1262	4.84	0.60	7.01	8.85	8.50	2.63	1.33	4.66	1.72	2.94	—	0.41	4.34	3.82	1.76	3.50	3.70	0.50	8.88	8.00	6.67	1.500	0.500	1/8 x 1.00	3/8 x 3.00
1300	5.25	0.60	7.86	10.06	9.94	3.00	1.75	5.38	2.06	3.25	—	0.41	4.84	4.35	1.76	3.75	3.78	0.50	9.89	9.00	7.37	2.188	0.625	3/16 x 1.38	1/2 x 3.00
1325	5.75	0.54	8.05	10.25	10.44	3.25	1.75	5.38	2.06	3.50	—	0.41	5.02	4.35	1.76	3.94	4.03	0.50	9.89	9.00	7.37	2.188	0.625	3/16 x 1.38	1/2 x 3.00
1425	6.13	0.63	9.18	11.57	12.78	4.25	2.06	6.38	2.28	4.44	—	0.56	6.10	4.82	1.76	4.25	4.56	0.62	12.95	11.50	9.65	2.188	0.625	3/16 x 1.38	1/2 x 3.00
1525	7.19	0.97	11.57	14.47	15.43	5.25	2.63	8.00	2.94	5.12	—	0.69	7.50	6.07	2.38	5.25	5.62	0.75	15.50	14.00	11.75	3.438	0.750	3/16 x 1.63	7/8 x 3.44
1600	8.13	0.52	13.30	16.70	18.38	6.00	3.25	9.38	3.50	6.50	10.24	0.69	—	6.76	2.38	5.75	7.26	0.75	18.00	15.63	14.00	3.438	0.875	3/16 x 1.63	7/8 x 3.44
1700	7.63	1.09	12.96	16.90	20.46	7.00	3.25	9.38	3.50	7.59	10.63	0.78	—	6.76	2.38	6.75	7.45	0.75	21.00	18.38	15.63	3.938	0.875	3/16 x 1.75 ^④	1 x 1/2 ^④
1800	8.63	1.03	13.94	18.19	23.79	8.00	4.25	11.38	4.44	8.86	11.93	1.03	—	9.57	3.47	7.25	8.34	0.75	24.00	21.00	17.88	4.438	1.250	1/4 x 2.88 ^④	1 x 1/2 ^④
11000	9.53	1.39	17.05	22.30	29.24	10.00	5.25	14.00	5.12	10.36	14.34	1.03	—	10.88	3.38	9.25	9.07	1.00	29.00	25.00	21.19	5.438	1.250	1/4 x 3.00 ^④	1-1/4 x 5/8 ^④

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ 48CZ/ 56C/140TC	LQ1			RQ			
	48CZ	56C/ 140TC	180TC/ 210TC	250TC		180TC	210TC	250TC	48CZ/ 56C/140TC	180TC	210TC	250TC
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1154	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1175	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1206	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1238	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1262	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1300	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1325	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1425	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—	—
1525	—	8.32	9.32	—	5.19 ^⑤	5.62	—	—	4.82 ^⑤	5.13	—	—
1600	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	6.25	—
1700	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	6.25	—
1800	—	11.81	12.90	13.46	6.45 ^⑤	7.21	7.21	7.77	6.04 ^⑤	6.68	6.68	7.24
11000	—	13.21	14.30	14.86	7.85 ^⑤	8.61	8.61	9.17	7.35 ^⑤	7.98	7.98	8.54

NEMA Dimensions (in)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑥	BF ^⑦
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑧

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/ D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1154	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1175	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1206	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1238	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1262	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1300	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1325	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1425	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	—
1525	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07	—
1600	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1700	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1800	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.14	6.93
11000	—	—	—	7.78	7.78	8.57	—	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

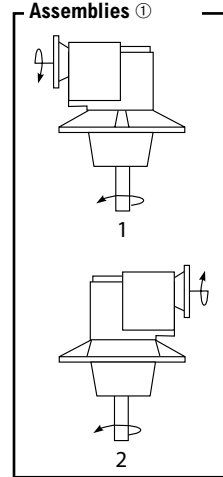
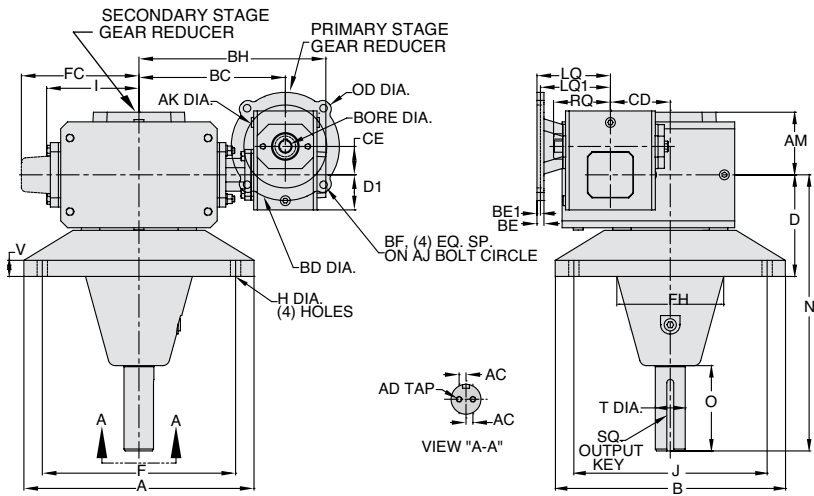
Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^⑥	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/ D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 have extended cap. Dimensions refer to cap location.
- ② Max bore dimensions shown. For additional bores available, refer to **page 51**.
- ③ Type WLWQ and WLWQF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ Keyway width by depth.

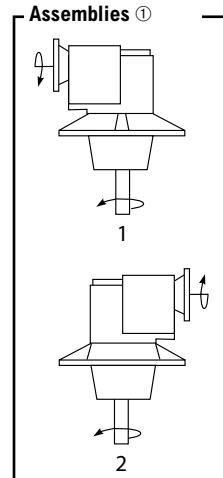
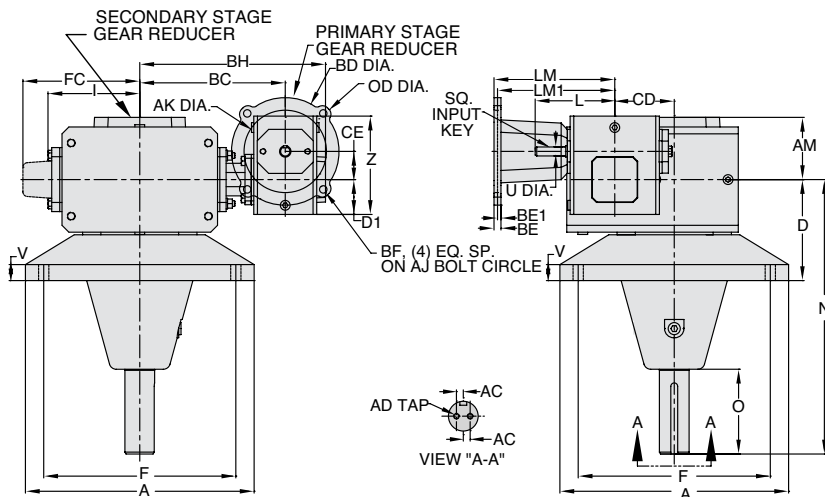
- ⑦ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WLWQF with frame sizes 180TC-250TC.
 - ⑧ Metric IEC B5 input flange options are available only on quill input styles.
- ⚠ WARNING**
For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Type WRWM, WRWF, WRW Double Reduction Worm-Worm/Drop Bearing Flanged Output

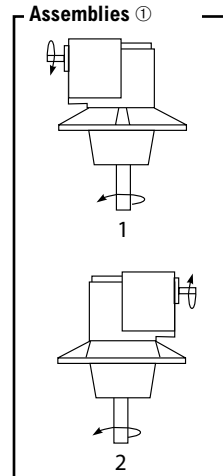
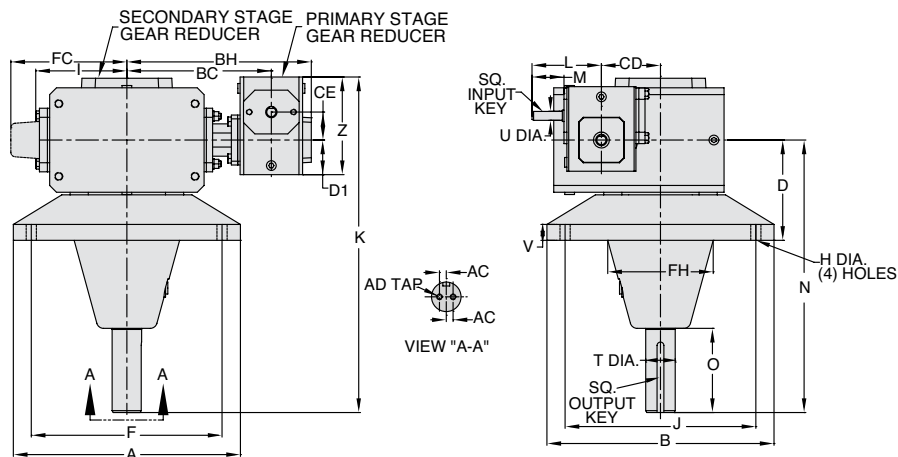
Type WRWM



Type WRWF



Type WRW



① Refer to **page 94** for Non-Preferred Mounting Positons.

Type WRWM, WRWF, WRW Double Reduction Worm-Worm/Drop Bearing Flanged Output

Dimensions (in)

Size	A	AC	AD	AM	B	BC	BH	CD	CE	C1	D	D1	F	FC ^①	FH	H	I	J	K	L	M	N	O ^②	V -.0015	T +.000 -.0015	U +.000	P ^③	Output Key ^④
1300	11.00	0.375	0.31-18 UNC x 1.00 DP	3.15	11.00	7.86	10.06	3.00	1.75	5.38	4.60	2.06	9.00	—	5.12	0.56	4.84	9.00	17.85	4.35	1.76	14.38	4.96	0.78	1.438	0.625	3/16 x 1.38	3/8 x 3.88
1325	12.50	0.375	0.31-18 UNC x 1.00 DP	3.40	12.50	8.05	10.25	3.25	1.75	5.38	5.52	2.06	10.50	—	5.75	0.56	5.02	10.50	18.47	4.35	1.76	15.00	4.63	0.88	1.438	0.625	3/16 x 1.38	3/8 x 3.69
1425	14.00	0.500	0.38-16 UNC x 1.00 DP	3.62	14.00	9.18	11.57	4.25	2.06	6.38	5.74	2.28	12.00	—	6.75	0.69	6.10	12.00	20.59	4.82	1.76	16.50	5.91	1.00	1.688	0.625	3/16 x 1.38	3/8 x 4.68
1525	16.00	0.750	0.38-16 UNC x 1.00 DP	4.28	16.00	11.57	14.47	5.25	2.62	8.00	6.00	2.94	14.00	—	8.00	0.81	7.50	14.00	21.56	6.07	2.38	16.50	5.62	1.25	2.188	0.750	3/16 x 1.63	1/2 x 4.63
1600	19.50	0.750	0.38-16 UNC x 1.00 DP	5.28	19.50	13.30	16.70	6.00	3.25	9.38	7.00	3.50	17.00	10.24	9.50	0.88	—	17.00	28.36	6.76	2.38	22.50	7.63	1.50	2.438	0.875	3/16 x 1.63	5/8 x 6.50
1700	22.00	1.000	0.38-16 UNC x 1.00 DP	6.06	22.00	12.96	16.90	7.00	3.25	9.38	8.50	3.50	19.00	10.63	10.75	1.13	—	19.00	29.88	6.76	2.38	24.00	7.63	1.75	2.937	0.875	3/16 x 1.75 ^④	3/4 x 6.44
1800	28.00	1.062	0.62-11 UNC x 1.50 DP	6.22	28.00	13.94	18.19	8.00	4.25	11.38	10.00	4.44	24.00	11.93	13.75	1.31	—	24.00	34.00	9.57	3.47	27.06	9.25	2.00	3.438	1.250	1/4 x 2.88 ^④	7/8 x 8.00
11000	32.00	1.118	0.62-11 UNC x 1.50 DP	7.94	32.00	17.05	22.30	10.00	5.25	14.00	12.50	5.12	28.00	14.34	17.00	1.31	—	28.00	38.38	10.88	3.38	29.50	9.43	2.25	3.938	1.250	1/4 x 3.00 ^④	1 x 7.75

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM		L1		LQ		LQ1			RQ		
	48CZ	56C/140TC	180TC/210TC	250TC	48CZ/56C/140TC	180TC	210TC	250TC	48CZ/56C/140TC	180TC	210TC	250TC
1300	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1325	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1425	6.63	7.07	—	—	4.46	—	—	—	4.06	—	—	—
1525	—	8.32	9.32	—	5.19 ^⑤	5.62	—	—	4.82 ^⑤	5.13	—	—
1600	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	6.25	—
1700	—	9.01	10.01	—	6.14 ^⑤	6.34	6.75	—	5.51 ^⑤	5.81	6.25	—
1800	—	11.81	12.90	13.46	6.45 ^⑤	7.21	7.21	7.77	6.04 ^⑤	6.68	6.68	7.24
11000	—	13.21	14.30	14.86	7.85 ^⑤	8.61	8.61	9.17	7.35 ^⑤	7.98	7.98	8.54

NEMA Dimensions (in)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway ^⑥	BF ^⑦
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53
250TC	7.25	8.50	9.00	—	0.50	1.625	3/8 x 3/16	0.53

IEC B5 & B3/B5 Metric Dimensions (in) ^⑧

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/D112MD	D132D
1300	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1325	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1425	3.62	3.65	3.89	—	—	—	3.43	3.44	3.68	—	—	—
1525	—	4.28	4.90	4.90	5.30	—	—	4.09	4.72	4.72	5.07	—
1600	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1700	—	4.97	5.59	5.59	6.07	—	—	4.78	5.41	5.41	5.76	—
1800	—	—	—	6.38	6.39	7.17	—	—	—	6.16	6.14	6.93
11000	—	—	—	7.78	7.78	8.57	—	—	—	7.46	7.45	8.24

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^⑥	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184
D90D	165	130	165	15	24	8 x 3.5	M10 x 1.50	184
D100LD/D112MD	215	180	216	18	28	8 x 3.5	M12 x 1.75	237
D132D	265	230	267	18	38	10 x 4	M12 x 1.75	290

- ① Sizes 1600-11000 with extended cap. Dimensions refer to cap location.
- ② "O" dimension is the minimum dimension to output or screw head on Sizes 1600-11000.
- ③ Type WRW and WRWF only.
- ④ Key not provided with gear reducer. Keyway dimension shown.
- ⑤ 48CZ not available.
- ⑥ Keyway width by depth.

- ⑦ Mounting holes rotated 45 degrees from positions shown on Size 1600, Type WRWF with frame sizes 180TC-250TC.

- ⑧ Metric IEC B5 input flange options are available only on quill input styles.



WARNING For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

Selection Guide
Solid Output Shaft Type Double Reduction Helical-Worm

Stock Types

Modified Stock Types

Using off-the-shelf accessories, stock types WBHM and WBH can be field or factory-modified into a wide range of styles.

NON-FLANGED
INPUT

Type WBH



Ratings: **page 76**
 Dimensions: **pages 78-79**

**Horizontal Base
Worm Over
Type WOH**



Ratings: **page 76**
 Dimensions: **pages 80-81**



NON-FLANGED
INPUT

Type WXH ①



Ratings: **page 76**
 Dimensions: **pages 82-83**

Type WRH



Ratings: **page 76**
 Dimensions: **pages 84-85**

① Specify shaft up or down for these types.

Additional accessories, options and assembly services are available. Contact Rexnord for details.

Selection Guide
Hollow Output Shaft Type Double Reduction Helical-Worm

Stock Types

Modified Stock Types

Using off-the-shelf accessories, stock type WBHQ can be field or factory-modified into a wide range of styles.

Type WBHQ

**NON-FLANGED
INPUT**



Ratings: **page 76**
Dimensions: **pages 78-79**

Double Reduction Helical-Worm Quick Selection Tables

How to Use

Based on required output rpm and input motor horsepower, read across table for the appropriate reducer size. As a rule of thumb, use 1.00 service factor table for applications having uniform loads with up to 10 hours service duration per day. Use 1.25 service factor table for longer service or shock loading. These tables are to be considered as guides only. Typically double reduction reducers are selected based on application torque, not necessarily hp. Refer to **page 8** or contact Rexnord with specific application information. Series numbers correspond to center distances of secondary stage reducer, as shown in the table below.

1.00 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM							
		5	7-1/2	10	15	20	25	30	40
25	70.0	—	—	—	1700	1800	1800	1800	11000
50	35.0	—	—	—	1700	1800	11000	11000	—
75	23.3	—	—	1700	1800	11000	11000	—	—
100	17.5	—	1700	1800	11000	11000	—	—	—
125	14.0	—	1700	1800	11000	—	—	—	—
150	11.7	—	1800	11000	11000	—	—	—	—
200	8.8	1700	11000	11000	—	—	—	—	—
250	7.0	1800	11000	11000	—	—	—	—	—
300	5.8	11000	—	—	—	—	—	—	—

① Actual ratio combinations may vary from above depending on application and manufacturing requirements. Refer to **page 77** for exact ratio of helical primary stage and worm gear secondary stage.

NOTE: Actual service factor may be greater than indicated. For actual service factors and maximum worm reducer ratings, refer to **page 76**.

Double Reduction Helical-Worm Quick Selection Tables

1.25 Service Factor

Nominal Ratio ①	Output RPM	Input Horsepower @ 1750 RPM							
		3	5	7-1/2	10	15	20	25	30
25	70.0	–	–	–	1700	1700	1800	11000	11000
50	35.0	–	–	–	1700	1800	11000	11000	11000
75	23.3	–	–	1700	1800	11000	11000	–	–
100	17.5	–	–	1800	1800	11000	–	–	–
125	14.0	–	1700	1800	11000	11000	–	–	–
150	11.7	–	1700	11000	11000	–	–	–	–
200	8.8	–	1700	11000	11000	–	–	–	–
250	7.0	1700	11000	11000	–	–	–	–	–
300	5.8	1800	11000	–	–	–	–	–	–

① Actual ratio combinations may vary from above depending on application and manufacturing requirements. Refer to **page 77** for exact ratio of helical primary stage and worm gear secondary stage.

NOTE: Actual service factor may be greater than indicated. For actual service factors and maximum worm reducer ratings, refer to **page 76**.

Double Reduction/Helical-Worm Horsepower and Torque Ratings

Nominal Ratio	Speed (RPM)		Size 1700				Size 1800				Size 11000			
	Input	Output	Horsepower		Output Torque (lb-in)	Exact Total	Horsepower		Output Torque (lb-in)	Exact Total	Horsepower		Output Torque (lb-in)	Exact Total
			Input	Output			Input	Output			Input	Output		
25	1750	70.0	19.60	18.10	17000	26.05	31.90	29.70	26900	25.23	42.10	39.30	36800	26.02
	1170	46.8	14.50	13.11	18284	26.05								
	870	34.8	11.60	10.38	19478	26.05								
37.5	1750	46.7	18.60	16.90	22900	37.61	26.80	24.60	32300	36.43	42.10	39.00	52300	37.23
	1170	31.2				37.61								
	870	23.2				37.61								
50	1750	35.0	15.20	13.70	24400	49.56	21.70	19.70	34100	48.00	37.80	34.60	61700	49.50
	1170	23.4												
	870	17.4												
75	1750	23.3	11.20	9.74	26200	74.55	16.20	14.30	37100	72.21	28.40	25.20	67700	74.46
	1170	15.6												
	870	11.6												
100	1750	17.5	8.95	7.41	27800	104.20	12.60	10.60	38600	100.92	22.30	19.00	71400	104.08
	1170	11.7												
	870	8.7												
125	1750	14.0	7.56	6.14	27500	124.53	10.80	8.90	38600	120.61	18.90	15.80	70600	124.39
	1170	9.4												
	870	7.0												
138	1750	12.7	6.90	5.84	29000	138.08	10.20	8.75	41200	130.65	17.80	15.40	79000	139.22
	1170	8.5												
	870	6.3												
150	1750	11.7	6.26	4.95	26700	149.95	9.05	7.27	38000	145.23	15.80	13.00	69000	149.77
	1170	7.8												
	870	5.8												
185	1750	9.5	5.52	4.43	30800	192.99	8.00	6.53	42900	182.61	14.20	11.70	83900	194.59
	1170	6.3												
	870	4.7												
200	1750	8.8	5.06	3.70	27100	203.32	7.00	5.22	37000	196.92	12.40	9.46	69200	203.08
	1170	5.9												
	870	4.4												
210	1750	8.3	4.90	4.07	30200	205.92	6.94	5.84	43200	205.78	12.60	10.70	80800	212.23
	1170	5.6												
	870	4.1												
250	1750	7.0	3.77	3.25	28500	244.04	5.35	4.63	41100	246.38	10.10	8.81	77300	243.65
	1170	4.7												
	870	3.5												
280	1750	6.3	3.98	3.09	32000	287.82	5.50	4.38	45300	287.62	10.10	8.13	86800	296.64
	1170	4.2												
	870	3.1												
300	1750	5.8	3.31	2.23	24500	304.98	4.78	3.23	34300	295.38	7.15	5.69	62400	304.62
	1170	3.9												
	870	2.9												

NOTE: Actual ratio combinations may vary from above depending on application and manufacturing requirements. Refer to **page 77** for exact ratio of helical primary stage and worm gear secondary stage. At speeds above 1750 input RPM, gear reducers may become thermally limited. For continuous operation, limit input HP to 1750 RPM input ratings shown. Contact Rexnord with application requirements if higher speeds are required. For input/output shaft overhung load and thrust load ratings, refer to **page 98**.

Exact Ratio Combinations and Weights

Double & Triple Reduction (Helical-Worm) Exact Ratio Combinations

Nominal Total Ratio	Gear Reducer Size					
	1700		1800		11000	
	Primary Helical 5115	Secondary 1700	Primary Helical 5203	Secondary 1800	Primary Helical 5207	Secondary 11000
25	5.083	5.13	5.071	5.13	5.077	5.13
37.5	5.083	7.40	5.071	7.40	5.077	7.33
50	5.083	9.75	5.071	9.75	5.077	9.75
75	5.083	14.67	5.071	14.67	5.077	14.67
100	5.083	20.5	5.071	20.5	5.077	20.5
138	9.414	14.67	9.179	14.67	9.492	14.67
150	5.083	29.5	5.071	29.5	5.077	29.5
185	9.414	20.5	9.179	20.5	9.492	20.5
200	5.083	40.0	5.071	40	5.077	40
210	14.04	14.67	14.452	14.67	14.47	14.67
250	25.03	9.75	26.942	9.75	24.99	9.75
280	14.04	20.5	14.452	20.5	14.47	20.5
300	5.083	60	5.071	60	5.077	60

NOTE: Exact ratios are listed. Actual ratio combinations supplied may vary from above depending on application and manufacturing requirements. For exact total of double reduction package, multiply primary stage ratio by secondary stage ratio.

Double Reduction Helical-Worm Approximate Weights^① (lb)

Reducer Type	Reducer Size		
	1700	1800	11000
Solid Output Shaft			
WBH	510	770	1250
WOH	551	818	1326
WXH	581	848	1403
WRH	671	968	1526
Hollow Output Shaft			
WBHQ	510	770	1250

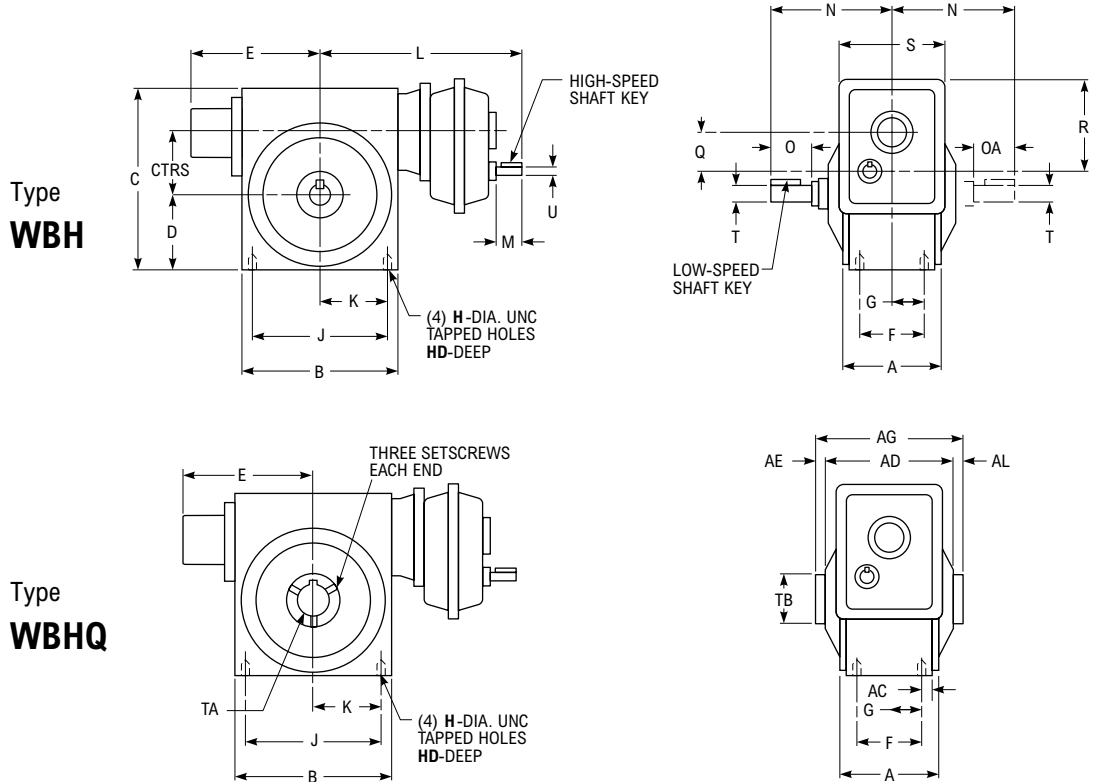
^① Weights include oil.

Accessories Approximate Weights (lb)

Accessory	Reducer Size		
	1700	1800	11000
HOFK	41	48	76
VOFK	②	②	②
OFK	②	②	②
Coupling Input C-Flange Kits			
180TC-210TC	30	30	—
250TC	34	36	—

^② This accessory must be assembled at the factory. It is not available as a kit for field installation.

Type WBH, WBHQ Double and Triple Reduction Helical-Worm



Dimensions (in)

Size ①	CTRS	A	B	C	D	E	F	G	H	HD	J	K	L	M ②	N	O ③	OA ③	Q	R	S
1700	7.00	7.63	14.88	18.91	7.59	10.63	5.50	2.75	1.0000-8	1.56	12.50	6.25	19.68	2.50	11.76	5.65	5.65	3.49	8.10	10.36
1800	8.00	8.63	17.00	20.96	8.86	11.93	6.50	3.25	1.0000-8	1.66	14.25	7.13	21.30	3.00	12.25	5.98	5.98	4.07	9.89	11.64
11000	10.00	9.53	20.88	25.47	10.36	14.34	6.88	3.44	1.2500-7	2.04	17.75	8.88	25.78	3.50	14.75	6.76	6.76	4.90	11.83	13.85

Size ①	Low-Speed Shaft		Hollow Low-Speed Shaft			High-Speed Shaft			AC	AD	AE	AG	AL	Approx. Wt (lb)	
	T -.0005 -.0015	Key	TA Max +.002 -.000	TB	Key	U -.0005 -.0015	Key	WBH						WBHM	
1700	2.750	0.625 x 0.625 x 4.00	3.938	4.92	1.000 x 0.750 x 7.00	1.1250	0.250 x 0.250 x 2.25	1.06	11.36	1.09	13.50	1.09	510	510	
1800	3.000	0.750 x 0.750 x 4.50	4.438	5.55	1.000 x 0.750 x 8.50	1.3750	0.313 x 0.313 x 2.75	1.06	12.48	1.03	14.50	1.03	770	770	
11000	3.750	0.875 x 0.875 x 5.00	5.438	6.67	1.250 x 0.938 x 12.00	1.5000	0.375 x 0.375 x 3.25	1.33	15.78	1.39	18.50	1.39	1250	1250	

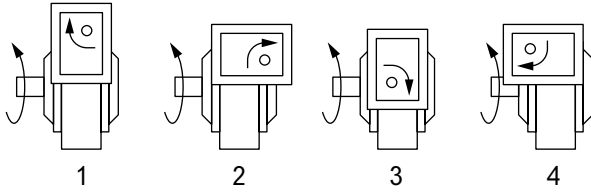
- ① Drives are for horizontal operation unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Dimension "M" is the usable shaft extension length.
- ③ Dimensions "O" & "OA" are the usable shaft extension lengths.

Type WBH, WBHQ Double and Triple Reduction Helical-Worm

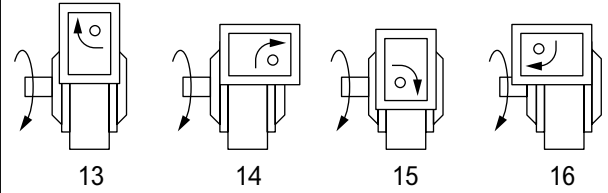
Assemblies ①

NOTE: Reverse all arrows for opposite rotation of high-speed shaft.

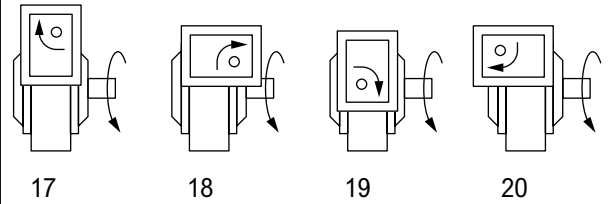
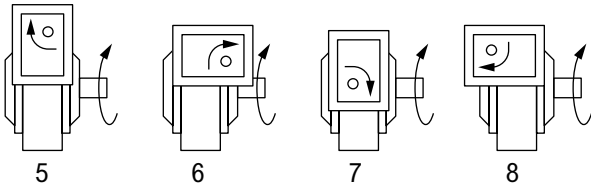
Double Reduction — Solid Output Shaft



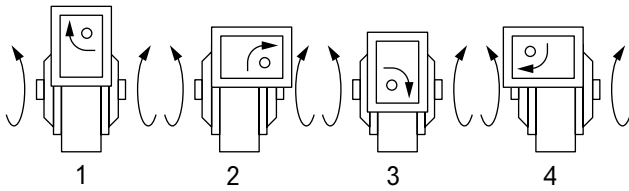
Triple Reduction — Solid Output Shaft



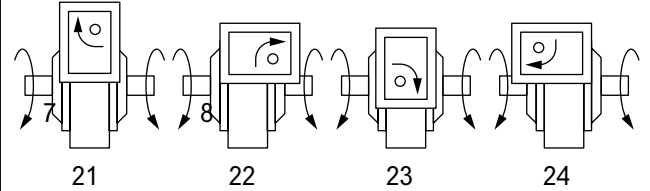
WBH



Double Reduction — Double L.S. Shaft Extension

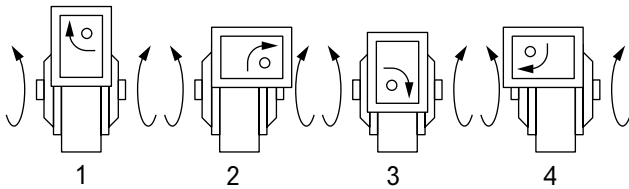


Triple Reduction — Double L.S. Shaft Extension

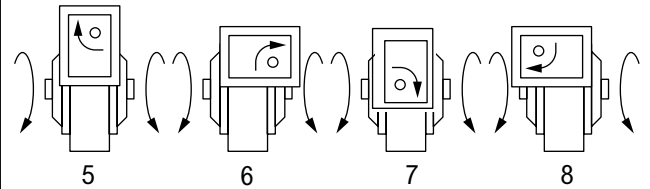


Double Reduction — Hollow Output

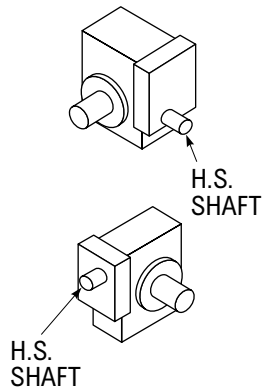
WBHQ



Triple Reduction — Hollow Output



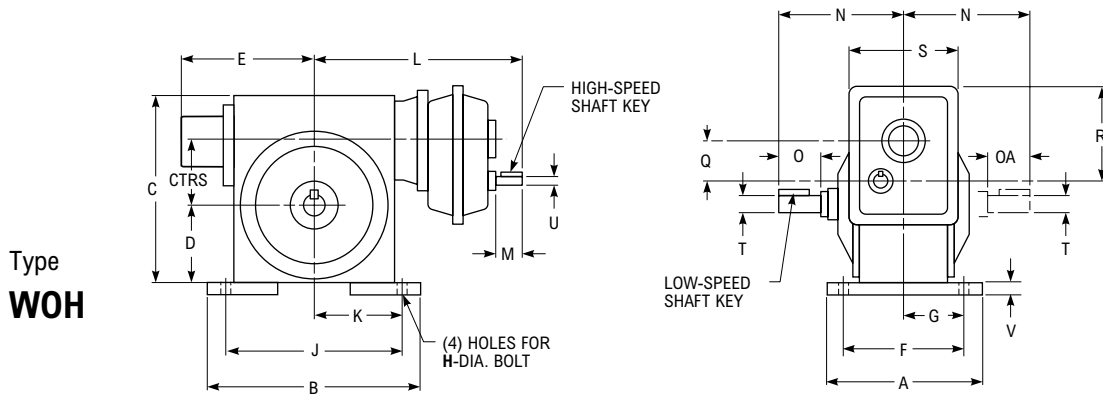
Double Reduction Ratios (Nominal)
25:1
37.5:1
50:1
75:1
100:1
125:1
150:1
200:1
300:1



Triple Reduction Ratios (Nominal)	
138:1	560:1
185:1	625:1
210:1	700:1
250:1	750:1
280:1	840:1
350:1	1000:1
375:1	1250:1
420:1	1500:1
500:1	1750:1

① Refer to page 94 for Non-Preferred Mounting Positions.

Type WOH Double and Triple Reduction Helical-Worm/Worm Over



Dimensions (in)

Size ①	CTRS	A	B	C	D	E	F	G	H	J	K	L	M ^②	N	O ^③	OA ^③	Q	R	S
1700	7.00	13.38	15.38	20.33	9.00	10.63	11.25	5.63	1.13	13.00	6.50	19.68	2.50	11.76	5.69	5.69	3.49	8.10	10.36
1800	8.00	13.50	17.37	22.61	10.50	11.93	11.50	5.75	1.13	14.75	7.38	21.30	3.00	12.25	6.02	6.02	4.07	9.89	11.64
11000	10.00	16.88	21.24	27.12	12.00	14.34	14.00	7.00	1.44	17.00	8.50	25.78	3.50	14.75	6.80	6.80	4.90	11.83	13.85

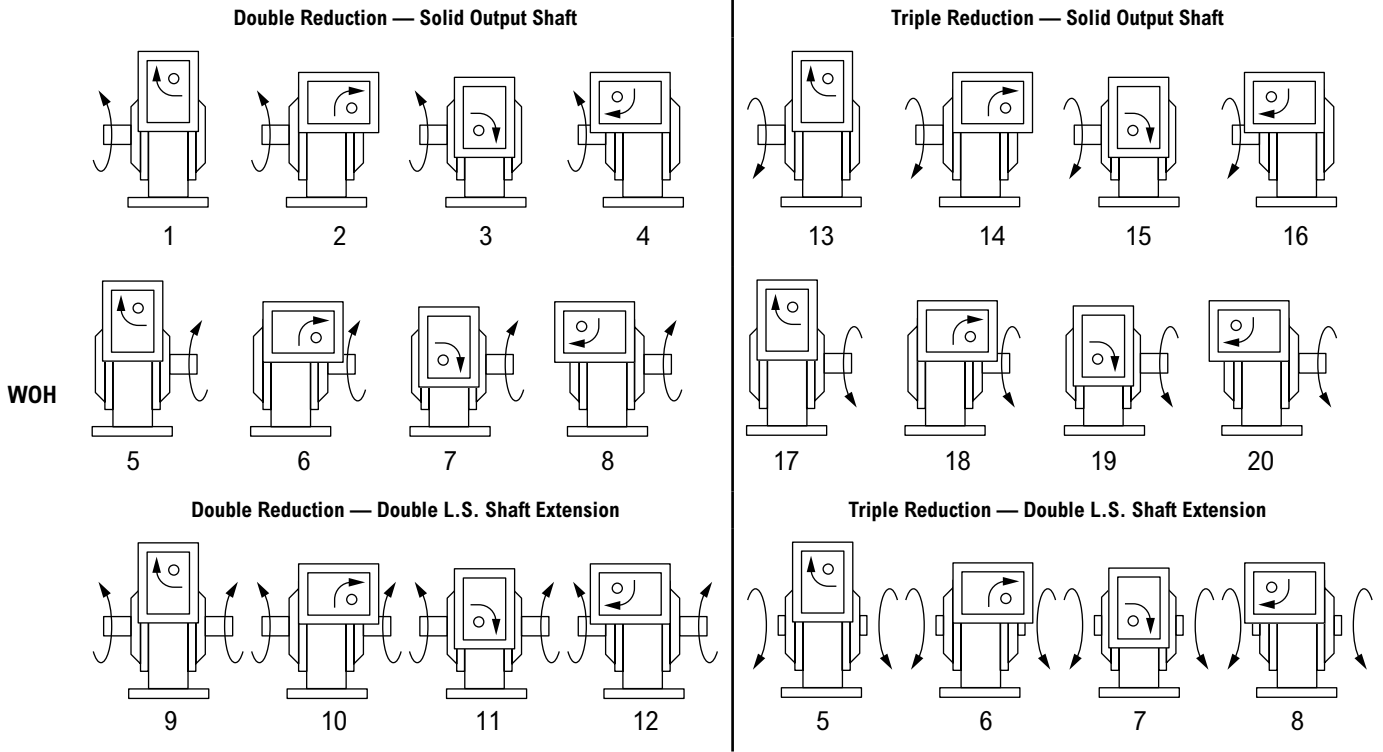
Size ①	Low-Speed Shaft		High-Speed Shaft		V	Approx. Wt (lb)
	T -.0005 -.0015	Key	U -.0005 -.0015	Key		
1700	2.7500	0.625 x 0.625 x 4.00	1.1250	0.250 x 0.250 x 2.25	1.42	510
1800	3.0000	0.750 x 0.750 x 4.50	1.3750	0.313 x 0.313 x 2.75	1.65	770
11000	3.7500	0.875 x 0.875 x 5.00	1.5000	0.375 x 0.375 x 3.25	1.65	1250

- ① Drives are for horizontal 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 Dimension "M" is the usable shaft extension length.
- ③ Dimensions "O" & "OA" are the usable shaft extension lengths.

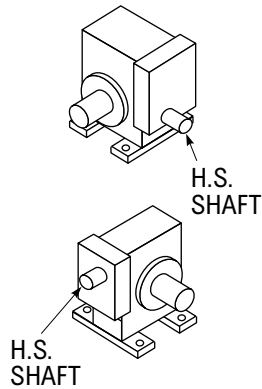
Type WOH Double and Triple Reduction Helical-Worm/Worm Over

Assemblies ①

NOTE: Reverse all arrows for opposite rotation of high-speed shaft.



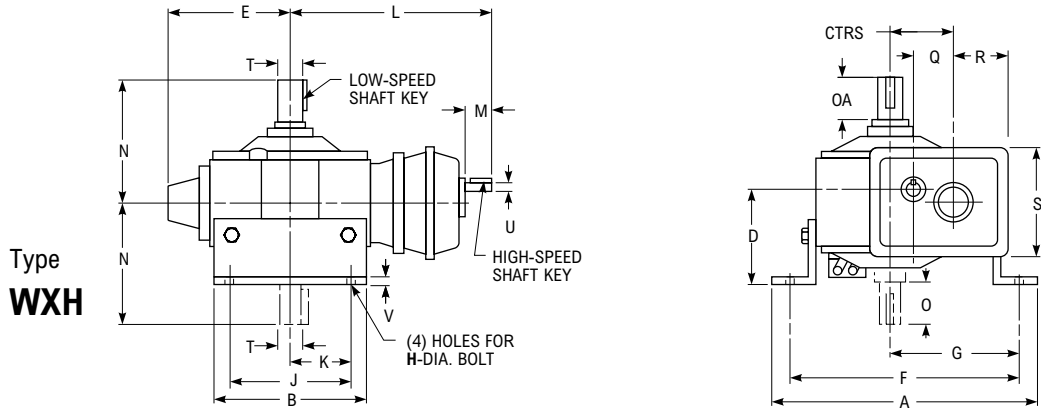
Double Reduction Ratios (Nominal)
25:1
37.5:1
50:1
75:1
100:1
125:1
150:1
200:1
300:1



Triple Reduction Ratios (Nominal)	
138:1	560:1
185:1	625:1
210:1	700:1
250:1	750:1
280:1	840:1
350:1	1000:1
375:1	1250:1
420:1	1500:1
500:1	1750:1

① Refer to **page 94** for Non-Preferred Mounting Positions.

Type WXH Double and Triple Reduction Helical-Worm/Vertical Output



Dimensions (in)

Size ①	CTRS	A	B	D	E	F	G	H	J	K	L	M ^②	N	O ^③	OA ^③	Q	R	S
1700	7.00	26.91	14.88	7.00	10.63	23.99	13.87	1.13	12.50	6.25	19.68	2.50	11.76	5.69	5.69	3.49	7.59	10.36
1800	8.00	28.96	17.00	8.00	11.93	25.50	14.38	1.13	14.00	7.00	21.30	3.00	12.25	6.02	6.02	4.07	8.86	11.64
11000	10.00	37.47	20.88	9.00	14.34	30.75	17.76	1.44	17.75	8.88	25.78	3.50	14.75	6.80	6.80	4.90	10.36	13.85

Size ①	Low-Speed Shaft		High-Speed Shaft		V	Approx. Wt (lb)
	T -.0005 -.0015	Key	U -.0005 -.0015	Key		
1700	2.7498	0.625 x 0.625 x 4.00	1.1250	0.250 x 0.250 x 2.25	0.75	510
1800	2.9995	0.750 x 0.750 x 4.50	1.3750	0.313 x 0.313 x 2.75	0.75	770
11000	3.7495	0.875 x 0.875 x 5.00	1.5000	0.375 x 0.375 x 3.25	1.00	1250

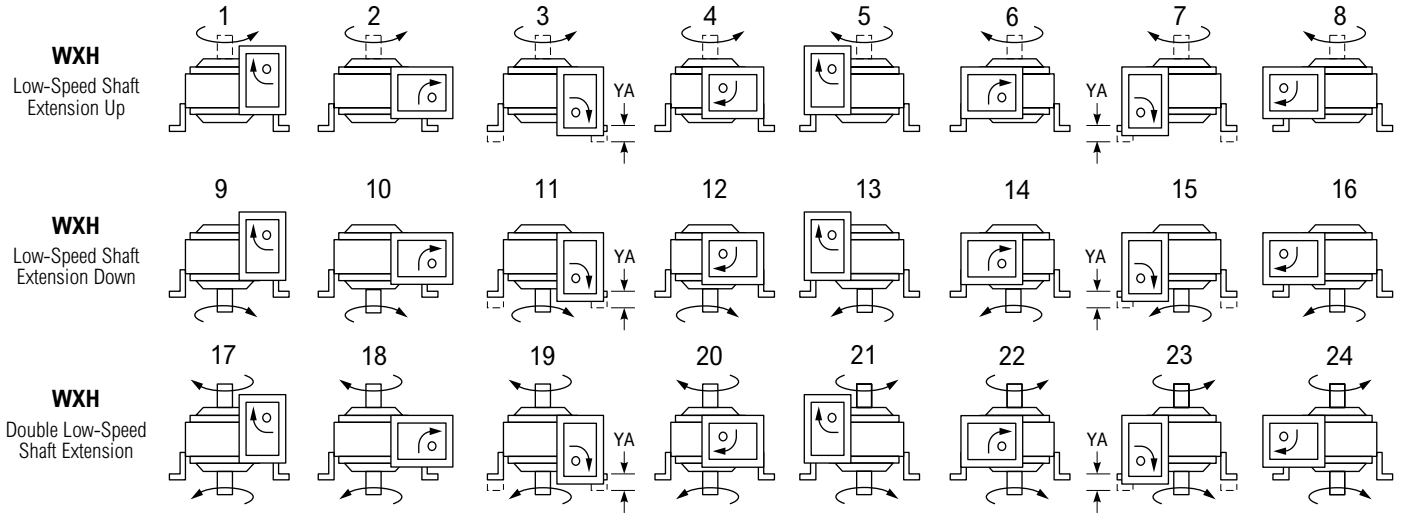
- ① Drives are for horizontal operation unless specifically stated otherwise. Consult Factory for other mountings. Dimensions are for reference only and are subject to change without notice unless certified.
- ② Dimension "M" is the usable shaft extension length.
- ③ Dimensions "O" & "OA" are the usable shaft extension lengths.

Type WXH Double and Triple Reduction Helical-Worm/Vertical Output

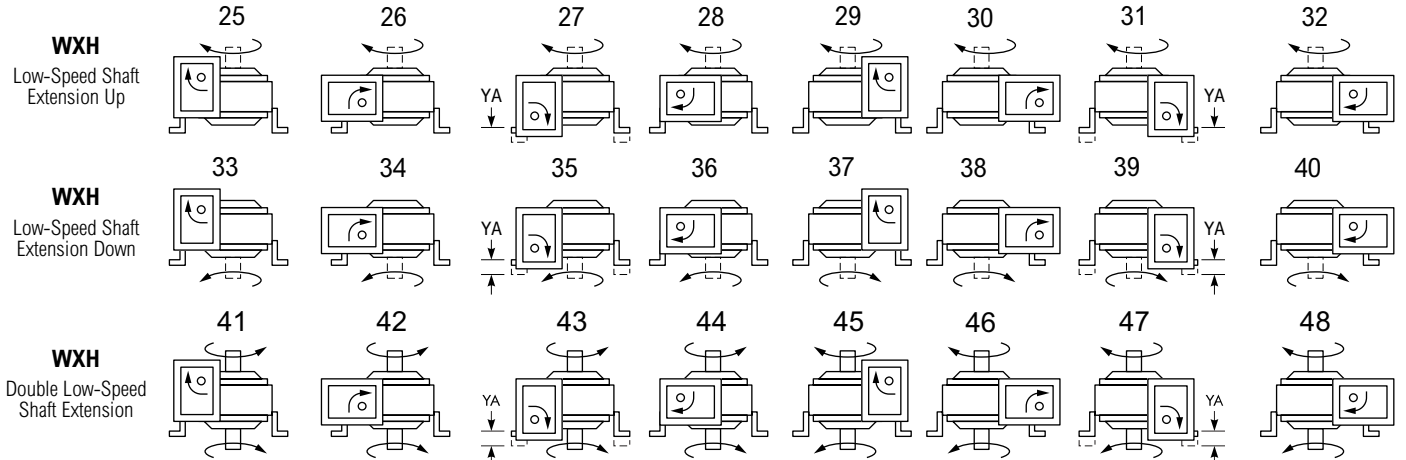
Assemblies ①

NOTE: Reverse all arrows for opposite rotation of high-speed shaft.

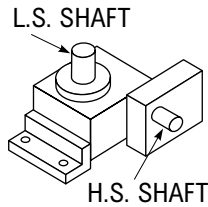
Double Reduction ②



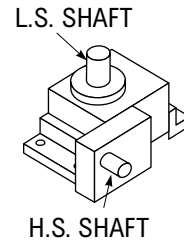
Triple Reduction ②



Double Reduction Ratios (Nominal)
25:1
37.5:1
50:1
75:1
100:1
125:1
150:1
200:1
300:1



Triple Reduction Ratios (Nominal)	
138:1	560:1
185:1	625:1
210:1	700:1
250:1	750:1
280:1	840:1
350:1	1000:1
375:1	1250:1
420:1	1500:1
500:1	1750:1

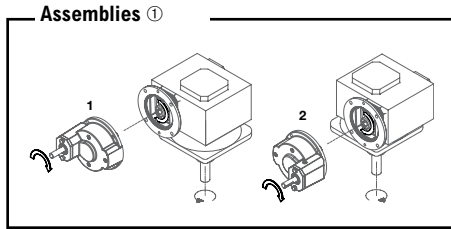
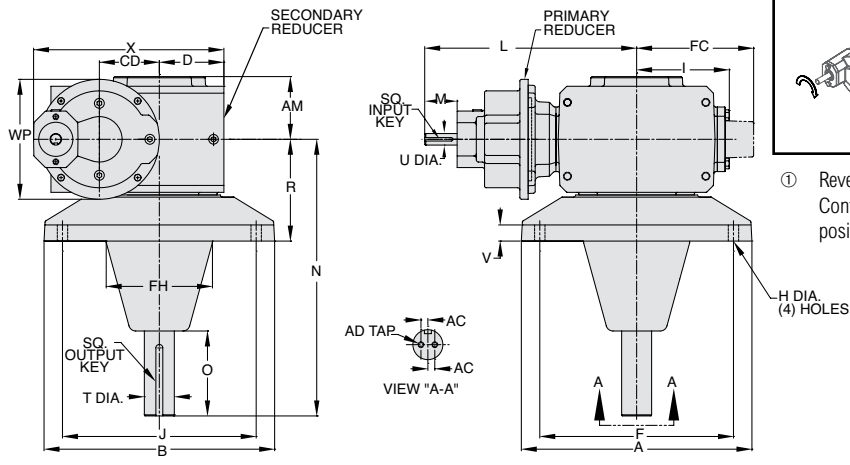


① Refer to **page 94** for Non-Preferred Mounting Positions.

② For assemblies 3, 7, 11, 16, 19, 23, 27, 31, 43 & 47, dimension "YA" is the thickness of shims required under drive to permit helical head to clear the foundation by 0.25 inches. Add "YA" dimension to dimension "V". Shims by purchaser.

Type WRH Double Reduction Helical-Worm/Flange Mounted

Type
WRH



① Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Type WRH Double Reduction Helical-Worm/Flange Mounted

Dimensions (in)

Size	A	AC	AD	AM	B	CD	D	F	FC ^①	FH	H
1700	22.00	1.000	0.38-16 UNC X 1.00 DP	6.06	22.00	7.00	8.50	19.00	10.63	10.75	1.13
1800	28.00	1.062	0.62-11 UNC X 1.50 DP	6.22	28.00	8.00	10.00	24.00	11.93	13.75	1.31
11000	32.00	1.118	0.62-11 UNC X 1.50 DP	7.94	32.00	10.00	12.50	28.00	14.34	17.00	1.31

Size	I	J	L	M	N	O ^②	R	V	WP	X	T + .000 - .0015	U + .000 - .0015	Input Key ^③	P ^④
1700	–	19.00	19.68	2.50	24.00	7.63	7.59	1.75	10.36	21.84	2.937	1.625	3/8 x 2.87 ^④	3/4 x 6.44
1800	–	24.00	21.30	3.00	27.06	9.25	8.86	2.00	11.64	25.93	3.438	1.875	1/2 x 2.81 ^④	7/8 x 8.00
11000	–	28.00	25.78	3.50	29.50	9.43	10.36	2.25	13.85	31.35	3.938	2.250	1/2 x 3.69 ^④	1 x 7.75

① Sizes 1700-11000 have extended cap on input cover. Dimension FC is to back face of the cap.

② "O" dimension is the minimum dimension to output seal or screw head on Sizes 1700-11000.

③ Type WRH only.

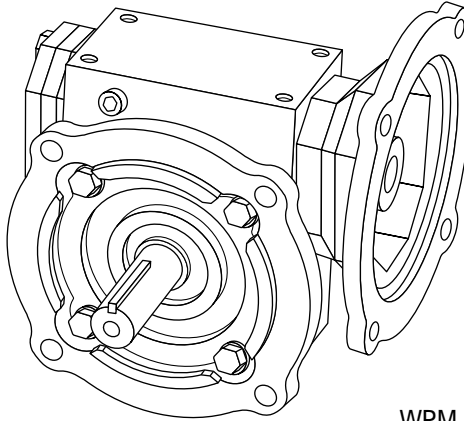
④ Key not provided with gear reducer. Keyway dimension shown.



For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

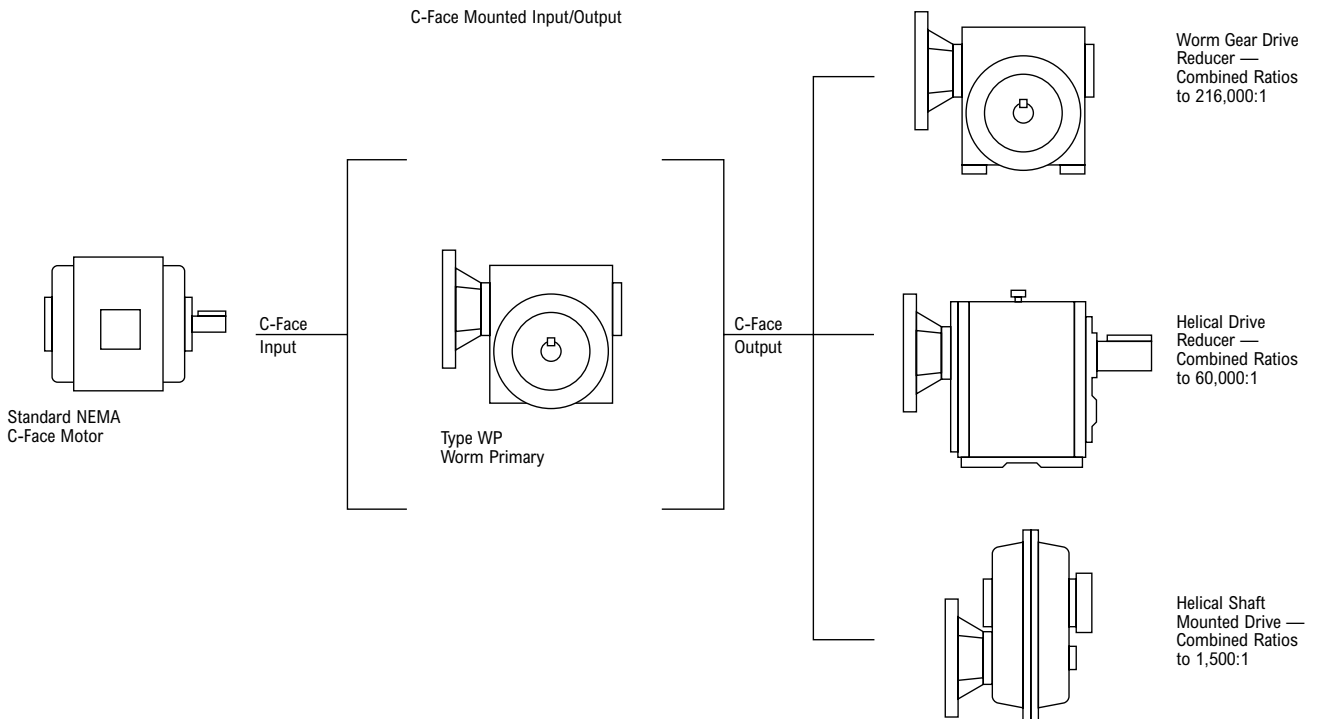
Helical and Worm Primaries Type WP Selection Guide

- Increases inventory & application flexibility.
- Choice of ratios 2:1 through 60:1.
- Three input types:
 - Solid input
 - Motorized hollow input
 - Motorized solid input/coupling
- Motor frame



WPM

Ratio Multipliers for Universal Mounting Between Any C-Face Motor & Drive



Helical and Worm Primaries

Type WP Selection Guide

Selection Procedure

1. Determine Service Factor (SF).
2. Determine motor horsepower (HP), input RPM, output RPM & overall ratio.

$$\text{Overall Ratio} = \frac{\text{Input RPM}}{\text{Output RPM}}$$

3. Calculate equivalent output torque rating.

$$\frac{\text{HP} \times \text{SF} \times 6300}{\text{Output RPM}}$$

4. Select secondary size and type.

$$\text{Input RPM} = \frac{\text{Motor RPM}}{\text{Primary Ratio}}$$

$$\text{Secondary Ratio} = \frac{\text{Overall Ratio}}{\text{Primary Ratio}}$$

Select the secondary size and ratio at the corresponding input/output rpm with an output torque rating that exceeds the equivalent output torque.

5. Check overhung or thrust loads.
6. Select the primary size and type.

Select the primary size and ratio at the corresponding input/output rpm with an equivalent hp rating (SF x motor HP) that exceeds the drive input hp rating.

Match the primary C-face output to the secondary C-face input flange.

NOTE: The output torque delivered is a function of the overall drive combined efficiency!

7. Check drive dimensions.

Example:

Select a drive for a uniformly-loaded, hollow shaft connected belt conveyor with a headshaft speed of 17.5 rpm, operating 16 hours per day, driven by a 1750 rpm, 3 hp electric motor.

1. Service Factor is 1.25 from **page 8**.
2. Motor horsepower is 3 hp.
3. Drive output speed is 17.5 rpm,

$$\frac{1750 \text{ RPM Input}}{1750 \text{ RPM Output}} = 100:1 \text{ Overall Ratio}$$

NOTE: When using a worm gear secondary, the selection can be made from the WBW Worm-Worm Quick Selection tables. After making the selection, substitute the WPM worm primary of the same size and ratio for the WBW standard primary, onto the secondary drive with a C-face input sized to match the primary output.

4. Equivalent output torque rating:

$$\frac{3 \text{ HP} \times 1.25 \text{ SF} \times 63,000}{17.5 \text{ RPM}} = 3,500 \text{ lb-in}$$

5. Select secondary size and type.

$$\frac{100:1 \text{ Overall Ratio}}{\text{Primary Ratio}} = \text{Secondary Ratio}$$

$$\frac{1750 \text{ RPM}}{5:1 \text{ Primary Ratio}} = 350 \text{ RPM Secondary Input Speed}$$

Select the secondary size at 350 rpm input with 20:1 ratio and an output torque rating equal to or greater than 13,500 lb-in.

6. No overhung or thrust loads.
7. Select primary size and type:

$$\text{Equivalent HP rating} = 3 \text{ HP} \times 1.25 \text{ SF} = 3.75 E_{hp}$$

Select the primary size at 1750 rpm input and 20:1 ratio with an input hp rating greater than 3.75 hp.

8. Check drive dimensions.

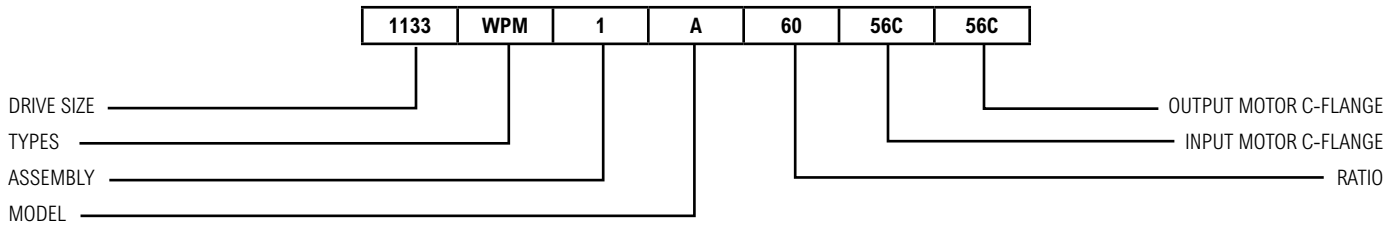
Worm Primaries Horsepower and Torque Ratings

Input Speed: 1750 rpm

(For other input speed ratings refer to the worm drive rating section for single reduction drives. For all other capacity ratings based on AGMA Standards with a service factor of 1.0.)

Size	1133			1175			1238			
Exact Ratio	Input HP	Output HP	Output Torque (lb-in)	Input HP	Output HP	Output Torque (lb-in)	Input HP	Output HP	Output Torque (lb-in)	
5	1.248	1.158	209	2.600	2.422	436	5.323	4.985	898	
7.5	1.025	0.933	252	1.909	1.754	471	3.992	3.685	995	
10	0.823	0.729	263	1.625	1.466	528	3.564	3.253	1172	
15	0.642	0.541	292	1.224	1.058	571	2.765	2.438	1318	
20	0.551	0.445	326	1.046	0.875	630	2.326	1.972	1421	
25	0.445	0.344	309	0.884	0.715	644	1.967	1.615	1454	
30	0.395	0.290	314	0.741	0.569	614	1.653	1.317	1423	
40	0.324	0.223	322	0.609	0.440	634	1.342	0.994	1433	
50	0.285	0.182	327	0.515	0.352	634	1.137	0.795	1432	
60	0.246	0.145	313	0.449	0.288	623	0.567	0.656	1418	
Weight (lb)	WPS	17			25			48		
	WPM	19			26			56		
	WPF	24			32			62		

Nomenclature



Drive Size/Shaft Centers (in)

1133 = 1.33

1175 = 1.75

1238 = 2.38

Types

WPM — Flange-Mounted Motorized Hollow Input

WPF — Flange-Mounted Motorized Solid Input/Coupling

WPS — Solid Input

Assembly

1 or 2

Input Motor C-Flange

Refer to dimension pages

Output Motor C-Flange

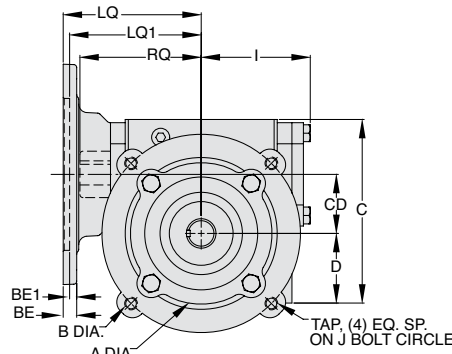
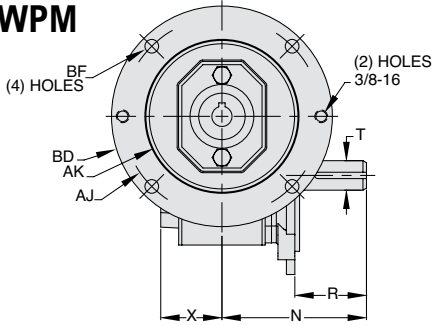
Refer to dimension pages

Ratio

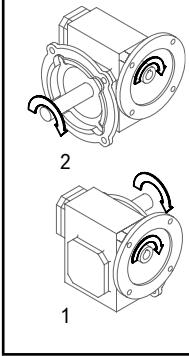
As shown above

Type WPM, WPS Worm Primaries

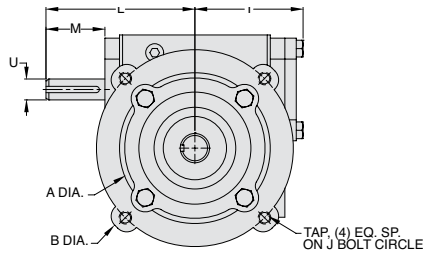
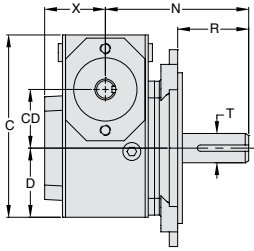
Type WPM



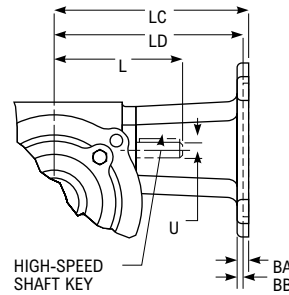
Assemblies ①



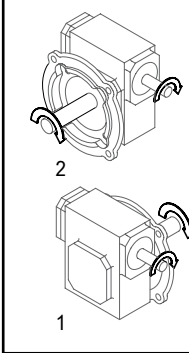
Type WPS



Type WPF



Assemblies ①



① Reverse all arrows for opposite input shaft rotation. Contact Rexnord for other mountings or assembly positions.

Motor Data

NEMA Motor Flange Face Locations (in)

Drive Size	56C/140TC		180TC		210TC
	LA	LC	LB	LD	LD
1133	3.46	6.07	—	—	—
1175	4.09	6.70	—	—	—
1238	4.63	7.76	5.06	8.76	8.76

NEMA Motor Mounting Dimensions (in)

Frame Size	AJ	AK	BA	BB	BD	BF	BG	UA	Keyway
56C	5.88	4.50	0.38	—	5.88	0.41	6.64	0.625	0.1875 x 0.0938
140TC	5.88	4.50	0.38	—	5.88	0.41	6.64	0.875	0.1875 x 0.0938
180TC	7.25	8.50	—	0.50	9.00	0.53	—	1.125	0.2500 x 0.1250
210TC	7.25	8.50	—	0.50	9.00	0.53	—	1.375	0.3125 x 0.1562

Dimensions (in)

Series	Output C-Face Frame	A	B	C	D	CD	I	J	L	M	N	R	X	Tap Size	T + .000 - .0015	U + .000 - .0015	Input Key ^②	Output Key
1133	56C	4.50	6.64	4.66	1.72	1.33	2.61	5.88	3.82	1.76	5.00	2.06	1.84	3/8-16 UNC	0.625	0.500	1/8 X 1.00	3/16 X 1.50
1175	140TC	4.50	6.64	5.44	2.06	1.75	3.24	5.88	4.45	1.76	4.28	2.13	1.81	3/8-16 UNC	0.875	0.625	3/16 X 1.38	3/16 X 1.38
1238	180TC	8.50	9.00	6.88	2.69	2.38	3.77	7.25	5.51	2.38	6.59	2.37	1.97	1/2-13 UNC	1.125	0.750	3/16 X 1.63	1/4 X 1.75

Motor Mounting Dimensions

NEMA Dimensions (in)

Size	LM	L1	LQ			LQ1			RQ			
	48CZ/56C/140TC	180TC/210TC/250TC	48CZ/56C/140TC	180TC	210TC	250TC	48CZ/56C/140TC	180TC	210TC	250TC		
1133	5.63	6.07	—	—	3.46	—	—	—	3.09	—	—	—
1175	6.26	6.70	—	—	4.09	—	—	—	3.59	—	—	—
1238	—	7.76	8.76	—	4.63 ^③	5.06	—	—	4.09 ^③	4.56	—	—

NEMA Dimensions (in)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway ^④	BF
48CZ	3.75	3.00	4.36	0.38	—	0.500	1/8 x 1/16	0.28
56C	5.88	4.50	6.50	0.38	—	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	—	0.875	3/16 x 3/32	0.41
180TC	7.25	8.50	9.00	—	0.50	1.125	1/4 x 1/8	0.53
210TC	7.25	8.50	9.00	—	0.50	1.375	5/16 x 5/32	0.53

IEC B5 & B3/B5 Metric Dimensions (in)^⑤

Size	LQ1						RQ					
	D63D	D71D	D80D	D90D	D100LD/D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/D112MD	D132D
1133	2.62	2.65	2.89	—	—	—	2.45	2.47	2.71	—	—	—
1175	3.25	3.28	3.52	—	—	—	2.95	2.97	3.21	—	—	—
1238	—	3.72	4.34	—	—	—	—	3.46	3.71	—	—	—

IEC B5 & B3/B5 Metric Dimensions (mm)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway ^④	BF TAP	OD
D63D	115	95	117	10	11	4 x 2	M8 x 1.25	131
D71D	130	110	132	11	14	5 x 2.5	M8 x 1.25	146
D80D	165	130	165	15	19	6 x 3	M10 x 1.50	184

② Type WPS only.

③ 48CZ not available.

④ Keyway width by depth.

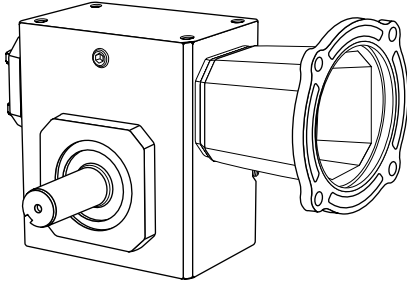
⑤ Metric IEC B5 input flange options are available only on quill input styles.



For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

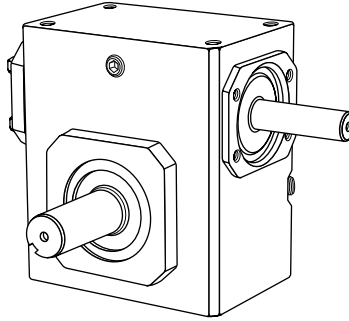
Additional Product Offerings for Special Applications

Stainless Steel



- Suitable for harsh environments and special wash-down applications.
- Housings and covers are 304 grade cast stainless steel, output shafts are 303 grade stainless steel.
- External hardware is all stainless steel.
- Includes Pressure Equalizing System.
- Viton® seals are standards.
- Synthetic lube.
- Stainless steel nameplate.

BISSC Certified



- Suitable for wash-down applications and furnished with USDA approved paint, 303 stainless steel output shafts, Viton seals, smooth exterior surfaces, solid head plugs and bolts for easy cleaning and a stainless steel nameplate.

Certifications:

- Baking Industry Sanitation Standard Committee (BISSC) Certified
- Standard Lubrications us USDA H-2 Approved

Size and Type Availability of Stainless Steel and BISSC Certified

Drive Size	Single Reduction					Double Reduction		
	WBF	WBM		WBQM		WBWF	WBWM	WBWQM
	56/140	56/140	180/210	56/140	180/210	56/140	56/140	56/140
1133	X	X		X		X	X	X
1154	X	X		X		X	X	X
1175 ①	X	X		X		X	X	X
1206	X	X	X*	X	X*	X	X	X
1238	X	X	X*	X	X*	X	X	X
1262 ①	X	X	X*	X	X*	X	X	X
1325	X	X	X*	X	X*	X	X	X

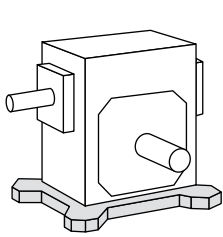
① Stainless steel only.

* Only available with 180 frame.

Additional Products Available

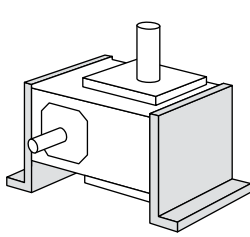
- Ratios larger than 100:1
- Double reduction worm reducers
- Size 1425-1800

Accessories



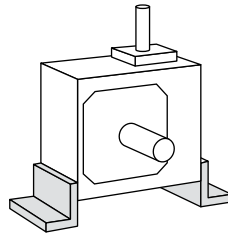
Horizontal Output Foot Kit (HOFK)

Drive Size	Number
1133	HOFK 1133
1154	HOFK 1154
1175	HOFK 1175
1206	HOFK 1206
1238	HOFK 1238
1262	HOFK 1262
1300	HOFK 1300
1325	HOFK 1325
1425	HOFK 1425
1525	HOFK 1525
1600	HOFK 1600
1700	HOFK 1700
1800	HOFK 1800
11000	HOFK 11000



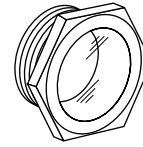
Vertical Output Foot Kit (VOFK)

Drive Size	Number
1133	VOFK 1133
1154	VOFK 1154
1175	VOFK 1175
1206	VOFK 1206
1238	VOFK 1238
1262	VOFK 1262
1300	VOFK 1300
1325	VOFK 1325
1425	VOFK 1425
1525	VOFK 1525
1600	VOFK 1600
1700	VOFK 1700
1800	VOFK 1800
11000	VOFK 11000



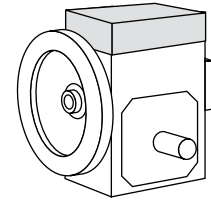
Vertical Input Foot Kit (VIFK)

Drive Size	Number
1133	VIFK 1133
1154	VIFK 1154
1175	VIFK 1175
1206	VIFK 1206
1238	VIFK 1238
1262	VIFK 1262
1300	VIFK 1300
1325	VIFK 1325
1425	VIFK 1425
1525	VIFK 1525



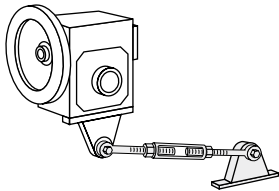
Oil Level Sight Gauge (OLSG)

Drive Size	Number
1133	OLSG 1133
1154	OLSG 1154
1175	OLSG 1175
1206	OLSG 1206
1238	OLSG 1238
1262	OLSG 1262
1300	OLSG 1300
1325	OLSG 1325
1425	OLSG 1425
1525	OLSG 1525
1600	OLSG 1600
1700	OLSG 1700
1800	OLSG 1800
11000	OLSG 11000



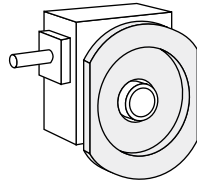
Riser Block (RB)

Drive Size	Number	Height (inches)
1133	—	—
1154	RB 1154	2.00
1175	RB 1175	2.00
1206	RB 1206	2.00
1238	RB 1238	2.00
1262	RB 1262	1.50
1300	RB 1300	2.13
1325	RB 1325	2.13
1425	RB 1425	2.13
1525	RB 1525	1.25
1600	—	—
1700	—	—
1800	—	—
11000	—	—



Tie Rod (TRK)

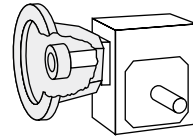
Drive Size	Number
1133	TRK 1133
1154	TRK 1154
1175	TRK 1175
1206	TRK 1206
1238	TRK 1238
1262	TRK 1262
1300	TRK 1300
1325	TRK 1325
1425	TRK 1425
1525	TRK 1525
1600	TRK 1600



Hollow Output Flange Kit (OFK)

Drive Size	Number
1133	OFK 1133
1154	OFK 1154
1175	OFK 1175
1206	OFK 1206
1238	OFK 1238
1262	OFK 1262
1300	OFK 1300
1325	OFK 1325
1425	OFK 1425
1525	OFK 1525
1600	OFK 1600
1700	OFK 1700 ①
1800	OFK 1800 ①
11000	OFK 11000 ①

NOTE: Flange can only mount to "bolted cover side" of hollow reducer on sizes 1133-1525. Please specify correct mounting assembly with order. Refer to dimension pages for assembly positions.

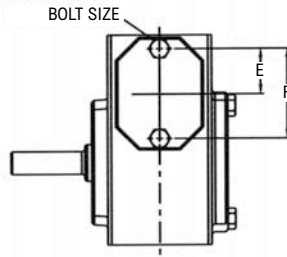
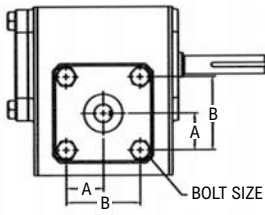


Motor Flange & Coupling (MFK)

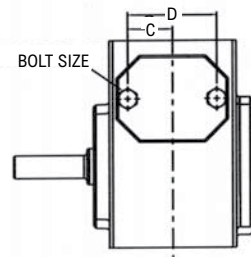
Drive Size	Number	Drive Size	Number
1133	MFK 1133-48	1325	MFK 1325-56
	MFK 1133-56		MFK 1325-140
	MFK 1133-140		MFK 1325-180
1154	MFK 1154-48	1425	MFK 1325-210
	MFK 1154-56		MFK 1425-56
	MFK 1154-140		MFK 1425-140
1175	MFK 1175-48	1525	MFK 1425-180
	MFK 1175-56		MFK 1425-210
	MFK 1175-140		MFK 1425-250
1206	MFK 1206-48	1600	MFK 1525-56
	MFK 1206-56		MFK 1525-140
	MFK 1206-140		MFK 1525-180
1238	MFK 1238-56	1700	MFK 1525-210
	MFK 1238-140		MFK 1525-250
	MFK 1238-180		MFK 1600-180
1262	MFK 1238-210	1800	MFK 1600-210
	MFK 1262-56		MFK 1600-250
	MFK 1262-140		MFK 1700-180
1300	MFK 1262-180	1800	MFK 1700-210
	MFK 1262-210		MFK 1700-250
	MFK 1300-56		MFK 1800-210
1300	MFK 1300-140		MFK 1800-250
	MFK 1300-180		
	MFK 1300-180		

Technical Information — Bolt Circle Dimensions

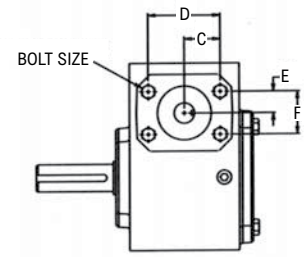
NOTE: Reducers do not have tapped holes on “integral cover side” of reducer. Integral side of reducer can be machined with tapped holes. See reverse housing assembly below for dimensions.



Size 1133



Size 1154-1206



Size 1238-11000

Output Cover Dimensions (in)

Drive Size	A	B	Bolt Size
1133	1.016	2.033	0.312-18
1154	1.016	2.033	0.312-18
1175	1.480	2.961	0.312-18
1206	1.480	2.961	0.312-18
1238	1.856	3.712	0.312-18
1262	1.856	3.712	0.312-18
1300	2.298	4.596	0.375-16
1325	2.298	4.596	0.375-16
1425	2.939	5.877	0.438-14
1525	3.359	6.717	0.438-14
1600	Consult Factory		0.500-13
1700	Consult Factory		0.500-13
1800	Consult Factory		0.500-13
11000	Consult Factory		0.500-13

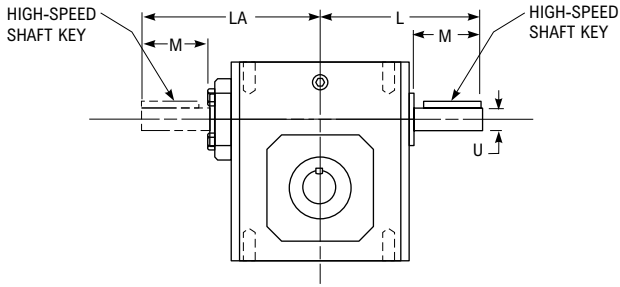
Input Cover Dimensions (in)

Drive Size	C	D	E	F	Bolt Size
1133	1.219	2.438	—	—	0.312-18
1154	1.219	2.438	—	—	0.312-18
1175	1.219	2.438	—	—	0.312-18
1206	1.219	2.438	—	—	0.312-18
1238	1.313	2.625	0.781	1.562	0.312-18
1262	1.313	2.625	0.781	1.562	0.312-18
1300	1.600	3.200	1.050	2.100	0.438-14
1325	1.600	3.200	1.050	2.100	0.438-14
1425	1.600	3.200	1.050	2.100	0.438-14
1525	1.600	3.200	1.050	2.100	0.438-14
1600	1.370	2.740	1.370	2.740	0.438-14
1700	2.033	4.066	2.033	4.066	0.438-14
1800	2.121	4.242	2.121	4.066	0.500-13
11000	Consult Factory				0.625-11

Double-Ended High-Speed Shafts

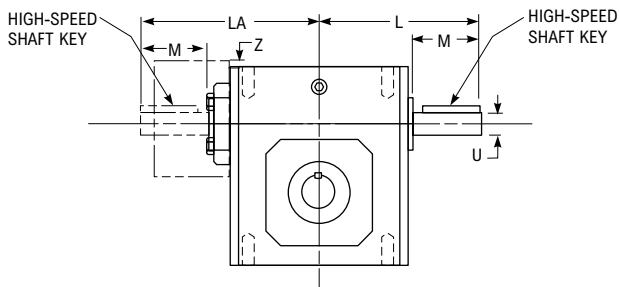
Dimension (in)

Solid/Solid Size 1133-1325



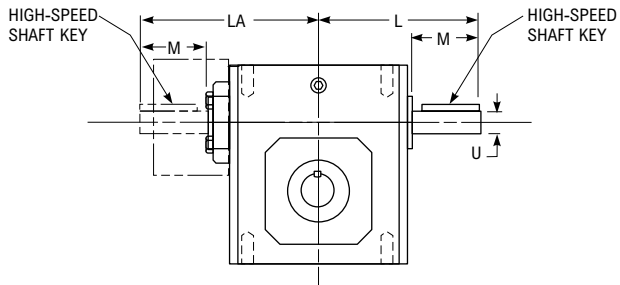
Drive	L	LA	M	U	Key
1133	3.82	4.37	1.76	0.500	0.1250 x 1.44
1154	4.35	4.90	1.76	0.625	0.1875 x 1.50
1175	4.45	5.00	1.76	0.625	0.1875 x 1.50
1206	4.82	5.37	1.76	0.625	0.1875 x 1.50
1238	5.51	6.15	2.38	0.750	0.1875 x 1.50
1262	6.07	6.72	2.38	0.750	0.1875 x 1.50
1300	6.57	7.22	2.38	0.875	0.1875 x 1.50
1325	6.76	7.40	2.38	0.875	0.1875 x 1.50

Solid/Solid Size 1425-1525



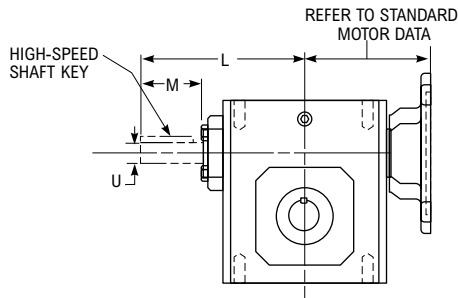
Drive	L	M	U	Key
1425	9.57	3.47	1.250	0.2500 x 2.88
1525	10.88	3.38	1.250	0.2500 x 3.00

Solid/Solid Size 1600-11000



Drive	L	LA	M	MA	U	Key	Z
1600	11.78	14.55	3.41	3.41	1.500	0.3750 x 3.00	0.33
1700	11.50	13.88	2.97	2.51	1.625	0.3750 x 2.81	0.35
1800	12.50	15.50	2.84	2.98	1.875	0.5000 x 2.81	0.57
11000	15.50	18.82	3.76	4.13	2.250	0.5000 x 3.69	0.51

Quill/Solid Size 1133-1600



Drive	L	M	U	Key
1133	4.37	1.76	0.500	0.1250 x 1.44
1154	4.90	1.76	0.625	0.1875 x 1.50
1175	5.00	1.76	0.625	0.1875 x 1.50
1206	5.37	1.76	0.625	0.1875 x 1.50
1238	6.15	2.38	0.750	0.1875 x 1.50
1262	6.72	2.38	0.750	0.1875 x 1.50
1300	7.22	2.38	0.875	0.1875 x 1.50
1325	7.40	2.38	0.875	0.1875 x 1.50
1425	9.55	3.47	1.250	0.2500 x 2.88
1525	10.88	3.39	1.250	0.2500 x 3.00
1600 ①	14.55	3.41	1.500	0.3750 x 3.00

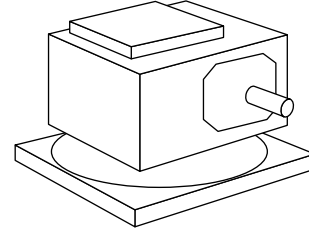
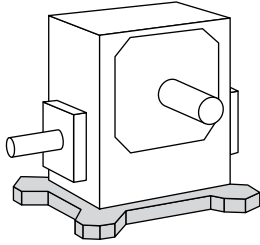
① Size 1600 comes standard with fan not shown.

Non-Preferred Mounting Positions

The mounting positions noted below are not recommended due to the increased probability of leakage from high-speed shafts seals. Assembly position options also apply to motor flange drives.

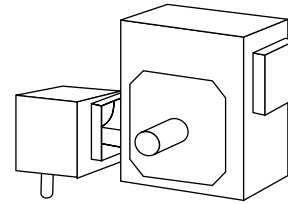
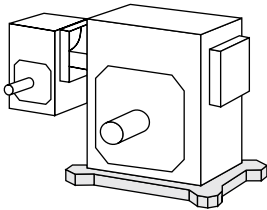
Single Reduction

All types of worm drives mounted in the Worm-Under position or where the drive is rotated so the high-speed solid shaft is pointing vertically down.



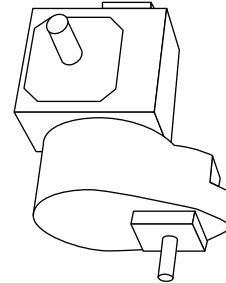
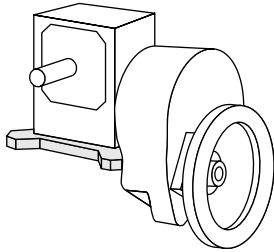
Double Reduction/Worm-Worm

All types of worm primaries where the primary is in the Worm-Under position or where the worm primary is rotated so the high-speed shaft is pointing vertically down.



Double Reduction/Helical-Worm

All types of helical primaries where the high-speed shaft is in the six o'clock position (high-speed shaft is beneath the low-speed shaft) or where the helical primary is positioned with the high-speed shaft pointing vertically down.



Technical Information — Oil Capacities and Lubrication

The precision-made gears and bearings in Falk Omnibox Worm Gear Drives require high-grade lubricants of the proper viscosity to maintain trouble-free performance. Synthetic lubricants provide the potential for numerous benefits including wider operating temperature range and increased interval between changes. For normal ambient temperatures (-10°F to 105°F)^① we recommend the use of ISO viscosity grade Mobile Glycoyle 460 polyalkalene glycol (PAG) lubricant which is the standard oil shipped in our product and is compatible with the Viton seal material used through Size 1525. For other temperatures, contact Rexnord for a recommendation. For synthetic lubrication to be used in helical reducers (primaries of helical-worm reducers and ratio multipliers), contact Rexnord.

① Temperature range for continuous duty. For intermittent duty, contact Rexnord.

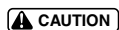
Oil Capacities (oz) - Standard Units

Mounting Position	Unit Size													
	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700 ^②	1800 ^②	11000 ^②
Worm Over	4	12	12	20	24	40	56	72	112	188	312	560	768	1152
Worm Under	8	16	20	28	40	60	84	108	152	304	328	524	820	1280
Vertical Output	4	16	16	28	32	48	68	88	128	248	320	332	460	640
Vertical Input	4	16	16	24	32	48	72	92	128	248	325	584	800	1200
Extended Bearing	—	—	—	—	—	—	—	8	12	17	27	640	1008	1632
Worm Over on Secondary of Double Reduction	—	—	—	—	—	—	—	192	308	320	485	805	1144	1716
Stainless Steel and Washguard® All Mounting Positions	6	14	18	26	32	50	78	98	—	—	—	—	—	—

② Shipped dry.

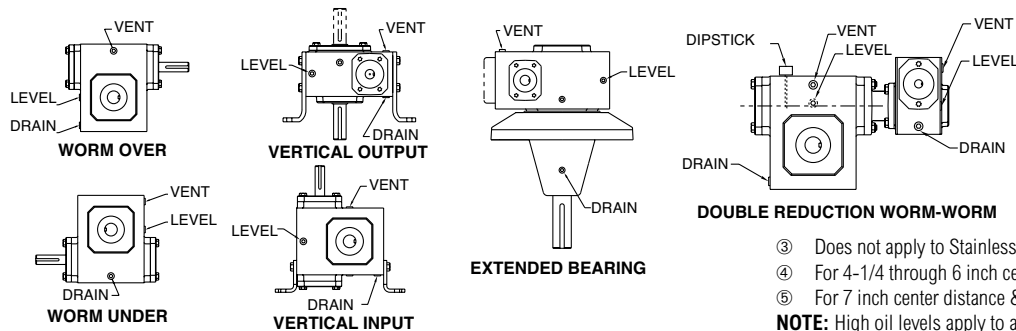


Always check for proper oil level after filling. Capacities vary somewhat with model and mounting position. Oil should rise to bottom edge of level hole. Do not overfill.



Do not operate the reducer without making sure it contains the correct amount of oil. Do not overfill or underfill with oil, or injury to personnel, or damage to reducer or other equipment may result.

Standard Gear Reducer Mounting Positions & Vent Plug, Level and Drain Locations^③



16 oz = 1 pint
 2 pints = 1 quart
 4 quarts = 1 gallon
 1 gallon = 128 oz = 231 in³

- ③ Does not apply to Stainless Steel, Washguard or units with Enviroseal option.
- ④ For 4-1/4 through 6 inch center distance units (far side plug).
- ⑤ For 7 inch center distance & larger units.

NOTE: High oil levels apply to all 4-1/4 inch center distance & larger secondary & tertiary units, regardless of primary unit type.

Lubrication

Units shipped from factory are assembled to properly lubricate all internal components based on a specific assumed mounting orientation. Factory-assumed mounting orientations are given below. If a Size 1175 or larger unit will be mounted in a different orientation than listed below or run with sustained input speeds less than 1200 rpm, it should be specified with the order. The unit can then be modified to assure proper lubrication.

Factory-Assumed Mounting Orientation	Applicable Unit Types ^⑥	
Worm Over	WB, WO, WL, WBQ, WLQ	Single Reduction
	WBW, WOW, WLW, WBWQ, WLWQ	Double Reduction Worm-Worm
	WBH, WOH, WBHQ, WLHQ	Double Reduction Helical-Worm
Worm Under	WU	Single Reduction
	WUW	Double Reduction Worm-Worm
Vertical Output	WX, WR	Single Reduction
	WXW, WRW	Double Reduction Worm-Worm
	WXH, WRH	Double Reduction Helical-Worm
Vertical Input	WJ	Single Reduction
	WJW	Double Reduction Worm-Worm

⑥ Includes "F" and "M" versions of all styles listed.

Falk Omnibox Interchangeability

Component Interchangeability of Gear Drives & Accessories 100W Series & 1000W Series ^①

100W Series	100	133	154	175	206	238	262	300	325	425	525	600	700	800	1000	
1000W Series	NA	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000	
WB	②	YES ⑤					YES									
WBM ⑤	③						YES					NA				
WBQ	③	YES ⑤										YES				
WBQM ⑤	③						YES					NA				
HOFK	③						YES									
VOFK	③						YES									
VIFK	③						YES					NA				
Tie Rod	③						YES					NA				
Slide Base	③	YES										NA				
Oil Sight Gauge	③						YES									
WWAK	③						NO					NA				
MFK	③						NO					YES				
Coupling for MFK	③						YES					NA				
Output Flange	③						NO					YES				
Riser Blocks	③						YES					NA				
Bushings	③						YES ④					YES				
Fans	③	NA										NO				
Scoop Mount												③				
Top Motor Mount												③				
Drywell												③				
Added 1000 Series Features																
Pressure Equalizing System	NA	Refer to Product Catalog for Specific Feature Availability														
Stainless Steel Drives	NA	Refer to Product Catalog for Specific Feature Availability														

① NA = Not Available

Yes = Item is interchangeable between 100 & 1000 Series Drives.

No = Item is not interchangeable between 100 & 1000 Series Drives.

② Item or size is discontinued for 1000 Series.

③ Distance from the end of the input shaft to the centerline of the drive is shorter on the 1000 Series Omnibox. All other critical dimensions are the same.

④ 100 Series Bushings may be used in 1000 Series Drives provided the setscrew holes are redrilled.

⑤ Sizes 1700 and 1800 are Types WBF or WBQF.

Overhung Load and Thrust Loads

Overhung Load — 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 overhung load formula below considers the transmitted horsepower 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.

Overhung Load Formulas:

$$\text{Output OHL} = \frac{126,000 \times \text{motor hp} \times \text{output hp rating} \times F_c \times L_f}{\text{pitch diameter} \times \text{input hp rating} \times \text{output rpm}}$$

$$\text{Input OHL} = \frac{126,000 \times \text{motor hp} \times \text{output hp rating} \times F_c \times L_f}{\text{pitch diameter} \times \text{input rpm}}$$

Where:

Output hp Rating = from **pages 17-20**

Input hp Rating = from **pages 17-20** (Single Reduction), **pages 45-49** (Double Reduction, Worm-Worm), or **page 76** (Double Reduction, Helical-Worm)

F_c = load connection factor

L_f = load location factor (The input shaft OHL is assumed to be applied at one shaft diameter from the seal cage, ($L_f = 1.0$). If the load is applied at a distance greater than one shaft diameter from the seal cage, refer the application to Rexnord.)

The calculated overhung load must be less than or equal to the capacity shown on **page 98**.

Load Location Factor (L_f) — The output shaft load location factors are shown below.

L_f - Load Location Factors for Output Shafts

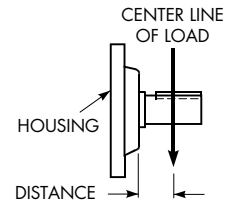
Distance in inches ^②	Drive Size													
	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000
0.250	0.89	0.89												
0.375	0.93	0.93												
0.500	0.96	0.96	0.92	0.90	—	0.89								
0.625	1.00	1.00	0.94	0.93	0.90	0.91								
0.750	1.08	1.08	0.97	0.95	0.91	0.93	0.92	0.89	0.86					
0.875	1.16	1.16	1.00	0.97	0.94	0.95	0.94	0.91	0.88	0.88				
1.000	1.23	1.23	1.06	1.00	0.97	0.98	0.96	0.93	0.91	0.89	0.88	0.69	0.68	0.63
1.125	1.31	1.31	1.13	1.07	1.00	1.00	0.98	0.95	0.92	0.91	0.89	0.72	0.71	0.65
1.250	1.39	1.39	1.20	1.14	1.03	1.03	1.00	0.98	0.93	0.92	0.90	0.75	0.74	0.67
1.375	1.48	1.48	1.28	1.21	1.09	1.08	1.06	1.00	0.94	0.93	0.92	0.76	0.76	0.69
1.500	1.56	1.56	1.35	1.27	1.14	1.12	1.10	1.03	0.96	0.94	0.93	0.79	0.77	0.71
1.625	1.64	1.64	1.42	1.33	1.21	1.16	1.16	1.06	0.97	0.96	0.94	0.81	0.79	0.72
1.750	1.72	1.72	1.49	1.39	1.28	1.22	1.21	1.10	0.98	0.97	0.95	0.82	0.80	0.73
1.875	1.79	1.82	1.56	1.45	1.35	1.27	1.26	1.12	1.00	0.99	0.96	0.84	0.82	0.75
2.000	—	—	—	1.52	1.45	1.33	1.31	1.16	1.04	1.00	0.97	0.87	0.84	0.77
2.250	—	—	—	—	1.64	1.47	1.42	1.25	1.11	1.06	1.00	0.91	0.88	0.80
2.500	—	—	—	—	—	1.64	1.52	1.33	1.18	1.12	1.09	0.96	0.92	0.84
2.750	—	—	—	—	—	—	1.62	1.45	1.25	1.19	1.18	1.00	0.96	0.87
3.000	—	—	—	—	—	—	1.72	1.59	1.33	1.25	1.27	1.04	1.00	0.90
3.250	—	—	—	—	—	—	1.83	1.72	1.41	1.32	1.35	1.08	1.04	0.93
3.500	—	—	—	—	—	—	—	—	1.47	1.39	1.43	1.13	1.08	0.97
3.750	—	—	—	—	—	—	—	—	1.54	1.45	1.52	1.18	1.12	1.00
4.000	—	—	—	—	—	—	—	—	—	1.52	1.61	1.23	1.16	1.03
4.250	—	—	—	—	—	—	—	—	—	—	1.69	1.28	1.20	1.06
4.500	—	—	—	—	—	—	—	—	—	—	1.79	1.32	1.24	1.10
4.750	—	—	—	—	—	—	—	—	—	—	1.89	1.36	1.28	1.13
5.000	—	—	—	—	—	—	—	—	—	—	1.96	1.40	1.32	1.16
5.750	—	—	—	—	—	—	—	—	—	—	—	—	—	1.26

② Distance is in inches from the L.S. Seal Cage. Interpolate for Load Location Factors at intermediate distances. For example, the load location factor is 1.56 for Size 1262 when distance is 2.375 inches. Consult Rexnord for distances greater than those shown.

Load Connection Factor (F_c)

Type of Connection	Factor
Sprocket or Timing Belt ①	1.00
Machined Pinion & Gear ①	1.25
V-Belt	1.50
Flat Belt	2.50
Synchronous (Timing) Belts ①	1.30

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



Locate the centerline of the load as close to the drive housing as practical to minimize the overhung load and increase the bearing life. The overhung load formula employs the transmitted horsepower, without service factor, providing the overloads starting loads and brake capacities do not exceed the amounts listed in Basic Information on **page 4**.

Example:

Gear Drive Size = 1325WB2B30, exact ratio of 30.0

Input hp rating = 3.619 hp

Output hp rating = 2.986 hp

Motor = 3.0 hp at 1750 rpm

Low-speed shaft rpm =

4-inch diameter sprocket mounted on low-speed shaft. Centerline of sprocket overhung load is positioned at 1.125 inches.

Calculate the overhung load as follows:

$$\text{OHL} = \frac{126,000 \times 3.0 \times 2.986 \times 1.00 \times 0.95}{4 \times 58.3 \times 3.619} = 1270 \text{ lb}$$

Allowable OHL on **page 98** is 2275 lbs and is satisfactory for this selection.

Overhung Load and Thrust Loads

Consult Factory for Higher Overhung Load Ratings — In many cases, overhung load capacity in excess of that published is available. Published ratings are based on a combination of the most unfavorable conditions of rotation, speed, direction of applied load and drive loading. If the actual load should exceed the published capacity, refer full details to Factory.

Thrust Loads

Output shaft external thrust capacities are shown below. The applied external thrust must be less than or equal to the published capacity. The published thrust capacity is for applications with a pure thrust load only. Combined overhung load and thrust applications should be referred to the Factory.

Engineering Data

The following overhung load values are based on load located at one shaft diameter from seal cage. Published ratings are based on a combination of the most unfavorable conditions of loading. For higher ratings, refer full data to Factory.

Single Reduction L.S. Shaft Overhung Load (lb)

Nominal Ratio	Speed (RPM)		Drive Size													
	Input	Approx. Output	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000
5	1750	350	700	860	1200	494	1770	1625	2170	2275	2204	2384	3538	6209	7761	11028
	1170	234									2265	2591	3723			
	1700	174									2265	2750	3723			
	100	20									2265	2752	3723			
7.5	1750	233	700	860	1200	494	1770	1625	2170	2275	2265	2724	3723	6209	7761	11028
	1170	156									2752					
	1700	116									2752					
	100	13									2752					
All Other Ratios			700	860	1200	494	1770	1625	2170	2275	2265	2752	3723	6209	7761	11028

Single Reduction H.S. Shaft Overhung Load (lb)

Drive Size	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000
H.S. Shaft OHL	75	75	75	75	125	125	150	150	175	300	450	450	450	500

Single Reduction L.S. Shaft Thrust Load Capacity (lb)

Nominal Ratio	Drive Size														
	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000	
5	827	794	793	735	1451	1420	1729	1605	1445	1675	3633	4009	4777	6808	
7.5	948	949	868	811	1659	1609	1944	1869	1640	2021	3990	4009	4777	6808	
10	1070	1056	976	898	1820	1762	2147	2026	1788	2449	3990	4009	4777	6808	
15	1144	1144	1144	1099	2091	2069	2459	2490	2319	3033	3990	4009	4777	6808	
All Other Ratios		1144	1144	1144	1144	2091	2091	2574	2574	2533	3412	3990	4009	4777	6808

Double Reduction (Worm-Worm) L.S. Shaft & H.S. Shaft Overhung Load & Thrust Load Capacity (lb)

Drive Size	1133	1154	1175	1206	1238	1262	1300	1325	1425	1525	1600	1700	1800	11000
L.S. Shaft OHL (all ratios)	419	517	473	494	1107	1107	1518	1536	2265	2752	3951	6209	7761	11028
H.S. Shaft OHL (all ratios)	75	75	75	75	75	75	75	75	75	125	150	150	175	300
L.S. Shaft Thrust	1144	1144	1144	1144	2091	2091	2574	2574	2533	3412	3990	4009	4777	6808

Double Reduction & Triple (Helical-Worm) Overhung Load & Thrust Load Capacity (lb)

Drive Size	1700	1800	11000
L.S. Shaft OHL	6209	7761	11028
H.S. Shaft OHL	175	300	450
L.S. Shaft Thrust	4009	477	6808

Overhead Conveyor Drive — WR

Extended Output Shaft Drive Overhung Load

Single and Double Reduction Input Shaft Overhung Load (lb)

Drive Size	1133	1154	1175	1206	1237	1262	1300	1325	1425	1525	1600	1700	1800	11000
Single Reduction	75	75	75	75	125	125	150	150	175	300	450	450	450	500
Double Reduction Worm-Worm	75	75	75	75	75	75	75	75	75	125	150	150	175	300
Double Reduction Helical-Worm	75	75	75	75	75	75	75	75	150	150	150	175	300	450

Single and Double Reduction Output Shaft Overhung Load (lb)

Drive Size	1300	1325	1425	1525	1600	1700	1800	11000
OHL	605	959	1200	2524	2245	3791	4850	8500

L_f — Load Location Factors for Output Shafts

Distance from End of Shaft (in) ①	Drive Size					
	1425	1525	1600	1700	1800	11000
0	1.00	1.00	1.00	1.00	1.00	1.00
0.5	1.03	1.03	1.02	1.02	1.02	1.02
1.0	1.06	1.06	1.04	1.04	1.04	1.03
1.5	1.09	1.09	1.06	1.06	1.05	1.05
2.0	1.12	1.12	1.09	1.08	1.07	1.06
2.5	1.16	1.15	1.11	1.10	1.09	1.08
3.0	1.20	1.19	1.14	1.13	1.11	1.10
3.5	1.24	1.23	1.16	1.15	1.13	1.12
4.0	1.28	1.27	1.19	1.17	1.15	1.14
4.5	1.32	1.32	1.22	1.20	1.18	1.16
5.0	1.37	1.36	1.25	1.23	1.20	1.18
5.5	1.43	1.42	1.28	1.26	1.23	1.20
6.0	—	—	1.31	1.29	1.25	1.22
6.5	—	—	1.35	1.32	1.28	1.24
7.0	—	—	1.39	1.35	1.31	1.27
7.5	—	—	1.42	1.38	1.33	1.29
8.0	—	—	—	—	1.36	1.31
8.5	—	—	—	—	1.40	1.34
9.0	—	—	—	—	1.43	1.37

① Distance is in inches from the end of output shaft (inward towards housing). Interpolate for load location factors at intermediate distances. For example, the load location factor is 1.21 for Size 1525 when distance is 3.25 inches.

Consult Factory for Higher Input Shaft Overhung Ratings

In many cases, overhung load capacity in excess of that published is available. Published ratings are based on a combination of the most unfavorable conditions of rotation, speed, direction of applied load and drive loading. If the actual load should exceed the published capacity, refer full details to the Factory.

Input Shaft OHL

Calculate the input shaft overhung load using the following formula:

$$\text{Input OHL} = \frac{126,000 \times \text{motor HP} \times F_c \times L_f}{\text{pitch diameter} \times \text{input RPM}}$$

Where:

F_c = load connection factor (below)

L_f = load location factor — the input shaft OHL is assumed to be applied at one shaft diameter from the seal cage, (L_f = 1.0). If the calculated overhung load exceeds the capacity shown above or if the load is applied at a distance greater than one shaft diameter from the seal cage, refer the application to the Factory.

Load Connection Factor (F_c)

Type of Connection	Factor
Sprocket or Timing Belt	1.00
Machined Pinion & Gear ②	1.25
V-Belt	1.50
Flat-Belt	2.00
Synchronous (Timing) Belts	1.30

② Refer all multiple chain, sprocket and pinion-mounted applications to Factory for deflection analysis.



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