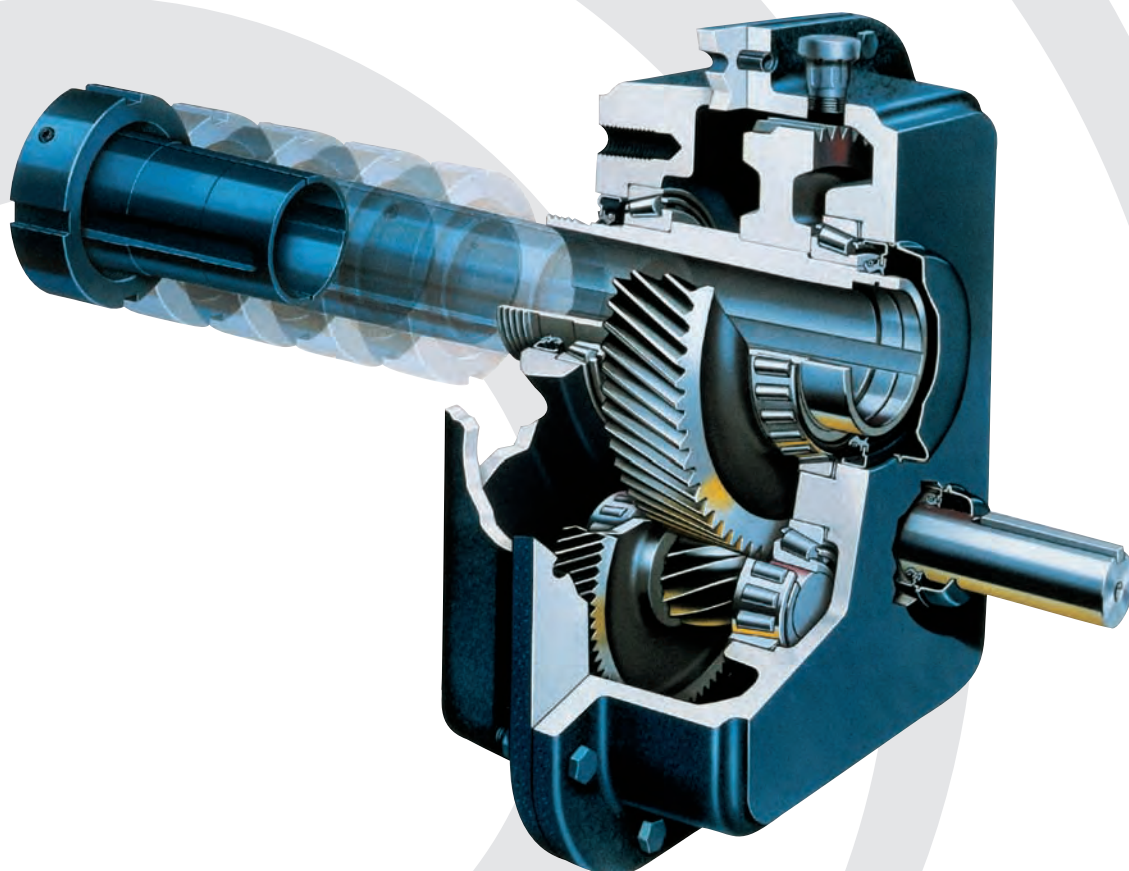


Falk™ Quadrive® Shaft Mounted Drive | **Easiest Off, Easiest On, Guaranteed**
(English-Metric)





Stop Dodging the Issue

With the new Falk 5000 Series Quadrive, you don't have to turn a blind eye to drive removal issues. It's a simple fact. The heavy duty, shaft-mounted Falk Quadrive features a completely unique design that makes it the easiest, quickest shaft-mounted drive to install and remove.

Quadrive is built to stand up to continuous rough duty. High temperature Viton® seals are standard. And now, with new higher ratings, you may be able to downsize the drive, saving money right up front.

The Falk TA Taper® Bushing design makes sure that drive removal is not only simple, but won't damage the drive, or driven equipment. You don't need extra time. You don't need extra tools. And you're assured safe, worry-free operation.

In a game where there are so few sure things, Falk Quadrive is the right shot to take.

The TA Taper Bushing Easiest On, Easiest Off

The torque-assist taper bushing makes installation and removal easy. It eliminates binding found with twin-taper and single-flanged bushings.

Concentric operation minimizes wobble, even on worn shafts.

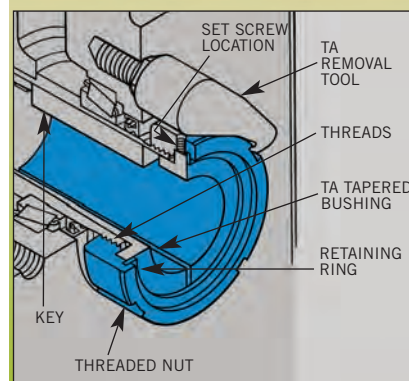
The quill cover keeps contaminants out and protects the outboard shaft seal.

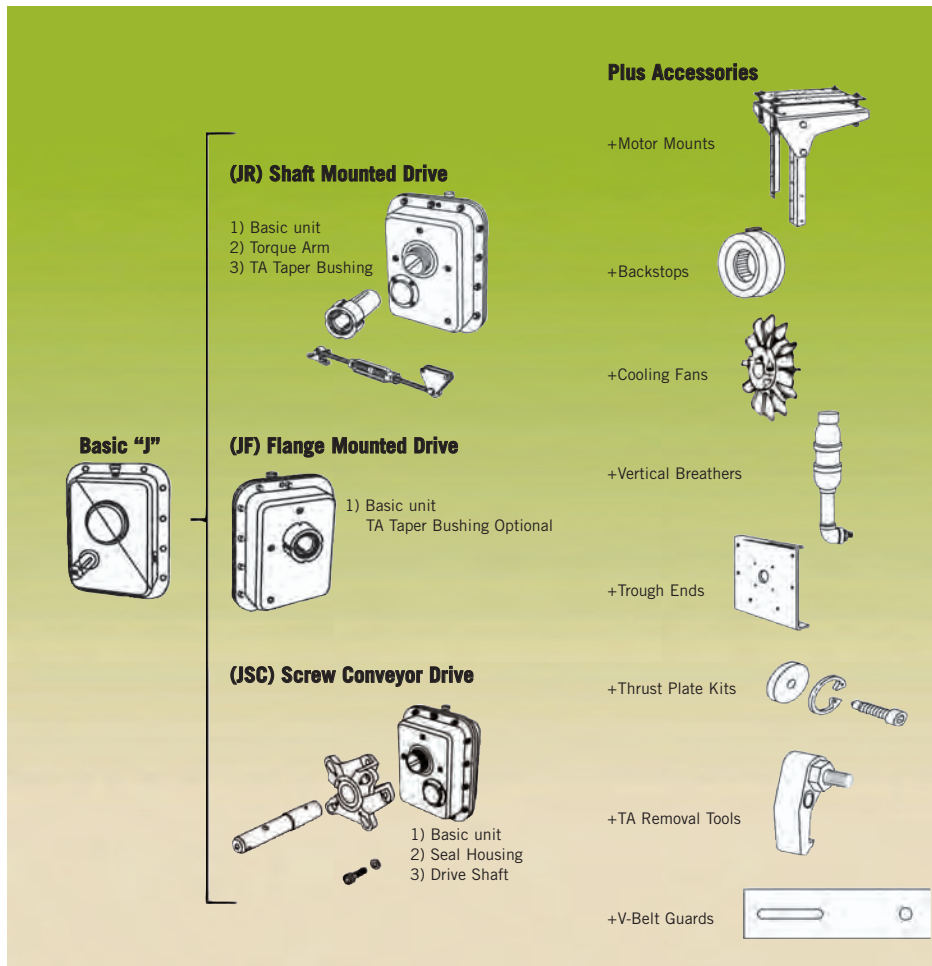
The inboard bushing location minimizes sheave overhang, saving high-speed bearings.

Minimal shaft engagement is required for retrofits.

Lifetime Removal Guarantee

Due to the unique properties of the TA Taper® Bushing, Quadrive is guaranteed to come off the shaft, regardless of length of service or operating conditions, or we'll replace it FREE. That's a promise no other shaft-mounted drive can make.



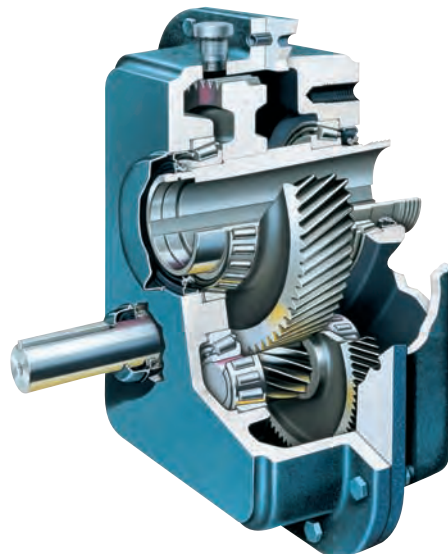
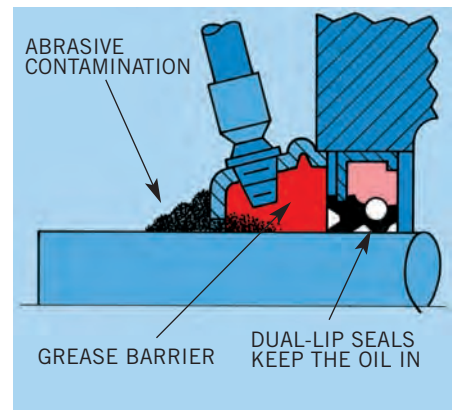


Falk Quadrive Features

Standard Bearings and Viton® Seals: Replacement downtime is minimized with locally available bearings and seals. Manufacturers' numbers are published.

Severe Duty, Grease-Purged Viton Seals: Handle high temperatures, prevent leakage, and ultimate drive failure. Grease barrier traps abrasive contaminants before they can groove the shaft or enter the gear drive.

Long Life Gearing: Quadrive helical design features high hardness, surface finished teeth with a wider face for maximum load carrying capacity.



Off-the-Shelf Availability

Whatever your application, Falk Quadrive offers a shaft-mounted solution. Eleven sizes, with 25 to 160 mm (1 to 6 1/2") bushing bores, are available with power ratings up to 224kW (300 HP), 40 675 Nm (360,000 lb.-in.) output. Output from 5 to 350 RPM.

Horizontal/vertical mounting. And the Falk Quadrive serves a whole world of applications with metric or inch output shaft bushings, and motor mounts to suit NEMA and IEC requirements.

Rexnord distributors stock the Quadrive with modular components locally, in popular sizes, and with accessories. Regional distribution centers offer additional drives and parts. So when we say "off the shelf," we mean it.

A Full Line of Accessories

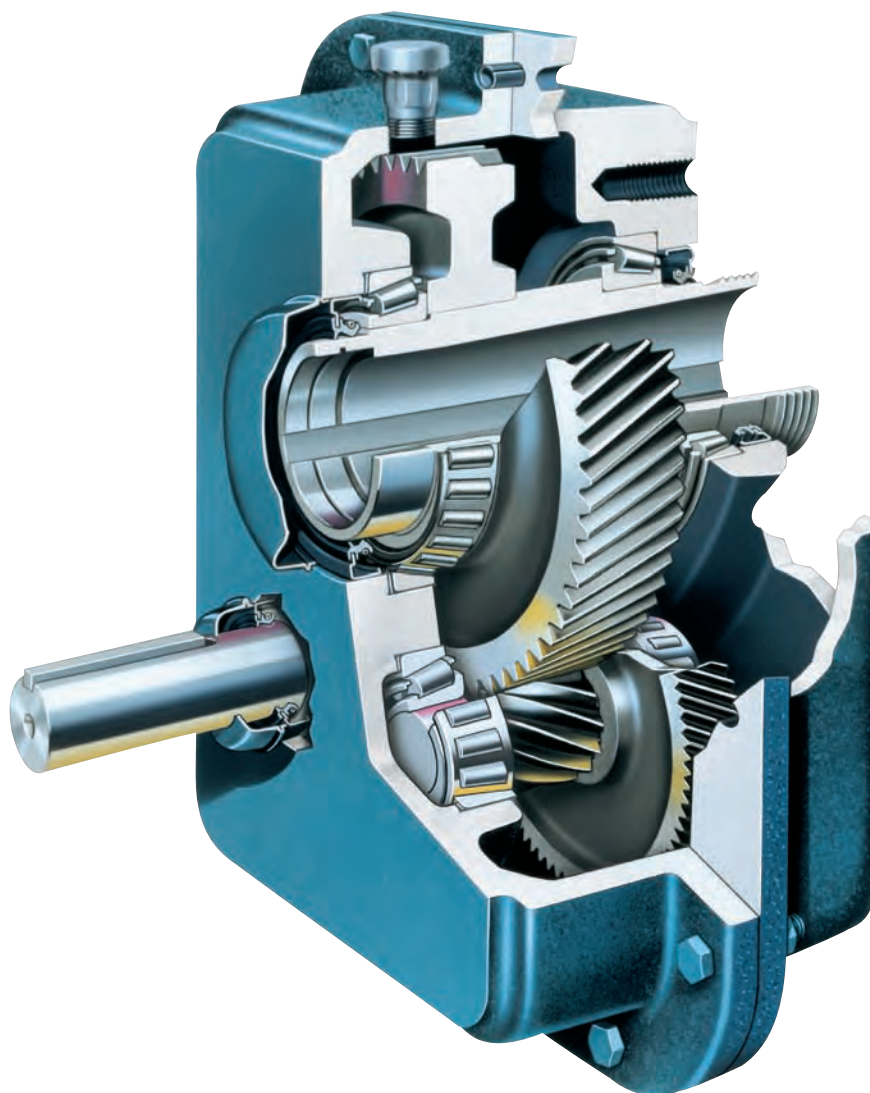
A complete accessory package includes V-belt guards, torque arms, motor mounts, backstops, cooling fans and other time and money saving options.

3-Year Heavy-Duty Warranty

Quadrive is backed by the industry's first standard 3-year warranty, providing full "shaft-to-shaft" protection on all Quadrive components - including bearings and seals.

Quadrive Shaft-Mounted Drives

Selection Guide



Selection Guide M371-110, March 2007

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Factory Warranty — We're so confident in the performance and reliability of these Falk heavy-duty gear drives that we're backing this comprehensive offering with the best standard warranty in the business. Our full, 3-year Heavy-Duty Warranty provides "shaft-to-shaft" protection on all Falk components — including bearings and seals (warranty extends for 3 years from date of shipment). It's an industry first... and one more powerful reason why Rexnord is your ultimate bottom-line value.

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.

When one prime mover drives two pieces of equipment, one of which is either a standard Rexnord geared drive or a customer standard geared drive, the division of power between each machine is the responsibility of the customer. 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 owner's manual which is available upon request. Suitable guards for rotating members may be purchased from Rexnord as optional accessories. Consult your local Rexnord Account Executive 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 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 Rexnord warranty may remain in effect provided the design load conditions are not exceeded and certification to the appropriate safety codes and load conditions has been obtained by the system designer or end user from the appropriate enforcement authorities.

Gear Drive Ratings

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

Power & Torque Gear drive mechanical power and torque ratings are tabulated in the selection guide to permit selections for specific application requirements. NOTE: Drives may be selected using the Quick Selection Tables under most circumstances. Refer to those tables starting on Page 8 for selection guidelines.

Thermal Ratings must be considered when selecting a gear drive. Refer to Page 19 for more information.

Gear Drive Identification Tables in this selection guide identify gear drives by size, type and ratio. See Drive Identification Page 8.

Conditions Affecting Gear Drive Selection and Application — Refer to Page 6 for more information.

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

Periodically inspect stored or inactive 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 rustproof parts for periods longer than those cited above, if specified on the order.

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

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The contents of this selection guide are subject to change without notice or obligation. Information contained herein should be confirmed before placing orders.

Conditions Affecting Selections

Non-Standard Application Procedures

The following conditions may affect the 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.

Class I Selections:

100% overload or 200% of Nominal Motor Rating.

Class II Selections:

180% overload or 280% of Nominal Motor Rating.

Class III Selections:

300% overload or 400% of Nominal Motor Rating.

If maximum starting or momentary load exceeds the above conditions, refer to Factory.

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

Brake Equipped Applications — When a gear drive is equipped with a “working” brake that is used to decelerate the motion of the system and the brake is located between the prime mover and the gear drive, select the drive based on the brake rating or the highest equivalent 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 of the gear drive selected for the application. If the brake rating is greater than 200% of the gear drive catalog rating, refer the application to the Factory. Also refer to the Factory all applications in which the brake is located on the output shaft of the gear drive.

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

Speed Variation — When selecting gear drives for multi-speed or variable speed applications, determine the speed which develops the greatest torque and select the gear drives on this basis.

Effects of Solar Energy — If a drive operates in the sun at ambient temperatures over 38°C (100°F), 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 to prevent the sump temperature from exceeding the allowable maximum of 93°C (200°F).

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

Mounting Positions — All drives must be mounted within the limits specified on the dimension pages unless specifically ordered otherwise. Unless Rexnord approved, other mounting positions may lower the oil to a level that will starve gears and bearings; overfilling a drive with oil may cause leakage through the air vent, foaming and churning and consequently, overheating. Either condition can result in damage to gears and bearings.

Backstops — Backstops provide positive prevention of reverse rotation or backrun without backlash on conveyors, elevator head shafts and similar applications. Designed as standard accessories, backstops can be furnished on horizontal drives. Do not use backstops on vertical drives.

DO NOT use the backstop as a substitute for a brake.

These backstops are designed to prevent reverse rotation five times or less in eight hours, with one minute or more in the overrunning direction between backstopping load applications. If backstopping operations are more frequent, or the time between operations is less than one minute, the backstop is classified as a working or indexing device and the application must be referred to the Factory for engineering review.

When ordering a drive equipped with a backstop, specify whether the hollow shaft is to rotate clockwise or counterclockwise when facing the input side of the gear drive.

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How to Order

The following information is required to quote or ship to your requirements. Unless specifically stated otherwise **on the purchase order**, all gear drives (and backstops, if furnished) will be shipped with NLGI #2 grease in the seal housing cavities. Where this grease could contaminate the product, as in the food and drug industries, clearly indicate **on the purchase order** that: "Gear drive seal housing cavities must not contain grease."

Sizes 5107 thru 5315

- ☐ JR Shaft Mounted Drive
- 1. Basic Drive/Ratio (PN)
- 2. Bushing Size/Bore (PN)
- 3. Torque Arm (PN)

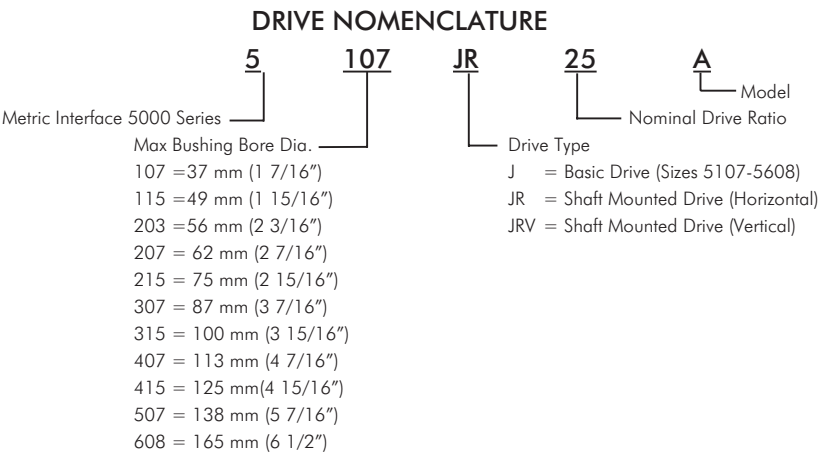
Sizes 5407 thru 5608

- ☐ JR Shaft Mounted Drive
- 1. Drive/Ratio (PN)
- Torque Arm Included
- 2. Bushing Size/Bore (PN)

Accessories

- Motor Mount—Description/Motor Frame Size (PN)
- Backstop—Description/L.S. Rotation Viewing Input Side (PN) (Not available on vertical drives.)
- Shaft Cooling Fan—Specify on Order/Factory Installed (5215-5608J only)
- Electric Fan—Description (PN)/Specify Fan Mounting Position (5307-5608J) If Factory Installed
- Vertical Breather—Description/H.S. Shaft Up or Down (PN)
- TA Removal Tool—Description (PN)
- V-Belt Guard—Description (PN)

Contact the Factory for special design options.



Service Factors

Service Factors

Service Factors are application based factors that affect the selection of a drive. These factors are based on field experience and take into account various operating requirements and conditions for specific applications.

Table 2 lists Service Factors based on application for Quadri-Drives. Refer unlisted applications to the Factory.

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 the Factory for special considerations.

The type of prime mover (electric motor or engine) will also affect selections. Since most industrial applications are electric motor driven, Service Factors are based on the use of electric motors. These factors can be easily adjusted for engine-driven factors as outlined below.

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. Then refer to Table 1, column 1 for the same number. Opposite this figure, under the desired hours of service and prime mover, locate the converted Service Factor.

For example, from Table 2, the Service Factor is 1,25 for a heavy duty 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 3 to 10 Hour Service Factor	3 to 10 Hours per Day	Over 10 Hours per Day	Intermittent — Up to 3 Hours per Day ‡	
	Multi-Cylinder Engine †	Multi-Cylinder Engine †	Motor	Multi-Cylinder Engine †
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
2,00	2,25	2,50	1,75	2,00

† For applications operating one half hour or less per day and applications driven by single cylinder engines, refer to the Factory.

‡ 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.

Table 2 — Service Factors Listed by Application

(For electric motor driven applications. . . recommendations are MINIMUM and normal conditions are assumed.)

Service	3 to 10 Hour	Over 10 Hour	Service	3 to 10 Hour	Over 10 Hour
AGITATORS			LINE SHAFTS		
Paper Mill (Mixers)	1,50	1,50	Uniform Load	1,00	1,25
Pure Liquids	1,00	1,25	Heavy Load	1,25	1,50
Semi-Liquids, Variable Density	1,25	1,50			
APRON CONVEYORS			LIVE ROLL CONVEYORS		
Uniformly Loaded	1,00	1,50	Uniformly Loaded, Package	1,00	1,50
Heavy Duty	1,25	2,00	Heavy Duty	Refer to Factory	
ASSEMBLY CONVEYORS			MACHINE TOOLS		
Uniformly Loaded	1,00	1,25	Auxiliary Drives	1,00	1,25
Heavy Duty	1,25	1,50	Main Drives Uniform Load	1,25	1,50
			Main Drives Heavy Load	2,00	2,00
BELT CONVEYORS			METAL MILLS		
Uniformly Loaded	1,00	1,25	Table Conveyors, Non Reversing	1,50	2,00
Heavy Duty	1,25	1,50	Reversing	Refer to Factory	
BREWING & DISTILLING			Wire Drawing & Flattening Machines	1,25	2,00
Bottling Machinery	1,00	1,25			
Brew Kettles, Continuous	1,00	1,25	MILLS		
Can Filling Machines	1,00	1,25	(See Metal Mills)		
Cookers, Continuous	1,00	1,25	Pebble	1,50	2,00
Mash Tubs, Continuous	1,00	1,25			
Scale Hoppers, Frequent Starts	1,25	1,50	MIXERS (See Agitators)		
BUCKET			Concrete, Continuous	1,25	2,00
Conveyors Heavy Duty	1,25	1,50	Concrete, Intermittent	1,25	1,50
Elevators, Uniform Load	1,00	1,50	Constant Density	1,00	1,50
Elevators, Heavy Duty	1,25	2,00	Variable Density	1,25	1,50
CAN FILLING MACHINES	1,00	1,25	Liquid	1,00	1,25
CAR			Paper Mill (Agitators)	1,50	1,50
Dumpers	2,00	2,00	Semi-Liquid	1,25	1,50
Pullers	Refer to Factory				
CLARIFIERS	1,00	1,25	OVEN CONVEYORS		
CLASSIFIERS	1,25	1,50	Uniformly Loaded	1,00	1,25
CLAY WORKING MACHINERY			Heavy Duty	1,25	1,50
Brick Presses	2,00	2,00			
Briquette Machines	2,00	2,00	PAN CONVEYORS		
Extruders & Mixers	1,50	2,00	Heavy Duty	1,25	1,50
▲ CONVEYORS — Uniformly Loaded or Fed			PAPER MILLS		
Apron	1,00	1,50	Agitators (Mixers)	1,50	1,50
Assembly	1,00	1,25	Bleachers	1,00	1,50
Belt	1,00	1,25	Calenders	1,00	2,00
Flight	1,25	1,25	Cylinders	1,00	1,25
Oven	1,00	1,25	Felt Stretchers	1,00	1,50
Live Roll (Package)	1,00	1,50	Winders	1,00	1,25
Screw	1,00	1,25			
Table-See Metal Mills	1,00	1,25	PEBBLE MILLS	1,50	2,00
▲ CONVEYORS — Heavy Duty-Not Uniformly Fed			PUMPS		
Apron	1,25	2,00	Proportioning	Refer to Factory	
Assembly	1,25	1,50	Reciprocating, open Discharge	1,00	1,50
Belt	1,25	1,50	Double Acting Multi-Cylinder	1,25	2,00
Bucket or Pan	1,25	1,50	Single Cylinder	Refer to Factory	
Flight	1,25	1,50	Rotary (Gear Type)	1,00	1,25
Live Roll	Refer to Factory		Constant Density	1,00	1,25
Oven	1,25	1,50	Rotary (Gear Type)	1,25	1,25
Reciprocating	2,00	2,00	Variable Density	1,25	1,25
Screw	1,25	1,50			
Table-See Metal Mills	1,00	1,25	RECIPROCATING		
▲ CRANES & HOISTS			Conveyors	2,00	2,00
Bridge and Trolley Drive	1,50	1,50	RUBBER INDUSTRY		
CUTTER HEAD DRIVES	Refer to Factory		Tire Building Machines	1,50	1,50
DISTILLING — See Brewing			Tire & Tube Press Openers	1,00	1,00
DRYERS & COOLERS, ROTARY	1,50	2,00	SCREENS		
ELEVATORS			Air Washing	1,00	1,25
Bucket-Uniform Load	1,00	1,50	Rotary, Stone or Gravel	1,25	1,50
Bucket-Heavy Load	1,25	2,00	Traveling Water Intake	1,00	1,25
Escalators	Not Approved		Shaker	1,50	2,00
Freight	Not Approved				
Man lifts, Passenger	Not Approved		SCREW CONVEYORS		
FLIGHT CONVEYORS			Uniformly Loaded	1,00	1,25
Uniformly Loaded	1,25	1,25	Heavy Duty	1,25	1,50
Heavy Duty	1,25	1,50	SKI TOWS & LIFTS	Not Approved	
FOOD INDUSTRY			▲ SKIP HOISTS	1,25	1,25
Beet Slicers	1,25	1,50	STOKERS	1,25	1,25
Can Filling Machines	1,00	1,25	TEXTILE INDUSTRY		
Cereal Cookers	1,00	1,25	Batchers	1,25	1,50
Dough Mixers	1,25	1,50	Calenders	1,25	1,50
Meat Grinders	1,25	2,00	Card Machines	2,00	2,00
			Dry Cans	1,25	1,50
LAUNDRY			Dyeing Machinery	1,25	1,50
Washers, reversing	Refer to Factory		Looms	Refer to Factory	
Tumblers	1,25	2,00	Mangles, Nappers & Soapers	1,25	1,50
			Spinners	1,25	2,00
			Tenter Frames	1,25	1,50
			TUMBLING BARRELS	2,00	2,00
			WINDLASS	1,50	2,00

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

How to Select/Quick Selection Method

Selection Information

This selection guide contains two methods of selection. The Quick Selection Method and the Power and Torque Rating Table Method.

Before proceeding, determine which selection procedure to use. Use the Quick Selection Method if your application meets the following guidelines:

- Electric motor, 1500 rpm
- Required service factor is 1,00, 1,25, 1,50 or 2,00
- Maximum ambient temperature is 25°C (77°F)
- Sea level (0 to 750 m)

NOTE: If the above guidelines cannot be met, use the Power and Torque Rating Table Method. Also, if you have an application involving any of the following conditions, refer to Page 6.

- Excessive overloads
- Reversing service
- Brake equipped applications
- Oversized prime movers
- Multi-speed or variable speed applications
- Excessive solar energy
- Product modifications
- Non-standard mounting positions
- Backstops

How to Select by Quick Selection

1. Determine service factor from Table 2, Page 9, for electric motor driven applications operating 3 to 10 or over 10 hours per day. For occasional and intermittent service or engine driven applications, refer to Table 1 and instructions, Page 9. Turn to the 1,00, 1,25, 1,50 or 2,00 service factor Quick Selection Table, Pages 11-14.
2. Select basic gear drive size and ratio opposite desired power and output speed. (Note the minimum high speed shaft sheave pitch diameter). The selection will indicate the auxiliary cooling required to have sufficient thermal capacity. Order the auxiliary cooling, if required, as an accessory.

NOTE: Thermal capacities in the Quick Selection tables are based on 25°C (77°F) ambient. If ambient temperature exceeds this value, refer to How to Select/Rating Table Method by Power or Torque, Page 15.

3. Check dimensions. Refer to drive size dimension pages and check TA taper bushing bore, mounting position, clearances, and motor mount & motor frame size details.
4. Determine sheave ratio. Nominal sheave ratios for 1500 rpm and 1000 rpm electric motors are given in Table 8 on Page 46.
NOTE: The pitch diameter of the high speed shaft sheave must be equal to or larger than the minimum high speed sheave pitch diameter noted in Step 2.
5. Determine the accessories required for your application: i.e. backstop, motor mount, v-belt guard, etc.
6. Place the order. See Page 8 for How to Order.

Quick Selection Example

Application Details:

Heavy Duty Bucket Elevator.
75 kilowatts, 1000 rpm motor, 280M frame.
6 hours per day operation.
125 millimeter diameter head shaft at 44 rpm.
Shaft mounted drive/horizontal.

1. From Service Factor table, Table 2, the minimum required service factor is 1,25 for an electric motor driven, heavy duty bucket elevator operating 3 to 10 hours per day.
2. From the 1,25 Quick Selection table, Page 12, the basic gear drive size is 5507J with a nominal 25:1 ratio opposite 75 kilowatts and output range of 50-33 rpm. The minimum high speed shaft sheave pitch diameter is 200 millimeters. This selection requires a shaft driven fan. Drive type is a "JR" shaft mounted drive.
3. Refer to Pages 42 and 43 to check drive dimension data. A hollow shaft Bushing No. BU5507J-125 mm, Part No. 0775949 is required to fit the drive to the 125 mm diameter head shaft. An A3 mounting position is required. The motor mount center distance range available is 1172 mm - 1267 mm with a 280M frame motor.
4. From Table 8, on Page 46, the nominal sheave ratio is 1,10 for a 25:1 ratio drive with a 1000 rpm motor, at 44 output. Select the V-belt drive to suit the available center distance range. Be sure to allow for belt take up. Also, verify that the driven sheave pitch diameter is 200 mm or larger.
5. A motor mount, a shaft fan kit and a v-belt guard are the accessories required for this application.
6. Place the order per instructions on Page 8.
Drive 5507JR25C PN 0787325
Bushing BU5507J-125 mm PN 0775949
Motor Mount MM5507J-M5 PN 0787399
Shaft Fan Kit SFK5507J PN 0785893
V-Belt Guard

Quick Selection Tables

1,00 Service Factor *

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Tabular Selection Data will be supplied at a later date.

Quick Selection Tables

1,25 Service Factor *

kW	Output rpm	Drive Size	Minimum H.S.S. Sheave Pitch Dia ★ (mm)	kW	Output rpm	Drive Size	Minimum H.S.S. Sheave Pitch Dia ★ (mm)	kW	Output rpm	Drive Size	Minimum H.S.S. Sheave Pitch Dia ★ (mm)	kW	Output rpm	Drive Size	Minimum H.S.S. Sheave Pitch Dia ★ (mm)
.55	300-171	5107J_05	40	7.5	300-212	5107J_05	149	22	300-218	5207J_05	382	55	300-241	5307J_05	240
	170-111	5107J_09	40		211-171	5115J_05	89		217-171	5215J_05	150		240-202	5307J_05	380
	110-61	5107J_14	40		170-111	5115J_09	53		170-141	5207J_09	189		201-171	5315J_05	201
	60-12	5107J_25	50		110-88	5115J_14	50		140-115	5207J_09	370		170-143	5307J_09 ■	362
	11-7	5115J_25	60		87-61	5203J_14	100		114-111	5215J_09	180		142-111	5315J_09 ■	220
	6-5	5203J_25	100		60-56	5203J_25	100		110-107	5207J_14	201		110-92	5307J_14 ■	184
.75	300-171	5107J_05	40		55-34	5207J_25	130		106-61	5215J_14	150		91-73	5315J_14 ■	287
	170-111	5107J_09	40		33-21	5215J_25	150		60-37	5307J_25	180		72-61	5407J_14 •	184
	110-61	5107J_14	40		20-13	5307J_25	180		36-29	5315J_25	180		60-49	5407J_25 •	180
	60-16	5107J_25	52		12-10	5315J_25	180		28-20	5407J_25	180		48-38	5415J_25 •	200
	15-9	5115J_25	64		9-7	5407J_25	180		19-15	5415J_25	200		37	5507J_25 •	200
	8-6	5203J_25	100		6-5	5415J_25	200		14-10	5507J_25	200		36-24	5507J_25	200
1.1	5	5207J_25	130	300-203	5115J_05	151	9-7	5608J_25	240	23-16	5608J_25	240			
	300-171	5107J_05	40	202-171	5203J_05	267	300-241	5215J_05	150	300-241	5315J_05	236			
	170-111	5107J_09	40	170-138	5115J_09	68	240-191	5215J_05	213	240-211	5315J_05	309			
	110-61	5107J_14	40	137-111	5203J_09	129	190-171	5215J_05	355	210-192	5315J_05	403			
	60-24	5107J_25	50	110-80	5203J_14	109	170-129	5215J_09 •	150	191-141	5407J_05	180			
	23-13	5115J_25	65	79-61	5207J_14	130	128-111	5215J_09	150	140-111	5407J_05	245			
1.5	12-8	5203J_25	100	60-50	5207J_25	130	110-102	5215J_14 •	150	110-72	5407J_14 ■	180			
	7-5	5207J_25	130	49-30	5215J_25	150	101-88	5215J_14	150	71-61	5415J_14 •	261			
	300-171	5107J_05	40	29-19	5307J_25	180	87-61	5307J_14	180	60-51	5415J_25 ■	200			
	170-111	5107J_09	40	18-15	5315J_25	180	60-50	5307J_25	180	50-33	5507J_25 •	200			
	110-61	5107J_14	40	14-10	5407J_25	180	49-40	5315J_25	180	32-29	5608J_25 •	240			
	60-32	5107J_25	52	9-8	5415J_25	200	39-27	5407J_25	180	28-22	5608J_25	240			
2.2	31-17	5115J_25	67	7-5	5507J_25	200	26-21	5415J_25	200	300-258	5315J_05 •	419			
	16-11	5203J_25	100	300-262	5203J_05	300	20-13	5507J_25	200	257-194	5407J_05 •	268			
	10-7	5207J_25	130	261-171	5207J_05	130	12-9	5608J_25	240	193-141	5407J_05	253			
	6-5	5215J_25	150	170-130	5203J_09	297	300-237	5215J_05	305	140-111	5407J_05	370			
	300-171	5107J_05	40	129-111	5207J_09	130	236-171	5307J_05	180	300-258	5315J_05 •	419			
	170-111	5107J_09	40	110-68	5207J_14	156	170-141	5215J_09 •	180	257-194	5407J_05 •	268			
4.0	110-61	5107J_14	40	67-61	5215J_14	150	140-111	5215J_09 •	221	193-141	5407J_05	253			
	60-47	5107J_25	51	60-41	5215J_25	150	110-101	5215J_14 •	221	140-111	5407J_05	370			
	46-26	5115J_25	65	40-25	5307J_25	180	100-62	5307J_14	180	38-27	5608J_25 •	249			
	25-16	5203J_25	100	24-20	5315J_25	180	61-49	5315J_25 •	180	300-241	5407J_05 •	264			
	15-10	5207J_25	130	19-14	5407J_25	180	48-33	5407J_25	180	240-181	5407J_05 •	351			
	9-6	5215J_25	150	13-11	5415J_25	200	32-25	5415J_25	200	180-138	5407J_05 •	513			
5.5	5	5307J_25	180	10-7	5507J_25	200	24-16	5507J_25	200	137-120	5415J_05 •	522			
	300-241	5115J_05	48	6-5	5608J_25	240	15-11	5608J_25	240	121-111	5507J_05 •	493			
	240-171	5115J_05	69	300-241	5207J_05	130	300-261	5307J_05	180	110-76	5415J_14 ■	200			
	170-111	5107J_09	44	240-171	5207J_05	369	260-201	5307J_05	197	75-61	5507J_14 ■	200			
	110-89	5107J_14	40	170-146	5207J_09	130	200-171	5307J_05	272	60-48	5507J_25 ■	200			
	88-61	5115J_14	50	145-111	5207J_09	185	170-151	5215J_09 ■	158	47-33	5608J_25 •	249			
18.5	60-39	5203J_25	100	110-84	5207J_14	198	150-122	5215J_09 ■	246	110-91	5415J_14 ■	200			
	38-25	5207J_25	130	83-61	5215J_14	150	170-141	5307J_09 •	252	90-61	5507J_14 ■	200			
	24-15	5215J_25	150	60-50	5215J_25	150	140-121	5307J_09 •	340	60-58	5507J_25 ■	200			
	14-10	5307J_25	180	49-31	5307J_25	180	120-111	5307J_09 •	420	57-39	5608J_25 ■	240			
	9-8	5315J_25	180	30-25	5315J_25	180	110-76	5307J_14 •	207						
	7-5	5407J_25	180	24-17	5407J_25	180	75-61	5315J_14 •	277						
55	6	5315J_25	180	16-13	5415J_25	200	60-40	5407J_25 •	180						
	5	5407J_25	180	12-8	5507J_25	200	39-31	5415J_25 •	200						
				7-6	5608J_25	240	30-20	5507J_25	200						
							19-14	5608J_25	240						

Quick Selection Tables

1,50 Service Factor *

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Tabular Selection Data will be supplied at a later date.

Alternate TA Taper Bushings — Inch

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5107J-1.000	0769061	2	1/4 x 1/8 x 2 1/2	2.1
BU5107J-1.125	0769062	2	1/4 x 1/8 x 2 1/4	1.8
BU5107J-1.188	0769063	2	1/4 x 1/8 x 2	1.6
BU5107J-1.250	0769064	1	1/4 x 1/8 x 2 1/2	1.5
BU5107J-1.375	6720659	1	3/8 x 3/16 x 2 1/2	1.0
BU5107J-1.438	0769065	1	3/8 x 3/16 x 2 1/2	1.0

‡ Consists of bushing, drive key, nut, retaining ring and setscrew.

• Check strength of driven shaft and unfurnished key.

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5115J-1.188	0769077	2	1/4 x 1/8 x 4 1/4	4.3
BU5115J-1.250	0769078	2	1/4 x 1/8 x 4	4.1
BU5115J-1.438	0769079	2	3/8 x 3/16 x 2 1/4	3.5
BU5115J-1.500	0769080	2	3/8 x 3/16 x 2 1/4	3.3
BU5115J-1.625	0769081	1	3/8 x 3/16 x 2 3/4	2.9
BU5115J-1.688	0769082	1	3/8 x 3/16 x 2 3/4	2.7
BU5115J-1.750	0769083	1	3/8 x 3/16 x 2 3/4	2.4
BU5115J-1.938	0769084	1	1/2 x 1/4 x 2 3/4	1.7

‡ • (See footnotes on Page 16.)

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5203J-1.438	0769117	2	3/8 x 3/16 x 3 1/4	5.0
BU5203J-1.500	0769118	2	3/8 x 3/16 x 3 1/4	5.1
BU5203J-1.625	0769119	2	3/8 x 3/16 x 3	4.6
BU5203J-1.688	0769120	2	3/8 x 3/16 x 2 3/4	4.4
BU5203J-1.750	0769121	2	1/2 x 1/4 x 2 3/4	4.4
BU5203J-1.875	0769122	1	1/2 x 1/4 x 3 1/4	3.6
BU5203J-1.938	0769123	1	1/2 x 1/4 x 3 1/4	3.3
BU5203J-2.000	0769124	1	1/2 x 1/4 x 3 1/4	3.0
BU5203J-2.188	0769125	1	1/2 x 1/4 x 3 1/4	3.0

‡ • (See footnotes on Page 16.)

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5207J-1.375	0769095	2	3/16 x 5/32 x 5 3/4	7.6
BU5207J-1.438	0769096	2	3/8 x 3/16 x 5 3/4	7.3
BU5207J-1.500	0769097	2	3/8 x 3/16 x 5 3/4	7.1
BU5207J-1.625	0765848	2	3/8 x 3/16 x 5 3/4	6.7
BU5207J-1.688	0769098	2	3/8 x 3/16 x 5 1/4	6.4
BU5207J-1.750	0769099	2	3/8 x 3/16 x 5 1/4	6.1
BU5207J-1.875	0769100	2	1/2 x 1/4 x 3 1/2	5.6
BU5207J-1.938	0769101	1	1/2 x 1/4 x 4 1/4	5.3
BU5207J-2.000	0769102	1	1/2 x 1/4 x 4 1/4	5.0
BU5207J-2.188	0769103	1	1/2 x 1/4 x 4 1/4	4.4
BU5207J-2.250	0769104	1	1/2 x 1/4 x 4 1/4	3.7
BU5207J-2.375	2113886	1	5/8 x 5/16 x 4 1/4	3.0
BU5207J-2.438	0769105	1	5/8 x 5/16 x 4 1/4	2.6

‡ • (See footnotes on Page 16.)

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5215J-1.938	0769137	2	1/2 x 1/4 x 5	11.4
BU5215J-2.000	0769138	2	1/2 x 1/4 x 4 3/4	11.1
BU5215J-2.188	0769139	2	1/2 x 1/4 x 4 1/2	9.9
BU5215J-2.250	0769140	2	1/2 x 1/4 x 4 1/4	9.5
BU5215J-2.438	0769141	1	5/8 x 5/16 x 3 1/2	8.3
BU5215J-2.500	0769142	1	5/8 x 5/16 x 3 1/2	7.8
BU5215J-2.688	0769143	1	5/8 x 5/16 x 3 1/2	6.5
BU5215J-2.750	2116065	1	5/8 x 5/16 x 3 1/2	5.5
BU5215J-2.938	0769144	1	3/4 x 3/8 x 3 1/2	4.5

‡ • (See footnotes on Page 16.)

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5307J-2.000	0769155	2	1/2 x 1/4 x 7	17.8
BU5307J-2.188	0769156	2	1/2 x 1/4 x 7	16.6
BU5307J-2.250	0769157	2	1/2 x 1/4 x 7	16.2
BU5307J-2.438	0769158	2	5/8 x 5/16 x 5 1/2	14.9
BU5307J-2.500	0769159	2	5/8 x 5/16 x 5	14.4
BU5307J-2.688	0769160	1	5/8 x 5/16 x 5	13.0
BU5307J-2.938	0769161	1	3/4 x 3/8 x 5	10.9
BU5307J-3.000	0769162	1	3/4 x 3/8 x 5	10.3
BU5307J-3.188	0769163	1	3/4 x 3/8 x 5	8.6
BU5307J-3.438	0769164	1	7/8 x 7/16 x 5	6.1

‡ • (See footnotes on Page 16.)

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5315J-2.438	0785778	2	5/8 x 5/16 x 7 1/2	23.6
BU5315J-2.500	0785779	2	5/8 x 5/16 x 7 1/2	23.1
BU5315J-2.688	0785780	2	5/8 x 5/16 x 7 1/2	21.6
BU5315J-2.938	0785781	2	3/4 x 3/8 x 5 1/2	19.4
BU5315J-3.000	0785782	2	3/4 x 3/8 x 5 1/2	18.8
BU5315J-3.438	0785783	1	7/8 x 7/16 x 5	14.3
BU5315J-3.938	0785784	1	1 x 1/2 x 5	8.4

‡ • (See footnotes on Page 16.)

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5407J-2.938	0786822	2	3/4 x 3/8 x 7 1/2	29.7
BU5407J-3.438	0785774	1	7/8 x 7/16 x 6	24.0
BU5407J-3.938	0785775	1	1 x 1/2 x 6	17.3
BU5407J-4.188	0785776	1	1 x 1/2 x 6	13.6
BU5407J-4.438	0785777	1	1 x 1/2 x 6	11.4

‡ • (See footnotes on Page 16.)

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5415J-3.438	0769234	2	7/8 x 7/16 x 8	41.5
BU5415J-3.938	0769235	2	1 x 1/2 x 6	33.8
BU5415J-4.188	0769236	1	1 x 1/2 x 7 1/2	29.5
BU5415J-4.438	0769237	1	1 x 1/2 x 7 1/2	24.9
BU5415J-4.938	0769238	1	1 1/4 x 3/8 x 7 1/2	15.1

‡ • (See footnotes on Page 16.)

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5507J-3.438	0786824	2	7/8 x 7/16 x 10	56.8
BU5507J-3.938	0786825	2	1 x 1/2 x 10	48.8
BU5507J-4.438	0786826	2	1 x 1/2 x 10	40.0
BU5507J-4.938	0785894	1	1 1/4 x 5/8 x 7 3/4	40.0
BU5507J-5.438	0785895	1	1 1/4 x 5/8 x 7 3/4	18.2

‡ • (See footnotes on Page 16.)

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway/Min Key Length •	Wt lb
BU5608J-5.437	0769737	1	1 1/4 x 5/8 x 10	64.5
BU5608J-5.937	0769738	1	1 1/2 x 3/4 x 10	49.6
BU5608J-6.437	0765847	1	1 1/2 x 3/4 x 10	30.0
BU5608J-6.500	0769739	1	1 1/2 x 3/4 x 10	31.4

‡ • (See footnotes on Page 16.)

How to Select/Rating Table Method by Power or Torque

Selection Information

The Quick Selection Method may be used in place of the Power and Torque Rating Table Method if the application meets the following guidelines:

- Electric motor, 1500 rpm
- Required service factor is 1,00, 1,25, 1,50 or 2,00
- Maximum ambient temperature is 25°C (77°F)
- Sea level (0 to 750 m)

NOTE: If you have an application involving any of the following conditions, refer to Page 6.

- Excessive overloads
- Reversing service
- Brake equipped applications
- Oversized prime movers
- Multi-speed or variable speed applications
- Excessive solar energy
- Product modifications
- Non-standard mounting positions
- Backstops

How to Select by Power

1. Determine service factor from Table 2, Page 9, for electric motor driven applications operating 3 to 10 or over 10 hours per day. For occasional and intermittent service or engine driven applications, refer to Table 1, Page 9, and instructions.
2. Calculate equivalent power by multiplying the actual power to be transmitted by the service factor.
3. Determine drive size and nominal ratio. Opposite required output shaft rpm, trace right to a power rating equal to or in excess of the equivalent power calculated in Step 2. Read the drive size at the top of the power column. Read the drive nominal ratio to the left of the required output shaft rpm column. Note the minimum high speed shaft sheave pitch diameter(s). If the required output shaft rpm falls between two tabulated output shaft speeds, interpolate the power ratings to determine drive rating at the required output shaft rpm. If the required output shaft rpm is less than 5 rpm or greater than 300 rpm, refer the application to the the Factory.
4. Check Thermal Power Ratings - See Page 19 for instructions. Order the auxiliary cooling, if required, as an accessory.
5. Check dimensions. Refer to drive size dimension pages and check TA taper bushing bore, mounting position, clearances, and motor mount & motor frame size details.
6. Determine sheave ratio. Nominal sheave ratios are given in Table 8, Page 46.

NOTE: The pitch diameter of the high speed shaft sheave must be equal to or larger than the minimum high speed sheave pitch diameter noted in Step 3.
7. Determine the accessories required for your application: i.e. backstop, electric fan, motor mount, shaft cooling fan, v-belt guard, etc.
8. Place the order. See Page 8 for How to Order.

Power Selection Example

A uniformly loaded belt conveyor requiring 11 kW at the headshaft operates 16 hours per day at 30 rpm. The headshaft diameter is 70mm. Assume an 1500 rpm electric motor is the prime mover.

1. From Service Factor table, Table 2, Page 9, the minimum required service factor is 1,25 for an electric motor driven, uniformly loaded belt conveyor operating over 10 hours per day.
2. Equivalent power = $1,25 \times 11 \text{ kW} = 13,8 \text{ kW}$.
3. Input speed = 1500 rpm. Output speed = 28 rpm. Drive size = 5307. Nominal ratio = 25:1. The minimum high speed shaft sheave pitch diameter is 180 mm for a 5307 drive with or without a shaft driven fan. Drive type is a "JR" shaft mounted drive.
4. Check the thermal rating per instructions given on Page 19.
5. Refer to Pages 34 and 35 to check drive dimension data. A hollow shaft Bushing No. BU5307J-70 mm, Part No. 0775779 is required to fit the drive to the 70 mm diameter headshaft. Select motor mount based on motor frame size.
6. From Table 8, Page 46, the nominal sheave ratio is 2,14 with a 1500 rpm motor for a 25:1 ratio drive at 28 rpm output. Select the V-belt drive to suit the motor mount center distance range (short, medium or long). Be sure to allow for belt take up. Also, verify that the driven high speed shaft sheave pitch diameter is larger than 180 mm.
7. Accessories required - Motor Mount, V-belt guard.
8. Place the order for the shaft mounted drive per instructions on Page 8.

How to Select By Torque

Simply follow the steps outlined in the How to Select by Power method, substituting torque values for power.

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

$$P \text{ (kW)} = \frac{\text{torque} \times \text{output speed}}{9\,550}$$

Torque Selection Example

Application: Apron conveyor, heavy duty, requires 5 000 Nm at the headshaft

Driver: Electric motor, 1 000 rpm

Duty Cycle: 24 hours per day

Headshaft Diameter: 110 mm

Output: 70 rpm

Maximum Ambient Temperature: 40°C (104°F)

Altitude: 1 500 m

1. From Service Factor table, Table 2, Page 9, the minimum required service factor is 2,00 for an electric motor driven, heavy duty apron conveyor operating over 10 hours per day.
2. Equivalent output torque = $2,00 \times 5\,000 \text{ Nm} = 10\,000 \text{ Nm}$.
3. Input speed = 1 000 rpm. Output speed = 70 rpm. Drive size = 5407. Nominal ratio = 14:1. The minimum high speed shaft sheave pitch diameter is 180 mm for a 5407 drive without a shaft driven fan and 214 mm with a shaft driven fan. Drive type is a "JR" shaft mounted drive.

Continued on next page

4. $P \text{ (kW)} = \frac{5\,000 \times 70}{9\,550} = 36,6 \text{ kW}$. The Application Adjusted Basic Thermal Rating, P_{TA} , for a 5407, 14:1 ratio drive without auxiliary cooling = $P_T \times B_1 \times B_2 \times B_3 \times B_4 \times B_5 = 38,6 \times 0,81 \times 0,90 \times 1 \times 1 \times 1 = 28,1 \text{ kW}$. The Application Adjusted Basic Thermal Rating, P_{TA} , for a 5407, 14:1 ratio drive with a shaft driven fan = $P_T \times B_1 \times B_2 \times B_3 \times B_4 \times B_5 = 61,5 \times 0,81 \times 0,90 \times 1 \times 1 \times 1 = 44,8 \text{ kW}$. A shaft driven fan is required.
5. Refer to Pages 38 and 39 to check drive dimension data. A hollow shaft Bushing No. BU5407J-110 mm, Part No. 0775941 is required to fit the drive to the 110 mm diameter headshaft. Select motor mount based on motor frame size.

6. From Table 8, on Page 46, the nominal sheave ratio is 1,02 with a 1000 rpm motor for a 14:1 ratio drive at 70 rpm output. Select the V-belt drive to suit the motor mount center distance range (short or long). Be sure to allow for belt take up. Also, verify that the driven high speed shaft sheave pitch diameter is larger than 214 mm.
7. Accessories required - Motor Mount, Shaft Fan Kit, V-belt guard.
8. Place the order for the shaft mounted drive per instructions on Page 8.

Power & Torque Ratings ★

Nominal Ratio †	Output Speed rpm ‡	DRIVE SIZE											
		5107			5115			5203			5207		
		Power (kW)	Output Torque (Nm)	Minimum High Speed Sheave Diameter (mm)	Power (kW)	Output Torque (Nm)	Minimum High Speed Sheave Diameter (mm)	Power (kW)	Output Torque (Nm)	Minimum High Speed Sheave Diameter (mm)	Power (kW)	Output Torque (Nm)	Minimum High Speed Sheave Diameter (mm)
25:1	5	0,298	569	53	0,545	1 040	66	0,867	1 655	100	1,38	2 636	130
	7	0,417	569	53	0,763	1 040	66	1,21	1 655	100	1,93	2 636	130
	10	0,596	569	53	1,09	1 040	66	1,73	1 655	100	2,76	2 636	130
	15	0,89	569	53	1,63	1 040	66	2,60	1 655	100	4,14	2 636	130
	20	1,19	569	53	2,18	1 040	66	3,47	1 655	100	5,52	2 636	130
	25	1,49	569	53	2,72	1 040	66	4,33	1 655	100	6,90	2 636	130
	30	1,79	569	53	3,27	1 040	66	5,20	1 655	100	8,29	2 636	130
	35	2,09	569	53	3,81	1 040	66	6,07	1 655	100	9,67	2 636	130
	40	2,38	569	53	4,36	1 040	66	6,93	1 655	100	11,0	2 636	130
	50	2,98	569	53	5,45	1 040	66	8,66	1 653	100	13,8	2 636	130
60	3,57	569	53	6,54	1 040	66	9,84	1 565	100	16,6	2 636	130	
14:1	61	3,44	538	43	6,51	1 019	51	10,6	1 655	100	16,9	2 636	140
	70	3,95	538	43	7,48	1 019	51	12,1	1 655	100	19,3	2 636	161
	80	4,51	538	43	8,54	1 019	51	13,9	1 655	112	22,1	2 636	188
	90	5,08	538	43	9,61	1 019	51	15,3	1 625	117	24,4	2 584	202
	100	5,64	538	43	10,7	1 019	51	16,5	1 574	117	26,2	2 504	202
	110	6,20	538	43	11,7	1 019	51	17,6	1 530	117	28,0	2 433	201
9:1	111	6,35	546	55	11,1	950	62	16,8	1 446	301	26,9	2 316	380
	120	6,87	546	55	12,0	950	63	17,7	1 412	300	28,5	2 262	380
	130	7,44	546	55	12,9	950	65	18,8	1 380	302	30,1	2 209	380
	140	8,01	546	55	13,9	950	68	19,8	1 348	300	31,7	2 161	380
	150	8,58	546	55	14,9	950	71	20,8	1 321	300	33,3	2 116	380
	160	9,16	546	58	15,9	950	74	21,7	1 295	300	34,8	2 076	380
	170	9,73	546	59	16,9	950	77	22,7	1 272	300	36,3	2 038	380
5:1	111												
	130												
	150												
	171	8,05	450	148	12,2	683	152	13,9	776	300	23,2	1294	380
	180	8,35	443	148	12,7	672	152	14,4	764	300	24,0	1274	380
	210	9,32	424	150	14,1	641	151	16,1	730	301	26,8	1217	380
	240	10,25	408	152	15,5	617	152	17,6	701	300	29,4	1169	380
	260	10,81	397	149	16,4	602	152	18,7	685	300	31,1	1141	380
	280	11,39	388	150	17,2	587	151	19,6	669	300	32,8	1116	380
	300	11,97	381	151	18,1	577	152	20,6	656	300	34,4	1093	380

★ Check drive dimension pages for backstop availability.

† Maximum output speed per nominal ratio based on 1500 input rpm.

‡ Minimum sheave diameters listed for the higher output speeds allow the use of standard sheaves (belt velocities of 33 meters/sec or less).

Continued on next page.

Power & Torque Ratings ★

Nominal Ratio †	Output Speed rpm ‡	DRIVE SIZE															
		5215				5307				5315				5407			
		Power (kW)	Output Torque (Nm)	Minimum High Speed Sheave Diameter (mm)		Power (kW)	Output Torque (Nm)	Minimum High Speed Dia (mm)		Power (kW)	Output Torque (Nm)	Minimum High Speed Sheave Diameter (mm)		Power (kW)	Output Torque (Nm)	Minimum High Speed Sheave Diameter (mm)	
				w/o Shaft Fan	With Shaft Fan			w/o Shaft Fan	With Shaft Fan			w/o Shaft Fan	With Shaft Fan			w/o Shaft Fan	With Shaft Fan
25:1	5	2,31	4 406	150	150	3,75	7 153	180	180	4,78	9 127	180	180	7,12	13593	180	180
	7	3,23	4 406	150	150	5,25	7 153	180	180	6,69	9 123	180	180	10,0	13586	180	180
	10	4,62	4 406	150	150	7,50	7 153	180	180	9,6	9 117	180	180	14,2	13576	180	180
	15	6,93	4 406	150	150	11,2	7 153	180	180	14,3	9 107	180	180	21,3	13559	180	180
	20	9,24	4 406	150	150	15,0	7 153	180	180	19,1	9 097	180	180	28,4	13542	180	180
	25	11,5	4 406	150	150	18,7	7 153	180	180	23,8	9 087	180	180	35,4	13525	180	180
	30	13,9	4 406	150	150	22,5	7 153	180	180	28,5	9 078	180	180	42,5	13508	180	180
	35	16,2	4 406	150	150	26,2	7 153	180	180	33,2	9 068	180	180	49,5	13491	180	180
	40	18,5	4 406	150	150	30,0	7 153	180	180	38,0	9 058	180	180	56,5	13474	180	180
	50	23,1	4 406	150	150	37,5	7 153	180	180	47,3	9 039	180	180	70,4	13440	180	180
	60	27,7	4 406	150	152	45,0	7 153	180	180	56,7	9 019	180	180	84,0	13363	180	180
14:1	61	28,2	4 406	150	150	45,7	7 153	180	209	57,6	9 017	243	296	80,2	12552	180	214
	70	32,3	4 406	150	164	52,5	7 153	180	209	66,0	8 999	275	333	92,0	12552	180	214
	80	36,9	4 406	150	183	60,0	7 153	180	218	75,3	8 980	306	379	105	12552	180	214
	90	41,6	4 406	154	203	67,5	7 153	182	233	84,5	8 960	356	428	118	12552	180	214
	100	46,2	4 406	172	225	75,0	7 153	194	248	91,9	8 769	375	450	132	12552	180	214
	110	50,8	4 406	191	249	82,0	7 115	206	263	96,6	8 382	350	420	145	12552	180	228
9:1	111	50,4	4 330	211	280	57,5	4 944	360	460	83	7 150	378	460				
	120	54,5	4 330	228	301	60,7	4 828	360	460	88	6 988	378	460				
	130	59,0	4 330	249	326	64,2	4 714	360	460	93	6 821	378	460				
	140	63,5	4 330	270	353	67,7	4 611	360	460	98	6 671	378	460				
	150	67,9	4 321	291	380	71,0	4 518	360	460	103	6 534	378	460				
	160	71,1	4 238	291	380	73,9	4 407	352	450	107	6 367	370	450				
	170	74,2	4 162	291	380	75,8	4 254	328	420	109	6 126	345	420				
5:1	111	...	...	...	...	...	...	...	...	...	...	...	...	118	10119	417	530
	130	...	...	...	...	...	...	...	...	...	...	...	...	131	9648	417	530
	150	...	...	...	...	...	...	...	...	...	...	...	...	145	9244	417	530
	171	36,9	2 058	310	380	61,1	3 410	378	460	86,3	4 818	400	460	159	8887	417	530
	180	38,2	2 027	310	380	63,4	3 359	378	460	89,5	4 745	400	460	165	8751	417	530
	210	42,6	1 935	310	380	70,6	3 207	378	460	99,7	4 530	400	460	184	8355	417	530
	240	46,8	1 860	310	380	77,5	3 082	378	460	109	4 352	400	460	202	8027	417	530
	260	49,5	1 815	310	380	82,0	3 008	378	460	116	4 249	400	460	209	7668	393	490
	280	52,1	1 775	310	380	85,9	2 927	370	450	121	4 134	391	450	211	7199	354	450
	300	54,7	1 739	310	380	88,7	2 820	343	420	125	3 980	363	420	216	6857	331	420

Refer to footnotes on Page 16.

Power & Torque Ratings ★

Nominal Ratio †	Output Shaft rpm ‡	DRIVE SIZE											
		5415				5507				5608			
		Power (kW)	Output Torque (Nm)	Minimum High Speed Sheave Diameter (mm)		Power (kW)	Output Torque (Nm)	Minimum High Speed Sheave Diameter (mm)		Power (kW)	Output Torque (Nm)	Minimum High Speed Sheave Diameter (mm)	
				w/o Shaft Fan	With Shaft Fan			w/o Shaft Fan	With Shaft Fan			w/o Shaft Fan	With Shaft Fan
25:1	5	9,31	17 769	200	200	14,6	27 910	200	200	21,6	41 252	240	259
	7	13,0	17 760	200	200	20,5	27 893	200	200	30,2	41 223	240	258
	10	18,6	17 746	200	200	29,2	27 867	200	200	43,1	41 180	240	258
	15	27,9	17 723	200	200	43,7	27 824	200	200	64,6	41 108	240	258
	20	37,1	17 699	200	200	58,2	27 781	200	200	86,0	41 036	240	257
	25	46,3	17 676	200	200	72,6	27 738	200	200	107	40 964	240	257
	30	55,5	17 653	200	200	87,0	27 695	200	200	129	40 891	240	256
	35	64,6	17 629	200	200	101	27 652	200	200	150	40 819	240	256
	40	73,8	17 606	200	200	116	27 609	200	200	171	40 747	240	258
	50	91,9	17 559	200	200	144	27 522	200	200	211	40 329	240	305
	60	110	17 513	200	200	172	27 436	200	200	250	39 797	251	354
14:1	61	112	17 508	200	312	175	27 428	200	412	211	33 077	240	304
	70	128	17 466	200	311	201	27 350	208	410	243	33 077	240	304
	80	146	17 419	200	312	229	27 264	227	409	277	33 077	240	330
	90	164	17 373	200	309	256	27 178	248	408	312	33 077	253	359
	100	182	17 326	200	308	280	26 757	260	402	347	33 077	274	389
	110	199	17 279	200	308	300	26 002	260	390	381	33 077	297	419
9:1													
5:1	111	129	11 113	321	530	147	12 646	216	530	224	19 289	485	610
	130	151	11 115	358	530	172	12 645	234	530	251	18 397	485	610
	150	175	11 115	398	530	199	12 645	252	530	277	17 624	485	610
	171	199	11 085	438	530	227	12 645	270	530	304	16 942	485	610
	180	206	10 914	438	530	238	12 645	278	530	315	16 688	485	610
	210	229	10 423	438	530	278	12 645	304	530	348	15 826	477	600
	240	252	10 013	438	530	318	12 645	329	530	361	14 358	418	525
	260	258	9 486	405	490	318	11 690	296	490	370	13 585	390	490
	280	263	8 966	372	450	315	10 738	263	450	374	12 767	358	450
	300	268	8 532	347	420	315	10 022	241	420	380	12 086	334	420

Refer to footnotes on Page 16.

Thermal Ratings

Thermal Rating

Thermal power is the actual power in kW (without service factor) that a drive will transmit continually for three hours or more without overheating. Checking the thermal power is extremely important, for if the drive creates heat faster than it can be dissipated, severe damage may occur.

Thermal ratings need not be considered when the continuous operating period does not exceed three hours and the shutdown time equals or exceeds the running time. However, when the running time exceeds the shutdown time, selection must be made on a basis of adequate thermal rating.

Adequate thermal rating is provided when the application adjusted thermal rating, adjusted basic thermal rating, is greater than brake power, the actual power rating required without service factor. If the brake power exceeds the application adjusted thermal rating for drives without auxiliary cooling, additional cooling, shaft fan (5215-5608J) or electric fan (5307-4608J), may be added. For cooling beyond the range of electric fan, refer to Factory for the selection of external pump and cooler assemblies.

Basic Thermal Rating

The basic thermal rating is the thermal rating calculated for the drive operating under the following criteria: maximum ambient temperature is 25°C (77°F), maximum sump oil temperature is 93°C (200°F), continuous operation, altitude is less than 750 m, and sustained ambient air velocity is at least 0,5 m/s to 1,4 m/s.

Basic thermal ratings for horizontal applications of the Quadrive are given in kilowatts. The maximum output speed for a given nominal ratio is based on 1 500 input rpm. Multiply the basic thermal ratings given by 0,8 to determine the basic thermal rating for vertical applications.

Thermal ratings for applications that are outside the criteria used to calculate the basic thermal rating must be adjusted with the environmental factors given in Tables 3-6 to determine the application adjusted thermal rating.

Application Adjusted Thermal Rating

The application adjusted thermal rating must be greater than brake power (without service factor). Determine the application adjusted thermal rating by multiplying the basic thermal rating by the appropriate environmental factors.

The duty cycle factor, Table 6, considers an increase in the basic thermal rating for gear drives that operate less than 100% of any one hour time period. If a drive operates for more than three hours and operates continuously for any given hour of the day, then the duty cycle must be considered 100%.

$PTA = PT \times B1 \times B2 \times B3 \times B4 \times B5$ where:

PTA = Application Adjusted Thermal Rating

PT = Basic Thermal Rating (for horizontal applications)

Basic Thermal Rating x 0,8 (for vertical applications)

B1 = Ambient Temperature Factor, Table 3

B2 = Altitude Factor, Table 4

B3 = Ambient Air Velocity Factor, Table 5

B4 = Inlet Water Temperature Factor (Not Applicable) = 1

B5 = Duty Cycle Factory, Table 6

Thermal Rating Example

A uniformly loaded belt conveyor requiring 95 kW operates 12 hours per day at 50 rpm. The belt conveyor is driven by a 110kW, 1 500 rpm, 280M frame electric motor connected with sheaves and v-belts to a Falk™ M5507JR25C drive. Assume the drive is mounted horizontally.

From the Service Factor Table, the minimum service factor is 1,25. The mechanical power rating for the drive given at 50 rpm is 144 kW. The actual service factor is $144 \div 95 = 1,52$. The drive selected has sufficient mechanical capacity.

The belt conveyor is located such that the following applies:

Maximum ambient temperature is 15°C (59°F)

Altitude is 1 500 m

Sustained ambient air velocity is 2 m/s

Determine if the drive selected has sufficient thermal capacity for this application.

Since the operating environment does not coincide with the criteria used to calculate the basic thermal ratings, the application adjusted thermal rating, PTA, must be calculated according to the equation: $PTA = PT \times B1 \times B2 \times B3 \times B4 \times B5$.

Calculate PTA for the drive without auxiliary cooling. $PT = 46,0$, $B1 = 1,12$ (Table 3), $B2 = 0,90$ (Table 4), $B3 = 1,4$ (Table 5), $B4 = 1$, $B5 = 1$ (Table 6); $PTA = 46,0 \times 1,12 \times 0,90 \times 1,4 \times 1 \times 1$; $PTA = 64,92$ kW. This drive will require auxiliary cooling because 64,92 kW is less than brake power (95 kW). Calculate PTA for the drive with the shaft fan next.

Calculate PTA for the drive with a shaft fan. $PT = 93,2$, $B1 = 1,12$ (Table 3), $B2 = 0,90$ (Table 4), $B3 = 1$ (factor not applicable with a shaft fan), $B4 = 1$, $B5 = 1$ (Table 6); $PTA = 93,2 \times 1,12 \times 0,90 \times 1 \times 1 \times 1$; $PTA = 93,95$ kW. The shaft fan does not provide sufficient thermal capacity. Try an electric fan next.

Calculate PTA for the drive with an electric fan. $PT = 149$, $B1 = 1,12$ (Table 3), $B2 = 0,90$ (Table 4), $B3 = 1$ (factor not applicable with an electric fan), $B4 = 1$, $B5 = 1$ (Table 6); $PTA = 149 \times 1,12 \times 0,90 \times 1 \times 1 \times 1$; $PTA = 150$ kW. The electric fan provides sufficient thermal capacity since the application adjusted thermal rating, 150 kW, is greater than brake power, 95 kW.

Table 3 — Ambient Temperature Factor – B₁
(For all cooling methods.)

Ambient Temperature ★	Factor with or without Shaft or Electric Fan
10°C	1,17
15°C	1,12
20°C	1,06
25°C	1,00
30°C	0,94
35°C	0,88
40°C	0,81
45°C	0,74
50°C	0,66

★ Factors for other ambient temperatures can be interpolated.

Table 4 — Altitude Factor – B₂
(For air cooling only.)

Altitude — meters Sea Level = 0	Factor With or Without Auxiliary Cooling
0 to 750	1,00
750	0,95
1 500	0,90
2 250	0,85
3 000	0,81
3 750	0,76
4 500	0,72
5 250	0,68

Table 5 — Ambient Air Velocity Factor – B₃
(For no auxiliary cooling only.)

Sustained Ambient Air Velocity † – m/s	Installed Environment	Factor Without Shaft or Electric Fan or Cooling Tubes
0,5	Small Confined Space	0,75
> 0,5 1,4	Large Indoor Room	1,00
> 1,4 < 3,7	Large Indoor Room	1,40
3,7	Outdoors	1,90

† The sustained ambient air velocity must be a continuous flow of air directly onto the gear drive. If the air flow cannot be counted on to be continuous, an ambient air velocity factor of 1,00 must be used.

Table 6 — Duty Cycle Factor ‡ – B₅
(For all cooling methods.)

% Operating Time Per Hour	Factor With or Without Auxiliary Cooling
100%	1,00
80%	1,05
60%	1,15
40%	1,35
20%	1,80

‡ The duty cycle factor must be based on the percentage of each hour that the drive is operating. For example: a gear drive operating for 48 minutes and resting for 12 minutes every hour of the day has an 80% duty cycle, but a drive operating for 4 hours and resting for 4 hours has a 100% duty cycle. For gear drives having a continuous operating time in excess of one hour, B₅ = 1,00 must be used. Where % run time per hour falls between values shown above, use next higher % run time.

Basic Thermal Ratings ★ – kW

Nominal Ratio	Output Shaft rpm	DRIVE SIZE											
		5107	5115	5203	5207	5215		5307			5315		
		Auxiliary Cooling	Auxiliary Cooling	Auxiliary Cooling	Auxiliary Cooling	Auxiliary Cooling		Auxiliary Cooling			Auxiliary Cooling		
		None	None	None	None	None	Shaft Fan	None	Shaft Fan	Electric Fan	None	Shaft Fan	Electric Fan
25:1	5	1,16	2,39	6,34	9,18	13,5	14,0	20,4	21,3	38,7	21,2	22,1	40,0
	7	1,60	3,36	7,02	10,2	14,9	15,6	22,5	23,8	42,9	23,4	24,6	44,3
	10	2,31	4,77	7,81	11,3	16,5	17,5	24,9	26,7	47,7	25,8	27,6	49,2
	15	3,47	7,20	8,75	12,7	18,5	20,0	27,7	30,4	53,4	28,7	31,5	55,1
	20	4,62	9,58	9,47	13,8	19,8	22,0	29,6	33,3	57,7	30,6	34,4	59,5
	25	5,78	12,0	10,0	14,6	20,9	23,6	30,9	35,7	61,1	32,0	36,9	62,9
	30	6,94	14,4	10,5	15,2	21,7	25,0	31,9	37,7	63,8	32,9	38,8	65,6
	35	8,09	16,7	10,8	15,7	22,2	26,2	32,5	39,4	65,9	33,5	40,5	67,8
	40	9,25	18,0	11,1	16,2	22,6	27,2	32,8	40,8	67,7	33,8	41,9	69,6
	50	7,16	13,0	11,6	16,8	23,0	28,8	32,7	43,0	70,2	33,6	44,0	72,0
	60	5,52	9,84	11,8	17,1	23,0	30,1	31,9	44,4	71,7	32,6	45,3	73,4
14:1	61	12,3	21,0	13,4	20,9	28,2	33,2	38,4	47,1	81,2	41,5	50,6	87,3
	70	9,69	17,2	13,7	21,3	28,4	34,2	38,0	48,1	82,8	41,1	51,6	88,9
	80	7,53	13,9	14,0	21,5	28,3	35,1	37,2	48,9	83,9	40,1	52,3	90,1
	90	6,56	11,3	14,1	21,6	28,0	35,7	35,8	49,1	84,5	38,7	52,6	90,6
	100	5,59	9,69	14,2	21,6	27,4	36,1	34,0	49,0	84,6	36,7	52,4	93,2
	110	4,77	8,50	14,3	21,4	26,6	36,3	31,8	48,6	84,1	34,4	51,9	93,2
9:1	111	8,95	15,6	15,0	23,4	31,1	38,6	39,8	52,5	94,9	41,1	54,0	97,5
	120	7,83	13,6	15,1	23,4	30,6	38,8	38,2	52,2	94,9	39,5	53,6	97,4
	130	6,86	11,9	15,1	23,3	29,9	38,8	36,2	51,6	94,6	37,4	52,9	97,1
	140	6,11	10,6	15,2	23,1	29,0	38,7	33,9	50,6	93,9	35,1	51,9	96,3
	150	5,52	9,62	15,1	22,8	28,0	38,4	31,3	49,4	92,9	32,3	50,6	95,2
	160	4,96	8,72	15,1	22,4	26,8	38,1	28,3	47,9	91,6	29,3	49,1	93,9
	170	4,59	8,05	14,9	21,9	25,4	37,5	25,0	46,2	90,0	25,9	47,2	93,2
5:1	171	15,4	21,4	26,9	42,2	55,8	65,7	81,9	100	171	84,2	102	176
	180	14,7	20,5	27,2	42,5	56,0	66,6	81,9	101	173	84,2	103	177
	210	13,3	18,1	27,8	43,5	56,5	69,0	81,2	103	177	83,2	106	181
	240	12,3	16,3	28,3	44,1	56,4	70,8	79,5	105	179	81,2	107	183
	260	11,2	15,2	28,5	44,3	56,1	71,8	77,7	106	180	79,3	108	184
	280	10,4	14,5	28,6	44,4	55,5	72,6	75,6	106	181	77,0	108	184
	300	9,92	13,7	28,6	44,4	54,8	73,2	73,2	106	181	74,2	107	184

★ For vertical applications, multiply basic thermal ratings by 0,8. Basic thermal ratings listed are for an ambient temperature of 25°C (77°F) from sea level to 750 m (2500 ft.). Application adjusted thermal ratings must be calculated using the environmental factors before comparing to the required load. For cooling beyond the range of electric fan, refer to the Factory for the selection of external pump and cooler assemblies.

Basic Thermal Ratings ★ – kW

Nominal Ratio	Output Shaft rpm	DRIVE SIZE											
		5407			5415			5507			5608		
		Auxiliary Cooling			Auxiliary Cooling			Auxiliary Cooling			Auxiliary Cooling		
		None	Shaft Fan	Electric Fan	None	Shaft Fan	Electric Fan	None	Shaft Fan	Electric Fan	None	Shaft Fan	Electric Fan
25:1	5	24,6	26,5	49,8	29,6	32,0	63,7	41,9	45,5	90,8	58,8	64,6	128
	7	27,0	29,8	54,9	32,5	36,0	70,3	46,0	51,2	100	64,2	72,5	141
	10	29,6	33,8	60,8	35,7	40,8	77,8	50,3	58,0	111	69,8	82,1	155
	15	32,6	39,0	68,0	39,1	47,0	86,9	54,7	66,7	124	75,2	94,3	172
	20	34,5	43,2	73,1	41,1	51,8	93,4	57,0	73,4	133	77,2	103	184
	25	35,6	46,7	76,9	42,1	55,8	98,2	57,8	78,6	139	76,8	110	191
	30	36,2	49,6	79,9	42,4	59,0	102	57,4	82,8	143	74,4	115	196
	35	36,3	52,1	82,1	42,0	61,7	104	55,9	86,0	146	70,2	119	199
	40	36,0	54,3	83,8	41,1	63,8	106	53,5	93,2	148	64,5	121	199
	50	34,4	57,7	85,8	37,6	66,8	108	46,0	93,2	149	48,2	122	195
	60	31,4	60,0	86,2	32,2	68,2	108	35,3	93,2	146	25,2	118	186
14:1	61	40,5	60,1	98,5	49,2	75,4	138	57,7	100	188	53,1	115	220
	70	38,6	61,5	99,4	45,0	75,6	138	47,9	98,1	185	34,0	108	213
	80	37,3	62,4	100	38,9	74,7	137	34,2	93,6	180	5,84	97,5	200
	90	32,2	62,6	98,8	31,5	74,6	135	17,2	87,2	172	0,00	83,2	184
	100	27,8	62,3	97,2	22,4	69,8	131	0,0	78,7	162	0,00	65,2	164
	110	22,7	61,3	95,0	11,5	65,8	126	0,0	68,1	150	0,00	42,8	140
5:1	111	96,6	125	214	106	138	254	144	195	358	184	261	478
	130	96,8	130	220	105	143	260	141	201	366	175	268	485
	150	95,8	135	225	103	147	265	135	206	371	161	270	488
	171	93,7	139	228	98,6	150	269	126	208	373	143	270	486
	180	92,4	140	229	96,5	151	269	122	209	373	134	269	484
	210	86,9	143	230	87,7	153	270	104	208	370	97,3	260	470
	240	79,6	145	230	76,2	152	268	81,0	203	362	50,5	245	450
	260	73,6	145	228	67,0	150	265	62,9	198	355	10,4	232	432
	280	66,8	145	226	56,5	148	261	42,3	191	345	0,0	216	411
	300	59,2	144	222	44,8	145	256	17,9	183	334	0,0	197	387

★ See footnote on Page 21.

Engineering Data

Minimum High Speed Shaft Sheave Diameters

Minimum high speed shaft sheave pitch diameters listed in the Power & Torque Ratings and the Quick Selection Tables are for V-belt drives with the load applied one shaft diameter from the seal cage or from the fan guard, if equipped with a shaft cooling fan. For minimum sheave diameters for loads applied at a greater distance, multiply the published minimum sheave diameter by the load location factor from Table 7 for the "distance" required. When using chains or timing belts, multiply minimum sheave diameters by 0,66.

Driven Shaft Tolerances

Driven shaft diameters shall be within h10 tolerances for turned and polished round bars. Driven shaft keys and keyways shall be in accordance with ISO/R773 and DIN 6885 sheet 1 with a N9 tolerance zone for the driven shaft keyway width.

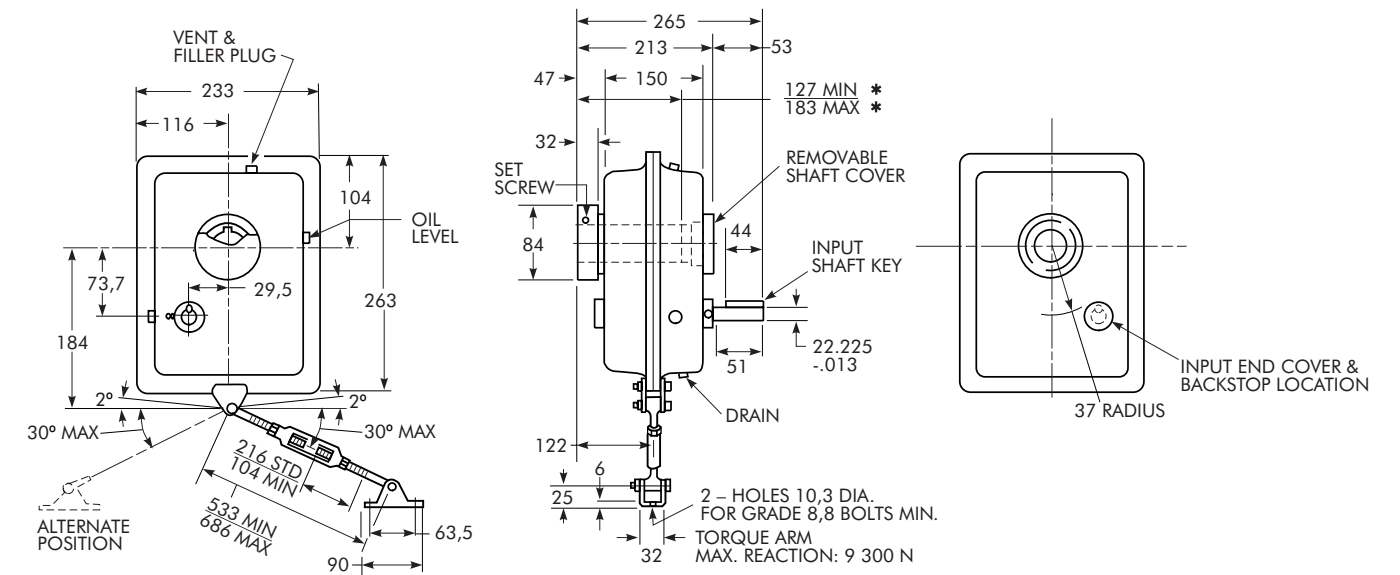
Table 7 — High Speed Shaft Load Location Factors

Distance D mm ★	DRIVE SIZE										
	5107	5115	5203	5207	5215	5307	5315	5407	5415	5507	5608
10	0,92										
15	0,96	0,93									
20	0,99	0,96	0,93								
25	1,05	0,98	0,96	0,93							
30	1,14	1,03	0,99	0,96	0,94						
35	1,23	1,11	1,04	0,98	0,96	0,94	0,93				
40	1,31	1,18	1,10	1,02	0,98	0,96	0,95	0,93	0,94		
45	1,40	1,26	1,17	1,07	1,00	0,98	0,96	0,95	0,96	0,94	
50	1,49	1,34	1,23	1,13	1,05	1,00	0,98	0,96	0,97	0,96	0,94
55	...	1,41	1,29	1,18	1,10	1,04	1,00	0,98	0,99	0,97	0,95
60	...	1,49	1,36	1,23	1,15	1,09	1,04	1,00	1,00	0,99	0,96
65	...	...	1,42	1,28	1,20	1,13	1,07	1,04	1,04	1,00	0,97
70	...	...	1,48	1,34	1,25	1,17	1,11	1,09	1,08	1,04	0,99
75	...	...	1,55	1,39	1,30	1,22	1,15	1,13	1,11	1,07	1,00
80	...	...	1,61	1,44	1,35	1,26	1,18	1,17	1,15	1,11	1,03
85	...	...	...	...	1,40	1,30	1,22	1,22	1,19	1,14	1,07
90	...	...	...	...	1,45	1,35	1,26	1,26	1,23	1,18	1,10
95	...	...	...	...	1,49	1,39	1,29	1,30	1,27	1,21	1,13
100	...	...	...	...	1,54	1,43	1,33	1,35	1,31	1,25	1,17
105	...	...	...	...	1,59	1,47	1,36	1,39	1,35	1,28	1,20
110	...	...	...	...	1,64	1,52	1,40	1,43	1,38	1,32	1,23
115	...	...	...	...	...	1,56	1,44	1,48	1,42	1,36	1,27
120	...	...	...	...	...	1,60	1,47	1,52	1,46	1,39	1,30
125	...	...	...	...	...	...	...	1,56	1,50	1,43	1,33
130	...	...	...	...	...	...	...	1,61	1,54	1,46	1,36
135	...	...	...	...	...	...	...	1,65	1,58	1,50	1,40
140	...	...	...	...	...	...	...	1,69	1,61	1,53	1,43
145	...	...	...	...	...	...	...	1,74	1,65	1,57	1,46
150	...	...	...	...	...	...	...	1,78	1,69	1,60	1,50
155	...	...	...	...	...	...	...	1,82	1,73	1,64	1,53
160	...	...	...	...	...	...	...	1,87	1,77	1,68	1,56
165	...	...	...	...	...	...	...	...	1,81	1,71	1,60
170	...	...	...	...	...	...	...	...	1,84	1,75	1,63
175	...	...	...	...	...	...	...	...	...	1,78	1,66
180	...	...	...	...	...	...	...	...	...	1,82	1,70
185	...	...	...	...	...	...	...	...	...	...	1,73
190	...	...	...	...	...	...	...	...	...	...	1,76
195	...	...	...	...	...	...	...	...	...	...	1,80
200	...	...	...	...	...	...	...	...	...	...	1,83
205	...	...	...	...	...	...	...	...	...	...	1,86
210	...	...	...	...	...	...	...	...	...	...	1,90
215	...	...	...	...	...	...	...	...	...	...	1,93
220	...	...	...	...	...	...	...	...	...	...	1,96

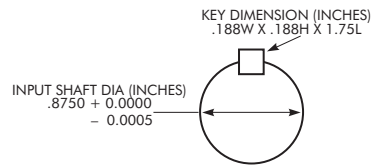
★ Distance D is in millimeters from the input face of the high speed seal cage. Interpolate for L_f factors at intermediate distances. For example, L_f is 1,28 for Size M4407 when distance is 92,5 millimeters. Consult the Factory for distances greater than those shown.

Size 5107/Dimensions – Millimeters

Shaft Mounted (JR) Drive ★

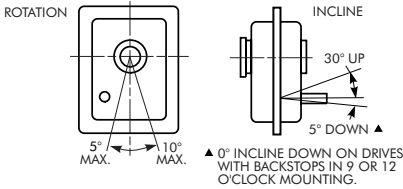


High Speed Shaft Details



Angular Limits For Horizontal Mounting

(All Clock Positions)
Refer to Factory for lubrication analysis of all inclined drives exceeding the maximum specified below. Also for drives with combined incline down and rotation.



BASIC DRIVE SIZE †	Part Number	Exact Ratio	Max Output rpm	Wt kg
5107J05A	0793781	5.077	300	11
5107J09A	0793782	9.462	170	14
5107J14A	0793783	14.43	110	14
5107J25A	0793784	25.81	60	14

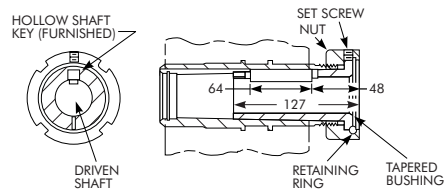
* MIN = Minimum required projection of driven shaft.
MAX = Maximum projection of driven shaft which allows for use of thrust plate.

† JR = Basic Drive + Bushing + Torque Arm

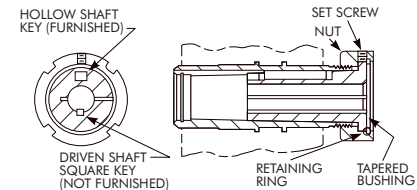
★ Dimensions are for reference only and subject to change without notice unless certified.

TA Taper Bushings

Style No. 1 — Thin-wall bushing



Style No. 2 — Thick-wall bushing



BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway • W x D x L	Wt kg
BUS107J-25 mm	0775900	2	8 x 4 x 70	1.0
BUS107J-30 mm	0775901	2	8 x 4 x 56	0.8
BUS107J-32 mm	0775902	1	10 x 5 x 74	0.7
BUS107J-35 mm	0775768	1	10 x 5 x 74	0.6

‡ Consists of bushing, drive key, nut, retaining ring and setscrew.

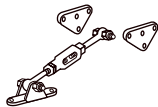
• Check strength of driven shaft and unfurnished key. Keyway width and depth per ISO/R773.

NOTE: See alternate TA Taper Bushings on Page 14.

Accessories

Torque Arm

TA5107J
PN 0785261
Wt. 2 kg



Backstop

BS5107J05/09/14
PN 0795654
BS5107J25
PN 0795655
Wt. 0,5 kg



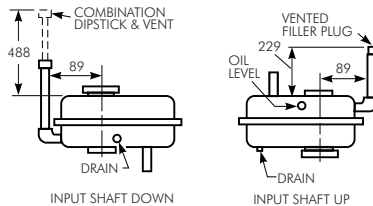
Vertical Breather

VB5107J-HSS Up
PN 0738540
VB5107J-HSS Down
PN 0738553
Wt. 3 kg



Vertical Drives

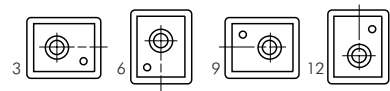
Refer to Factory for lubrication analysis of all vertical drives exceeding ±1° from true vertical.



Size 5107/Dimensions – Millimeters

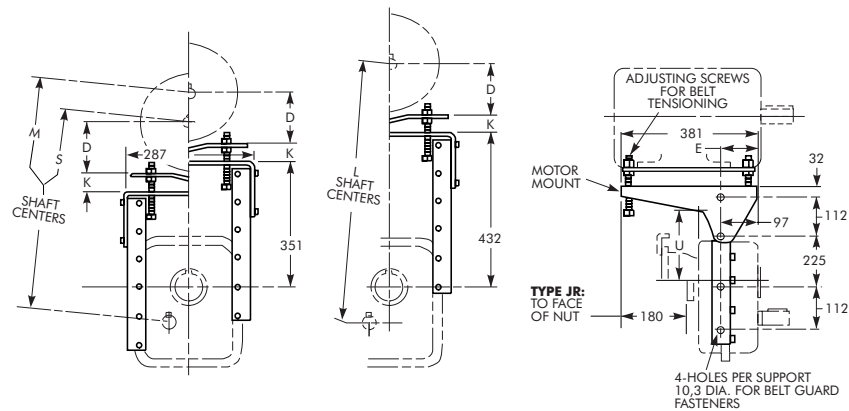
Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



Motor Mounts

Standard Horizontal Drive Assembly – (6 o'clock) ♦ (3-9-12 o'clock optional)



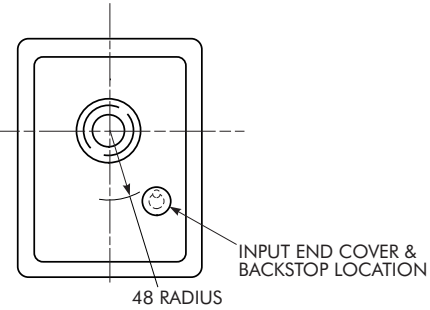
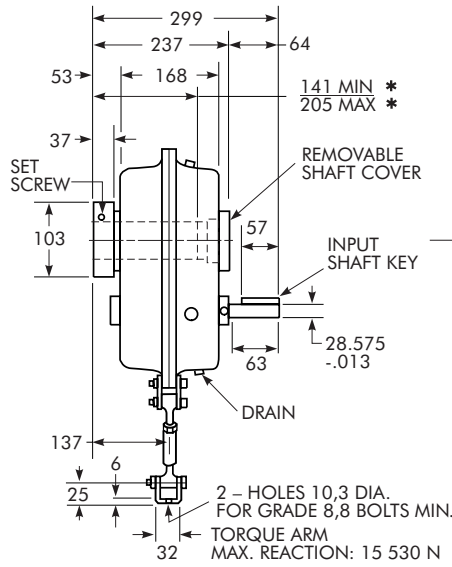
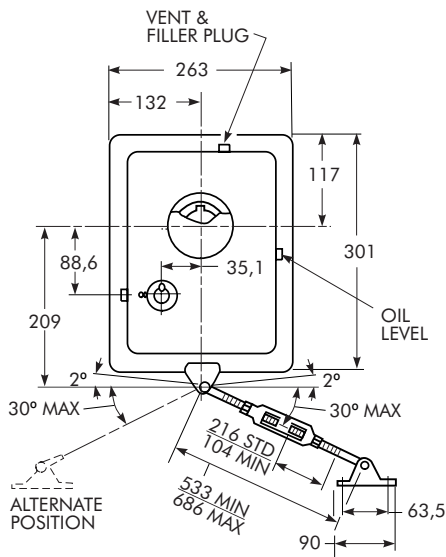
Frame	80	90	100	112	132
D	80	90	100	112	132
E	44	50	58,5	65,5	84,5
Shaft Centers	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
(S) Short	...	...	...	...	...
(M) Medium	521-605	532-615	541-625	553-637	573-657
(L) Long	602-686	613-696	623-706	634-718	655-738

MOTOR MOUNT SIZE ●	Part Number	IEC Frame		K		U		Motor Mount Wt-kg
		Min	Max	Min	Max	Med	Long	
MM5107J-M1	0787377	80	132	16	100	268	350	18

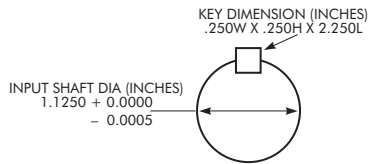
- Dimensions are for reference only and are subject to change without notice unless certified. When determining belt length for minimum shaft centers, follow the belt manufacturer's installation allowance recommendations.
- ♦ Refer to Factory for alternate horizontal drive assemblies (high speed shaft over low speed).

Size 5115/Dimension – Millimeters

Shaft Mounted (JR) Drive ★



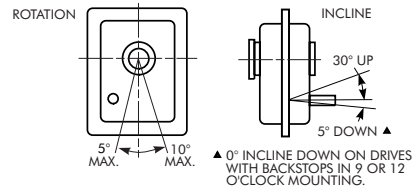
High Speed Shaft Details



Angular Limits For Horizontal Mounting

(All Clock Positions)

Refer to Factory for lubrication analysis of all inclined drives exceeding the maximum specified below. Also for drives with combined incline down and rotation.



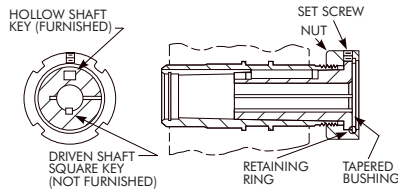
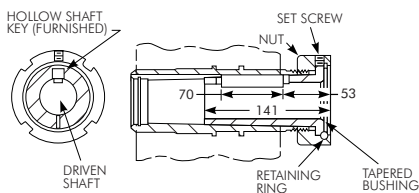
BASIC DRIVE SIZE †	Part Number	Exact Ratio	Max Output rpm	Wt kg
5115J05A	0793858	5,053	300	18
5115J09A	0793859	9,357	170	20
5115J14A	0793860	13,95	110	20
5115J25A	0793861	24,87	60	20

★ * † (See footnotes on Page 24.)

TA Taper Bushings

Style No. 1 — Thin-wall bushing

Style No. 2 — Thick-wall bushing



BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway ● W x D x L	Wt kg
BU5115J-30 mm	0775903	2	8 x 4 x 110	2,0
BU5115J-32 mm	0775904	2	10 x 5 x 110	2,0
BU5115J-35 mm	0775905	2	10 x 5 x 100	1,7
BU5115J-38 mm	0775906	2	10 x 5 x 90	1,5
BU5115J-40 mm	0775907	1	12 x 5 x 82	1,5
BU5115J-42 mm	0775908	1	12 x 5 x 82	1,3
BU5115J-45 mm	0775909	1	14 x 5,5 x 84	1,0

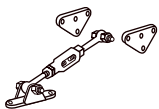
‡ ● (See footnotes on Page 24.)

NOTE: See alternate TA Taper Bushings on Page 14.

Accessories

Torque Arm

TA5115J
PN 0785261
Wt. 2 kg



Backstop

BS5115J05/09/14
PN 0793995
BS5115J25
PN 0795658
Wt. 0,5 kg



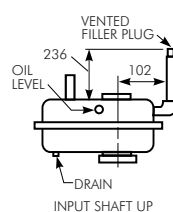
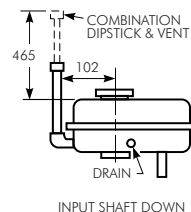
Vertical Breather

VB5115J-HSS Up
PN 0738540
VB5115J-HSS Down
PN 0738563
Wt. 3 kg



Vertical Drives

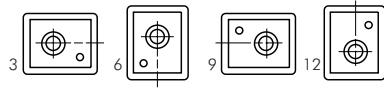
Refer to Factory for lubrication analysis of all vertical drives exceeding ±1° from true vertical.



Size 5115/Dimensions – Millimeters

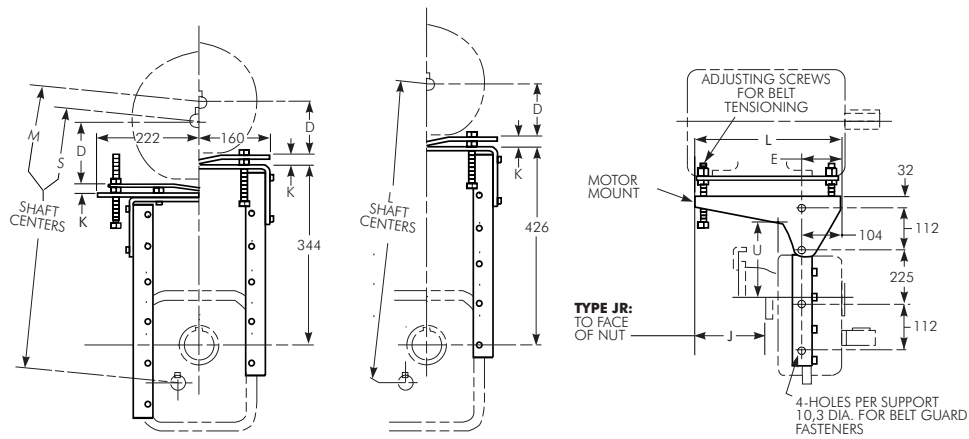
Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



Motor Mounts

Standard Horizontal Drive Assembly – (6 o'clock) ♦ (3-9-12 o'clock optional)



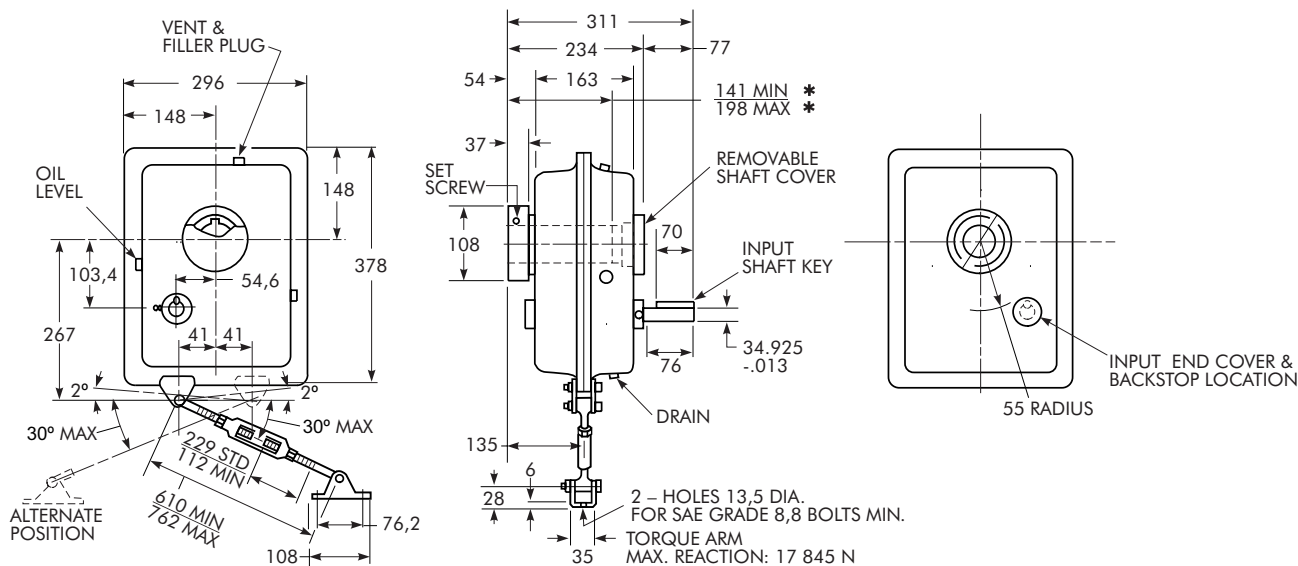
Frame	80	90	100	112	132	160
D	80	90	100	112	132	160
E	44	50	58,5	65,5	84,5	110,5
Shaft Centers	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
(S) Short	...	...	...	...	...	...
(M) Medium	531-614	541-624	551-634	563-646	583-666	626-721
(L) Long	612-695	622-705	632-715	644-727	664-747	707-802

MOTOR MOUNT SIZE ●	Part Number	IEC Frame		J	K		L	U			Motor Mount Wt.-kg
		Min	Max		Min	Max		Short	Med	Long	
MM5115J-M1	0787378	80	132	158	16	100	381	...	272	354	19
MM5115J-M2	0787379	160	160	297	32	127	521	...	272	354	37

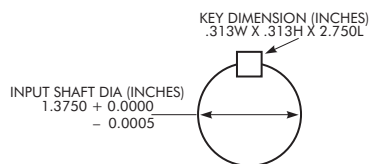
● ♦ (See footnotes on Page 25.)

Size 5203/Dimensions – Millimeters

Shaft Mounted (JR) Drive ★

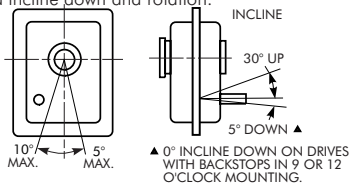


High Speed Shaft Details



Angular Limits For Horizontal Mounting

(All Clock Positions)
Refer to Factory for lubrication analysis of all inclined drives exceeding the maximum specified below. Also for drives with combined incline down and rotation.

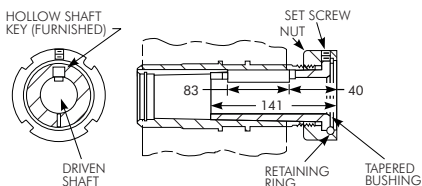


BASIC DRIVE SIZE †	Part Number	Exact Ratio	Max Output rpm	Wt kg
5203J05A	0794374	4,923	300	50
5203J09A	0794375	8,908	170	52
5203J14A	0794376	14,03	110	52
5203J25A	0794377	26,15	60	52

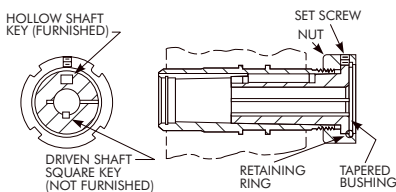
★ ★ † (See footnotes on Page 24.)

TA Taper Bushings

Style No. 1 — Thin-wall bushing



Style No. 2 — Thick-wall bushing



BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway • W x D x L	Wt kg
BU5203J-35 mm	0775910	2	10 x 5 x 140	2,4
BU5203J-38 mm	0775911	2	10 x 5 x 125	2,2
BU5203J-40 mm	0775912	2	12 x 5 x 125	2,0
BU5203J-42 mm	0775913	2	12 x 5 x 125	1,9
BU5203J-45 mm	0775914	2	14 x 5,5 x 100	1,4
BU5203J-50 mm	0775432	1	14 x 5,5 x 97	1,4
BU5203J-55 mm	0775915	1	16 x 6 x 99	1,0

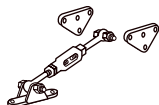
‡ • (See footnotes on Page 24.)

NOTE: See alternate TA Taper Bushings on Page 14.

Accessories

Torque Arm

TA5203J
PN 0785263
Wt. 3 kg



Backstop

BS5203J05/09/14/25
PN 0785596
Wt. 0,5 kg



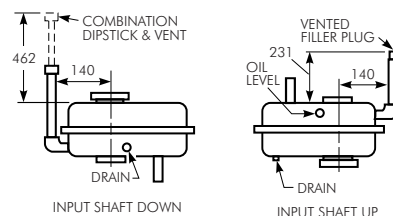
Vertical Breather

VB5203J-HSS Up
PN 0738540
VB5203J-HSS Down
PN 0738541
Wt. 2,3 kg



Vertical Drives

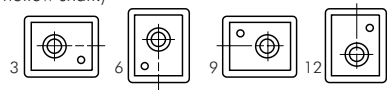
Refer to Factory for lubrication analysis of all vertical drives exceeding $\pm 1^\circ$ from true vertical.



Size 5203/Dimensions – Millimeters

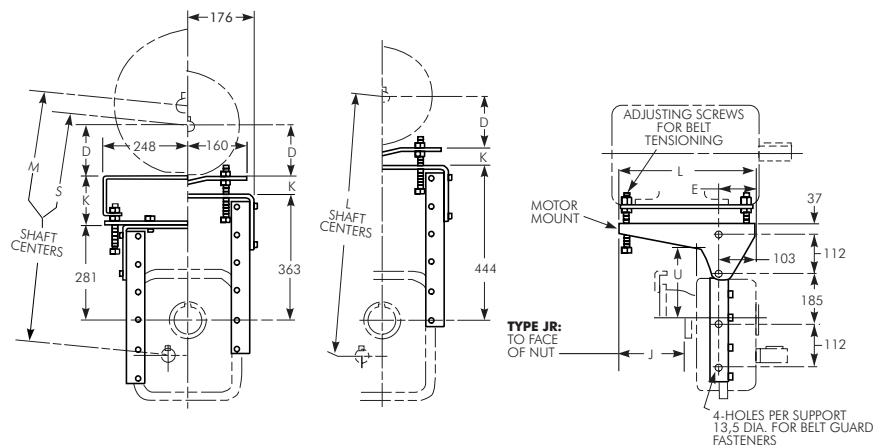
Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



Motor Mounts

Standard Horizontal Drive Assembly – (6 o'clock) ♦ (3-9-12 o'clock optional)



Frame	80	90	100	112	132	160	180
D	80	90	100	112	132	160	180
E	44	50	58,5	65,5	84,5	82,5	97,5
Shaft Centers	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
(S) Short	484-567	494-577	504-587	516-599	536-619	679-770	699-790
(M) Medium	565-648	575-658	585-668	597-680	617-700	760-851	780-871
(L) Long	646-729	656-739	666-749	678-761	698-781	842-932	861-952

MOTOR MOUNT SIZE ●	Part Number	IEC Frame		J	K		L	U			Motor Mount Wt-kg
		Min	Max		Min	Max		Short	Med	Long	
MM5203J-M1	0787380	80	132	158	16	100	381	202	283	364	21
MM5203J-M2	0787381	160	180	295	132	223	533	202	283	364	41

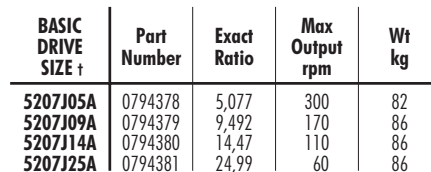
♦ ♦ (See footnotes on Page 25.)

Shaft Mounted (JR) Drive ★



(All Clock Positions)

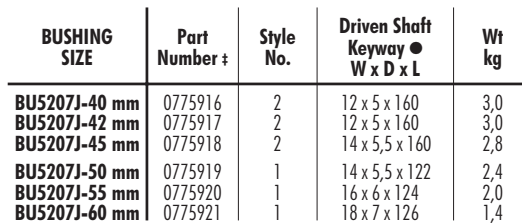
Refer to Factory for lubrication analysis of all inclined drives exceeding the maximum specified below. Also for drives with combined incline down and rotation.



★ * † (See footnotes on Page 24.)

TA Taper Bushings

Style No. 1 — Thin-wall bushing



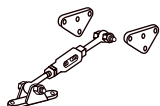
± ● (See footnotes on Page 24.)

NOTE: See alternate TA Taper Bushings on Page 14.

Accessories

Torque Arm

TA5207J
PN 0785265
Wt. 3 kg



Backstop

BS5207J05/09/14/25
PN 0783905
Wt. 1 kg



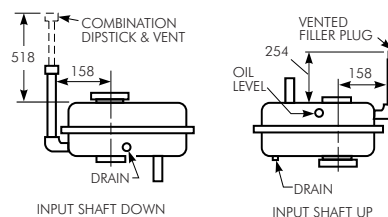
Vertical Breather

VB5207J-HSS Up
PN 0738569
VB5207J-HSS Down
PN 0738570
Wt. 3 kg



Vertical Drives

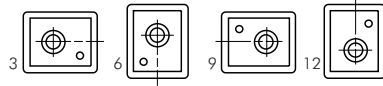
Refer to Factory for lubrication analysis of all vertical drives exceeding $\pm 1^\circ$ from true vertical.



Size 5207/Dimensions – Millimeters

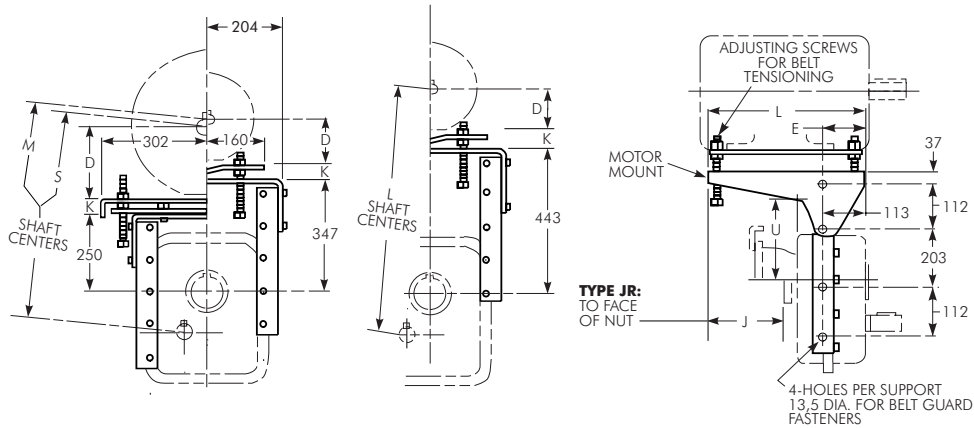
Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



Motor Mounts

Standard Horizontal Drive Assembly – (6 o'clock) ♦ (3-9-12 o'clock optional)



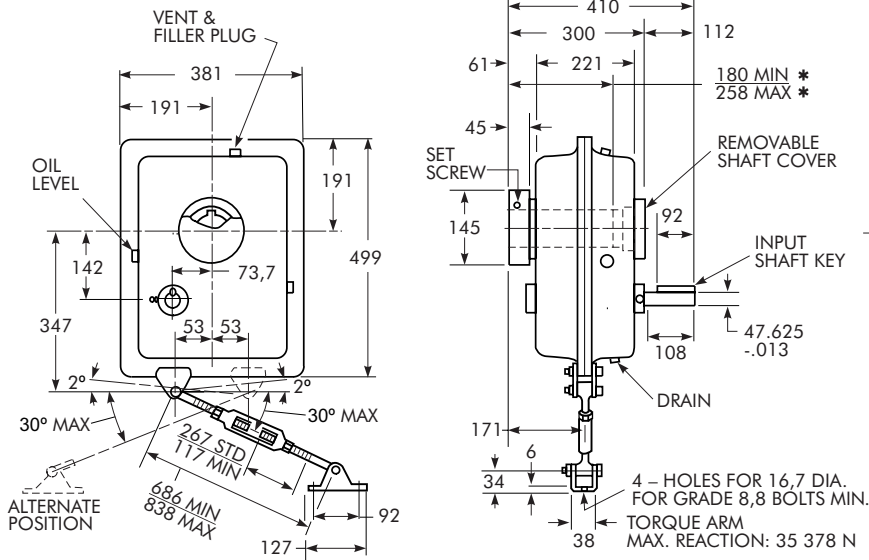
Frame	80	90	100	112	132	160	180	200
D	80	90	100	112	132	160	180	200
E	44	50	58,5	65,5	84,5	82,5	97,5	107,6
Shaft Centers	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
(S) Short	476-558	486-568	496-578	507-590	527-610	577-684	597-704	616-724
(M) Medium	571-654	581-664	591-674	603-686	623-706	673-780	693-800	712-820
(L) Long	667-750	677-760	687-770	699-782	719-802	769-876	789-896	808-916

MOTOR MOUNT SIZE ●	Part Number	IEC Frame		J	K		L	U			Motor Mount Wt.-kg
		Min	Max		Min	Max		Short	Med	Long	
MM5207J-M1	0787382	80	132	133	16	100	381	176	272	369	23
MM5207J-M2	0787383	160	200	397	38	146	660	176	272	369	45

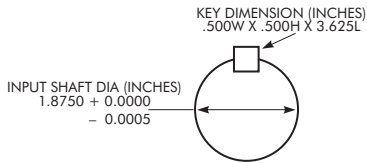
● ♦ (See footnotes on Page 25.)

Size 5215/Dimensions – Millimeters

Shaft Mounted (JR) Drive ★

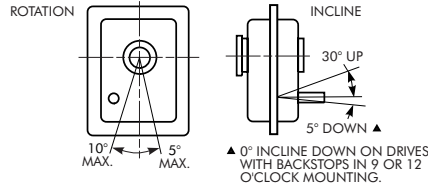


High Speed Shaft Details



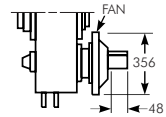
Angular Limits For horizontal Mounting

(All Clock Positions)
Refer to Factory for lubrication analysis of all inclined drives exceeding the maximum specified below. Also for drives with combined incline down and rotation.



Shaft Fan Kit

SFK5215J
PN 0785611
Wt. 2 kg

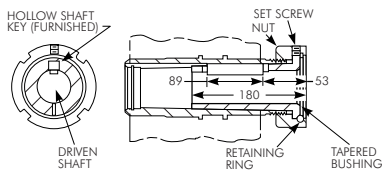


BASIC DRIVE SIZE †	Part Number	Exact Ratio	Max Output rpm	Wt kg
5215J05A	0794382	4,923	300	111
5215J09A	0794383	8,997	170	118
5215J14A	0794384	13,60	110	118
5215J25A	0794385	24,94	60	118

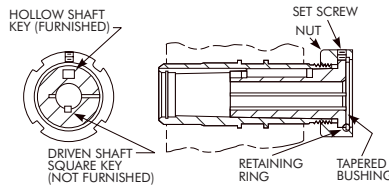
★ * † (See footnotes on Page 24.)

TA Taper Bushings

Style No. 1 — Thin-wall bushing



Style No. 2 — Thick-wall bushing



BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway ● W x D x L	Wt kg
BUS215J-50 mm	0775922	2	14 x 5,5 x 180	5,0
BUS215J-55 mm	0775923	2	16 x 6 x 180	4,6
BUS215J-60 mm	0775924	2	18 x 7 x 180	4,6
BUS215J-65 mm	0775925	1	18 x 7 x 107	3,4
BUS215J-70 mm	0775926	1	20 x 7,5 x 109	2,7
BUS215J-75 mm	6720645	1	20 x 7,5 x 107	2,7

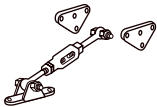
‡ ● (See footnotes on Page 24.)

NOTE: See alternate TA Taper Bushings on Page 14.

Accessories

Torque Arm

TA5215J
PN 0785267
Wt. 5 kg



Backstop

BS5215J05/09/14/25
PN 0785610
Wt. 1,5 kg



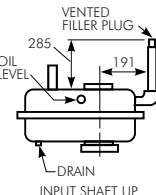
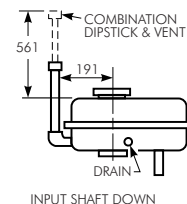
Vertical Breather

VB5215J-HSS Up
PN 0786774
VB5215J-HSS Down
PN 0738577
Wt. 3 kg



Vertical Drives

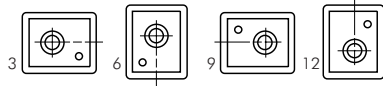
Refer to Factory for lubrication analysis of all vertical drives exceeding $\pm 1^\circ$ from true vertical.



Size 5215/Dimensions – Millimeters

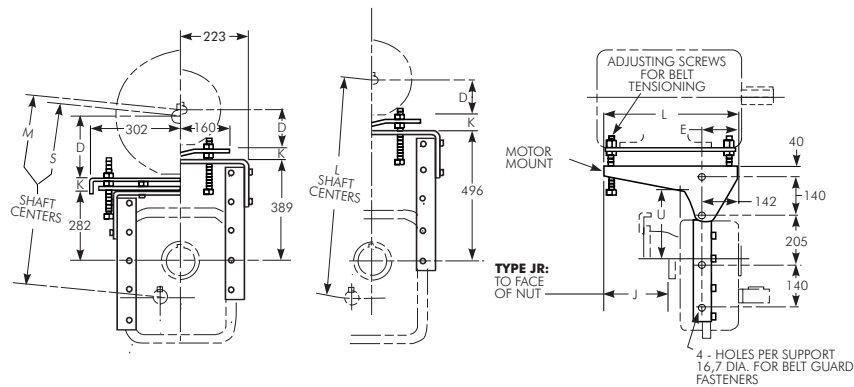
Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



Motor Mounts

Standard Horizontal Drive Assembly – (6 o'clock) ♦ (3-9-12 o'clock optional)



Frame ♦	80	90	100	112	132	160	180	200	225
D	80	90	100	112	132	160	180	200	225
E	44	50	58,5	65,5	84,5	82,5	97,5	107,6	127,6
Shaft Centers	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
(S) Short	526-608	535-618	545-628	557-640	577-660	627-734	647-754	666-774	691-799
(M) Medium	631-714	641-724	651-734	663-746	783-766	733-840	753-860	773-880	798-905
(L) Long	738-820	748-831	757-840	769-852	789-872	839-947	859-966	879-987	904-1 011

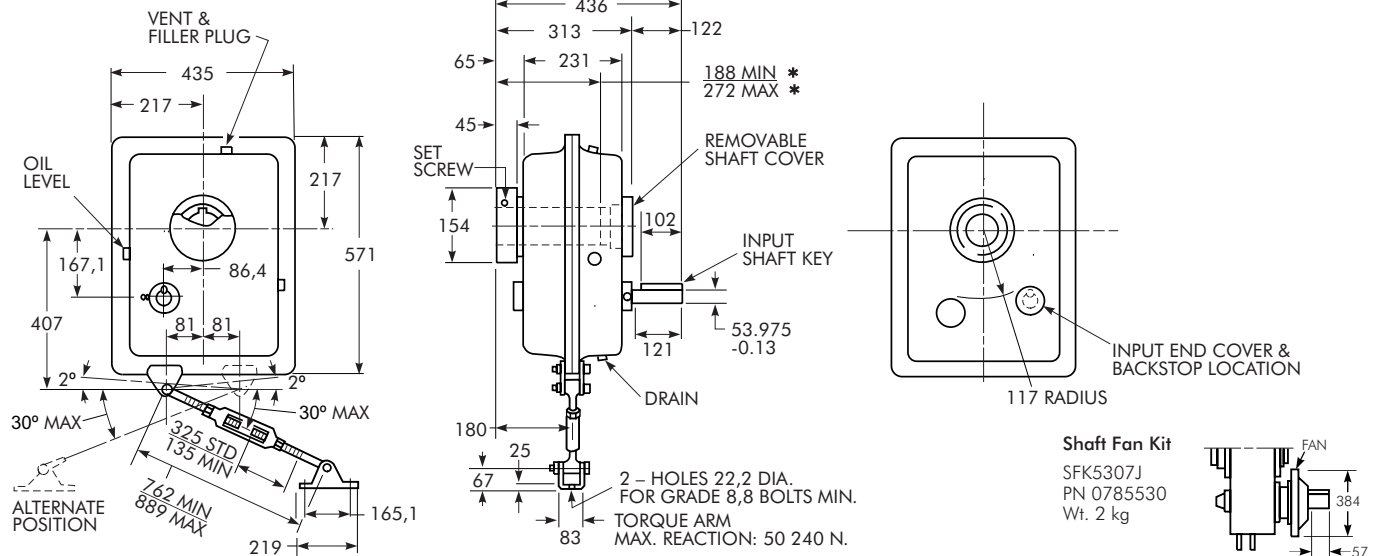
MOTOR MOUNT SIZE ●	Part Number	IEC Frame		J	K		L	U			Motor Mount Wt-kg
		Min	Max		Min	Max		Short	Med	Long	
MM5215J-M1	0787384	80	132	93	16	100	381	213	320	427	28
MM5215J-M2	0787385	160	225	356	38	146	660	213	320	427	57

● ♦ (See footnotes on Page 25.)

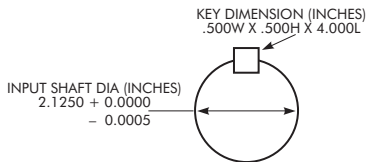
♣ Shaft driven fans are not compatible with motor mounts for frames 80 thru 132.

Size 5307/Dimensions – Millimeters

Shaft Mounted (JR) Drive ★

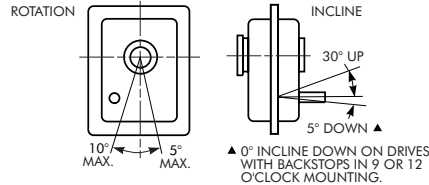


High Speed Shaft Details



Angular Limits For Horizontal Mounting

(All Clock Positions)
Refer to Factory for lubrication analysis of all inclined drives exceeding the maximum specified below. Also for drives with combined incline down and rotation.

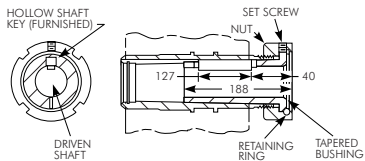


BASIC DRIVE SIZE †	Part Number	Exact Ratio	Max Output rpm	Wt kg
5307J05A	0794386	4,857	300	161
5307J09A	0794387	9,131	170	170
5307J14A	0794388	14,03	110	170
5307J25A	0794389	25,26	60	170

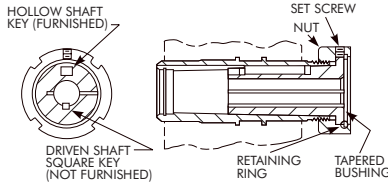
★ * † (See footnotes on Page 24.)

TA Taper Bushings

Style No. 1 — Thin-wall bushing



Style No. 2 — Thick-wall bushing



BUSHING SIZE	Part Number †	Style No.	Driven Shaft Keyway • W x D x L	Wt kg
BU5307J-60 mm	0775927	2	18 x 7,0 x 180	7,0
BU5307J-65 mm	0775928	2	18 x 7,0 x 180	6,4
BU5307J-70 mm	0775779	1	20 x 7,5 x 147	5,7
BU5307J-75 mm	0775929	1	20 x 7,5 x 147	5,0
BU5307J-80 mm	0775433	1	22 x 9,0 x 149	5,0
BU5307J-85 mm	0775930	1	22 x 9,0 x 149	3,3

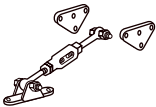
† • (See footnotes on Page 24.)

NOTE: See alternate TA Taper Bushings on Page 14.

Accessories

Torque Arm

TA5307J
PN 0785269
Wt. 11 kg



Backstop ■

BS5307J09/14/25
PN 0785529

Wt. 1,3 kg
■ Not available in 5:1 ratio.



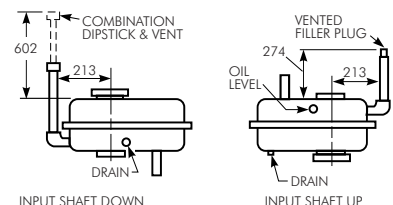
Vertical Breather

VB5307J-HSS Up
PN 0786774
VB5307J-HSS Down
PN 0738470
Wt. 3 kg



Vertical Drives

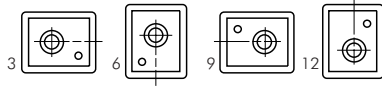
Refer to Factory for lubrication analysis of all vertical drives exceeding $\pm 1^\circ$ from true vertical.



Size 5307/Dimensions – Millimeters

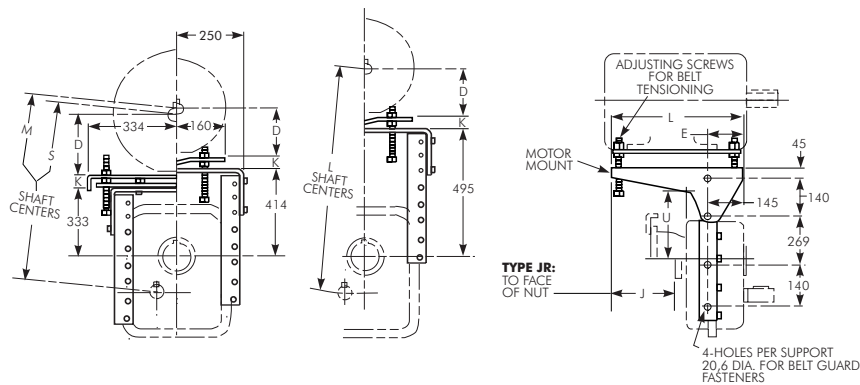
Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



Motor Mounts

Standard Horizontal Drive Assembly – (6 o'clock) ♦ (3-9-12 o'clock optional)



Frame ♦	80	90	100	112	132	160	180	200	225	250
D	80	90	100	112	132	160	180	200	225	250
E	44	50	58,5	65,5	84,5	95,5	110,5	120,5	140,5	155,5
Shaft Centers	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
(S) Short	602-685	612-695	622-705	634-717	654-736	703-811	723-830	743-850	768-875	793-900
(M) Medium	683-766	693-775	703-785	715-797	734-817	784-891	804-911	824-931	849-956	874-981
(L) Long	764-846	773-856	783-866	795-878	815-898	865-972	885-992	904-1 012	929-1 037	954-1 062

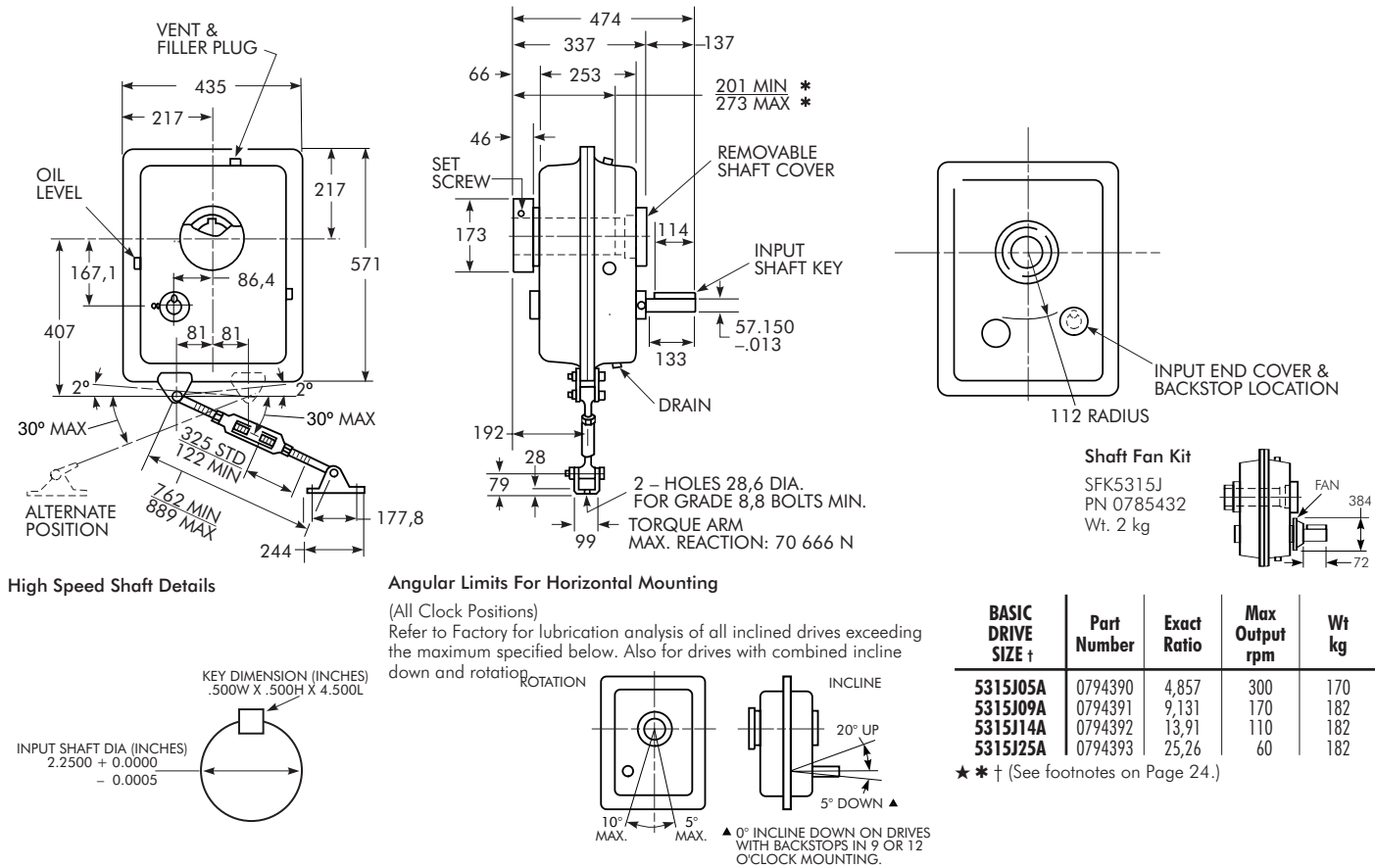
MOTOR MOUNT SIZE •	Part Number	IEC Frame		J	K		L	U			Motor Mount Wt.-kg
		Min	Max		Min	Max		Short	Med	Long	
MM5307J-M1	0787386	80	132	79	16	100	381	262	343	424	30
MM5307J-M2	0787387	160	250	342	38	146	648	262	343	424	64

♦ ♦ (See footnotes on Page 25.)

♣ (See footnote on Page 33.)

Size 5315/Dimensions – Millimeters

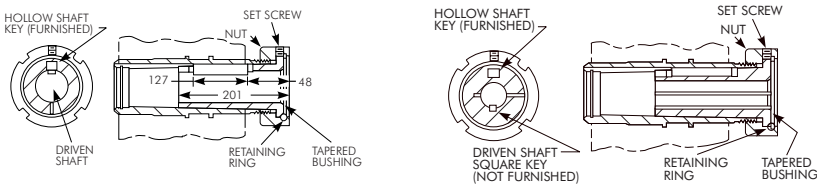
Shaft Mounted Drive ★



TA Taper Bushings

Style No. 1 — Thin-wall bushing

Style No. 2 — Thick-wall bushing



BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway • W x D x L	Wt kg
BU5315J-70 mm	0775931	2	20 x 7,5 x 200	10
BU5315J-75 mm	0775794	2	20 x 7,5 x 200	9
BU5315J-80 mm	0775932	2	22 x 9,0 x 200	8
BU5315J-85 mm	0775820	1	22 x 9,0 x 149	7
BU5315J-90 mm	0775933	1	25 x 9,0 x 152	6
BU5315J-95 mm	0775934	1	25 x 9,0 x 152	5
BU5315J-100 mm	0775935	1	28 x 10 x 155	4

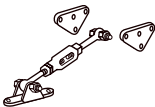
‡ • (See footnotes on Page 24.)

NOTE: See alternate TA Taper Bushings on Page 14.

Accessories

Torque Arm

TA5315J
PN 0785270
Wt. 17 kg



Backstop ■

BS5315J09/14/25
PN 0757183
Wt. 3 kg
■ Not available in 5:1 ratio.



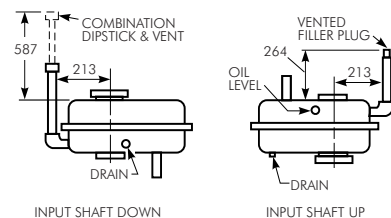
Vertical Breather

VB5315J-HSS Up
PN 0738471
VB5315J-HSS Down
PN 0738470
Wt. 3 kg



Vertical Drives

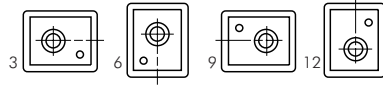
Refer to Factory for lubrication analysis of all vertical drives exceeding $\pm 1^\circ$ from true vertical.



Size 5315/Dimension – Millimeters

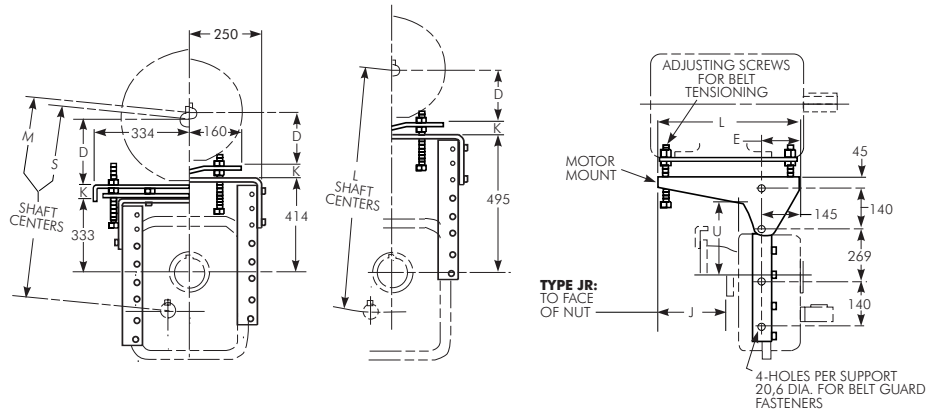
Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



Motor Mounts

Standard Horizontal Drive Assembly – (6 o'clock) ♦ (3-9-12 o'clock optional)



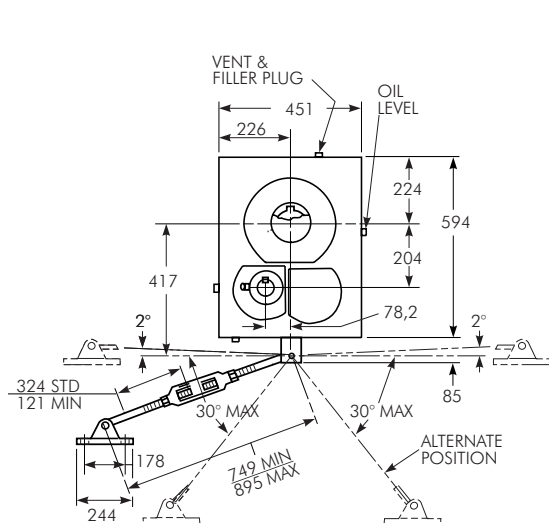
Frame ♦	80	90	100	112	132	160	180	200	225	250
D	80	90	100	112	132	160	180	200	225	250
E	44	50	58,5	65,5	84,5	95,5	110,5	120,5	140,5	155,5
Shaft Centers	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
(S) Short	602-685	612-695	622-705	634-717	654-736	703-811	723-830	743-850	768-875	793-900
(M) Medium	683-766	693-775	703-785	715-797	734-817	784-891	804-911	824-931	849-956	874-981
(L) Long	764-846	773-856	783-866	795-878	815-898	865-972	885-992	904-1 012	929-1 037	954-1 062

MOTOR MOUNT SIZE ♦	Part Number	IEC Frame		J	K		L	U			Motor Mount Wt-kg
		Min	Max		Min	Max		Short	Med	Long	
MM5315J-M1	0787386	80	132	67	16	100	381	277	359	440	30
MM5315J-M2	0787387	160	250	330	38	146	648	277	359	440	64

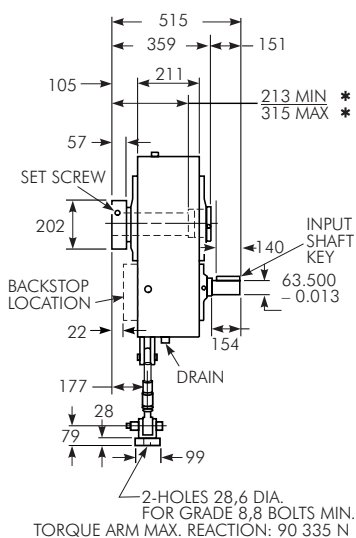
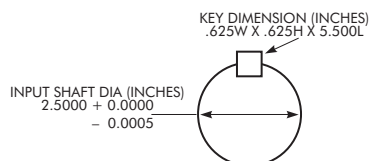
♦ ♦ (See footnotes on Page 25.)

♦ (See footnote on Page 33.)

Shaft Mounted (JR) Drive ★



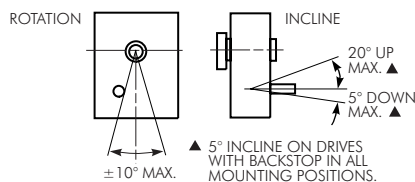
High Speed Shaft Details



Angular Limits For Horizontal Mounting

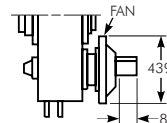
(All Clock Positions)

Refer to Factory for lubrication analysis of all inclined drives exceeding the maximum specified below.



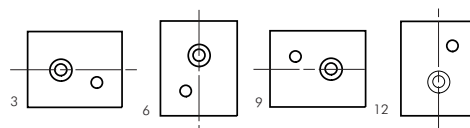
Shaft Fan Kit

SFK5407J
PN 0785773
Wt. 2 kg



Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



DRIVE SIZE †	Part Number	Exact Ratio	Max Output rpm	Wt kg
5407JR05A	0794400	4,938	300	261
5407JR14A	0794401	13,89	110	275
5407JR25A	0794402	25,04	60	275

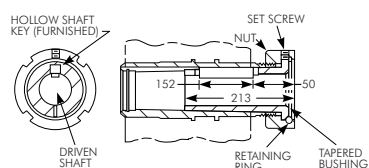
★ (See footnote on Page 24.)

* (See footnote on Page 24.)

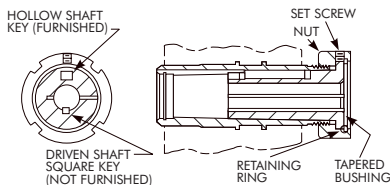
† JR = Drive (Includes Torque Arm) + Bushing.

TA Taper Bushings

Style No. 1 — Thin-wall bushing



Style No. 2 — Thick-wall bushing



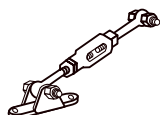
BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway • W x D x L	Wt kg
BU5407J-80 mm	0775936	2	22 x 9 x 220	12,5
BU5407J-85 mm	0775937	2	22 x 9 x 220	11,5
BU5407J-90 mm	0775938	2	25 x 9 x 220	10,5
BU5407J-95 mm	0775939	1	25 x 9 x 178	9
BU5407J-100 mm	0775940	1	28 x 10 x 181	8
BU5407J-110 mm	0775941	1	28 x 10 x 181	8

† ● (See footnotes on Page 24.)

NOTE: See alternate TA Taper Bushings on Page 14.

Torque Arm

TA5407J
PN 0785271
Wt. 16 kg



Backstop ■

BS5407J14/25
PN 0769170

Wt. 10 kg

■ Not available in 5:1 ratio.



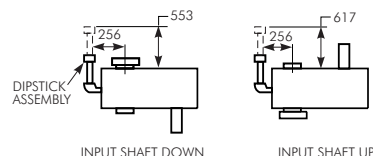
Vertical Breather

VB5407J-HSS Up W/O Fan
PN 0757208
VB5407J-HSS Down W/O Fan
PN 0757209
VB5407J-HSS Up With Fan
PN 0765839
VB5407J-HSS Down With Fan
PN 0765840
Wt. 3 kg



Vertical Drives

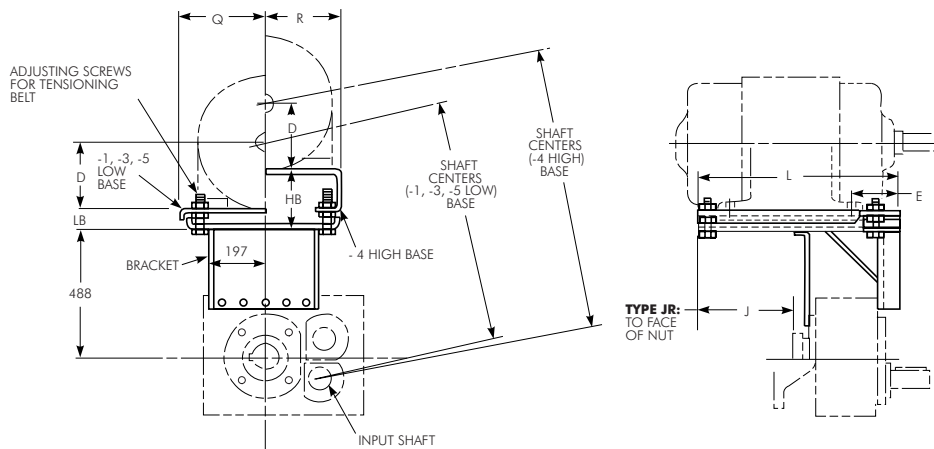
Refer to Factory for lubrication analysis of all vertical drives exceeding $\pm 1^\circ$ from true vertical.



Size 5407/Dimensions – Millimeter

Motor Mounts

Standard Horizontal Drive Assembly – 3 o'clock (A3)



Refer to Page 52 for minimum and maximum shaft centers for bottom and side mounting. The assemblies may also be rotated about the hollow shaft in 90° increments to position the input shaft in 3, 6, 9 and 12 o'clock positions, ±10° and mounted vertically.

A3

C3

D3

Factory

Frame	80	90	100	112	132	160	180	200	225	250	280	315
D	80	90	100	112	132	160	180	200	225	250	280	315
E	48,5	54,5	63	70	89	105	120	130	150	165	189	215
Shaft Centers ‡	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
-1 Low Base	703-796	712-806	722-816	734-827	753-847							
-3 Low Base	...	...	...	...	...	798-893	817-913	836-932	861-956	885-981		
-4 High Base	...	...	...	...	...	893-988	913-1 008	932-1 027	956-1 052	981-1 076		
-5 Low Base	...	...	...	...	...	...	...	...	...	...	945-1 035	979-1 069

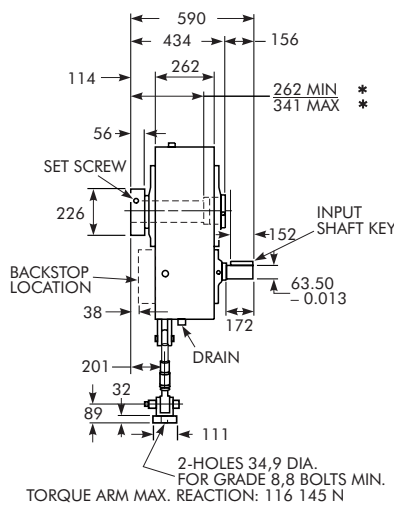
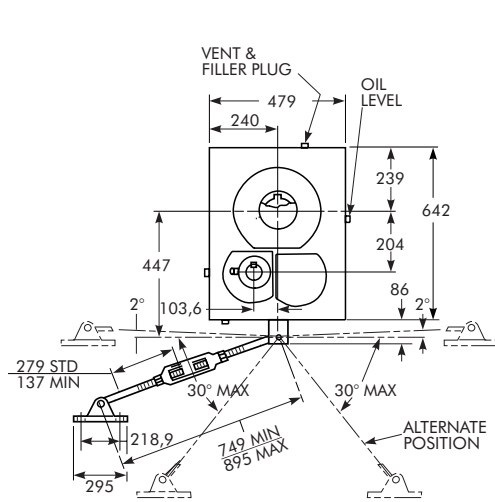
‡ Shaft centers can be increased up to 38 mm with shim blocks. See Page 53 for shim blocks.

MOTOR MOUNT SIZE •	Part Number	IEC Frame		J	L	Q	R	HB	LB	Motor Mount Wt-kg
		Min	Max					Min-Max	Min-Max	
MM5407J-M1	0787388	80	132	13	381	207	...	...	26-123	36
MM5407J-M3	0787389	160	250	300	667	302	...	...	54-151	88
MM5407J-M4	0787390	160	250	300	667	...	295	152-250	...	98
MM5404J-M5	0787391	280	315	497	864	406	...	...	86-178	148

• (See footnote on Page 25.)

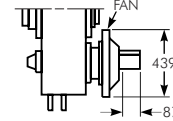
Size 5415/Dimensions – Millimeters

Shaft Mounted (JR) Drive ★



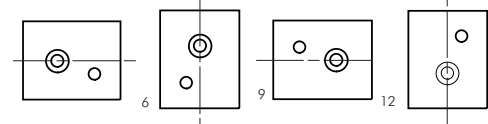
Shaft Fan Kit

SFK5415J
PN 0785881
Wt. 2 kg

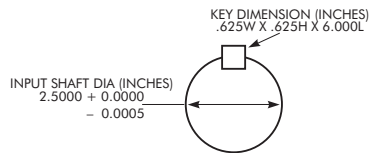


Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



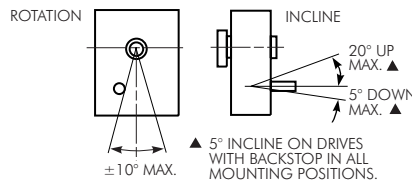
High Speed Shaft Details



Angular Limits For Horizontal Mounting

(All Clock Positions)

Refer to Factory for lubrication analysis of all inclined drives exceeding the maximum specified below.



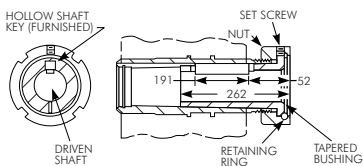
DRIVE SIZE †	Part Number	Exact Ratio	Max Output rpm	Wt kg
5415JR05A	0794403	5,077	300	347
5415JR14A	0794404	13,61	110	361
5415JR25A	0794405	26,11	60	361

★ ★ (See footnote on Page 24.)

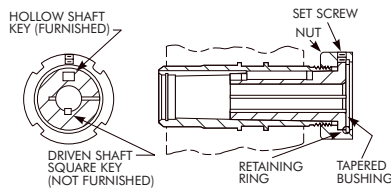
† (See footnote on Page 38.)

TA Taper Bushings

Style No. 1 — Thin-wall bushing



Style No. 2 — Thick-wall bushing



BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway • W x D x L	Wt kg
BU5415J-90 mm	0775942	2	25 x 9 x 280	18
BU5415J-95 mm	0775943	2	25 x 9 x 250	17
BU5415J-100 mm	0775944	2	28 x 10 x 220	15
BU5415J-110 mm	0775945	1	28 x 10 x 219	12
BU5415J-120 mm	0775946	1	32 x 11 x 223	9
BU5415J-125 mm	0775947	1	32 x 11 x 223	7

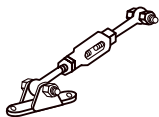
‡ • (See footnotes on Page 24.)

NOTE: See alternate TA Taper Bushings on Page 14.

Accessories

Torque Arm

TA5415J
PN 0785272
Wt. 25 kg



Backstop ■

BS5415J14
PN 0757220
BS5415J25
PN 0757221
Wt. 10 kg

■ Not available in 5:1 ratio.



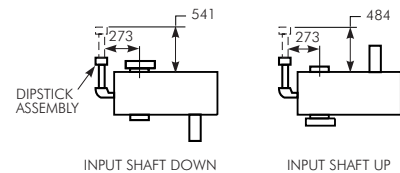
Vertical Breather

VB5415J-HSS Up W/O Fan
PN 0757223
VB5415J-HSS Down W/O Fan
PN 0757224
VB5415J-HSS Up With Fan
PN 0765841
VB5415J-HSS Down With Fan
PN 0765842
Wt. 4 kg



Vertical Drives

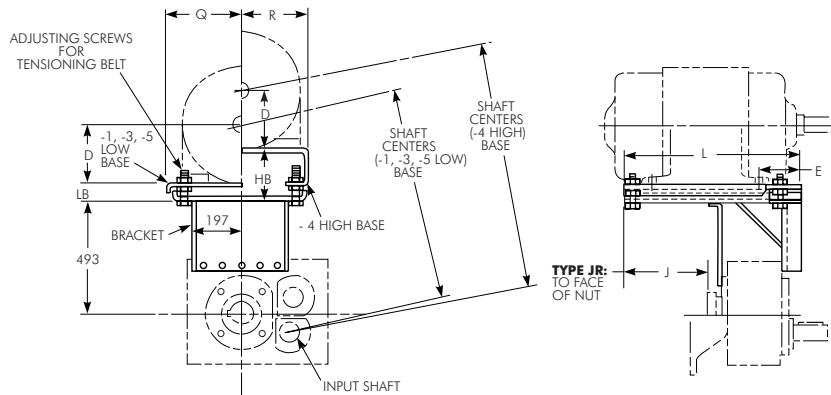
Refer to Factory for lubrication analysis of all vertical drives exceeding $\pm 1^\circ$ from true vertical.



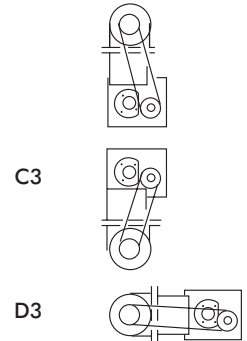
Size 5415/Dimensions – Millimeters

Motor Mounts

Standard Horizontal Drive Assembly – 3 o'clock (A3)



Refer to Page 52 for minimum and maximum shaft centers for bottom and side mounting positions. The assemblies may also be rotated about the hollow shaft in 90° increments to position the input shaft in 3, 6, 9 and 12 o'clock positions, $\pm 10^\circ$ and mounted vertically.



Frame	80	90	100	112	132	160	180	200	225	250	280	315
D	80	90	100	112	132	160	180	200	225	250	280	315
E	48,5	54,5	63	70	89	105	120	130	150	165	189	215
Shaft Centers ‡	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
-1 Low Base	741-834	750-844	760-854	771-865	791-885							
-3 Low Base	...	...	...	...	...	836-930	855-950	875-970	899-994	924-1 019		
-4 High Base	...	...	...	...	...	932-1 027	951-1 046	971-1 066	995-1 091	1 020-1 115		
-5 Low Base	...	...	...	...	...	...	...	...	...	...	983-1 074	1 018-1 108

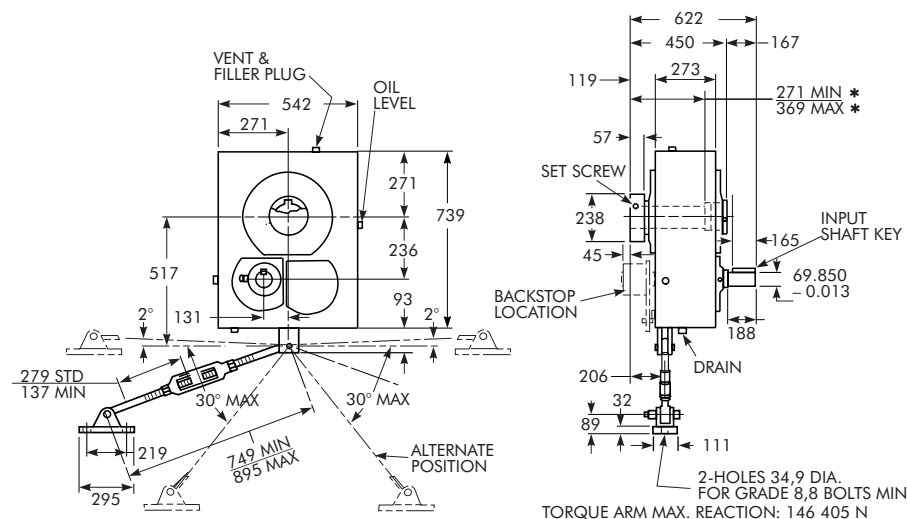
‡ (See footnote on Page 39.)

MOTOR MOUNT SIZE ●	Part Number	IEC Frame		J	L	Q	R	HB	LB	Motor Mount Wt-kg
		Min	Max					Min-Max	Min-Max	
MM5415J-M1	0787392	80	132	46 ♦	381	207	...	...	26-123	40
MM5415J-M3	0787393	160	250	241	667	302	...	...	54-151	89
MM5415J-M4	0787394	160	250	241	667	...	295	152-249	...	99
MM5415J-M5	0787395	280	315	437	864	406	...	...	86-178	148

● (See footnote on Page 25.)

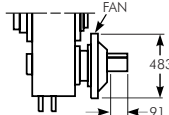
♦ Protrudes beyond the motor mount.

Shaft Mounted (JR) Drive ★



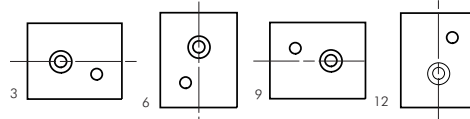
Shaft Fan Kit

SFK5507J
PN 0785893
Wt. 2,3 kg

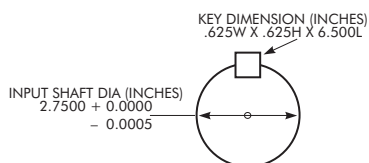


Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



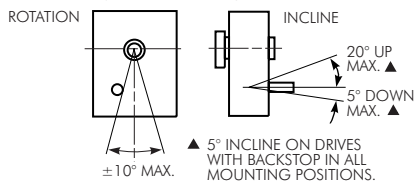
High Speed Shaft Details



Angular Limits For Horizontal Mounting

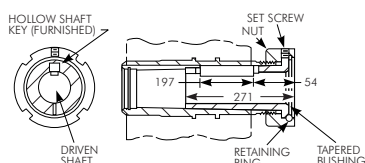
(All Clock Positions)

Refer to Factory for lubrication analysis of all inclined drives exceeding the maximum specified below.

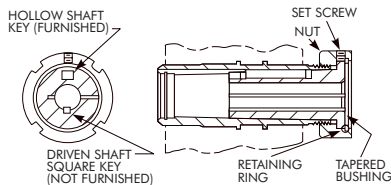


TA Taper Bushings

Style No. 1 — Thin-wall bushing



Style No. 2 — Thick-wall bushing



DRIVE SIZE †	Part Number		Exact Ratio	Max Output rpm	Wt kg
	W/O Backstop	With Backstop			
5507JR05A	0794406	0795667	4,929 ■	300	...
5507JR14A	0794407	0795667	13.46	110	484
5507JR25A	0794408	0795668	24.29	60	484

* (See footnote on Page 24.)

† (See footnote on Page 38.)

■ Non-stock, consult Factory .

BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway • W x D x L	Wt kg
BU5507J-120 mm	0775948	1	32 x 11 x 229	15
BU5507J-125 mm	0775949	1	32 x 11 x 229	14
BU5507J-130 mm	0775835	1	32 x 11 x 229	12
BU5507J-135 mm	0775836	1	36 x 12 x 233	10

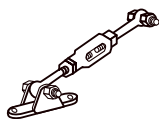
† ● (See footnotes on Page 24.)

NOTE: See alternate TA Taper Bushings on Page 14.

Accessories

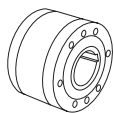
Torque Arm

TA5507J
PN 0785272
Wt. 25 kg



Backstop

BS5507J14
PN 0793687
BS5507J25
PN 0793688



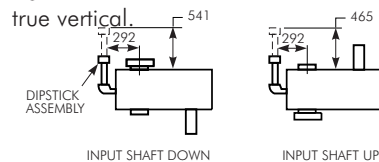
Vertical Breather

VB5507J-HSS Up W/O Fan
PN 0757223
VB5507J-HSS Down W/O Fan
PN 0757224
VB5507J-HSS Up With Fan
PN 0765841
VB5507J-HSS Down With Fan
PN 0765842
Wt. 4 kg



Vertical Drives

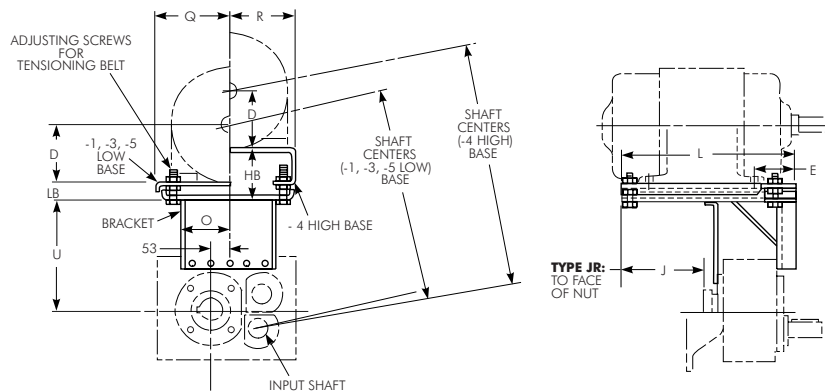
Refer to Factory for lubrication analysis
of all vertical drives exceeding $\pm 1^\circ$
from
true vertical. 541 465



Size 5507/Dimensions – Millimeters

Motor Mounts

Standard Horizontal Drive Assembly – 3 o'clock (A3)



Refer to Page 52 for minimum and maximum shaft centers for bottom and side mounting positions. The assemblies may also be rotated about the hollow shaft in 90° increments to position the input shaft in 3, 6, 9 and 12 o'clock positions, ±10° and mounted vertically.

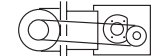
A3



C3



D3



Frame	80	90	100	112	132	160	180	200	225	250	280	315
D	80	90	100	112	132	160	180	200	225	250	280	315
E	48,5	54,5	63	70	89	105	120	130	150	165	189	215
Shaft Centers ‡	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
-1 Low Base	792-893	802-903	812-913	824-924	843-944							
-3 Low Base	...	...	...	...	...	889-984	908-1 004	928-1 024	953-1 048	977-1 073		
-4 High Base	...	...	...	...	...	985-1 081	1 005-1 101	1 024-1 121	1 049-1 145	1 074-1 170		
-5 Low Base	...	...	...	...	...	...	...	...	...	...	1 172-1 267	1 207-1 301

‡ (See footnote on Page 39.)

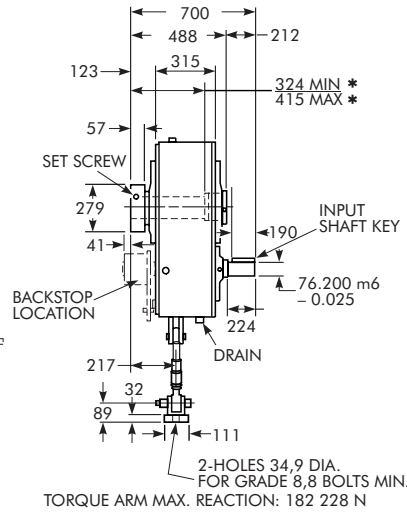
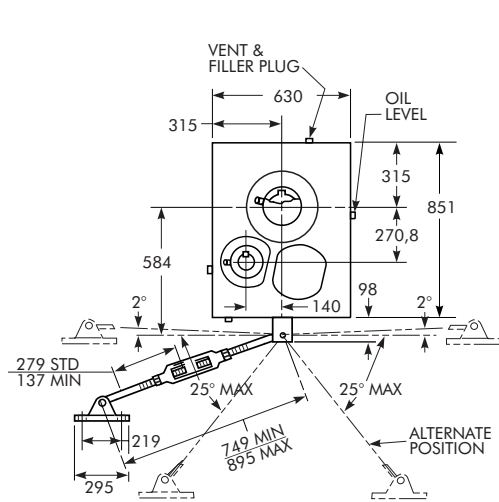
MOTOR MOUNT SIZE •	Part Number	IEC Frame		J	L	O	Q	R	U	HB	LB	Motor Mount Wt-kg
		Min	Max							Min-Max	Min-Max	
MM5507J-M1	0787396	80	132	64 ♦	381	197	207	...	534	...	26-129	50
MM5507J-M3	0787397	160	250	223	667	197	302	...	524	...	54-151	102
MM5507J-M4	0787398	160	250	223	667	197	...	295	524	152-250	...	112
MM5507J-M5	0787399	280	315	410	864	286	406	...	696	...	51-146	200

• (See footnote on Page 25.)

♦ (See footnotes on Page 41.)

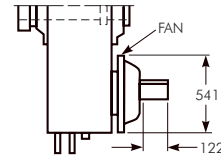
Size 5608/Dimensions – Millimeters

Shaft Mounted (JR) Drive ★



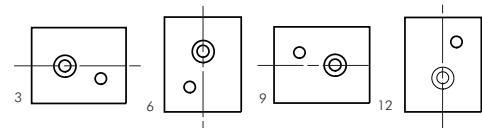
Shaft Fan Kit

SFK5608J
PN 0785468
Wt. 2,3 kg

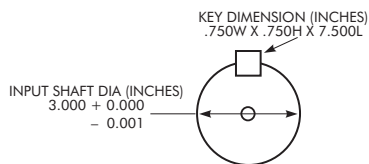


Drive Mounting Positions

(Based on clock position of input shaft relative to hollow shaft.)



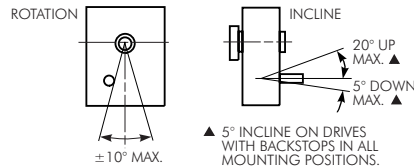
High Speed Shaft Details



Angular Limits For Horizontal Mounting

(All Clock Positions)

Refer to Factory for lubrication analysis of all inclined drives exceeding the maximum specified below.



DRIVE SIZE †	Part Number		Exact Ratio	Max Output rpm	Wt kg
	W/O Backstop	With Backstop			
5608JR05A	0794417	...	5,00 ■	300	...
5608JR14A	0794418	0794704	13,82	110	817
5608JR25A	0794419	0794705	25,33	60	817

* (See footnote on Page 24.)

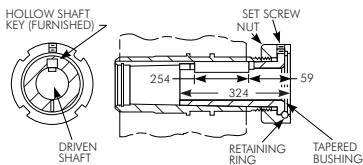
† (See footnote on Page 38.)

■ (See footnote on Page 42.)

★ (See footnote on Page 24.)

TA Taper Bushings

Style No. 1 — Thin-wall bushing



BUSHING SIZE	Part Number ‡	Style No.	Driven Shaft Keyway • W x D x L	Wt kg
BU5608J-150 mm	0775898	1	36 x 12 x 290	23
BU5608J-160 mm	0775899	1	40 x 13 x 294	17

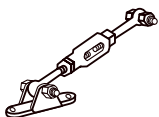
‡ • (See footnotes on Page 24.)

NOTE: See alternate TA Taper Bushings on Page 14.

Accessories

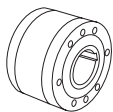
Torque Arm

TA5608J
PN 0785272
Wt. 25 kg



Backstop

BS5608J14
BS5608J25
PN 0793687



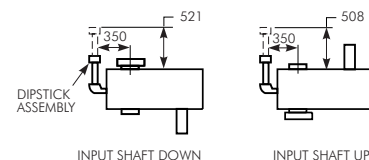
Vertical Breather

VB5608J-HSS Up W/O Fan
PN 0785474
VB5608J-HSS Down W/O Fan
PN 0757224
VB5608J-HSS Up With Fan
PN 0786718
VB5608J-HSS Down With Fan
PN 0765842
Wt. 4 kg



Vertical Drives

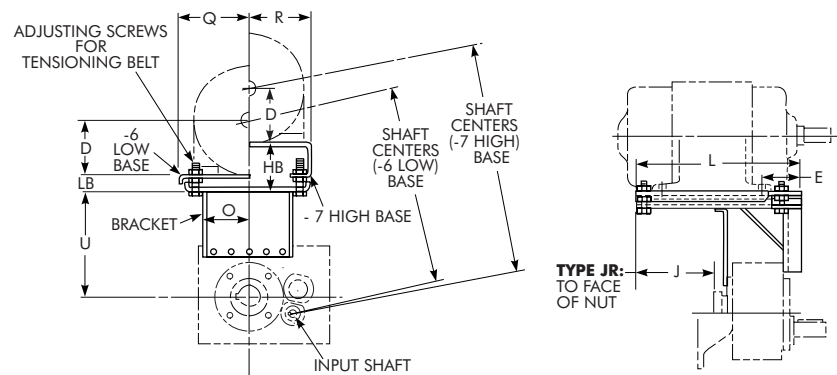
Refer to Factory for lubrication analysis of all vertical drives exceeding $\pm 1^\circ$ from true vertical.



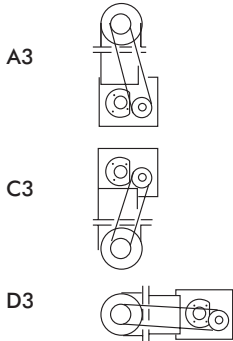
Size 5608/Dimensions – Millimeters

Motor Mounts

Standard Horizontal Drive Assembly – 3 o'clock (A3)



Refer to Page 52 for minimum and maximum shaft centers for bottom and side mounting positions. The assemblies may also be rotated about the hollow shaft in 90° increments to position the input shaft in 3, 6, 9 and 12 o'clock positions, ±10° and mounted vertically.



Frame	160	180	200	225	250	280	315
D	160	180	200	225	250	280	315
E	105	120	130	150	165	189	215
Shaft Centers ‡	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max	Min-Max
-6 Low Base	1 107-1 196	1 126-1 216	1 146-1 235	1 170-1 260	1 194-1 284	1 223-1 313	1 258-1 347
-7 High Base	1 199-1 292	1 219-1 312	1 238-1 331	1 263-1 356	1 287-1 380	1 316-1 410	1 351-1 444

‡ (See footnote on Page 39.)

MOTOR MOUNT SIZE ●	Part Number	IEC Frame		J	L	O	Q	R	U	HB	LB	Motor Mount Wt.-kg
		Min	Max							Min-Max	Min-Max	
MM5507J-M6	0787400	160	315	365	864	343	406	...	687	...	86-178	204
MM5507J-M7	0787401	160	315	365	864	343	...	384	687	181-276	...	209

● (See footnote on Page 25.)

Nominal Sheave Ratios and V-Belts

Sheave Ratios — The table below lists the sheave ratios for nominal gear drive ratios and output speeds when driven by 1500 and 1000 rpm motors. If sheave ratios are required for other motor speeds, or if greater accuracy is required, calculate the sheave ratio with the following formula, using the exact gear ratios. Check the sheave pitch diameter against the allowable minimums.

$$\text{Sheave ratio} = \frac{\text{Exact Motor Speed}}{\text{Exact Gear Drive Ratio} \times \text{Required Output Speed}}$$

V-Belts — Selections can be made from any belt manufacturer's catalog. If a Falk™ motor mount is used, refer to Pages 24 thru 45 for dimensions and shaft centers. When determining belt length and minimum center distance, include belt installation allowance in calculations.

Table 8 — Nominal Sheave Ratios ★

5:1 Ratio			9:1 Ratio			14:1 Ratio			25:1 Ratio		
Drive Output rpm	Motor rpm		Drive Output rpm	Motor rpm		Drive Output rpm	Motor rpm		Drive Output rpm	Motor rpm	
	1500	1000		1500	1000		1500	1000		1500	1000
400	1,33	2,00	250	1,50	2,25	160	1,49	2,24	80	1,33	2,00
390	1,30	1,95	240	1,44	2,16	155	1,45	2,17	75	1,25	1,88
380	1,27	1,90	230	1,38	2,07	150	1,40	2,10	70	1,17	1,75
370	1,23	1,85	220	1,32	1,98	145	1,35	2,03	65	1,08	1,63
360	1,20	1,80	210	1,26	1,89	140	1,31	1,96	60	1,00	1,50
350	1,17	1,75	200	1,20	1,80	135	1,26	1,89	58	1,03	1,45
340	1,13	1,70	195	1,17	1,76	130	1,21	1,82	56	1,07	1,40
330	1,10	1,65	190	1,14	1,71	125	1,17	1,75	54	1,11	1,35
320	1,07	1,60	185	1,11	1,67	120	1,12	1,68	52	1,15	1,30
310	1,03	1,55	180	1,08	1,62	115	1,07	1,61	50	1,20	1,25
300	1,00	1,50	175	1,05	1,58	110	1,03	1,54	48	1,25	1,20
290	1,03	1,45	170	1,02	1,53	105	1,02	1,47	46	1,30	1,15
280	1,07	1,40	165	1,01	1,49	100	1,07	1,40	44	1,36	1,10
270	1,11	1,35	160	1,04	1,44	95	1,13	1,33	42	1,43	1,05
260	1,15	1,30	155	1,08	1,40	90	1,19	1,26	40	1,50	1,00
255	1,18	1,28	150	1,11	1,35	85	1,26	1,19	38	1,58	1,05
250	1,20	1,25	145	1,15	1,31	80	1,34	1,12	36	1,67	1,11
245	1,22	1,23	140	1,19	1,26	75	1,43	1,05	34	1,76	1,18
240	1,25	1,20	135	1,23	1,22	70	1,53	1,02	32	1,88	1,25
235	1,28	1,18	130	1,28	1,17	65	1,65	1,10	30	2,00	1,33
230	1,30	1,15	125	1,33	1,13	60	1,79	1,19	28	2,14	1,43
225	1,33	1,13	120	1,39	1,08	58	1,85	1,23	26	2,31	1,54
220	1,36	1,10	115	1,45	1,04	56	1,91	1,28	24	2,50	1,67
215	1,40	1,08	110	1,52	1,01	54	1,98	1,32	22	2,73	1,82
210	1,43	1,05	105	1,59	1,06	52	2,06	1,37	20	3,00	2,00
205	1,46	1,03	100	1,67	1,11	50	2,14	1,43	18	3,33	2,22
200	1,50	1,00	95	1,75	1,17	48	2,23	1,49	16	3,75	2,50
195	1,54	1,03	90	1,85	1,23	46	2,33	1,55	14	4,29	2,86
190	1,58	1,05	85	1,96	1,31	44	2,44	1,62	12	5,00	3,33
185	1,62	1,08	80	2,08	1,39	42	2,55	1,70	10	6,00	4,00
180	1,67	1,11	78	2,14	1,42	40	2,68	1,79	9	...	4,44
175	1,71	1,14	76	2,19	1,46	38	2,82	1,88	8	...	5,00
170	1,76	1,18	74	2,25	1,50	36	2,98	1,98	7	...	5,71
165	1,82	1,21	72	2,31	1,54	34	3,15	2,10	6	...	6,67
160	1,88	1,25	70	2,38	1,59	32	3,35	2,23	5	...	8,00
155	1,94	1,29	68	2,45	1,63	30	3,57	2,38			
150	2,00	1,33	66	2,53	1,68	29	3,69	2,46			
145	2,07	1,38	64	2,60	1,74	28	3,83	2,55			
140	2,14	1,43	62	2,69	1,79	27	3,97	2,65			
135	2,22	1,48	60	2,78	1,85	26	4,12	2,75			
130	2,31	1,54	58	2,87	1,92	25	4,29	2,86			
125	2,40	1,60	56	2,98	1,98	24	4,46	2,98			
120	2,50	1,67	54	3,09	2,06	23	4,66	3,11			
115	2,61	1,74	52	3,21	2,14	22	4,87	3,25			
110	2,73	1,82	50	3,33	2,22	21	5,10	3,40			
105	2,86	1,90	48	3,47	2,31	20	5,36	3,57			
100	3,00	2,00	46	3,62	2,42	19	5,64	3,76			
95	3,16	2,11	44	3,79	2,53	18	5,95	3,97			
90	3,33	2,22	42	3,97	2,65	17	6,30	4,20			
85	3,53	2,35	40	4,17	2,78	16	6,70	4,46			
			38	4,39	2,92	15	...	4,76			
			36	4,63	3,09	14	...	5,10			
			34	4,90	3,27	13	...	5,49			
			32	5,21	3,47	12	...	5,95			
			30	5,56	3,70	11	...	6,49			
			29	5,75	3,83						
			28	5,95	3,97						
			27	6,17	4,12						

Falk™ V-Belt Guards, built for maximum safety and serviceability.

Falk™ V-belt guards offer more than just protection. For one thing, they're available at a low initial cost. For another, their practical construction makes them extremely user-friendly. You can quickly install them using easy-to-mount brackets. And since these covers are easy-to-remove and lightweight, they simplify field service of belt drives.

V-belt Guards are available in sizes to fit most Quadrive/V-belt combinations, or be used with other Rexnord drives. They come with an expanded metal cover with a safety-yellow paint finish. Falk™ V-belt guards — easily installed, easily removed.



Guard/Hardware Selection Procedure

1) Using Table 9 and known belt drive information, determine which guards are suitable.

For overall guard dimensions, refer to Table 15.

Table 9 — Standard V-Belt Guard Selection – Millimeters ‡

Selection Parameter	GUARD SIZE †							
	14E	15E, 15F	16E, 16F	17E, 17F	18E	19E, 19F	20E, 20F	21E, 21F
Center Distance (Minimum)	535	560	685	735	865	865	815	1080
Center Distance (Maximum)	710	735	865	915	1065	1065	1065	1420
Maximum Driver Shaft Diameter ★	85	85	85	85	85	85	85	85
Maximum Driver Shaft Diameter	50	55	55	55	75	75	75	75
Maximum Driver Sheave Diameter	165	200	200	255	255	305	305	355
Maximum Driver Sheave Diameter	200	355	355	380	380	510	710	810
Maximum Sheave Width	100	125	125	125	210	210	210	215

★ Maximum driver is a size 315 IEC frame.

† E = Expanded metal covers (without fans).

F = For drives with shaft driven fans.

‡ Table allows for 90 mm of belt take-up adjustment.

2) Determine availability of mounting hardware:

Is guard for use with Falk Quadrive?

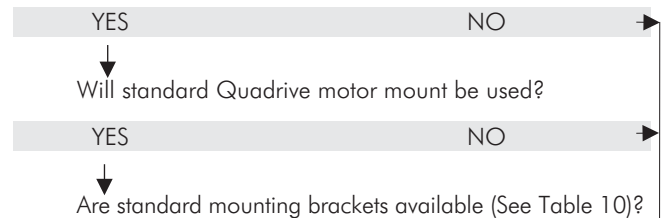
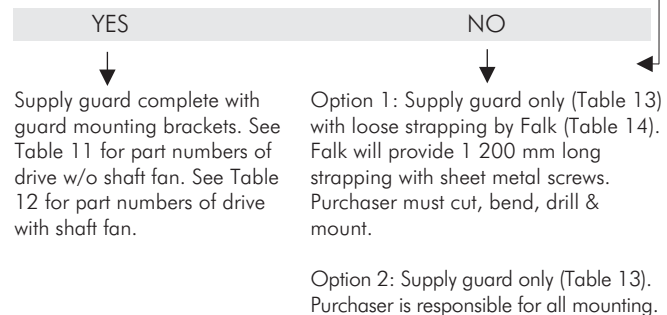


Table 10 — Mounting Bracket Availability

GUARD SIZE	DRIVE SIZE										
	5107	5115	5203	5207	5215	5307	5315	5407	5415	5507	5608
14E	OK OK	OK OK OK	OK OK OK OK	OK OK OK OK	OK OK OK	OK OK	OK OK		OK OK	OK OK OK	
15E											
16E											
17E											
18E											
19E					OK	OK	OK	OK OK OK	OK OK OK		
20E								OK OK OK	OK OK OK	OK OK	
21E											OK OK
15F					OK OK OK	OK OK	OK OK			OK OK	
16F											
17F											
19F											
20F											
21F								OK OK	OK OK	OK OK	OK OK



Guard Part Numbers

Table 11 — Part Numbers for Guards Including Quadrive Mounting Brackets – For Drives Without Fan

Expanded Metal Cover									
DRIVE SIZE	Motor Mount Position	14E	15E	16E	17E	18E	19E	20E	21E
5107 5115 5203 5207 5215 5307 5315	A6, B9, C12, D3	0783719 0783723 0783729 0783737 0783745	0783721 0783725 0783731 0783739 0783747	0783727 0783733 0783741 0783749 0783755 0783761	0783735 0783743 0783751 0783757 0783763	..... ..... .....	0783753 0783759 0783765		
5407	A3, B6, C9, D12 A9, B12, C3, D6	.....	.....	.....	.....	0783768	0783772	0783776	
	A6, B9, C12, D3	.....	.....	.....	.....	0783769	0783773	0783777	
5415	A3, B6, C9, D12 A9, B12, C3, D6	.....	.....	.....	.....	0783780	0783784	0783788	
	A6, B9, C12, D3	.....	.....	.....	.....	0783781	0783785	0783789	
5507	A3, B6, C9, D12	.....	.....	.....	.....	00783792	0783796	0783800	
	A9, B12, C3, D6	.....	.....	.....	.....	★ 0783793	★ 0783797	★ 0783801	
	A6, B9, C12, D3	.....	.....	.....	.....				
5608	A3, B6, C9, D12 A9, B12, C3, D6	.....	.....	.....	.....	.....	.....	0786865	0786867
	A6, B9, C12, D3	.....	.....	.....	.....	.....	.....	0786866	0786868

Table 12 — Part Numbers for Guards Including Quadrive Mounting Brackets – For Drives With Fan

Expanded Metal Cover							
DRIVE SIZE	Motor Mount Position †	15F	16F	17F	19F	20F	21F
5215 5307 5315	A6, B9, C12, D3	0786869	0786870 0786873 0786876	0786871 0786874 0786877	0786872 0786875 0786878		
5407	A3, B6, C9, D12 A9, B12, C3, D6 A6, B9, C12, D3	.....	.....	.....	0786879	0786880	
5415	A3, B6, C9, D12	.....	.....	.....	0786881	0786882	
	A9, B12, C3, D6 A6, B9, C12, D3	.....	.....	.....	0786883	0786884	
5507	A3, B6, C9, D12 A9, B12, C3, D6 A6, B9, C12, D3	..... ..... .....	..... ..... .....	..... ..... .....	0786885 ★ 0786887	0786886 ★ 0786888	
5608	A3, B6, C9, D12 A9, B12, C3, D6 A6, B9, C12, D3	.....	.....	.....	.....	0786889	0786890

★ Quadrive mounting brackets are not available for these assembly positions.

† Refer to Manual 377-820 & 377-822.

Table 13 — Part Numbers for Guard Only

With Expanded Metal Cover			
Size	Part Number	Size	Part Number
14E	0783803	...	See Table 10 (Guards not available without mounting brackets)
15E	0783805	15F	
16E	0783807	16F	
17E	0783809	17F	
18E	0783811	...	
19E	0783813	19F	
20E	0783815	20F	
21E	0786860	21F	

Table 14 — Options

Option	Part Number
Loose strapping & hardware (Purchaser to cut, bend, drill & mount)	0783816

Guard Dimensions

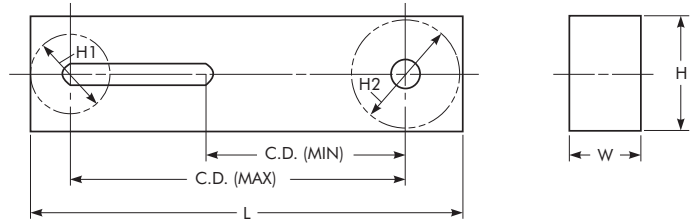


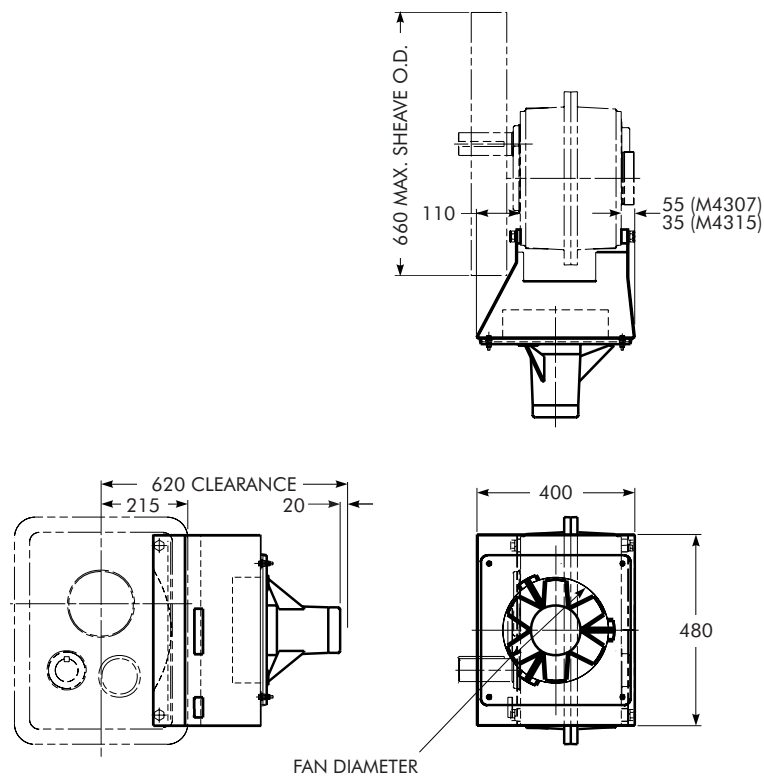
Table 15 — Standard V-Belt Guard Dimensions – Millimeters ‡

Dimension	GUARD SIZE							
	14E	15E, 15F	16E, 16F	17E, 17F	18E	19E, 19F	20E, 20F	21E, 21F
C.D. (Min)	535	560	685	735	865	865	815	1 080
C.D. (Max)	625	650	775	825	955	955	905	1 170
Driver Sheave Clearance (H1)	230	280	280	330	330	380	380	430
Driven Sheave Clearance (H2)	280	430	430	455	455	585	785	890
Width (W)	125	150	150	150	235	235	235	255
Height (H)	345	485	470	495	470	600	800	925
Length (L)	1 080	1 200	1 325	1 415	1 560	1 650	1 755	2 210
Approximate Weight – kg								
With Expanded Metal Cover	20.87	29.94	32.21	35.38	41.73	52.62	69.85	97.52

‡ All guards are 14 gauge steel.

Electric Fan Options/Dimensions – Millimeters ★

Sizes 5307 & 5315



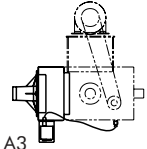
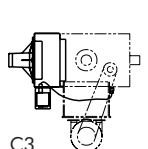
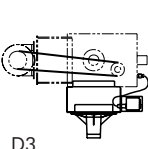
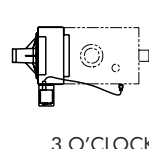
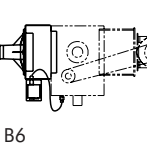
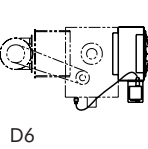
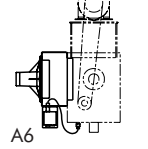
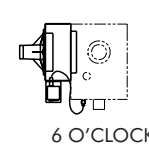
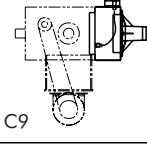
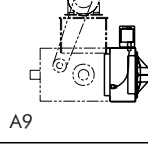
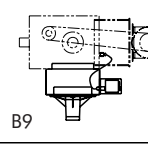
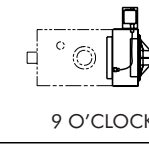
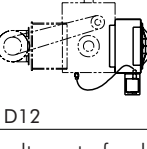
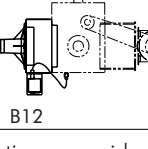
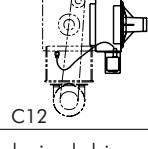
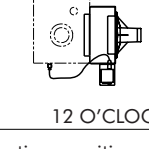
Electric Fan Kit	Fan Blade Dia (mm)	Electric Motor Specifications			Part No. †
		Volts	Phase	Hertz	
EFK5307J	250	110	1	60	0787260
		220	1	60	0787261
		220	1	50	0787262
		220/380	3	50	0787263
EFK5315J	250	110	1	60	0787264
		220	1	60	0787265
		220	1	50	0787266
		220/380	3	50	0787267

★ (See footnote on Page 24.)
† Includes fan, shroud and hardware (temperature switch not available).

Electric Fan Options/Dimensions – Millimeters ★

Sizes 5407– 5608

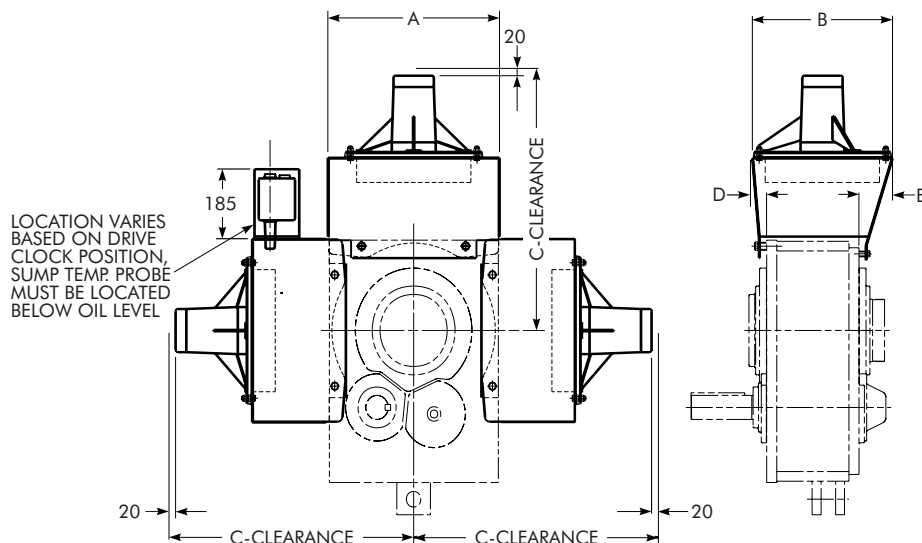
ELECTRIC FAN, TEMP. SWITCH & BULB-WELL STANDARD LOCATIONS (BASED ON DRIVE MOUNTING POSITION)

DRIVE WITH MOTOR MOUNT			DRIVE W/O MOTOR MOUNT
 A3	 C3	 D3	 3 O'CLOCK
 B6	 D6	 A6	 6 O'CLOCK
 C9	 A9	 B9	 9 O'CLOCK
 D12	 B12	 C12	 12 O'CLOCK

Electric Fan Kit	Fan Blade Dia (mm)	Electric Motor Specifications			Part No. †
		Volts	Phase	Hertz	
EFK5407J	250	110	1	60	0787268
		220	1	60	0787269
		220	1	50	0787270
		220/380	3	50	0787271
EFK5415J	300	110	1	60	0787272
		220	1	60	0787273
		220/380	3	60	0787274
		265/460	3	60	0787275
		220/380	3	50	0787276
EFK5507J	300	110	1	60	0787277
		220	1	60	0787278
		220/380	3	60	0787279
		265/460	3	60	0787280
		220/380	3	50	0787281
EFK5608J	300	110	1	60	0787282
		220	1	60	0787283
		220/380	3	60	0787284
		265/460	3	60	0787285
		220/380	3	50	0787286

† Includes fan, shroud, temperature switch, and hardware.

For alternate fan locations, provide the desired drive mounting position and the relative fan position (top, bottom, right or left) as viewed from the input side. For example, "drive to be 6 o'clock mounted with the fan on top."



THE ELECTRIC FAN ACCESSORY CAN BE MOUNTED IN ANY OF THE POSITIONS SHOWN, BOTTOM AND SIDE OF THE DRIVE SUMP ARE THE PREFERRED LOCATIONS

ELECTRIC FAN SIZE ★	A	B	C	D	E
EF5407	490	400	760	40	145
EF5415	490	400	695	40	95
EF5507	570	400	725	35	90
EF5608	665	400	745	35	50

★ (See footnote on Page 24.)

Motor Mount Shaft Centers & Motor Frame Sizes

Introduction

The following supplements the data published on Pages 38 through 45. If shaft centers exceed the published maximum, refer complete data to Rexnord engineering review.

Mounting Positions

The A3 assembly is the most common horizontal mounting position. However, the motor mount and drive may be mounted in any of the positions shown at the right. See Table 16 for center distance.

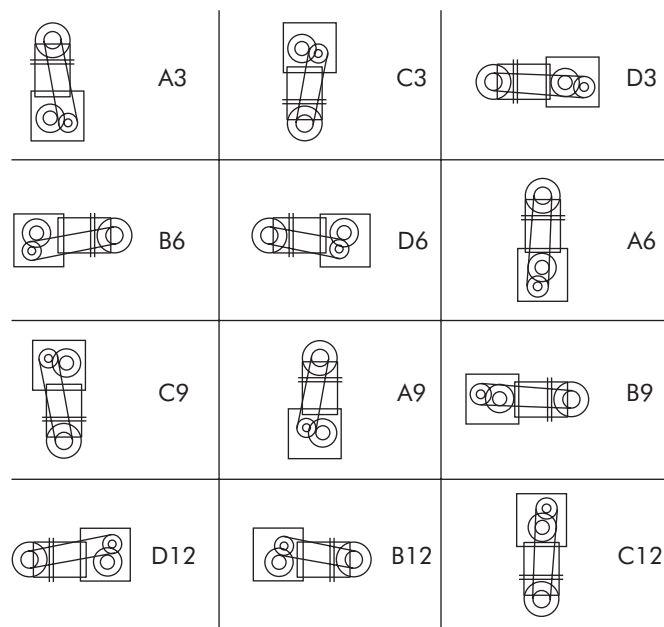


Table 16 — Motor-Drive Shaft Centers — Millimeters

Mounting Position	IEC Motor Frame Size	80	90	100	112	132	160	180	200	225	250	280	315
	MOTOR MOUNT SIZE	Shaft Centers Min-Max											
A3 B6 C9 D12	MM5407-M1	703-796	712-806	722-816	734-827	753-847							
	MM5407-M3	...	...	...	...	...	798-893	817-913	836-932	861-956	885-981		
	MM5407-M4	...	...	...	...	...	893-988	913-1 008	932-1 027	956-1 052	981-1 076		
	MM5407-M5	...	...	...	...	...	...	...	...	...	...	945-1 035	979-1 069
	MM5415-M1	741-834	750-844	760-854	771-865	791-885							
	MM5415-M3	...	...	...	...	...	836-930	855-950	875-970	899-994	924-1 019		
	MM5415-M4	...	...	...	...	...	932-1 027	951-1 046	971-1 066	995-1 091	1 020-1 115		
	MM5415-M5	...	...	...	...	...	...	...	...	...	...	983-1 074	1 018-1 108
	MM5507-M1	792-893	802-903	812-913	824-924	843-944							
	MM5507-M3	...	...	...	...	...	889-984	908-1 004	928-1 024	953-1 048	977-1 073		
	MM5507-M4	...	...	...	...	...	985-1 081	1 005-1 101	1 024-1 121	1 049-1 145	1 074-1 170		
	MM5507-M5	...	...	...	...	...	...	...	...	...	...	1 172-1 267	1 207-1 301
	MM5608-M6	...	...	...	...	...	1 107-1 196	1 126-1 216	1 146-1 235	1 170-1 260	1 194-1 284	1 223-1 313	1 258-1 347
	MM5608-M7	...	...	...	...	...	1 199-1 292	1 219-1 312	1 238-1 331	1 263-1 356	1 287-1 380	1 316-1 410	1 351-1 444
C3 D6 A9 B12	MM5407-M1	481-646	564-656	574-665	585-677	604-696							
	MM5407-M3	...	...	...	...	...	648-742	667-761	686-780	710-804	734-829		
	MM5407-M4	...	...	...	...	...	742-836	761-855	780-875	804-899	829-923		
	MM5407-M5	...	...	...	...	...	...	...	...	...	...	793-882	827-916
	MM5415-M1	544-635	553-645	563-654	574-665	567-685							
	MM5415-M3	...	...	...	...	...	637-729	656-749	675-768	699-792	723-816		
	MM5415-M4	...	...	...	...	...	731-824	750-844	769-863	793-888	817-912		
	MM5415-M5	...	...	...	...	...	...	...	...	...	...	763-871	816-905
	MM5507-M1	585-677	594-686	603-695	613-706	631-724							
	MM5507-M3	...	...	...	...	...	673-767	691-780	709-799	732-822	755-846		
	MM5507-M4	...	...	...	...	...	763-854	781-873	800-892	823-915	847-939		
	MM5507-M5	...	...	...	...	...	...	...	...	...	...	942-1 033	975-1 066
	MM5608-M6	...	...	...	...	...	838-926	857-945	876-964	900-988	924-1 012	952-1 041	986-1 075
	MM5608-M7	...	...	...	...	...	929-1 020	948-1 040	967-1 059	991-1 083	1 015-1 107	1 044-1 136	1 078-1 170
D3 A6 B9 C12	MM5407-M1	802-899	812-909	822-919	834-931	854-950							
	MM5407-M3	...	...	...	...	...	900-998	920-1 018	940-1 038	965-1 063	990-1 088		
	MM5407-M4	...	...	...	...	...	998-1 096	1 018-1 116	1 038-1 135	1 063-1 160	1 088-1 185		
	MM5407-M5	...	...	...	...	...	...	...	...	...	...	1 051-1 143	1 086-1 178
	MM5415-M1	819-915	829-925	838-935	850-947	870-967							
	MM5415-M3	...	...	...	...	...	917-1 013	936-1 033	956-1 053	981-1 078	1 006-1 103		
	MM5415-M4	...	...	...	...	...	1 015-1 111	1 034-1 131	1 054-1 151	1 079-1 176	1 104-1 201		
	MM5415-M5	...	...	...	...	...	...	...	...	...	...	1 067-1 159	1 102-1 194
	MM5507-M1	895-996	905-1 006	915-1 016	927-1 028	946-1 047							
	MM5507-M3	...	...	...	...	...	992-1 088	1 012-1 107	1 031-1 127	1 056-1 152	1 081-1 176		
	MM5507-M4	...	...	...	...	...	1 089-1 185	1 108-1 204	1 128-1 224	1 153-1 249	1 177-1 274		
	MM5507-M5	...	...	...	...	...	...	...	...	...	...	1 276-1 371	1 311-1 405
	MM5608-M6	...	...	...	...	...	1 212-1 304	1 232-1 323	1 252-1 343	1 277-1 368	1 301-1 393	1 331-1 423	1 366-1 458
	MM5608-M7	...	...	...	...	...	1 307-1 401	1 327-1 421	1 346-1 441	1 371-1 466	1 396-1 491	1 426-1 521	1 461-1 556

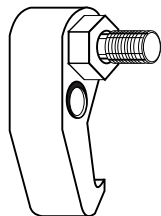
Accessories/Options

Shim Blocks for IEC Motors – Millimeters

Shim Block		Part Number		
No.	Thickness	56-132	160-180	200-355
X ½	13	0711640	0711645	0759948
X 1	25	0711643	0745025	0759949
X 1½	38	0709360	0709361	0709363

SHIM BLOCKS – ALL SIZES — Shim blocks are available (at no extra charge when ordered with the Motor Mount) to increase the shaft centers up to 38 mm as shown. Specify thickness required when ordering motor mount. These may be used with either the short center low bases or the long center high bases to assist in matching the shaft centers to the available V-belt centers. Please specify size shim block required; X½, X1 or X1½.

TA Removal Tool



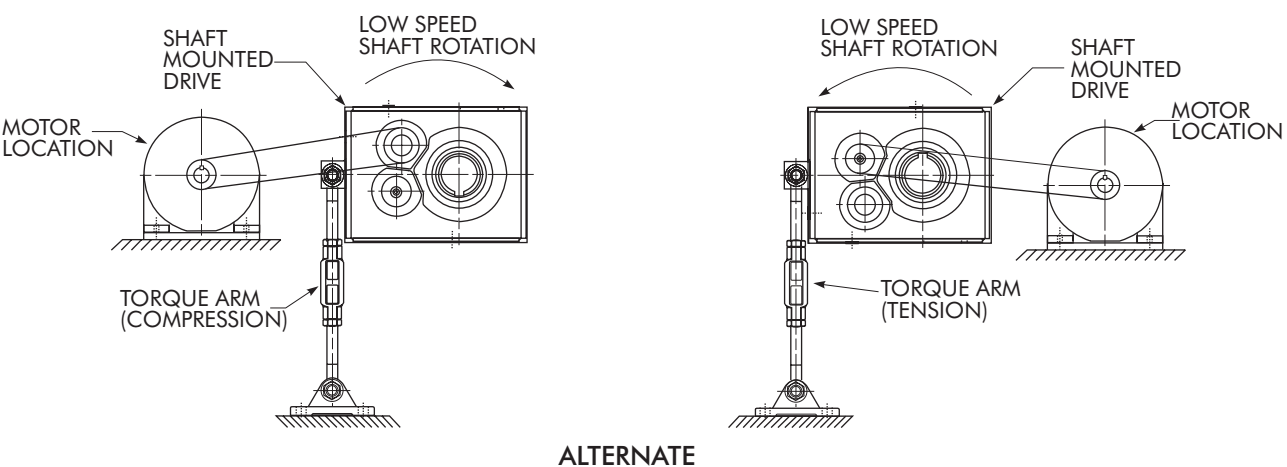
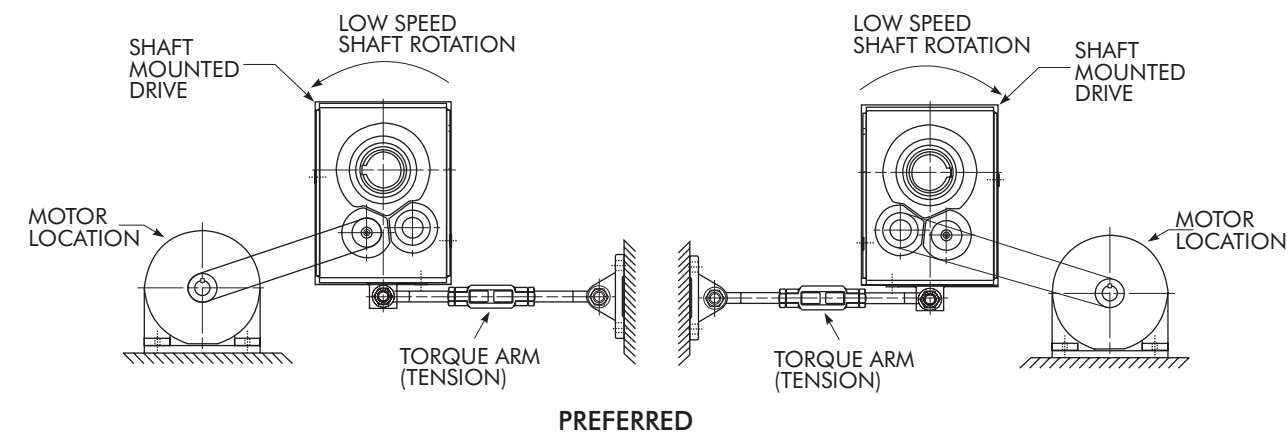
RT5107-5315J PN 0769406

Wt. 4 kg
(Tool with 5 adapters and case)

RT5407-5608J PN 0769407

Wt. 5 kg
(Tool with 2 adapters and case)

Suggested Drive Arrangement When Falk™ Motor Mount Is Not Used



Conversion Factors/U.S. Units to SI Metric Units

(Conversion values listed are for reference only. DO NOT use these values to convert or compare inch and metric selection guides.)

DESCRIPTION	U.S. Units	Multiply by to Obtain	SI Metric Units
Force	pound force (lbf)	4,448	newton (N)
Length	inch (in)	25,4	millimeter (mm)
	foot (ft)	0,304 8	meter (m)
Mass	pound mass (lbm)	0,453 6	kilogram (kg)
Power	horsepower (hp)	0,745 7	kilowatt (kW)
Rotational Inertia	pound-inch ² (lb-in ²)	0,000 292 6	kilogram-meter ² (kg-m ²)
Rotational Speed	revolutions per minute (rpm)	1	1/min
Temperature	°F	°C = (°F-32)/1,8	°C
Torque	pound-inch (lb-in)	0,113	newton-meter (Nm)
	pound-foot (lb-ft)	1,356	newton-meter (Nm)
Velocity	feet per minute (ft/min)	0,005 08	meters per second (m/s)
	miles per hour (mph)	1,609	kilometers per hour (km/h)
Volume	gallon (gal)	3,785	liter (L)
Volumetric Flow	gallons per minute (gal/min)	0,063 08	liters per second (L/s)

Conversion Factors/SI Metric Units to U.S. Units

(Conversion values listed are for reference only. DO NOT use these values to convert or compare inch and metric selection guides.)

DESCRIPTION	SI Metric Units	Multiply by to Obtain	U.S. Units
Force	newton (N)	0,224 8	pound force (lbf)
Length	millimeter (mm)	0,039 37	inch (in)
	meter (m)	3,280 8	foot (ft)
Mass	kilogram (kg)	2,204 6	pound mass (lbm)
Power	kilowatt (kW)	1,341	horsepower (hp)
Rotational Inertia	kilogram-meter ² (kg-m ²)	3 417,6	pound-inch ² (lb-in ²)
Rotational Speed	1/min	1	revolutions per minute (rpm)
Temperature	°C	°F = 1,8(°C) + 32	°F
Torque	newton-meter (Nm)	8,850	pound-inch (lb-in)
	newton-meter (Nm)	0,737 6	pound-foot (lb-ft)
Velocity	meters per second (m/s)	196,85	feet per minute (ft/min)
	kilometers per hour (km/h)	0,612 4	miles per hour (mph)
Volume	liter (L)	0,264 2	gallon (gal)
Volumetric Flow	liters per second (L/s)	15,85	gallons per minute (gal/min)

Equation:

$$\text{Torque (Nm)} = \frac{9550 \times P}{n}$$

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

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