Falk™ Series Y & YF Gear Drives

Proven Performance for High Thermal Capacity Applications

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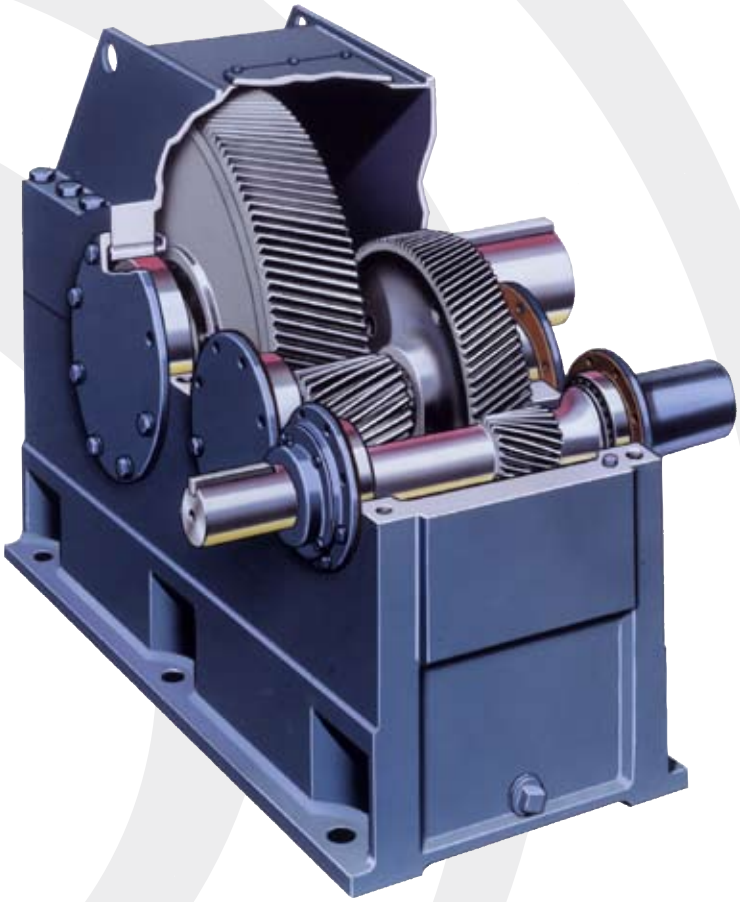


REXNORD

Falk™ Series Y & YF Parallel Shaft Gear Drives

Since 1897, Falk gear drives have benefitted from specialized research, design, and construction know-how. These precision, through-hardened, parallel shaft drives are based on earlier models that became the standard in the early 1900's. To maintain the reputation, and to keep a step ahead of today's increased industrial requirements, the 23 standard sizes of Type Y, and 20 standard sizes of Type YF, transmit higher capacity. These capacities are up to 10,000 hp and 2.8 million lb-in output torque), without an increase in external dimension. This means improved strength and performance of gears, shafts, and bearings. To hold them in exact alignment day after day and year after year, extra strong, accurately machined housings are provided.

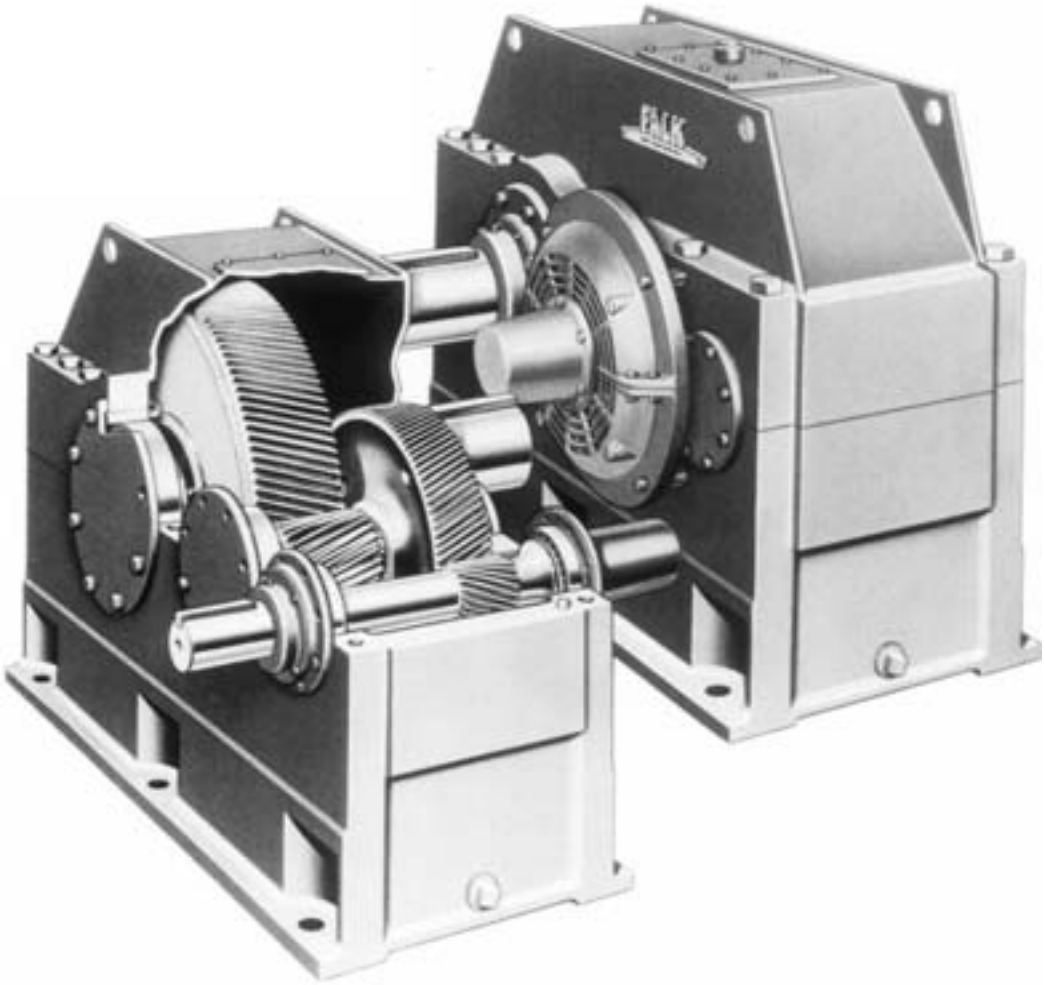
In addition, our Drive One and A-Plus line of parallel shaft gear drives offer state-of-the-art protuberance hobbed, case-carburized and finish ground gearing.

Please note the features and advantages above and described on Page 3. And as you review the basic information on Pages 4 & 5, we hope you'll sense the Rexnord know-how that is as much a part of these drives as the Falk precision gears.

Rexnord . . . Products and Services Worldwide

Rexnord products and services are available 24 hours a day, worldwide. A network of distribution centers, sales offices, and distributors, serves Rexnord customers in the continental United States and Canada. Central and South America are served from offices in Brazil, Mexico, Chile, and Miami. Rexnord offices in Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, and the United Kingdom service customers in Europe and Rexnord Offices in Australia, Republic of South Africa, China, Taiwan, and Singapore, service customers throughout Asia Pacific.

Around the world, no customers with Falk gear drives have ever been without product or service because of a work stoppage. No matter where your operation is located, Rexnord is ready, day or night, to help keep your plant running.



Selection Guide 141-110, February 2007

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THREE YEAR 3 THREE
HEAVY DUTY WARRANTY

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.

High Capacity Bearings — Roller bearings have been designed to exceed minimum AGMA specifications for the most severe loading conditions with minimum friction and easy starting. You can count on bearing life well in excess of industry standards for most applications. Falk's more precise selection methods are based on data obtained from actual tests of the drives.

Heavy Duty Shafting — Large shaft diameters are designed to maintain accurate support and alignment of gearing under the most adverse loading conditions, and provide optimum external thrust and overhung load capacities. Double ended low speed shaft extensions can be supplied at no extra charge, when customer specified on the order.

No Leak Seals

Keep Oil In — The Falk™ "Magnum" seal keeps oil in the drive and keeps dirt out. The inner cage has close fitting clearances between the shaft and bearing race which prevent oil from leaving the drive. The old drain back ensures an effective seal by returning any oil that gets beyond the bush seal, back into the drive. Since there are no moving parts, this throttling bush seal arrangement will last as long as the drive is properly maintained.

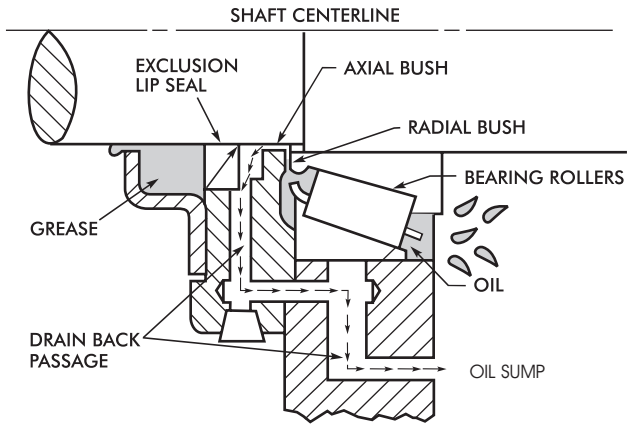
Keep Dirt Out — An outer cover assembly when filled with grease, prevents the ingress of foreign particles by trapping them before they enter the drive. Periodically, introducing fresh grease through the fitting in the cover will purge contaminants.

Rugged Housings — Fabricated steel housings provide maximum strength and rigidity. Accurate machining ensures precise alignment of all revolving elements necessary to maintain engineering and performance advantages. The split housing design with large inspection cover makes maintenance easy. Surfaces are smooth, flat,and easy to clean. The exterior is coated with the highest quality zinc chromate primer. The finish coat is sprayed with acid and alkali resistant enamel.

Precision Gearing — From the special alloy steel poured in our own foundry through the final finishing operation, constant quality control is maintained at each manufacturing step. The Falk™ full depth tooth form with high pressure angle allows greater surface durability, greater resistance to abrasion and breaking, and more load carrying capacity. High helical gear efficiency of 98½% per gear mesh remains constant throughout the entire life of the gears.

Positive Lubrication — Continuous splash system is positive and thorough, and provides higher thermal ratings through the use of large oil reservoir. Oil is carried to the working faces of the gear teeth through the oil troughs in the cover, then passes through the bearings. The system is basically simple, maintenance free and highly effective. Oil levels are easily checked with standard oil dipstick.

Falk™ Magnum Seal— The Falk Magnum seal shown below is also available for previous model Y drives. Ask for Service Manual 148-140 for retrofit instructions.



Basic Information

Safety Notes

Falk™ Gear Drives
Type Y and YF gear drives are designed to equal or exceed applicable AGMA standards. The Falk or Rexnord name on the gear drive is the purchaser's assurance that the drive was engineered, rated, and manufactured to sound gear practices.

Safety Codes
When one prime mover drives two pieces of equipment, one of which is either a standard Falk 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 Falk™ and Rexnord products in conformance with applicable local and national safety codes and per Rexnord installation manuals which are available upon request. Suitable guards for rotating members may be purchased from Rexnord as optional accessories. Contact Factory for complete details.

WARNING: Lock out power source and remove all external loads from drive before servicing drives or accessories. Locking out the power source and removing the load will reduce the possibility of an unexpected motion or reaction in the system.

People Conveying Equipment
Selection of Falk™ products for applications whose primary purpose is the transportation of people is not approved. This includes such applications as freight or passenger elevators, escalators, man lifts, work lift platforms, and ski tows and ski lifts.

If the primary purpose of the application is material conveyance and occasionally people are transported, the 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 load conditions (unity Service Factor). For other conditions, compute an equivalent horsepower by multiplying the actual horsepower required for the application by the appropriate Service Factor.

Gear Drive Identification
Tables in this selection guide identify gear drives by size, type, and ratio. From the following inset, the drive designation is 2070Y2 indicating...

2070 < Drive Size **Y** < Drive Type **2** < Number of Reductions

Horsepower and Torque
Gear drive mechanical horsepower and torque ratings are tabulated in the catalog to permit selections for specific application requirements.

When the required input speed falls between two tabulated input speeds of a drive with the same number of gear reductions, interpolate to determine drive rating.

type Y2 horsepower ratings

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE 2050	2060	2070	2080	2090	2100	2110
1750	8.40	210	84.1	132	187	266	372	500	704
	9.30	190	84.1	124	187	223	303	450	704
	10.29	170	84.1	115	166	257	325	440	704

Thermal Horsepower
Thermal horsepower is the actual horsepower (without Service Factor) that a gear drive will transmit continually for three hours or more without overheating.

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.

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

When the horsepower or torque rating appears in **bold** type, compare the actual horsepower required (without Service Factor) with the thermal horsepower capacity. If the actual load exceeds the thermal capacity, a fan (as described on Page 29) may be added, or a pump and cooler system may be used, or a larger drive may be selected.

Operating Temperature
Gear drives can encounter sump oil temperatures up to 200°F (93°C) with higher temperatures possible in localized areas.Since the drive will feel hot to the human hand at temperatures over 120°F (49°C), a portable pyrometer should be used to measure temperatures.

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 drive rating with a Service Factor of 1.0. If the maximum starting or momentary load exceeds the above conditions, compute a second equivalent horsepower by dividing the peak load by two. The gear drive selected must have capacity equal to, or in excess of, the larger equivalent horsepower.

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

Brake Equipped Applications — When a gear drive is equipped with a "working" brake that is used to decelerate the motion of the system and the brake is located between the prime mover and the gear drive, select the drive based on the brake rating or the highest equivalent horsepower, 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 Factory. Also refer to 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 Factory for selection of suitable drives.

Speed Variation — For variable or multi-speed applications – Refer to Page 29 for speed ranges of gear drives. Variable or multi-speed applications require special consideration to provide adequate splash lubrication at the slowest speed, but without excessive heating or churning at the highest speed. It is essential that all orders indicate minimum and maximum speeds, as well as the speed duration cycles.

Effects of Solar Energy — If a drive operates in the sun at ambient temperatures over 100°F (38°C), then special measures should be taken to protect the drive from solar energy. This protection can consist of a canopy over the drive or reflective paint on the drive. If neither is possible, a heat exchanger or other cooling device may be required to prevent the sump temperature from exceeding the allowable maximum of 200°F (93°C).

Overhung Loads and Thrust Loads — The overhung load and thrust ratings published in this selection guide are based on a combination of the most unfavorable conditions of rotation, speed, direction of applied load, and drive loading. If the calculated load exceeds the published value, or if an overhung load and thrust load are applied simultaneously to a shaft, refer complete application information to Factory. For more information, refer to tables and guidelines on Pages 30 through 35.

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

How to Select

Before making any selections, refer to the Basic Information and Conditions Affecting Selections on Pages 4 and 5.

How to select by hp method

1. Determine Service Factor from Table 2 or 3. For occasional and intermittent service or engine driven applications, refer to the instructions and Table1 below.

2. Calculate equivalent horsepower by multiplying the actual horsepower to be transmitted by the Service Factor. If momentary or peak loads exceed 200% of the normal load, refer to the introductory instructions on Page 5.

3. For ratio, divide high speed shaft rpm by low speed shaft rpm.

4. Determine drive size and nearest standard ratio from the Horsepower Selection Tables on Pages 8 through 22. Opposite the high speed shaft rpm, and the desired ratio and output speed, trace right to a horsepower capacity equal to or in excess of the equivalent horsepower calculated in Step 2. Read the size and type of drive at the top of the column. If the required high speed shaft rpm is not listed, select the nearest listed speed and proportion the required rpm and equivalent horse-power to suit. See Selection Example on Pages 18 and 19. When the horsepower rating is shown in bold face type, check the drive thermal rating on Pages 26, 27, or 28. If the thermal horsepower rating is less than the actual required horsepower (without Service Factor), refer to Page 29 for Falk™ cooling fans.

5. Check shaft connections as instructed on Pages 30 through 35. Check drive dimensions on Pages 36 through 40.

How to select by torque method

Determine Service Factor, equivalent torque and drive selection by following the same procedures outlined for the horsepower method, but in Step 4, refer to Pages 9 through 23 for Torque Selection Tables. Interpolate torques for speeds not listed. When torque rating is shown in bold face type, convert the actual required torque to horsepower and check against the thermal ratings on Pages 26, 27, or 28. To convert, use the torque (lb.-in.) and speed (rpm) at low speed shaft of the drive in the following formula:

$$hp = \frac{\text{Torque} \times \text{output speed}}{63{,}000}$$

Occasional and intermittent service or engine driven applications

For multi-cylinder engine driven applications and all applications operating intermittently up to 3 hours per day, refer to Table 2 or 3 for the Service Factor of the same application operating 3-10 hours per day. Next, in the first column of Table 1, find this same Service Factor in bold face type. Then, to the right, under the desired hours service and prime mover, locate the converted Service Factor.For example, from Table 3, the Service Factor is 1.00 for a uniformly loaded belt conveyor. From Table 1, for the same application, the following are the Service Factors for various conditions.

1. Engine driven (multi-cylinder): 3-10 hours per day, use 1.25.

2. Engine driven (multi-cylinder): over 10 hours per day, use 1.50.

3. Motor driven: up to 3 hours per day, use 0.80.

Table 1 — Service Factor Conversions

Table 2or 3 3 to 10 Hour Service Factor	3 to 10 Hours per Day	Over 10 Hours per Day		Intermittent – Up to 3 Hours per Day †	
	Multi-Cyl Engine ‡	Motor	Multi-Cyl Engine ‡	Motor	Multi-Cyl Engine ‡
1.00	1.25	1.25	1.50	.80	1.00
1.25	1.50	1.50	1.75	1.00	1.25
1.75	2.00	2.00	2.25	1.50	1.75
2.00	2.25	2.25	2.50	1.75	2.00

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

for electric motor, steam turbine, or hydraulic motors drives. . . Recommendations are MINIMUM and normal conditions are assumed.

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

★ Service Factors for paper mill applications are applied to the nameplate rating of the electric drive motor at the motor rated base speed and are consistent with those shown in TAPPI standards.

♦ Anti-friction bearings only.

● A service factor of 1.00 may be applied at base speed of a super calender operating over a speed range of part constant hp and part constant torque where the constant hp speed range is greater than 1.5 to 1. A service factor of 1.25 is applicable to super calenders operating at constant torque over the entire speed range or where the constant hp speed range is less than 1.5 to 1.

TABLE 3 — Service Factors Listed by Application

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

Application	Service 3 to 10 Hour	Service Over 10 Hour
AGITATORS		
Pure Liquids	1.00	1.25
Liquids & Solids	1.25	1.50
Liquids-Variable Density	1.25	1.50
APRON CONVEYORS		
Uniformly Loaded or Fed	1.00	1.25
Heavy Duty	1.25	1.50
APRON FEEDERS	1.25	1.50
ASSEMBLY CONVEYORS		
Uniformly Loaded or Fed	1.00	1.25
Heavy Duty	1.25	1.50
BALL MILLS	See Mills, Rotary	
BARGE HAUL PULLERS	1.75	2.00
BARKING		
Drums (Coupling Connected)	. . .	2.00
Mechanical	. . .	2.00
BAR SCREENS (Sewage)	1.00	1.25
BATCHERS (Textile)	1.25	1.50
BELT CONVEYORS		
Uniformly Loaded or Fed	1.25	1.25
Heavy Duty	1.25	1.50
BELT FEEDERS	1.25	1.50
BENDING ROLLS (Machine)	1.25	1.50
BLOWERS		
Centrifugal	1.00	1.25
Lobe	1.25	1.50
Vane	1.00	1.25
BOTTLING MACHINERY	1.00	1.25
BREWING	See Table 2	
BRICK PRESS (Clay Working)	1.75	2.00
BRIQUETTE MACHINES (Clay Working)	1.75	2.00
BUCKET		
Conveyors Uniform	1.00	1.25
Conveyors Heavy Duty	1.25	1.50
Elevators Continuous	1.00	1.25
Elevators Uniform	1.00	1.25
Elevators Heavy Duty	1.25	1.50
CALENDERS		
Rubber and Plastic	See Table 2	
Textile	1.25	1.50
CANE KNIVES	. . .	1.50
CAN FILLING MACHINES	1.00	1.25
CARD MACHINES (Textile)	1.25	1.50
CAR DUMPERS	1.75	2.00
CAR PULLERS	1.25	1.50
CEMENT KILNS	See Mills, Rotary	
CENTRIFUGAL		
Blower, Compressors, Discharge Elevators, Fans or Pumps	1.00	1.25
CHAIN CONVEYORS		
Uniformly Loaded or Fed	1.00	1.25
Heavy Duty	1.25	1.50
CHEMICAL FEEDERS (Sewage)	1.00	1.25
CLARIFIERS	1.00	1.25
CLASSIFIERS	1.25	1.50
CLAY WORKING	See Table 2	
COLLECTORS (Sewage)	1.00	1.25
COMPRESSORS		
Centrifugal	1.00	1.25
Lobe	1.25	1.50
Reciprocating		
Multi-Cylinder	1.25	1.50
Single-Cylinder	1.75	2.00
CONCRETE MIXERS		
Continuous	1.25	1.50
Intermittent	1.25	1.50

Application	Service 3 to 10 Hour	Service Over 10 Hour
▲CONVEYORS—Uniformly Loaded or Fed:		
Apron or Bucket	1.00	1.25
Assembly, Belt, Chain, Flight, Oven, Screw	1.00	1.25
▲CONVEYORS—Heavy Duty, Not Uniformly Fed		
Apron, Assembly, Belt, Bucket, Chain, Flight,Oven, Screw	1.25	1.50
CONVEYORS—Severe Duty		
Live Roll	Refer to Factory	
Reciprocating Shaker	1.75	2.00
COOKERS (Brewing & Distilling), (food)	1.00	1.25
COOLING TOWER FANS	Refer to Factory	
▲CRANES		
Dry Dock Cranes	*	*
Main Hoists	1.00	1.25
Bridge and Trolley Travel	Refer to Factory	
CRUSHERS		
Ore or Stone	1.75	2.00
Sugar	. . .	1.50
DEWATERING SCREENS (Sewage)	1.25	1.50
DISC FEEDERS	1.00	1.25
DISTILLING	See Table 2	
DOUBLE ACTING PUMPS		
2 or more Cylinders	1.25	1.50
Single Cylinder	Refer to Factory	
DOUGH MIXER (Food)	1.25	1.50
DRAW BENCH (Metal Mills) Carriage & Main Drive	1.25	1.50
DREDGES	See Table 2	
DRY DOCK CRANES	*	*
DRYERS & COOLERS (Mills, Rotary)	. . .	1.50
DYEING MACHINERY (Textile)	1.25	1.50
ELEVATORS		
Bucket-Uniform Load	1.00	1.25
Bucket-Heavy Duty	1.25	1.50
Bucket-Continuous	1.00	1.25
Centrifugal Discharge	1.00	1.25
Escalators	**Not Approved**	
Freight	**Not Approved**	
Gravity Discharge	1.00	1.25
Man Lifts, Passenger	**Not Approved**	
EXTRUDERS (Plastic & Rubber)	See Table 2	
FANS		
Centrifugal	100	1.25
Cooling Towers	Refer to Factory	
Forced Draft	. . .	1.25
Induced Draft	1.25	1.50
Large (Mine, etc.)	1.25	1.50
Large Industrial	1.25	1.50
Light (Small Diameter)	1.00	1.25
FEEDERS		
Apron, Belt	1.25	1.50
Disc	1.00	1.25
Reciprocating	1.75	2.00
Screw	1.25	1.50
FLIGHT CONVEYORS		
Uniform	1.00	1.25
Heavy	1.25	1.50
FOOD INDUSTRY	See Table 2	
GENERATORS (Not Welding)	1.00	1.25
GRAVITY DISCHARGE ELEVATORS	1.00	1.25
HAMMER MILLS	1.75	2.00

Application	Service 3 to 10 Hour	Service Over 10 Hour
▲HOISTS		
Heavy Duty	1.75	2.00
Medium Duty	1.25	1.50
Skip Hoist	1.25	1.50
INDUCED DRAFT FANS	1.25	1.50
KILNS	See Mills, Rotary	
LAUNDRY WASHERS	1.25	1.50
LAUNDRY TUMBLERS	1.25	1.50
LINE SHAFTS		
Driving Processing Equipment	1.25	1.50
Other Line Shafts, Light	1.00	1.25
LIVE ROLL CONVEYORS	Refer to Factory	
LOBE BLOWERS OR COMPRESSORS	1.25	1.50
LOG HAULS (Lumber)		
Incline-well Type	1.75	1.75
LOOMS (Textile)	1.25	1.50
LUMBER INDUSTRY	See Table 2	
MACHINE TOOLS		
Auxiliary Drives	1.00	1.25
Bending Rolls	1.25	1.50
Main Drives	1.25	1.50
Notching Press (Belted)	Refer to Factory	
Plate Planers	1.75	2.00
Punch Press (Geared)	1.75	2.00
Tapping machines	1.75	2.00
MANGLE (Textile)	1.25	1.50
MASH TUBS (Brewing & Distilling)	1.00	1.25
MEAT GRINDERS (Food)	1.25	1.50
METAL MILLS		
Draw Bench Carriages & Main Drives	1.25	1.50
Pinch, Dryer & Scrubber Rolls, Reversing	Refer to Factory	
Slitters	1.25	1.50
Table Conveyors, Non-Reversing Group Drives	1.25	1.50
Non-Reversing Individual Drives	1.75	2.00
Reversing	Refer to Factory	
Wire Drawing & Flattening Machines	1.25	1.50
Wire Winding Machines	1.25	1.50
MILLS, ROTARY		
Ball and Rod Mill		
with Spur Ring Gear	. . .	2.20
with Helical Ring Gear	. . .	1.65
Direct Connected	. . .	2.20
Cement Kilns, Dryers & Coolers		
Pebble, Plain & Wedge Bar Mills	. . .	1.65
Tumbling Barrels	1.75	2.00
MIXER (Also see Agitators)		
Concrete, Cont. & Int.	1.25	1.50
Constant Density	1.00	1.25
Variable Density	1.25	1.50
NAPPERS (Textile)	1.25	1.50
OIL INDUSTRY	See Table 2	
ORE CRUSHERS	1.75	2.00
OVEN CONVEYORS		
Uniform	1.00	1.25
Heavy Duty	1.25	1.50
PAPER MILLS	See Table 2	
▲PASSENGER ELEVATORS	**Not Approved**	
PEBBLE MILLS	. . .	1.50
PLATE PLANERS	1.75	2.00
PRINTING PRESSES	Refer to Factory	
PROPORTIONING PUMPS	1.25	1.50
PUG MILLS (Clay)	1.25	1.50
PULLERS (Barge Haul)	1.75	2.00

Application	Service 3 to 10 Hour	Service Over 10 Hour
PUMPS		
Centrifugal	1.00	1.25
Proportioning	1.25	1.50
Reciprocating		
Single Act., 3 or more Cyl.	1.25	1.50
Double Act., 2 or more Cyl.	1.25	1.50
Single Act., 1 or 2 Cyl.	Refer to Factory	
Double Acting, 1 Cyl.	Refer to Factory	
Rotary: Gear, Lobe, Vane	1.00	1.25
PUNCH PRESSES (Gear Driven)	1.75	2.00
RECIPROCATING Conveyors & Feeders	1.75	2.00
RECIPROCATING COMPRESSORS		
Multl-Cylinder	1.25	1.75
Single Cylinder	1.75	2.00
ROD MILLS	See Mills, Rotary	
ROTARY		
Pumps	1.00	1.25
Screens (Sand or Gravel)	1.25	1.50
RUBBER & PLASTICS INDUSTRIES	See Table 2	
SAND MULLERS	1.25	1.50
SCREENS		
Air Washing	1.00	1.25
Rotary—Sand or Gravel	1.25	1.50
Traveling Water Intake	1.00	1.25
SCREW CONVEYORS		
Uniform	1.00	1.25
Heavy Duty or Feeder	1.25	1.50
SCUM BREAKERS (Sewage)	1.25	1.50
SEWAGE DISPOSAL	See Table 2	
SHAKER CONVEYORS	1.75	2.00
SHEETERS (Rubber)	. . .	1.50
SINGLE ACTING PUMP		
1 or 2 Cylinders	Refer to Factory	
3 or more Cylinders	1.25	1.50
▲SKI TOWS & LIFTS	**Not Approved**	
▲SKIP HOIST	1.25	1.50
SLAB PUSHERS	1.25	1.50
SLITTERS (Metal)	1.25	1.50
SLUDGE COLLECTORS (Sewage)	1.00	1.25
SOAPERS (Textile)	1.25	1.50
SPINNERS (Textile)	1.25	1.50
STEERING GEARS	Refer to Factory	
STOKERS	1.00	1.25
STONE CRUSHERS	1.75	2.00
SUGAR INDUSTRY	See Table 2	
TABLE CONVEYORS (Non-Reversing)		
Group Drives	1.25	1.50
Individual Drives	1.75	2.00
Reversing	Refer to Factory	
TENTER FRAMES (Textile)	1.25	1.50
TEXTILE INDUSTRY	See Table 2	
THICKENERS (Sewage)	1.25	1.50
TUMBLING BARRELS	1.75	2.00
VACUUM FILTERS (Sewage)	1.25	1.50
VANE BLOWERS	1.00	1.25
WINCHES (Dredges)	1.25	1.50
WINDERS (Textile)	1.25	1.50
WINDLASS	Refer to Factory	
WIRE		
Drawing Machines	1.25	1.50
Winding Machines	1.25	1.50

▲ 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 have been obtained by the system designer or end user from the appropriate enforcement authorities.

* DRY DOCK CRANES (Hammerhead, Rotating and Whirler, Stationary or Moving), for ANY DURATION OF SERVICE: Main Hoist, Auxiliary Hoist, Boom (Luffing): 1.00; Rotating (Swing or Slew): 1.25; Tracking (Drive Wheel): 1.50.

Refer to Factory for proper selection of a Falk RAM mixer drive.

Type Y1/Horsepower Ratings

Ratios 1.84 through 7.59 Single Reduction 1750 through 1170 rpm

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE *												
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145
1750	1.84	950	300	435	689	869	1070	1715							
	2.03	860	326	464	687	833	1047	1406	2189						
	2.25	780	255	447	547	839	932	1479	2268						
	2.49	700	289	377	504	648	802	1252	1924	2070	2318				
	2.76	640	279	368	536	725	806	1307	1891	2054	2301	2824	3163		
	3.05	575	249	315	438	559	681	1079	1330	1408	1577	2087	2337		
	3.38	520	219	304	428	598	679	1128	1606	1805	2022	2342	2623	3355	3758
	3.74	470	193	264	394	521	584	902	1136	1208	1353	1715	1921	2239	2508
	4.13	420	168	242	340	468	583	919	1239	1460	1635	1954	2189	2579	2888
	4.57	380	151	206	286	396	497	849	1096	1291	1445	1719	1925	2300	2576
	5.06	350	116	177	263	334	458	713	936	1174	1315	1492	1671	1939	2172
	5.60	310	115	154	218	294	406	641	835	1018	1140	1346	1507	1784	1998
	6.20	280	95.1	140	197	267	358	526	708	907	1016	1109	1242	1544	1729
	6.86	255	82.8	113	156	212	315	474	646	759	850	1001	1121	1354	1517
	7.59	230	74.7	105	142	201	281	414	507	655	734	878	983	1105	1238
1430	1.84	780	260	378	591	754	929	1402	2136	2224	2491				
	2.03	700	271	386	573	695	874	1175	1830	1938	2171				
	2.25	640	221	388	475	728	810	1284	1896	1981	2219	2729	3057		
	2.49	575	241	314	420	540	670	1046	1607	1730	1938	2308	2585	3208	3593
	2.76	520	232	306	455	627	700	1135	1579	1717	1923	2370	2654	3511	3932
	3.05	470	207	262	365	466	568	900	1110	1176	1317	1744	1953	2158	2417
	3.38	420	182	257	363	507	589	980	1364	1508	1689	1956	2191	2871	3215
	3.74	380	163	223	333	449	563	752	948	1008	1129	1432	1604	1871	2096
	4.13	350	142	204	287	396	506	780	1054	1218	1364	1666	1866	2201	2465
	4.57	310	127	174	241	335	472	720	931	1097	1229	1464	1640	1963	2198
	5.06	280	97.2	149	222	282	388	604	794	998	1118	1270	1422	1652	1850
	5.60	255	96.8	130	184	248	343	543	708	864	968	1144	1281	1519	1701
	6.20	230	79.9	117	166	225	302	445	600	770	862	942	1055	1313	1470
	6.86	210	69.5	94.6	132	178	266	401	546	643	720	849	951	1151	1289
	7.59	190	62.6	88.4	119	169	237	350	428	555	622	744	833	938	1051
1170	1.84	640	226	328	484	655	807	1147	1787	1933	2165	2597	2909	3103	3475
	2.03	575	226	322	477	580	730	982	1530	1621	1816	2297	2573	3039	3404
	2.25	520	192	337	412	633	703	1116	1585	1657	1856	2285	2559	3504	3925
	2.49	470	200	261	350	450	559	873	1343	1447	1621	1930	2162	2686	3008
	2.76	420	193	254	385	532	608	986	1319	1435	1607	1982	2220	2938	3290
	3.05	380	172	218	304	388	473	751	926	982	1100	1458	1633	1804	2021
	3.38	350	151	217	307	430	512	851	1138	1260	1411	1634	1830	2452	2746
	3.74	310	137	188	282	380	490	626	790	841	942	1196	1339	1563	1751
	4.13	280	119	172	243	335	432	661	895	1015	1137	1392	1559	1877	2102
	4.57	255	107	147	203	283	399	610	790	932	1044	1246	1395	1671	1872
	5.06	230	81.7	126	187	238	328	511	673	847	949	1079	1208	1405	1574
	5.60	210	81.3	109	155	209	290	459	600	733	821	971	1088	1291	1446
	6.20	190	67.1	98.7	139	189	255	376	507	652	730	798	894	1115	1249
	6.86	170	58.3	79.4	111	150	224	338	462	544	609	720	806	977	1094
	7.59	155	52.5	74.2	100	143	199	295	361	470	526	629	705	795	890

* Mechanical hp ratings shown in **bold face** type exceed the drive thermal ratings. Check required hp (without service factor) against thermal hp ratings on Page 26, then refer to Page 29 for Falk™ cooling fans. For ratings at speed higher than 1750 rpm refer to Factory; below 580 rpm, reduce hp rating proportionally.

Type Y1/Torque Ratings

(POUND-INCHES AT LOW SPEED SHAFT. . .
MULTIPLY VALUES LISTED BELOW BY 1000)

Ratios 1.84 through 7.59 Single Reduction 1750 through 1170 rpm

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE *												
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145
1750	1.84	950	20.3	28.8	45.6	59.2	71.2	113							
	2.03	860	23.8	33.9	50.2	61.5	76.2	105	159						
	2.25	780	20.4	35.5	44.1	67.7	75.2	117	183						
	2.49	700	26.5	33.4	45.9	58.6	71.3	112	171	180	202				
	2.76	640	27.7	37.0	53.5	72.0	80.1	130	194	206	231	282	316		
	3.05	575	27.6	34.4	48.3	62.1	75.4	118	148	156	175	227	254		
	3.38	520	27.1	37.0	51.9	71.4	85.0	136	196	217	243	289	324	410	459
	3.74	470	26.3	36.0	51.8	68.5	76.7	122	154	163	182	236	264	302	338
	4.13	420	25.3	35.3	50.1	68.3	88.6	139	188	220	246	289	324	391	438
	4.57	380	24.7	33.0	47.1	65.4	80.0	136	181	215	240	281	315	380	426
	5.06	350	22.0	32.7	46.7	62.0	84.6	130	174	209	234	271	304	360	403
	5.60	310	22.9	30.3	43.7	59.7	82.5	126	167	200	224	265	297	354	397
	6.20	280	21.3	30.6	43.0	59.9	80.3	119	162	197	221	250	280	346	388
	6.86	255	20.7	27.6	39.0	52.9	76.9	116	156	188	210	244	273	326	365
	7.59	230	20.3	28.5	38.2	53.2	75.5	111	142	175	196	231	259	310	347
1430	1.84	780	21.5	30.6	47.9	62.9	75.7	113	175	184	206				
	2.03	700	24.2	34.5	51.2	62.8	77.9	108	163	174	195				
	2.25	640	21.7	37.7	46.8	71.9	80.0	125	187	197	221	270	302		
	2.49	575	27.1	34.0	46.8	59.8	72.9	115	174	185	207	253	283	352	394
	2.76	520	28.2	37.7	55.6	76.2	85.1	138	198	211	236	289	324	427	478
	3.05	470	28.0	35.0	49.3	63.3	76.9	120	151	160	179	232	260	293	328
	3.38	420	27.6	38.3	53.9	74.1	90.2	145	204	222	249	296	331	429	481
	3.74	380	27.2	37.2	53.6	72.2	90.5	124	157	166	186	240	269	308	345
	4.13	350	26.2	36.4	51.8	70.7	94.1	144	195	224	251	302	338	408	457
	4.57	310	25.5	34.1	48.6	67.7	93.0	141	188	223	250	293	328	397	445
	5.06	280	22.6	33.7	48.2	64.0	87.7	135	180	218	244	282	316	375	420
	5.60	255	23.6	31.3	45.1	61.7	85.3	131	174	208	233	276	309	370	414
	6.20	230	21.9	31.3	44.4	61.8	82.9	123	168	205	230	260	291	361	404
	6.86	210	21.2	28.3	40.3	54.4	79.5	120	161	195	218	253	283	339	380
	7.59	190	20.8	29.3	39.1	54.8	77.9	115	147	182	204	239	268	322	361
1170	1.84	640	22.9	32.5	48.0	66.8	80.3	113	179	196	219	256	287	311	348
	2.03	575	24.7	35.1	52.1	64.1	79.5	110	167	178	199	240	269	338	378
	2.25	520	23.0	40.0	49.7	76.4	84.8	133	191	201	225	276	309	422	473
	2.49	470	27.4	34.6	47.6	60.9	74.3	117	178	189	212	259	290	360	403
	2.76	420	28.7	38.2	57.5	79.1	90.4	146	202	215	241	296	331	437	489
	3.05	380	28.5	35.6	50.2	64.5	78.3	122	154	163	183	238	266	299	335
	3.38	350	28.0	39.5	55.7	76.8	95.8	154	208	227	254	302	338	448	502
	3.74	310	27.9	38.4	55.5	74.7	96.3	127	160	170	190	246	275	314	352
	4.13	280	26.9	37.6	53.6	73.1	98.2	149	203	229	256	308	345	425	476
	4.57	255	26.2	35.2	50.1	69.9	96.1	146	195	232	260	304	341	413	463
	5.06	230	23.2	34.8	49.6	66.0	90.7	139	187	226	253	293	328	389	436
	5.60	210	24.2	32.1	46.4	63.5	88.1	135	180	216	242	286	320	384	430
	6.20	190	22.5	32.3	45.4	63.4	85.6	127	174	213	238	270	302	374	419
	6.86	170	21.8	29.0	41.5	56.0	81.8	123	166	201	225	263	294	352	394
	7.59	155	21.3	30.1	40.2	56.6	80.0	119	151	188	210	248	278	333	373

* Torque ratings shown in **bold face** type exceed the drive thermal ratings. Convert required torque (without service factor) to hp and check required hp (without service factor) against thermal hp ratings on Page 26, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, use torque for 580 rpm.

Type Y1/Horsepower Ratings

Ratios 1.84 through 7.59 Single Reduction 870 through 580 rpm

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE *												
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145
870	**1.84**	**470**	**169**	**252**	**360**	**493**	**655**	**853**	**1355**	**1535**	**1719**	**1996**	**2235**	**2521**	**2824**
	2.03	**430**	**169**	**245**	**360**	**443**	**558**	**751**	**1173**	**1244**	**1393**	**1764**	**1976**	**2336**	**2616**
	2.25	**390**	**156**	**252**	**335**	**493**	**572**	**853**	**1214**	**1271**	**1423**	**1753**	**1963**	**2692**	**3015**
	2.49	**350**	**152**	**199**	**267**	**343**	**427**	**667**	**1028**	**1109**	**1242**	**1480**	**1658**	**2062**	**2309**
	2.76	**320**	**147**	**194**	**300**	**416**	**494**	**801**	**1008**	**1098**	**1230**	**1519**	**1701**	**2254**	**2524**
	3.05	**290**	**131**	166	231	295	361	**573**	**708**	752	**842**	**1116**	**1250**	**1383**	**1549**
	3.38	**260**	115	**168**	**239**	**335**	**416**	**685**	**869**	**963**	**1078**	**1250**	**1400**	**1935**	**2167**
	3.74	**235**	106	**146**	**219**	**296**	**397**	478	**603**	643	**720**	**914**	**1024**	**1197**	**1341**
	4.13	**210**	92.4	133	**188**	**260**	**336**	**516**	**700**	**775**	**868**	**1063**	**1191**	**1476**	**1653**
	4.57	**190**	82.5	113	**158**	**220**	**311**	**476**	**617**	**729**	**817**	**970**	**1086**	**1313**	**1471**
	5.06	**175**	63.0	97.0	**145**	**185**	**254**	**398**	**525**	**663**	**742**	**845**	**946**	**1103**	**1235**
	5.60	**155**	62.6	84.3	120	162	225	**357**	**467**	**572**	**641**	**760**	**851**	**1012**	**1133**
	6.20	**140**	51.6	76.1	108	146	198	292	**394**	508	**569**	623	**698**	**872**	**977**
	6.86	**130**	44.8	61.1	85.3	116	173	262	**359**	423	**474**	562	**629**	**763**	**855**
	7.59	**115**	40.3	57.0	77.2	110	154	229	280	365	409	490	549	620	694
720	**1.84**	**390**	**140**	**209**	**298**	**408**	**542**	**706**	**1122**	**1270**	**1422**	**1683**	**1885**	**2209**	**2474**
	2.03	**350**	**140**	**206**	**298**	**372**	**470**	**632**	**988**	**1048**	**1174**	**1488**	**1667**	**1971**	**2208**
	2.25	**320**	**131**	**209**	**282**	**408**	**483**	**706**	**1022**	**1071**	**1199**	**1478**	**1655**	**2271**	**2544**
	2.49	**290**	128	167	**224**	289	359	561	**865**	**934**	**1046**	**1247**	**1397**	**1738**	**1947**
	2.76	**260**	123	162	**256**	**354**	**417**	**677**	**848**	**925**	**1036**	**1279**	**1433**	**1900**	**2198**
	3.05	**235**	110	139	**194**	248	303	482	**595**	632	708	940	**1053**	1165	**1305**
	3.38	**210**	96.2	143	**203**	**285**	**352**	**581**	**731**	**810**	**907**	**1053**	**1179**	**1633**	**1829**
	3.74	**190**	89.8	124	**186**	**251**	**346**	401	507	540	605	770	862	1008	**1129**
	4.13	**175**	78.2	113	**160**	221	**286**	**440**	**596**	652	**730**	**895**	**1002**	**1263**	**1415**
	4.57	**155**	69.8	96.1	134	187	**264**	**405**	**525**	622	**697**	**815**	**913**	**1122**	**1257**
	5.06	**140**	53.2	82.0	123	157	216	339	**447**	564	**632**	721	**807**	**942**	**1055**
	5.60	**130**	52.9	71.3	101	137	191	304	397	488	**546**	648	**726**	**863**	**967**
	6.20	**115**	43.6	64.3	91.1	124	168	248	335	432	484	531	595	744	**833**
	6.86	**105**	37.8	51.6	72.1	98.1	147	223	305	360	403	478	535	650	728
	7.59	**95**	34.0	48.1	65.2	93.0	130	194	238	310	347	417	467	528	591
580	**1.84**	**320**	113	**168**	**240**	**329**	**437**	568	**904**	**1023**	**1146**	**1385**	**1551**	**1899**	**2127**
	2.03	**290**	113	**168**	**240**	305	385	519	**811**	862	**965**	**1224**	**1371**	**1621**	**1816**
	2.25	**260**	106	**168**	**227**	**329**	388	568	**839**	879	**984**	**1214**	**1360**	**1868**	**2092**
	2.49	**235**	104	136	183	236	294	460	**710**	767	859	1025	**1148**	**1429**	**1601**
	2.76	**210**	100	133	**212**	**294**	335	**545**	**695**	759	**850**	**1050**	**1176**	**1561**	**1748**
	3.05	**190**	89.4	114	158	203	248	395	488	519	581	771	864	957	1072
	3.38	**175**	78.5	118	168	237	284	**469**	**599**	664	744	863	**967**	**1341**	**1502**
	3.74	**155**	74.1	102	154	208	287	328	415	443	496	630	706	827	926
	4.13	**140**	64.5	93.4	132	183	237	365	494	534	598	733	821	1054	**1181**
	4.57	**130**	57.6	79.4	111	154	219	336	437	518	580	668	748	937	**1049**
	5.06	**115**	43.9	67.7	102	129	179	281	371	470	526	600	672	785	879
	5.60	**105**	43.6	58.8	83.5	113	158	251	330	405	454	538	603	719	805
	6.20	**95**	35.8	53.0	75.1	102	139	205	278	359	402	441	494	618	692
	6.86	**85**	31.1	42.5	59.4	80.9	121	184	252	298	334	396	444	540	605
	7.59	**77**	27.9	39.6	53.7	76.7	108	160	197	256	287	346	387	438	490

* Mechanical hp ratings shown in **bold face** type exceed the drive thermal ratings. Check required hp (without service factor) against thermal hp ratings on Page 26, then refer to Page 29 tor Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory, below 580 rpm, reduce hp rating proportionately.

Type Y1/Torque Ratings

(POUND-INCHES AT LOW SPEED SHAFT. . .
MULTIPLY VALUES LISTED BELOW BY 1000)

Ratios 1.84 through 7.59 Single Reduction 870 through 580 rpm

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE *												
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145
870	**1.84**	**470**	**23.0**	**33.6**	**48.0**	**67.6**	**87.7**	**113**	**183**	**209**	**234**	**264**	**296**	**339**	**380**
	2.03	**430**	**24.8**	**36.0**	**52.9**	65.8	**81.7**	**113**	**172**	**184**	**206**	**248**	**278**	**348**	**390**
	2.25	**390**	**25.2**	**40.3**	**54.3**	**80.0**	**92.8**	**136**	**197**	**207**	**232**	**285**	**319**	**436**	**488**
	2.49	**350**	**28.0**	**35.4**	**48.9**	**62.4**	**76.3**	**120**	**183**	**195**	**218**	**267**	**299**	**371**	**416**
	2.76	**320**	**29.4**	**39.2**	**60.2**	**83.1**	**98.7**	**160**	**208**	**221**	**248**	**304**	**341**	**450**	**504**
	3.05	**290**	**29.2**	36.4	51.3	65.9	80.4	**126**	**159**	168	**188**	**245**	**274**	**309**	**346**
	3.38	**260**	28.6	**41.1**	**58.3**	**80.5**	**105**	**167**	**214**	**233**	**261**	**311**	**348**	**475**	**532**
	3.74	**235**	29.0	40.1	**57.9**	**78.2**	**105**	130	**164**	174	**195**	**253**	**283**	**324**	**363**
	4.13	**210**	28.0	39.1	**55.8**	**76.3**	**103**	**157**	**213**	**235**	**263**	**317**	**355**	**450**	**504**
	4.57	**190**	27.2	36.4	**52.4**	**73.1**	**101**	**153**	**205**	**244**	**274**	**319**	**357**	**437**	**489**
	5.06	**175**	24.0	36.1	**51.7**	**69.0**	**94.4**	**146**	**196**	**238**	**266**	**309**	**346**	**412**	**461**
	5.60	**155**	25.1	33.4	48.3	66.2	91.9	**141**	**188**	**227**	**254**	**301**	**337**	**404**	**453**
	6.20	**140**	23.3	33.5	47.4	65.9	89.3	133	**181**	222	**249**	283	**317**	**394**	**441**
	6.86	**130**	22.5	30.0	42.9	58.2	85.0	129	**174**	211	**236**	275	**308**	**370**	**414**
	7.59	**115**	22.0	31.1	41.7	58.6	83.2	124	158	196	220	260	291	349	391
720	**1.84**	**390**	**23.0**	**33.6**	**48.0**	**67.6**	**87.7**	**113**	**183**	**209**	**234**	**270**	**302**	**360**	**403**
	2.03	**350**	**24.8**	**36.5**	**52.9**	**66.8**	**83.2**	**115**	**175**	**187**	**209**	**253**	**283**	**355**	**398**
	2.25	**320**	**25.6**	**40.4**	**55.2**	**80.0**	**94.7**	**136**	**200**	**212**	**237**	**290**	**325**	**445**	**498**
	2.49	**290**	28.5	35.9	**49.5**	63.5	77.5	122	**186**	**198**	**222**	**271**	**304**	**379**	**424**
	2.76	**260**	29.7	39.6	**62.1**	**85.5**	**101**	**163**	**211**	**225**	**252**	**311**	**348**	**458**	**513**
	3.05	**235**	29.6	36.9	**52.0**	67.0	81.5	128	**161**	171	191	249	**279**	314	**352**
	3.38	**210**	29.0	42.3	**59.8**	**82.7**	**107**	**171**	**217**	**237**	**265**	**316**	**354**	**485**	**543**
	3.74	**190**	29.7	41.1	**59.4**	**80.2**	**111**	132	167	177	198	256	287	329	**369**
	4.13	**175**	28.7	40.1	57.3	78.4	106	161	**219**	238	**267**	**322**	**361**	**465**	**521**
	4.57	**155**	27.8	37.4	53.7	75.1	103	158	**211**	252	**282**	**324**	**363**	**451**	**505**
	5.06	**140**	24.5	36.8	53.0	70.8	97.0	150	**201**	245	**274**	318	**356**	**424**	**475**
	5.60	**130**	25.6	34.1	49.2	67.6	94.3	146	193	233	**261**	311	**348**	**418**	**468**
	6.20	**115**	23.8	34.2	48.4	67.6	91.6	136	186	229	256	291	326	405	**454**
	6.86	**105**	22.9	30.6	43.8	59.5	87.3	132	189	216	242	283	317	380	426
	7.59	**95**	22.4	31.7	42.6	59.9	84.9	127	162	202	226	267	299	360	403
580	**1.84**	**320**	23.1	**33.6**	**48.0**	**67.6**	**87.7**	112	**183**	**209**	**234**	**275**	**308**	**384**	**430**
	2.03	**290**	24.9	**37.0**	**52.9**	68.0	84.6	117	**178**	191	**214**	**258**	**289**	**363**	**407**
	2.25	**260**	25.6	**40.3**	**55.2**	**80.1**	94.7	136	**204**	215	**241**	**296**	**331**	**454**	**508**
	2.49	**235**	28.8	36.3	50.2	64.4	78.8	124	**190**	202	226	277	**310**	**387**	**433**
	2.76	**210**	30.0	40.4	**63.8**	**88.1**	101	**163**	**215**	229	**257**	**316**	**354**	**468**	**524**
	3.05	**190**	29.9	37.5	52.6	68.0	82.8	130	164	173	194	254	284	321	359
	3.38	**175**	29.3	43.3	61.5	85.4	107	**171**	**221**	241	270	322	**361**	**495**	**554**
	3.74	**155**	30.4	42.0	61.1	82.5	114	134	169	179	201	261	292	336	376
	4.13	**140**	29.4	41.1	58.7	80.6	109	166	226	243	272	328	367	482	**540**
	4.57	**130**	28.5	38.4	55.2	76.8	106	162	218	260	291	329	369	467	**523**
	5.06	**115**	25.1	37.7	54.6	72.2	99.8	154	208	253	283	329	368	439	492
	5.60	**105**	26.2	34.9	50.5	69.3	96.8	149	199	241	270	320	358	431	483
	6.20	**95**	24.2	35.0	49.5	69.0	94.1	140	192	236	264	300	336	419	469
	6.86	**85**	23.4	31.3	44.8	60.9	89.2	136	183	222	249	291	336	392	439
	7.59	**77**	22.8	32.4	43.6	61.3	87.5	130	167	207	232	274	307	370	414

* Torque ratings shown in **bold face** type exceed the drive thermal ratings. Convert required torque (without service factor) to hp and check required hp (without service factor) against thermal hp ratings on Page 26, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580, use torque for 580 rpm.

Type Y1/Horsepower Ratings

Ratios 1.84 through 7.59 Single Reduction 1750 through 1170 rpm

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE * 1080	1090	1100	1110	1120	1125	1130	1135	1140	1145	1150	1155	1160	1165	1170	1175	1180	1185	1190	1195
1750	1.84	950	1530	2076	2079																	
	2.03	860	1442	1896	1982	2405																
	2.25	780	1350	1800	1822	2258																
	2.49	700	1217	1656	1723	2128	2605	2918														
	2.76	640	1101	1468	1621	1996	2420	2710	2995	3354												
	3.05	575	1030	1344	1508	1818	2217	2483	2777	3110												
	3.38	520	864	1180	1257	1700	1879	2105	2558	2865	3520	3942										
	3.74	470	775	1024	1134	1477	1730	1938	2392	2679	3149	3527	4200	4704								
	4.13	420	696	860	1094	1276	1608	1801	2008	2249	2846	3187	3839	4300								
	4.57	380	651	772	968	1152	1405	1574	1873	2098	2524	2827	3564	3992	4156	4655						
	5.06	350	562	733	873	1049	1363	1526	1706	1911	2097	2349	2875	3220	3880	4346	4510	5051				
	5.60	310	505	637	746	933	1071	1199	1532	1716	1872	2097	2667	2987	3376	3781	4045	4530				
	6.20	280	419	576	676	855	938	1051	1363	1526	1725	1932	2347	2629	3005	3366	3747	4197	4508	5049	6409	7178
	6.86	255	375	519	613	735	854	957	1159	1298	1576	1765	2074	2323	2729	3057	3446	3860	4156	4655	5644	6321
	7.59	230	344	428	520	634	767	859	981	1099	1374	1539	1796	2012	2388	2674	2834	3174	3641	4078	4909	5498
1430	1.84	780	1277	1734	1738	2127	2590	2901														
	2.03	700	1203	1583	1657	2011	2361	2644	3023	3386												
	2.25	640	1126	1500	1522	1888	2318	2596	2875	3220												
	2.49	575	1035	1411	1439	1778	2179	2440	2674	2995	3927	4398										
	2.76	520	935	1249	1353	1667	2022	2265	2504	2805	3684	4126										
	3.05	470	875	1120	1258	1518	1864	2088	2321	2600	3407	3816	4702	5266								
	3.38	420	720	996	1048	1418	1570	1758	2138	2394	2944	3297	3747	4197	5040	5645						
	3.74	380	645	869	945	1257	1444	1617	1997	2237	2632	2948	3513	3934	4796	5371						
	4.13	350	583	716	911	1064	1341	1502	1676	1877	2378	2663	3210	3595	3779	4232	5363	6007				
	4.57	310	541	642	806	960	1171	1312	1563	1750	2107	2360	2979	3336	3476	3893	4999	5599	5775	6468		
	5.06	280	467	610	736	874	1136	1272	1423	1594	1750	1960	2401	2689	3244	3633	3772	4225	5369	6013	6416	7186
	5.60	255	427	530	631	777	908	1017	1277	1430	1562	1749	2227	2494	2882	3228	3380	3786	4874	5459	5796	6492
	6.20	230	348	479	562	711	781	875	1157	1296	1438	1611	1958	2193	2510	2811	3131	3507	3768	4220	5379	6025
	6.86	210	313	437	518	621	711	796	983	1101	1313	1470	1764	1976	2318	2596	2886	3232	3472	3889	4828	5407
	7.59	190	289	355	439	527	645	722	816	914	1166	1306	1496	1676	2032	2276	2364	2648	3051	3417	4195	4698
1170	1.84	640	1066	1449	1453	1779	2168	2428	2717	3043	4004	4485										
	2.03	575	1004	1321	1384	1681	1976	2213	2531	2835	3690	4133	5371	6016								
	2.25	520	939	1250	1272	1578	1938	2171	2406	2695	3490	3909	5039	5644								
	2.49	470	865	1180	1202	1486	1821	2040	2238	2506	3288	3683	4850	5432								
	2.76	420	794	1062	1129	1392	1690	1893	2095	2346	3083	3453	4135	4631	4938	5530						
	3.05	380	742	934	1049	1267	1557	1744	1940	2173	2850	3192	3936	4408	4588	5139	5900	6608				
	3.38	350	599	830	874	1184	1310	1467	1786	2000	2462	2757	3135	3511	4221	4727	5328	5967	6938	7770		
	3.74	310	536	736	787	1067	1204	1349	1669	1869	2200	2464	2938	3290	4014	4496	4910	5499	6545	7330		
	4.13	280	485	596	759	887	1119	1253	1399	1567	1986	2224	2683	3005	3161	3540	4490	5029	5219	5845	7767	8699
	4.57	255	450	534	671	800	977	1094	1304	1460	1759	1970	2488	2787	2906	3255	4182	4684	4835	5415	7096	7948
	5.06	230	388	507	613	728	945	1060	1187	1329	1461	1636	2005	2246	2711	3036	3154	3533	4492	5031	5371	6016
	5.60	210	359	440	534	647	770	862	1064	1192	1303	1459	1858	2081	2421	2712	2825	3164	4108	4601	4850	5432
	6.20	190	289	398	467	592	650	728	965	1081	1199	1343	1633	1829	2095	2346	2616	2930	3149	3527	4499	5039
	6.86	170	260	363	430	525	591	662	833	933	1094	1225	1485	1663	1935	2167	2410	2699	2901	3249	4124	4619
	7.59	155	243	295	370	438	536	600	679	761	988	1107	1247	1397	1728	1935	1973	2210	2547	2853	3579	4009

* Type YF1 (1000 series) drives employ double helical gearing, with the exception of ratios 5.06 thru 7.59 in drive Size 1080 and ratios 5.60 thru 7.59 in drive Size 1090. Mechanical hp ratings shown in **bold face** type exceed the drive thermal ratings. Check required hp (without service factor) against thermal hp ratings on Page 27, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, reduce hp rating proportionately.

Drives with ratings in the shaded areas require jet lubrication. Refer to Selection Guide 131-310 for water-to-oil pump and cooler selections or Selection Guide 131-315 for air-to-oil pump and cooler selections.

Selection Example— ENGINE DRIVE

A single acting, 3 cylinder reciprocating pump operates 10 hours per day at 250 rpm input speed and 320 bhp. It is driven by a 330 hp, 1200rpm, multi-cylinder engine. Select a drive for the coupling connected application.

1. Service Factor is 1.50 for this application since it is driven by a multi-cylinder engine... Page 6, Table 1.
2. Equivalent hp = 1.50 x 320 = 480... Page 6, How to Select.
3. Required ratio - 1200 ÷ 250 = 4.80... Closest nominal ratio is 5.06... Single Reduction Selection Table, above.
4. Drive size 1090YF1... Single Reduction Selection Table above. Since 1200 high speed shaft rpm is not listed in the table proportion the hp to suit the nearest listed rpm. At 1170 rpm, the equivalent hp is 480 x 1170 ÷ 1200 or 468 hp. In the 1170 high speed shaft rpm section, opposite 5.06 ratio and 230 rpm trace right to 507 (nearest hp exceeding equivalent hp) and then read drive size 1090YF1 at top of column. Rating is in **bold face** type check thermal hp.

Type Y1/Torque Ratings

(POUND-INCHES AT LOW SPEED SHAFT. . .
MULTIPLY VALUES LISTED BELOW BY 1000)

Ratios 1.84 through 7.59 Single Reduction 1750 through 11700 rpm

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE *																			
			1080	1090	1100	1110	1120	1125	1130	1135	1140	1145	1150	1155	1160	1165	1170	1175	1180	1185	1190	1195
1750	1.84	950	101	135	136																	
	2.03	860	106	144	141	176																
	2.25	780	110	142	147	181																
	2.49	700	110	148	152	188	231	259														
	2.76	640	110	147	157	194	238	266	294	329												
	3.05	575	110	143	161	199	243	272	304	340												
	3.38	520	105	142	154	205	231	259	308	345	417	467										
	3.74	470	106	139	155	200	237	265	313	350	414	464	553	619								
	4.13	420	106	130	159	188	238	266	298	334	413	463	567	635								
	4.57	380	104	130	162	186	237	265	303	339	419	469	575	644	680	762						
	5.06	350	102	131	161	186	243	272	303	339	375	420	514	576	688	771	806	903				
	5.60	310	101	128	155	186	222	249	305	342	377	422	519	581	688	770	808	905				
	6.20	280	94.9	128	147	192	207	232	305	342	380	426	525	588	669	749	814	912	1002	1122	1419	1589
	6.86	255	93.9	127	147	184	209	234	290	325	385	431	513	574	662	741	829	928	1003	1123	1365	1529
	7.59	230	91.4	119	139	175	206	231	269	301	370	414	492	551	641	718	773	866	1011	1132	1306	1463
1430	1.84	780	103	138	139	169	212	237														
	2.03	700	108	147	144	180	212	237	270	302												
	2.25	640	112	144	150	185	228	255	279	313												
	2.49	575	115	154	155	192	237	265	293	328	429	481										
	2.76	520	115	153	160	199	243	272	301	337	445	498										
	3.05	470	114	146	164	203	250	280	311	348	456	511	615	689								
	3.38	420	107	147	157	209	237	265	315	353	427	478	558	625	754	844						
	3.74	380	107	144	158	208	241	270	320	358	424	475	566	634	771	863						
	4.13	350	109	133	162	192	243	272	304	341	422	473	580	650	680	762	968	1084				
	4.57	310	106	132	165	190	242	271	309	346	428	479	588	659	696	780	988	1106	1137	1273		
	5.06	280	104	133	166	190	248	278	309	346	383	429	525	588	704	789	826	925	1174	1315	1422	1593
	5.60	255	105	130	160	190	230	258	312	349	385	431	530	594	718	804	827	926	1161	1300	1444	1617
	6.20	230	96.5	130	150	195	211	236	318	356	388	434	536	600	683	765	833	933	1025	1148	1457	1632
	6.86	210	95.9	130	152	190	213	238	301	337	392	439	534	598	688	770	849	951	1026	1149	1429	1601
	7.59	190	94.0	120	144	178	213	238	273	306	384	430	502	562	668	748	789	884	1036	1160	1366	1530
1170	1.84	640	106	141	142	173	216	242	263	294	389	436										
	2.03	575	110	150	147	184	216	242	277	310	410	459	598	670								
	2.25	520	114	147	154	189	233	261	286	320	424	475	623	698								
	2.49	470	117	158	159	196	242	271	299	335	439	492	633	709								
	2.76	420	119	159	164	203	248	278	307	344	455	510	596	667	722	809						
	3.05	380	118	149	167	207	255	286	317	355	467	523	629	704	734	822	964	1080				
	3.38	350	108	150	160	213	241	270	321	360	436	488	571	639	771	864	946	1059	1249	1399		
	3.74	310	109	149	161	216	246	275	327	366	433	485	579	648	788	882	972	1089	1280	1434		
	4.13	280	111	135	165	196	247	277	311	348	431	483	593	664	696	779	990	1109	1149	1287	1687	1889
	4.57	255	108	135	168	193	246	276	314	352	437	489	601	673	712	797	1010	1131	1163	1303	1733	1941
	5.06	230	105	135	169	193	253	283	315	353	391	438	537	601	720	806	844	945	1201	1345	1455	1630
	5.60	210	108	132	166	193	238	267	318	356	392	439	541	606	738	826	845	946	1196	1340	1477	1654
	6.20	190	97.9	132	152	199	214	240	323	362	396	443	546	611	696	780	850	952	1046	1172	1489	1668
	6.86	170	97.4	132	155	196	216	242	312	349	399	447	549	615	701	785	867	971	1047	1173	1492	1671
	7.59	155	96.6	122	148	181	216	242	279	312	398	446	511	572	694	777	805	902	1057	1184	1425	1596

* Type YF1 (1000 series) drives employ double helical gearing, with the exception of ratios 5.06 thru 7.59 in drive Size 1080 and ratios 5.60 thru 7.59 in drive Size 1090. Torque ratings shown in **bold face** type exceed the drive thermal ratings. Convert required torque without service factor to hp and check required hp (without service factor) against thermal hp ratings on Page 27, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, use torque for 580 rpm.

Drives with ratings in the shaded areas require jet lubrication. Refer to Selection Guide 131-310 for water -to-oil pump and cooler selections or Selection Guide 131-315 for air-to-oil pump and cooler selections.

5. Drive thermal hp of 321 is adequate . . . Page 27, Thermal Horsepower Table. Since the thermal capacity of 321 hp exceeds the actual 320 hp load, the standard 1090YF1 is satisfactory.
6. There is no overhung load since the drive is coupling connected. Refer to Falk™ Steelflex® and Gear coupling Selection Guides for coupling selections.
7. Refer to Pages 36 and 37 for drive dimensions and Page 47 for information required to process order.

Type Y1/Horsepower Ratings

Ratios 1.84 through 7.59 Single Reduction 870 through 580 rpm

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE *																			
			1080	1090	1100	1110	1120	1125	1130	1135	1140	1145	1150	1155	1160	1165	1170	1175	1180	1185	1190	1195
	1.84	**470**	**814**	**1096**	**1113**	**1364**	**1663**	**1863**	**2088**	**2338**	**3079**	**3449**	**4387**	**4913**	**5310**	**5947**						
	2.03	**430**	**766**	**1010**	**1060**	**1288**	**1515**	**1697**	**1944**	**2177**	**2836**	**3176**	**4131**	**4627**	**4964**	**5560**	**5900**	**6608**				
	2.25	**390**	**717**	**950**	**973**	**1208**	**1486**	**1664**	**1846**	**2068**	**2680**	**3002**	**3873**	**4338**	**4579**	**5129**	**5664**	**6344**	**8230**	**9218**		
	2.49	**350**	**656**	**888**	**919**	**1137**	**1396**	**1563**	**1715**	**1921**	**2524**	**2827**	**3727**	**4174**	**4453**	**4987**	**5254**	**5884**	**7629**	**8544**		
	2.76	**320**	**594**	**792**	**863**	**1065**	**1294**	**1449**	**1604**	**1797**	**2365**	**2649**	**3175**	**3556**	**3796**	**4252**	**4973**	**5570**	**6155**	**6894**	**8791**	**9846**
	3.05	**290**	**560**	**712**	**801**	**968**	**1191**	**1334**	**1486**	**1664**	**2184**	**2446**	**3021**	**3383**	**3526**	**3949**	**4538**	**5082**	**5799**	**6495**	**8254**	**9244**
	3.38	**260**	**456**	**633**	**667**	**904**	**1002**	**1122**	**1366**	**1530**	**1886**	**2112**	**2404**	**2692**	**3240**	**3629**	**4095**	**4586**	**5336**	**5976**	**6914**	**7744**
870	**3.74**	**235**	**408**	**572**	**600**	**815**	**921**	**1031**	**1276**	**1429**	**1684**	**1886**	**2251**	**2521**	**3080**	**3450**	**3771**	**4223**	**5030**	**5634**	**6386**	**7152**
	4.13	**210**	368	**453**	**578**	**676**	**854**	**957**	**1069**	**1197**	**1520**	**1702**	**2054**	**2300**	**2423**	**2714**	**3446**	**3859**	**4008**	**4489**	**5971**	**6688**
	4.57	**190**	342	406	511	**610**	**745**	**834**	**996**	**1115**	**1345**	**1506**	**1904**	**2132**	**2226**	**2493**	**3207**	**3592**	**3711**	**4156**	**5451**	**6105**
	5.06	**175**	295	386	466	554	**721**	**808**	**905**	**1014**	**1115**	**1249**	**1533**	**1717**	**2076**	**2325**	**2417**	**2707**	**3446**	**3859**	**4123**	**4618**
	5.60	**155**	272	334	414	492	601	673	812	**909**	**995**	**1114**	**1420**	**1590**	**1852**	**2074**	**2163**	**2423**	**3149**	**3527**	**3720**	**4166**
	6.20	**140**	219	302	355	450	495	554	736	**824**	914	**1024**	**1246**	**1396**	**1601**	**1793**	**2002**	**2242**	**2412**	**2701**	**3448**	**3862**
	6.86	**130**	197	275	327	403	450	504	649	727	834	**934**	**1132**	**1268**	**1478**	**1655**	**1842**	**2063**	**2220**	**2486**	**3175**	**3556**
	7.59	**115**	186	223	287	332	407	456	517	579	754	845	951	**1065**	**1329**	**1489**	**1507**	**1688**	**1946**	**2180**	**2819**	**3157**
	1.84	**390**	**685**	**907**	**937**	**1150**	**1403**	**1571**	**1761**	**1972**	**2600**	**2912**	**3705**	**4150**	**4490**	**5029**	**5388**	**6035**	**7813**	**8751**		
	2.03	**350**	**644**	**850**	**892**	**1085**	**1278**	**1431**	**1639**	**1836**	**2393**	**2680**	**3489**	**3908**	**4196**	**4699**	**4990**	**5589**	**7397**	**8285**	**8958**	**10033**
	2.25	**320**	**602**	**800**	**818**	**1018**	**1252**	**1402**	**1557**	**1744**	**2262**	**2533**	**3270**	**3662**	**3869**	**4333**	**4789**	**5364**	**6963**	**7798**	**8493**	**9512**
	2.49	**290**	**543**	**735**	**773**	**957**	**1175**	**1316**	**1446**	**1619**	**2129**	**2384**	**3146**	**3523**	**3762**	**4213**	**4440**	**4973**	**6385**	**7151**	**8021**	**8984**
	2.76	**260**	**492**	**655**	**726**	**896**	**1089**	**1220**	**1352**	**1514**	**1994**	**2233**	**2679**	**3000**	**3205**	**3590**	**4201**	**4705**	**5203**	**5827**	**7435**	**8327**
	3.05	**235**	**463**	**599**	**674**	**814**	**1003**	**1123**	**1251**	**1401**	**1841**	**2062**	**2546**	**2852**	**2976**	**3333**	**3831**	**4291**	**4899**	**5487**	**6978**	**7815**
	3.38	**210**	383	**531**	560	**760**	**843**	**944**	**1150**	**1288**	**1588**	**1779**	**2026**	**2269**	**2733**	**3061**	**3456**	**3871**	**4505**	**5046**	**5843**	**6544**
720	**3.74**	**190**	342	480	504	685	774	**867**	**1074**	**1203**	**1418**	**1588**	**1896**	**2124**	**2597**	**2909**	**3181**	**3563**	**4246**	**4756**	**5393**	**6040**
	4.13	**175**	309	380	486	568	718	804	899	**1007**	**1279**	**1432**	**1729**	**1937**	**2042**	**2287**	**2905**	**3254**	**3381**	**3787**	**5042**	**5647**
	4.57	**155**	287	341	429	512	626	701	838	**938**	**1131**	**1267**	**1603**	**1795**	**1875**	**2100**	**2704**	**3028**	**3129**	**3505**	**4598**	**5150**
	5.06	**140**	247	323	391	465	606	679	762	853	938	**1051**	**1290**	**1445**	**1747**	**1957**	**2037**	**2281**	**2904**	**3252**	**3478**	**3895**
	5.60	**130**	228	280	347	413	512	573	681	763	836	936	**1195**	**1338**	**1558**	**1745**	**1821**	**2040**	**2653**	**2971**	**3135**	**3511**
	6.20	**115**	183	253	298	377	415	465	617	691	769	861	1047	**1173**	**1347**	**1509**	**1685**	**1887**	**2030**	**2274**	**2905**	**3254**
	6.86	**105**	165	230	274	338	378	423	553	619	700	784	952	1066	**1243**	**1392**	**1550**	**1736**	**1868**	**2092**	**2674**	**2995**
	7.59	**95**	155	187	243	279	342	383	434	486	633	709	798	894	1117	**1251**	1267	**1419**	**1638**	**1834**	**2413**	**2703**
	1.84	**320**	**561**	**731**	**769**	**944**	**1153**	**1291**	**1449**	**1623**	**2140**	**2397**	**3052**	**3418**	**3703**	**4147**	**4446**	**4979**	**6450**	**7224**	**7815**	**8753**
	2.03	**290**	**528**	**696**	**732**	**891**	**1049**	**1175**	**1348**	**1510**	**1969**	**2205**	**2872**	**3217**	**3458**	**3873**	**4115**	**4609**	**6104**	**6836**	**7397**	**8285**
	2.25	**260**	488	**671**	671	**835**	**1029**	**1152**	**1279**	**1433**	**1860**	**2083**	**2690**	**3013**	**3187**	**3569**	**3948**	**4422**	**5743**	**6432**	**7011**	**7852**
	2.49	**235**	438	**592**	634	785	**965**	**1081**	**1188**	**1330**	**1750**	**1960**	**2588**	**2898**	**3097**	**3469**	**3659**	**4098**	**5143**	**5760**	**6619**	**7413**
	2.76	**210**	396	528	595	735	894	**1001**	1110	**1243**	**1638**	**1835**	**2203**	**2467**	**2638**	**2955**	**3460**	**3875**	**4287**	**4801**	**6131**	**6867**
	3.05	**190**	373	490	552	667	815	913	1027	**1150**	**1512**	**1693**	**2094**	**2345**	**2448**	**2742**	**3154**	**3532**	**4036**	**4520**	**5670**	**6350**
	3.38	**175**	313	435	458	623	690	773	944	1057	**1304**	**1460**	**1664**	**1864**	**2246**	**2516**	**2844**	**3185**	**3709**	**4154**	**4813**	**5391**
580	**3.74**	**155**	280	390	412	561	634	710	880	986	1163	1303	**1557**	**1744**	**2135**	**2391**	**2616**	**2930**	**3494**	**3913**	**4440**	**4973**
	4.13	**140**	252	311	397	465	588	659	737	825	1049	1175	**1420**	**1590**	**1678**	**1879**	**2388**	**2674**	**2780**	**3114**	**4149**	**4647**
	4.57	**130**	234	278	351	419	513	574	686	768	927	1038	1314	**1472**	**1539**	**1724**	**2221**	**2487**	**2572**	**2881**	**3703**	**4148**
	5.06	**115**	202	264	319	381	496	555	623	698	769	861	1057	1184	**1434**	**1606**	**1672**	**1873**	**2386**	**2672**	**2858**	**3201**
	5.60	**105**	186	229	283	338	421	471	558	625	684	766	979	1096	1278	**1431**	**1495**	**1674**	**2179**	**2440**	**2576**	**2885**
	6.20	**95**	149	206	243	308	339	380	505	566	629	704	858	961	1104	1237	1382	**1548**	**1666**	**1866**	**2386**	**2672**
	6.86	**85**	134	188	223	276	308	345	453	507	573	642	779	872	1018	1140	1271	1423	1532	**1716**	**2195**	**2458**
	7.59	**77**	127	152	200	227	279	313	354	397	518	580	653	731	915	1025	1038	1163	1342	1503	**2002**	**2242**

* Type YF1 (1000 series) drives employ double helical gearing, with the exception of ratios 5.06 thru 7.59 in drive Size 1080 and ratios 5.60 thru 7.59 in drive Size 1090. Mechanical hp ratings shown in **bold face** type exceed the drive thermal ratings. Check required hp (without service factor) against thermal hp ratings on Page 27, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, reduce hp rating proportionately.

Type Y1/Torque Ratings

(POUND-INCHES AT LOW SPEED SHAFT. .. MULTIPLY VALUES LISTED BELOW BY 1000)

Ratios 1.84 through 7.59 Single Reduction 870 through 580 rpm

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE *																			
			1080	1090	1100	1110	1120	1125	1130	1135	1140	1145	1150	1155	1160	1165	1170	1175	1180	1185	1190	1195
870	1.84	470	108	143	146	178	223	250	271	304	403	451	595	666	696	780						
	2.03	430	113	154	151	189	223	250	286	320	423	474	619	693	729	817	865	969				
	2.25	390	117	150	158	195	240	269	295	330	438	491	644	721	756	847	909	1018	1315	1473		
	2.49	350	120	159	163	202	249	279	309	346	454	508	654	732	780	874	929	1040	1371	1535		
	2.76	320	120	160	168	209	256	287	316	354	470	526	615	689	747	837	979	1097	1217	1363	1713	1918
	3.05	290	120	153	172	213	263	294	327	366	480	538	649	727	759	850	997	1117	1248	1398	1771	1983
	3.38	260	111	153	165	219	248	278	330	370	449	503	588	659	796	892	978	1095	1292	1447	1655	1854
	3.74	235	112	156	165	222	253	283	336	376	446	499	596	667	813	911	1004	1124	1323	1482	1710	1915
	4.13	210	113	138	169	201	254	285	320	358	444	497	610	683	717	803	1022	1145	1187	1329	1744	1953
	4.57	190	110	138	172	198	253	283	323	362	448	502	618	692	733	821	1041	1166	1201	1345	1790	2005
	5.06	175	108	138	173	198	259	290	323	362	401	449	551	617	741	830	870	974	1239	1388	1502	1682
	5.60	155	110	135	173	197	251	281	326	365	403	451	556	623	758	849	870	974	1233	1381	1523	1706
	6.20	140	99.8	135	155	203	220	246	332	372	405	454	561	628	716	802	875	980	1078	1207	1535	1719
	6.86	130	99.2	135	158	203	221	248	327	366	410	459	563	630	721	807	891	998	1078	1207	1545	1730
	7.59	115	99.4	124	155	185	221	247	285	319	408	457	524	587	718	804	827	926	1087	1217	1509	1690
720	1.84	390	110	143	149	182	228	255	277	310	411	460	606	679	712	797	845	946	1263	1415		
	2.03	350	115	157	154	193	227	254	291	326	431	483	631	707	745	834	885	991	1315	1473	1590	1781
	2.25	320	119	153	161	198	245	274	301	337	446	500	657	736	772	865	929	1040	1345	1506	1644	1841
	2.49	290	120	159	166	205	254	284	314	352	463	518	667	747	796	892	948	1062	1387	1553	1698	1902
	2.76	260	120	159	171	212	261	292	322	361	479	536	628	703	763	854	999	1119	1243	1392	1750	1960
	3.05	235	120	155	175	217	267	299	332	372	489	548	662	741	774	867	1017	1139	1274	1427	1809	2026
	3.38	210	113	156	167	223	253	283	337	377	457	512	600	672	812	909	997	1117	1318	1476	1690	1893
	3.74	190	113	158	167	225	257	288	341	382	454	508	607	680	829	928	1023	1146	1350	1512	1745	1954
	4.13	175	115	140	172	204	258	289	325	364	451	505	621	695	730	818	1041	1166	1210	1355	1779	1992
	4.57	155	112	140	174	201	256	287	329	368	456	511	629	704	746	836	1061	1188	1224	1371	1825	2041
	5.06	140	109	140	176	200	263	295	329	368	408	457	561	628	754	844	886	992	1262	1413	1531	1715
	5.60	130	111	137	175	200	258	289	330	370	409	458	565	633	771	863	885	991	1255	1406	1551	1737
	6.20	115	101	137	158	205	222	249	337	377	412	461	569	637	729	816	890	997	1096	1228	1563	1751
	6.86	105	100	136	160	206	224	251	336	376	415	465	571	640	732	820	906	1015	1096	1227	1572	1761
	7.59	95	100	126	158	188	224	251	289	324	414	464	531	595	729	816	840	941	1104	1237	1561	1748
580	1.84	320	112	143	152	185	232	260	282	316	420	470	621	695	729	816	864	968	1295	1450	1541	1726
	2.03	290	117	159	157	196	231	259	297	333	441	494	646	723	762	853	905	1014	1347	1509	1630	1826
	2.25	260	120	159	163	202	249	279	306	343	456	511	671	752	789	884	950	1064	1377	1542	1685	1887
	2.49	235	120	159	169	209	258	289	321	359	472	529	681	763	814	912	971	1087	1387	1553	1739	1948
	2.76	210	120	160	174	216	265	297	329	368	488	546	640	717	779	872	1021	1144	1271	1424	1791	2006
	3.05	190	120	158	178	220	270	302	338	379	499	559	675	756	790	885	1039	1164	1303	1459	1825	2041
	3.38	175	114	158	169	227	256	287	343	384	466	522	612	685	829	928	1019	1141	1347	1509	1729	1936
	3.74	155	115	159	170	229	261	292	347	389	462	517	619	693	846	947	1045	1170	1379	1544	1783	1997
	4.13	140	116	142	174	207	263	294	330	370	460	515	633	709	745	834	1063	1190	1235	1383	1817	2035
	4.57	130	113	141	177	204	261	292	334	374	463	519	640	717	761	852	1081	1211	1248	1398	1826	2042
	5.06	115	111	142	178	204	267	299	333	373	414	464	571	639	768	860	903	1011	1287	1441	1562	1749
	5.60	105	112	139	177	203	263	295	336	376	415	465	575	644	785	879	901	1009	1279	1433	1582	1772
	6.20	95	102	138	159	208	226	253	342	383	418	468	579	648	741	830	906	1015	1117	1251	1593	1784
	6.86	85	101	138	162	208	227	254	342	383	422	473	580	650	744	833	922	1033	1116	1250	1602	1794
	7.59	77	102	127	162	189	227	254	293	328	421	471	539	604	741	830	854	957	1123	1258	1607	1800

* Type YF1 (1000 series) drives employ double helical gearing, with the exception of ratios 5.06 thru 7.59 in drive Size 1080 and ratios 5.60 thru 7.59 in drive Size 1090. Torque ratings shown in **bold face** type exceed the drive thermal ratings. Convert required torque without service factor to hp and check required hp (without service factor) against thermal hp ratings on Page 27, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, use torque for 580 rpm.

Type Y2/Horsepower Ratings

Ratios 8.40 through 47.08 Double Reduction 1750 through 1170 rpm

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE *																						
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145	2150	2155	2160	2165	2170	2175	2180	2185	2190	2195
1750	**8.40**	**210**	**84.1**	**132**	**187**	**266**	**372**	**500**	**570**	**704**	**789**	**887**	**993**	**1319**	**1477**	**1662**	**1861**								
	9.30	**190**	**84.1**	**124**	**187**	**223**	**303**	**450**	**570**	**704**	**789**	**887**	**993**	**1319**	**1477**	**1662**	**1861**								
	10.29	**170**	**82.8**	**115**	**166**	**257**	**325**	**440**	**570**	**704**	**789**	**887**	**993**	**1240**	**1389**	**1662**	**1861**								
	11.39	**155**	**66.7**	**101**	**153**	**226**	**266**	**420**	**486**	**584**	**654**	**750**	**840**	**1070**	**1198**	**1453**	**1627**	**1996**	**2236**						
	12.61	**140**	**66.3**	**87.5**	**126**	**212**	**270**	**377**	**492**	**578**	**647**	**793**	**888**	**1057**	**1184**	**1428**	**1599**	**1686**	**1888**						
	13.95	**125**	**54.6**	**78.9**	**113**	**187**	**221**	**343**	**416**	**495**	**554**	**650**	**728**	**911**	**1020**	**1159**	**1298**	**1638**	**1834**	**2054**	**2301**	**2737**	**3065**		
	15.44	**115**	**43.2**	**66.0**	**90.7**	**168**	**219**	**307**	**367**	**479**	**536**	**628**	**703**	**887**	**993**	**1185**	**1327**	**1380**	**1546**	**1903**	**2131**	**2497**	**2797**		
	17.09	**100**	**43.2**	**66.0**	**90.7**	**157**	**182**	**290**	**339**	**412**	**461**	**544**	**609**	**763**	**855**	**960**	**1075**	**1413**	**1582**	**1782**	**1996**	**2292**	**2567**	**3032**	**3396**
	18.91	**90**	**43.2**	**65.6**	**90.7**	**116**	**168**	**260**	**303**	**382**	**428**	**534**	**598**	**685**	**767**	**1002**	**1122**	**1190**	**1333**	**1632**	**1828**	**2091**	**2342**	**2754**	**3084**
	20.93	**84**	37.6	**59.0**	**87.5**	**116**	**153**	**242**	**287**	**347**	**389**	**464**	**520**	**626**	**701**	**812**	**909**	**1106**	**1239**	**1460**	**1635**	**1954**	**2189**	**2535**	**2839**
	23.16	**75**	37.4	51.3	**71.9**	**107**	**135**	**221**	**261**	**304**	**340**	**418**	**468**	**538**	**602**	**821**	**919**	**990**	**1109**	**1350**	**1512**	**1796**	**2011**	**2301**	**2577**
	25.63	**68**	30.7	46.1	64.6	**95.1**	116	**177**	**242**	**292**	**327**	**389**	**436**	**529**	**592**	**671**	**751**	**901**	**1009**	**1174**	**1315**	**1492**	**1671**	**1939**	**2172**
	28.36	**60**	25.6	40.2	56.3	**92.0**	110	**177**	**222**	**261**	**292**	**350**	**392**	**462**	**517**	**637**	**713**	**831**	**931**	**1170**	**1310**	**1492**	**1671**	**1939**	**2172**
	31.39	**56**	25.6	39.9	56.3	76.9	95.9	**146**	**177**	**235**	**263**	**298**	**334**	**409**	**458**	**569**	**637**	**756**	**847**	**978**	**1095**	**1267**	**1419**	**1611**	**1804**
	34.74	**50**	25.6	34.6	50.0	67.3	94.0	**140**	**177**	**221**	**247**	**283**	**317**	**388**	**435**	**470**	**526**	**632**	**708**	**847**	**949**	**1109**	**1242**	**1544**	**1729**
	38.44	**45**	21.5	31.1	44.9	60.6	82.3	125	140	176	197	238	**267**	**320**	**358**	**470**	**526**	**629**	**704**	**783**	**877**	**1050**	**1176**	**1365**	**1529**
	42.54	**40**	18.6	24.9	35.3	47.8	72.0	112	140	176	197	238	**267**	**320**	**358**	**417**	**467**	**510**	**571**	**696**	**780**	**874**	**979**	**1237**	**1385**
	47.08	**37**	16.7	23.1	31.9	45.2	63.7	97.2	120	157	176	208	233	263	295	367	**411**	**455**	**510**	**615**	**689**	**785**	**879**	**1028**	**1151**
1430	**8.40**	**170**	**70.9**	**111**	**158**	**223**	**316**	**434**	**484**	**600**	**672**	**770**	**862**	**1126**	**1261**	**1389**	**1556**	**1907**	**2136**	**2627**	**2942**				
	9.30	**155**	**70.9**	**108**	**156**	**188**	**259**	**391**	**484**	**600**	**672**	**768**	**860**	**1126**	**1261**	**1389**	**1556**	**1907**	**2136**	**2429**	**2721**				
	10.29	**140**	**68.4**	**95.2**	**137**	**216**	**273**	**370**	**484**	**595**	**666**	**770**	**862**	**1048**	**1174**	**1389**	**1556**	**1662**	**1861**	**2228**	**2495**				
	11.39	**125**	**55.7**	**84.1**	**128**	**190**	**223**	**353**	**409**	**492**	**551**	**632**	**708**	**904**	**1012**	**1207**	**1352**	**1690**	**1893**	**1981**	**2219**	**2729**	**3057**		
	12.61	**115**	**55.3**	**73.1**	**105**	**178**	**227**	**316**	**415**	**491**	**550**	**668**	**748**	**891**	**998**	**1206**	**1351**	**1426**	**1597**	**1916**	**2146**	**2517**	**2819**		
	13.95	**100**	45.5	**65.9**	**94.7**	**156**	**185**	**287**	**349**	**415**	**465**	**547**	**613**	**767**	**859**	**978**	**1095**	**1382**	**1548**	**1717**	**1923**	**2316**	**2594**	**3046**	**3411**
	15.44	**90**	36.3	55.5	76.3	**142**	**182**	**257**	**305**	**406**	**455**	**513**	**574**	**742**	**831**	**998**	**1118**	**1164**	**1304**	**1607**	**1800**	**2113**	**2366**	**2766**	**3098**
	17.09	**84**	36.3	55.5	76.3	**131**	**152**	**242**	**284**	**345**	**386**	**457**	**512**	**641**	**718**	**808**	**905**	**1190**	**1333**	**1504**	**1684**	**1935**	**2167**	**2563**	**2871**
	18.91	**75**	36.3	54.1	75.6	97.2	**142**	**217**	**257**	**324**	**363**	**453**	**507**	**581**	**651**	**843**	**944**	**1002**	**1122**	**1377**	**1542**	**1764**	**1976**	**2327**	**2606**
	20.93	**68**	31.3	49.1	72.9	97.2	127	**204**	**240**	**290**	**325**	**389**	**436**	**525**	**588**	**681**	**763**	**941**	**1054**	**1218**	**1364**	**1651**	**1849**	**2138**	**2394**
	23.16	**60**	31.0	42.7	59.8	89.3	112	**185**	218	256	**287**	**354**	**396**	**455**	**510**	**696**	**779**	**831**	**931**	**1136**	**1272**	**1512**	**1693**	**1939**	**2172**
	25.63	**56**	25.5	38.3	53.7	79.9	97.2	149	204	245	274	**326**	**365**	**442**	**495**	**562**	**629**	**756**	**847**	**998**	**1118**	**1270**	**1422**	**1652**	**1850**
	28.36	**50**	21.4	33.7	47.2	76.5	91.1	149	185	218	244	293	328	386	**432**	**539**	**604**	**697**	**781**	**982**	**1100**	**1261**	**1412**	**1630**	**1826**
	31.39	**45**	21.4	33.1	47.2	63.9	79.8	121	149	198	222	252	282	346	388	476	**533**	**634**	**710**	**820**	**918**	**1064**	**1192**	**1353**	**1515**
	34.74	**40**	21.4	28.5	41.5	55.8	78.1	117	149	184	206	236	264	324	363	397	445	536	**600**	**719**	**805**	**942**	**1055**	**1313**	**1470**
	38.44	**37**	17.8	25.8	37.2	50.3	68.4	104	116	148	166	201	225	270	302	393	440	526	589	**655**	**734**	**879**	**985**	**1145**	**1282**
	42.54	**34**	15.4	20.6	29.3	39.6	59.7	93.1	117	148	166	199	223	270	302	348	390	426	477	582	652	**731**	**819**	**1037**	**1161**
	47.08	**30**	13.8	19.1	26.4	37.5	52.8	80.8	99.5	131	147	173	194	220	246	305	342	380	426	514	576	656	**735**	**861**	**964**
1170	**8.40**	**140**	59.7	**93.9**	**133**	**188**	**266**	**377**	**411**	**510**	**571**	**669**	**749**	**960**	**1075**	**1162**	**1301**	**1596**	**1787**	**2199**	**2463**	**2597**	**2909**	**3926**	**4397**
	9.30	**125**	59.7	**93.4**	**129**	**157**	**217**	**340**	**411**	**510**	**571**	**638**	**715**	**958**	**1073**	**1162**	**1301**	**1596**	**1787**	**2060**	**2307**	**2597**	**2909**	**3568**	**3996**
	10.29	**115**	56.6	78.7	113	**181**	**229**	**311**	**408**	**501**	**561**	**650**	**728**	**886**	**992**	**1162**	**1301**	**1406**	**1575**	**1888**	**2115**	**2523**	**2826**	**3243**	**3632**
	11.39	**100**	46.5	70.2	107	**159**	**187**	**296**	**344**	**414**	**464**	**532**	**596**	**762**	**853**	**1004**	**1124**	**1415**	**1585**	**1657**	**1856**	**2285**	**2559**	**3068**	**3436**
	12.61	**90**	46.2	61.1	88.0	**148**	**190**	**265**	**348**	**417**	**467**	**563**	**630**	**747**	**837**	**1018**	**1140**	**1204**	**1349**	**1621**	**1815**	**2130**	**2386**	**2786**	**3120**
	13.95	**84**	38.0	55.0	79.1	130	155	**240**	**293**	**349**	**391**	**460**	**515**	**646**	**723**	**824**	**923**	**1166**	**1306**	**1435**	**1607**	**1957**	**2192**	**2578**	**2887**
	15.44	**75**	30.4	46.6	64.1	119	151	216	254	344	**385**	**420**	**470**	**615**	**689**	**840**	**941**	**981**	**1099**	**1356**	**1519**	**1784**	**1998**	**2339**	**2620**
	17.09	**68**	30.4	46.6	64.1	109	127	200	238	289	324	383	**429**	**538**	**603**	**679**	**761**	**1002**	**1122**	**1260**	**1411**	**1621**	**1816**	**2164**	**2424**
	18.91	**60**	30.4	44.6	62.4	81.7	119	182	217	274	307	384	**430**	494	**553**	**708**	**793**	**842**	**943**	**1159**	**1298**	**1487**	**1665**	**1963**	**2199**
	20.93	**56**	26.0	40.8	60.7	81.7	106	168	201	243	272	326	365	440	493	571	**640**	**799**	**895**	**1015**	**1137**	**1370**	**1534**	**1801**	**2017**
	23.16	**50**	25.8	35.5	49.8	74.3	93.5	154	182	217	243	299	335	386	432	583	653	698	**782**	**954**	**1069**	**1264**	**1416**	**1632**	**1828**
	25.63	**45**	21.1	31.9	44.7	67.1	81.7	125	170	204	228	272	305	370	414	471	527	635	711	**847**	**949**	**1079**	**1208**	**1405**	**1574**
	28.36	**40**	17.9	28.2	39.5	63.6	75.8	124	155	181	203	245	274	322	361	456	511	584	654	**824**	**923**	**1045**	**1170**	**1371**	**1535**
	31.39	**37**	17.9	27.4	39.5	53.1	66.3	101	125	167	187	213	238	293	328	398	446	530	594	688	770	**892**	**999**	**1136**	**1272**
	34.74	**34**	17.9	23.5	34.4	46.4	64.9	98.6	125	154	172	196	220	271	303	336	376	453	507	608	681	798	**894**	**1115**	**1249**
	38.44	**30**	14.7	21.4	30.9	41.7	56.8	86.5	96.6	124	139	169	189	228	255	328	367	439	492	548	614	737	825	959	**1074**
	42.54	**27**	12.7	17.1	24.3	32.9	49.6	77.4	98.6	124	139	165	185	227	254	290	325	355	398	487	545	612	685	868	972
	47.08	**25**	11.4	15.8	21.9	31.1	43.8	67.1	82.7	109	122	144	161	183	205	255	286	317	355	429	481	548	614	720	806

* Mechanical hp ratings shown in **bold face** type exceed the drive thermal ratings. Check required hp (without service factor) against thermal hp ratings on Page 28, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, reduce hp rating proportionately.

Drives with ratings in the shaded areas require jet lubrication. Refer to Selection Guide 131-310 for water-to-oil pump and cooler selections or Selection Guide 131-315 for air-to-oil pump and cooler selections.

Type Y2/Torque Ratings

(POUND-INCHES AT LOW SPEED SHAFT. . .
MULTIPLY VALUES LISTED BELOW BY 1000)

Ratios 8.40 through 47.08 Double Reduction 1750 through 1700 rpm

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE *																						
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145	2150	2155	2160	2165	2170	2175	2180	2185	2190	2195
1750	**8.40**	**210**	**25.1**	**40.3**	**54.3**	**82.6**	**113**	**133**	**173**	**215**	**241**	**274**	**307**	**403**	**451**	**497**	**557**								
	9.30	**190**	**27.8**	**40.6**	**60.9**	**77.8**	**105**	**151**	**194**	**231**	**259**	**304**	**341**	**452**	**506**	**550**	**616**								
	10.29	**170**	**29.7**	**41.3**	**60.4**	**93.2**	**116**	**159**	**210**	**255**	**286**	**330**	**370**	**456**	**511**	**590**	**660**								
	11.39	**155**	**27.7**	**41.8**	**59.9**	**91.0**	**109**	**169**	**205**	**247**	**277**	**321**	**359**	**444**	**497**	**582**	**652**	**812**	**909**						
	12.61	**140**	**28.9**	**38.6**	**55.7**	**95.8**	**120**	**164**	**217**	**254**	**285**	**350**	**392**	**471**	**528**	**613**	**687**	**771**	**864**						
	13.95	**125**	**26.8**	**38.7**	**54.5**	**93.9**	**113**	**174**	**210**	**254**	**285**	**329**	**368**	**458**	**513**	**577**	**646**	**846**	**948**	**1061**	**1188**	**1403**	**1571**		
	15.44	**115**	**24.3**	**36.6**	**49.3**	**92.5**	**121**	**169**	**205**	**261**	**292**	**341**	**382**	**487**	**545**	**637**	**713**	**804**	**900**	**1044**	**1169**	**1364**	**1528**		
	17.09	**100**	**26.9**	**39.1**	**55.3**	**96.0**	**116**	**178**	**217**	**263**	**294**	**338**	**379**	**473**	**530**	**597**	**669**	**871**	**975**	**1104**	**1237**	**1455**	**1630**	**1887**	**2113**
	18.91	**90**	**29.2**	**42.7**	**61.8**	**80.3**	**113**	**173**	**205**	**254**	**284**	**349**	**391**	**473**	**530**	**655**	**734**	**826**	**925**	**1075**	**1204**	**1415**	**1585**	**1833**	**2053**
	20.93	**84**	29.5	**44.3**	**64.2**	**89.1**	118	**179**	**222**	**269**	**301**	**347**	**389**	**488**	**547**	**615**	**689**	**846**	**947**	**1133**	**1269**	**1488**	**1666**	**1957**	**2192**
	23.16	**75**	30.8	41.0	**59.5**	**93.1**	115	**177**	**212**	**245**	**274**	**334**	**374**	**452**	**506**	**670**	**750**	**853**	**955**	**1113**	**1247**	**1457**	**1632**	**1900**	**2128**
	25.63	**68**	28.5	41.0	58.3	**86.4**	113	**165**	**225**	**275**	**308**	**356**	**399**	**501**	**561**	**634**	**710**	**827**	**926**	**1078**	**1207**	**1392**	**1559**	**1832**	**2052**
	28.36	**60**	25.5	40.1	57.1	**94.7**	118	**179**	**217**	**264**	**296**	**346**	**387**	**470**	**526**	**627**	**702**	**876**	**981**	**1141**	**1278**	**1484**	**1662**	**1960**	**2195**
	31.39	**56**	29.5	45.9	61.5	88.9	113	**169**	**208**	**266**	**298**	**346**	**388**	**471**	**528**	**649**	**727**	**849**	**951**	**1076**	**1205**	**1417**	**1587**	**1858**	**2081**
	34.74	**50**	30.9	42.5	61.6	85.2	119	**168**	**219**	**269**	**301**	**355**	**398**	**480**	**538**	**573**	**642**	**822**	**921**	**1066**	**1194**	**1370**	**1534**	**1888**	**2115**
	38.44	**45**	29.3	42.4	60.3	84.7	115	171	201	246	275	335	**375**	**447**	**501**	**664**	**744**	**871**	**976**	**1112**	**1245**	**1459**	**1634**	**1907**	**2136**
	42.54	**40**	28.2	37.9	54.3	74.3	110	166	205	263	295	362	**405**	**479**	**537**	**638**	**715**	**810**	**907**	**1071**	**1199**	**1369**	**1533**	**1846**	**2067**
	47.08	**37**	27.5	39.0	52.8	74.6	107	159	204	255	286	341	382	460	515	612	**685**	**778**	**871**	**1028**	**1151**	**1317**	**1475**	**1738**	**1946**
1430	**8.40**	**170**	**25.9**	**41.5**	**56.1**	**84.7**	**117**	**141**	**180**	**225**	**252**	**291**	**326**	**421**	**471**	**509**	**570**	**713**	**799**	**998**	**1118**				
	9.30	**155**	**28.7**	**43.2**	**62.2**	**80.3**	**110**	**160**	**202**	**241**	**270**	**323**	**362**	**472**	**529**	**563**	**630**	**789**	884	**1035**	**1159**				
	10.29	**140**	**30.0**	**41.8**	**61.0**	**95.8**	**120**	**164**	**218**	**263**	**295**	**351**	**393**	**471**	**528**	**604**	**676**	**774**	**867**	**1009**	**1130**				
	11.39	**125**	**28.3**	**42.6**	**61.4**	**93.6**	**112**	**174**	**211**	**254**	**285**	**330**	**370**	**459**	**514**	**592**	**663**	**841**	**942**	**1014**	**1136**	**1386**	**1552**		
	12.61	**115**	**29.5**	**39.5**	**56.8**	**98.5**	**123**	**168**	**224**	**264**	**296**	**361**	**404**	**487**	**545**	**635**	**711**	**799**	**895**	**1042**	**1167**	**1363**	**1526**		
	13.95	**100**	27.4	**39.5**	**55.9**	**95.8**	**115**	**179**	**216**	**262**	**293**	**338**	**379**	**472**	**529**	**596**	**667**	**874**	**979**	**1085**	**1215**	**1453**	**1627**	**1885**	**2111**
	15.44	**90**	25.0	37.6	50.7	**95.7**	**123**	**173**	**209**	**271**	**304**	**341**	**382**	**498**	**558**	**656**	**735**	**829**	**929**	**1079**	**1208**	**1413**	**1582**	**1831**	**2051**
	17.09	**84**	27.7	40.3	56.9	**98.0**	**118**	**182**	**222**	**269**	**301**	**348**	**390**	**486**	**544**	**615**	**689**	**898**	**1006**	**1141**	**1278**	**1504**	**1684**	**1953**	**2187**
	18.91	**75**	30.1	43.1	63.0	82.3	**117**	**177**	**213**	**263**	**294**	**362**	**405**	**492**	**551**	**675**	**756**	**851**	**953**	**1110**	**1243**	**1462**	**1637**	**1896**	**2123**
	20.93	**68**	30.0	45.1	65.4	91.4	120	**184**	**227**	**275**	**308**	**356**	**399**	**501**	**561**	**632**	**708**	**880**	**986**	**1156**	**1295**	**1538**	**1722**	**2020**	**2262**
	23.16	**60**	31.2	41.8	60.6	95.1	117	**181**	217	253	**283**	**346**	**387**	**468**	**524**	**695**	**778**	**876**	**981**	**1146**	**1284**	**1501**	**1681**	**1960**	**2195**
	25.63	**56**	28.9	41.7	59.3	88.9	116	170	232	282	316	**364**	**408**	**513**	**574**	**650**	**728**	**849**	**951**	**1121**	**1256**	**1450**	**1624**	**1910**	**2139**
	28.36	**50**	26.0	41.2	58.6	96.4	119	184	221	270	302	354	396	479	**537**	**650**	**728**	**899**	**1007**	**1172**	**1313**	**1535**	**1719**	**2016**	**2258**
	31.39	**45**	30.1	46.6	63.1	90.4	115	171	214	275	308	358	401	488	547	664	**744**	**871**	**975**	**1104**	**1236**	**1457**	**1632**	**1910**	**2139**
	34.74	**40**	31.7	42.8	62.6	86.4	121	171	225	274	307	362	405	490	549	594	665	853	**955**	**1106**	**1239**	**1424**	**1595**	**1965**	**2201**
	38.44	**37**	29.7	43.0	61.2	86.0	117	174	204	253	283	346	387	462	517	679	761	892	999	**1138**	**1275**	**1496**	**1675**	**1956**	**2191**
	42.54	**34**	28.5	38.4	55.1	75.4	111	169	209	272	305	370	414	495	554	653	731	828	927	1095	1226	**1401**	**1569**	**1893**	**2120**
	47.08	**30**	27.8	39.5	53.4	75.7	108	162	207	261	292	347	389	470	526	622	697	796	891	1051	1177	1347	**1509**	**1781**	**1995**
1170	**8.40**	**140**	26.6	**42.9**	**57.8**	**87.3**	**121**	**150**	**187**	**233**	**261**	**310**	**347**	**438**	**491**	**520**	**582**	**729**	**817**	**1021**	**1143**	**1184**	**1326**	**1813**	**2030**
	9.30	**125**	29.5	**45.7**	**62.8**	**81.9**	**113**	**170**	**210**	**250**	**280**	**329**	**368**	**491**	**550**	**575**	**644**	**807**	**904**	**1072**	**1201**	**1314**	**1472**	**1821**	**2040**
	10.29	**115**	30.4	42.2	61.5	**98.1**	**122**	**169**	**225**	**271**	**304**	**363**	**406**	**488**	**546**	**617**	**691**	**801**	**897**	**1046**	**1171**	**1362**	**1525**	**1771**	**1983**
	11.39	**100**	28.9	43.5	62.7	**95.7**	**115**	**178**	**217**	**263**	**294**	**340**	**381**	**472**	**529**	**601**	**673**	**861**	**964**	**1037**	**1161**	**1418**	**1588**	**1883**	**2109**
	12.61	**90**	30.1	40.3	58.2	**100**	**126**	**172**	**230**	**275**	**308**	**371**	**416**	**498**	**558**	**654**	**733**	**825**	**924**	**1078**	**1207**	**1410**	**1579**	**1829**	**2048**
	13.95	**84**	27.9	40.3	57.1	97.6	118	**182**	**221**	**269**	**301**	**348**	**390**	**486**	**544**	**613**	**687**	**901**	**1009**	**1108**	**1241**	**1500**	**1680**	**1950**	**2184**
	15.44	**75**	25.6	38.6	52.1	98.0	125	178	212	280	**314**	**341**	**382**	**505**	**566**	**675**	**756**	**854**	**957**	**1113**	**1246**	**1458**	**1633**	**1893**	**2120**
	17.09	**68**	28.4	41.3	58.4	99.7	121	184	228	276	309	357	**400**	**499**	**559**	**632**	**708**	**924**	**1035**	**1168**	**1308**	**1539**	**1724**	**2014**	**2256**
	18.91	**60**	30.8	43.4	63.6	84.6	120	181	220	271	304	375	**420**	511	**572**	**693**	**776**	**874**	**979**	**1142**	**1279**	**1505**	**1686**	**1954**	**2189**
	20.93	**56**	30.5	45.8	66.6	93.9	123	185	233	281	315	365	409	513	575	648	**726**	**914**	**1024**	**1179**	**1320**	**1559**	**1746**	**2079**	**2329**
	23.16	**50**	31.8	42.5	61.7	96.7	119	184	222	262	293	357	400	485	543	712	797	899	**1007**	**1178**	**1319**	**1534**	**1718**	**2016**	**2258**
	25.63	**45**	29.3	42.4	60.4	91.2	119	175	236	287	321	372	417	524	587	665	745	871	976	**1163**	**1303**	**1505**	**1686**	**1986**	**2224**
	28.36	**40**	26.6	42.1	59.9	97.9	121	188	226	274	307	361	404	490	549	672	753	921	1031	**1203**	**1347**	**1554**	**1741**	**2071**	**2320**
	31.39	**37**	30.8	47.2	64.5	91.8	117	175	220	283	317	370	414	504	565	679	761	890	997	1132	1268	**1492**	**1671**	**1960**	**2195**
	34.74	**34**	32.4	43.1	63.4	87.8	123	177	231	279	313	369	413	500	560	613	687	880	986	1144	1281	1475	**1652**	**2040**	**2285**
	38.44	**30**	29.9	43.6	62.1	87.2	119	177	208	259	290	354	397	476	533	693	776	911	1020	1164	1304	1530	1714	2004	**2244**
	42.54	**27**	28.8	38.9	55.9	76.5	113	172	216	279	312	375	420	509	570	664	744	844	945	1119	1253	1432	1604	1937	2169
	47.08	**25**	28.1	39.9	54.2	76.8	110	164	211	264	296	353	395	478	535	637	713	810	907	1073	1202	1376	1541	1821	2039

* Torque ratings shown in **bold face** type exceed the drive thermal ratings. Convert required torque (without service factor) to hp and check required hp (without service factor) against thermal hp ratings on Page 28, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, use torque for 580 rpm.

Drives with ratings in the shaded areas require jet lubrication. Refer to Selection Guide 131-310 for water-to-oil pump and cooler selections or Selection Guide 131-315 for air-to-oil pump and cooler selections.

Type Y2/Horsepower Ratings

Ratios 8.40 through 47.08 Double Reduction 870 through 580 rpm

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE *																					
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145	2150	2155	2160	2165	2170	2175	2180	2185	2190	2195
870	**8.40**	**105**	46.2	72.8	104	144	205	284	321	400	448	535	599	738	**827**	**889**	**996**	**1223**	**1370**	**1671**	**1871**	**1996**	**2235**	**2929**	**3280**
	9.30	**95**	46.2	72.8	97.5	121	167	268	321	400	448	485	543	728	**815**	**889**	**996**	**1223**	**1370**	**1608**	**1801**	**1996**	**2235**	**2796**	**3131**
	10.29	**85**	42.6	59.4	85.6	139	176	240	315	388	434	504	564	679	760	889	**996**	**1095**	**1226**	**1473**	**1650**	**1972**	**2209**	**2538**	**2843**
	11.39	**77**	35.5	53.7	82.0	122	144	227	265	320	358	412	461	590	661	763	854	**1084**	**1214**	**1271**	**1423**	**1753**	**1963**	**2396**	**2684**
	12.61	**70**	35.2	46.7	67.3	113	146	204	268	326	365	434	486	567	635	789	884	935	1047	**1260**	**1411**	**1660**	**1859**	**2174**	**2435**
	13.95	**62**	28.9	42.0	60.5	98.9	119	181	225	269	301	354	397	499	559	638	714	900	1008	1098	**1230**	**1503**	**1683**	**2007**	**2248**
	15.44	**55**	23.3	35.9	49.4	92.4	115	165	193	268	300	312	349	466	522	649	727	759	850	1052	1178	**1385**	**1551**	**1820**	**2038**
	17.09	**50**	23.3	35.9	49.4	81.9	97.0	151	182	222	249	295	330	415	465	524	587	774	867	963	1078	1230	**1378**	**1679**	**1881**
	18.91	**45**	23.2	33.6	47.0	63.0	92.4	139	168	213	239	299	335	375	420	546	611	650	728	896	1004	1136	1272	**1522**	**1705**
	20.93	**42**	19.7	31.0	46.2	63.0	81.0	127	153	187	209	250	280	338	378	440	493	625	700	775	868	1038	1163	1393	**1560**
	23.16	**38**	19.5	26.7	37.8	56.5	71.2	118	139	168	188	232	260	300	336	448	502	537	601	736	824	958	1073	1262	1413
	25.63	**34**	16.0	24.2	33.9	51.6	63.0	96.9	130	156	175	209	234	284	318	361	404	488	546	663	742	845	946	1103	1235
	28.36	**31**	13.7	21.6	30.4	48.3	57.6	94.5	118	138	155	187	209	247	277	355	398	448	502	634	710	790	885	1056	1183
	31.39	**28**	13.7	20.8	30.4	40.3	50.4	76.9	96.9	129	145	165	185	227	254	304	341	407	456	528	591	686	768	874	979
	34.74	**25**	13.4	17.6	26.1	35.2	49.3	76.0	94.9	117	131	150	168	207	232	261	292	352	394	474	531	623	698	872	977
	38.44	**22**	11.1	16.2	23.4	31.6	43.1	65.7	73.5	96.4	108	130	146	177	198	250	280	337	377	420	470	564	632	737	825
	42.54	**21**	9.62	12.9	18.4	24.9	37.6	58.8	76.0	96.4	108	126	141	173	194	221	248	271	304	372	417	469	525	666	746
	47.08	**18**	8.62	12.0	16.6	23.5	33.2	50.9	62.8	82.8	92.7	109	122	139	156	195	218	242	271	328	367	420	470	552	618
720	**8.40**	**85**	39.1	61.7	87.9	122	173	235	274	341	382	451	505	621	696	749	839	1030	1154	1383	1549	1683	**1885**	**2424**	**2715**
	9.30	**77**	39.1	61.7	81.5	102	141	225	274	341	382	406	455	610	683	749	839	1030	1154	1370	1534	1683	**1885**	**2387**	**2673**
	10.29	**70**	35.6	49.6	71.5	116	149	203	266	329	368	427	478	569	637	749	839	930	1042	1254	1404	1681	**1883**	**2165**	**2425**
	11.39	**62**	29.8	45.2	69.0	102	121	189	224	271	303	348	390	500	560	638	715	913	1022	1071	1199	1478	1655	**2041**	**2286**
	12.61	**55**	29.6	39.2	56.6	94.0	123	172	226	276	309	368	412	474	531	669	749	794	889	1071	1199	1412	1581	1851	**2073**
	13.95	**50**	24.3	35.3	50.9	82.5	99.9	151	190	227	254	300	336	422	473	540	605	757	848	925	1036	1260	1411	1706	1911
	15.44	**45**	19.7	30.3	41.8	77.8	96.2	139	162	228	255	258	289	390	437	549	615	643	720	892	999	1163	1302	1546	1732
	17.09	**42**	19.7	30.3	41.8	68.3	81.6	126	154	188	210	249	279	351	393	443	496	653	731	810	907	1030	1154	1425	1596
	18.91	**38**	19.3	28.0	39.2	53.2	78.2	117	143	181	203	254	285	313	351	461	516	550	616	759	850	951	1065	1291	1446
	20.93	**34**	16.5	26.0	38.7	53.2	68.0	106	129	157	176	211	236	285	319	371	416	532	596	652	730	869	973	1179	1321
	23.16	**31**	16.2	22.2	31.7	47.4	59.8	98.8	117	143	160	197	221	255	286	378	423	454	508	621	696	802	898	1068	1196
	25.63	**28**	13.4	20.2	28.4	43.6	53.2	82.0	109	131	147	176	197	238	267	304	341	412	461	564	632	717	803	942	1055
	28.36	**25**	11.5	18.2	25.6	40.5	48.3	78.8	99.1	117	131	157	176	208	233	303	339	378	423	535	599	661	740	893	1000
	31.39	**22**	11.5	17.4	25.6	33.7	42.2	64.5	82.0	110	123	140	157	193	216	256	287	343	384	445	498	579	648	738	826
	34.74	**21**	11.2	14.7	21.8	29.4	41.3	64.3	79.6	98.2	110	126	141	174	195	221	248	299	335	404	452	531	595	744	833
	38.44	**18**	9.31	13.5	19.5	26.5	36.0	55.1	61.6	81.3	91.1	111	124	150	168	211	236	283	317	354	396	476	533	621	695
	42.54	**17**	8.03	10.8	15.3	20.8	31.5	49.2	64.3	80.9	90.6	105	118	146	163	187	209	229	256	313	351	395	442	561	628
	47.08	**15**	7.20	9.99	13.8	19.7	27.8	42.6	52.6	69.4	77.7	90.2	101	117	131	163	183	204	228	276	309	354	396	464	520
580	**8.40**	**70**	32.2	51.0	72.7	100	143	189	228	284	318	368	412	509	570	615	689	846	948	1113	1247	1385	1551	1953	2187
	9.30	**62**	32.2	51.0	66.3	83.8	116	183	228	284	318	331	371	498	558	615	689	846	948	1113	1247	1385	1551	1953	2187
	10.29	**55**	28.9	40.3	58.1	94.5	122	167	220	271	303	353	395	464	520	615	689	771	864	1041	1166	1385	1551	1802	2018
	11.39	**50**	24.4	37.0	56.6	82.9	99.7	154	184	223	250	288	322	413	463	521	584	749	839	879	984	1214	1360	1696	1900
	12.61	**45**	24.2	32.0	46.4	76.4	100	142	186	228	255	303	339	387	433	553	619	656	735	879	984	1156	1295	1538	1722
	13.95	**42**	19.9	28.9	41.7	67.1	81.9	123	156	187	209	247	277	348	390	446	499	621	695	759	850	1029	1152	1414	1584
	15.44	**38**	16.2	24.9	34.4	63.2	78.5	114	132	188	210	215	233	318	356	454	508	530	594	738	826	949	1063	1281	1435
	17.09	**34**	16.2	24.9	34.4	55.4	66.8	102	126	154	172	204	229	288	323	365	409	535	599	664	744	841	942	1179	1320
	18.91	**31**	15.6	22.7	31.8	43.9	64.5	95.6	118	150	168	212	237	255	286	379	425	453	507	626	701	775	868	1067	1195
	20.93	**28**	13.5	21.2	31.6	43.9	55.6	86.0	106	129	144	173	194	234	262	305	342	441	494	534	598	708	793	963	1079
	23.16	**25**	13.1	18.0	25.9	38.7	48.9	80.2	96.0	118	132	163	183	212	237	311	348	373	418	512	573	653	731	881	987
	25.63	**22**	10.9	16.5	23.2	35.8	43.9	67.6	89.3	107	120	144	161	196	219	250	280	338	379	470	526	584	654	785	879
	28.36	**21**	9.44	14.9	21.0	33.0	39.4	63.9	81.1	95.5	107	129	144	171	191	251	281	310	347	440	493	538	603	729	816
	31.39	**18**	9.33	14.2	21.0	27.5	34.5	52.7	67.6	90.2	101	115	129	160	179	210	235	281	315	366	410	476	533	607	680
	34.74	**17**	9.03	11.9	17.8	24.0	33.7	52.9	65.1	80.3	89.9	104	116	142	159	183	205	248	278	334	374	438	490	607	680
	38.44	**15**	7.57	11.0	15.9	21.6	29.4	44.9	50.3	67.1	75.1	91.1	102	124	139	172	193	232	260	289	324	388	434	510	571
	42.54	**14**	6.53	8.78	12.4	16.9	25.6	40.1	52.9	66.1	74.0	86.4	96.8	119	133	153	171	187	209	257	288	323	362	461	516
	47.08	**12.5**	5.85	8.12	11.3	16.0	22.6	34.7	42.9	56.6	63.4	73.4	82.2	95.5	107	133	149	166	186	226	253	289	324	381	427

* Mechanical hp ratings shown in **bold face** type exceed the drive thermal ratings. Check required hp (without service factor) against thermal hp ratings on Page 28, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, reduce hp rating proportionately.

Selection Example— HORSEPOWER METHOD

A draw bench requiring 120 bhp operates 10 hours per day with speeds varying from 75 to 150 rpm is driven by an 870/1750 rpm variable speed, constant hp, electric motor. Select a gear drive for the coupling connected application.

In the 870 high speed shaft section opposite 11.39 ratio and 77 rpm, trace right to 227 (nearest hp exceeding equivalent hp) and then read drive size 2100Y2 at top of column. When making a constant hp selection, always use the combination of horsepower and slowest speed that will give the greatest torque at the low speed shaft of the drive.

1. Service Factor is 1.25 for a draw bench drive operating 10 hours per day. . . Page 7, Table 3.

Type Y2/Torque Ratings

(POUND-INCHES AT LOW SPEED SHAFT. . .
MULTIPLY VALUES LISTED BELOW BY 1000)

Ratios 8.40 through 47.08 Double Reduction 870 through 580 rpm

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE *																						
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145	2150	2155	2160	2165	2170	2175	2180	2185	2190	2195
870	**8.40**	**105**	27.7	44.7	60.7	89.9	125	164	196	246	276	333	373	454	**508**	**535**	**599**	**753**	**843**	**1043**	**1168**	**1223**	**1370**	**1819**	**2037**
	9.30	**95**	30.7	47.9	63.9	84.9	117	181	220	263	295	336	376	502	**562**	**592**	**663**	**832**	**932**	**1126**	**1261**	**1358**	**1521**	**1919**	**2149**
	10.29	**85**	30.7	42.9	62.7	101	127	175	233	282	316	378	423	502	562	635	**711**	**838**	**939**	**1096**	**1228**	**1431**	**1603**	**1863**	**2087**
	11.39	**77**	29.7	44.7	64.6	98.8	119	183	224	272	305	354	396	493	552	614	688	**887**	**993**	**1069**	**1197**	**1463**	**1638**	**1978**	**2215**
	12.61	**70**	30.9	41.4	59.9	103	130	178	238	288	323	386	432	509	570	682	764	861	964	**1127**	**1262**	**1477**	**1654**	**1920**	**2150**
	13.95	**62**	28.6	41.4	58.7	99.8	122	185	229	278	311	361	404	505	566	638	715	936	1048	1140	**1277**	**1549**	**1735**	**2042**	**2287**
	15.44	**55**	26.4	40.0	54.0	102	128	183	217	294	329	341	382	515	577	702	786	888	995	1161	1300	**1522**	**1705**	**1980**	**2218**
	17.09	**50**	29.2	42.8	60.6	101	124	187	234	285	319	369	413	517	579	656	735	960	1075	1200	1344	1571	**1760**	**2103**	**2355**
	18.91	**45**	31.6	44.0	64.4	87.7	125	186	229	285	319	393	440	521	584	719	805	908	1017	1188	1331	1546	1732	**2038**	**2283**
	20.93	**42**	31.1	46.8	68.2	97.4	126	189	238	290	325	377	422	529	593	671	752	962	1077	1210	1355	1589	1780	2163	**2422**
	23.16	**38**	32.3	43.0	62.9	98.9	122	190	228	272	305	372	417	507	568	736	824	929	1041	1221	1367	1563	1751	2096	2347
	25.63	**34**	29.8	43.3	61.6	94.4	123	182	243	296	331	384	430	541	606	686	768	900	1008	1223	1370	1585	1775	2096	2347
	28.36	**31**	27.4	43.4	62.0	100	124	192	232	282	316	371	415	505	566	704	789	950	1064	1244	1393	1581	1771	2146	2404
	31.39	**28**	31.7	48.2	66.8	93.7	120	179	229	295	330	387	433	526	589	698	782	920	1030	1168	1308	1543	1728	2029	2272
	34.74	**25**	32.6	43.4	64.7	89.6	126	183	236	287	321	379	424	515	577	640	717	921	1031	1200	1344	1549	1735	2146	2404
	38.44	**22**	30.4	44.4	63.3	88.8	121	181	213	271	303	369	413	497	557	711	796	938	1051	1198	1342	1577	1766	2070	2318
	42.54	**21**	29.3	39.5	56.9	77.9	115	176	224	291	326	384	430	522	585	682	764	867	971	1151	1289	1477	1654	1999	2239
	47.08	**18**	28.6	40.8	55.2	78.0	112	167	215	271	303	360	403	489	548	653	731	831	931	1101	1233	1416	1586	1877	2102
720	**8.40**	**85**	28.3	45.8	62.0	92.1	127	168	203	254	284	339	380	462	517	545	610	766	858	1044	1169	1246	**1396**	**1819**	**2037**
	9.30	**71**	31.4	49.0	64.5	86.5	119	183	227	271	304	339	380	508	569	603	675	846	948	1159	1298	1384	**1550**	**1979**	**2217**
	10.29	**70**	31.0	43.3	63.3	102	130	179	238	289	324	387	433	508	569	646	724	861	964	1128	1263	1474	**1651**	**1921**	**2151**
	11.39	**62**	30.1	45.5	65.7	99.8	121	185	229	278	311	362	405	504	565	621	696	902	1010	1088	1219	1490	1669	**2036**	**2280**
	12.61	**55**	31.4	42.0	60.8	103	133	182	243	296	331	395	442	514	576	698	782	883	989	1156	1295	1518	1700	1974	2211
	13.95	**50**	29.0	42.0	59.7	101	124	187	233	284	318	369	413	516	578	654	732	951	1065	1161	1300	1569	1757	2097	2349
	15.44	**45**	27.0	40.8	55.2	104	129	186	220	302	338	341	382	521	583	717	803	909	1018	1189	1332	1544	1729	2034	2278
	17.09	**42**	29.9	43.7	61.9	101	126	188	239	290	325	377	422	529	592	670	750	978	1095	1221	1367	1590	1781	2155	2414
	18.91	**38**	31.8	44.3	64.9	89.5	128	189	235	292	327	404	453	527	590	733	821	928	1039	1215	1361	1564	1752	2089	2340
	20.93	**34**	31.4	47.4	69.0	99.4	128	190	243	296	331	383	429	540	605	684	766	989	1108	1229	1377	1607	1800	2213	2478
	23.16	**31**	32.4	43.2	63.8	100	124	192	231	279	313	383	429	521	584	749	839	949	1063	1246	1395	1581	1771	2143	2400
	25.63	**28**	30.2	43.6	62.3	96.3	126	186	246	300	336	391	438	549	615	700	784	918	1028	1259	1410	1626	1821	2163	2422
	28.36	**25**	27.8	44.2	63.1	101	126	194	235	288	322	377	422	514	576	725	812	967	1083	1268	1420	1597	1789	2193	2456
	31.39	**22**	32.2	48.7	67.9	94.7	121	182	234	303	339	396	444	540	605	711	796	936	1048	1189	1332	1573	1762	2068	2316
	34.74	**21**	32.9	43.8	65.3	90.4	127	187	239	291	326	384	430	523	586	657	736	946	1059	1234	1382	1596	1787	2212	2477
	38.44	**18**	30.8	44.7	63.7	90.0	122	184	215	276	309	379	424	510	571	724	811	954	1068	1220	1366	1607	1800	2106	2359
	42.54	**17**	29.6	40.0	57.2	78.6	117	178	229	295	330	388	435	530	594	695	778	882	988	1171	1311	1502	1682	2033	2277
	47.08	**15**	28.8	41.0	55.5	79.0	113	169	218	273	306	360	403	496	556	662	741	846	947	1120	1254	1442	1615	1908	2137
580	**8.40**	**70**	29.0	47.0	63.7	93.7	131	168	209	263	294	344	385	469	525	555	622	781	875	1043	1168	1273	1426	1819	2037
	9.30	**62**	32.1	50.3	65.1	88.2	122	185	235	281	315	344	385	515	577	614	688	863	967	1170	1310	1413	1583	2011	2252
	10.29	**55**	31.3	43.6	63.8	103	132	183	245	296	331	396	444	515	577	659	738	886	992	1163	1302	1507	1688	1985	2223
	11.39	**50**	30.6	46.2	66.9	101	124	187	234	285	319	371	415	518	580	630	706	919	1029	1109	1242	1521	1703	2100	2352
	12.61	**45**	31.8	42.6	61.9	104	134	186	248	303	339	404	452	521	583	717	803	906	1015	1179	1320	1543	1728	2036	2280
	13.95	**42**	29.5	42.7	60.7	102	126	189	238	289	324	378	423	529	592	669	749	968	1084	1182	1324	1590	1781	2158	2417
	15.44	**38**	27.5	41.6	56.4	105	131	189	223	309	346	352	382	527	590	736	824	931	1043	1221	1367	1564	1752	2092	2343
	17.09	**34**	30.5	44.6	63.2	102	128	189	243	296	331	384	430	539	604	686	768	995	1114	1243	1392	1611	1804	2213	2479
	18.91	**31**	31.9	44.6	65.4	91.7	131	192	241	300	336	417	467	533	597	749	839	948	1062	1245	1394	1583	1773	2143	2400
	20.93	**28**	31.9	48.0	69.9	102	130	192	247	300	336	391	438	551	617	698	782	1018	1140	1250	1400	1626	1821	2244	2513
	23.16	**25**	32.5	43.5	64.7	102	126	193	236	287	321	394	441	537	601	765	857	970	1086	1273	1426	1597	1789	2196	2459
	25.63	**22**	30.5	44.2	63.2	98.2	129	191	250	304	341	396	444	559	626	713	799	937	1049	1301	1457	1644	1841	2237	2505
	28.36	**21**	28.3	44.9	64.3	102	127	195	239	292	327	383	429	523	586	746	835	985	1103	1296	1451	1616	1810	2221	2488
	31.39	**18**	32.4	49.3	69.2	95.9	123	184	240	308	345	404	453	555	622	722	809	953	1067	1216	1362	1606	1799	2113	2367
	34.74	**17**	32.9	44.1	66.2	91.7	129	191	243	295	330	392	439	529	593	674	755	974	1091	1268	1420	1631	1827	2241	2510
	38.44	**15**	31.1	45.2	64.5	91.1	124	186	218	282	316	387	433	524	587	735	823	971	1087	1239	1388	1624	1819	2148	2406
	42.54	**14**	29.8	40.3	57.5	79.3	118	180	234	299	335	396	443	538	602	705	790	894	1001	1193	1336	1527	1710	2074	2323
	47.08	**12.5**	29.1	41.4	56.4	79.7	114	171	220	277	310	363	407	504	564	669	749	856	959	1138	1275	1464	1640	1946	2179

* Torque ratings shown in **bold face** type exceed the drive thermal ratings. Convert required torque (without service factor) to hp and check required hp (without service factor) against thermal hp ratings on Page 28, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, use torque for 580 rpm.

2. Equivalent hp = 1.25 x 120 = 150. . .Page 6, How to Select.
3. Required ratio = 870 ÷ 75 = 11.6. . .Closest nominal ratio is 11.39. . . Double Reduction Selection Table, Page 18.
4. Drive size is 2100Y2. . . Double Reduction Selection Table, Page 18.
5. The thermal capacity at 870 input is satisfactory since the hp rating is not shown in bold face type. At 1750 input, thermal hp of 121 is adequate (Page 28). Since the thermal capacity of 121 hp exceeds the actual 120 hp load, the standard 2100Y2 is satisfactory.
6. There is no overhung load since the drive is coupling connected. Refer to Falk coupling Selection Guides for coupling selections.

Type Y3/Horsepower Ratings

Ratios 52.11 through 29.19 Triple Reduction 1750 through 1170 rpm

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE *																						
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145	2150	2155	2160	2165	2170	2175	2180	2185	2190	2195
1750	**52.11**	**34**	14.5	22.9	32.1	48.1	61.0	101	122	157	176	184	206	280	314	433	485	**513**	**574**	**694**	**777**	**800**	**861**	**992**	**1111**
	57.66	**30**	14.5	22.9	32.1	48.1	61.0	91.3	122	148	166	184	206	259	290	349	391	**466**	**522**	**610**	**683**	**759**	**850**	**992**	**1111**
	63.82	**27**	14.5	20.5	29.5	45.0	53.5	78.9	102	136	152	167	187	237	265	363	407	**465**	**475**	490	**549**	**595**	**666**	**857**	**960**
	70.62	**25**	13.4	20.3	31.1	39.3	53.5	77.6	101	127	142	162	181	229	256	292	327	370	414	**523**	**586**	**595**	**666**	**846**	**947**
	78.16	**22**	12.4	16.3	24.5	34.3	47.1	72.4	79.9	113	126	130	139	189	212	299	335	345	358	420	470	520	**582**	**776**	**869**
	86.50	**20**	10.7	16.1	24.9	30.8	41.1	62.7	79.9	104	116	124	139	186	208	240	269	320	358	449	503	514	**576**	**712**	**797**
	95.73	**18**	9.84	13.5	19.5	29.6	38.2	58.8	79.3	92.0	103	110	118	157	176	249	279	288	299	395	442	446	500	**651**	**729**
	105.9	**16.5**	8.70	13.2	18.2	27.8	35.9	51.4	70.4	84.5	94.6	105	118	154	173	201	225	265	297	371	415	423	474	581	**651**
	117.2	**15**	8.05	11.2	15.9	24.3	31.2	46.1	58.1	76.3	85.4	92.0	103	132	148	206	231	245	260	317	355	378	423	548	**614**
	129.7	**13.5**	7.43	11.3	17.0	21.6	30.6	43.6	56.4	69.7	78.1	89.3	100	129	145	167	187	221	248	295	330	351	393	486	544
	143.6	**12**	6.75	8.88	13.2	21.5	26.8	40.6	45.4	60.6	67.9	78.0	87.4	105	118	172	193	205	219	272	305	317	355	443	497
	158.9	**11.0**	6.02	8.75	12.5	19.1	23.9	35.1	45.4	55.5	62.2	72.1	80.8	104	116	141	158	185	207	230	258	291	326	372	417
	175.9	**10**	5.19	7.54	10.9	16.7	21.0	31.1	40.4	51.2	57.4	68.7	76.9	89.2	99.9	141	158	168	188	216	242	263	294	329	368
	194.6	**9.0**	5.00	7.63	11.8	14.9	20.3	28.7	38.6	47.0	52.6	61.6	69.0	87.6	98.1	116	130	155	174	192	215	237	265	329	368
	215.4	**8.1**	4.54	5.97	9.05	13.0	17.8	26.8	31.5	39.6	44.4	54.1	60.6	73.8	82.7	112	125	137	153	179	201	218	244	284	318
	238.4	**7.5**	4.07	5.92	8.60	11.7	15.5	23.1	31.5	38.8	43.5	51.4	57.6	72.6	81.3	94.6	106	128	143	155	174	192	215	268	300
	263.8	**6.6**	3.51	4.72	6.24	8.99	13.5	21.2	27.6	35.1	39.3	42.8	47.9	61.0	68.3	83.5	93.5	103	115	138	154	172	193	246	275
	291.9	**6.0**	3.14	4.36	5.98	8.65	11.9	18.4	23.0	30.0	33.6	36.2	40.6	52.0	58.2	73.0	81.8	91.1	102	121	136	154	173	203	227
1430	**52.11**	**27**	12.0	19.1	26.7	41.8	52.9	84.1	106	131	147	160	179	232	260	361	404	428	479	590	661	**667**	**747**	**861**	**964**
	57.66	**25**	12.0	19.1	26.7	41.7	51.9	75.2	105	123	138	156	175	225	252	290	325	388	435	529	593	627	**702**	**838**	**938**
	63.82	**22**	12.0	16.8	24.2	37.0	44.6	65.9	85.2	113	127	145	162	196	219	302	338	349	360	426	477	516	578	**744**	**833**
	70.62	**20**	11.1	16.8	25.7	32.5	44.3	63.9	84.0	105	118	134	150	191	214	243	272	321	359	441	494	510	571	704	**789**
	78.16	**18**	10.2	13.4	20.1	28.4	38.9	59.5	66.7	93.8	105	112	120	155	174	247	277	292	311	364	408	451	505	674	**755**
	86.50	**16.5**	8.85	13.4	20.5	25.5	34.0	51.5	66.7	86.0	96.3	107	120	153	171	199	223	268	300	370	414	424	475	593	664
	95.73	**15**	8.08	11.1	16.0	25.5	31.8	48.3	67.0	75.9	85.0	92.0	103	129	145	205	230	244	260	324	364	388	434	546	611
	105.9	**13.5**	7.17	10.9	15.0	22.8	29.6	42.2	58.2	69.5	77.8	89.1	99.8	127	142	166	186	220	246	305	342	349	391	483	541
	117.2	**12**	6.60	9.19	13.0	19.9	25.9	38.3	48.3	62.3	69.8	79.6	89.1	109	122	170	190	199	223	272	305	314	352	452	506
	129.7	**11.0**	6.10	9.28	14.0	17.8	25.2	35.8	46.5	57.1	63.9	74.0	82.9	106	119	138	155	183	205	245	274	289	324	403	451
	143.6	**10**	5.54	7.29	10.8	17.8	22.1	33.4	37.7	49.6	55.5	66.6	74.6	86.3	96.7	142	159	165	185	224	251	261	292	323	362
	158.9	**9.0**	4.95	7.20	10.3	15.7	19.6	28.9	37.7	45.4	50.8	59.6	66.8	84.8	95.0	116	130	153	171	189	212	239	268	323	362
	175.9	**8.1**	4.27	6.18	8.94	13.7	17.4	25.8	33.5	41.9	46.9	57.1	63.9	73.3	82.1	116	130	138	154	178	199	216	242	285	319
	194.6	**7.5**	4.09	6.28	9.69	12.3	16.6	23.6	31.8	38.3	42.9	50.8	56.9	72.0	80.6	95.5	107	129	144	157	176	195	218	271	304
	215.4	**6.6**	3.72	4.89	7.42	10.7	14.7	22.0	26.1	32.9	36.8	44.9	50.3	60.7	68.0	92.9	104	113	126	148	166	179	200	246	276
	238.4	**6.0**	3.35	4.87	7.08	9.60	12.8	19.0	26.1	31.8	35.6	42.4	47.5	59.6	66.7	77.9	87.3	105	118	129	144	158	177	221	247
	263.8	**5.4**	2.88	3.88	5.11	7.37	11.1	17.5	22.7	28.9	32.4	35.1	39.3	50.1	56.1	68.8	77.1	84.6	94.8	113	127	141	158	203	227
	291.9	**5.0**	2.58	3.59	4.90	7.11	9.82	15.1	18.9	24.6	27.6	29.7	33.3	42.9	48.0	60.2	67.4	75.4	84.4	100	112	128	143	168	188
1170	**52.11**	**22**	10.0	15.9	22.3	36.3	45.5	70.2	92.2	110	123	138	155	192	215	301	337	356	399	491	550	579	649	748	838
	57.66	**20**	10.0	15.9	22.3	34.9	43.0	61.9	86.8	102	114	130	146	188	211	242	271	323	362	445	498	518	580	699	783
	63.82	**18**	9.95	13.8	19.9	30.4	37.2	55.0	71.2	94.6	106	121	135	161	180	250	280	290	313	371	415	448	502	646	724
	70.62	**16.5**	9.14	13.9	21.2	26.9	36.7	52.6	69.6	87.1	97.5	111	124	158	177	202	226	267	299	364	408	421	471	588	658
	78.16	**15**	8.35	11.0	16.6	23.4	32.2	49.0	55.7	77.4	86.7	93.8	105	129	144	204	228	241	270	317	355	392	439	558	625
	86.50	**13.5**	7.30	11.3	16.9	21.1	28.1	42.4	55.7	70.9	79.4	91.1	102	126	141	165	185	222	249	305	342	350	392	494	553
	95.73	**12**	6.63	9.10	13.1	21.1	26.4	39.8	55.5	62.1	69.5	79.7	89.3	106	119	169	189	198	222	268	300	324	363	450	504
	105.9	**11.0**	5.91	8.96	12.4	18.8	24.4	34.7	48.1	56.8	63.6	73.8	82.7	104	117	138	154	182	204	252	282	288	322	401	449
	117.2	**10**	5.42	7.55	10.7	16.4	21.5	31.9	40.2	51.0	57.1	68.3	76.5	89.3	100	139	156	164	184	224	251	259	290	372	417
	129.7	**9.0**	5.01	7.65	11.6	14.7	20.8	29.4	38.4	46.6	52.2	61.2	68.6	87.8	98.3	114	128	152	170	203	227	238	267	332	372
	143.6	**8.1**	4.55	5.98	8.89	14.7	18.3	27.4	31.4	40.5	45.4	55.4	62.0	71.1	79.6	117	131	140	152	185	207	215	241	280	314
	158.9	**7.5**	4.08	5.93	8.45	12.9	16.1	23.7	31.4	37.1	41.6	49.3	55.2	69.7	78.1	96.4	108	127	142	156	175	197	221	268	300
	175.9	**6.6**	3.51	5.07	7.34	11.2	14.4	21.4	27.8	34.3	38.4	47.4	53.1	60.3	67.5	95.5	107	113	127	146	164	178	199	247	277
	194.6	**6.0**	3.36	5.17	7.98	10.1	13.7	19.4	26.3	31.3	35.1	42.0	47.0	59.2	66.3	79.0	88.5	106	119	129	145	160	179	223	250
	215.4	**5.4**	3.05	4.02	6.09	8.81	12.1	18.0	21.6	27.2	30.5	37.2	41.7	49.9	55.9	77.3	86.6	92.9	104	121	136	147	165	204	228
	238.4	**5.0**	2.75	4.00	5.82	7.90	10.5	15.6	21.6	26.0	29.1	35.0	39.2	48.9	54.8	64.4	72.1	86.6	97.0	106	119	130	146	181	203
	263.8	**4.4**	2.37	3.19	4.20	6.05	9.17	14.4	18.6	23.8	26.7	28.8	32.3	41.2	46.1	56.9	63.7	69.9	78.3	93.8	105	116	130	168	188
	291.9	**4.0**	2.12	2.95	4.02	5.85	8.09	12.4	15.6	20.3	22.7	24.4	27.3	35.4	39.6	49.7	55.7	62.1	69.6	82.6	92.5	105	118	138	155

* Mechanical hp ratings shown in **bold face** type exceed the drive thermal ratings. Check required hp (without service factor) against thermal hp ratings on Page 28, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, reduce hp rating proportionately.

Selection Example—TORQUE METHOD

A main hoist requires 34,200 pound-inches torque at its input shaft which operates at 13 rpm. The hoist is in service 10 hours per day and is driven by a coupling connected 7½ hp, 1170 rpm electric motor. Select gear drive for the application.

1. Service Factor is 1.00 for a main hoist operating 10 hours per day. . . Page 7, Table 3 under Cranes, Main Hoist.
2. Equivalent torque = 34,200 x 1.00 = 34,200 lb-in. . .Page 6.
3. Required ratio = 1170 ÷ 13 = 90. . .Closest nominal ratio is 86.50 . . . Page 21, Triple Reduction Selection Table.

Type Y3/Torque Ratings

(POUND-INCHES AT LOW SPEED SHAFT. . .
MULTIPLY VALUES LISTED BELOW BY 1000)

Ratios 52.11 through 29.19 Triple Reduction 1750 through 1170 rpm

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE *																					
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145	2150	2155	2160	2165	2170	2175	2180	2185	2190	2195
1750	**52.11**	**34**	26.2	42.5	56.9	86.3	116	186	219	287	321	351	393	527	590	785	879	**994**	**1113**	**1281**	**1435**	**1471**	**1583**	**1827**	**2046**
	57.66	**30**	29.0	45.5	63.8	95.8	133	191	250	316	354	402	450	549	615	733	821	**963**	**1078**	**1254**	**1405**	**1569**	**1757**	**2085**	**2335**
	63.82	**27**	31.5	44.7	65.6	101	120	172	232	293	328	378	423	533	597	800	897	**1114**	**1138**	1167	**1307**	**1358**	**1521**	**1911**	**2140**
	70.62	**25**	33.7	51.1	74.4	99.5	138	192	262	320	358	419	469	581	651	746	835	943	1056	**1325**	**1484**	**1527**	**1710**	**2152**	**2410**
	78.16	**22**	32.7	43.7	66.1	95.1	134	194	215	301	337	364	389	540	605	817	915	1004	1042	1183	1325	1439	**1612**	**2094**	**2345**
	86.50	**20**	34.0	49.1	75.5	94.3	129	193	245	324	363	398	446	597	669	760	851	991	1110	1368	1532	1602	**1794**	**2193**	**2456**
	95.73	**18**	32.9	43.8	66.7	100	132	196	266	307	344	384	412	543	608	827	926	1038	1078	1375	1538	1522	1705	**2196**	**2460**
	105.9	**16.5**	32.7	47.6	67.9	104	142	195	270	329	369	421	472	602	674	771	864	1019	1141	1378	1543	1667	1867	2239	**2508**
	117.2	**15**	32.5	45.4	66.7	103	127	182	247	310	347	391	438	547	613	832	932	1073	1139	1323	1482	1622	1817	2254	**2524**
	129.7	**13.5**	34.7	52.8	76.7	103	143	196	274	331	371	435	487	605	678	779	873	1034	1158	1314	1472	1680	1882	2279	2553
	143.6	**12**	33.1	44.2	67.2	107	138	197	228	310	347	417	467	553	619	837	937	1092	1167	1388	1555	1654	1852	2269	2546
	158.9	**11.0**	33.3	48.4	69.4	105	145	195	261	331	371	442	495	613	686	793	888	1049	1175	1405	1574	1692	1895	2179	2441
	175.9	**10**	31.9	45.8	67.1	104	131	189	256	310	347	434	486	554	620	843	944	1076	1205	1401	1569	1665	1865	2032	2276
	194.6	**9.0**	35.0	53.4	78.2	105	146	198	279	331	371	446	500	613	687	804	900	1061	1188	1416	1586	1708	1913	2320	2598
	215.4	**8.1**	33.4	44.6	67.7	99.9	140	200	236	295	330	413	463	556	623	827	926	1078	1207	1407	1576	1677	1878	2177	2438
	238.4	**7.5**	33.7	49.1	70.2	99.3	135	197	270	338	378	450	504	617	691	812	909	1073	1202	1374	1539	1662	1861	2345	2626
	263.8	**6.6**	32.3	43.7	58.2	84.9	128	196	248	328	367	404	453	556	623	775	868	989	1108	1317	1475	1681	1883	2296	2571
	291.9	**6.0**	31.5	44.8	60.1	86.7	124	187	241	304	340	371	415	552	618	738	827	944	1057	1263	1415	1615	1809	2148	2406
1430	**52.11**	**27**	26.5	43.4	57.9	91.7	123	190	233	293	328	373	418	534	598	800	896	1015	1137	1334	1494	**1501**	**1681**	**1939**	**2172**
	57.66	**25**	29.4	46.5	64.9	102	138	193	263	321	360	418	468	584	654	746	835	982	1100	1333	1493	1586	**1776**	**2154**	**2413**
	63.82	**22**	31.9	44.8	65.8	102	123	176	237	300	336	400	448	539	604	814	912	1023	1055	1241	1390	1442	1615	**2029**	**2272**
	70.62	**20**	34.2	51.7	75.2	101	140	194	267	325	364	424	475	595	666	759	850	1000	1120	1367	1531	1602	1794	2194	**2457**
	78.16	**18**	33.0	44.0	66.4	96.4	135	195	219	307	344	384	411	542	607	827	926	1040	1108	1257	1408	1528	1711	2226	**2493**
	86.50	**16.5**	34.4	50.0	76.0	95.5	130	194	251	329	368	421	471	602	674	771	863	1017	1139	1378	1543	1616	1810	2236	2504
	95.73	**15**	33.0	44.1	67.0	106	134	197	275	310	347	393	440	547	613	834	934	1077	1148	1379	1549	1617	1811	2253	2523
	105.9	**13.5**	33.0	48.1	68.5	105	143	196	273	331	371	436	488	604	677	780	874	1033	1157	1390	1557	1683	1885	2278	2551
	117.2	**12**	32.6	45.6	66.7	104	129	185	251	310	347	414	464	552	618	838	938	1068	1196	1391	1558	1652	1850	2272	2545
	129.7	**11**	34.9	53.1	77.3	104	144	197	276	331	371	441	494	608	681	791	886	1046	1171	1336	1496	1696	1899	2313	2590
	143.6	**10**	33.3	44.4	67.3	108	139	199	232	310	347	436	488	554	620	844	945	1077	1206	1398	1566	1664	1864	2028	2271
	158.9	**9.0**	33.5	48.7	70.0	106	145	197	265	331	371	447	501	614	688	798	894	1061	1188	1413	1583	1702	1906	2315	2593
	175.9	**8.1**	32.1	45.9	67.4	105	133	192	259	310	347	442	495	557	624	849	951	1079	1208	1410	1579	1677	1878	2155	2414
	194.6	**7.5**	35.1	53.8	78.6	106	146	199	281	331	371	450	504	617	691	809	906	1075	1204	1419	1589	1720	1926	2346	2627
	215.4	**6.6**	33.5	44.7	67.9	101	142	201	239	299	335	421	471	560	627	842	943	1087	1217	1421	1592	1682	1884	2312	2589
	238.4	**6.0**	34.0	49.4	70.7	99.7	136	199	273	338	379	454	509	620	694	818	916	1084	1214	1392	1559	1674	1875	2363	2646
	263.8	**5.4**	32.5	44.0	58.4	85.2	129	198	250	330	370	406	455	559	626	782	876	997	1117	1329	1488	1685	1887	2319	2597
	291.9	**5.0**	31.6	45.2	60.2	87.2	125	188.	242	304	341	371	416	556	623	745	834	956	1071	1273	1426	1634	1830	2177	2438
1170	**52.11**	**22**	27.0	44.2	59.1	97.4	129	193	247	299	335	395	442	539	604	816	914	1033	1157	1356	1519	1594	1785	2061	2308
	57.66	**20**	29.9	47.3	66.3	104	140	194	266	324	363	426	477	597	669	760	851	999	1119	1368	1532	1602	1794	2198	2462
	63.82	**18**	32.3	45.0	66.1	103	125	179	242	306	343	407	456	542	607	824	923	1039	1121	1320	1478	1531	1715	2155	2414
	70.62	**16.5**	34.4	52.3	75.8	102	142	195	270	329	368	429	480	601	673	771	863	1018	1140	1380	1546	1615	1809	2237	2505
	78.16	**15**	33.0	44.1	67.0	97.0	137	196	224	310	347	393	440	548	614	831	931	1050	1176	1337	1497	1623	1818	2253	2523
	86.50	**13.5**	34.7	51.5	76.6	96.6	132	195	256	331	371	437	489	606	679	781	875	1031	1155	1391	1558	1630	1826	2275	2548
	95.73	**12**	33.1	44.2	67.0	107	136	199	279	310	347	416	466	549	615	838	938	1070	1198	1391	1558	1653	1851	2271	2544
	105.9	**11.0**	33.3	48.3	69.2	106	144	197	276	331	371	442	495	609	682	790	885	1046	1172	1401	1569	1694	1897	2311	2588
	117.2	**10**	32.7	45.8	67.1	104	131	189	255	310	347	435	487	553	619	840	941	1077	1206	1399	1567	1663	1863	2289	2564
	129.7	**9.0**	35.0	53.5	78.3	105	146	198	279	331	371	446	500	613	687	798	894	1060	1187	1352	1514	1708	1913	2331	2611
	143.6	**8.1**	33.4	44.5	67.7	109	141	199	236	310	347	443	496	557	624	849	951	1115	1211	1410	1579	1679	1880	2150	2408
	158.9	**7.5**	33.7	49.1	70.2	106	146	197	270	331	371	452	506	617	691	811	908	1076	1205	1426	1597	1716	1922	2345	2626
	175.9	**6.6**	32.3	46.0	67.6	105	135	194	263	310	347	448	502	560	627	854	956	1088	1218	1421	1591	1686	1888	2288	2562
	194.6	**6.0**	35.2	54.2	79.1	106	147	200	284	331	371	454	509	620	694	818	916	1086	1216	1429	1600	1726	1933	2357	2640
	215.4	**5.4**	33.5	44.9	68.2	101	143	201	242	303	339	426	477	563	630	856	959	1096	1228	1424	1595	1696	1900	2334	2614
	238.4	**5.0**	34.1	49.6	71.0	100	137	199	277	338	378	459	514	622	697	826	925	1089	1220	1405	1574	1688	1890	2373	2658
	263.8	**4.4**	32.7	44.2	58.6	85.4	130	199	250	333	373	408	457	562	629	790	885	1007	1128	1343	1504	1694	1897	2347	2629
	291.9	**4.0**	31.8	45.4	60.4	87.7	126	189	245	306	343	372	417	562	629	752	842	963	1079	1286	1440	1647	1845	2194	2457

* Torque ratings shown in **bold face** type exceed the drive thermal rating. Convert required torque (without service factor) to hp and check required hp (without service factor)against thermal ratings on Page 28, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than1750 rpm, refer to Factory; below 580 rpm, use torque for 580.

4. Drive size is 2050Y3 . . . Triple Reduction Selection Table, Page 21. In the 1170 high speed shaft section opposite 86.50 ratio and 13.5 rpm, trace right to 34.7 (x 1000), the nearest torque exceeding equivalent torque, and then read drive size 2050Y3 at top of column.
5. The thermal capacity is satisfactory since the torque rating is not shown in bold face type.
6. There is no overhung load since the drive is coupling connected. Refer to Falk™ coupling Selection Guides for coupling selections.

Type Y3/Horsepower Ratings

Ratios 52.11 through 29.19 Triple Reduction 870 through 580 rpm

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE *																						
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145	2150	2155	2160	2165	2170	2175	2180	2185	2190	2195
	52.11	**17**	7.60	12.1	16.9	28.9	34.8	53.2	74.9	84.5	94.6	108	121	144	161	228	255	271	303	370	414	441	494	605	678
	57.66	**15.0**	7.60	12.1	16.9	26.1	32.5	46.4	65.8	77.3	86.6	98.2	110	142	159	184	206	246	276	335	375	390	437	534	598
	63.82	**14**	7.44	10.4	14.9	22.8	28.3	42.0	54.4	71.3	79.9	92.9	104	121	135	188	211	221	247	289	324	358	401	504	565
	70.62	**12.5**	6.87	10.4	16.0	20.3	27.7	39.4	52.6	65.3	73.1	84.1	94.2	119	133	153	171	203	227	274	307	317	355	448	502
	78.16	**11**	6.25	8.21	12.4	17.7	24.3	36.7	42.5	57.6	64.5	75.9	85.0	96.4	108	153	171	183	205	246	276	297	333	420	470
	86.50	**10.0**	5.46	8.62	12.8	15.9	21.2	31.8	42.5	52.7	59.0	68.8	77.0	94.6	106	125	140	169	189	229	257	263	295	374	419
	95.73	**9.1**	4.96	6.81	9.83	16.0	20.0	29.8	41.6	46.2	51.7	62.4	69.9	79.9	89.5	127	142	148	166	201	225	243	272	338	379
	105.9	**8.3**	4.44	6.74	9.32	14.0	18.3	26.0	36.3	42.2	47.3	55.7	62.4	78.5	87.9	104	117	138	155	189	212	216	242	302	338
870	**117.2**	**7.5**	4.05	5.64	8.00	12.2	16.3	24.2	30.5	37.9	42.4	52.1	58.3	67.0	75.0	104	117	123	138	168	188	195	218	279	313
	129.7	**6.8**	3.74	5.74	8.69	11.0	15.6	22.0	29.0	34.6	38.8	46.2	51.7	65.7	73.6	86.6	97.0	115	129	154	172	179	200	249	279
	143.6	**6.1**	3.40	4.47	6.65	11.0	13.7	20.5	23.8	30.2	33.8	42.1	47.1	53.2	59.6	87.5	98.0	102	114	138	155	161	180	226	253
	158.9	**5.5**	3.06	4.45	6.35	9.62	12.1	17.7	23.8	27.6	30.9	37.1	41.5	52.2	58.5	72.6	81.3	95.5	107	117	131	148	166	201	225
	175.9	**5.0**	2.63	3.79	5.48	8.39	10.9	16.2	21.0	25.4	28.5	36.0	40.3	45.1	50.5	71.4	80.0	84.9	95.1	110	123	133	149	188	211
	194.6	**4.5**	2.51	3.87	5.99	7.59	10.2	14.5	19.7	23.3	26.1	31.5	35.3	44.3	49.6	59.6	66.7	79.4	88.9	97.3	109	120	134	168	188
	215.4	**4.1**	2.28	3.00	4.55	6.60	9.07	13.5	16.4	20.6	23.1	28.2	31.6	37.3	41.8	57.9	64.8	69.3	77.6	91.1	102	110	123	153	171
	238.4	**3.8**	2.06	3.00	4.37	5.92	7.90	11.6	16.4	19.3	21.6	26.2	29.4	36.6	41.0	48.5	54.3	64.8	72.6	80.1	89.7	97.3	109	136	152
	263.8	**3.3**	1.77	2.39	3.13	4.51	6.88	10.8	13.9	17.9	20.1	21.5	24.1	30.8	34.5	42.8	47.9	52.7	59.0	70.8	79.3	87.0	97.4	127	142
	291.9	**3.0**	1.59	2.21	3.00	4.39	6.06	9.33	11.7	15.1	16.9	18.2	20.4	26.5	29.7	37.4	41.9	46.8	52.4	62.1	69.6	79.5	89.0	104	117
	52.11	**14**	6.37	10.1	14.2	24.3	29.2	44.3	63.5	69.9	78.3	91.1	102	120	134	189	212	226	253	308	345	368	412	505	566
	57.66	**12.5**	6.37	10.1	14.2	21.7	27.1	38.6	55.0	64.0	71.7	82.5	92.4	118	132	154	173	207	232	279	312	325	364	449	503
	63.82	**11**	6.18	8.61	12.4	19.0	23.8	35.3	45.8	59.0	66.1	78.1	87.5	101	113	157	176	184	206	241	270	298	334	421	471
	70.62	**10.0**	5.71	8.70	13.4	16.9	23.1	32.8	44.0	54.0	60.5	70.4	78.8	99.1	111	129	144	170	190	229	256	264	296	375	420
	78.16	**9.1**	5.19	6.82	10.3	14.7	20.3	30.5	35.7	47.7	53.4	64.2	71.9	80.1	89.7	128	143	153	171	204	229	247	277	350	392
	86.50	**8.3**	4.53	7.23	10.6	13.2	17.7	26.4	35.7	43.6	48.8	57.4	64.3	78.7	88.1	104	117	141	158	191	214	219	245	312	349
	95.73	**7.5**	4.12	5.65	8.16	13.3	16.8	24.7	34.5	38.2	42.8	52.4	58.7	66.5	74.5	105	118	124	139	168	188	203	227	282	316
	105.9	**6.8**	3.70	5.61	7.77	11.7	15.2	21.6	30.3	35.0	39.2	46.5	52.1	65.3	73.1	87.1	97.6	115	129	157	176	179	201	251	281
720	**117.2**	**6.1**	3.36	4.68	6.64	10.2	13.6	20.2	25.6	31.3	35.1	43.7	48.9	55.7	62.4	87.1	97.6	103	115	140	157	162	181	233	261
	129.7	**5.5**	3.10	4.78	7.24	9.17	12.9	18.3	24.1	28.8	32.2	38.5	43.1	54.6	61.2	72.3	81.0	95.5	107	129	144	148	166	207	232
	143.6	**5.0**	2.82	3.71	5.52	9.11	11.4	17.0	19.9	24.9	27.9	35.3	39.5	44.2	49.5	72.7	81.4	84.6	94.7	115	129	134	150	188	210
	158.9	**4.5**	2.54	3.70	5.28	7.98	10.0	14.7	19.9	22.9	25.6	30.9	34.6	43.4	48.6	60.6	67.9	79.1	88.6	97.3	109	123	138	167	187
	175.9	**4.1**	2.19	3.14	4.55	6.96	9.08	13.5	17.6	21.1	23.6	30.1	33.7	37.5	42.0	59.4	66.5	70.5	79.0	91.1	102	111	124	156	175
	194.6	**3.8**	2.08	3.22	4.98	6.31	8.47	12.0	16.4	19.3	21.6	26.2	29.4	36.8	41.2	49.6	55.6	66.0	73.9	80.6	90.3	99.1	111	139	156
	215.4	**3.3**	1.89	2.49	3.77	5.49	7.54	11.2	13.7	17.2	19.3	23.7	26.5	31.0	34.7	48.0	53.8	57.6	64.5	75.6	84.7	92.0	103	127	142
	238.4	**3.0**	1.71	2.49	3.63	4.93	6.57	9.66	13.7	16.0	17.9	21.8	24.4	30.4	34.0	40.4	45.2	53.8	60.3	66.8	74.8	80.9	90.6	113	126
	263.8	**2.7**	1.47	1.99	2.60	3.74	5.72	8.99	11.5	14.9	16.7	17.9	20.0	25.5	28.6	35.6	39.9	43.8	49.1	59.0	66.1	72.2	80.9	105	118
	291.9	**2.5**	1.32	1.83	2.49	3.65	5.04	7.76	9.72	12.6	14.1	15.2	17.0	22.1	24.7	31.2	34.9	39.0	43.7	51.8	58.0	66.3	74.2	87.0	97
	52.11	**11**	5.19	8.25	11.6	19.9	23.9	35.8	51.6	56.3	63.1	74.8	83.8	97.3	109	154	172	183	205	250	280	298	334	411	460
	57.66	**10.0**	5.19	8.25	11.5	17.6	22.1	31.3	44.8	51.5	57.7	67.3	75.4	95.5	107	126	141	169	189	227	254	264	296	366	410
	63.82	**9.1**	5.00	6.96	10.0	15.3	19.5	28.9	37.5	47.5	53.2	64.1	71.8	81.6	91.4	127	142	149	167	196	219	242	271	341	382
	70.62	**8.3**	4.61	7.06	10.8	13.7	18.7	26.5	35.8	43.5	48.7	57.3	64.2	80.2	89.8	104	117	138	155	185	207	214	240	304	341
	78.16	**7.5**	4.19	5.52	8.33	12.0	16.5	24.7	29.2	38.4	43.0	52.7	59.0	64.9	72.7	104	116	123	138	166	186	201	225	284	318
	86.50	**6.8**	3.66	5.87	8.63	10.7	14.4	21.4	29.2	35.1	39.3	46.7	52.3	63.7	71.3	85.4	95.6	115	129	154	173	178	199	253	283
	95.73	**6.1**	3.33	4.57	6.60	10.8	13.7	20.0	28.0	30.8	34.5	42.9	48.0	53.8	60.3	85.4	95.6	100	112	136	152	164	184	229	256
	105.9	**5.5**	3.00	4.55	6.30	9.42	12.3	17.5	24.6	28.1	31.5	37.9	42.4	52.9	59.2	70.9	79.4	93.8	105	128	143	146	163	204	228
580	**117.2**	**5.0**	2.72	3.78	5.37	8.22	11.1	16.5	20.9	25.3	28.3	35.7	40.0	45.1	50.5	70.5	79.0	82.9	92.8	113	127	131	147	188	211
	129.7	**4.5**	2.51	3.87	5.86	7.44	10.4	14.8	19.6	23.1	25.9	31.3	35.0	44.2	49.5	58.8	65.9	77.5	86.8	104	117	121	135	168	188
	143.6	**4.1**	2.28	3.00	4.46	7.36	9.27	13.8	16.2	20.1	22.5	28.8	32.2	35.8	40.1	58.8	65.9	68.5	76.7	92.9	104	109	122	152	170
	158.9	**3.8**	2.06	3.00	4.28	6.45	8.08	11.9	16.2	18.4	20.6	25.0	28.0	35.1	39.3	49.3	55.2	64.0	71.7	78.6	88.0	100	112	136	152
	175.9	**3.3**	1.77	2.54	3.67	5.62	7.38	11.0	14.3	17.0	19.0	24.6	27.5	30.3	33.9	48.0	53.8	57.1	63.9	73.7	82.6	89.3	100	127	142
	194.6	**3.0**	1.68	2.61	4.03	5.11	6.85	9.70	13.3	15.5	17.4	21.2	23.7	29.7	33.3	40.4	45.2	53.4	59.8	65.3	73.1	80.5	90.2	113	126
	215.4	**2.7**	1.52	2.01	3.05	4.45	6.11	9.03	11.1	14.0	15.7	19.3	21.6	25.1	28.1	38.8	43.5	46.5	52.1	61.2	68.5	74.1	83.0	103	115
	238.4	**2.5**	1.38	2.02	2.94	3.99	5.32	7.80	11.1	12.9	14.4	17.6	19.7	24.6	27.5	32.8	36.7	43.5	48.7	54.2	60.7	65.4	73.3	91.1	102
	263.8	**2.2**	1.19	1.61	2.10	3.02	4.63	7.28	9.32	12.1	13.5	14.5	16.2	20.6	23.1	28.9	32.4	35.6	39.9	47.9	53.7	58.5	65.5	85.9	96.2
	291.9	**2.0**	1.07	1.48	2.01	2.95	4.08	6.28	7.87	10.2	11.4	12.2	13.7	17.9	20.1	25.3	28.3	31.6	35.4	42.1	47.1	53.8	60.2	70.6	79.1

✱ Check required hp (without service factor) against thermal hp ratings on Page 28, then refer to Page 29 for Falk™ cooling fans. For ratings of speeds higher than 1750 rpm, refer to Factory; below 580 rpm, reduce hp rating proportionately.

Type Y3/Torque Ratings

(POUND-INCHES AT LOW SPEED SHAFT. . .
MULTIPLY VALUES LISTED BELOW BY 1000)

Ratios 52.11 through 29.19 Triple Reduction 870 through 580 rpm

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE *																						
			2050	2060	2070	2080	2090	2100	2110	2120	2125	2130	2135	2140	2145	2150	2155	2160	2165	2170	2175	2180	2185	2190	2195
870	**52.11**	**17**	27.6	45.2	60.2	104	133	197	270	310	347	414	464	544	609	830	930	1055	1182	1373	1538	1631	1827	2242	2511
	57.66	**15.0**	30.6	48.4	67.6	105	143	195	271	331	371	432	484	605	678	777	870	1024	1147	1386	1552	1622	1817	2258	2529
	63.82	**14**	32.5	45.6	66.6	103	128	184	248	310	347	422	473	546	612	836	936	1062	1189	1386	1552	1645	1842	2263	2534
	70.62	**12.5**	34.8	52.6	77.0	103	144	196	274	331	371	438	491	607	680	784	878	1039	1164	1396	1564	1638	1834	2295	2570
	78.16	**11**	33.2	44.3	67.3	98.7	139	198	230	310	347	428	479	554	620	838	939	1072	1201	1398	1566	1656	1855	2278	2551
	86.50	**10.0**	34.9	52.8	78.0	97.9	134	196	263	331	371	444	497	613	686	796	891	1053	1179	1405	1574	1650	1848	2319	2597
	95.73	**9.1**	33.3	44.5	67.6	109	139	200	281	310	347	438	491	555	622	846	948	1075	1204	1404	1572	1666	1866	2297	2573
	105.9	**8.3**	33.6	48.9	69.9	106	146	198	280	331	371	448	502	615	689	807	904	1070	1198	1416	1586	1712	1917	2339	2620
	117.2	**7.5**	32.9	46.0	67.5	104	134	193	261	310	347	446	499	558	625	847	949	1086	1216	1410	1579	1681	1883	2311	2588
	129.7	**6.8**	35.1	54.0	78.9	106	147	199	283	330	370	453	507	618	692	813	911	1081	1211	1378	1543	1721	1927	2352	2634
	143.6	**6.1**	33.5	44.8	68.1	110	142	200	241	310	347	452	506	561	628	854	957	1091	1222	1420	1590	1687	1889	2329	2609
	158.9	**5.5**	34.0	49.5	71.0	107	148	198	275	331	371	456	511	621	696	821	919	1091	1222	1436	1608	1733	1941	2365	2649
	175.9	**5.0**	32.5	46.3	67.9	105	137	198	267	309	346	458	513	563	630	859	962	1095	1226	1432	1604	1697	1901	2344	2625
	194.6	**4.5**	35.4	54.5	79.9	107	147	201	286	331	371	459	514	624	699	829	928	1090	1221	1444	1617	1738	1946	2384	2670
	215.4	**4.1**	33.7	45.0	68.5	102	144	202	247	309	346	434	486	565	633	862	965	1100	1232	1436	1608	1701	1905	2354	2637
	238.4	**3.8**	34.3	50.0	71.7	101	138	199	282	337	377	463	518	626	701	837	937	1096	1228	1425	1596	1695	1898	2389	2676
	263.8	**3.3**	32.8	44.5	58.7	85.7	131	201	252	338	378	409	458	565	633	799	895	1021	1143	1364	1528	1707	1912	2385	2671
	291.9	**3.0**	32.1	45.7	60.6	88.5	127	191	247	307	344	374	419	566	634	761	852	976	1093	1301	1457	1671	1872	2227	2494
720	**52.11**	**14**	28.0	45.6	61.2	106	135	198	277	310	347	422	473	546	612	834	934	1064	1192	1382	1548	1644	1841	2262	2533
	57.66	**12.5**	31.0	48.8	68.6	105	144	196	274	331	371	438	491	607	680	788	882	1040	1165	1393	1560	1633	1829	2295	2570
	63.82	**11**	32.6	45.6	67.0	104	130	187	253	310	347	429	481	553	619	842	943	1070	1198	1396	1563	1655	1854	2279	2552
	70.62	**10.0**	34.9	53.2	77.9	104	145	198	277	331	371	443	496	613	686	797	893	1052	1178	1407	1576	1649	1847	2320	2598
	78.16	**9.1**	33.3	44.4	67.6	99.1	140	199	233	310	347	437	489	555	622	847	949	1080	1210	1402	1570	1664	1864	2296	2571
	86.50	**8.3**	35.0	53.5	78.1	98.2	135	197	266	331	371	447	501	615	689	803	899	1063	1191	1414	1584	1655	1854	2333	2613
	95.13	**7.5**	33.4	44.6	67.9	109	141	201	281	310	347	445	498	558	625	850	952	1088	1219	1417	1587	1679	1881	2314	2592
	105.9	**6.8**	33.8	49.2	70.5	107	146	199	283	331	371	452	506	618	692	813	911	1076	1205	1421	1591	1718	1924	2350	2632
	117.2	**6.1**	33.0	46.1	67.7	105	135	194	264	310	347	452	506	561	628	854	957	1094	1225	1422	1593	1687	1889	2329	2608
	129.7	**5.5**	35.2	54.3	79.4	107	147	200	284	332	372	455	510	621	695	821	920	1084	1214	1394	1561	1725	1932	2363	2646
	143.6	**5.0**	33.6	44.9	68.3	110	142	201	243	309	346	458	513	563	631	857	960	1095	1226	1428	1599	1698	1902	2337	2617
	158.9	**4.5**	34.1	49.8	71.3	107	147	199	278	331	371	460	515	624	699	829	928	1091	1222	1443	1616	1741	1950	2375	2660
	175.9	**4.1**	32.7	46.3	68.1	106	138	199	271	310	347	463	518	566	634	863	966	1099	1231	1436	1608	1706	1911	2349	2631
	194.6	**3.8**	35.4	54.8	80.2	108	148	201	288	331	371	463	518	626	701	835	935	1096	1227	1446	1619	1739	1948	2390	2677
	215.4	**3.3**	33.8	45.2	68.6	103	145	203	249	312	349	439	492	567	635	865	969	1104	1237	1441	1614	1721	1927	2363	2646
	238.4	**3.0**	34.4	50.2	72.0	102	139	201	285	338	378	463	519	627	702	841	942	1100	1232	1436	1608	1702	1906	2394	2681
	263.8	**2.7**	32.9	44.8	59.0	85.8	132	202	252	338	379	411	460	566	634	804	901	1026	1149	1374	1539	1713	1919	2395	2682
	291.9	**2.5**	32.2	45.7	60.8	88.9	128	192	248	309	346	377	422	569	637	765	857	983	1101	1310	1467	1683	1885	2240	2509
580	**52.11**	**11**	28.3	46.2	62.0	108	137	199	279	310	347	430	482	552	618	840	941	1071	1199	1393	1560	1654	1853	2281	2555
	57.66	**10.0**	31.3	49.5	69.0	106	145	198	277	331	371	444	497	611	684	797	893	1052	1178	1407	1576	1649	1847	2321	2600
	63.82	**9.1**	32.8	45.8	67.0	104	132	190	257	310	347	438	490	555	622	843	944	1077	1206	1405	1574	1667	1867	2294	2569
	70.62	**8.3**	35.0	53.6	77.9	105	146	198	280	331	371	448	502	615	689	804	901	1065	1193	1413	1582	1661	1860	2338	2619
	78.16	**7.5**	33.4	44.7	67.8	100	141	200	237	310	347	445	498	559	626	854	956	1082	1212	1413	1583	1679	1880	2312	2589
	86.50	**6.8**	35.1	54.0	78.9	98.8	136	198	271	331	371	452	506	618	692	814	912	1078	1207	1420	1590	1670	1870	2349	2631
	95.13	**6.1**	33.6	44.8	68.1	110	142	202	284	310	347	452	506	561	628	854	957	1088	1219	1421	1592	1690	1893	2328	2607
	105.9	**5.5**	34.1	49.5	70.9	107	147	200	285	330	370	457	512	621	696	821	920	1087	1217	1433	1605	1729	1937	2367	2651
	117.2	**5.0**	33.1	46.2	67.9	106	136	197	268	310	347	458	513	563	631	858	961	1096	1227	1429	1600	1701	1905	2337	2617
	129.7	**4.5**	35.4	54.6	79.8	107	147	201	287	331	371	460	515	623	698	829	929	1092	1223	1406	1575	1742	1951	2377	2662
	143.6	**4.1**	33.7	45.1	68.5	110	144	202	246	310	347	463	519	566	634	862	965	1101	1233	1429	1600	1714	1920	2348	2630
	158.9	**3.8**	34.4	50.1	71.7	107	148	200	281	331	371	462	517	626	701	836	936	1096	1228	1446	1620	1754	1964	2396	2684
	175.9	**3.3**	32.8	46.5	68.2	106	139	201	273	309	346	469	525	567	635	866	970	1104	1236	1443	1616	1708	1913	2366	2650
	194.6	**3.0**	35.5	55.2	80.6	108	148	202	290	331	371	463	518	629	704	843	944	1100	1232	1453	1627	1754	1965	2396	2684
	215.4	**2.7**	33.7	45.3	68.9	103	145	203	251	314	352	445	498	571	639	868	972	1108	1241	1446	1620	1721	1928	2375	2660
	238.4	**2.5**	34.5	50.5	72.4	102	140	201	287	337	377	465	521	629	705	848	950	1103	1235	1446	1620	1709	1914	2405	2694
	263.8	**2.2**	33.1	45.0	59.1	86.0	132	203	253	340	381	413	462	567	635	811	908	1036	1160	1386	1552	1721	1928	2423	2714
	291.9	**2.0**	32.4	45.9	60.9	89.2	128	193	249	311	348	377	422	575	644	771	863	988	1107	1321	1479	1696	1899	2258	2529

* Convert required torque (without service factor) to hp and check required hp (without service factor) against thermal hp ratings on Page 28, then refer to Page 29 for Falk™ cooling fans. For ratings at speeds higher than 1750 rpm, refer to Factory; below 580 rpm, use torque for 580 rpm.

Type Y1 Exact Ratios * Single Reduction

Nominal Ratios *	DRIVE SIZE									
	2050	2060	2070	2080	2090	2100	2110	2120 2125	2130 2135	2140 2145
1.84	1.880	1.840	1.840	1.893 *	1.848	1.822	1.860	1.878	1.830	1.860
2.03	2.027	2.027	2.029	2.051	2.022	2.078	2.021	2.038	1.943 *	2.061
2.25	2.227	2.207	2.238	2.241	2.241	2.206	2.237	2.256	2.244	2.237
2.49	2.548	2.459	2.528	2.512	2.468	2.489	2.463	2.426	2.489	2.488
2.76	2.759	2.793	2.773	2.760	2.760	2.759	2.844 *	2.784	2.771	2.758
3.05	3.074	3.031	3.065	3.086	3.075	3.026	3.093	3.082	3.023	3.082
3.38	3.440	3.381	3.368	3.318	3.476	3.360	3.393	3.344	3.433	3.393
3.74	3.783	3.789	3.652	3.650	3.650	3.758	3.757	3.738	3.811	3.738
4.13	4.190	4.056	4.095	4.053	4.222	4.190	4.208	4.185	4.115	4.208
4.57	4.550	4.450	4.579	4.588	4.471	4.450	4.591	4.619	4.542	4.591
5.06	5.267 *	5.133	4.929	5.154	5.133	5.056	5.150	4.950	5.045	5.150
5.60	5.529	5.471	5.562	5.643	5.643	5.471	5.562	5.467	5.471	5.526
6.20	6.231	6.077	6.067	6.231	6.231	6.267	6.357	6.050	6.267	6.235
6.86	6.929	6.786	6.937	6.933	6.786	6.786	6.687	6.867	6.765	6.687
7.59	7.538	7.533	7.467	7.357 *	7.462	7.467	7.786	7.429	7.312 *	7.786

* Except where noted with an asterisk (*), exact ratios are within ±3% of the nominal ratios.

Type YF1 Exact Ratios * Single Reduction

Nominal Ratios *	DRIVE SIZE											
	1080	1090	1100	1110	1120 1125	1130 1135	1140 1145	1150 1155	1160 1165	1170 1175	1180 1185	1190 1195
1.84	1.839	1.806	1.816	1.806	1.853	1.795	1.806	1.871	1.811	1.791	1.848	1.816
2.03	2.034	2.107 *	1.972	2.030	2.031	2.028	2.061	2.069	2.029	2.026	2.032	2.029
2.25	2.259	2.185	2.242	2.226	2.233	2,206	2.258	2.296	2.281	2.216	2.207	2.212
2.49	2.520	2.480	2.452	2.448	2.464	2,484	2.483	2.423	2.419	2.441	2.481	2.419
2.76	2.783	2.783	2.690	2.704	2.731	2,724	2.741	2.676 *	2.718	2.719	2.730	2.690
3.05	2.955 *	2.960	2.963	3.040	3.042	3.037	3.040	2.968	2.972	3.034	2.971	2.963
3.38	3.360	3.348	3.406	3.348	3.423	3,344	3.290	3.382	3.394	3.297	3.344	3.306
3.74	3.783	3.762	3.793	3.762	3.792	3.633	3.655	3.656	3.645	3.676	3.633	3.697
4.13	4.238	4.208	4.036	4.097	4.107	4.129	4.032	4.103	4.088	4.097	4.088	4.032
4.57	4.450	4.682	4.640	4.483	4.680	4.483	4.607	4.481	4.548	4.483	4.469	4.536
5.06	5.040	4.952	5.130	4.926	4.958	4,926	4.967	4.966	4.931	4.969	4.966	5.031
5.60	5.565	5.577	5.762	5.542	5.762	5.542	5.593	5.407 *	5.654	5.552	5.407 *	5.655
6.20	6.292	6.167	6.042	6.227	6.120	6.227	6.120	6.208	6.179	6.037	6.172	6.148
6.86	6.955	6.773	6.682	6.950	6.783	6.950	6.783	6.864	6.731	6.680	6.704	6.720
7.59	7.381	7.696	7.450	7.682	7.476	7.609	7.476	7.609	7.458	7.577	7.708	7.391

* Except where noted with an asterisk (*), exact ratios are within ±3% of the nominal ratios.

Shaded area indicates single helical gears; all others are double helical.

Type Y2 Exact Ratios * Double Reduction

Nominal Ratios *	DRIVE SIZE														
	2050	2060	2070	2080	2090	2100	2110	2120 2125	2130 2135	2140 2145	2150 2155	2160 2165	2170 2175	2180 2185	2190 2195
8.40	8.286	8.488	8.065 *	8.626	8.405	8.188	8.447	8.499	8.597	8.486	8.309	8.493	8.622	8.463	8.574
9.30	9.179	9.084	9.044	9.689 *	9.651	9.302	9.476	9.108	9.550	9.520	9.190	9.391	9.672	9.398	9.480
10.29	9.967	9.968	10.11	10.07	9.957	10.07	10.23	10.06	10.36	10.22	9.861 *	10.58	10.28	10.02	10.14
11.39	11.54	11.50	10.88 *	11.18	11.43	11.16	11.70	11.75	11.86 *	11.53	11.13	11.29	11.62	11.53	11.40
12.61	12.11	12.25	12.28	12.56	12.33	12.07 *	12.28	12.23	12.26	12.39	11.94 *	12.71	12.35	12.29	12.19
13.95	13.65	13.61	13.40	13.94	14.16	14.12	14.03	14.29	14.05	13.98	13.82	14.35	14.34	14.24	14.05
15.44	15.63	15.39	15.10	15.30	15.38	15.28	15.54	15.16	15.10	15.25	14.93	16.16 *	15.24	15.18	15.03
17.09	17.32	16.48	16.93	16.98	17.66	17.09	17.76	17.70	17.30	17.21	17.29	17.13	17.22	17.63	17.29
18.91	18.81	18.08 *	18.93	19.22	18.73	18.50	18.81	18.41	18.15	19.21	18.18	19.29	18.30	18.80	18.49
20.93	21.77 *	20.85	20.37	21.34 *	21.51	20.50	21.49	21.51	20.79	21.68	21.06	21.24	21.55	21.14	21.44
23.16	22.85	22.22 *	22.99	24.16 *	23.65	22.19 *	22.61	22.39	22.17 *	23.33	22.68	23.92	22.91	22.54	22.94
25.63	25.75	24.69	25.08	25.25	27.04 *	25.95	25.78	26.15	25.40	26.33	26.26	25.48	25.49	25.92	26.24
28.36	27.62	27.73	28.18	28.59	29.72 *	28.08	27.12 *	28.12	27.41	28.24	27.36	29.27	27.09 *	27.63	28.07
31.39	31.98	31.98	30.33	32.11	32.82 *	32.17	32.63	31.47	32.30	32.01	31.68	31.19	30.57	31.07	32.04
34.74	33.57	34.09	34.23	35.16	35.16	33.24 *	34.33	33.84	34.86	34.33	33.91	36.14	34.95	34.32	33.98
38.44	37.83	37.86	37.33	38.82	38.82	38.08	39.97	38.73	39.05	38.85	39.27	38.50	39.43	38.59	38.80
42.54	42.07	42.28	42.69	43.20	42.28	41.24	40.64 *	41.66	42.15	41.67	42.52	44.10	42.70	43.50	41.45
47.08	45.77	46.94	45.95	45.84	46.49	45.37	47.31	45.07 *	45.56	48.51	46.28	47.47	46.39	46.61	46.97

* Except where noted with an asterisk (*), extra ratios are within ±4% of the nominal ratios.

Type Y3 Exact Ratios * Triple Reduction

Nominal Ratios *	DRIVE SIZE														
	2050	2060	2070	2080	2090	2100	2110	2120 2125	2130 2135	2140 2145	2150 2155	2160 2165	2170 2175	2180 2185	2190 2195
52.11	50.18	51.60	49.23 *	49.82 *	52.74	51.17	49.82 *	50.65	53.01	52.20	50.34	53.86	51.29	51.07	51.15
57.66	55.60	55.22 *	55.20 *	55.31 *	60.56 *	58.13	56.93	59.16	60.72 *	58.89	58.29	57.38	57.14	57.43	58.39
63.82	60.37 *	60.59 *	61.72	62.62	62.40	60.57 *	63.06	60.01 *	62.80	62.61	61.23 *	66.49 *	66.15	63.44	61.92
70.62	69.87	69.89	66.44 *	70.34	71.65	68.82	72.07	70.09	71.94	70.64	70.91	70.83	70.36	71.33	70.70
78.16	73.36 *	74.48 *	74.98 *	77.02	78.76	74.47 *	74.65 *	74.33 *	77.78	79.24	75.86	80.87	78.33	76.92	74.96 *
86.50	88.36	84.64	84.20	85.04	86.96	85.30	85.31	86.81	89.10	89.40	87.84	86.16	84.59	86.49	85.58
95.73	92.76	90.20 *	95.03	94.00	95.65	92.80	93.24	92.68	96.99	95.91	92.16	100.2 *	96.45	94.72	93.74
105.9	104.5	100.2 *	103.6	104.4	109.8	105.4	106.6	108.2	111.1 *	108.2	106.7	106.7	103.3	109.4	107.0
117.2	112.1 *	112.5	116.5	118.2	113.2	109.9 *	118.0	112.9	118.1	115.0	112.0 *	121.7	116.0	119.3	114.2
129.7	129.8	129.8	125.4	132.7	129.9	124.8	134.9	131.9	135.3 *	129.8	129.7	129.7	123.9 *	133.0	130.4
143.6	136.3 *	138.3	141.5	138.1	142.8	135.1 *	139.7	141.9	148.5	145.6	134.8 *	148.0	141.6	144.9	142.4
158.9	153.5	153.7	154.3	153.3	168.5 *	154.7	159.7	165.7 *	170.1 *	164.3	156.1	157.7	169.5 *	161.5	162.6
175.9	170.7	168.7 *	171.1	173.6	173.6	168.5 *	175.7	167.9 *	175.7	172.4	166.0 *	178.1	180.1	176.2	171.8
194.6	194.5	194.6	184.1 *	195.0	199.3	191.4	200.8	196.1	201.2	194.5	192.2	189.7	204.9 *	200.6	196.1
215.4	204.2 *	207.4	207.8	213.5	219.1	207.1	208.0	206.6 *	212.4	209.2	205.7 *	219.2	217.7	213.8	213.0
238.4	230.1	230.3	226.7 *	235.7	241.9	237.3	237.7	241.3	243.3	236.1	238.2	233.5	245.7	240.4	243.1
263.8	255.9	257.2	259.2	262.3	263.4	256.9	250.1 *	259.6	262.6	253.2	258.0	267.6	266.0	271.0	259.7
291.9	278.4 *	285.5	279.0 *	278.3 *	289.7	282.7	291.2	280.8	283.9	294.8	280.7	288.0	289.1	290.4	294.4

* Except where noted with an asterisk (*), extra ratios are within ±4% of the nominal ratios.

Type Y1/Thermal Horsepower Ratings *

This is actual hp (without service factor) that the drive will transmit continually for three hours or more without overheating.

Ratios 1.84 through 7.59 Single Reduction 1750 through 580 rpm

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE *									
			2050	2060	2070	2080	2090	2100	2110	2120 2125	2130 2135	2140 2145
1750	1.84	950	104	140	171	213	234	242				
	2.25	780	108	144	167	213	237	256	183			
	2.76	640	116	151	162	214	242	277	250	292	196	
	3.38	520	107	142	154	202	238	284	273	333	294	234
	4.13	420	112	135	158	192	235	295	309	394	395	424
	5.06	350	86	143	168	202	232	307	350	451	533	644
	6.20	280	75	109	177	215	246	294	322	425	509	627
	7.59	230	62	98	125	155	256	306	289	393	490	605
1430	1.84	780	122	156	198	259	314	404	388	446		
	2.25	640	126	158	190	254	304	391	394	480	455	
	2.76	520	127	163	181	247	291	373	404	528	540	576
	3.38	420	129	157	183	232	275	360	400	522	563	627
	4.13	350	135	164	192	236	266	343	395	513	587	693
	5.06	280	83	114	201	248	280	336	389	506	621	770
	6.20	230	73	106	135	167	292	349	347	462	566	718
	7.59	190	60	...	...	151	189	286	298	407	520	645
1170	1.84	640	154	184	216	285	363	506	544	671	736	873
	2.25	520	157	188	223	276	344	475	527	673	745	877
	2.76	420	160	192	227	274	320	432	500	676	757	883
	3.38	350	123	195	229	278	319	406	478	639	731	872
	4.13	280	105	136	230	283	327	392	445	584	706	858
	5.06	230	80	109	143	180	257	402	408	535	671	843
	6.20	190	...	...	130	162	221	305	366	494	596	768
	7.59	155	...	...	...	...	182	278	317	443	532	662
870	1.84	470	125	174	285	355	404	588	676	862	1033	1283
	2.25	390	129	176	290	358	408	541	637	834	991	1225
	2.76	320	136	180	295	365	415	496	576	795	939	1145
	3.38	260	...	160	188	269	308	505	544	742	869	1077
	4.13	210	...	...	163	229	279	511	497	664	798	991
	5.06	175	...	...	135	171	244	352	444	593	701	891
	6.20	140	...	...	...	...	...	...	379	517	623	810
	7.59	115										
720	1.84	390	123	171	232	318	483	612	720	927	1138	1432
	2.25	320	126	172	219	307	387	586	673	886	1076	1348
	2.76	260	...	...	203	292	363	591	598	831	999	1234
	3.38	210	...	...	182	262	324	446	558	765	925	1144
	4.13	175	...	...	157	...	284	394	500	666	849	1029
	5.06	140	...	...	...	...	...	...	433	577	746	897
	6.20	115	...	...	...	...	...	...	...	...	...	805
	7.59	95										
580	1.84	320	...	166	225	312	426	...	745	965	1207	1532
	2.25	260	...	166	212	299	...	...	708	915	1130	1429
	2.76	210	...	...	195	282	...	514	650	847	1032	1288
	3.38	175	...	...	...	...	...	464	594	...	942	1192
	4.13	140	...	...	...	...	...	...	...	...	...	1070
	5.06	115										
	6.20	95										
	7.59	77										

* Thermal hp values are listed only if they are less than the mechanical hp. For thermal hp ratings of ratios not shown, interpolate between the nearest two ratios.

Thermal Rating Factors

Thermal horsepower ratings catalogued on pages 26, 27, & 28 are based on a 100°F (38°C) ambient temperature at sea level. For other conditions, the thermal horsepower rating may be multiplied by the factors shown in the tables at right. Where no thermal horsepower ratings are shown in the tables, refer to Factory for selections at ambient above 100° F (38°C) and altitudes above sea level.

Temperature Factors

Ambient Temperature	Factor w/o Aux. Cooling or w/Fan ★
50°F(10°C)	1.39
60°F(16°C)	1.32
70°F (21°C	1.25
80°F (27°C)	1.17
90°F (32°C	1.09
100°F (38°C)	1.00
110°F (43°C)	.91
120°F (49°C)	.81

★ Factors tor other ambient temperatures can be interpolated.

Altitude Factors

Altitude (ft)	Factor
0	1.00
2,500	.95
5,000	.90
7,500	.85
10,000	.81
12,500	.76
15,000	.72
17,500	.68

Type YF1/Thermal Horsepower Ratings *

This is actual hp (without service factor) that the drive will transmit continually for three hours or more without overheating.

Ratios 1.84 through 7.59 Single Reduction 1750 through 580 rpm

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE *											
			1080	1090	1100	1110	1120 1125	1130 1135	1140 1145	1150 1155	1160 ‡ 1165 ‡	1170 1175	1180 1185	1190 1195
1750	**1.84**	**950**	35	0	66									
	2.25	**780**	49	23	111	52								
	2.76	**640**	68	61	159	112	154	0						
	3.38	**520**	104	100	221	203	275	153	160					
	4.13	**420**	159	160	276	308	396	348	377	436				
	5.06	**350**	210	213	372	426	546	546	651	701				
	6.20	**280**	202	238	360	418	549	583	706	820				
	7.59	**230**	196	271	343	410	553	624	771	955				
1430	**1.84**	**780**	175	203	334	233	379							
	2.25	**640**	170	200	335	289	417	318						
	2.76	**520**	164	196	337	354	469	463	438					
	3.38	**420**	192	226	359	398	524	539	569	354	243‡			
	4.13	**350**	234	273	380	451	580	637	747	715	494‡	451		
	5.06	**280**	274	314	415	509	649	736	972	1149	798‡	738	615	**222**
	6.20	**230**	230	292	407	501	620	717	933	1140	941‡	965	975	**891**
	7.59	**190**	193	266	397	494	588	698	888	1131	1088‡	1293	1434	**1636**
1170	**1.84**	**640**	258	322	498	485	683	728	911					
	2.25	**520**	241	303	472	492	672	750	912	**742**				
	2.76	**420**	221	275	446	500	658	778	914	**737**	**0**			
	3.38	**350**	233	286	459	516	672	797	976	948	398‡	**379**	**436**	
	4.13	**280**	253	305	471	535	687	823	1060	1165	806‡	905	**965**	**1000**
	5.06	**230**	271	321	493	556	706	849	1167	1424	1303‡	1479	1590	**1745**
	6.20	**190**	226	293	452	524	683	834	1067	1332	1296‡	1524	1688	**1966**
	7.59	**155**	188	259					951	1230	1290‡	1589	1813	**2214**
870	**1.84**	**470**	324	417	630	693	931	1160	1509	**1575**	**1276**			
	2.25	**390**	315	385	581	656	876	1103	1408	**1535**	**1287**	**1052**	**1137**	
	2.76	**320**	305	337	531	615	806	1033	1302	**1501**	**1299**	**893**	**1402**	**1135**
	3.38	**260**	294	332	515	621	808	1003	1305	1543	1427‡	**1202**	**1676**	**1627**
	4.13	**210**	277	325	501	628	810	966	1310	1586	1559‡	1630	**2008**	**2207**
	5.06	**175**	262	319				928		1638	1719‡	2097	2400	**3006**
	6.20	**140**	217	286							1580‡	1982	2272	**2848**
	7.59	**115**	178								1438‡		2109	**2674**
720	**1.84**	**390**	375	447	673	762	1013	1310	1717	**1864**	**1887**	**2154**	**2127**	
	2.25	**320**	344	427	615	709	942	1223	1578	**1814**	**1849**	**1961**	**2227**	**2353**
	2.76	**260**	306	397	555	650	850	1115	1431	**1770**	**1815**	**1734**	**2375**	**2430**
	3.38	**210**	292	375	528	642	831	1089	1446	1747	1826‡	**1881**	**2458**	**2699**
	4.13	**175**	271	341						1724	1839‡	2084	**2559**	**3016**
	5.06	**140**		313							1854‡		2679	**3453**
	6.20	**115**												**3150**
	7.59	**95**												
580	**1.84**	**320**	375	490	695	804	1059	1405	1850	**2056**	**2320**	**2851**	**2957**	**3678**
	2.25	**260**	342	451	653	765	1010	1296	1683	**1999**	**2247**	**2615**	**3004**	**3526**
	2.76	**210**	302	391		722	948	1160	1506	**1949**	**2180**	**2336**	**3074**	**3343**
	3.38	**175**	286	367							2167‡	**2361**	**3013**	**3449**
	4.13	**140**										2397	**2940**	**3574**
	5.06	**115**												
	6.20	**95**												
	7.59	**77**												

* Thermal hp values are listed only if they are less than the mechanical hp. Cooling fans are NOT available for drives with thermal ratings shown in **bold face** type and YF1 drives with (‡) symbol, fans are available for Type YFN1 drives with (‡) symbol. Refer to Selection Guide 131-310 for water-to-oil pump and cooler selections or Selection Guide 131-315 for air-to-oil pump and cooler selections. For thermal HP ratings of ratios not shown, interpolate between the nearest two ratios.

Type YF2 & YF3/ Thermal Horsepower Ratings *

Ratios 9.30 through 105.9 Double & Triple Reduction 1750 through 720 rpm

This is actual hp (without service factor) that the drive will transmit continually for three hours or more without overheating.

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE * 2050	2060	2070	2080	2090	2100	2110	2120 2125	2130 2135	2140 2145	2150 2155	2160 2165	2170 2175	2180 2185	2190 2195
1750	9.30	190	35	45	60	70	90	115	140	170	200	245	290				
	11.39	155	36	47	62	73	94	121	146	177	208	255	302	348			
	13.95	125	38	49	65	76	97	124	151	184	216	265	313	362	400	434	
	17.09	100	39	50	66	77	99	127	154	187	220	270	319	369	407	442	490
	20.93	84		52	70	81	104	133	162	197	232	284	336	389	429	466	516
	25.63	68				83	107	137	167	202	238	292	345	399	440	478	530
	31.39	56						140	171	207	244	299	354	409	451	490	543
	38.44	45									250	306	363	419	463	503	556
	47.08	37											377	436	481	523	579
1430	9.30	155	46	59	79	92	118	151	183	223	262	321	380	439	485		
	11.39	125	48	62	82	96	123	158	192	233	274	336	397	459	507	551	
	13.95	100		64	85	99	128	163	199	241	284	348	412	476	525	571	632
	17.09	84				104	134	171	209	253	298	365	432	499	551	599	663
	20.93	68						178	217	264	310	380	450	519	574	623	690
	25.63	56									322	394	467	539	596	647	716
	31.39	45											490	566	625	679	752
	38.44	37													651	708	783
	47.08	30														716	792
1170	9.30	125		86	115	134	173	221	269	326	384	470	557	643	710	772	854
	11.39	100				139	178	228	277	337	396	485	574	663	733	796	881
	13.95	84						230	280	340	400	490	580	670	740	804	890
	17.09	68									410	502	595	687	759	824	912
	20.93	56											609	704	777	844	935
	25.63	45													792	860	952
	31.39	37														884	979
	38.44	30															992
	47.08	25															
870	9.30	95										747	885	1022	1129	1226	1357
	11.39	77												1049	1158	1258	1393
	13.95	62													1184	1286	1424
	17.09	50														1319	1460
	20.93	42															1482
	25.63	34															
	31.39	28															
	38.44	22															
	47.08	18															
720	9.30	77														1717	1900
	11.39	62															1936
	13.95	50															

Type Y3 Thermal Horsepower Rating*

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE * 2050	2060	2070	2080	2090	2100	2110	2120 2125	2130 2135	2140 2145	2150 2155	2160 2165	2170 2175	2180 2185	2190 2195
1750	57.66	30												461	499	553	597
	70.62	25													502	557	602
	86.50	20														561	606
	105.9	16.5															606
1430	57.66	25														684	739
	70.62	20															743

* Thermal hp values are listed only if they are less than the mechanical hp. For thermal HP ratings of ratios not shown, interpolate between the nearest two ratios.

Drives with ratings in the shaded areas require jet lubrication. Refer to Selection Guide 131-310 for water-to-oil pump and cooler selections or Selection Guide 131-315 for air-to-oil pump and cooler selections.

COOLING FANS FOR Y SERIES DRIVES

Thermal horsepower ratings catalogued on these pages can be increased when the drive is equipped with two Falk™ cooling fans. See Page 29 for cooling fans.

Cooling Fans for Type Y Drives

For Sizes 2050-2195Y2 . . . apply a multiplier of 2.5 to the thermal horsepower ratings catalogued on Page 28, when equipped with two Falk™ cooling fans. Exact thermal horsepower ratings for YF, Y1, and Y2 drives equipped with one or two fans can be found in Engineering 141-110.1.

As noted on Page 4, thermal horsepower is the actual horsepower (without Service Factor) that a drive will transmit continually for three hours or more without overheating. If a drive creates heat faster than it can be dissipated, severe damage may occur. Falk™ Cooling Fans provide a simple and inexpensive way to utilize the mechanical rating of drives by lowering operating temperatures, thus increasing thermal horsepower capacity. Cooling fans have been successfully used on electric motors and other related machinery for many years. They eliminate the need for water or oil cooling, pumps, and external piping.

Falk™ Pump and Cooler selections provide for thermal capacities beyond the range of fan cooled drives. Refer to Selection Guide 131-310 for water-to-oil pump and cooler selections or Selection Guide 131-315 for air-to-oil pump and cooler selections.

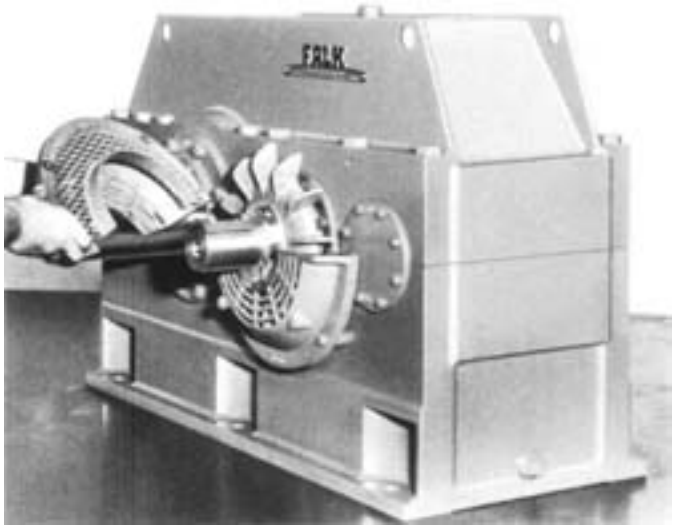
Application Benefits

Low initial cost and upkeep — In addition to low initial cost and negligible maintenance, cooling fans eliminate the need to provide liquid cooling and piping to and from the drive.

High efficiency — Less than one quarter of one per cent catalogued horsepower rating required to drive the fans.

Minimum space — The air deflector on double reduction drives increases drive length a maximum of 2 inches, depending on drive size; all other dimensions remain the same.

Built-in safety — The unused end of the high speed shaft is covered with a shaft guard. Small openings in the fan guards and



two-piece expanded metal grills on the inside of the guards protect operators.

Coupling guard provisions — Four pads are provided on the fan guards so expanded metal coupling guards can be bolted directly to the fan guards.

Simple disassembly — All fan parts can be added or removed without dismantling the gear drive. Split fan hubs and shaft guards slide over the shaft ends; split fan guards lift off.

Sound level — The sound level at 1750 rpm is about the same as that from fans on totally enclosed, fan cooled driving motors.

Effects of Speed Variation on Splash Lubrication

When selecting drives for multi-speed or variable speed applications, determine the speed which develops the greatest torque and select the drive on this basis. If the speed is not listed in the selection table, use the next lower speed. Gear drives offered in this Selection Guide are assembled with a variety of standard internal lubrication components such as oil pans, wipers, dams, and extra oil troughs to ensure proper splash lubrication. In addition, different oil levels are necessary for various drive sizes, speeds, and ratios. Consequently, to operate an existing drive at different speeds from those shown on the nameplate, full application and nameplate information must be referred to Factory for review of the lubrication system.

Single Speed Applications

These drives are designed to operate with splash lubrication on any single speed application and any ratio shown in this Selection Guide unless otherwise noted. It is essential that all orders indicate the desired operating speed and ratio so that the proper internal oil distribution accessories can be supplied for the specific speed.

Variable or Multi-speed Applications

All variable or multi-speed applications will be referred to the Engineering Department to specify lubrication components for adequate lubrication at the slowest speed, without excessive heating or churning at the highest speed. It is essential that all orders indicate minimum and maximum speeds, as well as the speed duration cycles.

When the speeds of variable or multi-speed applications are as follows, a separate motor-driven oil pump (at an extra charge) may be required.

Single Reduction Drives. . . Refer application details to Factory when:

A. the high speed shaft minimum speed is under 400 rpm and/or

B. the low speed shaft minimum speed is under 50 rpm.

Double and Triple Reduction Drives. . . Refer application details to Factory when the low speed shaft rpm is as follows:

Low Speed Shaft RPM		
Minimum	**Maximum**	**Oil Pump Required**
0-49	50+	Yes
0-29	30+	Yes

Other speed do not require on oil pump or adequate lubrication at variable speeds, unless a pump is needed for another purpose.

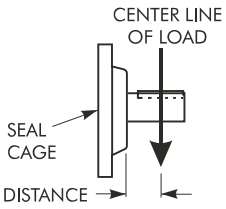
Calculate High Speed Shaft Overhung Load

High speed shaft overhung load ratings are for normal conditions where the center line of the load is one shaft diameter from the seal cage, and for speeds of 1170 rpm or lower. Where the center line of the load is one shaft diameter from the seal cage or closer, calculate the high speed shaft overhung load using $L_f = 1.00$ in the following formula.

$$\text{Overhung Load} = \frac{126{,}000 \times hp \times Fc \times L_f}{\text{Pitch Dia} \times rpm}$$

Check the result against the rating in the table on Page 31. Refer the application to Factory, if the calculated overhung load (using Lf = 1) for either of these conditions exceeds the value published, or if the load is applied at a distance greater than one shaft diameter from the seal cage. The above overhung load formula employs the transmitted horsepower without Service Factor, providing the overloads, starting loads, and brake capacities do not exceed the amounts listed in Gear Drive Ratings on Page 4. If the overloads do exceed these values, refer the application to Factory.

Refer to Factory for Higher Overhung Load Ratings — In many cases, capacity in excess of that published is available. Published ratings are based on a combination of the most unfavorable conditions of rotation, speed, hand of drive, direction of applied load, and drive loading.



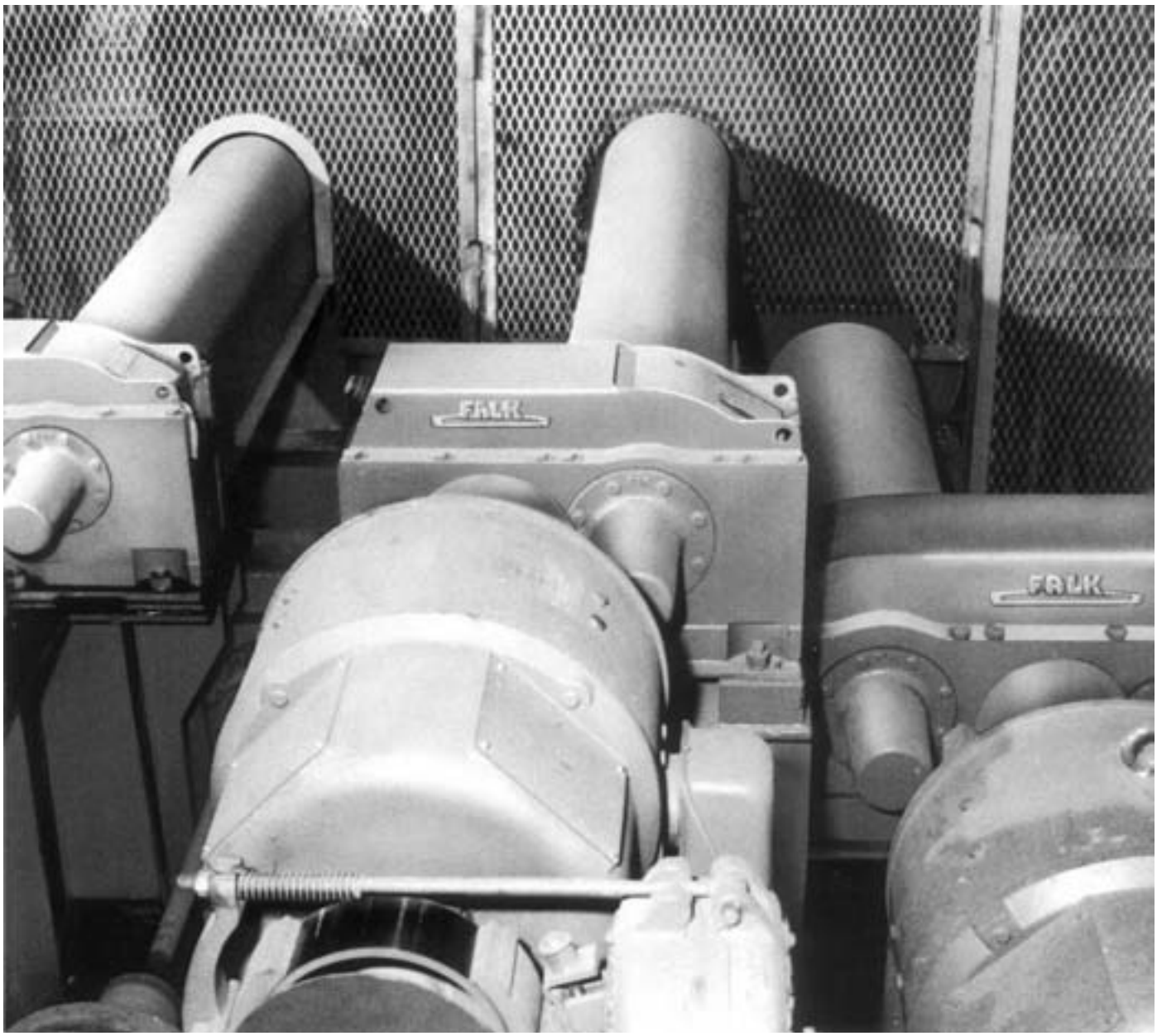
Fc = Load Connection Factor

Sprocket†	1.00
Machined Pinion & Gear†	1.25
Synchronous (Timing) Belt	1.30
V-Belt	1.50
Flat Belt	2.50

L_f = Load Location Factor

L.S.S. - See Page 33
H.S.S - See instructions on left.

† Refer all multiple chain sprocket and pinion mounted applications to Factory for deflection analysis.



Type Y, YF, YT & YFT All Reductions

Overhung Load Ratings* – Pounds

High Speed Shaft For loads applied one shaft diameter from seal cage and speeds of 1170 rpm or lower. . . Refer to Factory for higher overhung load ratings.

High Speed Shaft rpm	Nominal Ratios ±4%	Approx. L.S. Shaft rpm	DRIVE SIZE 2050	2060	2070	2080	2090	2100	2110	2120 2125	2130 2135	2140 2145	2150 2155	2160 2165	2170 2175	2180 2185	2190 2195
SINGLE REDUCTION			Refer to Factory for Y1 and YF1 H.S.S. Overhung loads														
DOUBLE REDUCTION																	
	8.40	**140**	600	700	800	1000	1160	...	1520	2000	1070	2000	3000	2790	3340	4600	3350
	11.39	**100**	...	...	...	...	1200	900	1700	...	2300	2600	...	2780	4000	4600	4230
	13.95	**84**	...	...	...	...	...	1010	...	...	...	...	...	3220	...	4600	5250
1170	**17.09**	**68**	...	...	...	...	...	1170	...	...	...	...	...	3400	...	4600	5400
	20.93	**56**	...	...	...	...	...	1240	...	...	...	...	...	...	...	4600	
	25.63	**45**	...	...	...	...	...	1400	...	...	...	...	...	...	...	1910	
	31.39	**37**	...	...	...	...	...	...	...	...	...	...	...	...	...	4600	
	8.40	**105**	600	700	800	1000	1050	390	1700	1740	1830	1780	3000	3400	3910	4600	4800
	11.39	**77**	...	...	...	...	1200	1190	...	2000	2300	2600	...	...	4000	4600	5400
	13.95	**62**	...	...	...	...	...	1350	...	...	...	...	...	...	...	4600	
870	**17.09**	**50**	...	...	...	...	...	1400	...	...	...	...	...	...	...	4600	
	20.93	**42**	...	...	...	...	...	...	...	...	...	...	...	...	...	4600	
	25.63	**34**	...	...	...	...	...	...	...	...	...	...	...	...	...	2910	
	31.39	**28**	...	...	...	...	...	...	...	...	...	...	...	...	...	4600	
	8.40	**85**	600	700	800	1000	980	950	1700	1540	1730	1650	3000	3400	3350	4600	5400
	11.39	**62**	...	...	...	...	1180	1400	...	2000	2300	2600	...	...	4000	4600	
	13.95	**50**	...	...	...	...	1200	...	...	...	...	...	...	...	...	4600	
720	**17.09**	**42**	...	...	...	...	...	...	...	...	...	...	...	...	...	4600	
	20.93	**34**	...	...	...	...	...	...	...	...	...	...	...	...	...	4600	
	25.63	**28**	...	...	...	...	...	...	...	...	...	...	...	...	...	3790	
	31.39	**22**	...	...	...	...	...	...	...	...	...	...	...	...	...	4600	
	8.40	**70**	600	700	800	1000	910	1390	1660	1320	1630	1510	3000	3400	3180	4600	5400
580	**11.39**	**50**	...	...	...	...	1110	1400	1700	2000	2300	2600	...	...	4000		
	13.95	**42**	...	...	...	...	1200										
TRIPLE REDUCTION																	
1170	**52.11**	**22**	300	350	400	500	600	590	850	1000	1120	1300	1500	1700	1650	2300	2700
	70.62	**16.5**	...	...	...	...	...	700	...	...	1150	...	...	...	2000		
870	**52.11**	**17.0**	300	350	400	500	600	580	850	1000	1080	1300	1500	1700	1560	2220	2700
	70.62	**12.5**	...	...	...	...	...	700	...	...	1150	...	...	...	2000	2300	
	52.11	**14.0**	300	350	400	500	600	570	840	1000	1040	1300	1500	1700	1520	2170	2700
720	**70.62**	**10.0**	...	...	...	...	...	700	850	...	1150	...	...	...	1950	2300	
	86.50	**8.3**	...	...	...	...	...	...	...	...	...	...	...	...	2000		
	52.11	**11.0**	300	350	400	500	600	560	810	1000	1000	1300	1500	1700	1440	2110	2700
580	**70.62**	**8.3**	...	...	...	...	...	700	850	...	1150	...	...	...	1930	2300	
	86.50	**6.8**	...	...	...	...	...	...	...	...	...	...	...	...	2000		

* In each High Speed Shaft rpm section, the last overhung load value applies to all of the higher ratios of that gear reduction. Published ratings are based on combination of the most unfavorable conditions of loading. For higher ratings and single reduction Y1 and YF1, refer full data to Factory. For OHL values of ratios or H.S. shaft speeds not shown, use the OHL value of the next lowest ratio or next highest H.S. shaft rpm.

Calculate Low Speed Shaft Overhung Load

Standard low speed bearings in Type Y drives will accommodate most overhung loads. Where extra capacity is required, the Type YT drives are offered with higher capacity bearings to permit customizing of standard drives to many applications at only a minimal extra charge. However, if an outboard bearing is used instead, the overhung load ratings of Y drives can be increased 80%.

Locate the center line of the load as close to the drive seal cage as practical to minimize the overhung load and increase bearing life. Calculate the low speed shaft overhung load using the formula and the Fc value from Page 30. The Lf load location factors are tabulated on Page 33 and are based on the distance from the center line of the load to the drive seal cage.

Low speed shaft overhung load example — A belt conveyor requiring 115 hp is driven by a 2110Y2 gear drive with a low speed shaft output at 68 rpm. A 10 inch pitch diameter, single chain sprocket is mounted on the drive low speed shaft with the center line of the load 5 1/2 inches from the seal cage. Calculate the overhung load.

$$\text{Overhung Load} = \frac{126{,}000 \times 115 \times 1.00 \times 1.00}{10 \times 68} = 21{,}300 \text{ lb}$$

From the Type Y table, Page 34, the low speed shaft overhung load capacity at 68 rpm for the 2110Y2 drive is 16,000 pounds. Since the actual load exceeds the published capacity of the 2110Y2, refer to the Type YT table on Page 35 and note that the overhung load capacity of the 2110YT2 of 25,000 pounds is satisfactory for this application.

Type Y Single Reduction

Overhung Load Ratings ★ Pounds

Low Speed Shaft Multiply values listed below by 1000 . . .

Refer to Factory for higher overhung load ratings

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE ‡									
			2050	2060	2070	2080	2090	2100	2110	2120 2125	2130 2135	2140 2145
1750	**1.84**	**950**	3.06	4.88	4.64	6.68	9.02	9.97				
	2.25	**780**	3.27	5.20	4.86	7.44	9.63	10.4	9.58			
	2.76	**640**	4.43	5.65	5.87	8.00	10.3	11.2	10.6	10.6	13.9	
	3.38	**520**	4.97	6.12	6.49	8.75	11.2	12.0	11.4	11.3	15.4	12.6
	4.13	**420**	5.46	6.64	7.40	9.66	11.9	13.1	13.0	12.6	16.8	17.3
	5.06	**350**	6.19	7.43	7.82	10.5	12.9	14.4	14.3	13.6	18.8	20.7
	6.20	**280**	6.62	8.00	8.80	11.6	14.1	16.0	15.5	15.5	20.6	24.8
	7.59	**230**	6.87	8.55	9.66	12.5	15.5	17.4	17.5	16.9	22.7	29.9
1170	**1.84**	**640**	3.46	5.51	5.77	7.55	10.2	11.7	10.5	10.2	14.0	13.3
	2.25	**520**	3.70	5.87	5.50	8.39	10.9	11.7	11.2	11.5	15.1	8.17
	2.76	**420**	5.16	6.54	6.75	9.11	11.7	12.7	12.3	12.4	16.2	12.5
	3.38	**350**	5.76	7.01	7.44	10.0	12.6	13.6	13.2	13.2	17.9	15.0
	4.13	**280**	6.26	7.60	8.46	11.0	13.5	15.0	14.9	14.6	19.3	20.3
	5.06	**230**	6.87	8.47	8.95	12.0	14.7	16.5	16.4	15.5	21.5	24.2
	6.20	**190**	6.87	8.55	10.0	13.2	16.1	18.2	17.7	17.7	23.5	28.8
	7.59	**155**	6.87	8.55	11.0	14.2	17.6	19.8	20.0	19.3	25.9	34.5
580	**1.84**	**320**	5.65	7.18	7.71	10.4	13.0	15.1	14.0	13.5	18.4	16.4
	2.25	**260**	4.87	7.69	7.26	10.9	13.4	15.3	14.7	15.0	19.7	15.7
	2.76	**210**	6.70	8.40	8.64	11.6	14.4	15.9	16.1	16.2	21.2	19.4
	3.38	**175**	6.87	8.55	9.50	12.7	15.7	17.1	17.2	17.2	23.3	21.8
	4.13	**140**	6.87	8.55	10.7	14.0	17.1	19.0	18.9	19.0	25.1	27.2
	5.06	**115**	6.87	8.55	11.3	14.8	18.6	20.8	20.8	19.8	27.2	32.1
	6.20	**95**	6.87	8.55	11.5	14.8	18.8	22.9	22.4	22.4	29.8	37.7
	7.59	**77**	6.87	8.55	11.5	14.8	18.8	24.3	25.1	24.4	32.7	44.6

★ Refer to Factory for higher overhung load capacities and capacities at unlisted speeds. Published ratings ore for standard assemblies with shaft extensions as shown on the How to Order page (47) and are based on the most unfavorable conditions of loading. For higher ratings and ratings for the second shaft extension, refer full data to Factory. For OHL values of ratios or L.S. shaft speeds not shown, use the OHL value of the next lowest ratio or next highest L.S. shaft rpm.

‡ Type Y overhung load values can be increased by 80% when an outboard bearing is used.

Type Y & YF All Reductions

L_f Load Location Factors*

Low Speed Shaft Based on distance from the center line of load to drive seal cage

Distance in inches	DRIVE SIZE										Distance in inches	DRIVE SIZE				
	2050	2060	2070	2080	2090	2100	2110	2120 2125	2130 2135	2140 2145		2150 2155	2160 2165	2170 2175	2180 2185	2190 2195
2	.94	.92	.90	.88							4	.90				
2.5	.98	.96	.93	.91	.89						4.50	.91	.90			
3	1.02	1.00	.96	.94	.92	.90	.89				5	.92	.91	.90		
3.5	1.06	1.04	1.00	.97	.95	.93	.92	.90	.89	.89	5.50	.94	.93	.91	.90	
4	1.10	1.08	1.03	1.00	.97	.95	.94	.92	.91	.91	6	.95	.94	.92	.91	.90
4.5	. . .	1.11	1.06	1.03	1.00	.97	.96	.94	.92	.92	7	.98	.96	.95	.93	.92
5	. . .	. . .	1.10	1.06	1.03	1.00	.98	.96	.94	.94	8	1.01	.99	.97	.96	.94
5.5	. . .		. . .	1.09	1.05	1.02	1.00	.98	.96	.95	9	1.03	1.01	.99	.98	.96
6	. . .	. . .	. . .	1.12	1.08	1.03	1.02	1.00	.98	.96	10	1.06	1.04	1.02	1.00	.98
6.5	. . .	. . .	. . .	. . .	1.11	1.07	1.05	1.02	1.00	.98	11	1.09	1.06	1.04	1.02	1.00
7	. . .	. . .	. . .	. . .	1.13	1.09	1.07	1.04	1.02	.99	12	1.12	1.09	1.06	1.04	1.02
7.5	. . .	. . .	. . .	. . .	. . .	1.12	1.09	1.06	1.04	1.01	13	. . .	1.11	1.09	1.06	1.04
8	. . .	. . .	. . .	. . .	. . .	1.14	1.11	1.08	1.06	1.02	14	. . .	. . .	1.11	1.09	1.06
8.5	. . .	. . .	. . .	. . .	. . .	. . .	. . .	1.10	1.07	1.03	15	. . .	. . .	1.13	1.11	1.08
9	. . .	. . .	. . .	. . .	. . .	. . .	. . .	1.12	1.09	1.05	16				1.13	1.11
10	Center line of load is beyond end of standard L.S. Shaft. Contact Factory for special shaft.					. . .	. . .	. . .	1.13	1.08	17	Center line of load is beyond end of standard L.S. Shaft. Contact Factory for special shaft.			. .	1.12
11						. . .	. . .	. . .	. . .	1.11	18				. .	1.13
12						. . .	. . .	. . .	. . .	1.14	19					

✱ Data for Drive Sizes 2080 thru 2195 also applies to Drive Sizes 1080 thru 1195 respectively. Interpolate for intermediate values, for example, Lf is .98 for a Size 2060 drive when Distance is $2^3/_4$ inches.

Type YF Single Reduction

Overhung Load Factors ★ — Pounds

Low Speed Shaft Multiply values listed below by 1000. . .

Refer to Factory for overhung load ratings

High Speed Shaft rpm	Nominal Ratios ±3%	Approx L.S. Shaft rpm	DRIVE SIZE ‡											
			1080	1090	1100	1110	1120 1125	1130 1135	1140 1145	1150 1155	1160 1165	1170 1175	1180 1185	1190 1190
1750	1.84	950	5.21	6.63	8.57									
	2.25	780	5.76	7.33	9.39	9.25								
	2.76	640	6.59	8.47	10.1	10.0	9.25	13.2						
	3.38	520	7.61	9.61	11.6	11.0	10.9	14.7	25.0					
	4.13	420	8.59	11.2	12.5	12.7	12.0	16.7	27.8	30.8				
	5.06	350	9.16	12.0	13.8	14.0	13.1	18.1	30.0	34.7	40.0	50.0		
	6.20	280	10.4	12.9	15.2	15.3	15.3	20.0	30.0	35.0	40.0	50.0	55.0	65.0
	7.59	230	11.2	14.4	16.7	17.0	16.7	22.5	30.0	35.0	40.0	50.0	55.0	65.0
1170	1.84	640	6.25	7.90	10.1	10.0	9.17	13.0	21.8					
	2.25	520	6.88	8.72	11.0	10.8	9.98	14.2	23.9	25.3				
	2.76	420	7.64	9.78	11.8	11.7	11.0	15.5	25.8	28.9	37.2			
	3.38	350	8.93	11.2	13.5	12.9	12.8	17.2	29.1	33.1	40.0	47.6	55.0	
	4.13	280	10.0	12.9	14.4	14.8	14.1	19.4	30.0	35.0	40.0	50.0	55.0	65.0
	5.06	230	10.7	13.9	15.9	16.1	15.3	21.0	30.0	35.0	40.0	50.0	55.0	65.0
	6.20	190	12.0	15.0	17.5	17.6	17.7	23.0	30.0	35.0	40.0	50.0	55.0	65.0
	7.59	155	12.9	16.6	19.1	19.5	18.2	26.0	30.0	35.0	40.0	50.0	55.0	65.0
580	1.84	320	8.48	10.9	13.2	13.2	12.4	17.2	28.6	30.7	39.4	47.8	55.0	60.1
	2.25	260	9.32	11.5	14.4	14.3	13.4	18.8	30.0	33.5	40.0	50.0	55.0	64.5
	2.76	210	10.4	13.3	15.4	15.4	14.7	20.4	30.0	35.0	40.0	50.0	55.0	65.0
	3.38	175	11.7	14.6	17.4	16.8	16.9	22.5	30.0	35.0	40.0	50.0	55.0	65.0
	4.13	140	13.0	16.7	18.6	19.0	18.4	25.1	30.0	35.0	40.0	50.0	55.0	65.0
	5.06	115	13.9	17.9	19.9	20.7	19.9	27.1	30.0	35.0	40.0	50.0	55.0	65.0
	6.20	95	14.1	18.4	20.1	22.6	22.7	29.6	30.0	35.0	40.0	50.0	55.0	65.0
	7.59	77	14.1	18.5	20.2	24.8	24.5	33.1	30.0	35.0	40.0	50.0	55.0	65.0

★ Refer to Factory for higher overhung load capacities and capacities at unlisted speeds. Published ratings are for standard assemblies with shaft extensions as shown on the How to Order page (47) and are based on the most unfavorable conditions of loading. For higher ratings and ratings for the second shaft extension, refer full data to Factory. For OHL values of ratios or L.S. shaft speeds not shown, use the OHL value of the next lowest ratio or next highest L.S. shaft rpm.

‡ Type YF overhung load values can be increased by 80% when an outboard bearing is used.

Type Y Double & Triple Reduction

Overhung Load Ratings * – Pounds

Low Speed Shaft Multiply values listed below by 1000...

Refer to Factory for higher overhung load ratings

Approx. L.S. Shaft rpm	DRIVE SIZE ‡															
	2050	2060	2070	2080	2090	2100	2110	2150 2125	2130 2135	2140 2145	2150 2155	2160 2165	2170 2175	2180 2185	2190 2195
190	6.0	7.0	8.3	11.0	12.5	14.0	15.4	14.6	20.0	23.8	30.3				
155	. . .	. . .	8.6	. . .	. . .	. . .	16.0	15.1	. . .	25.8	32.1	37.2			
125	. . .	. . .	9.0	. . .	. . .	. . .	. . .	16.2	. . .	27.9	32.0	40.0	50.0	55.0	
100	. . .	. . .	. . .	. . .	. . .	. . .	. . .	17.5	. . .	30.0	34.8	. . .	. . .	. . .	65. 0
95	. . .	. . .	. . .	. . .	. . .	. . .	. . .	18.0	. . .	. . .	35.0				
84															
77															
68															
62															
56															
50	* The last overhung load value in each size column applies to all lower output speeds for that drive														
45															

* Refer to Factory for higher overhung load capacities and capacities at unlisted speeds. Furnish complete application information. Published ratings are for standard assemblies with shaft extension as shown on the How to Order page (47) and are based on the most unfavorable conditions of loading. For higher ratings and ratings for the second shaft extension, refer full data to Factory. For OHL values of ratios or L.S. shaft speeds not shown, use the OHL value of the next lowest ratio or next highest L.S. shaft rpm.

‡ Type Y drive overhung load values can be increased 80% when an outboard bearing is used.

Ratings for Extra Capacity L.S. Shaft Bearings

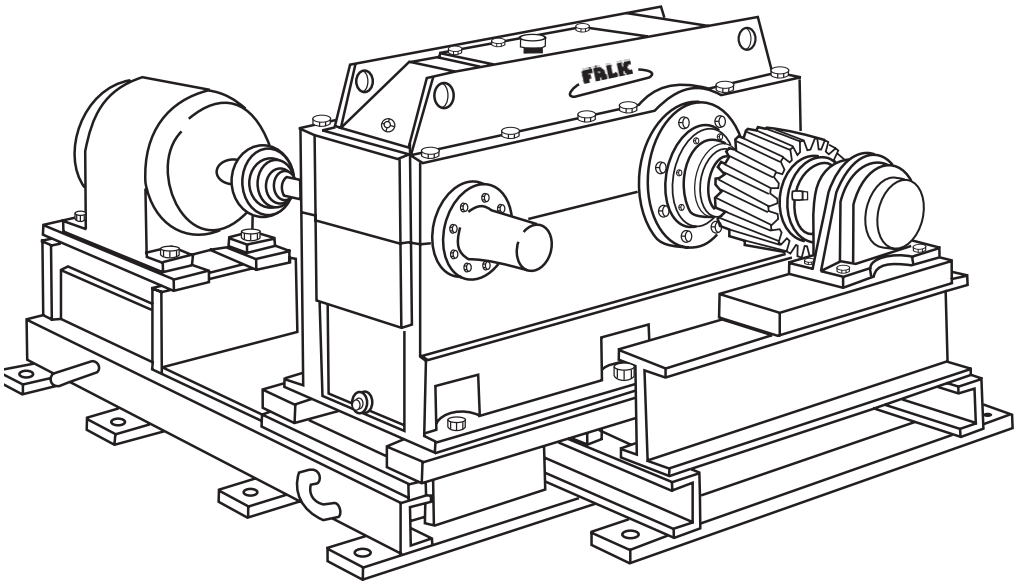
When the applied load exceeds the rated capacity of the standard low speed shaft of a Type Y or YF drive, the following are available for an extra charge, either

1. the Type YT or YFT drive with extra capacity low speed bearings, or
2. an outboard bearing to increase overhung load capacity, or
3. refer full details to Factory if the actual load exceeds the published capacity.

Published capacities are based on the most severe loading conditions. A check with Rexnord for specific application will show that additional capacity is available in many cases. External dimensions are the same for types Y and YT or YF and YFT drives except as noted in the footnotes on pages 37 and 39.

Outboard Bearings Increased by 80% the overhung load ratings of Type Y & YF Gears Drives!

When overhung loads are greater than those listed on pages 32 thru 35, or when the nature of the load requires special support, outboard bearings can be provided. Specifications and dimensions are available on request.



Type YFT Single Reduction

Overhung Load Ratings ★ – Pounds

Low Speed Shaft Multiply values listed below by 1000...

Refer to Factory for higher overhung load ratings

High Speed Shaft rpm	Nominal Ratios ±3%	Approx. L.S. Shaft rpm	DRIVE SIZE								
			1110	1120 1125	1130 1135	1140 1145	1150 1155	1160 1165	1170 1175	1180 1185	1190 1195
1750	1.84	950									
	2.25	780	14.8								
	2.76	640	15.9	17.2	20.1						
	3.38	520	17.3	19.5	22.1	34.7					
	4.13	420	19.5	21.1	24.6	38.0	41.5				
	5.06	350	21.2	22.8	26.5	42.1	45.9	58.3	65.1		
	6.20	280	23.1	25.7	29.0	45.0	49.9	60.0	65.2	85.0	88.4
	7.59	230	25.0	27.7	32.2	49.0	54.0	60.0	65.6	85.0	96.1
1170	1.84	640	15.9	17.1	19.9	30.9					
	2.25	520	17.1	18.4	21.5	33.6	35.4				
	2.76	420	18.4	20.0	23.3	36.1	39.5	52.4			
	3.38	350	20.0	22.5	25.6	39.9	44.4	56.8	63.9	77.5	
	4.13	280	22.5	24.4	28.4	43.6	47.7	60.0	63.9	85.0	83.5
	5.06	230	24.4	26.2	30.5	45.0	50.0	60.0	64.9	85.0	94.0
	6.20	190	25.0	29.5	33.2	45.0	50.0	60.0	65.0	85.0	99.2
	7.59	155	25.0	30.0	35.0	45.0	50.0	60.0	65.4	85.0	99.9
580	1.84	320	20.5	22.3	25.8	39.8	42.5	56.1	63.3	76.0	77.2
	2.25	260	22.1	23.9	27.9	43.2	46.0	59.6	63.1	81.1	82.6
	2.76	210	23.7	25.9	30.1	45.0	50.0	60.0	63.0	85.0	89.2
	3.38	175	25.0	28.9	32.9	45.0	50.0	60.0	63.5	85.0	96.2
	4.13	140	25.0	30.0	35.0	45.0	50.0	60.0	63.4	85.0	96.2
	5.06	115	25.0	30.0	35.0	45.0	50.0	60.0	64.6	85.0	98.4
	6.20	95	25.0	30.0	35.0	45.0	50.0	60.0	64.7	85.0	98.5
	7.59	77	25.0	30.0	35.0	45.0	50.0	60.0	65.1	85.0	98.7

★ Refer to Factory for higher overhung load capacities and capacities at unlisted speeds. Furnish complete application information. Published ratings ore for standard assemblies with shaft extensions as shown on the How to Order page (47) and are based on the most unfavorable conditions of loading. For higher ratings and ratings for the second shaft extension, refer full data to Factory. For OHL values of ratios or L.S. shaft speeds not shown, use the OHL value of the next lowest ratio or next highest L.S. shaft rpm.

Type YT Single Reduction

Overhung Load Ratings ★ — Pounds

Low Speed Shaft Multiple values listed below by

1000. . .Refer to Factory for higher overhung load rating

High Speed Shaft rpm	Nominal Ratios ± 3%	Approx. L.S. Shaft rpm	DRIVE SIZE			
			2110	2120 2125	2130 2135	2140 2145
1750	1.84	950				
	2.25	780	9.42			
	2.76	640	10.9	11.3	11.4	
	3.38	520	12.4	12.4	13.7	25.8
	4.13	420	15.1	14.6	15.9	30.7
	5.06	350	17.3	16.0	19.4	34.5
	6.20	280	18.6	20.2	21.5	38.9
	7.59	230	22.4	22.2	25.9	44.3
1170	1.84	640	10.5	9.45	11.3	25.6
	2.25	520	11.5	12.4	12.7	23.3
	2.76	420	13.3	13.9	14.2	26.7
	3.38	350	14.7	15.1	16.9	29.8
	4.13	280	17.5	17.6	18.9	35.3
	5.06	230	19.9	18.7	22.5	39.7
	6.20	190	21.5	23.4	25.0	44.6
	7.59	155	25.7	25.6	29.9	50.7
580	1.84	320	15.3	14.1	16.6	31.6
	2.25	260	16.1	17.5	18.5	32.1
	2.76	210	18.3	19.4	20.4	36.3
	3.38	175	20.1	21.0	23.7	39.4
	4.13	140	22.8	24.1	26.3	45.4
	5.06	115	25.8	24.6	29.5	50.8
	6.20	95	27.8	30.2	32.7	56.8
	7.59	77	32.8	33.1	38.5	64.2

Type YT Single Reduction

Overhung Load Ratings ★ — Pounds

Low Speed Shaft Multiple values listed below by

1000. . .Refer to Factory for higher overhung load rating

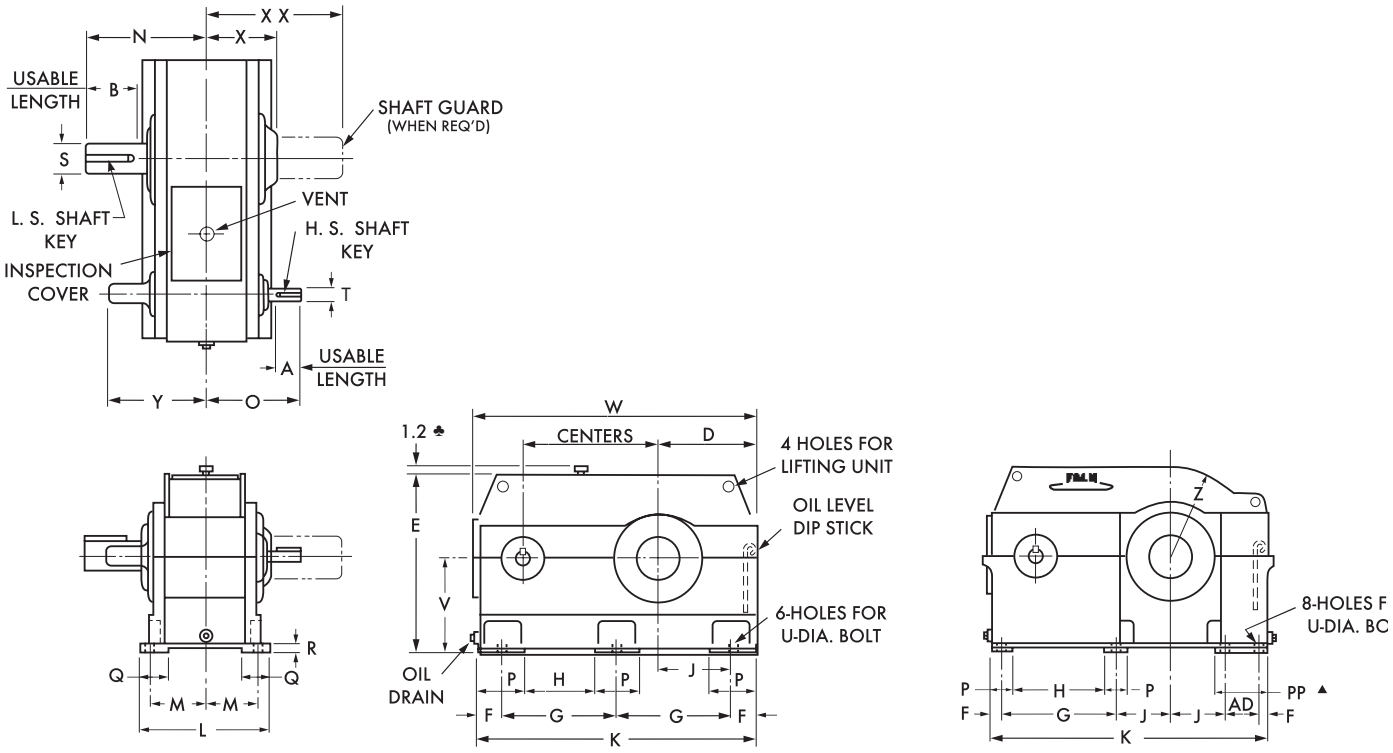
Approx. L.S. Shaft rpm	DRIVE SIZE								
	2110	2120 2125	2130 2135	2140 2145	2150 2155	2160 2165	2170 2178	2180 2185	2190 2195
155	21.4	20.4	24.7	40.7	47.4				
125	21.7	19.9	25.0	45.0	50.0	60.0			
100	23.3	21.6	26.8	. . .	. . .	. . .	75.0	85.0	
95	25.0	23.6	29.2	. . .	. . .	. . .	. . .	. . .	67.1
84	. . .	24.7	31.4	. . .	. . .	. . .	. . .	. . .	73.1
77	. . .	25.7	34.1	. . .	. . .	. . .	. . .	. . .	84.6
68	. . .	26.8	35.0	. . .	. . .	. . .	. . .	. . .	95.6
62	. . .	29.1	. . .	. . .	. . .	. . .	. . .	. . .	100.0
56	. . .	29.2							
50	. . .	29.6							
45	. . .	30.0							
42									
37									
34									
30									
28									
25									

The last overhung load value in each size column applies to all lower output speeds for that drive.

★ Refer to Factory for higher overhung load capacities and capacities at unlisted speeds. Furnish complete application information. Published ratings ore for standard assemblies with shaft extensions as shown on the How to Order page (47) and are based on the most unfavorable conditions of loading. For higher ratings and ratings for the second shaft extension, refer full data to Factory. For OHL values of ratios or L.S. shaft speeds not shown, use the OHL value of the next lowest ratio or next highest L.S. shaft rpm.

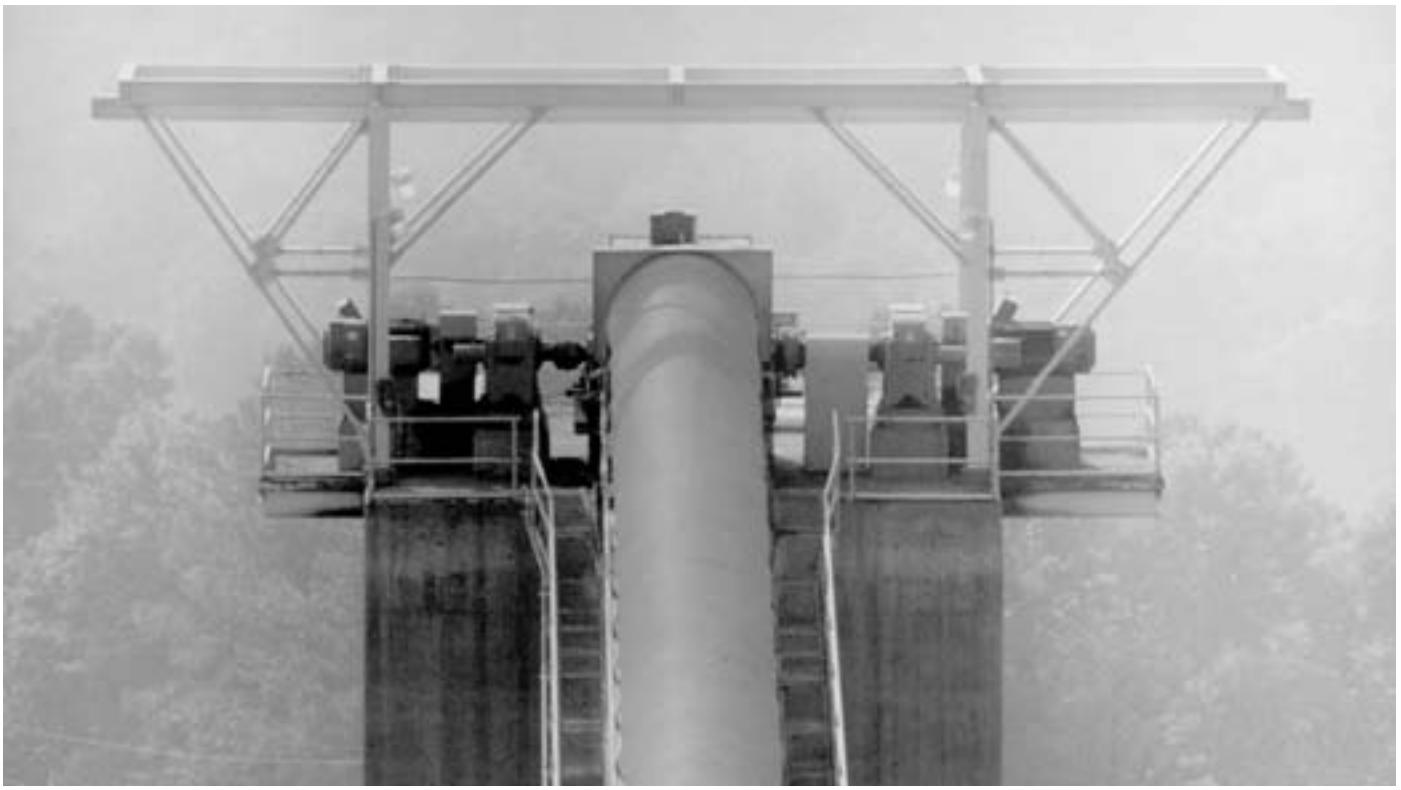
Type YF1 and YFT1 Dimensions — Inches

Parallel Shaft Drives Single Reduction Sizes 1080 through 1155



ELEVATION: SIZES 1080 thru 1135
(6 FOUNDATION HOLES)

ELEVATION: SIZES 1140 thru 1155
(8 FOUNDATION HOLES)



Coal train load-out conveyor with dual drives.

DRIVE SIZE ★	B	D	E	F	G	H ♦	J	K	L	M	N	P ♦	Q	R	L.S. Shaft *		U	V ★	W	X	XX ●	Z	AD
															S	Key							
1080	6.38	12.13	22.50	3.00	14.50	...	9.13	35.00	15.50	6.63	15.13	...	3.75	0.75	4.000	1 x 1 x 6	1.00	11.50	35.38	8.13	15.75		
1090	7.25	13.38	25.38	3.38	15.50	...	10.00	37.75	16.75	7.13	16.50	...	3.38	0.94	4.500	1 x 1 x 7	1.13	13.00	38.13	8.63	17.75		
1100	8.25	15.00	29.19	3.38	18.00	...	11.63	42.75	18.50	8.00	18.50	...	3.25	0.94	5.000	$1\frac{1}{4}$ x $1\frac{1}{4}$ x $7\frac{1}{2}$	1.13	14.50	43.13	9.75	19.50		
1110	9.06 †	17.00	32.81	3.50	19.75	...	13.50	46.50	19.50	8.38	19.88	...	4.75	1.06	5.500	$1\frac{1}{4}$ x $1\frac{1}{4}$ x $8\frac{1}{2}$ †	1.25	16.25	46.88	10.25 ‡	20.50 ■		
1120/25	9.88 †	18.75	36.06	3.63	22.50	15.25	15.13	52.25	21.00	9.13	21.50	7.25	4.00	1.06	6.000	$1\frac{1}{2}$ x $1\frac{1}{2}$ x 9 †	1.25	18.00	52.69	11.00 ‡	22.25 ■		
1130/35	10.69 †	20.63	39.94	4.25	24.75	16.25	16.38	58.00	23.75	10.25	23.50	8.50	4.00	1.13	6.500	$1\frac{1}{2}$ x $1\frac{1}{2}$ x 10	1.50	20.00	58.44	12.13	24.34 ■		
1140/45	12.13	23.75	45.00	3.00	27.75	18.75	11.50	65.50	30.50	13.38	28.25	8.00	6.00	1.25	7.250	$1\frac{3}{4}$ x $1\frac{1}{4}$ x 11	1.75	22.50	67.00	15.50	29.00	21.63	8.75
1150/55	12.63	26.00	49.75	3.00	32.50	23.50	12.00	73.00	32.00	14.13	29.75	8.00	6.00	1.50	7.750	2 x $1\frac{1}{2}$ x 12	1.75	25.00	74.50	16.25	30.50	23.88	10.50

DRIVE SIZE ★	Wt lb	Centers	Ratio Range	A w/o Fan	O	Y	H.S. Shaft *		DRIVE SIZE	Wt lb	Centers	Ratio Range	A w/o Fan	O	Y	H.S. Shaft *	
							T	Key								T	Key
2080	1285	11.000{	1.84 thru 4.57:1 5.06 thru 7.59:1	5.25 4.13	14.53 13.00	15.03 14.00	3.250 2.500	$\frac{3}{4}$ x $\frac{3}{4}$ x 5 $\frac{1}{2}$ $\frac{5}{8}$ x $\frac{5}{8}$ x 4	**1120/25**	3730	18.000{	1.84 thru 2.76:1 305 thru 7.59:1	6.31 5.81	17.88 17.63	18.50 18.50	4.000 3.500	1 x 1 x 6 $\frac{7}{8}$ x $\frac{7}{8}$ x 6
1090	1765	12.500{	1.84 thru 5.06:1 5.60 thru 7.59:1	5.25 4.63	15.00 14.00	15.50 14.50	3.250 2.750	$\frac{3}{4}$ x $\frac{3}{4}$ x 5 $\frac{1}{2}$ $\frac{5}{8}$ x $\frac{5}{8}$ x 4 $\frac{1}{2}$	**1130/35**	5120	20.000	1.84 thru 7.59:1	7.44	20.50	21.00	4.500	1 x 1 x 7 $\frac{1}{2}$
1100	2190	14.250{	1.84 thru 2.76:1 3.05 thru 7.59:1	5.63 5.13	16.25 15.50	16.88 16.88	3.500 3.000	$\frac{7}{8}$ x $\frac{7}{8}$ x 5 $\frac{1}{2}$ $\frac{3}{4}$ x $\frac{3}{4}$ x 5	**1140/45**	7570	22.500{	1.84 thru 3.38:1 3.74 thru 7.59:1	9.13 8.25	23.13 22.13	24.38 24.38	5.500 5.000	$1\frac{1}{4}$ x $1\frac{1}{4}$ x 9 $1\frac{1}{4}$ x $1\frac{1}{4}$ x 8
1110	2690	16.000{	1.84 thru 2.76:1 3.05 thru 7.59:1	5.69 5.31	17.13 16.38	17.75 17.75	4.000 3.250	1 x 1 x 6 $\frac{3}{4}$ x $\frac{3}{4}$ x 5 $\frac{1}{2}$	**1150/55**	9300	25.000{	1.84 thru 3.05:1 3.38 thru 7.59:1	9.69 8.31	24.50 23.00	26.13 26.13	6.000 5.000	$1\frac{1}{2}$ x $1\frac{1}{2}$ x 9 $1\frac{1}{4}$ x $1\frac{1}{4}$ x 8

▲ Dimensions PP is 143/4 for 1140/1145 and 171/2 for 1150/1155.

♦ Sizes 1080 through 1110 have foundation pads full length of base.

★ Drives are for horizontal floor mounted operation unless specifically stated otherwise. Contact Factory for other mountings. Dimensions are for reference and subject to change without notice unless certified.

■ Dimensions 'XX' is 21"for 1110YFT, 235/8" for 1120/1125YFT and 241/4 for 1130/1135YFT.

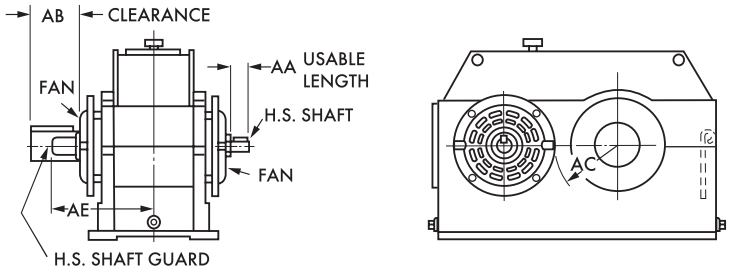
✱ Shaft diameters under 3" are held to limits of +.0000", - .0005". Shaft diameters 3 " and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.

† For YFT drive, reduce this dimension by 1/2.

‡ Dimension "X" is 103/4 for 1110YFT and 111/2 for 1120/1125YFT.

● Double extensions will be furnished only when specified on the order.

♣ Dimension for Sizes 1080-1135.



Cooling fan clearance dimensions Sizes 1080 through 1155

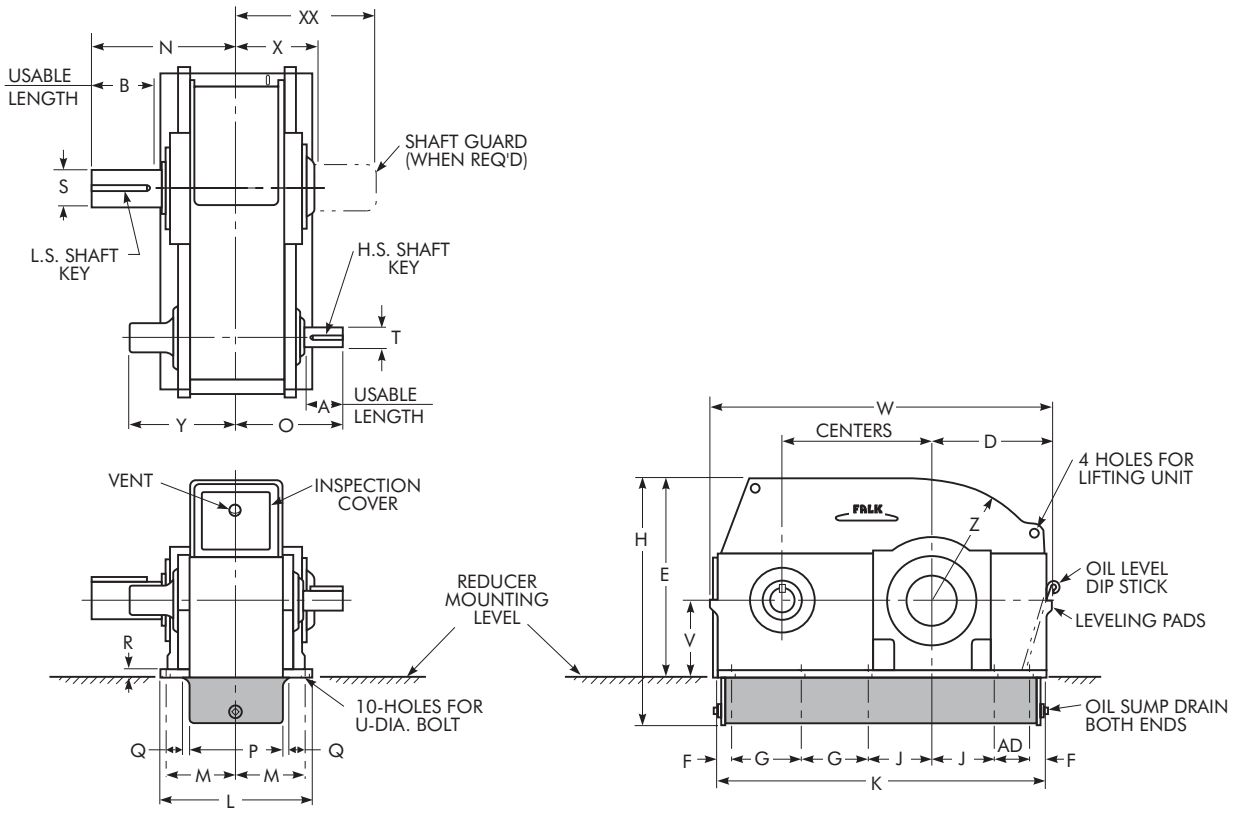
DRIVE SIZE	Ratio Range	AA§	AB§	AC§	AE
1080 {	1.84 thru 4.57:1 5.06 thru 7.59:1	3.94 3.06	4.88 5.25	3.00 4.00	15.1 3 14.25
1090 {	1.84 thru 5.06:1 5.60 thru 7.59:1	3.94 3.56	5.63 6.13	4.50 5.50	15.6 9 14.75
1100 {	1.84 thru 2.76:1 3.05 thru 7.59:1	4.13 3.38	6.38 6.50	4.50 4.50	17.50 17.38
1110 {	1.84 thru 2.76:1 3.05 thru 7.59:1	4.19 3.94	6.94 7.56	5.25 6.25	18.63 17.75
1120/1125 {	1.84 thru 2.76:1 3.05 thru 7.59:1	4.56 4.38	8.19 8.25	7.25 8.25	19.00 18.63
1130/1135	1.84 thru 7.59:1	5.69	8.69	8.63	22.88
1140/1145 {	1.84 thru 3.38:1 3.74 thru 7.59:1	7.44 6.44	12.56 12.56	11.13 11.13	23.75 23.75
1150/1155	3.38 thru 7.59:1	6.63	13.38	13.63	24.38

Refer to Factory for larger sizes or ratios not listed.

§ Allow clearance for hub overhung at AA and clearance at AB and AC.

Type YF1 and YFT1 Dimensions — Inches

Parallel Shaft Drives Single Reduction Sizes 1160 through 1195



DRIVE SIZE ★	B	D	E	F	G	H	J	K	L	M	N	P	Q	R	L.S. Shaft * S	L.S. Shaft * Key	U	V ★	W	X	XX ●	Z	AD
1160/1165	13.81	30.38	44.88	3.00	18.50	56.38	13.75	83.50	36.00	15.88	33.00	19.50	7.25	1.88	8.500	2 x 1 1/2 x 13	2.00	16.25	85.38	18.25	33.75	27.63	13.00
1170/1175	15.06	33.13	49.38	3.00	21.00	61.88	15.00	92.50	38.50	16.88	35.50	21.00	7.75	1.88	9.250	2 1/2 x 1 3/4 x 14	2.25	18.00	94.38	19.50	36.38	30.38	14.50
1180/1185	16.69	36.75	54.00	3.00	23.25	68.00	16.00	101.50	41.00	18.13	38.50	22.75	8.00	2.13	10.000	2 1/2 x 1 3/4 x 15	2.25	19.50	103.75	21.00	39.50	33.50	17.00
1190/1195	18.69	40.25	60.25	3.50	26.25	75.38	17.50	113.00	45.00	19.75	42.00	25.25	8.50	2.38	11.000	2 1/2 x 1 3/4 x 17	2.50	22.00	115.38	22.75	43.00	37.00	18.50

DRIVE SIZE ★	Wt lb	Centers		Ratio Range	A w/o Fan	O	Y	H.S. Shaft * S	H.S. Shaft * Key	DRIVE SIZE ★	Wt lb	Centers		Ratio Range	A w/o Fan	O	Y	H.S. SHAFT * T	H.S. SHAFT * Key
1160/65	10,900	29.000	{	1.84 thru 3.05:1 3.38 thru 7.59:1	10.13 9.31	26.75 25.75	27.50 27.50	6.500 5.500	1 1/2 x 1 1/2 x 10 1 1/4 x 1 1/4 x 9	**1180/85**	17,300	35.000	{	1.84 thru 4.13:1 4.57 thru 7.59:1	12.50 9.75	31.00 28.13	31.50 31.50	7.250 6.000	1 3/4 x 1 1/4 x 11 1/2 1 1/2 x 1 1/2 x 9
1170/78	13,200	32.000	{	1.84 thru 3.74:1 4.13 thru 7.59:1	11.75 9.38	29.50 26.50	30.00 28.25	7.000 5.500	1 3/4 x 1 1/4 x 11 1 1/4 x 1 1/4 x 9	**1190/95**	22,400	39.000	{	1.84 thru 4.13:1 4.57 thru 7.59:1	12.50 10.38	32.50 30.00	35.13 35.00	7.750 6.500	2 x 1 1/2 x 12 1 1/2 x 1 1/2 x 10

★ Drives are for horizontal floor mounted operation unless specifically stated otherwise. Refer to Factory for other mountings. Drive sizes 1160 thru 1195 are also available with mounting level at bottom of the drive (Type YFN).

● Double extension will be furnished only when specified on the order.

✱ Shaft diameter 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of key height.
Dimensions are for reference and subject to change without notice unless certified.

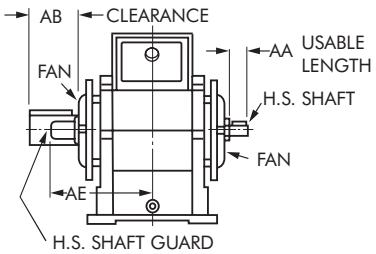
Cooling fan clearance dimensions

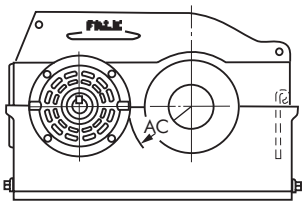
Sizes 1160 through 1185

DRIVE SIZE	Ratio Range	AA ■	AB ■	AC ■	AE
1160/1165 ▲	3.38 - 7.59:1	7.19	14.44	15.38	28.31
1170/1175	4.13 - 7.59:1	7.19	16.19	18.38	29.06
1180/1185	4.57 - 7.59:1	7.63	18.00	21.25	30.25

■ Allow clearance for hub overhang at AA and clearance at AB and AC.

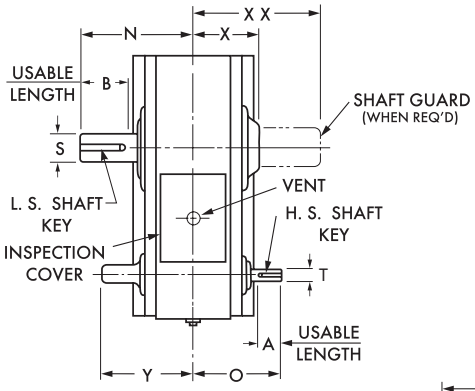
▲ Fans available for type YFN only.

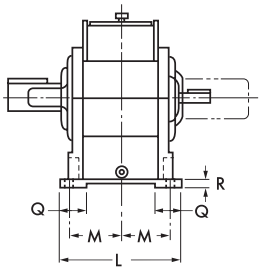


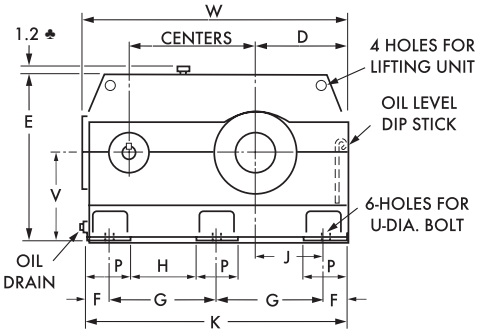


Type Y and YT Dimensions — Inches

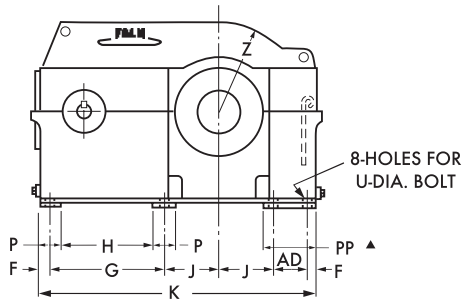
Parallel Shaft Drives Single, Double, & Triple Reduction Sizes 2050 through 2155 (Fan Dimensions on Page 40)







ELEVATION: SIZES 2050 thru 2135
(6 FOUNDATION HOLES)



ELEVATION: SIZES 2140 THRU 2155
(8 FOUNDATION HOLES)

DRIVE SIZE ★	B	D	E	F	G	H	J	K	L	M	N	P	Q	R	L.S. Shaft * S	L.S. Shaft * Key	U	V ★	W	X	XX ●	Z	AD
2050	4.00	8.50	15.75	2.50	9.25	. . .	6.00	23.50	11.50	4.88	11.00	. . .	2.75	0.63	2.750	5/8 x 5/8 x 4	0.75	8.00	24.00	6.13	12.31		
2060	4.81	9.50	17.75	2.50	10.88	. . .	7.00	26.75	12.25	5.25	12.00	. . .	3.13	0.63	3.000	3/4 x 3/4 x 4 1/2	0.75	9.00	27.13	6.75	14.17		
2070	5.38	10.63	20.13	3.00	12.13	. . .	7.63	30.25	14.00	5.88	13.50	. . .	3.00	0.75	3.500	7/8 x 7/8 x 5	1.00	10.25	30.63	7.38	14.63		
2080	6.44	12.13	22.50	3.00	14.50	. . .	9.13	35.00	15.50	6.63	15.13	. . .	3.75	0.75	4.000	1 x 1 x 6	1.00	11.50	35.38	8.13	15.75		
2090	7.06	13.38	25.38	3.38	15.50	. . .	10.00	37.75	16.75	7.13	16.50	. . .	3.38	0.94	4.500	1 x 1 x 7	1.13	13.00	38.13	8.63	17.75		
2100	8.25	15.00	29.19	3.38	18.00	. . .	11.63	42.75	18.50	8.00	18.50	. . .	3.25	0.94	5.000	1 1/4 x 1 1/4 x 7 1/2	1.13	14.50	43.13	9.75	19.50		
2110	9.06 †	17.00	32.81	3.50	19.75	. . .	13.50	46.50	19.50	8.38	19.88	. . .	4.75	1.06	5.500	1 1/4 x 1 1/4 x 8 1/2 †	1.25	16.25	46.88	10.25 ‡	20.50 ■		
2120/25	9.88 †	18.75	36.06	3.63	22.50	15.25	15.13	52.25	21.00	9.13	21.50	7.25	4.00	1.06	6.000	1 1/2 x 1 1/2 x 9 †	1.25	18.00	52.69	11.00 ‡	22.25 ■		
2130/35	10.69 †	20.63	39.94	4.25	24.75	16.25	16.38	58.00	23.75	10.25	23.50	8.50	4.00	1.13	6.500	1 1/2 x 1 1/2 x 10	1.50	20.00	58.44	12.13	24.34 ■		
2140/45	12.13	23.75	45.00	3.00	27.75	18.75	11.50	65.50	30.50	13.38	28.25	8.00	6.00	1.25	7.250	1 3/4 x 1 1/4 x 11	1.75	22.50	67.00	15.50	29.00	21.63	8.75
2150/55	12.63	26.00	49.75	3.00	32.50	23.50	12.00	73.00	32.00	14.13	29.75	8.00	6.00	1.50	7.750	2 x 1 1/2 x 12	1.75	25.00	74.50	16.25	30.50	23.88	10.50

DRIVE SIZE ★	Single Reduction							Double Reduction							Triple Reduction						
	Wt lb	Centers	A w/o Fan	O	Y	H.S. Shaft * T	H.S. Shaft * Key	Wt lb	Centers	A w/o Fan	O	Y	H.S. Shaft * T	H.S. Shaft * Key	Wt lb	Centers	A w/o Fan	O	Y	H.S. Shaft * T	H.S. Shaft * Key
2050	440	7.500	3.06	9.88	10.91	1.750	3/8 x 3/8 x 3		12.187	2.25	9.13	9.88	1.250	1/4 x 1/4 x 2 1/2		12.187	2.06	8.75	9.88	1.125	1/4 x 1/4 x 2 1/4
2060	560	8.500	3.38	10.75	11.34	2.000	1/2 x 1/2 x 3 1/2		14.125	2.63	9.88	10.25	1.500	3/8 x 3/8 x 2 3/4		14.125	2.06	9.13	10.25	1.125	1/4 x 1/4 x 2 1/4
2070	780	9.750	3.88	11.88	12.75	2.250	1/2 x 1/2 x 4		16.000	3.06	10.88	11.75	1.750	3/8 x 3/8 x 3		16.000	2.44	10.13	11.75	1.250	1/4 x 1/4 x 2 1/2
2080	1,100	11.000	4.13	13.00	14.00	2.500	5/8 x 5/8 x 4		18.500	3.38	12.13	12.50	2.000	1/2 x 1/2 x 3 1/2	1,200	18.500	2.44	10.88	12.50	1.250	1/4 x 1/4 x 2 1/2
2090	1,630	12.500	4.75	14.00	14.50	2.750	5/8 x 5/8 x 4 1/2	1,720	20.000	3.88	13.13	14.00	2.250	1/2 x 1/2 x 4	1,720	20.000	2.88	11.75	14.00	1.500	3/8 x 3/8 x 3
2100	1,910	14.250	5.56	15.50	16.88	3.000	3/4 x 3/4 x 5	2,020	22.750	4.13	14.38	14.88	2.500	5/8 x 5/8 x 4	2,020	22.750	2.88	12.63	14.88	1.500	3/8 x 3/8 x 3
2110	2,420	16.000	5.69	16.25	17.50	3.500	7/8 x 7/8 x 5 1/2	2,580	24.500	4.75	15.25	15.75	2.750	5/8 x 5/8 x 4 1/2	2,610	24.500	3.19	13.38	15.75	1.750	3/8 x 3/8 x 3
2120/25	3,250	18.000	6.31	17.38	18.25	4.000	1 x 1 x 6	3,390	27.750	5.56	16.63	17.88	3.000	3/4 x 3/4 x 5	3,460	27.750	3.50	14.75	17.88	2.000	1/2 x 1/2 x 3 1/2
2130/35	4.520	20.000	6.75	19.25	20.88	4.500	1 x 1 x 6 1/2	4,630	31.000	6.00	18.13	19.00	3.250	3/4 x 3/4 x 5 1/2	4,880	31.000	3.50	15.88	19.00	2.000	1/2 x 1/2 x 3 1/2
2140/45	6,900	22.500	8.63	22.13	24.25	5.000	1 1/4 x 1 1/4 x 8	7,090	35.000	5.94	19.38	20.25	3.500	7/8 x 7/8 x 6	7,620	35.000	4.06	17.38	20.25	2.250	1/2 x 1/2 x 4
2150/55	. . .	. . .	. . .	. . .	. . .	. . .	. . .	8,460	39.250	5.94	20.13	22.50	3.500	7/8 x 7/8 x 6	8,540	39.250	4.31	18.50	22.50	2.500	5/8 x 5/8 x 4 1/2

▲ Dimension PP is 14 3/4" for 2140/2145 and 17 1/2" for 2150/2155.

♦ Sizes 2050 through 2110 have foundation pads full length of base.

★ Drives are for horizontal floor mounted operation unless specifically stated otherwise. Refer to Factory for other mountings. Dimensions are for reference and subject to change without notice unless certified.

■ Dimension "XX" is 21" for 2110YT, 23 5/8" for 2120/2125YT and 24 1/4" for 2130/2135YT.

§ Dimension for Sizes 2050 thru 2135 only.

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

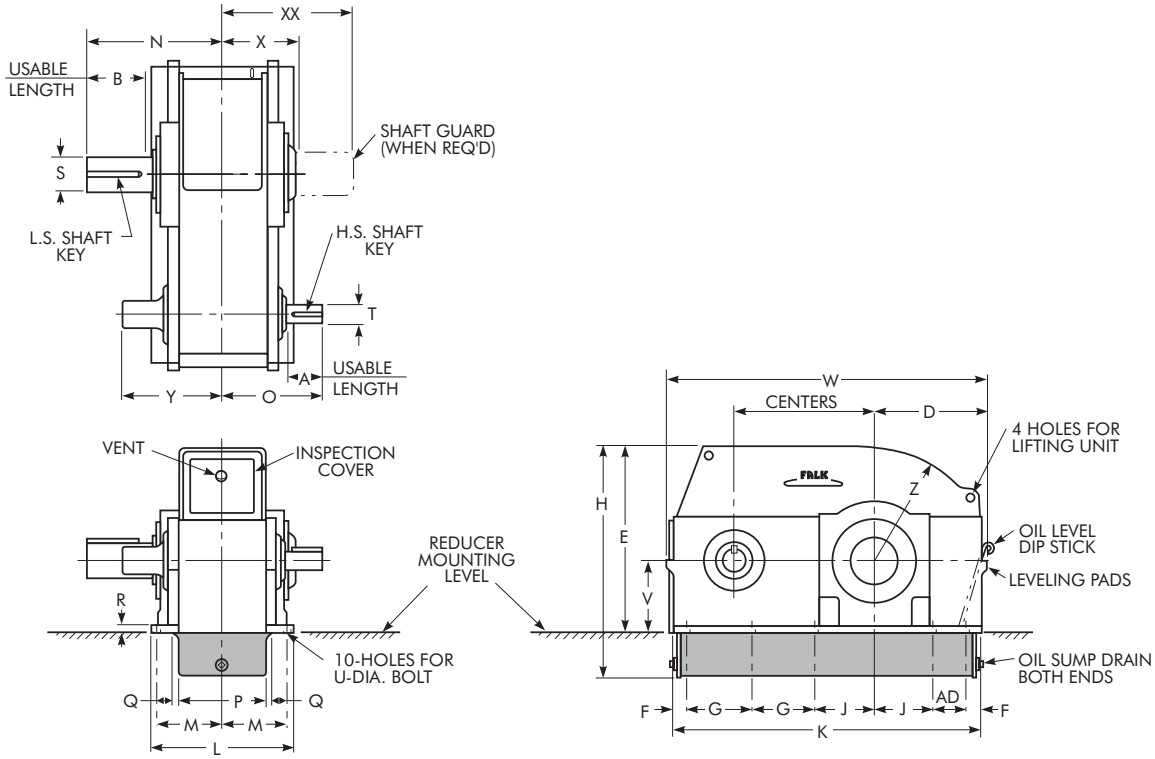
† For YT drive, reduce this dimension by 1/2.

‡ Dimension "X" is 10 3/4" for 2110YT and 11 1/2" for 2120 and 2125YT.

● Double extension will be furnished only when specified on the order.

Type Y and YT Dimensions — Inches

Parallel Shaft Drives Double & Triple Reduction Sizes 2160 through 2195



DRIVE SIZE ★	B	D	E	F	G	H	J	K	L	M	N	P	Q	R	L.S. Shaft * S	L.S. Shaft * Key	U	V ★	W	X	XX ●	Z	AD
2160/2165	13.81	30.38	44.88	3.00	18.50	56.38	13.75	83.50	36.00	15.88	33.00	19.50	7.25	1.88	8.500	2 x 1 ½ x 13	2.00	16.25	85.38	18.25	33.75	27.63	13.00
2170/2175	15.06	33.13	49.38	3.00	21.00	61.88	15.00	92.50	38.50	16.88	35.50	21.00	7.75	1.88	9.250	2 ½ x 1 3/4 x 14	2.25	18.00	94.38	19.50	36.38	30.38	14.50
2180/2185	16.69	36.75	54.00	3.00	23.25	68.00	16.00	101.50	41.00	18.13	38.50	22.75	8.00	2.13	10.000	2 1/2 x 1 3/4 x 15	2.25	19.50	103.75	21.00	39.50	33.50	17.00
2190/2195	18.69	40.25	60.25	3.50	26.25	75.38	17.50	113.00	45.00	19.75	42.00	25.25	8.50	2.38	11.000	2 1/2 x 1 3/4 x 17	2.50	22.00	115.38	22.75	43.00	37.00	18.50

DRIVE SIZE ★	Double Reduction Wt lb	Centers	A w/o Fan	O	Y	H.S. Shaft * T	H.S. Shaft * Key	Triple Reduction Wt lb	Centers	A w/o Fan	O	Y	H.S. Shaft * T	H.S. Shaft * Key
2160/2165	9,650	45.000	6.81	22.38	24.88	4.000	1 x 1 x 6 ½	9,610	45.000	5.06	20.50	24.88	2.750	5/8 x 5/8 x 5
2170/2175	12,100	50.000	7.56	24.00	27.25	4.500	1 x 1 x 7	12,160	50.000	5.81	22.00	22.88	3.250	3/4 x 3/4 x 5 ½
2180/2185	15,750	55.000	8.44	26.00	29.25	5.000	1 ¼ x 1¼ x 8	15,650	55.000	5.88	23.50	24.00	3.500	7/8 x 7/8 x 6
2190/2195	20,300	61.500	9.38	28.50	30.63	5.500	1 ¼ x 1¼ x 9	20,000	61.500	6.44	25.50	27.25	3.750	7/8 x 7/8 x 6

★ Drives are for horizontal floor mounted operation unless specifically stated otherwise. Refer to Factory for other mountings. Dimensions are for reference and are subject to change without notice unless certified. Drive Sizes 2160 through 2195 are also available with mounting level at bottom of drive. (Type YN)

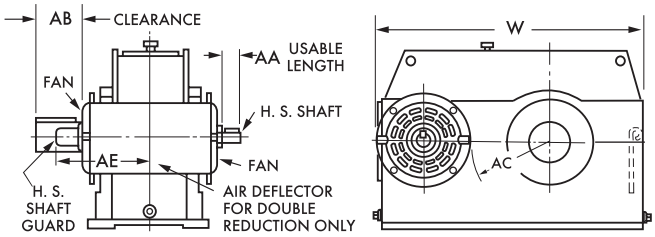
✱ Shaft diameters under 3" are held to limits of +.0000, -.0005". Shaft diameters 3" and over are held to limits of +.000", -.001". Shaft keyseat depth is one-half of the key height.

● Double extension will be furnished only when specified on the order.

Cooling fan clearance dimensions

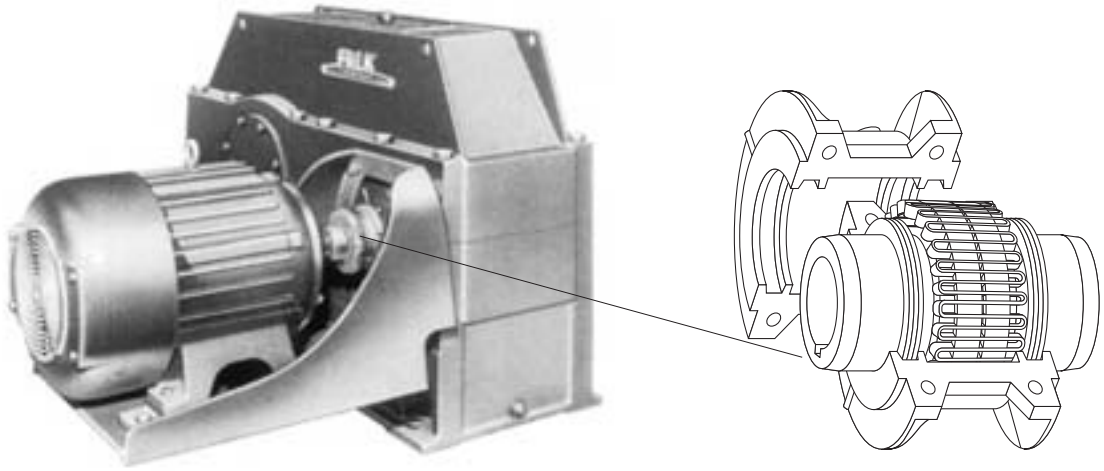
Sizes 2050 through 2155 ‡

DRIVE SIZE ‡	Single Reduction AA ■	AB ■	AC ■	AE	W	Double Reduction AA ■	AB ■	AC ■	AE	W
2050	2.19	3.44	2.88	10.44	24.00	1.44	3.44	7.63	10.00	25.69
2060	2.25	3.75	3.13	11.81	27.13	1.81	4.06	9.56	10.38	28.63
2070	2.75	4.63	4.38	12.44	30.63	2.19	4.81	11.38	11.44	31.63
2080	3.06	5.31	4.00	14.25	35.38	2.25	5.25	13.19	13.25	36.44
2090	3.56	6.19	5.50	14.75	38.13	2.75	6.13	14.69	13.75	39.06
2100	3.38	6.44	4.50	17.38	43.13	2.69	6.81	15.75	16.00	45.13
2110	3.75	7.44	6.25	17.75	46.88	3.19	7.81	17.50	16.38	48.88
2120/2125	4.06	8.50	7.25	18.63	52.69	3.75	8.69	18.00	18.13	56.88
2130/2135	4.38	8.88	8.63	22.88	58.44	4.19	9.56	21.25	19.25	62.00
2140/2145	6.31	12.75	11.13	23.81	67.00	4.50	13.38	25.25	20.25	68.63
2150/2155‡	. . .	. . .	. . .	. . .	. . .	4.50	14.13	29.50	20.94	76.50



Motor Brackets for Y Series Gear Drives

Plus Steelflex® Couplings



A Falk Steel Motor Bracket can be used on any gear drive application where the physical size of the motor is not larger than the drive. A Motor Bracket eliminates extra foundations and simplifies installation. Brackets bolt to the gear drive housing in much the same manner as on the universally popular UltraMax design. Housings are drilled and tapped for brackets only when drives are purchased with Falk™ motor brackets. The price includes drilling and tapping ONE face of drive housing, an adapter, a bracket and mounting of the bracket. (Coupling is extra.) For an extra charge, both sides of a Y housing can be drilled and tapped for the bracket assembly if the customer so specifies. Drive Sizes 2160 and larger usually require the Type YN housing to permit bracket clearance at the drive feet.

Proceed as follows to determine whether a motor bracket satisfies your motor application requirements.

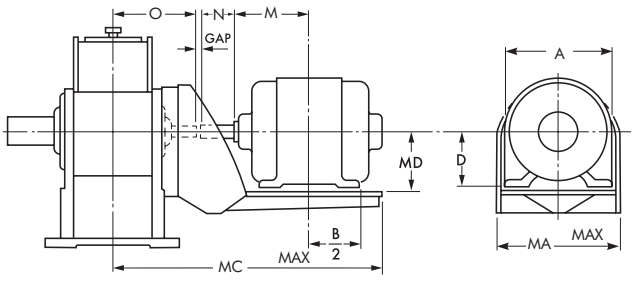
How to Select

For Standard NEMA Motor Frames 143T thru 445TS:
Refer to the top of Page 42 and select a motor bracket to suit the drive and motor frame size for the particular application. Bracket dimensions are shown at the bottom of the page.

For Non-NEMA Motor Frames and Larger Motors:
Check motor dimensions A, B, D, M and N as explained below to determine whether a motor bracket can be used. Bracket dimensions are shown at the bottom of Page 42.

Why take a chance? Independent experts, using precision measuring equipment, have tested Steelflex in competition with other shaft couplings. The results prove, time and again, the superiority of Falk™ Steelflex design in reducing the damaging effects of shock and vibration... up to 30% and sometimes more.

This standard Falk™ Steelflex coupling is applicable to more than 90% of all installations. There are other special purpose and dual purpose Falk™ couplings for applications requiring high speeds, floating shafts, built-in brake wheels, engine flywheels and controlled torque requirements. Rexnord also offers large Steelflex couplings for steel mills, cement mills, and similar large applications. For more information, contact Factory.



A Motor Bracket can be used if **ALL** of the following conditions exist:

1. MC max. equals or exceeds
   0 + GAP + (N + M+ B/2 of motor), and
2. MA equals or exceeds A of motor, and
3. MD equals or exceeds D of motor.

If **ALL** of the above conditions cannot be met, larger Brackets are not practical and a Bedplate is required. Refer to Page 45.

Type Y Motor Bracket Selection and Dimensions

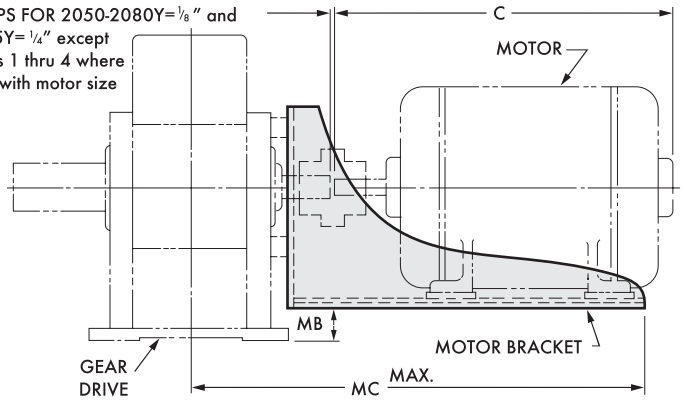
Motor bracket selection

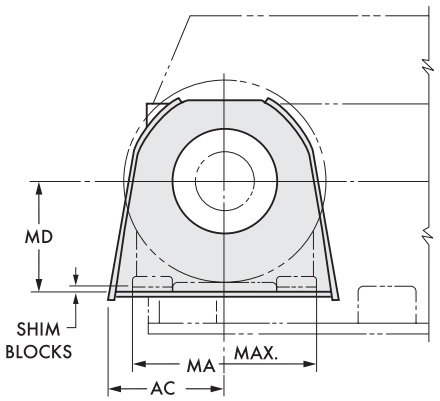
T Motor Frame Size (1964)	HORSEPOWER AT RPM			U Motor Frame Size (1983)	HORSEPOWER AT RPM			DRIVE AND MOTOR BRACKET SIZE									
	1750	1170	870		1750	1170	870	2050	2060	2070	2080	2090	2100	2110	2120 2125	2130 2135	2140 thru 2155
143T 145T	1.00 1.50 - 2	0.75 1.00	0.50 0.75	. . . . . .	. . . . . .	. . . . . .	. . . . . .	19	19	20							
182T 184T	3.00 5.00	1.50 2.00	1.00 1.50	182 184	1.00 1.50 - 2	0.75 1 - 1.50	0.50 0.75	21	21	25	25	25					
213T 215T	7.50 10.00	3.00 5.0	2.00 3.00	213 215	3.00 5.00	2.00 3.00	1 - 1.50 2.00	22	22	26	26	26	26	26	26		
254T 256T	15.00 20.00	7.50 10.00	5.00 7.50	254U 256U	7.50 10.00	5.00 7.50	3.00 5.00	23	23	27	27	27	27	27	27	27	
284T 286T	25.00 30.00	15.00 20.00	10.00 15.00	284U 286U	15.00 20.00	10.00 . . .	7.50 10.00	24	24	28	28	28	28	28	28	28	
324T 326T	40.00 50.00	25.00 30.00	20.00 25.00	324U 326U	25.00 30.00	15.00 20.00	. . . 15.00			29	29	29	29	29	29	29	
364T 365TS	60.00 75.00	40.00 50.00	30.00 40.00	364U 365US	40.00 50.00	25.00 30.00	20.00 25.00				30	30	30	30	30	30	
404TS 405TS	. . . 100.00	60.00 75.00	50.00 60.00	404US 405US	60.00 75.00	40.00 50.00	30.00 40.00					31	31	31	31	31	1 or 3
444TS 445TS	125.00 150.00	100.00 125.00	75.00 100.00	444US 445US	100.00 125.00	60.00 75.00	50.00 60.00					32	32	32	32	32	1 or 3

‡ Contact Factory for Type YF selection and dimensions.

Motor Brackets in shaded area must be removed to install foundation bolt.

SHAFT GAPS FOR 2050-2080Y=⅛" and 2090-2135Y=¼" except for Brackets 1 thru 4 where gap varies with motor size and type.





Dimensions — Inches

BRACKET NUMBER	2050		2060		2070		2080		2090		2100		2110		2120/2125		2130/2135		2140/2145		2150/2155		2050 thru 2155			
	MB	MC	MB	MC	MB	MC	MB	MC	MB	MC	MB	MC	MB	MC	MB	MC	MB	MC	MB	MC	MB	MC	AC	C	MA	MD
19	3.31	20.69	4.31	21.06																			5.25		7.00	3.63
20	. . .	. . .	. . .	. . .	5.56	22.94																	5.50		7.00	3.63
21	2.81	20.75	3.81	21.13																			5.25		9.00	4.63
22	2.06	23.75	3.06	24.13																			6.00		10.50	5.38
23	1.06	28.50	2.06	28.88																			7.06		12.50	6.38
24	0.25	31.38	1.25	31.75																			7.88		14.00	7.13
25	. . .	. . .	. . .	. . .	5.06	22.94	6.31	23.69	7.81	24.69	9.31	25.75	11.06	26.63	12.81	28.00	14.81	29.38					5.56		9.00	4.63
26	. . .	. . .	. . .	. . .	4.25	25.75	5.75	26.50	7.00	27.50	8.50	28.75	10.25	29.63	12.00	31.00	14.00	32.38					6.19		10.50	5.38
27	. . .	. . .	. . .	. . .	3.25	30.63	4.50	31.38	6.00	32.38	7.50	33.63	9.25	34.50	11.00	35.88	13.00	37.25					7.13		12.50	6.38
28	. . .	. . .	. . .	. . .	2.50	33.75	3.75	34.50	5.25	35.50	6.75	36.38	8.50	37.63	10.25	39.00	12.25	40.38					8.69		14.00	7.13
29	. . .	. . .	. . .	. . .	1.35	36.25	2.63	37.00	4.13	38.00	5.63	38.88	7.38	40.13	9.13	40.88	11.13	42.88					8.88		16.00	8.13
30	. . .	. . .	. . .	. . .	♦	37.25	0.25	38.00	1.75	39.00	3.25	39.88	5.00	41.00	6.75	21.50	8.75	43.63					10.56		18.00	9.13
31	. . .	. . .	. . .	. . .	. . .	. . .	■	41.00	0.25	42.00	1.75	42.88	3.50	43.25	5.25	44.00	7.25	45.13					12.25		20.00	10.13
32	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	*	44.25	0.69	45.13	2.44	45.50	4.19	46.75	6.19	48.13					12.44		22.00	11.13
4	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	*	75.63	1.44	76.50	3.94†	77.19	15.75		30.00	14.63
3	REMOVE BRACKET to install foundation bolt when MB dimension is below heavy line except where marked with (†)																									
2															0.13	71.00	1.38†	72.13	3.88†	73.00	6.38†	73.69	13.75		26.00	12.63
1	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	0.13	57.00	1.38†	58.13	3.88†	59.00	6.38†	59.69	13.75		26.00	12.63

♦ SHIM DRIVE 1.25", then MB = 0.25".
■ SHIM DRIVE 1.50", then MB = 0.25".

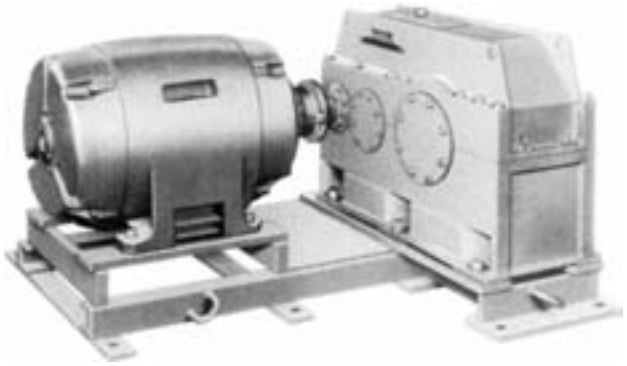
✱ SHIM DRIVE 1.00", then MB = 0.1875".
† See note in dimension table above.

Dimension C depends on type, size, and make of the motor. Dimensions are for reference and subject to change without notice unless certified.

Bedplates for Y Series Gear Drives

A bedplate is recommended to insure proper alignment of the drive with the motor. Rexnord offers a complete line of fabricated steel Bedplates for all popular sizes of standard Type Y series gear drives. These bedplates accommodate any standard NEMA frame motor within the horsepower range of the gear drive and most of the larger non-NEMA frame motors. In addition, special bedplates can be manufactured to suit any given drive, motor, and special accessory combination.

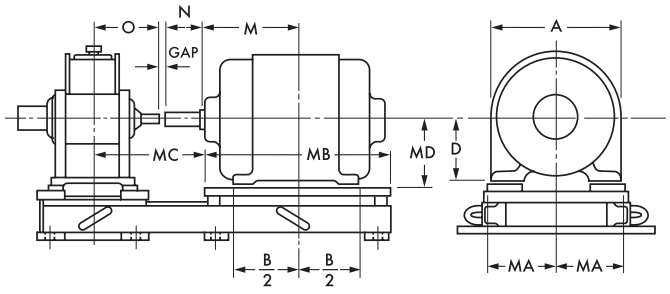
Versatile welded steel construction permits rapid modification of standard bedplates by addition or deletion. Supports for tachometers, brakes, timing devices, or other accessories can also be added.



How to Select

For standard NEMA Motor Frames: The Bedplate Size Code explained on Page 44 indicates the range of NEMA motor frames that are covered with the standard Bedplates. Select a bed to suit the drive size, reduction, and motor frame size. Specify whether a left or right hand assembly is required, as indicated on Page 44.

For Non-NEMA Motor Frames: When a motor does not conform to NEMA standards, check motor mounting dimensions A, B, D, M, and N as follows to determine whether a standard Bedplate can be used.



A. A Standard Bedplate can be used for a non-NEMA motor if **ALL** of the following conditions exist:
   1. MC + MB equals or exceeds
      0 + GAP + (N + M+ B/2 of motor),
   2. MC equals or is less than
      0 + GAP + (N + M –B/2 of motor),
   3. 2MA equals or exceeds A of motor,
   4. MD equals or exceeds D of motor.

B. A standard drive section can be used with a special motor section when motor dimensions A and D **do not exceed** those shown in Table at right.

C. If **all** of the conditions of A **or** B above cannot be met, a completely special bedplate is required; contact Factory.

APPROXIMATE BEDPLATE WEIGHTS – POUNDS

DRIVE SIZE	Motor Frame Size								
	254 256	284 286	324 326	364 365	404 405	444 445	504 505	583 588	683 688
2050	270	270	315	315	432	432	504	675 *	
2060	378	378	405	405	450	450	513	630 *	1044 *
2070	396	396	423	423	468	468	531	720	774 *
2080	603	603	603	711	711	711	738	774	1197 *
2090	783	783	783	891	891	891	909	954	1179
2100	...	...	1035	1035	1035	1134	1134	1080	1368
2110	...	...	1008	1008	1008	1107	1107	1071	1341
2120/2125	...	...	...	...	1377	1377	1404	1539	1602
2130/2135	...	...	...	...	1521	1521	1557	1683	1746
2140/2145	...	...	...	....	...	...	2574	2610	2889
2150/2155	...	...	...	..	...	...	2637	2673	2961

* Single Reduction only.

MAXIMUM MOTOR DIMENSIONS – INCHES

(For Special Motor Sections with Standard Drive Section)

DRIVE SIZE	Type Y1		Type Y2 & Y3	
	A	D	A	D
2050	34.00	14.50	29.00	12.50
2060	38.00	17.00	29.00	12.50
2070	38.00	17.00	34.00	14.50
2080	38.00	17.00	34.00	14.50
2090	38.00	17.00	38.00	17.00
2100	38.00	17.00	38.00	17.00
2110	38.00	17.00	38.00	17.00
2120/2125	43.00	20.25	43.00	20.25
2130/2135	43.00	21.25	43.00	21.25
2140/2145	49.50	25.75	49.50	25.75
2150/2155	...	...	49.50	26.75

Bedplate Selection and Dimensions †

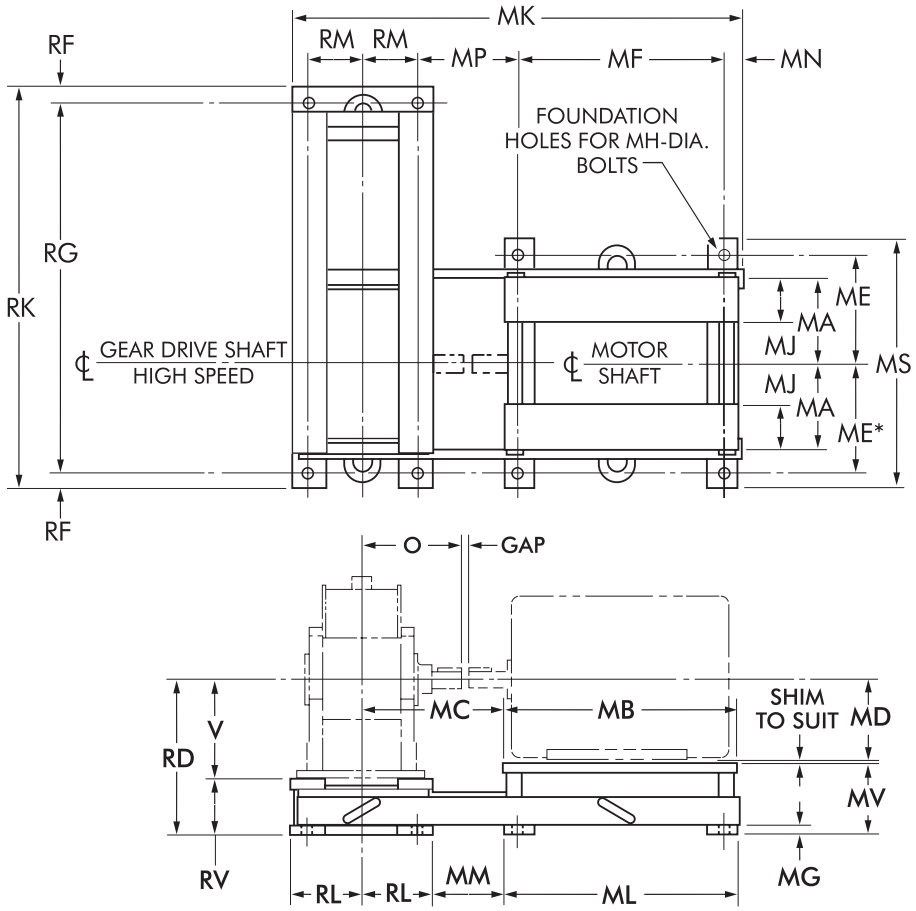
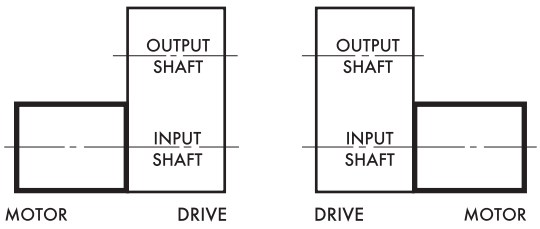


Figure 1: Y2 and Y3 DRIVES (and Y1 only when MR = ME)

STANDARD ASSEMBLIES



1– LEFT HAND **2 – RIGHT HAND**

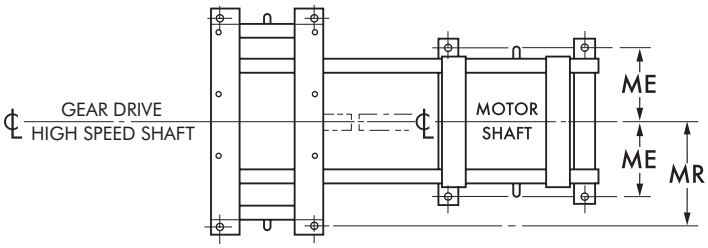


Figure 2: Y1 Drives *

OUTBOARD BEARINGS ALSO
AVAILABLE. . . See Page 34

BEDPLATE SIZE CODE

0-000 0-00 00

- ASSEMBLY (HAND)
- DRIVE SIZE
- DRIVE REDUCTION
  0, all reductions;
  1, single; 2, double & triple
- MAX. MOTOR FRAME
- MIN. MOTOR FRAME

NOTE: Last digit of Motor Frame and Drive Sizes were omitted.

All shaft gaps are 1/8" except as follows:

2050Y3 2060Y3 2070Y3	210T	0.25"
2080Y3	210T	0.50"
2120Y3 2125Y3	364TS	0.75"
2130Y3 2135Y3	364TS	1.13"

Dimensions – Inches

DRIVE SIZE	BEDPLATE SIZE CODE		MOTOR SECTION ‡ (Based o 1964 Nema Standards)																DRIVE SECTION									
	Y1 Drives	Y2 & Y3 Drives	MA	MB	MC	MD	ME *	MF	MG	MH	MJ	MK	ML	MM	MN	MP	MR	MS	MV	V	RD	RF	RG	RK	RL	RM	RV	Type	O
2050	…	2052-2128	7.50	18.50	14.88	7.06	8.63	15.00	1.00	1.00	4.5	40.25	18.75	8.25	2.00	11.88	12.13	20.75	6.63	8.00	13.75	1.75	30.13	33.63	6.63	4.75	5.75		
	2050-3236	2050-3236	9.50	23.00	14.88	9.06	8.63	25.75	1.00	1.00	4.0	47.00	29.25	4.50	1.75	8.13	12.13	20.75	4.63	8.00	13.75	1.75	30.13	33.63	6.63	4.75	5.75	Y1	9.88
	2050-4044	2050-4044	11.50	28.75	16.88	11.06	12.25	25.00	1.00	1.00	5.0	52.50	29.00	10.25	2.00	14.13	12.25	28.00	6.13	8.00	17.25	1.75	33.75	37.25	6.63	4.75	9.25	Y2	9.13
	2050-5000	2050-5000	13.00	32.63	19.63	12.56	12.25	35.50	1.00	1.00	6.0	61.50	39.00	9.25	1.75	12.88	12.25	28.00	4.63	8.00	17.25	1.75	33.75	37.25	6.63	4.75	9.25	Y3	8.75
	2051-5800	…	15.00	35.38	23.13	14.56	14.50	38.88	1.13	1.00	6.0	68.38	43.00	12.13	2.00	16.13	14.50	33.00	5.88	8.00	20.50	2.00	36.25	40.25	6.63	4.75	12.50		
2060	…	2062-2128	7.50	18.50	15.25	7.06	10.00	15.00	1.00	1.00	4.5	41.00	18.75	8.25	2.00	12.00	14.50	23.50	10.13	9.00	17.25	1.75	36.75	40.25	7.00	5.00	8.25		
	2060-3236	2060-3236	9.50	23.00	15.25	9.06	12.25	19.50	1.00	1.00	4.0	45.50	23.25	8.25	2.00	12.00	12.25	28.00	8.13	9.00	17.25	1.75	36.75	40.25	7.00	5.00	8.25	Y1	10.75
	2060-4044	2060-4044	11.50	28.75	17.25	11.06	12.25	25.00	1.00	1.00	5.0	53.25	29.00	10.25	2.00	14.25	12.25	28.00	6.13	9.00	17.25	1.75	36.75	40.25	7.00	5.00	8.25	Y2	9.88
	2060-5000	2060-5000	13.00	32.63	20.00	12.56	12.25	35.50	1.00	1.00	6.0	62.25	39.00	9.25	1.75	13.00	12.25	28.00	4.63	9.00	17.25	1.75	36.75	40.25	7.00	5.00	8.25	Y3	9.13
	2061-5800	…	15.00	35.38	23.50	14.56	14.50	38.88	1.13	1.00	6.0	69.13	43.00	12.13	2.00	16.25	14.50	33.00	5.88	9.00	20.50	2.00	39.00	43.00	7.00	5.00	11.50		
	2061-6800	…	17.50	42.50	27.13	17.06	16.25	46.38	1.25	1.00	7.0	80.13	50.88	15.25	2.25	19.50	16.25	37.00	7.13	9.00	24.25	2.25	41.25	45.75	7.00	5.00	15.25		
2070	…	2072-2128	7.50	18.50	16.25	7.06	10.00	15.00	1.00	1.13	4.5	43.00	18.75	8.25	2.00	12.00	14.50	23.50	10.13	10.25	17.25	1.75	39.75	43.25	8.00	6.00	7.00		
	2070-3236	2072-3236	9.50	23.00	16.25	9.06	12.25	19.50	1.00	1.13	4.0	47.50	23.25	8.25	2.00	12.00	12.25	28.00	8.13	10.25	17.25	1.75	39.75	43.25	8.00	6.00	7.00	Y1	11.88
	2070-4044	2070-4044	11.50	28.75	18.25	11.06	12.25	25.00	1.00	1.13	5.0	55.25	29.00	10.25	2.00	14.25	12.25	28.00	6.13	10.25	17.25	1.75	39.75	43.25	8.00	6.00	7.00	Y2	10.88
	2070-5000	2070-5000	13.00	32.63	21.00	12.56	12.25	35.50	1.00	1.13	6.0	64.25	39.13	9.13	1.75	13.00	12.25	28.00	4.63	10.25	17.25	1.75	39.75	43.25	8.00	6.00	7.00	Y3	10.13
	2070-5800	2070-5800	15.00	35.38	23.50	14.56	14.50	38.88	1.13	1.13	6.0	70.13	43.00	11.13	2.00	15.25	14.75	33.00	5.88	10.25	20.50	1.75	42.50	46.00	8.00	6.00	10.25		
	2071-6800	…	17.50	42.50	28.13	17.06	16.25	46.38	1.25	1.13	7.0	82.13	50.88	15.25	2.25	19.50	16.25	37.00	7.13	10.25	24.25	2.25	44.00	48.50	8.00	6.00	14.00		
2080	…	2082-2132	8.50	21.75	17.25	8.06	11.50	18.25	1.13	1.25	5.5	48.13	22.13	8.50	2.13	12.25	17.50	27.00	12.38	11.50	20.50	2.00	46.38	50.38	8.75	6.75	9.00		
	2080-3644	2082-3644	11.50	30.75	18.25	11.06	14.50	27.25	1.13	1.25	6.0	58.13	31.13	9.50	2.13	13.25	14.50	33.00	9.38	11.50	20.50	2.00	46.38	50.38	8.75	6.75	9.00	Y1	13.00
	2080-5000	2080-5000	13.00	33.50	22.13	12.56	14.50	30.00	1.13	1.25	6.0	64.75	33.88	13.38	2.13	17.13	14.50	33.00	7.88	11.50	20.50	2.00	46.38	50.38	8.75	6.75	9.00	Y2	12.13
	2080-5800	2080-5800	15.00	35.38	25.25	14.56	14.50	38.88	1.13	1.25	6.0	72.63	43.00	12.13	2.00	16.25	14.50	33.00	5.88	11.50	20.50	2.00	46.38	50.38	8.75	6.75	9.00	Y3	10.88
	2081-6800	…	17.50	42.50	28.88	17.06	16.25	46.38	1.25	1.25	7.0	83.63	50.88	15.25	2.25	19.50	16.25	37.00	7.13	11.50	24.25	2.25	48.00	52.50	8.75	6.75	12.75		
2090	…	2092-2132	8.50	21.75	17.75	8.06	11.50	18.25	1.13	1.25	5.5	49.13	22.13	8.50	2.13	12.25	17.50	27.00	12.38	13.00	20.50	2.00	49.13	53.13	9.25	7.25	7.50		
	2090-3644	2092-3644	11.50	30.75	18.75	11.06	14.50	27.25	1.13	1.25	6.0	59.13	31.13	9.50	2.13	13.25	14.50	33.00	9.38	13.00	20.50	2.00	49.13	53.13	9.25	7.25	7.50	Y1	14.00
	2090-5000	2090-5000	13.00	33.50	22.63	12.56	14.50	30.00	1.13	1.25	6.0	65.75	33.88	13.38	2.13	17.13	14.50	33.00	7.88	13.00	20.50	2.00	49.13	53.13	9.25	7.25	7.50	Y2	13.13
	2090-5800	2090-5080	15.00	35.38	25.75	14.56	14.50	38.88	1.13	1.25	6.0	73.63	43.00	12.13	2.00	16.25	14.50	33.00	5.88	13.00	20.50	2.00	49.13	53.13	9.25	7.25	7.50	Y3	11.75
	2090-6800	2090-6800	17.50	42.50	29.38	17.06	16.25	46.38	1.25	1.25	7.0	84.63	50.88	15.25	2.25	19.5 0	16.25	37.00	7.13	13.00	24.25	2.25	51.00	55.50	9.25	7.25	11.25		
2100	…	2102-2840	11.00	25.50	19.13	10.06	12.75	21.00	1.25	1.50	6.5	55.25	25.88	8.88	2.63	13.63	19.75	30.00	14.13	14.50	24.25	2.25	55.25	59.75	10.25	7.75	9.75		
	…	2102-4450	13.00	35.50	22.13	12.56	16.25	31.00	1.25	1.50	6.0	68.25	35.88	11.88	2.63	16.63	16.25	37.00	11.63	14.50	24.25	2.25	55.25	59.75	10.25	7.75	9.75	Y1	15.50
	2100-5800	2100-5800	15.00	34.25	28.38	14.56	16.25	29.75	1.25	1.50	6.0	73.25	34.63	18.13	2.63	22.88	16.25	37.00	9.63	14.50	24.25	2.25	55.25	59.75	10.25	7.75	9.75	Y2	14.38
	2100-6800	2100-6800	17.50	42.50	30.38	17.06	16.25	46.38	1.25	1.50	7.0	86.63	50.88	15.25	2.25	20.00	16.25	37.00	7.13	14.50	24.25	2.25	55.25	59.75	10.25	7.75	9.75	Y3	12.63
2110	…	2112-2840	11.00	25.50	19.63	10.06	12.75	21.00	1.25	1.50	6.5	56.25	25.88	8.88	2.63	13.63	19.75	30.00	14.13	16.25	24.25	2.25	59.00	63.50	10.75	8.25	8.00		
	…	2112-4450	13.00	35.50	22.63	12.56	16.25	31.00	1.25	1.50	6.0	69.25	35.88	11.88	2.63	16.63	16.25	37.00	11.63	16.25	24.25	2.25	59.00	63.50	10.75	8.25	8.00	Y1	16.25
	…	2110-5800	15.00	34.25	28.88	14.56	16.25	29.75	1.25	1.50	6.0	74.25	34.63	18.13	2.63	22.88	16.25	37.00	9.63	16.25	24.25	2.25	59.00	63.50	10.75	8.25	8.00	Y2	15.25
	…	2110-6800	17.50	42.50	30.88	17.06	16.25	46.38	1.25	1.50	7.0	87.63	50.88	15.25	2.25	20.00	16.25	37.00	7.13	16.25	24.25	2.25	59.00	63.50	10.75	8.25	8.00	Y3	13.38
2120 2125	…	2122-3644	11.50	30.00	23.13	11.06	15.25	25.00	1.50	1.50	6.0	65.00	30.38	11.63	2.88	17.13	22.75	35.50	18.13	18.00	29.25	2.50	67.13	72.13	11.50	8.50	11.25		
	…	2122-5000	13.25	35.75	24.13	12.56	15.25	30.75	1.50	1.50	6.0	71.75	36.13	12.63	2.88	18.13	22.75	35.50	16.63	18.00	29.25	2.50	67.13	72.13	11.50	8.50	11.25	Y1	17.38
	…	2120-5800	15.00	39.50	25.88	14.56	19.00	34.50	1.50	1.50	6.0	77.25	39.88	14.38	2.88	19.88	19.00	43.00	14.63	18.00	29.25	2.50	67.13	72.13	11.50	8.50	11.25	Y2	16.63
	…	2120-6800	17.50	43.25	31.38	17.06	19.00	38.25	1.50	1.50	7.0	86.50	43.63	19.88	2.88	25.38	19.00	43.00	12.13	18.00	29.25	2.50	67.13	72.13	11.50	8.50	11.25	Y3	14.75
2130 2135	…	2132-364	11.50	30.00	24.63	12.06	15.25	25.00	1.50	1.75	6.0	68.00	30.38	11.63	2.88	17.13	22.75	35.50	18.13	20.00	30.25	2.50	72.25	77.25	13.00	10.00	10.25		
	…	2132-5000	13.25	35.75	25.63	13.56	15.25	30.75	1.50	1.75	6.0	74.75	36.13	12.63	2.88	18.13	22.75	35.50	16.63	20.00	30.25	2.50	72.25	77.25	13.00	10.00	10.25	Y1	19.25
	…	2132-5800	15.00	39.50	27.38	15.56	19.00	34.50	1.50	1.75	6.0	80.25	39.88	14.38	2.88	19.88	19.00	43.00	14.63	20.00	30.25	2.50	72.25	77.25	13.00	10.00	10.25	Y2	18.13
	…	2132-6800	17.50	43.25	32.88	18.06	19.00	38.25	1.50	1.75	7.0	89.50	43.63	19.88	2.88	25.38	19.00	43.00	12.13	20.00	30.25	2.50	72.25	77.25	13.00	10.00	10.25	Y3	15.88
2140 2145	…	2142-4450	13.00	36.50	27.75	12.56	18.00	30.50	1.75	2.00	6.0	81.25	37.00	11.25	3.50	17.75	25.50	42.00	22.38	22.50	35.00	3.00	82.00	88.00	16.50	13.00	12.50	Y1	22.13
	…	2142-5800	15.50	39.25	30.00	14.56	18.00	33.25	1.75	2.00	6.0	86.25	39.75	13.50	3.50	20.00	25.50	42.00	20.38	22.50	35.00	3.00	82.00	88.00	16.50	13.00	12.50	Y2	19.38
	…	2142-6800	17.50	47.25	32.25	17.06	21.75	41.25	1.75	2.00	7.0	96.50	47.75	15.75	3.50	22.25	21.75	49.50	17.88	22.50	35.00	3.00	82.00	88.00	16.50	13.00	12.50	Y3	17.38
2150 2155	…	2152-4450	13.00	36.50	28.75	13.56	18.00	30.50	1.75	2.25	6.0	83.25	37.00	11.25	3.50	17.75	25.50	42.00	22.38	25.00	36.00	3.00	88.50	94.50	17.50	14.00	11.00	Y2	20.13
	…	2152-5800	15.50	39.25	31.00	15.56	18.00	33.25	1.75	2.25	6.0	88.25	39.75	13.50	3.50	20.00	25.50	42.00	20.38	25.00	36.00	3.00	88.50	94.50	17.50	14.00	11.00	Y3	18.50
	…	2152-6800	17.50	47.25	33.25	18.06	21.75	41.25	1.75	2.25	7.0	98.50	47.75	15.75	3.50	22.25	29.25	49.50	17.88	25.00	36.00	3.00	88.50	94.50	17.50	14.00	11.00		

† Contact Factory for Type YF Bedplate selections and dimensions.

‡ Bedplates fit type "S" motors only with 504 thru 688 frames; all types "U", "US", "S", "T", and "TS" with smaller frames.

✱ For Size 2050-2090 Y1 drives only, use Figure 2 when MR is greater than ME: use Figure 1 when MR equals ME.

Backstops

A positive method of preventing Reverse Rotation

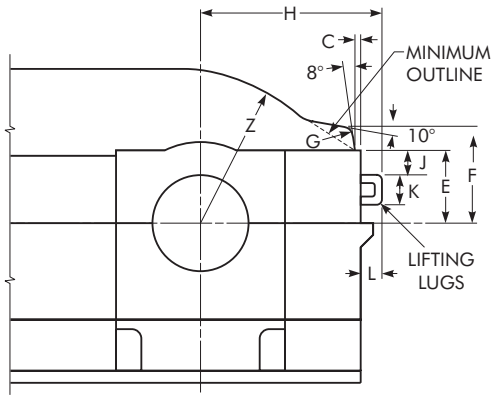
Specify the Falk™ self-contained backstop for positive prevention of reverse rotation or backrun without backlash for conveyors, elevator head shafts, and similar applications. Grease-purged seals are standard; features are identical to grease-purged seals used on Falk™ gear drives.

Available as a standard accessory for Falk™ drives only. The backstop is designed to operate during overrunning within a speed range of 400 to 1800 rpm and for creep drives between 100 and 400 rpm no more than one hour per month. For continuous speeds less than 400 rpm or greater than 1800 rpm, refer application to Factory. The backstop can operate successfully on slope mounted applications up to a maximum shaft axis tilt of ±6° from horizontal; refer to Factory for other mountings. The backstop is 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 Factory for selection.

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

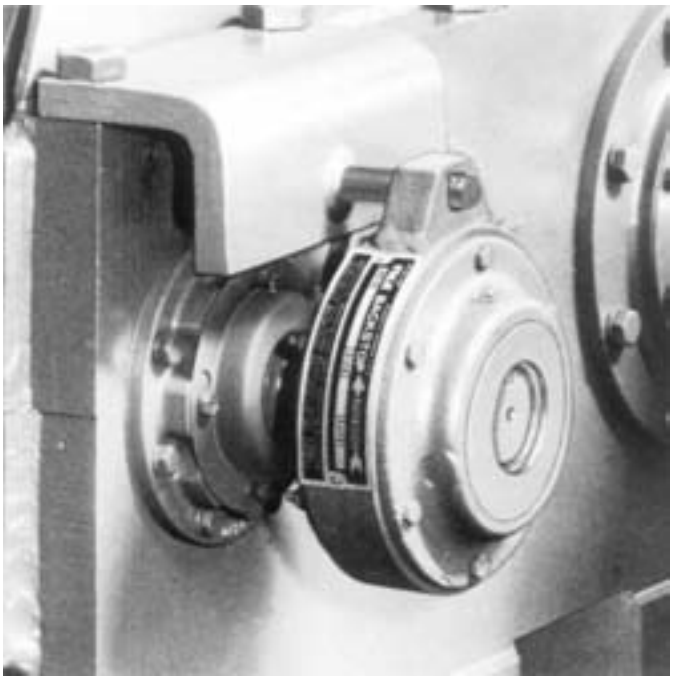
L.S. End Clearance

These housing dimensions are for Sizes 2140-2195 reference in applications such as kiln drives where clearance at the low speed end of the drive housing is at a premium. The housing cover can be modified by the Factory (when specified) to provide additional clearance by cutting the cover to the "minimum outline" and adding lifting lugs as illustrated.



To prevent damage to backstops due to incorrect motor shaft rotation at start up, couplings are NOT assembled when drives are furnished with backstops. After completing the electrical connection, check motor and drive shaft rotations. Then complete alignment and assembly of coupling.

DO NOT use Falk™ self-contained backstops in tandem. Refer to Falk all applications involving the need for two or more backstops in one system. DO NOT use the backstop as a substitute for a brake.



DRIVE SIZE	CLEARANCE DIMENSIONS – INCHES								
	C	E	F	G	H	J	K	L	Z
2140 2145	0.25	9.25	14.13	1.50	26.44	1.50	7.00	3.19	21.63
2150 2155	0.25	9.75	15.25	1.50	28.69	1.50	7.00	3.19	23.88
2160 2165	0.50	11.25	17.63	1.50	32.94	1.50	7.00	3.19	27.63
2170 2175	0.50	11.50	18.69	1.50	36.69	1.75	9.38	4.19	30.38
2180 2185	0.50	12.50	20.13	1.50	40.19	1.75	9.38	4.19	33.50
2190 2195	0.50	13.50	21.50	1.50	43.69	1.75	9.38	4.19	37.00

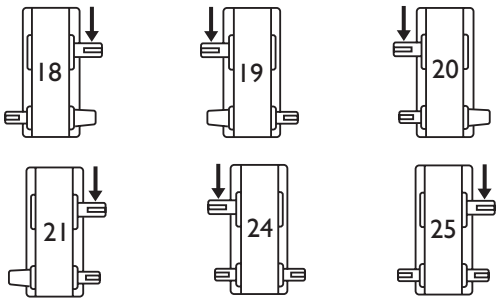
Data for drive sizes 2140 thru 2195 also applies to drive sizes 1140 thru 1195 respectively.

How to Order Parallel Shaft Gear Drives

The following information is required to quote or ship to your requirements;

SHAFT ASSEMBLIES AND ROTATIONS Please specify from the plan views below, the desired assembly number. H.S. shaft overhung load capacities published on Pages 30 and 31 apply to either H.S. shaft extension. The L.S. shaft overhung load capacities published on Pages 32 thru 35 apply only to the L.S. shaft extensions below with the heavy arrows. Published overhung load ratings can be increased when an outboard bearing is used. Contact Factory for overhung load capacities of opposite shaft extensions (which are less).

Standard Assemblies

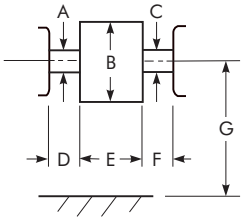


PRIME MOVER (a) Type.. . motor, engine **(b)** Horsepower **(c)** Output speed **(d)** Mounting position... if inclined. **(e)** Dimensions ...if Rexnord is to furnish a bedplate, or coupling.

DRIVEN MACHINE (a) Kind ...agitator, kiln, etc. **(b)** Horsepower load **(c)** Speed **(d)** Service . . . Hours per day and reversals per minute, if reversing. Unless specifically stated otherwise on the purchase order, all drives (and backstops, if furnished) will be shipped with NLGI #2 grease in the seal housing cavities.

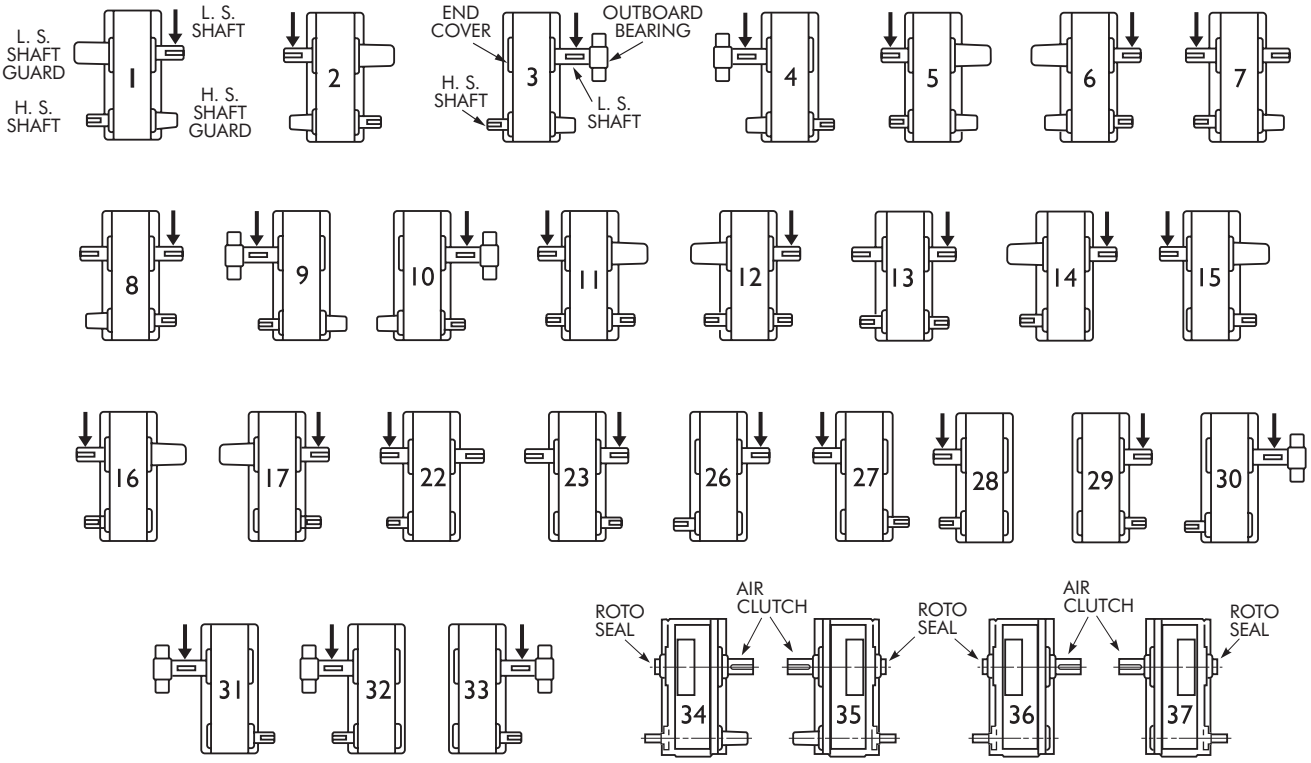
GEAR DRIVE (a) Type... Y, YF, YT or YFT **(b)** Input speed **(c)** Output speed **(d)** Mounting position. . . if inclined. **(e)** Direction of rotation for drives with backstop. When ordering a drive with backstop, indicate the direction of rotation of the low speed shaft, clockwise or counter-clockwise, when looking toward the drive from the low speed end. **(f)** Ambient temperature **(g)** Assembly number... see below.

SHAFT CONNECTIONS (a) Coupling... give shaft diameters and key sizes for Falk™ coupling **(b)** Overhung loads... give diameter and type; sheave, sprocket or pinion **(c)** Thrust loads, if any **(d)** Coupling guards... low speed shaft...high speed shaft... give dimensions A thru G at right.



B & E...Max Cplg Dim
D & F..Exposed Shaft

Other Available Assemblies



Drives with Rifle Drilled Low Speed Shaft for Air Clutch

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For more than 100 years, the dedicated people of Rexnord have delivered excellence in quality and service to our customers around the globe. Rexnord is a trusted name when it comes to providing skillfully engineered products that improve productivity and efficiency for industrial applications worldwide. We are committed to exceeding customer expectations in every area of our business: product design, application engineering, operations, and customer service.

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