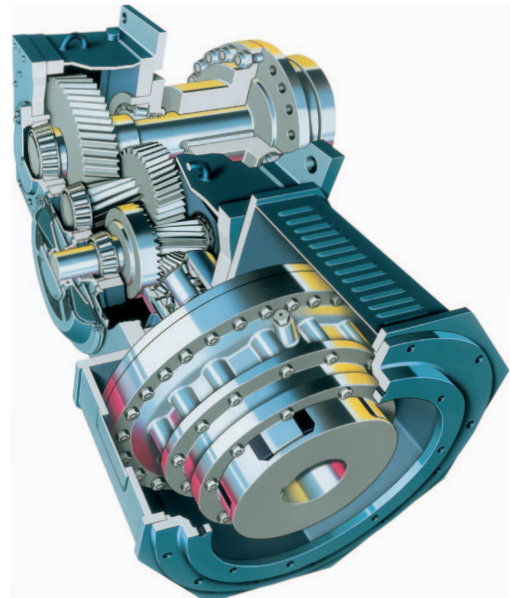




Falk Alignment-Free Drives (Inch)



Falk™ Alignment Free Drives™

Lowest Initial Cost, Reduced Downtime, Simplified Maintenance

The Falk Alignment Free Drive – Developed by Rexnord specifically to meet the demands of worldwide surface and underground belt conveyor applications – is a cost-effective alternative to conventional drive approaches. The Alignment Free drive offers 40-125 output rpm, compatibility with both Nema and IEC motors in ranges from 125Hp (90Kw) to 800Hp (630Kw), and uses fluid or electrical soft starts.

For the lowest initial cost, backed up with simplified maintenance, minimal downtime, and reduced spares expense, the Falk Alignment Free drive puts teeth into your productivity plans.

Lowest Initial Cost

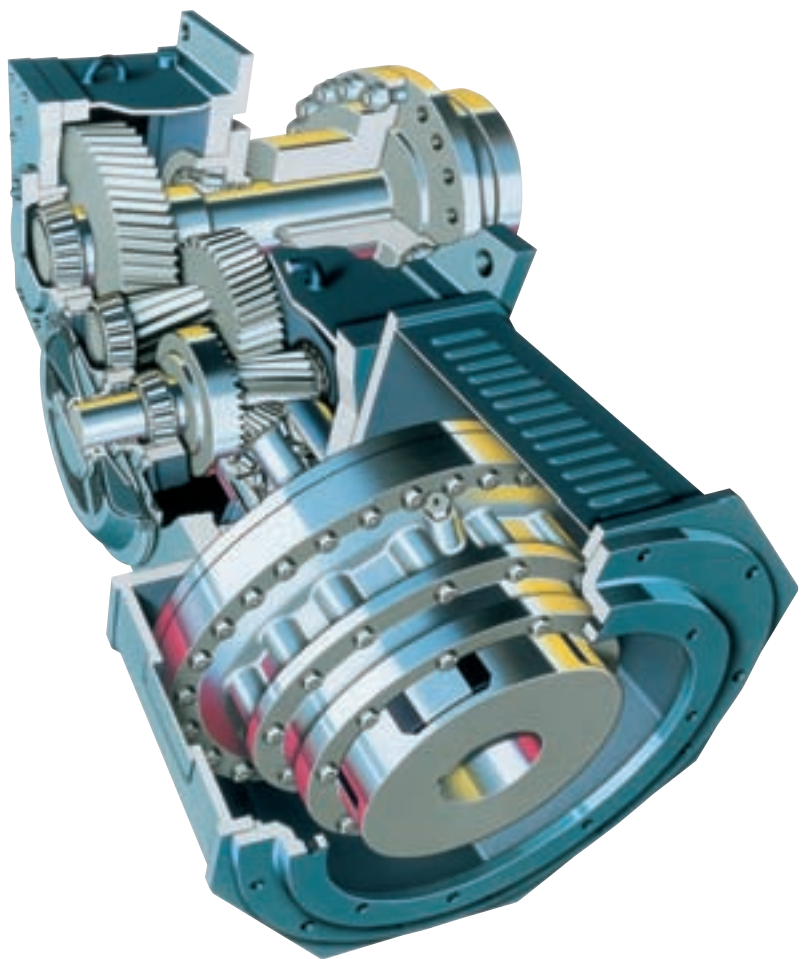
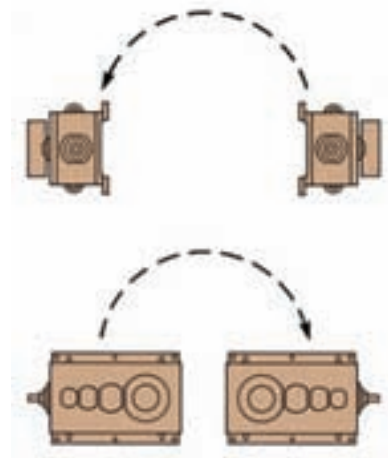
Up front, you save as much as 20% over conventional foot-mounted approaches. How? By eliminating expensive foundation and installation costs. A symmetrical housing design allows the Alignment Free drive to be used in right or left-hand assembly, with only a dipstick and torque arm relocation.

Reduced Downtime

Shaft misalignment – a major cause of costly failure and downtime – is eliminated. What's more, the Alignment Free drive offers registered fit and bolt-together construction for quick, proper assembly and trouble-free operation. The drive is not affected by foundation movement, and offers superior mobility.

Simplified Maintenance

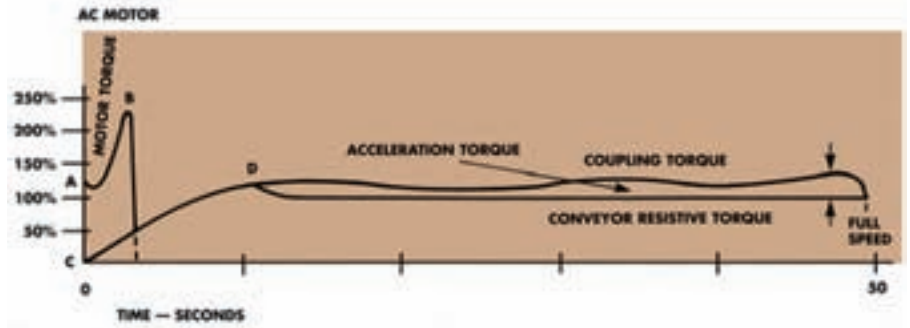
The Alignment Free drive gives you plenty of value-added features, including “High Strength” gearing, “Tough Steel” housing construction and Magnum™ tandem seals. These extras simplify maintenance, extend operating life – and save on long-term costs.



Extra Soft Starts

The combination of the Falk True Torque® extended start fluid coupling and the Alignment Free drive exceeds nearly all requirements for conveyor belt protection and load sharing. An improved fluid circuit design – with an oversized delay fill chamber and field-adjustable metering orifices – delivers ultra-low starting torques, and conveyor start times as long as 50 seconds.

The Alignment Free Drive also accepts AC and DC motors and controls for multiple-drive speed and torque control.



Accessories and Options

Standard Accessories

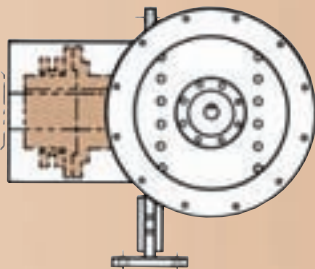
- Intermediate Shaft Fans
- Electric Fans
- Coupling Guards
- High Speed Backstops

Engineered Options

- Brakes
- Flywheel
- Sump Heaters
- Inching Drives
- Special Paint

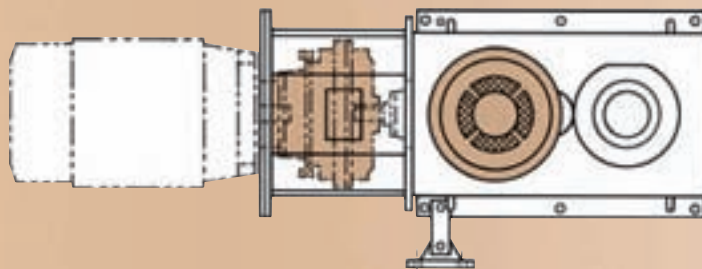
MCF Coupling (Flanged Connection) Coupling with shrink disc offers easy installation and removal

Type ABRCM with MCF Coupling (Flanged Connection)

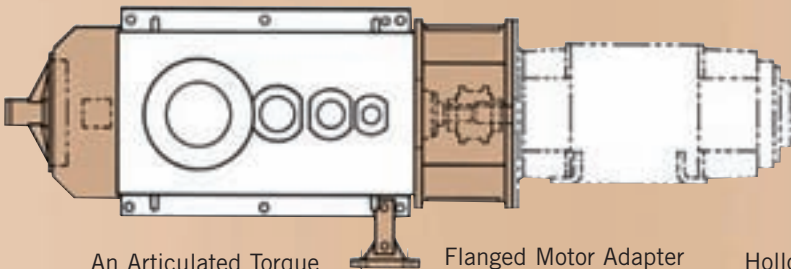


Flanged Motor Adapter (with True Torque Fluid Coupling) features ventilated top and bottom covers, and air turbulators for effective cooling. Side inspection covers and fill angle match marks simplify fluid settings.

Bi-directional Intermediate Shaft fans can meet a wide range of underground cooling requirements.



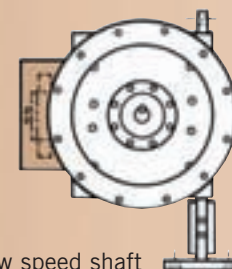
High-volume electric fans are available with standard temperature regulating switch.



An Articulated Torque Arm accommodates drive system movement without binding.

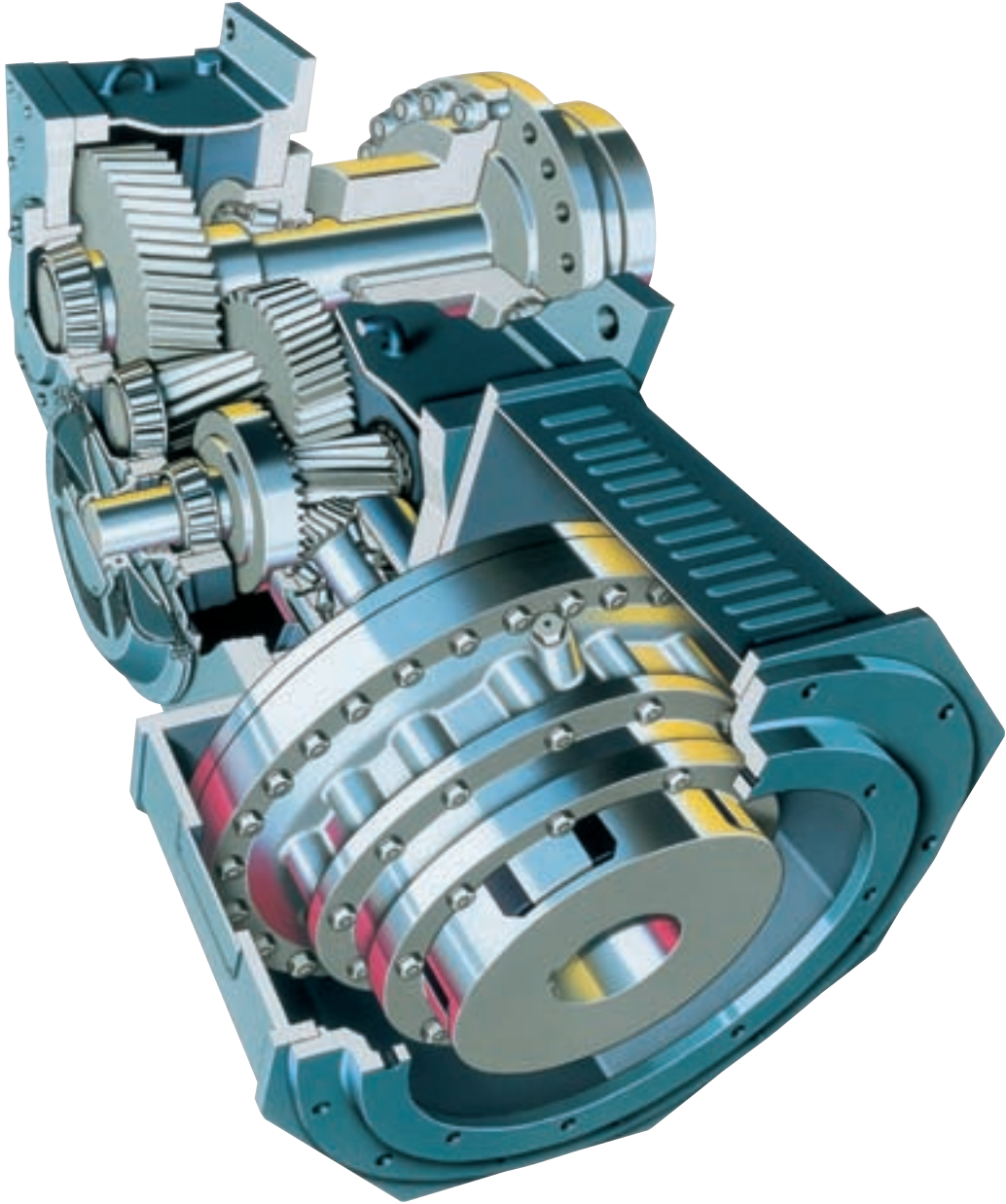
Flanged Motor Adapter with a Steelflex® Coupling is used together with electronic soft starts and controls.

Hollow low speed shaft with shrink disc is ideal for axially-restricted applications.



Type ABRCJ Hollow Low Speed Shaft with Shrink Disc

Alignment Free Drives – Selection Guide





Selection Guide 231-210, October 2005

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

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



Factory Warranty We're so confident in the performance and reliability of our latest generation of Falk™ 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. It's an industry first... and one more powerful reason why Rexnord is your ultimate bottom-line drive and coupling value.★

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

Basic Information

Safety Notes

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

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 Rexnord products in conformance with applicable local and national safety codes and per Rexnord installation manuals which are available upon request. Consult your local Rexnord Account Executive for complete details.

WARNING: *Lock out power source and remove all external loads from gear drive before servicing drive 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 Rexnord Gear Drives for applications whose primary purpose is the transportation of people is not approved. This includes such applications as freight or passenger elevators, escalators, man lifts, work lift platforms and ski tows and ski lifts. If the primary purpose of the application is material conveyance and occasionally people are transported, the Rexnord warranty may remain in effect provided the design load conditions are not exceeded and certification to the appropriate safety codes and load conditions has been obtained by the system designer or end user from the appropriate enforcement authorities.

Gear Drive Ratings — **All gear drive ratings in this selection guide allow for starting loads and momentary overloads of 200% selection horsepower.**

Operating Temperature — Gear drives can encounter sump oil temperatures up to 200°F (93°C). Higher temperatures are 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 selection horsepower. 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 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 selection horsepower of the gear drive selected for the application. If the brake rating is greater than 200% of the selection horsepower, 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 — Refer to Factory variable speed or multi-speed applications.

Ambient Temperatures — 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).

Selection tables were prepared for 60°F (16°C) and 100°F (38°C) ambient temperatures. If the ambient temperature is between 60°F (16°C) and 100°F (38°C), you may select the drive and cooling accessories from the 100°F (38°C) selection table. If the ambient temperature is less than 60°F (16°C), you may select the drive and cooling accessories from the 60°F (16°C) selection table. For exact cooling requirements at ambient conditions other than 60°F (16°C) and 100°F (38°C), consult Factory.

Non-Standard Motors or Prime Movers — Motor prints must be submitted to Rexnord for motors that are NOT standard NEMA motors through the 449TD frame size or standard IEC motors through the 400 frame size.

Non-Horizontal Mounting Positions — The ABRC drives were designed for horizontal input and horizontal output. Refer to Factory applications requiring other mounting positions.

How to Select

1. **Determine Service Factor** from Service Factor Table, Page 12, for electric motor driven applications operating 3 to 10 hours or over 10 hours per day. For applications requiring service factors other than 1.25 or 1.50, refer to Factory.
2. **Determine Ambient Temperature** — either 60°F for applications under ground or 100°F for applications above ground.
3. **Determine Motor Power** — hp.
4. **Determine Gear Drive Ratio** — For ratio, divide high speed shaft rpm by low speed shaft rpm.
5. **Select Drive Size** — Locate the selection tables on Pages 10 or 11 for the appropriate service factor and ambient temperature. Select the drive size opposite the motor power and ratio determined in steps 3 and 4. Note the cooling requirements, if needed.
6. **Select Coupling Type** — For fluid couplings refer to the last rows of the appropriate selection table used in Step 5 for the size and fill angle. If the H.S. coupling is a Steelflex® (T10 or T20), an analysis by Rexnord is required upon receipt of order. Refer to Factory any non-standard coupling requirements.
7. **Compare Motor Weights** to the minimum and maximum weights provided in the Motor Weight Limits Table on Page 12. For motor weights outside these limits, or for Steelflex coupling connections, refer to Factory.
8. **Select the Standard Assembly Desired** — Identify the gear drive nomenclature below and the standard assembly number on Page 12.
9. **Select Low Speed Connection Option** — For MCF flange connections, refer to Page 19. Insure driven shaft diameter is within the bore range of the driven hub option. The Falk™ MCF coupling is the recommended interface between the solid low speed shaft drive and the driven shaft. Provide Rexnord the diameter and the usable shaft length dimensions of the driven shaft for a MCF guard (Refer to Page 20). The Falk™ MCC coupling is NOT approved for ABRC drives. For a hollow shaft/shrink disc connection, refer to Pages 14 and 15 for details.
10. **Loads Generated** — Verify that the driven shaft can withstand the maximum bending moment and radial force being transmitted at the face of the MCF coupling (Flange Connection). Verify the driven shaft can withstand the maximum forces being transmitted (Hollow Shaft Connection). Verify the foundation supplied for the torque arm can withstand the maximum force being transmitted by the ABRC Drive. The maximum moments and forces are provided in the Forces Generated Table on Page 12.
11. **Engineered Options** — Refer to Rexnord requirements for brakes, flywheels, cast iron/steel fluid couplings, sump heaters, inching drives, special paint, monitoring devices, special ratios, special torque arms, or other special needs.

Drive Nomenclature

M	425	ABRCM	3	A	B	18.45
Drive Size	Type	Reduction	Model	Variations	Ratio	
405	ABRC = Conveyor Industry Standard	3 = Triple	A, B, C, etc.	A = Drive with Backstop	Exact ratio	
425	M = Solid L.S. Shaft (Flange Connection)			B = Drive with Fan(s)	expressed to	
445	J = Hollow L.S. Shaft (Shrink Disc)			C = Drive with Backstop & Fan	4 digits	
465				R = Drive with Any Combinations of The Variations		
485				S = Modified Standard Drive with Minor Changes		

If blank= Inch. If M= Metric.

The ABRCM drive is supplied complete with standard torque arm, flanged motor adapter, fluid or Steelflex H.S. coupling, required cooling accessory, and MCF flange connection with 2/4 (shrink disc) hub types and guard.

The ABRCJ drive is supplied complete with standard torque arm, flanged motor adapter, fluid or Steelflex H. S. coupling, required cooling accessory, and hollow L.S. shaft, shrink disc and guard.

Selection Example

Application: Surface Belt Conveyor, heavy duty, driven shaft speed is 100 rpm, ambient temperature is 100°F (38°C).

Duty Cycle: 12 hours per day.

Driver: Flange mounted 600 hp AC electric motor, 1750 rpm, approximate motor weight — 6500 lb.

1. Service Factor from Page 12 is 1.50.
2. Ambient Temperature is 100°F (38°C).
3. Motor power is 600 hp.
4. Ratio is 17.50. The closest standard ratio is 17.09:1.
5. From Page 10, in the 1.50 Service Factor — 100°F (38°C) Selection Table, the correct drive size is a 465 drive. An electric fan is required.
6. From the last row of the selection table, the correct Fluid Coupling is a 1660HFDD132 with a 102° fill angle.
7. The approximate motor weight is within the allowable range.
8. The desired standard assembly is assembly 2. The gear drive nomenclature is 465ABRCM3-A-17.50.
9. From Page 19, the required MCF Coupling is a 1065MCF. A 300SD is desired. The diameter of the driven shaft is within the bore range of the shrink disk. A MCF guard is needed. Provide diameter and usable length of driven shaft to Rexnord.
10. Check the driven shaft and the foundation for their ability to withstand the loading being transmitted by the ABRC drive.
11. No engineered options required.

How to Order

On the order please supply:

1. Drive size, type, and ratio.
2. Drive assembly number, MCF driven hub bore and type if required.
3. Cooling accessory if required.
4. Fluid coupling size and fill angle, or, Steelflex coupling motor connection.
5. Provide electric motor certified prints.
6. List any other accessories or engineered options required.

Surface Belt Conveyors/1750 rpm/100°F (38°C) Ambient

Quick Drive Size Selections for Service Factor 1.25

Total Ratio	LSS rpm	Selection HP †											
		125	150	200	250	300	350	400	450	500	600	700	800
13.95	125	405	405	405	405	425	425	445	445	445	465	465	465
15.44	115	405	405	405	425	425	425	445	445	445	465	465	465
17.09	100	405	405	405	425	425	425	445	445	445	465	465	485
18.91	90	405	405	405	425	425	425	445	445	445	465	465	485
20.93	84	405	405	405	425	425	425	445	445	445	465	465	485
23.16	75	405	405	405	425	425	425	445	445	445	465	465	485
25.63	68	405	405	405	425	425	445	445	445	465	465	485	485
28.36	60	405	405	405	425	425	445	445	465	465	465	485	485
31.39	56	405	405	425	425	445	445	465	465	465	485	485	485
34.74	50	405	425	425	425	445	445	465	465	485	485	485	Consult Factory
Fluid Coupling Size & Fill Angle •		1420HFDD132 90°	1420HFDD132 86°	1420HFDD132 78°	1480HFDD132 92°	1480HFDD132 81°	1584HFDD132 101°	1584HFDD132 99°	1584HFDD132 97°	1584HFDD132 95°	1660HFDD132 102°	1660HFDD132 97°	1660HFDD132 92°

Quick Drive Size Selections for Service Factor 1.50

Total Ratio	LSS rpm	Selection HP †											
		125	150	200	250	300	350	400	450	500	600	700	800
13.95	125	405	405	405	425	425	425	445	445	465	465	485	485
15.44	115	405	405	425	425	425	425	445	445	465	465	485	485
17.09	100	405	405	425	425	425	425	445	445	465	465	485	485
18.91	90	405	405	425	425	425	445	445	445	465	465	485	485
20.93	84	405	405	425	425	425	445	445	445	465	465	485	485
23.16	75	405	405	425	425	425	445	445	465	465	485	485	485
25.63	68	405	405	425	425	445	445	445	465	465	485	485	485
28.36	60	405	405	425	425	445	445	465	465	465	485	485	485
31.39	56	405	425	425	445	445	465	465	485	485	485	485	Consult Factory
34.74	50	425	425	425	445	445	465	465	485	485	485	Consult Factory	Consult Factory
Fluid Coupling & Fill Angle •		1420HFDD132 90°	1420HFDD132 86°	1420HFDD132 78°	1480HFDD132 92°	1480HFDD132 81°	1584HFDD132 101°	1584HFDD132 99°	1584HFDD132 97°	1584HFDD132 95°	1660HFDD132 102°	1660HFDD132 97°	1660HFDD132 92°

† Selections in **bold** type require two intermediate shaft driven fans.

■ Shaded selections require an electric fan.

• Fill angle shown is based on a typical 120% start factor.

Exact Ratios

Nominal Ratios ■	DRIVE SIZE				
	405	425	445	465	485
13.95	14.38	13.70	14.41	13.82	14.16
15.44	15.99	14.98	15.57	15.30	15.24
17.09	17.71	17.27	16.83	16.43	16.72
18.91	18.60	18.45	18.19	18.19	17.99 ■
20.93	21.65	21.28	21.48	20.99	20.72
23.16	22.32	23.16	22.83	22.74	22.55
25.63	25.19	25.20	24.76	26.33	26.11
28.36	27.28	27.61	29.20	27.52	28.42
31.39	32.07	31.97	31.26	32.24	30.93
34.74	33.48	34.80	34.25	34.54	33.83

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

Underground Belt Conveyors/1750 rpm/60°F (16°C) Ambient

Quick Drive Size Selections for Service Factor 1.25

Total Ratio	LSS rpm	Selection HP †												
		125	150	200	250	300	350	400	450	500	600	700	800	
13.95	125	405	405	405	405	425	425	425	425	445	445	465	465	465
15.44	115	405	405	405	425	425	425	425	445	445	445	465	465	465
17.09	100	405	405	405	425	425	425	425	445	445	445	465	465	485
18.91	90	405	405	405	425	425	425	445	445	445	445	465	465	485
20.93	84	405	405	405	425	425	425	445	445	445	445	465	465	485
23.16	75	405	405	405	425	425	425	445	445	445	445	465	465	485
25.63	68	405	405	405	425	425	445	445	445	445	465	465	485	485
28.36	60	405	405	405	425	425	445	445	445	465	465	465	485	485
31.39	56	405	405	425	425	445	445	465	465	465	465	485	485	485
34.74	50	405	425	425	425	445	445	465	465	465	485	485	485	Consult Factory
Fluid Coupling & Fill Angle ●		1420HFDD132 90°	1420HFDD132 86°	1420HFDD132 78°	1480HFDD132 92°	1480HFDD132 81°	1584HFDD132 101°	1584HFDD132 99°	1584HFDD132 97°	1584HFDD132 95°	1660HFDD132 102°	1660HFDD132 97°	1660HFDD132 92°	

Quick Drive Size Selections for Service Factor 1.50

Total Ratio	LSS rpm	Selection HP †												
		125	150	200	250	300	350	400	450	500	600	700	800	
13.95	125	405	405	405	425	425	425	445	445	465	465	485	485	485
15.44	115	405	405	425	425	425	425	445	445	465	465	485	485	485
17.09	100	405	405	425	425	425	425	445	445	465	465	485	485	485
18.91	90	405	405	425	425	425	445	445	445	465	465	485	485	485
20.93	84	405	405	425	425	425	445	445	445	465	465	485	485	485
23.16	75	405	405	425	425	425	445	445	445	465	465	485	485	485
25.63	68	405	405	425	425	445	445	445	445	465	465	485	485	485
28.36	60	405	405	425	425	445	445	465	465	465	465	485	485	485
31.39	56	405	425	425	445	445	465	465	485	485	485	485	485	Consult Factory
34.74	50	425	425	425	445	445	465	465	485	485	485	485	485	Consult Factory
Fluid Coupling & Fill Angle ●		1420HFDD132 90°	1420HFDD132 86°	1420HFDD132 78°	1480HFDD132 92°	1480HFDD132 81°	1584HFDD132 101°	1584HFDD132 99°	1584HFDD132 97°	1584HFDD132 95°	1660HFDD132 102°	1660HFDD132 97°	1660HFDD132 92°	Consult Factory

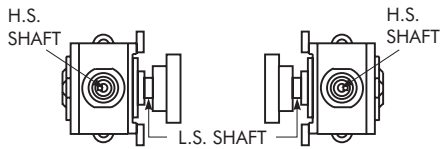
† Selections in **bold** type require two intermediate shaft driven fans.

● Fill angle shown is based on a typical 120% start factor.

Standard Assemblies

Please specify from the plan views below, the desired assembly number.

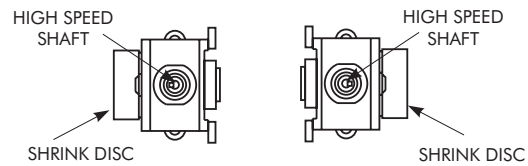
Type ABRCM (Solid Low Speed Shaft)



Assembly 1

Assembly 2

Type ABRCJ (Hollow Low Speed Shaft)



Assembly 5

Assembly 6

Service Factors

Conveyor Application	3 to 10 Hours per Day	Over 10 Hours per Day
Uniformly Loaded or Fed	1.25	1.25
Heavy Duty, Not Uniformly Fed	1.25	1.50

Motor Weight Limits

DRIVE SIZE	Motor Weight — lb	
	Minimum	Maximum
405	0	5,800
425	500	5,800
445	500	10,000
465	1,500	10,000
485	1,500	10,000

Loads Generated†/Torque Arm Forces, Hollow Shaft Forces & Loads at the Flange Connection

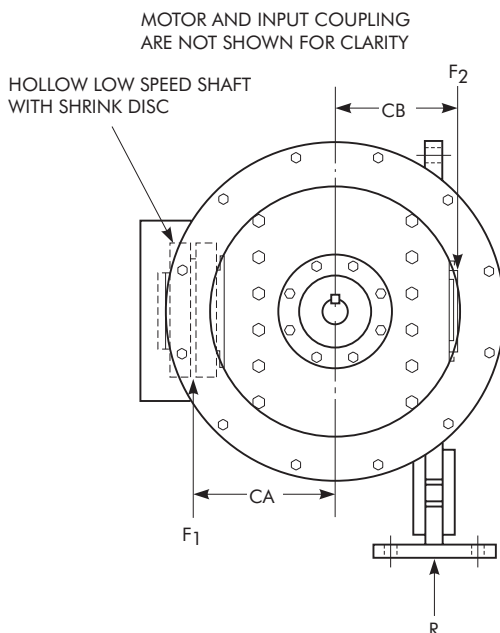
DRIVE SIZE	Maximum Torque Arm Force ★ R — lb	Dimensions — Inches		Maximum Forces on Hollow Shaft ★		Maximum Loads at Face of MCF Coupling (Flange Connection)	
		CA	CB	F ₁ — lb	F ₂ — lb	Radial Force ★ F — lb	Bending Moment ★ M — in-lb
405	32,100	12.05	10.9	3,900	24,400	22,600	168,300
425	40,800	14.30	12.3	4,900	31,000	29,600	259,300
445	56,700	15.60	13.2	6,300	43,700	40,000	372,200
465	61,600	16.75	14.1	6,400	48,500	41,700	516,000
485	89,700	18.30	15.0	7,100	67,000	67,000	817,600

† The loads generated are based upon a combination of the most unfavorable conditions of rotation, speed, selection horsepower, motor weight and a 150% start factor. Refer to Factory any Steelflex or non-standard coupling requirement.

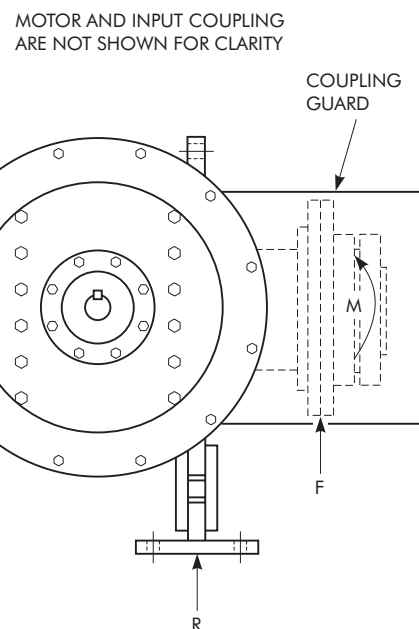
★ Values of R, F, F₁, F₂ and M are the maximum loads at the position shown during start-up.

The loads may NOT be acting in the direction of the arrows. Use the worst case loading condition when designing the driven equipment.

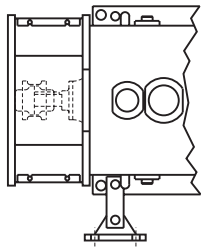
Hollow Low Speed Shaft Connection



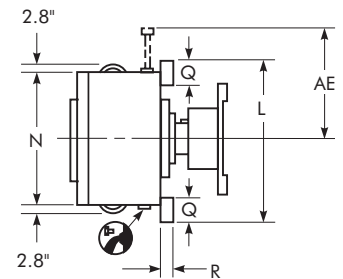
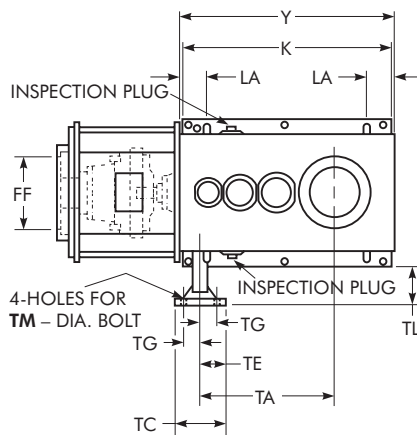
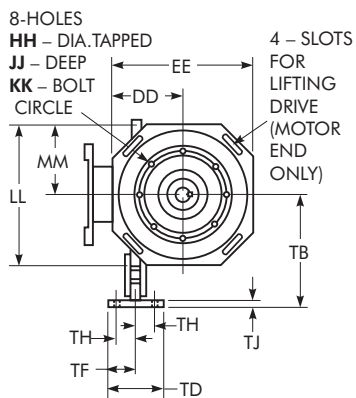
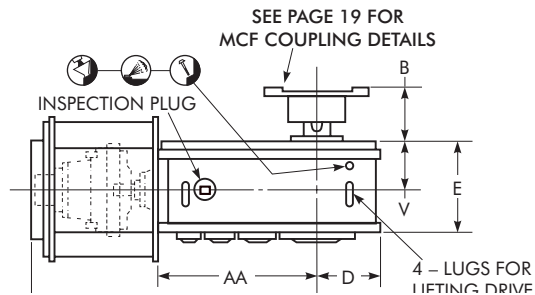
Flange Connection(MCF)



Type ABRC Conveyor Drive/Dimensions—Inches



**STEELFLEX COUPLING OPTION
(DESIGNED TO THE ORDER)**



DRIVE SIZE ★	AE	B	D	E	K	L	LA	N	Q	R	Torque Arm										DRIVE SIZE ★		
											TA	TB		TC	TD	TE	TF	TG	TH	TJ		TL	TM
												Standard	Maximum										
405	25.4	10.32	11.31	17.65	40.00	27.75	5.7	21.62	5.00	1.50	25.50	22.00	45.50	11.00	12.00	5.50	6.00	3.50	4.00	1.25	8.13	1.25	405
425	28.2	11.62	12.31	19.45	45.00	31.80	6.6 ●	24.62	6.00	1.60	29.00	24.00	47.50	11.00	12.00	5.50	6.00	3.50	4.00	1.25	8.10	1.25	425
445	32.9	12.82	14.62	21.41	51.50	37.00	6.7	29.25	7.00	1.81	33.00	27.50	62.00	12.00	13.50	6.00	6.75	4.00	4.75	1.50	9.00	1.50	445
465	37.4	14.62	16.62	23.16	58.25	41.00	7.7	33.25	7.00	1.79	37.50	29.50	66.50	12.00	13.50	6.00	6.75	4.00	4.75	1.50	9.00	1.50	465
485	40.7	14.52	18.50	25.00	58.38	46.50	9.4 ●	37.00	8.00	2.00	34.60	33.00	70.00	14.50	15.50	7.25	7.75	5.00	5.50	1.75	9.75	1.75	485

DRIVE SIZE ★	V	Y	Flange Motor Adapter										Wt - lb	DRIVE SIZE ★
			AA	BB	DD	EE	FF	HH	JJ	KK	LL	MM		
405	9.70	41.12	29.81	s	14.25	28.50	†	†	†	†	28.50	14.25	3,586	405
425	10.60	46.01	33.70	s	16.75	33.50	†	†	†	†	33.50	16.75	5,134	425
445	11.70	52.67	38.05	s	16.75	33.50	†	†	†	†	33.50	16.75	6,561	445
465	12.60	59.43	42.80	s	18.50	37.00	†	†	†	†	37.00	18.50	9,611	465
485	13.60	59.50	41.00	♣	◆	Q	†	†	†	†	41.50	20.75	12,159	485

★ Drives are for horizontal shaft mounted operation unless specifically stated otherwise. Consult Factory for other mountings.

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

† Dimensions vary with motor selections. Certified prints will be provided after receipt of order.

● Size 425 Low speed end of drive dimension LA=6.7"

◆ Size 485 Low speed end of drive dimension LA=9.5"

♣ Use Grade 5 fasteners for diameter thru 1.50". For larger diameters use ASTM A-354 Grade BC.

◆ 16.75" with 1584HFDD132 coupling. 18.25" with 1660HFDD132 coupling.

★ 33.50" with 1584HFDD132 coupling. 36.50" with 1660HFDD132 coupling.

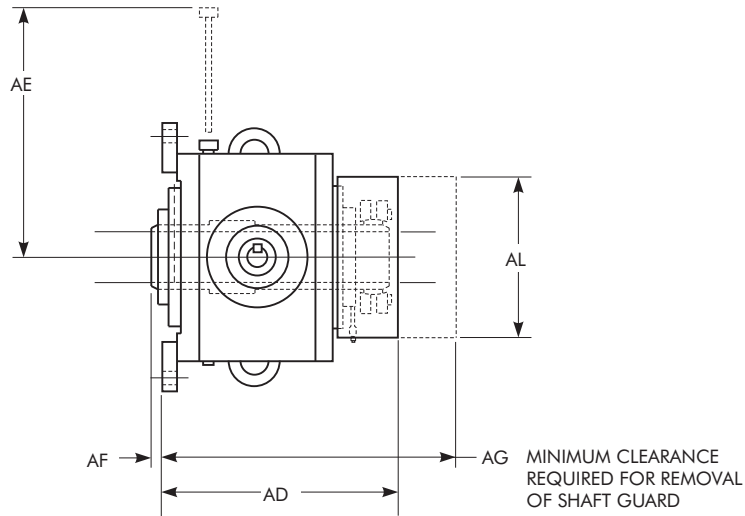
▲ "BB" dimension typically varies from 170% to 200% of "AA" dimension.

♣ "BB" dimension typically varies from 200% to 215% of "AA" dimension.

Type ABRCJ

Hollow Low Speed Shaft with Shrink Disc/Dimensions—Inches

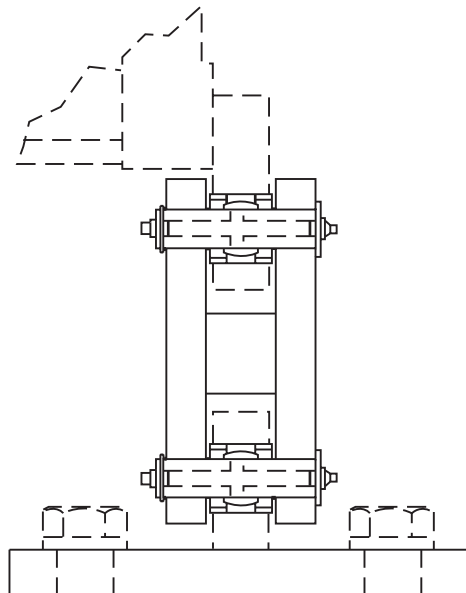
Dimensions to be used in conjunction with conveyor drive dimensions on Page 13.



DRIVE SIZE ★	AD	AE	AF	AG	AL
405	26.51	25.40	1.20	31.96	16.72
425	29.91	28.20	1.70	37.95	17.96
445	33.33	32.90	1.50	42.27	19.83
465	35.60	37.40	1.50	45.16	21.33
485	38.89	40.70	1.40	49.94	24.62

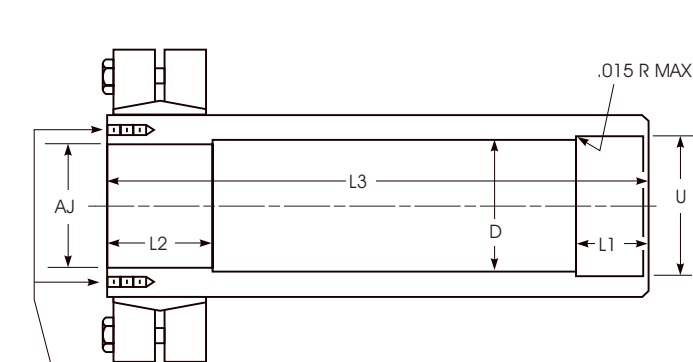
★ Dimensions are for reference only and are subject to change without notice unless certified.

TORQUE ARM DETAIL



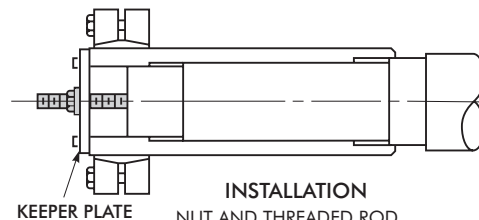
Type ABRCJ

Driven Shaft Recommendations/Dimensions—Inches

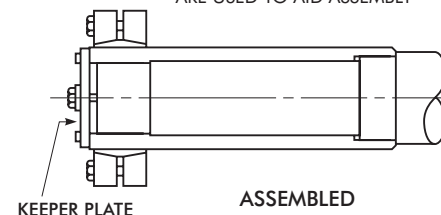


Z - QUANTITY
 ZA - DIA. UNC TAPPED HOLES IN HOLLOW SHAFT
 ZB - DEEP
 Y - DIA. BOLT CIRCLE - EQUALLY SPACED HOLES FOR USE IN DRIVEN SHAFT REMOVAL

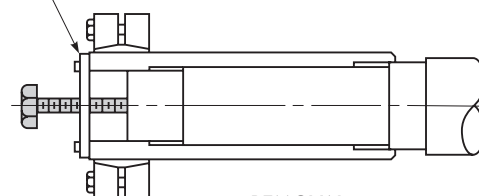
COMBINATION KEEPER PLATE INSTALLATION AND REMOVAL TOOL KIT IS AVAILABLE FROM REYNORD AS AN OPTIONAL ACCESSORY. PARTS SHOWN SCREENED ARE NOT PART OF THE KIT.



INSTALLATION
 NUT AND THREADED ROD INSERTED IN DRIVEN SHAFT ARE USED TO AID ASSEMBLY



ASSEMBLED



REMOVAL

LARGER FASTENER INSERTED IN A TAPPED HOLE IN THE CENTER OF THE KEEPER PLATE IS USED TO REMOVE DRIVEN SHAFT FROM DRIVE.

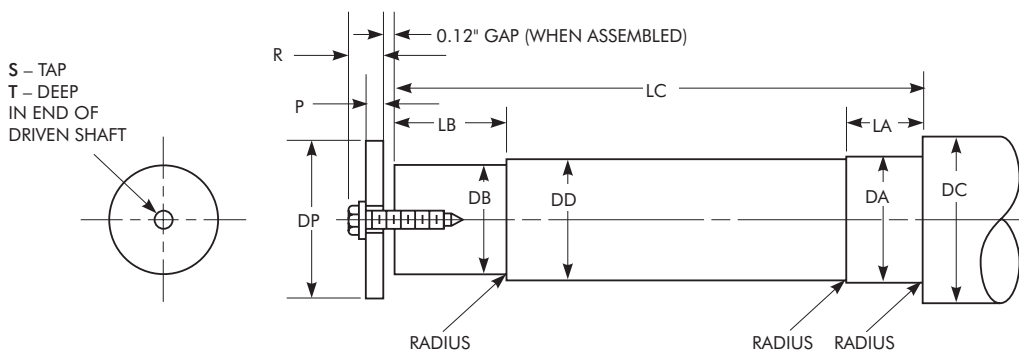
COMBINATION KEEPER PLATE INSTALLATION AND REMOVAL TOOL KIT IS AVAILABLE FROM FALK AS AN OPTIONAL ACCESSORY. PARTS SHOWN SCREENED ARE NOT PART OF THE KIT.

Drive Hollow Low Speed Shaft Dimensions — Inches

DRIVE SIZE ★	AJ † +.0016 -.0000	D	L1	L2	L3	U +.002 -.000	Z	ZA	ZB	Y
405	5.2505	5.400	2.50	3.50	24.70	5.500	8	.375-16	.75	6.00
425	6.0005	6.100	3.50	5.00	29.10	6.250	8	.375-16	.75	6.75
445	6.5005	6.600	3.50	6.00	31.80	6.750	6	.500-13	1.00	7.50
465	7.2505	7.400	3.50	6.50	34.10	7.500	6	.500-13	1.00	8.25
485	8.5005	8.625	5.00	8.00	37.30	8.750	6	.500-13	1.00	9.75

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

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



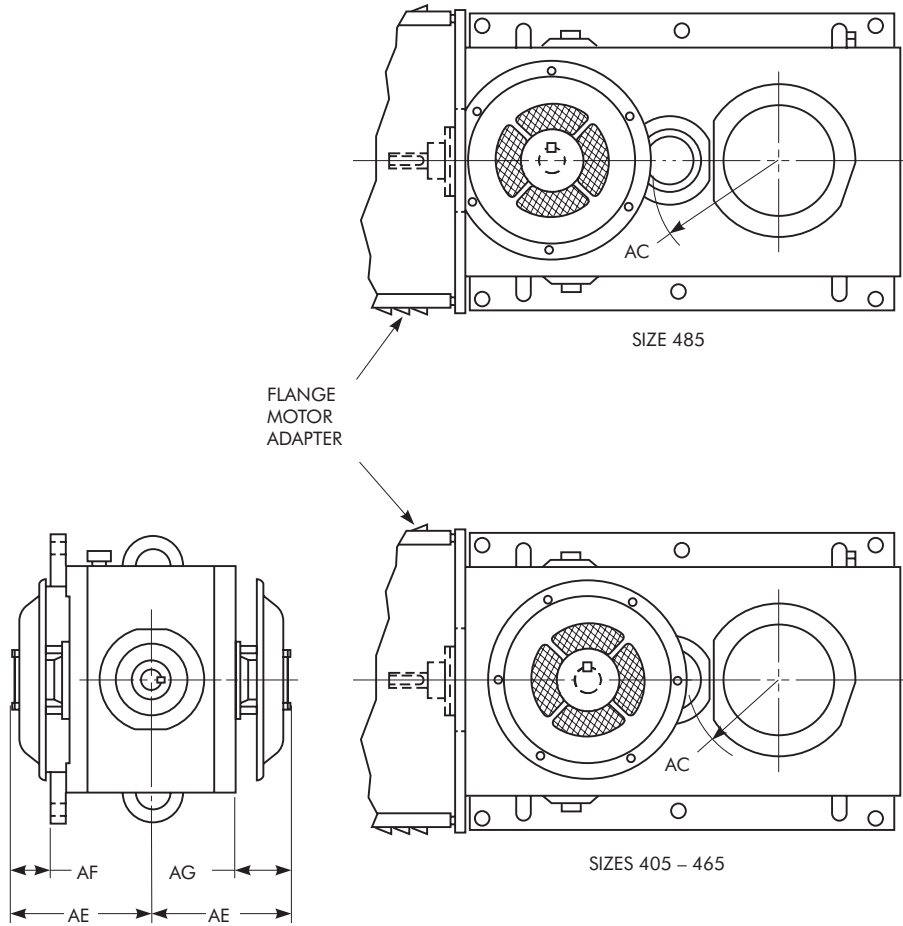
Recommended Driven Shaft Dimensions — Inches

DRIVE SIZE ★	DA +.0000 -.0015	DB +.000 -.001	DC Min	DD +.010 -.010	Radius Max	LA	LB	LC	DP	P	R	S	T	Fastener Length	Tapped Hole In Center of Keeper Plate	Gap
405	5.5000	5.250	6.00	5.312	0.125	2.38	3.75	24.58	6.88	0.75	1.76	1.250-7	2.50	2.50	1.750-5	0.12
425	6.2500	6.000	6.75	6.062	0.125	3.38	5.25	28.98	7.62	0.75	1.76	1.250-7	2.50	2.50	1.750-5	0.12
445	6.7500	6.500	7.25	6.531	0.125	3.38	6.25	31.68	8.62	1.00	2.18	1.500-6	3.00	3.00	2.000-4.5	0.12
465	7.5000	7.250	8.25	7.312	0.125	3.38	6.75	33.98	9.38	1.00	2.18	1.500-6	3.00	3.00	2.000-4.5	0.12
485	8.7500	8.500	9.50	8.562	0.125	4.88	8.25	37.18	10.88	1.00	2.18	1.500-6	3.00	3.00	2.000-4.5	0.12

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

Type ABRC

Shaft Driven Fan Clearance/Dimensions—Inches

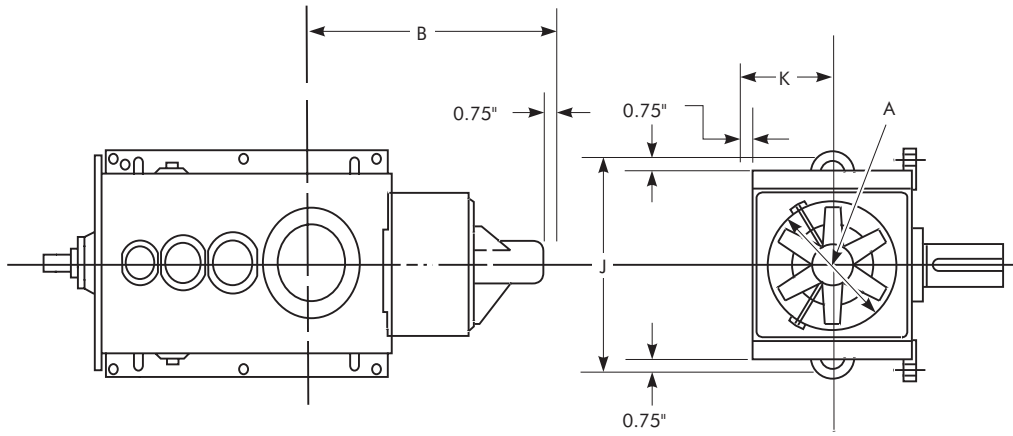


DRIVE SIZE ★	AC	AE	AF	AG
405	8.06	13.12	3.42	5.19
425	9.50	14.35	3.75	5.51
445	11.42	15.63	3.92	5.91
465	13.62	16.54	3.94	5.94
485	17.12	17.62	4.02	6.22

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

Type ABRC

Electric Fan Clearance/Dimensions—Inches

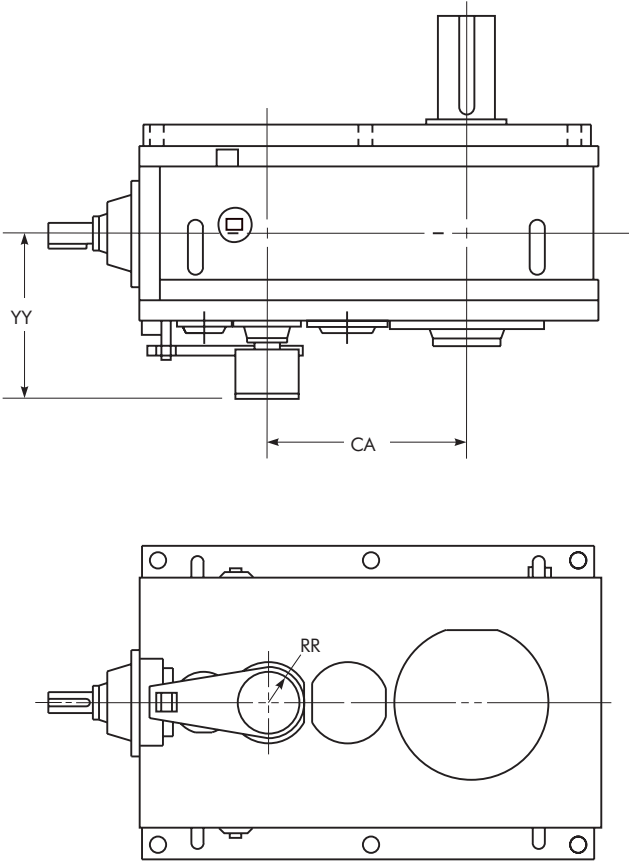


DRIVE SIZE ★	A	Air Flow (cfm)	B	J	K	DRIVE SIZE ★
405	14	2,040	30.55	24.55	9.82	405
425	16	2,765	32.69	27.55	10.82	425
445	18	3,620	35.06	32.05	11.69	445
465	20	4,640	38.43	36.05	12.95	465
485	22	5,595	42.78	39.80	13.82	485

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

Type ABRC

Drives with Backstops/Dimensions—Inches

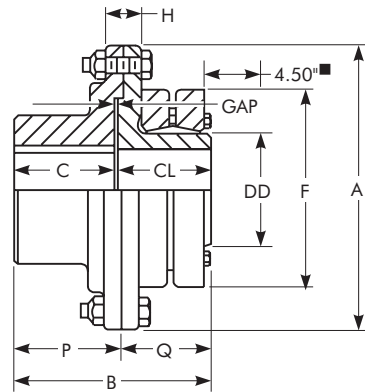


DRIVE SIZE ★	CA	RR	YY
405	17.70	3.12	15.65
425	20.20	4.00	17.87
445	23.30	4.00	18.89
465	26.50	5.00	20.05
485	30.00	5.00	21.22

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

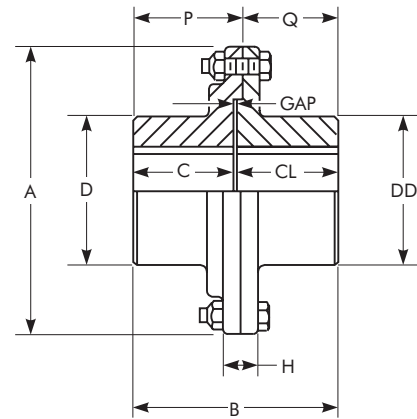
Type MCF Couplings

Flange Connection/Dimensions—Inches



DRIVING HUB (Type 2) DRIVEN HUB WITH SHRINK DISC (Type 4)

STANDARD



DRIVING HUB (Type 2) DRIVEN HUB (Type 2)

OPTIONAL

DRIVE SIZE	CPLG SIZE ★	Hub Type				Min/Max Bore ‡	Dimensions – Inches											
		Driving Hub	No. †	Driven Hub	No. †		Driven Hub	Cplg • Wt – lb	A	B	C	CL	D	DD	F	H	P	Q
405	1045MCF	RSB	2	RSB	2	5.000-7.000	510	19.68	14.12	7.00	7.00	10.00	10.00	...	2.50	7.62	6.50	.12
		RSB	2	185SD	4	5.315-5.709	560	19.68	13.68	7.00	6.56	10.00	7.28	12.99	2.50	7.62	6.06	.12
		RSB	2	200SD	4	5.709-6.102	570	19.68	13.68	7.00	6.56	10.00	7.87	13.78	2.50	7.62	6.06	.12
425	1055MCF	RSB	2	RSB	2	5.750-8.000	720	21.84	16.12	8.00	8.00	11.50	11.50	...	2.50	8.62	7.50	.12
		RSB	2	220SD	4	6.299-6.693	770	21.84	15.56	8.00	7.44	11.50	8.66	14.57	2.50	8.62	6.94	.12
		RSB	2	240SD	4	6.693-7.480	840	21.84	16.12	8.00	8.00	11.50	9.45	15.94	2.50	8.62	7.50	.12
445	1060MCF	RSB	2	RSB	2	6.500-9.000	990	23.25	18.12	9.00	9.00	13.00	13.00	...	3.00	9.62	8.50	.12
		RSB	2	240SD	4	6.693-7.480	1040	23.25	17.31	9.00	8.19	13.00	9.45	15.94	3.00	9.62	7.69	.12
		RSB	2	260SD	4	7.480-8.268	1110	23.25	18.12	9.00	9.00	13.00	10.24	16.93	3.00	9.62	8.50	.12
465	1065MCF	RSB	2	RSB	2	7.250-10.000	1260	24.50	20.62	10.00	10.00	14.00	14.00	...	3.50	10.62	10.00	.12
		RSB	2	280SD	4	8.268-9.055	1410	24.50	19.65	10.00	9.53	14.00	11.02	18.11	3.50	10.62	9.03	.12
		RSB	2	300SD	4	9.055-9.646	1460	24.50	19.81	10.00	9.69	14.00	11.81	19.09	3.50	10.62	9.19	.12
485	1075MCF	RSB	2	RSB	2	8.000-11.500	1870	27.50	23.12	11.50	11.50	16.00	16.00	...	4.00	12.12	11.00	.12
		RSB	2	320SD	4	9.449-10.236	1990	27.50	21.87	11.50	10.25	16.00	12.60	20.47	4.00	12.12	9.75	.12

★ Refer to Factory all applications above 125 rpm. Dimensions are for reference only and are subject to change without notice unless certified.

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

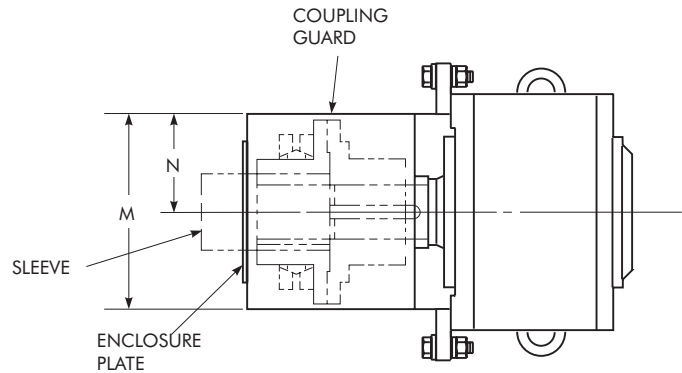
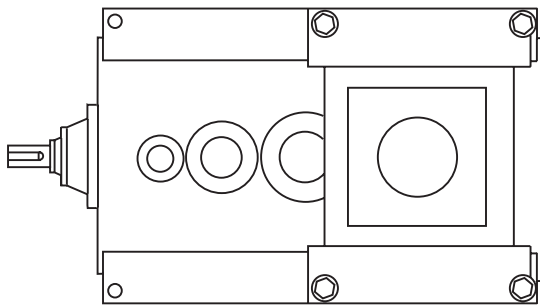
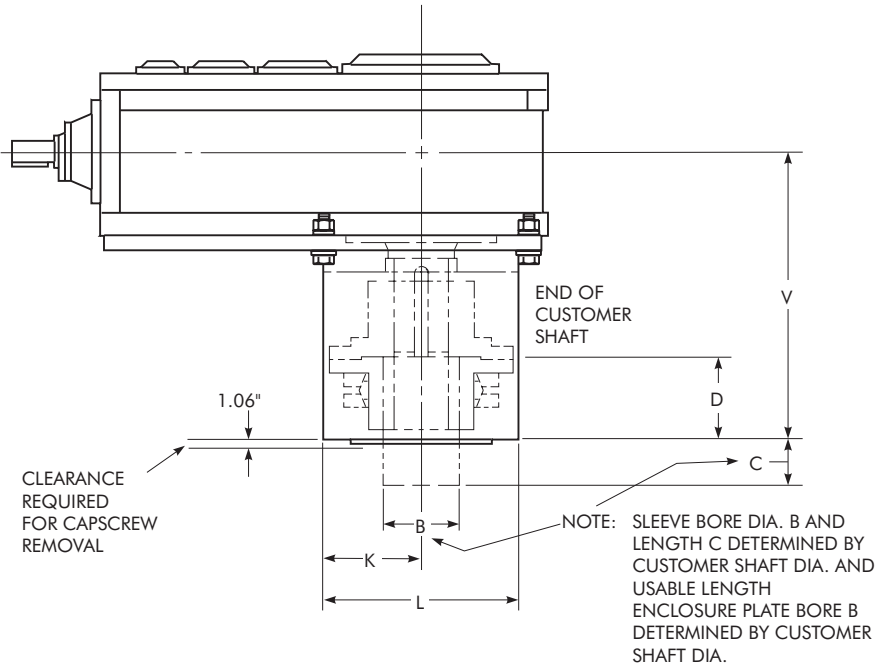
‡ All interference fit hubs are bored for a **Minimum** interference fit of .00075 inches per inch of shaft diameter. Driven shaft diameter tolerance is +.000", -.001".

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

† Type 2 hub is straight bored without shrink disc; Type 4 hub is straight bored with shrink disc.

Type ABRC

MCF Coupling Guards/Dimensions—Inches



DRIVE SIZE ★	D	K	L	M	N	V
405	8.25	10.66	21.32	21.50	10.75	27.77
425	8.95	12.07	24.14	24.14	12.07	30.67
445	10.07	13.07	26.14	26.40	13.20	34.10
465	10.94	13.07	26.14	27.14	13.57	37.67
485	12.32	14.82	29.64	29.64	14.82	39.98

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

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