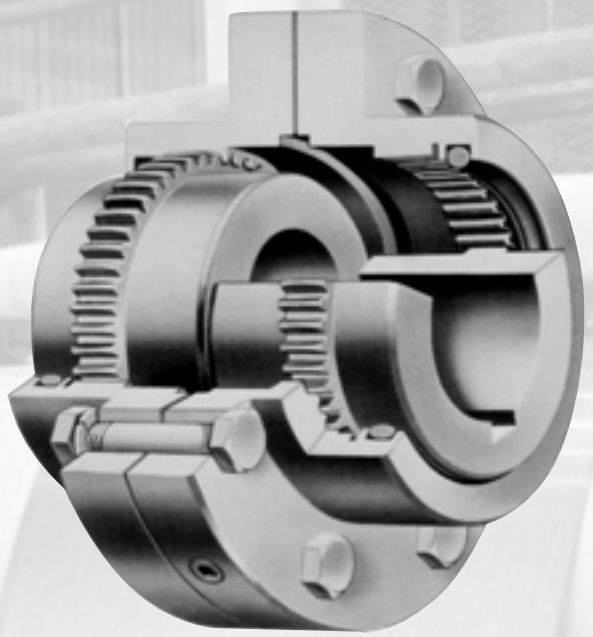
Series H
Gear Couplings
Size 1 through 30



Most Economical Gear Coupling Design

Large Bore Capacity, with O-ring Seal

Index:

For More Information

Visit www.kopflex.com

The Series H Advantages:

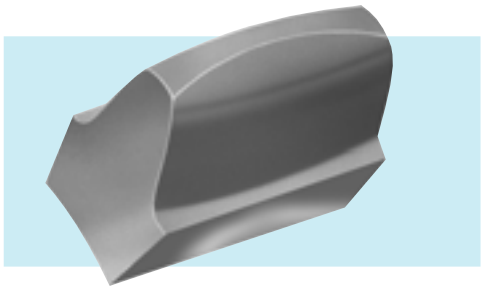
Higher Misalignment Capability
Sizes 1-7 compensate for up to ±1 1/2° static angular misalignment per gear mesh.
Minimizing operating misalignment will maximize the life of the coupling. Refer to the Installation and Alignment Instructions for alignment recommendations.

Larger Bore Capabilities allow the most economical size selection for shafts up to 10 5/8".

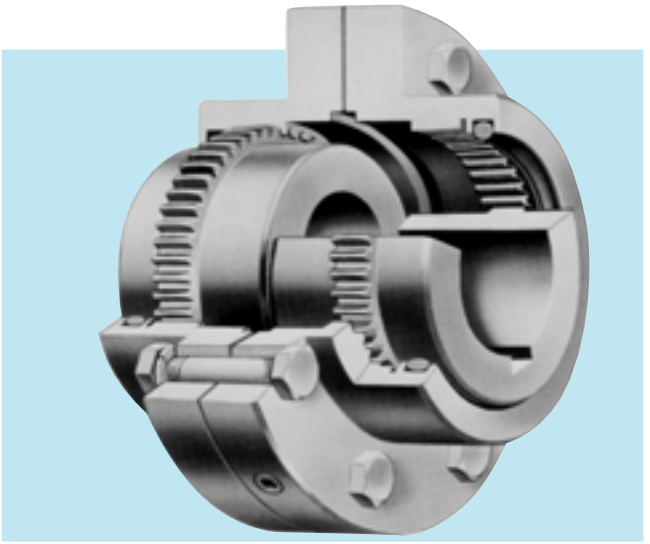
Higher Torque Ratings due to larger tooth pitch diameters than other couplings.

Versatility in that Series H's are interchangeable by half coupling with competitive coupling designs.

1 1/2° Curved-Face Teeth are a prime feature of the Series H coupling, sizes 1-7. The crowned hub teeth are a 20° full-depth involute tooth form with flank, tip, and root curvature. When used with the straight faced sleeve teeth, these 1 1/2 ° curved face hubs offer increased shaft misalignment capability.



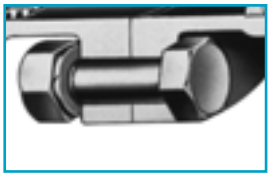
Coupling Greases
KOP-FLEX offers greases specifically designed for use in coupling applications. For proper lubrication and long service life, use KSG Standard Coupling Grease, or KHP High Performance Coupling Grease. See pages 204-206 for detailed specifications.

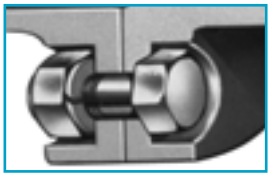


Crowned Tooth Sizes 1 - 7

Center Flange Bolting:

All couplings feature precision-drilled flange bolt holes, and tight tolerance Grade 5 flange bolts to assure a long-lasting flange to flange and fastener fit. Exposed bolt flanges are standard. Shrouded bolt flanges can be supplied through size 5. Size #5 1/2 and larger couplings are only available with exposed bolt flanges.

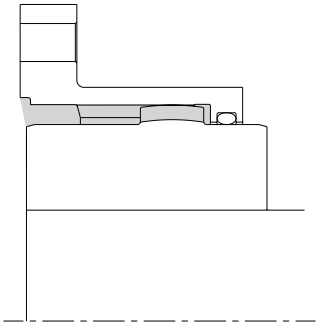




Lubrication:

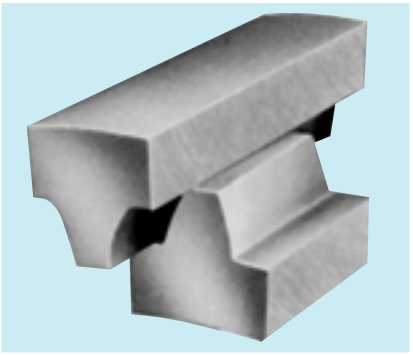
Each sleeve flange is supplied with two pipe plugs 180° apart. This permits assembly of a full flex coupling with four lube plugs positioned every 90°, facilitating lubrication.

The lube seal is a Buna-N O-ring to help retain grease and exclude contaminants. KHP or KSG coupling greases are recommended in order to obtain maximum operating life.



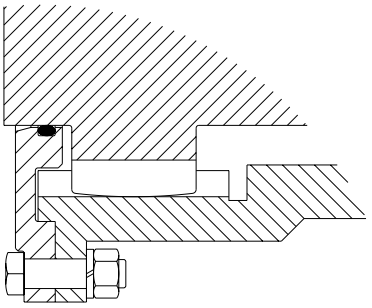
Series H couplings of Size 8 to 30 are designed for ±1/2° misalignment per flex half coupling, to compensate for misalignment between the shafts in a full-flex coupling.

Series H couplings can be supplied in full-flex, flex-rigid, floating shaft and spacer arrangements as well as custom designs. Only exposed bolt flanges are available in sizes 8 to 30.



Straight Tooth Sizes 8 - 30

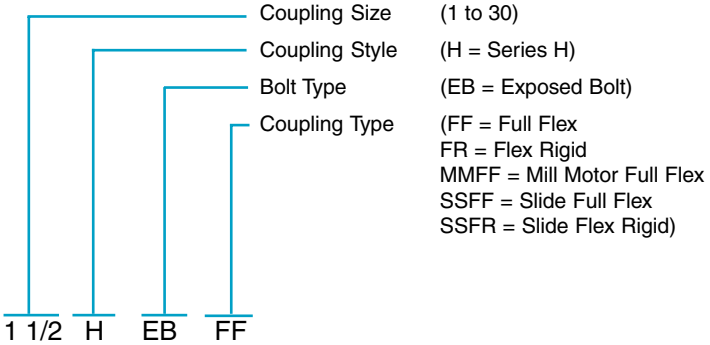
The straight-faced, involute stub tooth form is used in the Series H coupling, sizes 8 to 30. This tooth form distributes contact pressures across the full length of the hub tooth, to best develop the needed lubricating film, minimizing tooth wear and extending coupling service life for years of operation.



The End Rings are removable for ease of assembly and to allow inspection of the gear sets. A Buna-N O-ring seal is incorporated to help exclude contaminants and retain the lubricant. Designed for grease lubrication, our KSG or KHP coupling greases are recommended to obtain maximum operating life.

HOW TO ORDER

PART NUMBER EXPLANATION
Complete Rough Bore Coupling



For More Information

Visit www.kopflex.com

Coupling Parts

Description

*FHUB = Flex Hub
*RHUB = Rigid Hub
*MMHUB = Mill Motor Hub
SLEEVE = Standard Sleeve
SSLEEVE = Slide Sleeve
FS = Fastener Set (w/gasket)
ERFS = End Ring Fastener Set
VSFS = Vertical/Slide Fastener Set (w/gasket)
LEFD = LEF Disk
SPRxxx = Spacer for x.xx shaft separation
SP = Stop Plate for Slide Couplings
VP = Vertical Plate

* For finish bored hubs, add FB and bore size. All finish bores and keyways per AGMA 9002-A86 with interference fits. Clearance bores are available on request with one setscrew over keyway.

1 1/2H FHUB FB

Service Factors

Values listed are intended only as a general guide, and are typical of usual service requirements. For systems which frequently utilize the peak torque capability of the power source, verify that the magnitude of this peak torque does not exceed the 1.0 Service Factor Rating of the coupling selected. Applications which involve extreme repetitive shock or high-energy load absorption characteristics should be referred — with full particulars — to KOP-FLEX.

Values contained in the table are to be applied to smooth power sources such as electric motors and steam turbines. For drives involving internal combustion engines of four or five cylinders, add 1.0 to the values listed; for six or more cylinders, add 0.5 to the values listed. For systems utilizing AC or DC Mill Motors as the prime mover, refer to Note (1).

⚠CAUTION All peoplemoving applications must be referred to engineering.

Application	Typical Service Factor
AGITATORS	
Pure Liquids	1.0
Liquids & Solids	1.25
Liquids — Variable Density	1.25
BLOWERS	
Centrifugal	1.0
Lobe	1.5
Vane	1.25
BRIQUETTE MACHINES	2.0
CAR PULLERS — Intermittent Duty	1.5
COMPRESSORS	
Centrifugal	1.0
Centriaxial	1.25
Lobe	1.5
Reciprocating — Multi-Cylinder	2.0
CONVEYORS — LIGHT DUTY UNIFORMLY FED	
Apron, Bucket, Chain, Flight, Screw	1.25
Assembly, Belt	1.0
Oven	1.5
CONVEYORS — HEAVY DUTY NOT UNIFORMLY FED	
Apron, Bucket, Chain, Flight, Oven	1.5
Assembly, Belt	1.25
Reciprocating, Shaker	2.5
CRANES AND HOISTS (NOTE 1 and 2)	
Main hoists, Reversing	2.5
Skip Hoists, Trolley & Bridge Drives	2.0
Slope	2.0
CRUSHERS	
Ore, Stone	3.0
DREDGES	
Cable Reels	1.75
Conveyors	1.5
Cutter Head Jig Drives	2.5
Maneuvering Winches	1.75
Pumps	1.75
Screen Drives	1.75
Stackers	1.75
Utility Winches	1.5
ELEVATORS (NOTE 2)	
Bucket	1.75
Centrifugal & Gravity Discharge	1.5
Escalators	1.5
Freight	2.5
FANS	
Centrifugal	1.0
Cooling Towers	1.5
Forced Draft	1.5
Induced Draft without Damper Control	2.0
FEEDERS	
Apron, Belt, Disc, Screw	1.25
Reciprocating	2.5
GENERATORS —	
(Not Welding)	1.0
HAMMER MILLS	2.0
LAUNDRY WASHERS —	
Reversing	2.0
LAUNDRY TUMBLERS	2.0
LINE SHAFT	1.5
LUMBER INDUSTRY	
Barkers — Drum Type	2.0
Edger Feed	2.0
Live Rolls	2.0
Log Haul — Incline	2.0
Log Haul — Well type	2.0
Off Bearing Rolls	2.0
Planer Feed Chains	1.75
Planer Floor Chains	1.75
Planer Tilting Hoist	1.75
Slab Conveyor	1.5
Sorting Table	1.5
Trimmer Feed	1.75
MARINE PROPULSION	
Main Drives	2.0
MACHINE TOOLS	
Bending Roll	2.0
Plate Planer	1.5
Punch Press — Gear Driven	2.0
Tapping Machines	2.5
Other Machine Tools	
Main Drives	1.5
Auxiliary Drives	1.25
METAL MILLS	
Draw Bench — Carriage	2.0
Draw Bench — Main Drive	2.0
Forming Machines	2.0
Slitters	1.5
Table Conveyors	
Non-Reversing	2.25
Reversing	2.5
Wire Drawing & Flattening Machine	2.0
Wire Winding Machine	1.75
METAL ROLLING MILLS (NOTE 1)	
Blooming Mills	*
Coilers, hot mill	2.0
Coilers, cold mill	1.25
Cold Mills	2.0
Cooling Beds	1.75
Door Openers	2.0
Draw Benches	2.0
Edger Drives	1.75
Feed Rolls, Reversing Mills	3.5
Furnace Pushers	2.5
Hot Mills	3.0
Ingot Cars	2.5
Kick-outs	2.5
Manipulators	3.0
Merchant Mills	3.0
Piercers	3.0
Pusher Rams	2.5
Reel Drives	1.75
Reel Drums	2.0
Reelers	3.0
Rod and Bar Mills	1.5
Roughing Mill Delivery Table	3.0
Runout Tables	
Reversing	3.0
Non-Reversing	2.0
Saws, hot & cold	2.5
Screwdown Drives	3.0
Skelp Mills	3.0
Slitters	3.0
Slabbing Mills	3.0
Soaking Pit Cover Drives	3.0
Straighteners	2.5
Tables, transfer & runout	2.0
Thrust Block	3.0
Traction Drive	3.0
Tube Conveyor Rolls	2.5
Unscramblers	2.5
Wire Drawing	1.5
MILLS, ROTARY TYPE	
Ball	2.25
Dryers & Coolers	2.0
Hammer	1.75
Kilns	2.0
Pebble & Rod	2.0
Pug	1.75
Tumbling Barrels	2.0
MIXERS	
Concrete Mixers	1.75
Drum Type	1.5
OIL INDUSTRY	
Chillers	1.25
Paraffin Filter Press	1.75
PAPER MILLS	
Barker Auxiliaries, Hydraulic	2.0
Barker, Mechanical	2.0
Barking Drum Spur Gear Only	2.25
Beater & Pulper	1.75
Bleacher	1.0
Calenders	2.0
Chippers	2.5
Coaters	1.0
Converting Machines, except Cutters, Platers	1.5
Couch Roll	1.75
Cutters, Platers	2.0
Cylinders	1.75
Disc Refiners	1.75
Dryers	1.75
Felt Stretcher	1.25
Felt Whipper	2.0
Jordans	1.75
Line Shaft	1.5
Log Haul	2.0
Pulp Grinder	1.75
Press Roll	2.0
Reel	1.5
Stock Chests	1.5
Suction Roll	1.75
Washers & Thickeners	1.5
Winders	1.5
PRINTING PRESSES	1.5
PULLERS — Barge Haul	2.0
PUMPS	
Centrifugal	1.0
Boiler Feed	1.5
Reciprocating	
Single Acting	
1 or 2 Cylinders	2.25
3 or more Cylinders	1.75
Double Acting	2.0
Rotary, Gear, Lobe, Vane	1.5
RUBBER INDUSTRY	
Mixer — Banbury	2.5
Rubber Calendar	2.0
Rubber Mill (2 or more)	2.25
Sheeter	2.0
Tire Building Machines	2.5
Tire & Tube Press Openers	1.0
Tubers & Strainers	2.0
SCREENS	
Air Washing	1.0
Grizzly	2.0
Rotary — Stone or Gravel	1.5
Traveling Water Intake	1.25
Vibrating	2.5
SEWAGE DISPOSAL EQUIPMENT	
Bar Screens	1.25
Chemical Feeders	1.25
Collectors, Circuline or Straightline	1.25
Dewatering Screens	1.25
Grit Collectors	1.25
Scum Breakers	1.25
Slow or Rapid Mixers	1.25
Sludge Collectors	1.25
Thickeners	1.25
Vacuum Filters	1.25
STEERING GEAR	1.0
STOKERS	1.0
WINCH	1.5
WINDLASS	1.75

* Refer to KOP-FLEX

NOTES
(1) Maximum Torque at the coupling must not exceed Rated Torque of the coupling.
(2) Check local and industrial safety codes.

Selection Procedure

1. **Select Coupling Based on Bore Capacity.**
   Select the coupling size that has a maximum bore capacity equal to or larger than the larger of the two shafts. For interference fits larger than AGMA standards, consult KOP-FLEX.
2. **Verify Coupling Size Based on Load Rating**.
   a. Select appropriate Service Factor from the Table on page 162.
   b. Calculate required HP / 100 RPM:
   $$\frac{\text{HP x Service Factor x 100}}{\text{RPM}} = \text{HP / 100 RPM}$$
   c. Verify that the selected coupling has a rating greater than or equal to the required HP / 100 RPM.
3. **Check Balance Requirements.**
   Consult the Dynamic Balancing Guide to help determine if balancing is required. Verify that the maximum operating speed does not exceed the maximum speed rating of the coupling. The maximum speed rating does not consider lateral critical speed considerations for floating shaft applications**.**

Note: Care must be exercised on proper selection of any shaft coupling. The Users must assure themselves that the design of the shaft to coupling hub connection is adequate for the duty intended.

Dynamic Balancing Guide

Balancing requirements for a coupling are dependent on factors determined by the characteristics of the connected equipment. For this reason, the Balancing Charts should be used as a GUIDE ONLY to assist in determining whether or not balancing is required.

The Balancing Charts shown are based on AGMA 9000-C90 suggested balance classes for systems with “Average” sensitivity to unbalance. For systems with higher sensitivity to unbalance, balancing of the coupling may be required at lower speeds. For systems which are less sensitive to unbalance, couplings may be able to operate at higher speeds than those shown at lower balance levels. Therefore, in the absence of either a thorough system analysis or past user experience with a similar installation, these charts should be used as a GUIDE ONLY.

FAST’S® and Series H gear couplings may be component balanced, or assembly balanced with fitted components (Type FB and Type HB, respectively).

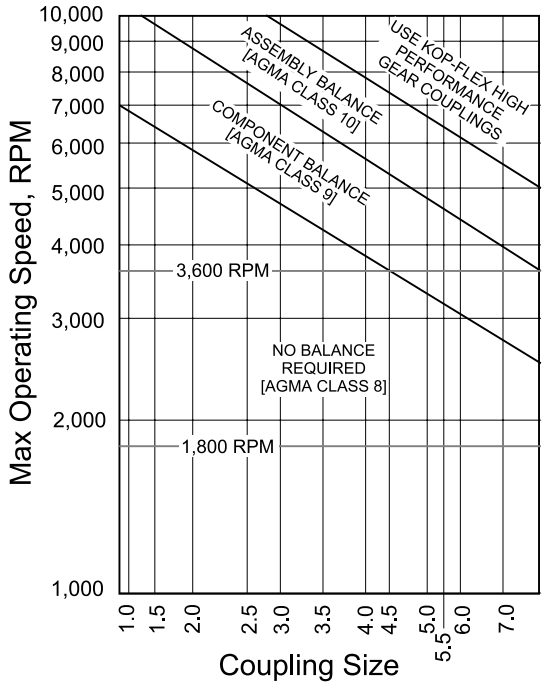
WALDRON® gear couplings are available component balanced only.

Model B gear couplings are not designed to be balanced.

These charts apply to sizes 1 through 7 only. Dynamic balance of size 8 through 30 must be considered on a case-by-case basis. Consult KOP-FLEX for assistance.

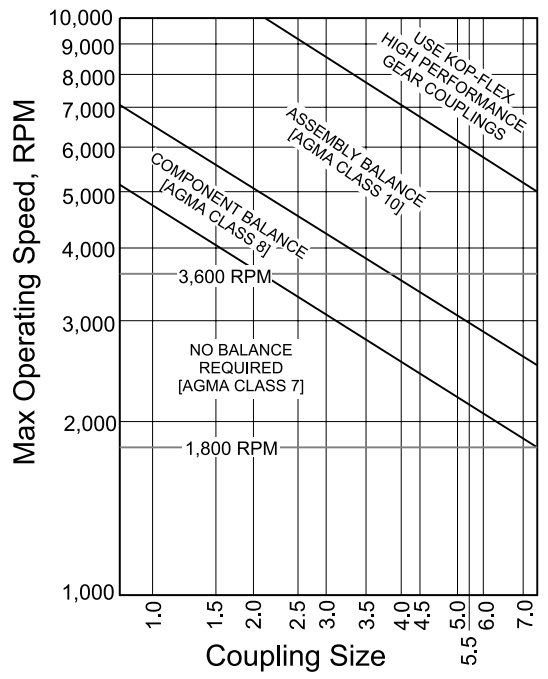
Close Coupled Balancing Chart

Based on AGMA 9000-C90 for Average System Sensitivity



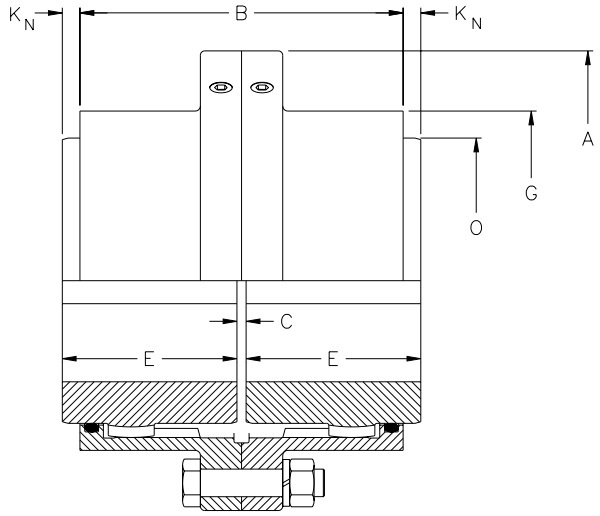
Spacer Coupling Balancing Chart for 12“ Shaft Separation

Based on AGMA 9000-C90 for Average System Sensitivity



Full Flex Coupling Size 1-7

A conventional 4-bearing system has two bearings on the driving shaft and two bearings on the driven shaft. Both angular and offset shaft misalignment will be present to some degree and a full flex coupling is mandatory. The full flex coupling is the standard coupling having two gear ring sets, one set per half coupling. For selection procedure see page 163.

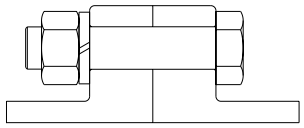


Coupling Greases

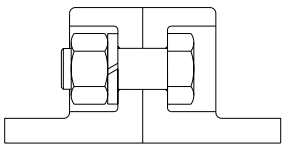
KOP-FLEX offers greases specifically designed for use in coupling applications. For proper lubrication and long service life, use KSG Standard Coupling Grease, or KHP High Performance Coupling Grease. See pages 204-206 for detailed specifications.

Coupling Size	Maximum Bore with Standard Keyway	Maximum Bore with Reduced Depth Keyway	Reduced Depth Keyway	Rating HP / 100 RPM	Torque Rating (lb.-in.)	Peak Torque Rating (lb.-in.)	Maximum Speed (RPM)	Weight with Solid Hubs (lb.)	Dimensions									
									A	B	C	C_I	C_W	E	G	K_N	K_R	O
1	1 5/8	1 3/4	3/8 x 1/8	12	7500	15000	14500	10	4 9/16	3 1/16	1/8	3/16	1/4	1 11/16	3 1/16	7/32	9/32	2 3/8
1 1/2	2 1/4	2 3/8	5/8 x 7/32	27	17000	34000	12000	18	6	3 9/16	1/8	5/16	1/2	1 15/16	3 15/16	7/32	13/32	3 1/8
2	2 7/8	3	3/4 x 1/4	50	31500	63000	9300	33	7	4 11/16	1/8	9/16	1	2 7/16	4 15/16	5/32	19/32	4
2 1/2	3 1/2	3 3/4	7/8 x 5/16	90	56700	113400	7900	57	8 3/8	5 3/8	3/16	15/32	3/4	3 1/32	5 7/8	7/16	23/32	4 7/8
3	4	4 3/8	1 x 3/8	160	101000	202000	6800	85	9 7/16	6 9/16	3/16	29/32	1 5/8	3 19/32	6 7/8	13/32	1 1/8	5 5/8
3 1/2	4 5/8	5	1 1/4 x 7/16	235	148000	296000	6000	130	11	7 11/16	1/4	1 1/16	1 7/8	4 3/16	7 29/32	15/32	1 9/32	6 1/2
4	5 1/2	6 1/8	1 1/2 x 1/2	375	236000	472000	5260	192	12 1/2	8 3/4	1/4	1 1/4	2 1/4	4 3/4	9 1/4	1/2	1 1/2	7 3/4
4 1/2	6 1/4	6 7/8	1 3/4 x 1/2	505	318000	636000	4770	261	13 5/8	9 11/16	5/16	1 7/16	2 9/16	5 5/16	10 3/8	5/8	1 3/4	8 1/2
5	7 1/8	7 3/8	1 3/4 x 1/2	700	441000	882000	4300	376	15 5/16	11 1/16	5/16	1 31/32	3 5/8	6 1/32	11 9/16	21/32	2 5/16	9 1/2
5 1/2*	8	8 1/4	2 x 1/2	920	580000	1160000	3880	474	16 3/4	12 7/16	5/16	2 3/32	3 7/8	6 29/32	12 11/16	27/32	2 5/8	10 1/2
6*	8 7/8	9 1/4	2 1/2 x 5/8	1205	759000	1518000	3600	604	18	13 5/16	5/16	2 11/32	4 3/8	7 13/32	13 7/8	29/32	2 15/16	11 1/2
7*	10 3/8	10 3/4	2 1/2 x 3/4	1840	1160000	2320000	3000	902	20 3/4	15 3/8	3/8	2 13/16	5 1/4	8 11/16	16 1/16	1 3/16	3 5/8	13 1/2

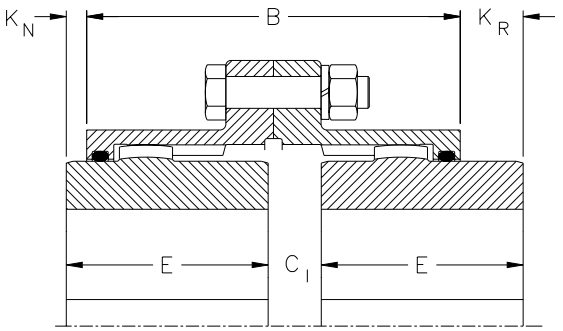
* Sizes 5 1/2, 6 and 7 are only available with exposed bolt sleeves. Type EB exposed bolt sleeves are standard.



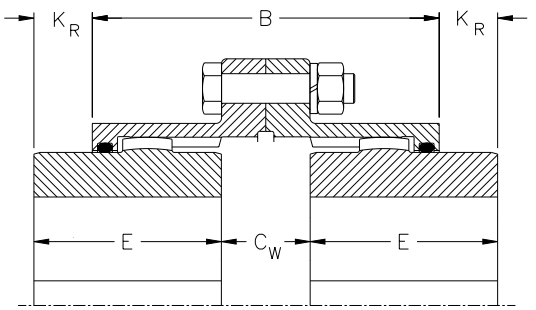
TYPE EB - EXPOSED BOLTS



TYPE SB - SHROUDED BOLTS



ONE HUB REVERSED



TWO HUBS REVERSED

Fastener Data

Coupling Size	Type EB Exposed Bolt			Type SB Shrouded Bolt		
	Qty.	Size & Length	Bolt Circle	Qty.	Size & Length	Bolt Circle
1	6	1/4 x 1 1/2	3 3/4	6	1/4 x 7/8	3 3/4
1 1/2	8	3/8 x 2	4 13/16	8	3/8 x 1	4 13/16
2	6	1/2 x 2 1/2	5 7/8	10	3/8 x 1	5 13/16
2 1/2	6	5/8 x 2 3/4	7 1/8	10	1/2 x 1 5/16	7
3	8	5/8 x 2 3/4	8 1/8	12	1/2 x 1 5/16	8
3 1/2	8	3/4 x 3 3/8	9 1/2	12	5/8 x 1 5/8	9 9/32
4	8	3/4 x 3 3/8	11	14	5/8 x 1 5/8	10 5/8
4 1/2	10	3/4 x 3 3/8	12	14	5/8 x 1 5/8	11 3/4
5	8	7/8 x 4 1/4	13 1/2	14	3/4 x 2 1/8	13 3/16
5 1/2*	14	7/8 x 3 1/4	14 1/2	-	-	-
6*	14	7/8 x 3 1/4	15 3/4	-	-	-
7*	16	1 x 3 5/8	18 1/4	-	-	-

Sizes #5 1/2 and larger are available in exposed bolts only.

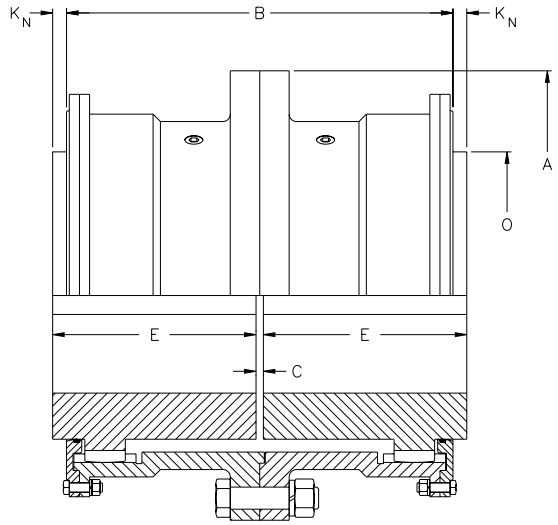
Full Flex Coupling Size 8-30

Series H coupling sizes 8-30 feature an all-metal end ring which can be easily removed to inspect the hub and sleeve teeth without removing the hub from its shaft.

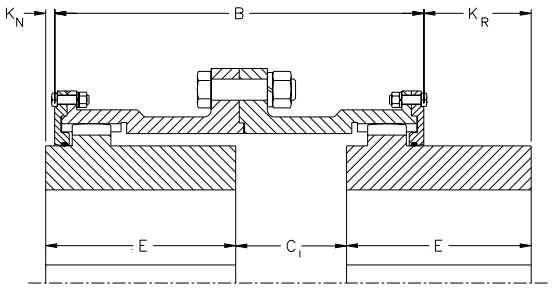
All end rings have gaskets and are bolted to the sleeves. Non-critical surfaces are as-cast, or as-forged. Sleeves have mating male and female rabbets at the center and end flange joints to simplify installation. The sleeves have two lube plugs in the body.

Standardized center flanges allow flex-half substitution regardless of design or vintage. All bolts are special with respect to body length, thread length, and bolt body tolerance.

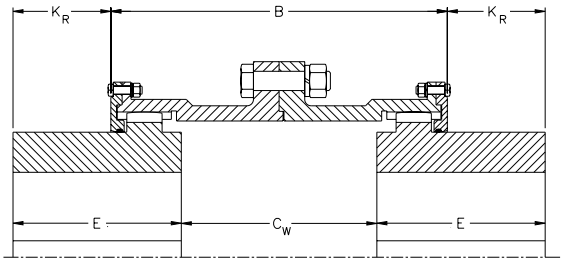
Sizes 8 - 30 are available with exposed bolts only.



Coupling Size	Maximum Bore with Standard Key	Rating HP / 100 RPM	Torque Rating (lb.-in. x 1000)	Peak Torque Rating (lb.-in. x 1000)	Maximum Speed (RPM)	Weight with Solid Hubs (lb.)	Dimensions						
							A	B	C	C_I	C_W	E	O
8	10 3/4	2230	1404	2808	1750	1430	23 1/4	19 1/2	3/8	5 9/16	10 3/4	9 13/16	14
9	11 3/4	3170	1995	3990	1625	2000	26	21 3/4	1/2	6 1/4	12	10 7/8	15 1/2
10	13	4350	2744	5488	1500	2670	28	24	1/2	7 1/8	13 3/4	12	17 1/2
11	15	5780	3645	7290	1375	3520	30 1/2	26 1/4	1/2	7 7/8	15 1/4	13 1/8	19 1/2
12	16 1/4	7190	4532	9064	1250	4450	33	27 3/4	1/2	8 1/8	15 3/4	13 7/8	21 1/2
13	17 1/2	9030	5688	11376	1125	5410	35 3/4	29 1/2	3/4	8 7/16	16 1/8	14 5/8	23
14	18 3/4	11080	6982	13964	1000	6600	38	31 1/4	3/4	9	17 1/4	15 1/2	25
15	20 3/4	13470	8488	16976	875	8040	40 1/2	33 1/8	3/4	9 7/16	18 1/8	16 1/2	27
16	22	16100	10150	20300	750	9680	43	35	1	9 7/8	18 3/4	17 3/8	29
18	25 1/4	21100	13300	26600	500	12500	47 1/4	36 1/8	1	10 1/4	19 1/2	18	33
20	27 1/4	28800	18144	36288	400	17900	53 1/2	42 3/8	1	12 3/8	23 3/4	21 1/8	36 1/2
22	30	38100	24009	48018	300	23300	59	46	1	13 3/4	26 1/2	23	40
24	33 1/4	42400	26699	53398	200	30300	64 1/4	49 1/2	1	15	29	24 3/4	44 1/2
26	36 3/4	53000	33415	66830	200	37700	68 1/2	53	1	15 5/8	30 1/4	26 1/2	48 1/2
28	40	65900	41564	83128	200	45200	73 3/4	54 1/4	1	15 7/8	30 3/4	27 1/8	52 1/2
30	43 1/2	80300	50614	101228	200	52700	78	55 1/4	1	15 7/8	30 3/4	27 5/8	56 1/2



ONE HUB REVERSED



TWO HUBS REVERSED

Fastener Data

Coupling Size	Center Flange			End Ring		
	Quantity	Size & Length	Bolt Circle	Quantity (each)	Size & Length	Bolt Circle
8	16	1 1/8 x 4 1/8	20 3/4	10	1/2 x 2	19 3/8
9	18	1 1/4 x 4 1/2	23 1/4	12	5/8 x 2 3/16	21 3/4
10	18	1 3/8 x 5 3/8	25 1/4	12	5/8 x 2 3/16	23 7/8
11	18	1 1/2 x 5 7/8	27 1/2	12	5/8 x 2 3/16	26 1/16
12	18	1 1/2 x 6 1/8	30	12	3/4 x 2 9/16	28 5/16
13	18	1 5/8 x 6 3/8	32 1/4	12	3/4 x 2 9/16	30 1/2
14	18	1 3/4 x 6 5/8	34 1/2	14	3/4 x 2 9/16	32 5/8
15	20	1 3/4 x 6 5/8	36 3/4	14	7/8 x 2 7/8	35
16	20	2 x 7 3/8	39	14	7/8 x 2 7/8	37 1/8
18	22	2 x 7 3/8	43 1/4	14	7/8 x 2 7/8	41 3/8
20	22	2 1/4 x 7 5/8	48 3/4	16	1 x 3 5/8	46 1/4
22	22	2 1/2 x 8 1/8	53 1/2	16	1 x 3 5/8	50 3/4
24	22	2 3/4 x 8 7/8	58 1/4	16	1 1/8 x 4 1/8	55
26	24	2 3/4 x 8 7/8	62 1/2	18	1 1/8 x 4 1/8	59 1/4
28	22	3 x 9 5/8	67 1/4	16	1 1/4 x 4 1/4	63 11/16
30	24	3 x 9 5/8	71 1/2	18	1 1/4 x 4 1/4	68 3/16

Coupling Type EB (Exposed Bolts) Part Numbers

Coupling Size	Full Flex Coupling			Fastener Set (Includes Gasket)		Sleeve		Flex Hub		
	No Bore Part No.	Wt.	Finish Bore① Part No.	Part No.	Wt.	Part No.	Wt.	No Bore Part No.	Wt.	Finish Bore① Part No.
1	1H EB FF	10	1H EB FF FB	1 EB FS	1	1H EB SLEEVE	2	1H FHUB	3	1H FHUB
1 1/2	1 1/2H EB FF	19	1 1/2H EB FF FB	1 1/2 EB FS	1	1 1/2H EB SLEEVE	6	1 1/2H FHUB	3	1 1/2H FHUB FB
2	2H EB FF	30	2H EB FF FB	2 EB FS	1	2H EB SLEEVE	8	2H FHUB	7	2H FHUB FB
2 1/2	2 1/2H EB FF	52	2 1/2H EB FF FB	2 1/2 EB FS	2	2 1/2H EB SLEEVE	14	2 1/2H FHUB	12	2 1/2H FHUB FB
3	3H EB FF	76	3H EB FF FB	3 EB FS	3	3H EB SLEEVE	17	3H FHUB	20	3H FHUB FB
3 1/2	3 1/2H EB FF	117	3 1/2H EB FF FB	3 1/2 EB FS	5	3 1/2H EB SLEEVE	28	3 1/2H FHUB	28	3 1/2H FHUB FB
4	4H EB FF	180	4H EB FF FB	4 EB FS	5	4H EB SLEEVE	41	4H FHUB	47	4H FHUB FB
4 1/2	4 1/2H EB FF	244	4 1/2H EB FF FB	4 1/2 EB FS	7	4 1/2H EB SLEEVE	53	4 1/2H FHUB	66	4 1/2H FHUB FB
5	5H EB FF	361	5H EB FF FB	5 EB FS	9	5H EB SLEEVE	80	5H FHUB	96	5H FHUB FB
5 1/2	5 1/2H EB FF	422	5 1/2H EB FF FB	5 1/2 EB FS	14	5 1/2H EB SLEEVE	89	5 1/2H FHUB	115	5 1/2H FHUB
6	6H EB FF	494	6H EB FF FB	6 EB FS	14	6H EB SLEEVE	100	6H FHUB	140	6H FHUB
7	7H EB FF	822	7H EB FF FB	7 EB FS	22	7H EB SLEEVE	160	7H FHUB	240	7H FHUB

① All finish bores and keyways per AGMA 9002-A86 commercial standard tolerances with interference fit bores. Clearance fit bores are available on request and include one setscrew over keyway.

Coupling Type SB (Shrouded Bolts) Part Numbers

Coupling Size	Full Flex Coupling			Fastener Set (Includes Gasket)		Sleeve		Flex Hub		
	No Bore Part No.	Wt.	Finish Bore① Part No.	Part No.	Wt.	Part No.	Wt.	No Bore Part No.	Wt.	Finish Bore① Part No.
1	1H SB FF	10	1H SB FF FB	1 SB FS	1	1H SB SLEEVE	2	1H FHUB	3	1H FHUB FB
1 1/2	1 1/2H SB FF	19	1 1/2H SB FF FB	1 1/2 SB FS	1	1 1/2H SB SLEEVE	6	1 1/2H FHUB	3	1 1/2H FHUB FB
2	2H SB FF	30	2H SB FF FB	2 SB FS	1	2H SB SLEEVE	8	2H FHUB	7	2H FHUB FB
2 1/2	2 1/2H SB FF	52	2 1/2H SB FF FB	2 1/2 SB FS	2	2 1/2H SB SLEEVE	13	2 1/2H FHUB	12	2 1/2H FHUB FB
3	3H SB FF	76	3H SB FF FB	3 SB FS	2	3H SB SLEEVE	15	3H FHUB	20	3H FHUB FB
3 1/2	3 1/2H SB FF	117	3 1/2H SB FF FB	3 1/2 SB FS	4	3 1/2H SB SLEEVE	26	3 1/2H FHUB	28	3 1/2H FHUB FB
4	4H SB FF	180	4H SB FF FB	4 SB FS	4	4H SB SLEEVE	37	4H FHUB	47	4H FHUB FB
4 1/2	4 1/2H SB FF	244	4 1/2H SB FF FB	4 1/2 SB FS	4	4 1/2H SB SLEEVE	50	4 1/2H FHUB	66	4 1/2H FHUB FB
5	5H SB FF	361	5H SB FF FB	5 SB FS	7	5H SB SLEEVE	72	5H FHUB	96	5H FHUB FB

① All finish bores and keyways per AGMA 9002-A86 commercial standard tolerances with interference fit bores. Clearance fit bores are available on request and include one setscrew over keyway.

Coupling Type (Exposed Bolts) Part Numbers

Coupling Size	Full Flex	Male Half w/Access	Female Half w/Access	Hub	Male Sleeve	Female Sleeve	End Ring	Center Flange Fastener Set (includes gasket)	End Ring Fastener Set (includes gasket)
8	8H EB FF	8H EB MH	8H EB FH	8H FHUB	8H EB MSLEEVE	8H EB FSLEEVE	8H ERING	8 EB FS	8 ERFS
9	9H EB FF	9H EB MH	9H EB FH	9H FHUB	9H EB MSLEEVE	9H EB FSLEEVE	9H ERING	9 EB FS	9 ERFS
10	10H EB FF	10H EB MH	10H EB FH	10H FHUB	10H EB MSLEEVE	10H EB FSLEEVE	10H ERING	10 EB FS	10 ERFS
11	11H EB FF	11H EB MH	11H EB FH	11H FHUB	11H EB MSLEEVE	11H EB FSLEEVE	11H ERING	11 EB FS	11 ERFS
12	12H EB FF	12H EB MH	12H EB FH	12H FHUB	12H EB MSLEEVE	12H EB FSLEEVE	12H ERING	12 EB FS	12 ERFS
13	13H EB FF	13H EB MH	13H EB FH	13H FHUB	13H EB MSLEEVE	13H EB FSLEEVE	13H ERING	13 EB FS	13 ERFS
14	14H EB FF	14H EB MH	14H EB FH	14H FHUB	14H EB MSLEEVE	14H EB FSLEEVE	14H ERING	14 EB FS	14 ERFS
15	15H EB FF	15H EB MH	15H EB FH	15H FHUB	15H EB MSLEEVE	15H EB FSLEEVE	15H ERING	15 EB FS	15 ERFS
16	16H EB FF	16H EB MH	16H EB FH	16H FHUB	16H EB MSLEEVE	16H EB FSLEEVE	16H ERING	16 EB FS	16 ERFS
18	18H EB FF	18H EB MH	18H EB FH	18H FHUB	18H EB MSLEEVE	18H EB FSLEEVE	18H ERING	18 EB FS	18 ERFS
20	20H EB FF	20H EB MH	20H EB FH	20H FHUB	20H EB MSLEEVE	20H EB FSLEEVE	20H ERING	20 EB FS	20 ERFS
22	22H EB FF	22H EB MH	22H EB FH	22H FHUB	22H EB MSLEEVE	22H EB FSLEEVE	22H ERING	22 EB FS	22 ERFS
24	24H EB FF	24H EB MH	24H EB FH	24H FHUB	24H EB MSLEEVE	24H EB FSLEEVE	24H ERING	24 EB FS	24 ERFS
26	26H EB FF	26H EB MH	26H EB FH	26H FHUB	26H EB MSLEEVE	26H EB FSLEEVE	26H ERING	26 EB FS	26 ERFS
28	28H EB FF	28H EB MH	28H EB FH	28H FHUB	28H EB MSLEEVE	28H EB FSLEEVE	28H ERING	28 EB FS	28 ERFS
30	30H EB FF	30H EB MH	30H EB FH	30H FHUB	30H EB MSLEEVE	30H EB FSLEEVE	30H ERING	30 EB FS	30 ERFS

Spacer Coupling Size 1 1/2 - 7

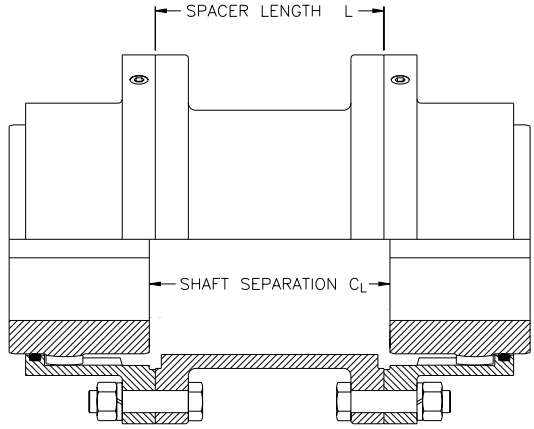
Standard Spacer Couplings

Full-flex spacer couplings are used for 4 bearing installations with extended shaft separations. Tabulated below are spacers for industry standard shaft separations, C_L.

Type EB exposed bolt spacers and Type SB shrouded bolt spacers for standard shaft separations are normally in stock. Other lengths are manufactured to order.

Spacer length, **L**, is calculated by subtracting the standard full-flex, close coupled gap, **C**, from the shaft separation, C_L.

$$L = C_L - C \quad \text{(full-flex, close coupled)}$$



Spacer Part Numbers

Stock Spacer Part Numbers Type SB (Shrouded Bolts)

Coupling Size	Shaft Separation							
	3 1/2"		4 3/8"		5"		7"	
	Part No.	Wt.	Part No.	Wt.	Part No.	Wt.	Part No.	Wt.
1 1/2	1 1/2 SB SPR350	6	1 1/2 SB SPR438	7	1 1/2 SB SPR500	8		
2	2 SB SPR350	8	2 SB SPR438	9	2 SB SPR500	10	2 SB SPR700	12
2 1/2					2 1/2 SB SPR500	14	2 1/2 SB SPR700	17
3					3 SB SPR500	17	3 SB SPR700	20
3 1/2					3 1/2 SB SPR500	27		

Note: Spacer part number references the shaft separation, not the actual length of the spacer.

Stock Spacer Part Numbers Type EB (Exposed Bolts)

Coupling Size	Shaft Separation			
	5"		7"	
	Part No.	Wt.	Part No.	Wt.
1 1/2	1 1/2 EB SPR500	8		
2	2 EB SPR500	10	2 EB SPR700	12
2 1/2	2 1/2 EB SPR500	14		
3	3 EB SPR500	17		

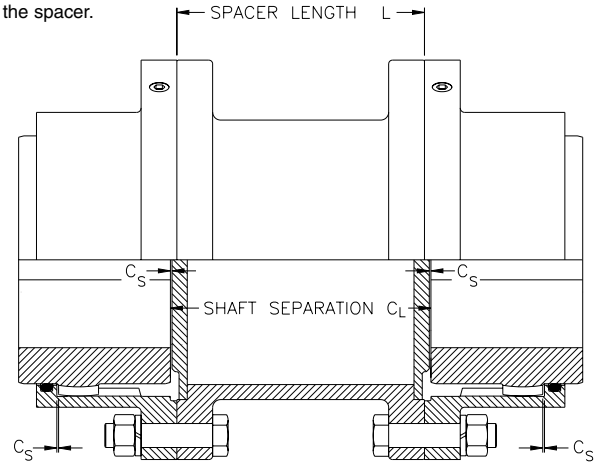
LEF Spacer Couplings

Limited End Float (LEF) spacer couplings are used for sleeve bearing motor applications with extended shaft separations. LEF spacers are supplied with steel LEF plates installed in each end.

Spacer length, L_{LEF}, is calculated by subtracting the LEF full-flex, close coupled gap, C_{LEF}, from the shaft separation, C_L.

$$L_{LEF} = C_L - C_{LEF} \quad \text{(full-flex, close coupled)}$$

LEF spacers are shorter than standard spacers for a given shaft separation, and are manufactured to order.

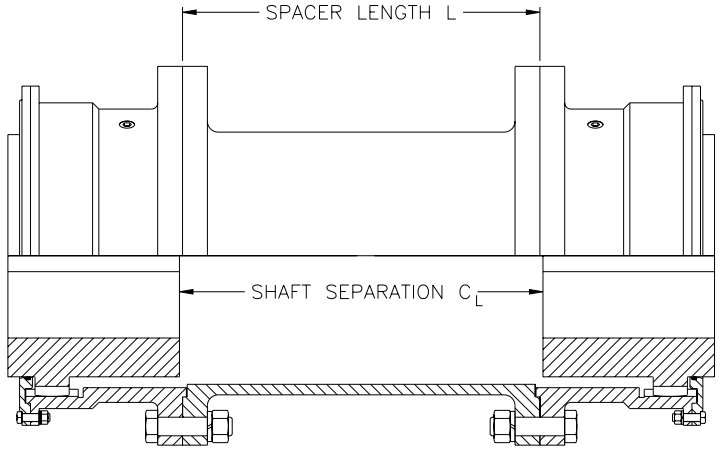


Spacer Couplings Size 8-30

Coupling sizes 8 - 30 are also available as spacer couplings for extended shaft separations. These sizes are available in exposed bolt only.

Spacers for coupling sizes 4 - 30 are non-stock and are manufactured to order. LEF spacer couplings are also manufactured to order.

Note: Spacer part number references the shaft separation, not the actual length of the spacer.

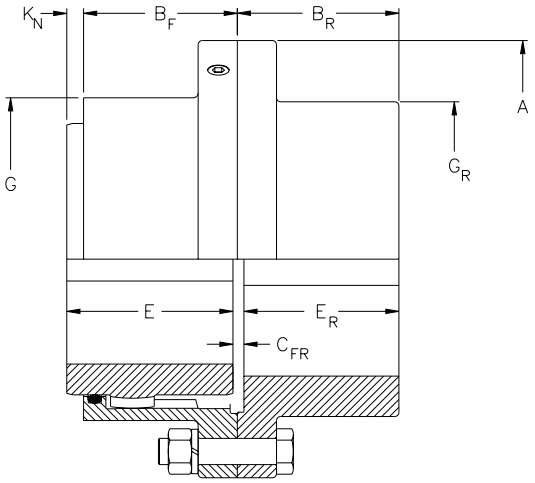


Coupling Greases

KOP-FLEX offers greases specifically designed for use in coupling applications. For proper lubrication and long service life, use KSG Standard Coupling Grease, or KHP High Performance Coupling Grease. See pages 204-206 for detailed specifications.

Flex Rigid and Floating Shaft Couplings Size 1- 7

When driving and driven shafts are widely separated, an unsupported or floating shaft is used to span the gap. The two couplings required at each end of that shaft consist of one half of a standard coupling bolted to a Rigid Hub, each unit called a Flex-Rigid Coupling. Usually, the rigid hubs are mounted on the driving and driven shafts so that the flex halves on the floating shaft may be replaced without disturbing the connected equipment.



Coupling Type EB (Exposed Bolts) Part Numbers

Coupling Size	Flex Rigid Coupling			Rigid Hub②		
	No Bore Part No.	Wt.	Finish Bore① Part No.	No Bore Part No.	Wt.	Finish Bore① Part No.
1	1H EB FR	10	1H EB FR FB	1 EB RHUB	5	1 EB RHUB FB
1 1/2	1 1/2H EB FR	19	1 1/2H EB FR FB	1 1/2 EB RHUB	9	1 1/2 EB RHUB FB
2	2H EB FR	31	2H EB FR FB	2 EB RHUB	15	2 EB RHUB FB
2 1/2	2 1/2H EB FR	55	2 1/2H EB FR FB	2 1/2 EB RHUB	27	2 1/2 EB RHUB FB
3	3H EB FR	83	3H EB FR FB	3 EB RHUB	40	3 EB RHUB FB
3 1/2	3 1/2H EB FR	126	3 1/2H EB FR FB	3 1/2 EB RHUB	65	3 1/2 EB RHUB FB
4	4H EB FR	184	4H EB FR FB	4 EB RHUB	90	4 EB RHUB FB
4 1/2	4 1/2H EB FR	252	4 1/2H EB FR FB	4 1/2 EB RHUB	124	4 1/2 EB RHUB FB
5	5H EB FR	371	5H EB FR FB	5 EB RHUB	119	5 EB RHUB FB
5 1/2	5 1/2H EB FR	418	5 1/2H EB FR FB	5 1/2 EB RHUB	200	5 1/2 EB RHUB FB
6	6H EB FR	504	6H EB FR FB	6 EB RHUB	250	6 EB RHUB FB
7	7H EB FR	792	7H EB FR FB	7 EB RHUB	370	7 EB RHUB FB

Coupling Type SB (Shrouded Bolts) Part Numbers

Coupling Size	Flex Rigid Coupling			Rigid Hub②		
	No Bore Part No.	Wt.	Finish Bore① Part No.	No Bore Part No.	Wt.	Finish Bore① Part No.
1	1H SB FR	10	1H SB FR FB	1 SB RHUB	5	1 SB RHUB FB
1 1/2	1 1/2H SB FR	19	1 1/2H SB FR FB	1 1/2 SB RHUB	9	1 1/2 SB RHUB FB
2	2H SB FR	31	2H SB FR FB	2 SB RHUB	15	2 SB RHUB FB
2 1/2	2 1/2H SB FR	55	2 1/2H SB FR FB	2 1/2 SB RHUB	27	2 1/2 SB RHUB FB
3	3H SB FR	83	3H SB FR FB	3 SB RHUB	40	3 SB RHUB FB
3 1/2	3 1/2H SB FR	126	3 1/2H SB FR FB	3 1/2 SB RHUB	65	3 1/2 SB RHUB FB
4	4H SB FR	184	4H SB FR FB	4 SB RHUB	90	4 SB RHUB FB
4 1/2	4 1/2H SB FR	252	4 1/2H SB FR FB	4 1/2 SB RHUB	124	4 1/2 SB RHUB FB
5	5H SB FR	371	5H SB FR FB	5 SB RHUB	119	5 SB RHUB FB

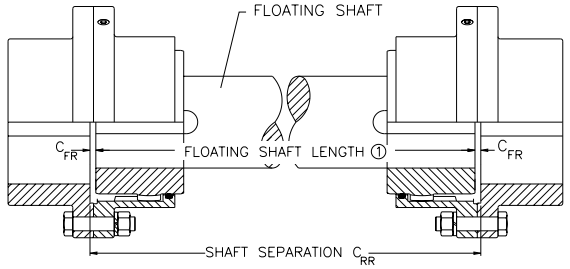
① All finish bores and keyways per AGMA 9002-A86 commercial standard tolerances.
② Rigid hubs are furnished less fasteners.

Flex-Rigid Coupling Data

Coupling Size	Maximum Bore with Standard Keyway		Rating HP / 100 RPM	Torque Rating (lb.-in.)	Peak Torque Rating (lb.-in.)	Maximum Speed (RPM) ②	Dimensions						
	Flex	Rigid					A	B_F	B_R	C_{FR} ①	E	E_R	G_R
1	1 5/8	2 1/4	12	7500	15000	14500	4 9/16	1 17/32	1 21/32	5/32	1 11/16	1 9/16	3
1 1/2	2 1/4	2 11/16	27	17000	34000	12000	6	1 25/32	1 15/16	5/32	1 15/16	1 27/32	3 13/16
2	2 3/4	3 3/8	50	31500	63000	9300	7	2 11/32	2 3/8	5/32	2 7/16	2 9/32	4 13/16
2 1/2	3 1/2	4	90	56700	113400	7900	8 3/8	2 11/16	3	3/16	3 1/32	2 29/32	5 3/4
3	4	4 3/4	160	101000	202000	6800	9 7/16	3 9/32	3 9/16	3/16	3 19/32	3 15/32	6 3/4
3 1/2	4 1/2	5 1/2	235	148000	296000	6000	11	3 27/32	4 1/8	7/32	4 3/16	4 1/32	7 3/4
4	5 1/2	6 3/8	375	236000	472000	5260	12 1/2	4 3/8	4 5/8	5/16	4 3/4	4 7/16	9
4 1/2	6	7 1/4	505	318000	636000	4770	13 5/8	4 27/32	5 1/4	11/32	5 5/16	5 1/16	10 1/8
5	6 7/8	8 1/2	700	441000	882000	4300	15 5/16	5 17/32	5 7/8	11/32	6 1/32	5 11/16	11 3/8
5 1/2*	7 3/4	8	920	580000	1160000	3880	16 3/4	6 7/32	7 5/32	11/32	6 29/32	6 31/32	10 3/4
6*	8 5/8	8 3/4	1205	759000	1518000	3600	18	6 21/32	7 21/32	11/32	7 13/32	7 15/32	11 1/2
7*	10 3/8	10	1840	1160000	2320000	3000	20 3/4	7 11/16	9	7/16	8 11/16	8 3/4	13 3/8

* Sizes 5 1/2, 6 and 7 are only available with exposed bolts. Type EB exposed bolts are standard.
① Floating shaft length is equal to the shaft separation minus 2 times the C_{FR} dimension.
② Max. speed is based on flange stress limits and does not consider lateral critical speed considerations for floating shaft applications.

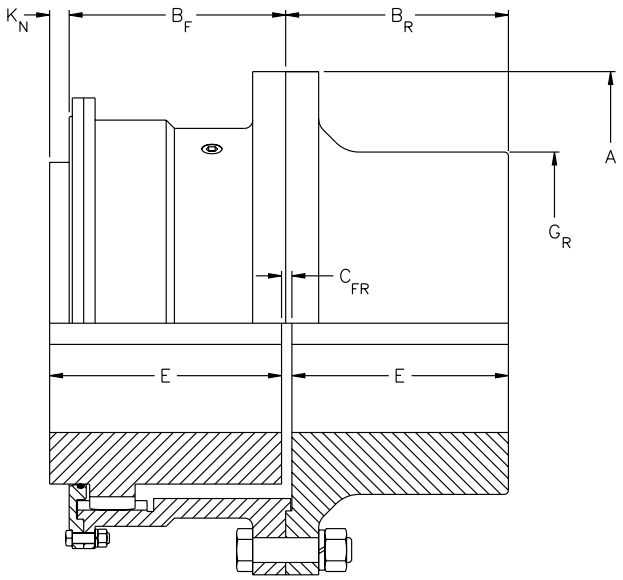
FLOATING SHAFT ASSEMBLY



Ordering Instructions: **When ordering floating shaft couplings, be sure to include hp and rpm, shaft separation, and equipment shaft sizes. Applications with very large shaft separations and/or high speeds may require tubular floating shafts due to lateral critical speed concerns.**

Important: Care must be exercised in proper selection of any shaft coupling. The Users must assure themselves that the design of the shaft to coupling hub connection is adequate for the duty intended.

Flex Rigid and Floating Shaft Couplings
Size 8 - 30



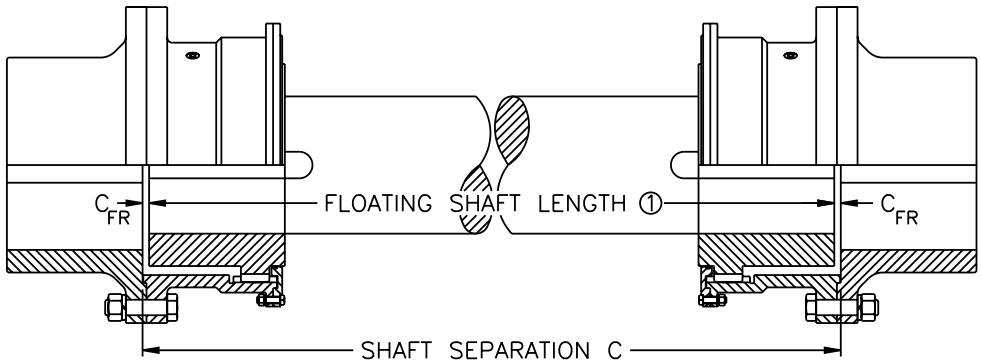
Coupling Type EB
(Exposed Bolts) Part Numbers

Coupling Size	Flex Rigid w/Access	Male Rigid	Female Rigid
8	8H EB FR	8H EB MRHUB	8H EB FRHUB
9	9H EB FR	9H EB MRHUB	9H EB FRHUB
10	10H EB FR	10H EB MRHUB	10H EB FRHUB
11	11H EB FR	11H EB MRHUB	11H EB FRHUB
12	12H EB FR	12H EB MRHUB	12H EB FRHUB
13	13H EB FR	13H EB MRHUB	13H EB FRHUB
14	14H EB FR	14H EB MRHUB	14H EB FRHUB
15	15H EB FR	15H EB MRHUB	15H EB FRHUB
16	16H EB FR	16H EB MRHUB	16H EB FRHUB
18	18H EB FR	18H EB MRHUB	18H EB FRHUB
20	20H EB FR	20H EB MRHUB	20H EB FRHUB
22	22H EB FR	22H EB MRHUB	22H EB FRHUB
24	24H EB FR	24H EB MRHUB	24H EB FRHUB
26	26H EB FR	26H EB MRHUB	26H EB FRHUB
28	28H EB FR	28H EB MRHUB	28H EB FRHUB
30	30H EB FR	30H EB MRHUB	30H EB FRHUB

Coupling Size	Maximum Bore with Standard Key		Rating HP / 100 RPM	Torque Rating (lb.-in. x 1000)	Peak Torque Rating (lb.-in. x 1000)	Maximum Speed (RPM) ②	Weight with Solid Hubs (lb.)	Dimensions					
	Flex	Rigid						A	B_F	B_R	C_{FR} ①	E	G_R
8	10 3/4	11	2230	1404	2808	1750	1470	23 1/4	9 3/4	10 1/8	1/2	9 13/16	15 1/4
9	11 3/4	12 3/4	3170	1995	3990	1625	1960	26	10 7/8	11 13/16	9/16	10 7/8	17 1/4
10	13	13 1/2	4350	2744	5488	1500	2720	28	12	12 3/8	5/8	12	19
11	15	15	5780	3645	7290	1375	3520	30 1/2	13 1/8	13 1/2	5/8	13 1/8	20 3/4
12	16 1/4	16 1/4	7190	4532	9064	1250	4450	33	13 7/8	14 1/4	5/8	13 7/8	22 5/8
13	17 1/2	18	9030	5688	11376	1125	5480	35 3/4	14 3/4	15	3/4	14 5/8	24 5/8
14	18 3/4	19	11080	6982	13964	1000	6560	38	15 5/8	15 7/8	3/4	15 1/2	26 1/4
15	20 3/4	20 1/2	13470	8488	16976	875	7920	40 1/2	16 9/16	16 7/8	3/4	16 1/2	28
16	22	22	16100	10150	20300	750	9560	43	17 1/2	17 7/8	1	17 3/8	29 3/4
18	25 1/4	25	21100	13300	26600	500	12400	47 1/4	18 1/16	18 1/2	1	18	34
20	27 1/4	26	28800	18144	36288	400	16500	53 1/2	21 3/16	21 5/8	1	21 1/8	36
22	30	27	38100	24009	48018	300	21000	59	23	23 5/8	1 1/8	23	38
24	33 1/4	28	42400	26699	53398	200	26300	64 1/4	24 3/4	25 3/8	1 1/8	24 3/4	40
26	36 3/4	29	53000	33415	66830	200	32000	68 1/2	26 1/2	27 1/8	1 1/8	26 1/2	42
28	40	30	65900	41564	83128	200	37700	73 3/4	27 1/8	27 3/4	1 1/8	27 1/8	44
30	43 1/2	36	80300	50614	101228	200	43400	78	27 5/8	28 1/4	1 1/8	27 5/8	50

NOTE: Couplings are only available with exposed bolts.
① Floating shaft length is equal to the shaft separation, minus 2 times the C_{FR} dimension.
② Max. speed is based on flange stress limits and does not consider lateral critical speed considerations for floating shaft applications.

FLOATING SHAFT ASSEMBLY



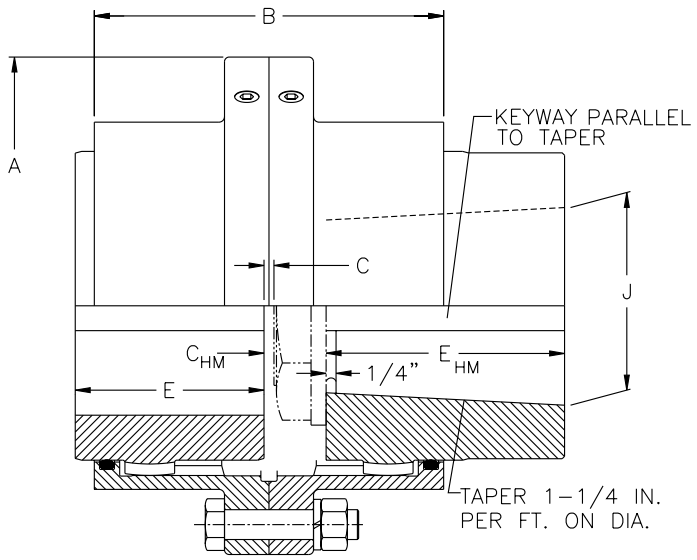
Ordering Instructions: **When ordering floating shaft couplings, be sure to include hp and rpm, shaft separation, and equipment shaft sizes. Applications with very large shaft separations and/or high speeds may require tubular floating shafts due to lateral critical speed concerns.**

Important: Care must be exercised in proper selection of any shaft coupling. The Users must assure themselves that the design of the shaft to coupling hub connection is adequate for the duty intended.

AISE Mill Motor Coupling

The Series H Mill Motor Coupling is designed for use on AISE and other mill motors having tapered shafts with locknuts, and are used primarily in the metals industry. This design is also commonly used on other types of equipment which use tapered shafts with locknuts, such as turbines, pumps, and compressors.

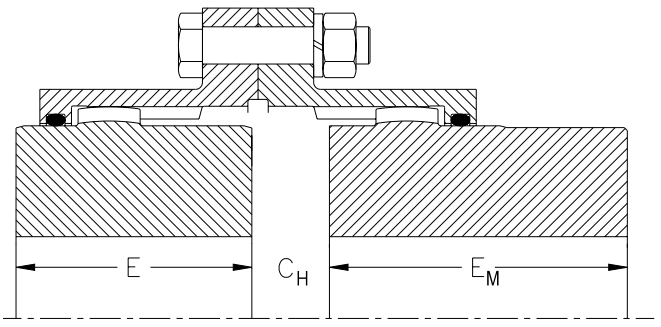
The standard "composite" mill motor hub is a semi-finished hub which can be modified and bored to fit a variety of AISE mill motor frames. Note that one size of coupling will fit several motor frames; conversely, several sizes may fit a single motor frame. See page 163 for proper coupling selection.



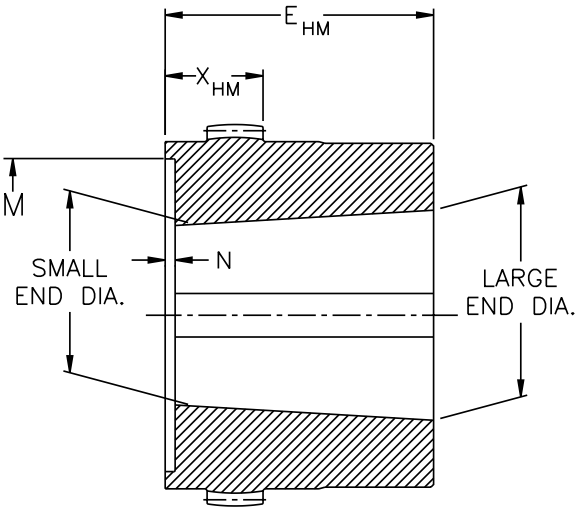
Coupling Size	Maximum Bore with Standard Key	Rating HP / 100 RPM	Torque Rating (lb.-in.)	Peak Torque Rating (lb.-in.)	Maximum Speed (RPM)	Weight with Solid Hubs (lb.)	Dimensions		
							A	B	E
1 1/2	2 1/4	27	17000	34000	12000	22.9	6	3 9/16	1 15/16
2	2 3/4	50	31500	63000	9300	38.9	7	4 11/16	2 7/16
2 1/2	3 1/2	90	56700	113400	7900	70	8 3/8	5 3/8	3 1/32
3	4	160	101000	202000	6800	100	9 7/16	6 9/16	3 19/32
3 1/2	4 1/2	235	148000	296000	6000	155	11	7 11/16	4 3/16
4	5 1/2	375	236000	472000	5260	219	12 1/2	8 3/4	4 3/4
4 1/2	6	505	318000	636000	4770	298	13 5/8	9 11/16	5 5/16
5	6 7/8	700	441000	882000	4300	433	15 5/16	11 1/16	6 1/32
5 1/2*	7 3/4	920	580000	1160000	3880	610	16 3/4	12 7/16	6 29/32
6*	8 5/8	1205	759000	1518000	3600	718	18	13 5/16	7 13/32

See next page for additional dimensions.

* Sizes 5 1/2 and 6 are only available with exposed bolts. Type EB exposed bolts are standard.



MILL MOTOR COMPOSITE HUB
ROUGH BORED

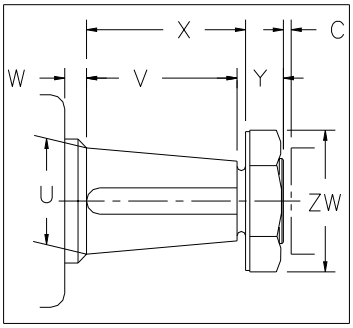


MILL MOTOR COMPOSITE HUB
FINISH BORED

AISE Mill Motor Coupling

Type MM Coupling Size	For: AISE Mill Motor Frame Sizes	Rough Bored Composite Hub Dimensions & Part Numbers				Finish Bored Composite Hub For AISE Mill Motors Dimensions & Part Numbers									
		Dimensions			Part Number	Dimensions						Bore Dia.		Keyway	Part Number
		C_H	E_M	X_M		C	C_{HM}	E_{HM}	X_{HM}	M	N	Large End	Small End		
1 1/2	802 602 AC1 AC2 AC4	3/4	3 7/8	23/32	1 1/2H MMHUB	1/8	3/4	3 5/16	23/32	2 5/8	5/16				1 1/2H MMHUB02
2		1 1/16	4 3/16	27/32	2H MMHUB	1/8	1 1/16	3	27/32	–	–	1.749	1.4365	1/2 x 1/4	2H MMHUB02
2 1/2		1 1/8	5 9/16	1 1/8	2 1/2H MMHUB	3/16	1 1/8	3	1 1/8	–	–				2 1/2H MMHUB02
1 1/2	803 804 603 604	3/4	3 7/8	23/32	1 1/2H MMHUB	1/8	3/4	3 7/8	23/32	2 5/8	3/8				1 1/2H MMHUB0304
2		1 1/16	4 3/16	27/32	2H MMHUB	1/8	1 1/16	3 9/16	27/32	2 5/8	1/16	1.999	1.6344	1/2 x 1/4	2H MMHUB0304
2 1/2		1 1/8	5 9/16	1 1/8	2 1/2H MMHUB	3/16	1 3/16	3 1/2	1 1/16	–	–				2 1/2H MMHUB0304
3		1 3/16	5 5/8	1 5/8	3H MMHUB	3/16	1 3/16	3 1/2	1 5/8	–	–				3H MMHUB0304
2	806 606 AC8 AC12	1 1/16	4 3/16	27/32	2H MMHUB	1/8	1 1/16	4 3/16	27/32	3 1/8	3/16				2 H MMHUB06
2 1/2		1 1/8	5 9/16	1 1/8	2 1/2H MMHUB	3/16	1 5/16	4	15/16	–	–	2.499	2.0823	1/2 x 1/4	2 1/2H MMHUB06
3		1 3/16	5 5/8	1 5/8	3H MMHUB	3/16	1 5/16	4	1 1/2	–	–				3H MMHUB06
3 1/2		1 3/8	6 1/8	1 29/32	3 1/2H MMHUB	1/4	1 3/8	4	1 29/32	–	–				3 1/2H MMHUB06
2 1/2	808 608	1 1/8	5 9/16	1 1/8	2 1/2H MMHUB	3/16	1 9/32	4 21/32	31/32	3 3/4	5/32				2 1/2H MMHUB08
3		1 3/16	5 5/8	1 5/8	3H MMHUB	3/16	1 7/16	4 1/2	1 3/8	–	–	2.9985	2.5298	3/4 x 1/4	3H MMHUB08
3 1/2		1 3/8	6 1/8	1 29/32	3 1/2H MMHUB	1/4	1 1/2	4 1/2	1 25/32	–	–				3 1/2H MMHUB08
2 1/2	810 610 AC18	1 1/8	5 9/16	1 1/8	2 1/2H MMHUB	3/16	1 9/32	4 25/32	31/32	4	9/32				2 1/2H MMHUB10
3		1 3/16	5 5/8	1 5/8	3H MMHUB	3/16	1 9/16	4 1/2	1 1/4	–	–	3.2485	2.7798	3/4 x 1/4	3H MMHUB10
3 1/2		1 3/8	6 1/8	1 29/32	3 1/2H MMHUB	1/4	1 5/8	4 1/2	1 21/32	–	–				3 1/2H MMHUB10
4		1 9/16	6	2 3/16	4H MMHUB	1/4	1 5/8	4 1/2	2 1/8	–	–				4H MMHUB10
2 1/2	812 612 AC25 AC30	1 1/8	5 9/16	1 1/8	2 1/2H MMHUB	3/16	1 9/32	5 13/32	31/32	4 1/4	13/32				2 1/2H MMHUB12
3		1 3/16	5 5/8	1 5/8	3H MMHUB	3/16	1 11/16	5	1 1/8	–	–				3H MMHUB12
3 1/2		1 3/8	6 1/8	1 29/32	3 1/2H MMHUB	1/4	1 3/4	5	1 17/32	–	–	3.623	3.1022	3/4 x 1/4	3 1/2H MMHUB12
4		1 9/16	6	2 3/16	4H MMHUB	1/4	1 3/4	5	2	–	–				4H MMHUB12
4 1/2		1 5/8	7 3/16	2 19/32	4 1/2H MMHUB	5/16	1 13/16	5	2 13/32	–	–				4 1/2H MMHUB12
3	814 614 AC40 AC50	1 3/16	5 5/8	3 9/32	3H MMHUB	3/16	1 11/16	5 1/4	1 1/8	5 1/4	1/8				3H MMHUB14
3 1/2		1 3/8	6 1/8	1 29/32	3 1/2H MMHUB	1/4	1 7/8	5	1 13/32	–	–				3 1/2H MMHUB14
4		1 9/16	6	2 3/16	4H MMHUB	1/4	1 7/8	5	1 7/8	–	–	4.248	3.7272	1 x 3/8	4H MMHUB14
4 1/2		1 5/8	7 3/16	2 19/32	4 1/2H MMHUB	5/16	1 15/16	5	2 9/32	–	–				4 1/2H MMHUB14
5		1 5/8	8 5/16	3 9/32	5H MMHUB	5/16	1 15/16	5	2 31/32	–	–				5H MMHUB14
3 1/2	816 616	1 3/8	6 1/8	1 29/32	3 1/2H MMHUB	1/4	2	5 1/2	1 9/32	–	–				3 1/2H MMHUB16
4		1 9/16	6	2 3/16	4H MMHUB	1/4	2	5 1/2	1 3/4	–	–				4H MMHUB16
4 1/2		1 5/8	7 3/16	2 19/32	4 1/2H MMHUB	5/16	2 1/16	5 1/2	2 5/32	–	–				4 1/2H MMHUB16
5		1 5/8	8 5/16	3 9/32	5H MMHUB	5/16	2 1/16	5 1/2	2 27/32	–	–	4.6225	4.0496	1 1/4 x 3/8	5H MMHUB16
5 1/2		1 5/8	10 5/16	3 7/8	5 1/2H MMHUB	5/16	2 1/16	5 1/2	3 7/16	–	–				5 1/2H MMHUB16
6		1 5/8	10 5/16	4 5/16	6H MMHUB	5/16	2 1/16	5 1/2	3 7/8	–	–				6H MMHUB16
4	818 618	1 9/16	6	2 3/16	4H MMHUB	1/4	1 9/16	6	2 3/16	–	–				4H MMHUB18
4 1/2		1 5/8	7 3/16	2 19/32	4 1/2H MMHUB	5/16	1 5/8	6	2 19/32	–	–				4 1/2H MMHUB18
5		1 5/8	8 5/16	3 9/32	5H MMHUB	5/16	1 5/8	6	3 9/32	–	–	4.9975	4.3725	1 1/4 x 1/2	5H MMHUB18
5 1/2		1 5/8	10 5/16	3 7/8	5 1/2H MMHUB	5/16	1 5/8	6	3 7/8	–	–				5 1/2H MMHUB18
6		1 5/8	10 5/16	4 5/16	6H MMHUB	5/16	1 5/8	6	4 5/16	–	–				6H MMHUB18
4 1/2	620	1 5/8	7 3/16	2 19/32	4 1/2H MMHUB	5/16	2 1/16	6 3/4	2 5/32	–	–				4 1/2H MMHUB20
5		1 5/8	8 5/16	3 9/32	5H MMHUB	5/16	2 1/16	6 3/4	2 27/32	–	–	5.872	5.1689	1 1/2 x 3/4	5H MMHUB20
5 1/2		1 5/8	10 5/16	3 7/8	5 1/2H MMHUB	5/16	2 1/16	6 3/4	3 7/16	–	–				5 1/2H MMHUB20
6		1 5/8	10 5/16	4 5/16	6H MMHUB	5/16	2 1/16	6 3/4	3 7/8	–	–				6H MMHUB20
5	622	1 5/8	8 5/16	3 9/32	5H MMHUB	5/16	2 11/16	7 1/4	2 7/32	–	–				5H MMHUB22
5 1/2		1 5/8	10 5/16	3 7/8	5 1/2H MMHUB	5/16	2 11/16	7 1/4	2 13/16	–	–	6.247	5.4918	1 1/2 x 3/4	5 1/2H MMHUB22
6		1 5/8	10 5/16	4 5/16	6H MMHUB	5/16	2 11/16	7 1/4	3 1/4	–	–				6H MMHUB22
5 1/2	624	1 5/8	10 5/16	3 7/8	5 1/2H MMHUB	5/16	2 11/16	9 1/4	2 13/16	–	–				5 1/2H MMHUB24
6		1 5/8	10 5/16	4 5/16	6H MMHUB	5/16	2 11/16	9 1/4	3 1/4	–	–	6.9965	6.0330	1 1/2 X 3/4	6H MMHUB24

*ALL KEYWAYS SHOWN ARE PARALLEL TO THE TAPER. TAPER IS 1 1/4 INCH PER FOOT ON DIAMETER.



TAPERED BORES For Tapered Shafts, with or without locknut, determine applicable AISE Mill Motor frame or give data below:

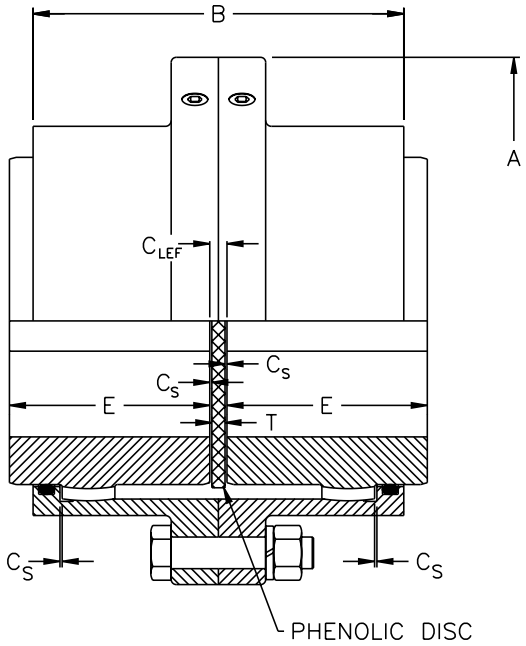
1. U Major diameter.
2. V Length of tapered portion of shaft.
3. X Length to face of lockwasher.
4. Y Length of threaded projection.
5. ZW Locknut diameter across corners.
6. W Clearance to bearing housing.
7. Taper (inches on diameter per foot of length).
8. Keyway width and depth.
9. Whether keyway is parallel to shaft or to taper.
10. C Shaft separation if machines are in place.

Limited End Float Coupling Size 1-7

For sleeve bearing motor applications, a Series H standard full flex coupling is supplied with an LEF disc to limit the axial float of the motor rotor, and protect the motor bearings at start-up and shut-down. The hub separation, C_{LEF} is larger than for a standard full flex, and the phenolic LEF disc is placed between the hubs at assembly, limiting the float of the motor rotor to the total LEF value shown.

The equipment should be installed with the proper hub separation, C_{LEF}, when the motor rotor is located on magnetic center.

The LEF disc part numbers are listed below. See page 166 for the standard full flex part numbers.



Note: Spacer part number references the shaft separation, not the actual length of the spacer.

Coupling Size	Total LEF (in.)	Dimensions						LEF Disc①	
		A	B	$C_{S\ min.}$	C_{LEF} (Hub Sep.)	E	T (Disc Width)	Part No.	Wt.
1	1/8	4 9/16	3 1/16	1/32	3/16	1 11/16	1/8	1H LEFD	1
1 1/2	1/8	6	3 9/16	1/32	3/16	1 15/16	1/8	1 1/2H LEFD	1
2	1/8	7	4 11/16	1/32	3/16	2 7/16	1/8	2H LEFD	1
2 1/2	3/16	8 3/8	5 3/8	3/64	9/32	3 1/32	3/16	2 1/2H LEFD	1
3	3/16	9 7/16	6 9/16	3/64	9/32	3 19/32	3/16	3H LEFD	1
3 1/2	3/16	11	7 11/16	3/64	13/32	4 3/16	5/16	3 1/2H LEFD	2
4	3/16	12 1/2	8 3/4	3/64	13/32	4 3/4	5/16	4H LEFD	2
4 1/2	3/16	13 5/8	9 11/16	3/64	17/32	5 5/16	7/16	4 1/2H LEFD	2
5	3/16	15 5/16	11 1/16	3/64	17/32	6 1/32	7/16	5H LEFD	2
5 1/2*	3/16	16 3/4	12 7/16	3/64	19/32	6 29/32	1/2	5 1/2H LEFD	2
6*	3/16	18	13 5/16	3/64	19/32	7 13/32	1/2	6H LEFD	2
7*	1/4	20 3/4	15 3/8	1/16	3/4	8 11/16	5/8	7H LEFD	2

* Sizes 5 1/2, 6 and 7 are only available with exposed bolts. Type EB exposed bolts are standard.

① LEF Discs are used only in close coupled applications. One disc is required per coupling.

Note: For ratings and max. bores refer to page 164.

Coupling Greases

KOP-FLEX offers greases specifically designed for use in coupling applications. For proper lubrication and long service life, use KSG Standard Coupling Grease, or KHP High Performance Coupling Grease. See pages 204-206 for detailed specifications.

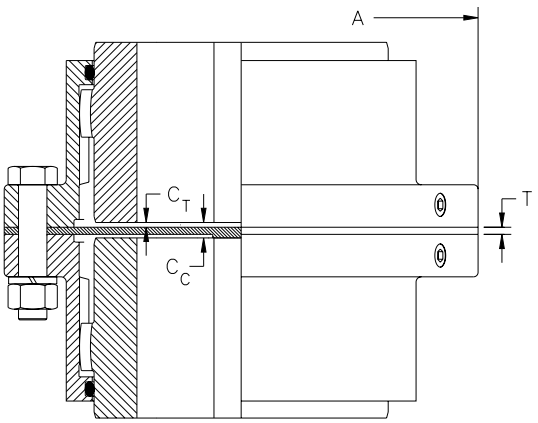
Vertical Coupling Size 1-7

For vertical applications, a standard full flex coupling is supplied with a vertical plate, and vertical flange fasteners are used in place of standard. The vertical plate is installed with button down, and is used to support the assembled sleeves.

*Coupling Size	Dimensions				Vertical Plate①		Fastener Set (includes gasket)	
	A	C_T	C_C	T	Part No.	Wt.	Part No.	Wt.
1	4 9/16	1/16	1/4	1/8	1H EB VP	1	1 EB VSFS	1
1 1/2	6	1/16	1/4	1/8	1 1/2H EB VP	1	1 1/2 EB VSFS	1
2	7	1/16	1/4	1/8	2H EB VP	2	2 EB VSFS	1
2 1/2	8 3/8	3/32	5/16	1/8	2 1/2H EB VP	2	2 1/2 EB VSFS	2
3	9 7/16	3/32	5/16	1/8	3H EB VP	3	3 EB VSFS	3
3 1/2	11	1/8	7/16	3/16	3 1/2H EB VP	4	3 1/2 EB VSFS	5
4	12 1/2	1/8	7/16	3/16	4H EB VP	7	4 EB VSFS	5
4 1/2	13 5/8	5/32	1/2	3/16	4 1/2H EB VP	10	4 1/2 EB VSFS	7
5	15 5/16	5/32	1/2	3/16	5H EB VP	12	5 EB VSFS	9
5 1/2	16 3/4	5/32	9/16	1/4	5 1/2H EB VP	15	5 1/2 EB VSFS	14
6	18	5/32	9/16	1/4	6H EB VP	19	6 EB VSFS	14
7	20 3/4	3/16	11/16	5/16	7H EB VP	25	7 EB VSFS	22

* Exposed bolts are standard for all sizes.

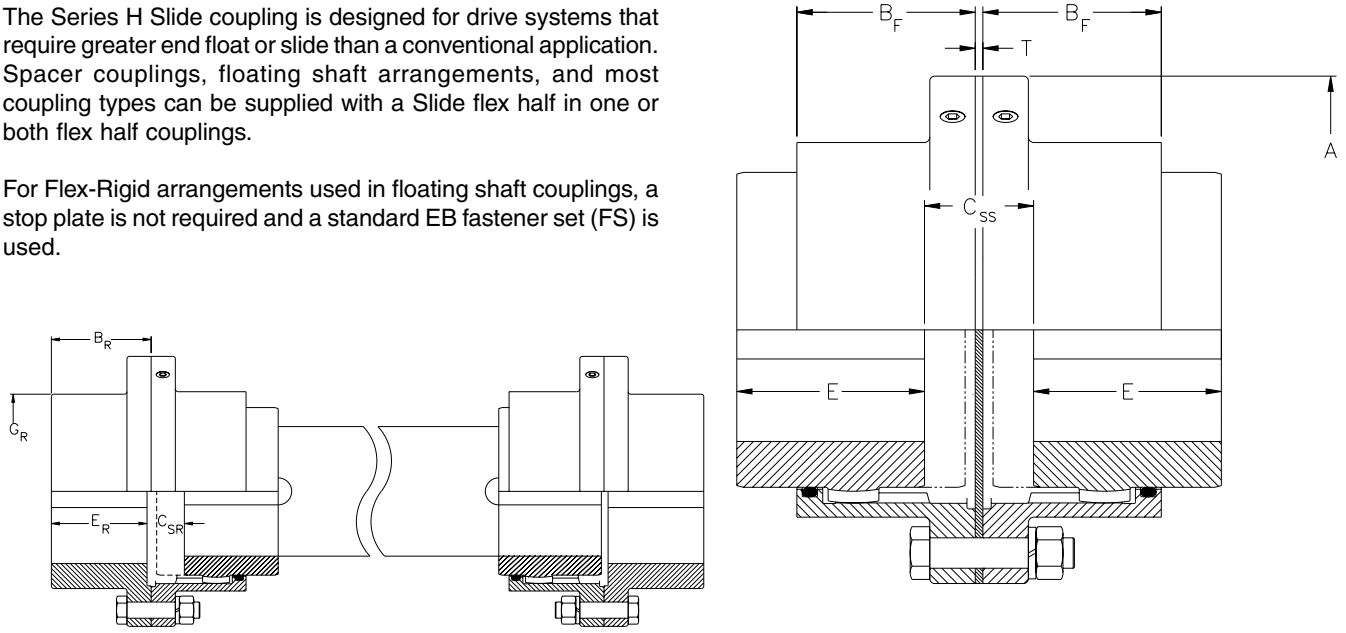
① LEF Discs are used only in close coupled applications. One disc is required per coupling.



Slide Coupling

The Series H Slide coupling is designed for drive systems that require greater end float or slide than a conventional application. Spacer couplings, floating shaft arrangements, and most coupling types can be supplied with a Slide flex half in one or both flex half couplings.

For Flex-Rigid arrangements used in floating shaft couplings, a stop plate is not required and a standard EB fastener set (FS) is used.



FLOATING SHAFT ASSEMBLY

Coupling Size*	Total Slide①		Dimensions										
	Full-Flex	Flex-Rigid	A	B_F	B_R	C_{SS} Hub & Shaft Separation		C_{SR} Hub & Shaft Separation		E	E_R	T	O
						Min.	Max.	Min.	Max.				
1	1/8	3/32	4 9/16	1 17/32	1 21/32	1/4	3/8	1/8	7/32	1 11/16	1 9/16	1/8	2 3/8
1 1/2	3/8	7/32	6	1 25/32	1 15/16	1/4	5/8	1/8	11/32	1 15/16	1 27/32	1/8	3 1/8
2	7/8	15/32	7	2 11/32	2 3/8	1/4	1 1/8	1/8	19/32	2 7/16	2 9/32	1/8	4
2 1/2	9/16	5/16	8 3/8	2 11/16	3	5/16	7/8	5/32	15/32	3 1/32	2 29/32	1/8	4 7/8
3	1 7/16	3/4	9 7/16	3 9/32	3 9/16	5/16	1 3/4	5/32	29/32	3 19/32	3 15/32	1/8	5 5/8
3 1/2	1 5/8	7/8	11	3 27/32	4 1/8	7/16	2 1/16	5/32	1 1/32	4 3/16	4 1/32	3/16	6 1/2
4	2	1 1/16	12 1/2	4 3/8	4 5/8	7/16	2 7/16	1/4	1 5/16	4 3/4	4 7/16	3/16	7 3/4
4 1/2	2 1/4	1 7/32	13 5/8	4 27/32	5 1/4	1/2	2 3/4	1/4	1 15/32	5 5/16	5 1/16	3/16	8 1/2
5	3 5/16	1 3/4	15 5/16	5 17/32	5 7/8	1/2	3 13/16	1/4	2	6 1/32	5 11/16	3/16	9 1/2
5 1/2	3 9/16	1 7/8	16 3/4	6 7/32	7 5/32	9/16	4 1/8	5/16	2 3/16	6 29/32	6 31/32	1/4	10 1/2
6	4 1/16	2 1/8	18	6 21/32	7 21/32	9/16	4 5/8	5/16	2 7/16	7 13/32	7 15/32	1/4	11 1/2
7	4 7/8	2 9/16	20 3/4	7 11/16	9	11/16	5 9/16	3/8	2 15/16	8 11/16	8 3/4	5/16	13 1/2

*Exposed bolts are standard for all sizes.
Note: For ratings, max. bores and additional dimensions, see page 168.

Coupling Size *	Full Flex Coupling			Stop Plate		Fastener Set (Includes Gasket)		Slide Sleeve		Flex Hub	
	No Bore Part No.	Wt.	Finish Bore① Part No.	Part No.	Wt.	Part No.	Wt.	Part No.	Wt.	No Bore Part No.	Wt.
1	1H EB SSFF	10	1H EB SSFF FB	1 EB SP	1	1 EB VSFS	1	1H EB SSLEEVE	2	1H FHUB	3
1 1/2	1 1/2H EB SSFF	18	1 1/2H EB SSFF FB	1 1/2 EB SP	1	1 1/2 EB VSFS	1	1 1/2H EB SSLEEVE	6	1 1/2H FHUB	3
2	2H EB SSFF	28	2H EB SSFF FB	2 EB SP	2	2 EB VSFS	1	2H EB SSLEEVE	8	2H FHUB	6
2 1/2	2 1/2H EB SSFF	50	2 1/2H EB SSFF FB	2 1/2 EB SP	2	2 1/2 EB VSFS	2	2 1/2H EB SSLEEVE	14	2 1/2H FHUB	11
3	3H EB SSFF	74	3H EB SSFF FB	3 EB SP	3	3 EB VSFS	3	3H EB SSLEEVE	17	3H FHUB	18
3 1/2	3 1/2H EB SSFF	110	3 1/2H EB SSFF FB	3 1/2 EB SP	4	3 1/2 EB VSFS	5	3 1/2H EB SSLEEVE	28	3 1/2H FHUB	26
4	4H EB SSFF	170	4H EB SSFF FB	4 EB SP	7	4 EB VSFS	5	4H EB SSLEEVE	41	4H FHUB	44
4 1/2	4 1/2H EB SSFF	230	4 1/2H EB SSFF FB	4 1/2 EB SP	10	4 1/2 EB VSFS	7	4 1/2H EB SSLEEVE	53	4 1/2H FHUB	62
5	5H EB SSFF	350	5H EB SSFF FB	5 EB SP	12	5 EB VSFS	9	5H EB SSLEEVE	80	5H FHUB	90
5 1/2	5 1/2H EB SSFF	400	5 1/2H EB SSFF FB	5 1/2 EB SP	15	5 1/2 EB VSFS	14	5 1/2H EB SSLEEVE	89	5 1/2H FHUB	105
6	6H EB SSFF	470	6H EB SSFF FB	6 EB SP	19	6 EB VSFS	14	6H EB SSLEEVE	100	6H FHUB	130
7	7H EB SSFF	790	7H EB SSFF FB	7 EB SP	25	7 EB VSFS	22	7H EB SSLEEVE	160	7H FHUB	210

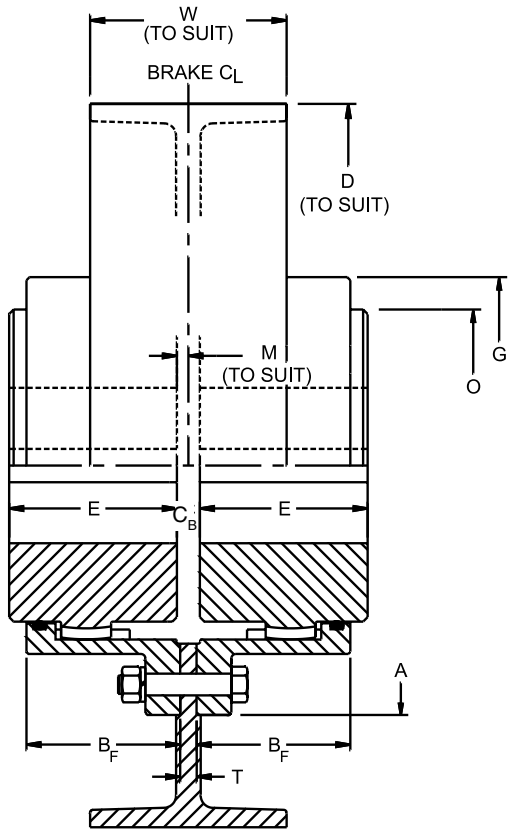
* Exposed bolts are standard for all sizes.
① All finish bores and keyways per AGMA 9002-A86 commercial standard tolerances with interference fit bores. Clearance fit bores are available on request and include one setscrew over keyway.

Brake Wheel Couplings

Series H Brakewheel couplings are comprised of standard full flex couplings with longer flange bolts and an extra gasket. Brakewheels are piloted to the outside diameter of the sleeve flanges. These couplings are also available in flex rigid configurations and with hubs bore for AISE mill motors.

Standard brakewheels are made from carbon steel, but are also commonly supplied in ductile iron for better heat dissipation when braking. The user should specify the required brakewheel material when ordering. The brakewheel dimensions shown below are for reference and can be modified to suit your particular application.

Brakewheels may also be used with the FAST'S® full flex, flex rigid, mill motor and double engagement designs. Consult KOP-FLEX for any special requirements.



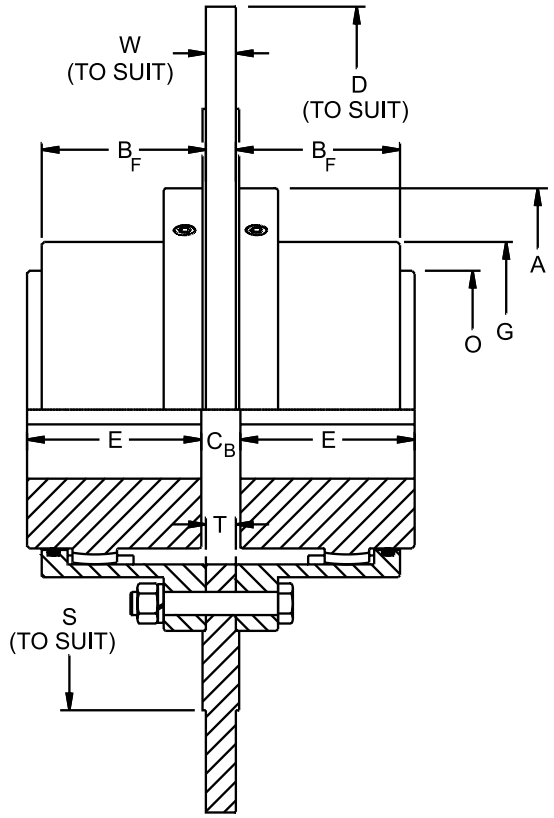
CPLG Size	Maximum Bore with Standard Keyway	Rating HP / 100 RPM	Torque Rating (lb.-in.)	Peak Torque Rating (lb.-in.)	Coupling Dimensions (inches)						Typical Brakewheel Dimensions (inches)		
					A	B_F	C_B	E	G	O	T	D Minimum	Typical W (Ref.)
1	1 5/8	12	7500	15000	4 9/16	1 17/32	1/2	1 11/16	3 1/16	2 3/8	3/8	7	2 3/4
1 1/2	2 1/4	27	17000	34000	6	1 25/32	5/8	1 15/16	3 15/16	3 1/8	1/2	8	3 1/4
2	2 7/8	50	31500	63000	7	2 11/32	5/8	2 7/16	4 15/16	4	1/2	9 5/8	3 3/4
2 1/2	3 1/2	90	56700	113400	8 3/8	2 11/16	3/4	3 1/32	5 7/8	4 7/8	9/16	11 3/8	4 3/4
3	4	160	101000	202000	9 7/16	3 9/32	3/4	3 19/32	6 7/8	5 5/8	9/16	12 5/8	5 3/4
3 1/2	4 5/8	235	148000	296000	11	3 27/32	1	4 3/16	7 29/32	6 1/2	3/4	14 5/8	6 3/4
4	5 1/2	375	236000	472000	12	4 3/8	1	4 3/4	9 1/4	7 3/4	3/4	16 7/8	7 3/4
4 1/2	6 1/4	505	318000	636000	13 5/8	4 27/32	1 1/16	5 5/16	10 3/8	8 1/2	3/4	18	8 3/4
5	7 1/8	700	441000	882000	15 5/16	5 17/32	1 5/16	6 1/32	11 9/16	9 1/2	1	19 3/8	9 3/4
5 1/2	8	920	580000	1160000	16 3/4	6 7/32	1 5/16	6 29/32	12 11/16	10 1/2	1	20 7/8	10 1/4
6	8 7/8	1205	759000	1518000	18	6 21/32	1 5/16	7 13/32	13 7/8	11 1/2	1	23	11 1/4
7	10 3/8	1840	1160000	2320000	20 3/4	7 11/16	1 3/8	8 11/16	16 1/16	13 1/2	1	26	12 1/4

Brake Disc Couplings

Series H Brake Disc couplings use standard full flex couplings with longer flange bolts and an extra gasket. Brake Discs are piloted to the outside diameter of the sleeve flanges. These couplings are also available in flex rigid configurations and with hubs bore for AISE mill motors.

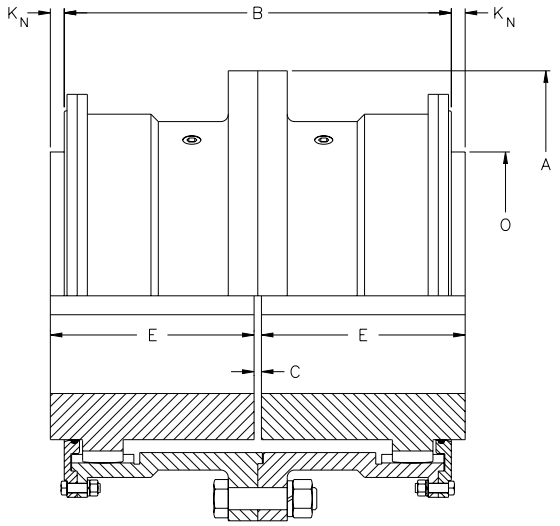
Standard brake discs are made from carbon steel, but are also commonly supplied in ductile iron for better heat dissipation when braking. The user should specify the required brake disc material when ordering. The brake disc dimensions shown below are for reference and can be modified to suit your particular application.

Brake discs may also be used with the FAST'S® full flex, flex rigid, mill motor, and double engagement designs. Consult KOP-FLEX for any special requirements.

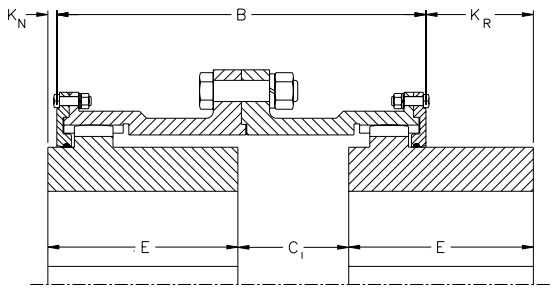


CPLG Size	Maximum Bore with Standard Key	Rating HP / 100 RPM	Torque Rating (lb.-in.)	Peak Torque Rating (lb.-in.)	Coupling Dimensions (inches)						Brake Disc Dimensions (inches)			
					A	B_F	C_B	E	G	O	T	Typical S (Ref.)	Typical D (Ref.)	Typical W (Ref.)
1	1 5/8	12	7500	15000	4 9/16	1 17/32	1/2	1 11/16	3 1/16	2 3/8	3/8	8	14	3/8
1 1/2	2 1/4	27	17000	34000	6	1 25/32	5/8	1 15/16	3 15/16	3 1/8	1/2	8	14, 18	1/2
2	2 3/4	50	31500	63000	7	2 11/32	5/8	2 7/16	4 15/16	4	1/2	10	14, 16, 18	1/2
2 1/2	3 1/2	90	56700	113400	8 3/8	2 11/16	3/4	3 1/32	5 7/8	4 7/8	9/16	12	16, 18, 20 1/4	9/16
3	4	160	101000	202000	9 7/16	3 9/32	3/4	3 19/32	6 7/8	5 5/8	9/16	14 1/4	16, 18, 20 1/4	9/16
3 1/2	4 1/2	235	148000	296000	11	3 27/32	1	4 3/16	7 29/32	6 1/2	3/4	14 1/4	20 1/4, 28	3/4
4	5 1/2	375	236000	472000	12	4 3/8	1	4 3/4	9 1/4	7 3/4	3/4	14 1/4	20 1/4, 28	3/4
4 1/2	6	505	318000	636000	13 5/8	4 27/32	1 1/16	5 5/16	10 3/8	8 1/2	3/4	22	28, 32	3/4
5	6 7/8	700	441000	882000	15 5/16	5 17/32	1 5/16	6 1/32	11 9/16	9 1/2	1	22	28, 32	1
5 1/2	7 3/4	920	580000	1160000	16 3/4	6 7/32	1 5/16	6 5/8	12 11/16	10 1/2	1	22	28, 32	1
6	8 5/8	1205	759000	1518000	18	6 21/32	1 5/16	7 13/32	13 7/8	11 1/2	1	22	32, 36	1
7	10 3/8	1840	1160000	2320000	20 3/4	7 11/16	1 3/8	8 11/16	16 1/16	13 1/2	1	22	32, 36	1

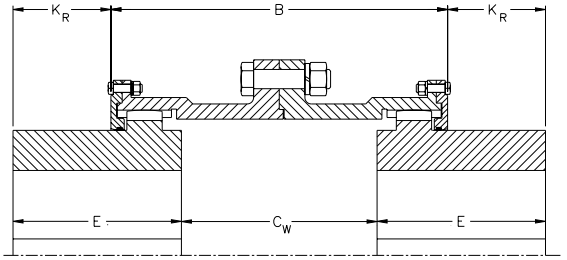
Alloy Steel Series H couplings, size 8 through 30, are identical in design to the standard couplings, except that the material of the hubs and sleeves are alloy steel for higher torque capacity. Grade 8 bolts are substituted for higher strength as well. The bolts are special with respect to body length, thread length, and bolt body tolerance. All end rings are gasketed and are bolted to the sleeves which can be easily removed for inspection of the gear teeth without removing the hub from the shaft. Hubs may be installed in the standard position, or with one or both hubs reversed to accommodate various shaft separations. **Sizes 8 through 30 are available in exposed bolt only.**



Coupling Size	Maximum Bore with Standard Key	Rating HP / 100 RPM	Torque Rating (lb.-in. x 1000)	Peak Torque Rating (lb.-in. x 1000)	Maximum Speed (RPM)	Weight with Solid Hubs (lb.)	Dimensions						
							A	B	C	C_1	C_W	E	O
8	10 3/4	4179	2633	7899	1750	1430	23 1/4	19 1/2	3/8	5 9/16	10 3/4	9 13/16	14
9	11 3/4	5938	3741	11223	1625	2000	26	21 3/4	1/2	6 1/4	12	10 7/8	15 1/2
10	13	8167	5145	15435	1500	2670	28	24	1/2	7 1/8	13 3/4	12	17 1/2
11	15	10848	6834	20502	1375	3520	30 1/2	26 1/4	1/2	7 7/8	15 1/4	13 1/8	19 1/2
12	16 1/4	13489	8498	25494	1250	4450	33	27 3/4	1/2	8 1/8	15 3/4	13 7/8	21 1/2
13	17 1/2	16929	10665	31995	1125	5410	35 3/4	29 1/2	3/4	8 7/16	16 1/8	14 5/8	23
14	18 3/4	20779	13091	39273	1000	6600	38	31 1/4	3/4	9	17 1/4	15 1/2	25
15	20 3/4	25262	15915	47745	875	8040	40 1/2	33 1/8	3/4	9 7/16	18 1/8	16 1/2	27
16	22	30208	19031	57093	750	9680	43	35	1	9 7/8	18 3/4	17 3/8	29
18	25 1/4	39584	24938	74814	500	12500	47 1/4	36 1/8	1	10 1/4	19 1/2	18	33
20	27 1/4	54000	34020	102060	400	17900	53 1/2	42 3/8	1	12 3/8	23 3/4	21 1/8	36 1/2
22	30	71456	45017	135051	300	23300	59	46	1	13 3/4	26 1/2	23	40
24	33 1/4	79462	50061	150183	200	30300	64 1/4	49 1/2	1	15	29	24 3/4	44 1/2
26	36 3/4	99449	62653	187959	200	37700	68 1/2	53	1	15 5/8	30 1/4	26 1/2	48 1/2
28	40	123703	77933	233799	200	45200	73 3/4	54 1/4	1	15 7/8	30 3/4	27 1/8	52 1/2
30	43 1/2	150637	94901	284703	200	52700	78	55 1/4	1	15 7/8	30 3/4	27 5/8	56 1/2



ONE HUB REVERSED

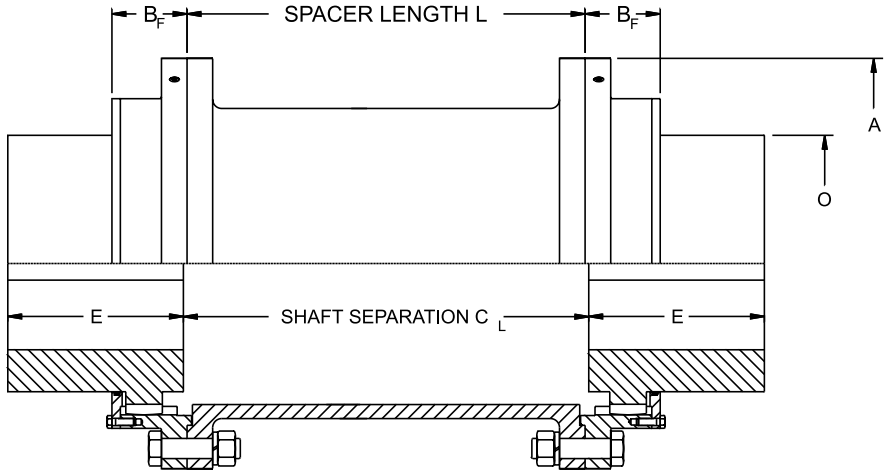


TWO HUBS REVERSED

Coupling Size	Center Flange			End Ring		
	Quantity	Size & Length	Bolt Circle	Quantity (each)	Size & Length	Bolt Circle
8	16	1 1/8 x 4 1/8	20 3/4	10	1/2 x 2	19 3/8
9	18	1 1/4 x 4 1/2	23 1/4	12	5/8 x 2 3/16	21 3/4
10	18	1 3/8 x 5 3/8	25 1/4	12	5/8 x 2 3/16	23 7/8
11	18	1 1/2 x 5 7/8	27 1/2	12	5/8 x 2 3/16	26 1/16
12	18	1 1/2 x 6 1/8	30	12	3/4 x 2 9/16	28 5/16
13	18	1 5/8 x 6 3/8	32 1/4	12	3/4 x 2 9/16	30 1/2
14	18	1 3/4 x 6 5/8	34 1/2	14	3/4 x 2 9/16	32 5/8
15	20	1 3/4 x 6 5/8	36 3/4	14	7/8 x 2 7/8	35
16	20	2 x 7 3/8	39	14	7/8 x 2 7/8	37 1/8
18	22	2 x 7 3/8	43 1/4	14	7/8 x 2 7/8	41 3/8
20	22	2 1/4 x 7 5/8	48 3/4	16	1 x 3 5/8	46 1/4
22	22	2 1/2 x 8 1/8	53 1/2	16	1 x 3 5/8	50 3/4
24	22	2 3/4 x 8 7/8	58 1/4	16	1 1/8 x 4 1/8	55
26	24	2 3/4 x 8 7/8	62 1/2	18	1 1/8 x 4 1/8	59 1/4
28	22	3 x 9 5/8	67 1/4	16	1 1/4 x 4 1/4	63 11/16
30	24	3 x 9 5/8	71 1/2	18	1 1/4 x 4 1/4	68 3/16

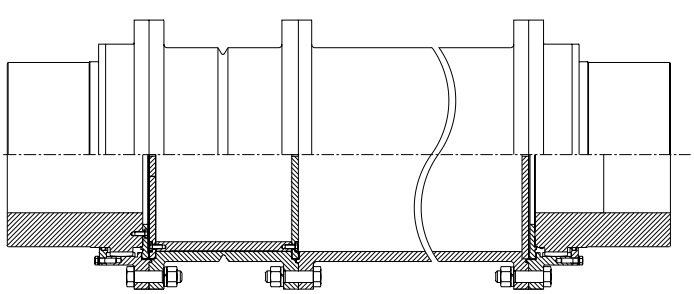
Alloy Steel Spacer Coupling

Alloy Steel Series H spacer couplings are available for applications with extended shaft separations and offer the same higher torque ratings of the close coupled alloy steel design. Bolt on end rings are supplied to allow inspection of the hub teeth without removing the hub from the shaft.

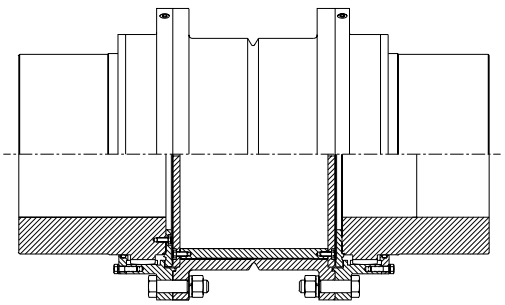


Coupling Size	Maximum Bore with Std. Key	Rating HP/100 RPM	Torque Rating (lb.-in. x 1000)	Peak Torque Rating (lb.-in. x 1000)	Maximum Speed (RPM)	Dimensions			
						A	B_F	E	O
8	10 3/4	4179	2633	7899	1750	23 1/4	4 3/8	9 13/16	14
9	11 3/4	5938	3741	11223	1625	26	4 7/8	10 7/8	15 1/2
10	13	8167	5145	15435	1500	28	5 1/8	12	17 1/2
11	15	10848	6834	20502	1375	30 1/2	5 7/16	13 1/8	19 1/2
12	16 1/4	13489	8498	25494	1250	33	6	13 7/8	21 1/2
13	17 1/2	16929	10665	31995	1125	35 3/4	6 11/16	14 5/8	23
14	18 3/4	20779	13091	39273	1000	38	6 15/16	15 1/2	25
15	20 3/4	25262	15915	47745	875	40 1/2	7 17/32	16 1/2	27
16	22	30208	19031	57093	750	43	8 7/32	17 3/8	29
18	25 1/4	39584	24938	74814	500	47 1/4	8 13/32	18	33
20	27 1/4	54000	34020	102060	400	53 1/2	9 3/8	21 1/8	36 1/2
22	30	71456	45017	135051	300	59	9 13/16	23	40
24	33 1/4	79462	50061	150183	200	64 1/4	10 1/4	24 3/4	44 1/2
26	36 3/4	99449	62653	187959	200	68 1/2	11 3/8	26 1/2	48 1/2
28	40	123703	77933	233799	200	73 3/4	11 3/4	27 1/8	52 1/2
30	43 1/2	150637	94901	284703	200	78	12 3/16	27 5/8	56 1/2

Shear spacer designs are used where there is a need to prevent large peak torques from being transmitted back through the drive train. This design acts as a fuse to prevent damage to large, expensive drive train equipment due to wrecks or cobbles in the mill stands.



Combination Spacer Design with Shear



Shear Spacer for Torque Overload Release

the power of EPT™

Connect at www.emerson-ept.com to receive:

- Cost savings through electronic services
- Engineering efficiencies via online technical support
- Integrated site for integrated solutions across seven major brands

or www.kopflex.com for Engineered couplings designed to order.

Browning®

KOP-FLEX®

McGILL®

Morse®

ROLLWAY®

SEALMASTER®

US GEARMOTORS™

Our Web Site Provides a Wide Range of Efficient eBusiness Tools

User-friendly site provides comprehensive data on demand.

Product information is readily available to all visitors and registrants "24-7."

- Corporate overview
- All product families and brands
- Find a distributor
- Literature request forms

EDGE® Online provides you with technical information and product selection capabilities

Also available around-the-clock, these electronic tools provide for efficient drive design and product selection:

- **eCatalog** — an interactive, robust electronic "database" with over 100,000 part numbers searchable by part number or general description providing features and benefits of each product line
- **Product Selection** — selection tools with extensive engineering efficiency benefits
- **Smart Interchange** — a dynamic tool that provides the user an intelligent interchange for competitive parts
- **CAD** — an online service that allows users to view and upload a 2D or 3D CAD template drawing in a number of customer-compatible formats to be integrated into your drawings
- **Media Library** — digital (PDF) version of paper catalogs, documents, and downloadable installation and maintenance instructions
- **Engineered Solutions** — a quick and easy way for engineers to communicate special application information