

Light-To-Medium Duty Applications are handled readily by the FAST'S® Model B coupling line, sizes #1 through #3 1/2. All Model B couplings are designed for 1/2° static angular misalignment per flex half.

The Distinguishing Feature of the FAST'S® Model B coupling is its **all-metal end ring** design in a configuration that is smaller in size and lighter in weight than the FAST'S® Coupling — while maintaining the same maximum bore capacities.

Application

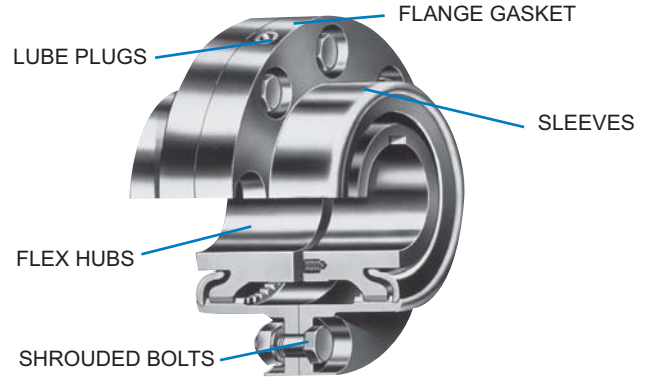
The FAST'S® Model B coupling can be used to directly connect any two shaft ends from 1/2 inch to over 4 inches in diameter on centrifugal pumps, small compressors, blowers, conveyor drives, fan drives, and all other similar medium-duty, moderate-speed applications.

Model B couplings are not dynamically balanced.

Description

Model B couplings are manufactured from the same materials and to the same quality standards as the larger, heavier FAST'S® type.

The Model B end ring provides a permanent seal and permits a compact design. Each sleeve has a Type UD lube plug permitting assembly at 180° apart to facilitate lubrication.



When properly installed and lubricated the Model B coupling should require little maintenance. Under most conditions the lubricant reservoir is adequate to allow continuous operation for a year or more.

All flange bolt holes are precision drilled to assure flange piloting and interchangeability. Model B bolts are special with respect to body length, thread length, and bolt body tolerance.

Flex Rigid and Floating Shaft Couplings

Coupling Type SB (Shrouded Bolts) Part Numbers

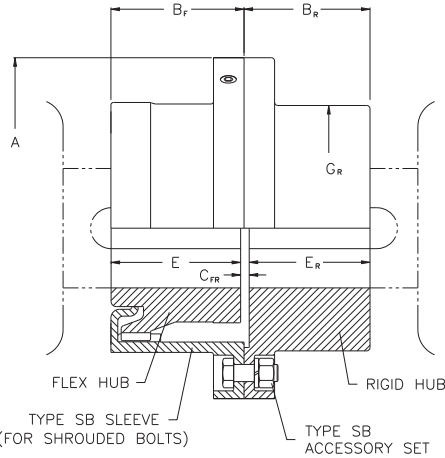
Coupling Size	Flex Rigid Coupling				Rigid Hub ^②		
	No Bore		Finish Bore ^① Part No.	No Bore		Finish Bore ^① Part No.	
	Part No.	Wt.		Part No.	Wt.		
1	1B SB FR	6	1B SB FR FB	1B SB RHUB	3	1B SB RHUB FB	
1 1/2	1 1/2B SB FR	12	1 1/2B SB FR FB	1 1/2B SB RHUB	6	1 1/2B SB RHUB FB	
2	2B SB FR	20	2B SB FR FB	2B SB RHUB	9	2B SB RHUB FB	
2 1/2	2 1/2B SB FR	32	2 1/2B SB FR FB	2 1/2B SB RHUB	15	2 1/2B SB RHUB FB	
3	3B SB FR	57	3B SB FR FB	3B SB RHUB	28	3B SB RHUB FB	
3 1/2	3 1/2B SB FR	85	3 1/2B SB FR FB	3 1/2B SB RHUB	42	3 1/2B SB RHUB FB	

Coupling Type EB (Exposed Bolts) Part Numbers

Coupling Size	Flex Rigid Coupling			Rigid Hub		
	No Bore		Finish Bore Part No.	No Bore		Finish Bore Part No.
	Part No.	Wt.		Part No.	Wt.	
1	1B EB FR	6	1B EB FR FB	1B EB RHUB	3	1B EB RHUB FB
1 1/2	1 1/2 EB FR	12	1 1/2 EB FR FB	1 1/2 EB RHUB	6	1 1/2 EB RHUB FB
2	2B EB FR	20	2B EB FR FB	2B EB RHUB	9	2B EB RHUB FB
2 1/2	2 1/2 EB FR	32	2 1/2 EB FR FB	2 1/2 EB RHUB	15	2 1/2 EB RHUB FB
3	3B EB FR	57	3B EB FR FB	3B EB RHUB	28	3B EB RHUB FB
3 1/2	3 1/2 EB FR	85	3 1/2 EB FR FB	3 1/2 EB RHUB	42	3 1/2 EB RHUB FB

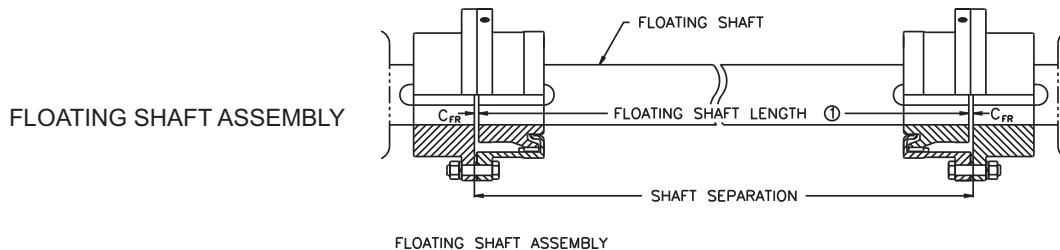
① All finish bores and keyways per AGMA/ANSI 9112 commercial standard tolerances.

② Rigid hubs are furnished less fasteners.



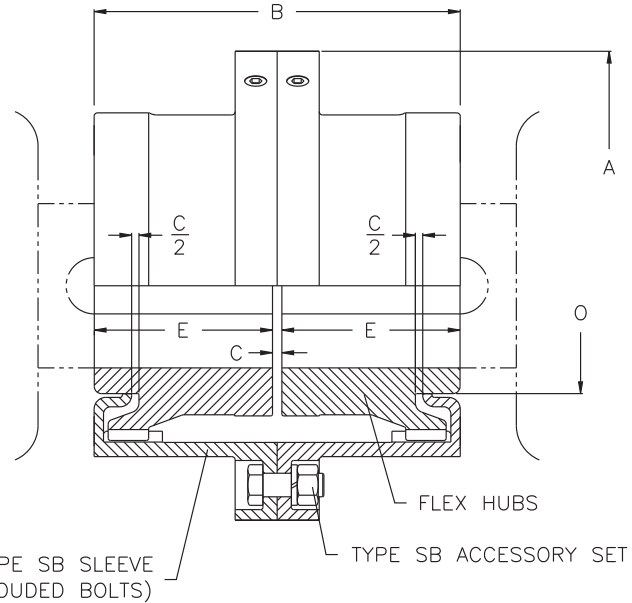
Coupling Size	Rigid Hub Maximum Bore with Standard Key	Rating HP / 100 RPM	Torque Rating (lb.-in.)	Peak Torque Rating (lb.-in.)	Maximum Speed (RPM)	Weight with Solid Hubs (lb.)	Dimensions						
							A	B _F	B _R	C _{FR} ^①	E	E _R	G _R
1	2	10.5	6600	13200	14500	6	4	1 5/16	1 5/16	1/8	1 1/4	1 1/4	2 23/32
1 1/2	2 3/8	18.5	11500	23000	12000	12	5	1 3/4	1 3/4	1/8	1 11/16	1 11/16	3 5/16
2	2 5/8	36.5	23000	46000	9300	18	6	2 5/32	1 15/16	5/32	2 3/32	1 27/32	3 3/4
2 1/2	3 1/4	62	39000	78000	7900	30	7	2 5/8	2 3/8	5/32	2 9/16	2 9/32	4 3/4
3	4	110	69300	138600	6800	55	8 3/8	3 1/4	3	3/16	3 5/32	2 29/32	5 3/4
3 1/2	4 3/4	186	117200	234400	6000	84	9 7/16	3 7/8	3 9/16	3/16	3 25/32	3 15/32	6 3/4

① Floating shaft length is equal to the shaft separation, minus 2 times the C_{FR} dimension.



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.

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 99.



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 170-172 for detailed specifications.

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					Shrouded Bolt* and Exposed Bolt	
							A	B	C	E	O	Bolt Circle	Number & Size.
1	1 1/8	10.5	6600	13200	14500	5.5	4	2 5/8	1/8	1 1/4	1 9/16	3 5/16	6 — 1/4
1 1/2	1 5/8	18.5	11500	23000	12000	11	5	3 1/2	1/8	1 11/16	2 3/16	4 3/32	6 — 5/16
2	2 1/8	36.5	23000	46000	9300	19	6	4 5/16	1/8	2 3/32	2 7/8	5	6 — 3/8
2 1/2	2 3/4	62	39000	78000	7900	31	7	5 1/4	1/8	2 9/16	3 11/16	6	6 — 3/8
3	3 1/8	110	69300	138600	6800	57	8 3/8	6 1/2	3/16	3 5/32	4 1/4	7 3/16	8 — 1/2
3 1/2	3 3/4	186	117200	234400	6000	81	9 7/16	7 3/4	3/16	3 25/32	5	8 1/4	10 — 1/2

* Shrouded and exposed bolts are identical except for length.

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 Bore ① Part No.	Part No.	Wt.	Part No.	Wt.	No Bore Part No.	Wt.	Finish Bore ① Part No.
1	1B SB FF	7	1B SB FF FB	1B SB FS	1	1B SB SLEEVE	2	1B FHUB	1	1B FHUB FB
1 1/2	1 1/2B SB FF	12	1 1/2B SB FF FB	1 1/2B SB FS	1	1 1/2B SB SLEEVE	3	1 1/2B FHUB	3	1 1/2B FHUB FB
2	2B SB FF	21	2B SB FF FB	2B SB FS	1	2B SB SLEEVE	5	2B FHUB	5	2B FHUB FB
2 1/2	2 1/2B SB FF	33	2 1/2B SB FF FB	2 1/2B SB FS	1	2 1/2B SB SLEEVE	7	2 1/2B FHUB	9	2 1/2B FHUB FB
3	3B SB FF	55	3B SB FF FB	3B SB FS	2	3B SB SLEEVE	12	3B FHUB	16	3B FHUB FB
3 1/2	3 1/2B SB FF	84	3 1/2B SB FF FB	3 1/2B SB FS	2	3 1/2B SB SLEEVE	16	3 1/2B FHUB	25	3 1/2B FHUB FB

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 Bore ① Part No.	Part No.	Wt.	Part No.	Wt.	No Bore Part No.	Wt.	Finish Bore ① Part No.
1	1B EB FF	7	1B EB FF FB	1B EB FS	1	1B EB SLEEVE	2	1B FHUB	1	1B FHUB FB
1 1/2	1 1/2B EB FF	12	1 1/2B EB FF FB	1 1/2B EB FS	1	1 1/2B EB SLEEVE	3	1 1/2B FHUB	3	1 1/2B FHUB FB
2	2B EB FF	21	2B EB FF FB	2B EB FS	1	2B EB SLEEVE	5	2B FHUB	5	2B FHUB FB
2 1/2	2 1/2B EB FF	33	2 1/2B EB FF FB	2 1/2B EB FS	1	2 1/2B EB SLEEVE	7	2 1/2B FHUB	9	2 1/2B FHUB FB
3	3B EB FF	55	3B EB FF FB	3B EB FS	2	3B EB SLEEVE	12	3B FHUB	16	3B FHUB FB
3 1/2	3 1/2B EB FF	84	3 1/2B EB FF FB	3 1/2B EB FS	2	3 1/2B EB SLEEVE	16	3 1/2B FHUB	25	3 1/2B FHUB FB

① All finish bores and keyways per AGMA/ANSI 9112 commercial standard tolerances. Each clearance bore includes one setscrew over keyway.

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.