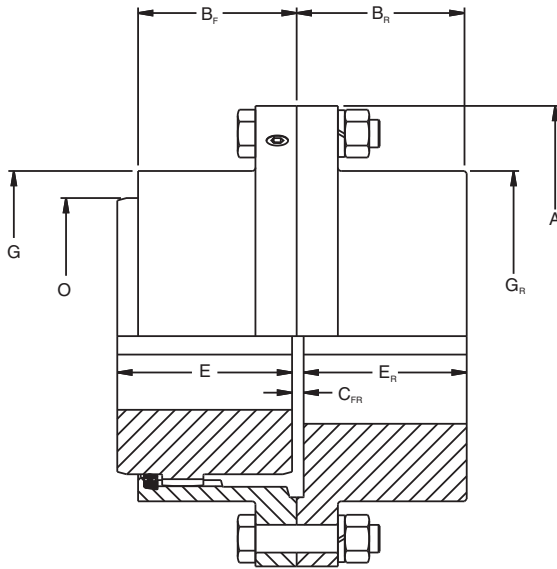


Flex Rigid and Floating Shaft Couplings Size 1-7

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 Hub | | |
|---------------|---------------------|-----|----------------------|------------------|-----|----------------------|
| | No Bore Part No. | Wt. | Finish Bore Part No. | No Bore Part No. | Wt. | Finish Bore Part No. |
| 1 | 1W EB FR | 10 | 1W EB FR FB | 1 EB RHUB | 5 | 1 EB RHUB FB |
| 1 1/2 | 1 1/2W EB FR | 19 | 1 1/2W EB FR FB | 1 1/2 EB RHUB | 9 | 1 1/2 EB RHUB FB |
| 2 | 2W EB FR | 31 | 2W EB FR FB | 2 EB RHUB | 15 | 2 EB RHUB FB |
| 2 1/2 | 2 1/2W EB FR | 55 | 2 1/2W EB FR FB | 2 1/2 EB RHUB | 27 | 2 1/2 EB RHUB FB |
| 3 | 3W EB FR | 83 | 3W EB FR FB | 3 EB RHUB | 40 | 3 EB RHUB FB |
| 3 1/2 | 3 1/2W EB FR | 126 | 3 1/2W EB FR FB | 3 1/2 EB RHUB | 65 | 3 1/2 EB RHUB FB |
| 4 | 4W EB FR | 184 | 4W EB FR FB | 4 EB RHUB | 90 | 4 EB RHUB FB |
| 4 1/2 | 4 1/2W EB FR | 252 | 4 1/2W EB FR FB | 4 1/2 EB RHUB | 124 | 4 1/2 EB RHUB FB |
| 5 | 5W EB FR | 371 | 5W EB FR FB | 5 EB RHUB | 119 | 5 EB RHUB FB |
| 5 1/2 | 5 1/2W EB FR | 418 | 5 1/2W EB FR FB | 5 1/2 EB RHUB | 200 | 5 1/2 EB RHUB FB |
| 6 | 6W EB FR | 504 | 6W EB FR FB | 6 EB RHUB | 250 | 6 EB RHUB FB |
| 7 | 7W EB FR | 792 | 7W EB FR FB | 7 EB RHUB | 370 | 7 EB RHUB FB |

Coupling Type SB (Shrouded Bolts) Part Numbers

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

① All finish bores and keyways per AGMA/ANSI 9002 (Imperial) and AGMA/ANSI 9112 (Metric).

② Rigid hubs are furnished less fasteners.

Flex-Rigid Coupling Data

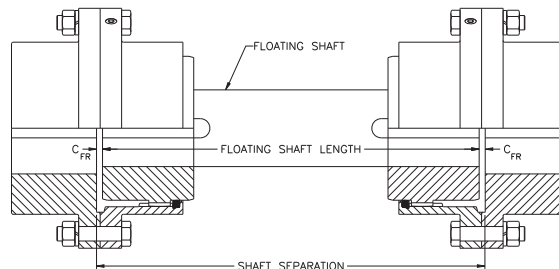
| Coupling Size | Maximum Bore with Standard Keyway | | Rating HP / 100 RPM | Torque Rating (lb.-in.) | Peak Torque Rating (lb.-in.) | Maximum Speed (RPM) ② | Dimensions | | | | | | |
|---------------|-----------------------------------|---------|---------------------|-------------------------|------------------------------|-----------------------|------------|----------------|----------------|-------------------|---------|----------------|----------------|
| | Flex | Rigid | | | | | A | B _F | B _R | C _{FR} ① | E | E _R | G _R |
| 1 | 1 5/8 | 2 1/4 | 10 | 6300 | 12600 | 10000 | 4 9/16 | 1 19/32 | 1 21/32 | 5/32 | 1 11/16 | 1 9/16 | 3 |
| 1 1/2 | 2 3/16 | 2 11/16 | 24 | 15100 | 30200 | 7400 | 6 | 1 15/16 | 1 15/16 | 5/32 | 2 1/16 | 1 27/32 | 3 13/16 |
| 2 | 2 3/4 | 3 3/8 | 50 | 31500 | 63000 | 5900 | 7 | 2 5/16 | 2 3/8 | 5/32 | 2 7/16 | 2 9/32 | 4 13/16 |
| 2 1/2 | 3 1/4 | 4 | 90 | 56700 | 113400 | 5000 | 8 3/8 | 2 27/32 | 3 | 3/16 | 3 1/32 | 2 29/32 | 5 3/4 |
| 3 | 4 | 4 3/4 | 150 | 94500 | 189000 | 4300 | 9 7/16 | 3 9/32 | 3 9/16 | 3/16 | 3 19/32 | 3 15/32 | 6 3/4 |
| 3 1/2 | 4 3/4 | 5 1/2 | 230 | 145000 | 290000 | 3900 | 11 | 3 13/16 | 4 1/8 | 7/32 | 4 3/16 | 4 1/32 | 7 3/4 |
| 4 | 5 3/8 | 6 3/8 | 350 | 221000 | 442000 | 3500 | 12 1/2 | 4 5/16 | 4 5/8 | 5/16 | 4 3/4 | 4 7/16 | 9 |
| 4 1/2 | 6 | 7 1/4 | 480 | 300000 | 600000 | 3200 | 13 5/8 | 4 13/16 | 5 1/4 | 11/32 | 5 3/8 | 5 1/16 | 10 1/8 |
| 5 | 6 3/4 | 8 1/2 | 650 | 410000 | 820000 | 2900 | 15 5/16 | 5 13/32 | 5 7/8 | 11/32 | 6 1/8 | 5 11/16 | 11 3/8 |
| 5 1/2* | 7 1/2 | 8 | 850 | 536000 | 1072000 | 2700 | 16 3/4 | 5 13/16 | 7 5/32 | 11/32 | 6 5/8 | 6 31/32 | 10 3/4 |
| 6* | 8 1/4 | 8 3/4 | 1100 | 693000 | 1386000 | 2500 | 18 | 6 5/8 | 7 21/32 | 11/32 | 7 3/8 | 7 15/32 | 11 1/2 |
| 7* | 9 1/4 | 10 | 1600 | 1010000 | 2020000 | 2200 | 20 3/4 | 7 3/8 | 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 CFR 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.