## Lovejoy / Sier-Bath Continuous Sleeve Gear Couplings

### CFS Type Floating Shaft Coupling

The CFS Type coupling consists of two flex-rigid (CFR) couplings with a shaft between them. Normally the driver and driven ends are rigid while the two center hubs connected by the center shaft are flexible. These hubs can be reversed if necessary without sacrificing ease of installation or disassembly.



### *CFS Type Performance Data*

| Size | Nominal Torque in-lb | Nominal Torque Nm | Maximum Speed Unbal RPM | Maximum Speed Bal RPM | ID1 - ID2 Flex & Rigid Max Bore in | ID1 - ID2 Flex & Rigid Max Bore mm | ID1 - ID2 Flex & Rigid Rough Stock Bore in | ID1 - ID2 Flex & Rigid Rough Stock Bore mm | Weight Coupling Only lbs | Weight Coupling Only kg | Parallel Misalignment in | Parallel Misalignment mm | Max Angular Misalignment Degrees |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **7/8** | 2,500 | 300 | 6,000 | 18,000 | 1.25 | 31 | 0.44 | 11 | 10 | 4.5 | 0.005 | .13 | |
| **1.5** | 7,600 | 900 | 5,000 | 15,000 | 1.63 | 42 | 0.63 | 16 | 16 | 7.3 | 0.007 | .18 | |
| **2** | 20,200 | 2 300 | 4,200 | 12,600 | 2.13 | 56 | 0.73 | 19 | 26 | 12.0 | 0.007 | .18 | 1/2° |
| **2.5** | 30,200 | 3 400 | 3,750 | 11,250 | 2.63 | 70 | 0.88 | 22 | 40 | 18.0 | 0.007 | .18 | |
| **3** | 50,400 | 5 700 | 3,600 | 9,000 | 3.13 | 84 | 1.19 | 30 | 66 | 30.0 | 0.010 | .25 | |
| **3.5** | 88,200 | 10 000 | 2,800 | 8,400 | 3.63 | 97 | 1.25 | 32 | 126 | 57.0 | 0.012 | .30 | |
| **4** | 126,000 | 14 200 | 2,400 | 7,200 | 4.13 | 111 | 1.75 | 44 | 182 | 83.0 | 0.012 | .30 | |
| **4.5** | 184,000 | 20 800 | 2,200 | 6,600 | 4.75 | 130 | 2.38 | 60 | 252 | 114.0 | 0.007 | .18 | 1/4° |
| **5** | 270,000 | 30 600 | 2,100 | 6,300 | 5.75 | 160 | 2.88 | 73 | 390 | 177.0 | 0.007 | .18 | |
| **6** | 378,000 | 42 700 | 2,000 | 6,000 | 6.75 | 186 | 3.88 | 99 | 534 | 242.0 | 0.009 | .23 | |

**Ordering Information**

- Application: Driver and Driven.
- Type and size of coupling, horizontal, vertical etc.
- Power: Motor horspower or torque requirement.
- Speed: Motor RPM or Driven RPM.
- Distance between shaft ends (BSE).
- Shaft sizes.

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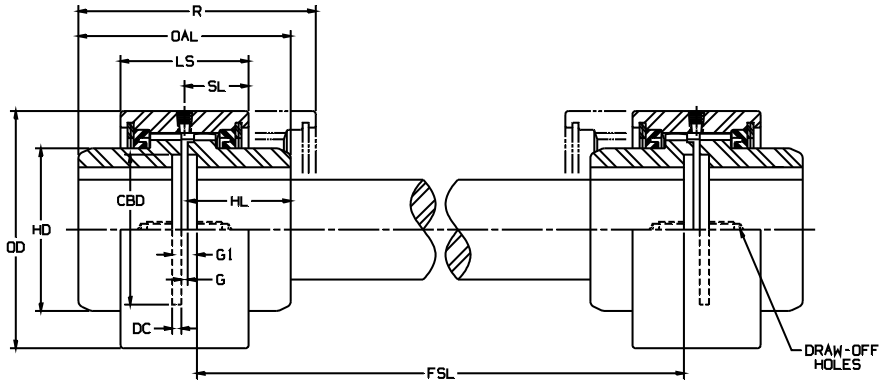


### *CFS Type Dimensional Data*

| Size | R in | OAL in | LS in | SL in | ID1 - ID2 Flex & Rigid Max Bore in | ID1 - ID2 Flex & Rigid Max Bore mm | ID1 - ID2 Flex & Rigid Rough Stock Bore in | ID1 - ID2 Flex & Rigid Rough Stock Bore mm | HL in | DC in | BSE Min in | G in | G1 in | OD in | HD in | CBD in |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **7/8** | 3.75 | 3.13 | 2.00 | 1.00 | 1.25 | 31 | 0.44 | 11 | 2.00 | 0.13 | 3.75 | 0.13 | 0.38 | 3.31 | 2.00 | 1.94 |
| **1.5** | 4.59 | 3.75 | 2.53 | 1.27 | 1.63 | 42 | 0.63 | 16 | 2.38 | 0.19 | 4.63 | 0.13 | 0.50 | 3.75 | 2.38 | 2.25 |
| **2** | 4.88 | 4.25 | 2.56 | 1.28 | 2.13 | 56 | 0.73 | 19 | 3.25 | 0.19 | 5.13 | 0.13 | 0.50 | 4.75 | 3.25 | 3.00 |
| **2.5** | 5.72 | 4.75 | 3.06 | 1.53 | 2.63 | 70 | 0.88 | 22 | 3.94 | 0.25 | 6.00 | 0.25 | 0.75 | 5.50 | 3.94 | 3.75 |
| **3** | 6.88 | 5.50 | 3.75 | 1.88 | 3.13 | 84 | 1.19 | 30 | 4.75 | 0.25 | 6.75 | 0.25 | 0.75 | 6.63 | 4.75 | 4.75 |
| **3.5** | 9.25 | 8.75 | 4.00 | 2.00 | 3.63 | 97 | 1.25 | 32 | 5.38 | 0.25 | 9.50 | 0.25 | 0.75 | 7.50 | 5.38 | 5.50 |
| **4** | 9.50 | 9.00 | 4.63 | 2.31 | 4.13 | 111 | 1.75 | 44 | 6.25 | 0.25 | 9.75 | 0.25 | 0.75 | 8.75 | 6.25 | 6.50 |
| **4.5** | 10.38 | 10.25 | 4.88 | 2.44 | 4.75 | 130 | 2.38 | 60 | 7.25 | 0.25 | 11.00 | 0.25 | 0.75 | 9.50 | 7.25 | 7.25 |
| **5** | 12.25 | 12.25 | 5.75 | 2.88 | 5.75 | 160 | 2.88 | 73 | 8.25 | 0.25 | 13.00 | 0.25 | 0.75 | 10.75 | 8.25 | 8.13 |
| **6** | 13.38 | 13.00 | 6.50 | 3.25 | 6.75 | 186 | 3.88 | 99 | 9.50 | 0.25 | 13.75 | 0.25 | 0.75 | 12.25 | 9.50 | 9.25 |

Notes:
- FSL Dimension is the minimum length of the floating shaft.
- The BSE (distance Between Shaft Ends) vary between G and G1.
- Puller Holes are standard on sizes 4 through 6.
- Puller Holes are available for sizes 7/8 through 3.5 at an additional charge.
- Interference bores with no set screws are standard unless otherwise specified.
- Inch bores and keyway tolerances conform to ANSI / AGMA 9002-B04.
- For metric bores and keyway tolerances, consult Lovejoy Engineering Section.
- Larger sizes are available, please consult Lovejoy Technical Support.