

# **Bibby Series III Standard and Modified Designs**



 **Bibby®**  
*Turboflex*

*An Altra Industrial Motion Company*





## Bibby Series III Gear Coupling



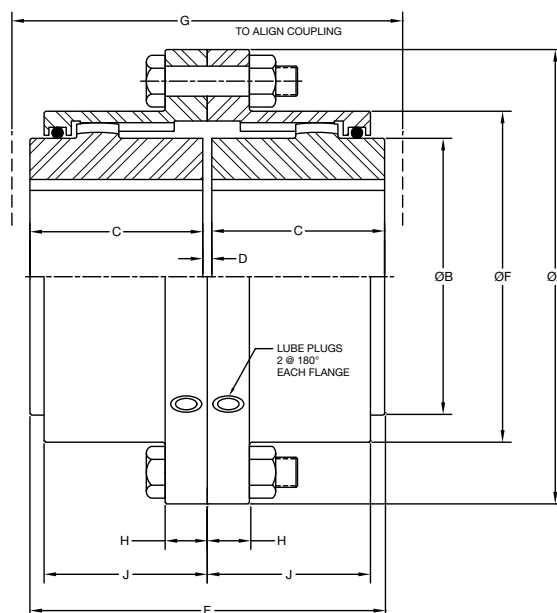
### Flexible Couplings Series FD - High Torque

#### Sizes 15-70

##### Flanged Sleeve — Double-Engagement Type

**Application:** Meets requirements of all standard applications for shaft sizes up to 265 mm. Compensates for both angular misalignment and parallel offset.

**Description:** Series FD Flexible Coupling is designed with bolted center flanges to facilitate installation and alignment. Optimum separation of gear meshes permits high parallel offset capacity. Flanged-sleeve design makes possible minimum distance between bearing housings to facilitate shaft alignment. The coupling is optimized for the greatest torque capacity.



FD Exposed Bolt

| FD   | Torque Capacity | Maximum Speed | Maximum Bore | DIMENSIONS |       |       |     |       |       |       |      |       | Mass  | MR <sup>2</sup> Inertia |
|------|-----------------|---------------|--------------|------------|-------|-------|-----|-------|-------|-------|------|-------|-------|-------------------------|
| Size | NM              | RPM           | mm           | A          | B     | C     | D   | E     | F     | G     | H    | J     | kg    | kgm <sup>2</sup>        |
| 15   | 2,373           | 5,400         | 55           | 152.4      | 79.2  | 49.3  | 3.0 | 101.6 | 99.6  | 120.0 | 19.1 | 45.0  | 7.7   | 0.0170                  |
| 20   | 5,084           | 4,800         | 75           | 177.8      | 101.6 | 62.0  | 3.0 | 127.0 | 123.4 | 150.0 | 19.1 | 57.7  | 13.6  | 0.0378                  |
| 25   | 8,756           | 4,300         | 95           | 212.9      | 124.0 | 77.0  | 4.8 | 158.8 | 148.8 | 185.0 | 22.4 | 71.4  | 24.1  | 0.0935                  |
| 30   | 12,993          | 4,000         | 110          | 239.8      | 146.1 | 91.2  | 4.8 | 187.5 | 174.2 | 215.0 | 22.4 | 86.1  | 37.2  | 0.1808                  |
| 35   | 19,433          | 3,600         | 125          | 279.4      | 165.1 | 106.4 | 6.4 | 218.9 | 200.2 | 255.0 | 26.9 | 99.3  | 57.7  | 0.3821                  |
| 40   | 30,618          | 3,200         | 150          | 317.5      | 196.9 | 120.7 | 6.4 | 247.7 | 234.2 | 280.0 | 26.9 | 113.3 | 87.6  | 0.7430                  |
| 45   | 42,029          | 3,000         | 175          | 345.9      | 228.6 | 134.9 | 7.9 | 277.9 | 262.9 | 315.0 | 26.9 | 126.5 | 120.8 | 1.2230                  |
| 50   | 57,056          | 2,600         | 185          | 388.9      | 241.3 | 153.2 | 7.9 | 314.5 | 290.6 | 350.0 | 38.1 | 144.0 | 167.1 | 2.1603                  |
| 55   | 81,008          | 2,400         | 205          | 420.6      | 266.7 | 168.1 | 7.9 | 344.4 | 322.3 | 390.0 | 38.1 | 158.8 | 221.6 | 3.3683                  |
| 60   | 95,018          | 2,200         | 230          | 457.2      | 298.5 | 188.2 | 7.9 | 384.0 | 349.3 | 420.0 | 25.4 | 175.0 | 290.6 | 5.0191                  |
| 70   | 135,578         | 1,800         | 265          | 527.1      | 342.9 | 220.7 | 9.7 | 450.9 | 406.4 | 490.0 | 28.4 | 198.4 | 441.7 | 10.0461                 |

CONTACT THE FACTORY FOR ADDITIONAL DETAILS, MODIFICATIONS AND VARIATIONS.

COMBINED ANGULAR AND PARALLEL OFFSET SHOULD NOT EXCEED + 3/4° PER GEAR MESH.

Bibby Series III Couplings - Fully-Crowned Teeth for Higher Torque, Higher Speed, Higher Misalignment Capacity  
All Series FD Couplings incorporate the following engineered features:

- $\pm 3/4^\circ$  angular misalignment capacity per gear mesh.
- Torque ratings at full misalignment - in excess of normal requirements for average applications.
- Accurately machined medium carbon steel hubs and sleeves.
- Positive-type O-ring seals keep lubricant in...contaminants out. Seals enshrouded to prevent damage.



## Bibby Series III Gear Coupling



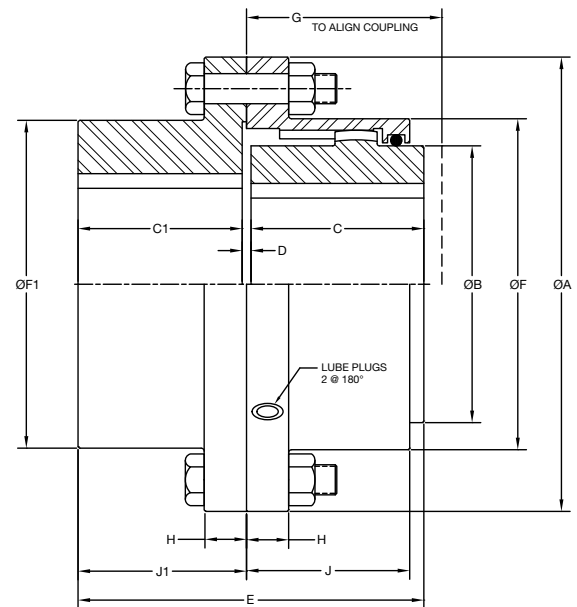
### Flexible Couplings Series FS - High Torque

#### Sizes 15-70

##### Flanged Sleeve — Single-Engagement Type

**Application:** Used primarily in tandem pairs, connected by intermediate floating shafts or as individual unit in conjunction with a driver or driven shaft having self-aligning support bearing. When used singly, compensates for angular misalignment only.

**Description:** Series FS Flexible Coupling consists of one standard flexible half coupling and one rigid half. The bolted center flanges facilitate installation and alignment.



| FS   | Maximum Hub Bore (mm) |       | Torque  | DIMENSIONS |       |       |       |      |       |       |       |       |      |       |       | Mass  | MR <sup>2</sup>             |
|------|-----------------------|-------|---------|------------|-------|-------|-------|------|-------|-------|-------|-------|------|-------|-------|-------|-----------------------------|
| Size | Flex                  | Rigid | Nm      | A          | B     | C     | C1    | D    | E     | F     | F1    | G     | H    | J     | J1    | kg    | Interia<br>kgm <sup>2</sup> |
| 15   | 55                    | 75    | 2,373   | 152.4      | 79.2  | 49.3  | 45.5  | 4.1  | 98.6  | 99.6  | 99.6  | 60.0  | 19.1 | 45.0  | 47.8  | 8.4   | 0.0188                      |
| 20   | 75                    | 95    | 5,084   | 177.8      | 101.6 | 62.0  | 58.2  | 4.1  | 124.0 | 123.4 | 123.4 | 75.0  | 19.1 | 57.7  | 60.5  | 14.6  | 0.0416                      |
| 25   | 95                    | 115   | 8,756   | 212.9      | 124.0 | 77.0  | 73.9  | 4.8  | 155.6 | 148.8 | 148.8 | 95.0  | 22.4 | 71.4  | 76.2  | 25.7  | 0.0973                      |
| 30   | 110                   | 135   | 12,993  | 239.8      | 146.1 | 91.2  | 86.6  | 4.8  | 182.6 | 174.2 | 174.2 | 110.0 | 22.4 | 86.1  | 88.9  | 38.9  | 0.1960                      |
| 35   | 125                   | 155   | 19,433  | 279.4      | 165.1 | 106.4 | 100.8 | 5.6  | 212.6 | 200.2 | 200.2 | 130.0 | 26.9 | 99.3  | 103.1 | 60.8  | 0.4134                      |
| 40   | 150                   | 180   | 30,618  | 317.5      | 196.9 | 120.7 | 112.8 | 7.9  | 241.2 | 234.2 | 234.2 | 140.0 | 26.9 | 113.3 | 117.3 | 90.8  | 0.7896                      |
| 45   | 175                   | 200   | 42,029  | 345.9      | 228.6 | 134.9 | 127.0 | 8.6  | 270.5 | 262.9 | 258.6 | 160.0 | 26.9 | 126.5 | 131.6 | 124.9 | 1.2854                      |
| 50   | 185                   | 225   | 57,056  | 388.9      | 241.3 | 153.2 | 146.3 | 8.6  | 308.1 | 290.6 | 290.6 | 175.0 | 38.1 | 144.0 | 150.9 | 178.0 | 2.3891                      |
| 55   | 205                   | 250   | 81,008  | 420.6      | 266.7 | 168.1 | 155.7 | 8.6  | 332.5 | 322.3 | 322.3 | 195.0 | 38.1 | 158.8 | 160.3 | 230.2 | 3.6018                      |
| 60   | 230                   | 270   | 95,018  | 457.2      | 298.5 | 188.2 | 181.9 | 10.4 | 380.2 | 349.3 | 349.3 | 210.0 | 25.4 | 175.0 | 188.2 | 311.0 | 5.1586                      |
| 70   | 265                   | 310   | 135,578 | 527.1      | 342.9 | 220.7 | 214.4 | 12.7 | 447.7 | 406.4 | 400.1 | 245.0 | 28.4 | 198.4 | 222.3 | 474.4 | 10.6919                     |

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| Electromagnetic Clutches and Brakes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Couplings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Heavy Duty Clutches and Brakes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Overrunning Clutches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| <b>Warner Electric</b><br><i>Electromagnetic Clutches and Brakes</i><br>New Hartford, CT - USA<br><b>1-800-825-6544</b><br><i>For application assistance:</i><br>1-800-825-9050<br><br>St Barthelemy d'Anjou, France<br>+33 (0) 2 41 21 24 24<br><br><i>Precision Electric Coils and Electromagnetic Clutches and Brakes</i><br>Columbia City, IN - USA<br><b>1-260-244-6183</b><br><br><b>Matrix International</b><br><i>Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes</i><br>Brechin, Scotland<br>+44 (0) 1356 602000<br>New Hartford, CT - USA<br><b>1-800-825-6544</b><br><br><b>Inertia Dynamics</b><br><i>Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes</i><br>New Hartford, CT - USA<br><b>1-800-800-6445</b> | <b>Ameridrives Couplings</b><br><i>Mill Spindles, Ameriflex, Ameridisc</i><br>Erie, PA - USA<br><b>1-814-480-5000</b><br><br><i>Gear Couplings</i><br>San Marcos, TX - USA<br><b>1-800-458-0887</b><br><br><b>Bibby Turboflex</b><br><i>Disc, Gear, Grid Couplings, Overload Clutches</i><br>Dewsbury, England<br>+44 (0) 1924 460801<br>Boksburg, South Africa<br>+27 11 918 4270<br><br><b>TB Wood's</b><br><i>Elastomeric Couplings</i><br>Chambersburg, PA - USA<br><b>1-888-829-6637</b> – Press #5<br><i>For application assistance:</i><br>1-888-829-6637 – Press #7<br><br><i>General Purpose Disc Couplings</i><br>San Marcos, TX - USA<br><b>1-888-449-9439</b><br><br><b>Ameridrives Power Transmission</b><br><i>Universal Joints, Drive Shafts, Mill Gear Couplings</i><br>Green Bay, WI - USA<br><b>1-920-593-2444</b><br><br><b>Huco Dynatork</b><br><i>Precision Couplings and Air Motors</i><br>Hertford, England<br>+44 (0) 1992 501900<br>Charlotte, NC - USA<br><b>1-800-825-6544</b> | <b>Wichita Clutch</b><br><i>Pneumatic Clutches and Brakes</i><br>Wichita Falls, TX - USA<br><b>1-800-964-3262</b><br>Bedford, England<br>+44 (0) 1234 350311<br><br><b>Twiflex Limited</b><br><i>Caliper Brakes and Thrusters</i><br>Twickenham, England<br>+44 (0) 20 8894 1161<br><br><b>Industrial Clutch</b><br><i>Pneumatic and Oil Immersed Clutches and Brakes</i><br>Waukesha, WI - USA<br><b>1-262-547-3357</b><br><br><b>Gearing</b><br><br><b>Boston Gear</b><br><i>Enclosed and Open Gearing, Electrical and Mechanical P.T. Components</i><br>Charlotte, NC - USA<br><b>1-800-825-6544</b><br><br><i>For application assistance:</i><br>1-800-816-5608<br><br><b>Bauer Gear Motor</b><br><i>Geared Motors</i><br>Esslingen, Germany<br>+49 (711) 3518-0<br><br><b>Nuttall Gear and Delroyd Worm Gear</b><br><i>Worm Gear and Helical Speed Reducers</i><br>Niagara Falls, NY - USA<br><b>1-716-298-4100</b> | <b>Formsprag Clutch</b><br><i>Overrunning Clutches and Holdbacks</i><br>Warren, MI - USA<br><b>1-800-348-0881</b> – Press #1<br><br><i>For application assistance:</i><br>1-800-348-0881 – Press #2<br><br><b>Marland Clutch</b><br><i>Roller Ramp and Sprag Type Overrunning Clutches and Backstops</i><br>South Beloit, IL - USA<br><b>1-800-216-3515</b><br><br><b>Stieber Clutch</b><br><i>Overrunning Clutches and Holdbacks</i><br>Heidelberg, Germany<br>+49 (0) 6221 30 47 0<br><br><b>Belted Drives and Sheaves</b><br><br><b>TB Wood's</b><br><i>Belted Drives</i><br>Chambersburg, PA - USA<br><b>1-888-829-6637</b> – Press #5<br><br><i>For application assistance:</i><br>1-888-829-6637 – Press #7<br><br><b>Engineered Bearing Assemblies</b><br><br><b>Kilian Manufacturing</b><br><i>Engineered Bearing Assemblies</i><br>Syracuse, NY - USA<br><b>1-315-432-0700</b><br><br><br>For information concerning our sales offices in Asia Pacific check our website<br><a href="http://www.altramotion.com.cn">www.altramotion.com.cn</a> |
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| <b>Warner Linear</b><br><i>Linear Actuators</i><br>Belvidere, IL - USA<br><b>1-800-825-6544</b><br><br><i>For application assistance:</i><br>1-800-825-9050<br><br>St Barthelemy d'Anjou, France<br>+33 (0) 2 41 21 24 24                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |



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[www.bibbyturboflex.com](http://www.bibbyturboflex.com)

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