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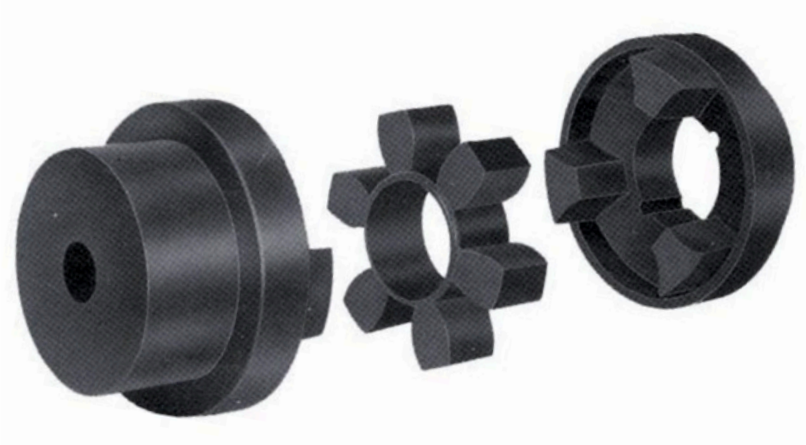
POWER TRANSMISSIONS INTERNATIONAL

# Jaw-Flex Couplings - Type RFC



The RFC coupling is a general purpose flexible coupling available in eight different sizes in taper bore, pilot bore or finished bore.

### Easy installation
Alignment is quickly achieved by simply placing a straight edge across the outside diameter of the hubs. No special tools are needed, only a hexagon wrench for the locking of the taper bush.

### Accommodates Misalignment
The RFC coupling compensates for axial, parallel & angular misalignments.

### Extra protection Against Failure
The Inter-linking hubs act as an additional safegaurd, though the flexible element fails, the drive will be maintained by the interaction of the jaws which are an integral part of the coupling hubs. The hubs are made of C. I.. Jaws are unmachined.

### Interchangeable
The RFC coupling is compatible with leading makes of couplings. Elastomeric spider is of Nitrile rubber having shore hardness of 80°, suitable for temperatures from -40°C to + 100°c.

### TABLE 1. POWER RATING (kW)

| Speed rpm | Coupling Size | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | RFC 7 | RFC 9 | RFC 11 | RFC 13 | RFC 15 | RFC 18 | RFC 23 | RFC 28 |
| 100 | 0.33 | 0.84 | 1.68 | 3.30 | 6.28 | 9.95 | 20.90 | 33.00 |
| 1500 | 4.95 | 12.55 | 25.15 | 49.50 | 94.00 | 149.00 | 313.50 | 495.00 |
| 3000 | 9.90 | 25.10 | 50.30 | 99.00 | 188.00 | 298.00 | — | — |

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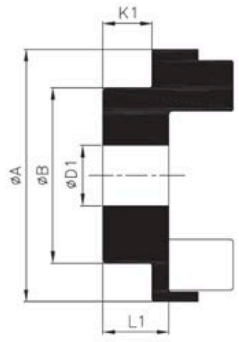
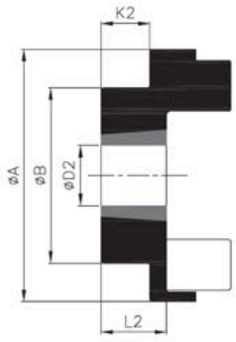
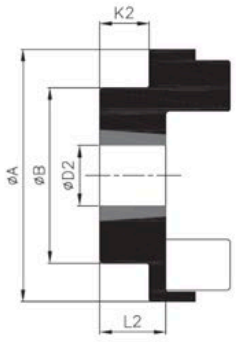


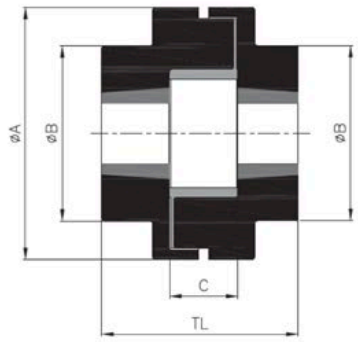

B HUB




F HUB




H HUB




## TABLE 2. DIMENSIONS DATA (mm)

| Coupling Size | B Hub | | | | #F / H Hub | | | | | ØA | ØB | C | TL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bore ØD1 | | K1 | L1 | #Bush Size | Bore ØD2 | | K2 | L2 | | | | | | |
| | Max. | Min. | | | | Max. | Min. | | | | | | TL1 | TL2 | TL3 |
| 7 | 32 | 10 | 21 | 26 | 1008 | 25 | 10 | 19 | 24 | 69 | 60 | 17.5 | 66 | 68 | 70.0 |
| 9 | 42 | 10 | 26 | 32 | 1108 | 28 | 10 | 18 | 24 | 85 | 65 | 22.5 | 70.5 | 78.5 | 86.5 |
| 11 | 55 | 10 | 37 | 45 | 1610 | 42 | 14 | 19 | 27 | 112 | 100 | 29 | 83 | 101 | 119.0 |
| 13 | 60 | 20 | 46 | 55 | 1610 | 42 | 14 | 17.5 | 26.5 | 130 | 105 | 36 | 89 | 117.5 | 146.0 |
| 15 | 70 | 20 | 50 | 60 | 2012 | 50 | 14 | 24 | 34 | 150 | 115 | 40 | 108 | 134 | 160.0 |
| 18 | 80 | 30 | 58 | 70 | 2517 | 60 | 16 | 35 | 47 | 180 | 125 | 49 | 143 | 166 | 189.0 |
| 23 | 100 | 40 | 77 | 90 | 3020 | 75 | 24 | 39.5 | 52.5 | 225 | 155 | 58.5 | 163.5 | 201 | 238.5 |
| 28 | 115 | 50 | 88.5 | 105 | 3535 | 90 | 35 | 74.0 | 90.5 | 275 | 185 | 74.5 | 255.5 | 270 | 284.5 |

## TABLE 3. TECHNICAL DATA

| Coupling Size | Maximum Speed rpm | Torque Rating (Nm) | | Moment of Inertia $WR^2$ ($kgm^2$) | Torsional Stiffness (Nm / degree) | Maximum Misalignment | | $ Weight (kg) |
|---|---|---|---|---|---|---|---|---|
| | | Normal | Maximum | | | Parallel | Axial | |
| 7 | 8300 | 31.5 | 72 | 0.0003 | 10.2 | 0.3 | +0.20 | 1.1 |
| 9 | 6740 | 80 | 180 | 0.001 | 25.5 | 0.3 | +0.49 | 1.8 |
| 11 | 5110 | 160 | 360 | 0.003 | 48.0 | 0.3 | +0.61 | 5.0 |
| 13 | 4400 | 315 | 720 | 0.005 | 84.0 | 0.4 | +0.79 | 8.0 |
| 15 | 3820 | 600 | 1500 | 0.010 | 176.0 | 0.4 | +0.92 | 11.7 |
| 18 | 3180 | 950 | 2350 | 0.022 | 240.0 | 0.4 | +1.09 | 18.2 |
| 23 | 2540 | 2000 | 5000 | 0.065 | 336.0 | 0.5 | +1.32 | 35.0 |
| 28 | 2080 | 3150 | 7200 | 0.191 | 960.0 | 0.5 | +1.70 | 66.5 |

# Available only with taper bore, without taper bush.
$ Weight and M.I. are at max bores with one type-B hub combination.
NOTES: TL 1 = Combination of F-F / H-H / F-H hub
TL2 = Combination of B-F / B-H hub
TL3 = Combination of B-B hub
Consult for Max Bore with Square Key.