

HRC Coupling

"Your Supermarket of Industrial Parts"

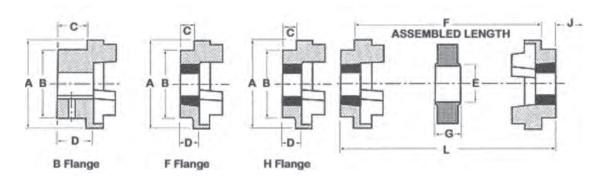
The HRC Coupling is a proven performer, consisting of two cast iron flanges and a rubber element, which performs under compression.

The modular design allows for a simple fitting and easy maintenance whilst the rubber element absorbs shock loading and compensates for marginal misalignment.

Industrial World carries a full range of HRC Couplings in Pilot Bore and Taper Lock.



| Coupling | А | В | Е | F | G | Bush | Max. Bore | | С | D | |
|----------|-----|-----|-----|-------|------|------|-----------|----------|------|-------|----|
| | | | | | | | mm | inch | | U | , |
| 70 | 69 | 60 | 31 | 25 | 18 | 1008 | 25 | 1 | 20 | 23.75 | 29 |
| 90 | 85 | 70 | 32 | 30.5 | 22.5 | 1108 | 28 | 1 1/8 | 19.5 | 23.25 | 29 |
| 110 | 112 | 100 | 45 | 45 | 29 | 1610 | 32 | 1 1/4 | 18.5 | 26.75 | 38 |
| 130 | 130 | 105 | 50 | 53 | 36 | 1610 | 42 | 1 5/8 | 18 | 26.5 | 38 |
| 150 | 150 | 115 | 62 | 60 | 40 | 2012 | 50 | 2 | 23.5 | 33.5 | 42 |
| 180 | 180 | 125 | 77 | 73 | 49 | 2517 | 60 | 2 1/2 | 34.5 | 46.5 | 48 |
| 230 | 225 | 155 | 99 | 85.5 | 59.5 | 3020 | 75 | 3 | 39.5 | 52.5 | 55 |
| 280 | 275 | 185 | 119 | 105.5 | 74.5 | 3525 | 90 | 3 1/2 | 74 | 90 | 67 |



| Coupling | Assembled Length (L) | Weight | Inertia | Dynamic Stiffness | Maximum Misalignment | | Nominal Torque |
|----------|-------------------------|--------|---------|----------------------|-------------------------|-------|-------------------|
| | FF,FH,HH | Kg | Mr2 kgm | Nm/° | Parallel | Axial | Nm |
| 70 | 65 | 1 | 0.00085 | - | 0.3 | 0.2 | 31 |
| 90 | 69.5 | 1.17 | 0.00115 | _ | 0.3 | 0.5 | 80 |
| 110 | 82 | 5 | 0.004 | 65 | 0.3 | 0.6 | 160 |
| 130 | 89 | 5.46 | 0.0078 | 130 | 0.4 | 0.8 | 315 |
| 150 | 107 | 7.11 | 0.0181 | 175 | 0.4 | 0.9 | 600 |
| 180 | 142 | 16.6 | 0.0434 | 229 | 0.4 | 1.1 | 950 |
| 230 | 164.5 | 26 | 0.12068 | 587 | 0.5 | 1.3 | 2000 |
| 280 | 207.5 | 55.3 | 0.44653 | 1025 | 0.5 | 1.7 | 3150 |

HRC Coupling



Service Factors

| SPECIAL CASES For applications where substantial shock, vibration and torque fluctuation occur, and for | Type of Driv | ring Unit | | Type of Driving Unit | | |
|---|----------------------------|------------------------------|---------|--|------------------------------|---------|
| reciprocating machines e.g. internal combustion engines, piston type pumps and compressors, refer to your local Authorised Distributor with full machine details for torsional analysis. | Electric Mot Steam Turb | .0.0 | | Internal Combustion Engines Steam Engines Water Turbines | | |
| | Hours per d | ay duty | | Hours per day duty | | |
| Driven Machine Class | 8 and under | Over 8 to 16 inclusive | Over 16 | 8 and under | Over 8 to 16 inclusive | Over 16 |
| UNIFORM Agitators, Brewing machinery, Centrifugal blowers, Centrifugal compressorst, Conveyors, Centrifugal fans and pumps, Generators, Sewage disposal equipment. | 1 | 1.12 | 1.25 | 1.25 | 1.4 | 1.6 |
| MODERATE SHOCK* Clay working machinery, Crane hoists, Laundry machinery, Wood working machinery, Machine tools, Rotary mills, Paper mill machinery, Textile machinery, Non-unifomly loaded centrifugal pumps. | 1.6 | 1.8 | 2 | 2 | 2.24 | 2.5 |
| HEAVY SHOCK* Reciprocating conveyors, Crushers, Shakers, Metal mills, Rubber machinery (Banbury mixers and mills), Reciprocating compressors, Welding sets. | 2.5 | 2.8 | 3.12 | 3.12 | 3.55 | 4 |

Power Ratings (KW)

| Speed | Coupling Sizes | | | | | | | | | | |
|----------|----------------|------|------|------|------|------|------|-----|--|--|--|
| rev/min. | 70 | 90 | 110 | 130 | 150 | 180 | 230 | 280 | | | |
| 100 | 0.33 | 0.84 | 1.68 | 3.3 | 6.28 | 9.95 | 20.9 | 33 | | | |
| 200 | 0.66 | 1.68 | 3.35 | 6.6 | 12.6 | 19.9 | 41.9 | 65 | | | |
| 400 | 1.32 | 3.35 | 6.7 | 13.2 | 25.1 | 39.8 | 83.8 | 132 | | | |
| 600 | 1.98 | 5.03 | 10.1 | 19.8 | 37.7 | 59.7 | 126 | 198 | | | |
| 720 | 2.37 | 6.03 | 12.1 | 23.8 | 45.2 | 71.6 | 151 | 238 | | | |
| 800 | 2.64 | 6.7 | 13.4 | 26.4 | 50.3 | 79.6 | 168 | 264 | | | |
| 960 | 3.17 | 8.04 | 16.1 | 31.7 | 60.3 | 95.5 | 201 | 317 | | | |
| 1200 | 3.96 | 10.1 | 20.1 | 39.6 | 75.4 | 119 | 251 | 396 | | | |
| 1440 | 4.75 | 12.1 | 24.1 | 47.5 | 90.5 | 143 | 302 | 475 | | | |
| 1600 | 5.28 | 13.4 | 26.8 | 52.8 | 101 | 159 | 335 | 528 | | | |
| 1800 | 5.94 | 15.1 | 30.2 | 59.4 | 113 | 179 | 377 | 594 | | | |
| 2000 | 6.6 | 16.8 | 33.5 | 66 | 126 | 199 | 419 | 660 | | | |
| 2200 | 7.26 | 18.4 | 36.9 | 72.6 | 138 | 219 | 461 | 726 | | | |
| 2400 | 7.92 | 20.1 | 40.2 | 79.2 | 151 | 239 | 503 | | | | |
| 2600 | 8.58 | 21.8 | 43.6 | 85.8 | 163 | 259 | 545 | | | | |
| 2880 | 9.5 | 24.1 | 48.3 | 95 | 181 | 286 | | | | | |
| 3000 | 9.9 | 25.1 | 50.3 | 99 | 188 | 298 | | | | | |
| 3600 | 11.9 | 30.1 | 60.3 | 118 | 226 | | | | | | |

For speeds below 100 rev/min, and intermediate speeds, use nominal torque ratings.

^{*} Maximum coupling speeds are calculated using an allowable peripheral speed for the hub material.

For selection of smaller sizes with speeds in excess of 3600 rev/min – contact us for more information.