

ROTOFLEX
TYRE COUPLINGS

Rotoflex Tyre Type Coupling

ROTOFLEX Tyre Type Coupling comprises of a rubber type of high quality which connects two metal hubs-one on the driving shaft and the other on the driven shaft. The tyre with reinforcements, specially designed and manufactured under advanced technology, provides reasonable resilience to the tyre coupling-a feature that makes a tyre coupling capable of absorbing, parallel misalignment upto 5 mm, angular misalignment upto 4°, end float upto 5mm or combination of all misalignment depending upon the size of the coupling.

Design and construction of tyre coupling is such that

- Its mounting on and dismantling from shafts can be easily accomplished.
- Inspection of components can be carried out without dismantling of coupling.
- Type element can be easily replaced without disturbing the alignment of the installation.
- No lubrication is needed.

Rotoflex Selection

Details required for coupling selection are

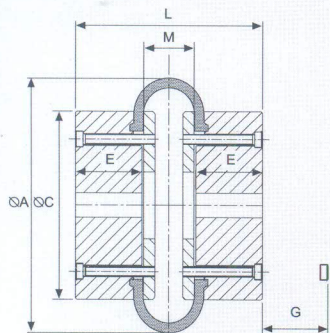
- Power rating and RPM of the drive/driven machine.
- Type of drive and driven machine.
- Diameter of shafts to be connected.
- Usable shaft length i.e. length of the keys on both shaft.
- Application for which the coupling is to be used.

To ensure above coupling so selected for the required rating capacity

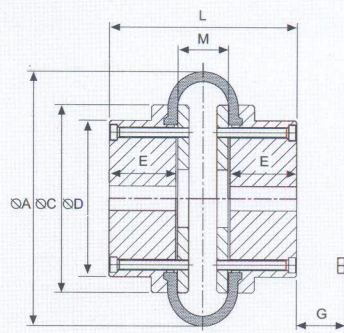
- a. Check the service factor applicable to the drive from the service factor chart.
- b. Find out the rating HP/100 RPM of the drive as per the following formula.

$$\text{Rating of coupling} = \frac{\text{HP} \times \text{Service Factor} \times 100}{\text{RPM}} = \text{HP/100 RPM}$$

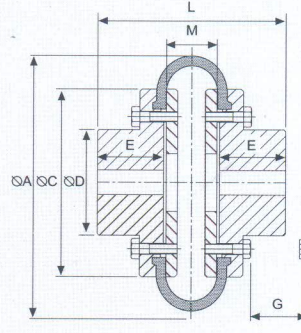
- c. Select the correct coupling size by matching the derived rating with the table and subsequently conforming with the shaft dia to be connected.



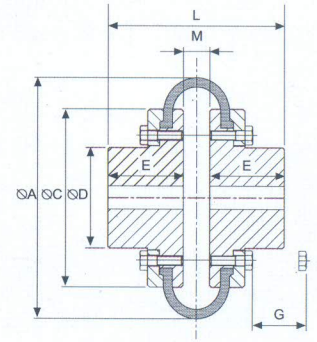
RF 01 & RF 02



RF 02A & RF 03



RF 03A & RF 07



RF 08 & RF 09

Size	Rating		Max Speed rev/min	Bore (mm)		Dimensions							No. of screw per flange	Approx Wt. Kg
	HP/ 100 RPM	Torque Kgm		Pilot	Max	A	L	D	E	C	G	M		
RF 01	0.9	6.5	4500	13	30	104	67	-	22	82	43	23	4	2.0
RF 02	1.6	11.2	4500	13	32	120	73	-	25	94	43	23	4	2.2
RF 02A	2.3	16.3	4500	18	38	133	92	79	32	100	43	28	4	4.0
RF 03	4.5	32.4	4000	18	48	165	112	73	38	125	43	36	5	5.0
RF 03A	6.9	49.6	3600	20	55	197	132	82	45	144	10	42	5	8.0
RF 03B	10.8	77.3	3100	26	65	211	149	95	51	167	10	47	6	12.0
RF 04	13.0	93.3	3000	32	70	222	154	103	53	179	13	48	6	14.0
RF 04A	15.6	111.7	2880	32	76	235	164	110	57	188	13	50	6	15.0
RF 05	21.6	154.6	2600	32	85	254	178	124	60	216	13	58	6	21.0
RF 06	30.4	217.8	2300	32	90	279	180	134	65	233	14	50	6	28.0
RF 07	50.5	361.6	2050	39	102	314	207	152	76	264	14	55	6	41.0
RF 08	80.3	575.1	1800	76	120	359	204	195	89	311	14	26	8	61.0
RF 08A	133	952	1600	75	140	402	220	216	102	345	19	16	8	86.0
RF 09	234.2	1677.4	1500	75	150	470	258	266	114	398	19	30	10	141.0

NOTE: All dimensions are in mm are approximate for general guidance only and subject to change without notice.

Service Factors

Load	Driven Equipment	Prime Mover		
		Motor or Turbine	Hydraulic or Drive	Reciprocating Engine
Uniform	Centrifugal Pumps, Conveyors loading, Exciters Fans & Blowers, Light Duty Generators-uniform loading, Mixers-liquid	1.00	1.10	1.25
Light Shock	Centrifugal Pumps, Generators, Pulsating Grinders, Hydraulic Pumps, Kilns, Line Crafting Machine Tools, Oscillating Pumps, Textile Machinery, Woodworking Machinery	1.25	1.5	1.85
Medium Shock	Air Compressors Multi-Cylinder, Ball & Rod Mills, Cranes, Elevators & Hoists, Punch Presses, Reciprocating Pumps, Shares Ships Drives, Welding Generators	1.75	2.00	2.35
Heavy Shock	Air Compressors Single Cylinder, Dredgers, Drilling Rings, Mining Machinery, Rolling Mill Drives, Rubber Mixers	2.25	2.50	2.80
Extreme Shock	Ore Crushers, Barstock Sheers, Conveyors-vibrating	2.75	3.25	3.75

Permissible Misalignment

Parallel

Range

RF01 to RF05 1.0 mm to 2.5 mm
 RF06 to RF09 2.5 mm to 5.0 mm

Angular

RF01 to RF09 1° to 4° per mesh



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