

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 safeguard, 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.

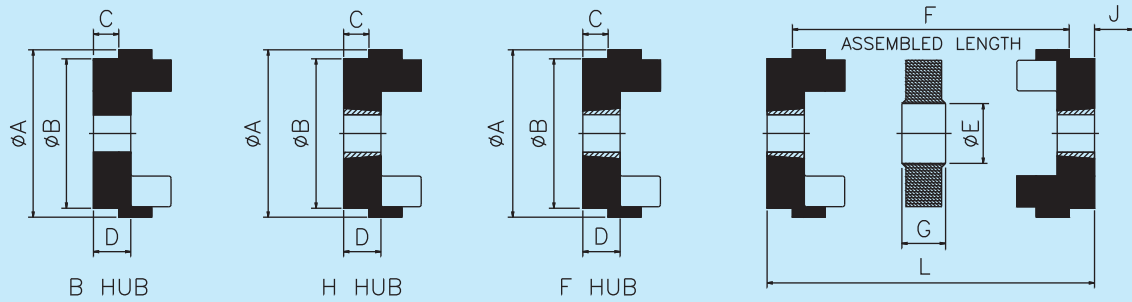
**TABLE 1. SERVICE FACTORS**

Applications with excessive shocks, vibrations and torque fluctuations (compressors, engine, centrifugal pumps blowers, fans, generators, conveyors etc.)	Type of Driving Unit					
	Electric Motors Steam Turbines			Internal Combustion Engines Steam Engines Water Turbines		
	Hours Per Day Duty			Hours Per Day Duty		
CLASS OF DRIVEN MACHINE	Upto 8	To 16	Over 16	Upto 8	To 16	Over 16
Uniformly Driven Machines	1.00	1.12	1.25	1.25	1.40	1.60
Machines Driven With Moderate Shocks.	1.60	1.80	2.00	2.00	2.24	2.50
Machines Driven With Heavy Shocks.	2.50	2.80	3.12	3.12	3.55	4.00

**TABLE 2. 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	—	—

**Note :** Power rating can be increased by using 92° shore hardness spider, please consult manufacturer for the same.



**TABLE 3. DIMENSIONS DATA (mm)**

Size	F / H Hub					B Hub				Ø A	Ø B	Ø E	F	G	L			J
	Bush Size	# Bore		C	D	Bore		C	D						L1	L2	L3	
		Max	Min			Max	Min											
RFC 7	1008	25	10	19	24.0	32	10	21	26	69	60	31	28	17.5	66	68	70	29
RFC 9	1108	28	10	18	24.0	42	10	26	32	85	65	32	34.5	22.5	70.5	78.5	86.5	29
RFC 11	1610	42	14	19	27.0	55	10	37	45	112	100	45	45	29	83	101	119	38
RFC 13	1610	42	14	17.5	26.5	60	20	46	55	130	105	50	54	36	89	117.5	146	38
RFC 15	2012	50	14	24	34.0	70	20	50	60	150	115	62	60	40	108	134	160	42
RFC 18	2517	60	16	35	47.0	80	30	58	70	180	125	77	73	49	143	166	189	48
RFC 23	3020	75	24	39.5	52.5	100	40	77	90	225	155	99	84.5	58.5	163.5	201	238.5	55
RFC 28	3535	90	35	74.0	90.5	115	50	88.5	105	275	185	118	107.5	74.5	255.5	270	284.5	67
RFC 28A	3525	*100	35	50.0	66.5	125	50	88.5	105	275	206	118	107.5	74.5	207.5	246	284.5	67

# For detail information about Taper Bush bore, please refer Taper Bush catalogue.

\* Std. Max. Bore - 90 mm, with Shallow Key - 100 mm

**NOTES :** L1 = Length with assembly combinations FF,HH,FH. J = Wrench clearance required to tighten and loosen the bush on the shaft.  
L2 = Length with assembly combinations FB,HB.  
L3 = Length with assembly combinations BB. Bore tolerance is H7 unless otherwise specified.



**TABLE 4. TECHNICAL DATA**

Size	Maximum Speed rpm	Torque Rating (Nm)		Moment of Inertia $WR^2$ (kgm <sup>2</sup> )	Torsional Stiffness (Nm / degree)	Maximum Misalignment		Weight (kg)
		Normal	Maximum			Parallel	Axial	
RFC 7	9100	31.5	72	0.00085	10.2	0.3	+0.20	1.00
RFC 9	7400	80	180	0.00115	25.5	0.3	+0.49	1.17
RFC 11	5630	160	360	0.00400	48	0.3	+0.61	5.00
RFC 13	4850	315	720	0.00780	84	0.4	+0.79	5.46
RFC 15	4200	600	1500	0.01810	176	0.4	+0.92	7.11
RFC 18	3500	950	2350	0.04340	240	0.4	+1.09	16.60
RFC 23	2800	2000	5000	0.12068	336	0.5	+1.32	26.00
RFC 28/28A	2300	3150	7200	0.44653	960	0.5	+1.70	50.00

- Weight & M.I. are for Coupling with mid-range bore taper bushes.
- For speeds below 100 rpm & intermediate speeds use normal torque ratings.

- The maximum angular misalignment is 1°
- All dimensions are in mm unless otherwise specified.
- For vertical installation contact RATHI.

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