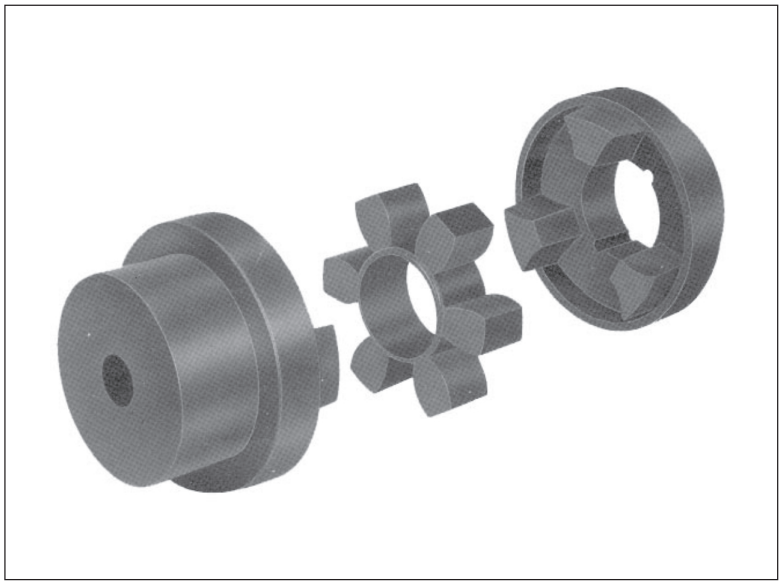
JAW - FLEX COUPLINGS

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. 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	8 To 16	Over 16	Upto 8	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.

R-J-11/1-05/13

JAW - FLEX COUPLINGS

TYPE RFC

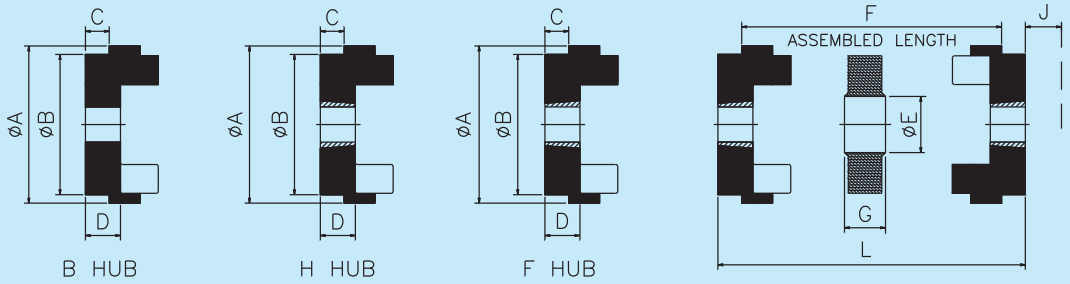


TABLE 3. DIMENSIONS DATA (mm)

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

TABLE 4. TECHNICAL DATA

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	
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.

In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specifications without prior notice.

ISO 9001 BUREAU VERITAS Certification
UKAS QUALITY MANAGEMENT 008

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Website : www.rathicouplings.com

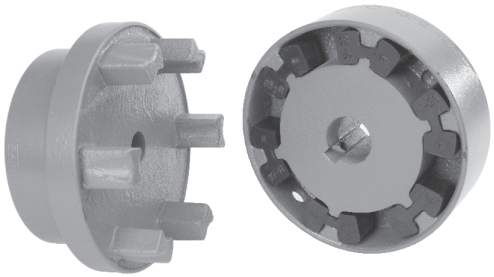
Distributor

R-J-11/1-05/13

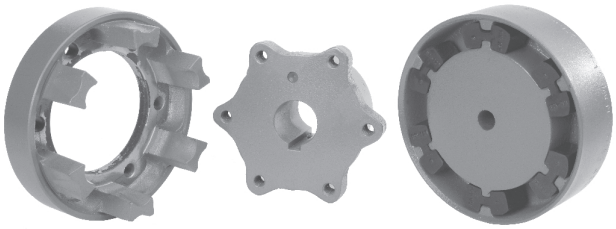
N-FLEX RN COUPLINGS

TYPE
RN / RNS

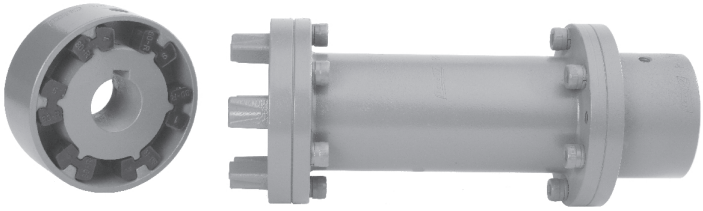
Rathi N-Flex couplings consists of graded cast iron hubs and a set of 'H' shaped highly resilient blocks which accommodates parallel, angular and axial misalignments & absorbs torsional vibrations. Rathi N-Flex spacer couplings (Type - RNS) are suitable for 'Back Pullout Pumps' in which the impeller can be disassembled without disturbing motor and pump from the base frame.



RN (B)



RN (A)



RNS(H)

FEATURES

SIMPLICITY OF CONSTRUCTION

Easy to assemble & disassemble. Suitable for reversing operation.

VARYING STIFFNESS CHARACTERISTICS

Special H shaped inserts provide progressively increasing stiffness characteristics, hence ensure effective shocks & vibration absorption. Special elastomer can be supplied to suit specific application needs.

NO LUBRICATION

RN/RNS couplings do not require lubrication of any kind.

SIMPLE / EASY MAINTENANCE

No complicated mechanism to demand adjustment or maintenance. Inspection and replacement of inserts is easy.

LOW OPERATIONAL COST

Only wear part is low cost inserts which make coupling economical in long run.

SMOOTH & QUIET OPERATION

Reduces vibration & noise arising from severe torque fluctuations. Operating temp. is -30^{0}C to +100^{0}C.

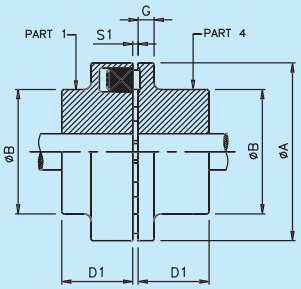
Application :

Mainly for pump applications such as :

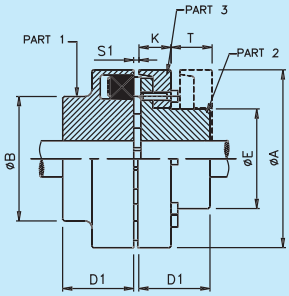
Water Pumps, Slurry Pumps, Sewage Pumps, Back Pull out Pumps, Multistage Pumps, Spilt Case Pumps, API Pumps, Chemical Process Pumps, Metering/Dosing Pumps, Gear Pumps, Paper Stock Pumps, Screw Pumps, Vacuum Pumps, Fire Pumps, High Pressure Pumps.

N-FLEX RN COUPLINGS

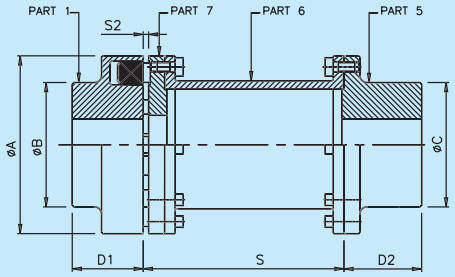
TYPE
RN / RNS



RN(B)
SIZES 68 to 250



RN(A)
SIZES 110 to 250



RNS(H)
SIZES 80 to 250

Coupling Size	Rated Torque N-m	Kw at 100 RPM	Max. Speed	Max. Bore (mm) Part No			Dimensions (mm)									Weight (Kg)			M.I (WR^2) $Kg\text{-}m^2$		
			RPM	1, 5	4	2	ØA	ØB	ØC	ØE	D1	D2	G	K	T	S	RN(B)	RN(A)	RNS(H)	RN(B)	RN(A)	RNS(H)
68 B	34	0.36	5000	24	28	-	68	46	-	-	20	-	8	-	-	-	0.63	-	-	0.0003	-	-
80 B,H	60	0.63	5000	30 *	38	-	80	68	55	-	30	45	10	-	-	100 140	1.51	-	2.8 2.9	0.0012	-	0.0014 0.0015
95 B,H	100	1.1	5000	42	42	-	95	76	70	-	35	45	12	-	-	100 140	2.6	-	3.9 4.2	0.0027	-	0.0028 0.0031
A,B,H 110	160	1.7	5000	48	48	38	110	86	80	62	40	50	14	20	33	100 140 180	3.9	3.5	5.8 6.2 6.6	0.0055	0.0047	0.0056 0.006 0.0064
A,B,H 125	240	2.5	5000	55	55	45	125	100	90	75	50	50	18	23	38	100 140 180	6.2	5.6	8.2 8.7 9.2	0.0107	0.0095	0.0099 0.010 0.011
A,B,H 140	360	3.8	4900	60	60	50	140	100	100	82	55	65	20	28	43	140 180	6.9	7	11.8 12.3	0.014	0.015	0.019 0.020
A,B,H 160	560	5.9	4250	65	65	58	160	108	108	95	60	70	20	28	47	140 180	9.4	9.8	15.2 16.0	0.025	0.028	0.032 0.034
A,B,H 180	880	9.2	3800	75	75	65	180	125	125	108	70	80	20	30	50	140 180	14	14.2	21.0 21.9	0.045	0.049	0.054 0.058
A,B,H 200	1340	14	3400	85	85	75	200	140	140	122	80	90	24	32	53	180 200 250	20	19.8	30.3 30.9 32.1	0.08	0.085	0.100 0.105 0.110
A,B,H 225	2000	21	3000	90	90	85	225	150	150	138	90	100	18	38	61	180 200 250	24.5	27	39 39.7 41.5	0.135	0.15	0.160 0.170 0.180
A,B,H 250	2800	29	2750	100	100	95	250	165	165	155	100	110	18	42	69	200 250	34	37	54.7 56.5	0.23	0.25	0.280 0.300

- All dimensions are in mm.
- * = Bore 32 mm for part 5.
- S1 = 2-4mm for sizes 68 to 140, 2-6 mm for sizes 160 to 225 & 3-8 mm for size 250.
- S2 = 5 mm for sizes 80 to 140, 6 mm for sizes 160 to 225 & 8 mm for size 250.
- Part No. 5 is available with different length through Bores D2.
- Max. bore for coupling with or equivalent to DIN 6885 keys.
- For vertical installation contact RATHI.

ISO 9001 BUREAU VERITAS Certification

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Distributor

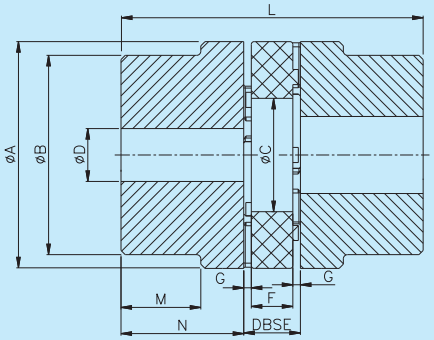
CURVE-*Flex* COUPLINGS

TYPE RRJ

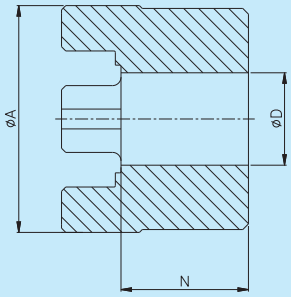
- Allover machining - Inherently balanced
- No Lubrication, Maintenance free - Long life
- Compact design, High power to weight ratio
- Fail safe - Will perform even if spider fails
- Vibrations Damping, torsionally flexible
- Axial plug-in, easy to assemble

RRJ Coupling

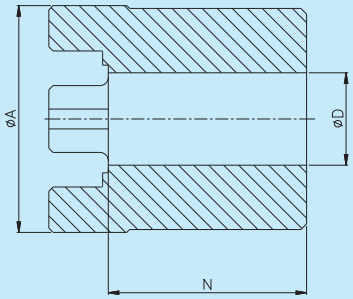
HUB TYPE I



HUB TYPE II



HUB TYPE III



TECHNICAL DATA

RRJ - Aluminium (AL) *

Coupling Size	Coupling Type	KW @ 100 rpm		Max. Speed rpm	Finish Bore - D		A	B	C	DBSE min.	F	G	L	M	N	Assembly #	
		Red	Yellow		Min.	Max.										Weight (Kg.)	M.I. ($Kg.m^2$)
19	I	0.17	0.10	14000	6	19	41	32	18	16	12	2	66	20	25	0.11	2.3×10^{-5}
	II				19	24		41								0.14	4.3×10^{-5}
24	I	0.60	0.35	10600	9	24	56	40	27	18	14	2	78	24	30	0.24	9×10^{-5}
	II				22	28		56								0.34	19×10^{-5}
28	I	1.60	0.95	8500	10	28	66	48	30	20	15	2.5	90	28	35	0.39	20×10^{-5}
	II				28	38		66								0.54	42×10^{-5}

RRJ - Cast Iron (CI) *

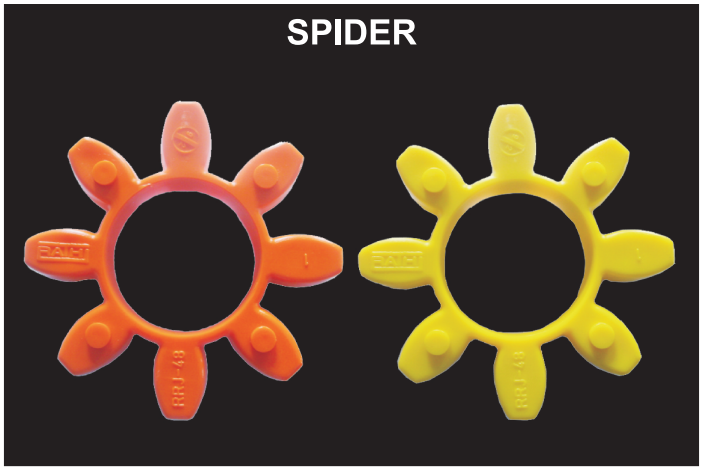
38	I	3.25	1.90	7100	12	40	80	66	38	24	18	3	114	37	45	2.0	1.85×10^{-3}
	II				38	48		78								2.4	2.45×10^{-3}
	III				12	48							164	62	70	3.6	3.72×10^{-3}
42	I	4.50	2.65	6000	14	45	95	75	46	26	20	3	126	40	50	3.2	4.1×10^{-3}
	II				42	55		94								3.8	5.90×10^{-3}
	III				14	55							176	65	75	5.5	8.54×10^{-3}
48	I	5.25	3.10	5600	15	52	105	85	51	28	21	3.5	140	45	56	4.4	6.2×10^{-3}
	II				48	62		104								5.2	9.6×10^{-3}
	III				15	62							188	69	80	4.2	13.4×10^{-3}
55	I	6.85	4.10	4750	20	60	120	98	60	30	22	4	160	52	65	6.6	12.3×10^{-3}
	II				55	74		118								7.5	17.3×10^{-3}
	III				20	74							210	77	90	10.2	23.7×10^{-3}
65	I	9.40	6.25	4250	22	70	135	115	68	35	26	4.5	185	61	75	10.1	24.5×10^{-3}
	II				65	80		133								11.5	27.8×10^{-3}
	III				22	80							235	86	100	15.0	36.3×10^{-3}
75	I	19.20	12.80	3550	30	80	160	135	80	40	30	5	210	69	85	16.0	54×10^{-3}
	II				75	95		158								18.2	61.4×10^{-3}
	III				30	95							260	84	110	21.2	71.5×10^{-3}
90	I	36	24	2800	40	97	200	160	100	45	34	5.5	245	81	100	27.5	138×10^{-3}
	II				90	110		198								36.3	182×10^{-3}
	III				40	110							295	106	125	44.8	225×10^{-3}

Weight & Moment of Inertia (M.I.) of coupling assembly refer to maximum finish bore without keyway.

* Alternative hub material available on request - Steel (Sizes 19 to 90) , S. G. Iron (Sizes 38 to 90).

R-J-14/2A-05/13

SPIDER



TECHNICAL DATA - Polyurethane Spiders

Spider Size	Red (Std.)		Yellow	
	T_{nom} (Nm)	T_{max} (Nm)	T_{nom} (Nm)	T_{max} (Nm)
19	17	34	10	20
24	60	120	35	70
28	160	320	95	190
38	325	650	190	380
42	450	900	265	530
48	525	1050	310	620
55	685	1370	410	820
65	940	1880	625	1250
75	1920	3840	1280	2560
90	3600	7200	2400	4800
Hardness	95 Shore A		92 Shore A	
Temperature	- 40°C to 90°C			

Selection Procedure:

1. Determine Application Nominal Torque (Nm)
   Tnom (Nm) = (kw x 9550/rpm)

2. Calculate application service factor using following charts - Total service factor (SF) will be
   SF = SF1 x SF2 x SF3

3. Calculate Application Maximum Torque (Tmax)
   Tmax = Tnom X SF (Nm)

4. Select the proper spider showing Tnom greater than application nominal torque. Then select spider showing Tmax greater than application maximum torque. Select the higher of two.

5. Ensure that application rpm and max. bore requirements are less than or equal to selected coupling max. rpm and max. bore size otherwise select next size coupling.

For SF1, SF2, SF3 refer chart.

SF1 - Application Service Factor

Driven Machine / Example	Electric Motors	Prime Motor	
		4 Cylinder or more	Less than 4 Cylinder
a. Uniform operation, no shocks.	1.5	2.0	2.5
b. Irregular operation, light shocks.	2.0	2.5	3.0
C. Irregular operation, medium shocks.	2.5	3.0	3.5
D. Irregular operation, heavy shocks.	3.0	3.5	4.0

SF2 - Application Service Factor for Temperature

Temperature Range °C	< 30°C	30°C - 70°C	> 70°C
SF2	1.0	1.5	2.0

SF3 - Application Service Factor for starting frequency

Starting frequency cycles / hour	< 100	100 - 500	> 500
SF3	1.0	1.5	2.0

MISALIGNMENT DATA

Size	19	24	28	38	42	48	55	65	75	90
Maximum axial displacement (mm)	1.6	1.8	2.0	2.2	2.3	3.0	3.0	3.5	3.5	4.5
Maximum radial misalignment (mm)	0.15	0.20	0.20	0.25	0.30	0.35	0.35	0.40	0.45	0.50
Maximum angular misalignment (Deg.)	0.80	0.80	0.80	0.90	0.90	1.0	1.0	1.0	1.1	1.1

ORDER SEQUENCE	Coupling Size	Hub Type (Driver / Driven)	Finish Bore (Driver / Driven)	Spider Type	Hub Material
Example	RRJ-55	I / II	40 / 60	Red	CI

- Coupling with std. Spider is supplied if not specified.

- All dimensions are in mm unless otherwise specified.
- For vertical installation contact RATHI.

In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specifications without prior notice.

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Distributor

TYRE - FLEX COUPLINGS
TYPE - T/TO

SELECTION PROCEDURE

(a) Service Factor

Determine the required service factor from table 1 below.

(b) Design Power

Multiply the normal running power by the service factor. This gives **Design Power** which is used as a basis for selecting the coupling.

(c) Coupling Size

Refer table 2 and from the appropriate speed read across until a power greater than that required is found. The size of Tyre-flex coupling required is given in that column..

(d) Bore Size

Check from table 3 that selected coupling can accommodate required bores.

TABLE 1 : SERVICE FACTORS

SPECIAL CLASSES For applications where substantial shock, vibration and torque fluctuations occur and for reciprocating machines e.g. internal combustion engines, piston pumps and compressors, refer to Rathi Transpower Pvt. Ltd. with full application details for analysis.	**Type of Driving Unit**					
	Electric Motors Steam Turbines			**Internal Combustion Engines Steam Engines Water Engines**		
	Hours per day duty			**Hours per day duty**		
Type of Driven Machine	upto 10	over 10 to 16 incl.	Over 16	upto 10	over 10 to16 incl.	Over 16
CLASS 1 Agitators, Brewing mahinery, Centrifugal compressors and pumps, Belt Conveyors, Dynamometers, Lineshafts, Fans upto 7.5 kW, Blower and exhausters (except positive displacement) & Generators.	0.8	0.9	1.0	1.3	1.4	1.5
CLASS 2 Clay working machinery, General machine tools, Paper mill beaters and winders, Rotary pumps, Rubber extruders, Rotary Screens, Textile Machinery, Marine Propellers & Fans over 7.5 kW.	1.3	1.4	1.5	1.8	1.9	2.0
CLASS 3 Bucket elevators, Cooling tower fans, Piston compressors & pumps, Foundry machinery, Metal presses, Paper mills, Calenders, Hammer mills, Presses and pulp grinders, Rubber Calenders, Pulverisers & Positive displacement blowers.	1.8	1.9	2.0	2.3	2.4	2.5
CLASS 4 Reciprocating conveyors, Gyratory crushers, Mills (ball, pebble and rod). Rubber Machinery (Banbury Mixers and Mills) & Vibratory screens.	2.3	2.4	2.5	2.8	2.9	3.0

TABLE 2: POWER RATING (kW)

Speed rpm	Size T / TO														
	4	5	6	7	8	9	10	11	12	14	16	18	20	22	25
750	1.87	5.17	9.97	19.65	29.47	39.30	53.02	68.70	104.25	182.25	296.25	492.75	732	907.5	1155
1000	2.50	6.90	13.30	26.20	39.30	52.40	70.70	91.60	139.0	243.0	395.0	657.0	976	1215	1537
1500	3.75	10.35	19.95	39.30	58.95	78.60	106.05	137.40	208.50	364.50	592.50*	986.5*	-	-	-
1800	4.50	12.42	23.94	47.16	70.74	94.32	127.26	164.88	250.20	437.40*	-	-	-	-	-
3000	7.50	20.70	39.90	78.60	117.90*	157.20*	-	-	-	-	-	-	-	-	-
3600	9.00	24.84	47.98	94.32	-	-	-	-	-	-	-	-	-	-	-

All these power ratings are calculated at constant torque.
For speeds below 100 RPM and intermediate speeds use normal torque ratings.
* Dynamic balancing preferred at these speeds.

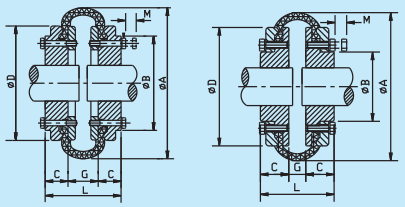
Poles	2	4	6	8
rpm	3000	1500	1000	750

TECHNICAL DATA : FLEXIBLE TYRES

Size	4	5	6	7	8	9	10	11	12	14	16	18	20	22	25
Torsional Stiffness Nm/deg	5	13	26	41	63	91	126	178	296	470	778	1371	1959	2760	3562
Parallel Misalignment mm	1.1	1.3	1.6	1.9	2.1	2.4	2.6	2.9	3.2	3.7	4.2	4.8	5.3	5.8	6.6
End Float mm	1.3	1.7	2.0	2.3	2.6	3.0	3.3	3.7	4.0	4.6	5.3	6.0	6.6	7.3	8.2
Rated Torque Nm	24	66	127	250	375	500	675	875	1330	2325	3730	6270	9325	11600	14675
Max. Torque Nm	64	160	318	487	759	1096	1517	2137	3547	5642	9339	16455	23508	33125	42750

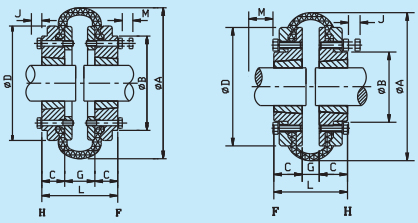
TYRE - FLEX COUPLINGS
TYPE - T/TO

T-4 to T-12 | TO-14 to TO-25



TYPE B

T-4 to T-6 | TO-14 to TO-22



TYPE F/H

TABLE 3 : DIMENSIONAL DATA : TYRE-FLEX HUB TYPES B, F & H

Size	Kw at 100 RPM	MAX. SPEED rpm	Type	# Bush Size	# Bore PB	# Bore Max. Metric	# Bore Max. Inch	Type F/H L	Type F/H C	Type F/H J	Type B L	Type B C	ØA	ØD	ØB	M	G	Wt. per Coupling Kg	MI (WR^2) PER COUPLING kgm^2
T-4	0.25	4500	B	-	10	32	1 1/4	-	-	-	68	22	104	82	-	17	24	1.9	0.00161
			F/H	1008	-	25	1	68	22	29	-	-						1.7	0.00148
T-5	0.69	4500	B	-	10	38	1 1/2	-	-	-	93	32	133	100	79	17	29	3.5	0.00358
			F/H	1210	-	32	1 1/4	79	25	38	-	-				19		2.7	0.00349
T-6	1.33	4000	B	-	15	45	1 3/4	-	-	-	111	38	165	125	73	8	35	5	0.0105
			F/H	1610	-	42	1 5/8	85	25	38	-	-			103	19		3.6	0.0103
T-7	2.62	3600	B	-	19	50	2	-	-	-	133	45	197	144	82	-	43	7.8	0.0198
T-8	3.93	3100	B	-	25	63	2 1/2	-	-	-	149.5	51	210	167	96	-	47.5	10.9	0.042
T-9	5.24	3000	B	-	30	75	3	-	-	-	165	57	235	188	110	-	51	15	0.0681
T-10	7.07	2600	B	-	32	80	3 1/8	-	-	-	178	60	254	216	125	-	58	21.5	0.1303
T-11	9.16	2300	B	-	32	90	3 1/2	-	-	-	183	65	279	233	140	-	53	28.8	0.1622
T-12	13.9	2050	B	-	38	100	4	-	-	-	209.5	76	314	264	152	-	57.5	43.1	0.365
TO-14	24.3	1800	B	-	58	127	5	-	-	-	201	89	359	311	195	26	23	60.6	0.6045
			F/H	3525	-	*100	4	153	65	67	-	-				-		42.6	0.4922
TO-16	39.5	1600	B	-	65	140	5 1/2	-	-	-	212	102	395	345	216	-	8	86.4	1.2755
			F/H	4030	-	*115	4 1/2	162	77	80	-	-						72.6	1.1134
TO-18	65.7	1500	B	-	70	150	6	-	-	-	254	116	470	398	220	-	22	133.3	2.1525
			F/H	4535	-	*125	5	200	89	89	-	-						123.0	1.9514
TO-20	97.6	1300	B	-	70	150	6	-	-	-	258	114	508	429	220	-	30	144.6	3.1765
			F/H	4535	-	*125	5	208	89	89	-	-						158.3	3.0129
TO-22	121	1100	B	-	75	160	6 1/2	-	-	-	281	127	562	470	240	-	27	181.63	4.7861
			F/H	5040	-	125	5	231	102	92	-	-						195.1	4.8954
TO-25	154	1000	B	-	85	190	7 1/2	-	-	-	294	132	628	532	275	-	30	281.1	8.129

- All dimensions are in mm. Unless otherwise specified.
- M is the amount by which clamping screws need to be withdrawn to release the tyre.
- J is the wrench clearance to allow for tightening and loosening the bush on the shaft.
- Shaft ends, although normally located G apart, can project beyond the flanges as shown. In this event allow sufficient space between shaft ends for end float and misalignment.
- Maximum torque figures should be regarded as short duration overload rating for direct on line starting. Angular misalignment capacity up to 4°.
- Weights & Moment of Inertia specified are at without bores.
- F/H construction for size 7 to 12 available in TO7 to TO12.

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

* Standard Bore of 90 mm, 100 mm, 115 mm and max. bore with shallow key 100 mm, 115 mm and 125 mm for bush nos. 3525, 4030 & 4535 resply.

In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specifications without prior notice.

ISO 9001 BUREAU VERITAS Certification

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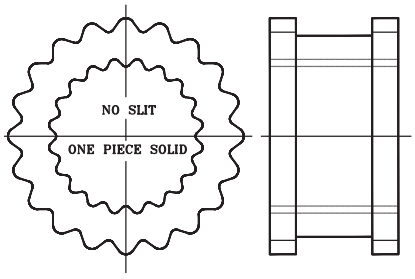
E-mail : enquiry@rathigroup.com
Website : www.rathicouplings.com

Distributor

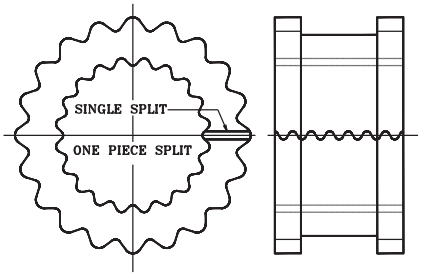
Sleeve-Flex Elastomeric Couplings

Design Features

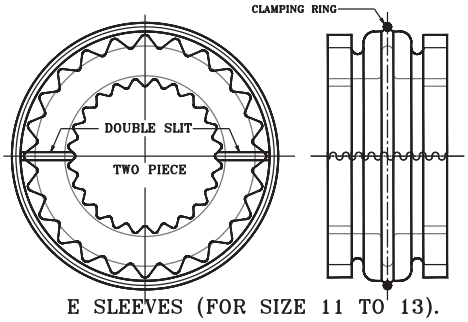
- Need No Lubrication
- No Maintenance
- Quick & Easy Installation
- Clean & quiet Performance



JE SLEEVES (FOR SIZE 3 TO 10)



JES SLEEVES (FOR SIZE 3 TO 10).



E SLEEVES (FOR SIZE 11 TO 13).

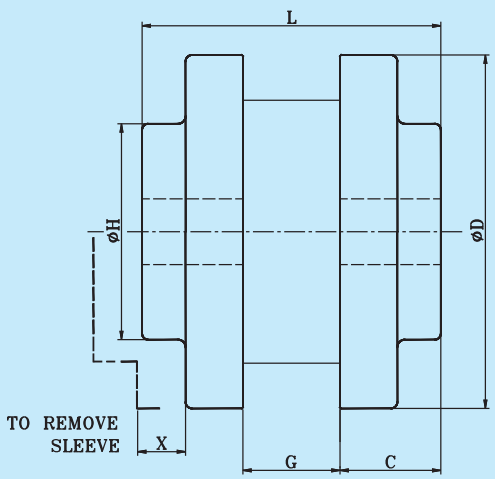
Sleeve-Flex can be installed quickly and easily, because there are no bolts, gaskets, covers or seals. Alignment can be checked with a straight edge placed across the outside of the precision machined flanges. No special tools are needed for installation, alignment or removal.

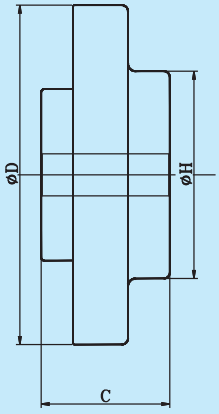
The teeth of sleeve lock into the teeth of the flanges without clamps or screws, tightening under torque to provide smooth transmission of power. There is no rubbing action of metal against rubber to cause wear. Couplings are not affected by abrasives, dirt or moisture.

This eliminates the need for lubrication or maintenance, provides clean, dependable, quiet performance.

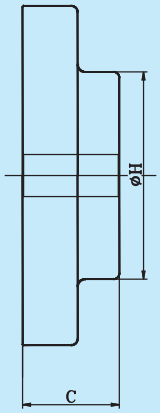
SLEEVE FLEX COUPLINGS

TYPE RBW





FLANGE TYPE 'S'



FLANGE TYPE 'J'

TECHNICAL DATA

Coupling Size	Flange Type	Sleeve Type	kW @ 100 rpm	Rated Torque	Max. Speed	Bore (mm)		Dimensions (mm)						Weight
				N-m	rpm	P.B.	MAX.	C	D	G	H	L	X	Kg
3	J	JE, JES	0.08	7.64	9200	10	22	20	52	9	38	49	16	0.3
4	J		0.15	14.32	7600	13	25	22	63	16	41	60	16	0.5
5	J		0.30	28.65	7600	13	29	26	83	18	48	70	23	1.1
	S							34		19		71	30	
6	J		0.52	49.66	6000	16	35	33	102	22	63	88	28	2
	S							44		21		88	36	
7	S		0.90	85.94	5250	16	48	47	118	25	71	100	34	2.8
8	S		1.34	127.96	4500	19	54	53	138	28	98	112	38	4.8
9	S		2.16	206.26	3750	22	64	61	161	36	98	128	45	7.2
10	S		3.43	327.54	3600	29	73	69	191	41	111	144	51	11.2
11	S	E	5.37	512.80	3600	32	87	87	219	48	133	180	61	18
12	S		8.50	811.69	2800	38	98	104	254	60	146	210	68	28
13	S		13.43	1282.47	2400	51	100	111	299	68	171	235	78	48

- 3 & 4 Flanges are available in Aluminium.
- 5 to 13 Flanges are available in Cast Iron.
- The Weight is approximate with solid Flanges.

- All dimensions are in mm unless otherwise specified.
- For vertical installation contact RATHI.

ISO 9001 BUREAU VERITAS Certification

UKAS QUALITY MANAGEMENT 008

Rathi Transpower Pvt Ltd

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E-mail : enquiry@rathigroup.com
Website : www.rathicouplings.com

Distributor

CONE - FLEX COUPLINGS
TYPE RC / RCT

Lovejoy Cone - Flex couplings consists of sets of resilient "Cone-Flex" rings with pins & nuts and two flanged hubs of graded cast iron. These "Cone-Flex" rings are specially shaped to permit the rubber to deflect in all directions and give over four times torsional flexibility as compared to a plain bush.

UNMATCHED SIMPLICITY :
Easy to assemble & disassemble. With pins removed, the equipment can run independently for no load. Flanged hub can be withdrawn upwards without disturbing original alignment.

NO LUBRICATION :
"Cone-Flex" couplings do not require lubrication of any kind whatsoever.

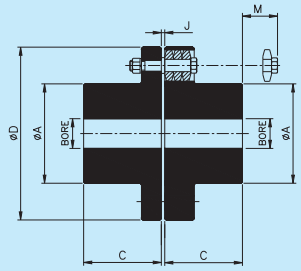
SIZE AND COST :
High torque capacity for compact size and low weight.

SIMPLE / EASY MAINTENANCE :
No complicated mechanism to demand adjustment or maintenance. Inspection and replacement of "Cone-Flex" rings are easy and can be quickly fitted without dismantling or moving either of coupled shafts.

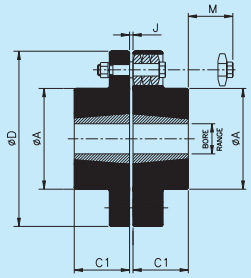
LOW OPERATIONAL COST :
Only wear part is low cost "Cone-Flex" rings make the coupling economical in long run.

SMOOTH & QUIET OPERATION :
Reduces vibrations and noise arising from severe torque fluctuations.
"Cone-Flex" couplings are suitable in ambient temperature upto 70^0 C.

CONE - FLEX COUPLINGS
TYPE RC / RCT



TYPE – RC



TYPE – RCT

TECHNICAL DATA

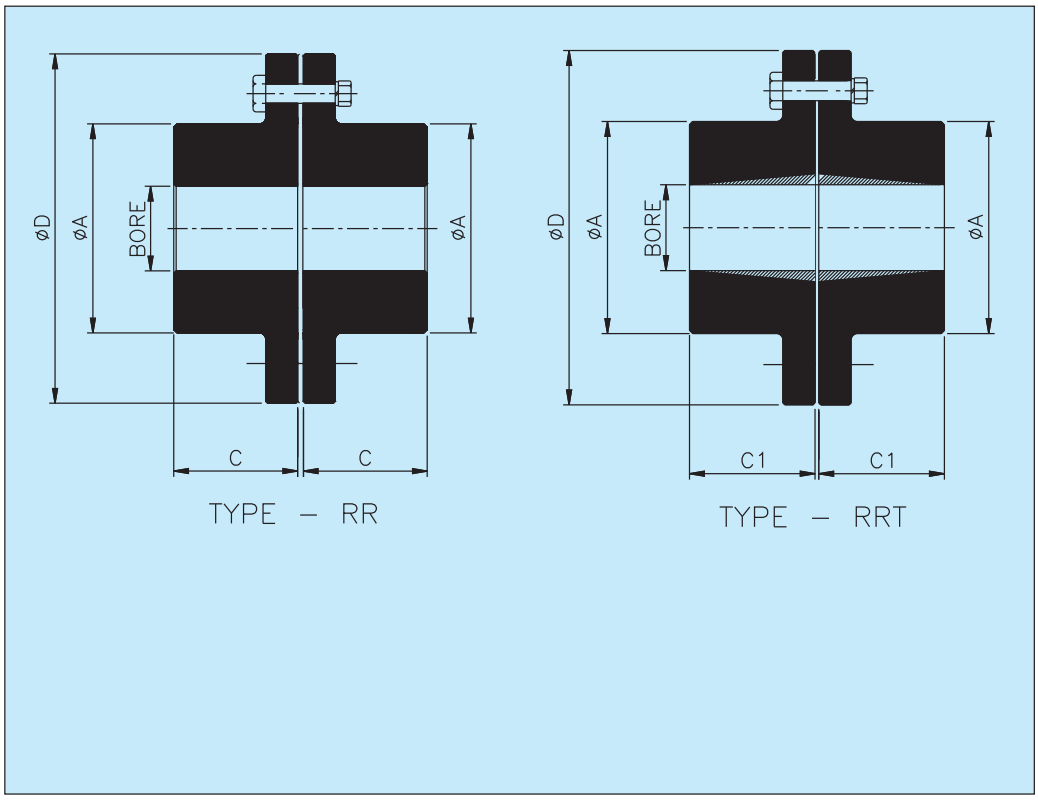
Coupling Type	Size	Torque Nm	"kW at 100 RPM"	Max. Speed RPM	RC		RCT			Dimensions							Wt. in Kg. (Min. Bore)		M.I. (WR^2) $Kg.m^2$ (Min. Bore)	
					Min. Bore	Max. Bore	Min. Bore	Max. Bore #	Bush Size	ØD	ØA	C	C1	RC M	RCT M	J	RC	RCT	RC	RCT
RC	020	50	0.56	6500	12	22	-	-	-	89	35	33	-	30	-	3	1.8	-	0.0020	-
	030	110	1.2	5470	12	32	-	-	-	127	51	41	-	28	-	3	3.5	-	0.0070	-
	038	190	2	5260	15	40	-	-	-	132	64	48	-	22	-	3	4.9	-	0.009	-
RC/ RCT	042	290	3	4750	15	44	12	32	1215	146	70	56	38	14	32	3	6.3	5.42	0.013	0.012
	048	480	5	4050	21	52	16	42	1615	171	81	61	38	28	52	3	10.4	8.88	0.034	0.031
	058	760	8	3600	21	62	14	50	2017	193	97	68	45	24	52	3	14.2	13	0.055	0.053
	070	1000	11	3220	21	74	19	60	2525	216	117	76	63.5	23	28	3	19.8	17.78	0.092	0.086
	075	2600	27	2730	28	80	16	60	2525	254	127	88	64	50	28	3	36.9	35.2	0.269	0.27
	085	3500	37	2480	28	92	35	75	3030	279	147	100	76	38	60	3	48.5	43.6	0.408	0.380
	105	5300	56	2100	34	114	35	90	3535	330	180	117	89	25	54	3	76.4	71.4	0.832	0.76
	120	9000	94	1880	61	130	40	100	4040	370	206	132	102	48	78	6	121	107	1.811	1.7
	135	12223	128	1660	67	144	55	110	4545	419	230	147	114.3	35	68	6	163	142.8	2.998	2.84
	150	16000	167	1520	82	160	70	125	5050	457	256	165	127	16	55	6	209	179.1	4.397	4.02
RC	170	25000	262	1300	96	184	-	-	-	533	292	188	-	48	-	6	305	-	9.998	-
	190	34377	360	1170	122	206	-	-	-	597	330	211	-	28	-	6	397	-	15.90	-
	215	45000	471	1050	135	230	-	-	-	660	368	237	-	10	-	6	508	-	24.950	-
	240	75248	788	800	152	254	-	-	-	737	407	264	-	43	-	6	736	-	45.40	-
	265	100000	1047	700	165	286	-	-	-	826	457	292	-	15	-	6	976	-	76.850	-

Notes :
- Maintain gap B at the time of assembly
- B = 3 mm for size 020 to 105
  = 6 mm for size 120 to 265
- # For detail information about Taper Bush bore, please refer Taper Bush catalogue.
- For vertical installation contact RATHI.
- BH = BUSH HALF (DRIVEN)
- PH = PIN HALF (DRIVE)

SPARE PARTS

Type RC			Type RCT				Pins and Nuts			Cone Rings	
Size	Pin Half Part No.	Bush Half Part No.	Size	Bush Size	Pin Half Part No.	Bush Half Part No.	Pin Part No.	Nut Size	No/per Coupling	Part No.	No/per Coupling
RC - 020	RC - 020 / 1	RC - 020/2	—	—	—	—	GC 3/4" /3/5	M 8	6	GC 3/4" /4	18
RC - 030	RC - 030 / 1	RC - 030/2	—	—	—	—	GC 1"/3/5	M 10	4	GC 1" /4	12
RC - 038	RC - 038 / 1	RC - 038 /2	—	—	—	—			6		18
RC - 042	RC - 042 / 1	RC - 042 /2	RCT - 042	1215	RCT - 042/ 1	RCT - 042/2			8		24
RC - 048	RC - 048 / 1	RC - 048/2	RCT - 048	1615	RCT - 048/ 1	RCT - 048/2	GC 1 3/4"/3/5	M 12	6	GC 1 3/4"/4	18
RC - 058	RC - 058 / 1	RC - 058/2	RCT - 058	2017	RCT - 058/ 1	RCT - 058/2			8		24
RC - 070	RC - 070 / 1	RC - 070/2	RCT - 070	2525	RCT - 070/ 1	RCT - 070/2			10		30
RC - 075	RC - 075 / 1	RC - 075/2	—	—	—	—	GC 2 3/4" /3/5	M 20	8	GC 2 3/4"/4	32
RC - 085	RC - 085 / 1	RC - 085/2	RCT - 085	3030	RCT - 085/ 1	RCT - 085/2			10		40
RC - 105	RC - 105 / 1	RC - 105/2	RCT - 105	3535	RCT - 105/ 1	RCT - 105/2			12		48
RC - 120	RC - 120 / 1	RC - 120/2	RCT - 120	4040	RCT - 120/ 1	RCT - 120/2	GC 4 1/4"/3/5	M 24	10	GC 4 1/4"/4	40
RC - 135	RC - 135 / 1	RC - 135/2	RCT - 135	4545	RCT - 135/ 1	RCT - 135/2			12		48
RC - 150	RC - 150 / 1	RC - 150/2	RCT - 150	5050	RCT - 150/ 1	RCT - 150/2			14		56
RC - 170	RC - 170 / 1	RC - 170/2	—	—	—	—	GC 6 1/4"/3/5	M 36	10	GC 6 1/4"/4	40
RC - 190	RC - 190 / 1	RC - 190/2	—	—	—	—			12		48
RC - 215	RC - 215 / 1	RC - 215/2	—	—	—	—			14		56
RC - 240	RC - 240 / 1	RC - 240/2	—	—	—	—	GC 9" /3/5	M 48	12	GC 9"/4	48
RC - 265	RC - 265 / 1	RC - 265/2	—	—	—	—			14		56

RIGID COUPLINGS
TYPE RR / RRT



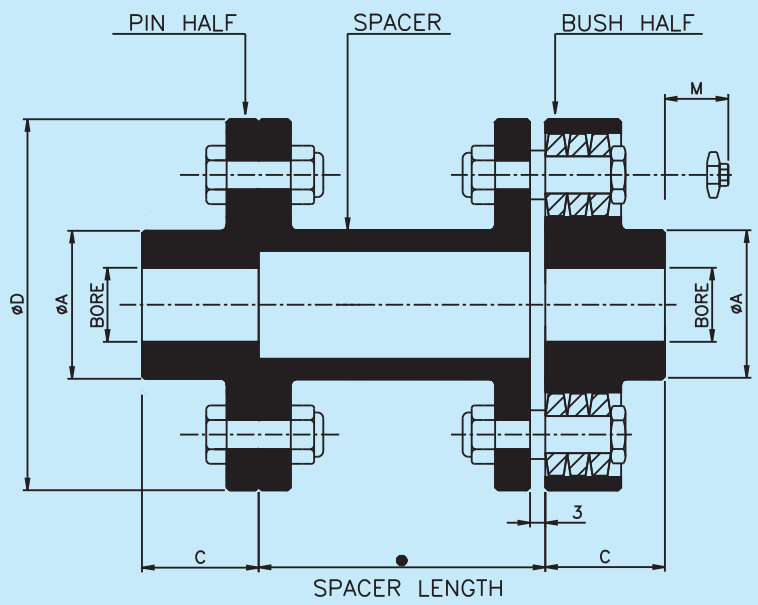
Rathi Rigid Couplings are robust, simple & ideal for exactly aligned shafts. They are torsionally stiff & backlashfree. Type RR permits larger finish bores in both halves.

TECHNICAL DATA

Coupling Type	Size	"kW at 100 RPM"	Torque Nm	Max. Speed RPM	RR		RRT			ØD	ØA	C	C1	Wt. in Kg. (Min. Bore)		M.I. (WR^2) Kg. m^2 (Min. Bore)	
					Min. Bore	Max. Bore	Bush Size	Min. Bore	Max. Bore #					RR	RRT	RR	RRT
RR	020	1.06	101	6500	12	22	-	-	-	89	35	33	-	1.6	-	0.002	-
RR/ RRT	030	2.3	220	5470	12	32	1008	10	25	127	51	41	23	3.2	2.8	0.004	0.004
	038	4.8	458	5260	15	40	1108	10	28	132	64	48	23	4.1	3.6	0.006	0.006
	042	6.4	611	4750	15	44	1215	12	32	146	70	56	38.1	5.6	5	0.008	0.0080
	048	9.63	920	4050	21	52	1615	16	42	171	81	61	38	9.3	8.3	0.024	0.023
	058	16.9	1614	3600	21	62	2017	14	50	193	97	68	47	12	10.7	0.04	0.038
	070	29.9	2855	3220	21	74	2525	16	60	216	117	76	63.5	18	16	0.07	0.067
	075	36.5	3485	2730	28	80	2525	16	60	254	127	88	68	32	30	0.18	0.177
	085	53.4	5099	2480	28	92	3030	24	75	279	147	100	76	44	39.3	0.28	0.260
	105	100	9549	2100	34	114	3535	35	90	330	180	117	89	69	61	0.59	0.56
	120	149	14228	1880	61	130	4040	40	100	370	206	132	102	109	97	1.42	1.36
	135	213	20340	1660	67	144	4545	55	115	419	230	147	114.3	145	129	2.35	2.25
	150	292	27884	1520	82	160	5050	70	127	457	256	165	127	186	166	3.48	3.33
RR	170	470	44882	1300	96	184	-	-	-	533	292	188	-	350	-	9.52	-
	190	575	54908	1170	122	206	-	-	-	597	330	211	-	475	-	14.2	-
	215	750	71620	1050	135	230	-	-	-	660	368	237	-	640	-	22.8	-

For detail information about Taper Bush bore, please refer Taper Bush catalogue.
● For vertical installation contact RATHI.

CONE - FLEX SPACER COUPLINGS
TYPE RCS



- Std. DBSE – 100, 140, 180 mm.
- Non–Standard DBSE Spacer length available on request.

Spacer Type "Cone-Flex" coupling is suitable where distance between shaft ends (DBSE) is large. The spacer member is radially removable without disturbing shaft alignment. Flexible element can be installed without disturbing the hub.

TECHNICAL DATA

Coupling Size	Torque Nm	kW at 100 rpm	Max. Speed rpm	Bore		Dimensions			
				Min.	Max.	ØA	C	ØD	M
RCS – 020	50	0.56	6500	12	20	35	33	89	30
RCS – 030	110	1.2	5470	12	30	51	41	127	28
RCS – 038	190	2	5260	15	38	64	48	132	22
RCS – 042	290	3	4750	15	42	70	56	146	14
RCS – 048	480	5	4050	21	48	82	61	171	28
RCS – 058	760	8	3600	21	58	97	68	193	24
RCS – 070	1000	11	3220	21	70	117	76	216	23

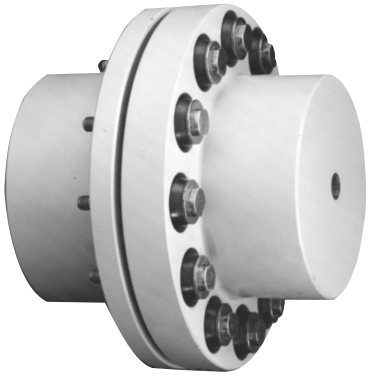
- All dimensions are in mm unless otherwise specified.
- For vertical installation contact RATHI.

ISO 9001 BUREAU VERITAS Certification
UKAS QUALITY MANAGEMENT 008

Rathi Transpower Pvt Ltd
Rathi Chambers, 7, Deccan College Road,
Pune 411 006.(INDIA)
Phone : 91-20-30517201
Fax : 91-20-30517212
E-mail : enquiry@rathigroup.com
Website : www.rathicouplings.com

Distributor

B-FLEX COUPLINGS
TYPE - RB



Lovejoy B-FLEX couplings consist of a set of resilient BARREL shaped bushes with pins & nuts and two flanged hubs of graded cast iron.

These special BARREL shaped bushes permit the MISALIGNMENT IN ALL DIRECTIONS and give extra torsional flexibility as compared to plain bushes. These couplings are suitable for general engineering application requiring reliable power transmission even under conditions of shaft misalignments which are often unavoidable.

FEATURES

SIMPLICITY OF CONSTRUCTION
Easy to assemble & disassemble. Suitable for independent running of the drive.

VARYING STIFFNESS CHARACTERISTICS
Special barrel shaped bushes provide progressively increasing stiffness characteristics, hence ensure effective shocks & vibration absorption.

NO LUBRICATION
B-FLEX couplings never require lubrication of any kind.

SIMPLE / EASY MAINTENANCE
No complicated mechanism to demand adjustment or maintenance. Inspection and replacement of bushes is easy and bushes can be quickly fitted without dismantling or moving either of coupled shafts.

LOW OPERATIONAL COST
Only wearing part is low cost bushes which make coupling economical in long run.

SMOOTH & QUIET OPERATION
Reduces vibration & noise arising from severe torque fluctuations.

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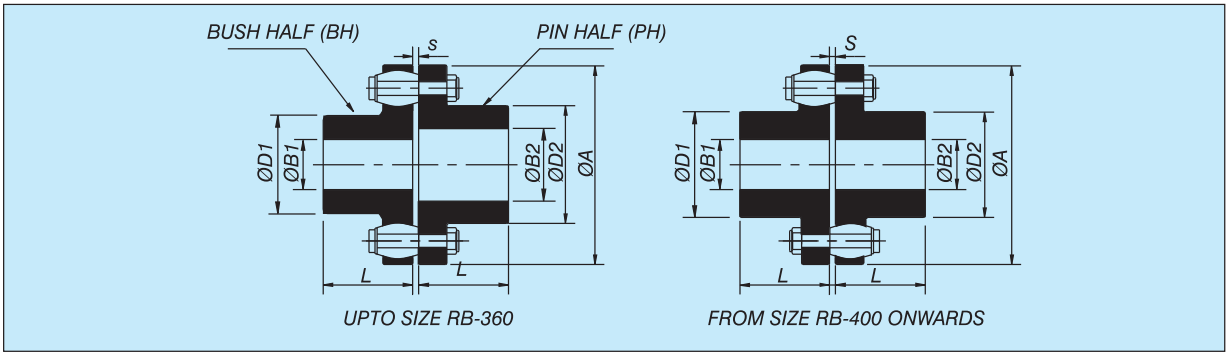
B-FLEX COUPLINGS
TYPE - RB



UPTO SIZE RB-360 — FROM SIZE RB-400 ONWARDS

TECHNICAL DATA

Coupling Size	kW at 100 RPM	Troque Nm	Max. Speed rpm	Min. Bore	Max. Bore		ØA	ØD1	ØD2	L	S	Wt. in kg.	M.I.(WR²) in $_2$ kgm	Max. Misalignment (±)		
					ØB1	ØB2								Axial (mm)	Radial (mm)	Angular
RB-105-3	1.0	95	7200	11	30	32	105	48	50	45	2-6	2	0.0030	2	0.3	1°
RB-116-4	1.5	146	6100	12	39	42	116	60	68	45	2-6	2.6	0.0050	2	0.3	1°
RB-125-4	1.7	166	5500	14	45	50	125	68	78	50	2-6	3.1	0.0070	2	0.4	1°
RB-144-6	3.3	318	4900	18	50	60	144	82	91	55	2-6	4.3	0.012	2	0.4	1°
RB-162-6	5.5	525	4500	22	60	65	162	89	100	60	2-6	7.5	0.030	2	0.4	1°
RB-178-6	6.7	643	3800	24	70	75	178	105	115	70	2-6	10	0.040	2	0.5	1°
RB-198-10	13	1248	3400	28	80	90	198	124	135	80	2-6	13	0.062	2	0.5	1°
RB-228-11	21	2050	3000	28	90	100	228	133	146	90	4-10	18	0.100	3	0.6	1°
RB-252-12	32	3069	2700	38	105	115	252	156	167	100	4-10	24	0.17	3	0.6	1°
RB-285-11	48	4552	2400	48	115	125	285	170	186	110	4-10	35	0.31	3	0.7	1°
RB-320-12	64	6099	2100	55	125	135	320	196	212	125	4-10	51	0.53	3	0.7	1°
RB-360-11	93	8900	1900	65	135	150	360	212	232	140	4-12	73	1.02	4	0.9	1°
RB-400-10	126	12051	1700	75	160	160	410	230	230	160	4-12	101	1.70	4	1.1	1°
RB-450-12	195	18602	1500	85	180	180	450	260	260	180	4-12	137	2.90	4	1.1	0.5°
RB-500-14	270	25802	1350	95	200	200	500	290	290	200	4-12	180	4.70	4	1.1	0.4°
RB-560-10	325	31003	1200	95	225	225	560	320	320	220	4-8	278	10.70	2	1.5	0.3°
RB-630-12	440	41998	1050	100	250	250	630	355	355	240	4-8	365	17.4	2	1.5	0.3°
RB-710-12	785	75000	950	100	260	260	710	385	385	260	5-9	516	33	2	1.8	0.3°
RB-800-14	1047	100000	850	100	280	280	800	420	420	290	5-9	691	53	2	1.8	0.3°
RB-900-16	1623	154998	750	100	305	305	900	465	465	320	5-9	927	86	2	1.8	0.3°
RB-1000-18	2042	194997	680	125	320	320	1000	515	515	350	5-10	1224	142.8	2	2	0.1°
RB1120-18	2827	269997	600	135	350	350	1120	560	560	380	6-11	1584	231	2	2.2	0.1°
RB-1250-20	3613	344997	550	150	380	380	1250	610	610	420	6-11	2070	367.5	2	2.4	0.1°
RB-1400-20	5550	529999	490	175	440	440	1400	700	700	480	6-12	3060	693	2	2.7	0.1°
RB-1600-24	7854	749995	430	200	480	480	1600	770	770	540	6-12	3960	1155	2	3	0.1°
RB-1800-22	10210	974996	380	225	540	540	1800	870	870	600	8-16	5760	2205	2	3.4	0.1°
RB-2000-26	13614	1299997	340	250	600	600	2000	960	960	660	8-16	7020	3255	2	3.8	0.1°

- PH = Pin Half (Drive) upto size 360
- BH = Bush Half (Driven) upto size 360

SPARE PARTS

Coupling SIZE	Pin Half Part No.	Bush Half Part No.	Pin + Washer Part No.	Bush Part No.	No. Of Pin-Bush Assy./Coupling	Nut Size
RB-105-3	RB-105-3/1	RB-105-3/2	RB/P-2	RB/B-2	3	M8
RB-116-4	RB-116-4/1	RB-116-4/2	RB/P-2	RB/B-2	4	M8
RB-125-4	RB-125-4/1	RB-125-4/2	RB/P-2	RB/B-2	4	M8
RB-144-6	RB-144-6/1	RB-144-6/2	RB/P-2	RB/B-2	6	M8
RB-162-6	RB-162-6/1	RB-162-6/2	RB/P-3	RB/B-3	6	M10
RB-178-6	RB-178-6/1	RB-178-6/2	RB/P-3	RB/B-3	6	M10
RB-198-10	RB-198-10/1	RB-198-10/2	RB/P-3	RB/B-3	10	M10
RB-228-11	RB-228-11/1	RB-228-11/2	RB/P-4	RB/B-4	11	M14
RB-252-12	RB-252-12/1	RB-252-12/2	RB/P-4	RB/B-4	12	M14
RB-285-11	RB-285-11/1	RB-285-11/2	RB/P-5	RB/B-5	11	M16
RB-320-12	RB-320-12/1	RB-320-12/2	RB/P-5	RB/B-5	12	M16
RB-360-11	RB-360-11/1	RB-360-11/2	RB/P-6	RB/B-6	11	M20
RB-400-10	RB-400-10		RB/P-7	RB/B-7	10	M20
RB-450-12	RB-450-12		RB/P-7	RB/B-7	12	M20
RB-500-14	RB-500-14		RB/P-7	RB/B-7	14	M20
RB-560-10	RB-560-10		RB/P-8	RB/B-8	10	M36
RB-630-12	RB-630-12		RB/P-8	RB/B-8	12	M36
RB-710-12	RB-710-12		RB/P-9	RB/B-9	12	M42
RB-800-14	RB-800-14		RB/P-9	RB/B-9	14	M42
RB-900-16	RB-900-16		RB/P-9	RB/B-9	16	M42

NOTES -
* All dimensions are in mm. Unless otherwise specified.
* Weight & inertia figures are at maximum bores.
* Each coupling is capable of withstanding maximum torque of 3 times of nominal torque for short durations such as during start up.
* For vertical installation contact RATHI.

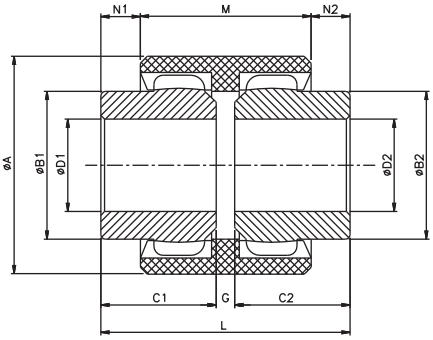
- In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change Specifications without prior notice.
-

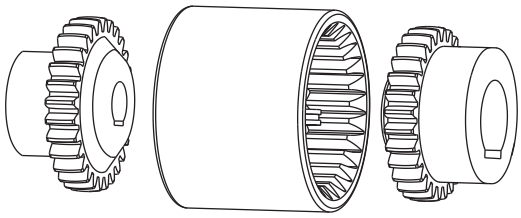
POLYGEAR COUPLINGS

TYPE RPG

- Double cardanic curve tooth gear coupling
- Operating temp.. range -25^0 C to +100^0 C
- Accommodated axial, parallel and angular shaft misalignment
- Suitable for vertical and horizontal application
- Simple & easy to assemble - Axial Plug In
- Low weight & low inertia
- Maintenance free due to combination of steel & nylon
- Useful for all applications of general engineering & hydraulics

RPG Coupling



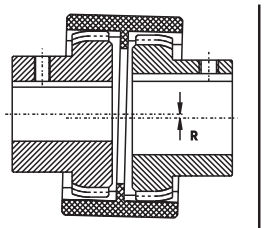


Hub Sleeve Hub

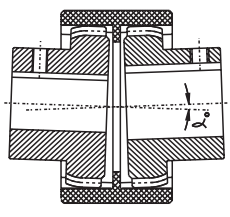
TECHNICAL DATA

Coupling Size	Rating at 100 rpm		Rated Torque (N-m)	Max. Speed rpm	Max. Bore (ø D1, ø D2) mm	ø A	ø B1, ø B2	C1, C2	G	M	N1, N2	Wt. in kg.	M.I. (WR^2) in kgm^2	Maximum Misalignment		
	KW	HP												Axial ± mm	Radial ± mm	Angular #
RPG-14	0.10	0.13	10	14000	15	40	25	23	4	37	6.5	0.10	0.26	1	0.3	±1°
RPG-19	0.17	0.22	16	11800	20	48	32	25	4	37	8.5	0.23	0.47	1	0.3	±1°
RPG-24	0.21	0.28	20	10600	24	52	36	26	4	41	7.5	0.32	0.93	1	0.4	±1°
RPG-28	0.47	0.63	45	8500	28	66	44	40	4	46	19	0.74	3.09	1	0.4	±1°
RPG-32	0.63	0.84	60	7500	32	76	50	40	4	48	18	0.95	5.48	1	0.4	±1°
RPG-38	0.84	1.12	80	6700	38	83	58	40	4	48	18	1.23	8.68	1	0.4	±1°
RPG-42	1.00	1.34	100	6000	42	92	65	42	4	50	19	1.5	14.28	1	0.4	±1°
RPG-48	1.50	2.01	140	5600	48	95	68	50	4	50	27	1.81	18.34	1	0.4	±1°
RPG-65	4.00	5.36	380	4000	65	132	96	55	4	68	23	4.35	84.80	1	0.4	±1°

ON EACH HUB



RADIAL MISALIGNMENT (R)



ANGULAR MISALIGNMENT (∠)

GUIDELINES FOR ASSEMBLY

Both the hubs must be assembled in such a way that they are flush with shaft ends. Maintain gap 'G' as mentioned in the following table. If it is difficult to measure dimension 'G', use overall length to determine the same.

The maximum speed and maximum misalignment cannot be used at the same time: the presence of misalignment reduces the maximum speed. With constant torque and well-aligned shafts, 'Rathi' polygear couplings can be used upto the maximum torque.

It is important that the sleeve slides easily in the axial direction. Accurate alignment of shafts improves the life of this coupling.

Order Sequence	Coupling Size	Finish Bore (Driver)	Finish Bore (Driven)
Example	RPG-28	ø 20	ø 25

All dimensions are in mm unless otherwise specified.
For vertical installation contact RATHI.
In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specifications without prior notice.

ISO 9001 BUREAU VERITAS Certification — UKAS QUALITY MANAGEMENT 008

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Distributor

POWER GRIP COUPLING

TYPE RP

Features -

Polyurethane Sleeve compounds provide excellent torsional vibration dampening; absorb load pulsations and minimize drive line shock. This sleeve design allows the coupling to act as a predictable fuse in the system.

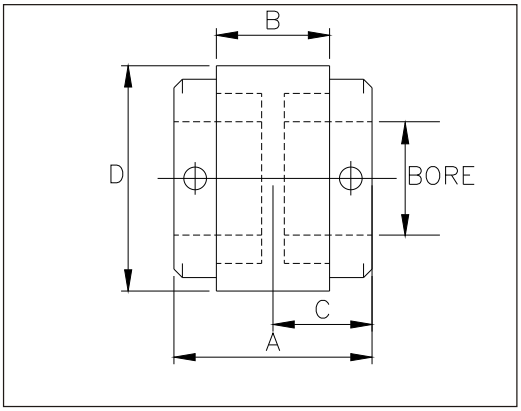
Minimum backlash.

Coupling length can be varied to meet application requirements.

Non-Corrosive metal ends and rubber compounds are not affected by moisture, dirt and abrasives. No lubrication, adjustments or maintenance is required. No metal-to-metal contact even when the coupling shears.

Compact, small diameter coupling with low moment of inertia.

Temperature range from-25 C to +100 C.



TECHNICAL DATA

Coupling Size	Rated Torque N-m	kW at 100 rpm	Max. Speed rpm	Bore Size		Dimensions			
				Min.	Max.	A	B	C	D
RP-43	13.6	0.14	3500	9.5	22	60.5	40	29	47
RP-56	40.6	0.43	3500	12	30	63.5	40	30	55
RP-66	61.0	0.64	3500	12	35	70	40	33	78.5

- All dimensions are in mm.

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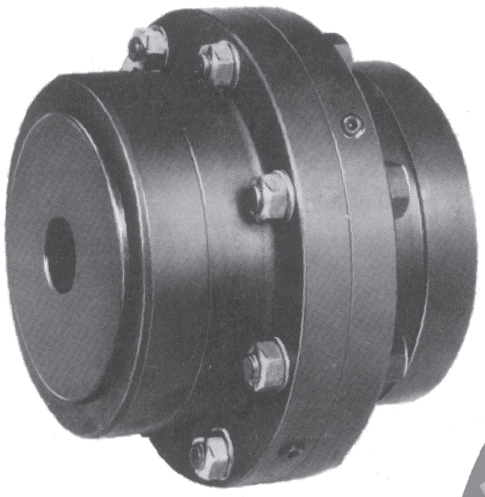
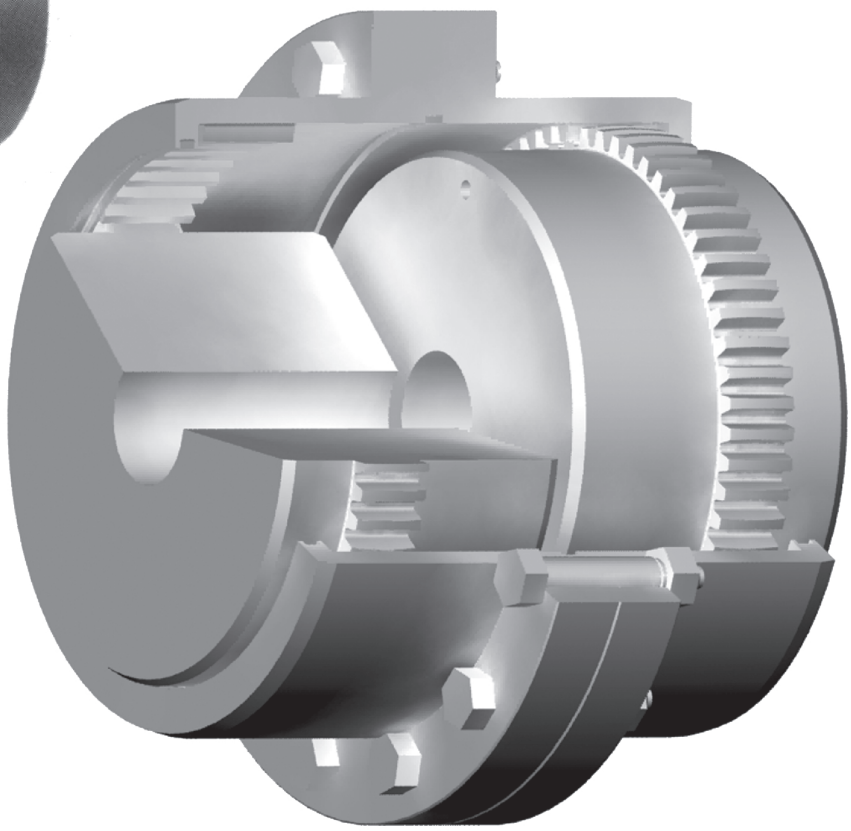
RATH®

GEAR-*Flex* COUPLINGS

TYPE
RGD / RGS

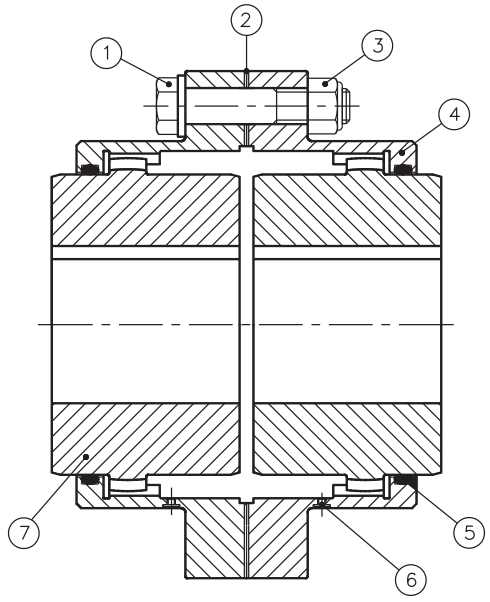




FEATURES

- High Torque Ratings
- Large Bore Capacity
- Interchangeability
- Better Fastener Design
- High Misalignment Capacity
- Improved Lubrication System

CONFORMS TO AGMA STANDARD



1)BOLT
2)GASKET
3)NUT
4)SLEEVE
5) O-RING
6) OIL PLUG
7) HUB

High Torque Ratings
Rathi RGD & RGS Series Gear coupling; torque capacity exceeds the competition, and it allows smaller coupling size of increased service factor.

Large Bore Capacity
Rathi RGD & RGS Series Gear couplings can accommodate large shaft diameters for given particular size of coupling compared to the competition, in most instances. That mean you can buy a smaller less expensive coupling and still get the proper rating for the equipment.

Interchangeability
Complete half coupling assemblies are interchangeable with any other half gear coupling with exposed bolt flange manufactured to AGMA standard. Rathi replacement half couplings provide additional hub strength and lower gear mesh loads.

High Misalignment Capacity
Rathi RGD & RGS Gear couplings are designed to accommodate a static misalignment of $1\frac{1}{2}^{0}$ per gear mesh. The recommended operating misalignment is limited to $3/4^{0}$ per gear mesh. Axial moment of connected shafts is also accommodated in these couplings.

Lubrication System
Rathi Special Grease (RSG) properties are designed/developed to resist separation of Base oil & thickner due to centrifugal forces encountered in Gear coupling. This benefits for the application -

- Significantly extended relubrication intervals
- Reduced maintenance cost
- Superior lubrication
- Increased coupling life

The location & size lubrication holes in the sleeve ensures that adequate grease is available at the gear mesh, where it is needed must fully moulded seals positively lubricant and seal interior against foreign matter

SERVICE FACTOR - S. F.

Torque Variation	Electric motor gas or steam turbine	Steam engine or Water turbine	Gas or oil Recip. Engine
Consultant Torque e.g. centrifugal pumps and compressors, light fans and light duty agitators	1.0	1.25	3.0
Slight Fluctuations e.g. screw compressors & pumps, liquid ring compressors, medium duty mixer & fans	1.5	2.0	3.0
Substantial Fluctuations e.g. reciprocating pumps, heavy duty mixer & fans	2.0	2.5	4.0

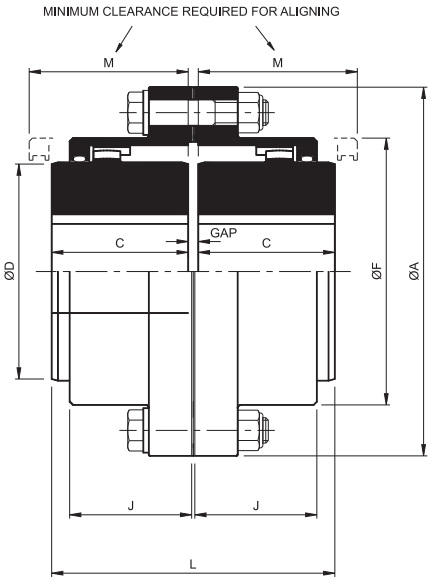
SELECTION :

1. Select appropriate service factor S.F.
2. Calculate coupling Torque T (kNm)

$$T = \frac{9.55 \times P \times S.F.}{N}$$

Where P = Drive rated power (kW)
N = Speed (rev./min)

3. Select coupling with the same or higher Torque.
4. Check hub bore capacity.
5. Check allowable speed.



TYPE RGD

Double Engagement Couplings : TYPE - RGD

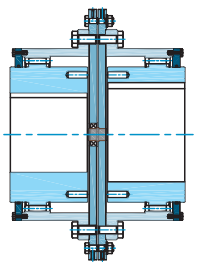
Standard Double engagement couplings accommodate both angular and parallel misalignment or combination of both, as well as end float without imposing appreciable axial loads on adjacent bearings.

The exposed bolt design allows use of the either open end or socket wrenches, which makes it the preferred design for most industrial applications.

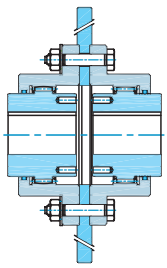
Ideal for all standard applications including fans, overhead cranes, conveyors, steel and paper mill equipments.

Special requirements like limited end float, electrical insulation, Mill motor, Slide, Spacer, Brake drum, Shear pin, Shrouded bolt designs are supplied. Many designs can be created for " Unique" applications as well, contact **RATHI.**

Size	Coupling Rating		Maximum Speed rpm	Bore Dia mm		Dimensions mm								Solid Hub	
	kW at 100 rpm	Rated Torque Nm		Min. Bore	Max. Bore	ØA	L	C	ØD	ØF	J	M	Gap	Mass kg	M.I. (WR^2) kg-m^2
10	14	1337	8000	14	52	116	89	43	69	84	39	51	3	4.4	0.0052
15	30	2865	6500	22	65	152	103	50	86	105	48	61	3	9	0.0192
20	53	5061	5600	27	80	178	127	62	105	127	60	76	3	15	0.041
25	105	10027	5000	32	98	213	159	77	131	155	72	92	5	27	0.105
30	168	16043	4400	42	115	240	187	91	152	181	84	106	5	40	0.195
35	231	22059	3900	47	135	279	220	107	178	211	98	130	6	65	0.454
40	336	32086	3600	47	160	318	248	121	210	250	111	145	6	96	0.86
45	472	45073	3200	52	180	346	278	135	235	274	123	165	8	131	1.39
50	650	62070	2900	72	195	389	314	153	254	306	141	183	8	186	2.53
55	880	84034	2650	72	215	425	344	168	279	334	158	203	8	247	3.83
60	1205	115069	2450	77	235	457	384	188	305	366	169	228	8	299	5.21
70	1823	174084	2150	92	280	527	451	221	356	425	196	266	9	473	11
80	2639	252006	1750	95	285	590	508	249	385	485	243	300	10	682	20.72
90	3037	290012	1550	100	300	660	565	276	420	535	265	325	13	898	34.95
100	4100	391521	1450	120	330	711	623	305	470	595	294	355	13	1242	55.95

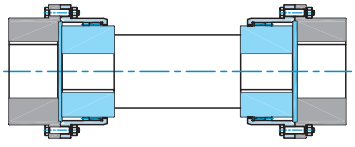


SHEAR PIN GEAR COUPLING



DISK BRAKE GEAR COUPLING

Brake Drum



FLOATING SHAFT GEAR COUPLING

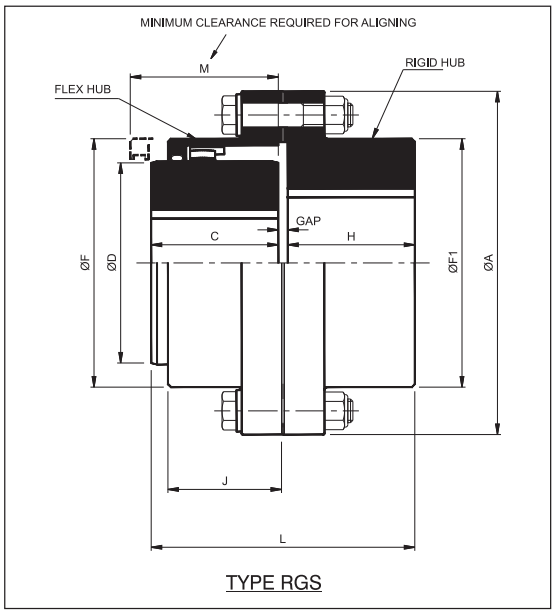
Spacer Type

Single Engagement Couplings : TYPE - RGS

Standard Single engagement couplings accommodate angular misalignment and end float without imposing appreciable axial loads on adjacent bearings.

Exposed bolt design allows the use of either open end or socket wrenches which makes it the preferred design for most industrial applications.

Used primarily with floating shaft assemblies to cover longer distance between shaft ends. Consult **RATHI** for vertical applications.



TYPE RGS

Size	Coupling Rating		Max.	Min Bore Dia mm		Max Bore Dia mm		Dimensions mm										Solid Hub	
	kW at 100 rpm	Rated Torque Nm	Speed rpm	Flex Hub	Rigid Hub	Flex Hub	Rigid Hub	ØA	L	C	ØD	ØF	ØF1	J	H	M	Gap	Mass kg	M.I. (WR^2) kg-m^2
10	14	1337	8000	14	18	52	60	116	87	43	69	84	84	39	40	51	4	4.5	0.0055
15	30	2865	6500	22	26	65	80	152	101	50	86	105	107	48	47	61	4	9.5	0.0204
20	53	5061	5600	27	30	80	90	178	125	62	105	127	130	60	59	76	4	15.5	0.0436
25	105	10027	5000	32	37	98	110	213	156	77	131	155	157	72	74	92	5	27.5	0.111
30	168	16043	4400	42	44	115	130	240	184	91	152	181	182	84	88	106	5	41.5	0.210
35	231	22059	3900	47	52	135	150	279	215	107	178	211	212	98	102	130	6	67	0.477
40	336	32086	3600	47	52	160	180	318	245	121	210	246	250	111	116	145	8	100	0.92
45	472	45073	3200	52	57	180	200	346	274	135	235	274	276	123	131	165	8	135	1.468
50	650	62070	2900	72	77	195	220	389	310	153	254	306	309	141	148	183	9	195	2.73
55	880	84034	2650	72	77	215	240	425	350	168	279	334	334	158	173	203	9	261	4.20
60	1205	115069	2450	77	82	235	260	457	384	188	305	366	366	169	185	228	10	316	5.70
70	1823	174084	2150	92	102	280	300	527	452	221	356	425	425	196	218	266	13	500	12.05
80	2639	252006	1750	95	105	285	335	590	511	249	385	485	470	243	249	300	13	715	21.77
90	3037	290012	1550	100	-	300	370	660	567	276	420	535	518	265	276	325	15	969	36.60
100	4100	391521	1450	120	-	330	405	711	626	305	470	595	572	294	305	355	16	1259	56.27

- The outer dimensions of flanges are rounded up to nearest figure in above tables.
- To attend the max. Speed specified above Dynamic balancing is required please contact RATHI.
- Max. bores specified above are for uniformly loaded drives only.
- Max. bore for coupling with or equivalent to DIN 6885 keys.
- Min. bore is nothing but a rough stock bore, to which the couplings are manufactured.
- For vertical installation, higher sizes & spacer type couplings contact to RATHI.

ISO 9001
BUREAU VERITAS Certification
UKAS QUALITY MANAGEMENT 008

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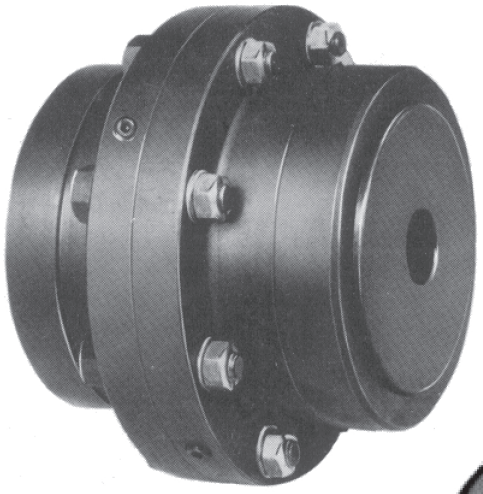
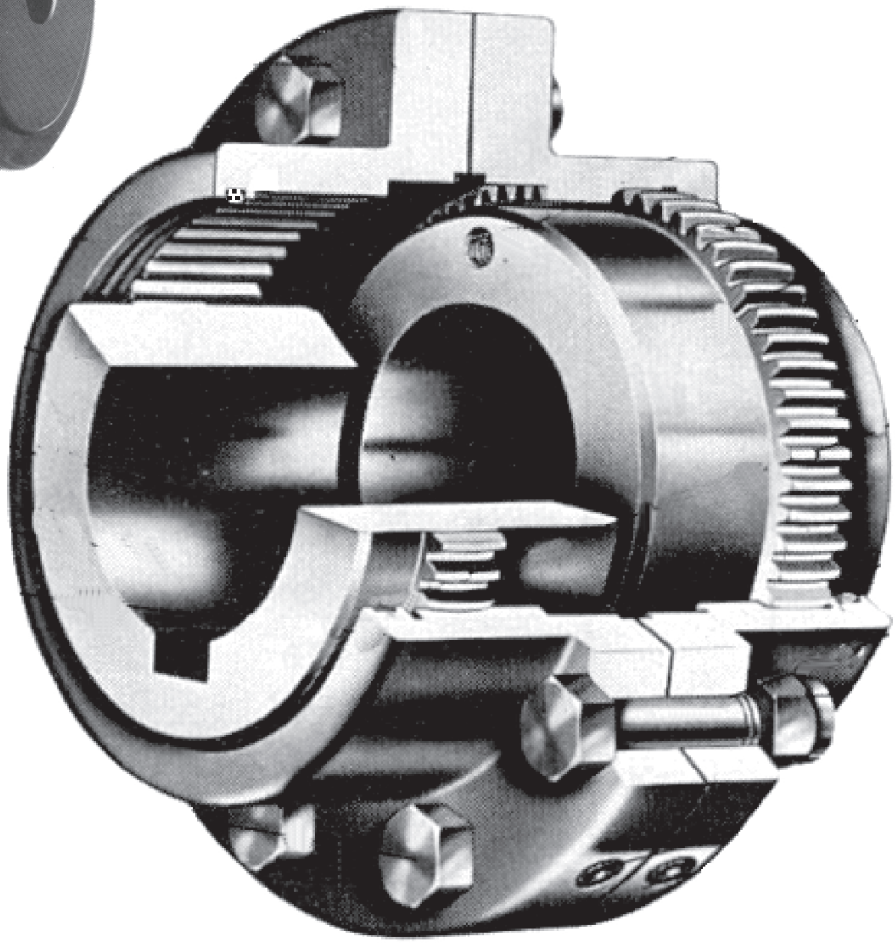
Distributor

GEAR-*flex* COUPLINGS

TYPE - LFG / LHG





FEATURES

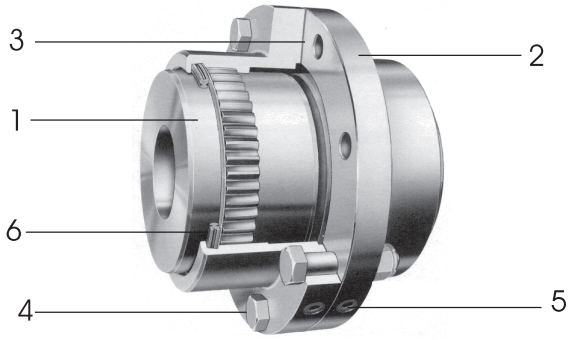
- Less Backlash.
- Compact Assembly.
- Larger Bore Capacities.
- High Power To Weight Ratio.
- Accommodates Angular, Parallel & Axial Misalignments.
- Generally used upto 120°C. Can be used for higher temperatures by using proper grade of grease or oil.

CONSTRUCTION

Full gear type LFG Lovejoy Flexible Gear Coupling consists of two identical toothed hubs, two identical flanged sleeves with internal teeth, a gasket, a set of bolts, nuts and lock washers, lube plugs and two oil / grease retaining seals over the hubs.

NOMENCLATURE

1	FORGED HUBS WITH EXTERNAL TEETH
2	FORGED SLEEVES WITH INTERNAL TEETH
3	FLANGE GASKET
4	CLOSE TOLERANCE CONNECTING BOLTS
5	LUBRICATION PLUG
6	'O' RING



SELECTION PROCEDURE

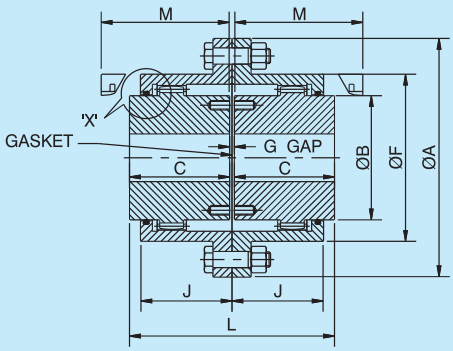
1. Select an appropriate SERVICE FACTOR from table given below.
2. Multiply the rated running power by the service factor. This gives DESIGN POWER at rated speed (rpm). Convert this to design power at 100 rpm. This is used as a basis for coupling selection.
3. Refer to the rating column and read until the power greater than or equal to the design power at 100 rpm is found. The size of the gear coupling is given in the corresponding first column. Check the max. bore capacities. If required bore size is greater than the max. bore of selected coupling size, then go for higher size to meet the required bore.

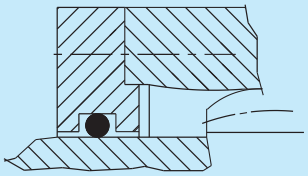
SERVICE FACTORS

LOAD	DRIVEN EQUIPMENT	TYPE OF DRIVE	
		Motor or Turbine	Reciprocating Engine
Uniform	Centrifugal Pumps, Conveyors - Even Loaded, Exciters, Fans and Blowers - Light Duty, Generators - Even Loaded & Mixers - Liquid.	1	1.5
Light	Centrifugal Pumps, Generators - Pulsating Load, Grinders, Hydraulic Pumps, Kilns, Line Shafting, Machine Tools, Oscillating Pumps, Textile Machinery & Woodworking Machinery.	1.5	2
Medium	Air compressors - Multi - Cylinder, Ball and Rod Mills, Cranes, Elevators, Hoists, Punch Presses, Reciprocating pumps, Shears, Ship Drives & Welding Generators.	2	2.5
Heavy	Air Compressors - Single Cylinder, Dredges, Drilling Rigs, Mine Machinery, Rolling Mill Drives & Rubber Mixers.	2.5	3
Extreme	Ore Crushers, Bar Stock Shears & Vibrating Conveyors.	3	4

FEATURES

Standard full flexible gear coupling TYPE LFG accommodates angular & parallel misalignments or a combination of both as well as axial misalignment (end float). Ideal for all horizontal, close coupled applications including fans, overhead cranes, conveyors, steel & paper mill equipments. One or both the hubs can be easily reversed for more than normal shafts separation applications.





DETAIL 'X'

THIS COVER PLATE CONSTRUCTION FOR SIZES LFG - 111 ONWARDS.

FULL FLEXIBLE TYPE LFG

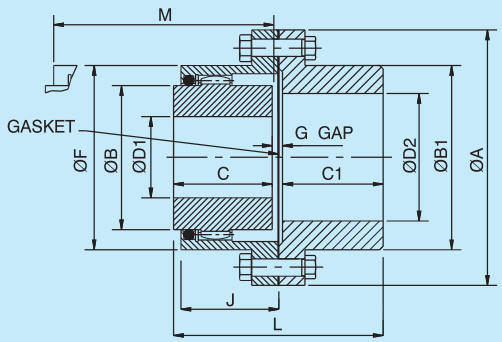
TECHNICAL DATA

Size	kW at 100 rpm	Rated Torque Nm	Max. rpm	Bore		ØA	C	ØB	ØF	M	G	J	L	Solid Hub	
				PB	Max.									Wt. kg	M.I.(WR^2) kg-m^2
LFG-100	5.9	559	7600	13	35	120	45	50	75	54	3	39	93	4.2	0.01
LFG-101	11.8	1127	6300	21	50	170	55	65	110	67	5	49	115	11	0.04
LFG-102	29.4	2804	5000	30	60	185	70	85	125	83	5	62	145	15	0.05
LFG-103	52.9	5047	4000	40	75	220	85	105	150	103	5	78	175	25	0.12
LFG-104	100	9557	3350	50	90	250	105	130	175	124	5	96	215	39	0.24
LFG-105	153	14605	2800	60	110	290	110	155	200	136	10	106	230	57	0.49
LFG-106	235	22444	2500	75	125	320	125	175	230	152	10	117	260	85	0.75
LFG-107	412	39303	2100	90	140	350	140	205	260	174	10	134	290	103	1.31
LFG-108	529	50472	1900	105	160	380	155	230	290	187	10	147	320	138	2.13
LFG-109	658	62821	1700	125	180	430	165	250	330	196	10	156	340	210	3.75
LFG-110	963	91923	1400	140	220	490	180	310	390	216	10	171	370	277	7.63
LFG-111	1289	123065	1250	160	260	545	200	350	445	245	10	191	410	550	14.5
LFG-112	1723	164516	1120	180	300	590	240	400	490	289	10	230	490	710	22
LFG-113	2344	223793	1000	200	330	680	260	440	555	312	15	241	535	980	34.5
LFG-114	3351	320012	900	220	370	730	280	500	610	341	15	265	575	1320	72.75
LFG-115	4071	388738	800	250	410	780	320	540	660	385	15	303	655	1700	88.25
LFG-116	7028	671165	710	300	455	900	350	625	755	423	20	333	720	2550	172
LFG-117	9997	954665	630	375	520	1000	400	720	855	489	20	384	820	3620	309
LFG-118	13236	1263938	560	450	610	1100	450	810	950	533	20	428	920	4860	491
LFG-119	17454	1666744	500	520	710	1250	485	910	1050	559	30	444	1000	6380	753

- *All dimensions are in mm unless otherwise specified.*
- *Spacer couplings, Brake drum, Brake disc, Shear pin, Floating shaft couplings are available.*
- *Weights & M.I. specified are with solid hubs.*
- *For vertical installation contact RATHI.*

FEATURES

- **Standard half flexible gear coupling TYPE LHG cannot accommodate parallel misalignment.**
- **Used primarily with floating shaft assemblies. Extensively used for cross traverse and long travel line shaft drives.**



HALF FLEXIBLE TYPE LHG

TECHNICAL DATA

Size	kW at 100 rpm	Rated Torque Nm	Max. rpm	Bore			ØA	C	ØB	ØF	M	G	J	L	C1	ØB1	Solid Hub	
				PB	Max.												Wt. kg	M.I. (WR^2) kg-m^2
					ØD1	ØD2												
LHG-100	5.9	559	7600	13	35	45	120	45	50	75	54	3	39	93	45	65	4.2	0.01
LHG-101	11.8	1127	6300	21	50	60	170	55	65	110	67	5	49	115	55	85	11	0.04
LHG-102	29.4	2803	5000	30	60	75	185	70	85	125	83	5	62	145	70	110	15	0.05
LHG-103	52.9	5046	4000	40	75	90	220	85	105	150	103	5	78	175	85	130	20	0.12
LHG-104	100	9556	3350	50	90	110	250	105	130	175	124	5	96	215	105	160	40	0.25
LHG-105	153	14604	2800	60	110	130	290	110	155	200	136	10	106	230	110	185	60	0.5
LHG-106	235	22443	2500	75	125	150	320	125	175	230	152	10	117	260	125	215	80	0.83
LHG-107	412	39303	2100	90	140	170	350	140	205	260	174	10	134	290	140	240	106	1.45
LHG-108	529	50472	1900	105	160	200	380	155	230	290	187	10	147	320	155	285	149	2.38
LHG-109	658	62821	1700	125	180	220	430	165	250	330	196	10	156	340	165	315	170	4.2
LHG-110	963	91922	1400	140	220	260	490	180	310	390	216	10	171	370	180	370	264	8.75

- *All dimensions are in mm unless otherwise specified.*
- *Spacer couplings, Brake drum, Brake disc, Shear pin, Floating shaft couplings are available.*
- *Weights & M.I. specified are with solid hubs.*
- *For vertical installation contact RATHI.*

- **In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specifications without prior notice.**
- **This document is the intellectual property of Rathi Transpower Pvt. Ltd. and subject to copyright.**

ISO 9001 BUREAU VERITAS Certification — UKAS QUALITY MANAGEMENT 008

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Distributor

GRID-*f*LEX COUPLINGS
TYPE - LGF

Lovejoy Grid-*f*lex couplings are lubricated, having high torque capacity like gear couplings & with torsional flexibility of an Elastomer couplings. Grid-*f*lex offers the simplest, most cost effective solution for moderate to high torque application.

FEATURES :

SIMPLICITY

Has few components such as Hubs, Grid, Cover, Seal & Fasteners.

- **Hubs** are made from high fatigue strength steel, so that tooth fatigue failures are eliminated. Hubs are accurately machined to permit utilization of any hub surface for measurement of shaft alignment.
- **Grid** is made from high strength spring steel and duly heat treated to get high hardness. So that the stresses developed in the grid by transmitted load are well below the design value. Both straight & taper grids are available.
- **Covers** are made of Graded Cast Iron / Aluminium covers which permit higher running speeds.
- **Seal** is specially "U" shaped and made of synthetic material to withstand oil, dusty atmosphere and prevent leakage of lubricant.
- **Fasteners** are made of High tensile grade materials.

SIMPLE / EASY MAINTENANCE

As there are fewer & less complicated components, maintenance is less & when regular inspection / lubrication is done the couplings gives good life.

LOW OPERATIONAL COST

The spare required is mainly the grid, which is a low cost component and that also gives substantial life. Hence the operational cost is much low.

SMOOTH & QUIET OPERATION

The coupling components except grid to hub have no relative movement. Hence are smooth is operation. In grid & hub also the relative movement is very low & depends on misalignment. Hence the coupling as a whole is smooth & quite in operation.

LUBRICATION

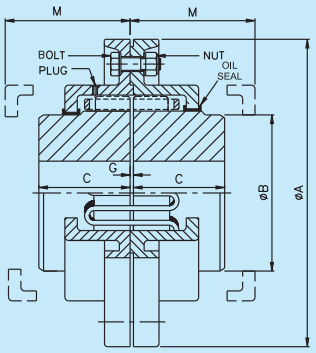
Rathi Special Grease (RSG) is developed to resist separation of base oil & thickener due to centrifugal forces encountered in Grid coupling to avoid wear & tear.

Service Factor :

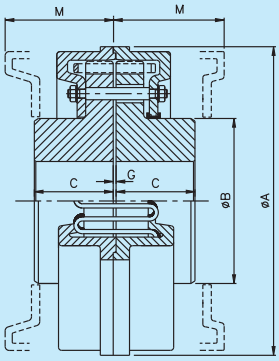
Class of Machine			S.F.	Class of Machine			S.F.
Agitator			2	Fan	:	Cooling tower	2.5
Calender			3		:	Industrial	2.0
Cement Mill & Kiln			3		:	Mine	2.5
Conveyor	:	Horizontal	1.0	Haulage			3
	:	Inclined	1.5	Line Shafting			2
Couches	:		2.5	Machine Tool		: Reversing	3.0
Crane motions :-						: Other	1.5
a) (Classes 3 & 4)		Hoist	4	Paper Mill		:	2~4
		Long travel	3	Pumps		: Centrifugal	1.25
		Cross traverse	3			: Rotary	2
b) (Classes 1 & 2)		Hoist	3			: Reciprocating	3
		Long travel	2.5	Rock Crushers		:	4
		Cross traverse	2.5	Rubber Mill		: Rubber Mixer	3
Electric Generator (Steady load)			1.75	Steel Work Drives		:	2~5
				Turbine Driven Generators		:	1.25
				Rolling Mills, Motors Driven without Flywheel		:	4

GRID-*f*LEX COUPLINGS
TYPE - LGF

VERTICAL SPLIT COVERS



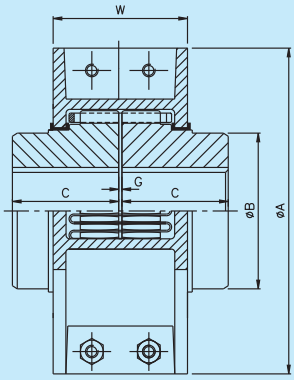
(SIZE 105 TO 425)



(SIZE 432 & 492)

TYPE V

HORIZONTAL SPLIT COVERS



(SIZE 105 TO 492)

TYPE H

TECHNICAL DATA

Size	kW at 100 rpm	Max. Speed rpm		Bore		Dimensions							Weight kg	
						ØA		C	ØB	W	M	G		
		V	H	Pilot	Max.	V	H						V	H
LGF-105	0.45	5800	3600	10	29	105	104	38.0	45	57	53	0.80	3	3
LGF-120	0.70	5000	3350	12	38	120	120	38.0	58	65	53	0.80	4	4
LGF-144	1.50	4500	3350	16	42	144	127	44.5	62	65	60	0.80	5	5
LGF-172	2.20	3500	2600	16	58	172	159	51.0	87	66	60	0.80	9	8
LGF-190	3.40	3300	2400	16	58	190	178	51.0	85	85	80	0.80	11	13
LGF-197	4.90	3100	2200	16	65	197	190	57.0	100	85	80	0.80	16	17
LGF-222	7.00	2600	1900	25	80	222	222	63.5	120	87	80	0.80	20	19
LGF-254	9.40	2300	1700	25	95	254	245	70.0	143	87	81	0.80	27	27
LGF-276	13.80	2000	1600	25	110	276	267	89.0	165	87	81	0.80	43	39
LGF-295	26.50	1900	1500	38	104	295	276	102.0	155	138	129	1.60	54	47
LGF-324	33.90	1800	1300	50	124	324	324	101.5	187	157	148	1.60	63	67
LGF-336	48.90	1600	1300	50	124	336	336	101.5	184	157	148	1.60	72	74
LGF-375	67.50	1400	1100	50	148	375	381	114.0	222	159	148	1.60	104	108
LGF-425	93.60	1200	1000	50	170	425	425	127.0	254	160	148	1.60	149	149
LGF-432	179.00	1200	800	75	* 157	432	501	140.0	239	180	180	3.20	180	234
LGF-492	261.00	1100	700	85	* 173	492	552	152.5	267	180	180	3.20	216	318

Note :-

* Max. Bore for 'H' Type LGF - 432 = 202 mm & for LGF - 492 = 234 mm.

\# Dimension B for H type LGF - 432 = 302 mm & for LGF - 492 = 349 mm.

- All dimensions are in mm unless otherwise specified.
- For vertical installation contact RATHI.
- Speeds specified are with standard material of construction, consult manufacturer for higher speeds.
- Weights specified are with max. bore.
- For Inertia, torsional stiffness and for higher sizes consult manufacturer.
- In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specification without prior notice.
-

ISO 9001 BUREAU VERITAS Certification

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Website : www.rathicouplings.com

Distributor

TAPER GRID COUPLINGS

TYPE RGTH

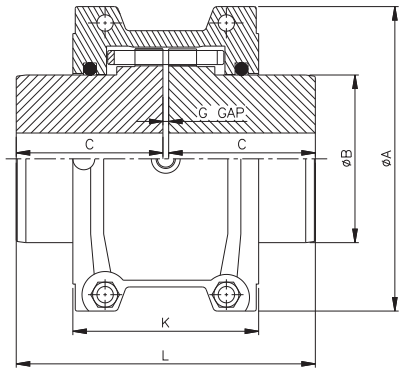
Features

- Torsionally Flexible.
- Vibration dampening - reduced peak / shock loads.
- Accommodates angular, parallel & axial misalignments.
- Low operating cost.
- Smooth & quiet operation.
- Low & easy maintenance.
- Overload conditions cause the grid element to shear, like a mechanical fuse.
- Quick & easy installation.

RGTH Coupling

Applications

- Cement mills: Crushers and grinding machines.
- Steel mills: Coilers, cold mills, hot mills etc.
- Paper mills: Calendar, couch roll, suction roll, dryer drives etc.
- Sugar mills: Cane carrier and leveler, cane knife and crusher.
- General: Agitators, Blowers, conveyors, cranes etc.



TECHNICAL DATA

Coupling Size	KW at 100 rpm	Basic Torque (Nm)	Max. Speed (rpm)	Bore Dia (mm)		Dimensions (mm)					Gap (mm)	Lube weight (Kg)	Weight In (kg)
				Min.	Max.	ØA	Ø B	C	K	L			
1020	0.50	48	4500	13.0	30	101.5	39.7	47.5	66.5	98.0	3	0.03	1.9
1030	1.42	136	4500	13.0	36	110.0	49.2	47.5	68.0	98.0	3	0.03	2.6
1040	2.36	226	4500	13.0	44	117.5	57.1	51.0	70.0	104.5	3	0.05	3.4
1050	4.14	395	4500	13.0	51	138.0	66.7	60.0	79.5	123.5	3	0.05	5.4
1060	6.50	621	4350	19.5	57	150.5	76.2	63.5	92.0	130.0	3	0.09	7.3
1070	9.46	903	4125	19.5	68	162.0	87.3	76.0	95.0	155.5	3	0.11	10
1080	19.51	1863	3600	27.0	82	194.0	104.8	89.0	116.0	181.0	3	0.17	18
1090	35.47	3387	3600	27.0	95	213.0	123.8	98.5	122.0	200.0	3	0.25	25
1100	59.71	5702	2400	41.5	110	250.0	142.0	120.5	155.5	245.5	4.5	0.43	42
1110	88.67	8468	2250	41.5	120	270.0	160.3	127.0	161.5	258.5	4.5	0.51	54
1120	130.05	12420	2025	60.5	140	308.0	179.4	149.5	191.5	304.5	6	0.73	81
1130	189.17	18066	1800	66.5	170	346.0	217.5	162.0	195.0	330.0	6	0.91	121
1140	271.93	25969	1650	66.5	200	384.0	254.0	183.0	201.0	371.5	6	1.13	178
1150	378.34	36131	1500	108.0	215	453.0	269.2	183.0	271.0	372.0	6	1.95	234
1160	532.04	50810	1350	120.5	240	501.5	304.8	198.0	279.0	402.0	6	2.81	317
1170	709.38	67746	1225	133.5	280	566.5	355.6	216.0	304.0	438.0	6	3.49	448
1180	983.68	93941	1100	152.5	300	630.0	393.7	239.0	321.0	483.5	6	3.76	619
1190	1300.53	124201	1050	152.5	335	675.5	436.9	259.0	325.0	524.5	6	4.40	776
1200	1773.46	169365	900	179.0	360	757.0	497.8	279.5	355.5	565.0	6	5.62	1058
1210	2605.47	248822	820	178.0	390	844.5	533.4	305.0	432.0	622.5	12.7	10.5	1424
1220	3515.89	335768	730	203.0	420	920.5	571.5	325.1	490.0	663.0	12.7	16.1	1785

Lubrication:

For quality lubrication to get good performance and long life, Rathi Special Grease (RSG) is highly recommended.
After every three months or every 240 ~ 250 operating hours, required to add grease. Every 6 months or every 4000 operating hours required to replace all deteriorated grease.

TAPER GRID COUPLINGS

TYPE RGTV

FEATURES

- Vertical split cover: Ideal for higher running speeds and general purpose. Horizontal split also available for specific applications.
- Lubrication fittings: One or more lube holes in each half cover makes for easier lubrication. Fill through one and remove other plug for venting.
- Seals: Durable synthetic material prevents loss of lubricant & entrance of water, dust or other foreign materials.
- Hubs: Made of steel for maximum strength.
- Taper Grid: Made of high strength steel, quenched and tempered to spring hardness.

RGTV Coupling

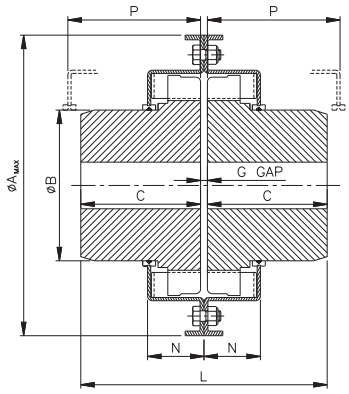
Selection Procedure

1. Select appropriate service factor F.
2. Calculate coupling Torque T (Knm)

$$T = \frac{9.55 \times kW \times F}{N}$$

Where kW = Drive rated power (kW)
N = Speed (rev./min)

3. Select coupling with the same or higher Torque.
4. Check hub bore capacity.
5. Check allowable speed.



TECHNICAL DATA

Coupling Size	KW at 100 RPM	Basic Torque (Nm)	Max. Speed (rpm)	Bore Dia (mm)		Dimensions (mm)						Gap (mm)	Lube weight (Kg)	Weight In (kg)
				Min.	Max.	ØA	Ø B	C	L	N	P			
1020	0.50	48	6000	13.0	30	111.0	39.7	47.5	98.0	24.0	47.5	3	0.03	2.0
1030	1.40	134	6000	13.0	36	121.0	49.2	47.5	98.0	25.0	47.5	3	0.03	2.6
1040	2.30	219	6000	13.0	44	128.5	57.1	51.0	104.5	25.5	51.0	3	0.05	3.4
1050	4.10	391	6000	13.0	51	147.5	66.7	60.5	123.5	31.0	60.5	3	0.05	5.4
1060	6.49	620	6000	19.0	57	162.0	76.2	63.5	130.0	32.0	63.5	3	0.09	7.3
1070	9.39	897	5500	19.0	68	173.0	87.3	76.0	155.5	33.5	76.0	3	0.11	10.4
1080	19.48	1860	4750	27.0	82	200.0	104.8	89.0	181.0	44.0	89.0	3	0.17	17.7
1090	34.96	3339	4000	27.0	95	232.0	123.8	98.5	200.0	47.5	98.5	3	0.25	25.4
1100	59.44	5676	3250	41.5	110	267.0	142.0	120.5	245.5	60.0	120.5	4.5	0.43	42.2
1110	87.90	8395	3000	41.5	120	286.0	160.3	127.0	258.5	64.0	127.0	4.5	0.51	54.4
1120	129.86	12401	2700	60.5	140	319.0	179.4	149.0	304.5	73.5	149.0	6	0.73	81.6
1130	188.79	18030	2400	67.0	170	378.0	217.5	162.0	330.0	75.0	162.0	6	0.91	122.5
1140	271.70	25948	2200	67.0	200	416.0	254.0	183.0	371.5	78.0	183.0	6	1.13	180.1
1150	378.59	36155	2000	108.0	215	476.5	269.2	183.0	372.0	107.0	183.0	6	1.95	230.0
1160	532.04	50810	1750	121.0	240	533.5	304.8	198.0	402.0	114.5	198.0	6	2.81	321.1
1170	709.38	67746	1600	133.5	280	584.0	355.6	216.0	438.0	120.0	216.0	6	3.49	448.2
1180	983.68	93941	1400	152.5	300	630.0	393.7	239.0	483.5	130.0	239.0	6	3.76	591.0
1190	1300.53	124201	1300	152.5	335	685.0	436.9	260.0	524.0	135.0	259.0	6	4.40	761.0
1200	1773.46	169365	1100	178.0	360	737.0	497.8	279.5	565.0	145.0	279.5	6	5.62	1021.0

- All dimensions are in mm unless otherwise specified.

In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specifications without prior notice.

ISO 9001 BUREAU VERITAS Certification

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Distributor

RATH®

Lovejoy® INDIA

DISC-O-FLEX COUPLINGS

DISC-O-FLEX COUPLINGS

Lovejoy Disc-O-Flex couplings are fully metallic couplings, consisting of two hubs, one centre spacer member, two sets of stainless steel element blades bolted together with high tensile bolts. Replacement of element blades is easy, simple and is possible without disturbing drive or driven equipment.

FEATURES

- High power - to - weight ratio.
- No wearing parts, no lubrication required.
- Easy installation with 'Drop Out' spacer.
- Accommodates angular, parallel and axial misalignments.
- Non stainless steel parts coated with a durable anticorrossive coating.
- High temperature application.
- Replaceable element blades.
- Visual inspection possible without disassembling equipment.
- Inherently balanced.
- High torsional rigidity with low axial stiffness.
- Special options including spacer lengths, modified hubs, special materials are available.
- Floating shaft/cooling tower couplings are available.
- Backlash free.
- High speed capability.
- Dynamic balancing to customer specifications.
- Machined to high precision standards.
- Lightweight couplings.

Lovejoy Disc-O-Flex couplings are available in LM, EM series.

TYPE - LM

- Normal duty coupling.
- Suitable for general industrial applications.

TYPE - EM

- High performance coupling.
- Specially suitable for petrochemical & fertilizer industries.
- API-610 / API-671 compliance available on request.
- Coupling with antifly spacer.

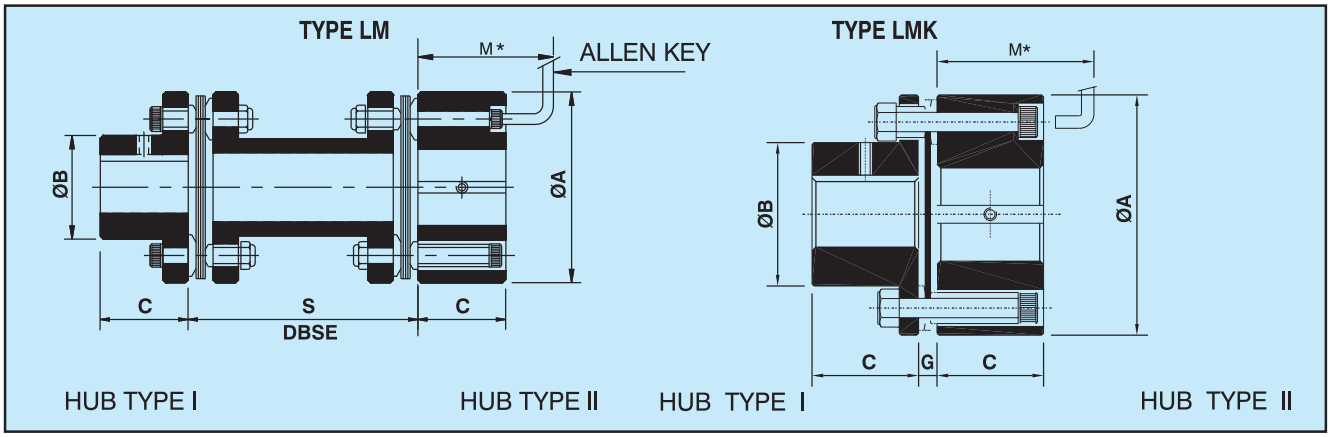
SELECTION PROCEDURE

1) **Select an appropriate SERVICE FACTOR from table given below.**
2) **Multiply the rated running power by the service factor. This gives DESIGN POWER at rated speed (rpm). Now convert this to design power at 100 rpm. This is used as a basis for coupling selection.**
3) **Refer to the rating column and read until the power greater than or equal to the design power at 100 rpm is found. The size of the Disc-O-Flex coupling is given in the corresponding first column.**
4) **Select either standard type I or type II hubs to suit shaft sizes.**
   Select either Type III or Type IV hub in type EM for larger shaft sizes.
5) **Specify the distance between shaft ends (DBSE).**

SERVICE FACTORS

Duty	Prime Mover		
	Electric Motor Steam or Gas Turbine	Steam Engine or Water Turbine	Gas or Oil Engine
Constant Torque e.g. centrifugal pumps, compressor, light conveyors, alternators & light fans.	1.0	1.5	3.0
Slight Torque Fluctuations e.g. machine tools, screw compressors, screw pumps, liquid ring compressors & rotary dryers.	1.5	2.0	3.0
Substantial Torque Fluctuations e.g. reciprocating pumps, low viscosity mixers, cranes & winches.	2.0	2.5	4.0
Exceptionally High Torque Fluctuations e.g. rotary presses, reciprocating compressors, high viscosity mixers & marine propellers.	3.0	3.5	5.0

DISC-O-FLEX COUPLINGS
TYPE - LM/LMK



TECHNICAL DATA - LM

Coupling Size	kW at 100 rpm	Torque Nm	Max Speed rpm	Bore			Min. DBSE 'S'	Std. DBSE 'S'	C	ØA	ØB	* M	Weight in kg. Approx.		M. I.(WR^2) in kgm^2 Approx.		Tors. Stiff. MNm/ rad Approx.
				Min.	Max. Type I	Max. Type II							Min. Std. 'S'	Per Mtr Extra 'S'	Min. Std. 'S'	Per Mtr Extra `'S'	
5	0.35	33	7500	8	20	22	41	100	25	55	30	65	0.9	2	0.0003	0.0003	0.016
10	0.67	64	7500	10	22	25	55	140	30	63	35	75	1.3	2.3	0.0007	0.0004	0.031
35	1.67	159	7000	12	30	38	57	100	40	82	45	85	2.47	3.2	0.0021	0.0011	0.025
95	5.4	516	6000	17	40	50	82	140	45	102	57	95	4.6	3.2	0.006	0.0011	0.04
170	9.0	859	5200	17	52	70	89	180	55	128	77	110	8.1	7	0.018	0.0047	0.099
220	14.0	1337	4800	22	65	80	108	140	60	146	94	120	12.1	8.4	0.036	0.0088	0.176
400	25.0	2387	4400	27	80	100	114	180	70	176	115	140	20	13.1	0.09	0.021	0.305
520	35.0	3342	4200	32	90	115	126	180	90	197	132	175	30.5	21.7	0.17	0.056	0.432
1000	53.0	5061	4000	42	105	130	143	250	95	225	147	185	43.4	21.7	0.32	0.056	0.6
1300	75.0	7162	3800	47	115	140	168	180	105	250	162	195	61.6	27.1	0.55	0.067	0.8
2000	105.0	10027	3700	52	120	155	180	250	115	275	178	215	82	42.8	0.88	0.167	1.5
2500	140.0	13369	3600	62	135	165	180	300	130	300	190	235	107.1	42.8	1.38	0.167	1.4

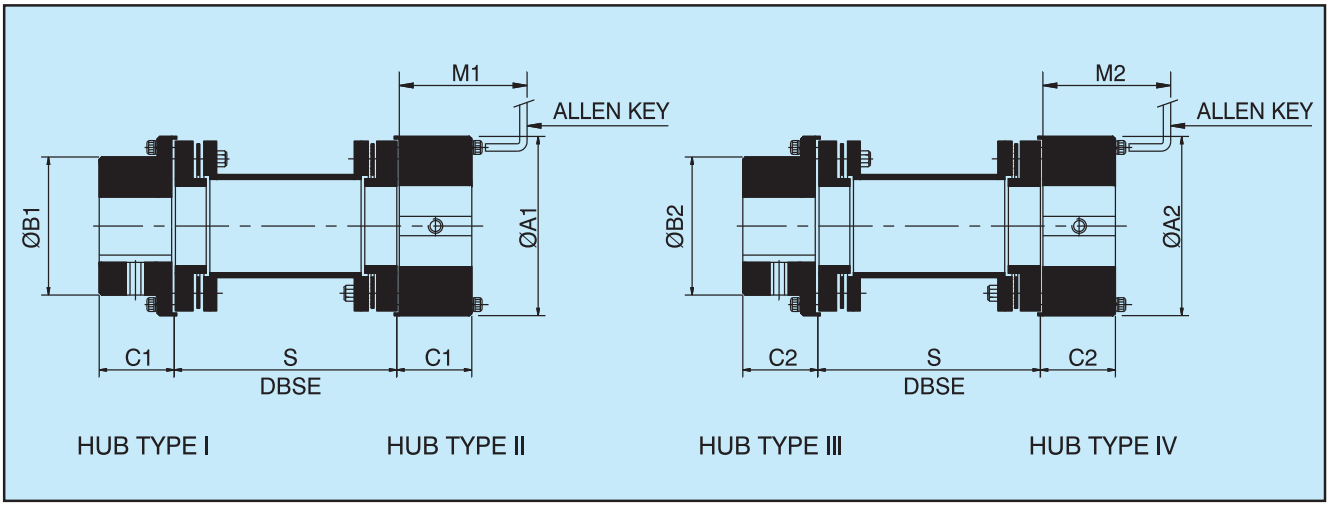
TECHNICAL DATA - LMK

Coupling Size	kW at 100 rpm	Torque Nm	Max Speed rpm	Bore			DBSE G	C	ØA	ØB	* M	Weight in kg. (Approx.)	M. I.(WR^2) in kgm^2 (Approx.)	Torsional Stiffness MNm/Rad (Approx.)
				Min.	Max. Type I	Max. Type II								
5	0.35	33	7500	8	20	22	5.2	25	55	30	65	0.55	0.00020	0.0360
10	0.67	64	7500	10	24	25	6.5	30	63	35	75	0.87	0.00030	0.0430
35	1.67	159	7000	12	30	38	6.5	40	82	45	85	1.8	0.0008	0.062
95	5.4	516	6000	17	40	50	8	45	102	57	95	3.2	0.0026	0.118
170	9.0	859	5200	17	52	70	9.5	55	128	77	110	5.83	0.0087	0.260
220	14.0	1337	4800	22	65	80	12	60	146	94	120	8.4	0.017	0.492
400	25.0	2387	4400	27	80	100	13	70	176	115	140	14.1	0.045	1.228
520	35.0	3342	4200	32	90	115	14.4	90	197	132	175	22.1	0.089	1.926
1000	53.0	5061	4000	42	105	130	16.2	95	225	147	185	30.7	0.16	3.613
1300	75.0	7162	3800	47	115	140	19.5	105	250	162	195	42.8	0.27	ON REQUEST
2000	105.0	10027	3700	52	120	155	21.5	115	275	178	215	57.6	0.44	
2500	140.0	13369	3600	62	135	165	23.5	130	300	190	235	76.2	0.67	

- All dimensions are in mm. unless otherwise specified.
- For vertical installation contact RATHI.
- Non Standard DBSE available on request.
- Please specify type of hubs (I/I, I/II or II/II).
- Weight, M. I. and Stiffness are at max. bores with min. Std. DBSE with one I / II hub combination.
- Available for non-sparking applications on request.
- Coupling with taper bush also available on request.
- Coupling with sizes higher than 2500 available on request.

* M' is only for hub type II.

DISC-O-FLEX COUPLINGS
TYPE - EM



TECHNICAL DATA

Coup. Size	kW at 100 rpm	Torque Nm	Max Speed rpm	Bore					Min. DBSE 'S'	Std. DBSE 'S'	C1	C2	ØA1	ØA2	ØB1	ØB2	M1	M2	Weight in kg Approx.		M. I.(WR²) in kgm² Approx.		Tors. Stiff. MNm/rad Approx.
				Min.	Max. Type I	Max. Type II	Max. Type III	Max. Type IV											Min. Std. 'S'	Per Mtr Extra 'S'	Min. Std. 'S'	Per Mtr Extra 'S'	
4	0.35	33	7500	8	19	32	24	42	51	100	25	30	61	69	32	40	70	80	1.3	1.2	0.0006	0.0001	0.016
8	0.67	64	7500	8	24	42	38	48	65	140	30	40	69	90	40	55	80	90	2.0	1.3	0.001	0.0002	0.03
25	1.67	159	7000	10	38	48	48	72	71	180	40	45	90	108	55	70	90	105	3.76	2.41	0.0038	0.00047	0.025
65	5.4	516	6000	15	48	72	65	92	95		45	55	108	135	70	86	105	120	6.0	2.7	0.009	0.0009	0.04
125	9.0	859	5200	20	65	92	80	102	107	140	55	60	135	152	86	108	120	125	11.1	7.0	0.03	0.00047	0.095
165	14.0	1337	4800	25	80	102	90	120	129	180	60	70	152	182	108	130	125	135	17.0	8.4	0.06	0.0088	0.17
370	25.0	2387	4400	30	90	120	108	140	142		70	90	182	197	130	158	135	155	28.4	13.1	0.13	0.0213	0.3
390	35.0	3342	4200	45	108	140	127	155	153	180	90	95	197	225	158	181	155	160	38.3	12.82	0.2335	0.0360	0.43
790	53.0	5061	4000	55	127	155	140	178	156	250	95	105	225	250	181	206	160	170	53.18	19.21	0.4181	0.0530	0.6
1025	75.0	7162	3800	65	140	178	155	192	169		105	115	250	275	206	223	170	190	74.4	27.1	0.7	0.067	0.8
1425	105.0	10027	3700	70	155	192	170	212	188	250	115	130	275	300	223	248	190	215	98.63	34.6	1.134	0.14	1.1
1880	140.0	13369	3600	75	170	212	190	255	202		130	145	300	375	248	280	215	245	128.1	42.8	1.7	0.16	1.5

- All dimensions are in mm. unless otherwise specified.
- For vertical installation contact RATHI.
- Non Standard DBSE available on request.
- Please specify type of hub. Possible combinations of hubs are hub type I/I, I/II, II/II, III/III, III/IV, IV/IV.
- Weight, M. I. and Stiffness are at max. bores with min. Std. DBSE with one type I / II hub combination.
- Available for non-sparking applications on request.
- M1 is applicable for hub type II. M2 is applicable for hub type IV.
- Min. Bores specified are for hub Type I/II for hub Type III/IV consult manufacturer.
- Coupling with taper bush also available on request.
- Couplings with sizes higher than 1880 are available on request.

ISO 9001 BUREAU VERITAS Certification
UKAS QUALITY MANAGEMENT 008

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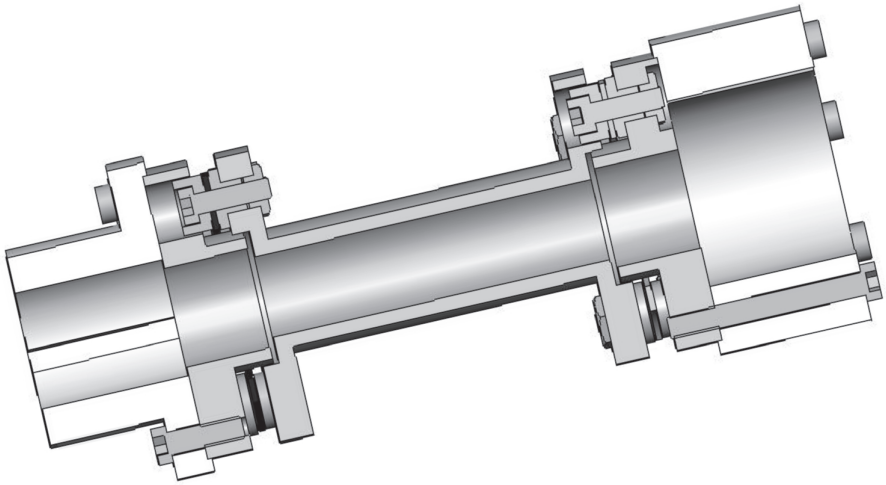
Distributor

DISC-O-FLEX SPACER COUPLING

TYPE RSK

Rathi Disc-O-Flex couplings are fully metallic couplings, consisting of two hubs, one centre spacer member, two sets of stainless steel element blades bolted together with high tensile bolts. Replacement of element blades is easy, simple and is possible without disturbing drive or driven equipment.



FEATURES

- High power-to-weight ratio.
- No wearing parts, no lubrication required.
- Easy installation with 'Drop Out' spacer.
- Accommodates angular, parallel and axial misalignments.
- Non stainless steel parts coated with a durable anticorrossive coating.
- High temperature application.
- Replaceable element blades with adapter.
- Visual inspection possible without disassembling equipment.
- Inherently balanced.
- High torsional rigidity with low axial stiffness.
- Special options including spacer lengths, modified hubs, special materials are available.
- Floating shaft / cooling tower couplings are available.
- Backlash free.
- High speed capability.
- Dynamic balancing to customer specifications.
- Machined to high precision standards.
- Lightweight couplings.
- Specially suitable for Petrochemical & Fertilizer Industries.
- API 610 & API 671 compliance availble on request.
- Coupling with anti-fly features.

Selection Procedure:

1 Select an appropriate SERVICE FACTOR from table given below.

2 Multiply the rated running power by the service factor. This gives DESIGN POWER at rated speed (rpm).

3 Now convert this to design power at 1000 rpm. This is used as a basis for coupling selection.

4 Refer to the rating column and read until the power greater than or equal to the design power at 1000 rpm is found. The size of the coupling is given in the corresponding first column.

5 Select either standard type I or type II hubs to suit shaft sizes.

6 Specify the distance between shaft ends (DBSE)

Service Factor :

Suggested service factors for electric motor, steam turbine, and gas turbine drivers are given below:

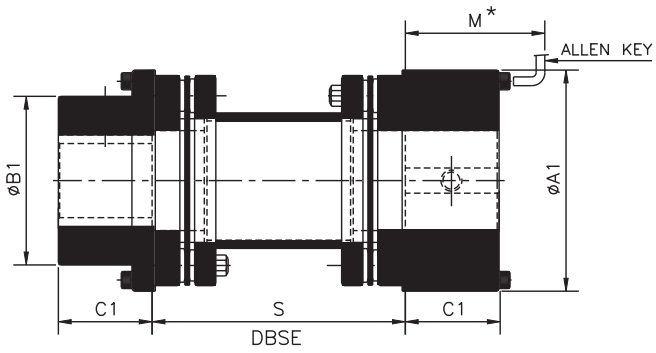
Duty		Service Factor
Constant Torque	Centrifugal Pump, Centrifugal Compressor Axial Compressor Centrifugal Blower	1.0*
Slight Torque Fluctuation	Screw Compressor Gear, Lobe and Vane Pumps Forced Draft Fan Medium Duty Mixer Lobe Blower	1.5
Substantial Torque Fluctuation	Reciprocating Pumps, Heavy Duty Mixers Induced Draft Fans	2.0

* Use a minimum service factor of 1.25 on electric motor drives through a gearbox.

RSK TECHNICAL DATA

Coupling Size	Rating kW at 1000 rpm	Max. Continuous Torque Nm	Peak Overload Torque Nm	Max. rpm	Weight Transmission Unit		Weight Unbored Hubs - Kg	
					Std.	Extra DBSE kg/m	Hub I	Hub II
13	13	124	310	25500	1.5	3.1	1.0	1.9
33	33	315	790	20000	3.0	5.0	1.4	3.1
75	75	716	1790	16500	5.6	6.5	3.6	5.8
135	135	1289	3220	14400	9.3	10.5	5.9	8.7
230	230	2196	5490	12000	14.0	13.0	9.0	14.0
350	350	3342	8360	10500	18.7	22.0	16.4	-
500	500	4775	11940	9500	25.6	22.0	21.0	-
740	740	7066	17670	8000	34.2	27.5	30.0	-
930	930	8881	22200	7000	44.0	40.0	38.0	-
1400	1400	13369	33400	6000	54.0	40.0	52.1	-

- Note that for the complete coupling, weights of two appropriate hubs plus a transmission unit are required.



HUB TYPE I HUB TYPE II

TECHNICAL DATA

Coupling Size	Max. Bore		DBSE 'S min'	Std. DBSE 'S'	C1	ØA1	ØB1	M*
	Type I	Type II						
13	36	51	75	100 140 180	40	86	54	90
33	46	70	90		45	105	69	105
75	65	90	107	140 180 250	55	130	90	120
135	80	102	127		62	152	112	127
230	90	121	133		70	179	131	135
350	115	-	139	180 250	90	197	163	-
500	127	-	141		95	222	181	-
740	140	-	143		107	247	206	-
930	155	-	155		115	272	223	-
1400	172	-	175		130	297	248	-

Notes:-

- Non Standard DBSE available on request.
- Available for non-sparking application on request.
- Please specify type of Hub.
- * 'M' is only for hub type II.
- For vertical installation contact RATHI.

Coupling Alignment

Correct installation and alignment of couplings is essential for reliable machinery performance.

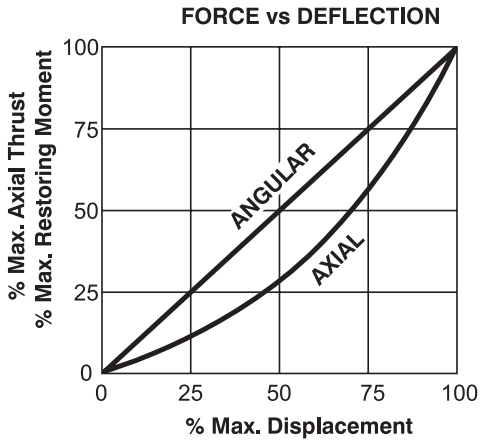
RSK MISALIGNMENT

Coupling Size	Max. Axial Misalignment *		Max. Parallel Misalignment **	
	+/- mm.	Equivalent Thrust kN	mm	Restoring Moment Nm
13	1.00	210	0.30	4.1
33	1.25	280	0.36	6.1
75	1.50	360	0.45	8.8
135	2.00	560	0.55	11.8
230	2.50	740	0.60	14.7
350	2.75	780	0.64	34.3
500	3.25	1080	0.65	40.7
740	3.75	1270	0.68	47.6
930	4.25	1470	0.72	53.9
1400	5.00	2700	0.83	61.3

NOTES: * Meets NEMA end float specification without modification.

** Values based on angular deflection of ½° per end and minimum DBSE. Greater misalignment accommodation is possible by increasing dimension S.

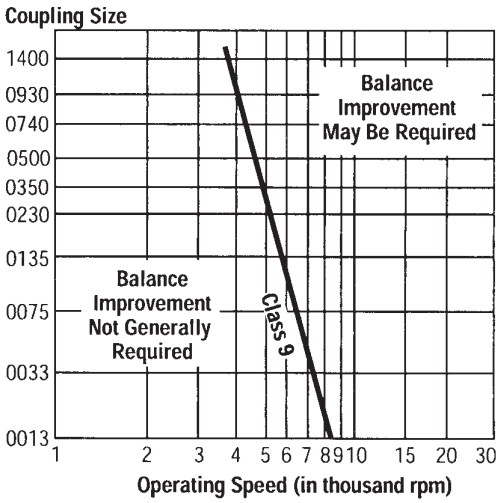
The angular and axial restoring forces in the table below left are given at maximum deflections. The chart can be used to determine forces across the full deflection range. The nonlinear characteristics can detune a system to prevent high amplitude axial vibration.



Balance Recommendations

The inherent balance of the RSK range meets AGMA standard 9000-C90 class 9. The adjacent chart relates the RSK sizes to operating speeds on the basis of this AGMA class 9 characteristic to provide a general guide to determine if dynamic balance improvement is necessary.

When balancing improvement is requested. RATHI will dynamically balance the transmission unit. Hubs may also be dynamically balanced, and this will usually be carried out after machining the bore but before cutting single keyways.



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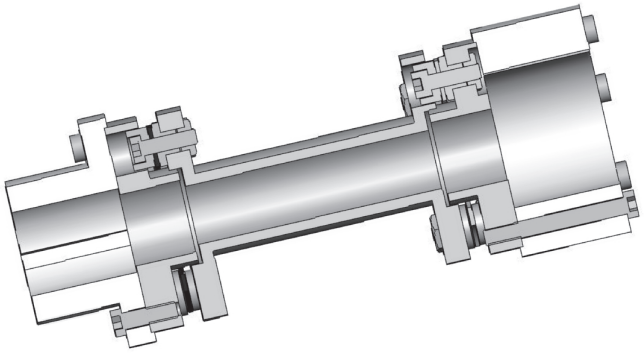
Distributor

DISC-O-FLEX SPACER COUPLING

TYPE RSK

Rathi Disc-O-Flex couplings are fully metallic couplings, consisting of two hubs, one centre spacer member, two sets of stainless steel element blades bolted together with high tensile bolts. Replacement of element blades is easy, simple and is possible without disturbing drive or driven equipment.



Selection Procedure:

1 Select an appropriate SERVICE FACTOR from table given below.

2 Multiply the rated running power by the service factor. This gives DESIGN POWER at rated speed (rpm).

3 Now convert this to design power at 1000 rpm. This is used as a basis for coupling selection.

4 Refer to the rating column and read until the power greater than or equal to the design power at 1000 rpm is found. The size of the coupling is given in the corresponding first column.

5 Select either standard type I or type II hubs to suit shaft sizes.

6 Specify the distance between shaft ends (DBSE)

FEATURES

- High power-to-weight ratio.
- No wearing parts, no lubrication required.
- Easy installation with 'Drop Out' spacer.
- Accommodates angular, parallel and axial misalignments.
- Non stainless steel parts coated with a durable anticorrossive coating.
- High temperature application.
- Replaceable element blades with adapter.
- Visual inspection possible without disassembling equipment.
- Inherently balanced.
- High torsional rigidity with low axial stiffness.
- Special options including spacer lengths, modified hubs, special materials are available.
- Floating shaft / cooling tower couplings are available.
- Backlash free.
- High speed capability.
- Dynamic balancing to customer specifications.
- Machined to high precision standards.
- Lightweight couplings.
- Specially suitable for Petrochemical & Fertilizer Industries.
- API 610 & API 671 compliance availble on request.
- Coupling with anti-fly features.

Service Factor :

Suggested service factors for electric motor, steam turbine, and gas turbine drivers are given below:

Duty		Service Factor
Constant Torque	• Centrifugal Pump • Centrifugal Compressor, • Axial Compressor • Centrifugal Blower	1.0*
Slight Torque Fluctuation	• Screw Compressor • Lobe Blower • Forced Draft Fan • Medium Duty Mixer • Gear, Lobe and Vane Pumps	1.5
Substantial Torque Fluctuation	• Reciprocating Pumps, • Heavy Duty Mixers • Induced Draft Fans	2.0

* Use a minimum service factor of 1.25 on electric motor drives through a gearbox.

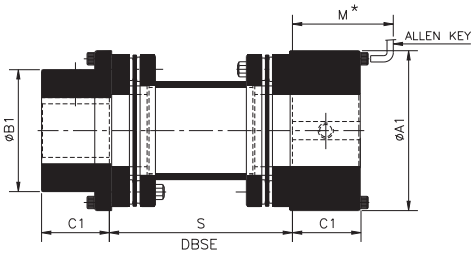
DISC-O-FLEX SPACER COUPLING

TYPE RSK

RSK TECHNICAL DATA

Coupling Size	Rating kW at 1000 rpm	Max. Continuous Torque Nm	Peak Overload Torque Nm	Max. rpm	Weight Transmission Unit		Weight Unbored Hubs - Kg	
					Std.	Extra DBSE kg/m	Hub I	Hub II
13	13	124	310	25500	1.5	3.1	1.0	1.9
33	33	315	790	20000	3.0	5.0	1.4	3.1
75	75	716	1790	16500	5.6	6.5	3.6	5.8
135	135	1289	3220	14400	9.3	10.5	5.9	8.7
230	230	2196	5490	12000	14.0	13.0	9.0	14.0
350	350	3342	8360	10500	18.7	22.0	16.4	-
500	500	4775	11940	9500	25.6	22.0	21.0	-
740	740	7066	17670	8000	34.2	27.5	30.0	-
930	930	8881	22200	7000	44.0	40.0	38.0	-
1400	1400	13369	33400	6000	54.0	40.0	52.1	-

- Note that for the complete coupling, weights of two appropriate hubs plus a transmission unit are required.



HUB TYPE I HUB TYPE II

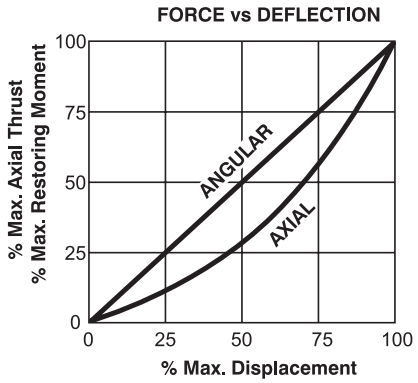
TECHNICAL DATA

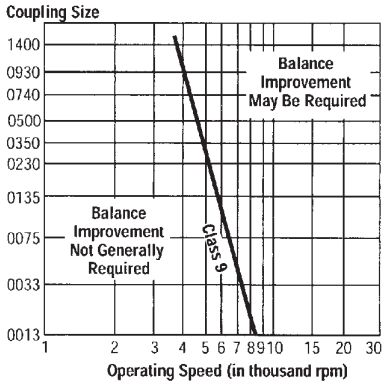
Coupling Size	Max. Bore		DBSE 'S min'	Std. DBSE 'S'	C1	∅A1	∅B1	M*
	Type I	Type II						
13	36	51	75	100 140 180	40	86	54	90
33	46	70	90		45	105	69	105
75	65	90	107	140 180 250	55	130	90	120
135	80	102	127		62	152	112	127
230	90	121	133		70	179	131	135
350	115	-	139	180 250	90	197	163	-
500	127	-	141		95	222	181	-
740	140	-	143		107	247	206	-
930	155	-	155		115	272	223	-
1400	172	-	175		130	297	248	-

Notes:-

- Non Standard DBSE available on request.
- Available for non-sparking application on request.
- Please specify type of Hub.
- * 'M' is only for hub type II.
- For vertical installation contact RATHI.

Coupling Alignment : Correct installation and alignment of couplings is essential for reliable machinery performance.





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MUFF COUPLINGS

TYPE MC

RATHI MUFF COUPLINGS are rigid coupling, designed for use in system where **misalignment is neither present nor desired.** These coupling offer an easy & cost effective method for extending a shaft or adapting between two different shaft sizes.

- Does not Mar the shaft.
- High tensile fasteners assure firm tightening, prevent loosening under vibrations.
- Alternate clamping takes care of better balancing.
- Precision bores makes it easy, simple for quick assembly & alignment.

F E A T U R E S

SIMPLICITY OF CONSTRUCTION

Very few components easy for assembly & dismantling.

NO LUBRICATION

Due to rigid connecting no lubrication is required.

SIMPLE / EASY MAINTENANCE

Their high torque capabilities makes them suitable for higher rpm power transmission applications.

LOW OPERATIONAL COST

As no lubrication is required & maintenance is minimal, operational cost is very low.

SMOOTH & QUIET OPERATION

No moving part hence noiseless operation.

Application :

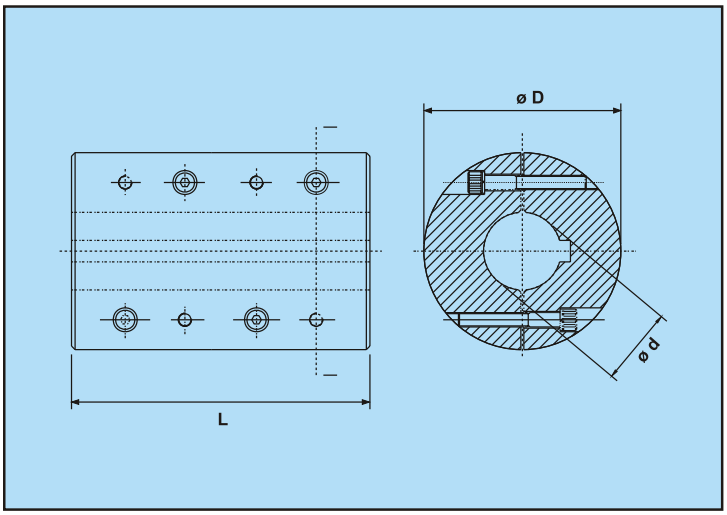
Various types are available to suit different application needs such as :

- Grooved muff couplings for vertical applications.
- Through bore muff couplings.
- Stepped bore muff couplings.
- 3 Piece couplings.
- Ribbed muff couplings.

☹ All above can be made in different material-Cast Iron, Carbon steel Aluminium, Stainless steel.

MUFF COUPLINGS

TYPE MC



ORDERING EXAMPLE :

*** FOR THROUGH BORES**

d = 55 mm

Muff Coupling Size - MC 55

*** FOR STEPPED BORES**

d = 55 mm & 60 mm

Muff coupling Size - MC 55 / 60

(Ref overall dimensions of MC 60)

TECHNICAL DATA

COUPLING SIZE	MAX. BORE ø d	TORQUE (Nm)		ALLEN HEAD SCREWS	OUTSIDE DIAMETER D	LENGTH L
		WITH KEY	WITHOUT KEYWAY			
MC 20	20	352	235	8 - M 8	60	100
MC 25	25	668	445	8 - M 10	80	130
MC 30	30	801	534	8 - M 10	80	130
MC 35	35	1126	750	8 - M 10	80	160
MC 40	40	1247	831	8 - M 10	80	160
MC 45	45	1546	1230	8 - M 10	100	190
MC 50	50	2052	1366	8 - M 10	100	190
MC 55	55	3015	2010	8 - M 10	120	220
MC 60	60	3286	2190	8 - M 10	120	220
MC 70	70	4836	3224	10 - M 12	140	250
MC 80	80	6804	4535	10 - M 12	160	280
MC 90	90	8383	5588	10 - M 16	180	310
MC 100	100	12480	8320	12 - M 16	200	350
MC 110	110	15840	10560	12 - M 16	220	390
MC 120	120	20646	13764	14 - M 16	250	430
MC 140	140	32634	21756	14 - M 20	280	490
MC 160	160	45120	30080	14 - M 24	320	560
MC 180	180	67392	44928	14 - M 24	360	630
MC 200	200	82680	55120	14 - M 27	400	700
MC 220	220	109048	72730	16 - M 30	450	770
MC 240	240	138384	92250	16 - M 30	480	840
MC 260	260	164424	109160	16 - M 36	520	910
MC 280	280	205422	136900	16 - M 42	570	980

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SNAP WRAP COUPLINGS

... the coupling that pays for itself

Type L Coupling

Spiders - Synthetic Rubber, Polyurethane,Hytrel, Bronze

Type SW Coupling

SW Elements - Synthetic Rubber, Polyurethane, Hytrel

Type RRS Spacer Coupling

With its unique wrap around Nitrile rubber connecting element, the Snap Wrap coupling eliminates the need for dismantling the connected equipment while inspecting or replacing the element - a major benefit when down-time on machinery can run into huge amounts.

Combined with a range of prebored hubs, a modular hub design and a spacer option, the Snap Wrap coupling is unsurpassed for quality, flexibility, speed of installation and maintenance.

6 ways the "Snap Wrap" coupling can help pay for itself:

1. Prebored hubs	Hubs bored and keyed to standard IEC motor shaft sizes.
2. Snap Wrap element	Ease of inspection and replacement within 5 minutes.
3. Modular hub design	Both Models , SW & RRS use the same hubs.
4. Spacer coupling	RRS spacer model is available for pump applications.
5. Fully machined hubs	Balance, ease of alignment and smooth contact surface for elements are assured.
6. Any environment	Water, oil, greases & dust do not affect performance.

JAW - FLEX COUPLINGS
TECHNICAL DATA

SELECTION PROCEDURE

(a) Service Factor

Determine appropriate SERVICE FACTOR from table A.

(b) Design Power

Convert application rating at 100 rpm by multiplying service factor. This gives DESIGN POWER which is used as a base for coupling selection.

(c) Coupling Size

Refer respective table for your required coupling type and read from the appropriate speed column until a power equal to or greater than the DESIGN POWER is found.

(d) Bore Size

Refer respective coupling 'TECHNICAL DATA' table to check that the required bores can be accommodated.

EXAMPLE

A coupling is required to transmit 65 kW from an electric motor which runs at 1500 rpm to a centrifugal pump for 12 hours a day. The motor shaft diameter is 60 mm. and the pump shaft diameter is 55 mm.

(a) Service Factor

From Table A the service factor is 1.0

(b) Design Power

Design Power

$$@100rpm = \frac{100}{1500} \times 65kW \times 1(SF) = 4.3\ kW$$

(c) Coupling Size

Refer Table. The first power to exceed Design Power of 4.3kW is 5.6kW. The size of coupling specified in the first column corresponding to 5.6kW is SW - 276.

(d) Bore Size

Max. Bore for coupling size SW-276 is 75 mm. This shows that both the shaft diameters are within the range.

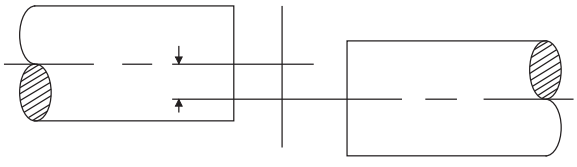
A : SERVICE FACTORS

SPECIAL CLASSES For applications where substantial shock, vibration and torque fluctuations occur and for reciprocating machines e.g. internal combustion engines, piston pumps and compressors, refer to Rathi Transpower with full machine details	**Type of Driving Unit**					
	Electric Motors			**Internal Combustion Engines Steam Engines Water Turbines**		
	Hours per day 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, Conveyors, Centrifugal Fans and Pumps, Generators, Sewage disposal Equipments.Evaporators, Feeders, Textile machines, Wood working machines.	1.00	1.00	1.00	1.00	1.10	1.10
MODERATE SHOCK* Clay working machinery, Crane Hoists, Laundry machinery, Machine Tools, Rotary Mills, Paper Mill machinery, Non-uniformly loaded centrifugal pumps, Rotary Screens, Centrifugal Compressors.Shredders, Printing presses, Oil industry, Mixers, Food industry, Beaters, Bucket elevators, Gear pumps, Wood working machinery, Textile machinery	1.10	1.10	1.20	1.20	1.25	1.25
HEAVY SHOCK* Reciprocating Conveyors, Crushers, Shakers, Metal Mills, Rubber machinery (Banbury Mixers and Mills) Reciprocating Compressors, Welding Sets, Freight & passenger elevators, Cooling tower fans, Hammer mills, Reciprocating pumps, Vibrating screens, Winches, Wire drawing machines.	1.25	1.40	1.60	1.60	1.80	2.00

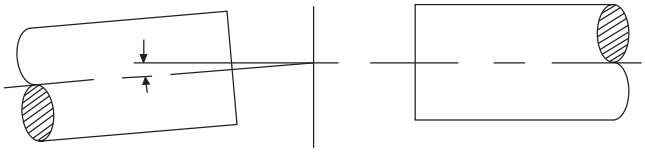
* It is recommended that keys with top clearance are fitted for applications where load fluctuation is expected.

MISALIGNMENT CAPABILITY

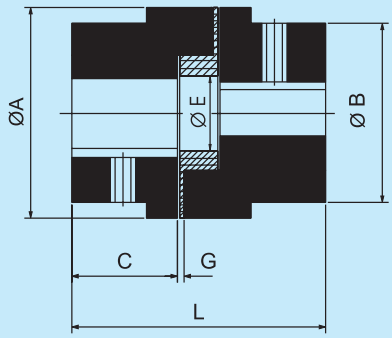
PARALLEL 0.4 mm



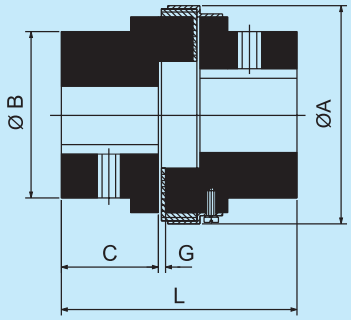
ANGULAR - 1°



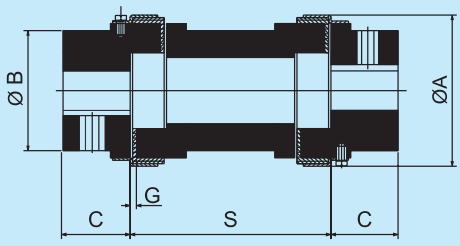
JAW - FLEX COUPLINGS
TYPE - L/SW/RRS



TYPE L



TYPE SW



S = STD. SPACER LENGTH

TYPE RRS

TECHNICAL DATA

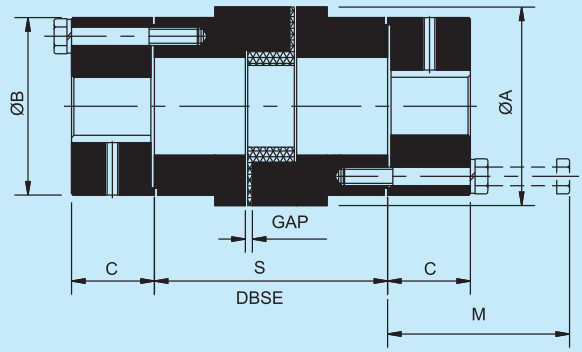
Coupling		Power Rating						Pilot Drill Size	Max. Bore	ØA		Length thru' Bore "C"	ØB	Gap G	ØE	S	#Overall Length "L" for (SW/L)
		Synthetic Rubber		Polyurethane		Hytrel											
Type	Size	Rated Torque (Nm)	kW@ 100 rpm	Rated Torque (Nm)	kW@ 100 rpm	Rated Torque (Nm)	kW@ 100 rpm			SW/ RRS	L						
L	035	0.38	0.004	0.6	0.01	1.0	0.01	-	10	-	16	6.5	16	1	-	-	21
	050	2.80	0.03	4.2	0.04	7.0	0.07	-	16	-	27	15	27	1	-	-	42
	070	4.90	0.05	7.4	0.08	12.3	0.13	-	20	-	34.5	19	34.5	2	-	-	51
	⊙ 075	9.80	0.1	14.7	0.15	24.5	0.26	-	22	-	44.5	21	44.5	2	-	-	55
	■ 075	9.80	0.1	14.7	0.15	24.5	0.26	-	22	-	44.5	21	39	2	-	-	55
L SW RRS	095	21.10	0.22	31.7	0.33	52.8	0.55	-	28	65	54	25	49	2	19	90,100,140	63
	099	46.40	0.49	69.6	0.73	116	1.2	-	30	78	65	27	51	2	27		72
	100	46.40	0.49	69.6	0.73	116	1.2	-	35	78	65	35	57	2	27	90	88
	110	89	0.93	133.5	1.4	222.5	2.3	-	42	96	85	43	76	3	35	100	108
	150	141	1.5	211.5	2.2	352.5	3.7	-	48	111	96	45	80	3	35	140	115
	190	190	2.0	285	3.0	475	5.0	-	60	129	115	54	102	3	45	180	133
	225	265	2.8	397.5	4.2	662.5	6.9	-	65	142	127	64	111	3	45		153
	226	327	3.4	490.5	5.1	817.5	8.6	25	70	153	137	70	119	3	51	100,140,180	178
L SW	276	532	5.6	798	8.4	1330	13.9	25	75	173	157	80	127	3	60	-	200
	280	782	8.2	1173	12.3	1955	20.5	30	80	208	192	80	140	3	70	-	200
	295	1279	13.4	1918.5	20.1	3197.5	33.5	30	95	253	237	95	162	3	80	-	238
	2955	2132	22.3	3198	33.5	5330	55.8	30	105	253	237	108	180	3	80	-	264
SW	300	3047	31.9	4570.5	47.9	7617.5	79.8	30	105	272	-	115	180	3	-	-	283
	350	4308	45.1	6462	67.7	10770	112.8	30	115	323	-	128	200	3	-	-	309

All dimensions are in mm.
For vertical installation contact RATHI.
For RRS/SW maintain gap 'G' at the time of assembly.
Maximum bores can be increased in case of steel hubs. Consult manufacturer

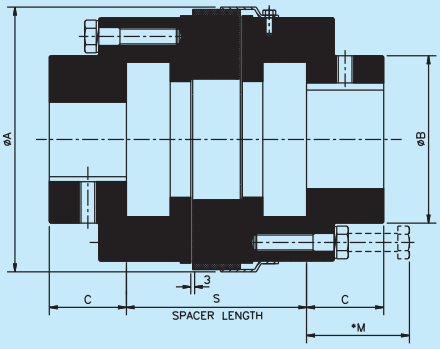
Material : Sintered iron for sizes 035 to 075
Aluminum for sizes 050 to 110 & for all RRS spacers.
Cast Iron for sizes 095 to 350.

■ 075 -- Aluminium
⊙ 075 -- Sintered Iron
For RRS, L = S + 2C

JAW - FLEX COUPLINGS
TYPE - RRL/SWQ



TYPE RRL



TYPE SWQ

Special Features:
Provides quick, easy disconnection from driving unit without disturbing drive shaft or piping, permits removal of equipment from line in three simple steps. Only two sets of bolts need to be removed.

Applications:
For pumps in chemical industry, ideal for reciprocating pumps, diesel or gas engines, multiple generator sets and other drives where rapid disconnection without disturbing the drive or driven unit is required.

DIMENSIONAL DATA

Size	Synthetic Rubber		DBSE 'S'		Min. Bore	Max. Bore		Outside Dia. Ø A	Adapter Hub Dia. Ø B	Length thru' Bore C		Min. bolt clearance * M	
	Rated Torque Nm	kW at 100 rpm	Min.	Std.		▲	Std.			▲	Std.	▲	Std.
RRL-095	21.1	0.22	75	90,100,140	10	—	28	54	54	—	25	—	45
RRL-100	46.4	0.49	75	90,100,140,180	10	—	38	65	65	—	30	—	50
RRL-110	89	0.93	75		15	24	42	85	76	35	35	36	60
RRL-150	141	1.5	75		15	32	48	96	90	40	40	48	70
RRL-190	190	2.00	75		15	38	55	115	102	45	45	48	75
RRL-225	265	2.8	90		15	42	65	127	115	50	50	54	90

▲ Triangular Adapter Body.

Size	Rated Torque Nm	kW at 100 rpm	DBSE 'S'	Bore		Outside Dia. Ø A	Adapter Hub Dia. Ø B	Length thru' Bore C	Min. bolt clearance * M
				Min.	Max.				
SWQ-226	327	3.4	140, 180	25	70	153	134	50	92
SWQ-276	532	5.6		25	80	173	130	60	107
SWQ-280	782	8.2		30	80	208	130	60	70
SWQ-295	1279	13.4		30	105	253	160	70	80
SWQ-2955	2132	22.3		30	105	253	160	75	80
SWQ-300	3047	31.9		30	115	272	180	80	85
SWQ-350	4308	45.1		30	125	323	200	90	85

* Loosening & Tightening of bolts is possible within dimension 'M'.

- Maintain gap 2 mm for RRL-095, RRL-100 & 3 mm for all other sizes at the time of assembly.
- Non-standard (NSTD) DBSE available on request.
- For vertical installation contact RATHI.

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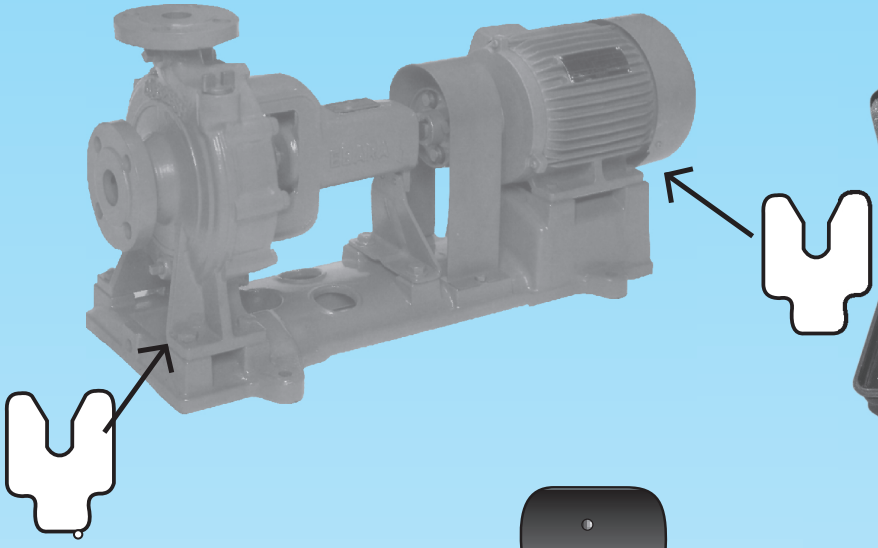
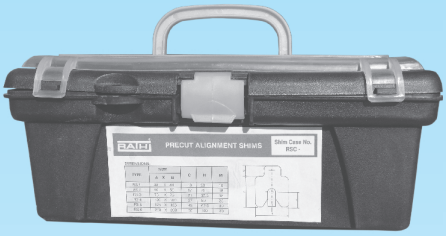
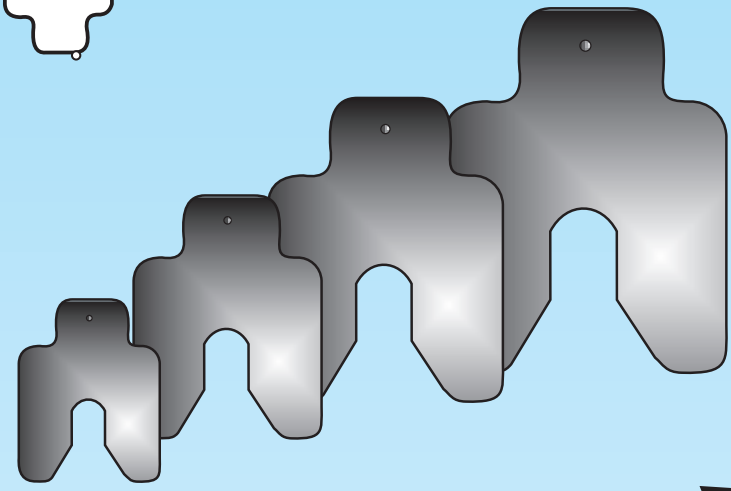
PRECUT ALIGNMENT SHIMS

TYPE
RS / RSC

During installation of rotating equipment shaft alignment is important. Shims play a crucial role in positioning accuracy of the equipment. Lack of shim of proper size and thickness during installation may lead to less than optimal support for the equipment feet during operation. This can lead to vibration and ultimately, to unplanned breakdowns and enormous downtime expenses.







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PRECUT ALIGNMENT SHIMS

TYPE
RS / RSC

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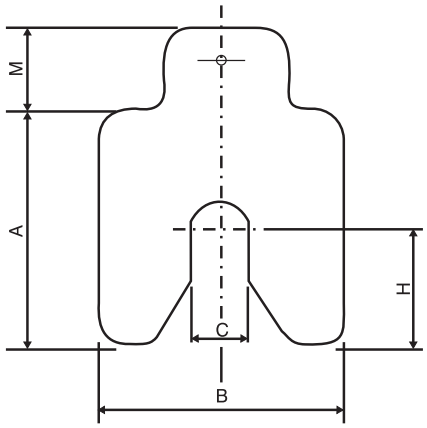

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B. RATHI SHIM CASE (RSC):

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RSC-3	20	20	20	20	20	20	20	10	0	150
RSC-4	20	20	20	20	20	20	20	10	0	150
RSC-5	10	10	10	10	10	10	10	10	0	80
RSC-6	10	10	10	10	10	10	10	10	0	80

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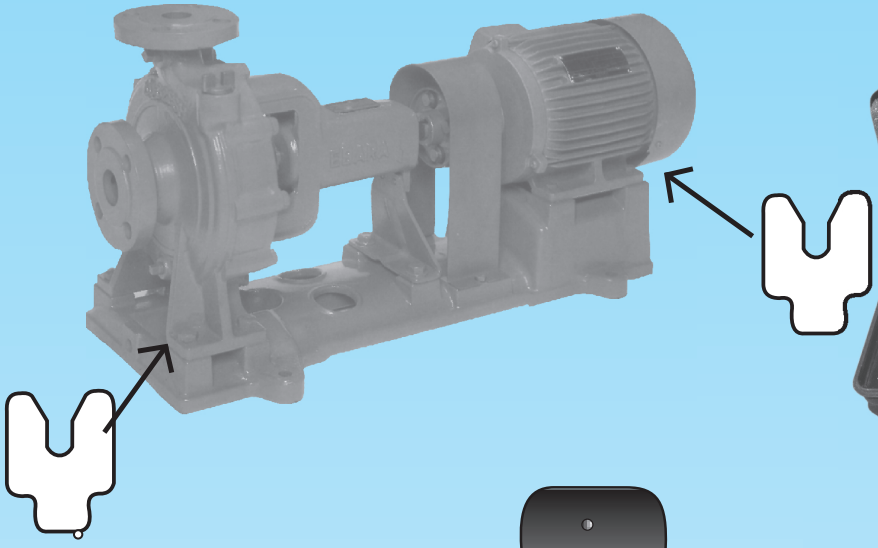

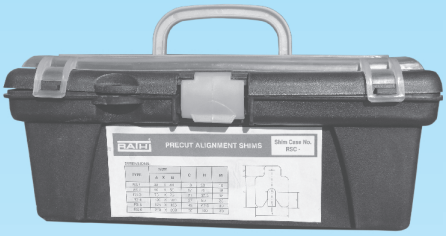

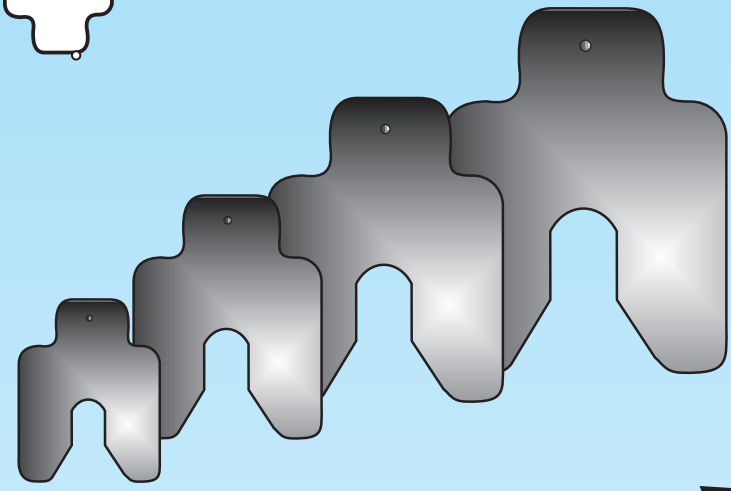

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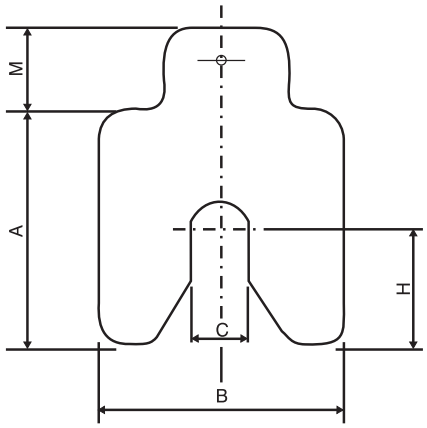

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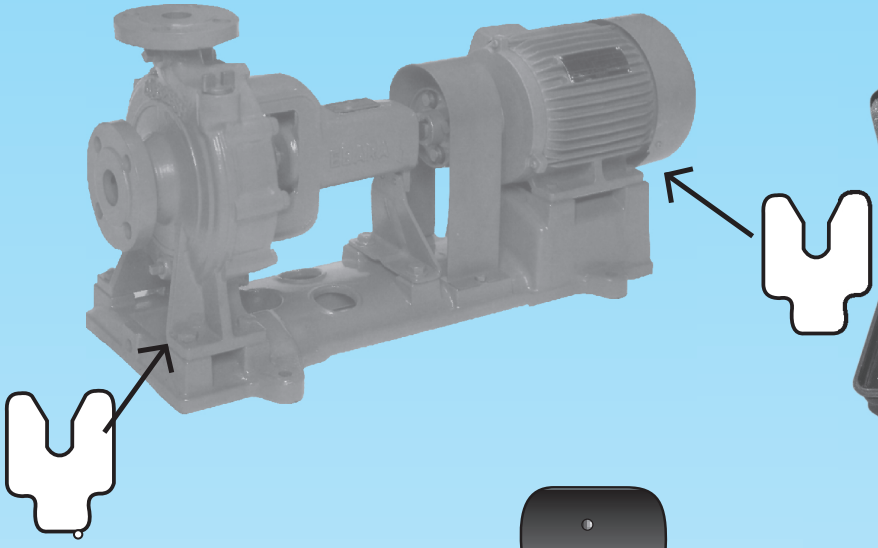

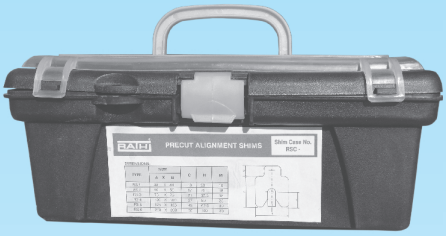

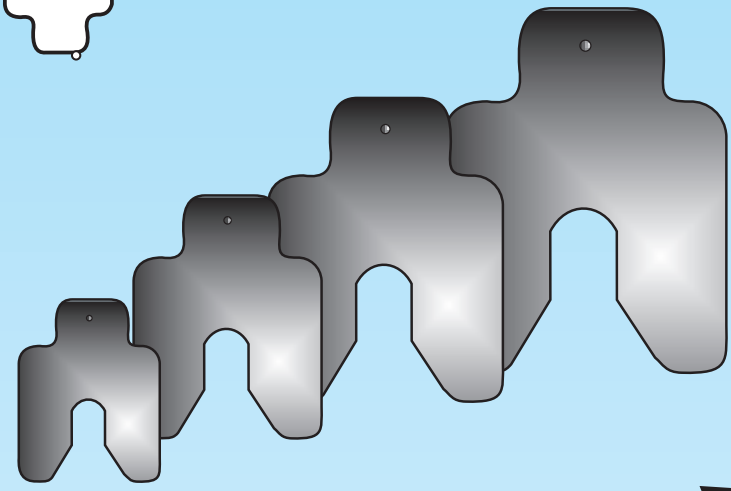

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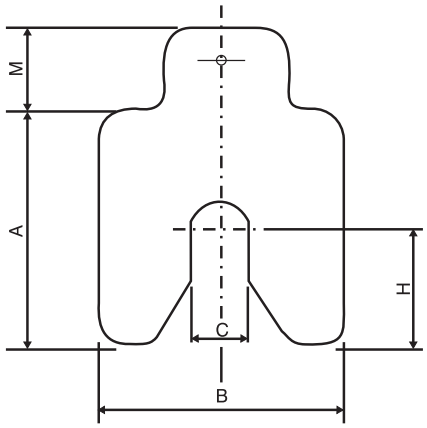

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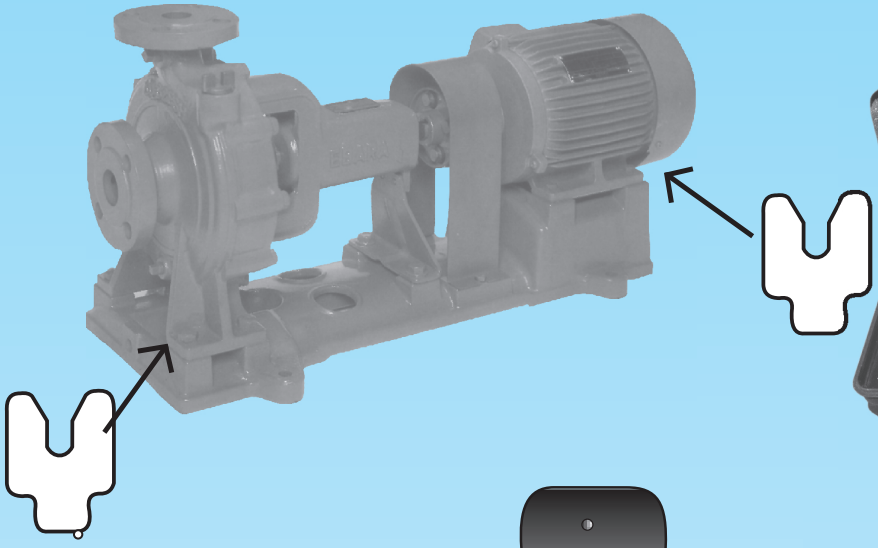

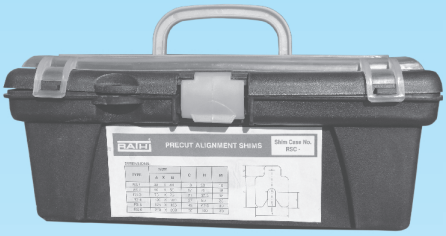

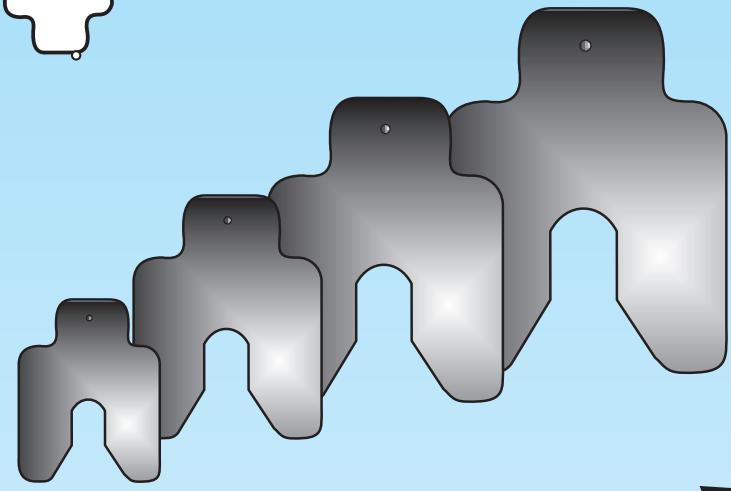

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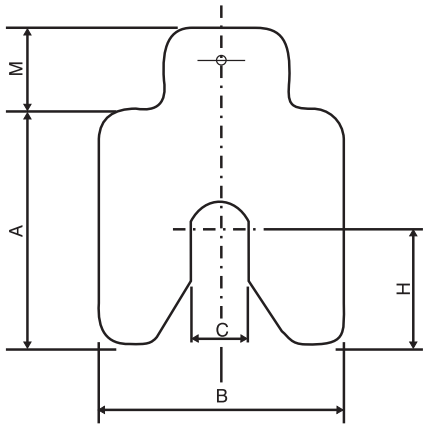

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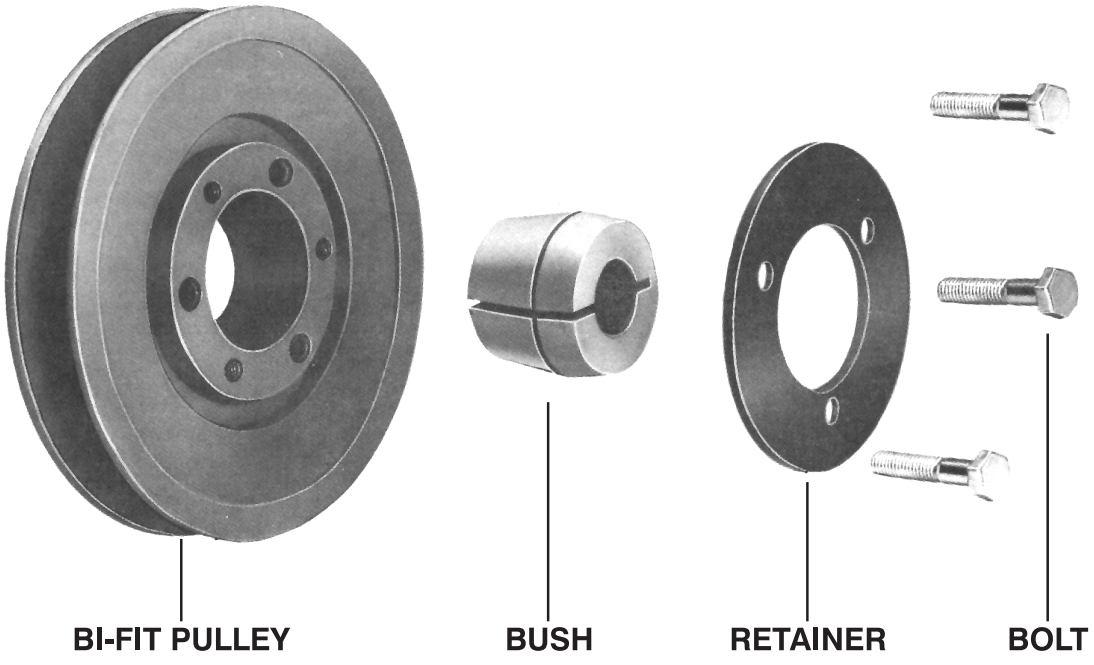
BI - FIT SYSTEMS

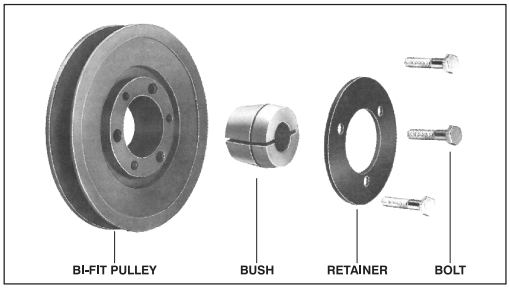


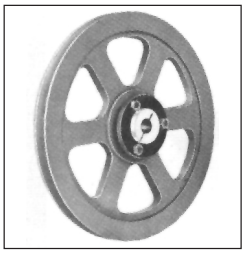
FEATURES

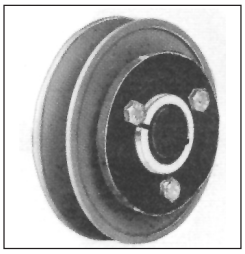
- New Metric range of BI-FIT dual duty pulleys.
- All sizes accept A or B V-belts.
- Single and double pulleys from minimum basic stock.
- Light-weight cast iron pulleys and twin taper steel bushes in metric and imperial bores.
- Shrunk-on-fit without keys or grub screws ON and OFF in a minute.
- Easily fitted - all you need is a spanner-for removal; slacken screws and lightly tap hexagon heads - it is so easy.
- The BI-FIT system provides real benefits - no costly reboring.

BI - FIT SYSTEMS

TYPE BF

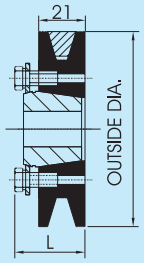






L = 31 for BUSH NO. 1

L = 36 for BUSH NO. 2

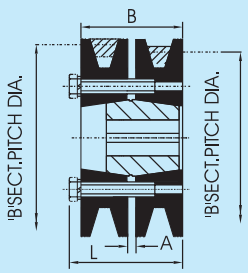


SINGLE GROOVE ASSY.

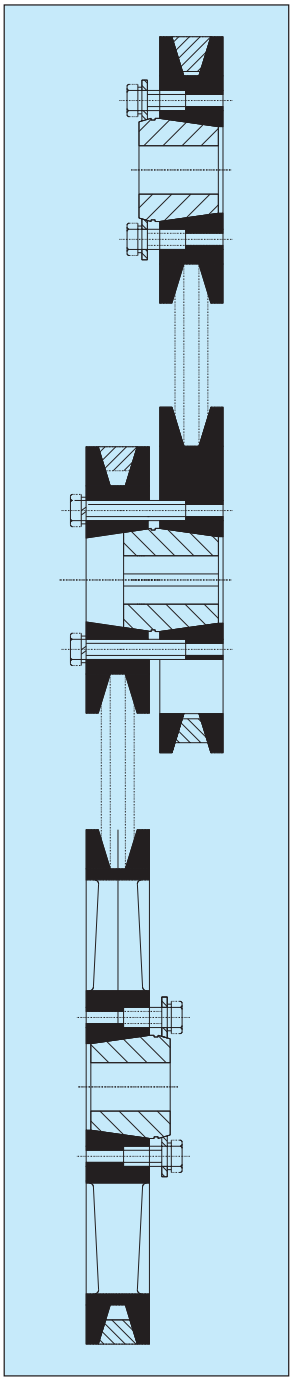
*For actual pitch dia.
deduct 0.2 mm. up to 190 mm.
deduct 0.3 mm above 190 mm.
#For actual outside diameter deduct 0.32 mm.
●All dimensions are in mm. otherwise stated.

For BUSH NO. 1
A = 2~3 mm
B = 44 (min.)
L = 49.5 (min.)

For BUSH NO. 2
A = 3~4 mm
B = 45 (min.)
L = 52.2(min.)



DOUBLE GROOVE ASSY.



- Pulleys are made from graded Cast Iron and twin taper bushes in steel.
- Twin taper bushes are available in wide range of bores - Metric & Imperial.
- Pulleys are fully machined (Upto size 180 A); inherently balanced.
- Suitable for 'A' or 'B' section V-Belts.
- Simple & easy to install and remove.
- Shrunk-on-fit. No keys or grub screws required.
- Can be used as single, double and stepped pulley from minimum stock.
- Low cost and low inventory.

BI-FIT PULLEYS				
Pulley Size	Pitch Dia *	Outside Dia #	Mass Kg.	Suitable Bush Retainer Size
71A	81	88	0.35	
75A	85	92	0.40	
80A	90	97	0.45	
85A	95	102	0.50	
90A	100	107	0.55	
95A	105	111	0.65	1
100A	110	117	0.75	
106A	116	123	0.80	
112A	122	129	0.95	
118A	128	135	1.00	
125A	135	142	1.05	
132A	142	149	1.10	
140A	150	157	1.35	
150A	160	167	1.45	
160A	170	177	1.65	
180A	190	197	1.90	
200A	209	216	2.20	
224A	233	240	2.40	
250A	259	266	2.75	2
280A	289	296	3.10	
315A	324	331	3.60	
355A	364	371	4.10	
400A	409	416	6.35	
450A	459	466	7.30	

BI-FIT BUSHES			
BUSH NO.1		BUSH NO.2	
METRIC	IMPERIAL	METRIC	IMPERIAL
11	0.375"	16	0.500"
12	0.437"	18	0.562"
14	0.500"	19	0.675"
15	0.562"	20	0.687"
16	0.625"	22	0.750"
18	0.687"	24	0.812"
19	0.750"	25	0.875"
20	0.812"	28	0.937"
22	0.875"	30	1.000"
24	0.937"	32	1.062"
25	1.000"	35	1.125"
28	1.062"	38	1.187"
	1.125"	40	1.250
		42	1.312"
			1.375"
			1.437"
			1.500"
			1.562"
			1.625"
Mass kg.-0.14		Mass kg.-0.32	

NOTES:
1. Mount single, double or diferent diameter pulleys on one bush.
2. Use Retainer & Screws for single pulley assembly.
3. Use Bolts for double groove pulley assembly.

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UKAS QUALITY MANAGEMENT 008

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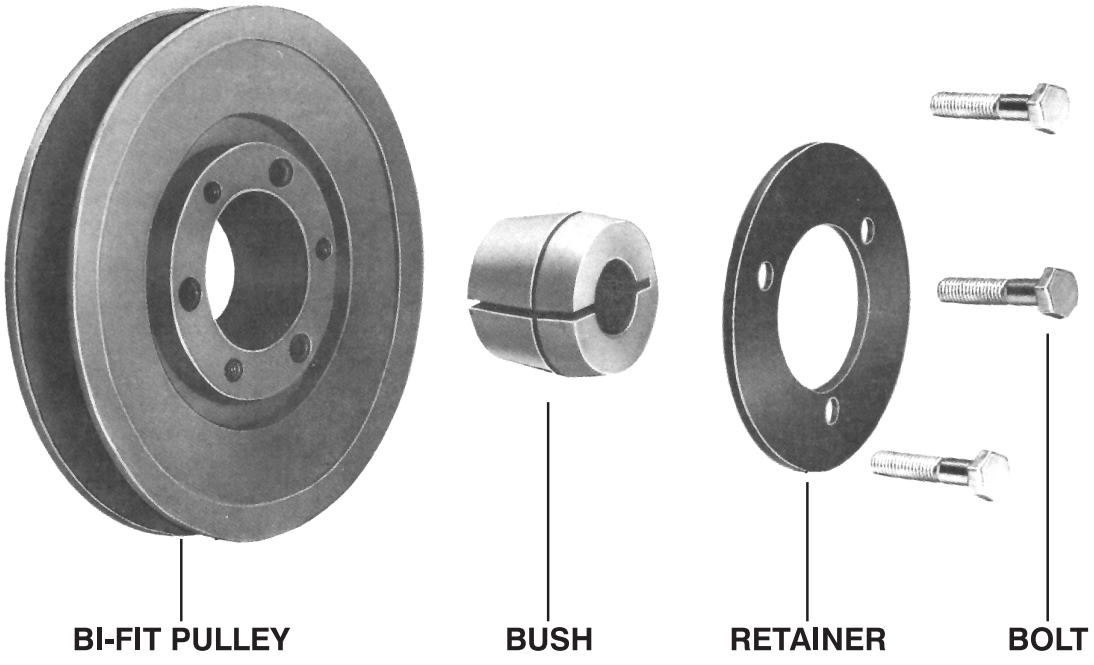

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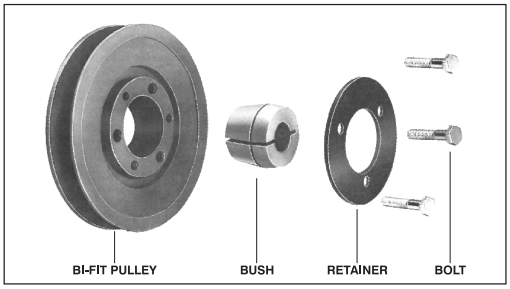
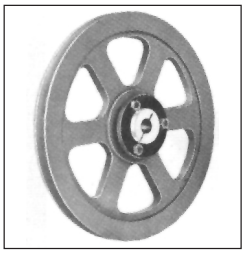
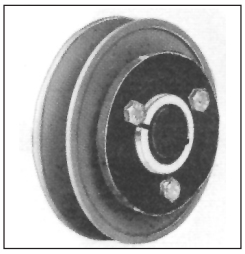
- Single and double pulleys from minimum basic stock.
- Light-weight cast iron pulleys and twin taper steel bushes in metric and imperial bores.
- Shrunk-on-fit without keys or grub screws ON and OFF in a minute.
- Easily fitted - all you need is a spanner-for removal; slacken screws and lightly tap hexagon heads - it is so easy.
- The BI-FIT system provides real benefits - no costly reboring.

BI - FIT SYSTEMS

TYPE BF

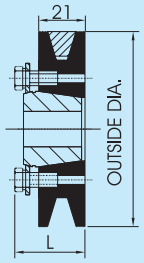






L = 31 for BUSH NO. 1

L = 36 for BUSH NO. 2

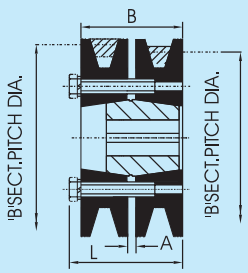


SINGLE GROOVE ASSY.

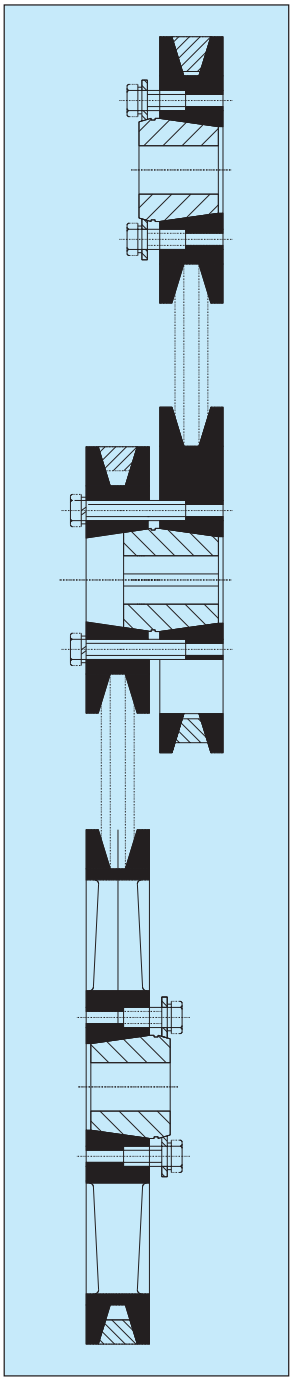
*For actual pitch dia.
deduct 0.2 mm. up to 190 mm.
deduct 0.3 mm above 190 mm.
#For actual outside diameter deduct 0.32 mm.
●All dimensions are in mm. otherwise stated.

For BUSH NO. 1
A = 2~3 mm
B = 44 (min.)
L = 49.5 (min.)

For BUSH NO. 2
A = 3~4 mm
B = 45 (min.)
L = 52.2(min.)



DOUBLE GROOVE ASSY.



- Pulleys are made from graded Cast Iron and twin taper bushes in steel.
- Twin taper bushes are available in wide range of bores - Metric & Imperial.
- Pulleys are fully machined (Upto size 180 A); inherently balanced.
- Suitable for 'A' or 'B' section V-Belts.
- Simple & easy to install and remove.
- Shrunk-on-fit. No keys or grub screws required.
- Can be used as single, double and stepped pulley from minimum stock.
- Low cost and low inventory.

BI-FIT PULLEYS				
Pulley Size	Pitch Dia *	Outside Dia #	Mass Kg.	Suitable Bush Retainer Size
71A	81	88	0.35	
75A	85	92	0.40	
80A	90	97	0.45	
85A	95	102	0.50	
90A	100	107	0.55	
95A	105	111	0.65	1
100A	110	117	0.75	
106A	116	123	0.80	
112A	122	129	0.95	
118A	128	135	1.00	
125A	135	142	1.05	
132A	142	149	1.10	
140A	150	157	1.35	
150A	160	167	1.45	
160A	170	177	1.65	
180A	190	197	1.90	
200A	209	216	2.20	
224A	233	240	2.40	
250A	259	266	2.75	2
280A	289	296	3.10	
315A	324	331	3.60	
355A	364	371	4.10	
400A	409	416	6.35	
450A	459	466	7.30	

BI-FIT BUSHES			
BUSH NO.1		BUSH NO.2	
METRIC	IMPERIAL	METRIC	IMPERIAL
11	0.375"	16	0.500"
12	0.437"	18	0.562"
14	0.500"	19	0.675"
15	0.562"	20	0.687"
16	0.625"	22	0.750"
18	0.687"	24	0.812"
19	0.750"	25	0.875"
20	0.812"	28	0.937"
22	0.875"	30	1.000"
24	0.937"	32	1.062"
25	1.000"	35	1.125"
28	1.062"	38	1.187"
	1.125"	40	1.250
		42	1.312"
			1.375"
			1.437"
			1.500"
			1.562"
			1.625"
Mass kg.-0.14		Mass kg.-0.32	

NOTES:
1. Mount single, double or diferent diameter pulleys on one bush.
2. Use Retainer & Screws for single pulley assembly.
3. Use Bolts for double groove pulley assembly.

ISO 9001 BUREAU VERITAS Certification
UKAS QUALITY MANAGEMENT 008

Rathi Transpower Pvt Ltd
Rathi Chambers, 7, Deccan College Road,
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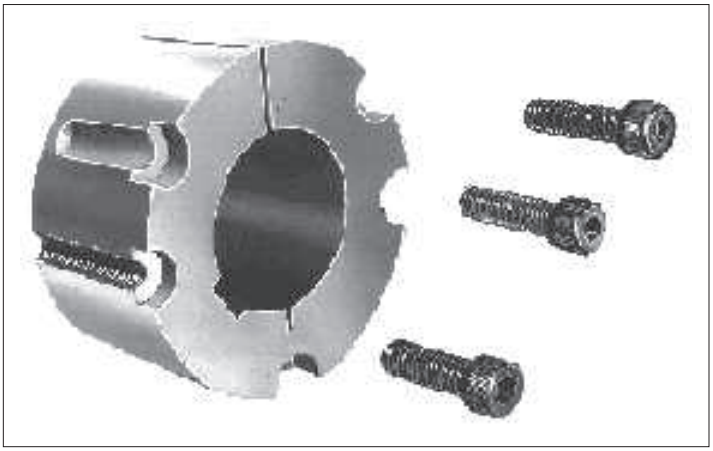
Website : www.rathicouplings.com

Distributor

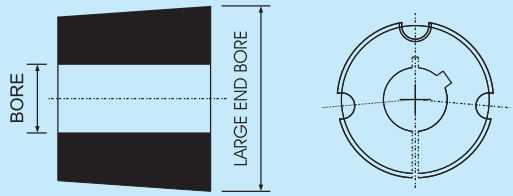
TAPER BUSHES

TYPE TB

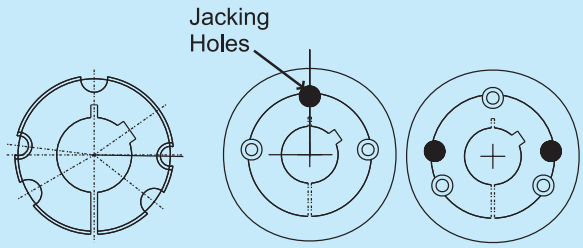


Rathi "Taper Bushes" offer an interchangeable bushing system that can be used in couplings, sprockets, pulleys, weld-on-hubs, bolt-on-hubs, adapters, sheaves etc. It offers -

- Easy fixing & removal.
- Wide range of bore sizes - Metric & Imperial.
- Vice-like grip on the shafts.
- Excellent concentricity.
- Clean flush appearance.
- Bore size may be changed in minutes.



TYPE A
SIZE 1008 TO 3030



TYPE B
SIZE 3525 & 5050

Bush Size		1008	1108	1210	1215	1610	1615	2012	2017	2517	2525	3020	3030	3525	3535	4030	4040	4535	4545	5050
Screw Tightening Torque (Nm)		5.6	5.6	20	20	20	20	30	30	50	50	90	90	113	113	170	170	190	190	270
Screw Details	Qty	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
	Size (BSW)	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	7/16"	7/16"	1/2"	1/2"	5/8"	5/8"	1/2"	1/2"	5/8"	5/8"	3/4"	3/4"	7/8"
	Hex Socket Size (mm)	3	3	5	5	5	5	6	6	6	6	8	8	10	10	12	12	14	14	14
Large end dia.(mm)		35.0	38.0	47.5	47.5	57.0	57.0	70.0	70.0	85.5	85.5	108.0	108.0	127.0	127.0	146.0	146.0	162.0	162.0	177.5
Approx Weight (kg)		0.1	0.1	0.2	0.3	0.3	0.5	0.7	1.1	1.5	2.1	2.7	3.6	3.8	5.0	5.6	7.7	7.5	10.0	14.0
Bore Size	Min (mm)	10	10	12	12	14	14	14	14	16	16	24	24	35	35	40	40	55	55	70
	Max (mm)	22	25	32	30	35	38	45	45	60	60	75	75	90	90	100	100	110	110	125
	Min (inch)	3/8"	3/8"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	5/8"	5/8"	1"	1"	1 3/8"	1 3/8"	1 1/2"	1 3/4"	2 1/4"	2 1/4"	2 3/4"
	Max (inch)	7/8"	1"	1 1/4"	1 1/8"	1 3/8"	1 1/2"	1 3/4"	1 3/4"	2 1/2"	2 3/8"	3"	3"	3 1/2"	3 1/2"	4"	4"	4 1/4"	4 1/4"	5"
◉ Bore Size	In mm	24-25	28	-	-	-	40-42	-	-	-	-	-	-	100	-	115	-	-	-	-
	in inch.	1"	1 1/8"	-	-	-	1 1/2"	-	-	-	-	-	-	4"	-	4 1/2"	-	-	-	-
★ Bore Size	In mm	-	-	-	32	38-42	40-42	48-50	48-50	-	-	-	-	95-100	-	105-115	-	115-125	115	-
	in inch.	-	-	-	-	1 5/8"	1 5/8"	2"	2"	-	-	-	-	4"	-	4 1/2"	-	5"	4 1/2"	-

◉ Shallow keyway for this Bore range. (Inclusive & above upto Max. Bore)
★ Special material for this Bore range. (Inclusive & above upto Max. Bore)
● All dimensions are in mm unless otherwise specified.

In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specifications without prior notice.

ISO 9001 BUREAU VERITAS Certification

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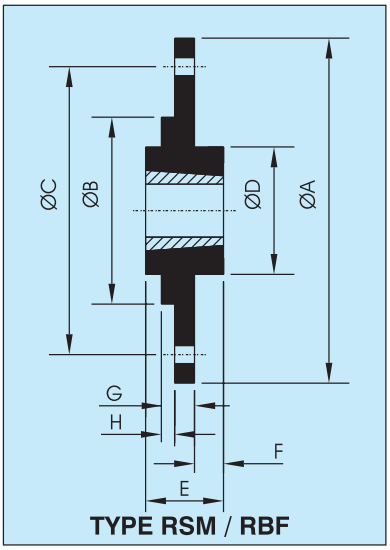
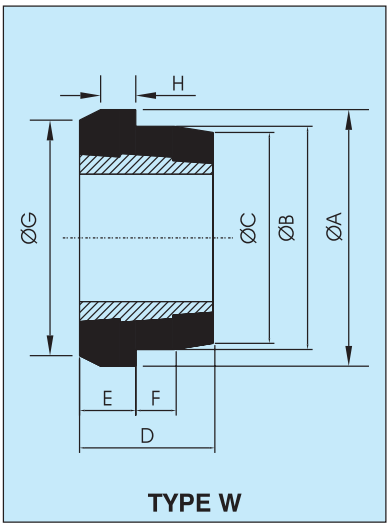


TYPE RSM / RBF

BOLT-ON HUBS - TYPE RSM / RBF

Type/Size	Bush Size	ØA	+0.0 −0.1 ØB	ØC	ØD	E	F	G	H	Bolt Qty. & Size
RSM 12	1210	180	90	135	75	25	6.75	11.5	2.5	6XM6
RSM 16	1615	200	110	150	85	38	12.75	12.5	2.5	6XM6
RSM 20	2012	270	140	190	110	32	9.25	13.5	2.5	6XM8
RSM 25	2517	340	170	240	125	45	14.75	14.5	2.5	8XM10
RSM 30-1	3020	430	220	300	160	51	16.25	18.5	2.5	8XM12
RSM 30-2	3020	485	250	340	160	51	15.75	19.5	2.5	8XM12
RBF 12	1210	120	80	100	74	25	10	9	2.5	6XM6
RBF 16	1610	130	90	110	84	25	10	9	2.5	6XM6
RBF 20	2012	145	100	125	99	32	13	11	2.5	6XM8
RBF 25	2517	185	130	155	120	44	20	14	2.5	6XM10
RBF 30	3020	220	165	190	146	50	20	14	2.5	6XM12

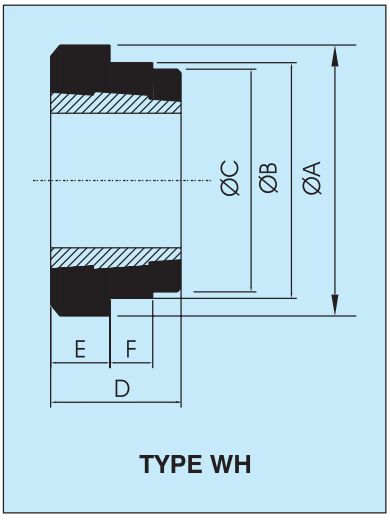


TYPE W

WELD-ON HUBS — TYPE W

FOR LONG SERIES BUSH

Hub Size	Use Bush Size	ØA	+0.00 −0.05 ØB	Ø C	D	E	F	Ø G	H
W 12	1215	73	63.5	60	38	16	11	67	10
W 16	1615	83	73.0	70	38	16	11	76	10
W 20	2017	102	88.9	86	44	19	13	95	10
W 25	2517	127	111.1	108	44	19	13	117	10
W 30	3030	152	133.5	125	76	25	19	140	13
*W 35	3535	184	158.7	151	89	32	25	168	16
*W 40	4040	225	196.8	187	102	32	32	210	16
*W 45	4545	254	222.2	213	114	38	38	232	16
*W 50	5050	276	241.3	229	127	38	38	241	19



TYPE WH

WELD-ON HUBS — TYPE WH

FOR SHORT SERIES BUSH

Hub Size	Use Bush Size	Ø A	+0.00 −0.05 ØB	Ø C	D	E	F
WH 12	1210	70	65	64.5	25	9	10
WH 16	1610	80	75	74.5	25	9	10
WH 20	2012	95	90	89.5	32	12	12
WH 25	2517	115	110	109.5	44	19	15
WH 30	3020	145	140	139.5	50	20	15
WH 35	3525	190	180	179.5	65	25	25
WH 40	4040	200	190	189.5	102	32	30
WH 45	4545	210	200	199.5	114	40	30
WH 50	5050	230	220	219.5	127	40	35

- All dimensions are in mm unless otherwise specified.
- Refer to bush chart for Max. & Min. Bores.

* Sizes available on request.