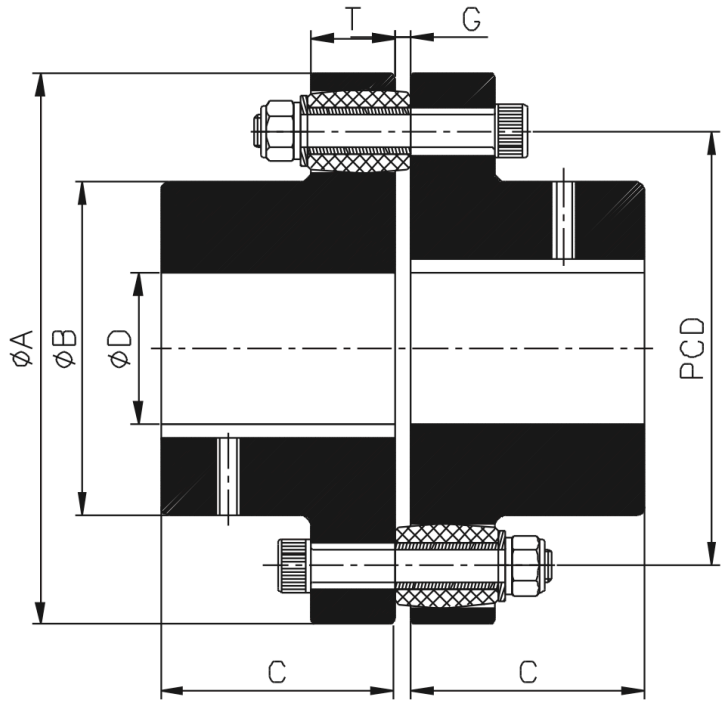
PIN FLEX COUPLINGS
TYPE RP

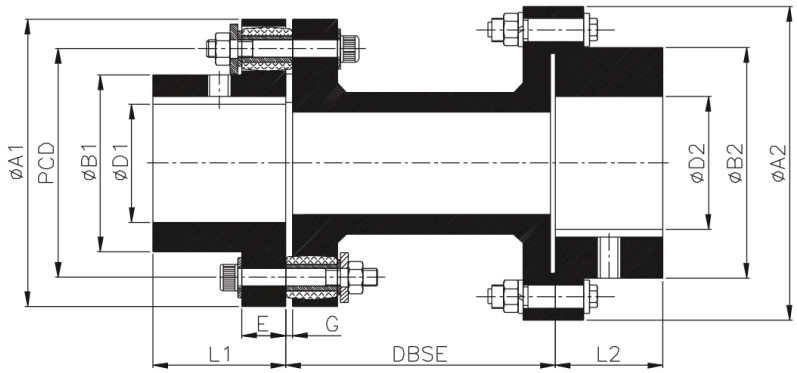


TECHNICAL DATA

Size	Polyurethane buffer			Dimensions (mm)							Solid hub		Bolt Details	
	Torque (Nm)	Kw @ 100 rpm	Max. Speed (rpm)	ØA	ØB	C	ØD (Min-Max)	G	T	PCD	Weight (kg)	M.I. (Kgm2)	Size	Qty.
RP-7.2	50	0.52	5000	72	35	29	12 – 20	2	15	54	1.16	0.00065	M5	6
RP-9.0	325	3.4	6000	90	48	40	16 - 35	3	17	68	2.53	0.002	M6	8
RP-12.5	900	9.4	5800	125	70	50	16 - 50	3	20	95	6.0	0.009	M8	12
RP-14.5	1500	15.7	5500	145	80	65	16 - 58	5	25	112	10.1	0.020	M10	12
RP-16.5	2100	22	4800	165	100	70	22 - 75	5	25	130	14.7	0.037	M10	12
RP-19.5	4200	44	4400	195	120	90	32 - 90	5	30	155	27.13	0.090	M12	12
RP-24.0	9000	94.2	3600	240	150	105	42 - 110	5	35	190	46.6	0.25	M16	16
RP-29.0	17000	177.9	3000	290	180	125	60 - 130	6	50	230	86.2	0.70	M20	16
RP-32.0	22000	230.2	2600	320	210	151	70 - 150	6	50	260	124.3	1.17	M20	16
RP-35.0	30000	314	2400	350	225	161	76 - 160	6	60	285	161.7	1.88	M24	16
RP-38.0	37500	392.5	2200	380	245	181	80 - 180	6	60	310	206.4	2.73	M24	16
RP-51.0	50000	523.6	1300	510	320	211	0 – 200	6	75	410	380	9.20	M30	16
RP-56.0	68000	712.1	1200	560	350	235	0 – 215	10	80	450	500	15.50	M30	16

NOTE :-
1) All dimensions in mm.
2) weight & Inertia shown are at solid bore condition.
3) Maintain Gap 'G' at time of assembly.

PIN FLEX COUPLINGS
TYPE RP SPACER



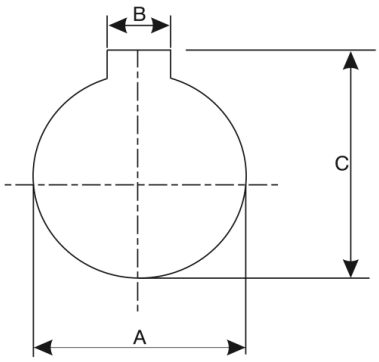
TECHNICAL DATA

Coupling Size	Power Kw at 100 RPM	Rated Torque, Nm	Max Speed, RPM	ØD1 (Min-Max)	ØA1	ØB1	L1	DBSE	G	E	PCD	Bolt Size X Nos	ØD2 (Min-Max)	ØA2	ØB2	L2	Weight (Kg appx)	MI (Kgm2 appx)
RP 16.5 R(25)	22	2100	4800	22-75	165	100	70	140	5	25	130	M10x12	37-110	213	157	73	36	0.096
								180									36.6	0.098
RP 16.5 R(15)								140					26-80	152	107	46	26.7	0.053
RP 19.5 R(25)	44	4200	4400	32-90	195	120	90		5	30	155	M12x12	37-110	213	157	73	51.5	0.155
								180									52.3	0.157
RP 24 R(25)	94.2	9000	3600	42-110	240	150	105	140	5	35	190	M16x16					78.7	0.322
																	79.4	0.323
RP 29 R(30)	178	17000	3000	60-130	290	180	125	180	6	50	230	M20x16	44-130	240	182	88	137	0.954
RP 32 R(40)	230.2	22000	2600	70-150	320	210	151		6	50	260	M20x16	52-180	318	250	115	214	1.302
RP 32 R(35)													52-150	279	212	102	198	1.432
RP 35 R(40)	314	30000	2400	76-160	350	225	161		6	60	285	M24x16	52-180	318	250	115	258	2.33
RP 38 R(40)	392.5	37500	2200	80-180	380	245	181		6	60	310	M24x16					315	3.142

NOTE :-
1) All dimensions in mm.
2) weight & Inertia shown are at solid bore condition.
3) Maintain Gap 'G' at time of assembly.

METRIC BORE & KEYWAYS : IS:2048-1983 / BS 4235-1:1972 (Dimensions comply with DIN 6885/1)

SR. NO.	BORE SIZE (A) H7		KEYWAY WIDTH (B) Js9		KEYWAY DEPTH (C)		SET SCREW SIZE
1	11	+0.018 -0.000	4	±0.015	12.8	+0.1 -0.0	M5 X 0.8P
2	14		5		16.3		
3	19	+0.021 -0.000	6	±0.018	21.8	+0.2 -0.0	M6 X 1P
4	24		8	±0.022	27.3		
5	28		8		31.3		
6	34	+0.025 -0.000	10		37.3		M10 X 1.5P
7	38		10		41.3		
8	42		12		45.3		
9	48		14	±0.027	51.8		M12 X 1.75P
10	55	+0.030 -0.000	16		59.3		
11	60		18		64.4		
12	65		18		69.4		
13	75		20	± 0.033	74.9		M16 X 2P
14	80		22		85.4		
15	85	+0.035 -0.000	22		90.4		M20 X 2.5P
16	100		28		106.4		
17	110		28		116.4		
18	115		32		122.4		
19	120		32		127.4		
20	125	+0.040 -0.000	32		132.4		
21	130		32		137.4		
22	135		36		143.4	+0.3 -0.0	
23	140		36		148.4		
24	145		36		153.4		
25	150		36		158.4		



Imperial Bores
Data available on request.

ELASTOMERIC FLEXIBLE MEMBERS FAILURE MODE CAUSES

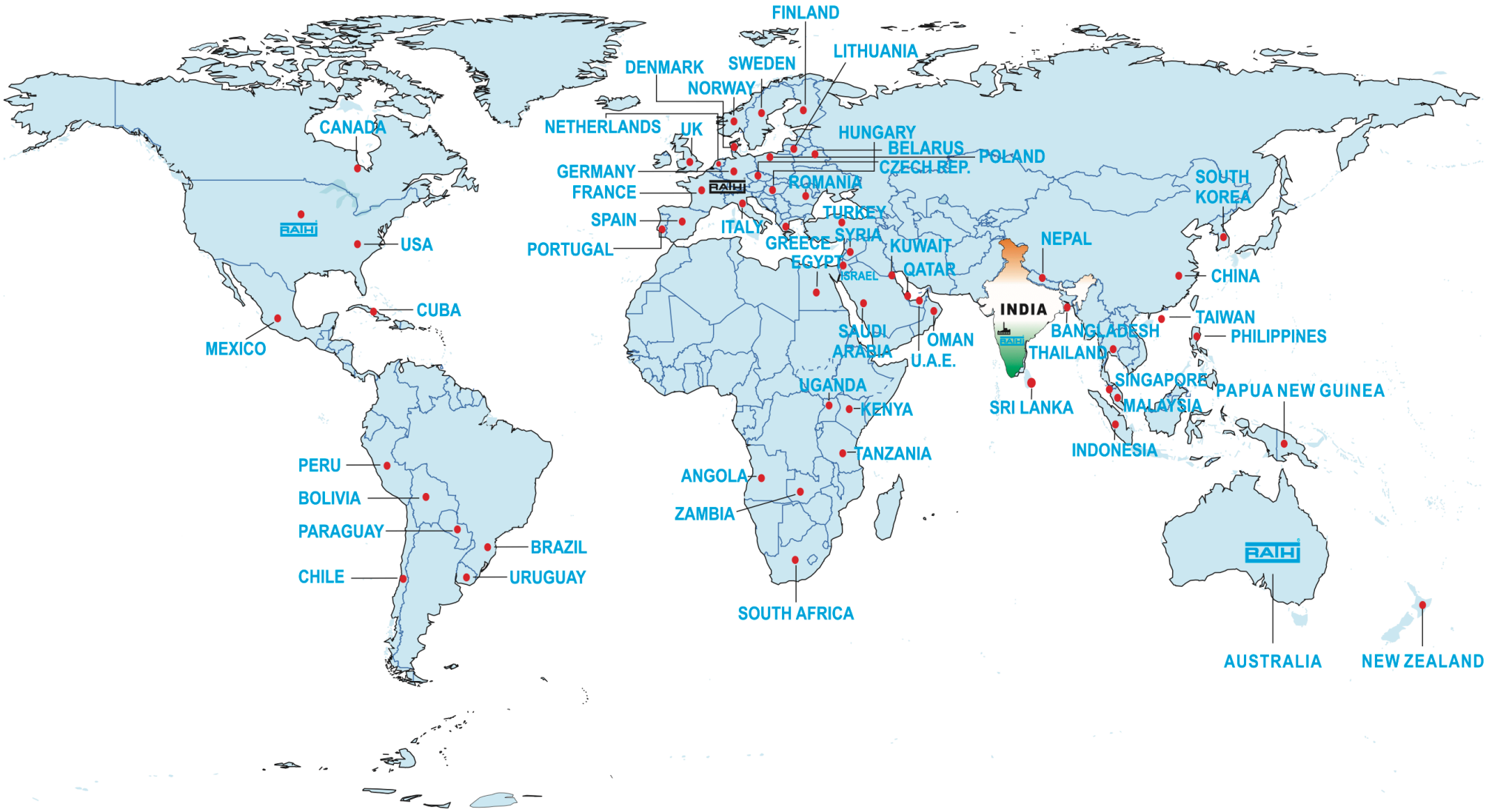
The investigation procedure is somewhat tougher here. There are many types of elastomers used in various elastomeric couplings. A guideline of failure mode & causes are given below :-

FAILURE MODE	PROBABLE CAUSE	CORRECTIVE ACTION
Worn flexing element or shaft bushings. Shaft bearing failure. High-pitched or staccato noise.	Excessive shaft misalignment.	Realign coupling and shaft to meet specified tolerances.
Ruptured elastomeric flexing element. Sheared hub, pins or teeth. Loose hubs on shaft, sheared keys.	torsional shock overload.	Find and eliminate cause of overload. Use larger coupling.
Fatigue of flexible element. Overheated elastomeric tyre or sleeve. Fatigue or hub pins or discs. Worn gear teeth. Staccato or clacking noise. Loose hub on shaft, keyseat wallos.	1. Torsional vibration. 2. Excessive starts and stops. 3. High peak-to-peak torsional overloads.	1 & 2 Use larger coupling. 3 Add flywheel to hub.
Shaft bearing failures. High-pitched whine. Motor thrust bearing failure.	Lubricant failure.	Replace or rebuild coupling.
Swollen or cracked elastomeric flexible member. Lubricant failure. Severe hub corrosion.	Chemical attack.	Use more chemically resistant flexing member or hub. Coat hubs.
Distorted or deteriorated elastomeric flexing member. Lubricant failure.	Excessive heat.	Use special high-temperature rubber compounds and lubricants.
Shattered flexing member. Lubricant failure.	Low temperature. (below - 18°C)	Use special low-temperature rubber compounds and lubricants.

COMPREHENSIVE PERFORMANCE HISTORY

In reality, the flexible coupling is a mechanical fuse. The failure of this fuse, which is usually the cheapest component in the driveline, should be welcomed. For it thus indicates trouble in the system and a major component failure is avoided. However, if the coupling failure presents a hazard, as it could on a manned lift or an overload crane, point out this hazard vividly to the manufacturer.

Distribution throughout the world



ISO 9001 BUREAU VERITAS Certification — UKAS QUALITY MANAGEMENT 008

Manufacturer
Rathi Transpower Pvt Ltd
Gaia Apex, S. No. 33/2D, Viman Nagar
Pune 411 014.(INDIA)
Phone : 91-20-30517201
Fax : 91-20-30517212
E-mail : export.inquiry@rathigroup.com
Website : www.rathicouplings.com

European Operation
Rathi Europe GmbH
Im Wied 2, D-32683,
Barntrup, Germany
Phone : +49 (0) 5263 9561 840
Fax : +49 (0) 5263 9561 849
E-mail : sales@rathi-europe.com
Website : www.rathicouplings.com

Australian Operation
Rathi Polybond Pty Ltd
Unit 9/56, Smith Road,
Springvale,
Victoria 3171
Tel. : 03-9558 6922
E-mail : sales@rathipolybond.com
Website : www.rathipolybond.com

North America
Rathi North America
P.o. Box 42, N56 W13855
Silver Spring DR.
Menomonee Falls,
Wi 53051 United States USA
E-mail : ----------
Website : www.rathicouplings.com

Distributor
Rathi Couplings France
www.rathicouplings.fr
sales@3t-rathi.eu
Tél : 033 188 321 885