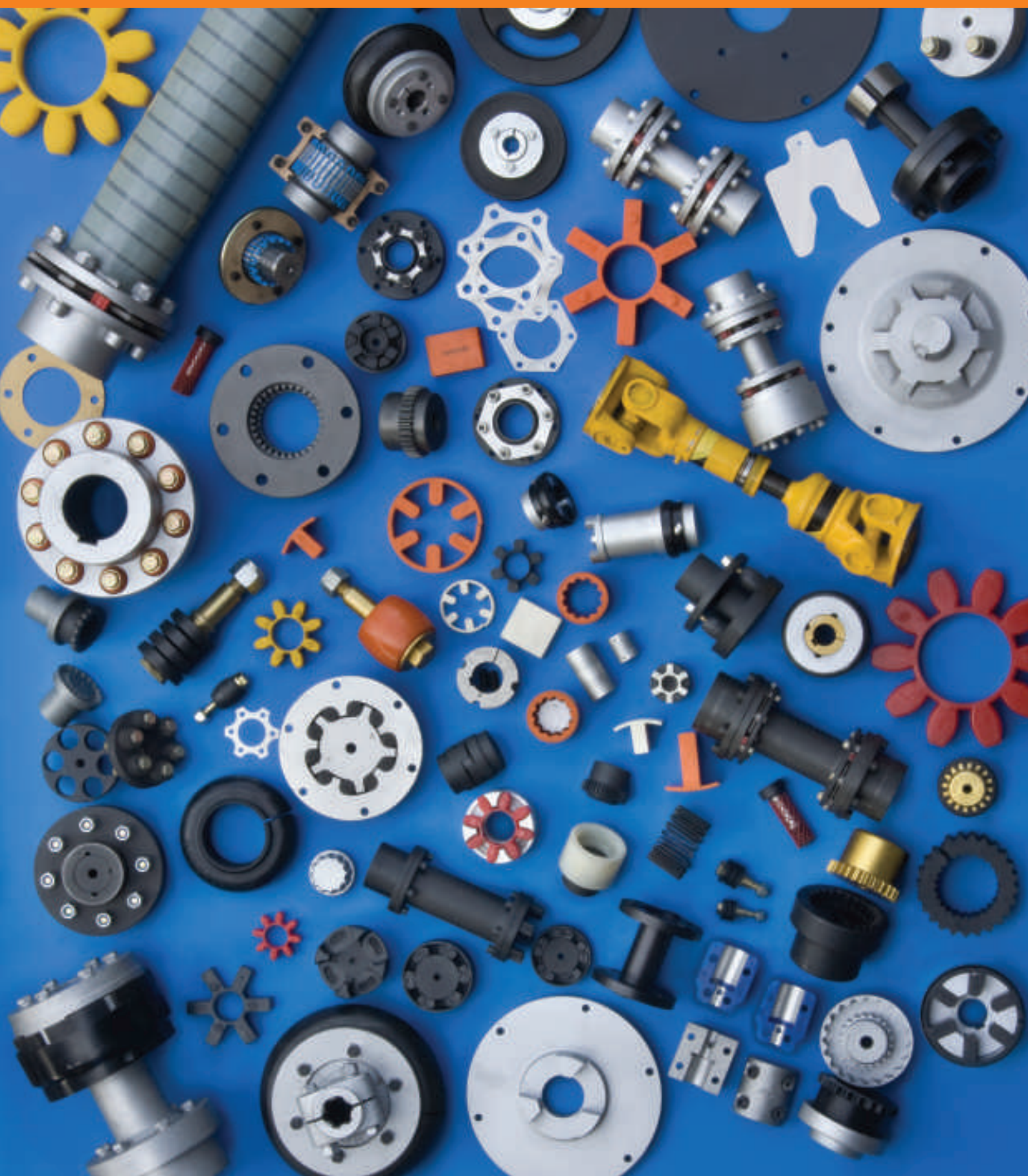




POWER TRANSMISSION PRODUCTS

www.rathicouplings.com

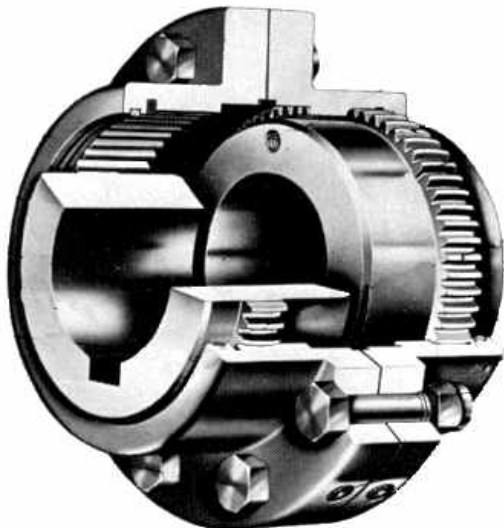
Lovejoy
INDIA HAS BEEN A MARKET LEADER IN MECHANICAL POWER
ENGINEERING SOLUTIONS FOR ROTATING EQUIPMENT FOR OVER 45



- 



TYPE - GEAR *flex* - LFG / LHG



LFG Coupling

COMPLYING TO ISO-14691

Size LFG	kW at 100 RPM	Max. Bore		Outside Dia.	Length Thru Bore	Overall Length
		PB	Gear Hub			
100	6	13	35	120	45	93
101	12	21	50	170	55	115
102	29	30	60	185	70	145
103	52	40	75	220	85	175
104	100	50	90	250	105	215
105	153	60	110	290	110	230
106	235	75	125	320	125	260
107	411	90	140	350	140	290
108	528	105	160	380	155	320
109	658	125	180	430	165	340
110	963	140	220	490	180	370
111	1289	160	260	545	200	410
112	1723	180	300	590	240	490
113	2344	200	330	680	260	535
114	3352	220	370	730	280	575
115	4072	250	410	780	320	655
116	7031	300	455	900	350	720
117	10001	375	520	1000	400	820
118	13241	450	610	1100	450	920
119	17461	520	710	1250	485	1000

Refer individual catalogue for LHG (Half gear coupling)

LFG - Full Flexible Gear

LHG - Half Flexible Gear

TYPE - GEAR *flex* - RGD / RGS (AGMA)

Size RGD/RGS	kW at 100 RPM	Max. Bore		Outside Dia.	Length Thru' Bore		Overall Length	
		Gear Hub	Rigid Hub		Gear Hub	Rigid Hub	RGD	RGS
10	14	52	60	116	43	40	89	87
15	30	65	80	152	50	47	103	101
20	53	80	90	178	62	59	127	125
25	105	98	110	213	77	74	159	156
30	168	115	130	240	91	88	187	184
35	231	135	150	279	107	102	220	215
40	336	160	180	318	121	116	248	245
45	472	180	200	346	135	131	278	274
50	650	195	220	389	153	148	314	310
55	880	215	240	425	168	173	344	350
60	1205	235	260	457	188	187	384	385
70	1823	280	300	527	221	220	451	452
80	2639	285	335	590	249	249	508	511
90	3037	300	370	660	276	276	565	567
100	4100	330	405	711	305	305	623	626



RGD Spacer Coupling

CONFIRMING TO AGMA
COMPLYING TO ATEX / ISO-14691

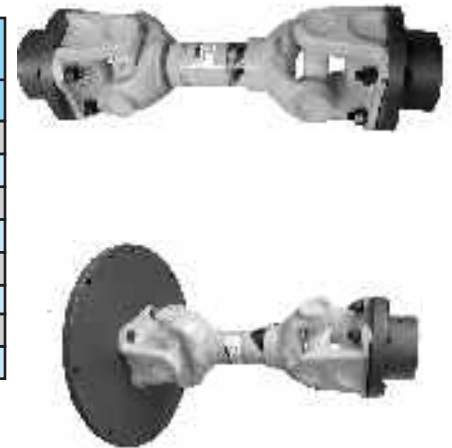
RGD - Double Engagement Gear Coupling

RGS - Single Engagement Gear Coupling

Gear Spacer, Drum, Shear Pin, Brake Disc, Mill Motor couplings available on request.

TYPE - DRIVE SHAFT COUPLING

Size	Short Duration Torque (N-m)	Max. Bore		Angle (B) Max.	Slip Movement K	Compressed Length (Lc)	
		RDSCF	RDSJF			Min.	Max.
1140 ●	571	30	55	14°	43	260	2500
1260 ●/1310 ●	800	38	60	20°	50	335	2500
1350 ■/1410 ■	2100	42	70	18°	57	356	2500
1510 ●/1550 ■	3200	55	95	18°	60	464 / 425	2500
1600 ●	4500	75	114	20°	70	533	2500
1700 ●	6500	80	140	25°	95	585	2500
1800 ●	9260	80	140	25°	105	602	2500
1850 ●	15000	90	150	25°	105	602	2500



Drive Shaft Coupling

- Super short drive shaft available on request.
- Higher sizes available on request.
- Round Flange
- Rectangular Flange

GRID-fLEX : TYPE - LGF (Parallel Grid)

Size	kW at 100 rpm	Max Bore	Outside Dia.		Length Thru' Bore
			V Type	H Type	
105	0.45	29	105	104	38
120	0.70	38	120	120	38
144	1.50	42	144	127	44.5
172	2.20	58	172	159	51
190	3.40	58	190	178	51
197	4.90	65	197	190	57
222	7.00	80	222	222	63.5
254	9.40	95	254	245	70
276	13.80	110	276	267	89
295	26.50	104	295	276	102
324	33.90	124	324	324	101.5
336	48.90	124	336	336	101.5
375	67.50	148	375	381	114
425	93.60	170	425	425	127
432	179	157*	432	501	140
492	261	173*	492	552	152.5

Higher sizes available on request.

* Max Bore for 'H' type LGF-432= 202mm for LGF-432= 33mm



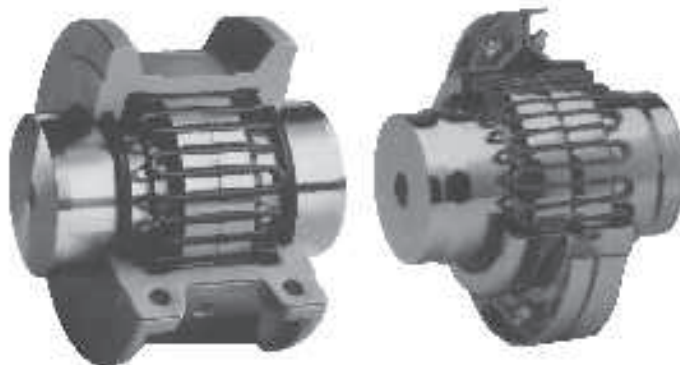
H Type

LGF Coupling

V Type

GRID-fLEX : TYPE - RGT (Taper Grid)

Size RGT	kW at 100 RPM	Max. Bore	Outside Dia.		Overall Length	Length Thru' Bore
			H Type	V Type		
1020	0.5	30	101	111	98	47
1030	1.42	36	110	121	98	47
1040	2.36	44	117	128	104	51
1050	4.14	51	138	147	123	60
1060	6.5	57	150	162	130	63
1070	9.46	68	162	173	155	76
1080	19.51	82	194	200	181	89
1090	35.47	95	213	232	200	98
1100	59.71	110	250	267	245	120
1110	88.67	120	270	286	258	127
1120	130.05	140	308	319	304	149
1130	189.17	170	346	378	330	162
1140	271.93	200	384	416	371	183
1150	378.34	215	453	476	372	183
1160	532.04	240	501	533	402	198
1170	709.38	280	566	584	438	216
1180	983.68	300	630	630	483	239
1190	1300.53	335	675	685	524	259
1200	1773.46	360	757	737	565	279
1210	2605.47	390	844	-	622	305
1220	3515.89	420	920	-	663	325



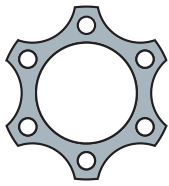
H Type

V Type

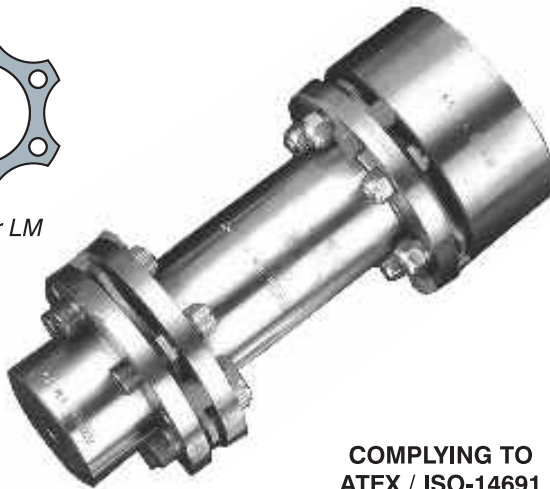
RGT Coupling

COMPLYING TO ATEX / ISO-14691

• All dimensions are in mm unless otherwise specified. For further details contact at enquiry@rathigroup.com



Disc for LM



LM Coupling

COMPLYING TO
ATEX / ISO-14691

TYPE - DISC-O-FLEX - LM

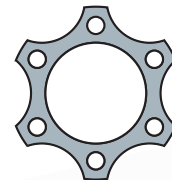
Size LM	kW at 100 RPM	Max. Bore		Std. DBSE	Length Thru' Bore	Out- side Dia.
		Type I	Type II			
5	0.35	20	22	100	25	55
10	0.67	22	25	140	30	63
35	1.67	30	38	100	40	82
95	5.4	40	50	140	45	102
170	9.0	52	70	180	55	128
220	14.0	65	80	140	60	146
400	25.0	80	100	180	70	176
520	35.0	90	115	180	90	197
1000	53.0	105	130	250	95	225
1300	75.0	115	140	180	105	250
2000	105.0	120	155	250	115	275
2500	140.0	135	165	300	130	300

Please specify adapter type combination (1/1, 1/2, 2/2).
Available for non-sparking application on request.
Overall length = DBSE + (2 X Length Thru' Bore)

TYPE - DISC-O-FLEX - EM

Size EM	kW at 100 RPM	Max. Bore				Std. DBSE	Length Thru' Bore		Outside Dia.	
		Type I	Type II	Type III	Type IV		Type I & II	Type III & IV	Type I & II	Type III & IV
4	0.35	19	32	24	42	100	25	30	61	69
8	0.67	24	42	38	48		30	40	69	90
25	1.67	38	48	48	72		40	45	90	108
65	5.4	48	72	65	92	180	45	55	108	135
125	9.0	65	92	80	102	140	55	60	135	155
165	14.0	80	102	90	120	180	60	70	155	182
370	25.0	90	120	108	140	180	70	90	182	200
390	35.0	108	140	127	155		90	95	200	225
790	53.0	127	155	140	178		95	105	225	250
1025	75.0	140	178	155	192	250	105	115	250	275
1425	105.0	155	192	170	212		115	130	275	300
1880	140.0	170	212	190	255		130	145	300	375

Please specify adapter type.
Possible combination of adapters are adapter type 1/1, 1/2, 2/2, 3/3, 3/4, 4/4 only.
Available for non-sparking application on request.
Overall length = DBSE + (2 X Length Thru' Bore)



Disc for EM



EM Coupling

COMPLYING TO
API 671 / 610 /
ATEX / ISO-10441



Disc for RSK



RSK Coupling

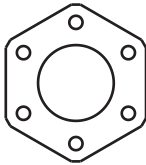
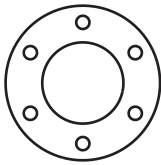
COMPLYING TO
API 671 / 610 / ATEX

DISC-O-FLEX : TYPE - RSK

Size	kW at 100 RPM	Max. Bore		Outside Dia.	Std. DBSE	Length Thru' Bore
		Type I	Type II			
13	1.3	36	51	86	100, 140	40
33	3.3	46	70	105	180	45
75	7.5	65	90	130	140	55
135	13.5	80	102	152	180	62
230	23	90	121	179	250	70
350	35	115	-	197	180 250	90
500	50	127	-	222		95
740	74	140	-	247		107
930	93	155	-	272		115
1400	140	172	-	297		130

Please specify Hub type.
Available for non-sparking application on request.
Overall length = DBSE + (2 X Length Thru' Bore)

High Performance Couplings



Disc Pack for EMT

COMPLYING TO
API 671 / 610 / ATEX / ISO-10441

TYPE - EMT

Size EMT	RATING			Max. Bore	DBSE Min.	Length Thru' Bore	Out- side Dia.	Boss Dia.
	kW at 100 RPM	Torque Nm	Max RPM					
82	2.7	250	8000	40	70	40	82	55
101	3.8	360	7000	51	70	45	101	78.5
127	14	1340	6000	73	200	75	127	101
149	26	2480	6000	85	140	85	149	117
176	40	3820	6000	105	140	105	176	144
203	75	4140	6000	120	180	120	203	166
241	140	13100	5000	145	295	145	241	199
283	200	19104	4500	170	210	170	283	235
335	300	28900	3800	200	235	200	335	280
385	630	60000	3600	230	260	230	385	322

DBSE variations are available to suit customer's requirements.
Pl. refer to Rathi for extreme variations.
Higher rating coupling available on request.

TYPE - EMD

Size EMD	RATING			Max. Bore	DBSE Min.	Length Thru' Bore	Out- side Dia.	Boss Dia.
	kW at 100 RPM	Torque Nm	Max RPM					
40	4.0	380	20000	50	70	40	82	55
45	4.5	430	18000	65	70	45	101	78.5
180	18	1720	15000	82	200	75	127	101
310	31	2960	12000	95	140	85	149	117
500	50	4780	10500	115	140	105	176	144
960	96	9360	9000	130	180	120	203	166
1840	184	17570	7800	180	295	145	241	199
2550	255	24350	6500	190	210	170	283	235
3900	390	37250	6700	220	235	200	335	280

DBSE variations are available to suit customer's requirements.
Pl. refer to Rathi for extreme variations.
Higher rating coupling available on request.

TYPE - RR

Size	kW at 100 RPM	Max. Bore	Outside Dia.	Length Thru' Bore	Overall Length
020	1.06	20	89	33	66
030	2.3	30	127	41	82
038	4.8	38	132	48	96
042	6.4	42	146	56	112
048	9.63	48	171	61	122
058	16.9	58	193	68	136
070	29.9	70	216	76	152
075	36.5	75	254	88	176
085	53.4	85	279	100	200
105	100	105	330	117	234
120	149	120	370	132	264
135	213	135	419	147	294
150	292	150	457	165	330
170	470	170	533	188	370
190	575	190	597	211	422
215	750	215	660	237	474



RR Coupling



RGR Coupling

TYPE - RGR

Size	kW at 100 RPM	Max. Bore	Outside Dia.	Length Thru' Bore	Overall Length
100	5.9	45	120	45	093
101	11.8	60	170	55	115
102	29.4	75	185	70	145
103	52	90	220	85	175
104	100	110	250	105	215
105	153	130	290	110	230
106	135	150	320	125	260
107	411	170	350	140	290
108	528	200	380	155	320
109	658	220	430	165	340
110	963	260	490	180	370

● All dimensions are in mm unless otherwise specified. For further details contact at enquiry@rathigroup.com

TYPE-L/SW



L Coupling



Spiders
(Synthetic / Urathane / Hytrel /
Bronze (050-225) for L, RRL)



SW Elements
(Nitrile / Urathane /
Hytrel for SW, RRS, SWQ)

SW Coupling

Type	Size	kW at 100 RPM	Max. Bore	Outside Dia.		Length Thru Bore	Overall Length
				L	SW		
L	035	0.004	10	16	-	6.5	21
	050	0.03	16	27	-	15	42
	070	0.05	20	34.5	-	19	51
	075	0.1	22	44.5	-	21	55
L	095	0.22	28	54	65	25	63
	099	0.49	30	65	78	27	72
	100	0.49	35	65	78	35	88
	110	0.93	42	85	96	43	108
	150	1.5	48	96	111	45	115
	190	2.0	60	115	129	54	133
	225	2.8	65	127	142	64	153
	226	3.4	70	137	153	70	178
	276	5.6	75	157	173	80	200
	280	8.2	80	192	208	80	200
SW	295	13.4	95	237	253	95	238
	2955	22.3	105	237	253	108	264
	300	31.9	105	-	272	115	283
	350	45.1	115	-	323	128	309

Size 035 - 075 Sintered iron

Size 050 - 110 Aluminium

Size 095 - 350 Cast Iron

Size 075 - 225 Hubs are solid

COMPLYING TO ATEX / ISO-14691

TYPE-H

Size	kW at 100 rpm (Synthetic Rubber)	Max. Bore	Outside Dia.	Length thru' Bore	Overall Length
H-307	56	105	262	121	295
H-357	75	115	288	127	314
H-367	104	130	313	143	353

TYPE-HR

Size	kW at 100 rpm	Max. Bore		Outside Dia.	Length thru' Bore		DBSE
		Hub Type I	Hub Type II		Hub Type I	Hub Type II	
HR-307	56 •	80	105	266	68	85	100
HR-357	75 •	85	115	292	76	95	110
HR-367	104 •	100	130	317	84	105	117
HR-407	224 *	120	155	349	95	120	126
HR-457	302 *	140	185	400	100	130	134
HR-509	359 *	145	190	412	110	140	133
HR-609	527 *	170	225	461	130	170	142
HR-709	730 *	190	265	524	140	195	162
HR-809	1530 #	215	295	600	155	210	196
HR-911	1770 #	265	340	667	190	240	216
HR-1013	2644 #	360	-	805	340	-	218
HR-1015	3665 #	420	-	910	340	-	235
HR-1115	4450 #	500	-	960	375	-	245
HR-1117	6807 #	600	-	1170	400	-	276

- Please specify the hub type required.

• Synthetic rating * Polyurethane rating

Hytrel rating



Load Cushion -
(Nitrile / Urathane /
Hytrel for H,HR)

H / HR Coupling

COMPLYING TO ATEX / ISO-14691

TYPE - RRS

Size	kW at 100 RPM	Std. Spacer Length	Max. Bore	Outside Dia.	Length Thru' Bore
095	0.22	90, 100, 140, 180	28	65	25
100	0.49		35	78	35
110	0.93		42	96	43
150	1.5		48	111	45
190	2.0		60	129	54
225	2.8		65	142	64
226	3.43	100, 140, 180	70	153	70

Overall length = Spacer length + (2 X Length Thru' Bore)

Note : Size 095 to Size 225 hubs are without pilot bore.



RRS Coupling

COMPLYING TO ATEX / ISO-14691

TYPE - RRL



RRL Coupling

Size	kW at 100 RPM	Spacer Length	Max. Bore		Outside Dia.	Length Thru' Bore	
			▲	Std		▲	Std
095	0.22	90,100,140	-	28	54	-	25
100	0.49	90	-	38	65	-	30
110	0.93		24	42	85	35	35
150	1.49		32	48	96	40	40
190	2.01		38	55	115	45	45
225	2.76		42	65	127	50	50

▲ TRIANGULAR ADAPTER BODY

TYPE-SWQ

Size	kW at 100 RPM	SPACER Length	Max Bore	Outside Dia.	Length Thru' Bore
226	3.43	140, 180	70	153	50
276	5.6		80	173	60
280	8.2		80	208	60
295	13.4		105	253	70
2955	22.4		105	253	75
300	31.9		115	272	80
350	45		125	323	90

Overall Length = Spacer Length + 2 X Length Thru' Bore
Spacer Length 3½", 5", 7" available



SWQ Coupling

COMPLYING TO ATEX / ISO-14691



RRJ Coupling



Spider (PU)



Spider (Nitrile)

CURVE-FLEX : TYPE - RRJ

RRJ - Aluminium (AL) *									
Size	Coupling Type	KW @ 100 rpm		Max. Speed rpm	Finish Bore - D		DBSE min.	Outside Dia.	Overall Length
		Red	Yellow		Min.	Max.			
19	I	0.17	0.10	14000	6	19	16	41	66
	II				19	24			
24	I	0.60	0.35	10600	9	24	18	56	78
	II				22	28			
28	I	1.60	0.95	8500	10	28	20	66	90
	II				28	38			
RRJ - Cast Iron (CI) *									
38	I	3.25	1.90	7100	12	38	24	80	114
	II				38	45			114
	III				38	45			164
42	I	4.50	2.65	6000	14	42	26	95	126
	II				42	55			126
	III				42	55			176
48	I	5.25	3.10	5600	15	48	28	105	140
	II				48	60			140
	III				48	60			188
55	I	6.85	4.10	4750	20	55	30	120	160
	II				55	70			160
	III				55	70			210
65	I	9.40	6.25	4250	22	65	35	135	185
	II				65	80			185
	III				65	80			235
75	I	19.20	12.80	3550	30	75	40	160	210
	II				75	95			210
	III				75	95			260
90	I	36	24	2800	40	90	45	200	245
	II				90	110			245
	III				90	110			295

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

TYPE-RFC

RFC Coupling

COMPLYING TO ATEX/
ISO-14691

Size	kW at 100 RPM	F/H Hub				B Hub			Outside Dia.
		Bush Size	#Max. Bore	Lg.thru' Bore	Overall Length	Max. Bore	Lg.thru' Bore	Overall Length	
7	0.33	1008	25	24.0	66	32	26	70	69
9	0.84	1108	28	24.0	70.5	42	32	86.5	85
11	1.68	1610	42	27.0	83	55	45	119	112
13	3.30	1610	42	26.5	89	60	55	146	130
15	6.28	2012	50	34.0	108	70	60	160	150
18	9.95	2517	60	47.0	143	80	70	189	180
23	20.90	3020	75	52.5	163.5	100	90	238.5	225
28	33.00	3535	90	90.5	255.5	115	105	284.5	275
28A	33.00	3525	100	66.5	207.5	125	105	284.5	275

Available with taper bush

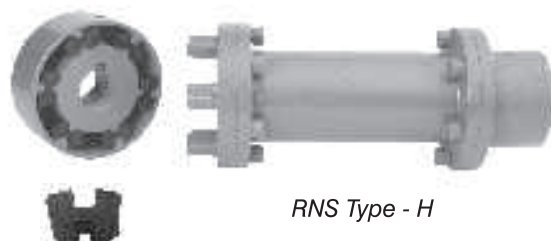
For detailed information about taper bush bore, please refer **Taper Bush Catalogue**.



RN Type - A



RN Type - B



RNS Type - H

H Insert

(Nitrile / PU / Hytrel)

N-FLEX : TYPE - RN / RNS

COMPLYING TO ATEX / ISO-14691

Size	kW at 100 RPM	Outside Dia.	RN(A) & RN(B) TYPE					RNS (H) TYPE				
			Max Bore			Length Thru' Bore	Gap Bet ⁿ Shaft	Max Bore		Length Thru' Bore		Spacer Length
			Female Hub	Male Hub (B)	Male Hub (A)			Female Hub	Adapter	Female Hub	Adapter	
68 B	0.36	68	24	28	-	20	2-4	-	-	-	-	-
80 B,H	0.63	80	30	38	-	30	2-4	30	32	30	45	5
95 B,H	1.1	95	42	42	-	35	2-4	42	42	35	45	5
110 A,B,H	1.7	110	48	48	38	40	2-4	48	48	40	50	5
125 A,B,H	2.5	125	55	55	45	50	2-4	55	55	50	50	5
140 A,B,H	3.8	140	60	60	50	55	2-4	60	60	55	65	6
160 A,B,H	5.9	160	65	65	58	60	2-6	65	65	60	70	6
180 A,B,H	9.2	180	75	75	65	70	2-6	75	75	70	80	6
200 A,B,H	14	200	85	85	75	80	2-6	85	85	80	90	6
225 A,B,H	21	225	90	90	85	90	2-6	90	90	90	100	6
250 A,B,H	29	250	100	100	95	100	3-8	100	100	100	110	8

Overall Length (RN) = 2 X LTB + Gap Betⁿ Shaft

Overall Length (RNS) = Spacer Length + LTB Female Hub + LTB Adapter

Available with taper bush

TYPE - B-FLEX - RB

Size RB	kW at 100 RPM	Max. Bore		Outer Dia.	Length Thru' Bore	Shaft Gap
		Bush Half	Pin Half			
105-3	1	30	32	105	45	2-6
116-4	1.5	39	42	116	45	2-6
125-4	1.7	45	50	125	50	2-6
144-6	3.3	50	60	144	55	2-6
162-6	5.5	60	65	162	60	2-6
178-6	6.7	70	75	178	70	2-6
198-10	13	80	90	198	80	2-6
228-11	21	90	100	228	90	4-10
252-12	32	105	115	252	100	4-10
285-11	48	115	125	285	110	4-10
320-12	64	125	135	320	125	4-10
360-11	93	135	150	360	140	4-12
400-10	126	160	160	410	160	4-12
450-12	195	180	180	450	180	4-12
500-14	270	200	200	500	200	4-12
560-10	325	225	225	560	220	4-8
630-12	440	250	250	630	240	4-8
710-12	785	260	260	710	260	5-9
800-14	1047	280	280	800	290	5-9
900-16	1623	305	305	900	320	5-9
1000-18	2042	320	320	1000	350	5-10
1120-18	2827	350	350	1120	380	6-11
1250-20	3613	380	380	1250	420	6-11
1400-20	5550	440	440	1400	480	6-12
1600-24	7854	480	480	1600	540	6-12
1800-22	10210	540	540	1800	600	8-16
2000-26	13614	600	600	2000	660	8-16

Overall length = Shaft Gap + (2 X Length Thru' Bore)
Higher sizes available on request.



COMPLYING TO
ATEX / ISO-14691

RB Coupling



RC Coupling



Cone Ring
(Nitrile / PU)

COMPLYING TO
ATEX / ISO-14691



Pin -Cone Ring Assembly

RR - Through bore Rigid Coupling available on request.
RRT - Taper Bush Rigid Coupling available on request.

TYPE - CONE-FLEX - RC / RCT

Coupling Type	Size	"kW at 100 RPM"	RC		RCT			Outside Dia.	Shaft Gap
			Max. Bore	Lg. Thru' Bore	Bush Size	Max. Bore #	Lg. Thru' Bore		
RC	020	0.56	20	33	-	-	-	89	3
	030	1.2	30	41	-	-	-	127	3
	038	2	38	48	-	-	-	132	3
RC/ RCT	042	3	42	56	1215	32	38	146	3
	048	5	48	61	1615	42	38	171	3
	058	8	58	68	2017	50	45	193	3
	070	11	70	76	2525	60	63.5	216	3
	075	27	75	88	2525	60	64	254	3
	085	37	85	100	3030	75	76	279	3
	105	56	105	117	3535	90	89	330	3
	120	94	120	132	4040	100	102	370	6
	135	128	135	147	4545	110	114.3	419	6
	150	167	150	165	5050	125	127	457	6
RC	170	258	170	188	-	-	-	533	6
	190	360	190	211	-	-	-	597	6
	215	467	215	237	-	-	-	660	6
	240	788	240	264	-	-	-	737	6
	265	1044	265	292	-	-	-	826	6

Overall length = Shaft gap + (LTB Pin Half + LTB Bush Half) - for RC

Overall length = Shaft gap + (2 X Length Thru' Bore) - for RCT

For detailed information about taper bush bore, please refer Taper Bush Catalogue.

● All dimensions are in mm unless otherwise specified. For further details contact at enquiry@rathigroup.com



TYRE-FLEX : TYPE - T/TO

Size	kW at 100 RPM	Bush Size	B TYPE			Length Thru' Bore	F/H TYPE			Length Thru' Bore	Outside Dia.
			Max Bore	Inch	Overall length#		Max Bore	Inch	Overall length#		
T4	0.25	1008	32	1 1/4	65	22	25	1	65	22	104
T5	0.69	1210	38	1 1/2	89	32	32	1 1/4	75	25	133
T6	1.33	1610	45	1 3/4	106	38	42	1 5/8	80	25	165
T7	2.62	-	50	2	132	45	-	-	-	-	197
T8	3.93	-	63	2 1/2	146	51	-	-	-	-	210
T9	5.24	-	75	3	163	57	-	-	-	-	235
T10	7.07	-	80	3 1/8	174	60	-	-	-	-	254
T11	9.16	-	90	3 1/2	181	65	-	-	-	-	279
T12	13.9	-	100	4	206	76	-	-	-	-	314
TO-14	24.3	3525	127	5	200	89	100	4	152	65	359
TO-16	39.5	4030	140	5 1/2	212	102	115	4 1/2	162	77	395
TO-18	65.7	4535	150	6	254	116	125	5	200	89	470
TO-20	97.6	4535	150	6	258	114	125	5	208	89	508
TO-22	121	5040	160	6 1/2	281	127	125	5	231	102	562
TO-25	154	-	190	7 1/2	294	132	-	-	-	-	628

Overall Length is excluding bolt head thickness.

Tyres are available in Natural Rubber.

* F/H construction for sizes 7 to 12 in TO7 to TO12 available on request.

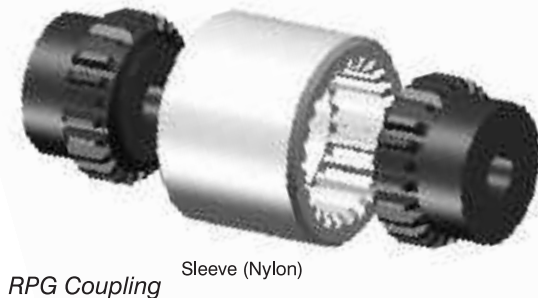
COMPLYING TO ATEX / ISO-14691

TYPE - SLEEVE FLEX - RBW

Coupling Size	kW at 100 RPM	Max. Bore	Outside Dia.	Length Thru' Bore	Overall Length
3	0.08	22	52	20	49
4	0.15	25	63	22	60
5	0.30	29	83	34	71
6	0.52	35	102	44	88
7	0.90	48	118	47	100
8	1.34	54	138	53	112
9	2.16	64	161	61	128
10	3.43	73	191	69	144
11	5.37	87	219	87	180
12	8.50	98	254	104	210
13	13.43	100	299	111	235



COMPLYING TO ISO-14691



COMPLYING TO ISO-14691

POLYGEAR : TYPE - RPG

Size	kW at 100 rpm	Max. Bore	Outside Dia.	Length Thru' Bore	Overall Length
19	0.17	20	48	25	54
24	0.21	24	52	26	56
28	0.47	28	66	40	84
32	0.63	32	76	40	84
38	0.84	38	83	40	84
42	1.00	42	92	42	88
48	1.50	48	95	50	104
65	4.00	65	132	55	114

Gap 'G' is 4 mm for all sizes.

POLYTEX : TYPE - RLPGT

Size	kW at 100 rpm	Max. Bore		Gap 'G'	Overall Length	Outside Dia.	Length Thru' Bore
		D1	D2				
1	0.4	25	20	1.6	59.6	65	29
2	1.5	35	30	1.6	77.6	90	38
3	2.2	42	38	1.6	115.6	105	57
4	4.5	55	52	3.2	155.2	140	76



COMPLYING TO ISO-14691



BI-FIT Pulley



Bush



Retainer



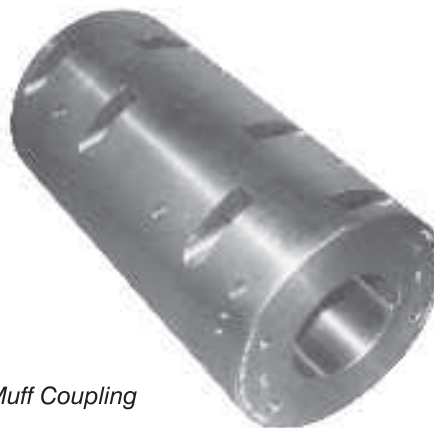
Bolt



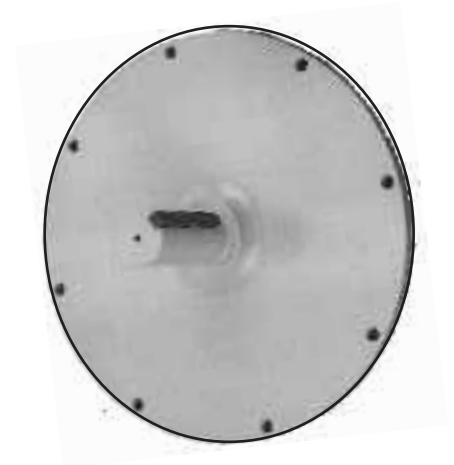
Power Grip



Heliflex Coupling



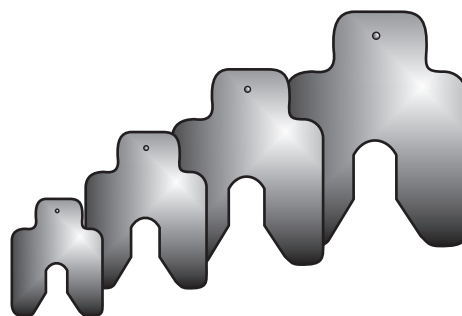
Muff Coupling



Stub Shaft



SAE Flange



Pre Cut Alignment Shims



Taper Bush

A. APPLICATION DETAILS

1. Application: _____
2. Rating (KW RPM): _____
3. Driving equipment : _____
4. Driven equipment : _____
5. Shaft Dia. (Drive): _____
6. Shaft Dia. (Driven): _____
7. Flange Details (Fly Wheel): SAE No.: _____ OR a) PCD _____ b) No. of Holes: _____
- c. Flange OD: _____ d) Hole/ Bolt Size: _____
- 8) Duty Cycle (Hrs/Day): _____
9. Distance Between Shaft End (DBSE) : _____
10. GA Drg. enclosed (Y/N): _____
11. Qty. (Nos./Month/Annum/One Time): _____
12. Operating Temp.: _____

B. CUSTOMER INPUTS

1. Existing Coupling: _____
2. Present Buying Price: _____
3. Suggested Coupling Type : _____
4. Recommended S. F. : _____

C. OTHER REQUIREMENTS

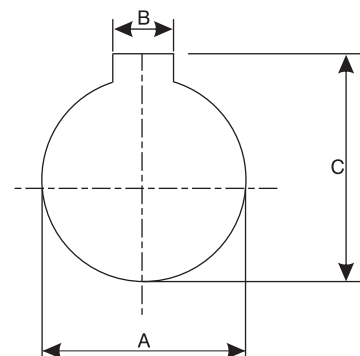
- 1A. Dynamic Balancing - Yes/No: _____
- 1B. If Yes, Grade: Std. 6.3 _____ Other Spcify: _____
- 2A. Material of Construction - Rathi Std. Yes/No: _____
- 2B. If No. Specify: _____

ADDITIONAL REQUIREMENTS

Note : Dimensions in mm. Std. FB & KW tol. H7 / Js9 (BS 4235 PI-72). Unit/Tol. other than above pl. Specify.

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

SR. NO.	BORE SIZE (A)		KEYWAY				SET SCREW SIZE
			WIDTH (B)		DEPTH (C)		
	H7		Js9				
1	11	+0.018	4	±0.015	12.8	+0.1	M5 X 0.8P
2	14	-0.000	5		16.3	-0.0	
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	±0.027	37.3		M10 X 1.5P
7	38		10		41.3		
8	42		12		45.3		
9	48		14		51.8		
10	55	+0.030 -0.000	16	±0.033	59.3		M12 X 1.75P
11	60		18		64.4		
12	65		18		69.4		
13	75		20		74.9		
14	80	+0.035 -0.000	22	±0.033	85.4	M16 X 2P	
15	85		22		90.4		
16	100		28		106.4		
17	110		28		116.4		M20 X 2.5P



Imperial Bores Data available on request.

APPLICATION DATA

The major cause of coupling failure is the absence of total application data supplied to the coupling manufacturer. Nearly all coupling manufacturers have developed reliable service factors and material references based on years of field experience. But unless the designer tells the complete story of application for which he needs the couplings; manufacturer cannot really offer the most suitable coupling for the specific duty. It is common to see a designer holding back, either deliberately or unknowingly information relating to his system. This lack of total application data.....complete and detailed..... is the major cause of coupling failures.

MISALIGNMENT DATA

Excessive misalignment is the killer of flexible couplings. Any rotating equipment works well when it is well aligned and the coupling's misalignment characteristics act as a fall back when something goes wrong.

This does not suggest that sloppy system assembly procedures that rely on compensation by a very flexible coupling are acceptable. That will be false economy in the long run. Yet it is fairly easy to determine unacceptable misalignment by using a straightedge, say a packet scale. If mating shafts are of different sizes, the coupling hubs usually have a common dimension that can be used to span with the scale. If the hubs cannot be so used, have a bushing made to bring the dia. of the smaller shaft up, to equal the dia. of the larger. The straightedge method and good mechanical sense are enough for most situations. This, however, does not mean that dial indicators prescribed in some detailed coupling installation instructions are unnecessary. It only means that some couplings are grossly misaligned and that a straightedge beats nothing. Better initial alignment of the coupling enhances its survival chance and that of the driving and driven equipment.

FAILURE MARKS

For fault diagnosis here are some telltale marks of coupling failure. Whether it is the hardware or the flexing member that has failed, the basic investigative approach is to examine the coupling hardware first. Whether the coupling flexible member is metallic or non metallic, take a good look at the hubs of the remains. They may show these marks and possible causes:

- Galling marks on fractured hub bore:
 - Bore could have been undersized for the shaft and forced on. Look for force on. Look for force marks on exterior surface.
 - Hub could have been cocked when positioned. Look for rolled up metal flakes in the bore exterior hammer marks.
- Deformation of key-way:
 - Key-way may be radially extended in only one direction of rotation. Overload or frequent high starting torque may be the cause.
 - Key-way may be extended in both direction of rotation. A bad key fit or reversing load may be the possible cause.
 - Key-way may be deformed for only a portion of its length. A short key or a slipped key may be the possible cause.
- Bore internal marks indicate that the hub was not engaged with shaft over its full length. Look for inevitable tell-tale marks of greases, dirt, rust and fret.
- Rippled-sand appearance of bore, key-way or connecting bolt holes:
Cause : Torsional vibration.
- Elongation or wear of outer peripheral jaws, bolt holes and points of engagement :
Excessive misalignment or torsional vibration may be the possible cause.
If none of these tips offers a clue, the investigator must turn to an analysis of the flexing member.

METALLIC FLEXIBLE MEMBERS

The nature of the flexible coupling subjects it to the rules of reverse bending fatigue. If 10 million equivalent and continuous cycles can be obtained, prolonged life is assured. If the coupling has failed before reaching 10 million cycles, it can be safely assumed that coupling overload, or excessive misalignment or torsional vibration has caused the failure.

In lubricated coupling, an obvious absence of lubrication at the time of failure is a revealing sign.

Excessive misalignment is indicated by metal necking down. Where fasteners are part of the peripheral anchoring system of the flexing element, overload of misalignment would be indicated by their bent condition.

If no tell-tale marks or neckdowns are present and misalignment and apparent overload are ruled out, the possibility of torsional vibration cannot be ignored.

ELASTOMERIC FLEXIBLE MEMBERS

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.

SELECTING A LOVEJOY COUPLING

1. APPLICATION INFORMATION

The following information is reqd to select a LOVEJOY COUPLING.

- kW or torque and running rpm.
- Type of equipment to be connected, (E.g. Motor-to-pump, Diesel Engine - to - generator)
- Shaft diameters and tolerances.
- Distances Between Shaft End (DBSE)

2. DETERMINE SERVICE FACTOR

Based on application select appropriate service factor (for more details refer individual coupling catalogue) from the table given.

3. DETERMINE DESIGN POWER

Multiply running power of the equipment by the service factor. This is DESIGN POWER which is used as basis for coupling selection, Convert this power per 100 rpm.

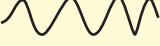
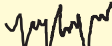
4. DETERMINE COUPLING SIZE

Refer to the kW rating column of respective coupling type and reqd until the power greater than or equal to the Design Power is found. The size of the coupling is given in the corresponding first column.

5. CHECK BORE SIZE

Refer respective coupling table to check that the required Bore sizes can be accommodated in the coupling size selected.

SERVICE FACTOR : A guide based on experience of the coupling rating to the system characteristics for specific application refer individual product leaflet contact **RATHI**.

Torque Demand Drive Machine	Typical application for electric motor or turbine driven equipment	Typical Service Factor
	Constant Torque such as Centrifugal Pumps, Blowers, And Compressors	1.0
	Continuous duty with some torque variations including Cooling Towers, Extruders Forced Draft Fans.	1.5
	Light shock loads from Briquetting Machine, Rubber Calender, or Crane and Hoist.	2.0
	Moderate shock loading as expected from a Car Dumper, Ball Mill, or Vibrating Screen.	2.5
	Heavy shock load with some negative torques from Crushers, Hammer Mill, and Barking Drum.	3.0

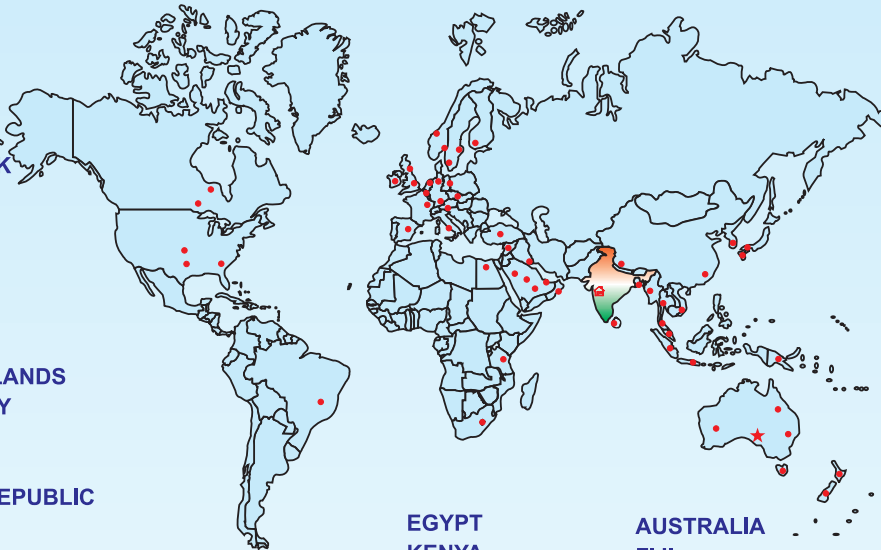
RATHI COMPATIBILITY WITH OTHER LEADING BRANDS

RATHI	TYPE	EQUIVALENT
JAW - FLEX	L / SW / RRS / H / HR	Lovejoy® - Jaw L / SW / RRS / H / HR
		Fenner® - Essex®
		Martin - Jaw / Browning® / Maska - Star Flex®
	RRJ	KTR-Rotex®
	RFC	Fenner® - HRC®
	N-Flex-RN-RNS- A / B / H	Flender - N-Eupex® A / B / H
TYRE - FLEX	T / TO	Fenner® - Fenaflex®
		Dodge - Para-Flex®
		Martin - Martin-Flex®
CONE FLEX / B-FLEX	RC / RCT	David Brown - Cone Ring® MC / MCT
	RB	Flender - Rupex®
METALLIC GEAR GRID	Disco-o-Flex LM / EM /RSK	Bibby Turboflex UK / John Crane Flexibox®-Metastream®(TSK)
POLY GEAR	RGD / RGS	AGMA Std
	RGT	Falk® / Bibby®
	RPG	KTR - Bowex®
RIGID COUPLING	RLPGT	David Brown® - GT
	RRM	Fenner® - RM
	RR-RRT	David Brown® - MR-MRT
SLEEVE FLEX	RBW	TB Wood's Sure-Flex® / Lovejoy®

Note :- ® Registered Trademark of various Companies

U.S.A
CANADA
BRAZIL

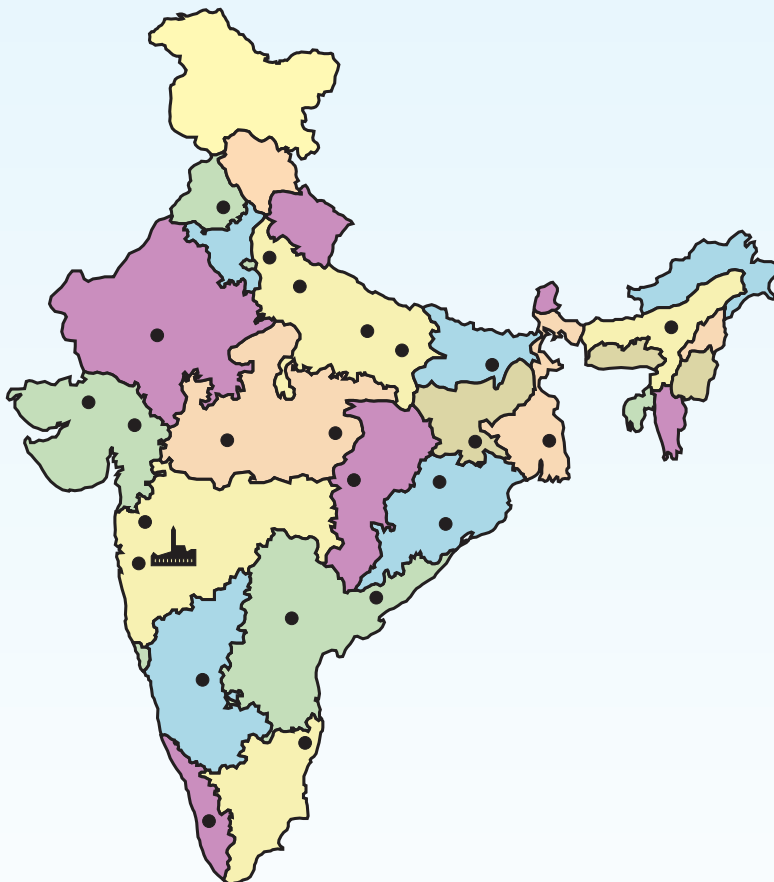
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SRI LANKA
SYRIA
U.A.E.
QATAR
OMAN
TURKEY



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Durgapur (W.B.)
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Jamshedpur (Bihar)
Rourkela (Orissa)
Bhubaneswar (Orissa)

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ZONE CENTRAL

Pune (Maharashtra)



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