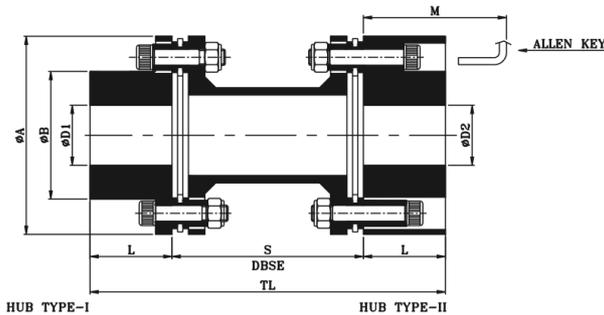
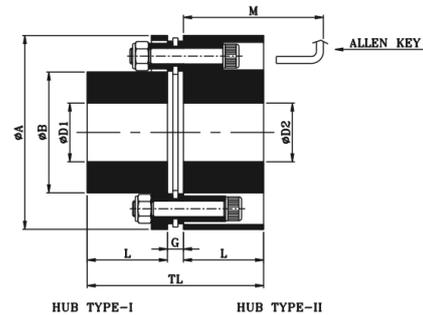


# DISC-O-FLEX SPACER COUPLINGS TYPE- RLM / RLMK



TYPE - RLM



TYPE - RLMK

## TECHNICAL DATA RLM

Coup. Size	kW at 100 rpm	Torque Nm	Max. Speed RPM	Bore			Min. DBSE 'S'	ØA	ØB	L	STD DBSE 'S'	TL (STD DBSE)	M	Weight in Kg Approx.		M.I. (MR2) in Kg. m <sup>2</sup> Approx		Tors. Stiff. MNm/rad Approx.
				Min. ØD1 & ØD2	Max.									Min. DBSE 'S'	Per Mtr. Extra 'S'	Min. DBSE 'S'	Per Mtr. Extra 'S'	
					ØD1 Type I	ØD2 Type II												
10	1.0	96	7500	10	22	25	54	63	35	30	100, 140	160, 200	75	1.3	2.3	0.0006	0.0004	0.021
35	2.4	232	7000	12	30	38	54	82	45	40	100	180, 220, 260	85	2.3	3.2	0.0021	0.0011	0.047
95	6.5	618	6000	17	40	50	66	102	57	45	140	190, 230, 270	95	4.7	6.0	0.0062	0.0017	0.100
170	12.6	1204	5200	17	52	70	78	128	77	55	180	210, 250, 290	110	8.0	7.0	0.0180	0.0047	0.222
220	20	1912	4800	22	65	80	88	146	94	60	180	220, 260, 300	120	11.4	8.4	0.0350	0.0088	0.381
400	36.3	3463	4400	27	80	100	102	176	115	70	140, 180	280, 320	140	19.5	13.1	0.0850	0.021	0.773
520	58.5	5583	4200	32	90	115	114	197	132	90	140, 180	320, 360, 430	175	29.3	21.7	0.1678	0.056	0.962
1000	74.2	7084	4000	42	105	130	132	225	147	95	250	330, 370, 440	185	42.1	21.7	0.3098	0.056	1.529
1300	108.7	10383	3800	47	115	140	144	250	162	105	180	390, 460, 510	195	61.0	27.1	0.5328	0.067	1.892
2000	152.2	14536	3700	52	120	155	168	275	178	115	250	410, 480, 530	215	81.7	42.8	0.8610	0.167	2.454
2500	196	18714	3600	62	135	165	170	300	190	130	300	440, 510, 560	235	106.9	42.8	1.3580	0.167	3.783

## TECHNICAL DATA - RLMK

Coup. Size	kW at 100 rpm	Torque Nm	Max. Speed RPM	Bore			ØA	ØB	L	DBSE 'G'	TL (STD DBSE)	M	Weight in Kg Approx.	M.I. (MR2) in Kg. m <sup>2</sup> Approx	Tors. Stiff. MNm/rad Approx.	Max. Mis-alignment	
				Min. ØD1 & ØD2	Max.											Axial (mm)	Angular / disc pack (Deg)
					ØD1 Type I	ØD2 Type II											
10	1.00	96	7500	10	22	25	63	35	30	6.5	66.5	75	0.9	0.00047	0.041	±1	0.75°
35	2.40	232	7000	12	30	38	82	45	40	6.5	86.5	85	1.8	0.0017	0.093		
95	6.5	618	6000	17	40	50	102	57	45	8	98	95	3.2	0.0082	0.248		
170	12.6	1204	5200	17	52	70	128	77	55	9.5	119.5	110	5.8	0.0143	0.529		
220	20	1912	4800	22	65	80	146	94	60	12	132	120	8.5	0.0263	0.895		
400	36.3	3463	4400	27	80	100	176	115	70	13	153	140	14.0	0.0640	1.665		
520	58.5	5583	4200	32	90	115	197	132	90	14.4	194.5	175	22.2	0.1320	2.393		
1000	74.2	7084	4000	42	105	130	225	147	95	16.2	206.1	185	30.5	0.2311	3.490		
1300	108.7	10383	3800	47	115	140	250	162	105	19.5	229.4	195	42.7	0.3945	ON		
2000	152.2	14536	3700	52	120	155	275	178	115	21.5	251.5	215	57.3	0.6350	REQUEST		
2500	196	18714	3600	62	135	165	300	190	130	23.5	283.6	235	76.1	1.0050	REQUEST		

### Notes

- All dimensions are in mm, unless otherwise specified.
- For vertical installation contact RATHI.
- Special DBSE available on request.
- Please specify type of hubs (I, II combination)
- Weight, M.I. & stiffness are at max. bores with min. std DBSE & with I/II hub combination.
- Available for non-sparking applications on request.
- Coupling with sizes higher than 2500 available on request.
- 'M' is for hub type II only.
- MAX. MIS-ALIGNMENTS ARE AS FOLLOWS.  
AXIAL : FOR SIZE 10 TO 400 : ±1MM & FOR SIZE 520 TO 2500 : ±2MM  
ANGULAR / DISC PACK : 0.75°  
RADIAL / PARALLEL : 0.013 MM X DBSE
- For RLMK series, hub combinations of I/I & I/II are only available.
- For RLMK couplings, parallel misalignment is zero.

# DISC-O-FLEX COUPLINGS



Disc-O-Flex couplings are fully metallic couplings, consisting of two hubs, one centre spacer member, two sets of stainless steel rivetted element blades bolted together with high tensile bolts. Replacement of rivetted discpack 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 anticorrosive coating.
- High temperature application.
- Visual inspection possible without disassembling equipment from foundation.
- 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.

Disc-O-Flex couplings are available in RLM, REM series.

### TYPE - RLM

- Rivetted discpack for better performance
- Suitable for power transmission in drives in hazardous areas.

### TYPE - REM

- Rivetted discpack for better performance
- Suitable for power transmission in drives in hazardous areas.
- Specially suitable for petrochemical & fertilizer industries.
- **API-610 / API-671 compliance available on request.**
- Coupling with anti-flail spacer.

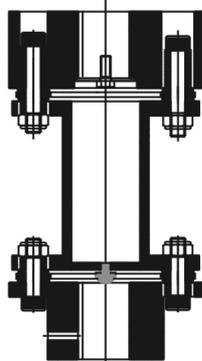
## SELECTION PROCEDURE

- 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 REM for larger bore sizes.
- 5) Specify the distance between shaft ends (DBSE).

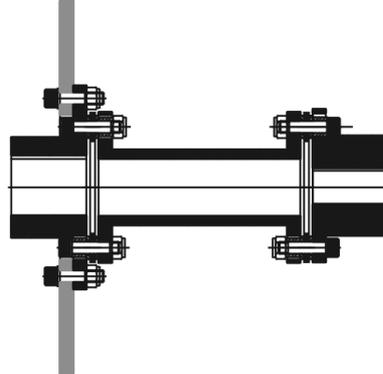
## SERVICE FACTORS

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

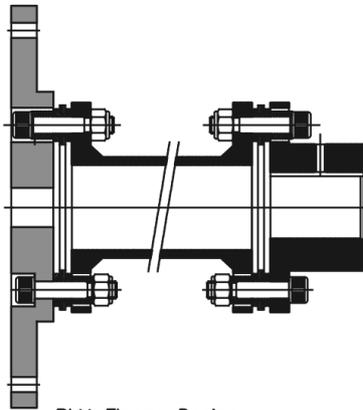
# SPECIAL DESIGN VARIANTS DISC COUPLINGS



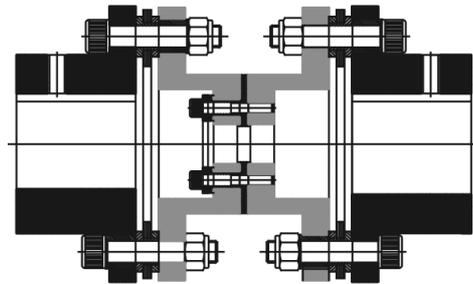
RLM Vertical Design



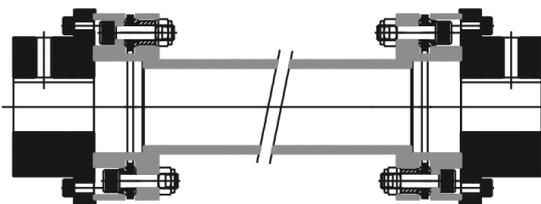
RLM with Brake Disc



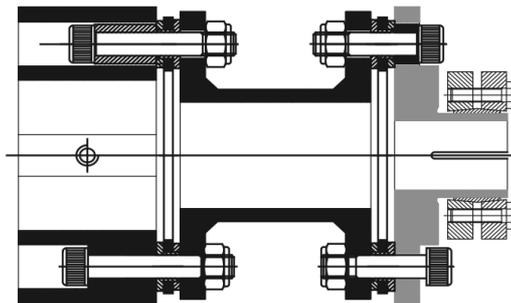
RLM Flange Design



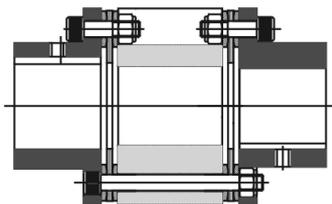
RLM Electrically Insulated



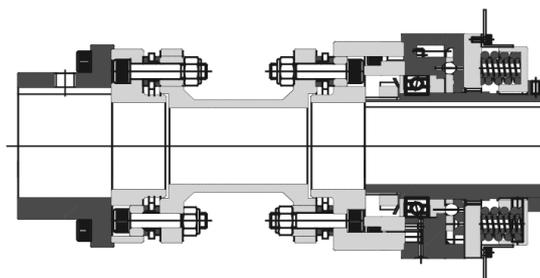
REM Long Spacer Design



RLM Shrink Design



RLMC Design with Special Spacer



Disc Coupling with Torque Limiter