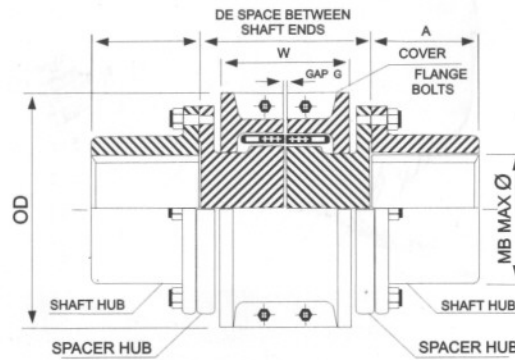


Coupling with cover mounted on seals (Figure 1)



Spacer coupling (Figure 2)



GBM Manufacturing Pvt.Ltd.

1D, CAMAC COURT 25 Camac Street, Kolkata 700 016
 Phone : 2247 2189 2240 6011. Facsimile : 033 2240 2058
 E-mail : info@gbmcoupling.com gbmpl@vsnl.net
 Website : www.gbmcoupling.com

Designed by : Artwards, Kolkata Ph: 2226 0394



**Hi-Torque
 Power Transmission
 Resilient Couplings**



HI-TORQUE POWER TRANSMISSION RESILIENT COUPLINGS

"GBM HI - Torque" Type Resilient Couplings are in use in all types of industrial applications over many years with success. Such a Resilient Coupling comprises mainly two Hubs, Grid Spring and Covers to protect the Spring. The Grid Spring element is so designed that it provides required resiliency for variable flexibility of a Coupling and considerable damping properties making the Coupling very suitable for drives involving high shock loads to the extent of 80%. Misalignment that inevitably occurs between rotating shafts, which are independently supported, is also taken care of by the spring element within allowable limits.

Dimensions given in the tables are approximate and pertain to Standard Coupling of GBM range, but tailor-made Couplings with Hubs of longer or shorter lengths, Seals & Grub Screws can also be supplied as per requirement of individual customer.

Following service information must be furnished with enquires -

1. H. P. & R. P. M. of the Drive
2. Types of driving & driven machines
3. Nominal diameters and lengths of shaft extensions of both the machines
4. Dimensional details of finished bores & keyways, if required
5. Any other details relevant to the working conditions of the Drive

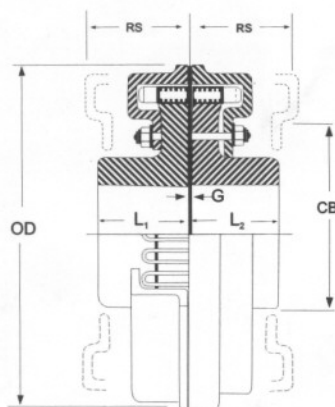
Standard Coupling Types : X, Y, Z & S

Selection of couplings :

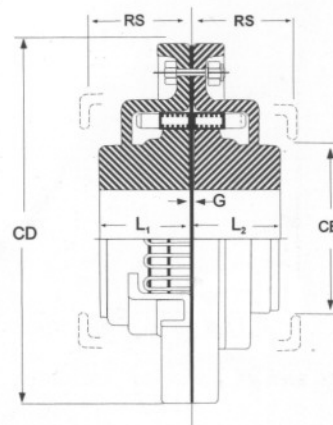
1. Determine service factor corresponding to the type of application under consideration from the Table of Service Factors.
2. Determine the Maximum Horse Power } Normal rated H. P. x Service Factor of DRIVE.
3. Determine Rating of Coupling = $\frac{\text{Maximum H.P.}}{\text{Rated R. P. M of DRIVE}}$
4. After having determined the Rating of Coupling, check whether maximum bore and recommended speed of the Coupling correspond to the requirements of the drive. If the allowable maximum bore is too small, select a larger coupling; in case allowable safe speed is too low, a different type of Coupling will have to be considered. You may refer to GBM for recommendation.

Lubrication : Indian Oil "Servogem 2", or, any equivalent grease is recommended for use. For Couplings for high speed and special application, use lubricants as will be recommended individually.

Spare parts : Parts of a Hi-Torque Resilient Coupling of particular type are interchangeable with parts of a Coupling of similar type. While ordering out spare Grid Spring or other parts, the code number/serial number stamped on the Coupling name-plate must be furnished to ensure correct supply.



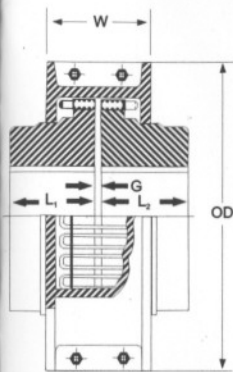
Type - Y
(No. 120 to 123 column 1)



Type - Z
(No. 101 to 117 column 1)

STANDARD COUPLING - TYPE Y & Z
(With vertically split covers) For use on horizontal shafts only

STANDARD COUPLING - TYPE X
(With axially split covers) For use on horizontal shafts only



Type - X
No. 101 to 117 column 1)

Coupling	Rating	Clear DIA OD	Boss Length	Boss Length	Cover Width	Gap	Bore Rough	Bore Max.	Safe Speed	Approx. Weight
No	HP/RPM	MM	L ₁ (MM)	L ₂ (MM)	W(MM)	G(MM)	(MM)	(MM)	RPM	KGS
101	.006	104.0	38.0	38.0	57.0	.85	10	29	3600	3.0
102	.010	120.0	38.0	38.0	64.5	.85	12	38	3350	4.0
103	.020	127.0	44.5	44.5	64.5	.85	16	41	3350	4.5
104	.030	159.0	51.0	51.0	66.0	.85	16	57	2575	7.5
106	.045	178.0	51.0	51.0	84.5	.85	16	54	2350	12.5
107	.065	190.5	57.0	57.0	85.0	.85	16	64	2150	16.5
108	.095	222.5	63.5	63.5	86.5	.85	25	78	1850	19.5
109	.125	244.5	70.0	70.0	86.5	.85	25	92	1650	27.0
110	.185	267.0	89.0	89.0	86.5	.85	25	108	1575	39.5
111	.355	276.0	102.0	102.0	136.0	1.60	38	102	1450	47.5
113	.455	324.0	101.5	101.5	157.0	1.60	50	123	1300	67.5
114	.655	336.5	101.5	101.5	157.0	1.60	50	121	1250	74.0
115	.905	381.0	114.0	114.0	159.0	1.60	50	146	1050	108.5
117	1.255	425.5	127.0	127.0	160.5	1.60	50	167	950	148.5
121	2.405	501.5	140.0	140.0	179.5	3.20	75	202	800	234.0
123	3.505	552.5	152.5	152.5	179.5	3.20	85	234	700	318.0

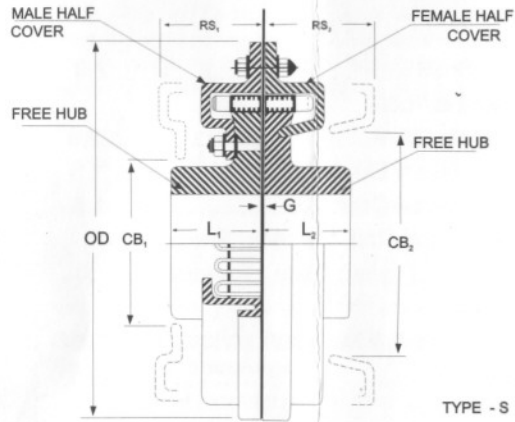
Coupling	Rating	Clear DIA OD	Boss Length	Boss Length	Removal Space	Gap	Bore Rough	Bore Max.	Cover Bore	Safe Speed	Approx. Weight
No	HP / RPM	MM	L ₁ (MM)	L ₂ (MM)	RS(MM)	G(MM)	(MM)	(MM)	CB(MM)	RPM	KGS
101	.006	105.0	38.0	38.0	52	.85	10	29	44.52	5650	3
102	.010	120.5	38.0	38.0	52	.85	12	38	58.80	4750	4
103	.020	144.5	44.5	44.5	59	.85	16	41	62.00	4450	5
104	.030	171.5	51.0	51.0	59	.85	16	57	87.45	3400	9
106	.045	190.5	51.0	51.0	79	.85	16	54	84.25	3200	11
107	.065	197.0	57.0	57.0	79	.85	16	64	96.95	2950	15
108	.095	222.0	63.5	63.5	79	.85	25	78	119.20	2500	20
109	.125	254.0	70.0	70.0	80	.85	25	92	143.00	2150	27
110	.185	276.0	89.0	89.0	80	.85	25	108	165.20	1900	43
111	.355	295.0	102.0	102.0	128	1.60	38	102	155.70	1800	54
113	.455	324.0	101.5	101.5	147	1.60	50	123	187.46	1650	63
114	.655	336.5	101.5	101.5	147	1.60	50	121	184.28	1550	72
115	.905	375.0	114.0	114.0	147	1.60	50	146	222.38	1350	104
117	1.255	425.5	127.0	127.0	147	1.60	50	167	254.00	1200	149
120	1.755	432.0	140.0	140.0	179	3.20	75	157	239.50	1200	175
121	2.405	432.0	140.0	140.0	179	3.20	75	157	239.50	1200	180
122	2.755	492.0	152.5	152.5	179	3.20	85	173	266.70	1100	207
123	3.505	492.0	152.5	152.5	179	3.20	85	173	266.70	1100	216

TABLE OF COUPLING SERVICE FACTORS

Agitators	2.0	Line Shaft	2.0
Blowers	2.0	Machine Tools	
Compressors		Main Drive	2.0
Centrifugal/Rotary	2.5	Auxilliary Drive	1.5
Conveyor		Traverse Drive	1.5
Apron, Belt, Chain	1.0	Bending Roll, Notching Press, Punch	
Bucket	2.0	Press, Planer, Plate - Reversing ...	3.0
Live Roll, Shaker	3.0	Mixers	
Cranes & Hoist		Concrete & Muller	2.5
Class 1&2 : Hoists	3.0	Paper Mill	1 to 5
Bridge, Travel or Trolley	2.5	Fans	
Class 3&4 : Hoists	4.0	Cooling Tower & Mine	2.5
Bridge, Travel & Trolley	3.0	Industrial	2.0
Crusher		Pumps	
Stones & Ores	4.0	Centrifugal, Even Load	1.25
Dynamometer	2.0	Centrifugal, Under Load	1.75
Elevators		Gear, Rotary or Vane	2.0
Bucket	2.5	Reciprocating, 1 or 2 Cyl.	3.0
Escalators	2.0	Reciprocating, 3 or more Cyl.	2.5
Extruder		Rubber Industry	
Plastics/Rubber	2.0	Mixing Mill, Refiner	3.0
Feeders		Worming Mill	2.5
Apron, Belt, Screw-Horizontal	1.0	Others	1.5 to 3.0
Generators		Screens	
Even Load	1.7	Rotary, Coal or Sand	2.0
Hoist or Rly. Service	2.5	Vibrating	3.5
Welder Load	2.5	*Steel Mills/ Rolling Mills	2 to 6
Hammer Mill		Stoker	1.5
Cement or Mines	2.5	Turbo-Generator	1.25
Haulage		Winch, Maneuvering	
Mining	3.0	Dredge, Marine	2.0
Kiln		Wood Working Machinery	1.5
Rotary for Cement, Mining	3.0		

* Drives in Paper Mills and Steel Mills are of so diverse nature that each application needs to be considered separately. Hence, full details of drive requirement must be referred to GBM Manufacturing (P) Ltd. for recommendation.

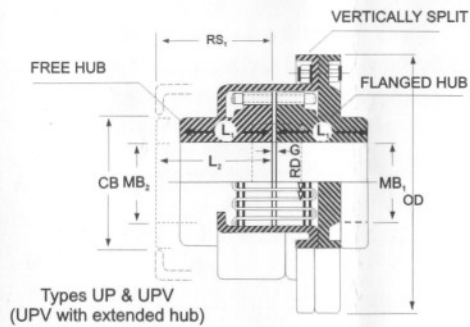
STANDARD COUPLINGS - TYPE S (WITH VERTICALLY SPLIT COVERS)



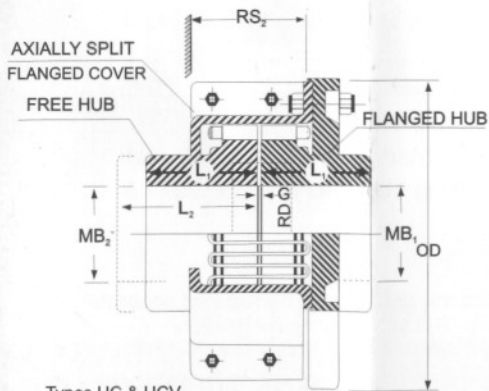
Coupling No	Rating HP / RPM	Clear DIA OD (MM)	Hub Length (MM)		Cover Width (MM)		Removal Space (MM)		Gap G (MM)	Bore Rough (MM)	Bore Max. (MM)	Safe Speed (RPM)	Approx. Weight (KGS)
			L ₁	L ₂	CB ₁	CB ₂	RS ₁	RS ₂					
125	5.55	686.5	178	178	349.25	427	210	208	3.20	110	191	1200	408
126	7.55	781.0	203	203	432.50	511	210	208	3.20	135	216	1050	545
127	10.55	876.0	228	228	482.65	573	249	249	6.35	145	242	900	875
128	17.55	1015.0	228	228	622.30	711	286	251	6.35	155	267	800	1570

Note : Approximate weights are for Couplings with maximum bore.

FLANGED COUPLINGS TYPE UP AND UPV, UC AND UCV



Types UP & UPV (UPV with extended hub)



Types UC & UCV (UCV with extended hub)

Coupling No	Rating HP / RPM	O/D (MM)	Hub Length (MM)		Removal Space (MM)		Cover Bore (MM)	Maximum Bore (MM)		Gap G (MM)	Max. Recess Dia. (RD) (MM)	SAFE SPEED (RPM)				Stock Rough Bore (KG)	Approx. Wt. UP/UC (KG)
			UP,UC L ₁	UPV,UCV L ₂	RS ₁	RS ₂		MB ₁	MB ₂			UPc,UPcV	UPn,UPnV	UPs,UPsV	UC,UCV		
101	.006	105	38.0	70	80	-	41.35	29	25	.85	45	6900	10350	-	-	10	3.5
102	.010	126	38.0	70	80	-	58.50	38	30	.85	50	5800	8700	-	-	12	4.0
103	.020	152	44.5	80	85	60	57.50	41	35	.85	52	5450	8100	11150	3550	16	5.0
104	.030	178	51.0	80	85	60	76.00	56	49	.85	62	4150	6050	8550	2700	16	9.0
105	.045	193	51.0	111	87	60	89.00	64	56	.85	70	3750	5450	7600	2550	16	10.0
107	.065	209	57.0	114	117	81	95.00	64	60	.85	78	3550	5200	7350	2450	16	14.0
108	.095	228	63.5	114	117	81	118.00	78	75	.85	101	3100	4450	6250	2100	25	20.0
109	.125	263	70.0	114	117	81	133.50	92	86	.85	111	2650	3750	5350	1800	25	29.0
110	.185	285	89.0	141	117	81	156.00	108	102	.85	133	2350	3350	4750	1700	25	40.0
111	.355	311	102.0	183	187	129	156.00	102	102	1.60	130	2250	3250	4600	1550	38	59.0
112	.255	305	102.0	176	187	129	152.50	102	100	1.60	125	2300	3300	4675	1650	38	56.0
113	.455	349	101.5	208	217	149	184.00	122	121	1.60	160	1950	2850	3950	1350	50	79.0
114	.655	362	101.5	208	217	149	187.50	120	123	1.60	158	1850	2700	3757	1300	50	84.0
115	.905	400	114.0	208	217	149	219.00	146	136	1.60	185	1600	2400	3250	1150	50	118.0
117	1.255	438	127.0	208	217	150	244.50	166	162	1.60	204	1450	2050	3000	1050	50	159.0
118	1.650	475	139.0	214	241	163	266.50	180	175	1.60	245	1350	1850	2750	950	70	180.0
119	2.000	533	152.0	214	241	163	308.00	180	175	1.60	250	1300	1775	2650	900	70	196.0
121	2.405	521	140.0	225	245	170	239.70	157	150	3.20	255	1200	1700	2550	850	75	214.0
123	3.505	578	152.5	240	245	170	266.70	176	165	3.20	261	1050	1500	2250	750	75	275.0