MOVICON

FLEXIBLE
COUPLINGS



MOVICON
FLEXIBLE COUPLINGS



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MOVICON
FLEXIBLE COUPLINGS



- Permits drive in either direction
- Lubrication not required
- No adjustment after fitting
- Barrel shaped bushes ensure effective shock and vibration absorption
- Low maintenance
- Facility to dismantle machines simply by removing bolts and rubber bushes

MOVICON Flexible Couplings transmit torque from one shaft to another and are particularly useful in cases where limited misalignment of shaft is unavoidable.

Flexible Couplings are cushioned drive types, transmitting the torque through rubber bushes which have excellent capacity to absorb shocks. The flanges are cast iron and are suitable for speeds up to the maximum limits as mentioned in the table below.

The quality of rubber used for bushes is a special type which remains unaffected by water, dust and atmospheric conditions.

The couplings work within the permissable limits of misalignment as per IS:2693 and BS:3170.

Flanges are bored to suit the requirement (see table for maximum bore) and key ways are according to DIN-6885, PART-1, unless otherwise specified. Couplings can also be supplied with the minimum/pilot bore condition to permit machining at site.

Flexible Couplings are suitable for driving all classes of machinery.

SERVICE FACTOR TABLE

Driven machines	Service factor		
	Type of driving unit		
	Electric motor or steam turbine	Steam engine or water turbine	Gas or oil engines
Even with torque machines, smooth loads, centrifugal pumps, generators, line shafting, textile machines, screens, evaporators, etc.	1	1.25	2
Balancers, liner sets, coucres, machine tools, reeders, beaters, agitators, rotary dryers, light fan drives, blowers, stackers, rubber mixers, conveyors, intermittent loads, etc.	1,1	1.35	2.4
Heavy fan and blower drives, mine fans, cement mills, vacuum pumps, disintegrators, winders, wood working machines, copper and brass rolling mills, etc.	1.3	1.6	2.6
Calendars, compressors, paper drying, cylinders, cranes and hoists, planning machines, three-throw pumps, elevators, etc.	1.5	1.8	3.
Tube and rolling mills, crushers, grinders, punch and shears, ball mills, pulverizers, double drum winders, dredgers, jordens, reversing and ship propulsion, etc.	2.2	2.4	3.4

SELECTION FOR
MOVICON FLEXIBLE COUPLING

1. **Obtain shaft sizes**
   Compare shaft sizes of driving and driven machine equipment with listed bores of desired series coupling.

2. **Compute effective kW/rpm OR hp/rpm OR Torque to be transmitted** and select a service factor from the table on the previous page.

Determine kW/ rpm:

$$\textbf{kW/ rpm} = \frac{\text{kW TRANSMITTED x SERVICE FACTOR}}{\text{rpm}}$$

OR determine hp/ rpm:

$$\textbf{hp/ rpm} = \frac{\text{hp TRANSMITTED x SERVICE FACTOR}}{\text{rpm}}$$

OR determine Torque (daNm):

$$\textbf{Torque (effective)} = \frac{955 \times \text{kW TRANSMITTED x SERVICE FACTOR}}{\text{rpm}}$$

Confirm tentative coupling size or increase to a size which has a rating equal to or greater than the value computed above.

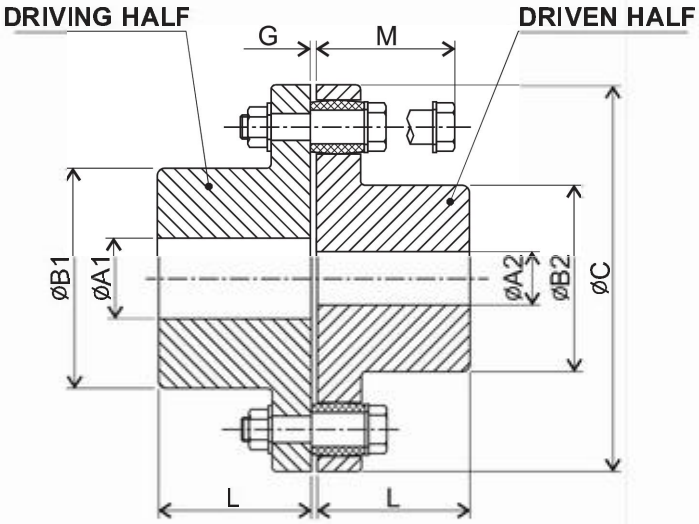
3. **Check maximum speed of application**
   Refer to maximum speed ratings. These speeds are given only as a guide since the maximum speed depends on the system characteristics.

4. **Check space limitations**
   Dimensions of the selected coupling should be compared with space provided in the application to assure proper clearances. Shaft extensions (should be greater than hub length of the coupling), seperation and clearances to align coupling as well as for removel of pins should be checked.

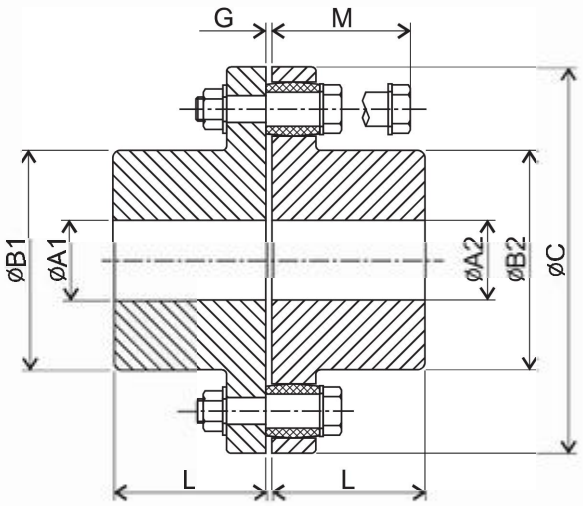
FEATURES:

- Compact design
- Low interia
- High torque to weight ratio
- Low torque to bore ratio
- Hexagonal headed pins for easy dismantling with standard spanners

TECHNICAL DETAILS TYPE MEFC



UP TO SIZE MEFC - 14



UP TO MEFC - 15 TO 17

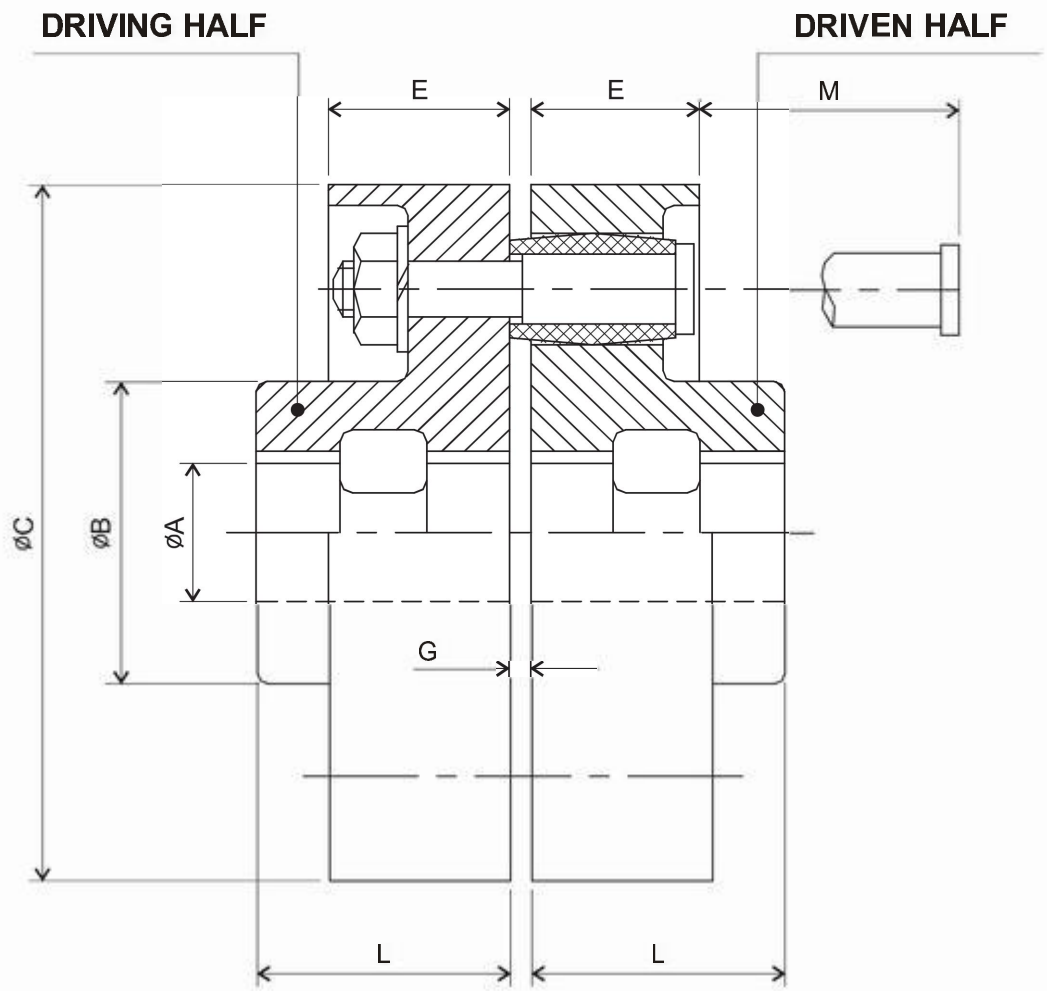
TECHNICAL DETAILS FOR TYPE MEFC

SIZE	RATINGS kW/rpm	RATINGS hp/rpm	TORQUE daNm	PILOT BORE	MIN. BORE	MAX. BORE ØA1	MAX. BORE ØA2	ØC	ØB1	ØB2	L	G	M	NO. OF PINS	APP. WEIGHT (kg)	GD² (kg.m²)	MAX. SPEED (rpm)
01	0.007	0.01	7	12	16	32	28	85	48	42	32	03	50	04	1.5	0.004	7860
02	0.01	0.015	10.8	12	16	38	32	105	60	48	38	03	52	04	2.5	0.010	6360
03	0.022	0.029	21	12	16	42	40	112	63	60	42	03	52	05	3.0	0.014	5960
04	0.034	0.046	33	16	20	48	45	127	72	63	48	03	64	06	4.75	0.028	5260
05	0.056	0.075	53	16	20	55	50	144	82	75	55	03	64	08	7.0	0.048	4635
06	0.066	0.089	63.5	16	20	60	55	162	90	82	60	03	74	06	9.5	0.087	4120
07	0.091	0.122	87	16	20	70	65	180	105	98	70	03	74	08	12	0.143	3710
08	0.171	0.230	164	16	20	85	75	220	127	112	85	05	100	06	24	0.413	3035
09	0.214	0.288	205	16	20	95	85	240	140	128	95	05	100	08	31	0.612	2780
10	0.321	0.430	306	40	45	105	100	270	157	150	105	05	100	10	40	1.030	2475
11	0.383	0.513	365	40	45	110	105	285	162	155	110	05	126	08	50	1.540	2345
12	0.476	0.638	455	40	45	120	115	320	182	170	125	05	126	10	70	2.510	2085
13	0.638	0.855	609	40	45	130	125	340	196	185	140	06	152	08	92	3.9	1965
14	0.933	1.250	891	40	45	140	135	360	205	200	150	06	152	10	110	5	1855
15	1.262	1.700	1204	55	60	160	160	410	235	235	170	06	152	12	153	8.9	1630
16	1.948	2.610	1859	55	60	175	175	450	255	255	185	06	187	08	210	15.2	1480
17	2.835	3.800	2706	55	60	195	195	500	290	290	205	06	187	10	280	24.5	1335

★ ALL DIMENSIONS ARE IN mm.
★ WEIGHT AND MOMENT OF INERTIA BASED ON PILOT BORE CONDITION
★ CONTINUOUS TORQUE RATING SUBJECT TO ACCURATE ALIGNMENT OF CONNECTING SHAFTS.

In accordance with our established policy to constantly improve our products, the specifications contained herein are subject to change without notice.

TECHNICAL DETAILS TYPE MFC



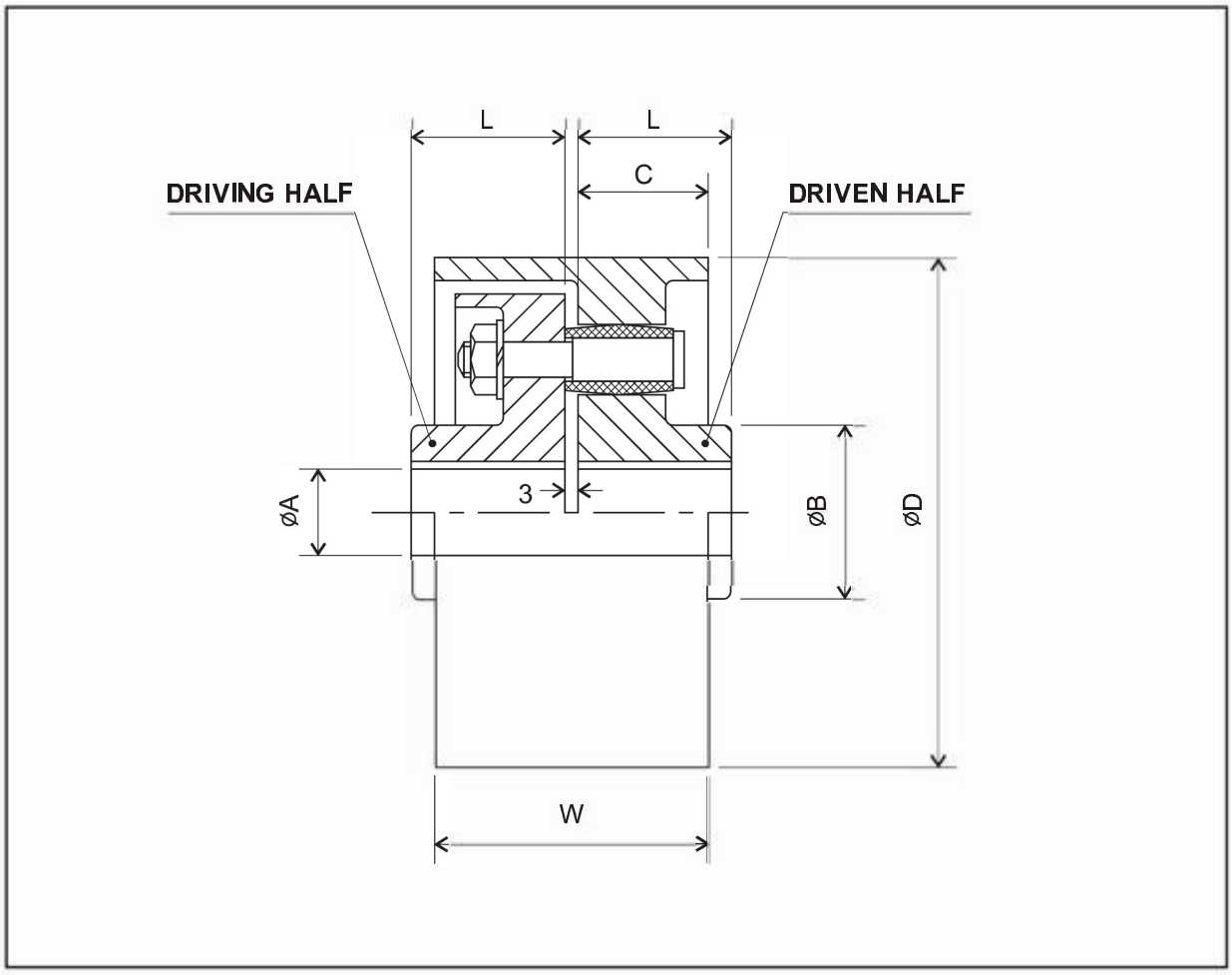
TECHNICAL DETAILS FOR TYPE MFC

SIZE	RATING		TORQUE	BORE (ØA)		ØB	ØC	L	E	M	G	No. of pins	Approx Weight (kg)	GD2 (kg.m2)	Max. speed (rpm)
	kW/rpm	hp/rpm	da Nm	Min	Max										
630	3.35	4.5	3200	120	220	360	630	260	120	110	12±5	14	410	66	1050
710	4.7	6.3	4500	120	240	390	710	280	135	130	12±5	18	560	114	940
800	6.35	8.5	6100	120	260	430	800	300	135	130	12±5	18	750	187	850
900	8.95	12	8600	140	290	480	900	320	152	150	12±5	12	990	308	750
1000	12.68	17	12200	180	320	540	1000	350	152	150	14±6	16	1300	474	670
1120	17.16	23	16500	230	350	590	1120	380	170	170	14±6	16	1700	824	600
1250	23.88	32	23000	240	380	640	1250	420	170	170	14±6	20	2150	1272	530
1400	33.58	45	32000	360	420	720	1400	460	195	190	14±6	14	3050	2213	480
1600	44.77	60	43000	280	460	750	1600	500	195	190	14±6	20	3950	4163	430

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TECHNICAL DETAILS TYPE MFBC



TECHNICAL DETAILS MFBC

SIZE	RATING hp/rpm	Nominal Torque daNm	BORE (ØA)		ØB	C	L	BRAKE DRUM		Approx weight (kg)	GD² (kgm²)	Maxi. speed (rpm)
			Mini	Maxi				ØD	W			
100	0.016	12	16	25	40	40	32	100	75	3	0.015	5730
150	0.028	20	16	32	54	43	42	150	85	8	0.09	3830
160	0.030	22	16	32	54	43	42	160	85	9	0.13	3600
200	0.090	64	16	55	92	46	60	200	95	17	0.32	2870
250	0.125	90	16	60	105	60	75	250	120	25	1.0	2300
300	0.350	250	16	85	140	75	95	300	160	58	2.5	1910
315	0.420	300	16	85	140	75	95	315	160	62	2.85	1820
400	0.500	356	45	115	190.5	100	120.7	400	180	128	9.94	1440
450	0.630	450	45	115	190.5	100	120.7	450	200	165	15.4	1270
500	1.380	983	45	135	235	112.5	146	500	225	244	27.5	1150

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For additional information or further details please get in touch with us:

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Details and dimensions are subject to change without prior notice.