



Fixed Speed / Constant Fill Fluid Couplings

<http://www.fluidomat.com>



Shaft Mounted SM/SMD/SM-DX

These are shaft mounted coupling enabling axially compact drive space. Rubber coupling on one end.

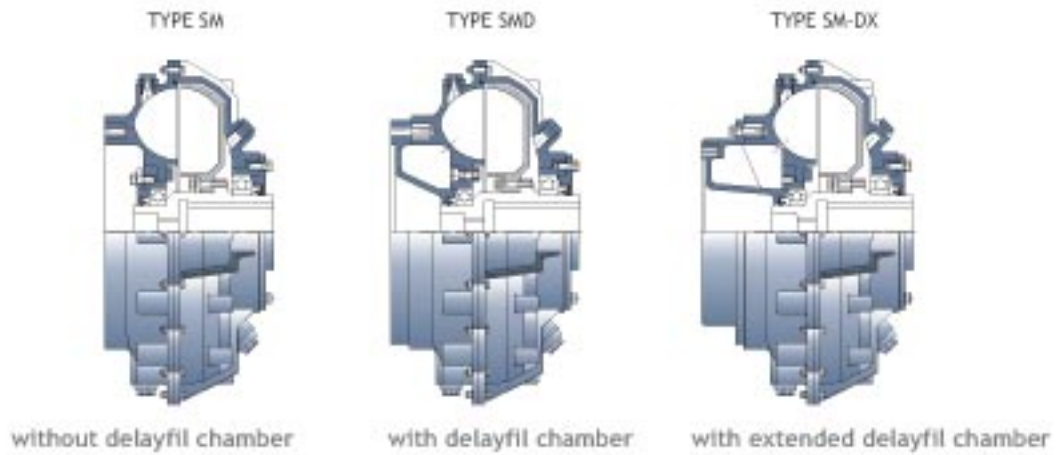
Radially Displaceable HF /HFD /HF-DX

These are radially displaceable coupling enabling prealignment of driving and driven shafts. Metallic disc flexible coupling on both ends. Weight of coupling shared by driving and driven shafts.



- To satisfy starting and running characteristics of industrial machines Fluidomat offer three circuit types to give starting torque down to 120% of nominal torque.
- Type SM and HF are basic coupling without delayfil chamber. Starting torque adjustable in the range of 170% to 270%.
- Type SMD and HFD are couplings with delayfil chamber. Starting torque adjustable in the range of 140% to 270%.
- Type SM-DX and HF-DX are couplings with extended delayfil chamber. Starting torque adjustable in the range of 120% to 270%.
- Normal operating slip - 2% to 5% depending on coupling size and starting torque value.
- Fusible plug blow off temperature 130°C as standard. Optional 160°C.
- Suitable for two consecutive starts from hot and three from cold.

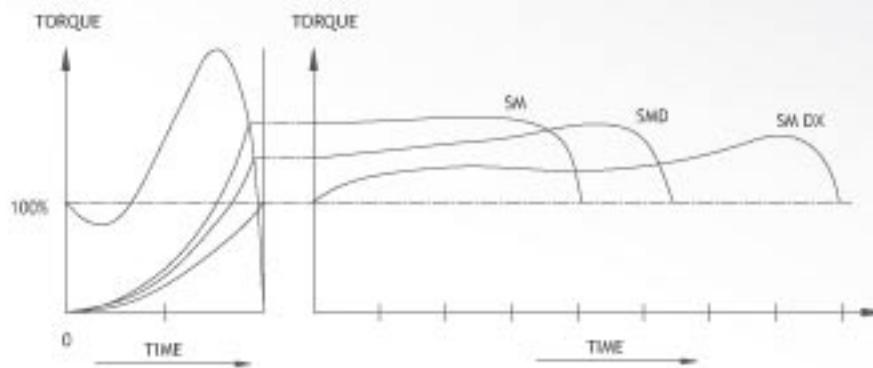
Different Executions of Oil Circuit



Oil Circuit and Oil Levels with Delayfil Chamber

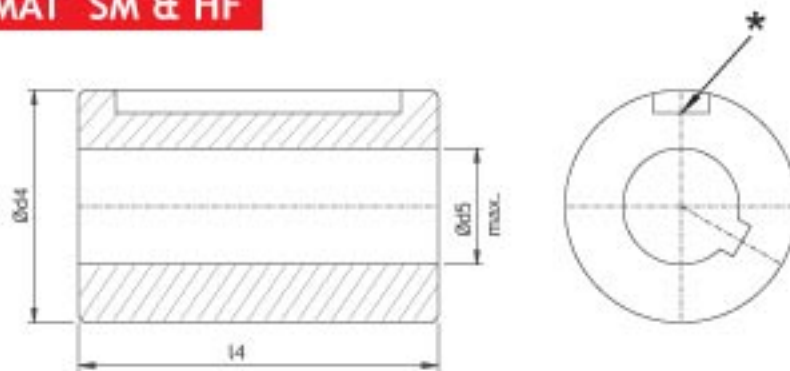


STARTING TORQUE CHARACTERISTICS WITH & WITHOUT DELAYFIL CHAMBER



TYPICAL VALUES

FLUIDOMAT SM & HF

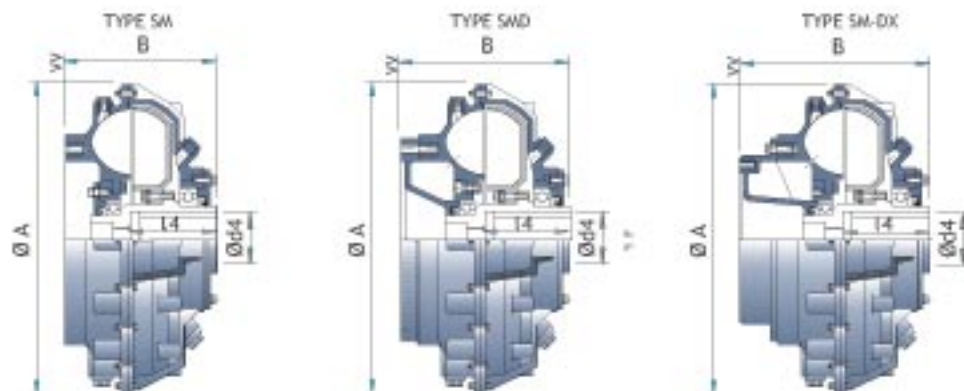


Coupling types SM/SMD/SM-DX are supplied in finished bores on the fluid coupling shaft. However where it is not possible to specify finished bores at the time of ordering, we can provide a separate shaft bush with $OD > \text{Ød4}$ and * narrow keyway. The allowable maximum bore in the shaft bush is denoted by Ød5 shown in the dimension table.



COUPLING MODEL SM/SMD/SM-DX HF/HFD/HF-DX	Maximum ratings in KW at different input speeds RPM.							
	600 RPM	730 RPM	900 RPM	970 RPM	1200 RPM	1470 RPM	1800 RPM	*3000 RPM
3	-	1	2	3	6	10	15	45
4	1	2	4	5	9	15	22	55
5	2	4	7	9	17	30	42	90
6	3	5	9	11	22	40	60	125
7	4	8	15	18	34	62	85	160
8	6	11	21	26	49	90	120	-
8 B	9	16	29	36	68	125	180	-
9	12	22	41	52	98	172	246	-
9 B	16	29	54	68	129	228	300	-
10	22	39	73	91	172	275	370	-
10 B	32	57	107	134	253	373	500	-
11	47	85	158	198	374	475	-	-
12	82	148	278	348	600	750	-	-
13	163	293	550	620	850	1100	-	-
14	277	500	758	850	1250	-	-	-
15	472	850	1148	1250	-	-	-	-
16	583	1050	1400	1500	-	-	-	-
16 DC	900	1500	1862	2000	-	-	-	-

* Coupling for 3000 RPM should be selected only after our approval is obtained.



^M Reference face for flexible coupling.

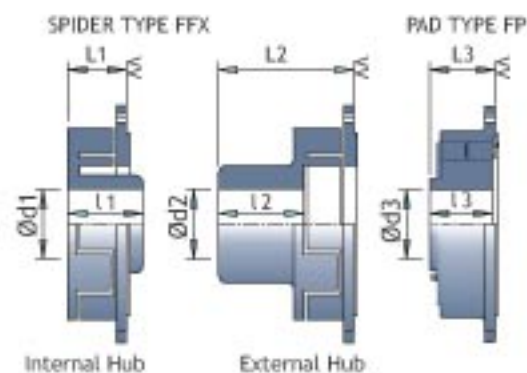
Technical Specification and Dimension Table for SM/SMD/SM-DX couplings

SM-SMD-SM-DX	Ø A	B			Ød4 max.	Ød5 max.	L4 max.	Dry Wt. In Kgs. With connected Flexible Coupling			Max. Oil Filling in Liters			Threads 'M' - For Coupling Withdrawl	Connected Flexible Coupling Model
		SM	SMD	SM-DX				SM	SMD	SM-DX	SM	SMD	SM-DX		
3	342	158	213	247	42	28	80	24	27	28	2.8	3.2	3.2	3/4"	FFX-1
4	367	160	215	249	50	34	90	30	34	35	3.8	4.2	4.2	3/4"	FFX-1
5	406	190	220	280	65	50	110	40	44	45	4.9	5.4	5.4	1"	FFX-2
6	435	213	239	310	70	50	120	55	59	61	5.6	7.1	7.1	1"	FFX-3
7	471	218	263	333	80	57	135	66	71	73	8.3	8.8	8.8	1"	FFX-3
8	505	238	279	359	80	57	140	77	83	85	9.8	10.8	10.8	1"	FFX-4
8 B	553	250	290	380	95	68	155	96	102	105	12.2	13.2	13.2	1 1/4"	FFX-4
9	584	255	305	385	95	68	155	104	110	113	15.8	16.8	16.8	1 1/4"	FFX-4
9 B	620	270	335	430	95	68	160	150	165	168	17.6	18.1	18.1	1 1/2"	FP-1 / FFX-5
10	644	280	329	424	110	80	170	170	180	185	22.0	24.0	24.0	1 1/2"	FP-1 / FFX-5
10 B	714	310	355	451	110	80	190	210	225	230	27.0	31.0	31.0	1 1/2"	FP-2A
11	751	320	375	471	120	95	200	254	268	273	35.0	40.0	40.0	Ø50-8P	FP-2A
12	845	359	435	555	130	-	240	310	345	355	55.0	57.0	57.0	Ø50-8P	FP-2B
13	960	441	489	619	150	-	270	440	480	495	87.0	92.0	92.0	Ø50-8P	FP-3
14	1104	451	494	624	160	-	275	682	730	745	130.0	137.0	137.0	Ø65-16P	FP-4A
15	1230	485	594	724	160	-	275	850	920	940	175.0	182.0	182.0	Ø75-16P	FP-4B
16	1298	-	571	-	190	-	320	-	1250	-	-	195.0	195.0	Ø75-16P	FP-4B
16 DC	1298	-	830	-	190	-	320	-	1800	-	-	350.0	350.0	Ø75-16P	-

BSW Up to model 10B and 5q. threads onwards.

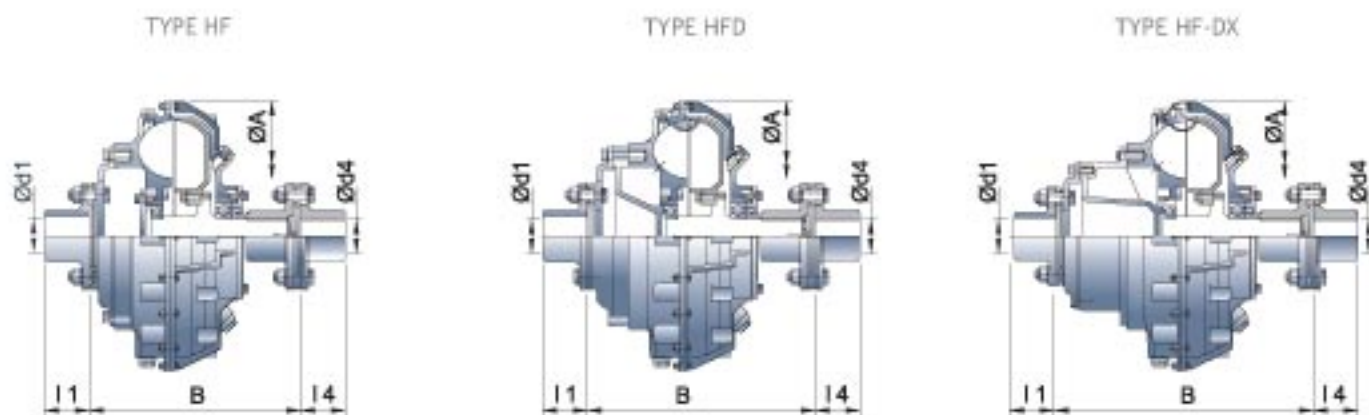
FLEXIBLE COUPLING

CONNECTED FLEXIBLE COUPLING MODEL WISE



^M Reference face for flexible coupling.

Model SM-SMD-SM-DX	Internal Hub			External Hub			Model SM-SMD-SM-DX	Pad Type Coupling		
	Ø d1 Max.	L1	L1	Ø d2 Max.	L2	L2		Ø d3 Max.	L3	L3
3,4	48	67	67	60	75	130	9B,10	100	110	120
5	60	72	72	75	90	150	10B,11	120	140	151
6,7	80	92	72	90	110	170	12	140	155	167
8,8B,9	90	102	87	100	120	195	13	160	180	179
9B,10	-	-	-	125	150	230	14	160	180	194
							15,16	180	200	214



Technical Specification and Dimension Table for HF/ HFD/ HF-DX couplings

HF HFD HF-DX	Ø A	B*			Ø d1 & Ø d4 max.	l1 & l4	Dry Wt. In Kgs. With connected Flexible Coupling			Max. Oil Filling In Liters			Connected Flexible Coupling Model
		HF	HFD	HF-DX			HF	HFD	HF-DX	HF	HFD	HF-DX	
3	342	239	295	329	55	70	25	28	29	2.8	3.2	3.2	FXC-I
4	367	264	320	354	60	70	34	37	39	3.8	4.2	4.2	FXC-II
5	406	285	315	375	60	70	48	51	54	4.9	5.4	5.4	FXC-II
6	435	332	358	429	75	95	64	67	70	5.6	7.1	7.1	FXC-III A
7	471	345	390	460	75	95	81	84	86	8.3	8.8	8.8	FXC-III A
8	505	366	407	487	80	95	96	102	107	9.8	10.8	10.8	FXC-III
8 B	553	405	445	535	90	110	116	122	127	12.2	13.2	13.2	FXC-III
9	584	395	445	526	90	110	124	130	135	15.8	16.8	16.8	FXC-III
9 B	620	446	511	589	110	125	168	180	184	17.6	18.1	18.1	FXC-IV A
10	644	468	517	611	110	125	172	184	188	22.0	24.0	24.0	FXC-IV A
10 B	714	491	537	632	110	125	217	233	237	27.0	31.0	31.0	FXC-IV A
11	751	511	566	661	112	125	281	292	300	35.0	40.0	40.0	FXC-IV
12	845	614	700	820	145	200	400	421	430	55.0	57.0	57.0	FXC-V
13	960	697	745	875	145	200	570	596	605	87	92.0	92.0	FXC-V
14	1104	770	813	943	180	200	640	688	703	130.0	137.0	137.0	FXC-VI
15	1230	-	901	1031	180	200	810	880	900	175.0	182.0	182.0	FXC-VI

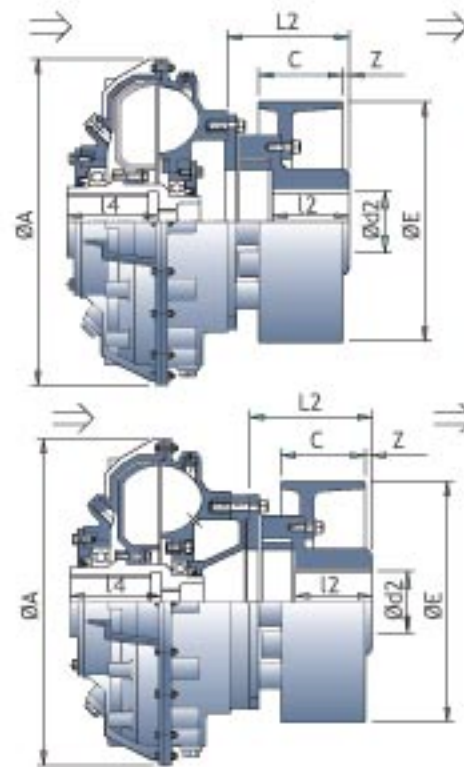
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BRAKE DRUM MOUNTING

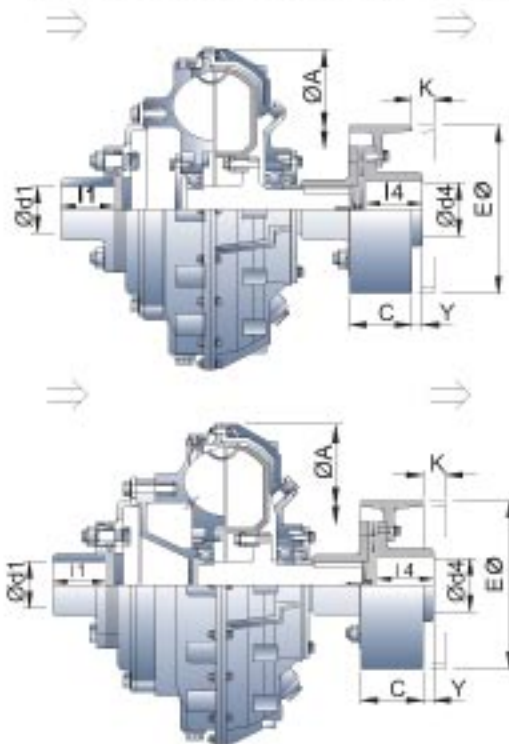
Flexible Coupling Model	Spider Type Coupling				
	ØE	C	Z	I2	L2
FFX-1	200	75	20	75	130
	250	95	0	75	130
FFX-2	250	95	20	90	150
	300	118	05	90	158
FFX-3	315	118	05	90	158
	300	118	17	110	170
	315	118	17	110	170
FFX-4	400	150	05	110	190
	300	118	42	120	195
	315	118	42	120	195
	400	150	10	120	195
* FFX-5	500	190	05	120	230
	400	150	29	150	230
	500	190	05	150	246

* For Fluid Coupling Model SM/SMD/SM-DX -9B & 10

TYPE SM/SMD/SM-DX WITH BRAKE DRUM (Inner Wheel Drive)



TYPE HF/HFD/HF-DX WITH BRAKE DRUM (Outer Wheel Drive)



* For radial displacement of Fluid Coupling the Brake drum shall need to be shifted by dimension 'K' As shown. The Machine/G.B. shaft length /space should be adequate for this shift of B.D.

Flexible Coupling Model	Metallic disc Coupling			
	ØE	C	Y	K* Min
FXC-I	160	75	21	26
	200	75	21	26
FXC-II	200	75	19	26
	250	95	10	35
FXC-III	250	95	35	35
	300	118	32	55
FXC-III	315	118	32	55
	250	95	48	35
	300	118	30	55
FXC-III	315	118	30	55
	400	150	18	73
	300	118	52	55
	315	118	52	55
FXC-IV	400	150	40	65
	500	190	05	70
	600	236	(-)31	80
	630	236	(-)31	80
FXC-V	500	190	70	70
	600	236	34	70
	630	236	34	70
	710	265	25	90