

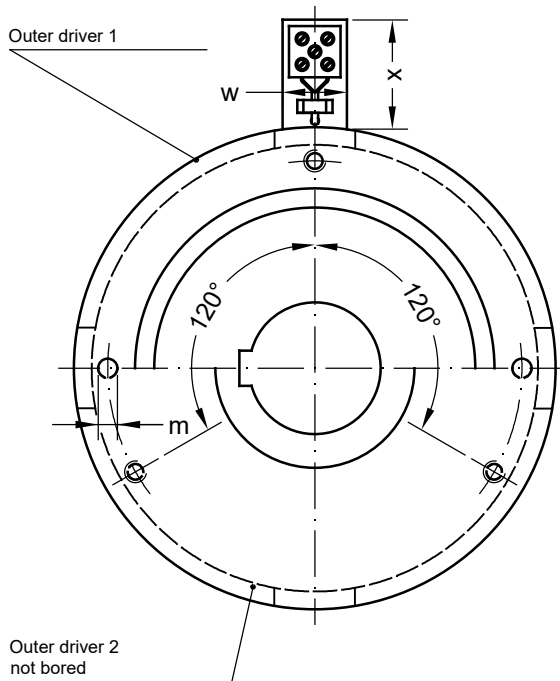
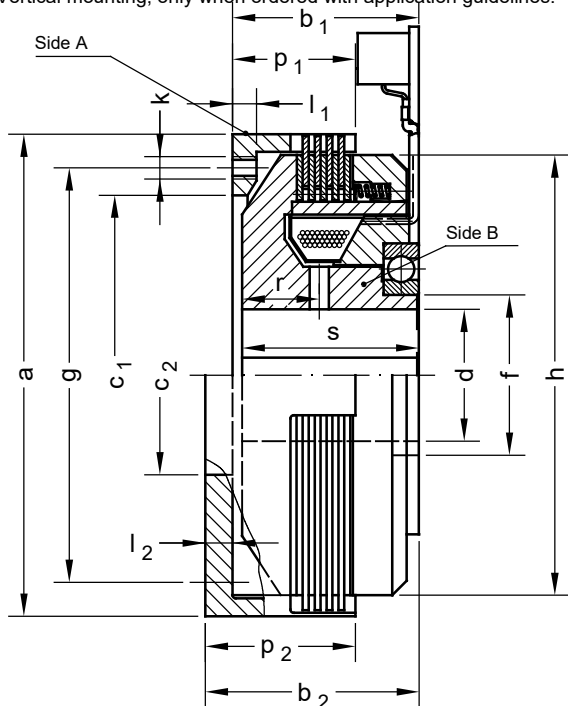
## Electromagnetic Stationary Field Multi-Disc Clutch

Clutch with outer driver for torque transmission between shaft and free wheeling gear part.

For oil operation, coil voltage 24 V DC

- ◆ Self-adjustment by magnetic flux permeating the disc stack.
- ◆ Special disc design for lowest possible idling torque.
- ◆ Wear resisting alloyed and heat treated discs.
- ◆ Effective heat dissipation by peripheral friction faces.
- ◆ Vertical mounting, only when ordered with application guidelines.

This clutch is specially suited for speed engagement of machines or equipment used in automated production lines. Precise clutch engagement and release, and thereby exact control of the required operation, are maintained throughout long-term operation periods. Available in special design suitable for combustion-engine applications.



Data and Dimensions		FOV 1,2	FOV 2,5	FOV 5	FOV 10	FOV 20	FOV 40	FOV 80	FOV 160	FOV 315	FOV 630
Static torque	Nm	25	50	100	200	400	800	1600	3200	6300	12600
Dynamic torque	Nm	12,5	25	50	100	200	400	800	1600	3200	6300
Idling torque	Nm	0,1	0,2	0,3	0,6	1,0	2,0	4,0	6,0	10	20
Friction work per engagement	kJ	5,9	9,6	15	22	44	89	143	278	520	1000
Thermal capacity	W	57	87	120	170	330	550	765	1230	1750	3000
Speed maximum	min <sup>-1</sup>	4000	3850	3650	3500	3200	2900	2400	1900	1400	1000
Torque-time constant <sup>1)</sup>	s	0,18	0,22	0,28	0,35	0,43	0,61	0,90	1,30	1,80	2,40
Disengagement time <sup>2)</sup>	s	0,07	0,08	0,09	0,12	0,14	0,16	0,20	0,26	0,32	0,40
Coil power consumption at 20 °C	W	25	25	30	50	65	75	75	95	150	170
Mass moment of inertia side A	10 <sup>-3</sup> kgm <sup>2</sup>	0,4	0,7	1,4	3,3	7,0	17	42	130	288	780
Mass moment of inertia side B	10 <sup>-3</sup> kgm <sup>2</sup>	0,35	0,7	1,9	4,0	8,8	28	65	180	525	1790
Mass (weight)	kg	1,6	2	3	4	8	14	23	43	75	140
Ø a	mm	90	99	112	133	161	200	237	292	355	452
b <sub>1</sub>	mm	38	41	48	53	63	75	88	99	122	147
b <sub>2</sub>	mm	43	47	54	61	71	83	98	112	134	162
Ø c <sub>1</sub> H7	mm	65	74	84	102	124	152	190	230	285	370
Ø c <sub>2 min</sub> H7	mm	20	20	25	30	35	40	50	60	70	90
Ø d H7	mm	10 ... 20	10 ... 25	12 ... 30	15 ... 40	20 ... 50	25 ... 60	30 ... 70	40 ... 90	50 ... 100	70 ... 130
Ø f	mm	25	30	35	45	55	70	80	105	130	160
Ø g	mm	74	84	98	118	140	172	210	257	316	407
Ø h	mm	83	92	107	127	152	189	224	277	342	432
k / Ø m rough bored for dowel	mm	M5 / 4	M5 / 5	M6 / 6	M6 / 6	M8 / 8	M8 / 8	M10 / 10	M12 / 12	M16 / 16	M16 / 20
l <sub>1</sub>	mm	4	4	5	6	7	8	9	11	13	14
l <sub>2</sub>	mm	4	5	6	8	8	10	12	15	15	18
p <sub>1</sub>	mm	26	27,5	32	37	42	54	60	69	85	105
p <sub>2</sub>	mm	31	33,5	38	45	50	62	70	80	97	120
r	mm	14	16	18	19	25	30	35	42	50	62
s	mm	36	39	45	50	60	70	83	94	116	141
w / x	mm	22 / 54	22 / 53	22 / 49	22 / 45	30 / 40	30 / 75	30 / 64	40 / 84	40 / 71	40 / 59
Keyway DIN 6885 - 2	-	1	1	1	1	1	2	2	2	2	2

1) up to 60% of full torque rate    2) drop to 10% of full torque rate