HEID ANTRIEBSTECHNIK
Produktion & Handel GmbH

MC

Electromagnetic Single-Face Clutch

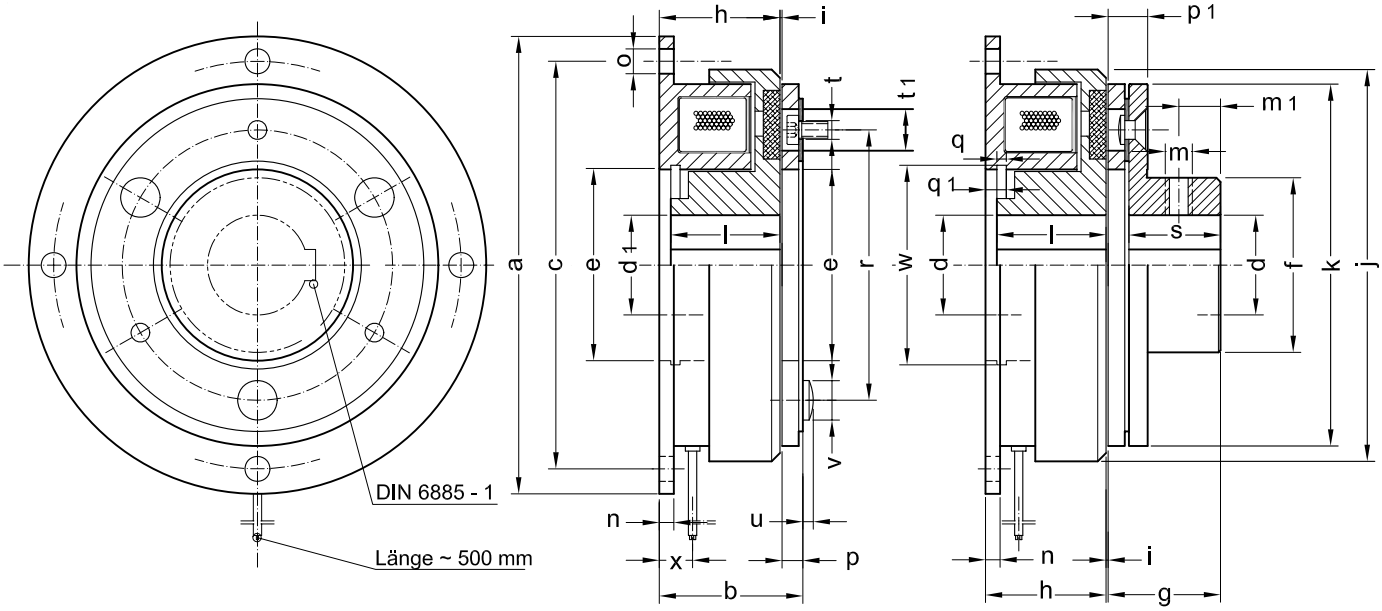
Flange mounted clutch with diaphragm plate to be connected to a shaft mounted driver.

For dry operation, coil voltage 24 V DC

- Friction locked torque connection without backlash.
- With diaphragm made of hardened spring steel.
- Self-acting adjustment by magnetic flux permeated friction faces.
- No idling torque because of complete disconnection when disengaged.
- Applicable for horizontal and vertical mounting.

When current is applied the armature plate is pulled against the magnet body resulting in a friction locked torque connection. When the current is switched off, the armature plate will be completely separated from the magnet body by the elastic force of the diaphragm.

Executions: MC without driver and diaphragm fastening screws.
MC with driver as shown in the dimension drawing.



Data and DImenslons		MC 0,3	MC 0,7	MC 1,5	MC 3	MC 6,5	MC 13	MC 25	MC 50
Dynamic brake torque 1)	Nm	3	7	15	30	65	130	250	500
Friction work per engagement	kJ	1	1,5	3	5	7	12	20	30
Thermal capacity	W	60	80	110	160	230	320	450	650
Speed maximum	min -1	6500	6000	5000	4500	4000	3000	2500	2000
Switch-on time - to 90 % nominal torque	ms	35	50	75	85	100	160	200	300
Switch-off time - to 10 % nominal torque	ms	10	15	20	40	70	100	130	200
Mass moment of inertia - rotor	10 -3 kgm 2	0,0375	0,0828	0,238	0,735	2,19	6,74	20	45
Mass moment of Inertia - armature plate	10 -3 kgm 2	0,01	0,045	0,12	0,5	1,3	4,9	14	36
Mass moment of inertia - armature + driver	10 -3 kgm 2	0,015	0,063	0,17	0,70	1,8	6,5	19	48
Coil power consumtion at 20° C	W	10	15	20	28	35	50	68	85
Mass (weight) inclusive driver	kg	0,4	0,5	1	1,8	3,1	6,3	11	20,3
Ø a h8	mm	65	80	100	125	150	190	230	290
b	mm	31,3	28	31	36,2	40,7	46,7	55,55	64,4
Ø c	mm	58	72	90	112	137	175	215	270
Ø d max. H7 / d 1 max. H7	mm	15 / 15	18 / 20	22 / 25	30 / 30	35 / 35	45 / 50	60 / 65	70 / 80
Ø e H8	mm	26	35	42	52	62	80	100	125
Ø f	mm	24	32	38	48	58	73	92	112
g	mm	15	18,8	24,3	31	36,9	46,9	59,15	68
h	mm	28,1	24	26,5	30	33,5	37,5	44	51
i airgap	mm	0,2	0,2	0,2	0,2	0,3	0,3	0,4	0,4
Ø j / Ø k	mm	54 / 50	67 / 53	85 / 80	106 / 100	133 / 125	169 / 160	212,5 / 200	266 / 250
l	mm	26,1	22	24	27	30	34	40	47
m / m 1	mm	1 x M5 / 5	1 x M6 / 6	1 x M6 / 8	1 x M8 / 10	2 x M10 / 12	2 x M12 / 15	2 x M12 / 19	2 x M12 / 22
n	mm	2	3	3	4	4	5	5	6
Ø o	mm	3,4	4,5	5,5	6,6	6,6	9	9	11
p / p 1	mm	3 / 6	3,8 / 7,3	4,3 / 8,3	6 / 11	6,9 / 12,9	8,9 / 15,9	11,15 / 20,2	13 / 14
q 1	mm	3,2	3,5	4,25	5	5,5	6	7	8
Ø r	mm	38	50	60	76	95	120	158	210
s	mm	12	15	20	25	30	38	48	55
Ø t / Ø t 1	mm	3 x 3,1 / 6,5	3 x 4,1 / 10	3 x 4,1 / 11	3 x 5,1 / 11,5	3 x 6,1 / 15	3 x 8,1 / 21	3 x 10,1 / 25	4 x 12,1 / 28
Ø v / u	mm	5,5 / 1,5	8 / 2	8 / 2	10 / 2,5	11,5 / 3	14,5 / 4	17,5 / 4,5	20,5 / 5
Ø w x q	mm	27 x 1,3	36 x 1,6	43,5 x 1,85	53,8 x 2,15	63,8 x 2,15	82,1 x 2,65	102,1 x 3,15	127,4 x 4,15
x	mm	7,5	6	7	8	9	11	12	15

1) Static brake torque ~ dynamic brake torque