

Electromagnetic Spring-Operated Multi Disc Brake

Safety brake for installation into gears.

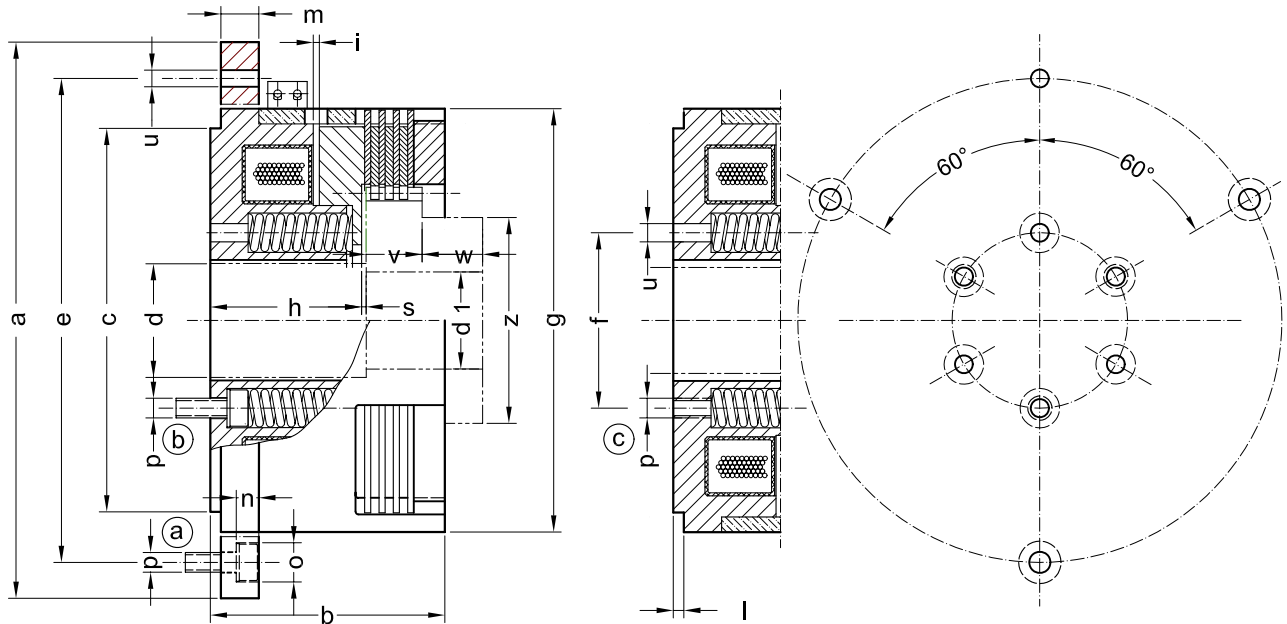
For oil and dry operation, coil voltage 24 V DC

- For mounting on gearing wall with shaft passing through the brake.
- Suited as safety brake against break of power supply.
- Compensation of disc wear by adjustable clutch gap.
- Extremely short braking times obtained with reduced holding voltage permit an accurate feed drive stop position.
- For horizontal mounting.

Several installation methods can be applied, according to brake version:

- a) by flange (standard version).
- b) without flange, by screws inserted into the magnet body.
- c) without flange, with tapped holes in the magnet body.

To obtain optimal operation a shim of nonmagnetic material between brake side face and supporting face as well as an inner driver made of nonmagnetic steel is of advantage.



Data and Dimensions			FMOB 1,2	FMOB 2,5	FMOB 5	FMOB 10	FMOB 20	FMOB 40	FMOB 80
Static torque	Oil - / dry operation	Nm	16 / 25	32 / 50	63 / 100	125 / 200	250 / 400	500 / 800	1000 / 1600
Dynamic torque		Nm	8 / 20	16 / 40	31 / 80	63 / 100	125 / 200	250 / 400	500 / 800
Idling torque		Nm	0,4 / 0,05	0,8 / 0,10	1,5 / 0,18	2,5 / 0,32	5 / 0,65	10 / 1,3	18 / 2,5
Friction work per engagement		kJ	9,5 / 5,2	20 / 13	30 / 11,5	37 / 24	64 / 41,5	81 / 60	148 / 110
Thermal capacity		W	115 / 46	200 / 95	275 / 125	300 / 142	445 / 210	470 / 250	690 / 370
Release time		s	0,17	0,20	0,24	0,30	0,40	0,50	0,60
Engagement time		s	0,030	0,040	0,045	0,050	0,055	0,065	0,080
Speed maximum		min ⁻¹	3400	3000	2500	2000	1600	1200	800
Coil power consumption at 20 °C		W	30	50	55	65	70	110	145
Mass (weight)		kg	3	5	6	12	20	30	55
Ø a		mm	130	155	165	210	245	300	340
b		mm	64	72	78	90	96	115	130
Ø c j 6		mm	90	110	120	150	185	225	270
Ø d max. shaft diameter		mm	24	29	35	45	56	67	83
Ø e		mm	114	140	150	190	220	275	315
Ø f		mm	38	45	52	70	90	105	130
Ø g		mm	100	120	130	165	200	250	295
h		mm	40,5	45,5	50	59	61,5	81,5	90
i airgap (brake engaged)		mm	1,0 - 1,2	1,2 - 1,4	1,3 - 1,5	1,4 - 1,6	1,4 - 1,6	1,5 - 1,7	1,5 - 1,7
l		mm	3	3	3	4	4	5	5
m		mm	10	10	10	13	13	15	15
n		mm	6	6	6	8	8	10	10
Ø o / p		mm	11 / M6	11 / M6	11 / M6	14 / M8	14 / M8	17 / M10	17 / M10
s		mm	1,5	1,5	1,5	1,5	1,5	2	2
Ø u rough bored / for dowel		mm	4 / 5	5 / 6	5 / 6	9 / 10	11 / 12	13 / 14	14 / 16
Inner driver	Ø d 1 H7	mm	20	20	30	40	45	56	70
	v / w	mm	18 / 57	18 / 57	20 / 70	22 / 78	25 / 87	35 / 97	35 / 115
	Ø z	mm	52	52	70	88	112	140	160
	Number of teeth x modul 1)	-	24 x 2,5	24 x 2,5	26 x 3	32 x 3	40 x 3	38 x 4	45 x 4
	w tooth width of	mm	19,206	19,206	23,148	32,257	41,440	55,173	67,313
w tooth width up to measured over tooth number	mm	19,240	19,240	23,182	32,291	41,478	55,211	67,405	

1) Tooth angle 20°