

Electromagnetic Multi-Disc Brake

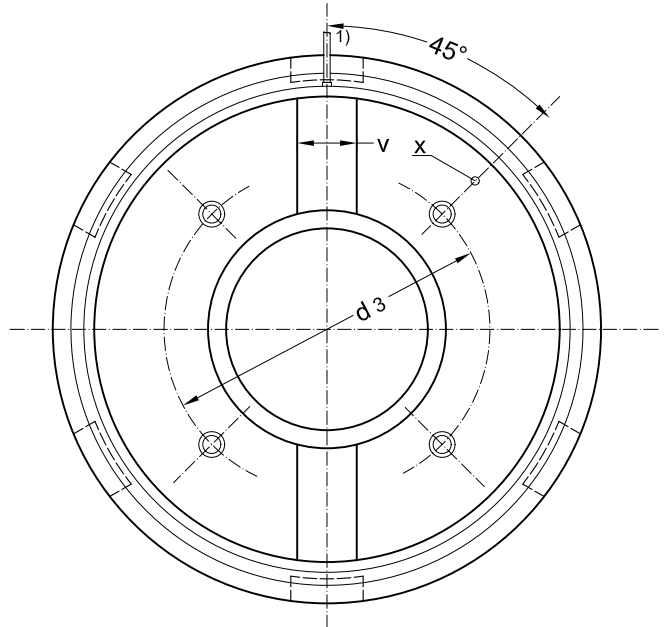
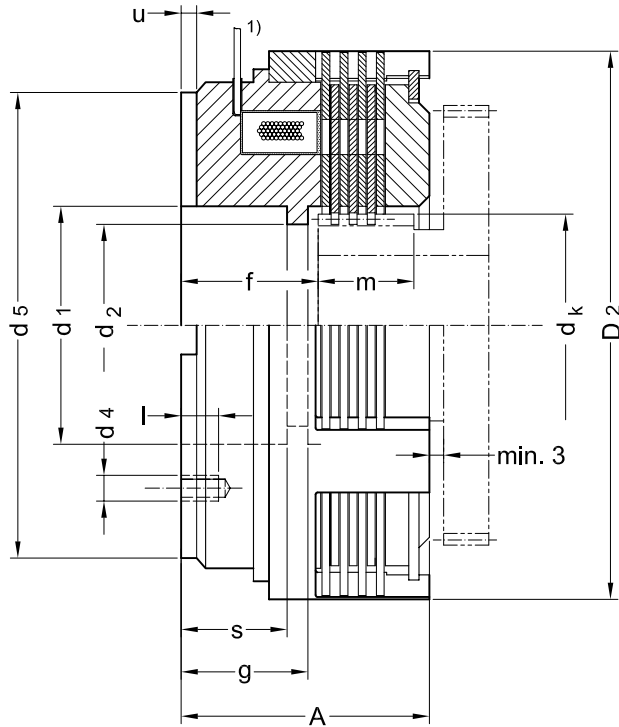
Brake with magnet body front face fastened to the housing.

For oil operation, coil voltage 24 V DC

- ◆ Version without inner driver, with hardened steel discs.
- ◆ Torque transmission over keys inserted in grooved magnet body.
- ◆ Further technical particulars on request.
- ◆ For horizontal mounting.

Heid multi disc brakes LCBW-S are comparable regarding technical data and dimensions with multi disc clutches of ZF Friedrichshafen AG listed in the table.

Most of the brakes LCBW-S documented in the data sheet can be amended according to order specification and so brought into line with the version to be replaced.



Data and Dimensions		LCBW	LCBW	LCBW	LCBW	LCBW	LCBW	LCBW	LCBW	LCBW	LCBW	LCBW	LCBW		
		1S	2S	5,5S	10S	20S	21S	40S	45S	60S	100S	130S	200S	320S	
comparable to ZF Type:		EK 1 B	EK 2 dB	EK 5 dB	EK 10 eB	EK 20 dB	EK 20 eB	EK 40 dB	EK 40 eB	EK 60 dB	EK 80 B	EK 120 eB	EK 160 B	EK 320 B	
Static torque	Nm	20	50	100	200	400	360	800	800	1100	1800	2400	3600	5800	
Dynamic torque	Nm	10	20	55	100	200	200	400	450	600	1000	1300	2000	3200	
Engagement time	ms	170	220	280	360	450	450	600	600	750	900	1100	1300	1700	
Disengagement time	ms	50	70	100	110	200	200	250	250	300	380	400	540	750	
Coil power consumption at 20 °C	W	15	18	22	27	41	38	59	77	79	88	130	130	170	
Mass (weight) ~	kg	0,70	1,15	1,95	3,7	6,2	6,1	9,6	9,2	12,8	17,0	21,0	38,3	66,0	
A	mm	31	38	49,5	55	58,5	64,5	69	68	77,5	80	86	108	118	
Ø D 2	mm	80	93	114	140	166	166	195	195	210	240	258	295	336	
Ø d 1 K6	mm	35	42	55	68	75	90	90	110	100	110	140	125	140	
Ø d 2	mm	31	37	45	60	65	80	80	100	90	100	130	115	130	
Ø d 3 ± 0,1	mm	50	56	75	90	100	116	116	125	130	145	170	200	275	
d 4	mm	M5	M6	M8	M8	M10	M10	M10	M10	M12	M12	M12	M16	M16	
Ø d 5	mm	67	78	95	120	142	142	170	170	184	216	234	260	304	
f	mm	20,5	25	30	32	33	36	37	36	42	43	44	55	57	
g	mm	19	22	27	29	30	33	34	34	39	40	41	52	53	
l max	mm	5	5	7	8	10	9	12	14	16	18	13	20	20	
m	mm	9,5	12	18,5	21,5	23,5	27,5	30	31	32,5	33	38	48	56	
s + 0,2	mm	17	20	22	22	25	28	28	28	31	32	33	42	43	
u	mm	2,5	2,5	5	5	6	6	6	6	6	6	8	8	8	
v H7	mm	12	12	14	16	20	20	20	20	20	25	25	25	25	
x partition fault max.	mm	0,2	0,2	0,2	0,2	0,4	0,4	0,4	0,4	0,4	0,6	0,6	0,6	0,6	
Inner driver gear acc. DIN 867 α = 20°	Number of teeth	-	20	27	27	31	27	33	33	34	36	42	54	37	37
	Modul	mm	1,5	1,5	1,75	2	2,5	2,5	2,5	3	2,5	2,5	2,5	3	3,5
	Tooth width of	mm	11,39	16,38	19,12	22,10	27,51	27,72	27,72	32,25	34,86	34,48	49,72	42,29	49,36
	Tooth width to over teeth	mm	11,34	16,33	19,07	22,05	27,45	27,66	27,66	32,15	34,80	34,42	49,65	42,21	49,28
	dk -0,2 addendum - Ø	mm	32,2	43,5	50,5	66,4	73,2	88,2	88,2	108,0	94,8	110,0	140,0	118,0	138,0

1) Connection with two braids.