HEID·ANTRIEBSTECHNIK
GMBH & CO KG

LMS

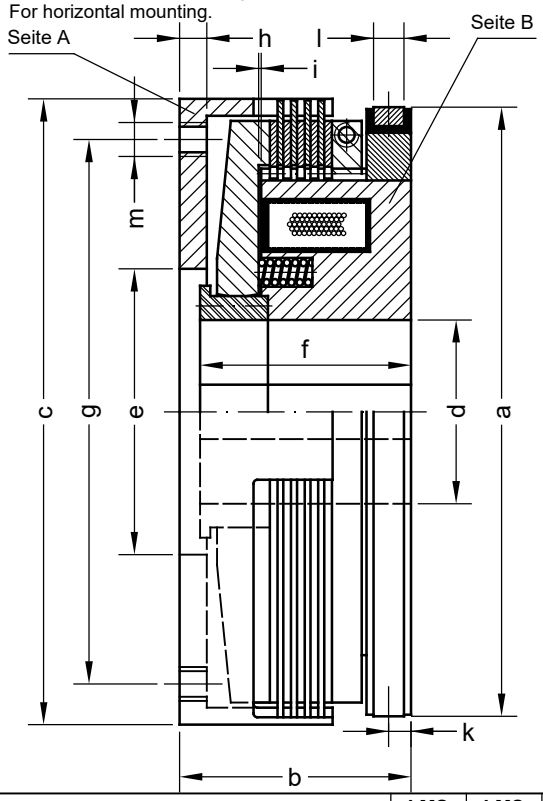
Electromagnetic Multi-Disc Clutch

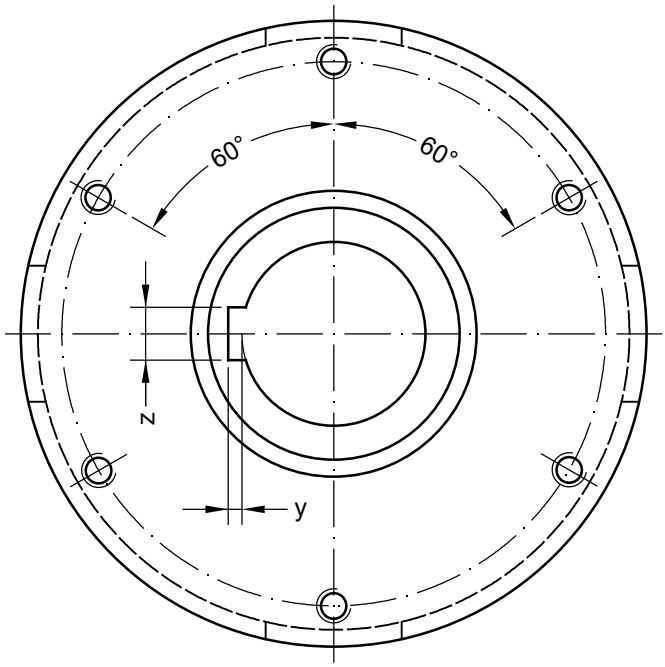
Clutch with outer driver for torque transmission between shaft and free wheeling gear part.

For oil and dry operation, coil voltage 24 V DC

- Clutch with adjustable gap.
- Suited for speed and feed engagements.
- High energy absorbtion by wear resistant steel- / sinter discs.
- Effective heat dissipation by peripheral friction faces.
- For horizontal mounting.

The clutch is suited for external gear application, but also used, with oil lubrication, in gears.
The magnetic flux does not circulate through the disc stack, this makes it possible to use non magnetic friction material for high power and torque load at the lowest wear rate.
Current intake through slip ring and return through earth connection (-).
Available in special design suitable for cumbustion-engine applications.





Data and Dimensions			LMS 1,6	LMS 2,5	LMS 4	LMS 6,3	LMS 10	LMS 16	LMS 25	LMS 40	LMS 63	LMS 100	LMS 160	LMS 250
wet operation	Static torque	Nm	25	40	63	100	160	250	400	630	1000	1600	2500	4000
	Dynamic torque	Nm	16	25	40	63	100	160	250	400	630	1000	1600	2500
	Idling torque	Nm	0,1	0,2	0,3	0,35	0,45	0,6	0,8	1,1	2,2	3,5	5	10
	Friction work per engagement	kJ	10	15	20	25	35	40	70	90	150	250	300	500
	Thermal capacity	W	90	120	130	170	250	330	450	550	770	1000	1250	1600
dry operation	Static torque	Nm	40	80	120	180	300	500	800	1200	1800	3000	5000	8000
	Dynamic torque	Nm	25	50	80	120	200	320	500	800	1200	2000	3200	5000
	Idling torque	Nm	0,05	0,08	0,12	0,16	0,25	0,4	0,5	0,6	1	1,4	1,6	2,4
	Friction work per engagement	kJ	2,5	4	5	6	8	12	18	25	35	60	80	110
	Thermal capacity	W	30	45	50	70	90	110	150	200	300	400	550	700
Speed maximum		min -1	3800	3500	3500	3200	3000	2600	2300	2100	1900	1700	1500	1300
Coil power consumption at 20° C		W	25	28	32	34	45	54	63	75	85	110	140	155
Mass moment of inertia side A		10 -3 kgm 2	0,7	1,3	1,4	2,6	4,5	8	15	22	42	80	160	380
Mass moment of inertia side B		10 -3 kgm 2	1,5	2,6	3	6,5	10,5	17	32	60	115	250	500	1000
Mass (weight)		kg	2	2,6	2,9	4	5,5	7,5	11	14,5	21	33	45	75
Ø a		mm	100	110	120	132	145	160	180	200	230	255	295	340
b		mm	45	48	52	55	58	62	68	76	86	100	115	132
Ø c		mm	97	112	115	133	147	158	180	198	235	265	290	355
Ø d H7 max.		mm	25	30	32	35	42	48	55	60	70	80	90	120
Ø e min H7		mm	50	50	50	60	70	80	90	100	100	110	140	180
f		mm	42	45	48	50	53	57	63	70	80	92	107	122
Ø g		mm	85	90	100	105	120	135	155	170	200	235	260	305
h		mm	5	5	6	7	7	7	8	9	10	12	14	15
i air gap (clutch engaged)		mm	0,3	0,3	0,3	0,3	0,35	0,4	0,45	0,5	0,6	0,7	0,8	0,9
k		mm	5,5	5,5	5,5	5,5	5,5	5,5	6	6	6	8,5	8,5	8,5
l		mm	8	8	8	8	8	8	8	8	8	10	10	10
m		mm	M6	M6	M6	M8	M8	M8	M 10	M10	M12	M12	M16	M16
Keyway **z** x **y** at d max		mm	8 x 3,3	10 x 3,3	10 x 3,3	10 x 3,3	12 x 3,3	14 x 3,8	16 x 4,3	18 x 4,4	29 x 4,9	22 x 5,4	25 x 5,4	32 x 7,4