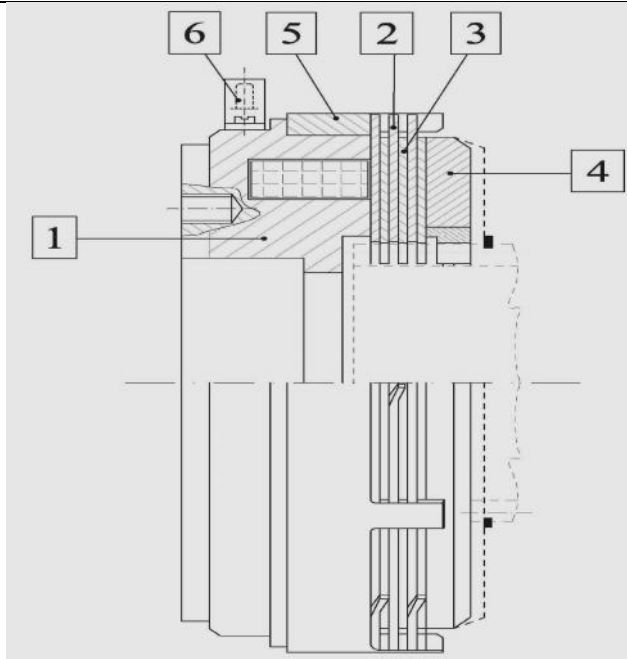


Size				11	12	15	21	22	24	26	28
Torque	Dyn	Ms	(Nm)	10	25	60	120	250	480	600	960
	Stat	Mu		20	40	100	200	400	800	1100	1600
Max.Speed			(min ⁻¹)	3000	3000	3000	2400	2000	2000	2000	2000
DC Voltage			(V)	24 V DC							
Power Consumption			(W)	18	18	30	30	45	66	79	88
Number of plates	Inner Plates			3	4	5	5	5	6	6	6
	Outer Plates			3	4	5	5	5	6	6	6
Weights			(kg)	1.0	1.2	2	3.5	6.5	9.3	12.3	16.7
Moment of inertia (Armature side)			(10 ⁻³ kgm ²)	0.14	0.18	0.5	1.45	4.8	11	21	34
Dimensions (mm)	∅ D	(mm)		82	95	114	134	166	195	210	240
	∅ d ^{k6}	(mm)		35	42	55	68	75	90	100	110
	∅ d ₁	(mm)		31	37	45	60	65	80	90	100
	∅ d ₂	(mm)		67	78	95	120	142	170	184	216
	∅ d ₄	(mm)		50	56	75	90	100	116	130	145
	∅ d ₇	(mm)		M5	M6	M8	M8	M10	M10	M12	M12
	L	(mm)		31	38	49.5	55	58.5	69	77.5	80
	l ^{+0.20}	(mm)		17	20	22	22	25	28	31	32
	l ₁	(mm)		19	22	27	29	30	34	39	40
	l ₂	(mm)		5	5	8	8	10	12	16	18
	l ₃	(mm)		5	6	12	13	12.5	12.5	14	15.5
	l ₄	(mm)		56.5	62.5	69.5	78	93	107	120.5	126
	l ₅	(mm)		20.5	25	30	32	33	37	42	43
	l ₆ ^{+0.10}	(mm)		2.5	2.5	5	5	6	6	6	6
l ₇ ^{H7}	(mm)		12	12	14	16	20	20	20	25	
l ₈	(mm)		1.0	1.2	1.8	2	2.5	3.5	4	5	

* Special Voltage Brakes available on request. * Brakes with 1000mm leads available as option. * Technical Alteration reserved



CONSTRUCTION

- | | | |
|------------------|--------------------|---------------|
| (1) Coil Housing | (3) Inner Plate | (5) Carrier |
| (2) Outer Plate | (4) Armature Plate | (6) Connector |

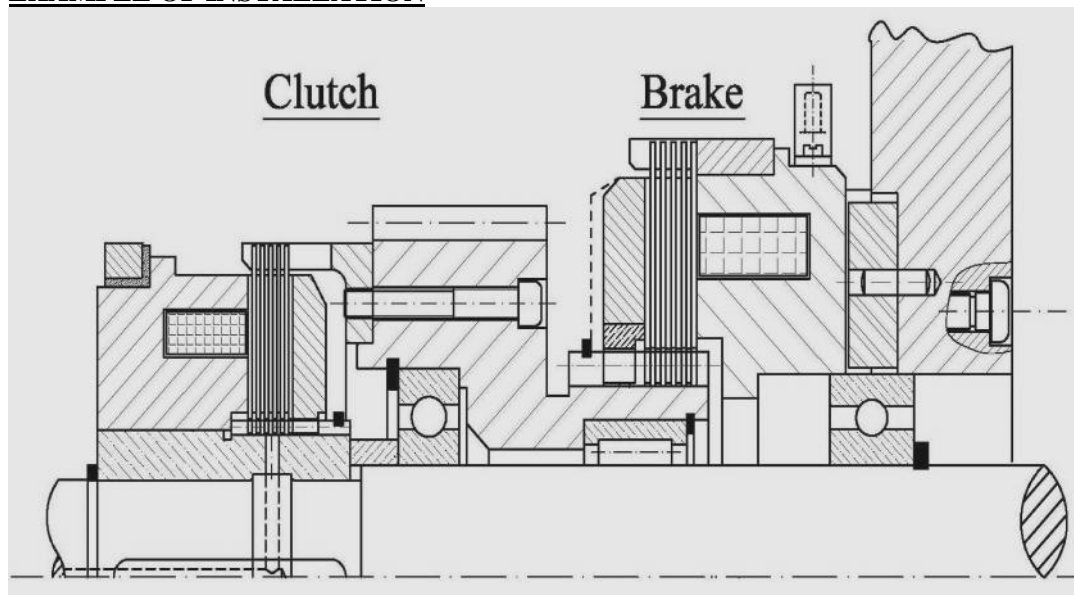
OPERATION

Carrier (5) is mounted on the coil Housing (1) and which supports the outer plate (2). Armature Plate (4) and Inner Plates (3) are supported on the gear Bush which must be supplied by the user (Refer Page 24 for Gear Bush tooth Profile). Coil housing (1) is fixed into the Machine Housing (stationary Part) and load shaft is connected to the gear bush. Energization of the coil Housing through the Connector (6) generates a magnetic field which attracts the sliding armature plate (4). The Clutch Plates (3&4) are thus Compressed and the braking torque is transmitted. To release the brake, all that is necessary to switch off the power supply.

APPLICATION

Braking and release while running or at rest. Operation in lubrication environment only.
Friction of Steel to Steel Plates.

EXAMPLE OF INSTALLATION



The Basic Version of BRAKE with Clutch and gear wheel.

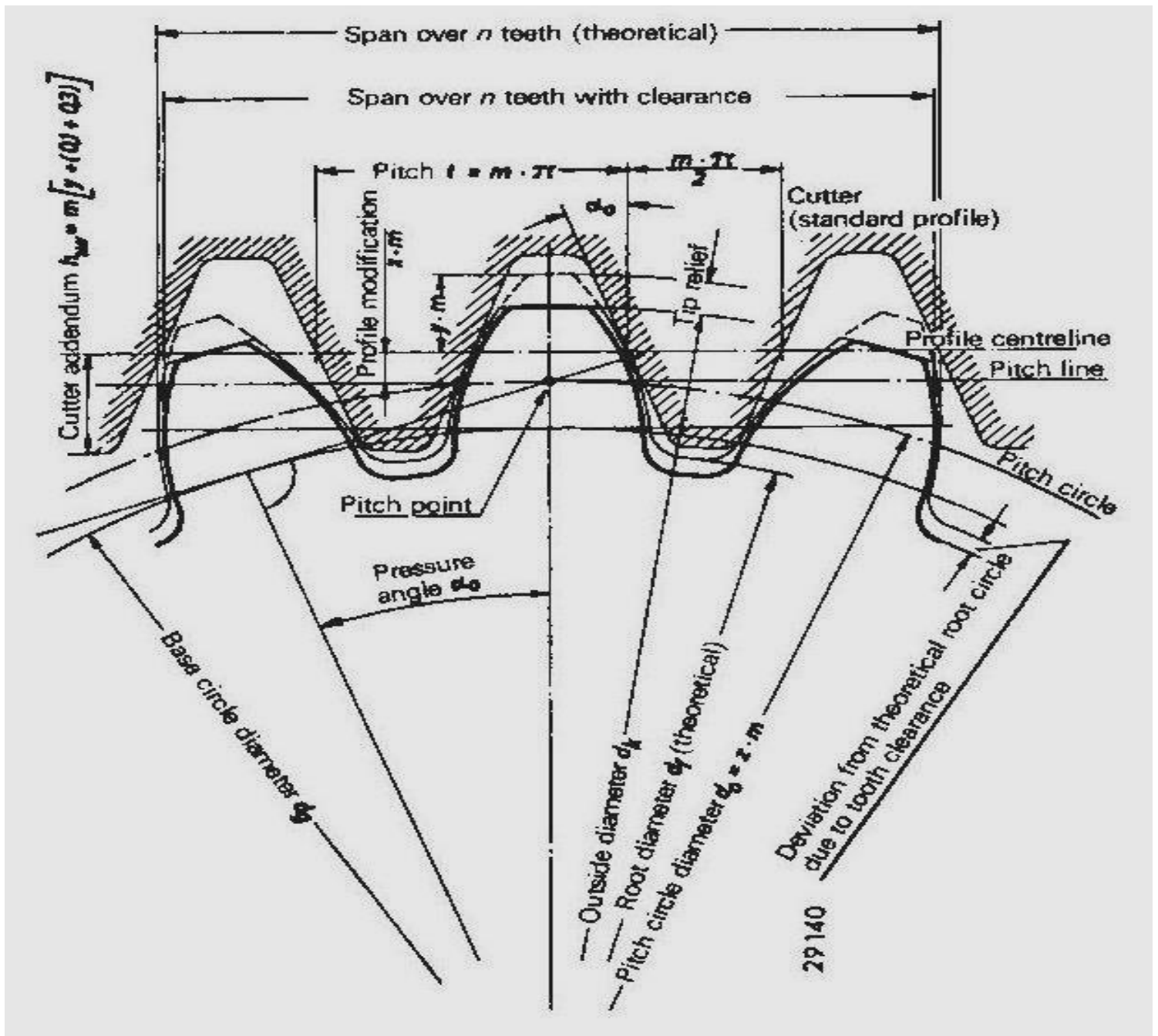
The Coil Housing of the brake is secured and located centrally to the end face of the housing.

A slot is provided on coil housing back to help in locating the Coil Housing. Make provision for armature travel 18.

Secure gear bush axially. For details of toothing for the gear bush “refer data sheet of Toothed profile for driving bush” Page No.24..

ORDER EXAMPLE.

Electromagnetic Multidisc Wet Run BRAKE
TYPE : 24.512.12.3 – 24 V.d.c



All necessary data have been given in page No.24 in order to facilitate machining of gear teeth for Driven Gear Bush (customer components), which is applicable to 24.502.____.1, 24.502.____.3, & 24.512.____.3.

- Z = No. of Teeth
- M = Module
- = Pressure Angle (20°)
- dk = Outside Diameter
- df = Root Diameter
- x = Pitch Error



TOOTH PROFILE FOR TOOTHED DRIVING BUSH

(Drive Bush for inner Clutch Plates)

Size	No.of teeth	Module	Tip dia	Root dia	Tooth Width	Span	Pitch error	Teeth length
	Z	m	d_k	d_f	W_n	Measurement over n teeth	x	l_z
11	20	1.5	32.2	25.95	11.38	3	-0.18	9.5
12	27	1.5	43.5	37.65	16.37	4	+0.3	12
15	27	1.75	50.5	43.96	19.11	4	+0.31	18.5
21	*28	2	60.5	52.64	22.01	4	+0.41	21.5
21	*31	2	66.4	58.68	22.1	4	+0.42	21.5
22	27	2.5	73.2	63.4	27.51	4	+0.43	23.5
24	33	2.5	88.2	78.4	27.72	4	+0.43	30
26	36	2.5	94.8	84.9	34.87	5	+0.23	32.5
28	42	2.5	110	98.15	34.48	5	-0.12	33

Pitch diameter $d_o = zm$; Pressure angle=20°

Outer toothing hardness of bush teeth 59-62HRC;0.2 to 0.6 deep.

INDEX:

- (1) 28 teeth only for sizes 1
- (2) 31 teeth only for sizes 3