

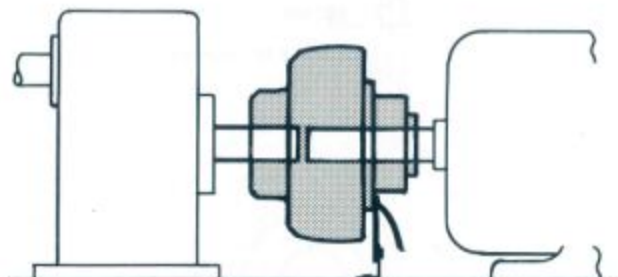
ALL  
BRITISH  
COMPANY

# SELF-ADJUSTING ELECTROMAGNETIC CLUTCHES TYPE BM

DATA  
SHEET  
SIZE  
**BM600**

WITH BEARING MOUNTED STATIONARY FIELD

MAXIMUM STATIC TORQUE 61 Nm. 45lb.ft.



Two part assembly : Input may be from either end.



## Clutch H.P. rating

R.P.M. at Clutch Shaft	Allowing for shock torque loads up to 250% of steady load occurring.	
	When load is up to speed	During the accelerating period
	H.P.	H.P.
100	0.343	0.332
200	0.686	0.648
300	1.029	0.950
400	1.372	1.225
500	1.715	1.490
600	2.058	1.750
700	2.401	1.980
800	2.744	2.195
900	3.087	2.400
1000	3.430	2.620
1250	4.290	3.050
1440	4.940	3.350
2000	6.860	4.040
2500	8.575	4.380

## General Specification

Maximum Static Torque	: 61 Nm. (45lb. ft.)
Standard Voltage	: 24 Volts D.C.
Rated Continuous Current	: 1 amp. at 24V.
Resistance (20°C)	: 24 Ohms
Other Voltages Available	: 6, 12, 50, 90 & 180 Volts D.C.
Maximum Speed	: 4750 R.P.M.
Maximum Heat Dissipation (Slipping)	

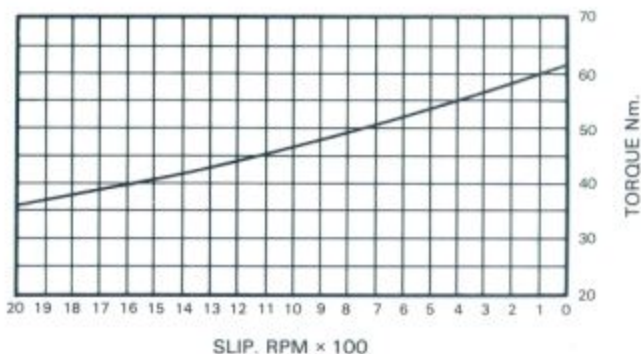
At various R.P.M.

500 r.p.m.:	14,820 Nm/min (10,900 ft.lb/min)
1000 r.p.m.:	22,440 Nm/min (16,500 ft.lb/min)
1500 r.p.m.:	28,560 Nm/min (21,000 ft.lb/min)
3000 r.p.m.:	49,640 Nm/min (36,500 ft.lb/min)

Weight : 7kg (15lb)

## Torque: Slip characteristic

i.e. Gives torque at moment of engagement  
and as load is accelerated.



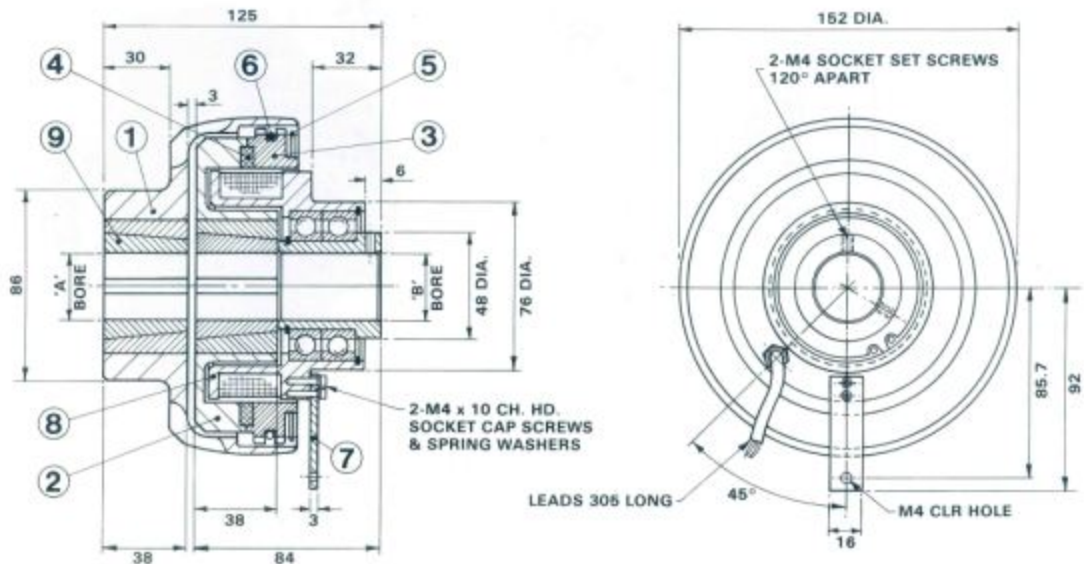
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Observe shaft parallel alignment requirements as given on Assembly and Maintenance data sheet at front of catalogue.



**Note :** Torque arm to be fastened only to relieve coil leads from light bearing drag. Do not tighten so as to load the bearing unnecessarily.

**PARTS LIST**

ITEM	PART No.	TITLE	No. OFF
1	672	OUTER MEMBER	1
2	4860	INNER ROTOR	1
3	4139	DRIVE RING	1
4	4331	FRICTION RING	1
5	731	SPRING CLIP	1
6	732	CUSHION RING	1
7	3062	TORQUE ARM	1
8	4269	FIELD SPOOL ASSY	1
9	1615	TAPER BUSH ASSY	2

**STANDARD BORES**

'A' INCHES	'B' INCHES	KEYWAY WIDTH INCHES
$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{16} \times \frac{3}{32}$
$\frac{7}{8}$	$\frac{7}{8}$	$\frac{1}{4} \times \frac{1}{8}$
1	1	$\frac{1}{4} \times \frac{1}{8}$
$1\frac{1}{8}$	$1\frac{1}{8}$	$\frac{5}{16} \times \frac{7}{64}$
$1\frac{1}{4}$	$1\frac{1}{4}$	$\frac{5}{16} \times \frac{7}{64}$
Metric Sizes (mm)		
12	12	4 × 1.8
14 16	14 16	5 × 2.3
18 19	18 19	6 × 2.8
20 22	20 22	8 × 3.3
24 25	24 25	8 × 3.3
28 30	28 30	10 × 1.3
32	32	10 × 1.3

**CLARK ELECTRIC CLUTCH AND CONTROLS Ltd**

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