

ALL  
BRITISH  
COMPANY

# SELF-ADJUSTING ELECTROMAGNETIC CLUTCHES & BRAKES

DATA  
SHEET  
SIZE  
**S175**

MAXIMUM STATIC TORQUE 1.1 N.m. 10lb.ins.

The data sheet gives dimensional and technical details for both the Clutch and the Brake. The Clutch may be used with the input at either end. The Brake shaft may enter from either end or pass right through.



## H.P. rating

R.P.M. at Clutch/ Brake shaft	Allowing for shock torque loads up to 250% of steady load occurring.	
	When load is up to speed	During the accelerating/ decelerating period
	H.P.	H.P.
100	0.0064	0.0057
200	0.0128	0.0112
300	0.0192	0.0156
400	0.0256	0.0191
500	0.0320	0.0226
600	0.0384	0.0264
700	0.0448	0.0293
800	0.0512	0.0311
900	0.0576	0.0343
1000	0.064	0.0382
1250	0.080	0.0474
1440	0.092	0.055
2000	0.128	0.0762
2500	0.160	0.0952

## General Specification

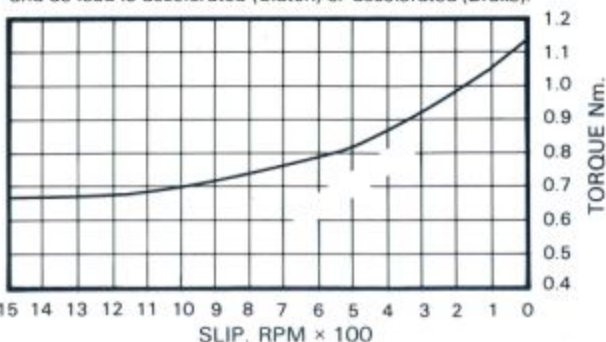
Maximum Static Torque	: 1.1 N.m. (10lb.ins.)
Standard Voltage	: 24 Volts D.C.
Rated Continuous Current	: 0.25 amp.
Resistance (20°C)	: 97 Ohms
Other Voltages Available	: 6, 12, 50, 90 Volts D.C.
Maximum Speed	: 15,700 R.P.M.
Maximum Heat Dissipation (Slipping)	

At various R.P.M.	0-500 r.p.m.:	870 Nm/min (640 ft.lb./min)
	1000 r.p.m.:	1333 Nm/min (980 ft.lb./min)
	1500 r.p.m.:	1500 Nm/min (1100 ft.lb./min)
	3000 r.p.m.:	1800 Nm/min (1325 ft.lb./min)

Weight : Clutch	: 0.23kg (8 oz)
Brake	: 0.23kg (8 oz)

## Torque: Slip characteristic

i.e. Gives torque at moment of engagement and as load is accelerated (Clutch) or decelerated (Brake).

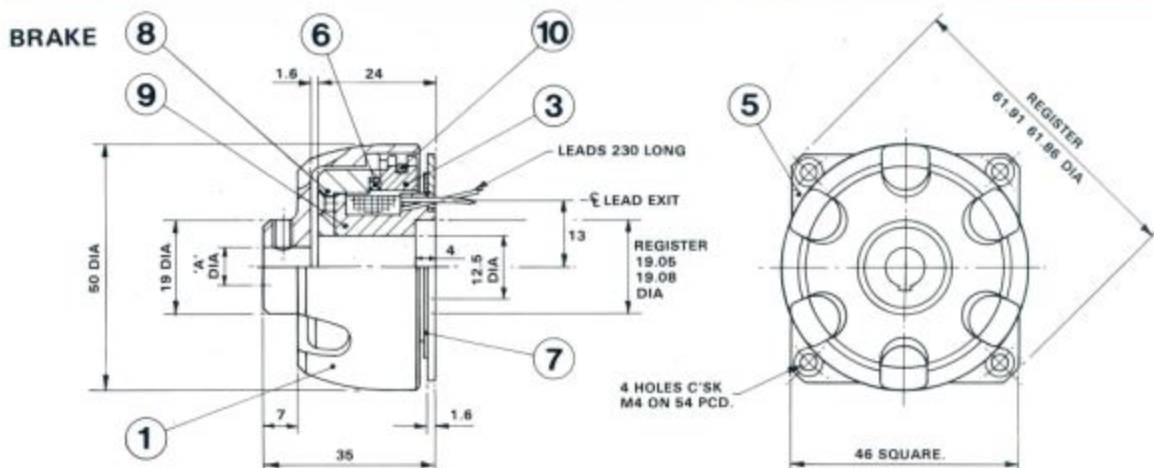
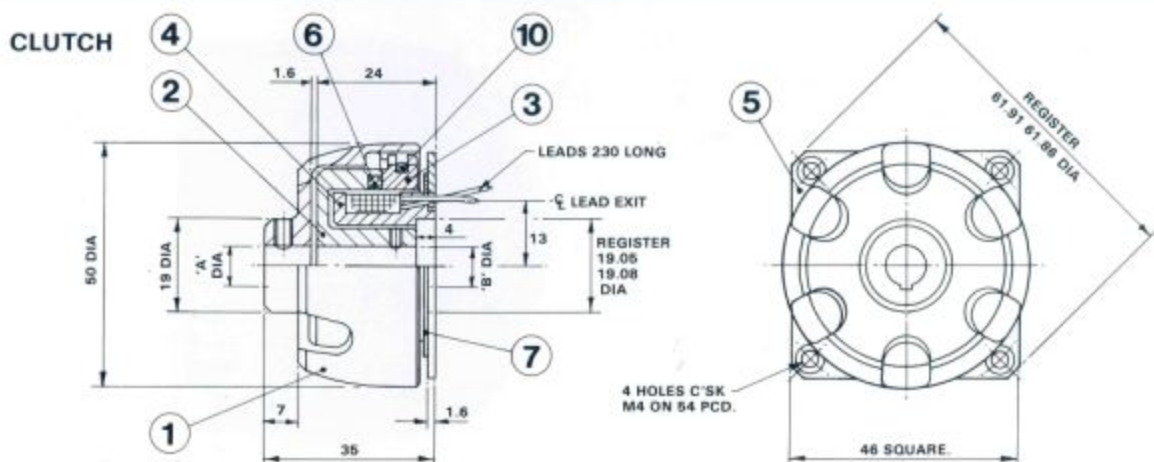


**DATA SHEET**  
**SIZE S175**

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**ALL BRITISH COMPANY**

To design a satisfactory arrangement reference should be made to the setting up procedure on the Installation & Maintenance sheet at the front of the catalogue.



**STANDARD BORES**

**PARTS LIST**

ITEM	PART No.	TITLE	No. OFF
1	540	OUTER MEMBER	1
2	541	INNER ROTOR	1
3	543	DRIVE RING	1
4	544	CLUTCH FIELD SPOOL ASSY	1
5	545	MOUNTING PLATE	1
6	552	FRICTION LINING	1
7	4854	MAGNETIC INSULATOR	1
8	5227	BRAKE FIXED POLE	1
9	609	BRAKE FIELD SPOOL ASSY	1
10	735	CUSHION RING	1

'A' INCHES	'B' INCHES	KEYWAY WIDTH INCHES
1.685 / 1.875	1.885 / 1.875	-
2.51 / 2.50	2.51 / 2.50	1/16
3.135 / 3.125	3.135 / 3.125	1/8
3.76 / 3.75	3.76 / 3.75	1/4
4.385 / 4.375	-	3/8
-0	-0	mm
mm +.03	mm +.03	mm
6	6	-
8	8	2
9	9	3
10	-	3

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