

**DESCRIPTION**

Water cooled electromagnet for use with linear accelerator magnetrons M5125, M5125X, M5167, M5193, MG5125, MG5125X, MG5167, MG5193, MG5260, MG6060 and MG6090.

**GENERAL DATA**

**Electrical (See note 1)**

The electromagnet coils should be fed from a constant current power supply.

Magnetic field range, measured		
between pole faces . . . . .	0 to 175	mT
Typical conditions for 155 mT field:		
current . . . . .	20	A
voltage (see notes 2 and 3) . . . . .	20	V

**Calibration**

An individual calibration chart is supplied with each electromagnet (see below).

**Cooling**

MG6062 is water cooled via 1/2-inch Polyflow adaptors; it may be connected in series with the magnetron.

Minimum water flow required (see note 4) . . . . .	5.0 l./min
Inlet water temperature (see note 3) . . . . .	40 °C max

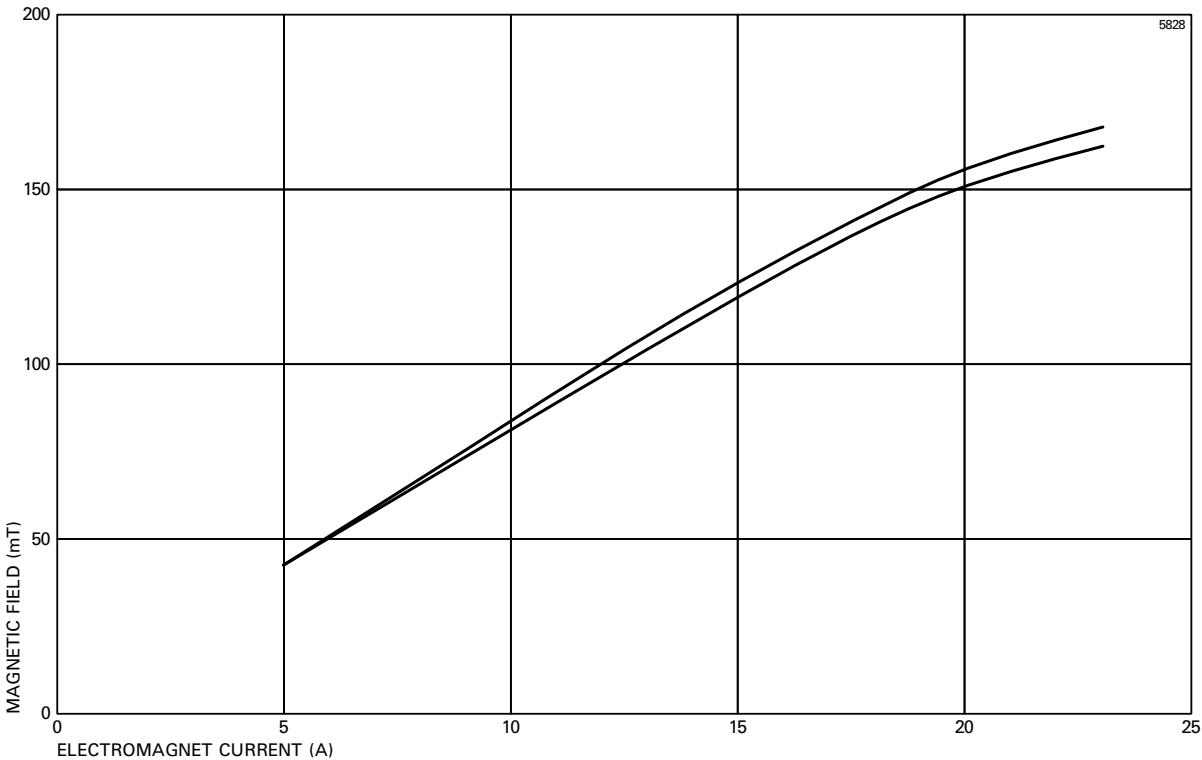
**Mechanical**

Overall dimensions . . . . . 260 x 252 x 151 mm nom  
 10.236 x 9.921 x 5.945 inches nom  
 Net weight . . . . . 16 1/4 kg (36 pounds) approx  
 The electromagnet is mounted by means of holes, threaded 5/16 UNC, in the yoke.  
 An AFC mounting facility is provided by four threaded holes on the yoke.

**NOTES**

1. The DC electrical connections are made via flexible cables to screw clamps on the yoke (see outline). The positive lead goes to the bottom connector and the negative lead to the top connector.
2. The field coil resistance increases after initial switch on, due to heating effects, necessitating an increase in voltage to maintain a constant current.
3. The field coil resistance varies with inlet water temperature.
4. For a water flow of 5 l./min, a pressure of approximately 1.25 kg/cm<sup>2</sup> is required.

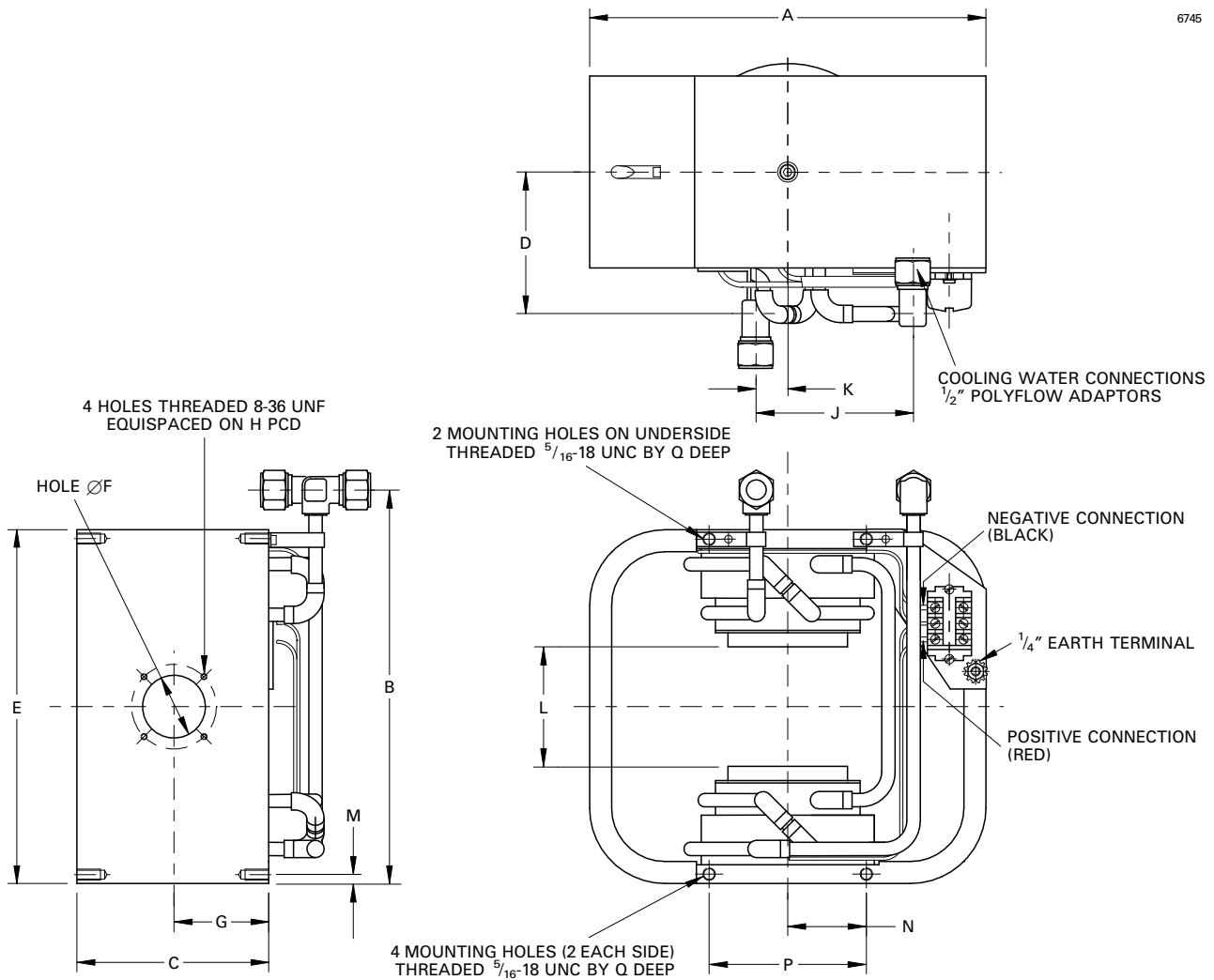
**TYPICAL CALIBRATION CHART**



# OUTLINE

(All dimensions without limits are nominal)

6745



Ref	Millimetres	Inches
A	252.0 max	9.921 max
B	250.0	9.843
C	122.0 max	4.803 max
D	90.0	3.543
E	225.0 max	8.858 max
F	40.0	1.575
G	60.0 + 0.5	2.362 + 0.020
H	53.97	2.125
J	100.0	3.937
K	20.0	0.787
L	75.44 min	2.970 min
M	6.0	0.236
N	50.0 + 0.5	1.969 + 0.020
P	100.0	3.937
Q	15.0 min	0.591 min

Inch dimensions have been derived from millimetres.

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