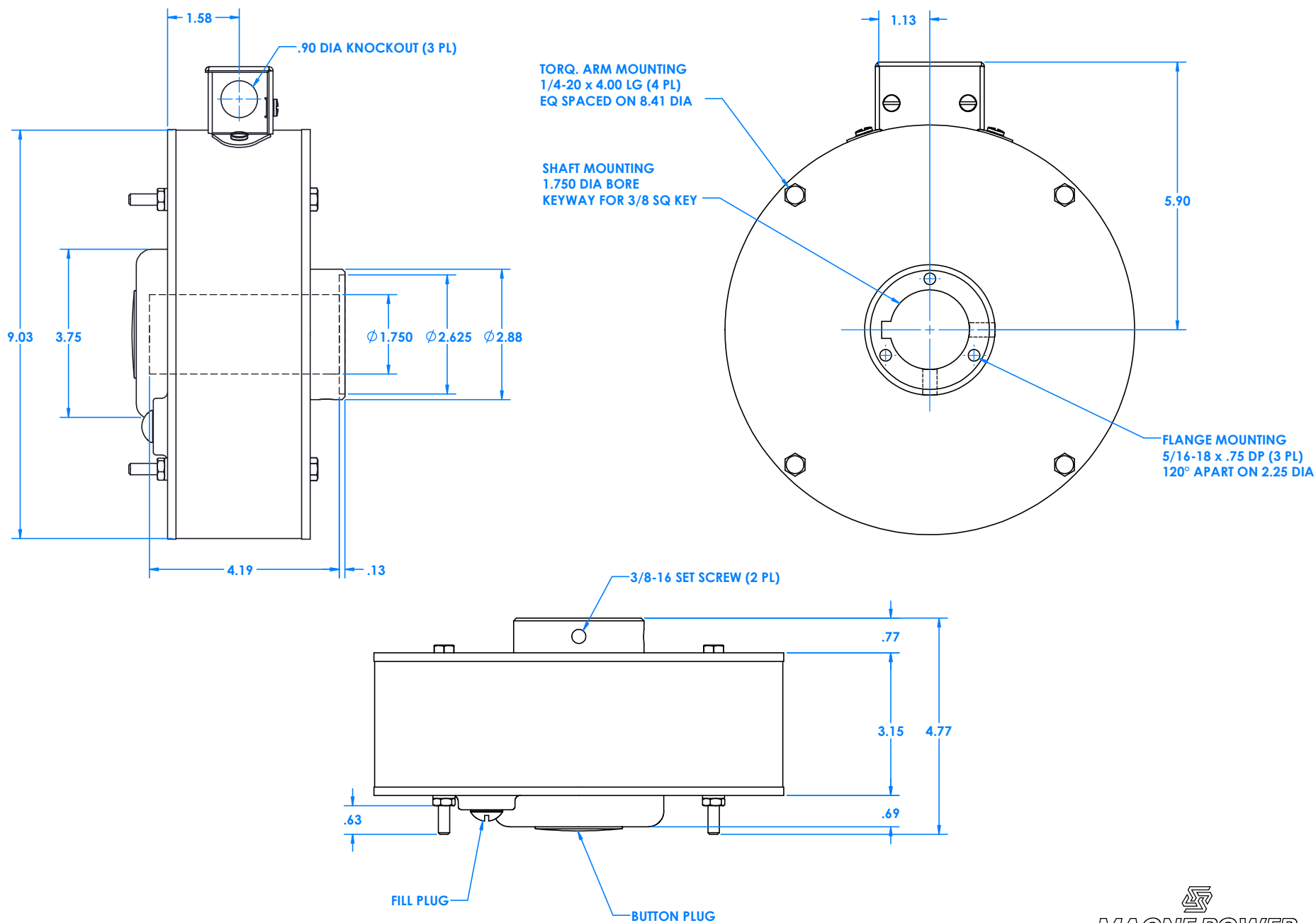


# 50MB90S MAGNEBRAKE PERFORMANCE & OUTLINE



UNITS: INCHES

**50MB90S**

P/N 0750562

TYPE OF COOLING

**AIR CONVECTION**

MOUNTING

**BRAKE CAN BE SHAFT MOUNTED OR FLANGE MOUNTED**

1. SHAFT MOUNTING

**A FINISHED BORE WITH KEYWAY AND SET SCREWS**

2. FLANGE MOUNTING

**3-BOLT MOUNTING ON CONCENTRIC OUTPUT FLANGE**

MAXIMUM SHAFT DEVIATION FROM HORIZONTAL

**30°**

Brake must have suitable torque arm to stop rotation. Torque arm should be free floating. Any two through bolts on brake can be used for mounting torque arm.

Torque arm available: **Model TAB-50**

**SPECIFICATIONS**

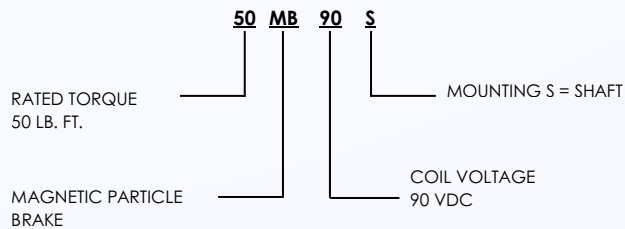
TORQUE RANGE (LB. FT.)	<b>.7-50</b>
SPEED RANGE (RPM)	<b>0 - 3500</b>
HEAT DISSIPATION (WATTS AT 1800 RPM)	<b>200</b>
(HP AT 1800 RPM)	<b>.27</b>
NON-EXCITED DRAG TORQUE (LB. FT.) MAX	<b>.7</b>
WEIGHT LBS. (APPROX)	<b>48</b>
ROTOR MOMENT OF INERTIA - (LB. FT. <sup>2</sup> )	<b>.40</b>

**COIL DATA**

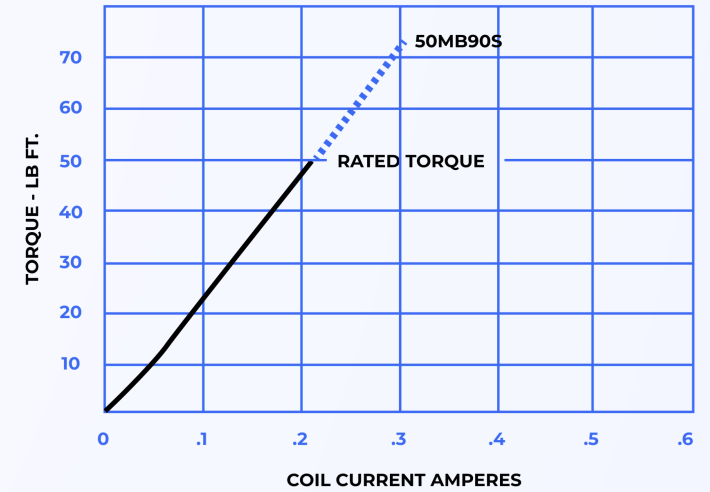
VOLTS DC	COIL TEMPERATURE (°C)	RESISTANCE (OHMS)	RATED CURRENT (AMPS)	CURRENT TIME CONSTANT (SEC)	TORQUE TIME CONSTANT (SEC)
<b>90</b>	<b>20</b>	<b>230</b>	<b>.30</b>	<b>.32</b>	<b>.40</b>

The time in seconds for current or torque to reach 63% of its final value after a step change in voltage is applied.

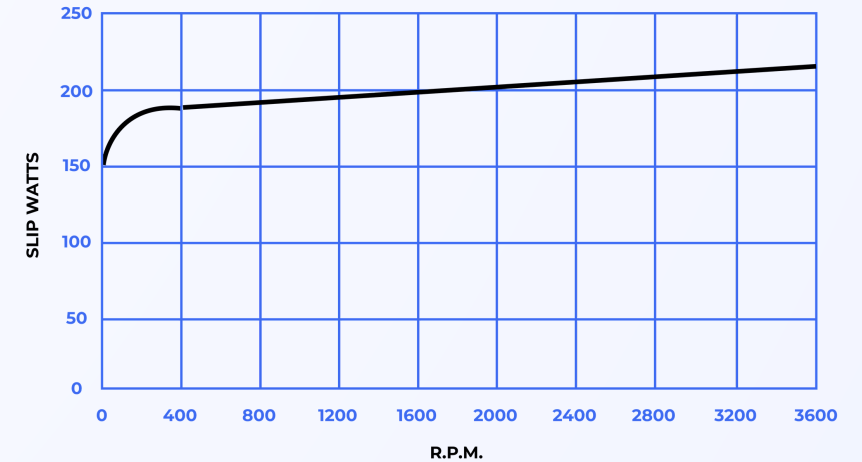
**MODEL CODE**



**TORQUE VS. COIL CURRENT**



**HEAT DISSIPATION VS. SPEED**



**NOTE:** The graph represents the average, continuous heat dissipation capacity of units operating under slip conditions. Slip watts can be calculated using the formula below. To ensure the life of the unit, it may be applied up to or below the curve.

$$\text{Slip watts} = \frac{\text{Torque} \times \text{RPM}}{7.04}$$