

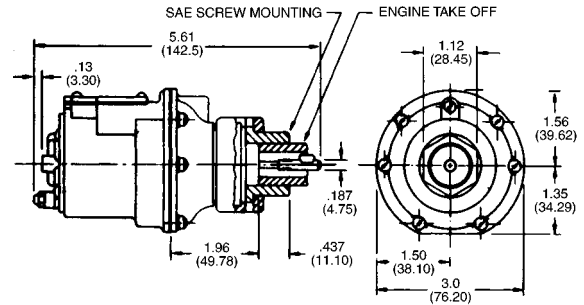
# Model 750 – Type J2/M2



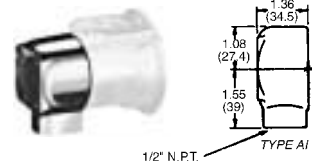
## Screw Mounting



### DIMENSIONS INCHES (MILLIMETERS)



### Binding Post Cover Box



The Model 750 DC Tachometer-Generator embodies a permanent magnet field surrounding a rotating armature. The commutator segments are made from a special non-corrosive alloy which has an exceptionally long life. The brushes are of a self-lubricating material and are carried in a self-aligning holder which equalizes the pressure of both brushes. The armature shaft rotates on ball bearings which under normal operation do not need lubrication for 15,000 hours running time or approximately 3 years, whichever comes first. Maximum recommended speed is 5,000 rpm. Brush life is greatest at the lower speeds.

Dust-proof aluminum alloy housing. S.A.E. 7/8" screw type steel mounting with 3/16" drive dog. Used on Diesel and gas engines where a standard S.A.E. screw type tachometer outlet is available. Two binding posts for electrical connection.

Approximate torque: 3.0 oz.-in. starting, 4.0 oz.-in. running (1000 RPM).  
Approximate weight: 1.8 lbs. (.82 kg.).  
**Cat. No. 750-9906000.**

### SPECIFICATIONS FOR J2 *J2R and M2 Differences are noted.*

#### VOLTAGE OUTPUT AT 1000 RPM:

6 Volts  $\pm 1\%$  Per 1000 RPM

#### ACCURACY:

$\pm 1\%$

#### EMF LINEARITY 1:

$\pm 0.15\%$

#### PERMISSIBLE CURRENT DRAIN:

50 mA

#### MAX. RMS VALUE OF AC RIPPLE:

2%

#### ALLOWABLE END PLAY:

.005"

#### MAX OPERATING TEMPERATURE:

250°F

#### INTERNAL RESISTANCE AT 25°C:

20  $\Omega$   $\pm 2\%$

J2R: 200  $\Omega$   $\pm 2\%$

#### NUMBER OF BRUSHES:

2 Per Set

#### COMPOSITION OF BRUSHES:

Palladium Silver Alloy

#### ARMATURE:

12 Bars, 12 Slots

#### INSULATION:

Insulation Class 105

#### HI-POT TEST:

500 Volts for 1 Min

#### BEARINGS:

Ball

#### TEMPERATURE COMPENSATION:

0.1% Per 10°C Change

#### NORMAL CONTINUOUS SPEED:

2000 RPM

#### MIN SPEED:

100 RPM

#### MAX TOP SPEED 2:

5000 RPM

#### STARTING TORQUE:

J2, J2R: 3.0 oz. ins.

M2: 1.0 oz. ins.

#### RUNNING TORQUE AT 1000 RPM:

J2, J2R: 4.0 oz. ins.

M2: 1.0 oz. ins.

#### WEIGHT:

1.8 lbs.

#### LENGTH:

5.61"

#### HEIGHT:

2.91"

#### WIDTH:

3"

#### MOUNTING:

SAE 7/8" Screw

#### ENCLOSURE:

Dust Resistant

#### SHAFT DIAMETER:

3/16"

#### SHAFT CONNECTION:

Direct

#### SHAFT LENGTH:

.47"

#### ADJUSTABLE MAGNETIC

#### SHUNT RANGE:

$\pm 4\%$

#### DIRECTION OF ROTATION

EFFECT:  $\pm 0.6\%$

**Type J2R**—Same as Type J2, except internal resistance is 200W.  
**Cat. No. 750-9906002.**

**Type M2**—Same as Type J2, except front bearing seal has been eliminated to reduce torque burden. Recommended for use with a low-torque gear box. Approximate torque: 1.0 oz.-in. starting, 1.0 oz.-in. running (1000 RPM). **Cat. No. 750-9906001.**

### Binding Post Cover Box

Provides protection for the terminals, and has a 1/2" NPT connection for conduit. **Cat. No. 9933-0143156**

### Replacement Brush Kit

Metallic leaf brushes are of an alloy which will wear before the commutator bars. Brush replacement is a simple field operation.

**Part No. 249302.901**