

Selectronic® Digital Tachometer – MT90 Model



Features

- ±1 RPM Accuracy
- Easy Calibration
- Clear-Read LCD Display
- Back Light for Night Viewing (Battery Powered models)
- Input Source Can Be a Magnetic Pickup or Engine Alternator
- Power Supplied by Magnetic Pickup or 12, 24, or 32 VDC Battery System

The Murphy Selectronic MT90 digital tachometer offers high accuracy and dependability resulting from use of a quartz crystal time based and digital, solid-state electronics.

Tachometer power is supplied by either a Murphy magnetic pickup, mounted at the flywheel ring-gear of an engine, or by a 12, 24 or 32 volt DC battery system.

RPM data is supplied by either a Murphy magnetic pickup or by the alternator in your battery charging circuit. The MT90 tachometer also has back-lighting for easy readings in low lit areas; this lighting requires a battery power source.

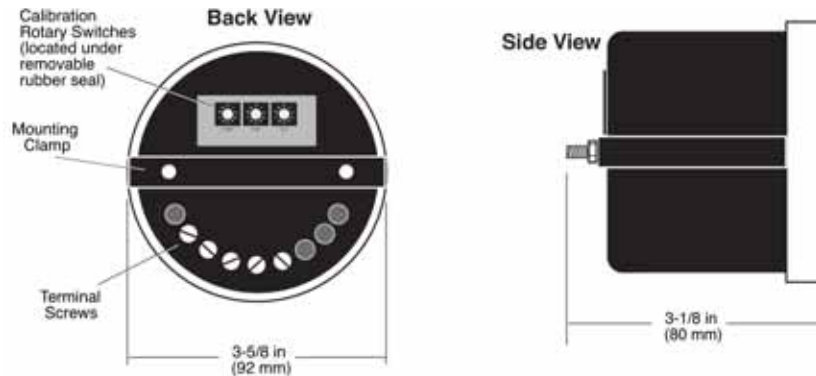
RPM Calibration

The MT90 is calibrated to engine RPM by setting a series of calibration rotary switches on the back of the tachometer. The proper switch sequence for the engine is determined by (1) the number of ring gear teeth for the magnetic pickup, or (2) by the ratio of alternator to engine pulley diameter, and the number of poles of the alternator.

Applications

Typical applications include: Generators, Compressors, Industrial Engines, Oil Field Equipment, Marine Vessels, Vehicles, Farm Equipment, and Construction Equipment.

Dimensions



Magnetic Pickups



Pickup Models	Total Length	Threaded Length	Thread Size
MP3298*	3 in. (76 mm)	3 in. (76 mm)	5/8-18 UNF
MP7906†	3 in. (76 mm)	3 in. (76 mm)	3/4-16 UNF
MP7905‡	4-1/2 in. (114 mm)	4-1/2 in. (114 mm)	3/4-16 UNF

* Replaces 20-01-0080 and MP100. Lead wire hookup (12 in. [305 mm]).

† Replaces 20-01-0081. Lead wire hookup (12 in. [305 mm]).

‡ Replaces 20-01-0082. Lead wire hookup (12 in. [305 mm]).

Specifications

Signal Input Voltage: 4 to 35 Vrms from a magnetic pickup or alternator.*

Pulses per Revolution: 3 to 999.

Power Requirements:

- Pickup Power: 4-35Vrms*.
- Battery Power: 8-40 VDC (12, 24, 32 volt).

Current:

- Tach back-light Off, 4mA @ 40 VDC.
- Tach back-light On, 25 mA @ 40 VDC.

* See "Special Note" for Magnetic Pickup Powered MT90 applications

Case: 1018 polycarbonate/polyester blend.

Lens: Polycarbonate.

Bezel: #430 Stainless Steel.

Display: LCD, 4-digit, seven segment.

Operating Temperature: -4 to 158°F (-20 to 70°C).

Storage Temperature: -13 to 185°F (-25 to 85°C).

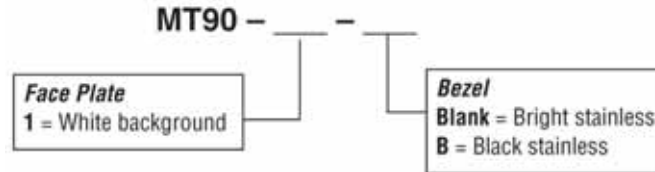
Mounting Hole: 3-7/16in. (87 mm).

Shipping Weight: 14 oz. (0.4 kg).

Shipping Dimensions: 5-1/2 x 5-1/2 x 5-1/2in. (140 x 140 x 140 mm)

How to Order

To order a MT90 for your application, use the diagram below.



To order a magnetic pickup, specify model number. Example: **MP3298**

Warranty - A limited warranty on materials and workmanship is given with this FW Murphy product.
A copy of the warranty may be viewed or printed by going to <http://www.fwmurphy.com/warranty>