

# Selectronic® Digital Tachometer MT90 Model

The Murphy Selectronic MT90 digital tachometer offers high accuracy and dependability resulting from use of a quartz crystal time-base 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.

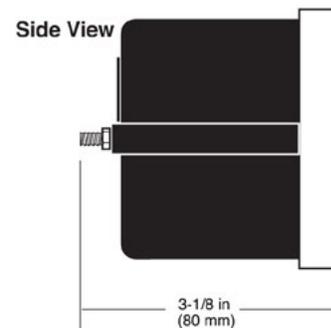
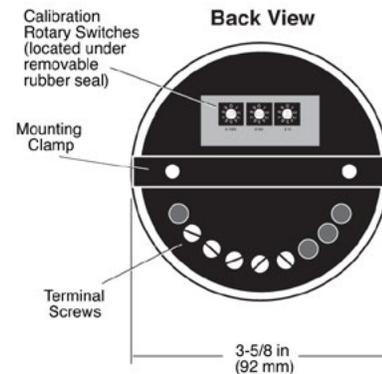
RPM data is supplied by either a Murphy magnetic pickup or by the alternator in your battery charging circuit. The MT90 tachometer also has backlighting for easy readings in low-lit areas. This lighting requires a battery power source.

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.

Typical applications include: generators, compressors, industrial engines, oil field equipment, marine vessels, vehicles, farm equipment and construction equipment.



## Dimensions



## 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 backlight Off, 4mA @ 40 VDC

Tach backlight On, 25 mA @ 40 VDC

**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)

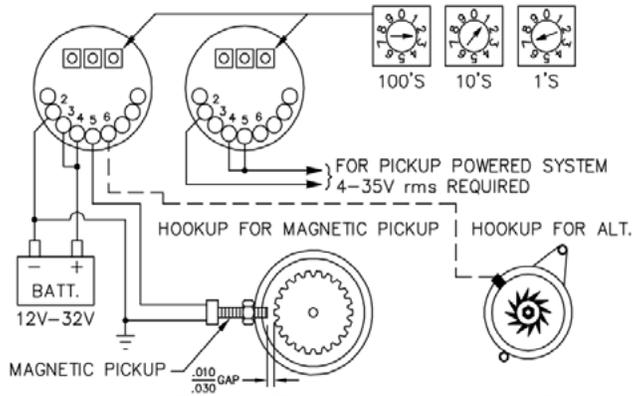
**Storage Temperature:** -13° to 185°F (-25° to 85°C)

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

**Shipping Weight:** 14 oz. (0.4 kg)

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

# Connection Diagram



## MT90 DIGITAL TACHOMETER

TO READ RPM:  
SET SWITCHES FOR TEETH/  
PULSES PER REVOLUTION

TO READ HERTZ:  
SET AT 60

## Magnetic Pickups

MP3298



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])

## How to Order

Options listed below. All configurations may not be available. Call your sales representative or Enovation Controls for more information.

