

## PowerView™ PVM Series Gages



### Features

- For modern electronic engines and equipment using SAE J1939 Controller Area Network
- Display SAE J1939 parameters broadcast by the PowerView system.
- Cutting-edge, stepper motor technology and robust functionality combined
- Microprocessor driven for high accuracy
- Simple installation and wiring design

The PowerView PVM Series gages are intelligent gages designed to display easy-to-read information transmitted by the PowerView. The PVM gages communicate with the PowerView via a single RS485 twisted pair MODBUS® RTU serial link. The gages can be daisy-chained using quick-connect harnesses.

The major feature of the PVM gages is their balance between design and functionality. These modern gages offer a selection of bezel styles and colors shown on page 3 of this document.

The PVM gages also include features such as a smooth stepper motor operation for the 270° sweep pointer, an environmentally sealed case with two Amp Mini Universal Mate-N-Lok connectors molded into the casing, and green LED back lighting. They are available for standard 2-1/16 in. (52 mm) and 3-3/8 in. (86 mm) diameter hole sizes. In addition their plastic cases incorporate a “D” shape allowing panel cutouts that eliminate gage rotation during installation.

### PVM20 Series Models

- PVM20-A = Engine Oil Pressure
- PVM20-B = Coolant Temperature
- PVM20-C = Voltmeter
- PVM20-D = Percent Load at current RPM
- PVM20-E = Transmission Oil Pressure
- PVM20-F = Transmission Oil Temperature
- PVM20-G = Engine Oil Temperature
- PVM20-H = Hydraulic Oil Temperature
- PVM20-J = Percent Fuel Level
- PVM20-K = Boost Pressure
- PVM20-L = Exhaust Gas Temperature
- PVM20-M = Intake Manifold Temperature
- PVM20-N = Auxiliary Temperature
- PVM20-P = Auxiliary Pressure
- PVM20-T = Tachometer

### PVM35 Series Models

- PVM35-T = Tachometer
- PVM35-S = Speedometer

# Specifications

## PV101 Compatibility

- Maximum supported: 5 PVM Gages
- Maximum distance to last gage: 8.5 Meters

## Power Supply Input Voltage

- 5V (4.5-5.5 VDC minimum & maximum voltage)

## Power Supply Operating Current (@ 5 VDC) =

- PVM20, PVM35: 18 mA minimum; 80 mA maximum

## Backlight Maximum Current: 60mA

Input: RS485 MODBUS® RTU data.

Output: Analog Readout.

## Environmental

Operating Temperature: -40 to 185°F (-40° to 85°C)

Storage Temperature: -67 to 185°F (-55° to 85°C)

## Environmental Sealed Enclosure:

- Sealing: IP68, ±5 PSI (± 34.4 kPa)
- Case and Clamp Material: Polyester (PBT)
- Lens Material: Polycarbonate
- Bezel Material: Polyester (PBT)

Dial: White numerals over black background

Return-To-Zero Needle Movement: Not Available for PVM20 models.

Indicating Pointer: Stepper motor operation with 270° sweep

Gage Accuracy: Better than ± 1.0% of scale

Maximum Panel Thickness: 3/8 inch (9.6 mm)

## Connectors:

- Amp Mini Universal Mate-N-Lok
- Amp Plug P/N: 172338-1
- Amp Socket P/N: 171639-1

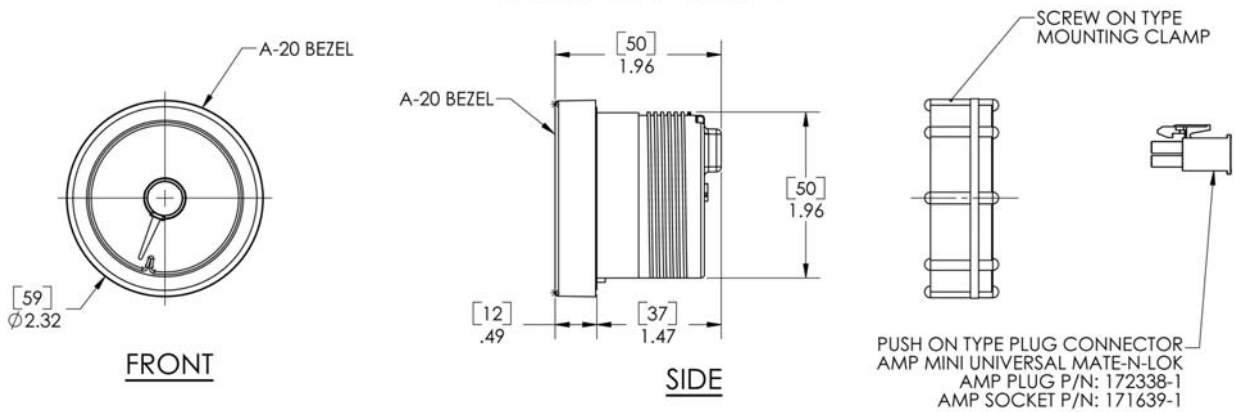
Shipping Weight: 1 Lb. (450 g.)

## Shipping Dimensions:

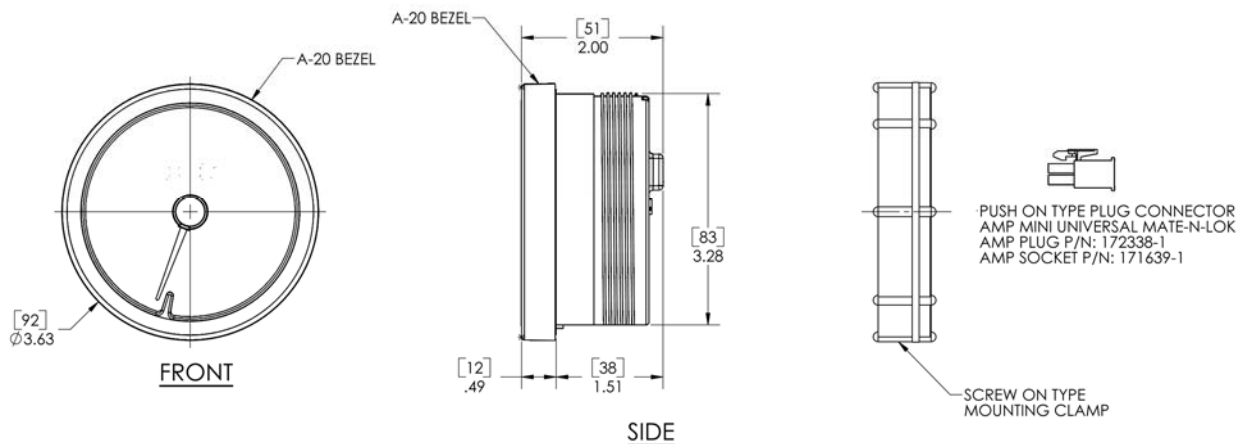
- 6 x 6 x 6 in. (153 x 153 x 153 mm)

# Typical Gage Dimensions

## PVM20 Series





## PVM35 Series











**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 [www.fwmurphy.com/support/warranty.htm](http://www.fwmurphy.com/support/warranty.htm)

## Bezel Styles

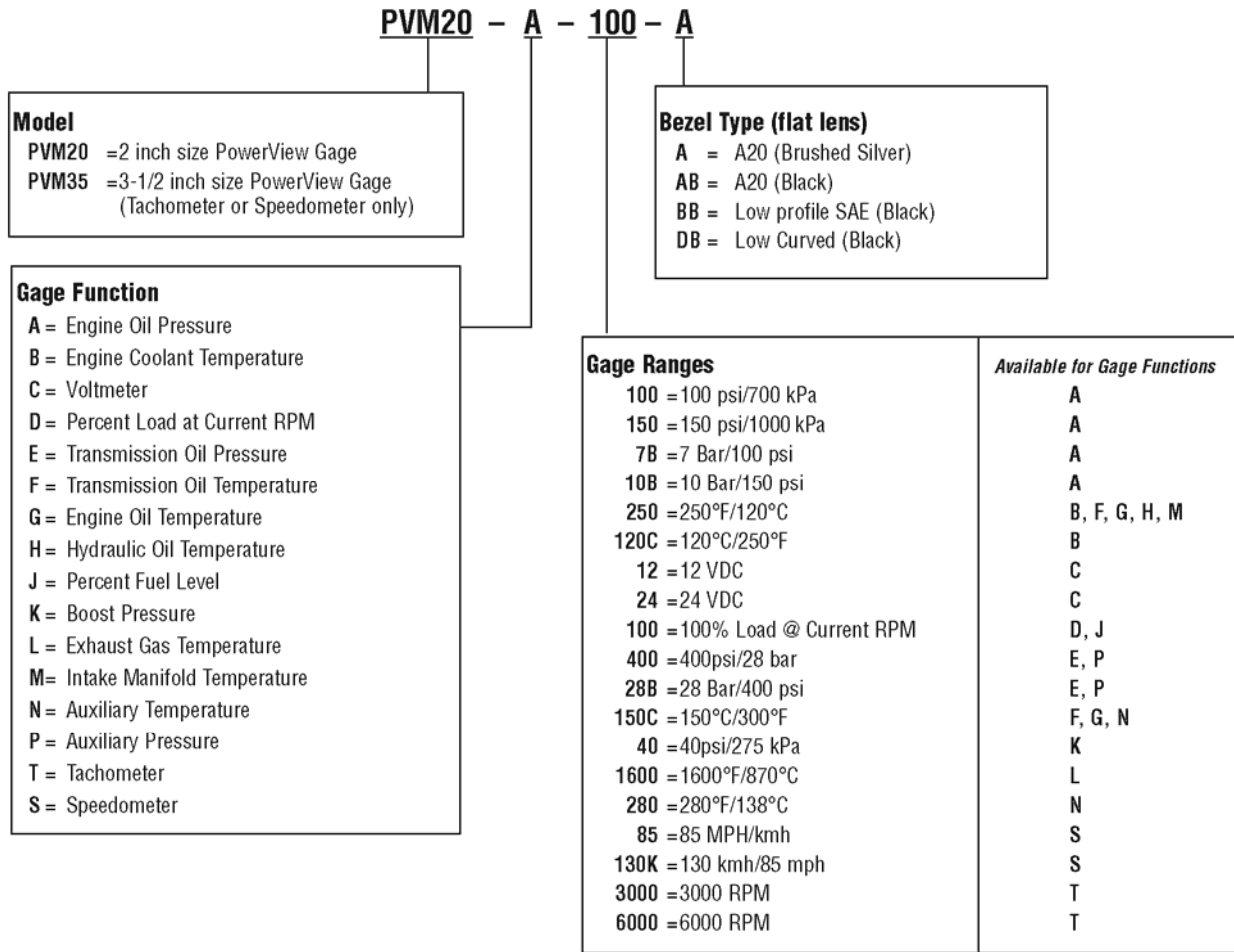
### PVM20 Series – 2 inch size gages

<b>AB</b> A-20 Style	<b>A</b> A-20 Style	<b>BB</b> Low Profile SAE Style	<b>DB</b> Low Curved Style
 	 	 	 

### PVM35 Series – 3-1/2 inch size gages

<b>AB</b> A-20 Style	<b>A</b> A-20 Style	<b>BB</b> Low Profile SAE Style	<b>DB</b> Low Curved Style
 	 	 	 

# How to Order



## Wiring Harnesses and Accessories

For details see bulletin "0710179 – Wiring Harness Accessories for PVM Gages".

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