

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 lens and bezel styles and colors.

The PVM gages also include features such as a smooth stepper motor operatio 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 2-1/6" (52mm) and 3-3/8" (86mm) 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, 5.5 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.)

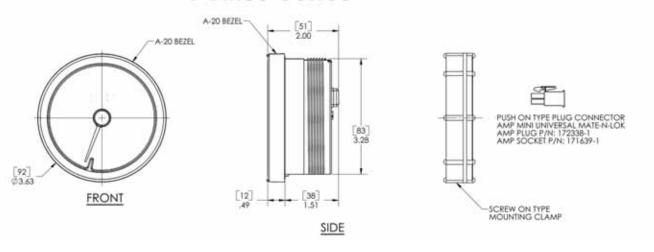
Shipping Dimensions:

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

Typical Gage Dimensions

PVM20 Series SCREW ON TYPE MOUNTING CLAMP A-20 BEZEL A-20 BEZEL FRONT SIDE PUSH ON TYPE PLUG CONNECTOR AMP MINI UNIVERSAL MATE-N-LOK AMP PLUG P/N: 172338-1 AMP SOCKET P/N: 171639-1

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 http://www.fwmurphy.com/warranty

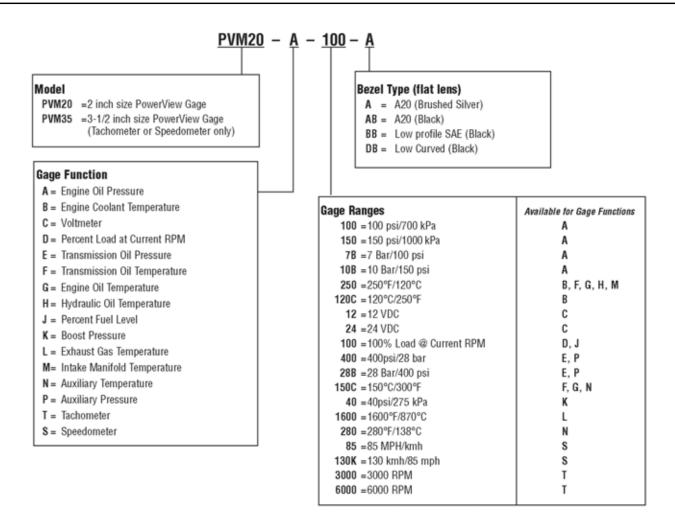
Bezel Styles

PVM20 Series - 2 inch size gages



PVM35 Series - 3-1/2 inch size gages





Wiring Harnesses and Accessories

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