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 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 2-1/6” (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)

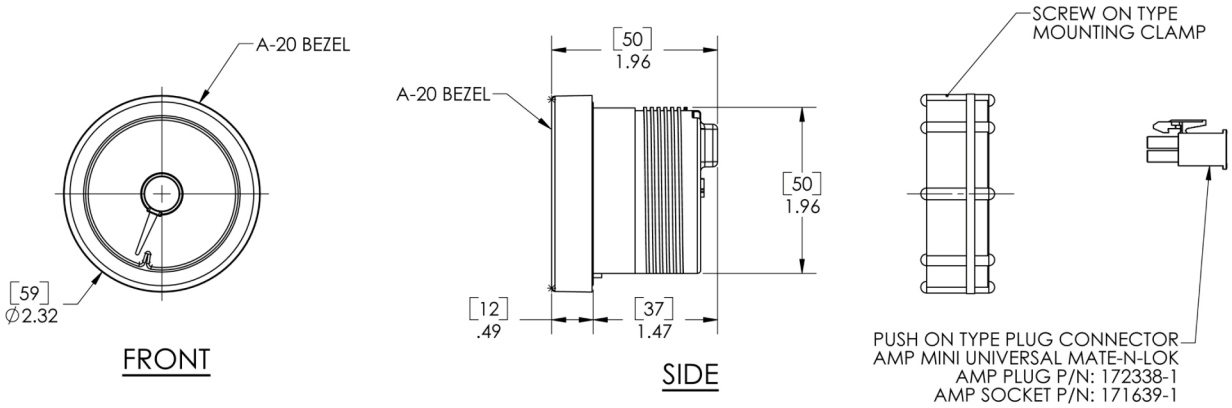
Connectors:
- Amp Mini Universal Mate-N-Lok
- Amp Plug P/N: 172338-1
- Amp Socket P/N: 171639-1

Shipping Weight: 1 Lb. (450 g.)

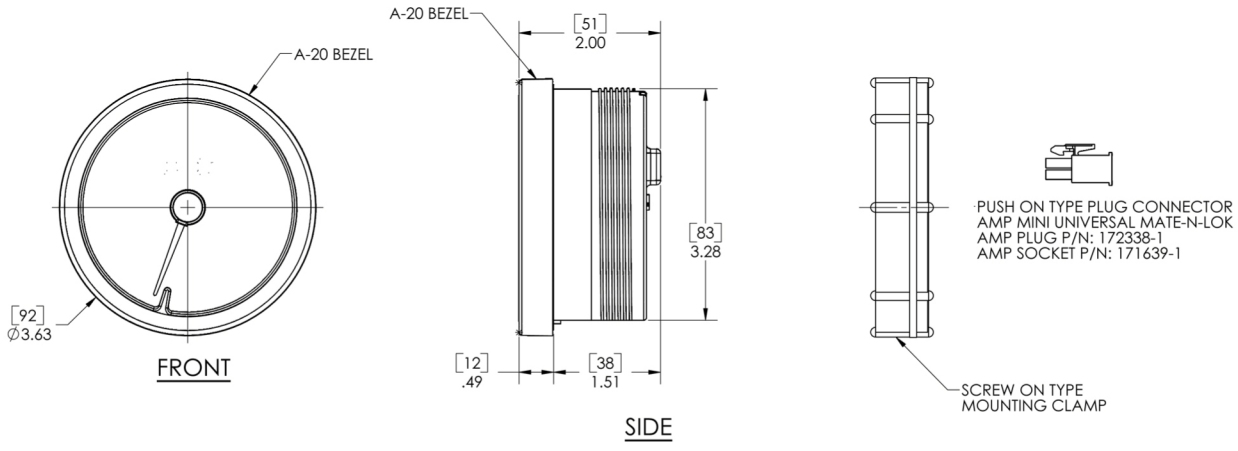
Shipping Dimensions:
- 6 x 6 x 6 in. (153 x 153 x 153 mm)

Typical Gage Dimensions

PVM20 Series

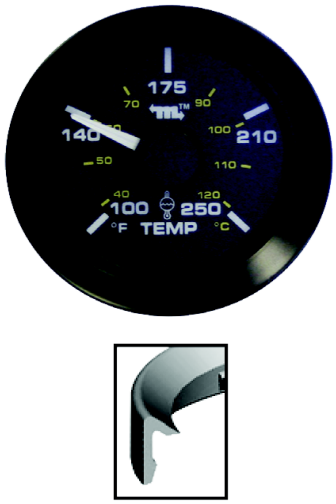


PVM35 Series



Bezel Styles

PVM20 Series – 2 inch size gages

AB A-20 Style	A A-20 Style	BB Low Profile SAE Style
		
		

PVM35 Series – 3-1/2 inch size gages

AB A-20 Style	A A-20 Style	BB Low Profile SAE Style
		
		

How to Order

PVM20 – A – 100 – A

Model
- **PVM20** =2 inch size PowerView Gage
- **PVM35** =3-1/2 inch size PowerView Gage (Tachometer or Speedometer only)

Bezel Type (flat lens)
- **A** = A20 (Brushed Silver)
- **AB** = A20 (Black)
- **BB** = Low profile SAE (Black)
- **DB** = Low Curved (Black)

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

Gage Ranges	*Available for Gage Functions*
100 =100 psi/700 kPa	**A**
150 =150 psi/1000 kPa	**A**
7B =7 Bar/100 psi	**A**
10B =10 Bar/150 psi	**A**
250 =250°F/120°C	**B, F, G, H, M**
120C =120°C/250°F	**B**
12 =12 VDC	**C**
24 =24 VDC	**C**
100 =100% Load @ Current RPM	**D, J**
400 =400psi/28 bar	**E, P**
28B =28 Bar/400 psi	**E, P**
150C =150°C/300°F	**F, G, N**
40 =40psi/275 kPa	**K**
1600 =1600°F/870°C	**L**
280 =280°F/138°C	**N**
85 =85 MPH/kmh	**S**
130K =130 kmh/85 mph	**S**
3000 =3000 RPM	**T**
6000 =6000 RPM	**T**

Wiring Harnesses and Accessories

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