

PowerView™ - PVCAN20 & PVCAN35 Series Gages – Installation Instructions



Features

- For modern electronic engines and equipment applications using the SAE J1939 Controller Area Network
- Displays SAE J1939 parameters broadcast via CAN
- Cutting-edge, stepper motor technology and robust functionality combined
- Microprocessor driven for high accuracy
- Simple installation and wiring design

The PowerView CAN (PVCAN) series is a line of intelligent gages designed for easy-to-read analog display of CAN SAE J1939 engine and equipment data. These gages are designed to be wired directly to the J1939 CAN bus, without the need of an intermediate device or interface. Features include smooth stepper motor operation for the 270-degree sweep pointer, and green LED backlighting that can be dimmed using an analog potentiometer or a CAN command.

PVCAN gages are available in several silver or black bezel styles, with flat or domed lenses, for standard 2 1/6-inch (52mm) and 3 3/8-inch (86mm) diameter cutout sizes. The environmentally sealed polycarbonate/polyester case incorporates molded Deutsch DT-style connectors, a quick-fit screw clamp and a D-shaped section for panel cutouts that eliminate gauge rotation during installation.

All PowerView gages can be powered by 12- or 24-VDC systems.

PVCAN20 Series Models: 2 inch size gages

More gage options may be available; call Enovation Controls for more information on specific gages not shown.

PGN	Model	Description
65263	PVCAN20-A	Engine Oil Pressure
65262	PVCAN20-B	Coolant Temperature
65271	PVCAN20-C	Voltmeter
		- 12/24: SPN 158 - 12C/24C: SPN 168
61443	PVCAN20-D	Percent Load at Current RPM
65272	PVCAN20-E	Transmission Oil Pressure
65272	PVCAN20-F	Transmission Oil Temperature
65262	PVCAN20-G	Engine Oil Temperature
65128	PVCAN20-H	Hydraulic Oil Temperature
65276	PVCAN20-J	Percent Fuel Level

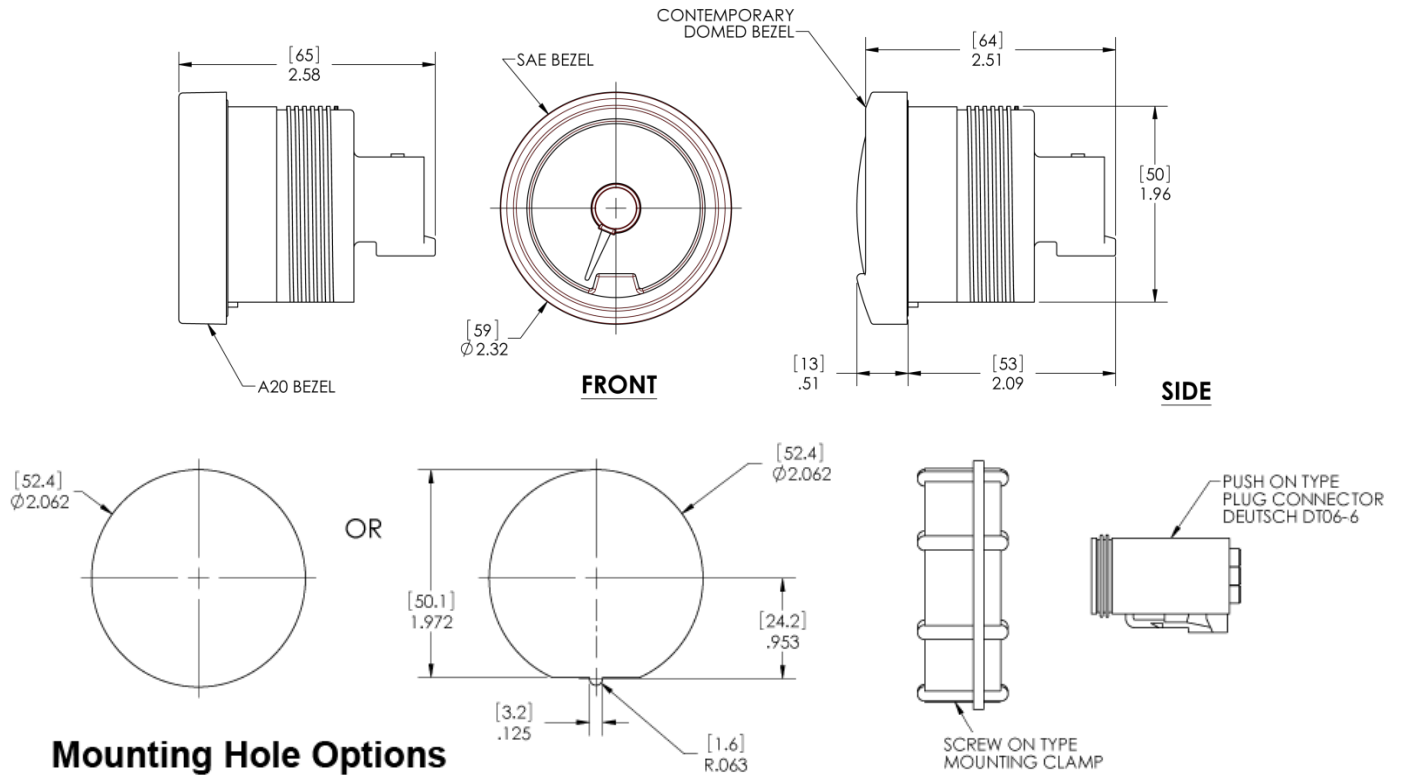
PGN	Model	Description
65270	PVCAN20-K	Boost Pressure
65270	PVCAN20-L	Exhaust Gas Temperature
65270	PVCAN20-M	Intake Manifold Temperature
61444	PVCAN20-T	Tachometer
65110	PVCAN20-BA	DEF Level

PVCAN35 Series Models: 3.5 inch size gages

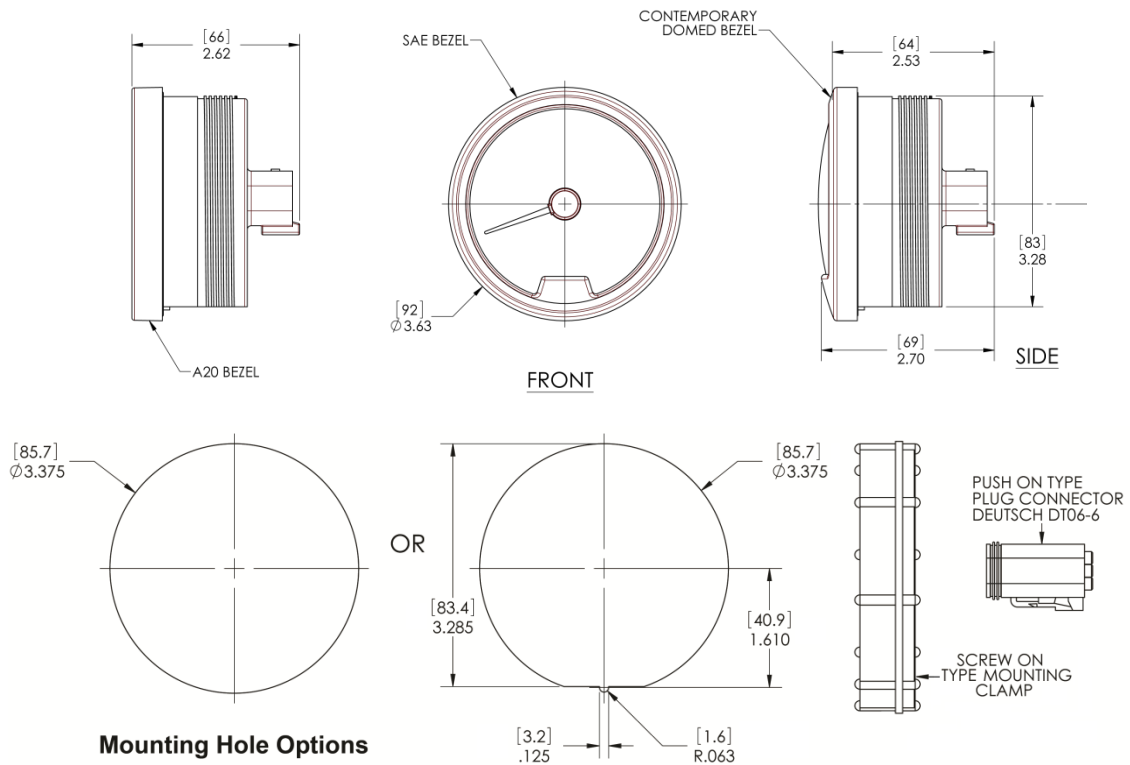
PGN	Model	Description
61444	PVCAN35-T	Tachometer
65265	PVCAN35-S	Speedometer

Dimensions and Mounting

PVCAN20 Series Typical Installation and Mounting Dimensions



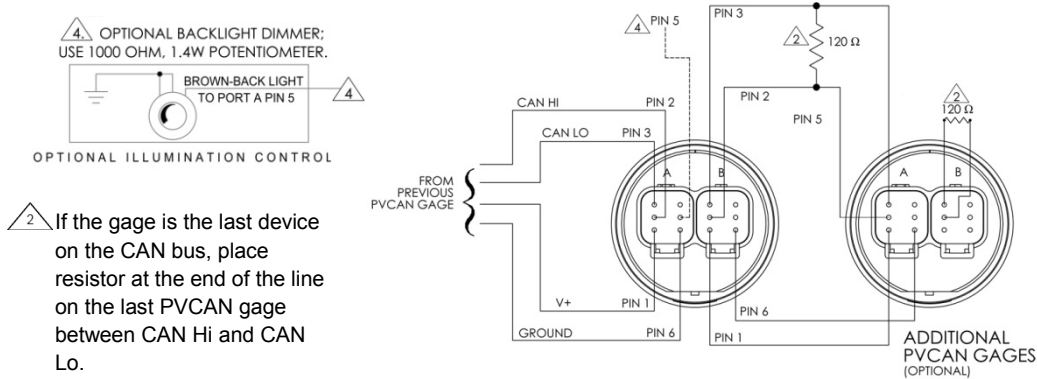
PVCAN35 Series Typical Installation and Mounting Dimensions



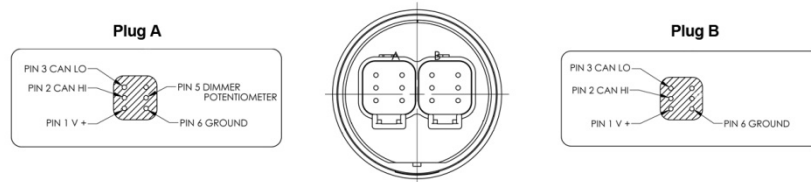
Wiring Diagrams

PVCAN20 Gages - Back View and Typical Connectors PIN Designation

PVCAN20 Gages Back View

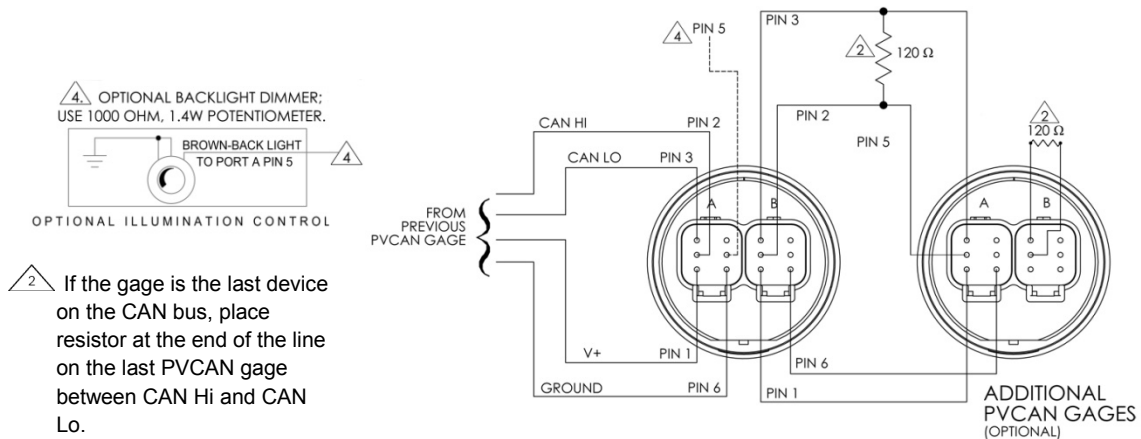


PVCAN20 Gages Typical Connectors PIN Designation

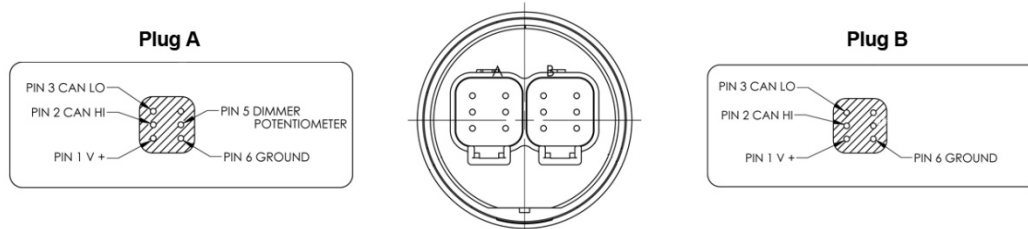


PVCAN35 Gages - Back View and Typical Connectors PIN Designation

PVCAN35 Gages Back View



PVCAN35 Gages Typical Connectors PIN Designation



Specifications

Power Supply Input Voltage

12/24V (8-32VDC min. and max. voltage)

Power Supply Operating Current

Typically 70mA

Backlight Maximum Current (not applicable to PVCAN20): 45mA

Analog Input Backlight Dimmer: Use 1000 OHM, 1.4W Potentiometer

Backlight Control VIA J1939:

Default PGN: 0xFFFE

1st Byte: 0x5A (Murphy ID)

2nd Byte: 0x01 (Command Byte)

3rd Byte: 0x00 to 0x64 (0-100%)

4th-8th Bytes: 0xFF

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

Storage Temperature: -60°C to 85°C (-76°F to 185°F)

Dial: White numerals over black background

Output: Analog Readout

Indicating Pointer: Stepper motor operation with 270° sweep

Gage Accuracy: Better than +/- 1% of full scale

Environmentally Sealed Enclosure:

Environmental Sealing: IP68, ±5 PSI (± 34.4 kPa)

Case Material: Polycarbonate/Polyester (PC+PBT)

Clamp Material: Polyester (PBT)

Lens Material: Polycarbonate

Bezel Material: ABS

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

Connectors: 6-Pin Deutsch DT06 Series

Electromagnetic Compatibility: 2004/108/EC

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