

# PowerView™ CAN Gages



## Features

- For modern electronic engines and equipment using 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
- No driving device required

The **PowerView CAN Gages (PVCAN)** are a series of intelligent gages designed to display easy-to-read information broadcast over the SAE J1939 communications. These gages are designed to be wired directly to the J1939 CAN bus without the need of another device driving them.

The PVCAN gage include features such as a smooth stepper motor operation for the 270° sweep pointer, an environmentally sealed case with two Deutsch DT style 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 polycarbonate cases incorporate a "D" shape allowing panel cutouts that eliminate gage rotation during installation.

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

## PVCAN Series Models: 2 inch size gages

- PVCAN20-A = Engine Oil Pressure
- PVCAN20-B = Coolant Temperature
- PVCAN20-C = Voltmeter
- PVCAN20-D = Percent Load at Current RPM
- PVCAN20-E = Transmission Oil Pressure
- PVCAN20-F = Transmission Oil Temperature
- PVCAN20-G = Engine Oil Temperature
- PVCAN20-H = Hydraulic Oil Temperature
- PVCAN20-J = Percent Fuel Level
- PVCAN20-K = Boost Pressure
- PVCAN20-L = Exhaust Gas Temperature
- PVCAN20-M = Intake Manifold Temperature
- PVCAN20-N = Auxiliary Temperature
- PVCAN20-P = Auxiliary Pressure
- PVCAN20-T = Tachometer

## PVCAN Series Models: 3.5 inch size gages

- PVCAN35-T = Tachometer
- PVCAN35-S = Speedometer

## Specifications

### Power Supply Input Voltage:

12/24V (8-32VDC Minimum and Maximum Voltage)

### Power Supply Operating Current:

Typically 70mA

### Backlight Maximum Current: 45mA

### Input: CAN (SAE J1939)

### Operating Temperatures:

-40° to 185°F (-40° to 85°C)

### Storage Temperatures:

-76° to 185°F (-60° to 85°C)

### Dial:

White numerals over black background

### Gage Accuracy:

Better than ±1% of scale

### Environmentally Sealed Enclosure:

**IP68:** ±5PSI (±34.4kPa).

**Case and Clamp Material:** Polyester (PBT)

**Lens Material:** Polycarbonate

**Bezel Material:** ABS

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

**Connectors:** 6-Pin Deutsch DT06 Series

**A-20 Style**

**Low Profile SAE Style**

**Contemporary Domed Bezel and Lens Style**

**PVCAN20 Series - 2 inch Size Gages**

AB Bezel Type



A Bezel Type

BB Bezel Type



B Bezel Type

EB Bezel Type



E Bezel Type

**PVCAN35 Series - 3-1/2 inch Size Gages**

AB Bezel Type



A Bezel Type

BB Bezel Type



B Bezel Type

EB Domed Bezel and Lens Type



E Bezel Type

## How to Order

**PVCAN20 - A - 100 - A**

### Model

**PVCAN20** = 2 inch size PowerView Gage  
**PVCAN35** = 3-1/2 inch size PowerView Gage  
 (Tachometer or Speedometer only)

### 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

### Bezel (All Models)

#### Bezel Type (flat lens)

**A** = A20 (Brushed Silver)  
**AB** = A20 (Black)  
**B** = Low profile SAE (Brushed Silver)  
**BB** = Low profile SAE (Black)

#### Bezel Type (domed lens)

**E** = Contemporary Domed (Brushed Silver)  
**EB** = Contemporary Domed (Glossy Black)

### Gage Ranges Available for Gage Functions

|  |                               |
|--|-------------------------------|
| <b>100</b> = 100 psi/700 kPa                   | <b>A</b>                      |
| <b>150</b> = 150 psi/1000 kPa (PVCAN20-A only) | <b>A</b>                      |
| <b>7B</b> = 7 Bar/100 psi                      | <b>A</b>                      |
| <b>10B</b> = 10 Bar/150 psi                    | <b>A</b>                      |
| <b>250</b> = 250°F/120°C                       | <b>B, F, G, H, M</b>          |
| <b>120C</b> = 120°C/250°F                      | <b>B</b>                      |
| <b>12</b> = 12 VDC                             | <b>C</b>                      |
| <b>24</b> = 24 VDC                             | <b>C</b>                      |
| <b>100</b> = 100%                              | <b>D, J</b>                   |
| <b>400</b> = 400psi/28 bar                     | <b>E, P</b>                   |
| <b>28B</b> = 28 Bar/400 psi                    | <b>E, P</b>                   |
| <b>150C</b> = 150°C/300°F                      | <b>F, G, N</b>                |
| <b>40</b> = 40psi/275 kPa                      | <b>K</b>                      |
| <b>1600</b> = 1600°F/870°C                     | <b>L</b>                      |
| <b>280</b> = 280°F/138°C                       | <b>N</b>                      |
| <b>85</b> = 85 mph/130kmh                      | <b>S</b>                      |
| <b>130K</b> = 130kmh/85mph                     | <b>S</b>                      |
| <b>3000</b> = 3000 RPM                         | <b>T</b>                      |
| <b>6000</b> = 6000 RPM                         | <b>T (PVCAN35 model only)</b> |

## Accessories

| Part Number | Model     | Description           |
|-------------|-----------|-----------------------|
| 78000761    | CANJR     | Terminating Resistor  |
| 78000745    | CANW-J-9  | 9" Jumper Harness*    |
| 78000746    | CANW-J-12 | 12" Jumper Harness*   |
| 78000747    | CANW-J-24 | 24" Jumper Harness*   |
| 78000748    | CANW-J-36 | 36" Jumper Harness*   |
| 78000124    | PVW-P-12  | 12" Power/CAN Harness |

\* According to recommended SAE J1939 wiring practices, any device on the CAN bus should be noded into the bus with a distance of no more than 1 meter.

**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>