

## **EG** Series

# Electric Gage & Swichgage® Instrument

The EGS21 Series Swichgage instrument has all of the features of the EG21 Series Gage plus an adjustable set point Power Hall Effect switch output for operating alarms or equipment shutdown. The trip point is adjustable over 90 percent of the scale and has a set point indicator visible from the gage face. Now you can have both the ease of electric gage installation and the reliable switching of Murphy's famous Swichgage instrument.

Features of the EG Series include:

- EG Air Core Movement design
- Technological improvements in lighting, accuracy in reading and wiring installation
- Environmentally sealed design
- Exceeds the rigid SAE J1810 standard
- Corrosion-resistant materials
- Desirable for marine and other environmentally sensitive applications
- Soft, non-glare dial and pointer illumination by cold light LED



**Power Input:** For Gage, Swichgage instrument and sender, 12 VDC or 24 VDC

**NOTE:** EG21 Series gage and EGS21 Series Swichgage instrument MOVEMENT and ILLUMINATION require 12 VDC to function. For 24-volt systems, voltage converters are built into the electrical wire/connector assembly and supplied with instrument. Specify voltage when ordering.

**Case:** Polyester (PBT), impact and weather resistant with convenient screw-on mounting clamp

**Bezel:** Polished 316 stainless steel bezel is supplied as standard; Available in black. SAE style optional.

Lens: Clear polycarbonate and UV stabilized
Air Core Movement: Silicon dampened pointer

**Dial:** Black background and white markings; behind dial lighting (white marking becomes red when illuminated); dual scale with mirror band to reduce parallax reading errors

**Swichgage Instrument Sensor:** Outputs ground signal (sinking output) rated 300 mA continuous (EGS21 Series only). Pressure, fuel, volts set on decreasing scale. Temperature and amps set on increasing scale.

## Output saturation voltage (voltage drop across switch):

1.3-2.3 Volts @ 77°F (25°C) (May require some conditioning to work with logic inputs)

**Swichgage Instrument Set Point Indicator:** Visible on mirror band (scale); adjustable from the back of the unit (1/16 in. hex type wrench)

**Wiring:** Plug connector with wire leads, 18 AWG  $(1.0 \text{ mm}^2) \times 8 \text{ in.}$  (203 mm) length

Operating Temperature: -40° to 185°F (-40° to 85°C) Storage Temperature: -77° to 185°F (-60° to 85°C)

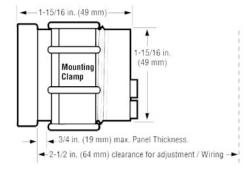
Over Voltage (Gage Movement): With stands a voltage of 200% of nominal system voltage for 5 minutes. (Meets SAE J1810 standards)

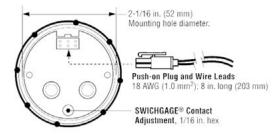
**Reversed Polarity (Gage Movement):** Withstands reversed battery terminal polarity indefinitely within operating temperatures **Environment and Test:** Meets SAE J1810 standards



#### **Dimensions**





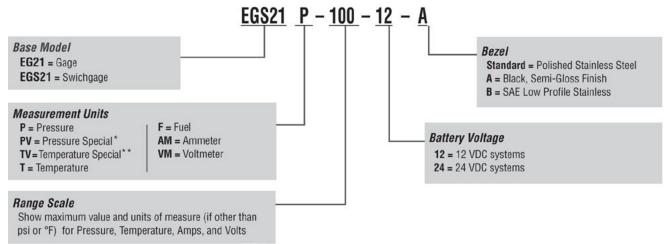


25 50 75 90	Pressure	80 psi	552 kPa	5.52 bar
		100 psi	689 kPa	6.89 bar
		200 psi	1.38 MPa	13.80 bar
		300 psi	2.07 MPa	20.70 bar
		400 psi	2.76 MPa	27.60 bar
7 C 80 70 200	Temperature	250° F	121° C	
		300° F	149° C	
V4 1/2 3/4 F FVEL	Fuel Level	Empty — 1/4 — 1/2 — 3/4 —Full		
50 30 50 AMP'S	Ammeter	60 — 0 — 60 amps (internal shunt)		
80 12 M 18 18 WOLTS	Voltmeter	12 VDC: 8-18 Volts		
		24 VDC: 16-36 Volts		

#### How to Order

Options listed below. All configurations may not be available. Call your sales representative or Enovation Controls for more information.

### **EG** Series Gage and Swichgage Instrument



**NOTE:** EG21 and EGS21 are designed for use with 12-volt systems. For 24-volt systems, voltage reducing resistors are included in the wire/connector assembly. No designator required for Standard configurations.

- \* The **EG21PV-80-**<u>12 or 24</u> is designed to read senders with a resistance curve of 9.5 to 182 Ohms, which are commonly supplied as standard senders on Deutz and VW engines.
- \*\*The **EG21TV-300-**12 or 24 is designed to read senders with a resistance of 240 to 18 Ohms, which are commonly supplied as standard senders on Deutz and VW engines.