

# DIGITAL PRESSURE GAUGE

#### **Product Description**

PIC's line of bulk micro-machined, gage and sealed gage digital pressure gauges for both harsh and benign media with the superior accuracy of  $\pm 0.25\%$  typical represents a significant cost savings over currently available digital gauges. These compact, robust gauges measure pressures from 15 Psi to 5,000 Psi and are well suited for a variety of industrial and commercial applications. PIC, a leading OEM supplier of pressure gauges...having developed full lines of industrial and process gauges, offers the Digital Pressure Gauge, targeted at OEM, industrial and commercial applications where cost, size, and performance are critical.

### **Special Features**

- ➤ Superb Accuracy ±0.25%
- ➤ Robust Package All laser-welded stainless steel design for optimal media isolation
- Maximum Flexibility Custom ASIC provides signal conditioning
- for calibration and temperature compensation of 0-50°C
- > Standard and custom options available
- Compact size, excellent price/performance ratio
- $\geqslant$  8 30 Volt input with 4 20 mA output (optional)



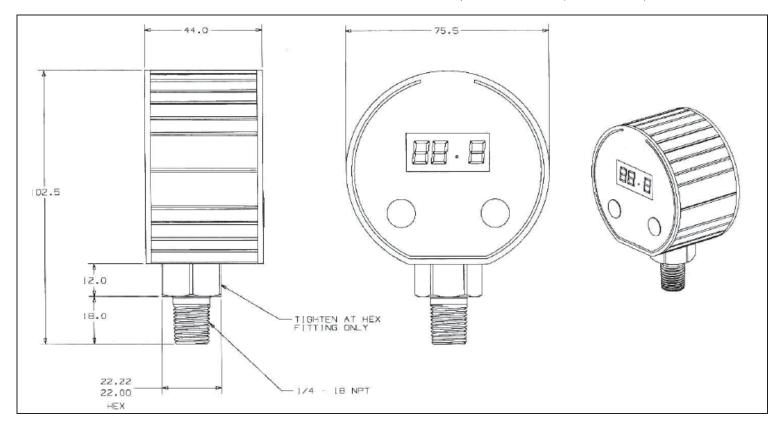
(Pictured with optional rubber cover)

#### Typical Applications

- Refrigeration n Compressors
- Pumps n Flow
- Hydraulics n Agriculture
- Process Control in Hydrogen Storage
- Spraying Systems in Waste Water
- Pneumatics in General Industrial

#### **Standard Full Scale Pressure Ranges**

- ▶ 15, 100, 300, 1000, 3000 and 5000 Psi
- ➤ ±0.25% Accuracy (BFSL) Typical, Least 1 Significant Digit
- > 4-20 mA output (optional)
- > High and Low Limit Set Points (optional)
- Back Lit Display
- Zero Reset
- Multiple Pressure Units (PSI, BAR, kPa)





Performance Specifications (all values at 22°C unless noted otherwise)						
Output Type		Standard	4 – 20 mA			
Accuracy (Typical)	75-3000 PSI	±0.25% FS Least 1 Significant Digit	±0.25% FS Least 1 Significant Digit			
	15-50 PSI	±0.50% FS Least 1 Significant Digit	±0.50% FS Least 1 Significant Digit			
Thermal Error (-10°C to 60°C) (Typical)	75-3000 PSI	±0.25% FS Least 1 Significant Digit	±0.25% FS Least 1 Significant Digit			
	15-50 PSI	±0.50% FS Least 1 Significant Digit	±0.50% FS Least 1 Significant Digit			
Total Error (Typical)	75-3000 PSI	±0.25% FS Least 1 Significant Digit	±0.25% FS Least 1 Significant Digit			
	15-50 PSI	±0.50% FS Least 1 Significant Digit	±0.50% FS Least 1 Significant Digit			
Stability (Typical)		< 0.25% FS/Year	< 0.25% FS/Year			
Zero Pressure Offset			4 mA			
Full Scale Output			20 mA			
Operating Temperature		-10° to 60°C	-10° to 60°C			

## **Electrical Specifications**

Storage Temperature

**Proof Pressure** 

**Burst Pressure** 

Output Type	4 – 20 mA	
Supply Voltage	9V Battery	8 to 30 Volts
Response Time	< 1 ms	< 1 ms
Reverse Polarity Protection	N/A	Yes

-20° to 85°C

3 x FS

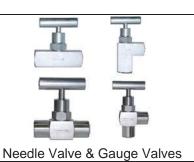
5 x FS

## **Reliability And Environmental Performance**

	Test Conditions	Value	Units
Wetted Materials	304L & 316L Stainless Steel	-	_
Pressure/Temperature Cycles	0 to FS @ 8Hz; and -20° to 85°C	>1.8x10 <sub>6</sub>	Cycles
Thermal Shock	85°C to -20°C, 0.5 hr soaks at Temp. (2s Transfer)	250	Cycles
Vibration	100 to 2050 Hz, 20 Sinusoidal, 3 Axes	144	Hours
EMC Compatibility	80 MHz - 1 GHz	100	V/M
Humidity	40°C and 90% to 95% R. H.	250	Hours

#### **Available Accessories Include:**







-20° to 85°C

3 x FS

5 x FS

For more information, Please contact: