

# "EP" Digital Pressure Gauge & Switch

## Introduction

The Anderson-Negele Digital Pressure Gauge platform is designed specifically for monitoring critical pressures in sanitary Life Sciences applications. The product line was developed to address several trends relative to performance, safety, and readability criteria of our core customers. When compared to mechanical gauges these electronic units provide much better accuracy, resolution, and over-range capability, and are backed by a 2 year warranty! The switch version provides all this, PLUS 2 fully adjustable switches with low-voltage relay outputs for simple control and/or alarming.

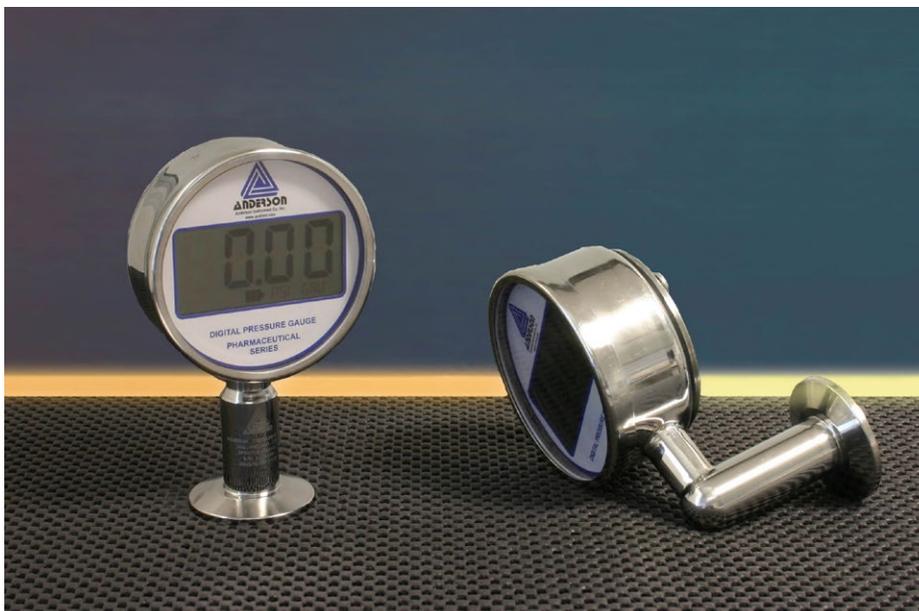
With the elimination of mechanical actuation comes improved reliability. Several other features have been incorporated that customers will find beneficial including a simple, tamper-resistant user interface for easy calibration and programming. The units are programmable for engineering units and all compound units boast auto-scaling to the appropriate units. There's also a "min/max" capture feature that can be used for troubleshooting your process and equipment. Powered by two "AA" batteries, the Digital Pressure Gauge will operate for up to a year before the "low battery" indicator comes on. The switch version operates continuously on DC loop power with battery back up possible to support off-site programming.

Like all Anderson-Negele "Life Sciences Series" products, these instruments are designed to meet the most stringent requirements of the industry. They are constructed entirely of welded stainless steel, not simply industrial or test gauges with sanitary seals added. They are designed to be cleaned and steamed in place (CIP/SIP) and meet the current ASME BPE standards. All wettable parts are 316 "L" stainless steel, electropolished to an Ra of 8 Microinches (0.2 microns). Each is provided with a complete documentation package including material, conformance, and calibration certifications as standard.

Complete specifications and ordering information are available on the reverse. For more information please visit our Web Site at [www.anderson-negele.com](http://www.anderson-negele.com), or contact your local Authorized Anderson-Negele Distributor.

## Features

- Highest accuracy and best over-range of any sanitary gauge
- Largest digital display available in a process gauge
- User programmable via simple operator interface
- Standard Min/Max Pressure capture feature
- Optional Alarm/Control relays
- 3-A compliant; Third party verified
- 2-Year Warranty



**Specifications**

**PERFORMANCE**

Accuracy: ±0.2% of transducer URL (30, 100, 200, 300, 500 psi)  
 ±0.5% of transducer URL (5 psi)  
 Complies with ASME B40.7-1998

Repeatability: ±0.06% of transducer URL (30, 100, 200, 300, 500 psi)  
 ±0.2% of transducer URL (5 psi)

Temperature stability: ±0.10 psi / 10°F change in process or ambient

Over-range Capacity: 2X URL

**OPERATIONAL**

Process Temp Limits: -4° to 127°C (25° to 260°F) continuous  
 Ambient Temp Limits: 4° to 49 °C (40° to 120°F)  
 Engineering Units: Programmable by user, see matrix for selections.

Actuating Fill: 100% mineral oil. Meets FDA requirements (21 CFR, 172.878 and 178.3620(a))

Compound ranges: Full Vacuum to selected positive pressure. If set to "HG, display reads in "HG when in the vacuum range and PSIG when there is positive pressure.

Min / Max Pressure: Captured and stored in non-volatile memory, may be cleared via tamper-resistant toggle.

**ELECTRICAL**

Power: Digital Gauge - 2 "AA" replaceable batteries up to one-year expected life with industrial grade batteries Digital Gauge with Switch - 9-30 Volts DC loop power

Relay Outputs (switching only): Two (2) independent, adjustable setpoint relays: Contact rating 1 amp at 24 volts DC,

SPST. May be ordered with normally open or closed contacts.

**MECHANICAL**

Display: LCD, with 0.9" height  
 Wetted Material: 316 "L" Stainless Steel, welded and polished to max Ra = 8 microinches (0.2 microns) - Hastelloy C22 optional  
 304 Stainless Steel, welded

Housing: Polysulphone  
 Lens: Polysulphone

**APPROVALS AND DOCUMENTATION**

Sanitary: Meet current ASME BPE-2014 standards; 3-A compliant, Third Party Verified  
 Complies with the Pressure Equipment Directive relative to Sound Engineering Practices

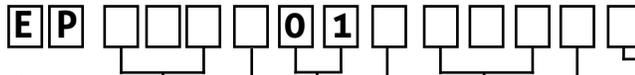
Electrical: Tested to IEC 61326 Standard for Emissions and Immunity in Industrial locations  
 Meets or exceeds requirements for NEMA 4X Material, Conformance and Calibration: Certificates provided with product, also available on-line using serial number

**OPTIONAL INTERFACE MODULE**

Operating Voltage: 90 to 260 VAC, 50/60 Hz, 10 V max.  
 AC Dip and Surge Protection: 60 to 375 VAC for 5 seconds max.  
 Operating Current: 1/8 amp, 115-230 VAC  
 Relay Contact Rating: 6 amp, 250 VAC inductive/resistive and 4 amp, 30 VDC max.

Power Loss Hold Up Time: 40 milliseconds at full load and 115 VAC min.

**Order Information**



**RANGE (Available units/URL)**

- 025 Full vacuum to 0 psi (M,B/30 psig)
- 028 Full vacuum to 0 to 15 psi (C,B/30 psig)
- 029 Full vacuum to 0 to 30 psi (C,B/30 psig)
- 031 Full vacuum to 0 to 60 psi (C,B/100 psig)
- 032 Full vacuum to 0 to 100 psi (C,B/100 psig)
- 059 0-5 psig (G,B,W/5 psig)
- 063 0-15 psi (G,B,W/30 psig; A/15 psia)
- 066 0-30 psi (G,A,B,W/30 psi)
- 068 0-50 psi (G,A,B,W/100 psi)
- 069 0-60 psi (G,A,B,W/100 psi)
- 071 0-100 psi (G,A,B,W/100 psi)
- 073 0-150 psi (G,A,B/200 psi)
- 074 0-160 psi (G,A,B/200 psi)
- 075 0-200 psi (G,A,B/200 psi)
- 077 0-300 psi (G,A,B/300 psi)
- 081 0-500 psi (G,B/500 psig)

**ENGINEERING UNITS**

- G PSIG
- M Hg(inches Mercury)
- A PSIA
- B BAR
- C Vacuum/Pressure("Hg&PSIG)
- W Inches WC

**NAME ON DIAL**

- O1 Anderson-Negele

**SWITCHING OPTION**

- 0 No Switching
- 1 Switching with 2 Normally Open Relays
- 2 Switching with 2 Normally Closed Relays

**DIAPHRAGM MATERIAL**

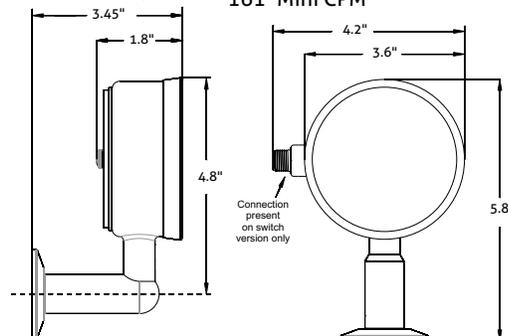
- 1 316L Stainless Steel (std.)
- 2 Hastelloy

**MOUNTING**

- 1 Bottom
- 4 Back
- 5 Left
- 6 Right

**FITTINGS/PROCESS CONNECTIONS**

- 002 3/4 Tri-Clamp®
- 003 1" Tri-Clamp®
- 004 1-1/2" Tri-Clamp®
- 005 2" Tri-Clamp®
- 016 1-1/2" Cherry-Burrell I-line(male)
- 017 2" Cherry-Burrell I-line (male)
- 059 1-1/2" NPT male <sup>1</sup>
- 123 Anderson CPM Flushmount
- 161 Mini CPM



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