

# Digital Pressure Gauge & Switch

## Introduction

The Anderson-Negele Digital Pressure Gauge platform is designed specifically for monitoring critical pressure applications in the Food, Beverage, and Dairy Industries. The product line was developed to address customer requirements for improved performance, safety, and readability of pressure indicators. The Anderson-Negele Digital Pressure Gauge provides a battery-powered, local display of pressure that is 6 times more accurate than its mechanical counter-part. Additionally, this product has 3 times the over-range capacity and 5-10 times the resolution of traditional mechanical pressure indicators. The switch version includes 2 fully adjustable switches with low-voltage relay outputs for simple control and/or alarming applications.

The Anderson-Negele Digital Pressure Gauge offers improved reliability over traditional gauges because it does not utilize mechanical actuation. 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 is also a "min/max" data capture feature that facilitates process and equipment troubleshooting. The Digital Pressure Gauge is powered by two "AA" batteries and will operate 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 sight programming.

Like all Anderson-Negele products, these instruments are designed to meet the most stringent requirements of the sanitary fluid process industries. 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 3A standards. All wettable parts are 316 "L" stainless steel, and both the gauge and switch version carry a NEMA 4X rating to withstand wash-down.

The Anderson-Negele Digital Pressure Gauge is another revolutionary design from the company that specializes in sanitary instrumentation products that solve customer problems.

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.

## Authorizations



## 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 data storage feature
- Optional Alarm/Control relays
- 3-A compliant; Third party verified
- 2-Year Warranty
- Rated Nema 4X for Wash-down



**Specifications (Apply to Gauge and Switch unless noted)**

**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: 25° to 260°F (-4° to 127°C) continuous

Ambient Temp Limits: 40° to 120°F (4° to 49°C)

Engineering Units: Programmable by user, see matrix for selections.

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 (Switch Only): Two (2) independent, adjustable setpoint relays: Contact rating 1 amp at 24 volts DC,

**MECHANICAL**

Display: LCD, with 0.9" height

Wetted Material: 316 "L" Stainless Steel, welded and polished to max Ra = 25 microinches, Hastelloy C22 optional

Housing: 304 Stainless Steel, welded

Lens: Polysulphone

Actuating Fill: 100% mineral oil, Meets FDA requirements (21CFR, 172.828 and 178.3620(a))

**APPROVALS AND DOCUMENTATION**

Sanitary: Authorized to display the 3-A Symbol, Third Party Verified

PED: Complies with the Pressure Equipment Directive relative to Sound Engineering Practices

Electrical: Tested to IEC 61326 Standard for Emissions and Immunity in Industrial locations

Enclosure: Meets or exceeds requirements for NEMA 4X

**OPTIONAL INTERFACE MODULE**

Operating Voltage: 90 to 260 VAC, 50/60 Hz, 10 V max.

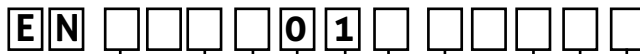
AC Dip and Surge Protection: 60 to 375 VAC for 5 seconds max.

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**

- 01 Anderson Instrument Co.

**SWITCHING/CONNECTOR**

- 0 No Switching
- 1 2 SPST Relays

**DIAPHRAGM MATERIAL**

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

**MOUNTING**

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

**FITTINGS/PROCESS CONNECTIONS**

- 004 1-1/2" Tri-Clamp
- 005 2" Tri-Clamp
- 006 2-1/2" Tri-Clamp
- 007 3" Tri-Clamp
- 016 1-1/2" Cherry-Burrell I-line(male)
- 017 2" Cherry-Burrell I-line (male)
- 045 2" #14 Bevel Seat w/13-H nut
- 049 2" #15 Bevel Seat (threaded male)
- 059 1-1/2" NPT male <sup>1</sup>
- 106 2" AB Perlick w/ 814-C hex nut <sup>1</sup>

