



**P R E S S U R E  
T E M P E R A T U R E  
L E V E L  
I N S T R U M E N T A T I O N  
F L O W  
A N A L Y T I C A L**

## Digital Pressure Gauge & Switch

- *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 in accordance with standard 74-02*
- *2-Year Warranty*

The Anderson Digital Pressure Gauge platform is designed specifically for monitoring critical pressures in sanitary BioPharmaceutical 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 at least a year before the "low battery" indicator comes on. The switch version operates on DC loop power with battery back up to support off-site programming.

Like all Anderson "Pharmaceutical-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  $R_a$  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.andinst.com](http://www.andinst.com), or contact your local Authorized Anderson Distributor.



# Complete Product Ordering Matrix



## 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/5 psig)
- 063 0-15 psi (G,B/30 psig; A/15 psia)
- 066 0-30 psi (G,A,B/30 psi)
- 068 0-50 psi (G,A,B/100 psi)
- 069 0-60 psi (G,A,B/100 psi)
- 071 0-100 psi (G,A,B/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)

## NAME ON DIAL

- 01 Anderson Instrument Co.

## DIAPHRAGM MATERIAL

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

## MOUNTING

- 1 Bottom
- 5 Left
- 6 Right

## FITTINGS/PROCESS CONNECTIONS

- 002 3/4 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\*
- 123 Anderson CPM Flushmount

## SWITCHING/CONNECTOR

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

\* Allow an extra 10 days for delivery

## Specifications (Apply to Gauge and Switch unless noted):

### Performance

- Accuracy: ±0.2% of URL (upper range limit)  
Complies with ASME B40.7-1998
- Repeatability: ±0.06% URL
- Hysteresis: ±0.07% URL
- Linearity: ±0.07% URL
- Temperature stability: ±0.16% / 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.
- 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: 2 "AA" replaceable batteries with one-year minimum expected life with industrial grade batteries (DPG); 9-30 Volts DC loop power (EPS)

Relay Outputs (EPS only): Two (2) independent, adjustable setpoint relays: Relay 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 = 8 microinches (0.2 microns)

Housing: 304 Stainless Steel, welded

Lens: Polysulphone

### Approvals and Documentation

Sanitary: Meet current ASME BPE-2002 standards; 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

Hazardous Locations: UL for Intrinsically Safe requirements pending

Material, Conformance and Calibration: Certificates provided with product, also available on-line using serial number