



# RSV Pressure Transmitter



The Anderson RSV Pharmaceutical Series Pressure Transmitter offers not only a new low profile design, but may be ordered with built-in LCD indication. The unit meets all pharmaceutical requirements for performance, finish and cleanability. It is designed and manufactured to withstand the harsh process and sterilization conditions encountered in the pharmaceutical and biotechnology industries.

Its one-piece stainless steel package design incorporates a transducer and electronic circuitry to convert pressure and/or vacuum to a proportional 4-20 mA signal. The wide variety of fittings and ranges provide flexibility in specifying the best transmitter for any application. The unit is designed to operate at high process

temperatures and withstand CIP/SIP conditions.

All units are supplied factory calibrated to standard or custom ranges. For field maintenance, non-interactive zero, and span adjustments, as well as field accessible test points are provided. The optional LCD cap mounted display can be scaled to match actual process units, 0-100% of full scale, or 4-20 mA. This useful feature provides indication directly at the process, in addition to the standard 4-20 mA output. Permanently marked tagging is provided at no extra charge. In addition the RSV complies with Class 1, Div. 1, Groups A, B, C and D for intrinsically safe apparatus. Units are supplied with certificates of calibration.

## SPECIFICATIONS

### Excitation:

9-32 VDC (Absolute), 24 VDC Nominal regulated or unregulated.  
14-37 VDC (Absolute) with display.

### Output:

4-20 mA DC

### Loop Resistance:

0-750 ohms at 24 VDC  
0-1050 ohms at 30 VDC

### Indication:

Optional, 3 1/2 digit, .5" high LCD, cap mounted

### Accuracy:

± 0.5% of span, full scale, for standard ranges except those below  
0-50 psig (±1.0% full scale. All vacuum/pressure ranges and PSIA ranges are ±1.0%)

### Over-Range Rating:

2 times base range

### Stability:

± 0.3% of calibrated range / 6 months

### Zero and Span Adjustments:

± 10% of range

### Repeatability:

± 0.3%

### Hysteresis:

± 0.1%

### Linearity:

± 0.1%

### Process Temperature Range:

20° to 275°F (Up to 325°F if horizontal mount)

### Process Temperature Effect:

± 0.1 psig/5.5°C (10°F)

### Ambient Temp. Operating Range:

0° to 120°F (-17.8° to 48.9°C)

### Storage Temperature:

-40° to 149°F (-40° to 65°C)

### Mounting:

Direct connection

### Housing Material:

304 Stainless Steel

### Housing Ratings:

NEMA 4X, IP-66

### Wetted Parts:

316L Stainless Steel standard; Hasteloy "C" diaphragm optional

### Surface Finish (wetable parts):

R<sub>a</sub> max = 8 microinches (.2 microns) electropolished

### Recommended Cable:

18-24 AWG, foil shielded, and PVC coated.  
(3/16 - 1/4 OD insulation)

### Wiring Connection:

Screw Terminal; Accessible via removable screw cap conduit housing

### Approvals:

UL Approved; Complies with Class 1, Div. 1, Grps. A-D for intrinsically safe apparatus

### Standard:

Designed and manufactured to sound engineering practices in accordance with Article 3.3 of the PED 97/23/EC

### Response Time:

200 μSec

\* Specifications are subject to change without notice.

# Complete Product Ordering Matrix



**RANGE**

025 30"Hg/0 psig  
 028 30"Hg/0/15 psig  
 029 30"Hg/0/30 psig  
 031 30"Hg/0/60 psig  
 032 30"Hg/0/100 psig  
 066 0/30 psig/psia  
 068 0/50 psig/psia  
 069 0/60 psig  
 071 0/100 psig  
 073 0/150 psig  
 074 0/160 psig  
 077 0/300 psig  
 081 0/500 psig  
 084 0/1000 psig

**ENGINEERING UNITS**

G PSIG  
 M Hg (inches mercury)  
 A PSIA  
 B BAR  
 C Vacuum/Pressure (Hg & PSIG)

**FITTING**

002 3/4" Tri-Clamp  
 004 1 1/2" Tri-Clamp  
 005 2" Tri-Clamp  
 010 1 1/2" APC "K"  
 011 2" APC "K"  
 016 1 1/2" Cherry "I" (male)  
 017 2" Cherry "I" (male)  
 027 1 1/2" G & H "H" line (male)  
 028 2" G & H "H" Line (male)  
 123 Anderson "CPM" Flushmount

**DISPLAY VALUE**

0 None  
 G PSIG  
 A PSIA  
 B BAR  
 R mA (milliamphere, for vac/press.)  
 Q % (percent, for vac/press.)

**DIAPHRAGM MATERIAL**

1 316L Stainless  
 2 Hastelloy "C" (not available with fitting "002")

**DIAPHRAGM FINISH**

2 Electropolished (R<sub>a</sub>8)

**CABLE LENGTH**

00 No Cable  
 05 25'  
 10 50'  
 15 75'  
 20 100'  
 21 125'  
 22 150'  
 23 175'  
 24 200'

SPECIFY TAGGING INFORMATION TO BE PERMANENTLY MARKED, IF APPLICABLE



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