

Product Information - SV

LIFE SCIENCES

SV Pressure Transmitter

Introduction

The Anderson-Negele SV Life Sciences Series Pressure Transmitter offers not only a new low profile design, but may be ordered with built-in LCD indication. The unit meets all life sciences requirements for performance, finish and cleanability. It is designed and manufactured to withstand the harsh process and sterilization conditions encountered in the Life Sciences industry.

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 SV 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	Mounting:	Direct connection
Output:	4-20 mA DC	Housing Material:	304 Stainless Steel
Loop Resistance:	0-750 ohms at 24 VDC 0-1050 ohms at 30 VDC	Housing Ratings:	NEMA 4X, IP66
Indication:	Optional, 3 1/2 digit, .5" high LCD, cap mounted	Wetted Parts:	316L Stainless Steel standard; Hasteloy "C" diaphragm optional
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%)	Actuating Fill:	100% mineral oil. Meets FDA requirements (21 CFR, 172.878 and 178.3620(a))
Over-Range Rating:	2 times base range	Surface Finish (wetable parts):	Ra max = 8 microinches (.2 microns) electropolished
Stability:	± 0.3% of calibrated range / 6 months	Recommended Cable:	18-24 AWG, foil shielded, and PVC coated. (3/16 - 1/4 OD insulation)
Zero and Span Adjustments:	± 10% of range	Wiring Connection:	Screw Terminal; Accessible via removable screw cap conduit housing
Repeatability:	± 0.3%	Approvals:	UL Approved; Complies with Class 1, Div. 1, Grps. A-D for intrinsically safe apparatus
Hysteresis:	± 0.1%	Standard:	Designed and manufactured to sound engineering practices in accordance with Article 3.3 of the PED 97/23/EC CSA B51-03 CRN# CSA0F9754.5C
Linearity:	± 0.1%	Response Time:	200 µSec
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:	-17.8° to 48.9°C (0° to 120°F)		
Storage Temperature:	-40° to 65°C (-40° to 149°F)		

* Specifications are subject to change without notice.

Order Information



- RANGE**
- 025 30/0 (M)
 - 028 30"Hg/0/15 psig (C)
 - 029 30"Hg/0/30 psig (C)
 - 031 30"Hg/0/60 psig (C)
 - 032 30"Hg/0/100psig (C)
 - 066 0/30 (G, A)
 - 068 0/50 (G, A, B)
 - 069 0/60 (G, A)
 - 071 0/100 (G, A)
 - 073 0/150 (G, A)
 - 074 0/160 (G, A)
 - 077 0/300 (G, A)
 - 081 0/500 (G)
 - 084 0/1000 (G)
 - 251 -1/0/1 BAR (B)
 - 286 -1/0/2.5 BAR (B)
 - 217 -1/0/3 BAR (B)
 - 056 -1/0/4 BAR (B)
 - 304 -1/0/7 BAR (B)
 - 235 0-3 BAR (B)
 - 192 0-4 BAR (B)
 - 061 0-10 BAR (B)
 - 065 0-20 BAR (B)

- ENGINEERING UNITS**
- G PSIG (Gauge)
 - M Hg (inches Mercury - Vacuum)
 - A PSIA (Absolute)
 - B BAR (Gauge)
 - C Vacuum/Pressure Compound (Hg & PSIG)
 - T BAR (Absolute)

- 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
 - 161 Anderson Mini "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 FITTINGS "002" or "161"

- DIAPHRAGM FINISH**
- 2 Electropolished (R₃)

SPECIFY TAGGING INFORMATION TO BE PERMANENTLY MARKED, IF APPLICABLE

- CABLE LENGTH**
- 00 No Cable
 - 05 25'
 - 10 50'
 - 15 75'
 - 20 100'
 - 24 200'
 - A0 Quick Disconnect Receptacle(QDR)*
 - A1 QDR & Field Wireable Connector(FWC)*
 - A2 QDR w/25 ft Molded Cordset*
 - A3 QDR w/50 ft Molded Cordset*
 - A5 QDR w/100 ft Molded Cordset*
 - A9 QDR w/200 ft Cable*

* UL Certification for Intrinsic Safety Pending



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