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Product Information - SR **FOOD**

SR Sanitary Electronic Pressure Transmitter

Introduction

The Anderson-Negele SR series pressure transmitter offers not only a low profile design, but may be ordered with built-in LCD indication. The unit meets all sanitary requirements for finish and cleanability. It is designed and manufactured to withstand the harsh process and environmental conditions encountered in the food, dairy, and beverage industries.

Its one-piece stainless steel 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.

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

Authorizations

Features

- All-welded stainless steel construction
- Compact, low profile design
- Meets all FDA, USDA, and CGMP requirements
- 3-A compliant; Third party verified
- Product contact surface 316L stainless steel, optional Hasteloy "C" diaphragm
- Optional cap mounted LCD indicator

Specifications

Accuracy (includes repeatability, linearity, and hysteresis):
± 0.5% of span, full scale, for standard ranges except ranges below 0-50 psig ±1% full scale. All vacuum/pressure ranges and PSIA ranges are ±1%. High pressure (Homogenizer) fittings: ±.75%.

Repeatability:	Better than 0.3% FSO
Hysteresis:	Less than 0.2% FSO
Linearity (BFSL):	± 0.2% FSO
Stability:	± 0.3% of calibrated range/6 months
Over-Range Rating:	2 times base range, or 12,000 psig, whichever is less
Zero and Span Adjustments:	± 10% of range
Output:	4-20 mA DC
Excitation:	12-40 VDC (Absolute), 24 VDC Nominal regulated or unregulated. 17-45 VDC (Absolute) with display.
Loop Resistance:	0-600 ohms at 24 VDC 0-900 ohms at 30 VDC
Indication:	Optional, 3-1/2 digit, .5" high LCD, cap mounted
Process Temperature Range:	20° to 300°F (-6.7 to 148.9°C) (Horizontal mounting recommended for continuous operation over 275°F/135°C)
Process Temperature Effect:	±0.1 psig/5.5°C (10°F)
Response Time:	200 µSec
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 (Std. for homogenizer fittings)
Surface Finish (wettable parts):	Ra max = 25 microinches (.6 microns)
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
Standards:	Designed and manufactured to sound engineering practices in accordance with Article 3.3 of the PED 97/23/EC

Order Information

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RANGE (Available Units)

025	30/0 (M)	086	0/2,000 [1] (G)
028	30/0/15 (C)	088	0/3,000 [1] (G)
029	30/0/30 (C)	090	0/5,000 [1] (G)
031	30/0/60 (C)	093	0/10,000 [1] (G)
032	30/0/100 (C)	251	-1/0/1 (B)
066	0/30 (G,A)	286	-1/0/2.5 (B)
068	0/50 (G,A,B)	217	-1/0/3 (B)
069	0/60 (G)	056	-1/0/4 (B)
070	0/99 (G)	304	-1/0/7 (B)
071	0/100 (G,A)	057	0-2 (B)
073	0/150 (G,A)	235	0-3 (B)
074	0/160 (G,A)	192	0-4 (B)
075	0/200 (G,A)	060	0-6 (B)
077	0/300 (G,A)	061	0-10 (B)
081	0/500 (G)	065	0-20 (B)
084	0/,1000 (G)		

ENGINEERING UNITS

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

FITTING

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)
044	1-1/2" #14 Bevel Seat (w/nut)
045	2" #14 Bevel Seat (w/nut)
056	High Pressure (Homogenizer) w/out Flange
057	High Pressure (Homogenizer) with 7/8" Flange
058	High Pressure (Homogenizer) with 1-1/8" Flange
059	1-1/2" NPT [3]
117	High Pressure (Rannie) [3]
129	38mm IDF w/Nut [3]
131	51mm IDF w/Nut [3]
157	High Pressure (Niro) [3]

CABLE LENGTH

00	No Cable
05	25'
10	50'
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

DIAPHRAGM FINISH

1	Standard (R_a25)

DIAPHRAGM MATERIAL

1	316L Stainless
2	Hastelloy "C" (Standard for fittings 056, 057, 058, 117, 157)

DISPLAY VALUE

0	None
G	PSIG [2]
A	PSIA
B	BAR
R	mA (milliamphere, for vac/press.)
Q	% (percent, for vac/press.)

[1] Available with High Pressure Fittings Only (056-058; 117,157).

[2] If over 1,000 PSIG, units are PSIG X 10.

[3] Not 3-A compliant

ANDERSON INSTRUMENT COMPANY
156 Auriesville Road
Fultonville, NY 12072

Phone 800-833-0081
Fax 518-922-8997
info@anderson-negele.com

Tech. Support:
techservice@anderson-negele.com
Phone 800-833-0081