



FLOW  
LEVEL  
PRESSURE  
ANALYTICAL  
TEMPERATURE  
INSTRUMENTATION  
PASTEURIZATION CONTROLS

## Model RSP Sanitary Electronic Pressure Transmitter

*All-welded stainless steel construction*

*Compact, low profile design*

*Meets all FDA, USDA, and CGMP requirements*

*3-A compliant; Third party verified in accordance with standard 74-02*

*Product contact surface 316L stainless steel, optional Hasteloy "C" diaphragm*

*Optional cap mounted LCD indicator*

The Anderson RSP 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, 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.

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.



# RSP 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 (wetable parts): R<sub>a</sub> 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

## HOW TO ORDER



RANGE (Available Units)	
025	30/0 (M)
028	30/0/15 (C)
029	30/0/30 (C)
031	30/0/60 (C)
032	30/0/100 (C)
066	0/30 (G,A)
068	0/50 (G,A,B)
069	0/60 (G)
070	0/99 (G)
071	0/100 (G,A)
073	0/150 (G,A)
074	0/160 (G,A)
075	0/200 (G,A)
077	0/300 (G,A)
081	0/500 (G)
084	0/1,000 (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
117	High Pressure (Rannie)
129	38mm IDF w/Nut
131	51mm IDF w/Nut
157	High Pressure (Niro)

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

DIAPHRAGM FINISH	
1	Standard (R <sub>a</sub> 25)

  

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

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

\* Available with High Pressure Fittings Only (056-059; 117, 157).  
 \*\* If over 1,000 PSIG, units are PSIG X 10.  
 \*\*\* Available with High Pressure Fitting 157 Only