

T - Series "Smart" Pressure Transmitter

FEATURES:

- New options and mounting configurations for high temperature applications, up to 204°C (400°F)
- Standard 4-20 mA Output with "HART" Protocol for Digital Communications
- Micro-based Design provides best performance of any sanitary transmitter
- Widest choice of sanitary clamp and flushmount "CPM" fittings
- Optional LCD Display now available for vertical or horizontal viewing
- 3-A compliant; Third party verified in accordance with standard 74-03

The Anderson "T" series pressure transmitter is a microprocessor-based sensor specifically designed for sanitary fluid process applications in the Pharmaceutical and Bio-technology industry. This product provides an extremely high level of performance combined with the flexibility of digital communication via the "HART" protocol. The "T" series can be specified in several configurations including high temperature models that are available in direct or remote mount variations. The high temperature direct mount is also recommended for applications where a horizontal orientation is required for display viewing, such as tank tops and overhead lines. All models comply with UL, "intrinsically



safe" requirements for Class 1, Div. 1, Groups A-D, and carry the "CE" mark. The units may be ordered with any of our wide variety of sanitary process fittings.

The "T" series simultaneously outputs an analog 4-20 mA signal while communicating digitally with a handheld communicator or other "HART" host device. This allows configuration of parameters such as range, engineering units, tagging info, and other device specific information, from any accessible point in the output loop. The analog output can even be "trimmed" or calibrated while online, if required. Also retained are internal, non-interactive zero and span analog adjustments. This pro-

vides the user with the immediate performance enhancements of this new product, with future compatibility with the "HART" protocol.

As with all Anderson sensors, the "T" series is designed to be cleaned and steam sterilized in place. The optional LCD display can be factory scaled to linear process engineering units, mA output, or 0-100%.

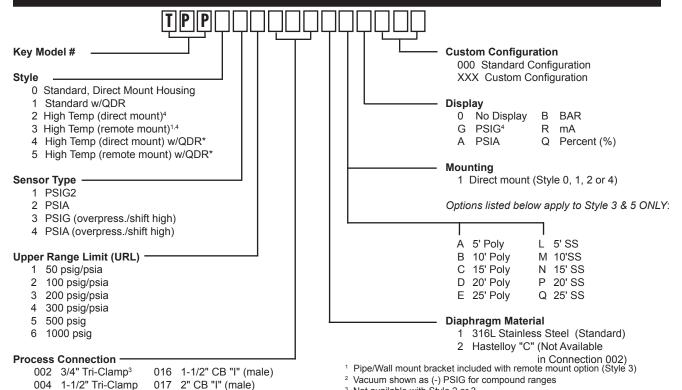


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Complete Product Ordering Matrix



GENERAL SPECIFICATIONS

005 2" Tri-Clamp

011 2" APC "K"

010 1-1/2" APC "K"

Defined by Upper Range Limit (URL)

Rangeability (Turn-down): 10:1 via Hand Held Terminal

Over Pressure Limit: 2X URL

Over Pressure Output: Sensor Style 1 & 2: Above 110% of

calibrated range - 3.8 mA

Sensor Style 3 & 4: No specified over

027 1-1/2" G&H "H" Line (male)

028 2" G&H "H" Line (male)

123 1-1/2" CPM Flushmount

Mechanical Trim Adjustments: Internally adjustable

± 5% of span (zero); ± 20% of span (span)

Output: 4-20mA, Two-wire, Linear, Digital Process variable

superimposed on 4-20mA signal, available to any

"HART" protocol conforming host.

Power Supply: 13-40 volts, D.C.

18-45 volts D.C. with display

Optional, cap-mounted, LCD Indication Indication:

accuracy ±1% F.S.

Temperature Limits (Process):

Standard/Direct Mount: -18 to 135°C (0 to 275°F) -18 to 177°C (0 to 350°F)** -18 to 204°C (0 to 400°F)** High Temp./Direct Mount: High Temp./Remote Mount: Temperature Limit (Ambient): -18 to 49°C (0 to 120°F)

Hazardous Locations Compliance:

UL Compliance with Class 1, Div. 1, Groups A thru D for intrinsically safe apparatus, when connected with approved barrier system (See instruction manual). For sensor type

1 & 2 ONLY

CE Compliance:

Transmitter complies with all CE requirements.

Optional LCD display accuracy = ±2% when subjected to a radiated transmission field of 150 to 180 MHz, and 230 to 350

MHz (field strength of 10V/m 80% AM 1KHz).

Standards:

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

Process Temperature Effect:

3 Not available with Style 2 or 3

Not available with Process Connection 002

Compound Range Ordering Examples:

For 30-0-50 psig, select 50 psig URL For 30-0-60 psig, select 100 psig URL UL Certification for Intrinsic Safety Pending

Less than 0.2% of full scale output/10°F change

Performance Specifications:

±0.2% of URL Accuracy* (psig ranges):

(psia, compound vacuum): ±0.2% URL(above

atmospheric zero); ±1.0% URL (below atmospheric zero)

* Accuracy includes repeatability, hysteresis and linearity.

Repeatability: ± 0.06% Hysteresis: ± 0.07% Linearity (BFSL):

(± 0.17% for psia, compund and vacuum ranges)

Stability: ± 0.3% OF URL/6 months

Physical Specifications:

Wetted Material Surface Finish: Electropolished to R_amax = 8 microinches (.2 microns)

Wetted Material: 316 "L" Stainless Steel 304 Stainless Steel Housing Material: NEMA 4X. IP-66 **Housing Ratings:**

Electrical Connections:

1/2-14NPT conduit with screw terminals and integral test loops for HART interface



Form AIC3705 © 3/04 Revised: February 2011 Supersedes: January 2011

Process vacuum in excess of 24" Hg may require slight de-rating of maximum temperature (consult factory).