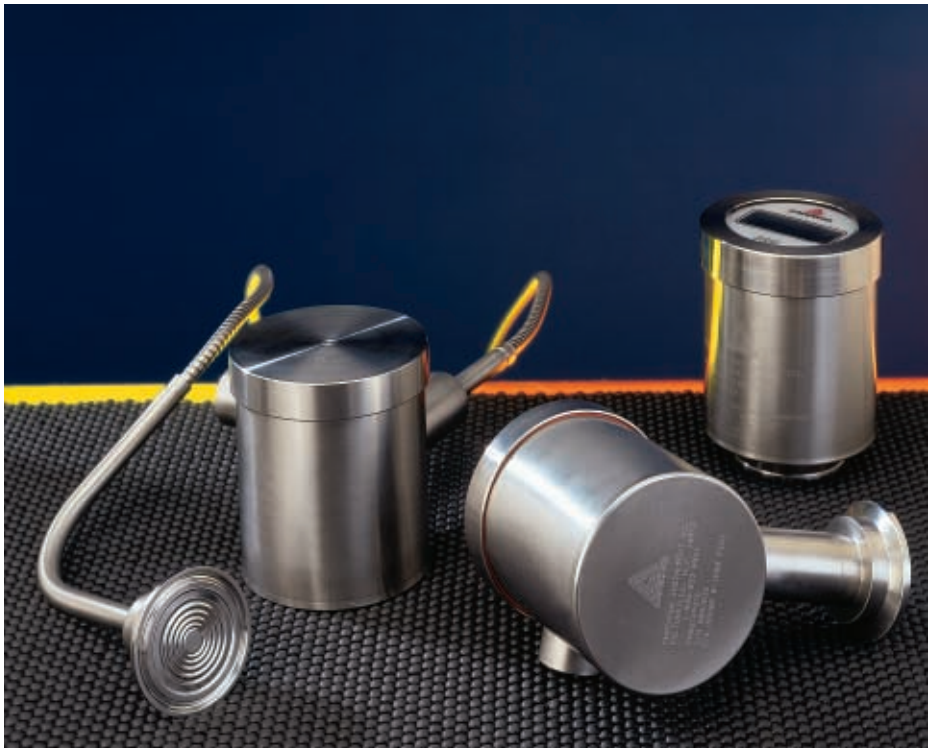
# Sanitary Foundation Fieldbus Pressure Transmitter

FEATURES:

- Foundation Fieldbus Protocol for Digital Communications
- Options and mounting configurations for high temperature applications, up to 204°C (400°F)
- Micro-based Design provides best performance of any sanitary transmitter
- Widest choice of sanitary clamp and flushmount "CPM" fittings
- Optional LCD Display available for vertical or horizontal viewing



The Anderson "FPP" 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 Foundation Fieldbus protocol. The "FPP" 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 "FPP" series communicates digitally with a Foundation Fieldbus 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 network. Anderson's "FPP" series transmitters provide an abundance of information to improve predictive maintenance, plant safety, product quality, and regulatory compliance.

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

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# Complete Product Ordering Matrix


**Key Model #**

**Style**
- 0 Standard
- 2 High Temp (direct mount)
- 3 High Temp (remote mount)[1]

**Sensor Type**
- 1 PSIG[2]
- 2 PSIA

**Upper Range Limit (URL)**
- 1 50 psig/psia
- 2 100 psig/psia
- 3 200 psig/psia
- 4 300 psig/psia
- 5 500 psig
- 6 1000 psig

**Process Connection**
- 002 3/4" Tri-Clamp[3]
- 004 1-1/2" Tri-Clamp
- 005 2" Tri-Clamp
- 016 1-1/2" CB "I" (male)
- 017 2" CB "I" (male)
- 123 1-1/2" CPM Flushmount

**Custom Configuration**
- 000 Standard Configuration
- XXX Custom Configuration

**Display**

| | | | |
|---|---|---|---|
| 0 | No Display | B | BAR |
| G | PSIG[4] | M | " Hg (inches merc.) |
| A | PSIA | Q | Percent (%) |
| | | X | Blank - no units |

**Mounting**
- 1 Direct mount (Style 0 or 2)

*Options listed below apply to Style 3 ONLY*:

| | | | |
|---|---|---|---|
| A | 5' Poly | L | 5' SS |
| B | 10' Poly | M | 10'SS |
| C | 15' Poly | N | 15' SS |
| D | 20' Poly | P | 20' SS |
| E | 25' Poly | Q | 25' SS |

**Diaphragm Material**
- 1 316L Stainless Steel (Standard)
- 2 Hastelloy "C" (Not Available in Connection 002)

[1] Pipe/Wall mount bracket included with remote mount option (Style 3)

[2] Compound Range Ordering Examples:
For 30-0-50 psig, select 50 psig URL
For 30-0-60 psig, select 100 psig URL

[3] Not available with Style 2 or 3

[4] Vacuum shown as (-) PSIG for compound ranges

## GENERAL SPECIFICATIONS

**Ranges**: Defined by Upper Range Limit (URL)
**Rangeability (Turn-down)**: 10:1 with Foundation Fieldbus host
**Over Pressure Limit**: 2X URL
**Communications**: Foundation Fieldbus H1 (31.25kb/s) Bus-powered, 2 terminals
**Power Supply**: 9-32 volts, D.C. 19 mA typical

**Indication**: Optional, cap-mounted, 4-digit LCD Indication

**Temperature Limits (Process)**:

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

**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).

**CE Compliance**:
Transmitter complies with IEC 61326 Industrial Location. Accuracy = less than ±2% when subjected to a radiated transmission field of 340 to 410 MHz (field strength of 10V/m 80% AM 1KHz).

**Conformance/ Interoperability Tests**: ITK Conformance Test (Passed); Foundation Fieldbus Interoperability (Passed)

**Performance Specifications**:

**Accuracy*** (psig ranges): ±0.2% of URL
(psia, compound & vacuum): ± 0.3% URL

* Accuracy includes repeatability, hysteresis and linearity.

**Repeatability**: ± 0.06%
**Hysteresis**: ± 0.07%
**Linearity (BFSL)**: ± 0.07% (± 0.17% for psia, compund and vacuum ranges)
**Stability**: ± 0.3% OF URL/6 months
**Process Temp. Effect**: 0.05 psi / 5.5°C Typical

**Physical Specifications**:

**Wetted Material Surface Finish**: Electropolished to $R_a$max = 8 microinches (.2 microns)
**Wetted Material**: 316 "L" Stainless Steel
**Housing Material**: 304 Stainless Steel
**Electrical Connections**: 1/2-14NPT conduit with screw terminals.

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

M E E T S O R E X C E E D S C G M P ' S O F T H E P H A R M A C E U T I C A L I N D U S T R Y

Form AIC5023