



**FW MURPHY®**  
PRODUCTION CONTROLS



Official FW Murphy Distributor  
**PT. ATAMORA TEHNIK MAKMUR**

## PXT-K Series Pressure Transmitters



The PXT-K Series pressure transmitters are state-of-the-art instruments that can be used in applications such as compressors, engines, process control, liquid level and pumps.

- Piezoresistive pressure transmitter
- Used with compressors, engines, process control, liquid level and pumps
- 4-20 mA output signal
- Corrosion resistant construction
- High stability

### Overview

The PXT-K Series pressure transmitters are state-of-the-art instruments providing 4-20 mA output. Each piezoresistive pressure transmitter contains a transducer comprised of a piezoresistive silicon chip mounted on a glass-metal feed-through header welded into a stainless steel housing and filled with silicone oil. The very thin laser-welded stainless steel isolation-diaphragm completes the front side. Media pressure is transferred from the stainless steel isolation-diaphragm via the oil inside the cell to the silicon measuring chip. This construction, combined with the advanced internal signal conditioning circuitry, results in a rugged instrument with extremely small temperature error and class-leading EMI/RFI resistance.

The enclosure and all wetted parts are made of 316L stainless steel.

### Specifications

#### Operating Range

- **Operating Pressure Range:**
  - See How to Order under the PXT-K Series Model Number Matrix in the FW Murphy bulletin
- **Operating Temperature:**
  - -22° to 176° F (-30° to 80° C)
- **Compensated Temp Range:**
  - -20° to 160° F (-29° to 71° C)
- **Process Connection:** 1/4 in. -18 NPT female with 7/8 in. or 1-3/16 in. hex nut
- **Electrical Connection:**
  - PXT-K: 1/2 in. NPT male conduit connection with 60 in. long cable, vented
  - PXT-KM: M12 connector
- **Enclosure Rating:** IP65
- **Body:** 316L stainless steel
- **Wetted Parts:** 316L stainless steel
- **Environmental Effect (Humidity):** No effect for 0-95%, non-condensing
- **Mounting:** Transmitter can be installed in any axis. Transmitter position has negligible effect on performance as long as it is perpendicular to the flow being monitored.
- **Shock Resistance:** 800g per IEC 60068-2-27 (Mechanical Shock)
- **Vibration Resistance:** 20G per IEC 60068-2-6 (Vibration under resonance)
- **Wiring Protection:** Protected against reverse polarity and short circuit, 48 VDC Maximum

#### HEAD OFFICE, MARKETING & BUSINESS DEVELOPMENT

Equity Tower, 25th Floor, Suite 25F, SCBD Lot 9,  
Jl. Jend. Sudirman Kav. 52-53, Jakarta Selatan, 12190 - Indonesia  
Phone : (021) 5154560, 5154561, Fax: (021) 6326748, 5154563  
Mobile Phone : 081310787177 (Products)  
email : products@atamora.co.id | atamora@atamora.co.id

#### OPERATION OFFICE

Jl. Ternate 21H, Jakarta Pusat 10150 - Indonesia  
Phone: (021) 6326740, 6327177 (Hunting)



<https://www.atamora.co.id>



@atamoraofficial



**FW MURPHY®**  
PRODUCTION CONTROLS



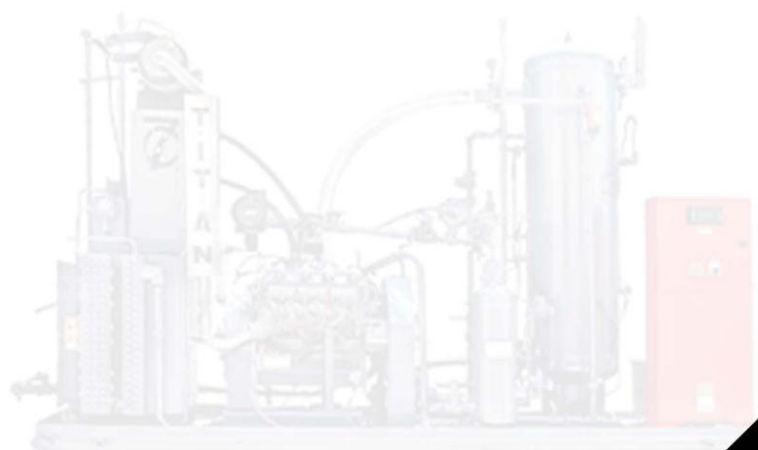
Official FW Murphy Distributor  
**PT. ATAMORA TEHNIK MAKMUR**

## PXT-K Series Pressure Transmitters

- **Supply Voltage:** 10 – 30 VDC (Typically 24 VDC)
- **Transmitter Output:** 4-20mA, two wire configurations with load characteristics
- **Insulation:** Greater than 10MΩ @ 300 VDC
- **Electromagnetic Compatibility (EMC):** Standards; EN 61000-6-2:2005, EN 61000-6-3:2007, EN 61326-2-3:2006
- **Voltage Surge/Spike Protection:** Protection against a 600-volt spike per IEC 60-2
- **Shipping Weight:** 6.5 ounces

### Applicable Standards

- **CSA (c/us):**
  - Class I / II / III, Div 1, Groups A-F T4
  - Class I / II / III, Div 2, Groups A-D,F,G T4
- **ATEX:**
  - IExU 10 ATEX 1124 X
  - II 1G Ex ia IIC T6-T4
  - II 3G Ex nA IIC T6
- **Canadian Registration Number:** OF15236.2 (all provinces and territories)



### HEAD OFFICE, MARKETING & BUSINESS DEVELOPMENT

Equity Tower, 25th Floor, Suite 25F, SCBD Lot 9,  
Jl. Jend. Sudirman Kav. 52-53, Jakarta Selatan, 12190 - Indonesia  
Phone : (021) 5154560, 5154561, Fax: (021) 6326748, 5154563  
Mobile Phone : 081310787177 (Products)  
email : products@atamora.co.id | atamora@atamora.co.id

### OPERATION OFFICE

Jl. Ternate 21H, Jakarta Pusat 10150 - Indonesia  
Phone: (021) 6326740, 6327177 (Hunting)



<https://www.atamora.co.id>



@atamoraofficial

# Pressure Transmitters

## PXT-K Series

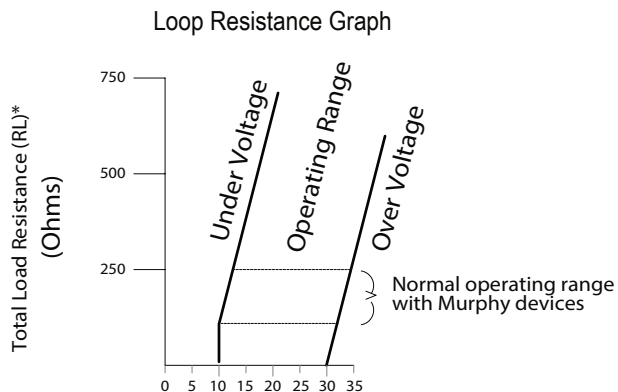
The PXT-K Series pressure transmitters are state-of-the-art instruments providing 4-20 mA output. Each piezoresistive pressure transmitter contains a transducer comprised of a piezoresistive silicon chip mounted on a glass-metal feed-through header welded into a stainless steel or Inconel housing and filled with oil. The very thin laser-welded stainless steel isolation-diaphragm completes the front side. Media pressure is transferred from the stainless steel isolation-diaphragm via the oil inside the cell to the silicon measuring chip. This construction, combined with the advanced internal signal conditioning circuitry, results in a rugged instrument with extremely small temperature error and class-leading EMI/RFI resistance.

The enclosure and all wetted parts are made of 316L stainless steel / alloy 625 (Inconel).

PXT-K Series Pressure Transmitters can be used in applications such as compressors, engines, process control, liquid level and pumps.

### Operating Range

Supply voltage for the PXT-K must be within range of 10-30 VDC. The graph below shows the minimum supply voltage (VDC) required for a given load resistance (R).



Power Supply Voltage (VDC)  
\*Note: Cable resistance effect included in RL.

Minimum Voltage for Common Input Modules		
Model	Input Impedance	Vmin
Centurion C4-1	231 Ω	13.62
MX5	221 Ω	13.42
Centurion C5	200 Ω	13.00
MX5-R2		
Third-Party PLC (typical)	249 Ω	13.98



### Specifications

**Operating Pressure Range:** See table, Pressure Range under How to Order section.

**Operating Temperature Range:** -22 to 212° F (-30 to 100° C)

**Certified Temperature Range:** -22 to 176° F (-30 to 80° C)

**Compensated Temp Range:** -20 to 160° F (-29 to 71° C)

**Process Connection:**

1/4"-18 NPT female with 7/8" hex nut (2000 psig and below) or 15/16" hex nut (3000 psig and above)

**Electrical Connection:**

PXT-K: 1/2" NPT male conduit connection, 60" long cable, vented  
PXT-KM: M12 connector

**Enclosure Rating:** IP65

**Body:** 316L stainless steel / alloy 625 (Inconel)

**Wetted Parts:** 316L stainless steel

**Environmental Effect (Humidity):**

No effect for 0-95%, non-condensing

**Mounting:** All axis positions, has negligible effect on performance as long as it is perpendicular to the flow being monitored

**Shock Resistance:**

800g per IEC 60068-2-27 (Mechanical shock)

**Vibration Resistance:**

20G per IEC 60068-2-6 (Vibration under resonance)

**Wiring Protection:** Protected against reverse polarity and short circuit, 48 VDC Maximum

**Supply Voltage:** 10 - 30 VDC (Typically 24 VDC)

**Transmitter Output:**

4-20 mA, two wire configurations with load characteristics

**Insulation:** Greater than 10 MΩ @ 300 VDC

**Electromagnetic Compatibility (EMC):** Standards; EN 61000-6-2:2005, EN 61000-6-3:2007, EN 61326-2-3:2006

**Voltage Surge/Spike Protection:**

Protection against a 600 volt spike per IEC 60-2

**Applicable Standards**

**CSA (c/us):** Class I / II / III, Div 1, Groups A-F T4  
Class I / II / III, Div 2, Groups A-D,F,G T4

**ATEX:** IBExU 10 ATEX 1124 X

II 1G Ex ia IIC T6-T4

II 3G Ex nA IIC T6

**Canadian Registration Number:** OF15236.2 (all providences and territories)

## Specifications (continued)

### Accuracy:

% of Span (BFSL)	+/- 0.25% of span*
Zero/Span Setting Tolerance	+/- 2.5% of full scale* max. (30V/30WC only) +/- 0.25% of span* typical, +/- 0.5% of span* max (all other ranges)
Operating Temperature	+/- 2.5% of span T.E.B.
Compensated Temperature	+/- 1.7% of span T.E.B.
Response Time	<5mS

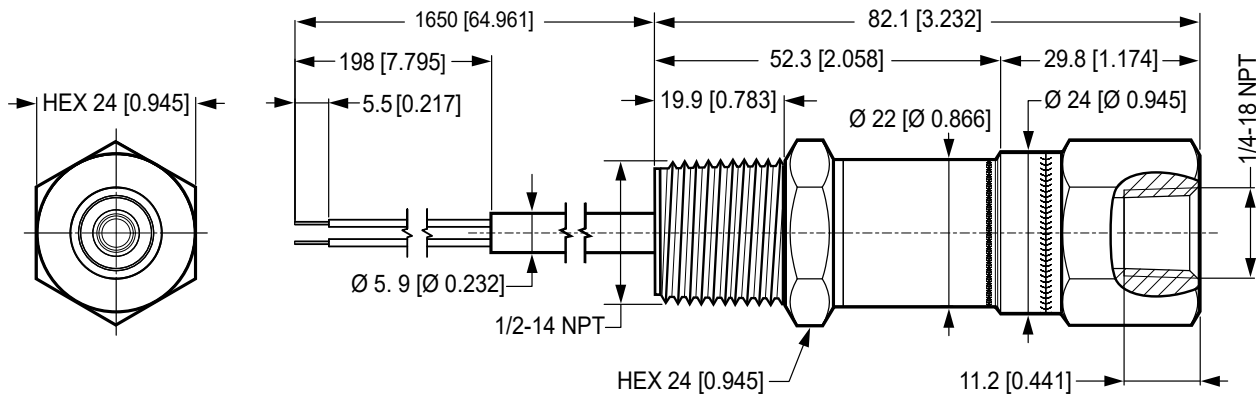
\* Accuracy tolerance to be applied at 25° C.

### Connections:

PXT-K Connections		PXT-KM Pin Assignment	
Wire Color	2 Wire, 4-20 mA	Pin (Color)	2 Wire, 4-20 mA
Black (BK)	V-/SIG	Pin 1	N.C.
Red (RD)	+ Vdc	Pin 2 (Black)	V-/SIG
		Pin 3 (Red)	+ Vdc
		Pin 4	N.C.

## Dimensions

The hex are for tightening process threads only. Do not twist the body. Hold hex when attaching to pressure source and when attaching conduit threads. The PXT-K 3000 psig model is shown.



## How to Order

NOTE: Installation Manual 00-02-0840 and Installation Diagram 05-08-0763 are available at [fwmurphy.com](http://fwmurphy.com).

Options listed below. All configurations may not be available. Call your sales representative or FW Murphy for more information.

Example: PXT-K-600 = FW Murphy two wire Pressure Transmitter with Flying Lead Connection, 0-600 psig range.

PXT	-	K	-	600
-----	---	---	---	-----

#### Connector

K	= PXT (Flying Lead)
KM	= PXM (M12 x 1 Connector)

#### Pressure Range

30V30WC	= (-30" H2O to +30" H2O)	400	= 0-400 (psig)
30V30	= (-30" HG to +30 psig)	600	= 0-600 (psig)
30V100	= (-30" HG to +100 psig)	1000	= 0-1000 (psig)
15	= 0-15 (psig)	2000	= 0-2000 (psig)
60	= 0-60 (psig)	3000	= 0-3000 (psig)
100	= 0-100 (psig)	5000	= 0-5000 (psig)
200	= 0-200 (psig)	6000	= 0-6000 (psig)
300	= 0-300 (psig)	10000	= 0-10000 (psig)

#### Approximate Shipping Weight and Dimensions

Model	Weight	Dimension
PXT-K	6.5 ounces	4-3/4 x 4-3/4 x 2-3/4 in. (121 x 121 x 70 mm)
PXT-KM	6.5 ounces	4-3/4 x 4-3/4 x 2-3/4 in. (121 x 121 x 70 mm)

Part Number	Model and Description	Notes
86031205	Adapter 1/4" x 1/4 NPT 316	
40051047	Cable, PXT-KM, M12 X 3 ft.	
40051048	Cable, PXT-KM, M12 X 6 ft.	
40051082	Cable, PXT-KM, M12 X 30 ft.	
40051049	Cable, PXT-KM, M12 X 50 ft.	
40051050	Cable, PXT-KM, M12 X 100 ft.	