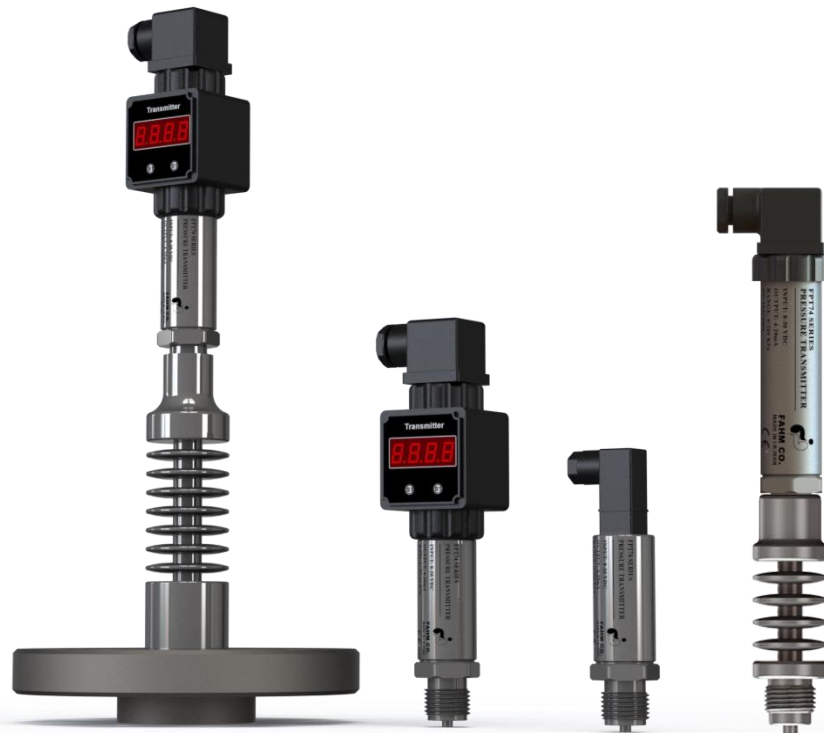


Low Cost Pressure Transmitter Gauge & Absolute FPT74 Series



Features

- Wider pressure range;
- Full stainless steel construction; optional pressure port; flush diaphragm type, sanitation type and anti-corrosive type are available; protection IP65;
- Optional output signal; local calibration and displayable;
- Reversed-polarity, transient current & voltage protection, which conform to EMI standard;
- Reliable performance, easy application
- Short protection and reverse polarity protection
- Measure gauge, absolute and vacuum gauge
- CE approved

Introduction

FPT74 transmitter uses piezoresistive OEM pressure sensor with isolated stainless steel diaphragm as signal sensing element, through automatic testing, laser trimming compensating zero and sensitivity in wider temperature range; the amplifier circuit is in stainless steel housing, transforming sensor signal into standard output signal. Through strict component making, semi-finished product and all-finished product testing and aging, the transmitter is stable and reliable, having excellent flexibility, sensitivity and diversity. The product is widely used for pressure measure and control of petroleum, chemi-industry, metallurgy, power station and hydrology, etc.

Specification

Pressure range: -0.1...0~0.01...70MPa

Overpressure: 1.5 times FS or 110MPa (min. value is valid)

Pressure type: gauge, absolute or sealed gauge

Accuracy: 0.25%FS (typ.) 0.5%FS (max.)

Long-term stability: 0.2%FS/year (typ. 0.3%FS/year (max.))

Zero temp. drift: 0.03%FS/°C ($\leq 100\text{kPa}$) ; 0.02%FS/°C ($> 100\text{kPa}$)

FS temp. drift: 0.03%FS/°C ($\leq 100\text{kPa}$) ; 0.02%FS/°C ($> 100\text{kPa}$)

Operation temp. -30°C~80°C

Storage temp.: -40°C~120°C

Power supply: 15~30VDC 15~28VDC 15~28VDC

Output signal: 4~20mADC 0~10/20mADC 0/1~5/10VDC

Transmitting: 2-wire 3-wire 3-wire

Load: $\leq (U-15) / 0.02\Omega \leq (U-15) / 0.02\Omega > 100\text{k}$

Protection: IP65 for both cable and plug connection

Electric connection: Plug connection or 1.5m cable connection

Housing: stainless steel

Diaphragm: stainless steel 316L

O-ring: Viton



Construction and Outline Dimension

Construction material:

Housing: stainless steel 1Cr18Ni9Ti

Sensor housing: stainless steel 1Cr18Ni9Ti

Diaphragm: stainless steel 316L

Sealed-ring: Viton

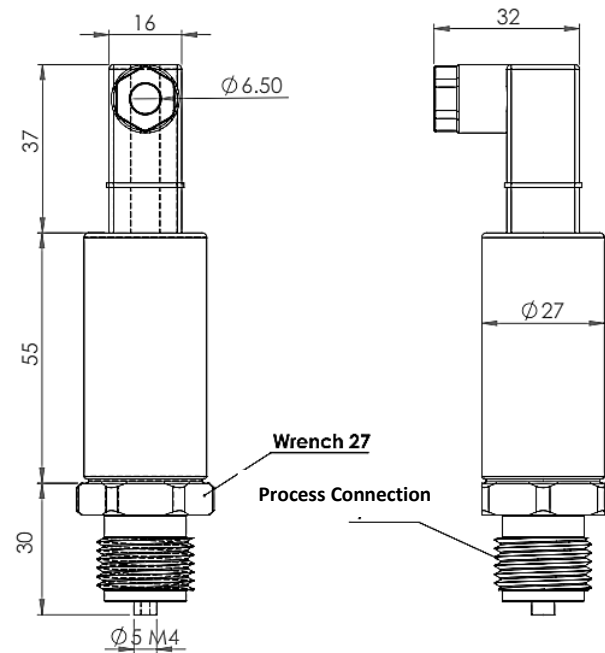
Plug housing: plastic

Cable: Φ 7.5mm Polyethylene Special Cable

Electric Connection

Transmitter connects with the outer circuit through

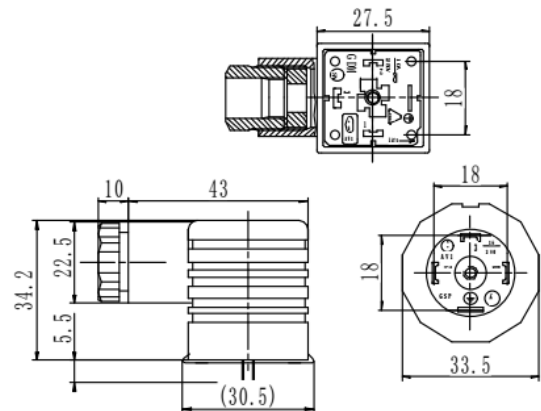
DIN43650 plug. Terminal definition as below:



Connection diagrams

All connectors with moulded cable have the same colour assignment as the unshielded cable outlet.

Angular Connector			
		Current (2Wire)	Voltage (3Wire)
		U _B	Brown (1)
0V	Blue (2)	Blue (2)	
S+	-	Black (3)	



Legend

- U_B Positive power supply terminal
- 0V Negative power supply terminal
- S+ Analogue output

Order Code FPT74 Series

Model	Transmitter type		
FPT74	Piezoresistive Pressure transmitter Accuracy: 0.25% FS		
Measurement type			
G	Gauge		
A	Absolute		
Pressure Range	FPT74	Pressure Range	FPT74
0	0 to 70 mbar	6	0 to 10 bar
1	0 to 350 mbar	7	0 to 20 bar
2	0 to 700 mbar	8	0 to 35 bar
3	0 to 1 bar	9	0 to 70 bar
4	0 to 2 bar	10	0 to 100 bar
5	0 to 7 bar	11	0 to 200 bar
Transmitter Output			
E	4~20mADC		
F	1~5VDC		
J	0~5VDC		
Q	0~10mADC		
U	0~20mADC		
V	0~10VDC		
Materials of Construction			
	Diaphragm	Pressure port	Housing
2	SS 316L	SS	SS
3	SS 316L	SS 316L	SS 316L
4	Alloy C-276 (Hastelloy)	SS	SS
5	Tantalum	SS	SS
Options			
B1	Electrical Entry: Plug connection, DIN 40050		
B2	Electrical Entry: Cable connection		
B3	Electrical Entry: Plug connection, DIN 43650		
M3	3 1/2 digits LCD digital indicator		
C1	Process Connection M20×1.5 Male		
C2	Process Connection G1/2 Male		
C3	Process Connection ½ NPT Male		
C4	Process Connection G1/4 Male		
C5	Process Connection G1/4 Female		
H	Heat Sink Interface		
Y	Gauge sensor to measure vacuum		
Typical Model Number: FPT74 E 2 B1M3C2Y			

Order Note:

1. Please pay attention that the media should be compatible with the contacted parts;
2. Flush diaphragm transmitter's pressure range: 0~70kPa...35MPa;



FAHM Co.
Industrial Automation
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Low Cost Pressure Transmitter
FPT74 Series Datasheet May.2020



FAHM Co.

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