Metal Foil Strain Gauge Pressure Transmitter MFPT74 Series







Features

- Rugged and fully welded structure
- Reliable metal foil strain gauge technology
- Isolated structure, suitable for many kinds of pressure medium
- protection IP65

FAHM Co.

Industrial Automation

Doc. MFPT74 Rev.98-05D

- High accuracy, high performance
- Anti-corrosive, anti-attrition, anti-impact
- Suitable for middle and high pressure measurement
- Measuring ranges: 0~40bar...6000bar
- Accuracy up to 0.5%FS(Standard), 0.25% FS optional
- Compensated temperature range: -10~+85°C

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Applications

- Industrial controls
- Hydraulic systems
- Compressors
- Food industry
- Process control systems

Introduction

Based on metal foil strain gauge technology, the sensing element of MFPT74 pressure sensor is strain gauge, this strain gauge form a Wheatstone bridge on back of the diaphragm to sensing the deformation of the diaphragm, this deformation results from the pressure which act vertically to the diaphragm. MFPT74 uses unique sealing method between the diaphragm and the connector, so as to ensure the sealing reliability, and also ensure the diaphragm performance.

As this model employs the flush-diaphragm structure, the MFPT74 is suitable for pressure measurement of viscous fluids or fluids with media containing **solids** applications.

This transmitter is widely used in food, medicine and beverage and specifically sewerage industries.

Specification

- Pressure medium: gas or liquid compatible to stainless steel restriction
- pressure ranges: 0~40bar...6000bar
- overload pressure: 150%FS
- accuracy: 0.5%FS(standard), 0.25%FS(optional)
- zero unbalance: <±2%FS
- long-term stability: <0.2%FS/year
- compensated temperature range: -10~+85°C
- operating temperature range: -20~+70°C
- process connection: G1/2, M20 or others
- Protection: IP65 for both cable and plug connection



MFPT74 Series Datasheet Jul.2019

Construction and Outline Dimension

Construction material:

Housing: stainless steel 1Cr18Ni9Ti

Sensor housing: stainless steel 1Cr18Ni9Ti

Sealed-ring: Viton

Plug housing: plastic

Cable: Φ7.5mm Polyethylene Special Cable

Electric Connection

Transmitter connects with the outer circuit through DIN43650 or DIN40050 plug.

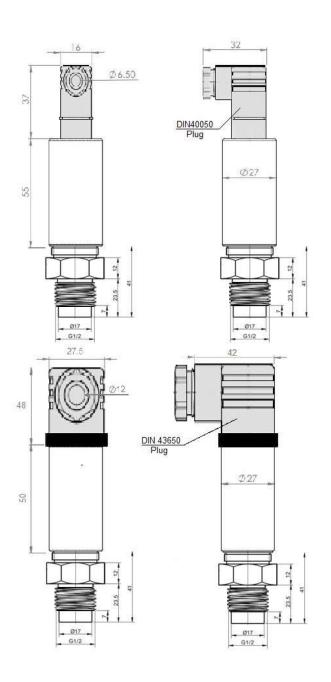
Terminal definition as below:

Pin	2-wire	3-wire
1	+V	+V
2	Signal: +OUT	GND
3	Null	Signal: +OUT

Wire color	2-wire	3-wire
Black	+V	+V
Red	0V	+OUT
White	Null	GND









Order Code MFPT74 Series

Model	Transmitter type	
MFPT74	Metal Foil Strain Gauge Pressure Transmitter Accuracy: 0. 5% FS	
Measurement type		
G	Gauge	
Pressure Range		
(0~X) bar	Measuring range: 0~40bar6000bar	
Transmitter Output		
E	4~20mADC	
F	1~5VDC	
J	0~5VDC	
V	0~10VDC	
Options		
B1	Electrical Entry: Plug connection DIN40050	
B2	Electrical Entry: Cable connection	
B3	Electrical Entry: Plug connection DIN 43650	
M3	3 1/2 digits LCD digital indicator	
P4	Process Connection M20×1.5	
P2	Process Connection G1/2	
A2	Accuracy: 0.25% FS	
Typical Model Number: MFPT74 G-(40)bar-E-B1-P4		

Order Note:

1. Please pay attention that the media should be compatible with the contacted parts;



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