

MRF25

Flush Diaphragm Pressure Transmitter For 3 to 20VDC Input Voltage

MeasureX

Features

- Pressure Measurement Range of -1 to 350bar
- High Measuring Accuracy
- Compact and Rugged Model
- Wide Range of Media Compatibility
- Low Static and Thermal Errors
- Sanitary Fitting Available
- Reverse polarity and transient current protected



Description

MRF25 series with SS316L flush membrane is a rugged silicon technology based pressure transmitter suitable for harsh environments. This compact pressure transmitter offers great flexibility and reliability for a wide range of applications in many industries such as water, food, beverage and pharmaceutical with competitive price. The 3 to 20VDC input voltage enables the transmitters to be used in portable applications such as agricultural machinery and automotive testing. It finds a wide range of applications due to its compatibility with different data loggers.

MRF25 is available in pressure ranges from -1 to 350bar with an output of V_{DC} . It is suitable for pressure measurement of gases & liquids compatible with SS316L. Options for Titanium, Hastelloy or Tantalum diaphragm are available on request. While the standard Precision is 0.5%FS, you can optionally get a precision of 0.25%FS. The robust construction of MRF25 with its high performance makes it ideal for demanding long term applications.

Applications

- Food industry
- Beverage machineries
- Data logging
- Pharmaceutical applications
- Water and Waste Water Monitoring
- Agricultural equipment
- Hydrology research
- Hydrostatic level control
- Hydraulic pumps
- Compressed air line

Technical Specifications

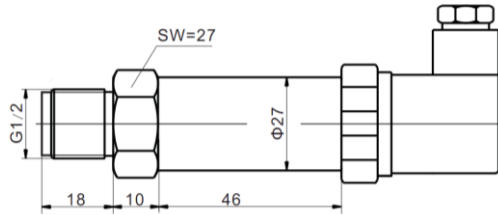
- **Pressure media:** all fluids compatible with SS316L
- **Ranges:** -1 to 350bar
- **Pressure references:** Gauge, Sealed Gauge, Absolute
- **Overpressure rating:** 150% FS
- **Supply voltage:** 3 to 20VDC
- **Output signals:** 0/2.5V
- **Precision:** 0.5% FS (standard), 0.25% FS, combined LRH error
- **Long term stability:** <0.2% FS/year
- **Protection Level:** IP65 with DIN connection; IP68 (option) with cable connection
- **Compensated temp. range:** 0 to 70°C
- **Operating temp. range:** - 30 to +80°C
- **Temp. coefficient of zero:** 0.03% FS /°C
- **Temp. coefficient of span:** 0.03% FS /°C
- **Insulation resistance:** 100MΩ @ 50VDC
- **Process connection:** G1/2 or others
- **Electrical connection:** DIN43650 and others
- **Case materials:** SS321
- **Diaphragm materials:** SS316L, Titanium, Hastelloy or Tantalum

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For 3 to 20VDC Input Voltage

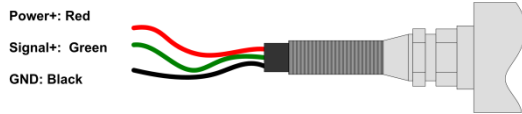
MeasureX

Dimensions

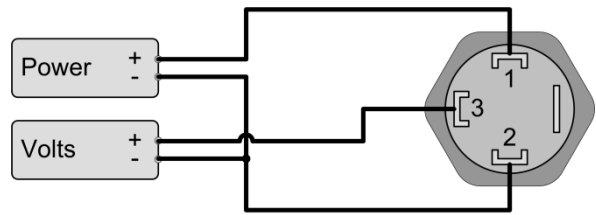


MRF25 with G1/2" port and DIN connector

Connection Diagrams



Voltage, 3-wire with cable connection



Power+: 1 Signal+: 3 GND: 2
Voltage, 3-wire with DIN connection

Ordering Code

MRF25							
Range	[-1/0]; [-1/+1]; [-0.5/+1]; 1, 2, 5, 10, 20, 35, 50, 100, 200, 350 bar or other ranges in bar or psi						
Pressure Reference							
	VG (vented gauge)	SG (sealed gauge)	Abs (absolute)				
Precision ±⁽¹⁾							
	0.5% FS		0.25% FS				
Output Signal							
	0/2.5V volts (for input of 3 to 20VDC)						
Pressure Port							
	G1/2 (1/2" BSPP male)		NPT1/2 (1/2" NPT male)				
	R1/2 (1/2" BSPT male)		and others ⁽¹⁾				
Electrical Connection							
	DIN 43650 connector		3m Cable				
	3m IP68 Cable ⁽²⁾		Others				
Diaphragm Material							
	SS316L						
	Tantalum						
	Others						
MRF25	200bar	SG	0.5%	0/2.5V	G1/4	DIN	SS316L

Notes:

- (1): Pressure port of 1/4" is not available for this sensor.
 - (2): IP68 cable is available for sealed gauge reference.
- Sensors with range of up to 1bar are available in only accuracy of 0.5% FS.
All specifications are subject to change without prior notice

Ver. 5.22-15/10