

# MRF23

## Flush Diaphragm Strain Gauge Pressure Transmitter

**MeasureX**

### Features

- Flush Diaphragm Model
- Sanitary Fitting Available
- High Measuring Accuracy
- Pressure Measurement Range of 0-20 to 600bar
- Compact and Rugged Model
- Wide Range of Media Compatibility
- Low Static and Thermal Errors



### Description

MRF23 series with 17-4PH flush membrane is a rugged strain gauge based pressure transmitter suitable for harsh environments. The strain gauge design of this pressure transmitter offers great flexibility and reliability for a wide range of applications with highly competitive pricing.

MRF23 comes in a range from 20bar to 600bar Full Scale Sealed Gauge with an output of mA or V. It is suitable for pressure measurement of gases & liquids compatible with stainless steel 17-4PH. While the standard Precision is 0.5% FS, you can optionally get a precision of 0.25% FS and 0.1% FS. It finds applications in hydraulic and pneumatic systems among many others.

The robust construction of MRF23 with its high performance makes it ideal for demanding long term applications.

### Applications

- Mining industry
- Beverage machineries
- Data logging
- Pharmaceutical applications
- Agricultural equipment
- Industrial process control
- Compressed air line

### Technical Specifications

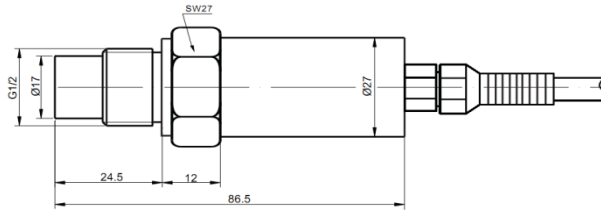
- Pressure media:** all fluids compatible with stainless steel
- Ranges:** 20 to 600bar
- Pressure references:** Sealed Gauge
- Overpressure rating:** 150% FS
- Supply voltage:** 12 to 36 VDC
- Output signals:** 4/20mA, 0/5V, 0/10V, 1/5V
- Precision:** 0.5% FS (standard), 0.25% FS, 0.1% FS, combine LRH error
- Long term stability:** <0.2% FS/year
- Protection Level:** IP65 with DIN connection; IP67 and IP68 (option) with cable connection
- Compensated temp. range:** -10 to +60°C
- Operating temp. range:** - 20 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 or others
- Case materials:** SS321 or 17-4PH
- Diaphragm materials:** 17-4PH
- Sealing:** n-Butyronitrile or fluoro-rubber sealing ring (Standard); Welded or integrated parts (option)

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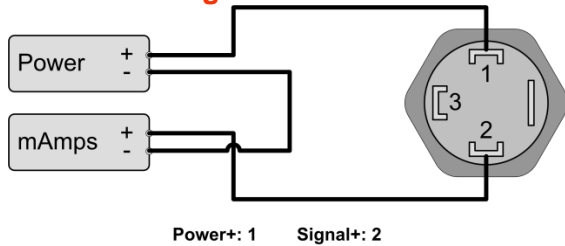
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### Dimensions

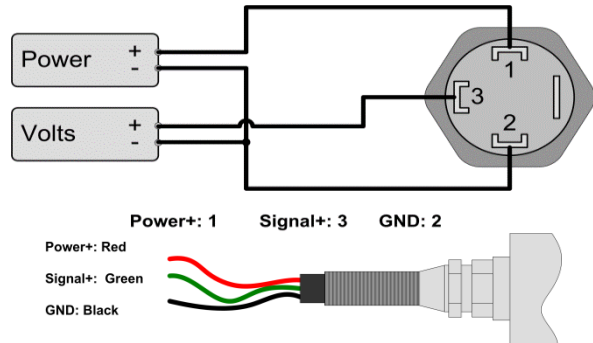


MRF23 with G1/2" flush type port and cable connector

### Connection Diagrams



4/20mA, 2 wire loop powered



Voltage, 3-wire

### Ordering Code

<b>MRF23</b>							
<b>Range</b>	20, 50, 100, 200, 400, 500, 600 bar or other ranges in bar or psi						
	<b>Pressure Reference</b>						
	SG (sealed gauge)						
	<b>Precision ±</b>						
	0.5% FS	0.25% FS	0.1% FS				
	<b>Output Signal</b>						
	4/20mA (2 wire loop-powered)		0/5V volts				
	0/10V volts		1/5V volts				
	<b>Pressure Port</b>						
	G1/2(1/2" BSPP male)		NPT1/2(1/2" NPT male)				
	R1/2(1/2" BSPT male)		and others <sup>(1)</sup>				
	<b>Electrical Connection</b>						
	DIN 43650 connector						
	3m Cable		3m IP68 Cable <sup>(2)</sup>				
	and others						
	<b>Display</b>						
	No display						
	3 1/2 digit LCD <sup>(3)</sup>						
	3 1/2 digit LED <sup>(3)</sup>						
<b>MRF23</b>	<b>100bar</b>	<b>SG</b>	<b>0.5%</b>	<b>4/20mA</b>	<b>G1/2</b>	<b>DIN</b>	

### Notes:

- (1): Pressure port of 1/4" is not available for this sensor.
  - (2): IP68 cable is available for sealed gauge reference.
  - (3): Available only with 4/20mA output and DIN 43650 connector
- All specifications are subject to change without prior notice

Ver. 5.3-17/05