

MRB23

Low Cost Pressure Transmitter for OEM Applications

MeasureX

Features

- Low Cost and option of low power supply(3 VDC)
- Pressure Measurement Range of -1 to 1000bar
- Piezoresistive Technology
- Wide Range of Media Compatibility
- OEM applications
- High Measuring Accuracy



Description

MRB23 series is a rugged piezoresistive silicon technology based pressure transmitter specially designed for applications where economical price and accurate pressure measurement is required. Mass production of the housing and circuitry makes it cost effective for high volume O.E.M applications.

The housing and the wetted parts are made of 304 stainless steel and the pressure membrane is made of SS316L. The users can choose accuracy of 0.5% (standard) or 0.25% for high accuracy requirements. MRB23 is available in pressure ranges from -1 to 1000bar with an output of mA or V. This model is ideal for general industrial applications, which is notable for its compact design and also offers excellent quality at an extremely competitive price.

Applications

- Production machinery
- Hydrology research
- Data logging
- Machine tool control
- Air conditioning
- Agricultural equipment
- Open cut mining
- Hydrostatic level control
- Machine building
- Pumps and compressors

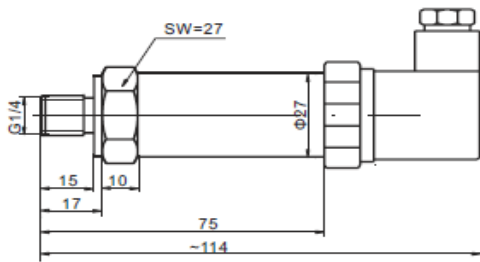
Technical Specifications

- **Pressure media:** all fluids compatible with SS304 and SS316L
- **Ranges:** -1 to 1000bar
- **Pressure references:** Vented Gauge, Sealed Gauge, Absolute
- **Overpressure rating:** 150% FS
- **Supply voltage:** 9 to 36 VDC / 3 to 5VDC
- **Output signals:** 4/20mA, 0/5V, 0/10V, 0/2.5V
- **Precision:** 0.5% FS(standard), 0.25% FS
- **Long term stability:** <0.2% FS/year
- **Protection Level:** IP65
- **Compensated temp. range:** -10 to 70°C
- **Operating temp. range:** -30 to 90°C
- **Temp. coefficient of zero:** 0.02% FS /°C
- **Temp. coefficient of span:** 0.02% FS /°C
- **Insulation resistance:** 100MΩ @ 50VDC
- **Process connection:** G1/4 or others
- **Electrical connection:** DIN43650, others
- **Housing and wetted parts:** SS 304
- **Diaphragm materials:** SS316L
- **Frequency response:** 1KHz

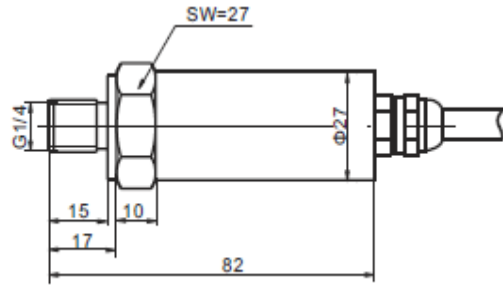
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Dimensions

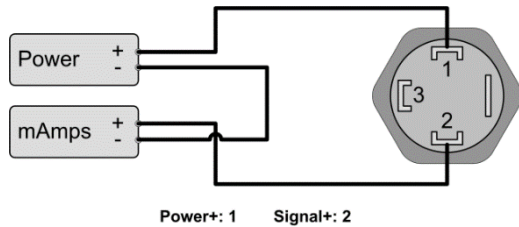


MRB23 with G1/4" port and DIN connector

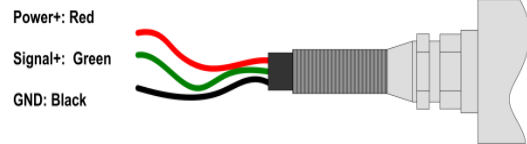


MRB23 with G1/4" port and cable connection

Connection Diagrams



4/20mA, 2 wire loop powered



Voltage, 3-wire

Ordering Code

MRB23						
Range	[-1/0]; [-1/+1]; [-0.5/+1]; 0.1, 0.2, 0.5, 1, 2, 4, 6, 8, 10, 12, 15, 16, 20, 35, 50, 100, 200, 300, 400, 500, 600, 700, 800, 1000 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					
	4/20mA	0/10V	0/5V	0/2.5V(3-5VDC supply)		
	Pressure Port					
	G1/4(1/4" BSPP male)		G1/2(1/2" BSPP male)			
	R1/4(1/4" BSPT male)		NPT1/4(1/4" NPT male)		others	
	Electrical Connection					
	3m Cable		DIN connector			
MRB23	200bar	SG	0.5%	4/20mA	G1/4	DIN

Notes:

- (1): Sensors with a range of up to 1bar are available in only accuracy of 0.5% FS.
- (2): Sensors up to range of 8 bar are available only with vented gauge

Ver. 5.1-18/03