

MRS21

Strain Gauge Pressure Transmitter

MeasureX

Features

- High Measuring Accuracy
- Pressure Measurement Range of 0-20 to 700bar
- Compact and Rugged Model
- Wide Range of Media Compatibility
- Low Static and Thermal Errors
- Reverse polarity and transient current protected



Description

MRS21 series with 17-4PH diaphragm is a rugged strain gauge based pressure transducer 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.

MRS21 comes in a range from 20bar to 700bar 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 MRS21 with its high performance makes it ideal for demanding long term applications.

Applications

- General industrial applications
- Pneumatics
- Open cut mining
- Data logging
- Off road
- Hydrostatic systems
- Hydraulic systems
- Injection mould equipment
- Internal combustion engine pipeline
- Construction

Technical Specifications

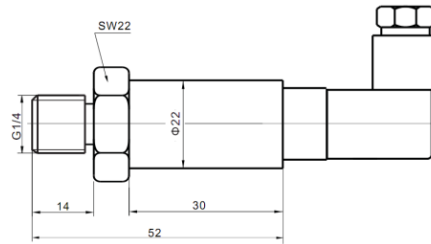
- **Pressure media:** all fluids compatible with stainless steel
- **Ranges:** 20 to 700bar
- **Pressure references:** Sealed Gauge
- **Overpressure rating:** 150% FS
- **Supply voltage:** 12 to 36 VDC
- **Output signals:** 4/20mA, 0/5V, 0/10V, 1/5V
- **Precision:** 0.5% FS (standard), 0.25% FS, 0.1% 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:** G1/4 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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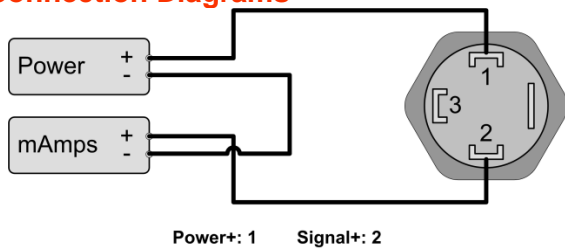
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Dimensions

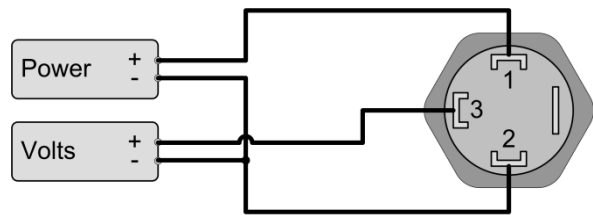


MRS21 with G1/4" port and DIN connector

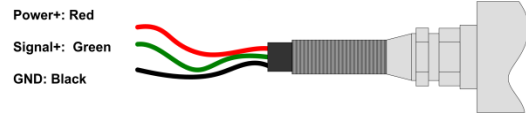
Connection Diagrams



Power+: 1 Signal+: 2



Power+: 1 Signal+: 3 GND: 2



4/20mA, 2 wire loop powered

Voltage, 3-wire

Ordering Code

MRS21							
Range	20, 50, 100, 200, 400, 500, 600 700bar or other ranges in bar or psi						
	Pressure Reference						
	SG (sealed gauge)						
	Precision ±						
	0.5% FS	0.25% FS	0.1% FS				
	Output Signal						
	4/20mA (2 wire loop-powered)			0/5V volts			
	0/10V volts			1/5V volts			
	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)				
	and others						
	Electrical Connection						
	DIN 43650 connector						
	3m Cable		3m IP68 Cable				
	and others						
	Display						
	No display						
	3½ digit LCD ⁽¹⁾						
	3½ digit LED ⁽¹⁾						
MRS21	200bar	SG	0.5%	4/20mA	G1/4	DIN	No display

Note: All specifications are subject to change without prior notice

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