

MRH21

High Frequency Pressure Transmitter

MeasureX

Features

- Frequency Response up to 1MHz
- High Measuring Accuracy
- Pressure Measurement of 0.1 to 1000bar
- Low Static and Thermal Errors
- Compact and Rugged Model
- Wide Range of Media Compatibility



Description

MRH21 series with embedded amplifier circuit is a rugged MEMS technology based pressure transmitter suitable for dynamic measurements. This compact pressure transmitter offers great flexibility and reliability for a wide range of applications at highly competitive pricing.

MRH21 is available in pressure ranges from 0.1 to 1000bar with voltage output. It is suitable for pressure measurement of gases & liquids compatible with stainless steel. While the standard Precision is 0.5% FS, you can optionally get a precision of 0.25% FS.

The robust construction of MRH21 with its high performance makes it ideal for demanding long term applications.

Applications

- Production machinery
- Oil and gas industry
- Machine tool control
- Research
- Aerospace and military industries
- Open cut mining
- Data logging
- Hydraulic equipment

Technical Specifications

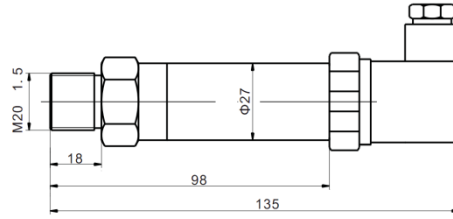
- **Pressure media:** all fluids compatible with stainless steel SS321
- **Ranges:** 0.1 to 1000bar
- **Pressure references:** Gauge, Sealed Gauge
- **Overpressure rating:** 200% FS
- **Supply voltage:** 12 to 32 VDC
- **Output signals:** 0/5V, 0/10V, 1/5V
- **Precision:** 0.5% FS (standard), 0.25% FS, combined LRH error
- **Long term stability:** <0.2% FS/year
- **Protection Level:** IP65 with DIN connection; IP67 and IP68 (option) with cable connection
- **Dynamic frequency response:** 1MHz max.
- **Compensated temp. range:** 0 to 70°C
- **Operating temp. range:** - 10 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:** M20x1.5 or others
- **Electrical connection:** DIN43650 and others
- **Case materials:** SS321
- **Diaphragm materials:** Silicon
- **Sealing:** Epoxy adhesive sealing

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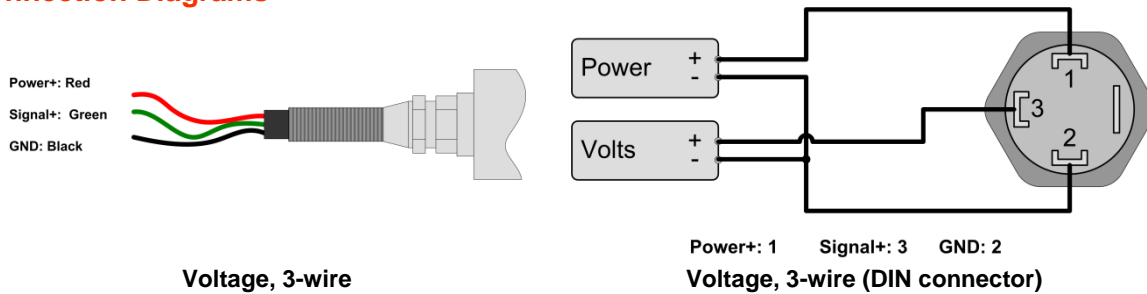
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Dimensions



MRH21 with M20x1.5 port and DIN connector

Connection Diagrams



Ordering Code

MRH21						
	Range	0.1, 0.2, 0.5, 1, 2, 5, 10, 20, 50, 100, 200, 400, 600, 800, 1000 bar or other ranges in bar or psi				
		Pressure Reference				
		VG (vented gauge)		SG (sealed gauge)		
		Precision \pm ⁽¹⁾				
		0.5% FS		0.25% FS		
		Output Signal				
		0/5V volts		and other voltage outputs		
		Pressure Port ⁽²⁾				
		M20x1.5		M12x1		
		1/2"NPT		G1/2(1/2" BSPP male)		
		and others				
		Electrical Connection				
		DIN 43650 connector				
		3m Cable		3m IP68 Cable ⁽³⁾		
MRH21	200bar	SG	0.5%	0/5V	M20x1.5	DIN

Notes:

- (1): Sensors with range of less than 1 bar and higher than 300bar are available only in accuracy of 0.5% FS.
 (2): Pressure port of 1/4" is not available for this sensor.
 (3): IP68 cable is available for sealed gauge reference.
 All specifications are subject to change without prior notice

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