

MRD25

Piezo-Resistive Silicon Differential Pressure Transducer

MeasureX

Features

- High Measuring Accuracy
- Differential Pressure Measurement Range of 1 to 600kPa
- Compact and Rugged Model
- Wide Range of Media Compatibility
- Low Static and Thermal Errors



Description

MRD25 series is a rugged silicon piezo-resistive technology based differential pressure transducer suitable for pipe lines and process control systems. This compact differential pressure transducer offers great flexibility and reliability for a wide range of applications with highly competitive pricing.

MRD25 is available in pressure ranges from 0.01 to 6bar with an output of 50mV. It is suitable for pressure measurement of non-corrosive and non-viscous liquids and gasses. While the standard Precision is 0.5% FS, you can optionally get a precision of 0.25% FS. It finds applications in hydraulic and pneumatic process control systems among many others.

The robust construction of MRD25 with its high performance makes it ideal for demanding long term applications.

Applications

- Process industries
- Pump controls
- Pneumatic systems
- Manufacturing process controls
- Power plants
- Manufacturing automation
- Air supply systems in production lines
- Mining industry

Technical Specifications

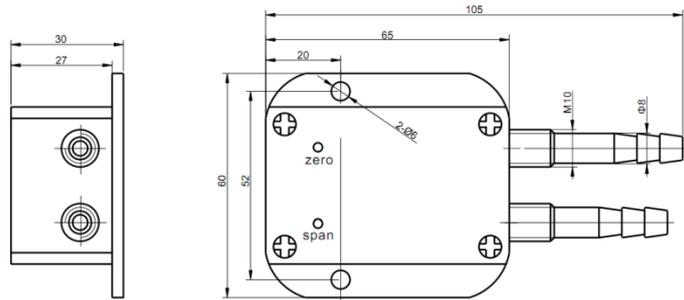
- **Pressure media:** Non-corrosive and non-conductive gas or liquid
- **Ranges:** 1...600kPa (0.01 ... 6bar)
- **System Pressure:** Max. 500 % FS
- **Overpressure rating:** 300% FS (for both positive and negative pressure sides).
- **Excitation:** 0.5 to 1.5mA or 3 to 10 VDC
- **Output signals:** 50mV
- **Precision:** 0.5% FS (standard), 0.25% FS; combined LRH errors
- **Zero offset:** $\leq 1.5\%$ FS
- **Long Term Stability:** $< 0.2\%$ FS/year
- **Protection:** IP65 (and optionally IP66)
- **Relative humidity:** 0 ... 80% RH
- **Compensated temp range:** 0~+60°C
- **Operating temp range:** -20~+85°C
- **Long term stability:** $<0.2\%$ FS/year
- **Temp. coefficient of zero:** 0.03% FS /°C
- **Temp. coefficient of span:** 0.03% FS /°C
- **Insulation resistance:** 500MΩ @ 50VDC
- **Electrical connection:** 3m length and 5mm diameter cable or others
- **Process connection:** M10 with $\phi 8$ gas nipple or others
- **Housing material:** Aluminium Alloy
- **Diaphragm material:** SS316L or Ceramic

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Dimensions



MRD25 with gas nipple process connection

Connection Diagrams



Ordering Code

MRD25					
	Range	1, 2, 5, 10, 20, 50, 100, 200, 400, 600 kPa or other ranges in bar or psi			
		Precision ±			
		0.5% FS	0.25% FS		
		Output Signal			
		50mV			
		Pressure Port (P1 and P2)			
		M10 with $\phi 8$ gas nipple and others			
		Electrical Connection			
		3m Cable	3m IP66 Cable		
		and others			
MRD25	1kPa	0.5%	50mV	M10	3m

Note:

All specifications are subject to change without prior notice

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