

MRT21

Strain Gauge Pressure Transducer

MeasureX

Features

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



Description

MRT21 series with 17-4PH diaphragm is a rugged strain gauge based pressure transducer suitable for harsh environments. The strain gauge design of this pressure transducer offers great flexibility for customisation for OEM applications with highly competitive pricing.

MRT21 comes in a range from 20bar to 600bar Full Scale Sealed Gauge with an output of mV/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 MRT21 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

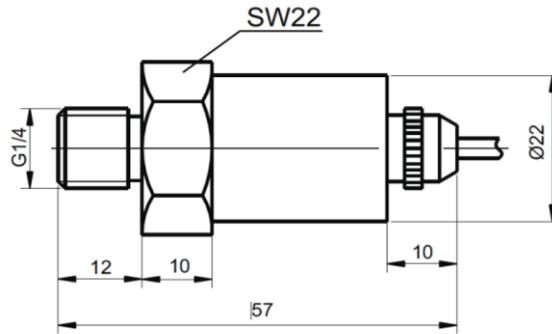
Technical Specifications

- Pressure media:** gas or liquid compatible with stainless steel 17-4PH
- Ranges:** 20...600bar
- Pressure reference:** Sealed Gauge (SG)
- Overpressure rating:** 150% FS
- Supply voltage:** 6VDC ~ 12VDC
- Output signals:** 1, 1.5 or 2mV/V
- Precision:** 0.5% FS (standard), 0.25% FS, 0.1% FS; combined LRH errors
- Zero unbalance:** $<\pm 2\%$ FS
- Compensated temp range:** -10 ~ +60°C
- Operating temp. range:** -20 ~ +70°C
- Long term. stability:** $<0.2\%$ FS/year
- Temp coefficient of zero:** 0.02% FS /°C
- Temp coefficient of span:** 0.02% FS /°C
- Input resistance:** 380±5Ω
- Output resistance:** 350±5Ω
- Insulation resistance:** 100MΩ @ 50VDC
- Electrical connection:** DIN43650 and others
- Case material:** SS321
- Diaphragm material:** 17-4PH
- Process connection:** G1/4 or others
- Sealing:** n-Butyronitrile or fluoro-rubber sealing ring (Standard); Welded or integrated parts (option)

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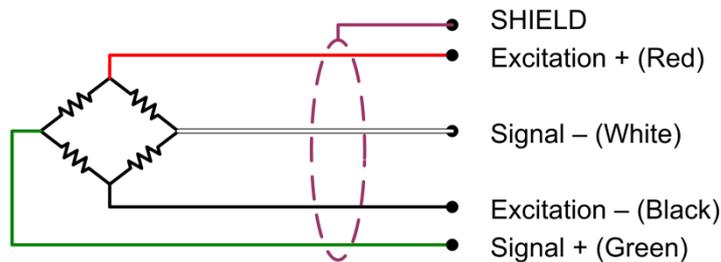
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Dimensions



MRT21 with G1/4" port connector

Connection Diagram



Ordering Code

MRT21						
	Range	20, 50, 100, 200, 400, 500, 600bar or other ranges in bar or psi				
		Pressure Reference				
		SG (sealed gauge)				
		Precision ±				
		0.5% FS	0.25% FS	0.1% FS		
		Output Signal				
		1mV/V	1.5mV/V	2mV/V		
		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				
MRT21	100 bar	SG	0.5%	2 mV/V	G1/4	DIN

Note:

All specification is subject to change without prior notice