

MRG23

Flush Diaphragm Strain Gauge Pressure Transducer

MeasureX

Features

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



Description

MRG23 series with 17-4PH flush membrane 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.

MRG23 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 MRG23 with its high performance makes it ideal for demanding long term applications.

Applications

- Food industry
- Beverage machineries
- Data logging
- Pharmaceutical applications
- Agricultural equipment
- Industrial process control
- Compressed air line

Technical Specifications

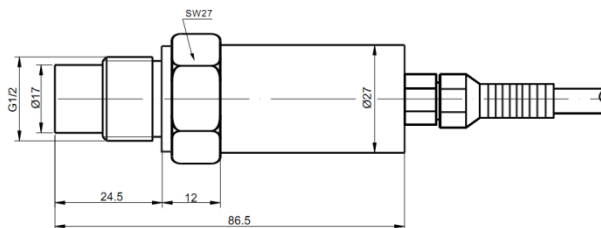
- **Pressure media:** all fluids compatible with stainless steel 17-4PH
- **Ranges:** 0 to 600bar
- **Pressure references:** Sealed Gauge
- **Overpressure rating:** 150% FS
- **Supply voltage:** 5 to 12VDC
- **Output signals:** 1, 1.5 or 2mV/V
- **Precision:** 0.5% FS (standard), 0.25% FS, 0.1% FS, combined 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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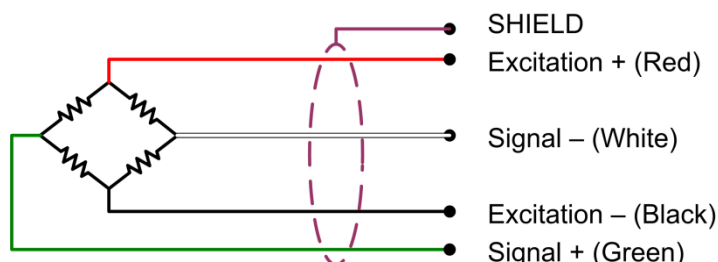
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Dimensions



MRG23 with G1/2" flush type port and cable connector

Connection Diagrams



Ordering Code

| MRG23 | | | | | | |
|-------|-----------------------|--|------------------------------|---------------------------|------|-----|
| | Range | 20, 50, 100, 200, 400, 500, 600 bar 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 (standard) | | others | | |
| | | Pressure Port | | | | |
| | | G1/2(½" BSPP male) | | NPT1/2(½" NPT male) | | |
| | | R1/2(½" BSPT male) | | and others ⁽¹⁾ | | |
| | Electrical Connection | | | | | |
| | DIN 43650 connector | | | | | |
| | 3m Cable | | 3m IP68 Cable ⁽²⁾ | | | |
| | and others | | | | | |
| MRG23 | 100bar | SG | 0.5% | 2mV/V | G1/2 | DIN |

Notes:

(1): Pressure port of 1/4" is not available for this sensor.

(2): IP68 cable is available for sealed gauge reference.

All specifications are subject to change without prior notice

Ver. 5.4-17/05