



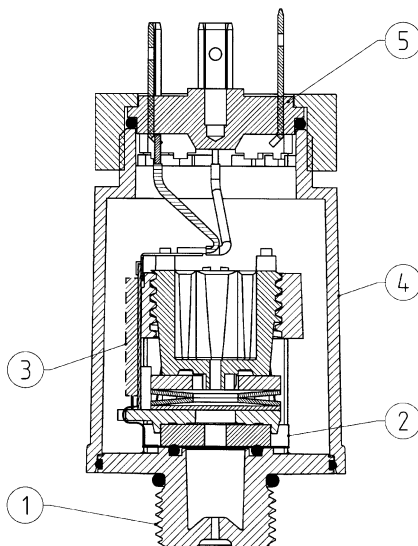
EDITION 02/2001

## OEM Pressure transmitter type 503 0 to 10 bar

### Technical overview

The relative pressure transmitter of type series 503 with proved ceramic technology features, calibrated and amplified sensor signals which are available as standardized voltage outputs.

Designed for large batch production in OEM applications.



### Legend to cross-section drawing

- 1 Connection fitting
- 2 Ceramic sensor
- 3 Hybrid electronics
- 4 Cover
- 5 Electrical connection

### Pressure ranges

Relative pressure  
(measurement of pressure relative to ambient pressure) according to order code selection table

### Overload

2 x Measuring range (fs)

### Rupture pressure

3 x Measuring range (fs)

### Accuracy

Total of linearity, hysteresis and repeatability  
< +/- 1 % fs

Adjustment accuracy zero point and full scale (repeatable, stable)  
< +/- 1.5% fs

### Housing material

ABS for cover AMP  
Pa 6 for DIN-connector and cable

### Materials in contact with the medium

Ceramic/fiber-reinforced plastic,  
see order code selection table  
Sealing material FPM, EPDM, NBR

### Temperature influences

Medium temperature  
0 °C to 90 °C (consider mounting position)  
Ambient temperature 10 °C to 60 °C  
TC zero point  
< +/- 0.06 % fs/°C  
TC sensitivity  
< +/- 0.015 % fs/°C typically

### The distinct advantages

- Fully-automated manufacture, giving ideal price/performance ratio
- Ideal for use as a control element, owing to small hysteresis
- Incorporates all the benefits of ceramics technology for industrial applications

### Load cycle

< 50 Hz

### Dynamic response

Suitable for static and dynamic measurements.

Response time < 5 ms.

### Pressure connections

Outside thread G 3/8

Plug connector Ø 15 mm

Counterpart, supplied by customer, see drawing on back page.

### Weight

41 grams with connector AMP

55 grams with connector DIN

95 grams with cable 1.5 meters

### Installation arrangement

Optional, with AMP connector do not use in the area of trickling water.

Starting torque G 3/8

min. 0.4 Nm / max. 0.8 Nm

Destruction > 30 Nm

### Signal

0.5 – 2.5 V

### Power supply

5 VDC +/- 10%

3-wire-cable

0.5 – 3.5 V

8.5 – 30 VDC

3-wire-cable

Nominal voltage to declare.

Short circuit-proof and protected against polarity reversal. For connector-versions only mechanically protected. The correct wiring acc. to the scheme has to be guaranteed by the OEM-customer.

### CE-marking

The product is designed exclusively for installation in equipment which complies with EU directives. The customer is responsible for CE conformity.

Electromagnetic compatibility to directive

– EN 61000-4-6 / – EN 61000-4-3

### Load

0.5 – 2.5 V

> 10 kOhm/< 100 nF

0.5 – 3.5 V

> 10 kOhm/< 100 nF

### Current consumption

0.5 – 2.5 V

< 5 mA

0.5 – 3.5 V

< 5 mA

### Electrical connections / Protection standard

Connector AMP Duoplug

IP 00

Connector DIN 43650A

IP 54

Cable 1.5 m

IP 54

### Calibration

Calibrated in the factory.

### Accessories

Safety spring for plug connector.

Female connector DIN 43650-A

AMP-Female connector with cable

