

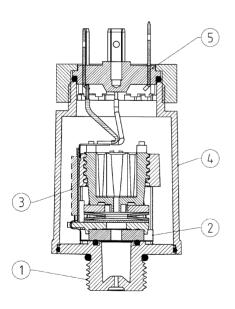
EDITION 02/2001

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.



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

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

TC sensitivity

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

< +/- 0.015 % fs/°C typically

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	Power supply
0.5 – 2.5 V	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

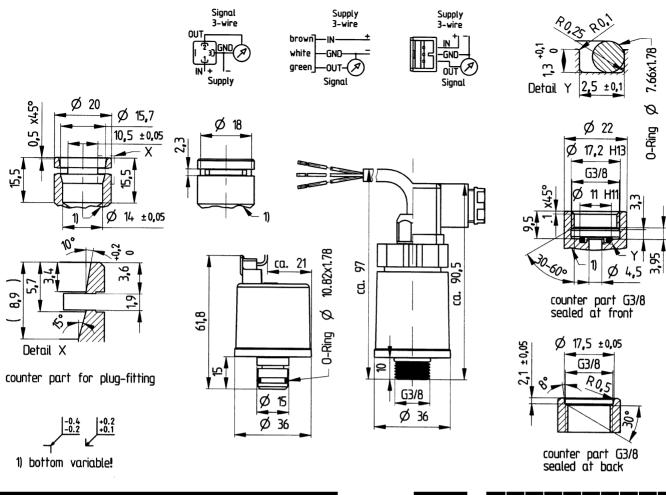
Connector AMP Duoplug IP 00 Connector DIN 43650A IP 54 Cable 1.5 m IP 54

Calibration

Calibrated in the factory.

Accessories

Safety spring for plug connector. Female connector DIN 43650-A AMP-Female connector with cable



Order code select	on table 503	X	X	X	Х	Х	X	X	X	
Pressure relative		9								
Pressure ranges (bar)	0 + 2.5 0 + 4 0 + 6 0 + 10		1 1 1 3	4 5 7 0						
Sealing materials ¹	FPM Fluoro-elastomer (Viton) EPDM Ethylene propylene NBR Nitrile butadiene				0 1 2					
Calibration	Factory calibrated					0				
Outputs and power supply	0.5 - 2.5 V 5 VDC +/- 10% 3-wire-cable 0.5 - 3.5 V 8.5 - 30 VDC 3-wire-cable						0			
Electrical connections ²	AMP-Duoplug protection standard IP 00 Connector DIN 43650 A protection standard IP 54 Cable 1.5 meters protection standard IP 54							0 1 2		
Pressure connections	Outside thread G 3/8 sealed at front Grivory GV 5H Outside thread G 3/8 sealed at back Grivory GV 5H Plug-fitting (to max. 4 bar measuring range) Noryl GTX 20% GF				1				0 1 2	
Accessories	Safety spring for plug connector Female connector 43650-A with sealing Female connector AMP with cable 1450 mm	1 1 1	0 0 0	5 3 3	8 5 1	8 1 6	3 0 7			

1 According to ISO standard R 1629

2 Without female connector

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503OEM.02/2001.HUBA/503OEMeDEP.SCHMO/000748.WOH Technical data subject to change.