



EDITION 06/2005

## OEM Pressure transmitter **2345**

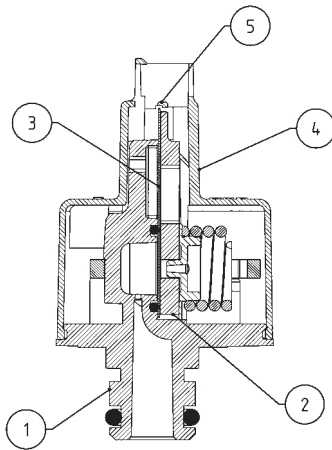
### Relative 0 to 4 bar

#### Technical overview

The pressure transmitters of type are measuring components for the measurement of pressure. They are suitable for analysing water pressure ratios in heating- and industrial circuits.

The novel ceramic measuring element with its included electronic gives a calibrated, amplified voltage signal.

Designed for large batch production in OEM applications.



#### Legend to cross-section drawing

- 1 Pressure connection
- 2 Ceramic sensor
- 3 Amplifier electronics
- 4 Cover
- 5 3-pole connector

#### The distinct advantages

- Best price-/performance ratio with:
  - electronic integrated in measuring element
  - optimized mounting concept
  - automatic production
- Ideal for use as a control element, owing to small hysteresis.
- The measuring element includes the well proven ceramic technology of Huba Control.

#### Pressure ranges

Relative pressure (differential measurement of pressure relative to ambient pressure)  
0 ... 4 bar

#### Overload

8 bar

#### Rupture pressure

12 bar

#### Accuracy

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

Adjustment accuracy zero point and full scale < +/- 1.5% fs

TC zero point < +/- 0.06% fs/K typ.

TC sensitivity < +/- 0.015% fs/K typ.

Ratiometric error for ratiometric version < +/- 0.5% fs typ.

#### Housing material

Cover plastic thermoplast

#### Materials in contact with the medium

Ceramic, Fibre reinforced plastic, Sealing material EPDM

#### Temperature influences

Medium temperature 2 °C ... 90 °C

Ambient temperature 2 °C ... 85 °C

#### Dynamic response

Suitable for static and dynamic measurements  
Response time < 5 ms

#### Pressure connections

Plug connector Ø 15 mm

Outside thread G 3/8"

Counterpart by customer see drawing on back page

#### Weight

30 grams

#### Installation arrangement

Proposal: electrical connection upwards

#### Signal / Power supply

0.5 – 3.5 V 8.5 – 30 VDC  
3-wire cable

Short circuit-proof and protected against polarity reversal. Each connection against other with max. +/- supply voltage.

0.5 – 3.5 V 5 VDC (4.75 – 5.25) 10 – 70%  
3-wire cable  
ratiometric

#### Load

≥ 10 kOhm / < 100 nF

#### Current consumption

< 7 mA  
Ratiometric version < 4 mA

#### Electrical connections / Protection standard

Connector 3-pole, rast 2.5 mm (e.g. AMP Duo-plug), mechanically protected against polarity reversal, IP 00

#### Tests / Admissions

Shock acc. IEC 68-2-27: 40 G, 11 ms half sine wave, all directions. Free fall from 1 m on concrete.

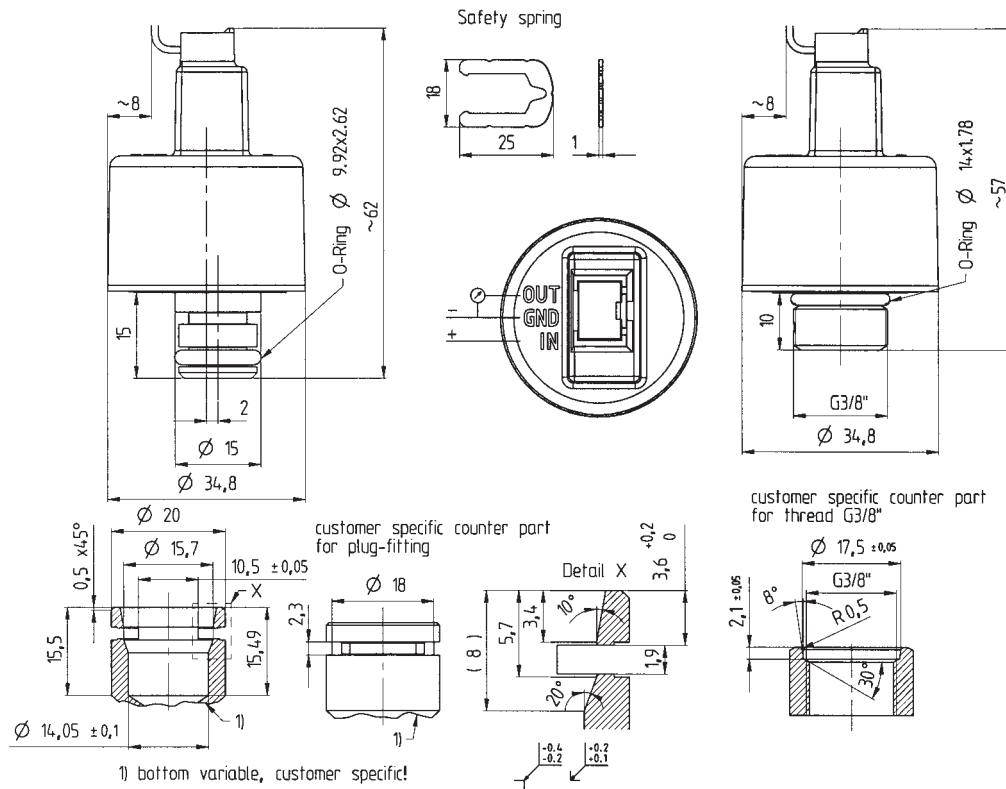
Vibration acc. IEC 68-2-6: 5 G, 2 ... 2000 Hz

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

EMC-behaviour see on the back.

#### Accessories

Safety spring for plug connector



Variantenplan		2345	X	X	X	X	X	X	X
Relative pressure	0 ... 4 bar		9	1	5				
Pressure connections	Connection plug-fitting Outside thread G 3/8"					3	4		
Outputs and power supply	0.5 – 3.5 V 0.5 – 3.5 V ratiometric	8.5 – 30 VDC 5 VDC (4.75 – 5.25)						0	1
Accessories	Safety spring for plug connector		1	0	5	8	8	3	

Electromagnetic compatibility: CE conformity (EMC) by application of harmonized standards: Interference stability EN 61000-6 EN 61000-6-2 and EN 61326-1			
Interference stability	Test standard		Effect
Electrostatic discharge (ESD)	EN 61000-4-2	8 kV air	no effect
High-frequency electromagnetic radiation (HF)	EN 61000-4-3	10 V/m, 80 ... 1000 Mz	no effect
Conducted HF interference	EN 61000-4-6	10 V, 0.15 ... 80 MHz	no effect
Fast transients (burst)	EN 61000-4-4	4 kV	no effect
Surge	EN 61000-4-5	max. tolerable cable length	10 m (EN 61000-6-2) 3 m (EN 61326-1)
Magnetic fields	EN 61000-4-8	30 A/m, 50 Hz	no effect
Interference emit	Test standard		Effect
Conducted interference	EN 55022 (CISPR 22)	0.15... 30 MHz	no emission
Radiation from housing		30...1000 MHz, 10 m	no emission