

Pressure Transmitters

With ceramic cell and DMS (wire resistance strain gauge)

CTMd

Applications

Pressure transmitters model CTMd are suitable for the overpressure measurement of liquid or gaseous media that do not corrode 1.4305 (303 stainless steel), Viton and aluminum oxide Al_2O_3 .

Construction

The measured pressure acts directly on a ceramic membrane that is being deformed under the influence of the pressure.

The deflection changes the output signal of the wire resistance strain gauge (DMS) mounted on the backside of the ceramic membrane.

The electronics integrated into the housing transform the DMS signal into an electrical standard output signal of 4- 20 mA resp. optionally 0 - 20 mA or 0 - 10 V DC.

Standard Version

Construction Type

Installation length: standard

Process Connection

G ½ B (½" BSP), 1.4305 (303 stainless steel)

Measuring Cell / Sensor

Aluminum oxide Al_2O_3 (96%) with DMS, placed inside

Sensor Seal

FPM (Viton®)

Case

1.4305 (303 stainless steel), case protection type IP 65

Pressure Ranges / Overload

Overpressure, $\ddot{u}s$ = overrange protected

Press. ranges	$\ddot{u}s$	Press. ranges	$\ddot{u}s$
0- 1 bar	2 bar	0- 16 bar	32 bar
0- 1.6 bar	3.2 bar	0- 25 bar	50 bar
0- 2.5 bar	5 bar	0- 40 bar	80 bar
0- 4 bar	8 bar	0- 60 bar	120 bar
0- 6 bar	12 bar	0-100 bar	150 bar
0- 10 bar	20 bar		

Measuring spans up to 16 bar also available for compound gauges.

Output Signal

Output Signal	Power supply	Load impedance
4 ... 20 mA 2-wire	9...32 VDC	(U_B -9V)/0.02 A
0 ... 20 mA 3-wire	6...30 VDC	(U_B -6V)/0.02 A
0 ... 10 V DC 3-wire	15...30 VDC	min. 2 kOhm

Measuring Accuracy

± 1 % of full span

Temperature Limitations

Storage temperature: -30...+ 80 °C (-22... +176 °F)
 Rated temperature: 0...+ 70 °C (+32... +158 °F)

Temperature Influence in the Rated Temperature Range

Zero point: ±0.4 % / 10 K
 Span: ±0.25 % / 10 K



Long-Term Stability of Zero Point and Span
 Better than ± 0.4 % p.a.

Reverse Voltage Protection
 Available

Position of Installation
 Any

Options

- Sensor sealing NBR for ambient temperature -30 up to +60 °C and medium temperature -30 up to +100 °C; other sensor sealings, e.g. EPDM, upon request
- G ¼ B (¼" BSP) according to EN 837-1 upon request
- With attached digital display model DASA according to data sheet 9912
- Attachment of chemical seals, e.g. for the food industry upon request

Ordering Information

Please specify in your order:

Basic model: **CTMd**

Pressure range: see table on left side, e.g. **0/10 bar**

Connection thread: **G ½ B** (others see "Options")

Output signal: 4-20 mA (standard),
 0-20 mA or
 0-10 V DC

Specifics: see "Options"

Examples:

- CTMd, 0-10 bar, G ½ B, 4-20 mA
- CTMd, 0-16 bar, G ½ B, 0-20 mA, with attachable digital display DASA according to data sheet 9912....



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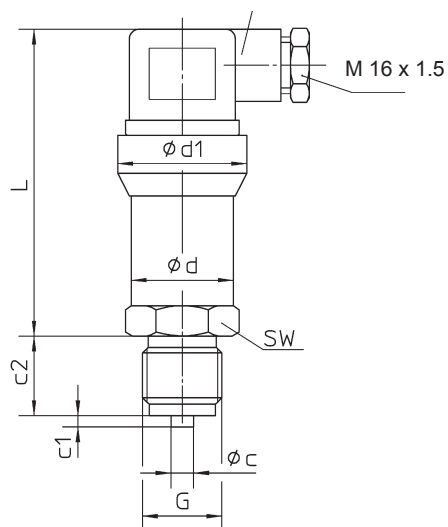
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Electrical Connection, Dimensional Data and Weights

Standard Version

Angular plug connection according to
DIN EN 175 301-803, construction type A

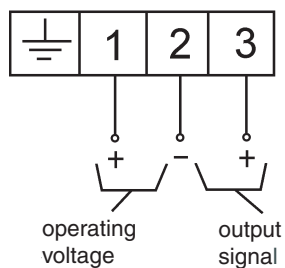


Dimensional Data (mm / inches) and Weights (kg / lb)

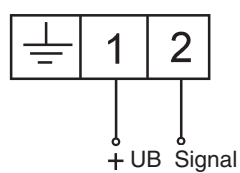
c	c1	c2	d	d1	G	L	SW	approx. weights
6 .24	3 .12	20 .79	28 1.10	38.5 1.52	G ½ B ½ " BSP	91 3.58	27 1.06	0.200 0.440

Wiring Diagram

3-wire



2-wire



Changes, replacement of materials and printing errors excepted.