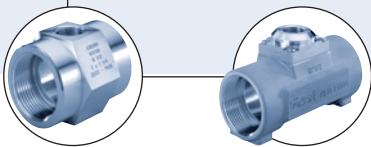




Pressure transmitter

- Ceramic measurement cell
- 2-wire version
- Wetted part material 1.4305, ceramics, FKM

Type TSD001 can be combined with...



Type S001

Fitting

Type S005

Fitting

The pressure transmitter consists of a ceramic sensor, an amplifier and a transmitter. The sensor signal will be amplified and the transmitter converts it into an analog signal.

The transmitter is designed for static and dynamic measurements in neutral or aggressive fluid or in gas and is characterized by a low temperature sensitivity and good mechanical properties (e.g. no aging, no creep).

Furthermore the modular transmitter commands high measurement accuracy, robustness, low required space and flexibility upon the adaptation to different measurement tasks. With these properties, many pressure control applications are possible (e.g. in water and gas distribution networks), through monitoring pumps or filters

Attention!

GND and housing are not galvanic linked but capacitive.

Technical data	
Measuring principle	Ceramic measurement cell
Measuring range²⁾	Vacuum - 0 bar 0 - 1 bar 0 - 4 bar 0 - 10 bar 0 - 16 bar (Further measuring range on request)
Load change	< 50 Hz
Response time (90%)	< 5 ms
Overload	2 x F.S. ¹⁾
Bursting pressure	3 x F.S. ¹⁾
Measurement procedure	Relative pressure measurement (Absolute pressure measurement on request)
Measuring error	< ± 0.3 % of F.S. ¹⁾
Operating voltage U	11 - 33 V DC, unregulated
Current consumption	< 20 mA
Output signal (two-wire)	Analog signal 4 - 20 mA (0 - 10 V; 0 - 5 V on request)
Load (Ω)	≤ (U - 11 V) / 0.2 A (at 4 - 20 mA)
Interference emission	Acc. to EN 61 000-6-3
Interference stability	Acc. to EN 61 000-6-2
EMC-Test standards	see <i>EMC-Chart acc. to harmonised Standards</i>
Electrical connection	Cable plug acc.to DIN 43650 A
Electrical protection	Short-circuit proof, protected against overvoltage and reverse polarity
Protection class	IP65
Wetted parts	Stainless steel 1.4305, ceramics, FKM
Medium temperature	-15 ... +80 °C
Ambient temperature	-15 ... +80 °C

¹⁾ F.S.: Full Scale

²⁾ Pressure data [bar]: Overpressure to atmospheric pressure

Technical Data - continued	
Temperature coefficient	
TK-Zero	< 0.03% of F.S. ¹⁾ /°C
TK-Span	≤ 0.015% of F.S. ¹⁾ /°C
Mounting	External thread G 1/2 other connection versions on request
Mounting position	As required, preferably with pressure connection in downright position
Weight	Approx. 250 g

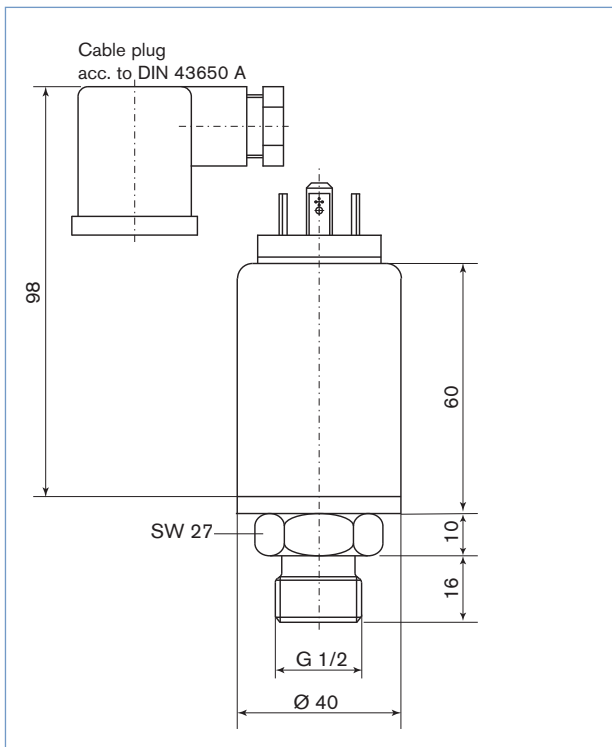
¹⁾F.S.: Full Scale

²⁾Pressure data [bar]: Overpressure to atmospheric pressure

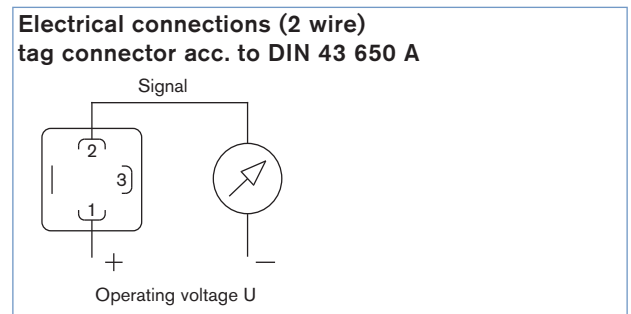
EMC acco. to harmonised standards EN 61 000-6-2 and EN 61 000-6-3

Interference stability	Test standard / Test condition	Effects
Electro-static discharge ESD	EN 61000-4-2	B (No effects)
	8 kV air / 8 kV contact discharge	
High frequency electro-magnetic irradiation	EN 61000-4-3	A (No effects)
	10 V/m / 80 to 1000 MHz	
Line related high frequency coupling	EN 61000-4-6	A (No effects)
	10 V / 0.15 - 80 MHz	
Fast transients (Bursts)	EN 61 000-4-4	B (No effects)
	2 kV	
Magnetic fields	EN 61 000-4-8	A (No effects)
	50 Hz and 30 A/m	

Dimensions [mm]



Electrical connections



Ordering chart

Pressure range [bar]	Item no.
Vacuum ... 0	783 727
0 ... 1	781 995
0 ... 4	783 729
0 ... 10	783 730
0 ... 16	783 731

*To find your nearest Bürkert facility, click on the orange box → www.burkert.com

In case of special application conditions, please consult for advice.

We reserve the right to make technical changes without notice.
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