



Type SDT 12

modular @ pressure

Modular pressure transmitter

Basic features

- ▶ High accuracy
- ▶ High temperature range
- ▶ Nominal pressure ranges up to 40 bar
- ▶ Relative pressure
- ▶ Absolute pressure
- ▶ Automatic zeroing
- ▶ Quadruplicate overload
- ▶ Totally front-flush membrane
- ▶ Wetting parts made of high-grade steel 1.4435 and 1.4404
- ▶ Case made of high-grade steel 1.4301, 1.4305
- ▶ FDA, EHEDG-conformal

Technical features

- ▶ Long-term stable
- ▶ Accuracy according to IEC 60770: 0.2 % FSO or optionally 0.1%
- ▶ Functional ranges (temperature):
Medium to be measured (permanent): -10 °C to 125 °C
Medium to be measured (1/2 h) max. up to 140 °C
- ▶ Customised versions:
 - special measuring ranges
 - multifarious electrical and mechanical process connections
 - further versions on request

Design and mode of operation

The pressure transducer SDT12 represents an extension of our well-tried pressure transducers of the SDT series.

It is available in the following mechanical versions

- **Standard:** modular, aseptic G1" process connection with polymer-free sealing system
- **Option:** Fixed process connections like e.g. Milchrohrverschraubung, varivent and tri-clamp or customer preference



Examples of modular process connections



Look at data-sheet process termination technique **modular @ process**

Accessories



Favoured fields of application are:

- ▶ Food technology
- ▶ Chemical industry and pharmaceutical industry
- ▶ Process measuring technology



Input (Effective range)

Basic effective range bar	0...0,1	0...0,4	0...1	0...1,6	0...2,5	0...4	0...6	0...10	0...16	0...25	0...40
Allowable overload bar	1,0	3,0	3,0	15	15	15	60	60	60	70	140

Output signal / electrical power

Standard 2-wire: 4 ... 20 mA / U_b = 12 ... 30 VDC
 Options 3-wire: 0 ... 10 V / U_b = 12 ... 30 VDC

Case material

High grade steel
 1.4301, 1.4305

Sensor material

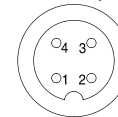
High grade steel
 1.4435 und 1.4404

Signal behaviour

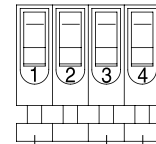
precision ≤ ± 0,2%, optionally ± 0,1% , IEC 60770
 Allowable load 2-wire, 160 - 640 Ohm
 3-wire, > 5KOhm

Dimension drawing

4...20mA
 Pin 1 +VDC
 Pin 4 Output



10...30VDC
 Pin 1 + VDC
 Pin 4 Output
 Pin 3 - VDC



VDC (VDC 3-wire)
 Output 4...20 mA (0...10 V 3-wire)

Electrical connection

- M 12-plug
- optional: connecting head made of high grade steel
- optional: high grade steel connecting head with M12-plug

Torque

Torque 30 Nm

Temperature Fault

Temperature drift 0,01 % FS 1°K (accuracy class 0,2%)
 0,005 % FS 1°K (accuracy class 0,1%)
 Repeat Accuracy ± 0,05% of final value
 Long Term Stability ± 0,2% of final value

Temperature operation range

duration process temp.: -10...125°C
 process temp.max. (1/2 h) 140°C
 ambient temperature: 0... 85°C

Order Code

SDT12 - [] - [] - []

Effective range	bar					
0...0,1		0	0			
0...0,4 / (0,6 bar absolute)		0	1			
0...1		0	2			
0...1,6		0	3			
0...2,5		0	4			
0...4		0	5			
0...6		0	6			
0...10		0	7			
0...16		0	8			
0...25		0	9			
0...40		1	1			
- 0,6...0,0		3	0			
- 1...0,0		3	1			
- 1...0,6		3	2			
- 1...1,5		3	3			
- 1...3		3	4			
- 1...5		3	5			
- 1...9		3	6			
Measuring range						
Relative pressure			0			
Absolute pressure	600mbar ... 40 bar		1			
Accuracy clas						
0,10%				1		
0,20%				2		
Output signal						
2-wire: 4 ... 20 mA / U _B = 12 ... 30 VDC					B	
3-wire: 0 ... 10 V / U _B = 12 ... 30 VDC					C	
Electrical connections						
Without Connection head with plug M12x1					M	
Connection head made of high grade steel with screw connection					5	
Capillary-line for pressure compensation (ventilation), line length in mtr.						0
Connection head made of high grade steel with implemented M12x1 plug					6	

Process connection

Please have a look at our data sheet process connections