



Type SDT 12

modular @ pressure

Modular pressure transducer

Basic features

- ▶ High accuracy
- ▶ High temperature range
- ▶ Nominal pressure ranges up to 40 bar
- ▶ Relative pressure
- ▶ PC-telecontrolled parametrizable
- ▶ External zeroing (Teach)
- ▶ Totally front-flush membrane
- ▶ Wetting parts made of high-grade steel 1.4435
- ▶ FDA, EHEDG-conformal

Technical features

- ▶ Accuracy according to IEC 60770: 0,2 % FSO
- ▶ Long-term stable
- ▶ Short-circuit-proof + reverse voltage protected
- ▶ Functional ranges (temperature):
Medium to be measured (permanent):
-20 °C to 110 °C
Medium to be measured max. (1/2 h)
up to 140 °C
- ▶ Response Time: 40...300 ms (dependently of the change of measurement; large jump = fast, small jump = slow)
- ▶ Protection class IP 67 according to EN 60529
- ▶ M12 connector made of high-grade steel
- ▶ Alternative with Head made of high grade steel and pressure screw
- ▶ Adjustable attenuation

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

- modular, aseptic G1" process connection with polymer-free sealing system



Examples of modular process connections



See data sheet process connection technology

modular @ process

Accessories



Clamp-Housing SDAG



Altitude Compensation-Element (High-Grade-Steel) DAE-E

Favoured fields of application are:

- ▶ Fill level measurement
- ▶ Food technology
- ▶ Chemical and pharmaceutical industry
- ▶ Process measurement



Technical data

Input variable (Measuring range)

Basic measuring range bar	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	1,6	4	6,4	10	16	24	40	64	100	160
Turn down: Offset, range adjustment ± 25% FS variable										

Housing material

Process connection + Neck High grade steel 1.4435 (316 L)
Connection Head 1.4305

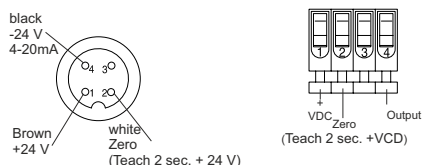
Sensor material (touched by media)

High grade steel 1.4435 (316 L) Advantages material of the food and Pharmaindustrie (corrosion resistance increased)

Filling medium / volume

AK 100, FDA conform
Volume: ca. 0,11 cm³

Pin Configuration M12-plug



Output signal / auxiliary power

Standard 2-wire: 4 ... 20 mA / U_B = 12 ... 30 VDC

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

Signal behaviour

Accuracy	Standard: < ± 0,2 % of Meas. range FS (incl. hysteresis and reproducibility)		
Allowable Load	450 Ohm	Current in case of error:	3,5 mA
Measuring range not reached:	3,8 mA	Meas. range exceeded	22,5 mA

Accuracy

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

Temperature operating range

All. duration mediumtemp.:	-20...110°C
Mediumtemp max ..: (1/2 h)	140°C
Ambient temperature.:	-20... 85°C

Ordercode

SDT12 - [] [] [] [] - [] - [] [] []

Effective range	bar	[]	[]	[]	[]	[]	[]	[]
0...0,4	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					
-	1...15	3	7					
Measuring range								
Relative pressure				0				
Accuracy clas								
0,20%				2				
Output signal								
2-wire: 4 ... 20 mA / U _B = 12 ... 30 VDC						B		
Electrical connections								
Without Connection head with plug M12x1							M	
Connection head made of high grade steel with screw connection							5	
Connection head made of high grade steel with implemented M12x1 plug							6	
Capillary-line for pressure compensation (ventilation), line length in mtr.							X	
Pressure balance with Goretex-filter							G	