



## Type SDT 03

**modular @ pressure**

### Basic features

- ▶ High accuracy
- ▶ High temperature range
- ▶ Nominal pressure ranges up to 40 bar
- ▶ Relative Pressure
- ▶ integrated control + indicator display optional
- ▶ programmable on unit or PC-telecontrolled Parametrizable
- ▶ very quick compensation of temperature jump
- ▶ Wetting parts made of high-grade steel 1.4435
- ▶ Housing made of high-grade steel 1.4404
- ▶ Pressure screw for free positioning
- ▶ individual measuring range adjustment
- ▶ smallest measuring range 100 mbar
- ▶ Turndown 4:1
- ▶ Fourfold overload
- ▶ Totally front-flush membrane
- ▶ 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): -10 °C to 100 °C
  - Medium to be measured max. (1/2 h) up to 140 °C
- ▶ Response Time: < 10 ms ( typical 4 ms)
- ▶ Protection class up to IP 69 K (execution-dependently )
- ▶ customized remarks:
  - special measuring range
  - various electrical and mechanical process connections
  - further remarks on request



### Examples of modular process connections



Triclamp Milk-Pipe

See data sheet process connection technology

**modular @ process**

### Design and mode of operation

The pressure transducer SDT03 represents the 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, pressure screw for free positioning

### Accessories

Clamp-Housing  
SDAGAltitude Compensation-Element  
(High-Grade-Steel)  
DAE-E

### Favoured fields of application are:

- ▶ Food technology
- ▶ Chemical and pharmaceutical industry
- ▶ Process measurement
- ▶ environmental technology
- ▶ fill level measuring

Stand 07/2009



## 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
Turndown 4 : 1										

### Housing material

High grade steel 1.4404  
(316 L)

### Sensormaterial (wetting parts)

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

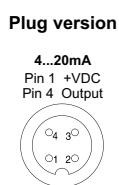
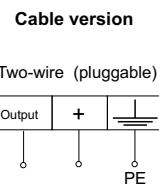
### Filling medium

AK 100, FDA conform

### Filling volume

ca. 0,11 cm<sup>3</sup>

### Connection dimensional drawing



### Output signal / auxiliary power

Standard 2-Leiter: 4 ... 20 mA / U<sub>0</sub> = 12 ... 30 VDC

### Torque

Torque 30 Nm

### Electrical connection / safety class

- High grade steel connecting head with M16-gland or M12-plug made of high grade steel
- with capillaries cable (Art.Nr. S0772-00001) IP 69K
- or Goretex-filter

### Signal behaviour

Accuracy Standard:  $\leq \pm 0,2\%$  of meas. Range FS ( incl. hysteresis and reproducibility)

Allowable load 450 Ohm

Lower current border adjustable (3,5...22,5 mA)

Upper current border adjustable (3,5...22,5 mA)

Current in case of error adjustable (3,5...22,5 mA)

### Temperature error

Temperature drift zero-point:  $\leq \pm 0,01\%$  FS/K

Temperature drift meas. range  $\leq \pm 0,01\%$  FS/K

Long Term Stability  $\pm 0,2\%$  of final value

### Temperature operating range

All. duration mediumtemp.: -10...100°C

Mediumtemp max.: (1/2 h) 140°C

Ambient temperature.: -20... 85°C

### Order Code

SDT03 - **0** - **B** -  -

#### Measuring range bar

0...0,4	advantages type	0	1
0...1	advantages type	0	2
0...1,6		0	3
0...2,5	advantages type	0	4
0...4		0	5
0...6		0	6
0...10	advantages type	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 value

Relative pressure

**0**

#### Output signal

4...20 mA, 2-wire technology

**B**

#### Parameter module

without integrated control and indicator display

**A**

with integrated control and indicator display

**B**

#### Electrical connections

Connecting head made of high-grade steel with M16 screw connection

**5**

Connecting head made of high-grade steel with implemented M12 plug + Goretex-Filter

**6**

**G**

Capillary-line for pressure compensation (ventilation), line length in mtr.

enclosure IP 69K

**X**

Pressure balance with Goretex-filter

enclosure IP 67

**G**

#### process connection

look at the data sheet process connections **modular @ process**

Stand 09/2009