



# Type SDT 03 High-Temperature-Version modular @ pressure

Parameterisable modular pressure transducer

### Basic features

- ▶ High accuracy
- ▶ High temperature range
- ▶ Nominal pressure ranges up to 40 bar
- ▶ Relative Pressure
- ▶ 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 of the sensor
- ▶ individual measuring range adjustment
- ▶ smallest measuring range 100 mbar
- ▶ Turndown 4:1
- ▶ Fourfold overload
- ▶ Totally front-flush membrane
- ▶ FDA, EHEDG conformal

### Technische Merkmale

- ▶ Accuracy according to IEC 60770: 0,2 % FSO
- ▶ Long-term stable
- ▶ Short-circuit-proof + reverse voltage protected
- ▶ Temperature range:  
Medium (permanent): -10 °C to 180 °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

### 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 polymeer-free sealing system, pressure screw for free positioning



### 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:

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



**Technical Data**

**High-Temperature-Version**

**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										

<b>Housing material</b>	<b>Sensormaterial (wetting parts)</b>
High grade steel 1.4404 (316 L)	High grade steel 1.4435 (316 L) Advantages material of the food and pharmaceutical industry (corrosion resistance increased)

<b>Filling medium</b>	<b>Filling volume</b>	<b>Connection dimensional drawing</b>
AK 100, FDA conform	ca. 0,11 cm <sup>3</sup>	<p><b>Cable version</b></p> <p>Two-wire (pluggable)</p> <p><b>Plug version</b></p> <p>4...20mA Pin 1 +VDC Pin 4 Output</p>

<b>Output signal / auxiliary power</b>
Standard 2-wire: 4 ... 20 mA / U <sub>B</sub> = 12 ... 30 VDC

<b>Elektrical connection / safety class</b>	<b>Torque</b>
<ul style="list-style-type: none"> <li>- High grade steel connecting head with M16-gland or M12-plug made of high grade steel</li> <li>- with capillaries cable (Art.No. S0772-00001) IP 69K</li> <li>- or Goretex-filter</li> </ul>	Torque 30 Nm

<b>Signal behaviour</b>
<p>Accuracy Standard: <math>\leq \pm 0,2\%</math> of meas. Range FS (incl. hysteresis and reproducibility)</p> <p>Allowable load 450 Ohm Lower current border adjustable (3,5...22,5 mA)</p> <p>Upper current border adjustable (3,5...22,5 mA) Current in case of error adjustable (3,5...22,5 mA)</p>

<b>Temperature-Error</b>	<b>Temperature ranges</b>
<p>Temperature-drift for zero-point <math>\leq \pm 0,01\%</math> FS/K</p> <p>Temperature-drift for measuring range <math>\leq \pm 0,01\%</math> FS/K</p> <p>Long-time-stability <math>\pm 0,2\%</math> of final value / year</p>	<p>Allowed mediums temp <math>\therefore -10...180^{\circ}\text{C}</math> (permanent)</p> <p>Ambient temperature: <math>-20... 85^{\circ}\text{C}</math></p>

<b>Order Code</b>	SDT03 - [ ] - 0 - B - [ ] - [ ] - [ ]									
<b>Measuring range bar</b>	0...0,4	0...1	0...1,6	0...2,5	0...4	0...6	0...10	0...16	0...25	0...40
Relative pressure	0									
<b>Output signal</b>	B									
Parameter module	A B									
<b>Electrical connections</b>	5 G 6 G X G									
<b>process connection</b>	look at the data sheet process connections modular @ process									