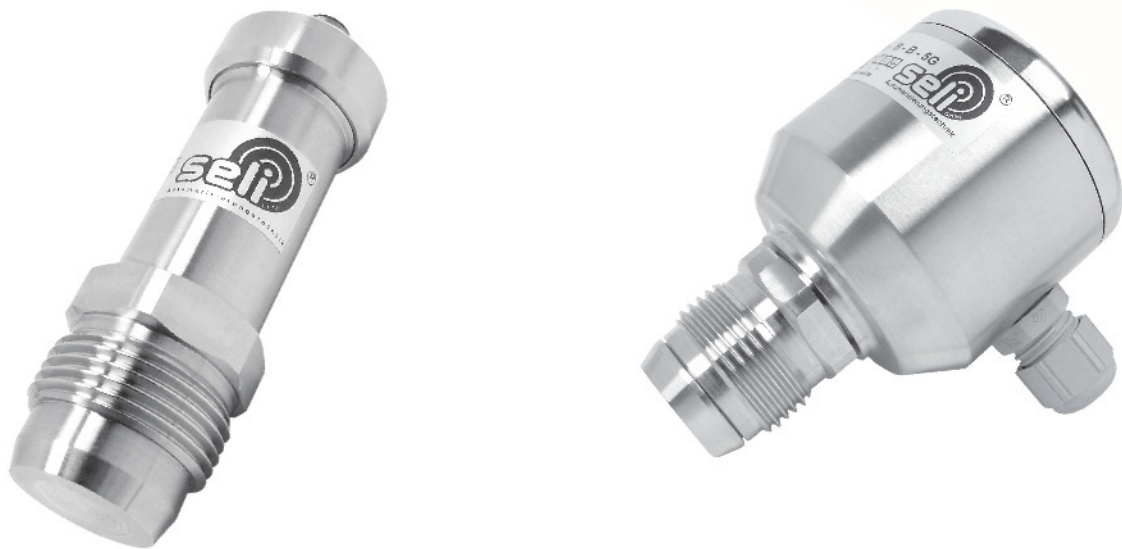


PRESSURE MEASUREMENT



Automatisierungstechnik

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Type SDT 01

basic @ pressure

Industrial pressure transducer

Basic features

- ▶ Thick-film ceramic sensor
- ▶ High accuracy
- ▶ High temperature range
- ▶ Nominal pressure ranges from -1 bar to 400 bar
- ▶ Absolute and relative pressure
- ▶ Wetting parts made of high grade steel 1.4301, (front-flushed Version high grade steel 1.4571) FKM, Ceramics Al₂O₃ 96%
- ▶ Case made of high-grade steel 1.4301

Technical features

- ▶ small temperature error
- ▶ Long-term stable
- ▶ Accuracy according to IEC 60770: 0,5 % FSO
- ▶ Functional ranges (temperature)
Medium to be measured: -25 °C bis 125 °C
- ▶ Customised versions:
 - special measuring ranges
 - multifarious electrical and mechanical couplings
 - further versions on request

Design and mode of operation

The pressure transducer SDT01 represents the basis of our well-tried industrial pressure transducers of the SDT series.

It is available in the following mechanical versions:

- Standard: open pressure connection G1/2" with immersed ceramic sensor (Manometer coupling)
- Option:
 - 1/4" DIN3852,
 - 1/2" DIN3852 (quasi front-flush)
 Ceramic sensor for nominal pressures von 0...0,5 bar bis 0...25 bar



Process connections



1/2" EN837 (manometer-coupling) 1/4" DIN3852 1/2" DIN3852 (quasi front-flush)

Favoured fields of application are:

- ▶ Medical technology
- ▶ Environment engineering
- ▶ Food-technology
- ▶ Hydraulics
- ▶ Chemical and pharmaceutical industry



Pressure transducer for standard applications



Automatisierungstechnik

Input variable

Nominal pressure	bar	-1...0	0,5	1	1,6	2,5	4	6	10	16	25	40	60	100	160	250	400
Allowable overpressure	bar	3	3	3	4	4	10	10	20	40	40	100	100	200	400	400	650

Temperature error

Temperature error
 For zero-point and range $\leq \pm 0,3\% \text{ FSO} / 10 \text{ K}$
 In the compensated area $-25...85^\circ\text{C}$

Functional ranges (temperature)

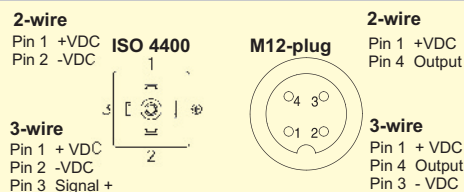
Medium to be measured: $-25...125^\circ\text{C}$
 Elektronik equipm./ambience: $-25... 85^\circ\text{C}$
 Storage: $-40...125^\circ\text{C}$

Output signal / auxiliary power

Standard 2-wire: $4 \dots 20 \text{ mA}$ oder $20 \dots 4 \text{ mA} / U_B = 8 \dots 32 \text{ V}_{DC}$
 Options 3-wire: $0 \dots 20 \text{ mA}$ oder $20 \dots 0 \text{ mA} / U_B = 14 \dots 30 \text{ V}_{DC}$
 $0 \dots 10 \text{ V}$ oder $10 \dots 0 \text{ V} / U_B = 14 \dots 30 \text{ V}_{DC}$

Signal behaviour

Accuracy $\leq \pm 0,5\% \text{ FSO}$ nach IEC 60770
 Allowable load
 Current 2-wire: $R_{max} = [(U_B - U_{Bmin}) / 0,02] \text{ Ohm}$
 Current 3-wire: $R_{max} = 500 \text{ Ohm}$
 Current 3-wire: $R_{min} = 10 \text{ kOhm}$
 Influence effect
 Auxiliary power: $0,05\% \text{ FSO} / 10 \text{ V}$
 Load: $0,05\% \text{ FSO} / \text{kOhm}$

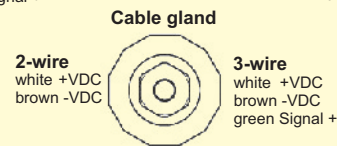


Case material

High grade steel 1.4301

Sensormaterial

Keramik Al O 96%



Order Code

SDT01-							
Measuring range	bar						
	0...0,5	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				
	0...60 ¹	1	1				
	0...100 ¹	1	2				
	0...160 ¹	1	3				
	0...250 ¹	1	4				
	0...400 ¹	1	5				
	- 1...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				
Absolute pressure	(From 0...1 bar to 0...25 bar)		1				
Process connection							
1/4" DIN 3852				0			
1/2" EN 837				1			
1/2" Flush with front	(Only relative pressure for meas. range -1 bis 25 bar)			2			
Output signal							
0...20 mA	2-wire				A		
4...20 mA	2-wire				B		
0...10 V	3-wire				C		
20...0 mA	3-wire				D		
20...4 mA	2-wire				E		
10...0 V	3-wire				F		
Electrical connection							
Plug ISO 4400					H	9	
Plug M12x1					M	0	
Cable gland Standard 2m					L	2	
Surcharge per metre					L	X	

Stand 01/2009



Type SDT 02

modular @ pressure

Modular pressure transducer

Basic features

- ▶ Wetting parts and case made of high-grade Steel
- ▶ High temperature range
- ▶ Nominal pressure ranges up to 40 bar
- ▶ Relative pressure
- ▶ PC-telecontrolled parametrizable
- ▶ Wetting parts made of high-grade steel 1.4435
- ▶ Case made of high-grade steel 1.4404
- ▶ Fourfold overload
- ▶ Totally front-flush membrane
- ▶ FDA, EHEDG-conformal

Technical features

- ▶ Accuracy according to IEC 60770: 0,5 % 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: 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
- ▶ Adjustable attenuation
- ▶ Offset, range modifiable within the dimensions $\pm 25\%$ FS
- ▶ Characteristic curve decreasing - increasing
- ▶ Current limitation

Design and mode of operation

The pressure transducer SDT02 represents the basis 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



Examples of modular process connections



See data sheet process connection technology

modular @ process

Favoured fields of application are:

- ▶ 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 $\pm 25\%$ FS variable										

Gehäusematerial	Sensormaterial (medienberührt)
High grade steel 1.4404 (316 L)	High grade steel 1.4435 (316 L) Advantages material of the food and Pharmaindustrie (corrosion resistance increased)

Filling medium	Filling volume	Connection dimensional drawing
AK 100, FDA conform	ca. 0,11 cm ³	

Output signal / auxiliary power
Standard 2-Leiter: 4 ... 20 mA / U _B = 12 ... 30 VDC

Electrical Connection
M 12-connector made of high-grade steel

Torque
Torque 30 Nm

Signal behaviour
Accuracy Standard: $< \pm 0,5\%$ 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

Temperature error
Temperature drift zero-point: $\leq \pm 0,02\%$ FS/K, max. $\leq \pm 0,04\%$ FS/K
Temperature drift meas. range: $\leq \pm 0,02\%$ FS/K, max. $\leq \pm 0,04\%$ FS/K

Temperature operating range
All. duration mediumtemp.: -10...100°C
Mediumtemp max.: (1/2 h) 140°C
Ambient temperature.: -20... 85°C

Ordercode

SDT02 - [] - 0 - B - M

Measuring range	bar				
0...0,4	preference type	0	1		
0...1	preference type	0	2		
0...1,6	preference type	0	3		
0...2,5	preference type	0	4		
0...4	preference type	0	5		
0...6	preference type	0	6		
0...10	preference 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	2-Leiter: 4 ... 20 mA / U _B = 12 ... 30 VDC			B	
Electrical Connection	Without Connection Head with plug M12x1				M



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

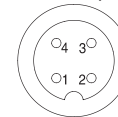
High grade steel
 1.4435 und 1.4404

Signal behaviour

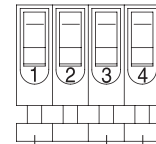
precision ≤ ± 0,2%, optionally ± 0,1% , IEC 60770
 Allowable load 2-wire, 160 - 640 Ohm
 3-wire, > 5KOhm

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

Pressure range (bar)	Torque
0,1 - 10	30
11 - 400	60

Temperature Fault

Temperature drift 0,01 % FS 1°K (accuracy class 0,2%)
 0,005 % FS 1°K (accuracy class 0,1%)

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



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

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



Triclam

Milk-Pipe

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

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	Sensormaterial (wetting parts)
High grade steel 1.4404 (316 L)	High grade steel 1.4435 (316 L) Advantages material of the food and Pharmaindustrie (corrosion resistance increased)

Filling medium	Filling volume	Connection dimensional drawing
AK 100, FDA conform	ca. 0,11 cm ³	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Cable version</p> <p>Two-wire (pluggable)</p> </div> <div style="text-align: center;"> <p>Plug version</p> <p>4...20mA</p> <p>Pin 1 +VDC Pin 4 Output</p> </div> </div>

Output signal / auxiliary power
Standard 2-Leiter: 4 ... 20 mA / U _B = 12 ... 30 VDC

Elektrical connection / safety class
<ul style="list-style-type: none"> - 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

Torque
Torque 30 Nm

Signal behaviour	
Accuracy	Standard: ≤ ± 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: ≤ ± 0,01% FS/K
Temperature drift meas. range ≤ ± 0,01% FS/K
Long Term Stability ± 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						



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										

Housing material	Sensormaterial (wetting parts)
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)

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

Output signal / auxiliary power
Standard 2-wire: 4 ... 20 mA / U _B = 12 ... 30 VDC

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

Signal behaviour
<p>Accuracy Standard: $\leq \pm 0,2\%$ 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>

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

Order Code	SDT03 - [] - 0 - B - [] - [] - []									
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
	- 0,6...0,0	- 1...0,0	- 1...0,6	- 1...1,5	- 1...3	- 1...5	- 1...9	- 1...15		
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 G									
	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									



Type SDT 09

basic @ pressure

Industrie Druckmessumformer

Basic features

- ▶ High accuracy
- ▶ Dipping probe completely made of high-grade steel 1.4571
- ▶ Diaphragm surface made of high-grade steel 1.4435
- ▶ Seals made of FKM
- ▶ Plastic cover for diaphragm surface

Technical features

- ▶ less temperature error
- ▶ very good linearity
- ▶ long-time stability
- ▶ accuracy at IEC 60770: 0,35% FSO
- ▶ high-grade-steel sensor
- ▶ small diameter of 27 mm
- ▶ effective range from 0...40 mbar to 0...25bar

Design and mode of operation

The dipping probe SDT 09 was conceived for for continous measuring of liquid or level and clean or / and dirty liquids.

The housing consists of high-grade-steel 1.4571, the sensor-diaphragma of 1.4435.

Seals are standardly made of FKM; on inquires other seal materials are available..

Because of the high quality of the high-grade-steel sensor the measuring characteristic is very good.

The dipping probe can be used in many different operational areas.



Accessories



Anchor clamp
ASK09



Clamp housing
SDAG-1

Favoured fields of application are:

- ▶ enviromental technology: water purification, sewage purification plant
- ▶ measuring of liquid level in water and clean or /and dirty media
- ▶ deep-measuringt in a spring and open waters
- ▶ ground water level measuring
- ▶ level monitoring in open container



pressure transmitter for spring and container filling level

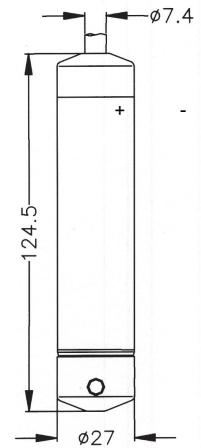
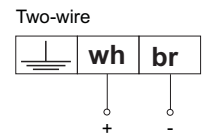


Technical facts

effective range in bar	0...0,04	0...0,06	0...0,1	0...0,16	0...0,25	0...0,4	0...0,6	0...1	0...1,6	0...2,5	0...4	0...6	0...10	0...16	0...25
confidence by overpressure in bar	0,2	0,2	0,5	0,5	1	1	3	3	6	6	20	20	20	60	60

precision ¹	Standard: $\leq \pm 0,35\%$ FSO nominal pressure $\leq 0,4$ bar: $\leq \pm 0,5\%$ FSO
perm. Burdens	$R_{max} = [(U_B - U_{Bmin}) / 0,02] \text{ Ohm}$
influence effects	auxiliary energy: 0,05% FSO / 10V burdens: 0,05% FSO / kOhm $\leq \pm 0,1\%$ FSO / year
long time stability	$\leq \pm 0,1\%$ FSO / year
storage temperature range	-25 °C... + 70 °C
temperature range of measuring material	-10 °C... + 70 °C
temperatur error	max., Middle.TK [% FSO / 10 K] $\pm 0,3$
protective system	IP 68
material: parts with medium contact	Chrome-nickel-Steel 1.4435
material: housing	Chrome-nickel-Steel 1.4571
seals	FKM
weight	ca. 200 g (without cable)

Wiring diagram



Electrical facts

operating voltage	12...36 V DC
output sign	4...20 mA
connecting lead	two-wire
electrical union	shielded cable, material: FEP
pole protection	by changing the polarity it will not damage the transmitter, but it will not function

Order Code	SDT09 - [] - 088 - B - H9 - []														
Measuring range	bar	0	1												
	0...0,04	0	1												
	0...0,06	0	2												
	0...0,10	0	3												
	0...0,16	0	4												
	0...0,25	0	5												
	0...0,40	0	6												
	0...0,60	0	7												
	0...1,00	0	8												
	0...1,60	0	9												
	0...2,50	1	0												
	0...4,00	1	1												
	0...6,00	1	2												
	0...10,0	1	3												
	0...16,0	1	4												
	0...25,0	1	5												
Output signal															
	4...20 mA, two-wire technology														
Electrical connection															
	cable length in metres														

Order Code Accessories

Anchor Clamp
High grade steel

ASK09

Clamp housing

SDAG-1

mit Goretex-Filter und 2 PG-Verschraubungen
with goretex-filter and two PG-screw connection

Stand 10/2006

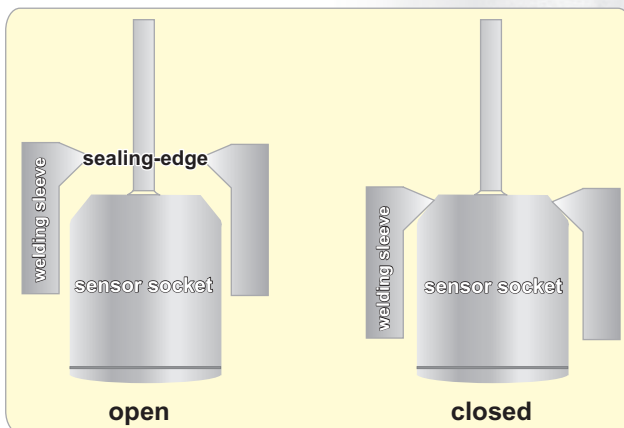
Hygienic adaption with welding sleeve system and modular process connections

Basic features

- ▶ hygienic process adaption
- ▶ dead-room and elastomer-free
- ▶ aseptic measuring point
- ▶ EHEDG-conformal
- ▶ modular concept for a huge number of process connections

Technical features

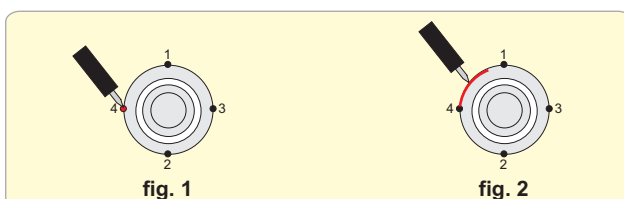
- ▶ adaption with following threads: M12, G1/2", G1"
- ▶ defined and signified position for cable connection or M12-plug (welding-sleeve-system)



Welding instruction

▶ Welding in tanks / pipings

1. Drill a hole with outside-diameter of the sleeve
Tolerance max. : +0,2 mm
2. Spot the sleeve with 4 points (fig. 1)
3. Screw in welding-help-plug
4. Weld the sections between the points (fig. 2)
4 sections when M12 and G1/2"
8 sections when G1"



e. G. G1/2"-system in temperature-measurement



e. g. G1/2"-system in fill level-measurement



e. g. G1"-system in pressure-measurement



Examples of modular process-connections





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