

Typ SDT43

„High-end“ Pressure Transmitter for aseptic applications
Parametrizable Pressure Transmitter

Basic features

- ▶ High grade steel housing, polished
- ▶ BMT-Technology
(Flushed diaphragm technology)
- ▶ Accuracy up to 0,075%
- ▶ Active temperature compensation
- ▶ Turn Down up to 20:1
- ▶ Measuring range max 0-60mbar up to 0-100bar (Special calibration 0-30mbar possible)
- ▶ Only 3 transmitter for all measuring ranges required 1,2bar/10bar/100bar
- ▶ Multilingual operating guidance „easy to use“
- ▶ more than 40 Process connections available
- ▶ 1 control button
- ▶ Graphic display incl. bar graph and backlight
- ▶ variable case linearisation possible (50Points), different tank forms preprogrammed
- ▶ Integrated pressure damper
- ▶ Special materials for e.g. Hastelloy C, Tantal or Gold deliverable
- ▶ EHEDG conformal
- ▶ Hart protocol HART 7 (5) (optional)
- ▶ ProfiBus PA (optional)
- ▶ Current simulation for transmitters with HART, choosable value between 3,80 mA up to 20,8 mA



Examples of modular process connections



Varivent

Triclamp

Milk-Pipe

See data sheet process connection technology
modular @ process

Favoured fields of application are:

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

Technical features

- ▶ Accuracy 0,1% (optional 0,075%) from adjusted measuring range
- ▶ Turn Down 10:1/ 20:1
- ▶ Temperature ranges medium:
(Duration): -20°C to 100°C (145°C / 45 min)
- ▶ Max. ambient temperature: -20°C to 70°C
- ▶ Reaction time < 10 ms (typical 4 ms)
- ▶ Protection class IP 68 (depends on version)
- ▶ Output signal:
 - 4..20mA 2-wire (standard)
 - Hart protocol (option Hart 7(5))
 - ProfiBus PA (Option)

Pressure Transmitter

Technical data

Input variable (Measuring range)

Basic measuring range bar	1,2	10	100						
Allowable overload	10	50	200						

Housing material

AISI 316L electropolished
Material Number: 1.4404

Sensormaterial (wetting parts)

AISI 316L
Material Number: 14404

Filling medium

Neobee, FDA conformal

Connection dimensional drawing

Output signal

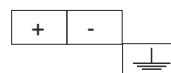
4..20mA 2-wire (standard)
Hart protocol (option Hart 7(5))
Profibus PA (option)

Auxiliary voltage

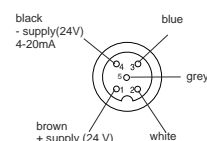
12 – 36 Vdc

Cable version

Two-wire (pluggable)



Plug version



Elektrical connection / safety class

- High grade steel connection head with M12- plug - High grade steel & goretexfilter IP66
- with capillary connection cable IP 68

Signal behaviour

Accuracy 0,1% (option 0,075%) of adjusted measuring range

Hysteresis: < 0,1% reproducibility < 0,1%

Upper current border adjustable: max. 22,8 mA

Error signal adjustable : 3,2..22,8mA

Perm. burden: 600 / 24 Vdc (max. 1200 / 36 Vdc)

Lower current border adjustable: min. 3,2 mA

Error signal adjustable (3,5...22,5 mA)

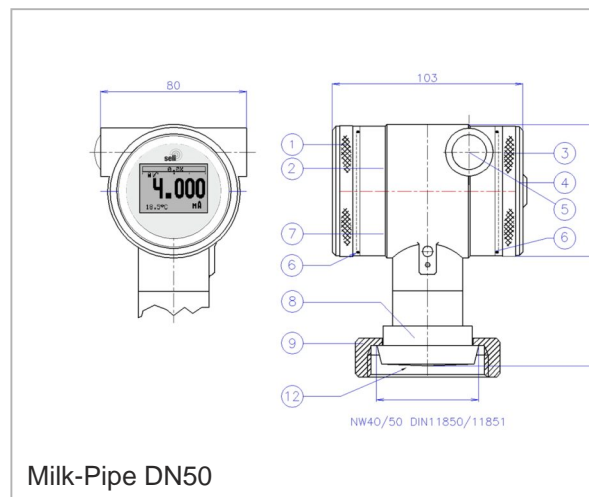
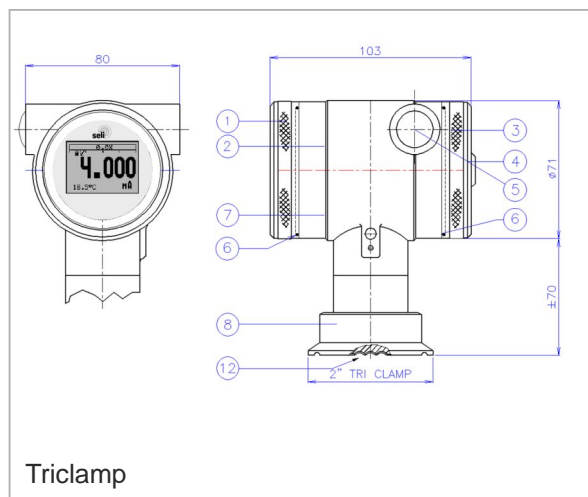
Temperature error

Temperature drift zero-point: 0,005% / K
Temperature drift meas. range 0,015% / K
Long-term stability < 0,075% / Year

Temperature operating range

All. duration mediumtemp.: -20...100°C
Mediumtemp max.: (45 Min) 145°C
Ambient temperature.: -20... 70°C

Dim. drawing, examples:



Corder Code

Compact Version

SDT43 -						-											
Accuracy																	
turn down 10:1 (Accuracy 0,1%)	0																
turn down 20:1 (Accuracy 0,075%)	1																
Measuring range bar																	
0..1,2 (at turndown 10:1 min. Measuring span 0...0,1bar)	0	3															
0..10	0	7															
0..100	0	9															
-1..1,2	3	3															
-1..10	3	7															
-1..100	3	9															
Measurement parameter																	
Relative pressure					0												
Absolute pressure					1												
Output signal																	
4..20mA 2-wire technology							B										
HART@-Protocol. HART 7 (= Factory setting), (HART 5 choosable)							H										
Profibus PA							PA										
Process connections																	
1" with hygienic sealing cone max. turndown 10:1 (Accuracy 0,1%)								BP									
Weld ferrule with EHEDG approval Ø85mm (incl. welding sleeve)								SN									
DN25 Milk-pipe acc. DIN 11851								DP									
DN40 Milk-pipe acc. DIN 11851								FP									
DN50 Milk-pipe acc. DIN 11851								GP									
Varivent Typ N								HP									
Triclamp 2"								TP									
Triclamp 1½"								IP									
DRD-flange								GA									
E & H universal adapter								AE									
further on request																	
Material diaphragm																	
High grade steelVA 1.4404 (Standard)								V									
Hastelloy C								H									
Tantal (Only choosable with connection SN and flange)								T									
Electrical connection																	
High grade steel connection head with screwing M20											5	0					
High grade steel connection head M12 plug & goretex-filter											6						
Capilar-line for pressure compensation (air vent) in mtr.													X				
Pressure compensation with goretex-filter													G				
High temperature version																	
Standard																	
High temperature version with cooling rib. Please declare the process temperature!																	HT