

# pressure transmitter for food industry and sanitary applications

# ST SA

- ✓ - Threaded and clamp connection as per:  
DIN 11581, SMS, and ISO 2852.
- ✓ - Wetted parts: AISI 316L st.st.
- ✓ - Process fluid temperature: up to 300°F (+150°C).
- ✓ - EMC emission and immunity: as per EN 61326.
- ✓ - Wiring: shieldless cable.
- ✓ - Calibration: adjustable.



74-03

Authorization NO. 597



**CE** Compliance to requirements of directives:  
EMC 89/336/EEC - PED 97/23/EC.

## 8.SSA - Standard Model

**Ranges:** 0...10/0...600 *psi*, relative (0...0,6/0...40 bar, relative);  
-30"...0/-30"...350 *psi*, relative (-1...0/-1...+24 bar, relative);  
0...10/0...200 *psi*, absolute (0...0,6/0...16 bar, absolute)

**Accuracy (% span):** 0,25 typical; ≤ 0,5 max.

**Calibration:** limit-point as per DIN 16086.

**Repeatability:** ≤ 0,15 % of span.

**Annual drift:** ≤ 0,2 % of span.

**Process fluid temperature:** 14...+212 °F (-10...+100 °C).

**Ambient temperature:** 14...+185 °F (-10...+85 °C).

**Storage temperature:** 14...+185 °F (-10...+85 °C)

**Output signals:** 4...20 mA, 0...5 Vdc<sup>(1)</sup>, 0...10 Vdc<sup>(1)</sup>.

**Supply and max load:** see on page 2.

**Zero calibration:** ± 10 % span typical.

**Span calibration:** ± 10 % span typical.

**Compensated temperature range:** +32...+176 °F (0...+80 °C).

**Process connection:** AISI 316L st.st.

**Diaphragm:** AISI 316L st.st., T.I.G. welded.

**Filling fluid:** food oil.

**Sensor:** piezoresistive for ranges ≤ 23 *psi* (1,6 bar);  
ceramic for ranges > 23 *psi* (1,6 bar).

**Case:** stainless steel, vented for pressure ranges ≤ 230 *psi*  
(≤ 16 bar).

**Electric connection:** EN 175301-803<sup>(2)</sup>, exit for cables ø 0.23...0.35"  
(6...9 mm).

**Protection degree:** IP 65 as per IEC 529 / EN 60529.

(1) Available with ceramic sensor only

(2) Ex DIN 43650

## 8.SSA.TA3 - Model with heat dissipator

**Process fluid temperature:** 14...+302 °F (-10...+150 °C).

**Other features:** as Standard Model.

Ranges psi, relative (1)	Overpressure psi, relative	Thermal drift % span / °F (2)
0...10	36	0.03
0...15	45	0.03
0...25	72	0.02
0...30	72	0.02
0...60	145	0.01
0...100/0...160	290	0.01
0...200	580	0.01
0...300	580	0.01
0...600	1450	0.01

(1) Other unit of measurement, intermediate ranges, vacuum and compound ranges are available, as requested by customer.

(2) Thermal drift on connection DIN 11851 DN40F.

Ranges bar, relative (1)	Overpressure psi, relative	Thermal drift % span / °C (2)
0...0,6	2,5	0,05
0...1	3	0,05
0...1,6	5	0,04
0...2,5	5	0,04
0...4	10	0,02
0...6/0...10	20	0,02
0...16	40	0,02
0...25/0...40	100	0,02

(1) Other unit of measurement, intermediate ranges, vacuum and compound ranges are available, as requested by customer.

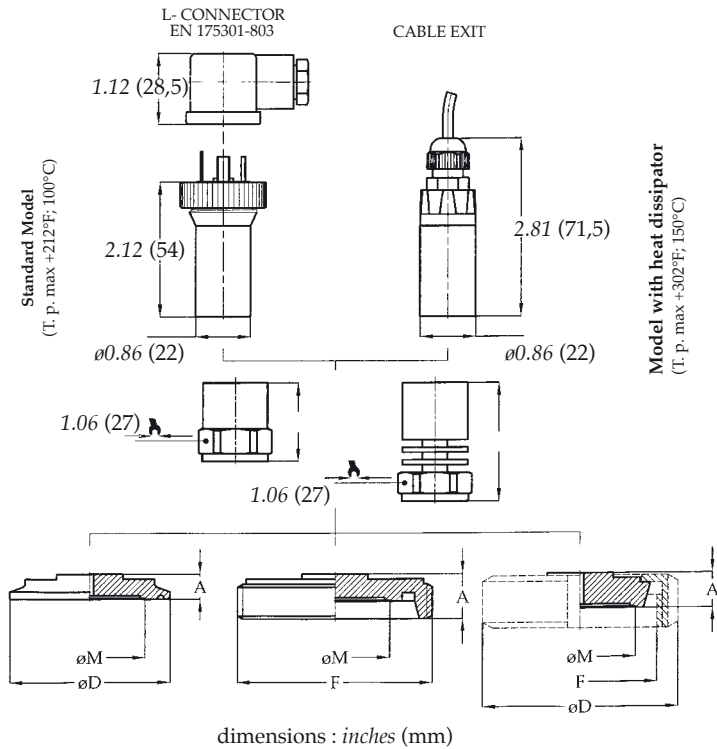
(2) Thermal drift on connection DIN 11851 DN40F.

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RII - 10/08

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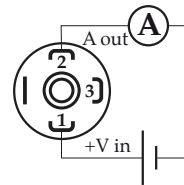
Standards	DN	A	øD	øM	F
<b>QHF</b> DIN 11851 F (1)	25	0.62 (16)	2.48 (63)	0.95 (23,5)	Rd 52 x 1/6
<b>SHF</b> DIN 11851 F (1)	40	0.62 (16)	3.07 (78)	1.73 (44)	Rd 65 x 1/6
<b>THF</b> DIN 11851 F (1)	50	0.66 (17)	3.62 (92)	2.24 (57)	Rd 78 x 1/6
<b>BIM</b> SMS M	2"	0.74 (19)		1.73 (44)	Rd 70 x 1/6
<b>AT0</b> ISO 2852 (clamp) (2)	1" 1/2	0.39 (10)	1.98 (50,5)	1.33 (34)	
<b>BT0</b> ISO 2852 (clamp) (2)	2"	0.39 (10)	2.51 (64)	1.73 (44)	
<b>DT0</b> ISO 2852 (clamp) (2)	2" 1/2	0.39 (10)	3.05 (77,5)	2.24 (57)	

dimensions : inches (mm)

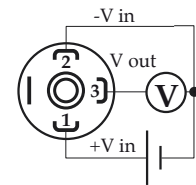
- (1) Execution without roller available on request: pls. contact our Technical Department.  
 (2) Execution with clamp, gasket and connection to be welded available on request: pls. contact our Technical Department.

Pn (bar)	H	Hd
≤ 1,6	1.42" (36,2)	2.05" (52,2)
> 1,6	1.23" (31,2)	1.86" (47,2)

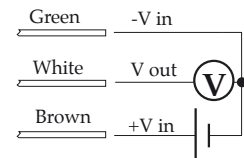
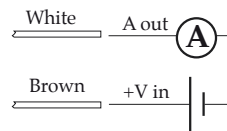
Output signal	4...20 mA 1	0...5 Vdc 4	0...10 Vdc 5
N. of wires	2	3	3
Load (Ohm)	$R_L \leq (V_{in}-8)/0,02$	$R_L \geq 5 \text{ K}\Omega$	$R_L \geq 10 \text{ K}\Omega$
Supply: +Vin	8...30	8...30	14...30
Ground	(pls. refer to Installation Manual)		



4...20 mA



0...5 Vdc  
0...10 Vdc



## OPTIONS

Model	Standard	With heat dissipator
<b>C01</b> - Calibration certificate	♦	♦
<b>PVC</b> - Cable exit, with PVC cable (1)	♦	♦

(1) Zero calibration not available

## "HOW TO ORDER" SEQUENCE

Section / Model / Special Version / Range / Process connection / Output signal / Options

8 SSA --- QHF...THF 1 C01  
TA3 BIM 4 PVC  
AT0...DT0 5