

Pressure sensors for food industry

with front flush diaphragm
for gauge and absolute pressure

accuracy 0.5 %

standard output: 4...20 mA; 2-wire-system
or 0...10 VDC; 3-wire-system



Description

tecsis pressure sensors for the food industry fulfil the special requirements of pressure connections in food industry, and they offer a wide range of different connections.

The combination of pressure sensor and special connection result in a better performance of the instrument. It can replace a necessary chemical seal system. All wetted parts are made of stainless steel and completely welded. The robust case is also made of stainless steel. It provides a protection type of at least IP65. The pressure transmitting liquid is approved by FDA.

The pressure sensor model P3269 is designed to ensure the surfaces exposed to the process are crack or crevice free according to the hygienic prescriptions. Pressure connections with clamp-connector or according to DIN 11851 respectively Varivent connections are available.

An integrated cooling element guarantees temperature ranges up to 150 °C.

Features

- Compact design
- Corrosion resistant stainless steel version
- High overload capacity
- Special pressure connection directly on the sensor
- Aseptic pressure connection
- Wetted parts 14435
- Certificate according to EHEDG and 3A sanitary standards

Measuring ranges

Gauge pressure

Negative -1...0 bar

positive 0...0.25 bar up to 0...25 bar

Absolute pressure 0...0.25 bar up to 0...16 bar

Application

Dairies and breweries,
food industry,
pharmaceutical industry,
sterilizers

Model: P3269

Technical data

Model	P3269									
Pressure type	positive gauge pressure absolute pressure									
Output signal	4...20 mA - 2-wire system 0...20 mA - 3-wire system 0...10 VDC - 3-wire system									
Pressure ranges ¹⁾	0.25	0.4	0.6	1.0	2.5	4	6	10	16	25
Overload limit	2	2	4	5	10	17	35	35	80	80
Accuracy % of F.S. ²⁾	0.5									
Repeatability	$\leq \pm 0.05$ % of F.S.									
Stability per year	$\leq \pm 0.2$ % of F.S. in rated conditions									
Case	stainless steel 1.4571									
Pressure connection	Tri-Clamp 1 1/2"; Option: Tri-Clamp 2" Union nut DIN 11851 DN 25; DN40; DN50. Union nut DIN 11864-1 DN40; DN50. Clamp ISO 2852 DN 33,7; DN 38; DN 40; DN 51. Clamp DIN 32676 DN 32; DN 40; DN 50. Varivent connection form F; form N.									
Wetted parts	stainless steel 1.4435									
Electrical connection	rectangular plug form A with junction box (DIN EN 175301-803 A) round connector M12x1, 4-pin cable outlet with 10 m cable									
Power supply / Load - 4...20 mA - 0...20 mA - 0...10 V	10...30 VDC 10...30 VDC 14...30 VDC	$R_A[\Omega] \leq (U_B[V]-10V) / 0.02A$ $R_A[\Omega] \leq (U_B[V]-3V) / 0.02A$ > 10 kOhm								
Power consumption - 4...20 mA - 0...20 mA - 0...10 V	Signal current signal current + 4 mA 8 mA									
Temp. comp. range	0...80°C									
Average TC of - zero point ³⁾ - span	$\leq \pm 0.2$ % /10 K $\leq \pm 0.2$ % /10 K									
Adjustability ⁴⁾	Zero point and full scale up to ± 10 %									
Response time	≤ 10 ms (from 10 % to 90 % of f.s.)									
Protection type	IP 65 to EN 60529/IEC 529 IP 67 for M12x1 connector IP 68 for cable outlet ⁴⁾									
Emission ⁵⁾	Acc. to EN 61326									
Interference ⁵⁾	acc. to EN 61326									
Electrical protection type	Polarity, over voltage and short-circuit protection									
Temperature ranges - Storage - Medium - Ambient	-40 100 °C -20 150 °C -20 80 °C									
Weight	approx. 0.2 kg									

of F.S. = of full scale value

- 1) Absolute pressure 0... 2.5 bar to 0... 16 bar
- 2) Terminal point adjustment according to DIN 16086 incl. linearity and hysteresis. Installation position vertical.
- 3) ≤ 0.4 % /10K for pressure range 0... 0.25 bar
 ≤ 0.25 % /10K for pressure ranges 0... 0.4 bar
- 4) No adjustability possible for cable outlet
- 5) Declaration of conformity on request

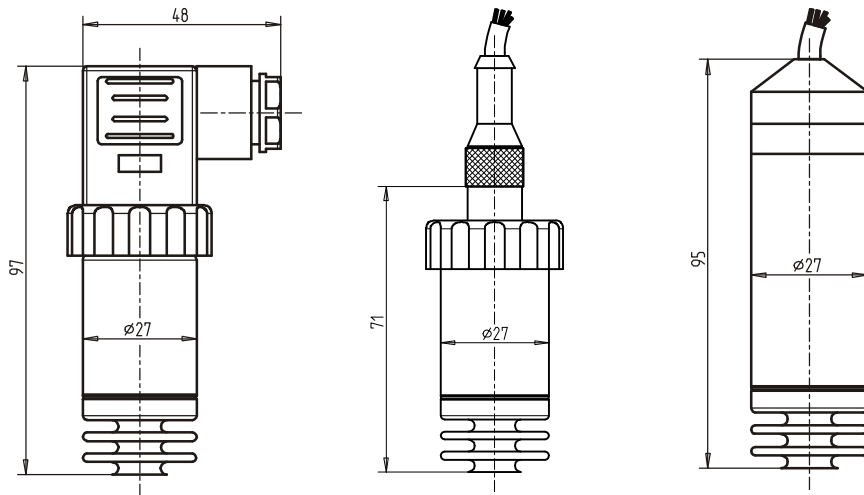
Dimensions (mm)

Case

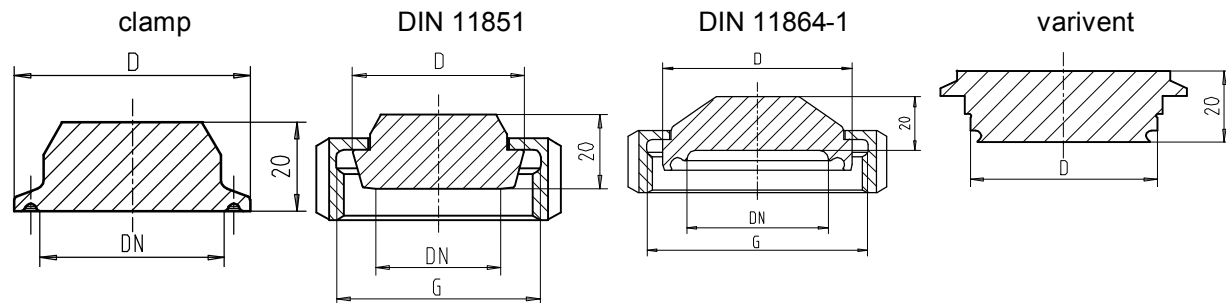
rectangular plug form A

round connector M12x1

cable outlet



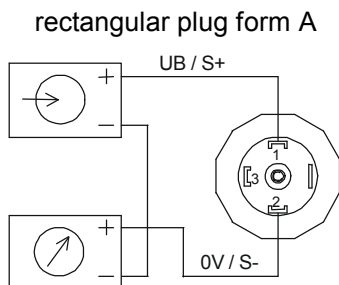
Pressure connection



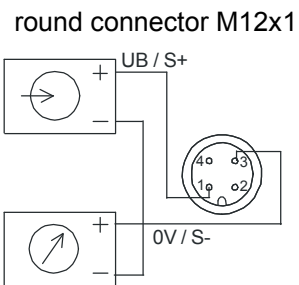
Pressure connection		Nominal diameter DN	Dimensions (mm)	
			D	G
Clamp	Tri-clamp	1 1/2"	50	
		2"	64	
	DIN 32676	DN 32	50	
		DN 40	50	
		DN 50	64	
	ISO 2852	DN 33,7	50	
		DN 38	50	
		DN 40	64	
Union nut DIN 11851 with conical coupling, for tubes to DIN 11850	DN 25	44	Rd 52 x 1/6	
	DN 40	56	Rd 65 x 1/6	
	DN 50	68.5	Rd 78 x 1/6	
Union nut DIN 11864-1 with liner form A, for tubes to DIN 11850	DN 40	54.9	Rd 65 x 1/6	
	DN 50	66.9	Rd 78 x 1/6	
Varivent	form F	DN 25/32	50	
	form N	DN 40/50	68	

Electrical connection

Two-wire system

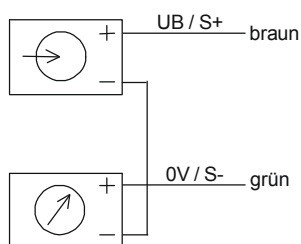


E-001

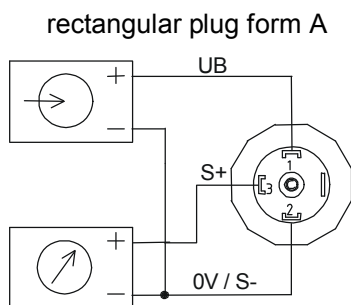


E-003

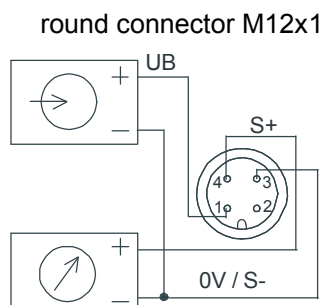
cable outlet



Three-wire system

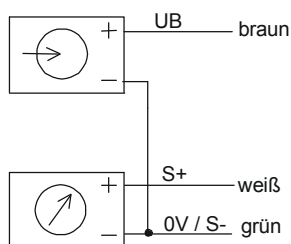


E-002



E-034

cable outlet



Connection table for DIN plug or cable outlet

	4...20 mA (2 - wire)		0...10VDC (3 - wire)	
Supply: +UB	1	brown	1	brown
Supply: 0V	2	green	2	green
Signal: +S	-	-	3	white
Signal: -S	-	-	2	green

Order details

1. Model
2. Measuring range
3. Output signal
4. Options

Subject to technical changes