# STAINLESS STEEL STANDARD PRESSURE SENSOR SPS 1000



The stainless steel pressure sensors of the SPS 1000 series excel particularly through good overload and burst pressure characteristics. Even in cases of pressure peaks, the monolithic pressure sensors offer outstanding safety features.

Operating in an aggressive media does not influence their superb performance.



TECHNICAL SPECIFICATIONS			
Supply voltage	4 30 VDC		
Impedance	10 k0hm $\pm$ 30 %		
FS output (Span)	Min. 1.8 / typ. 2.5 / max. 3.5 mV/V		
Offset	$0\pm0.5\text{mV/V}$		
Therm. offset shift	Typ. 0 ± 0.03 / max. 0 ± 0.05 % FS/K (25 85 ℃)		
Therm. span shift	Typ. 0 −0.02 % FS/K (0 70°C) max. 0 −0.05 % FS/K (0 70°C)		

Insulating resistor	>100 M0hm @ 500 VDC, RT, 70 % rH
Body material	Stainless steel
Operating temperature	−40 +125 °C
Storage temperature	−40 +125 °C

Mechanical and electrical characteristics are customisable. Specifications are subject to change without notice.

PRESSURE RANGE (BAR)	LONG THERM STABILITY *	LINEARITY/HYSTERESIS (TYP./MAX.) (% FS) **	BURST PRESSURE (BAR) * Pnom	OVER-PRESSURE (BAR) ***	VACUUM CAPABILITY (BAR)
10	± 0.4	$\pm 0.25/0.6$	$\geq 10$	≤ 15	-1
25	± 0.35	$\pm 0.25/0.6$	$\geq$ 10	≤ 35	-1
40	± 0.35	$\pm$ 0.25/0.6	$\geq$ 10	≤60	-1
100	± 0.3	$\pm 0.2/0.5$	$\geq$ 10	≤ 150	-1
200	± 0.3	$\pm$ 0.2/0.5	$\geq$ 10	≤300	-1
300	± 0.25	$\pm$ 0.2/0.5	$\geq$ 10	≤450	-1
400	± 0.25	$\pm 0.2/0.5$	$\geq$ 10	≤600	-1
600	± 0.25	± 0.3/0.5	≥10	≤900	-1
1000	± 0.25	± 0.3/0.5	≥ 10	≤ 1350	-1

\* 1000 hours @ 125 °C | 50 million pressure cycles @ 125 °C, 10 − 90 % FS @ 2.5 Hz | 50 thermal cycles +125 °C / − 20 °C, 2 K/min.

\*\* For indipendent linearity 10 points are measured and compared to an ideal straight line. For all measurements, DUT's are mounted in Metallux standard Housing according to "mounting proposal SPS 1000".

\*\*\* Over-Pressure indicates the maximum (short time < 1 s) operating pressure within no irreversible damage to the printed circuit are expected.

SAMPLE ORDER		
Туре	Pressure range (bar)	Electrical connection (acc. to drawing)
SPS 1000	100 bar	Solder pads
Other dimensions and electrical specifications on request.		

15.

7.62

2.54

## DIMENSIONAL DRAWINGS/CONNECTOR SCHEMATIC/ELECTRICAL CONNECTORS







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### Standard: Tin plated: Sn95.6; Ag3.8; Cu0.6

Customer specific, Flex: Lx/Ly/Wx/Hx, coating: blue

Wx max. 15

10°+20°

Ly

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Specific connectors on request

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Coating

Lx

5.95 5.60 1.60 1.60

#### Type of connection: flat cable

1.5+0.5 pre-tinned

 $2 \pm 1$ 







