

Pressure sensors in thin film technology on stainless steel diaphragm – hydrogen applications

Series PSP8-WL and PSP10-WL

Features

- Extremely media resistant, 1.4435 (316 L)
- Excellent for fields (e.g.)
 - Oil & gas, hydrogen applications
 - Chemical plants
 - Offshore technology
- For dynamic and static measurements
- Outstanding technical data
- Very high resistance against environmental influences
- RoHS – compliant

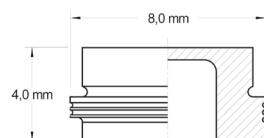
Optional Features

- Additional TC span compensation
- RTD – temperature sensor 1,000 Ohm
- Pressure port according to client's specification

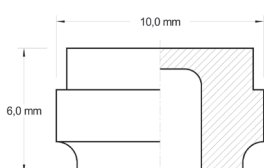
Customization (e.g.)

- Bridge resistance from 3.5 KOhm to 10 KOhm
- Specific schematics (e.g. open bridge)
- Other data on request

Dimensions

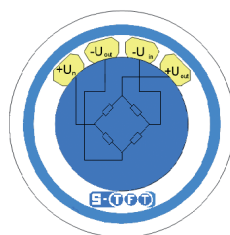


PSP8-WL



PSP10-WL

Standard Layout (e.g.)



Electrical connection via tinned pads,
ribbon cable or wire bondable



Technical Data

Feature	Unit	Series PSP8-WL	Series PSP10-WL
Diaphragm Material	-	1.4435	1.4435
Diameter (outer)	mm	8	10
Height	mm	4	6
Nominal pressure	bar	25 / 60 / 100 / 160 / 250 / 400 / 600 / 1,000	6 / 10 / 16
Overload	-	2 x Nominal pressure	2 x Nominal pressure (1,000 bar 1.5 x)
Burst pressure	-	5 x Nominal pressure	5 x Nominal pressure (1,000 bar 3 x)
Nominal span	mV/V	1.2	1.2
Range of span	mV/V	0.95 ... 1.45	0.95 ... 1.45
TC span	% FS/K	+ 0.01 ... + 0.03	+ 0.01 ... + 0.03
Zero signal	mV/V	< ± 0.2	< ± 0.2
TC zero	% FS/K	< ± 0.04	< ± 0.04
Bridge resistance	kΩ	4 ... 7	4 ... 7
TC of bridge resistors	ppm/K	< ± 25	< ± 25
Isolating resistance (100 VDC)	Ω	> 10 ⁹	> 10 ⁹
Isolating voltage	VAC	125 / 500	125 / 500
Nonlinearity			
Nominal pressure ≤ 16 bar		-	< 1.0
Nominal pressure ≥ 25 to ≤ 100 bar	% FS	< 1.0	-
Nominal pressure > 100 bar		< 0.5	-
Hysteresis	% FS	< 0.4	< 0.4
Repeatability	% FS	< ± 0.05	< ± 0.05
Long term stability (zero signal)			
72 h / 85 °C	% FS	< ± 0.2	< ± 0.2
1,000 h / 85 °C		< ± 0.25	< ± 0.25
100 h / 85 °C, 85 % r.H., 5 VDC		< ± 0.25	< ± 0.25
10 Mio. Load cycles (nominal pressure)	% FS	< ± 0.3	< ± 0.3
Operating temperature range	°C	- 25 ... + 85	- 25 ... + 85
Supply voltage range	VDC	10	10

Ordering Information

- Series
- Pressure range
- Bridge resistance
- TC compensation of the stainless steel (Yes/No)
- Temperature sensor (Yes/No)
- Special requirements
- Quantity
- Delivery form

Sales and Development

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