

Pressure sensors in thin film technology on stainless steel diaphragms – for extremely aggressive media

Series PSP8-SH and PSP10-SH

Features

- Extremely resistant against aggressive media, diaphragm made from Hastelloy C22
- Excellent for applications in the fields of (e.g.)
 - Oil & gas
 - Chemical process technology
 - Offshore and marine technology
- For dynamic and static measurements
- Outstanding technical data
- Very high resistance against environmental influences
- RoHS – compliant

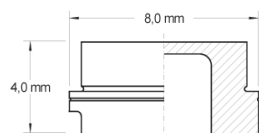
Optional Features

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

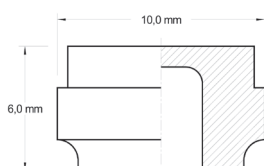
Customization (e.g.)

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

Dimensions

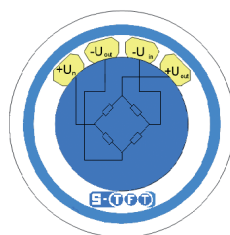


PSP8-SH



PSP10-SH

Standard Layout (e.g.)



Electrical connection via tinned pads, ribbon cable or wire bondable



Technical Data

Feature	Unit	Series PSP8-SH	Series PSP10-SH
Diaphragm Material	-	Hastelloy C22	Hastelloy C22
Diameter (outer)	mm	8	10
Height	mm	4	6
Nominal pressure	bar	25/60/100/160/ 250/400/600	10/16/1,000/ 1,600/2,000
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 2 x)
Nominal span	mV/V	1.8	1.8
Range of span	mV/V	1.4 ... 2.5	1.4 ... 2.5
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		-	< 0.5
Nominal pressure 25 ... 100 bar	% FS	< 1	-
Nominal pressure 160 ... 2,000 bar		< 0.7	< 0.7
Hysteresis	% FS	< 0.2	< 0.2
Repeatability	% FS	< ± 0.05	< ± 0.05
Long term stability (zero signal)			
72 h/85 °C	% FS	< ± 0.2	< ± 0.2
1,000 h/75 °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

Tel. +49(0)36601 858 - 0