

RESENZO

Sensoren und industrielle Regelungstechnik

Features

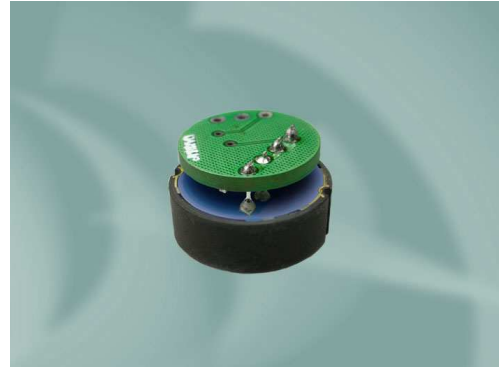
- ratiometric output signal (0,5 ... 4,5V)
- excellent chemical resistivity
- easy to assemble
- temperature compensated

Applications

- pneumatic
- hydraulic
- electronic pressure switches
- electronic pressure transmitters

Stainless Steel Pressure Sensor

SPS 1000 Z



General data

Sensor type	Monolithic sensor
Pressure type	Gauge pressure
Reference conditions	Temperature T_{ref} 25°C
	Supply voltage U_{ref} 5 Vdc

Electrical data

Supply voltage stabilised	$5 \pm 0,5$ Vdc
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Pressure ranges

Pressure range p_{Nom} [bar]	Overload pressure P_s (max. 1min) [bar]	Acceptable Minimum pressure	Burst pressure p_b [bar]	Output voltage range [V]
0 ... 10	20	Vacuum	≥ 50	0,5 ... 4,5 ratiometric
0 ... 25	50		≥ 125	
0 ... 40	80		≥ 200	
0 ... 60	120		≥ 300	
0 ... 100	200		≥ 500	
0 ... 160	250		≥ 650	
0 ... 250	400		≥ 750	
0 ... 400	700		≥ 1200	
0 ... 600	1200		≥ 1800	
0 ... 1000	2000		≥ 2500	

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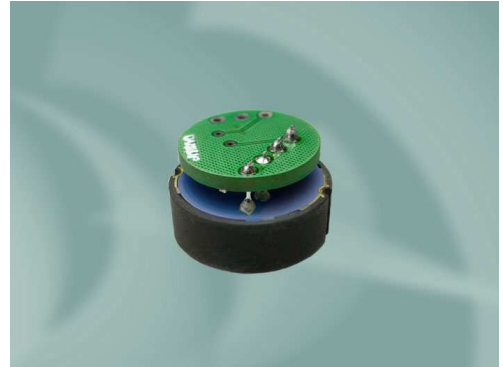
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Output data

Output voltage range	0,5 ... 4,5 V *) 3 wire, ratiometric
Offset voltage	0,5 V @ $U_s = 5V$ *)
Span	4,0 V @ $U_s = 5V$ *)
Calibration error	$\pm 0,5$ % FS
Measuring error by clamping **)	$< 0,5$ % FS (typ.)
Total error **)	$\leq \pm 0,4$ % FS typ.
Sum of non-linearity, hysteresis and non-repeatability ***)	$\leq \pm 1,5$ % FS max.
Offset change after 1000h @ 125°C	$\leq \pm 0,3$ % FS
Temperature influence	$\leq \pm 0,04$ % FS/K
TC-Offset	$\leq \pm 0,03$ % FS/K
TC-Span	
Current consumption	$\leq 2,5$ mA
Response time (10 ... 90%)	< 2 msec
Switch-on delay	< 250 msec
Output load resistance	1 ... 5 k Ω
Load capacitance	$< 0,05$ μ F

*) other data on request, minimum order quantity 150 pieces

***) depending on housing geometry and assembly conditions

***) terminal based according to DIN 16086:2006...01

Environmental conditions

Nominal temperature range	- 40 ... 125°C *)
Working temperature range	- 40 ... 125°C *)
Storage temperature range	- 50 ... 125°C *)
Material of parts in contact with the pressure medium	Stainless Steel

*) sensor without cable

Electrical connection

Standard	Soldering pads
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Dimensions

Diameter	$18 \pm 0,1$ mm
Height	< 12 mm
Other dimensions	see drawing

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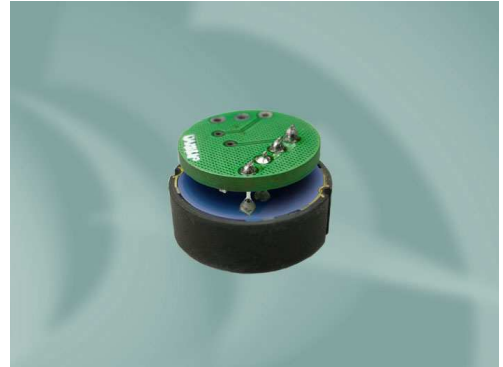
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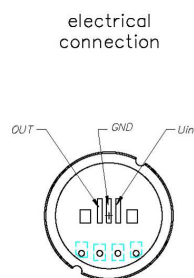
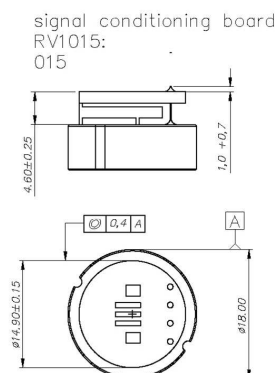
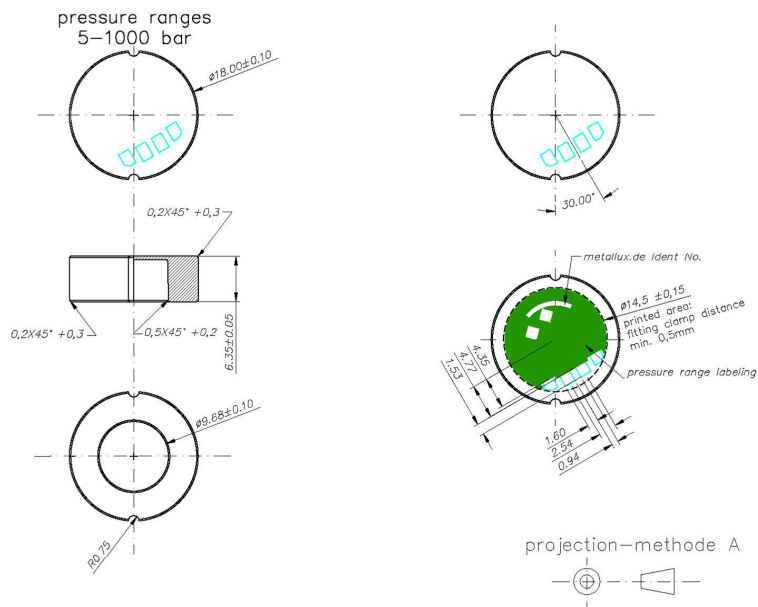
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Drawing

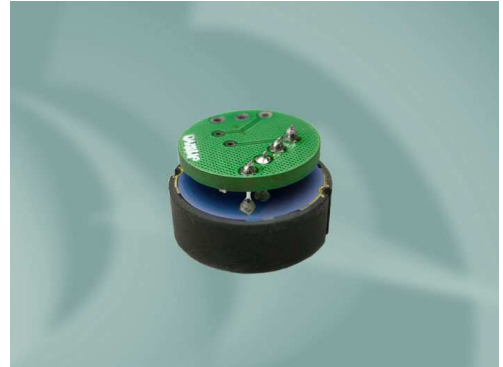


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How to order

Type	Pressure range	Pressure type	Electr. connection
SPS 1000 Z	200 bar	R (gauge)	Pads