

Ceramic Pressure Sensor

CPS 3500



Features

- monolithic ceramic technology
- robust design
- temperature compensated
- output 0,5 ... 4,5 V (ratiometric)

Applications

- brake systems
- printing machines
- valves
- pneumatic
- hydraulic
- electronic pressure switches
- pressure transmitters
- flow control

Metallux AG
Robert-Bosch-Str. 29
D-71397 Leutenbach - Germany
Tel: +49 (0) 7195/5980-0
Fax: +49 (0) 7195/5980-300
<http://www.metallux.de/>
info@metallux.de

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technology matters

Electrical Characteristics

Supply voltage	5 V _{DC} ± 0,25 (inverse-polarity protection)
Output voltage	0,5 ... 4,5 V 3 wire, ratiometric
Offset tolerance	± 1,5 % FS
Span tolerance	± 1,5 % FS
Measuring error by clamping	< 0,5 % FS (typ.)
Linearity/Hysteresis/repeatability	< ± 0,2 ... 1,5 % FS depending on pressure range
Long term stability of offset	< 0,4 % FS 1000 h @ 125°C
Temperature influence	
- 40°C ... 0°C	max. ± 3,0 % FS
0°C ... 90°C	max. ± 1,5 % FS
90°C ... 125°C	max. ± 3,0 % FS
Current consumption	≤ 10 mA
Response time (10 % ... 90 %)	< 2 msec
Load cycle	< 250 msec
Load resistance	1 ... 5k Ω
Load capacitance	< 0,05 μF
High frequency electromagnetic radiation (HF) according to EN 61000-4-3	0 ... 1000 MHz, 100 V/m, no influence
Conducted HF interference according to EN 61000-4-6	0 ... 80 MHz, 10 V, no influence
Electrostatic discharge (ESD) according EN 61000-4-2	depending on geometry and assembly conditions
Fast transients (burst) according to EN 61000-4-4	depending on geometry and assembly conditions

Mechanical Characteristics

Pressure range (p _{Nom}) Relative [bar]	Burst pressure [bar]
0 ... 4	15
0 ... 6	30
0 ... 10	30
0 ... 16	60
0 ... 25	60
0 ... 40	150
0 ... 60	150
0 ... 100	200

Specifications subject to change without notice

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Environment characteristics

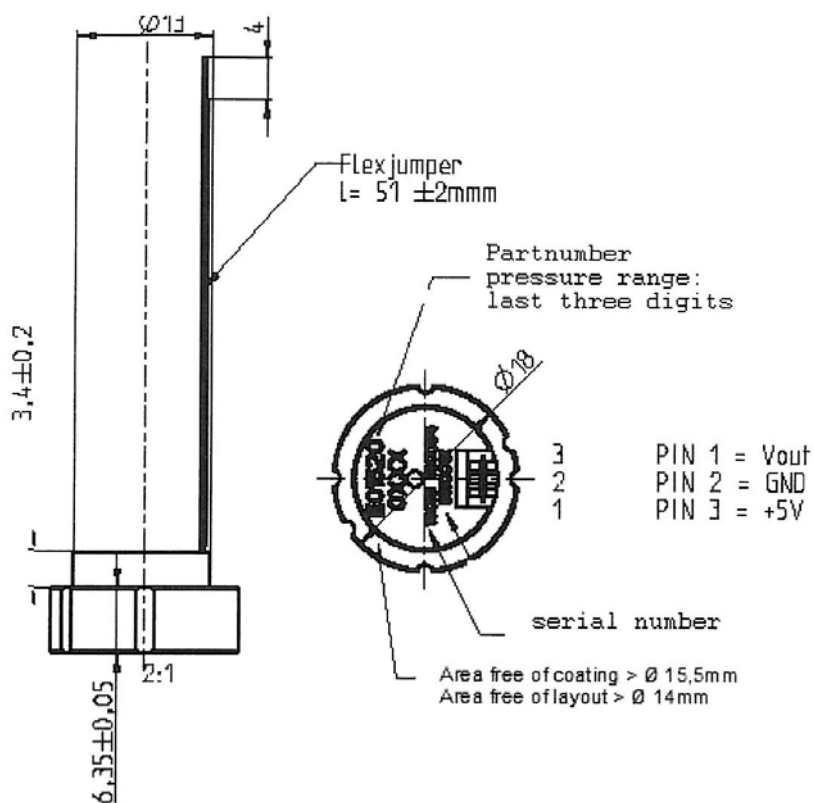
Storage temperature	- 40 °C ... + 125°C
Operating temperature	- 40 °C ... + 125°C

Material

Material	Al ₂ O ₃ , 96 %*)
Pins	Flexprint

*) Aluminium oxide shows highest chemical resistivity against liquid and gaseous media. It is recommended, especially in the case of new and not tested applications, to do own tests.

Dimensions



How to order

Type	Pressure range
CPS 3500	0 ... 6 bar

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