CERAMIC STANDARD PRESSURE SENSOR CPS 1184

Metallux monolithic pressure sensors are manufactured in large series and are in use in a range of applications in machinery production, the automotive industry, and ventilation and climate control equipment. The easy installation and calibration of the sensors simplifies the customer's production processes. The CPS 1184 features a compact design, high media compatibility and excellent long-term stability.

TECHNICAL SPECIFICATIONS	
Resistance/Tolerance	10 kOhm ± 20%
Output signal	See table "Span"
Linearity, hysteresis, reproducibility	≤ ± 0.4% FS typ.; pNom ≤ 60 bar ≤ ± 0.8% FS typ.; pNom >60 bar max < ± 1.5% FS ***
Supply voltage	3...30 V
Zero signal range	–0.2...0 mV/V * (opt. –0.1...0 mV/V) *
Zero signal stability	≤ ± 0.25% FS (1000h @ 125 °C) ≤ ± 0.1% FS (2.5 million pressure cycles 0...100%)
Span stability	≤ ± 0.05% FS (1000h @ 125 °C) ≤ ± 0.05% FS (2.5 million pressure cycles 0...100%)
Temperature error, zero point	< ± 0.02% FS/K *
Temperature error, span	≤ 0.012% FS (0...85 °C)
Electrical connectors	Tinned solder pads, pins, flat flexible cable
Nominal/Operating/ Storage temperature range	– 40...125 °C *
Material of parts that contact the media	Al2O3 96% **
Dimensions	see dimensional drawings
Pressure type	Relative pressure

NOMINAL PRESSURE	SPAN	BURST PRESSURE	VACUUM
1.6 bar	1.5...2.8 mV/V	≥ 4 bar	Vacuum-resistant
2.5 bar	2.5...4.4 mV/V	≥ 7 bar	Vacuum-resistant
4 bar	1.5...2.8 mV/V	≥ 15 bar	Vacuum-resistant
6 bar	2.4...4.2 mV/V	≥ 15 bar	Vacuum-resistant
10 bar	2.7...4.0 mV/V	≥ 35 bar	Vacuum-resistant
16 bar	2.2...3.5 mV/V	≥ 50 bar	Vacuum-resistant
25 bar	3.7...5.3 mV/V	≥ 70 bar	Vacuum-resistant
40 bar	2.0...3.3 mV/V	≥ 150 bar	Vacuum-resistant
60 bar	3.2...4.8 mV/V	≥ 150 bar	Vacuum-resistant
100 bar	2.1...2.7 mV/V	≥ 250 bar	Vacuum-resistant
160 bar	1.4...2.7 mV/V	≥ 320 bar	Vacuum-resistant
250 bar	2.2...4.2 mV/V	≥ 450 bar	Vacuum-resistant
400 bar	1.4...2.9 mV/V	≥ 700 bar	Vacuum-resistant

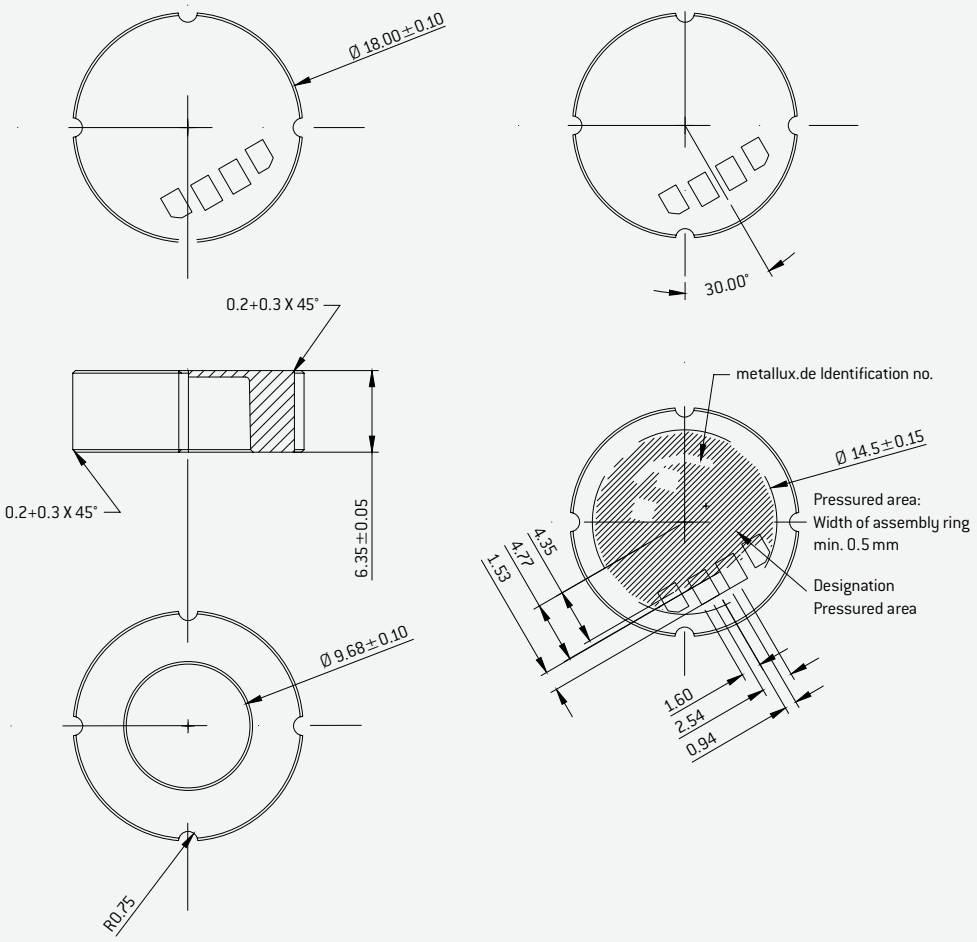
Mechanical and electrical characteristics are customisable. Specifications are subject to change without notice. * Sensor without cable ** Aluminium oxide offers high chemical resistance against a variety of measured media. We recommend that customers perform their own tests for new or untested applications. *** at max. setting acc. to DIN 16086

SAMPLE ORDER

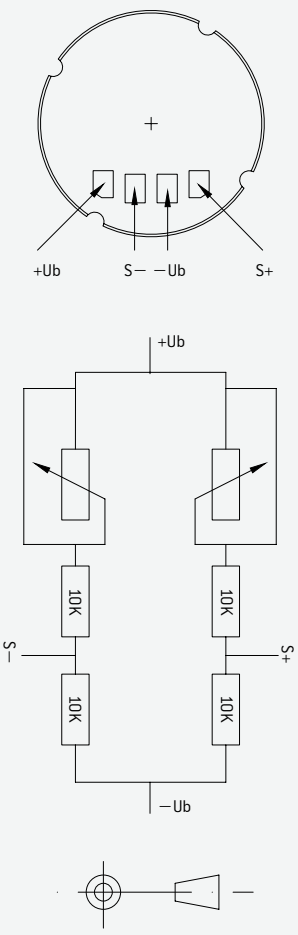
Type	Pressure range in bar	Electrical connection (acc. to drawing)
CPS 1184	100 bar	Solder pads
Other dimensions and electrical specifications on request.		

DIMENSIONAL DRAWINGS / CONNECTOR SCHEMATIC / ELECTRICAL CONNECTORS

Pressure range
1.6 – 400 bar



Pin assignment



Tinned connectors Sn95.6 Ag3.8 Cu0.6	Flex: B04-N025-A(Nomex) Cover: PUR 36788-1TM	Flat flexible cable: 4 X AWG26 2.54mm Cover: PUR 36788-1TM	Pins: 0.5 X 0.27 tinned