

Pressure Transducer Heavy Duty Industrial Piezoresistive





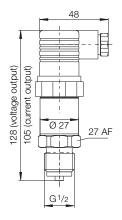


Description

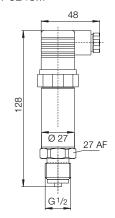
The heavy duty compact pressure sensors are top-of-the-range among pressure transmitters. A piezoresistive pressure measuring cell serves as measuring element. Housing and wetted parts are made of stainless steel and are thus resistant to chemically aggressive media. Pressure port and measuring cell are welded together – which means that the measuring system is very resistant to mechanical shock and vibrations. For difficult measurement applications (for example hydrostatic column) zero-point and span can be adjusted with two potentiometers.

Dimensions

SEN-3245...



SEN-3248...



Applications

- Plant engineering
- Process engineering
- Hydraulics
- R & D and laboratory
- Pneumatics

Technical Details

Version: internally-fitted diaphragm

Type of pressure: absolute pressure Housing: stainless steel 1.4301 Connections: $G^{1/2}$ external thread

according to DIN 16288

Wetted parts: stainless steel 1.4571 and 1.4542

Measuring element: piezoresistive

Max. temperature: storage: -40 to +100°C

measured medium: -30 to +100 °C

environment: -20 to +80°C

Allowed excess

pressure: \leq 16 bar: 3.5-fold

vacuum tight

Accuracy class: 0.25 or 0.5

Reproducibility: $\leq \pm 0.05\%$ f. s.

Stability per year: $\leq \pm 0.2\%$ f. s.

(at reference conditions)

Electrical connection: connector accord. to DIN 43 650

Auxiliary power: 10...30 V_{DC}

(14...30 V_{DC} for 0 - 10 V output)

Output: 4 - 20 mA (2-wire), 0 - 10 V_{DC}

Load (Ω): $\leq (U_B - 10 \text{ V})/0.02 \text{ A (at } 4 - 20 \text{ mA)}$

 $> 10 \text{ k}\Omega$ at 0 - 10 V

Response time: \leq 1 ms (within 10 - 90% f. s.) Variability: zero-point and span up to $\pm 5\%$

Compensated range: 0 to +80°C

Temperature effect: on zero-point and span

±0.2%/10 K

Protection: IP 65

Order Details Sensor (Example: SEN-3245 B015)

Measuring range	Order no. Absolute pressure class 0.5 4 - 20 mA	Order no. Absolute pressure class 0.5 0 -10 V _{DC}	Order no. Absolute pressure class 0.25 4 - 20 mA	Order no. Absolute pressure class 0.25 0-10 V _{DC}
0 to 0.25 bar	SEN-3245 B146	SEN-3245/2 B146	SEN-3248 B146	SEN-3248/2 B146
0 to 0.4 bar	SEN-3245 B156	SEN-3245/2 B156	SEN-3248 B156	SEN-3248/2 B156
0 to 0.6 bar	SEN-3245 B015	SEN-3245/2 B015	SEN-3248 B015	SEN-3248/2 B015
0 to 1.0 bar	SEN-3245 B025	SEN-3245/2 B025	SEN-3248 B025	SEN-3248/2 B025
0 to 1.6 bar	SEN-3245 B035	SEN-3245/2 B035	SEN-3248 B035	SEN-3248/2 B035
0 to 2.5 bar	SEN-3245 B045	SEN-3245/2 B045	SEN-3248 B045	SEN-3248/2 B045
0 to 4.0 bar	SEN-3245 B055	SEN-3245/2 B055	SEN-3248 B055	SEN-3248/2 B055
0 to 6.0 bar	SEN-3245 B065	SEN-3245/2 B065	SEN-3248 B065	SEN-3248/2 B065
0 to 10.0 bar	SEN-3245 B075	SEN-3245/2 B075	SEN-3248 B075	SEN-3248/2 B075
0 to 16.0 bar	SEN-3245 B085	SEN-3245/2 B085	SEN-3248 B085	SEN-3248/2 B085