

Pressure Transducer Heavy Duty Precision Thin Film



measuring • monitoring • analysing

SEN-3390



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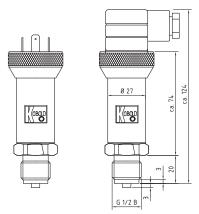


Description

The KOBOLD Heavy Duty Precision pressure transducers are the leaders among the pressure transducers. With an accuracy of 0.1% (0.05% optional) use in testing and calibration is given. By a programmatic compensation temperature of +10 °C ... +60 °C the temperature-induced error is practically zero. As measuring element, a thin-film pressure sensor is used. Case and wetted parts are stainless steel. Therefore they are extremly resistant against aggressive process fluids. The sensor in uneffected by shock or vibration. Optional software is available to adjust zero and span in difficult applications like measurement of the hydrostatic column.

Dimensions (in mm)

SEN-3390...



Applications

- Testing and calibration
- R & D and laboratory
- Process engineering

Hydraulics

Pneumatics

Technical Details

Technical Details	
Version:	internal diaphragm
Pressure type:	gauge pressure
Housing:	stainless steel
Connection:	G ½ B according to EN 837, optional G¼ B, ½ NPT, ¼ NPT
Wetted parts:	stainless steel
Sensor element:	Thin film
Max. temperature:	storage: -40+80°C medium: -20+105°C ambient: -20+80°C
Pressure limitiation:	< 600 bar: 2 x range,
	> 600 bar: 1.5 x range, vacuum-tight
Accuracy:	0.1% of full scale in range +10+60°C (option 0.05% of full scale at +20°C)
Repeatability:	$\leq \pm 0.03$ % of full scale
Stability per year:	$\leq \pm 0.2\%$ of full scale (under reference conditions)
Electrical connection:	connector DIN EN 175301-803 Form A (DIN 43 650 A) optional: cable outlet 1.5 m, connector M12x1
Power supply:	$930 V_{DC}$ (1430 V _{DC} for output 0 - 10 V)
Output:	4 - 20 mA (2-wire), optional: (0)4 - 20 mA (3-wire), 0 - 5 V _{DC} , 0 - 10 V _{DC}
Load (Ω):	$\begin{aligned} &RA[\Omega] \leq (U_{B}[V]\text{-9V})/0,02 \; A \\ &(\text{for } 4 \text{-} 20 \; \text{mA}) \\ &> 5 \; k\Omega \; \text{for } 0 \text{-} 5 \; V \\ &> 10 \; k\Omega \; \text{for } 0 \text{-} 10 \; V \end{aligned}$
Response time:	1 ms (1 kHz) 3-wire; 3 ms (0.33 kHz) 2-wire
Adjustability:	zero point -5+20% and span -20+5% (setting via software)
Compensated range:	-20+80°C
Temperature influence:	zero point and span ± 0.1 %/10 K
Protection:	IP65 (IP67 for cable/M12x1)

Order Details Sensor (Example: SEN-3390 A105)

Model
SEN-3390 Accuracy class 0.1 %