

# Pressure Transducer Heavy Duty Precision Thinfilm



measuring • monitoring • analysing

# SEN-3391



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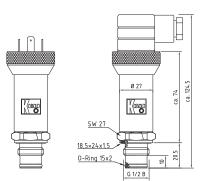
### Description

The Heavy Duty Industrial pressure transducers are leaders among pressure transducers. The flush type diaphragm allows the use with aggressive, viscous or crystallizing process fluids. This type of sealing permits cleaning of the process connections without residues. 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 the are extremely resistant against aggressive media and fulfill the most demanding requirements.

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-3391...



# Applications

- Testing and calibration
- R & D and laboratory
- Process engineering
- HydraulicsPneumatics
- Plant construction

Technical Data

Technology: flush diaphragm Pressure type: gauge pressure Housing: stainless steel Connections: G1/2 male Wetted parts: stainless steel; O-ring NBR (option FPM/ FKM or EPDM) Sensor: thinfilm storage: -40...+80°C Max. temperature: medium: -20...+105°C ambient: -20...+80°C Pressure limitation: 2 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: ≤±0,2% of full scale (at reference conditions) connector DIN EN 175301-803 Electrical connection: Form A (DIN 43 650 A), optional: cable outlet 1,5 m, connector M12x1 Auxiliary power:  $9...30 V_{DC}$  $(14\ldots 30~V_{\text{DC}}$  for output 0 - 10 V) 4-20 mA (2-wire), Output: optional (0)4 - 20 mA (3-wire), 0-5 V<sub>DC</sub>, 0-10 V<sub>DC</sub> Load (Ω):  $RA[\Omega] \le (U_{B}[V]-9V)/0,02A$  (for 4-20 mA); >5 kΩ for 0-5 V >10 k $\Omega$  for 0 - 10 V Response time: 1 ms (1 kHz) 3-wire; 3 ms (0,33 kHz) 2-wire Heating period: <10 min Variability: zero-point -5 ... +20% and span -20...+5% (setting via software) Compensated range: -20...+80°C Temperature influence: on zero-point and span ± 0,1 %/10 K Protection: IP 65 (IP 67 for cable / M12x1)

#### Accessory

Weld on Adapter for flush diaphragm transducer

Connection	Model
Weld on adapter G 1/2 female	MZB-ESAR15
Screw in adapter G 1 AG x G ½ female	MZB-ESAR25R15
Screw in adapter G ¾ AG x G ½ female	MZB-ESAR20R15

### Order Details Sensor (Example: SEN-3391 A105)

Model	Output	Measuring range	Connection
<b>SEN-3391</b> Accuracy class 0,1 %	without = $4 - 20 \text{ mA}$ , 2-wire /1 = $0 \dots 5 \text{ V}_{\text{DC}}$ /2 = $0 \dots 10 \text{ V}_{\text{DC}}$ /3 = $4 - 20 \text{ mA}$ , 3-wire	A 105 = 0 40 bar A 115 = 0 60 bar A 125 = 0 100 bar A 135 = 0 160 bar A 145 = 0 250 bar A 155 = 0 400 bar A 165 = 0 600 bar	without = plug Form A DIN EN 175301-803 Form A (DIN 43 650 A) incl. junction box   3 = plug M12x1 (4-pin, IP67)   5 = 2 m cable, IP67

No responsibility taken for errors; subject to change without prior notice.