

# **Pressure Transducer Heavy Duty Industrial Piezoresistive**



measuring monitoring analysing

SEN-3251/3252



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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 crystallising process fluids. This type of sealing permits cleaning of the process connections without residues. Case and wetted parts are stainless steel. Therefore the are extremely resistant against aggressive media and fulfill the most demanding requirements.

Two adjustment potentiometers for zero and span render possible the use in most difficult applications like measurement of the hydrostatic column.

### **Applications**

- Plant construction
- Process engineering
- Apparaturs engineering
- Development and laboratory

### **Technical Details**

Technology: flush diaphragm

Pressure type: gauge pressure

Housing: stainless steel 1.4301

Connections: measuring span

≤ 1.6 bar G1 male

measuring span ≥ 2.5 bar G½ male

Wetted parts: stainless steel 1.4571, NBR

Sensor: piezoresistive

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

medium: -30...+100°C ambient: -20...+80°C

Pressure limitation:  $\leq 16$  bar: 3,5 x range

>16 bar: 2 x range, vacuum-tight

Accuracy class: 0.25 or 0.5

Repeatability:  $\leq \pm 0.05\%$  of full scale Stability per year:  $\leq \pm 0.2\%$  of full scale (at reference conditions)

Electrical connection: connector according to DIN 43 650

Auxiliary power: 10...30 V<sub>DC</sub>

 $(14...30 V_{DC} \text{ for output } 0-10 \text{ V})$ 4-20 mA (2-wire), 0-10  $V_{DC}$ 

Output:  $4-20 \text{ mA (2-wire)}, \ 0-10 \text{ V}_{DC}$ Load ( $\Omega$ ):  $\leq (\text{U}_{\text{B}}-10 \text{ V})/0,02 \text{ A (for } 4-20 \text{ mA)}$ 

 $> 5 \text{ k}\Omega \text{ for } 0-5 \text{ V}$  $> 10 \text{ k}\Omega \text{ for } 0-10 \text{ V}$ 

Response time:  $\leq$  1 ms (within 10 - 90 % of full scale) Variability: zero-point and span up to  $\pm$  10 %

Compensated range: 0...+80°C

Temperature influence: on zero-point and span

± 0.2 % / 10 K zero point for meas.

range 0...0.1 and 0...0.16 bar ±0.4%/10K

Protection: IP 65 (IP 67)

#### Accessory

Weld on Adapter for flush diaphragm transducer

Connection	Model	
Weld on adapter G ½	MZB-ESAR15	
Weld on adapter G 1	MZB-ESAR25	
Screw in adapter G 1 male x G ½ female	MZB-ESAR25R15	
Screw in adapter G ¾ male x G ½ female	MZB-ESAR20R15	
Screw in adapter DIN 11851 1,5" x G 1 female	MZB-ESAF40R25	
Screw in adapter DIN 11851 2" x G 1 female	MZB-ESAF50R25	
Screw in adapter G ½ male x G ½ female	MZB-ESAR15R15	
Screw in adapter G 11/4 male x G 1/2 female	MZB-ESAR32R15	
Screw in adapter G 1½ male x G ½ female	MZB-ESAR40R15	
Screw in adapter G ½ male x G 1 female	MZB-ESAR15R25	
Screw in adapter G 11/4 male x G 1 female	MZB-ESAR32R25	
Screw in adapter G 1½ male x G 1 female	MZB-ESAR40R25	

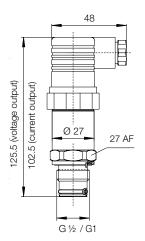


# Order Details Sensor (Example: SEN-3251 C315)

Model	Output	Measuring range		Connection	
SEN-3251 Accuracy class 0.50 % SEN-3252 Accuracy class 0.25 %	without = 4-20 mA, 2-wire /1 = 05 V <sub>DC</sub> /2 = 010 V <sub>DC</sub>	C 406 = -0,1 0 bar C 416 = -0,16 0 bar C 426 = -0,25 0 bar C 436 = -0,4 0 bar C 305 = -0,6 0 bar C 315 = -1 0 bar C 515 = -1 +1,5 bar C 525 = -1 +3 bar C 535 = -1 +5 bar B 126 = 0 0,16 bar	B 146 = 0 0,25 bar B 156 = 0 0,4 bar B 015 = 0 0,6 bar B 025 = 0 1 bar B 035 = 0 1,6 bar B 045 = 0 2,5 bar B 055 = 0 4 bar B 065 = 0 6 bar B 075 = 0 10 bar B 085 = 0 16 bar B 095 = 0 25 bar	without = 3 = 5 =	= plug Form A (DIN 43650) incl. junction box plug M12x1 (4-pin, IP67) 2 m cable, IP67

# Dimensions [mm]

SEN-3251...



### SEN-3252...

