



## Pressure Transducer Heavy Duty Industrial Piezoresistive



measuring  
•  
monitoring  
•  
analysing

SEN-3251/3252

Option:  
Pluggable  
Sandwich  
Display  
Model AUF



- Gauge pressure
- Flush diaphragm
- Measuring range:  
-1...0 to 0...25 bar
- Temperature (medium):  
max. 100°C
- Accuracy class:  
0.25 or 0.5
- Material: stainless steel
- Connection: G ½, G1



P2

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KOBOLD Messring GmbH  
Nordring 22-24  
D-65719 Hofheim/Ts.  
Head Office:  
+49(0)6192 299-0  
+49(0)6192 23398  
info.de@kobold.com  
www.kobold.com



### 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 they 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
- Apparatus engineering
- Development and laboratory

### Technical Details

Technology: flush diaphragm  
 Pressure type: gauge pressure  
 Housing: stainless steel 1.4301  
 Connections: measuring span  
                   ≤ 1.6 bar G 1 male  
                   measuring span  
                   ≥ 2.5 bar G 1/2 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: ≤ 16 bar: 3,5 x range  
                           > 16 bar: 2 x range, vacuum-tight  
 Accuracy class: 0.25 or 0.5  
 Repeatability: ≤ ± 0.05% of full scale  
 Stability per year: ≤ ± 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<sub>DC</sub> for output 0-10 V)  
 Output: 4-20 mA (2-wire), 0-10 V<sub>DC</sub>  
 Load (Ω): ≤ (U<sub>B</sub>-10 V)/0,02 A (for 4-20 mA)  
                   > 5 kΩ for 0-5 V  
                   > 10 kΩ for 0-10 V  
 Response time: ≤ 1 ms (within 10-90% of full scale)  
 Variability: zero-point and span up to ± 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 1/2	MZB-ESAR15
Weld on adapter G 1	MZB-ESAR25
Screw in adapter G 1 male x G 1/2 female	MZB-ESAR25R15
Screw in adapter G 3/4 male x G 1/2 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 1/2 male x G 1/2 female	MZB-ESAR15R15
Screw in adapter G 1 1/4 male x G 1/2 female	MZB-ESAR32R15
Screw in adapter G 1 1/2 male x G 1/2 female	MZB-ESAR40R15
Screw in adapter G 1/2 male x G 1 female	MZB-ESAR15R25
Screw in adapter G 1 1/4 male x G 1 female	MZB-ESAR32R25
Screw in adapter G 1 1/2 male x G 1 female	MZB-ESAR40R25

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

Model	Output	Measuring range		Connection
<b>SEN-3251...</b> Accuracy class 0.50 %  <b>SEN-3252...</b> Accuracy class 0.25 %	<b>without</b> = 4-20 mA, 2-wire /1 = 0...5 V <sub>DC</sub> /2 = 0...10 V <sub>DC</sub>	<b>C 406</b> = -0,1 ... 0 bar	<b>B 146</b> = 0 ... 0,25 bar	<b>without</b> = plug Form A (DIN 43650) incl. junction box  <b>3</b> = plug M12x1 (4-pin, IP67)  <b>5</b> = 2 m cable, IP67
		<b>C 416</b> = -0,16 ... 0 bar	<b>B 156</b> = 0 ... 0,4 bar	
<b>C 426</b> = -0,25 ... 0 bar	<b>B 015</b> = 0 ... 0,6 bar			
<b>C 436</b> = -0,4 ... 0 bar	<b>B 025</b> = 0 ... 1 bar			
<b>C 305</b> = -0,6 ... 0 bar	<b>B 035</b> = 0 ... 1,6 bar			
<b>C 315</b> = -1 ... 0 bar	<b>B 045</b> = 0 ... 2,5 bar			
<b>C 515</b> = -1 ... +1,5 bar	<b>B 055</b> = 0 ... 4 bar			
<b>C 525</b> = -1 ... +3 bar	<b>B 065</b> = 0 ... 6 bar			
<b>C 535</b> = -1 ... +5 bar	<b>B 075</b> = 0 ... 10 bar			
<b>B 126</b> = 0 ... 0,1 bar	<b>B 085</b> = 0 ... 16 bar			
<b>B 136</b> = 0 ... 0,16 bar	<b>B 095</b> = 0 ... 25 bar			

**Dimensions [mm]**

SEN-3251...

SEN-3252...

