



Pressure Sensor with Ceramic Sensor Element



measuring
•
monitoring
•
analysing

Option:
Pluggable
Sandwich
Display



- Measuring range:
-1 ... 0 to 0 ... 600 bar
- Accuracy:
±0.5 or 1.0% (f.s.d.)
- Material:
stainless steel and ceramic
- Gauge pressure



KOBOLD offices exist in the following countries:

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Model:
SEN 8700
SEN 8701



Description

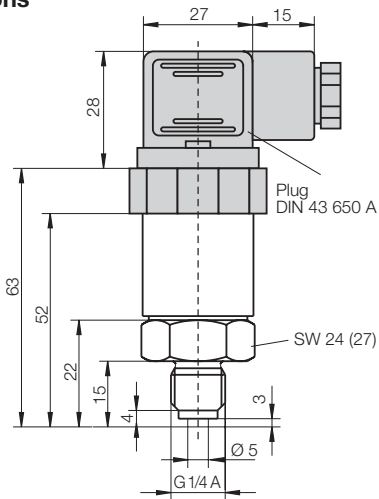
KOBOLD Pressure sensors models SEN 8700/SEN 8701 are inexpensive pressure sensors with thick film ceramic pressure element.

With their accuracy, reliability and compact design, they are perfectly suitable for OEM applications in medium to high quantities.

The materials and technology used make these pressure sensors insensitive to chemically aggressive media and mechanical load.

Particularly hydraulics systems with their high and fast pressure peaks are thus preferred applications.

Dimensions



Application

- Food and beverage industries (with diaphragm mounting)
- Process engineering
- Environmental engineering
- Hydraul. Pneumatic
- Chemical industry

Technical data

Technology: internal membrane
 Pressure type: gauge pressure
 Housing: stainless steel 1.4305
 Connection: G 1/4" male stainless steel 1.4301 (NPT, UNF on request)
 Sensor element: ceramic (Al₂O₃)
 Measuring principle: thick film techn. (DMS)
 O-Ring: NBR
 Max. temperature: Storage: -40...+85°C
 Medium: -40...+100°C
 Ambient: -40...+85°C
 Pressure limitation: < 60 bar: 2 x range
 > 60 bar: 1.5 x range
 Accuracy: SEN-8700: 0.5 (f.s.d.)
 SEN-8701: 1.0 (f.s.d.)
 Repeatability: SEN-8700: ≤ ±0.15% (f.s.d.)
 SEN-8701: ≤ ±0.3% (f.s.d.)
 Characteristic deviation: SEN-8700: ≤ ±0.3% (f.s.d.)
 SEN-8701: ≤ ±0.6% (f.s.d.)
 Stability (annual): ≤ ±0.2% of full scale rated conditions
 Electrical connection: plug DIN 43 650 A
 Power supply: 15...32 V_{DC}
 Output signal: 4-20 mA, 0-5 V_{DC}, 0-10 V_{DC}
 Load (Ω): ≤ (UB-15V)/0.02 A (for 4-20 mA)
 Response time: ≤ 1ms (within 10-90% of full scale)
 Temp. comp. range: -25...+85°C
 Temp. drift: Zero point:
 SEN-8700: ≤ ±0.02% K
 SEN-8701: ≤ ±0.04% K
 Span:
 SEN-8700: ≤ ±0.01% K
 SEN-8701: ≤ ±0.02% K
 Protection: IP 65

Order data sensor (Example: SEN-8700 C315)

Measuring range	Item no. class 0.5 4-20 mA	Item no. class 0.5 0-5 V _{DC}	Item no. class 0.5 0-10 V _{DC}	Item no. class 1.0 4-20 mA	Item no. class 1.0 0-5 V _{DC}	Item no. class 1.0 0-10 V _{DC}
-1 to 0 bar	SEN-8700 C315	SEN-8700/1 C315	SEN-8700/2 C315	SEN-8701 C315	SEN-8701/1 C315	SEN-8701/2 C315
0 to 1 bar	SEN-8700 B025	SEN-8700/1 B025	SEN-8700/2 B025	SEN-8701 B025	SEN-8701/1 B025	SEN-8701/2 B025
0 to 1.6 bar	SEN-8700 B035	SEN-8700/1 B035	SEN-8700/2 B035	SEN-8701 B035	SEN-8701/1 B035	SEN-8701/2 B035
0 to 2.5 bar	SEN-8700 B045	SEN-8700/1 B045	SEN-8700/2 B045	SEN-8701 B045	SEN-8701/1 B045	SEN-8701/2 B045
0 to 4 bar	SEN-8700 B055	SEN-8700/1 B055	SEN-8700/2 B055	SEN-8701 B055	SEN-8701/1 B055	SEN-8701/2 B055
0 to 6 bar	SEN-8700 B065	SEN-8700/1 B065	SEN-8700/2 B065	SEN-8701 B065	SEN-8701/1 B065	SEN-8701/2 B065
0 to 10 bar	SEN-8700 B075	SEN-8700/1 B075	SEN-8700/2 B075	SEN-8701 B075	SEN-8701/1 B075	SEN-8701/2 B075
0 to 16 bar	SEN-8700 B085	SEN-8700/1 B085	SEN-8700/2 B085	SEN-8701 B085	SEN-8701/1 B085	SEN-8701/2 B085
0 to 25 bar	SEN-8700 A095	SEN-8700/1 A095	SEN-8700/2 A095	SEN-8701 A095	SEN-8701/1 A095	SEN-8701/2 A095
0 to 40 bar	SEN-8700 A105	SEN-8700/1 A105	SEN-8700/2 A105	SEN-8701 A105	SEN-8701/1 A105	SEN-8701/2 A105
0 to 60 bar	SEN-8700 A115	SEN-8700/1 A115	SEN-8700/2 A115	SEN-8701 A115	SEN-8701/1 A115	SEN-8701/2 A115
0 to 100 bar	SEN-8700 A125	SEN-8700/1 A125	SEN-8700/2 A125	SEN-8701 A125	SEN-8701/1 A125	SEN-8701/2 A125
0 to 160 bar	SEN-8700 A135	SEN-8700/1 A135	SEN-8700/2 A135	SEN-8701 A135	SEN-8701/1 A135	SEN-8701/2 A135
0 to 250 bar	SEN-8700 A145	SEN-8700/1 A145	SEN-8700/2 A145	SEN-8701 A145	SEN-8701/1 A145	SEN-8701/2 A145
0 to 400 bar	SEN-8700 A155	SEN-8700/1 A155	SEN-8700/2 A155	SEN-8701 A155	SEN-8701/1 A155	SEN-8701/2 A155
0 to 600 bar	SEN-8700 A165	SEN-8700/1 A165	SEN-8700/2 A165	SEN-8701 A165	SEN-8701/1 A165	SEN-8701/2 A165