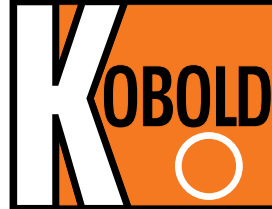




Pressure Sensor with Ceramic Sensor Element



measuring
•
monitoring
•
analysing

Option:
Pluggable
Sandwich
Display
Model AUF



- Gauge pressure
- Internal diaphragm
- Measuring range:
-1...0 to 0...600 bar
- Temperature (medium):
max. 100 °C
- Accuracy:
0.5 or 1.0 % (f.s.d.)
- Material:
stainless steel and ceramic
- Connection: G 1/2 male



KOBOLD offices exist in the following countries:

ARGENTINA, AUSTRIA, BELGIUM, BRAZIL, CANADA, CHINA,
FRANCE, GERMANY, GREAT BRITAIN, ITALY, MEXICO, NETHER-
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Fax +49(0)6192 23398
E-Mail: info.de@kobold.com
Internet: www.kobold.com

Model:
SEN-86



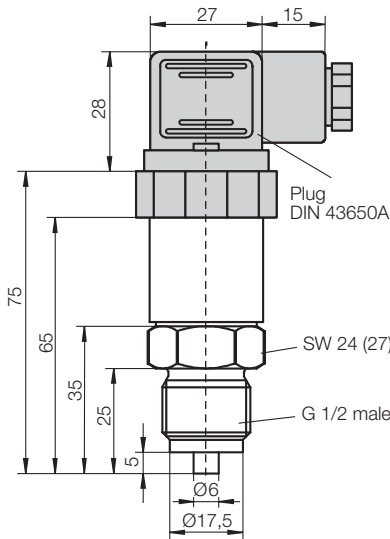
Description

KOBOLD Pressure sensors model SEN-86 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.

Technical data

Technology: internal diaphragm
 Pressure type: gauge pressure
 Housing: stainless steel 1.4305
 Connection: G 1/2 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 class: SEN-86*0: 0.5 (f.s.d.)
 SEN-86*1: 1.0 (f.s.d.)
 Repeatability: SEN-86*0: ≤ ±0.15% (f.s.d.)
 SEN-86*1: ≤ ±0.3% (f.s.d.)
 Characteristic deviation: SEN-86*0: ≤ ±0.3% (f.s.d.)
 SEN-86*1: ≤ ±0.6% (f.s.d.)
 Stability (annual): ≤ ±0.2% of full scale in rated conditions
 Electrical connection: Plug DIN 43 650 A / Plug M12 Cable connection x1
 Power supply: 15...32 V_{DC}
 Output signal: 4 - 20 mA, 0 - 5 V_{DC}, 0 - 10 V_{DC}
 Load (Ω): ≤ (U_B - 15V)/0.02 A (for 4 - 20 mA)
 Response time: ≤ 1 ms (within 10 - 90% of full scale)
 Temp. comp. range: -25...+85 °C
 Temperature drift: Zero:
 SEN-86*0: ≤ ±0.02% K
 SEN-86*0: ≤ ±0.04% K
 span:
 SEN-86*0: ≤ ±0.01% K
 SEN-86*1: ≤ ±0.02% K
 Protection: IP 65 (SEN-860..; SEN-863..) IP 68 (SEN-865..)

Dimensions



Applications

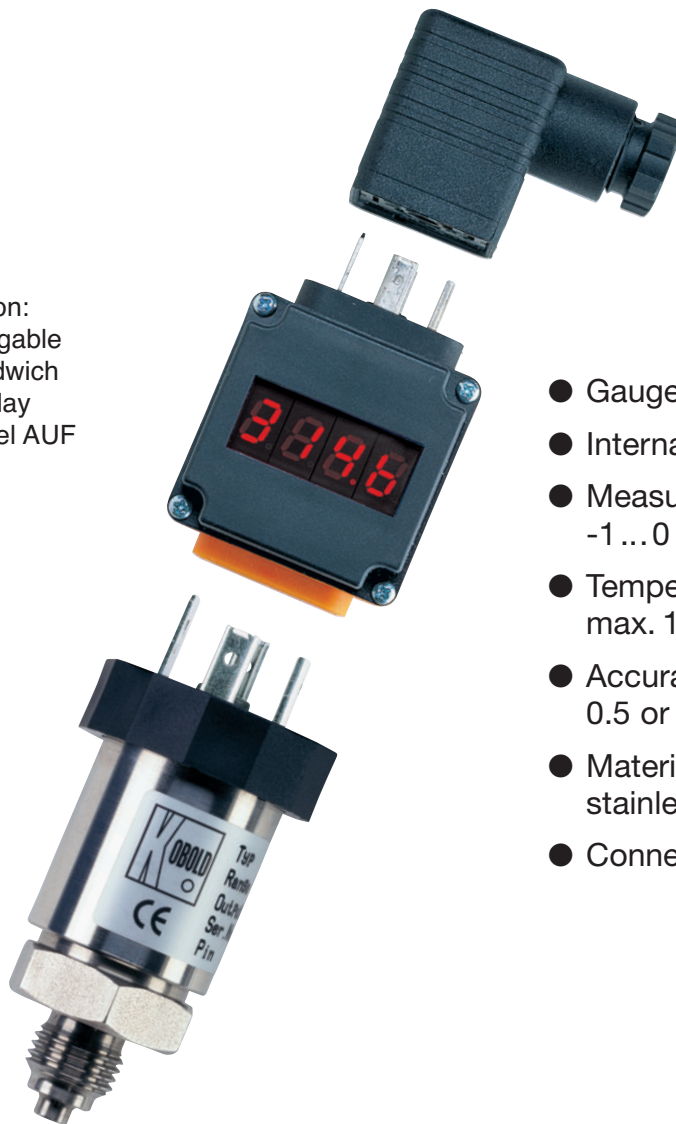
- Process engineering
- Environmental engineering
- Hydraulic pneum.
- Chemical industry

Order Details Sensor (Example: SEN-8600 C315)

Electrical connection	Class	Model	Output	Measuring range
DIN plug; IP 65	0.5	SEN-8600..	without = 4 - 20 mA /1 = 0 - 5 V /2 = 0 - 10 V	C315= -1 to 0 bar B025= 0 to 1 bar B035= 0 to 1.6 bar B045= 0 to 2.5 bar B055= 0 to 4 bar B065= 0 to 6 bar B075= 0 to 10 bar B085= 0 to 16 bar A095= 0 to 25 bar A105= 0 to 40 bar A115= 0 to 60 bar A125= 0 to 100 bar A135= 0 to 160 bar A145= 0 to 250 bar A155= 0 to 400 bar A165= 0 to 600 bar
M12 plug; IP 65	0.5	SEN-8630..		H315= -30 to 0 Hg
Cable connection; IP 68	0.5	SEN-8650..		P025= 0 to 15 psi g
DIN plug; IP 65	1.0	SEN-8601..		P045= 0 to 30 psi g
M12 plug; IP 65	1.0	SEN-8631..		P055= 0 to 50 psi g
Cable connection; IP 68	1.0	SEN-8651..		P065= 0 to 100 psi g P075= 0 to 150 psi g P085= 0 to 200 psi g P095= 0 to 350 psi g P105= 0 to 600 psi g P115= 0 to 1000 psi g P125= 0 to 1450 psi g P135= 0 to 2300 psi g P145= 0 to 3600 psi g P155= 0 to 5800 psi g YYYY= Special measuring range

Pressure Sensor with Ceramic Sensor Element

Option:
 Pluggable
 Sandwich
 Display
 Model AUF



- Gauge pressure
- Internal diaphragm
- Measuring range:
 -1 ... 0 to 0 ... 600 bar
- Temperature (medium):
 max. 100 °C
- Accuracy class:
 0.5 or 1.0
- Material:
 stainless steel and ceramic
- Connection: G 1/4 male



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 Internet: www.kobold.com

Model:
 SEN-87



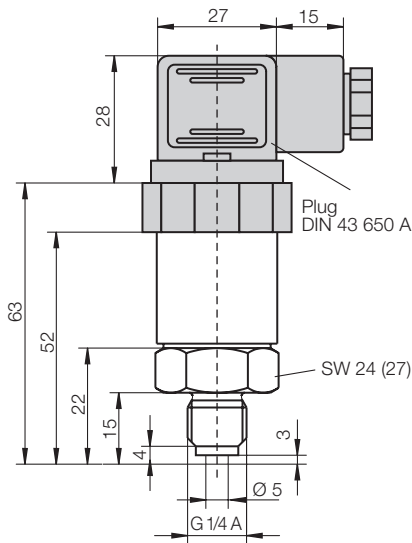
Description

KOBOLD Pressure sensors model SEN-87 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



Applications

- Process engineering
- Hydraulic Pneumatics
- Environmental engineering
- Chemical industry

Technical data

Technology: internal diaphragm
 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-87*0: 0.5 (f.s.d.)
 SEN-87*1: 1.0 (f.s.d.)
 Repeatability: SEN-87*0: ≤ ±0.15 % (f.s.d.)
 SEN-87*1: ≤ ±0.3 % (f.s.d.)
 Characteristic deviation: SEN-87*0: ≤ ±0.3 % (f.s.d.)
 SEN-87*1: ≤ ±0.6 % (f.s.d.)
 Stability (annual): ≤ ±0.2 % of full scale rated conditions
 Electrical connection: Plug DIN 43 650 / Plug M12x1
 Cable connection
 Power supply: 15...32 V_{DC}
 Output signal: 4 - 20 mA, 0 - 5 V_{DC}, 0 - 10 V_{DC}
 Load (Ω): ≤ (U_B-15V)/0.02 A (for 4 - 20 mA)
 Response time: ≤ 1 ms (within 10 - 90 % of full scale)
 Temp. comp. range: -25...+85 °C
 Temp. drift: Zero point:
 SEN-87*0: ≤ ±0.02 % K
 SEN-87*1: ≤ ±0.04 % K
 Span:
 SEN-87*0: ≤ ±0.01 % K
 SEN-87*1: ≤ ±0.02 % K
 Protection: IP 65 (SEN-870..; SEN-873..)
 IP 68 (SEN-875..)

Order Details Sensor (Example: SEN-8700 C315)

Electrical connection	Class	Model	Output	Measuring range
DIN plug; IP 65	0.5	SEN-8700..	without = 4 - 20 mA /1 = 0 - 5 V /2 = 0 - 10 V	C315 = -1 to 0 bar B025 = 0 to 1 bar B035 = 0 to 1.6 bar B045 = 0 to 2.5 bar B055 = 0 to 4 bar B065 = 0 to 6 bar B075 = 0 to 10 bar B085 = 0 to 16 bar A095 = 0 to 25 bar A105 = 0 to 40 bar A115 = 0 to 60 bar A125 = 0 to 100 bar A135 = 0 to 160 bar A145 = 0 to 250 bar A155 = 0 to 400 bar A165 = 0 to 600 bar H315 = -30 to 0 Hg P025 = 0 to 15 psi g P045 = 0 to 30 psi g P055 = 0 to 50 psi g P065 = 0 to 100 psi g P075 = 0 to 150 psi g P085 = 0 to 200 psi g P095 = 0 to 350 psi g P105 = 0 to 600 psi g P115 = 0 to 1000 psi g P125 = 0 to 1450 psi g P135 = 0 to 2300 psi g P145 = 0 to 3600 psi g P155 = 0 to 5800 psi g YYYY = Special measuring range
M12 plug; IP 65	0.5	SEN-8730..		
Cable connection; IP 68	0.5	SEN-8750..		
DIN plug; IP 65	1.0	SEN-8701..		
M12 plug; IP 65	1.0	SEN-8731..		
Cable connection; IP 68	1.0	SEN-8751..		