M-Zert
Zertifiziertes QM-System
DIN EN ISO 9001
Zertifikat-Nr. 01017

Electronic Pressure Switch

KOBOLD

measuring
•
monitoring
•
analysing

- Measuring ranges from -1 to +700 bar
- Measuring accuracy: 1.0 % of full scale
- p_{max}: 1200 bar
- t_{max}: 80 °C
- Process connection: G ¼, G ½, ¼ NPT, ½ NPT outer thread
- four-digit LED display
- easy 2-key programming
- integrated password protection

KOBOLD companies worldwide:
ARGENTINA, AUSTRIA, BELGIUM, CANADA, CHILE, CHINA, COLOMBIA, CZECHIA, FRANCE, GERMANY, GREAT BRITAIN, INDIA, IRAN, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, SINGAPORE, SLOVAKIA, SPAIN, SWITZERLAND, THAILAND, USA, VENEZUELA, VIETNAM

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Model:
PSC

Description

The electronic KOBOLD pressure switch PSC with integrated display is used for continuous pressure monitoring and allows simple switching point programming without pressurisation. For each switching point, the contact function (NC contact/NO contact), the reset points, the switch types (n/p switch) and the switching function (hysteresis/window function) can be programmed.

Switching currents ranging from a few µA to 500 mA can be switched by the output transistors. The long-term proven ceramic or thin-film cells give this pressure switch very good repeating accuracy and a long life, even at high load alternation. The rotating display and rotating connection allow the switch also to be used under extreme mounting conditions.

Its high-quality stainless steel housing makes the pressure switch also suitable for unfavourable environmental conditions. For the higher pressure ranges, all wetted parts are made of stainless steel, making almost all media restrictions unnecessary for the electronic pressure switch. The electronic pressure switch PSC can be used for a wide range of measuring tasks in hydraulics and pneumatics.

Fields of application and areas of use

- Mechanical engineering
- Vacuum technology
- Refrigeration technology
- Filter monitoring
- Building technology
- Gas technology

Technical Data

Display:	7-segment LED, 7.6 mm high -.999...9999 digits
Unit:	bar or PSI selectable
Accuracy:	1.0 % of full scale, ± 1 digit
Repeating accuracy:	0.2 % of full scale
Effect of temperature:	0.3 % / 10 K
Temperature ranges	
• Storage:	-30...+80 °C
• Medium to be measured:	-20...+80 °C
• Ambient:	-20...+70 °C
Alternating loads:	> 10 million pressure cycles
Max. pressure:	see table
Housing:	stainless steel 1.4305
Display electronics:	plastic

Wetted parts

Measuring ranges ≤ 50 bar:	stainless steel 1.4404, AL_2O_3, NBR (ceramic measuring cell)
Measuring ranges ≥ 100 bar:	only stainless steel 1.4404 (thin-film measuring cell)
Pressure connection:	G ¼ DIN 3852-E, G ½, ¼ NPT, ½ NPT, st. steel 1.4404, rotating (330°)
Power supply:	12...30 V_{DC}, pole–reversal–proof
Current consumption:	≤ 50 mA, without load current
Electric connection:	4-pin connector M12x1

Switching outputs

Switching function:	NC contact or NO contact p- or n-switching programmable
Switching power:	max. 0.5 A
Setting:	2-key programming
• Switching point:	0.5...100 % of full scale
• Hysteresis:	0.5...100 % of full scale
Analogue output:	4...20 mA or 0...10 V, 3-wire
Load resistance:	Voltage output > 10 kΩ
	Current output < 500 Ω
Hysteresis:	0.3 % of the range for the ceramic cell
	0.2 % of the range for the thin-film cell
Protection class:	IP 65
Shock resistance:	50 g according to IEC
Vibration resistance:	10 g according to IEC
Weight:	approx. 0.3 kg

02 / 04-2007

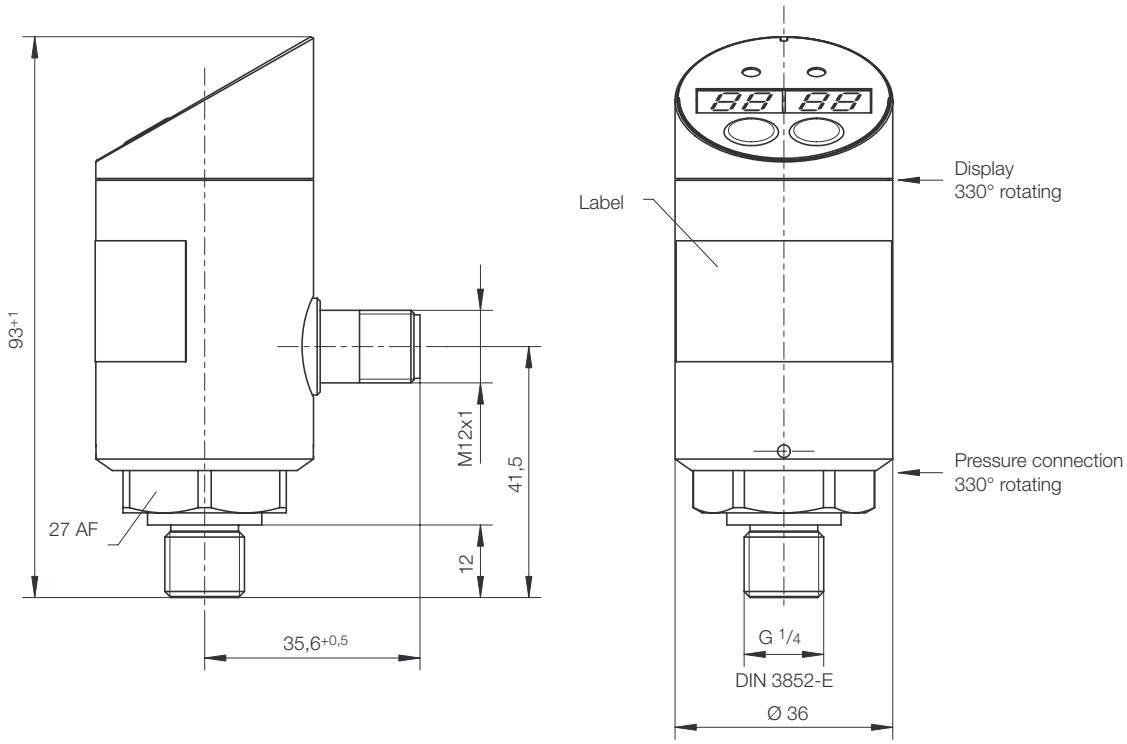
Max. pressure

Measuring range [bar]	Overload limit [bar]	Burst pressure [bar]	Sensor element
-1...+2	5	6	Ceramic cell
-1...+3	5	6	
-1...+5	10	12	
-1...+10	20	25	
0...2	5	6	
0...5	10	12	
0...10	20	25	
0...20	40	50	
0...50	100	120	
0...100	200	250	Thin-film cell
0...160	320	480	
0...250	500	750	
0...400	800	1200	
0...600	1200	1500	
0...700	1200	1500	

Order Details (example: **PSC-132R2 AG A**)

Display	Connection				Measuring range	Options
	[G ¼]	[G ½]	[¼ NPT]	[½ NPT]		
2 PNP/NPN-switching outputs	**PSC-132R2..**	**PSC-132R4..**	**PSC-132N2..**	**PSC-132N4..**	**..AG..** = -1...+2 bar rel. **..A2..** = -1...+3 bar rel. **..A3..** = -1...+5 bar rel. **..AK..** = -1...+10 bar rel. **..BF..** = 0...2 bar rel. **..BH..** = 0...5 bar rel. **..B7..** = 0...10 bar rel. **..BL..** = 0...20 bar rel. **..BN..** = 0...50 bar rel. **..C2..** = 0...100 bar rel. **..C3..** = 0...160 bar rel. **..C4..** = 0...250 bar rel. **..C5..** = 0...400 bar rel. **..C6..** = 0...600 bar rel. **..CA..** = 0...700 bar rel.	**..A** = Standard **..D** = Valve
1 PNP/NPN-switching output + 4-20 mA	**PSC-232R2..**	**PSC-232R4..**	**PSC-232N2..**	**PSC-232N4..**		
1 PNP/NPN-switching output + 0-10 V	**PSC-332R2..**	**PSC-332R4..**	**PSC-332N2..**	**PSC-332N4..**		

Dimensions


93+1
M12x1
41,5
12
27 AF
35,6+0,5
Label
Display
330° rotating
Pressure connection
330° rotating
G 1/4
DIN 3852-E
Ø 36