

# **Electronic Pressure Switch**



measuring monitoring analysing

# **PSC**



- Measuring range: -1...+700 bar
- Measuring accuracy: 1,0% of full scale
- p<sub>max</sub>: 1200 bar; t<sub>max</sub>: 80 °C
- Process connection: G1/4, G1/2, 1/4" NPT, 1/2" NPT male
- Display 330° rotating
- Four-digit LED display
- Easy 2-key programming
- Integrated password protection



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#### Electronic Pressure Switch 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  $\pm 1$  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

stainless steel 1.4305 Housing:

Display electronics: plastic

Wetted parts

Measuring ranges  $\leq$  50 bar: stainless steel, AL<sub>2</sub>O<sub>3</sub>, NBR

(ceramic measuring cell)

Measuring ranges ≥ 100 bar: only stainless steel 1.4404

(thin-film measuring cell)

G1/4 DIN 3852-E, Pressure connection:

G½, ¼" NPT, ½" NPT,

stainless steel, rotating (330°)

Power supply: 12...30 V<sub>DC</sub>,

pole-reversal-proof

Current consumption: ≤50 mA, without load current

Electrical connection: connector M12x1, 4-pin

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: 1...100% of full scale Reset point: 0...99% of full scale

Analogue output: 4...20 mA or 0...10 V, 3-wire

Load resistance: Voltage output > 10 k $\Omega$ 

Current output < 500  $\Omega$ 

0,3% of the range for the Hysteresis:

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

## Electronic Pressure Switch Model PSC

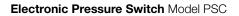


## Max. Pressure

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		
02	5	6		
05	5 10			
010	20	25		
020	40	50		
050	100	120		
0100	200	800		
0160	320	1000		
0250	500	1200	Thin-film cell	
0400	800	1700		
0600	0600 1000 240			
0700	0700 1000 24			

## Order Details (Example: PSC-132R2 AG A)

Display	Connection				Managerina vanas	Ontinus
	[G¼]	[G½]	[¼"NPT]	[½"NPT]	Measuring range	Options
2 x 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.	
1 x PNP/NPN switching output + 4-20 mA	PSC-232R2	PSC-232R4	PSC-232N2	PSC-232N4	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.	<b>A</b> = Standard <b>D</b> = Valve
1 x PNP/NPN switching output + 0-10 V	PSC-332R2	PSC-332R4	PSC-332N2	PSC-332N4	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.	





## **Dimensions**

