

PSA06

Electronic pressure switch with LED display

- measuring ranges: from -1 to 700 bar
- 2 switching points or 1 switching point with analog output (4–20 mA or 0–10 V)
- suitable for general use as a pressure switch, pressure sensor or pressure indicator
- easy programming of switching points or analog output
- display head and pressure port rotatable through 330 degrees



Description:

The PSA06 is based on ceramic or thin-film measuring cell technology; it is a heavy-duty pressure switch that is very precise and has a long service life. Continuous pressure indication is provided by the integral LED display and allows the pressure switch to be adjusted easily with the programming buttons on the display. Its rotary display and the rotary pressure port mean the device can be installed in almost any position.

Typical Applications:

The pressure switch is suitable for use with almost all liquids and gases and is deployed in vacuum engineering (pump control), the gas industry (gas level monitoring, leak detection), filter monitoring (soiling detection) and for a large variety of measuring tasks in hydraulics and pneumatics, in industrial machinery and systems, plant engineering, in the process industry and in building systems.

Materials:

Housing:	stainless steel, display made of plastic
Sensor element:	stainless steel, using 100 bar ceramics with NBR gasket
Process connection:	stainless steel

Measuring ranges:

Order-code	Setting-range in bar rel.	Overload limit in bar	Burst pressure in bar
R101	-1...2	-1...5	6
R044	-1...3	-1...5	6
R045	-1...5	-1...10	12
R047	-1...10	-1...20	25
R071	0...2	-1...5	6
R121	0...5	-1...10	12
R075	0...10	-1...20	25
R077	0...20	-1...40	50
R785	0...50	-1...100	120
R081	0...100	-1...200	250
R082	0...160	-1...320	480
R084	0...250	-1...500	750
R086	0...400	-1...800	1.200
R087	0...600	-1...1200	1.500
R104	0...700	-1...1200	1.500

Electrical Specifications:

Supply voltage:	12 to 30 VDC
Power consumption:	≤ 50 mA, no load current
Switched outputs:	
Number:	1 or 2
Switching function:	NC contact or NO contact programmable
Switch rating:	0.5 A
Adjustment:	switching point and hysteresis 1–100 % of full scale, programmable via display
Analog outputs:	
Signal:	4–20 mA or 0–10 V, 3-wire
Load impedance:	voltage output > 10 kOhm Current output < 500 ohm
Hysteresis:	0.3 % of full scale up to measuring range R785 0.2 % of full scale from measuring range R081

Model Coding:

Order Number:	PSA06	1.	A.	R075.	1.	0
Electronic pressure switches with LED display						
Model:	1 = internal membrane					
Output:	A = 2 x PNP/NPN B = 1 x PNP/NPN + 1 x analog output 4–20 mA C = 1 x PNP/NPN + 1 x analog output 0–10 VDC					
Setting range:	R101...R104, see table "measuring ranges"					
Electrical connection	1 = M12 x 1 connector without counter plug 2 = M12 x 1 connector with counter plug, angular with 2 m cable 3 = M12 x 1 connector with counter plug, straight with 2 m cable					
Special feature:	0 = None 1 = Please specify in writing					

Technical Specifications:

Measuring ranges:	see "Measuring ranges" table
Electrical connection:	M12x1 round plug, 4-pin
Process connection:	¼" as per DIN 3852-E
Max. pressure:	see "Measuring ranges" table
Gas/liquid temp:	-30 to 80 °C
Accuracy:	1% of full scale + 1 digit
Reproducibility:	0.5 % of full scale
Display:	7-segment LED, red, 7.6 mm high
Protection type:	IP65
Electrical protection:	polarity / overvoltage protection
EMC:	interference and noise immunity as per EN 61326

Dimensions:

