

PS00

Low-Cost Pressure Switch

- adjustable on site
- high mechanical life
- small dimensions
- measuring range -0,85...-0,15 bar to 30...320 bar
- max. temperature: 80 °C



Description:

A spring loaded diaphragm or a spring loaded piston sensing element (at higher pressure) are the metrological base for the PKP Low-Cost pressure switches PS00. Under the effect of pressure, the measuring element actuates an electronic microswitch equipped with self cleaning contacts, thus ensuring a long service life.

The preload of the spring can be infinitely varied by means of an adjusting screw, so that the switching point can be varied over the entire adjustment range.

The devices with angled plugs are also available with an adjustable reset hysteresis.

Typical applications:

The mechanical pressure switches are used in all areas in which an electrical signal is required as a function of specified pressure values.

The small dimensions, the high reliability and the long service life predestine these devices especially for applications in machine and plant construction. Due to the excellent price/performance ratio, the PS00 is also suitable for OEM applications with medium to high quantities.

Models:

- PS00.RxxB:** models with angle plug, switching function SPDT, fixed hysteresis
- PS00.RxxC:** version with angled plug, switching function SPDT, adjustable hysteresis
- Model:** ≤ 16 bar: diaphragm pressure switch
> 16 bar: piston pressure switch with PTFE-gasket

Technical Data:

- Adjustment range:** see order code
- Adjustability:** with adjusting screw, under pressure
- Overload limit:**
- PS00.RxxB/C: 20 bar until range R114
60 bar until range R076
350 bar from range R133

Switching hysteresis with flat plug:

- Swit. range -0,15 bar: guiding value: 250 mbar, fix
- Swit. range 2/8/16 bar: guiding value: 0,1 bar + 5...10 % of switching point, fix
- Swit. range ≥ 30 bar: guiding value: 5 bar + 5...10 % of switching point, fix

Switching hysteresis with angled plug:

- Swit. range -0,15 bar: guiding value: 150..350 mbar, adjustable
- Swit. range 2/8/16 bar: guiding value: 0,1 bar + 5...10 % of switching point, adjustable
- Swit. range ≥ 30 bar: guiding value: 5 bar + 5...10 % of switching point, adjustable

- Medium temper.:** -20 °C to +80 °C
- Housing:** galvanized steel, st. steel on request
- Diaphragm:** NBR (NBR for low temperature, EPDM, FKM on request)
- Process connection:** G 1/4 B
- Repeatability:** +/- 2 % FS at room temperature
- Mech. life cycle:** > 1 x 10⁶ switching cycles

Electrical Data:

Switching capacity:

- PS00.RxxB: max. 2 A at 48 VAC (ohmic load)
max. 2 A at 24 VDC (ohmic load)
max. 2 A at 48 VAC (inductive load)
max. 1 A at 24 VDC (inductive load)
- PS00.RxxC: max. 4 A at 250 VAC (ohmic load)
max. 4 A at 24 VDC (ohmic load)
max. 2 A at 250 VAC (inductive load)
max. 2 A at 24 VDC (inductive load)

Switching function: SPDT (Spring operated snap-action switches with self-cleaning contacts)

Connection: flat plug 2 x 6,3 x 0,8
angled plug acc. to DIN EN 175301-803A

Protection class: IP00 (flat plug)
IP65 (angled plug)

Order Code:

Order number: PS00. R075. 3. 0

Low-Cost pressure switch

Measuring range, electrical connection:

- R114B = -0,85...-0,15 bar, flat plug
R114C = -0,85...-0,15 bar, angled plug
R071B = 0,2...2 bar, flat plug
R071C = 0,2...2 bar, angled plug
R144B = 0,5...8 bar, flat plug
R144C = 0,5...8 bar, angled plug
R076B = 1...16 bar, flat plug
R076C = 1...16 bar, angled plug
R133B = 10...30 bar, flat plug
R133C = 10...30 bar, angled plug
R153B = 10...80 bar, flat plug
R153C = 10...80 bar, angled plug
R866B = 10...120 bar, flat plug
R866C = 10...120 bar, angled plug
R082B = 10...160 bar, flat plug
R082C = 10...160 bar, angled plug
R084B = 20...250 bar, flat plug
R084C = 20...250 bar, angled plug
R085B = 30...320 bar, flat plug
R085C = 30...320 bar, angled plug

Switching function:

3 = SPDT

Switch-point adjustment:

- 0 = without switching point adjustment
1 = with switching point adjustment

Advice:

Protection caps for devices with flat connector are available if required

Dimensions:

