



## PS-03

### Compact Pressure Switch

- **Compact**
- **Slim design**
- **6 pressure ranges**
- **Up to 400 bar**
- **Cable or plug connection**
- **IP67 / IP65 (IP69K)**

#### **Description:**

Mechanical pressure switches are intended for pressure-dependent switching on or off an electrical circuit. A pressure switch can be used as a control device as well as for visual or acoustic control for a operating point. The PS-03 series of compact pressure switches is designed as piston or diaphragm pressure switches depending on the pressure range. Due to their slim and compact design, they can be conveniently mounted even in the narrowest areas of a machine.

Both the version are similar in construction where, in the case of the former, a spring-loaded piston actuates the micro-switch while, in the case of the latter, a spring-loaded elastomer membrane assumes this function. As per the user's requirements, the setpoints are factory-set. Since the aspect of hysteresis must be taken into regard, it needs to be specified if the setpoint is required at increasing or decreasing pressure. The contacts for the micro-switch can be gold-plated on request so as to minimize the electrical transitional resistance, if necessary.

#### **Range of application:**

Thanks to the compact design of the PS-03 series, its high protection class (IP67 for cable connection) and the factory-set highly accurate setpoint, these switches are well-suited for machine and equipment manufacturing. Experience has shown successful application in the packaging machine and vehicle industry and in the effluent treatment industry.

## Versions:

### PS-03 Compact Pressure Switch

#### Operating range:

Type	Operating range in bar Pressure increasing	max. Hysteresis in bar	max. Operating pressure in bar
<b>Diaphragm</b>			
PS-03.1	1 to 6	0.6	40*
PS-03.2	5 to 25	2.6	40*
PS-03.3	10 to 40	3.8	40*
<b>Piston</b>			
PS-03.4	30 bis 100	15	300
PS-03.5	60 to 300	30	300
PS-03.6	150 to 400	60	400

\*Higher operating pressures (up to 150 bar) on request

**Setpoint:** Please specify here the setpoint in bar as [S] for increasing or [F] for decreasing pressure as it will be pre-set at the factory.

**Electrical connection:** The switch can be optionally provided with a 0.6 m silicon cable of IP67 or with a plug as per EN 175301-803 C for IP65.

**Process connection:** The PS-03 can be provided with M12x1.5 or G1/4"-male connection.

**Contacts:** The micro-switch designed as a change-over switch can be supplied with silver-plated or gold-plated contacts. The maximum loads are specified in the following table:

Silver contacts	Ind. Load	Res. Load	Gold contacts
30 VDC	3.0 A	5.0 A	$U_{max}$ 30 VDC
			$I_{max}$ 400 mA
			$(U \cdot I)_{max}$ 0.12 VA

## Ordering codes:

Ordering number: PS-03. 5. [1][5][0][S] 1. 1. 1.

PS-03 Compact Pressure Switch

#### Operating range:

- 1 = 1 bar to 6 bar
- 2 = 5 bar to 25 bar
- 3 = 10 bar to 40 bar
- 4 = 30 bar to 100 bar
- 5 = 60 bar to 300 bar
- 6 = 150 bar to 400 bar

#### Setpoint:

[ ] [ ] [ ] [S/F]

#### Electrical connection:

- 1 = cable cord
- 2 = plug EN 175301-803 C

#### Process connection:

- 1 = M12x1.5
- 2 = G1/4"

#### Contacts:

- 1 = silver
- 2 = gold

## Electrical specifications:

**Electrical connection:** plug connector EN 175301-803 C or cable cord with 0.6 m silicon cable

**Protection class:** IP65 – plug connection  
IP67 – cable cord (IP69K on request)

## Technical specifications:

**Operating range:** 1 bar to 400 bar

**max.**

**Test pressure:**  
Typ: PS-03.1...3: 80 bar (temporary)  
Typ: PS-03.4...5: 450 bar (temporary)  
Typ: PS-03.6: 600 bar (temporary)

**max. Media temperature.:** -40°C to +80°C (piston version)  
-20°C to +80°C (diaphragm version)

**Switching frequency:** max. 60/min (piston switch)  
max. 30/min (diaphragm switch)

**Repeatability:** +/- 1% typical (piston switch)  
+/- 2% typical (diaphragm switch)

**Housing:** stainless steel

**Weight:** approx. 0.2 kg

**Process connection:** M12x1.5 or G1/4"-male

**Process connection-material:** stainless steel (diaphragm version)  
brass (piston version)

**Wetted parts:** NBR, PTFE, FKM, EPDM, CR

Typ: PS-03.1...3: stainless steel

Typ: PS-03.4...6: brass and roller bearing steel

**Setpoint adjustment:** factory setting

