

# PSA10

## Electronic Pressure Switch with Display

- switching ranges -1...+16 bar to 4...400 bar
- switching status display as red and green backlighting clearly visible from a distance
- 2 transistor switching outputs PNP adjustable as N/C or N/O contact
- adjustable delay of switching signals
- 4-digit LED display with menu navigation
- max. temperature: 85 °C



### Description:

The electronic pressure switches of the PSA10 series operate reliably with a thin-film measuring cell as a pressure monitor up to 400 bar. The robust and reliable measuring device contains two transistor switching outputs (PNP), which can be configured as normally closed or normally open.

Due to the 4-digit LED display and the buttons located on the device, the pressure switch can be set very easily and self-explanatory on site. In addition to the current pressure display, the red or green LED backlight indicates the switching status.

The two switching points can also be used to select the "window function", which enables precise monitoring of a pressure range.

### Typical applications:

The pressure switch is suitable for almost all liquid and gaseous media and is used in vacuum technology, gas technology, filter monitoring as well as for various monitoring tasks in hydraulics and pneumatics, in machine, apparatus and plant construction, in process engineering and building services engineering.

## Technical Data:

<b>Unit:</b>	bar, psi, MPa
<b>Process connection:</b>	G 1/4 male, fest (standard) adapter G 1/4 AG, rotatable
<b>Media temperature:</b>	-25...+85 °C compensated
<b>Materials (wetted by the media):</b>	FPM st. steel 1.4548 (measuring cell) st. steel 1.4301 (connection piece)
<b>Shock resistance:</b>	50 g according to DIN EN 600068-2-6 (11 ms)
<b>Vibration resistance:</b>	10 g acc. to DIN EN 60068-2-29 (500 Hz)
<b>Accuracy</b>	≤ 1 % of span at room temperature incl. non-linearity, hysteresis, zero point and full scale deviation
<b>Mounting position:</b>	any
<b>Life span:</b>	100 million switching cycles, > 10 million Load changes (0...100 %)
<b>Weight:</b>	0,07 kg
<b>Protection class:</b>	IP67 acc. to DIN EN 40050

## Electrical Data:

<b>Auxiliary power:</b>	9,6...32 VDC
<b>Electr. connection:</b>	round plug connector M12x1
<b>Signal type:</b>	2 transistor outputs PNP, adjustable
<b>Power consumption:</b>	max. 0,535 A total
<b>Switching current:</b>	max. 250 mA per output
<b>Reaction time:</b>	< 10 ms

## Display:

<b>Display:</b>	4-digit, 7 segment LED display
<b>Character height:</b>	4,5 mm
<b>Switching state:</b>	multi-colored switching display (red / green background)

## Pressure Ranges:

Pressure range	Switching range [bar]			
	Lower limit	Upper limit	Step size	Min. hysteresis
-1...+16 bar	-1	16	0,05	0,25
0...20 bar	0,25	20	0,05	0,25
0...100 bar	1,0	100	0,2	1,0
0...250 bar	2,5	250	0,5	2,5
0...400 bar	4	400	1	4

## Order Code:

<b>Order number:</b>	<b>PSA10.</b>	<b>S.</b>	<b>020.</b>	<b>1.</b>	<b>M.</b>	<b>0</b>
<b>Electronic pressure switch with display</b>						
<b>Version:</b>	S = 2 transistor switching outputs PNP					
<b>Adjustment range:</b>	009 = -1,0...+16 bar, p <sub>max</sub> : 50 bar 020 = 0,25...20 bar, p <sub>max</sub> : 80 bar 100 = 1,0...100 bar, p <sub>max</sub> : 200 bar 250 = 2,5...250 bar, p <sub>max</sub> : 500 bar 400 = 4...400 bar, p <sub>max</sub> : 800 bar					
<b>Process connection:</b>	1 = G 1/4 male thread (solid, standard) A = adapter G 1/4 male thread (rotatable)					
<b>Electrical connection:</b>	M = round plug connector M12x1 (4-pin)					
<b>Options:</b>	0 = without 9 = please specify in plain text					

## Accessories:

<b>Order number:</b>	<b>SM12.</b>	<b>4.</b>	<b>2.</b>	<b>G.</b>	<b>0</b>
<b>M12x1-plug connector with PVC cable</b>					
<b>Number of poles:</b>	4 = 4-pin				
<b>Cable length:</b>	0 = without cable for self-assembly 2 = 2 m PVC cable (standard) 5 = 5 m PVC cable 10 = 10 m PVC cable				
<b>Version:</b>	G = straight W = angled				
<b>Options:</b>	0 = without 9 = please specify in plain text				



## Dimensions:

