



## Pressure switches EDS 10

Part no. 33405R01102011

electronic pressure switch

### benefits

- 4-digit LED display
- Display can be rotated and tilted to any position
- 2 PNP switching outputs
- accuracy  $\leq \pm 0.35\%$  at 400 mbar and higher
- measuring range selection from 100 mbar to 600 bar

### Application

Main application areas comprise monitoring of gaseous or liquid media in plant and mechanical engineering. The pressure switch lends itself to pneumatic or hydraulic systems requiring high switching accuracy. The display can be rotated and tilted to practically any position so that the device can be used under adverse mounting conditions.

### Description

The device uses a piezo-resistive stainless steel measuring cell. The 4-digit LED display of the pressure switch EDS 10 can be rotated by  $330^\circ$  and tilted by  $300^\circ$ . The switching points (switching hysteresis) are via the menu and two keys. The status of the switching outputs is indicated by an LED each. At a nominal pressure of  $\geq 1$ , the pressure switch is vacuum-tight without limitations.

### Technical Specifications

#### Measuring accuracy

Deviation from the characteristic curve according to IEC 60770 – limit point calibration (non-linearity, hysteresis, repeatability)  
 $> 0/0.4 \text{ bar} \leq \pm 0.35\% \text{ FSO}$

#### Long-term stability

$\leq \pm 0.3\% \text{ FSO/year}$

#### Display

4-digit, 7-segment, LED display, red,  
 range -1,999/+9,999,  
 visible area  $22.5 \times 10.5 \text{ mm}$ ,  
 4 LEDs for switchable pressure units (bar, mbar, psi, MPa),  
 Status indication switching output,  
 Switching output 1: green LED,  
 Switching output 2: yellow LED

#### Measuring range

-1/+1.5 bar

**Overpressure safety**

< 600 bar  
at least 2 x FS

**Burst pressure**

at least 3 x FS

**Operating temperature range**

Medium: -40/+125 °C  
Ambient: -40/+85 °C  
Storage: -40/+100 °C

**Process connection**

G $\frac{1}{2}$  (DIN 3852)

**material**

Housing: plastic (PA 6.6), highly impact-resistant and corrosion-resistant  
pressure connection: Stainless steel 316 L  
diaphragm: Stainless steel 316 L  
Seal: FKM (Viton)

**Supply voltage**

DC 18 – 30 V

**Current input**

< 40 mA

**switching outputs**

2 open collector (PNP), SIO mode, max. 125 mA  
Switching delay: 0 to 50 s  
repeatability:  $\leq \pm 0.1$  % FSO  
switching cycles: > 100 x 10<sup>6</sup>  
Switching frequency: max. 200 Hz

**Electrical connection**

Connector M12 x 1, 4-pin, Metal

**Degree of protection**

IP 67 (EN 60529)

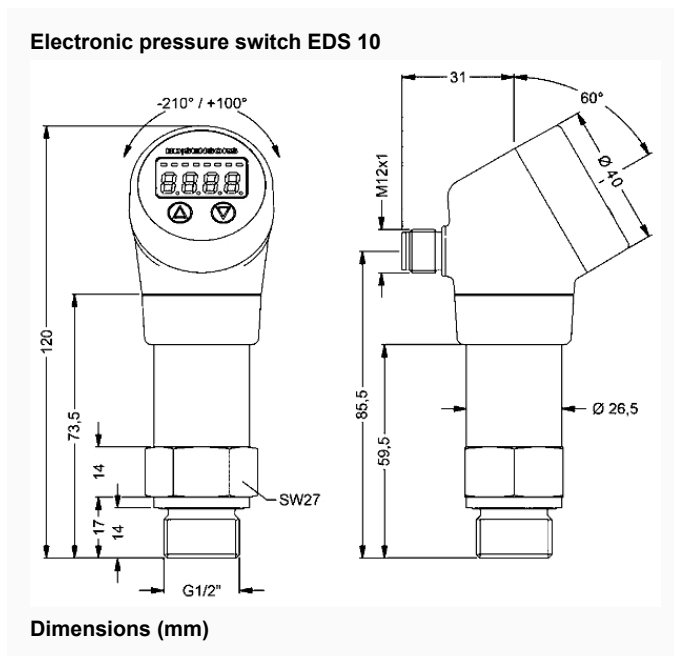
**CE conformity**

EMC Directive 2014/30/EU  
RoHS Directive 2011/65/EU  
Pressure Equipment Directive 2014/68/EU (module A)

**Options**

- other process connections
- Seal material (EPDM)
- other switching and analogue outputs

**Technical Drawings**



Versions

|                             | Pressure type     | Pressure type | Measuring range |                                                                                     | Part no.       |
|-----------------------------|-------------------|---------------|-----------------|-------------------------------------------------------------------------------------|----------------|
| Pressure switches<br>EDS 10 | Relative pressure |               | -1/+1.5 bar     |  | 33405R01102011 |

-  in-stock items
-  Non-stock items