



Pressure switches EDS 10

Part no. 33405R01120011

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° and tilted by 300° . 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 ≥ 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

0/160 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 10⁶
Switching frequency: max. 200 Hz

Electrical connection

Connector M12 x 1, 4-pin, Metal

Degree of protection

IP 67 (EN 60529)

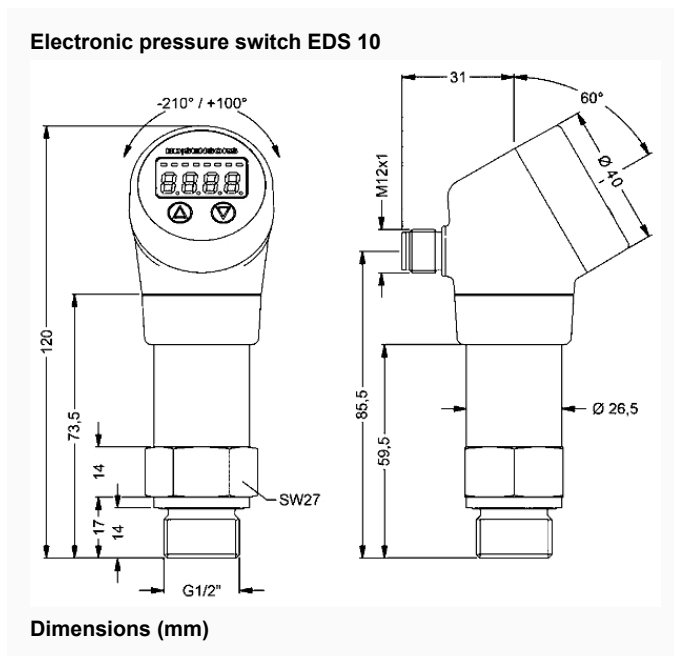
CE conformity

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 EDS 10	Relative pressure		0/160 bar		33405R01120011

-  in-stock items
-  Non-stock items