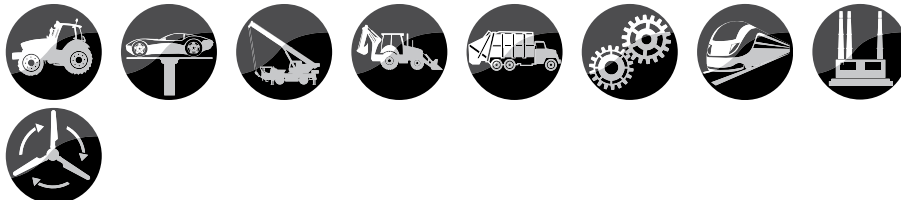


EDS 810 Series Factory Set Pressure Switch



Applications



Description

The electronic pressure switch EDS 810 has been specially developed for use in volume production machines.

The highly compact unit has a very robust pressure sensor with thin-film strain gauge on a stainless steel membrane.

The transistor switching output is available with either N/C or N/O function.

The switching and switch-back point of the EDS 810 is factory-set according to customer specification.

Various pressure ranges between 0 to 500 psi and 0 to 9000 psi are available.

Special Features

- Accuracy $\leq \pm 0.5\%$ BFSL
- Outstanding performance in terms of temperature effect and EMC
- Very compact design
- ECE type approval
(approved for road vehicles)

Approvals

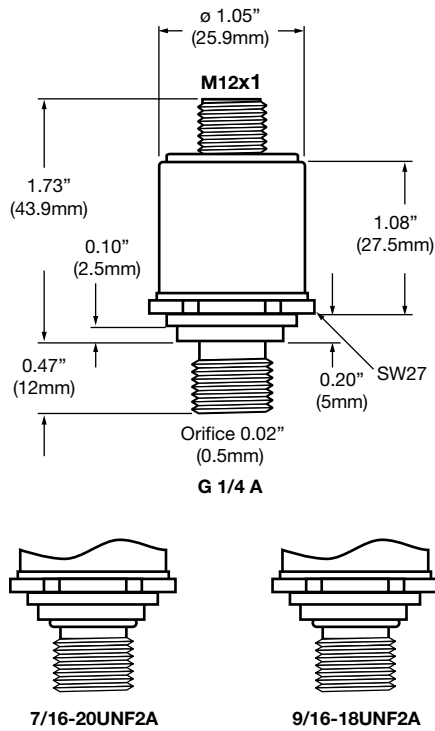


CE mark is a mandatory conformity mark on many products placed on the single market in the European Economic Area

Technical Details,

Sensor Specifications	
Measuring ranges - psi	500, 750, 1000, 1500, 3000, 6000, 9000
Overload pressure - psi	1160, 1160, 2900, 2900, 7250, 11600, 14500
Burst pressure - psi	2900, 2900, 7250, 7250, 14500, 29000, 29000
Mechanical connection	G1/4A DIN 3852 male (<i>bar ranges only</i>) SAE 6 9/16-18 male (<i>psi ranges only</i>) SAE 4 7/16-20 UNF 2A male
Tightening torque	SAE 6, G1/4: 15 lb-ft (20 Nm) SAE 4: 11 ft-lb (15Nm)
Parts in contact with media	Stainless steel, FPM seal
Accuracy (B.F.S.L.) including linearity, hysteresis, and repeatability	$\leq \pm 0.5\%$ BFSL.
Temperature compensation zero point	$\leq \pm 0.0085\%$ / °F typ. $\leq \pm 0.017\%$ / °F max.
Temperature compensation over range	$\leq \pm 0.0085\%$ / °F typ. $\leq \pm 0.017\%$ / °F max.
Long-term drift	$\leq \pm 0.3\%$ FS typ. / year
Life expectancy	10 million load cycles (0 to 100% FS)
Weight	Approximately 55 g
Switching Specifications	
Type	1 or 2 PNP outputs (N/C or N/O)
Repeatability	$\leq \pm 0.1\%$
Switching current	500 mA per output
Set point	to be specified by customer
Reset point	to be specified by customer
Switching cycles	≥ 100 million
Switch delay time	approx. 32 ms (<i>standard</i>) 8 to 2000ms to be specified by customer (in 8ms steps)
Environmental Condition	
Compensated temperature range	-13° to 185°F (-25° to 85°C)
Operating temperature range	-40° to 185°F (-40° to 85°C)
Storage temperature range	-40° to 212°F (-40° to 100°C)
Media temperature range	-40° to 212°F (-40° to 100°C)
CE mark	EN 61000-6-1 / 2 / 3 / 4
Vibration resistance to DIN EN 60068-2-6 at 10 to 500 Hz	$\leq 25g$
Environmental protection	IP 67 or IP 69K (<i>depending on electrical connection</i>)
Electrical Specifications	
Supply voltage	8 to 32 VDC
Residual ripple supply voltage	$\leq 5\%$
Electrical connection	M12x1, 4-pole AMP DIN 72585 Baj., 3-pole Deutsch DT04-3P, 3-pole Deutsch DT04-4P, 4-pole AMP Superseal, 3-pole Packard Metri Pack Series 150, 3-pole AMP Junior Power Times, 3-pole 1 m open ended cable
Reverse polarity protection of the supply voltage, excess voltage, override and short circuit protection	Standard

Dimensions



Plug Connection

