



Pressure Switch EDS 710 for series applications

Relative pressure

Factory-set

Customised designs thanks to
diverse electrical and mechanical
connections
1 switching output

Description:

The electronic pressure switch EDS 710 has been specially developed for use in series applications.

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

The EDS 710 is available with 1 transistor output (PNP) which can be defined either as N/C or N/O.

The switch and switch-back point of the EDS 710 each are factory-set acc. to customer specification (not field-adjustable).

Various pressure ranges between 0 .. 16 bar and 0 .. 600 bar are available.

Technical data:

Input data

Measuring ranges	bar	40	60	100	160	250	400	600
Overload pressures	bar	80	120	200	320	500	800	1000
Burst pressure	bar	200	300	500	800	1250	2000	2000
Mechanical connection	G1/4 A ISO 1179-2							
Tightening torque, recommended	20 Nm							
Parts in contact with fluid ¹⁾	Mech. connection: Stainless steel Seal: FKM							

Output data

Switching output	1 PNP transistor output Switching current: 400 mA Switching cycles: > 100 million Switch point/switch-back point: acc. to customer specification Switch-on and switch-off delay: 8 .. 2000 ms (standard 32 ms); factory-set acc. to customer specification
Accuracy acc. to DIN 16086, terminal based	≤ ± 0.5 % FS typ. ≤ ± 1 % FS max.
Temperature compensation, zero point	≤ ± 0.02 % FS / °C typ. ≤ ± 0.03 % FS / °C max.
Temperature compensation, span	≤ ± 0.02 % FS / °C typ. ≤ ± 0.03 % FS / °C max.
Repeatability	≤ 0.1 % FS max.
Long-term drift	≤ ± 0.3 % FS typ. / year

Environmental conditions

Compensated temperature range	-25 .. +85 °C
Operating temperature range ²⁾	-40 .. +85 °C / -25 .. +85 °C
Storage temperature range	-40 .. +100 °C
Fluid temperature range ²⁾	-40 .. +100 °C / -25 .. +100 °C
CE mark	EN 61000-6-1 / 2 / 3 / 4
Vibration resistance acc. to DIN EN 60068-2-6 at 10 .. 500 Hz	≤ 20 g
Shock resistance acc. to DIN EN 60068-2-27 (1 ms)	≤ 100 g
Protection class acc. to DIN EN 60529 ³⁾	IP 67

Other data

Electrical connection ⁴⁾	e.g. M12x1 (4 pole); jacketed cable
Supply voltage	8 .. 32 V DC
Residual ripple of supply voltage	≤ 5 %
Current consumption	max. 0.42 A total max. 20 mA with inactive switching output
Weight	~ 60 g

Note: Reverse polarity protection of the supply voltage, overvoltage, override and short circuit protection are provided.

FS (Full Scale) = relative to complete measuring range

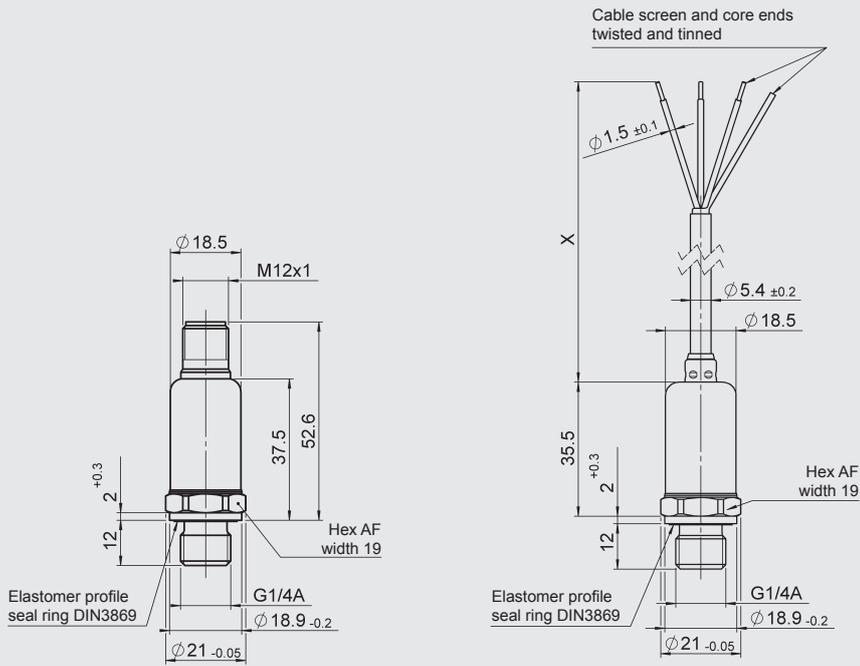
¹⁾ Other seal materials on request

²⁾ -25 °C with FKM seal, -40 °C on request

³⁾ With mounted mating connector in corresponding protection class (M12x1)

⁴⁾ Additional electrical connection options, such as cables with various connector variants, available on request

Dimensions:



Note:

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

Order details:

The electronic pressure switch EDS 710 has been specially developed for OEM customers and is available for minimum order quantities of 100 units per type.

For precise specifications, please contact the Sales Department of HYDAC ELECTRONIC.

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