



Electronic Pressure Switch

EDS 410

CSA Explosion Proof



(Minimum order quantity 50 pieces)

Description:

The pressure switch EDS 410 in **CSA Explosion Proof** version has been specially developed for the North American market for use in potentially explosive atmospheres and is based on the EDS 4000 series.

As with the industry model, the EDS 410 in **CSA Explosion Proof** version has a stainless steel measurement cell with thin-film strain gauge for measuring relative pressure in the high pressure range.

Intended areas of application are, for example, in the oil and gas industry, on gas turbines or in locations with high levels of dust, e.g. in mills.


Protection types and zones:

- Class I
Division 1
Group A, B, C, D T6,T5 [C, US]
- Class II
Division 1
Group E, F, G [C, US]
- Class III [C, US]
- Type 4 [C, US]

Special features:

- Accuracy $\leq \pm 1\%$ FS
- Certificate: CSA 1826717
- Option of PNP or NPN switching outputs
- High switching output capacity
- Very small temperature error
- Excellent EMC characteristics
- Excellent long-term characteristics

Technical specifications:

Input data	
Measuring ranges *	6; 16; 60; 100; 250; 400; 600 bar
Overload pressures	15; 32; 120; 200; 500; 800; 1000 bar
Burst pressure	100; 100; 300; 500; 1000; 2000; 2000 bar
Mechanical connection	1/4-18 NPT
Torque value	40 Nm
Parts in contact with medium	Sensor: Stainless steel Mech. connection: < 40 bar 1.4542; 316L ≥ 40 bar 316L; 1.4435; 1.4571; 1.4404 Seal: FPM
Output data	
Switching output	1 or 2 PNP or NPN switching outputs
Output load	1.2 A per switching output
Switching points	permanently pre-set according to customer specification
Switch-back points	permanently pre-set according to customer specification
Accuracy to DIN 16086, Max. setting	$\leq \pm 0.5\%$ FS typ. $\leq \pm 1\%$ FS max.
Repeatability	$\leq \pm 0.5\%$ FS
Temperature drift	$\leq \pm 0.03\%$ FS / °C max. zero point $\leq \pm 0.03\%$ FS / °C max. range
Response and reset delay	min.: 32 ms max.: according to customer specification
Long-term drift	$\leq \pm 0.3\%$ FS typ. / year
Ambient conditions	
Compensated temperature range **	T6: -25 .. +60 °C T5: -25 .. +80 °C
Operating temperature range **	T6: -40 .. +60 °C T5: -40 .. +80 °C
Storage temperature range	-40 .. +100 °C
Fluid temperature range	T6: -25 .. +60 °C T5: -25 .. +80 °C
 mark	Certificate No.: CSA 1826717
Vibration resistance to DIN EN 60068-2-6 at 10 .. 500 Hz	≤ 20 g
Protection class to DIN 40050	Min. IP 67
Other data	
Supply voltage	12 .. 30 V DC Fuse: 5 A normal or slow
Residual ripple of supply voltage	$\leq 5\%$
Life expectancy	> 10 million cycles 0 .. 100 % FS
Weight	approx. 280 g

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

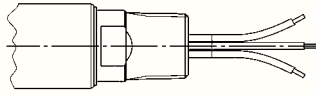
FS (Full Scale) = relative to the complete measuring range

* psi pressure ranges on request

** Minus temperatures depending on the seal material

Pin connections:

Conduit



Pin connections are configured according to customer specification.

Areas of application:

Protection class	Explosion Proof Gases and Dusts
Certificate	CSA 1826717
Zones / Categories	- Class I Division 1 Group A, B, C, D T6, T5 - Class II Division 1 Group E, F, G - Class III - Type 4
Electrical connection	9

Model code:

EDS 4 1 0 - XXXX - X - E XXX XXX

Pressure ranges in bar

0006; 0016; 0060; 0100; 0250; 0400; 0600

Mechanical connection*

0 = 1 switching output N/O function
1 = 1 switching output N/C function
2 = 2 switching outputs (function as per modification number)

Approval

E = Explosion Proof

Modification number *

XXX = The modification number includes information on type of switching outputs, function of the switch outputs, switching and switch-back point, response and reset delay.

Cable length in cm

Standard = 122 cm (48 inch)

Note:

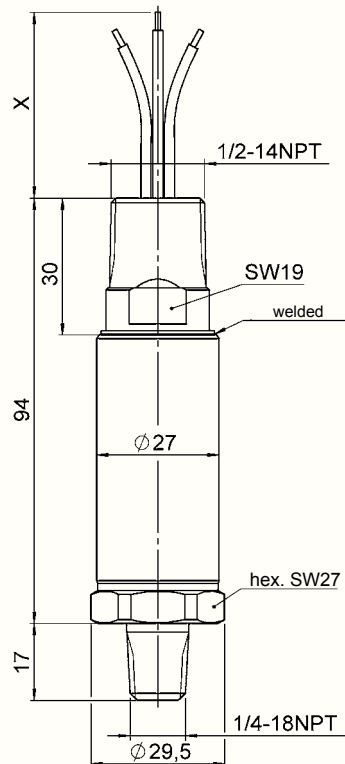
* Always check the type code (with regard to the Modification Number) or any amendments to the operating instructions supplied with the unit.

Ordering Details:

The electronic pressure switch EDS 410, CSA Explosion Proof version, has been specially developed for OEM customers and is available for minimum order quantities of 50 pieces per type.

For exact specification, please contact the Sales Department of HYDAC ELECTRONIC.

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.

HYDAC ELECTRONIC GMBH
Hauptstraße 27, D-66128 Saarbrücken
Telephone +49 (0)6897 509-01
Fax +49 (0)6897 509-1726
E-Mail: electronic@hydac.com
Internet: www.hydac.com

