

## EDS 1700



### About EDS 1700 Pressure Switches :

The EDS 1700, with its built-in pressure measuring cell, a 4-digit display and the 4 switching outputs, offers the user all the advantages of a modern electronic pressure switch.

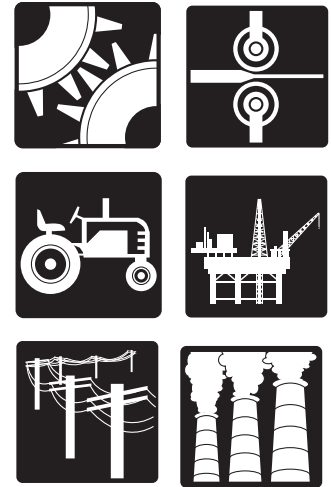
4 switching points and switch-back points can be adjusted very simply and independently of each other via a membrane keypad. For optimum incorporation into monitoring systems (eg with PLC) an analog output is also available (4 to 20 mA or 0 to 10 V).

The main applications of the EDS 1700 are in hydraulics and pneumatics. The instrument is ideal for use where frequent switching cycles (several million) require permanent switching point accuracy or simple and precise adjustment.

### Technical Details:

Input Data	
Measuring Ranges	232, 580, 1450, 3625, 5800, 8700 psi
Overload Pressures	200%, max. 1300 psi
Burst Pressure	300% FS
Hydraulic Connection	female port DIN 3852-G1/4
Torque rating	15 lb-ft (20 Nm)
Parts in contact with media	Stainless Steel
Output Data	
Accuracy (display, analog output) max.	P = 0.5% / N = 1.0%
Temperature Drift EDS 1700...P	zero point max. ≤ ±0.2% / 10 K range max. ≤ ±0.2% / 10 K
EDS 1700...N	zero point max. ≤ ±0.3% / 10 K range max. ≤ ±0.3% / 10 K
Analog Output	4 to 20 mA, ohmic resistance ≤ 400 Ω 0 to 10 V ohmic resistance ≥ 2 kΩ
Switching Outputs	
Type	4 relays with change-over contacts in 2 groups (common supply of each group connected)
Repeatability	EDS 1700...P ≤ ±0.25% FS max. EDS 1700...N ≤ ±0.5% FS max.
Switching Voltage	0.1 to 250 VAC / VDC
Switching Current	0.009 to 2 A
Switching Capacity	400 VA, 50 W (for inductive load use varistors)
Life Expectancy of Contacts	≥ 20 million (minimum load) ≥ 1 million (maximum load)
Reaction Time	approx. 20 ms
Switching Point Setting Range	1.5 to 100% FS
Setting Range of Switch-back Hysteresis / Switch-back Points	1 to 99% FS
Ambient Conditions	
Temperature Range of Medium	-13 to 176 °F (-25 to 80°C)
Ambient Temperature Range	-13 to 140 °F (-25 to 60°C)
Storage Temperature Range	-40 to 176 °F (-40 to 80°C)
Nominal Temperature Range	50 to 158 °F (10 to 70°C)
CE mark	EN 50081-1 and -2, EN 50082-1 and -2
Vibration Resistance	approx. 5 g
Shock Resistance	approx. 10 g
Safety Type	IP65
Other Data	
Supply Voltage	22 to 32 VDC (residual ripple ≤ 10%)
Electrical Connection	14 pole terminal block (cross-section of connection max. 1.5 mm <sup>2</sup> )
Current Consumption	approx. 200 mA
Display	4-digit, 7-segment LED, red (digits 13mm high)
Weight	approx. 800 g

### Applications:



### Approvals:



**Model Code:**

**EDS 17 9 X - X - XXX - 000**

**Series**

EDS 17 = 1700 Series Electronic Pressure Switch

**Mechanical Connection**

9 = female port DIN 3852-G1/4

**Display (units of pressure)**

1 = 4 digit bar  
2 = 4 digit psi

**Accuracy**

P = 0.25% BFSL  
N = 0.50% BFSL

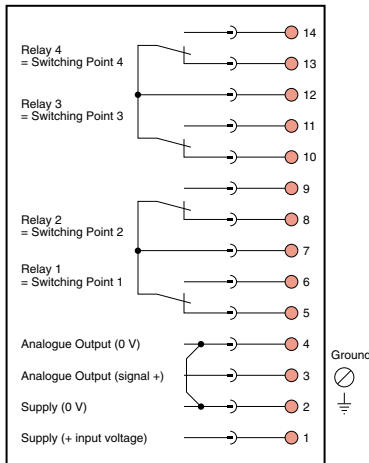
**Pressure Ranges**

016 = 16 bar (232 psi)  
040 = 40 bar (580 psi)  
100 = 100 bar (1450 psi)  
250 = 250 bar (3625 psi)  
400 = 400 bar (5800 psi)  
600 = 600 bar (8700 psi)  
note: vacuum version on request

**Modification Number**

000 = standard

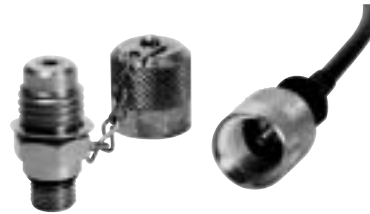
**Circuit Connection:**



**Mechanical Connection:**

For other mechanical connections, refer to our 1620 series testpoint and hose accessories.

**TestPoint with Hose Connection:**



**Dimensions:**

