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Part Number 908176

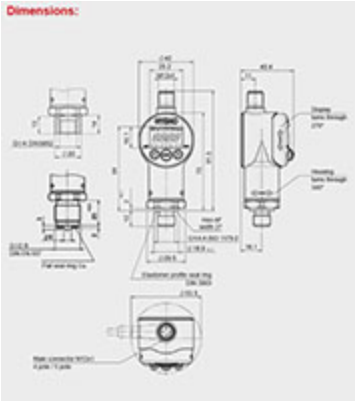
The EDS 3300 is a compact electronic pressure switch with integrated digital display for relative pressure measurement in the low pressure range.

It has a ceramic measurement cell with thick-layer strain gauge. Depending on the particular version, the instrument can have one or two switching outputs, and there is the option of an additional switchable Analog output signal (4 to 20 mA or 0 to 10 V).

A special design feature of the EDS 3300 is that the display can be moved in two planes. The device

more





List Price –

QUOTE

Specifications | Input Data | Output Data | Environmental Conditions | Setting Ranges for the Switch | Pin Connections | Additional Information | Special Features | Setting Options | Accessories | Note

Specifications –

Type	Electronic Pressure Switch
Model Code Description	EDS 3348-5-0016-000-F1
Note for Operating Temperature Range	-13 to 140
Direct Current (DC) Supply Voltage When Applied According to UL Specifications (With Analog Output)	18 to 35 V
Note for Direct Current (DC) Supply Voltage When Applied According to UL Specifications	Limited energy - According to 9.3 UL 61010; Class 2; UL 1310/1585; LPS UL 60950
Residual Ripple of Supply Voltage	≤ 5 %
Maximum Total Current Consumption	2.455 A
Maximum Current Consumption (With Inactive Switching Output)	35 mA
Maximum Current Consumption (With Inactive Switching Output and Analog Output)	55 mA
Display	4-Digit, LED, 7-Segment, Red, Height of Digits 7 mm
Weight	~120 g
Switching Outputs	2 Switching Outputs And 1 Analog Output
Switching Function	Adjustable N/O or N/C
Electrical Connection	Male M12x1, 5 Pole
BUn	EA
Division	ELECTRONICS
Product Group Family	PRESSURE SWITCHES
Product	PRESSURE SWITCHES

Input Data

Input Measuring Pressure Range	16 bar	
Input Overload Pressure	48 bar	
Burst Pressure	80 bar	
Input Mechanical Connection Type	G1/4 A ISO 1179-2	
Input Mechanical Connection Size	G1/4 A, male	
Torque Value	20 N·m	15 lb·ft
Recommended Tightening Torque	20 N·m	
Material of Connection	Stainless Steel	
Sensor Cell	Ceramic	
Seal Material	Fluorocarbon elastomer (FKM)	

Output Data

Switch Output Type	2 PNP Transistor Switching Outputs & 1

	Analog Output	
Maximum Switching Current Per Switch Output	1.2 A	
Switching Cycles	> 100 Million	
Analog Output Signal	4 to 20 mA	0 to 10 V
Maximum Output Permitted Load Resistance	500 O	
Minimum Output Permitted Load Resistance	1 kO	
Output Typical Accuracy According to DIN 16086, Terminal Based (Full Scale)	≤ ± 0.5 %	
Output Maximum Accuracy According to DIN 16086, Terminal Based (Full Scale)	≤ ± 1 %	
Output Typical Temperature Compensation Zero Point (Full Scale)	≤ ± 0.015 %/°C	
Output Maximum Temperature Compensation Zero Point (Full Scale)	≤ ± 0.025 %/°C	
Output Typical Temperature Compensation Span (Full Scale)	≤ ± 0.015 %/°C	
Output Maximum Temperature Compensation Span (Full Scale)	≤ ± 0.025 %/°C	
Maximum Output Repeatability (Full Scale)	≤ ± 0.25 %	
Output Reaction Time	< 10 ms	
Output Long-Term Drift Per Year (Full Scale)	≤ ± 0.3 %	

Environmental Conditions

Compensated Temperature Range	14 to 158 ºF	-10 to 70 ºC
Operating Temperature Range	-25 to 80 ºC	-13 to 176 ºF
Operating Temperature Range (for UL Spec)	-25 to 60 ºC	
Storage Temperature Range	-40 to 80 ºC	-40 to 176 ºF
Fluid Temperature Range	-25 to 80 ºC -13 to 176 ºF	
CE Mark	EN 61000-6-1/2/3/4	
CUL®US Mark	Certificate No.: E318391	
Note for CUL®US Mark	Environmental conditions according to 1.4.2 UL 61010-1; C22.2 No. 61010-1	
Vibration Resistance According to DIN EN 60068-2-6 at 10 to 500 Hz	≤ 10 g	
Shock Resistance According to DIN EN 60068-2-6 at 10 to 500 Hz Per 11 ms	≤ 50 g	
Protection Class According to DIN IEC 60529	IP 67	

Note for Protection Class According to DIN IEC 60529	With mounted mating connector in corresponding protection class

Setting Ranges for the Switch

Switch Point	0.25 to 16 bar
Hysteresis (Switch Point)	0.1 to 15.8 bar
Increment (Switch Point)	0.05 bar
Lower Switch Value (Window Function)	0.25 to 15.7 bar
Upper Switch Value (Window Function)	0.4 to 15.8 bar
Increment (Window Function)	0.05 bar
Note for Increment (Switch Point, Window Function)	All ranges given in the table can be adjusted by the increments shown.

Pin Connections

Pin Connection 1	$+U_B$
Pin Connection 2	Analog
Pin Connection 3	0 Voltage
Pin Connection 4	SP1
Pin Connection 5	SP2

Additional Information

The 4-digit display can indicate the pressure in bar, psi or MPa. The user can select the particular measurement unit. When changing to a different measurement unit, the device automatically converts all the switching settings to the new unit of measurement.

The EDS 3300 is also available in a variant with menu navigation in accordance with VDMA.

The main applications of the EDS 3300 are primarily in low-pressure ranges in hydraulics and pneumatics, as well as in refrigeration and air conditioning technology.

Special Features

- Switching mode of the switching outputs adjustable (switch point function or window function)
- Switching direction of the switching outputs adjustable (N/C or N/O function)
- Switch-on and switch-off delay adjustable from 0.00 to 99.99 seconds
- Analog output signal selectable 4 to 20 mA or 0 to 10 V
- Pressure can be displayed in measurement units bar, psi, MPa. The scaling can also be adapted to indicate force, weight, etc.
- Choice of display (actual pressure, peak value, switch point 1, switch point 2, display off)
- Display filter for smoothing the display value during pressure pulsations

Setting Options

All settings offered by the EDS 3300 are grouped in 2 easy-to-navigate menus.

In order to prevent unauthorized adjustment of the device, a programming lock can be set.

Accessories

Appropriate accessories, such as mating connectors, can be found in the Accessories brochure.

Note

Overvoltage, override, short circuit protection are provided.

Subject to technical modifications.