

Electronic Pressure Switch

UDS7 Series

Features

- ▶ Pressure control with internal stainless steel diaphragm
- ▶ Digital display
- ▶ 2 solid state outputs and 1 analog output
- ▶ Dual switch with built-in transducer output
- ▶ High accuracy with fully adjustable deadband
- ▶ Built-in digital pressure readout
- ▶ Fully configurable via keypad
- ▶ Suitable for rapid cycling (100 times per second)
- ▶ UL/CSA approved

Applications

- ▶ Hydraulic and pneumatic systems
- ▶ Process and chemical industry
- ▶ Test bench and instrumentation
- ▶ Automation equipment



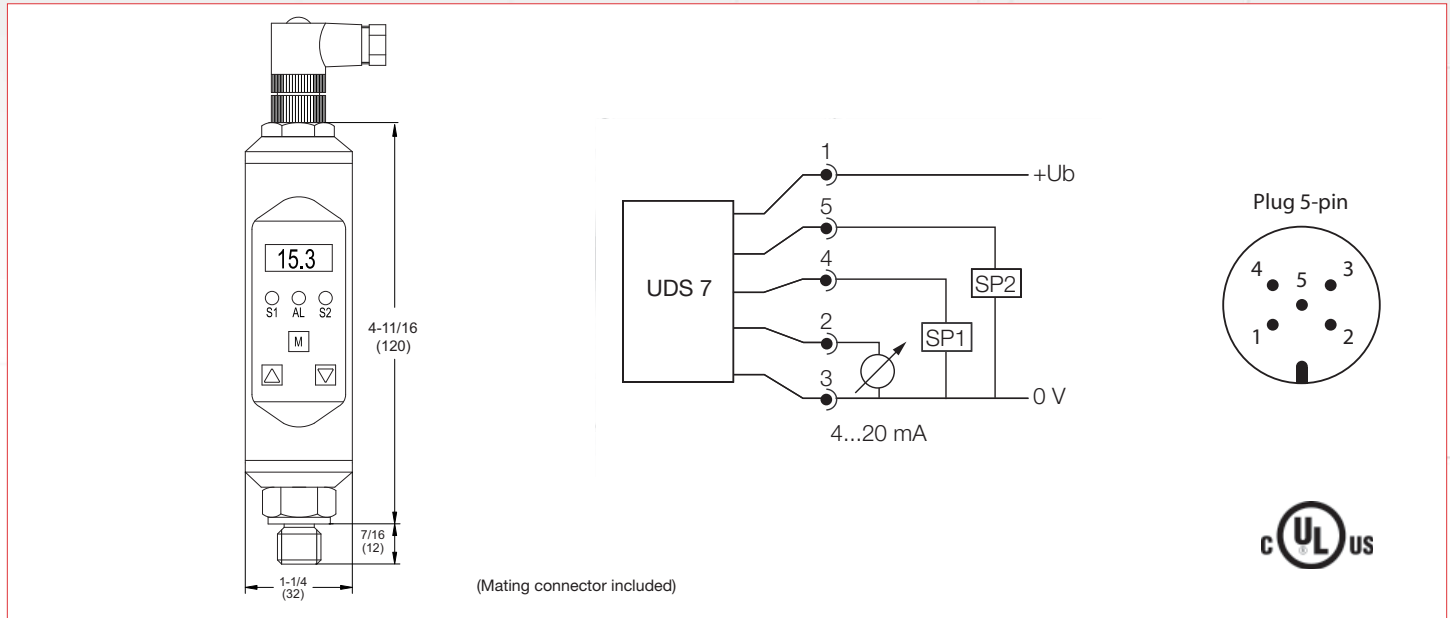
General Specifications*

Accuracy:	0.5% FS					
Linearity Error:	±0.5% f. s. at 77°F (25°C)					
Repeatability:	±0.1% f. s.					
Sensor Element:	Piezoresistive measuring cell					
Material: Wetted Parts: Seal:	Stainless steel 304 FKM (fluorelastomer)					
Measuring Ranges:	0 - 15 psi to 0 - 150 psi, absolute pressure 0 - 150 psi to 0 - 9000 psi, gauge					
Pressure Ranges (psi):	150	750	1500	3000	6000	9000
Proof Pressure (psi):	220	1100	2175	4400	9000	11,600
Process connection:	1/4 -18 NPT 7/16 - 20 SAE, G1/4 male with rotatable fitting only					
Electrical Connection:	Plug M 12 x 1, 5-pin					
Power Supply:	15 to 28 VDC					
Power Consumption:	Approx. 40 mA at 24 VDC (without load)					
A/D-Converter: Resolution: Scanning Rate:	12 bit (4096 steps per measure span) 100/s (for peak value memory)					
Analog Output: Current Output: Load: Load Influence: Voltage Output: Rating: Adjustment Range:	4 - 20 mA max. RI = (12 V) / 20 mA RI = 600 ohm at 24 V DC 0.3% / 100 ohm 0 to 10 V DC (optional) max. 10 mA, short circuit-proof 0% to 125% f. s.					

* See product configurator for additional options.

Switching Output(s): Adjustment Range: Hysteresis: Switching Frequency: Delay: Contact Rating: Status Display(s):	0 to 125% f. s. 0 to 125% f. s. max. 100 Hz 0.0 to 9.9 s - adjustable max. 400 mA, short circuit-proof LED(s) green
Digital Display: Display Range: Display Rate: Delay: Brightness:	4-digit dot matrix display, height 5 mm, green -999 to 999 5/s 0.0 - 9.9 adjustable 20 - 100% adjustable
Error Display:	LED red and alphanumeric display
Operating Elements:	3 easy response push buttons
Temperature Range: Media: Electronics: Storage:	-13°F to 212°F (-25°C to +100°C) 14°F to 158°F (-10°C to +70°C) -22°F to 178°F (-30°C to +80°C)
Temperature Influence:	±0.2% f.s. /10K
Protection Class:	IP65
Compensation Range:	14°F to 158°F (-10°C to +70°C)
Approvals:	UL, CE
Dimensions (Housing):	1.2 x 4.7 inch (32 X 120 mm) (without electrical plug)
Additional Features:	Alphanumeric 4-digit dot-matrix display, microprocessor-controlled, self monitoring with error display, scalable analog output, all parameters are configured by keypad.
Shipping Weight:	approx. 0.8 lb. (350 g)

Technical Drawings



Product Configurator

Example **UDS7** **-05** **-N** **-3** **-E**

Base Model

UDS7

Pressure Range

-01-A	0-15 PSIA (absolute)
-30-A	0-75 PSIG (absolute)
-05-A	0-150 PSIG (absolute)
-05	0-150 PSIG
-31	0-750 PSIG
-11	0-1500 PSIG
-13	0-3000 PSIG
-16	0-6000 PSIG
-32	0-9000 PSIG

Process Connection

-N	1/4 NPT
-P3	7/16-20 SAE
-G	G1/4

Optional

-E EPDM seal

Output

-3	Dual switch plus 4-20 mA output
-6	Dual switch plus 0-10 VDC output

Connection Chart

Plug M 12 X 1 5 pin	Model with 2 switching outputs and 1 analog output
Pin 1	+Ub (18 - 32 V DC)
Pin 2	Analog 4 - 20 mA/ 0 - 10 V DC
Pin 3	0 V
Pin 4	SP1 0.5 A max.
Pin 5	SP2 0.5 A max.

Accessories

Order #	Description
239263	- 5 Pin, M12 electrical mating connector