

The UDS3 Solid State Pressure Switch offers the unique ability to switch four discrete circuits in a single, compact unit.

The UDS3 is well suited for applications requiring precision pressure control, multiple switchpoints, and extremely long life.

Features

- Pressure control with internal stainless steel diaphragm
- 4 switching outputs and 1 4-20mA analog output
- High accuracy with fully adjustable deadband
- Easy-to-read LCD display with scalable bar graph
- Capable of switching both AC and DC loads
- Fully configurable via keypad
- UL/CSA approved

Applications

- OEM-applications in hydraulics and pneumatics
- Test bench
- Industrial machinery



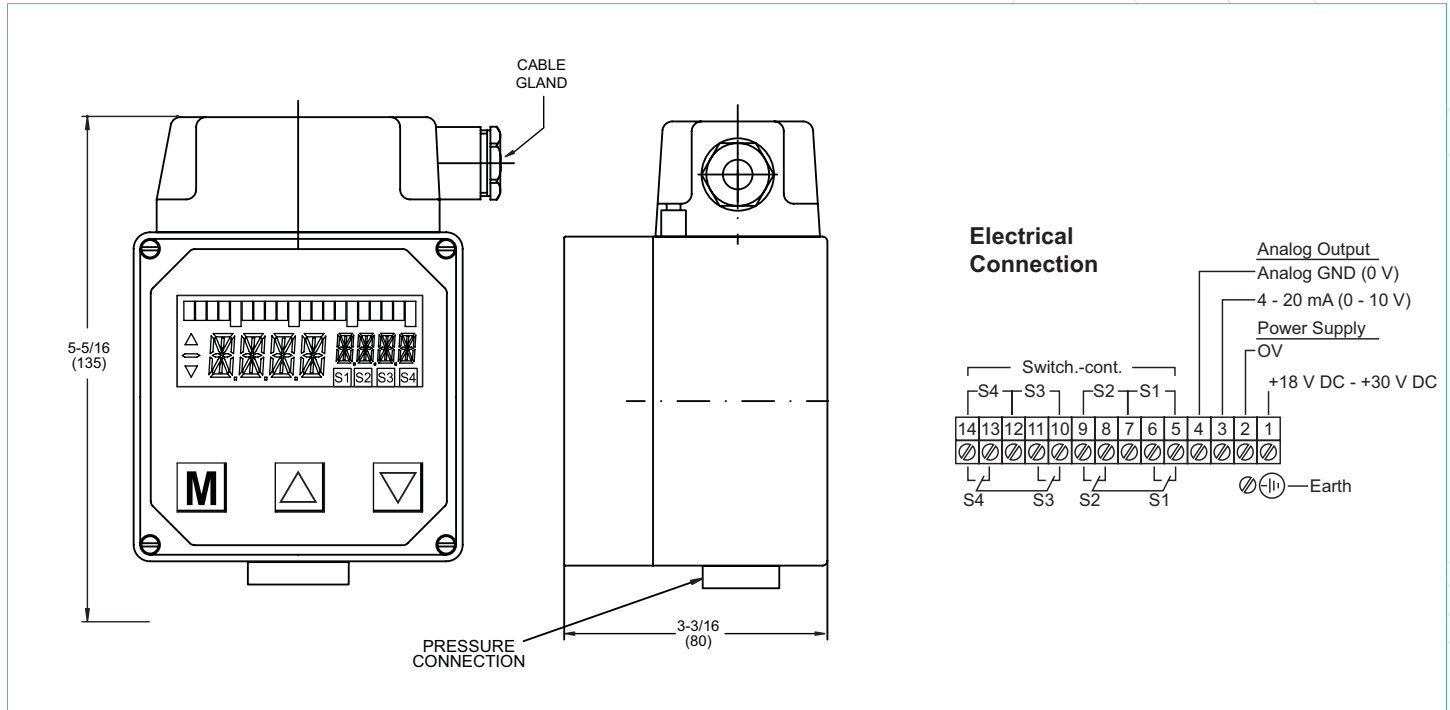
General Specifications*

Accuracy:	0.5% f. s.						
Linearity Error:	±0.5% f. s. at 77°F (25°C)						
Repeatability:	±0.1% f. s.						
Sensor Element:	Piezoresistive silicon measuring cell						
Wetted Parts:	304 stainless steel Housing: Seals: Keypad: Cast aluminum FKM Polyester film						
Measuring Ranges:	0 - 9,000 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" NPT F Option : G1/4 F, bottom entry						
Electrical Connection:	Plug-in, terminal strip with 14 slots for 1.5 mm ² , 14 AWG slots						
Power Supply:	18 - 32 VDC, reversed polarity protected						
A/D-Converter:	12 bit (4096 steps per span) Resolution: Scanning Rate: 1000 / s						
Time Constant:	Approx. 40s						
Analog Output:	4-20 mA Current Output: Load: max. loop resistance (RI)= (UB-12 V) / 20 mA UB= supply voltage RI= 600 Ohm at UB= 24 VDC Load Influence: Scanning Rate: Voltage Output: Rating: Adjustment Range 0.3% / 100 Ohm 1 ms 0 - 10 VDC max. 10 mA, short circuit-proof 25% to 100% f. s.						
Switching Output(s):	Normally open / normally closed, analog output, standard-/windows-mode Switching Function: Contact Rating: max. 120 VDC / 250 V AC max. 12 W / 1250 VA						

Switching Output(s) Cont.:	Cycles: Switching Rate: Delay: Operation Time: Status Display:	1 million @ 24 VDC/2A max. 20 / s 0.0 to 9.9 s adjustable 1 mS S1 to S4 on LCD display
Digital Display:	Height: Bargraph: Trend Arrows: Display Range: Display Rate: Display Unit:	8-digit 14-segment LCD display 0.5 in. (green) 20-segments Last value change -9999 to 9999 4 / s bar / psi / psi x 10 / hPa / mbar / °C / °F
Operating Elements:	Keypad with easy response push buttons	
Temperature Range:	Media: Electronics: Storage:	-13° to 212°F (-25°C to +100°C) 14° to 158°F (-10°C to +70°C) -22° to 176°F (-30°C to +80°C)
Temperature Influence:	±0.2% f. s. /10K	
Compensation Range:	14° to 158°F (-10°C to +70°C)	
Power Consumption:	appr. 350 mA at Ub = 24 V DC (without load)	
Protection Class:	IP65	
Dimensions (Housing):	3.9 (W) X 5.3 (H) X 3.1 (D) inches [100 (W) X 135 (H) X 80 (D) mm]	
Cable Gland:	1 x PG 13.5 side entry = standard	
Additional Features:	8-digit 14-segment LCD display with bargraph and trend indication, microcontroller, self monitoring, all parameters are configured by keypad, selective keypad lock, high accuracy, quick scanning rate (1 ms).	
Weight:	Approx. 2 lb	

* See product configurator for additional options.

Technical Drawings



Product Configurator

Example UDS3 -05 -N -4

Base Model

UDS3

Pressure Ranges

-05	0 - 150 PSIG (gauge)
-31	0-750 PSIG (gauge)
-11	0-1500 PSIG (gauge)
-13	0-3000 PSIG (gauge)
-16	0-6000 PSIG (gauge)
-32	0-9000 PSIG (gauge)

Options

-4	Four switches only (no analog output)
-5	Four switches plus 4-20 mA output
-6	Four switches plus 0-10 VDC output

Process Connection

-N	1/4 NPT
-G	G1/4

Accessory

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