

## Multiple Output Electronic Switch

**UDS3 Series**

### Features

- ▶ Pressure control with internal stainless steel diaphragm
- ▶ 4 switching outputs and 1 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\*

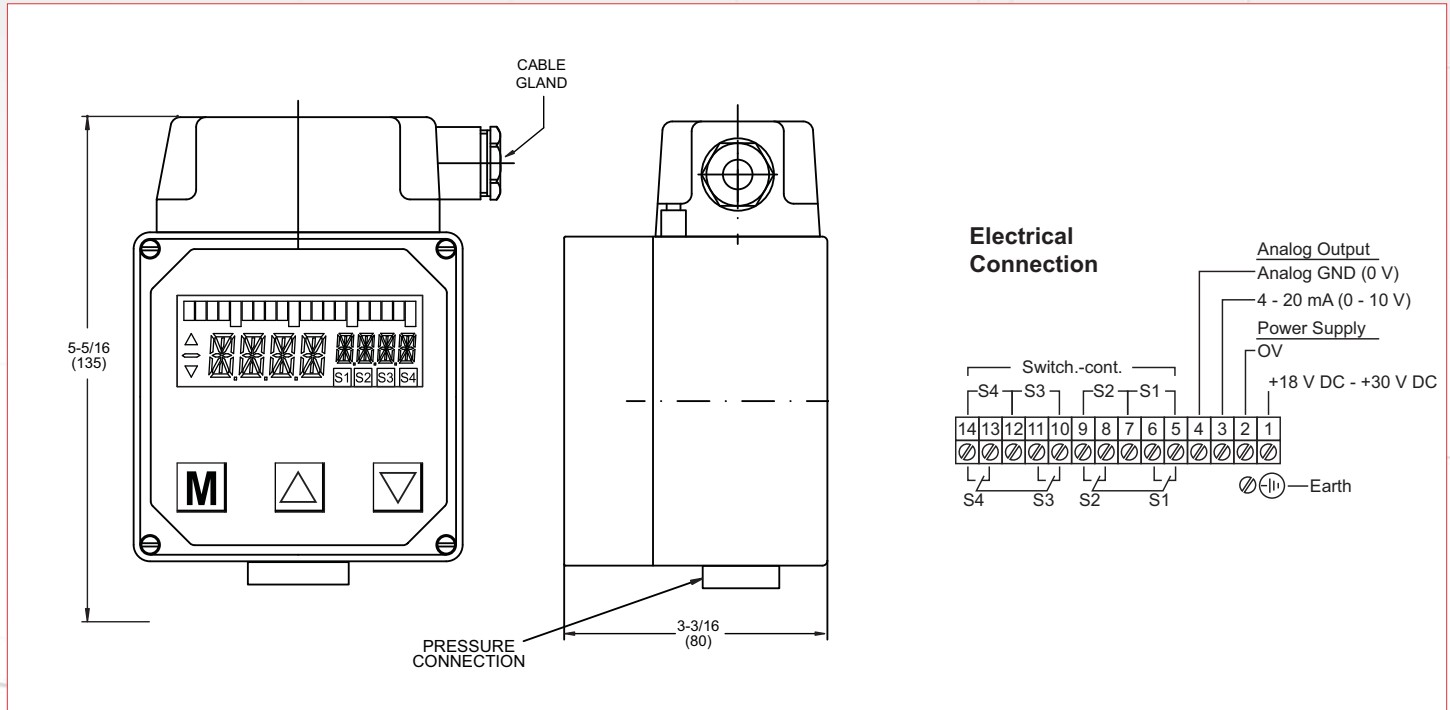
<b>Accuracy:</b>	0.5% f. s.					
<b>Linearity Error:</b>	±0.5% f. s. at 77°F (25°C)					
<b>Repeatability:</b>	±0.1% f. s.					
<b>Sensor Element:</b>	Piezoresistive silicon measuring cell					
<b>Wetted Parts:</b>	304 stainless steel					
Housing:	304 stainless steel					
Seals:	Cast aluminum FKM					
Keypad:	Polyester film					
<b>Measuring Ranges:</b>	0 - 9,000 psi, gauge					
<b>Pressure Ranges (psi):</b>	150	750	1500	3000	6000	9000
<b>Proof Pressure (psi):</b>	220	1100	2175	4400	9000	11,600
<b>Process Connection:</b>	1/4" NPT F Option : G1/4 F, bottom entry					
<b>Electrical Connection:</b>	Plug-in, terminal strip with 14 slots for 1.5 mm <sup>2</sup> , 14 AWG slots					
<b>Power Supply:</b>	18 - 32 VDC, reversed polarity protected					
<b>A/D-Converter:</b>	12 bit (4096 steps per span)					
Resolution:	12 bit (4096 steps per span)					
Scanning Rate:	1000 / s					
<b>Time Constant:</b>	Approx. 40s					
<b>Analog Output:</b>	4-20 mA					
Current Output:	4-20 mA					
Load:	max. RI = (Ub-12 V) / 20 mA RI= 600 Ohm at Ub = 24 VDC					
Load Influence:	0.3% / 100 Ohm					
Scanning Rate:	1 ms					
Voltage Output:	0 - 10 VDC					
Rating:	max. 10 mA, short circuit-proof					
Adjustment Range	25% to 100% f. s.					
<b>Switching Output(s):</b>	Normally open / normally closed, analog output, standard-/windows-mode					
Switching Function:	Normally open / normally closed, analog output, standard-/windows-mode					
Contact Rating:	max. 120 VDC / 250 V AC max. 12 W / 1250 VA					
<b>Switching Output(s) Cont.:</b>	Cycles: 1 million @ 24 VDC/2A Switching Rate: max. 20 / s Delay: 0.0 to 9.9 s adjustable Operation Time: 1 mS Status Display: S1 to S4 on LCD display					
<b>Digital Display:</b>	8-digit 14-segment LCD display Height: 0.5 in. (green) Bargraph: 20-segments Trend Arrows: Last value change Display Range: -9999 to 9999 Display Rate: 4 / s Display Unit: bar / psi / psi x 10 / hPa / mbar / °C / °F					
<b>Operating Elements:</b>	Keypad with easy response push buttons					
<b>Temperature Range:</b>	Media: -13° to 212°F (-25°C to +100°C) Electronics: 14° to 158°F (-10°C to +70°C) Storage: -22° to 176°F (-30°C to +80°C)					
<b>Temperature Influence:</b>	±0.2% f. s. /10K					
<b>Compensation Range:</b>	14° to 158°F (-10°C to +70°C)					
<b>Power Consumption:</b>	appr. 350 mA at Ub = 24 V DC (without load)					
<b>Protection Class:</b>	IP65					
<b>Dimensions (Housing):</b>	3.9 (W) X 5.3 (H) X 3.1 (D) inches [100 (W) X 135 (H) X 80 (D) mm]					
<b>Cable Gland:</b>	1 x PG 13.5 side entry = standard					
<b>Additional Features:</b>	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).					
<b>Weight:</b>	Approx. 2 lb					

\* See product configurator for additional options.

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## 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