

Solid State

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 LED display with scalable bar graph
- ▶ Capable of switching both AC and DC loads
- ▶ Fully configurable via keypad

Applications

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



General Specifications*

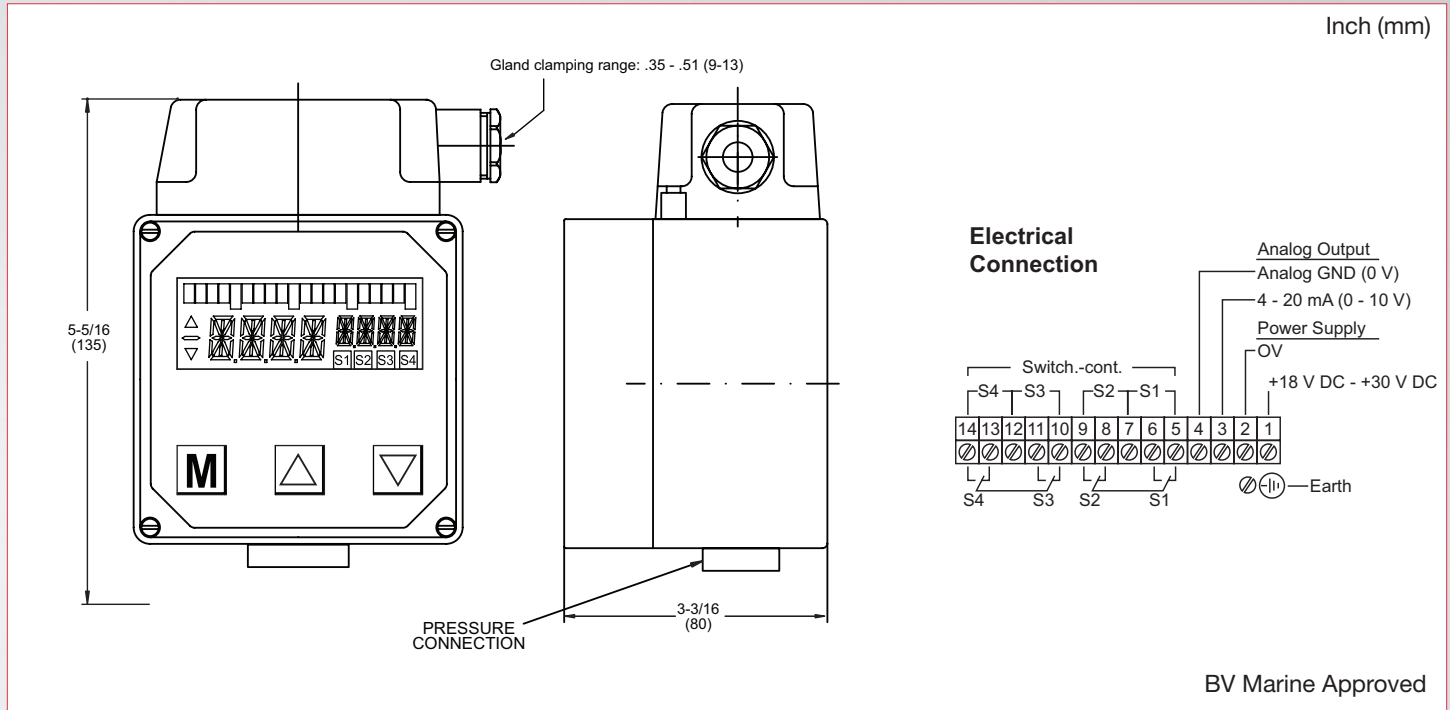
Accuracy:	0.5% f. s.						
Linearity Error:	±0.5% f. s. at 77°F (25°C)						
Repeatability:	±0.1% f. s.						
Sensor Element:	Piezoresistive silicon measuring cell						
Wetted Parts:	304 stainless steel						
Process:	Cast aluminum FKM						
Seals:	Polyester film						
Keypad:							
Measuring Ranges:	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:	1000 / s						
Scanning Rate:							
Time Constant:	Approx. 40s						
Analog Output:	4-20 mA						
Current Output:	max. RI = (Ub-12 V) / 20 mA						
Load:	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.						
Switching Output(s):	Normally open / normally closed, analog output, standard-/windows-mode						
Switching Function:	max. 120 VDC / 250 V AC						
Contact Rating:	max. 120 W / 1250 VA						
Switching Output(s) Cont.:	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 LED display						
Digital Display:	8-digit 14-segment LED 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						
Operating Elements:	Keypad with easy response push buttons						
Temperature Range:	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)						
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 LED 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 lbs.						

* See product configurator for additional options.

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Technical Drawings



Product Configurator

Example UDS3 -05 -N -4

Base Model

UDS3 Multiple output electronic switch

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