Explosion Proof Electronic Pressure Switch

UDS7-BX

Features

- ATEX Ex d Certified Construction
- Dual seal protection
- Adjustable setpoint delay - up to 9.9 seconds
- 2 setpoints
- High accuracy with fully adjustable deadband
- Digital readout
- Fully configurable via keypad
- Suitable for rapid cycling (100 times per second)
- NEMA 4, 7, 9 & IP66

Applications

- Oil & gas pipelines
- Refineries
- Petrochemical plants
- Pulp and paper mills
- Coal and oil fired power plants
- Cement plants
- Gas transfers for fuel systems

General Specifications*

Accuracy:	±1% f. s. at 77°F (25°C) TYP
Repeatability:	± 0.1% f. s. at 77°F (25°C)
Sensor Element:	Piezoresistive measuring cell
Wetted Parts:	316 and 17-4 PH stainless steel
Enclosure:	Die cast aluminum
Proof Pressure:	2X rated pressure or 13,000 PSIG (896 bar), whichever is less
Process connection:	1/4" NPTF
Electrical Connection:	Internal screw terminal strip via conduit connection 3/4" NPTF
Power Supply (V_s):	15 to 32 VDC, 10% max. ripple
Power Consumption:	Approx. 50 mA at 24 VDC (without load)
A/D-Converter: Resolution: Scanning Rate:	 10 bit (1,024 steps per measure span) 200/s (for peak value memory)
Switching Output(s): Adjustment Range: Deadband: 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

* See product configurator for additional options.

Digital Display: Display Range: Display Rate: Delay:	3-digit[1], 7-segment LED display; height 10 mm, (0.39 inches), red -1 to 999 20/s 0.0 to 9.9 s adjustable
Error Display:	Orange LED (alarm)
Operating Elements:	3 easy response push buttons
Temperature Range: Media: Electronics: Storage:	 -13°F to 185°F (-25°C to +85°C) 14°F to 158°F (-10°C to +70°C) -22°F to 176°F (-30°C to +80°C)
Temperature Influence:	±0.2% f. s. /10K
Protection Class:	NEMA 4, 7, 9 & IP66
Compensation Range:	14°F to 158°F (-10°C to +70°C)
Approvals:	CE0081 CML 18ATEX1165X IECEx CML 18.0089X Ⓔx II 2 G D Ex db IIC T6 Gb Ex tb IIIC T80°C Db IP66 -40°C ≤ Tamb ≤ +60°C
Additional Features:	Microprocessor-controlled, self monitoring with error code display, all parameters are confi gured by keypad.
Shipping Weight:	Approx. 9.3 lbs.

1. Pressure ranges greater than 1000 PSIG will be displayed in PSH units. PSIG = PSH x 10. Example: 750 PSH = 7500 PSIG

Barksdale®
CONTROL PRODUCTS
CRANE Barksdale, Inc./Barksdale GmbH
A Subsidiary of Crane Co.

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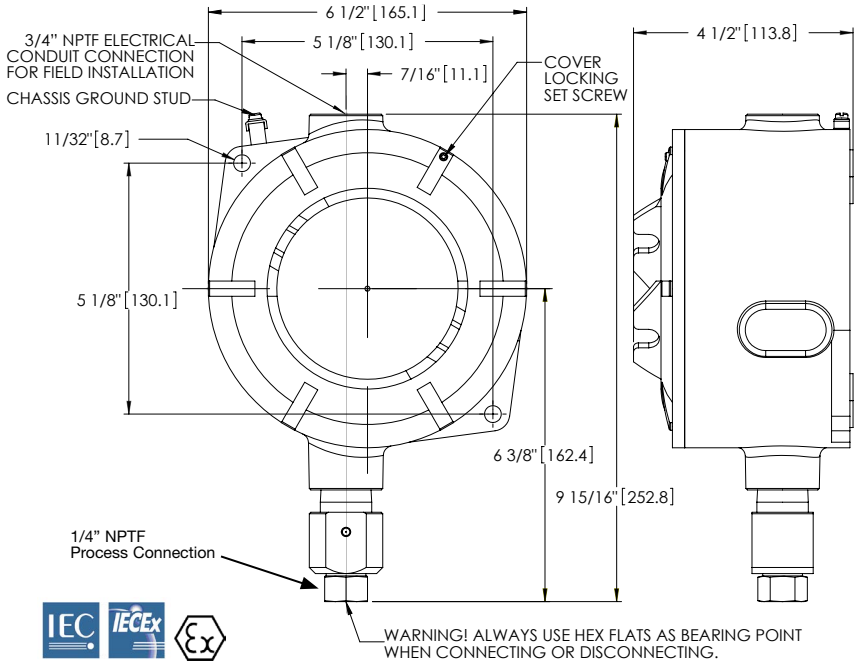
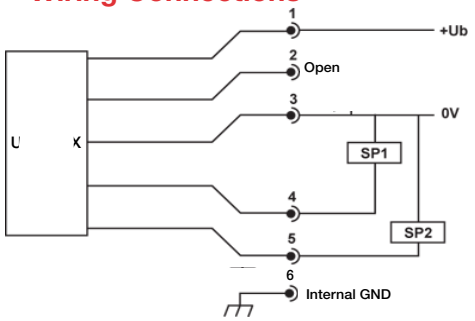
Technical Drawings



Wiring Connections



Connection Chart

Terminal Connection 6-Position	Description
Pin 1	Voltage (Ub): 15-32 VDC
Pin 2	Open
Pin 3	Common (-)
Pin 4	SP1: 0.4 A Max
Pin 5	SP2: 0.4 A Max
Pin 6	Internal Ground

Dimensions in inches [mm]

Product Configurator

Example	UDS7-BX	-08	-3

Base Model

UDS7-BX	Explosion Proof Electronic Pressure Switch

Pressure Range

-08	0-500 PSIG (0-34.5 BAR)
-19	0-600 PSIG (0-41.4 BAR)
-10	0-1000 PSIG (0-69 BAR)
-11[1]	01500 PSIG (0-104 BAR)
-12[1]	0-2000 PSIG (0-138 BAR)
-13[1]	0-3000 PSIG (0-207 BAR)
-14[1]	0-4000 PSIG (0-276 BAR)
-15[1]	0-5000 PSIG (0-345 BAR)
-16[1]	0-6000 PSIG (0-414 BAR)
-17[1]	0-7500 PSIG (0-517 BAR)
-18[1]	0-10000 PSIG (0-689 BAR)

Output[2]

-3	Dual switch output

Note:

1. Pressure ranges greater than 1000 PSIG will be displayed in PSH units. PSIG = PSH x 10. Example: 750 PSH = 7500 PSIG

2. For Analog output, consult factory. (4-20 mA or 0-10 VDC)