

Electronic Dual Differential Pressure Switch

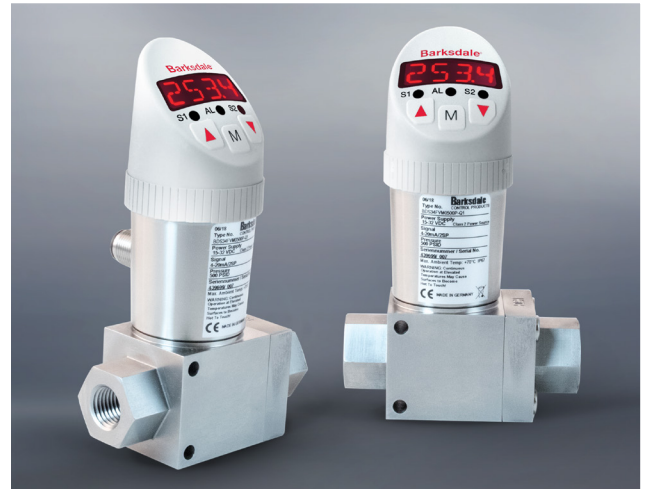
BDS3000

Features

- ▶ Measuring range: differential: 0 - 500 psid
- ▶ Enclosure Rating: Type 4X (IP65) / Type 6 (IP67)
- ▶ Two switch points
- ▶ 0.50% accuracy
- ▶ Analog output 4 - 20 mA or 0 - 10 V
- ▶ Superior EMI protection
- ▶ Display & electronic connection: rotatable by 320°
- ▶ Simple navigation menu
- ▶ Suitable for rapid cycling applications
- ▶ Hydraulic and pneumatic compatible

Applications

- ▶ Filtration
- ▶ Machine tool industry
- ▶ Factory Automation
- ▶ Lubrication monitoring
- ▶ Pumps and compressors



General Specifications

Sensor element:	Piezoresistive sensor	Power consumption:	Approx. 50 mA (without load)
Materials: Wetted parts:	Stainless steel fittings 316L Stainless steel sensors	Digital display: Display rate:	4-digit 14-segment LED red display, digit height .35 inches (9 mm) 20/s
Enclosure:	304 Stainless steel, PBT	Error display:	LED RED and alphanumeric display
Seals:	FKM fluoroelastomer	Analog output: Current output: Scanning rate: Voltage output: Rating: Adjustment range:	4-20 mA 2 ms 0 to 10 V DC max. 10 mA 25% to 100% f. s.
Operating elements:	3 easy-response push-buttons	Transistor switching outputs:	
Enclosure rating:	Type 4X (IP65) / Type 6 (IP67)	Switching function:	Normally open / normally closed, standard / window mode and diagnosis function adjustable
Protection class:	III	Switching output:	PNP
Electrical connection:	Plug M12 x 1, 5-pin	Adjustment range for switching point and hysteresis:	0% to 125% f. s.
Process connection:	1/4" NPT female (low and high sides)	Switching frequency:	Max. 100 Hz
Dimensions:	3.00 x 1.60 x 4.81 inches	Load:	Max. 500 mA, short-circuit-proof
Weight:	Approx. 1.5 lb	Delay:	0.0 s to 50.0 s adjustable
A/D-Converter: Resolution: Scanning rate:	12 bit (4,096 steps per measure span) 1000/s	Status display(s):	LED(s) red
Linearity error:	< ±0.5 % f. s. at +25 °C		
Temperature influence:	TC zero < ±0.2 % FSO / 10K TC span < ±0.3 % FSO / 10K		
Compensation range:	32°F to 122°F (0°C to +50°C)		
Repeatability:	±0.1% f. s.		
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 176°F (-30°C to +80°C)		
Power supply¹:	15 to 32 V DC, reversed polarity protected (SELV, PELV), Class 2		

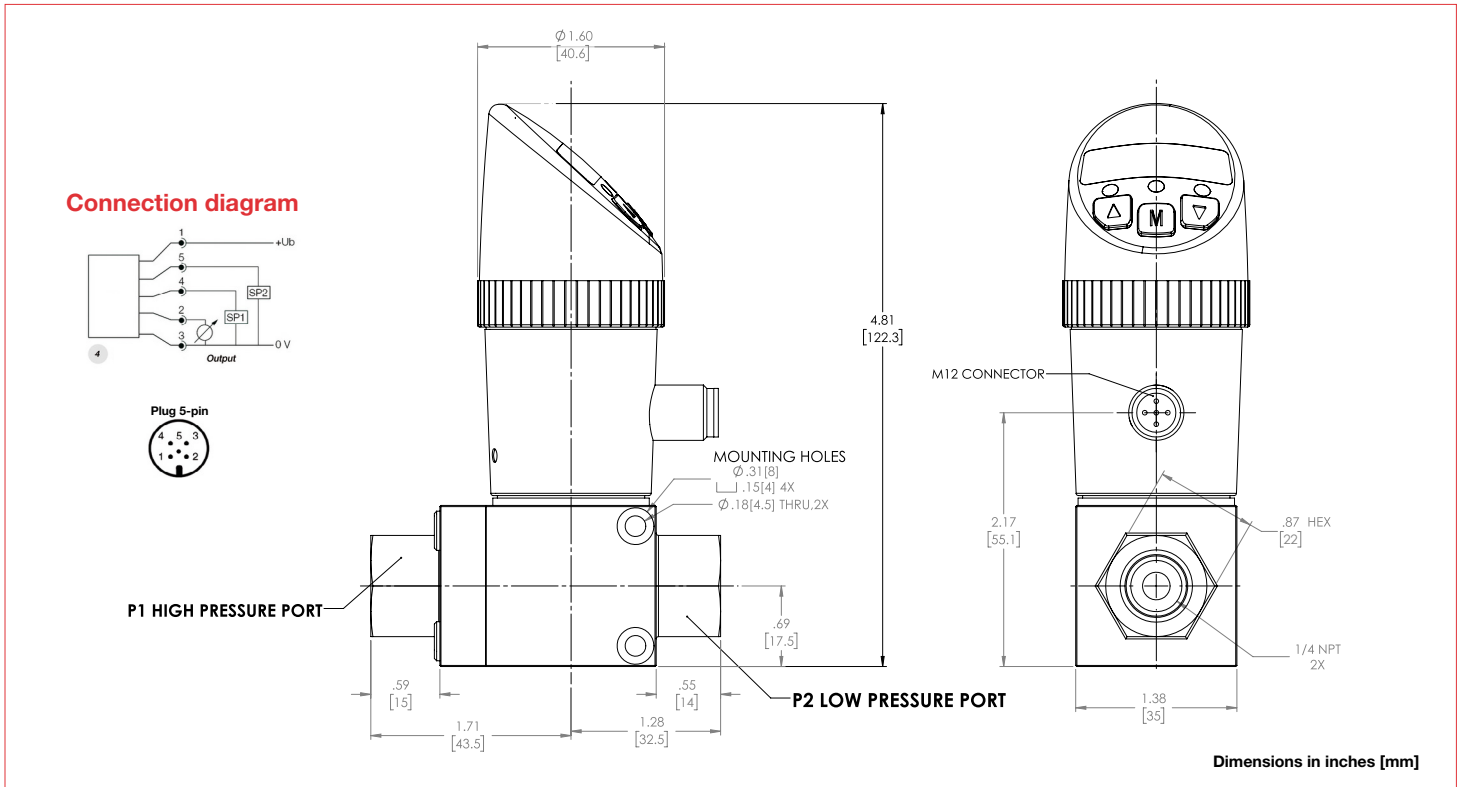
Pressure Ranges

Pressure Range Code	Differential Pressure	Proof Pressure	Proof Pressure	Common Pressure
	P1>P2 (PSID)	P1>P2 (PSID)	P2>P1 (PSID)	P1=P2 (PSI)
0500P	0-500	1000	150	2500

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BDS3000

Technical Drawings



Product Configurator

Example **BDS3 4 F V M 0500P**

Series:

BDS3 Series BDS3000, electronic dual differential pressure switch

Output:

4 Dual switch point plus 4-20mA (0-10V field selectable)

Process Connections:

F 1/4" NPT female

Electrical Connection:

M¹ M12

Pressure Ranges²

0500P 0 - 500 psid (differential)

Sealing:

V FKM fluoroelastomer

Accessories

Order Number	Description
239546-1M-R-S ³	5 Pin M12 Female Right Angle Plug Molded Cable, 3.28 Feet (1 Meter), Shielded
239546-1M-S ³	5 Pin M12, Female Straight Plug Molded Cable, 3.28 Feet (1 Meter), Shielded
239548-S	5 Pin M12 Female Straight Connector
239548-R	5 Pin M12 Female Right Angle Connector

Note:

- Mating connector not included with unit; mating connectors are available and can be ordered as an accessory.
- Contact factory for ranges not listed including BAR.
- See Cable Connectors & Accessories for more options.