

# Pressure

## Intrinsically Safe Compact Pressure Switch

Series 8000-EXI

### Features

- ▶ Proven design in stationary and mobile hydraulic applications
- ▶ Wide setpoint pressure range
- ▶ Available in wide range of configurations
- ▶ Precise setpoint adjustment
- ▶ Factory preset or field adjustable
- ▶ IP65, IP68
- ▶ ATEX
- ▶ Modular concept

### Applications

- ▶ Hydraulic power packs
- ▶ Oil and gas
- ▶ Flour mills
- ▶ Paint spraying
- ▶ Factory automation
- ▶ Mining
- ▶ Marine applications



### General Specifications\*

<b>Repeatability:</b>	±1% typical, piston models ±2% typical, diaphragm models
<b>Microswitch:</b> Type:	SPDT contact
Rating:	Silver/Gold contacts: Voltage = 28 V max Current = 50 mA max
<b>Switching Frequency:</b>	max. 60 /min piston switch max. 30/ min diaphragm switch
<b>Wetted Parts:</b> Process Fitting:	300 series stainless steel
Housing:	Aluminum die-cast 2014 or 2007 Stainless steel - optional AISI 303
Seals & Diaphragms:	Buna-N (NBR), FKM, EPDM
Adjustment Screw:	300 stainless steel (HEX 5mm)
<b>Electrical Connection:</b>	For IP rating and electrical connections see page 2

<b>Pressure Connection:</b>	Multiple pressure connections available
<b>Approvals:</b> ATEX: Ex II1GD Ex ia IIC T6 Ga Ex ia IIIC T100°C Da Ex II1GD Ex ia IIB T6 Ga Ex ia IIIC T100°C Da	DIN plug version Cable version GOST R
<b>Ambient Temperature Range:</b> Piston Switch: Diaphragm Switch:	-40°F to +167°F (-40°C to +75°C) -4°F to +167°F (-20°C to +75°C)
<b>Adjustment Instructions:</b> Setpoint Adjustment:	Turn adjustment screw clockwise to increase pressure; counterclockwise to decrease pressure.
<b>Shipping Weight:</b> CETOP Flange Model: Adaptor Version Straight: Adaptor Version 90° Angle:	0.77 lbs. (350 g) 1.36 lbs. (620 g) 1.48 lbs. (675 g)

\* See product configurator for additional options.

**Wiring Code**  
(contact status at atmospheric pressure)



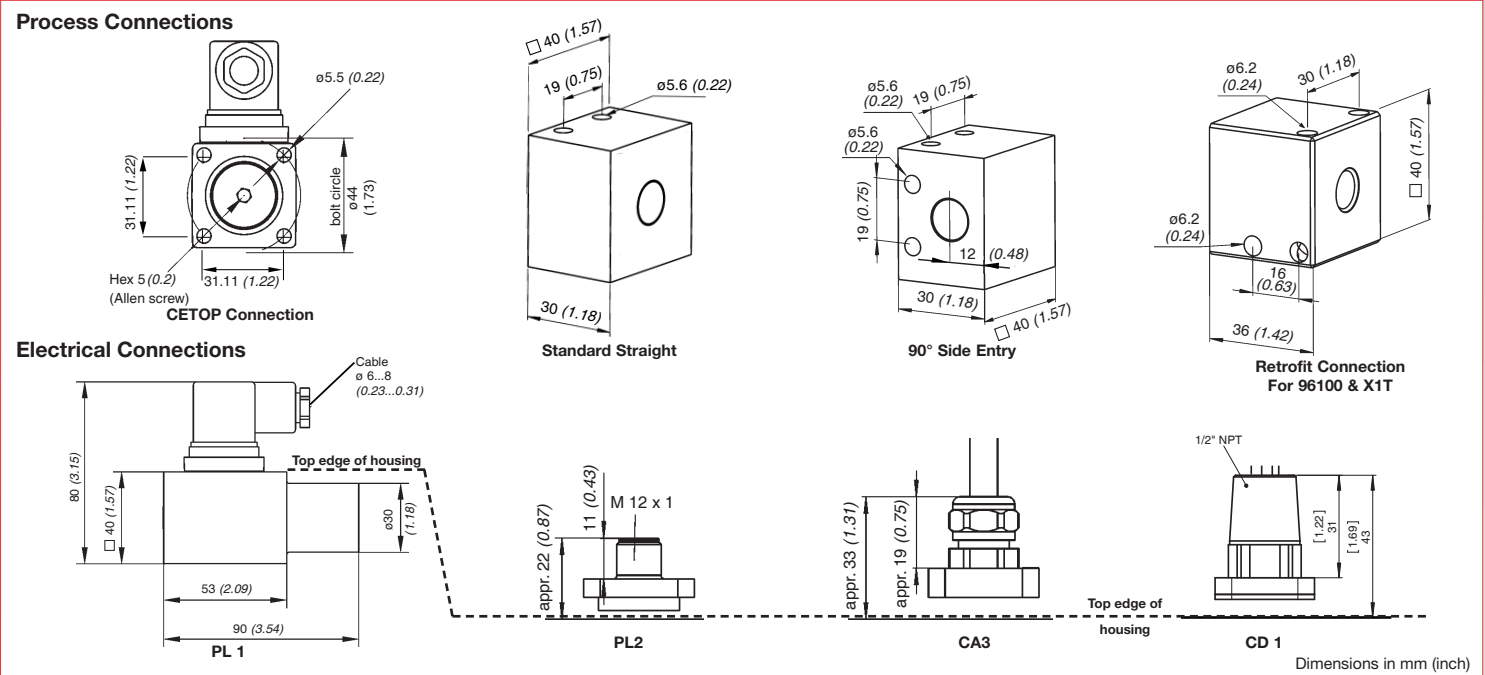
	DIN 43650 Plug (PL1)	M12 Plug (PL2)	Cable Gland (CA)	1/2" NPT Conduit w/ Free Leads (CD1)
<b>Common</b>	1	1	Brown	Violet
<b>Normally Closed</b>	2	2	Black	Blue
<b>Normally Open</b>	3	4	Gray	Red
<b>Ground</b>	GRD	3*	Green/Yellow	Green

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CONTROL PRODUCTS  
Barksdale, Inc./Barksdale GmbH  
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### Technical Drawings



### Product Configurator

Example: **8 A A 1 - PL1 - B -EXI -VA** Options<sup>4</sup>

Series 8000

#### Process Connections<sup>1</sup>

1 <sup>2</sup>	Manifold cetop connection flange 40 x 40
2	G1/4" female
A	1/4" NPT female
C	1/8" NPT female
D	1/4" NPT female, 90° side entry
E	7/16 SAE-4 20 UNF

#### SPDT Contacts

1	Silver
2	Gold-plated

#### Electrical Connectors

- PL1	Plug DIN 43650 A, IP65
- PL2	Plug M12, 4-pol. without female plug, IP67
- CA3	Cable gland, 27.5" (0.7 m) cable, neoprene jacketed, IP68
- CD1	1/2" NPTM AWG 20 with 24" (60 cm) leads (3 leads + ground)

Blank	Aluminum die-cast 230 (Standard)
-VA	300 series stainless steel (Optional)
-LH <sup>5</sup>	Low hysteresis
-D <sup>5</sup>	Surge protection

- EXI<sup>6</sup> Intrinsically safe EXia

#### Seals

- B	Buna -N (NBR)
- V	FKM
- E	EPDM

#### Pressure Range

	Adjustable Ranges				Max. Hysteresis <sup>3</sup> (Dead-band)	Max. Operating Pressure		Proof Pressure	
	(decreasing pressure) psi	(increasing pressure) (bar)	(increasing pressure) psi	(decreasing pressure) (bar)		psi	(bar)	psi	(bar)
Diaphragm					≤ 15% of max adjustable range	725	50	1200	(80) <sup>(†)</sup>
A	10 - 80	(0.7 - 5.5)	10 - 85	(0.7 - 5.9)		725	50	1200	(80) <sup>(†)</sup>
B	30 - 245	(2.0 - 17)	45 - 290	(3.1 - 20)		725	50	1200	(80) <sup>(†)</sup>
C	45 - 600	(3.1 - 41)	60 - 650	(4.1 - 45)					
Piston					≤ 15% of max adjustable range	3600	250	8700	(600)
D <sup>7</sup>	45 - 2320	(3.1 - 160)	75 - 2610	(5.2 - 180)		6500	450	8700	(600)
E <sup>7</sup>	430 - 4300	(3.1 - 300)	750 - 5000	(52 - 345)		8700	600	15000	(900)
F <sup>7</sup>	800 - 7550	(55 - 520)	1200 - 8700	(83 - 600)					

(†) Proof pressure 2900 psi (200 bar) on request (May shorten the lifetime of the switch).

#### Notes:

- Consult factory for other process connections. Minimum quantities may apply.
- Model 81XX- at pressure ranges is (A to E) delivered with 2 spring clips and 2 mounting screws 5 x 60 mm, steel 10.9, galvanized (hex 4). Pressure range (F) is delivered with 4 mounting screws.
- Consult sales drawing for dead-band chart
- Consult factory for additional options.
- Only for piston version (D, E, F pressure range)
- Intrinsically safe model can be ordered with or without stainless steel feature (-VA)
- For water applications or pressure over 3,000 psi, -D option, surge protection, is recommended