

Pressure

Compact Pressure Switch

Series 8000

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
- ▶ UL Type 4, IP65, IP68
- ▶ Modular concept

Applications

- ▶ Hydraulic power packs
- ▶ Machine tools
- ▶ Overload controls
- ▶ Railways
- ▶ Factory automation
- ▶ Balers and compactors
- ▶ Marine applications

General Specifications*



Repeatability:	±1% typical, piston models ±2% typical, diaphragm models	Approvals: Standard:	UL / cULus (CSA) IP65 (DIN-plug), IP68 (cable) GOST R/K
Microswitch: Type:	SPDT contact	Optional:	Intrinsically safe (Ex) II 1GD EXia IIB T6 (DIN plug) - EXI EXia IIC T6 (cable) - EXI GL approval, Type D
Rating:	Silver contacts: 3A @ 250 VAC 5A @ 120 VAC 0.4A @ 120 VDC Gold contacts: 0.1A @ 125 VAC 0.1A @ 30 VDC	Ambient Temperature Range: Piston Switch:	-40°F to +176°F (-40°C to +80°C)
Switching Frequency:	max. 60 /min piston switch max. 30/ min diaphragm switch	Diaphragm Switch:	-4°F to +176°F (-20°C to +80°C)
Wetted Parts: Process Fitting:	304 stainless steel	Adjustment Instructions: Setpoint Adjustment:	Turn adjustment screw clockwise to increase pressure; counterclockwise to decrease pressure.
Housing:	Aluminum die-cast 230	Shipping Weight:	0.88 lbs. (400 g)
Seals & Diaphragms:	Buna-N, Viton®, EPDM, Neoprene	CETOP Flange Model:	0.77 lbs. (350 g)
Adjustment Screw:	300 stainless steel (HEX 5)	Adaptor Version Straight:	1.36 lbs. (620 g)
Electrical Connection:	See options on next page	Adaptor Version 90° Angle:	1.48 lbs. (675 g)
Enclosure Ratings:	UL Listed, Type 4 for indoor and outdoor use.		
Pressure Connection:	Standard CETOP (multiple pressure connections available)		

* See product configurator for additional options.

Wiring Code

(contact status at atmospheric pressure)



	DIN 43650 Plug (PL1)	M12 Plug (PL2/5)	Cable Gland (CA)	1/2" NPT Conduit w/ Free Leads (CD1)
Common	1	1	Brown	Purple
Normally Closed	2	2	Black	Blue
Normally Open	3	4	Gray	Red
Ground	GRD	3	Green/Yellow	Green/Yellow

Barksdale

CONTROL PRODUCTS

Barksdale, Inc./Barksdale GmbH
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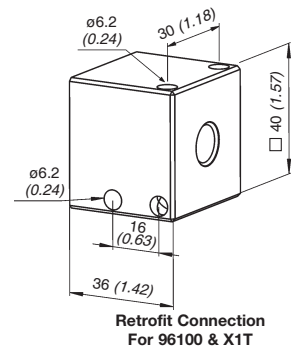
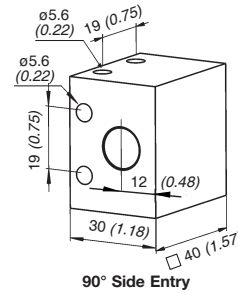
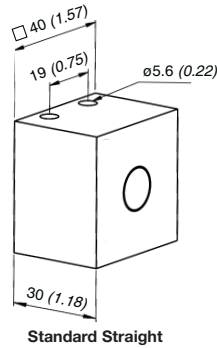
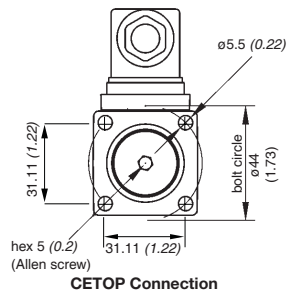


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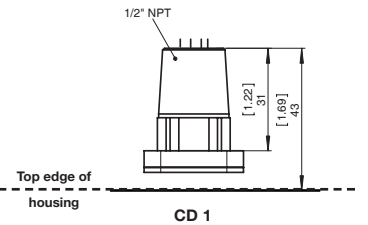
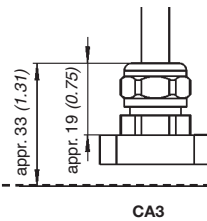
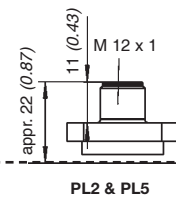
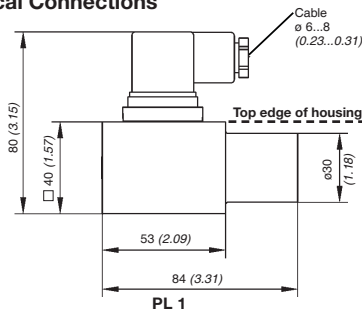
Series 8000

Technical Drawings

Process Connections



Electrical Connections



Dimensions in mm (inch)

Product Configurator

Example: 8 A A 1 - PL1 - B -UL⁵

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Process Connections

1 ¹	Cetop connection flange 40 x 40
3	G1/4" male, 40x40
4	G1/4" female, 90° side entry
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

Electrical Connectors

- PL1	Plug DIN 43650 A, IP65 (UR only)
- PL2	Plug M12, 4-pol. without female plug, IP67 (UR only)
- PL5	Plug M12, 5-pol. without female plug. (UR only)
- CA3	Cable gland, 27.5" (0.7 m) cable, neoprene jacketed, IP68
- CD1 ²	1/2" NPTM AWG 20 with 24" (60 cm) leads (3 leads + ground)

SPDT Contacts

1	Silver
2	Gold-plated

Options³

- EXI	Intrinsically safe EXia (not UL)
- GL	Shipboard GL approval (not UL)
- LH	Small hysteresis
- VA	300 series stainless steel housing

Seals

- B	Buna -N
- V	Viton®
- E	EPDM
- N	Neoprene

Adjustable Range

	Adjustable Ranges				Max. Hysteresis ⁴ (Dead-band)	Proof Pressure psi (bar)
	(decreasing pressure) psi (bar)	(increasing pressure) psi (bar)	(decreasing pressure) psi (bar)	(increasing pressure) psi (bar)		
Diaphragm						
A	5.8 - 82	(0.4 - 5.7)	6.0 - 87	(0.4 - 6.0)	≤ 15% of max adjustable range	1200 (80) ^(†)
B	29 - 246	(2.0 - 17)	43 - 290	(3.0 - 20)		1200 (80) ^(†)
C	43 - 600	(3.0 - 41)	58 - 650	(4.0 - 45)		1200 (80) ^(†)
Piston						
D	43 - 2320	(3.0 - 160)	73 - 2610	(5.0 - 180)	≤ 15% of max adjustable range	8700 (600)
E	430 - 4300	(30 - 300)	730 - 5075	(50 - 350)		8700 (600)
F	800 - 7550	(55 - 520)	1160 - 8700	(80 - 600)		13000 (900)

Notes:

¹ 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.

² Contact rating for silver contact is 3A @ 125 VAC.

³ Consult factory for additional options.

⁴ Consult sale drawing for dead-band chart

⁵ Not applicable with -EXI and -GL options

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