

## Compact Pressure Switch

**Series 7000**

### Features

- ▶ Compact size
- ▶ Multiple electrical connections
- ▶ SPDT snap action micro-switch
- ▶ NEMA 1 or 4 (depending on electrical connection)
- ▶ Factory preset or field adjustable
- ▶ Available in stainless steel or brass

### Applications

- ▶ Air proving in HVAC systems
- ▶ Engine monitoring
- ▶ Hydraulic power units
- ▶ Mobile hydraulics
- ▶ Pump or compressor control
- ▶ Hydraulic and pneumatic braking systems



### General Specifications\*

<b>Electrical Characteristics:</b>	All models incorporate Underwriters' Laboratories, Inc. and CSA Listed single pole double throw snap-action switching elements.
<b>Accuracy:</b>	±8% typical for ranges "2" to "7"
<b>Switch:</b>	SPDT snap action; single circuit
<b>Wetted Parts:</b>	
Diaphragm type: (range 2, 3)	300 series stainless steel fitting or brass fitting and Buna-N diaphragm.
Piston type: (ranges 4, 5, 6, 7)	300 series stainless steel or brass fitting.
<b>Electrical Connection:</b>	See product configurator for electrical connection options.
<b>Enclosure Ratings:</b>	NEMA 1; NEMA 4
<b>Pressure Connection:</b>	1/4" NPT (standard)

\* See product configurator for additional options.

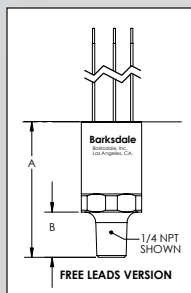
<b>Approvals:</b>	
UL:	Recognized components per UL 508 standard, industrial control equipment.
CSA:	Listed per CSA Guide 380-W1.16 class 3231
PED (European):	Compliant to PED 97/23/EC standard
<b>Temperature Range:</b>	
Operating:	-40° to +180°F - piston type 0° to 180°F - diaphragm type
Storage:	-40° to +200°F
<b>EMI/RFI:</b>	
Vibration:	10 g's per MIL-STD 202, method 204, condition A
Shock:	50 g's per MIL-STD 202, method 213, condition A
<b>Adjustment Instructions:</b>	
Pressure Setpoint:	Turn adjustment screw clockwise to increase pressure; counterclockwise to decrease pressure.
<b>Shipping Weight:</b>	Stainless steel: approximate .25 lbs.

### SS Fitting Dimension

FITTING	DIMENSION 'A'	DIMENSION 'B'
1/4 NPT	2.25 [57.15]	.75 [19.05]
1/8 NPT	2.62 [66.55]	1.10 [27.94]
* 7/16 NPT	2.25 [57.15]	.75 [19.05]
* G 1/4	2.25 [57.15]	.75 [19.05]

FOR (+6 AND -7) PRESSURE RANGE BRASS FITTINGS, ADD .51 INCH LENGTH TO ABOVE DIMENSIONS 'A' AND 'B'

\* Available in stainless steel only



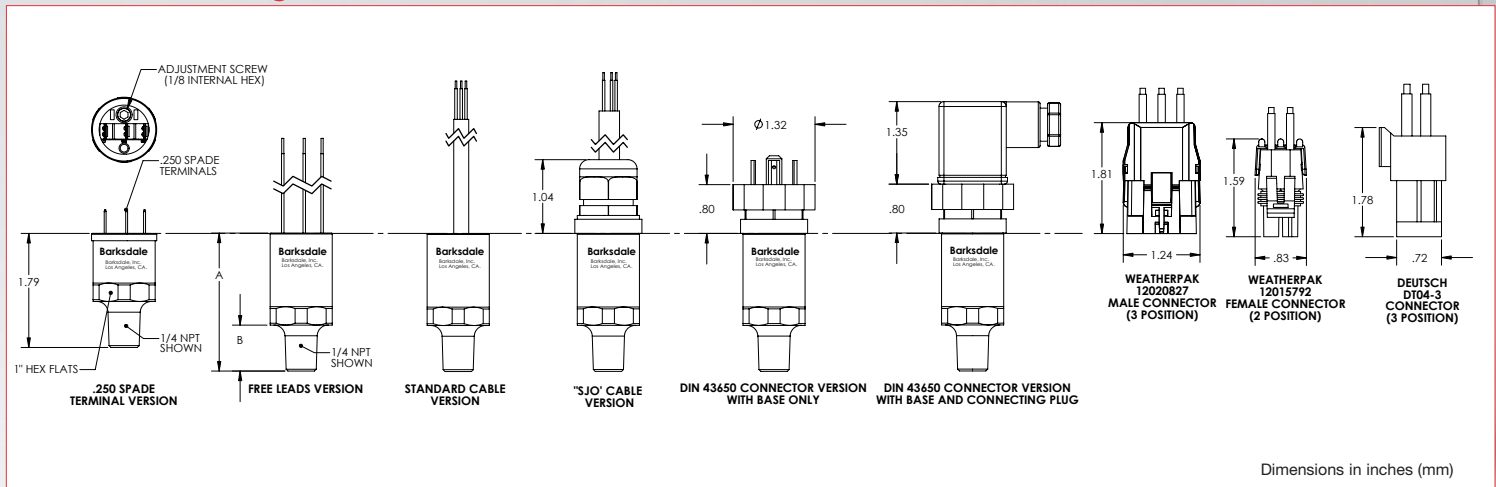
### Wiring Code

CONTACT	FREE LEADS	PVC GRAY CABLE	TYPE 'SJO' CABLE	DIN 43650 TYPE CONNECTOR
COMMON	PURPLE	WHITE	WHITE	POSITION 1
NORMALLY OPEN	RED	RED	GREEN	POSITION 3
NORMALLY CLOSED	BLUE	BLACK	BLACK	POSITION 2

# Compact Pressure Switch

# Series 7000

## Technical Drawing



Dimensions in inches (mm)

## Product Configurator

Example **72 4 S -2 4 -1 B**

### Basic Configuration

71	Factory set & permanently locked
72	Field adjustable
73	Field adjustable with factory pre-set

### Pressure Range

Range	Adjustable Range				Approx. Deadband (Actuation Value) psi	*Operating Pressure (Max) psi	Max. Proof Pressure psi
	Decreasing - psi		Increasing - psi				
	Min	Max	Min	Max			
2	6	35	8	50	2 - 15	80	100
3	30	90	40	120	5 - 30	130	140
4 <sup>2</sup>	150	700	250	1000	30 - 300	4000	6000
5 <sup>2</sup>	500	2300	600	3000	100 - 800	4000	6000
6 <sup>3</sup>	20	150	30	200	10 - 100	700	2000
7 <sup>3</sup>	80	400	150	500	20 - 150	700	2000

\* Operating pressure is defined as the maximum pressure at which the pressure switch can maintain set point accuracy.

### Fitting Material

S	300 series stainless steel
B <sup>6</sup>	Brass (only available with pressure ranges 6 and 7, and 1/8" NPT process connection)

### Limit Switch

-1	SPDT, snap-action switch, 5 Amps @ 125/250 VAC (silver contacts)
-2	SPDT, snap-action switch, 0.1 Amps @ 125/250 VAC (gold contacts)
-4	SPST, N.O., snap-action switch, 5 Amps @ 125/250 VAC (silver contacts)
-5	SPST, N.C., snap-action switch, 5 Amps @ 125/250 VAC (silver contacts)
-6	SPST, N.O., snap-action switch, 0.1 Amps @ 125/250 VAC (gold contacts)
-7	SPST, N.C., snap-action switch, 0.1 Amps @ 125/250 VAC (gold contacts)

### NOTES:

- Not UL/CSA certified
- Piston models - only available in stainless steel
- Available only in brass fittings (use Viton diaphragms as standard - no price adder)
- Available only with stainless steel or brass, factory set & locked models
- Minimum quantities may be required.
- Brass fitting only available in 1/8" NPT, pressure ranges 6 or 7, electrical connections 3 or 4.

### Options

-Wxxx Extra wire length (XXX = inches)

### Set Point

-XXX	Set point (not required for field adjustable)
R	Rising pressure
F	Falling pressure

### Wetted Material

B	Buna-N
N	Neoprene (all except -4 and -5 pressure range codes)
V	Viton <sup>®</sup> Diaphragm
D	Disogrin O-ring (available in stainless steel & piston models only)

### Process Connection <sup>5</sup>

-1	1/8" NPTM
-2	1/4" NPTM
-3	7/16-20 with O-ring seal (available only with stainless steel models)
-4	G1/4 (available only with stainless steel models)

### Electrical Connection

1	.250 x .032 male spade quick disconnects (NEMA 1), not available with brass
2	.110 x .020 male spade quick disconnects (NEMA 1), not available with brass, only SPDT
3	Free leads. 18 gauge, 18" long (NEMA 1)
4	Unshielded PVC jacketed cable, 18 AWG, 18" long (NEMA 4)
5 <sup>4</sup>	DIN 43650-type connector - base only (available only with stainless steel & factory set models - NEMA 4)
6 <sup>4</sup>	DIN 43650-type connector - with base & plug (available with factory set models - NEMA 4)
7 <sup>4</sup>	SJO type cable, 3 wire, 18 AWG, 18" long (available only with factory set models - NEMA 4)
8 <sup>1,5</sup>	Weatherpak connector, female, 2-position, two 18" free wires, for normally closed circuits
9 <sup>1,5</sup>	Weatherpak connector, female, 2-position, two 18" free wires, for normally open circuits
10 <sup>1,5</sup>	Weatherpak, connector, male, 3-position, three 18" free wires, used only with SPDT limit switches
11 <sup>1,5</sup>	Deutsch connector, female, 3-position, three 18" free wires, used only with SPDT limit switches