

### Non-Hazardous Areas Adjustable Pressure Switch

6900P\* - Piston Sensor

#### **DESCRIPTION**



6900PE Series Shown

Highly reliable devices utilizing the CCS Dual-Snap® Belleville disc spring principle pioneered by CCS' engineers.

- Engineering based on aerospace technology.
- Rigid, compact and internally adjustable for convenient field set point adjustment.
- Repeatable and stable set points.
- Vibration and shock resistant.
- High cycle life.
- High over-pressure capability.
- (System and Proof)
- Various options for wetted materials and electrical ratings to meet a wide range of application requirements and media compatibility.

SHIPPING WEIGHT: APPROXIMATELY 15 OUNCES (425 GRAMS)

#### **SERIES:**

6900P\*

### ADJUSTABLE SET POINT RANGE:

5 to 16,000 PSIG 0.34 to 1,103 bar 34.47 to 110,316 kPa

#### **OPERATING TEMPERATURE:**

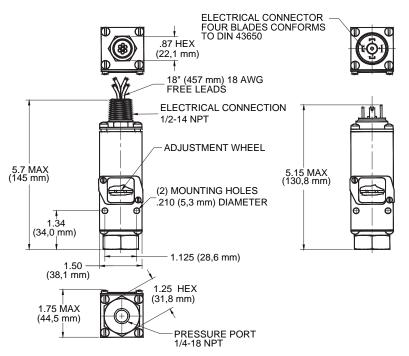
Temperature limits change with O-ring selection.

-40° to 186°F -40° to 86°C

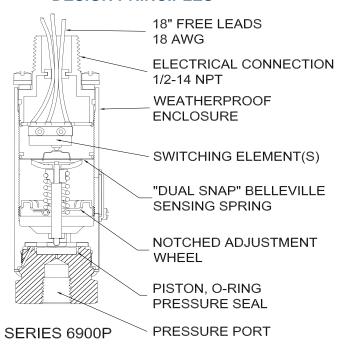
#### **STANDARD FEATURES:**

- CE Mark
- CCC
- CSA Listed
- CRN
- NACE MR0175 / ISO 15156
- NEMA: 4,13 / IP65
- Weatherproof

#### INSTALLATION DRAWING



#### **DESIGN PRINCIPLES**



FIELD SETTING: Loosen access cover. Adjust adjustment screw using screwdriver slot as illustrated, then attach to a variable pressure source with a suitable gage, and check that the circuit continuity operates at the pressures desired. Clockwise to increase settings. Counterclockwise to decrease setting.

NOTE: DO NOT USE ELECTRICAL HEX FOR TORQUING.





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#### **OPERATING AND ORDERING DATA**

SERIES 6900P*	PISTON PRESSURE SWITCH FOR HIGH CYCLING-LONG LIFE-HYDRAULIC APPLICATION WETTED PARTS: 1/4"-18 NPT ALUMINUM PRESSURE PORT, 400 STAINLESS STEEL PISTON, BUNA N O-RING / TEFLON				
	ADJUSTABLE SET POINT RANGE		APPROX. DEAD BAND	SYSTEM PRESSURE	PROOF PRESSURE
	INCREASING PRESSURE PSIG (BAR)	DECREASING PRESSURE PSIG (BAR)	PSI (BAR)	PSIG (BAR)	PSIG (BAR)
6900P*32	15-200	5-190	10	2000	3000
	(1.03-13.8)	(0.35-13.1)	(0.7)	(138)	(207)
6900P*34	150-1600	40-1490	110	3000	5000
	(10.3-110)	(2.8-103)	(7.6)	(207)	(345)
6900P*36	500-3200	330-3030	170	5000	7500
	(34.5-221)	(22.8-209)	(11.7)	(345)	(517)
6900P*38	2000-6500	1500-6000	500	10000	13000
	(138-448)	(103-414)	(34.5)	(689)	(896)
HIGH	WETTED PARTS: 7/16"-20 UNF 316 STAINLESS STEEL PRESSURE PORT & PISTON,				
PRESS.	BUNA N O-RING / TEFLON				
6900P*40	5000-11000	3500-9500	1500	14000	20000
	(345-758)	(241-655)	(103)	(965)	(1379)
6900P*42	10000-16000	7500-13500	2500	17000	25000
	(690-1103)	(517-931)	(172)	(1172)	(1724)

#### **HOW TO ORDER**

# Follow these steps to build your part number:

- Specify the series based on your required set point, range, dead band, system pressure and proof pressure.
   Add desired options model code letter.
- 3. Add the applicable standard suffix number.

(Ex: 6900PA42)

### PRESSURE CONVERSION

1 BAR = 14.5 PSI 1 kPa = 0.145 PSI

# OPTIONS MODEL CODES

A: Viton® O-RingF: Ethylene Propylene O-Ring

M: DPDT Electrical

Note: Additional modified standard suffixes are available, consult CCS sales department or CCS Representative.

## OPTIONAL STANDARD MODIFIED SUFFIXES

7008: Gold Contacts

**7038:** Stainless Steel Port and Piston (STD on ranges 40 and 42)

7075: Electrical Connector with 4 Blades Conforms to DIN-43650 (SPDT only)

7077: Electrical Connector with Gold Contacts and 4 Blades Conforms to DIN-43650 (SPDT only)

7092: 18 inch Teflon Free Leads (Low Temp Wire) (Non-Hazardous Area Option)

7088: 1/4" -18 NPT Female 316
Stainless Steel Pressure Port

7089: 1/2" -14 NPT Male 316 Stainless Steel Pressure Port

**7090:** 2 Meter Free Leads (Non-Hazardous Area Option)

#### **ELECTRICAL ENCLOSURE CERTIFICATIONS**

CSA listed by Canadian Standard Association (CSA) Testing Laboratories (File No. LR22665) for enclosure (4) non-hazardous locations.

#### CERTIFICATIONS

Consult CCS website for complete certification and approval listing.

#### **ELECTRICAL CHARACTERISTICS**

RATING OF SWITCH ELEMENT

	AMPERES				
VOLTS	SPDT	DPDT "M"			
	Res.	Res.			
125 AC - 50/60 Hz	11	11			
250 AC - 50/60 Hz	11	11			
30 DC	5	5			
125 DC	.5	.5			
*125 AC - 50/60 Hz	1 max	1 max			
*30 DC	1 max	1 max			
*Gold Contacts -7008 Suffix					

#### **ACCESSORIES - SOLD SEPARATELY**

**69-102:** Mating DIN-43650 Connector **57-159:** Sealing DIN-46650 Gasket

#### **SCHEMATIC AND WIRING CODE**

