



CustomControlSensors

# 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.

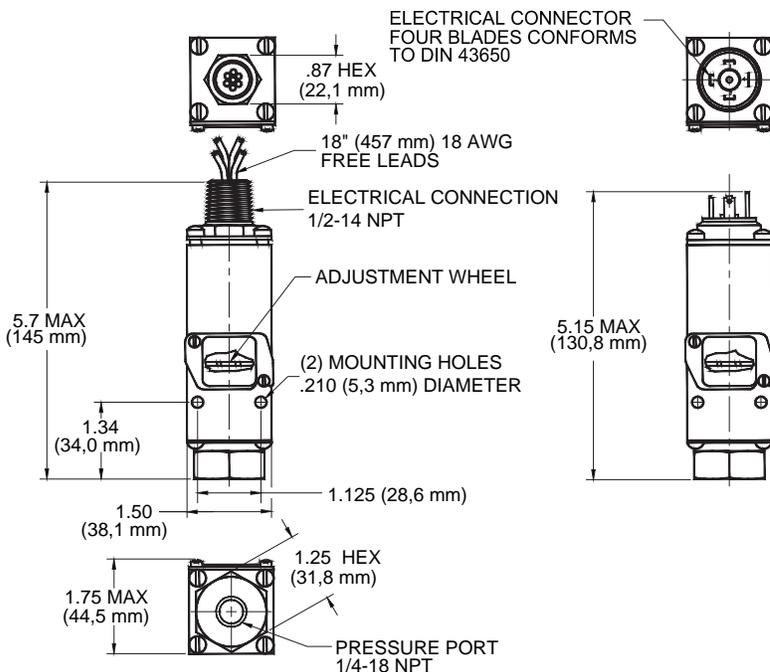
-40° to 186°F

-40° to 86°C

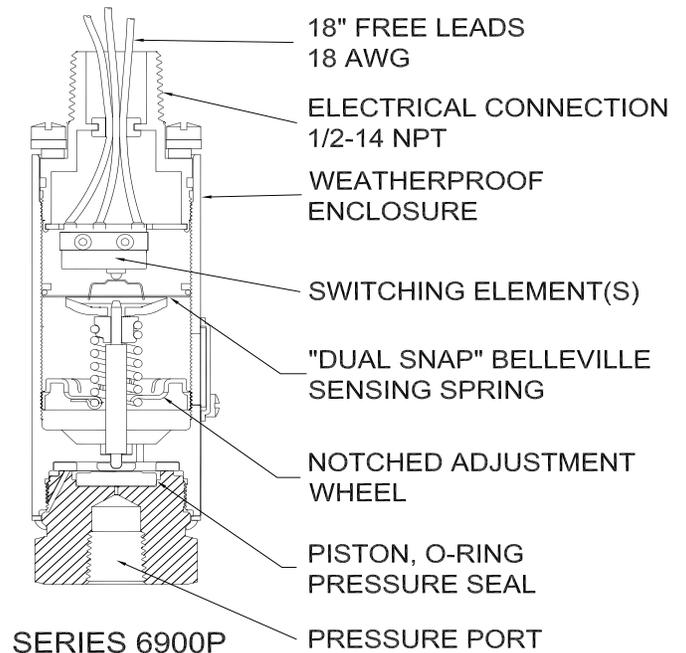
### STANDARD FEATURES:

- 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.





CustomControlSensors

# Non-Hazardous Areas Adjustable Pressure Switch

## 6900P\* - Piston Sensor

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

### HOW TO ORDER

Follow these steps to build your part number:

1. Specify the series based on your required set point, range, dead band, system pressure and proof pressure.
2. 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-Ring
- F: 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

VOLTS	AMPERES	
	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

