



CustomControlSensors

Non-Hazardous Areas Adjustable Pressure Switch

6900G* - Diaphragm Sensor



DESCRIPTION

- 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:

- 6900G*
- 6900GZ*

ADJUSTABLE SET POINT RANGE:

- 1 to 2500 PSIG
- 0.07 to 172 bar
- 6.89 to 17236 kPa

OPERATING TEMPERATURE:

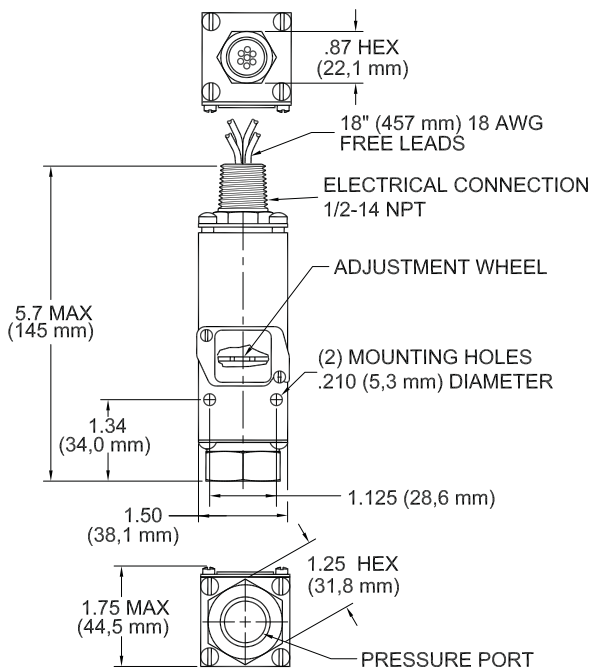
Temperature limits change with O-ring selection.

- 40° to 186°F
- 40° to 86°C

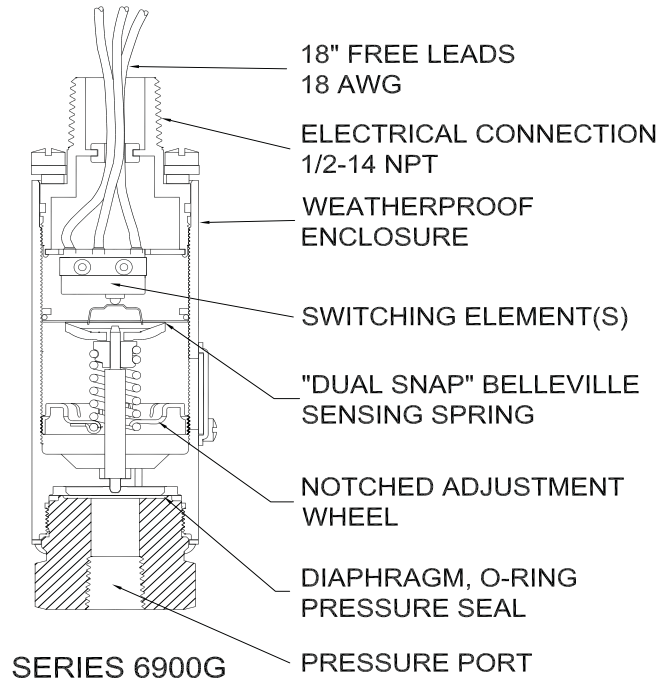
STANDARD FEATURES:

- CE Mark
- 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 6900G*	WETTED PARTS: 1/4"-18 NPT ALUMINUM PRESSURE PORT, POLYIMIDE DIAPHRAGM, BUNA N O-RING				
	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)			
6900G*12	3-20 (0.21-1.4)	1-18 (0.07-1.2)	2 (0.14)	500 (34.5)	750 (51.7)
6900G*14	6-75 (0.41-5.1)	2-71 (0.14-4.9)	4 (0.28)		
6900G*16	12-150 (0.8-10.3)	4-142 (0.28-9.8)	8 (0.6)	1500 (103)	2000 (138)
6900G*18	30-375 (2.0-25.9)	10-355 (0.7-24.4)	20 (1.4)		
6900G*20	300-1000 (20.7-69)	250-950 (17.2-66)	50 (3.5)	2000 (138)	3000 (207)
6900G*22	700-2200 (48.3-152)	600-2100 (41.4-145)	100 (6.9)	3000 (207)	4500 (310)
6900G*24	1800-3400 (124-234)	1580-3180 (109-219)	220 (15.2)	5000 (345)	7500 (517)

SERIES 6900GZ*	WETTED PARTS: 1/2"-14 NPT 316 STAINLESS STEEL PRESSURE PORT & DIAPHRAGM, VITON O-RING				
	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)			
6900GZ*12	3-20 (0.21-1.4)	1-18 (0.07-1.2)	2 (0.14)	500 (34.5)	750 (51.7)
6900GZ*14	9-75 (0.6-5.1)	3-69 (0.21-4.8)	6 (0.41)		
6900GZ*16	18-150 (1.2-10.3)	6-138 (0.41-9.5)	12 (0.8)	1500 (103)	2000 (138)
6900GZ*18	45-375 (3.1-25.9)	15-345 (1.0-23.8)	30 (2.0)		
6900GZ*20	300-1000 (20.7-68.9)	225-925 (15.5-64)	75 (5.1)	2000 (138)	3000 (207)
6900GZ*22	700-2200 (48.3-152)	520-2020 (35.9-139)	180 (12.4)	3000 (207)	4500 (310)
6900GZ*24	1800-3400 (124-234)	1520-3120 (105-215)	280 (19.3)	5000 (345)	7500 (517)

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: 6900GA16-7008)

PRESSURE CONVERSION

1 BAR = 14.5 PSI
1 kPa = 0.145 PSI

OPTIONS MODEL CODES

- A:** Viton® O-Ring (STD on GZ models)
- C:** 316 Stainless Steel Welded Capsule (GC Models only)
- F:** Ethylene Propylene O-Ring
- M:** DPDT Electrical

OPTIONAL STANDARD MODIFIED SUFFIXES

- 7008:** Gold Contacts
- 7044:** Monel Port and Diaphragm (GC models only)
- 7045:** Hastelloy C-276 Port and Diaphragm (GC models only)
- 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)
- 7091:** 316 Stainless Steel Diaphragm Flush Mount 1" NPT (Non-Hazardous Area Option)

ACCESSORIES - SOLD SEPARATELY

- 69-102:** Mating Connector
- 57-159:** Sealing Gasket

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

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 SCHEMATIC AND WIRING CODE

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

