



CustomControlSensors

Hazardous Areas Adjustable Pressure Switch

6900GCZZE*5Y* - 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)
- Certified explosion proof hermetically sealed electrical assembly for environmental protection.
- Various options for wetted materials and electrical ratings to meet a wide range of application requirements and media compatibility.

SHIPPING WEIGHT: APPROXIMATELY 25 OUNCES (708 GRAMS)

SERIES:

6900GCZZE5Y*

ADJUSTABLE SET POINT RANGE:

1 to 3400 PSIG
 0.07 to 234 bar
 6.89 to 23400 kPa

OPERATING TEMPERATURE:

Temperature limits change with O-ring selection.

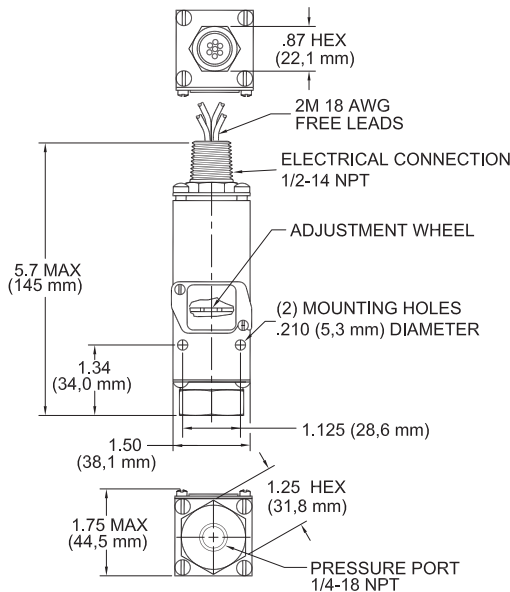
-40° to 186°F

-40° to 86°C

STANDARD FEATURES:

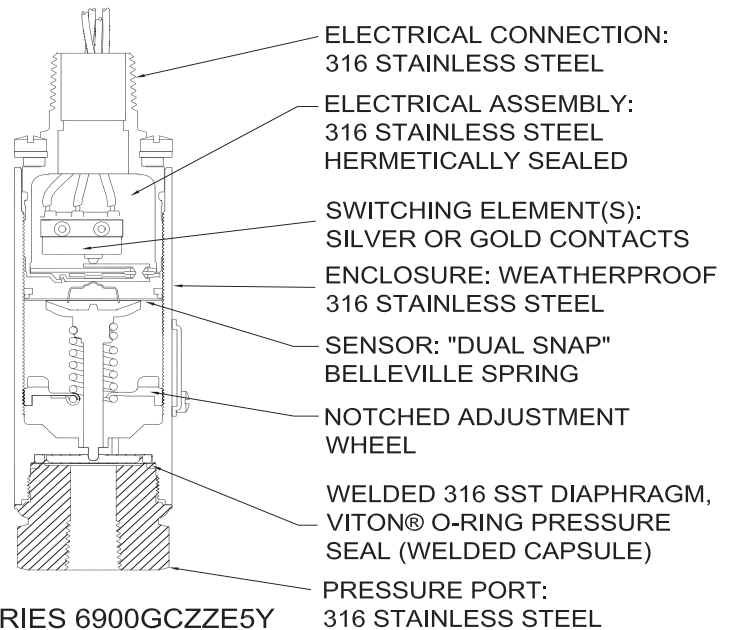
- CE Mark
- CCC
- CRN
- Dual Seal Certified: ANSI/ISA-12.27.01
- NACE MR0175 / ISO 15156
- NEMA: 4, 7, 9, 13 / IP66
- U.L. / CSA Hazardous Area Listed
- IECEx - ATEX Compliant
- Hermetically Sealed 316 SST Electrical Assembly
- 316 SST Body, Pressure Port and Welded Capsule

INSTALLATION DRAWING



MODEL 6900GCZZE5Y12 ILLUSTRATED

DESIGN PRINCIPLES



SERIES 6900GCZZE5Y

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 6900GCZZE*5Y*	1/4"-18 NPT 316 SST (FEMALE) PRESSURE CONNECTION AND WELDED DIAPHRAGM				
	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)			
6900GCZZE*5Y12	3-20 (0.21-1.4)	1-18 (0.07-1.2)	2 (0.14)	500 (34.5)	1000 (69)
6900GCZZE*5Y14	9-75 (0.6-5.1)	3-69 (0.21-4.8)	6 (0.41)		
6900GCZZE*5Y16	18-150 (1.2-10.3)	6-138 (0.41-9.5)	12 (0.8)	1500 (103)	2000 (138)
6900GCZZE*5Y18	45-375 (3.1-25.9)	15-345 (1.0-23.8)	30 (2.0)		
6900GCZZE*5Y20	300-1000 (20.7-69)	225-925 (15.5-64)	75 (5.1)	2000 (138)	5000 (345)
6900GCZZE*5Y22	700-2200 (48.3-152)	520-2020 (35.9-139)	180 (12.4)	3000 (207)	10000 (689)
6900GCZZE*5Y24	1800-3400 (124-234)	1520-3120 (105-215)	280 (19.3)	5000 (345)	

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: 6900GCZZEFM5Y14)

PRESSURE CONVERSION

1 BAR = 14.5 PSI
1 kPa = 0.145 PSI

STANDARD MODEL CODES

- C:** 316 Stainless Steel Welded Capsule
- ZZ:** 316 SST body and female pressure port with 1/4-18 NPT
- 5Y:** ATEX/UL/CSA certified electrical assembly with 1/2-14 conduit thread and 2 meter free leads.

OPTIONAL MODEL CODES

- F:** Ethylene Propylene O-Ring
- M:** DPDT Electrical
- L:** Gold Contact

ACCESORIES

- * **Junction Box:141-20**
Hazardous Area Junction Box (3/4" NPT Stainless Steel) Explosion Proof, Weatherproof, Div 1, Div 2, Zone 1, Zone 2, IP 68. Certified to ATEX, CSA, FM, IECEx.
- * **89-134-1H:** Horizontal SST 2 inch Pipe Clamp
- * **89-134-1V:** Vertical SST 2 inch Pipe Clamp

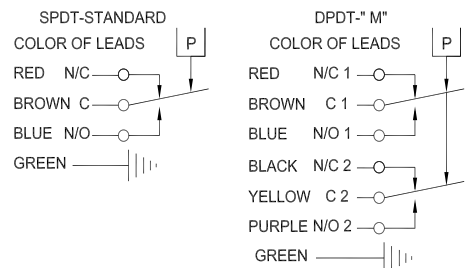
APPROVALS

- *c-UL, U.L./CSA Explosion Proof: Div. 1, 2 hermetically sealed electrical assembly P/N 46-1058 (46-1061 for M model option), listed by both Underwriter's Laboratories, Inc. (File No. E32961) and Canadian Standard Association (CSA) Testing Laboratories (File No. LR22921) for hazardous locations, Class 1, Groups A, B, C, and D; Class 2 Groups E, F, and G.
- *ATEX certified for potentially explosive atmospheres electrical assembly series 46-XXXXXXX, Models 6*****, Ex d IIC T5 and T6: Ex tb IIIC T100°C/T85°C Db IP66/7, Directive 94/9/EC Sira 08ATEX1046X. (Option Y)
- *IECEx - SIRA certified, SIR 10,0193X (Option Y)
- *Dual Seal Certified File No. LR22921
- * Russian Certificate, Gost R 0813770

ELECTRICAL CHARACTERISTICS SCHEMATIC AND WIRING CODE

VOLTS	RATING OF SWITCH ELEMENT	
	AMPERES	
	SPDT Res.	DPDT "M" 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

*L Gold Contacts



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

CERTIFICATIONS

Consult CCS website for complete certification and approval listing.