

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 Certfied: ANSI/ISA-12.27.01
- NACE MR0175 / ISO 15156
- NEMA: 4, 7, 9,13 / IP66
- U.L. / CSA Hazardous Area Listed
- Hermetically Sealed 316 SST Electrical Assembly
- IECEx ATEX Compliant

INSTALLATION DRAWING

.87 HEX (22,1 mm) 2M 18 AWG FREE LEADS **ELECTRICAL CONNECTION** 1/2-14 NPT ADJUSTMENT WHEEL 5.7 MAX (145 mm) (2) MOUNTING HOLES .210 (5,3 mm) DIAMETER 1.34 (34,0 mm) 1.125 (28,6 mm) 1.50 – (38,1 mm) 1.25 HEX (31.8 mm) 1.75 MAX PRESSURE PORT 1/4-18 NPT

DESIGN PRINCIPLES

2M FREE LEADS 18 AWG

ELECTRICAL CONNECTION

HERMETICALLY SEALED ELECTRICAL ASSEMBLY

SWITCHING ELEMENT(S)

WEATHERPOOF 316 STAINLESS STEEL ENCLOSURE

"DUAL SNAP" BELLEVILLE SENSING SPRING

NOTCHED ADJUSTMENT WHEEL

WELDED DIAPHRAGM PRESSURE SEAL

PRESSURE PORT

SERIES 6900GCZZE5Y

suitable gage, and check that the circuit continuity operates at the pressures desired. Clockwise to increase settings. Counterclockwise to decrease setting.





FIELD SETTING: Loosen access cover. Adjust adjustment screw using screwdriver slot as illustrated, then attach to a variable pressure source with a



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OPERATING AND ORDERING DATA

CEDIEC	1/4"-18 NPT (FEMALE) PRESSURE CONNECTION AND WELDED DIAPHRAGM					
SERIES 6900GCZZE5Y*	ADJUSTABLE SET POINT RANGE		APPROX.	SYSTEM	PROOF	
	INCREASING PRESSURE PSIG (BAR)	DECREASING PRESSURE PSIG (BAR)	DEAD BAND PSI (BAR)	PRESSURE PSIG (BAR)	PRESSURE PSIG (BAR)	
6900GCZZE*5Y12	3-20 (0.21-1.4)	1-18 (0.07-1.2)	2 (0.14)			
6900GCZZE*5Y14	9-75 (0.6-5.1)	3-69 (0.21-4.8)	6 (0.41)	500 (34.5)	1000 (69)	
6900GCZZE*5Y16	18-150 (1.2-10.3)	6-138 (0.41-9.5)	12 (0.8)			
6900GCZZE*5Y18	45-375 (3.1-25.9)	15-345 (1.0-23.8)	30 (2.0)	1500 (103)	2000 (138)	
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 (690)	
6900GCZZE*5Y24	1800-3400 (124-234)	1520-3120 (105-215)	280 (19.3)	5000 (345)	10000 (689)	

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: 6900GCZZEM5Y14)

PRESSURE CONVERSION

1 BAR = 14.5 PSI 1 kPa = 0.145 PSI

MODEL CODES

C: 316 Stainless Steal Welded Capsule

ZZ: 316 SST body and female pressure port with ¼-18 NPT

5Y: ATEX/UL/CSA certified electrical assembly with ½-14 conduit thread and 2 meter free leads.

M: DPDT Electrical **EA**: Gold Contact

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 F, 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

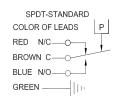
ACCESORIES

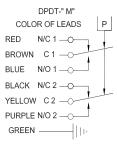
- * Junction Box:141-20 Hazardous Area Junction Box (3/4" NPT Stainless Steel) Explosion Proof, Weatherproof, Div 1, Div 2, Zone 1, Zone 2, IP 68. Certified to ATEX, CSA, FM. IECEX.
- * 89-134-1H: Horizontal SST 2 inch Pipe Clamp
- * 89-134-1V: Vertical SST 2 inch Pipe Clamp

ELECTRICAL CHARACTERISTICS SCHEMATIC AND WIRING CODE

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			
* EA 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.