



CustomControlSensors

# Hazardous Areas Adjustable Pressure Switch

## 6900DZE\* - Diaphragm Sensor



6900DZ Series Shown

### 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.

SHIPPING WEIGHT: APPROXIMATELY 49 OUNCES (1372 GRAMS)

### SERIES:

6900DZE\*

### ADJUSTABLE SET POINT RANGE:

#### DIFFERENTIAL PRESSURE:

.4 to 75 PSID  
0.028 to 5.17 bar  
2.76 to 517 kPa

### OPERATING TEMPERATURE:

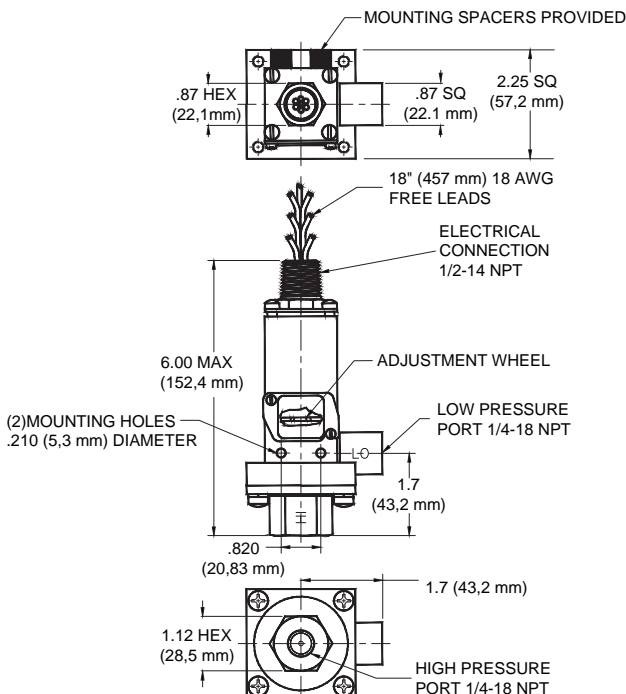
Temperature limits change with O-ring selection.

-40° to 186°F  
-40° to 86°C

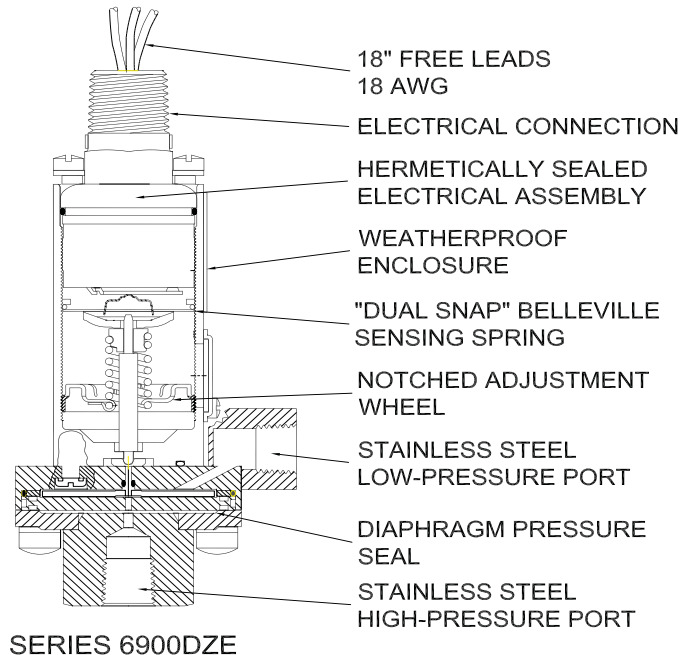
### STANDARD FEATURES:

- CE Mark
- CCC
- CRN
- Dual Seal: ANSI/ISA-12.27.01
- NACE MRO175 / ISO 15156
- NEMA: 4, 7, 9, 13 / IP66
- U.L. / CSA Listed
- Hermetically Sealed Electrical Assembly
- 316 SST Electrical Assembly

### 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 6900DZE*	WETTED PARTS: 1/4"-18 NPT STAINLESS STEEL PRESSURE PORT, POLYIMIDE DIAPHRAGM, VITON O-RING							
	ADJUSTABLE SET POINT RANGE PSID (BAR)		APPROX. DEAD BAND PSI (BAR)	MAX SYSTEM PRESSURE PSIG (BAR)		PROOF PRESSURE PSIG (BAR)		
	INCREASING PRESSURE	DECREASING PRESSURE		HIGH PRESS. PORT	LOW PRESS. PORT	BOTH PORTS SIMULT.	HIGH OVER LOW LOW OVER HIGH	
			HIGH				LOW	
6900DZE*8	1.5-18 (0.103-1.24)	.4-17.2 (0.03-1.19)	1 (0.07)	400 (27.6)		750 (51.7)	750 (51.7)	400 (27.8)
6900DZE*10	6-75 (0.41-5.17)	2-71 (0.13-4.89)	4 (0.28)					

### 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: 6900DZE10-7076)

### PRESSURE CONVERSION

1 BAR = 14.5 PSI  
1 kPa = 0.145 PSI

### OPTIONAL STANDARD MODIFIED SUFFIXES

- 7008:** Gold Contacts
- 7054:** 2 Meter Free Leads
- 7076:** 18 inch Teflon Free Leads (Low Temp Wire)
- 7081:** M20 Explosion Proof Electrical Conduit Connection (Y option)

### OPTIONS MODEL CODES

- F:** Ethylene Propylene O-Ring
- M:** DPDT Electrical
- Y:** ATEX / GOST Certified Electrical Assembly (Consult CCS Sales Department for GOST options and requirements.)

### CERTIFICATIONS

Consult CCS website for complete certification and approval listing.

### ELECTRICAL ENCLOSURE CERTIFICATIONS

- \* 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 T6, Directive 94/9/EC Sira 08ATEX1046X. (Option Y)
- \* IECEx - SIRA certified, SIR 10,0193X (Option Y)

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

### 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

