

## CustomControlSensors

## **Hazardous Areas Adjustable Pressure Switch**

## 672DE\* - 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, midsize 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 67 OUNCES (1899 GRAMS)

#### **SERIES:**

672DF\*

## **ADJUSTABLE SET POINT RANGE:**

## **DIFFERENTIAL PRESSURE:**

2 to 150 PSID 0.14 to 10.3 bar 13.79 to 1034 kPa

#### **OPERATING TEMPERATURE:**

Temperature limits change with o-ring selection.

-40° to 186°F -40° to 86°C

## STANDARD FEATURES:

- **CE Mark**
- CCC
- CRN
- CSA / U.L. Listed
- NACE MR0125 (Y Option) / ISO 15156
- NEMA: 4, 4X, 7, 9,13 / IP67
- Hermetically Sealed Electrical Assembly
- 316 SST Electrical Assembly

#### **INSTALLATION DRAWING**

## 1.50 260-.267 (38,1 mm) (6,6/6,8 mm) 3.31 1.75 (84.1 mm) (44,5 mm) **ELECTRICAL** 5.50 MAX. CONNECTION (139,7 mm) MAX. 1/2-18 NPT 1.60 (40,6 mm) (104,1 mm) 1.68 2.20 (42.7 mm) (55,9 mm) 3.30 (83,8 mm) PRESSURE PORTS 1/4-18 NPT (2 PLACES) HIGH PORT SHOWN THIS SIDE LOW PORT ON REVERSE SIDE

## **DESIGN PRINCIPLES**

18" FREE LEADS 18 AWG (4 OR 7 WIRES)

**ELECTRICAL CONNECTION** 1/2-14 NPT

**EXPLOSION PROOF** HERMETICALLY SEALED **ELECTRICAL ASSEMBLY** 

TORQUE TUBE ASSEMBLY

EARTHING CONNECTION

"DUAL SNAP" BELLEVILLE SENSING SPRING

ADJUSTMENT SCREW

STAINLESS STEEL BODY

SERIES 672 DE

FIELD SETTING: Loosen access cover. Adjust screwdriver adjustment slot. Clockwise to decrease settings. Counterclockwise to increase settings.

NOTE: DO NOT USE ELECTRICAL HEX FOR TORQUING.







## Hazardous Areas Adjustable Pressure Switch

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## **OPERATING AND ORDERING DATA**

SERIES 672DE*	WETTED PARTS: 1/4"-18 NPT 316 STAINLESS STEEL PRESSURE PORT & DIAPHRAGM, VITON O-RING							
	ADJUSTABLE SET POINT RANGE		APPROX. DEAD	MAX SYSTEM	PROOF PRESSURE PSIG (BAR)			
	INCREASING PRESSURE PSID (BAR)	DECREASING PRESSURE PSID (BAR)	BAND PSI (BAR)	PRESSURE PSIG (BAR)	BOTH PORTS SIMULT.	HIGH OVER LOW LOW OVER HIGH		
672DE*1	7-65 (0.48-4.48)	2-60 (0.14-4.14)	5 (0.345)			нібн	LOW	
672DEM*1	9-65 (0.62-4.48)	2-60 (0.14-4.14)	6 (0.41)	3000 (207)	4500 (310)	2000 (138)	1000 (68.9)	
672DE*4	60-150 (4.1-10.3)	40-130 (2.8-9.0)	20 (1.38)					

## **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: 672DEM1-7076)

## 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)

## OPTIONS MODEL

**F:** Ethylene Propylene O-Ring

M:DPDT Electrical

CODES

Y: ATEX / GOST Certified Electrical Assembly (Consult CCS Sales Department for GOST options and requirements.)

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

## **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 - Baseefa certified for potentially explosive atmospheres. Certificate 04ATEX0114X. IECEx - SIRA certified, Sira 08ATEX1046X. (Option Y)

#### PRESSURE SWITCH CERTIFICATIONS

\* ATEX - Certificate No. Baseefa 03ATEX0700X. Baseefa certified equipment or protective system intended for potentially explosive atmospheres Directive 94/9/EC. In compliance with EN60079-0:2012, EN 60079-1:2007, EN 60079-31:2009.

## ELECTRICAL CHARACTERISTICS 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				
*Gold Contacts -7008 Suffix						

#### SCHEMATIC AND WIRING CODE

