

## Hazardous Areas Pre-Set Pressure Switch

674DE\* - 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 factory setting.
- 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 47 OUNCES (1332 GRAMS)

#### **SERIES:**

674DE\*

## SET POINT RANGE: DIFFERENTIAL PRESSURE:

2 to 800 PSID 0.14 to 55.16 bar 13.79 to 5515 kPa

#### **OPERATING TEMPERATURE:**

Temperature limits change with o-ring selection.

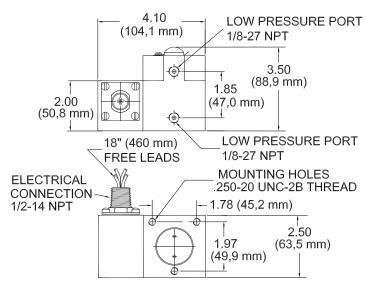
-40° to 186°F -40° to 86°C

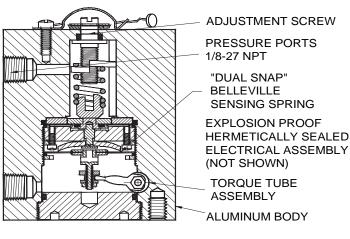
#### STANDARD FEATURES:

- CE Mark
- CCC
- CRN
- NEMA: 4, 7, 9,13 / IP66
- U.L. / CSA Listed
- Hermetically Sealed Electrical Assembly

#### **INSTALLATION DRAWING**

#### **DESIGN PRINCIPLES**





SERIES 674DE

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.



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#### OPERATING AND ORDERING DATA

	WETTED PARTS: 1/8"-27 NPT ALUMINUM PRESSURE PORT & POLYIMIDE DIAPHRAGM, VITON O-RING								
SERIES 674DE*	FIX SET POINT RANGE (SPECIFY SET POINT ON ORDER)		APPROXIMATE DEAD BAND PSI (BAR)		MAX SYSTEM	PROOF PRESSURE PSIG (BAR)			
	INCREASING PRESSURE PSID	DECREASING PRESSURE PSID	AT BOTTOM OF	AT TOP OF	PRESSURE PSIG (BAR)	BOTH PORTS SIMULT.	HIGH OVER LOW LOW OVER		
	(BAR)	(BAR)	RANGE	RANGE			HIGH	LOW	
674DE*1	7-80 (0.48-5.52)	2-68 (0.14-4.68)	5 (0.345)	12 (0.83)					
674DE*2	81-350 (5.58-24.13)	66-297 (4.55-20.48)	14 (.97)	52 (3.59)	3000 (207)	4500 (310)	2500 (172)	2500 (172)	
674DE*3	351-800 (24.2-55.15)	291-680 (20.06-46.88)	60 (4.13)	120 (8.23)					

#### **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: 674DEMY3-7054)

## 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 CODES

**F:** Ethylene Propylene O-Ring

M: DPDT Electrical

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 certified for potentially explosive atmospheres electrical assembly series 46-XXXXXXX, Models 6\*\*\*\*\*, Ex d IIC T6, Directive 94/9/EC Sira 08ATEX1046X. (Option Y). Consult CCS Sales Department for certification requirements.

\* IECEx - SIRA certified, SIR 10,0193X (Option Y)

#### **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

