



CustomControlSensors

# Non-Hazardous Areas Adjustable Pressure Switch

## 604D\* - 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)
- High - low over high capability.
- Various options for wetted materials and electrical ratings to meet a wide range of application requirements and media compatibility.

SHIPPING WEIGHT: APPROXIMATELY 40 OUNCES (1134 GRAMS)

### SERIES:

604D\*

### ADJUSTABLE SET POINT RANGE: DIFFERENTIAL PRESSURE:

0.3 to 75 PSID  
0.02 to 5.17 bar  
2.07 to 517 kPa

### OPERATING TEMPERATURE:

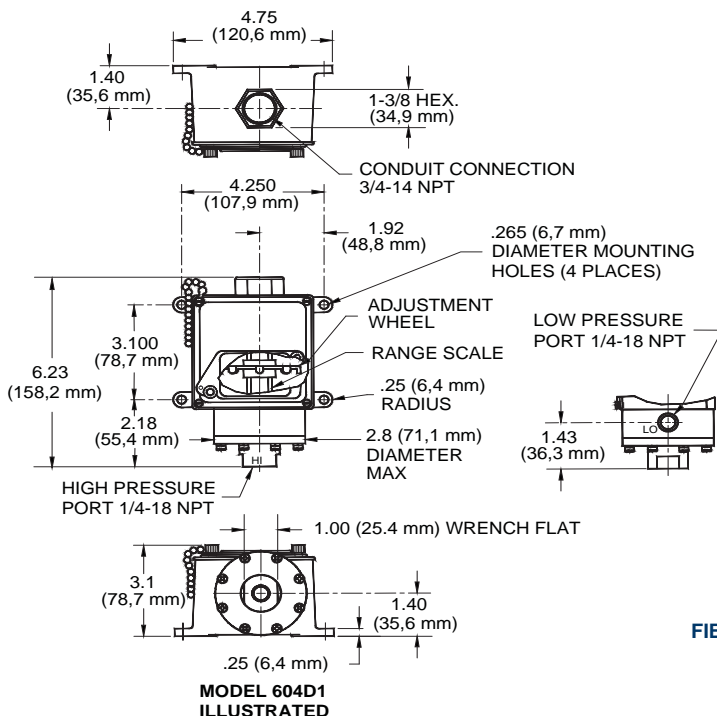
Temperature limits change with o-ring selection.

-40° to 186°F  
-40° to 86°C

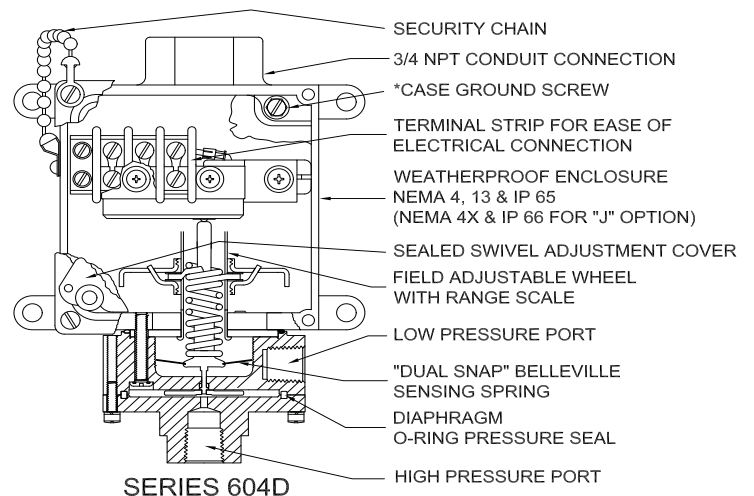
### STANDARD FEATURES:

- CE Mark
- CRN
- CCC
- NEMA: 4,13 / IP65
- Weatherproof
- Internal Case Ground
- U.L. Listed (File No. E72038)

### INSTALLATION DRAWING



### DESIGN PRINCIPLES



**FIELD SETTING:** Open access cover. Adjust wheel as illustrated. Clockwise to increase settings. Counterclockwise to decrease settings.

**NOTE:** DO NOT USE ELECTRICAL HEX FOR TORQUING.





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## 604D\* - Diaphragm Sensor

### OPERATING AND ORDERING DATA

SERIES 604D*	WETTED PARTS: 1/4"-18 NPT ALUMINUM PRESSURE PORT, POLYIMIDE DIAPHRAGM, VITON O-RING						
	ADJUSTABLE SET POINT RANGE		APPROX. DEAD BAND PSI (BAR)	MAX SYSTEM PRESSURE PSIG (BAR)	PROOF PRESSURE PSIG (BAR)		
	INCREASING PRESSURE PSID (BAR)	DECREASING PRESSURE PSID (BAR)			BOTH PORTS SIMULT.	HIGH OVER LOW LOW OVER HIGH	
						HIGH	LOW
604D*1	1-18 (0.069-1.24)	.4-17.4 (0.02-1.2)	.6 (0.042)	400 (28)	750 (52)	750 (52)	400 (28)
604D*2	6-75 (0.42-5.17)	2-71 (0.14-4.9)	4 (0.28)				
604DM*1	1.4-18 (0.097-1.24)	0.5-17.1 (0.034-1.18)	.9 (0.062)				
604DM*2	6-75 (0.42-5.17)	2-71 (0.14-4.9)	4 (0.28)				

SERIES 604DZ*-7011	WETTED PARTS: 1/4"-18 NPT 300 STAINLESS STEEL PRESSURE PORT, STAINLESS STEEL DIAPHRAGM, VITON O-RING						
	ADJUSTABLE SET POINT RANGE		APPROX. DEAD BAND PSI (BAR)	MAX SYSTEM PRESSURE PSIG (BAR)	PROOF PRESSURE PSIG (BAR)		
	INCREASING PRESSURE PSID (BAR)	DECREASING PRESSURE PSID (BAR)			BOTH PORTS SIMULT.	HIGH OVER LOW LOW OVER HIGH	
						HIGH	LOW
604DZ*1-7011	2-18 (0.138-1.24)	.5-16.5 (0.034-1.14)	1.5 (0.103)	400 (28)	750 (52)	400 (28)	100 (6.9)
604DZ*2-7011	9-75 (0.62-5.2)	3-69 (0.21-4.76)	6 (0.414)				

### 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: 604DM2-7008)

### PRESSURE CONVERSION

1 BAR = 14.5 PSI  
1 kPa = 0.145 PSI

### OPTIONS MODEL CODES

- F:** Ethylene Propylene O-Ring
- J:** CSA Approved (File No. LR22665) (SPDT ONLY)
- M:** DPDT Electrical
- X:** Double Break Switching Element

### OPTIONAL STANDARD MODIFIED SUFFIXES

**7008:** Gold Contacts

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

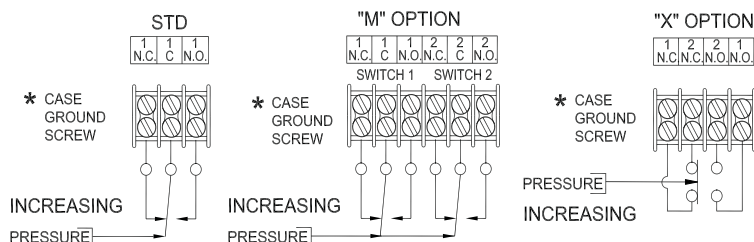
### ELECTRICAL CHARACTERISTICS

RATING OF SWITCH ELEMENT

VOLTS	AMPERES		
	SPDT Res.	DPDT "M" Res.	Dbl Brk "X" Res.
	125 AC - 50/60 Hz	15	5
250 AC - 50/60 Hz	15	5	15
480 AC - 50/60 Hz	15	-	15
28 DC	6	5	-
125 DC	.5	.5	1
250 DC	.2	-	.5
*125 AC - 50/60 Hz	1 max	1 max	-
*30 DC	1 max	1 max	-

\*Gold Contacts -7008 Suffix

### SCHEMATIC AND WIRING CODE



### CERTIFICATIONS

Consult CCS website for complete certification and approval listing.