



CustomControlSensors

# Non-Hazardous Areas Adjustable Temperature Switch

## 604TU\* - Capillary

### 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-temperature capability.
- Various options for electrical ratings to meet a wide range of application requirements.

SHIPPING WEIGHT: APPROXIMATELY 65 OUNCES (1843 GRAMS)

Capillary not shown.

### SERIES:

604TU\*

### ADJUSTABLE SET POINT RANGE: TEMPERATURE:

-39° to 630°F

-39° to 332°C

### OPERATING TEMPERATURE:

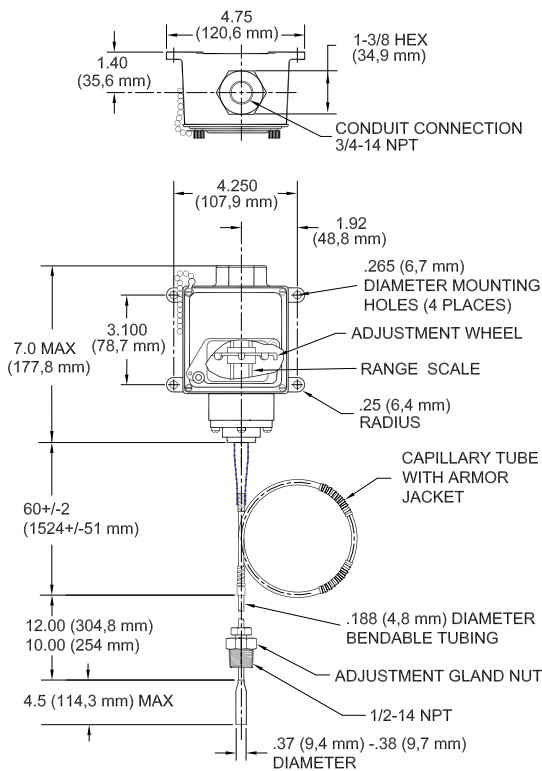
-40° to 186°F

-40° to 86°C

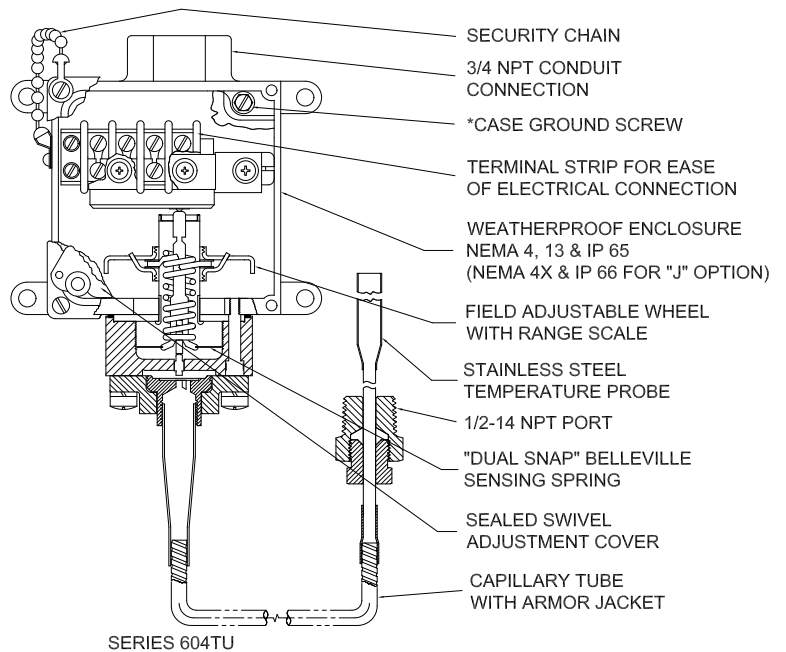
### STANDARD FEATURES:

- CE Mark
- CCC
- NACE MR0175 / ISO 15156
- NEMA: 4,13 / IP65
- Weatherproof
- Internal Case Ground
- U.L. Listed (File No. E72038)

### INSTALLATION DRAWING



### DESIGN PRINCIPLES



**FIELD SETTING:** Remove 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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## 604TU\* - Capillary

### OPERATING AND ORDERING DATA

SERIES 604TU*	WETTED PARTS: 300 STAINLESS STEEL AND GRAPHITE TEMPERATURE PROBE WITH LUBRICATED GLASS FIBER CAPILLARY TUBE				
	ADJUSTABLE SET POINT RANGE		APPROXIMATE DEAD BAND		MAXIMUM PROBE TEMPERATURE DEGREES F (DEGREES C)
	INCREASING TEMPERATURE DEGREES F (DEGREES C)	DECREASING TEMPERATURE DEGREES F (DEGREES C)	AT BOTTOM OF RANGE DEGREES F (DEGREES C)	AT TOP OF RANGE DEGREES F (DEGREES C)	
604TU*1	-30° to +55° (-34° to +13°)	-39° to +52° (-39° to +11°)	9° (5°)	3° (2°)	+150° (66°)
604TU*2	+35° to +140° (+2° to +60°)	+21° to +135° (-6° to +57°)	14° (4°)	5° (3°)	+300° (+149°)
604TU*3	+90° to +210° (+32° to +99°)	+75° to +205° (+24° to +96°)	15° (8°)	5° (3°)	+300° (+149°)
604TU*4	+175° to +310° (+80° to +154°)	+159° to +305° (+71° to +152°)	16° (9°)	5° (2°)	+500° (+260°)
604TU*5	+275° to +420° (+135° to +216°)	+256° to +414° (+123° to +212°)	19° (12°)	6° (4°)	+500° (+260°)
604TU*6	+380° to +525° (+193° to +274°)	+355° to +520° (+179° to +271°)	25° (4°)	5° (3°)	+600° (316°)
604TU*7	+480° to +630° (+249° to +332°)	+456° to +624° (+236° to +329°)	24° (13°)	6° (3°)	+650° (343°)

EXTERNAL PROBE PRESSURE:  
**System Pressure: 1250 PSIG (86 bar)**      **Proof Pressure: 1500 PSIG (103 bar)**

### 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: 604TUM7-7001)

### TEMPERATURE CONVERSION

32 Deg F = 0 Deg C

### OPTIONAL STANDARD MODIFIED SUFFIXES

- 7001: 10' Capillary
- 7002: 15' Capillary
- 7003: 25' Capillary
- 7008: Gold Contacts

### OPTIONS MODEL CODES

- J: CSA Approved (File No. LR22665) (SPDT ONLY)
- M: DPDT Electrical
- X: Double Break Electrical Assembly

### THERMOWELLS

Order as separate line items. See accessory page for detailed information.

- 113-34-1: 1" NPT 316 SST 4.5" "U" Dim.
- 113-34-2: 1" NPT 316 SST 7.5" "U" Dim.
- 113-34-3: 1" NPT 316 SST 10.5" "U" Dim.
- 113-34-4: 1" NPT 316 SST 13.5" "U" Dim.
- 113-35-1: 3/4" NPT 316 SST 4.5" "U" Dim.
- 113-35-2: 3/4" NPT 316 SST 7.5" "U" Dim.
- 113-35-3: 3/4" NPT 316 SST 10.5" "U" Dim.
- 113-35-4: 3/4" NPT 316 SST 13.5" "U" Dim.

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

### CERTIFICATIONS

Consult CCS website for complete certification and approval listing.

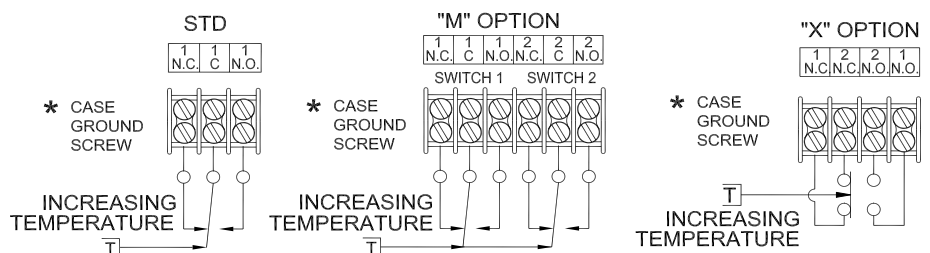
### ELECTRICAL CHARACTERISTICS

RATING OF SWITCH ELEMENT

VOLTS	AMPERES		
	SPDT	DPDT "M"	DbI Brk "X"
	Res.	Res.	Res.
125 AC - 50/60 Hz	15	5	15
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



DUAL-SNAP®

ccsdualsnap.com

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Form 830G, 7.20.15