

Non-Hazardous Areas Adjustable Temperature Switch

6900TU* - Capillary



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-temperature capability. (System and Proof)
- Various options for electrical ratings to meet a wide range of application requirements.

SHIPPING WEIGHT: APPROXIMATELY 32 OUNCES (907 GRAMS)

SERIES:

6900TU*

ADJUSTABLE SET POINT RANGE: TEMPERATURE:

0° to 650°F -18° to 340°C

OPERATING TEMPERATURE:

-40° to 186°F -40° to 86°C

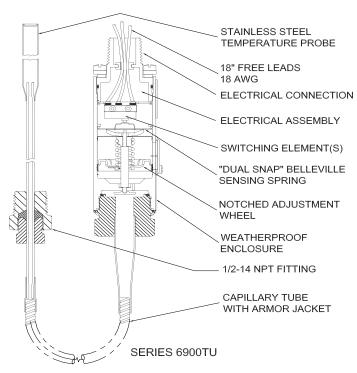
STANDARD FEATURES:

- CE Mark
- CCC
- CSA Listed
- NACE MR0175 / ISO 15156
- NEMA: 4, 13 / IP66
- Weatherproof

INSTALLATION DRAWING

ELECTRICAL CONNECTOR FOUR BLADES CONFORMS TO DIN 43650 1.75 .87 HEX (44,5 mm) (22,1 mm) 18" (457 mm) 18 AWG FRÈE LEADS .75 (19,1 mm) **ELECTRICAL CONNECTION** 1/2-1/4 NPT ADJUSTMENT WHEEL 5.15 MAX (130,8 mm) 5.68 MAX (144,3 mm) (2) MOUNTING HOLES .210 (5,3 mm) DIAMETER .38 / .37 1.34 (34,0 mm) (9,7 / 9,6 mm) 4.5 MAX (114,3 mm) 1.13 (28.6 mm) 1/2 - 14 NPT 1.50 _ (38,1 mm) 12.00 / 10.00 60+2 ADJUSTMENT (305 / 254 mm) (1524 ±50,8 mm) GLAND NUT CAP TUBE WITH 3/16 (4,8 mm) OD ARMOR JACKET BENDABLE TUBING

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.





CustomControlSensors

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OPERATING AND ORDERING DATA

	WETTED PARTS: 300 STAINLESS STEEL TEMPERATURE PROBE WITH 5' STAINLESS STEEL GRAPHITE AND LUBRICATED GLASS FIBER CAPILLARY TUBE				
SERIES 6900TU*	ADJUSTABLE SET POINT RANGE		APPROXIMATE DEAD BAND		MAXIMUM
	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)	PROBE TEMPERATURE DEGREES F (DEGREES C)
6900TU*12	+20° to +120°	+0° to +113°	20°	5°	+200°
	(-7° to +49°)	(-18° to +45°)	(11°)	(4°)	(+93°)
6900TU*14	+80° to +205°	+60° to +198°	20°	5°	+300°
	(+27° to +96°)	(+16° to +92°)	(11°)	(4°)	(+149°)
6900TU*16	+185° to +315°	+165° to +308°	20°	5°	+400°
	(+85° to +157°)	(+74° to +153°)	(11°)	(4°)	(+204°)
6900TU*18	+280° to +405°	+260° to +398°	20°	5°	+500°
	(+138° to +207°)	(+127° to +203°)	(11°)	(4°)	(+260°)
6900TU*20	+385° to +565°	+360° to +555°	25°	10°	+650°
	(+196° to +296°)	(+182° to +291°	(14°)	(5°)	(+343°)
6900TU*22	+465° to +650°	+440° to +640°	25°	10°	+700°
	(+241° to +343°)	(+227° to +338°)	(14°)	(5°)	(+371°)

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:

- Specify the series based on your required set point, range, dead band, system pressure and proof pressure.
- 2. Add desired options model code letter.
- Add the applicable standard suffix number.

(Ex: 6900TUM12-7090)

TEMPERATURE CONVERSION

32 Deg F = 0 Deg C

OPTIONAL STANDARD MODIFIED SUFFIXES

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

7042: Stainless Steel Body **7075:** Electrical Connector with 4 Blades Conforms to DIN-43650 (SPDT only)

7090: 2 Meter Free Leads 7092: 18 inch Teflon Free Leads (Low Temp Wire)

OPTIONS MODEL CODES

M: DPDT Electrical

ACCESSORIES - SOLD SEPARATELY

69-102: Mating DIN-43650 Connector **57-159:** Sealing DIN-46650 Gasket

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

THERMOWELLS

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

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

CERTIFICATIONS

Consult CCS website for complete certification and approval listing.

ELECTRICAL ENCLOSURE CERTIFICATIONS

CSA listed by Canadian Standard Association (CSA) Testing Laboratories (File No. LR22665) for enclosure (4) non-hazardous locations.

ELECTRICAL CHARACTERISTICS SCHEMATIC AND WIRING CODE

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					

