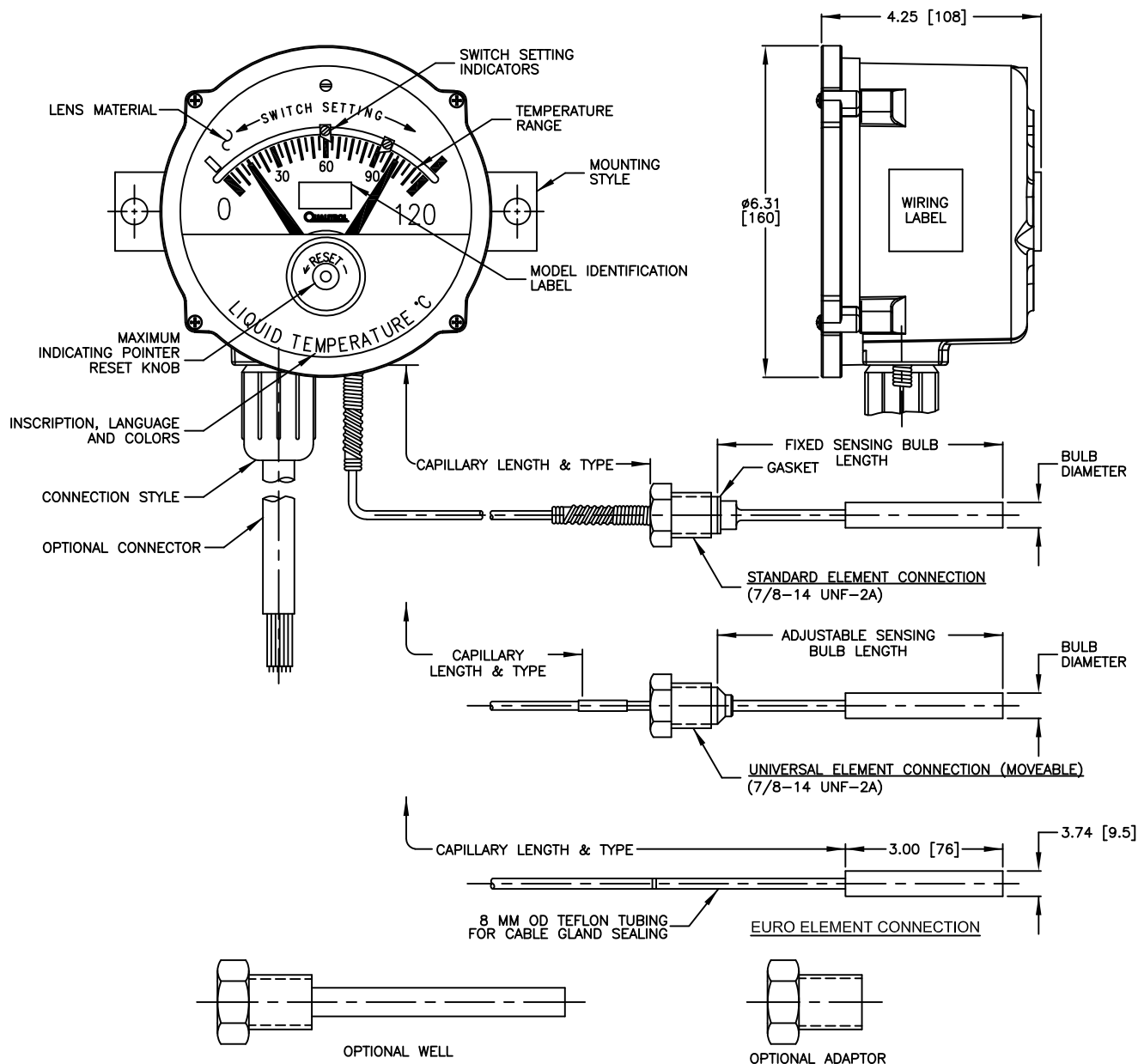


# Product Information

## 6" Remote Thermometer

### General

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#### NOTES: (UNLESS OTHERWISE SPECIFIED)

1. CASE: CAST ALUMINUM WITH ASA #70 LIGHT GRAY FINISH.
2. BEZEL: CAST ALUMINUM - REMOVABLE.
3. ENVIRONMENTAL SUITABILITY: SPECIFIED ON ORDER.
4. LENS MATERIAL: SPECIFIED ON ORDER.
5. DIAL COLORS: SPECIFIED ON ORDER.
6. POINTER COLOR: AS PER DIAL COLOR.
7. MAXIMUM INDICATING POINTER COLOR: RED.
8. SWITCH SETTING INDICATOR COLOR: SILVER.
9. SWITCH SETTINGS: SPECIFIED ON ORDER.
10. SWITCH SETTING ADJUSTABLE CENTRAL 80% OF DIAL RANGE.
11. SWITCH DIFFERENTIAL:  $7.5^{\circ}\text{C} \pm 2.5^{\circ}\text{C}$ .
12. ACCURACY:  $\pm 2\%$  OF DIAL RANGE.
13. SWITCH RATING (STANDARD):
  - UL/CSA RATING: 10 AMPS AND 1/3 HP @ 125, 250 VAC
  - 1/2 AMP @ 125 VDC (NON-INDUCTIVE)
  - 1/4 AMP @ 250 VDC (NON-INDUCTIVE)
  - 4 AMPS @ 125 VAC "L" (LAMP LOAD)
- (GOLD PLATED SWITCH CONTACTS AVAILABLE FOR 0.1 AMP @ 125 VAC).

14. CASE ASSEMBLY DIELECTRIC STRENGTH: 2,000 VOLTS TO GROUND FOR 60 SECONDS.
- SCADA REMOTE OUTPUT DIELECTRIC STRENGTH: 500 VOLTS TO GROUND FOR 60 SECONDS.
- TERMINAL BOX DIELECTRIC STRENGTH: 2,000 VOLTS TO GROUND FOR 60 SECONDS.
15. TO ADJUST SWITCH INDICATOR(S):
  - A.) REMOVE BEZEL AND LENS ASSEMBLY.
  - B.) LOOSEN SCREWS AND MOVE SWITCH SETTING INDICATOR TO DESIRED SETTING. RE-TIGHTEN SCREWS.
  - C.) REPLACE BEZEL AND LENS ASSEMBLY.
16. TO CHECK SWITCH OPERATION MANUALLY:
  - A.) REMOVE BEZEL AND LENS ASSEMBLY.
  - B.) TURN POINTER CLOCKWISE PAST THE SWITCH SETTING INDICATOR.
  - C.) SLOWLY RETURN THE POINTER TO ITS ORIGINAL POSITION.
  - D.) REPLACE BEZEL AND LENS ASSEMBLY.
  - E.) **CAUTION!!** POINTER MUST NEVER BE TURNED COUNTERCLOCKWISE.
17. DEVICE WIRING: SPECIFIED ON ORDER.
18. SCADA INPUT VOLTAGE: 90-264 VAC 50/60 Hz., OR 125/250 VDC, CONNECT TO TB2 1-2.
19. SCADA SEALING: END CUSTOMER IS RESPONSIBLE FOR PROPER CABLE GLAND SEALING.

# Product Information

## 6" Remote Thermometer

### Option Sheet

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**TYPE**

BASIC  SCADA

**CONSULT FACTORY**

SPECIAL LABELING

**mA OUTPUT**

0-1 mA (std)  
 0-1 mA w/ LTC OUTPUT  
 4-20 mA  
 4-20 mA w/ LTC OUTPUT

**LENS MATERIAL**

POLYCARBONATE (std)  
 TEMPERED GLASS

**SWITCH SETTINGS IN °C (see temp. range chart for available setting range)**

NUMBER OF SWITCHES	SWITCH #1 (>#1)	SWITCH #2 (>#2)	SWITCH #3 (>#3)	SWITCH #4 (>#4)
<input type="checkbox"/> NONE	Specify settings in 5°C increments. Switch differential is 5°/10° C.			
<input type="checkbox"/> 1				
<input type="checkbox"/> 2				
<input type="checkbox"/> 3				
<input type="checkbox"/> 4				

Switch #1 Operation:  RISING (std)  
 FALLING. All other switches operate on rising temperature.

**GAGE MOUNTING STYLE**

BTMMTPLT  
 EUROVIB  
 INT1/2THD  
 STDPLATE (std)  
 STUD3/4  
 UNIVPLT

**GAGE MOUNTING STYLE**

SCADAPLT (std)  
 SCADAVIB

**CABLE ENTRY PORTS**

ADP3/4NPSM  
 CABGRIPS (std)  
 THRU3/4DIA  
 THRU7/8DIA  
 7/8&17/16D (req'd for LTC)  
 TBPG16SCDA (req'd for non-LTC TERMINAL BOX)

**CONNECTION STYLE (for switches)**

QUALITROL (detachable)  
 ANSI (detachable)  
 MILITARY (detachable) SCADA n/a  
 PERM. ATTACHED  
 TERMINAL BOX (req'd for SCADA LTC)

**ENVIRONMENTAL CONDITIONS**

OUTDOOR, VENTED (NEMA 3R, std)  
 OUTDOOR, SEALED (IP65)  
 TROPICAL, HIGH HUMIDITY (IP65)  
 CORROSIVE (hydrogen sulfide) (IP65)

**SWITCH RATING**

10 Amps @ 125/250 VAC (std)  
 0.1 Amp @ 125 VAC (gold)

**DIAL INSCRIPTION**

LIQUID TEMPERATURE °C  
 WINDING TEMPERATURE °C  
 °C  
 UNIVERSAL (BOTH LIQ. AND WIND. DIALS)  
 TEMPERATURE °C (ENGLISH and FRENCH ONLY)  
 OTHER (consult factory)

**CAPILLARY TYPE**

BARE COPPER  
 W/ COPPER BRAIDED COVER (std)  
 NOPRENE COVER  
 STN STEEL ARMOR  
 STN STEEL ELEMENT (ext)

Inches Specify 6" increments (540" max.)  
 Meters Specify increments of 1 M (13 M max.)

**CAPILLARY LENGTH:**

**DEVICE WIRING**


**CONNECTOR NUT OR TERMINAL BOX STYLE**

--

**TEMPERATURE RANGE**  
(°C switch setting range)

TEMPERATURE RANGE	AVAIL. COLORS	MARKINGS
<input type="checkbox"/> 0/160°C (16/144)	w/b, y/b	
<input type="checkbox"/> 0/120°C (12/108)	w/b, y/b	0, 30, 60, 90, 120
<input type="checkbox"/> 0/120°C & 32/248°F (12/108)	w/b	0, 30, 60, 90, 120 DUAL SCALE
<input type="checkbox"/> 0/120°C (12/108)	w/b	0, 40, 80, 120
<input type="checkbox"/> 0/140°C (14/126)	w/b	
<input type="checkbox"/> 0/160°C & 32/320°F (16/144)	w/b	DUAL SCALE
<input type="checkbox"/> 0/180°C (18/162)	w/b, y/b	
<input type="checkbox"/> 0/180°C & 32/356°F (18/162)	w/b	DUAL SCALE
<input type="checkbox"/> 0/200°C (20/180)	w/b	
<input type="checkbox"/> 0/220°C (22/198)	w/b, y/b	
<input type="checkbox"/> 20/180°C (36/164)	w/b, y/b	
<input type="checkbox"/> 20/200°C (38/182)	w/b	
<input type="checkbox"/> -20/120°C (-6/106)	w/b	5°C GRADS
<input type="checkbox"/> -20/120°C (-6/106)	y/b	2°C GRADS
<input type="checkbox"/> -20/160°C (-2/142)	w/b, y/b	
<input type="checkbox"/> -40/140°C (-22/122)	w/b	
<input type="checkbox"/> -60/120°C (-42/102)	w/b	

w/b = white characters on black background, y/b = yellow characters on black background

**EXTERNAL WIRING**

<input type="checkbox"/> CABLE	<input type="checkbox"/> 16 Ga. SOW-A/SO (std) <input type="checkbox"/> Other (consult factory)
<input type="checkbox"/> FLYING LEADS	<input type="checkbox"/> 16 Ga. TEW (std) <input type="checkbox"/> 16 Ga. TEF <input type="checkbox"/> 14 Ga. TEW
<input type="checkbox"/> NONE	
<input type="checkbox"/> CONNECTOR PARTS ONLY	

**LENGTH OF CABLE OR FLYING LEADS**

<input type="checkbox"/> Inches Specify 6" increments (900" max.)	<input type="checkbox"/> Meters Can be specified to 0.1 M (22.8 M max.)
<b>LENGTH:</b>	

**INSRIPTION LANGUAGE (and colors)**

<input type="checkbox"/> ENGLISH (w/b), std
<input type="checkbox"/> FRENCH (w/b)
<input type="checkbox"/> GERMAN (y/b)
<input type="checkbox"/> PORTUGUESE (w/b)
<input type="checkbox"/> SPANISH (w/b)
<input type="checkbox"/> NO LOWER DIAL

**THREAD**  
(see chart)

7/8-14 UNF-2B

**OR**

**THREAD**  
(see chart)

7/8-14 UNF-2B

**OPTIONAL WELL** (for std. .481 bulb dia. ONLY)

<input type="checkbox"/> 167-50-3D; 1/2 NPT FOR 5.81" (148mm) bulb length (brass)
<input type="checkbox"/> 167-50-3E; 7/8-14 UNF-2A for 5.81" (148mm) bulb length (brass)
<input type="checkbox"/> 167-50-3L; 3/4 NPT for 5.81" (148mm) bulb length (brass)
<input type="checkbox"/> WEL-600-1; 7/8-14 UNF-2A for 6.38" (162mm) bulb length (brass)
<input type="checkbox"/> WEL-611-1; 1/2 NPT FOR 9.68" (246mm) bulb length (brass)
<input type="checkbox"/> WEL-625-1; 1/2 NPT FOR 5.81" (148mm) bulb length (stn stl)
<input type="checkbox"/> WEL-626-1; 3/4 NPT FOR 9.68" (246mm) bulb length (brass)

**OPTIONAL ADAPTOR**

<input type="checkbox"/> ADP-115-1; 3/8 NPT MALE	<input type="checkbox"/> ADP-179-1; 1.06-18 MALE
<input type="checkbox"/> ADP-170-1; 1/2 BSP PRL MALE	<input type="checkbox"/> ADP-180-1; 1.12-18 MALE
<input type="checkbox"/> ADP-174-1; 1/2 NPT MALE	<input type="checkbox"/> ADP-181-1; 1.62-12 MALE
<input type="checkbox"/> ADP-175-1; 1/2 NPT FEMALE	<input type="checkbox"/> ADP-182-1; 3/4-16 MALE
<input type="checkbox"/> ADP-176-1; 3/4 NPT FEMALE	<input type="checkbox"/> ADP-183-1; 3/4 NPSM FEMALE
<input type="checkbox"/> ADP-177-1; 1-14 MALE	<input type="checkbox"/> 167-50-29F; 7/8-14 MALE
<input type="checkbox"/> ADP-178-1; 1-18 MALE	<input type="checkbox"/> 167-50-29L; 3/4 NPT MALE

**SENSING BULB LENGTH**

<input type="checkbox"/> 18" (457 mm) ADJUSTABLE
<input type="checkbox"/> 26" (660 mm) ADJUSTABLE
<input type="checkbox"/> 3.00" (76 mm), EURO ONLY
<input type="checkbox"/> 5.00" (127 mm) FIXED
<input type="checkbox"/> 5.81" (148 mm) FIXED (std)
<input type="checkbox"/> 6.38" (162 mm) FIXED
<input type="checkbox"/> 9.68" (246 mm) FIXED

Note: Adjustable length bulbs must be used in wells.

**BULB DIAMETER**

<input type="checkbox"/> 0.312" (7.9 mm)
<input type="checkbox"/> 0.374" (9.5 mm)
<input type="checkbox"/> EURO ONLY
<input type="checkbox"/> 0.375" (9.5 mm)
<input type="checkbox"/> 0.481" (12.2 mm) (std)
<input type="checkbox"/> 0.625" (15.9 mm)
<input type="checkbox"/> 0.675" (17.1 mm)
<input type="checkbox"/> UNIVERSAL (.312", .375", .481", .625", .675")

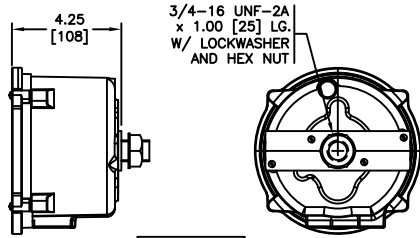
Note: Not all option combinations are available, please consult factory.

# Product Information

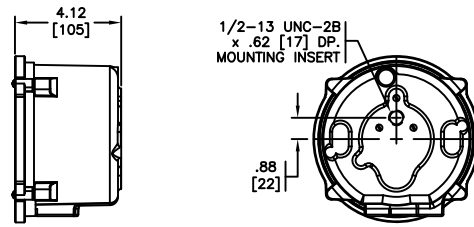
## 6" Remote Thermometer

### Basic Thermometer Mounting

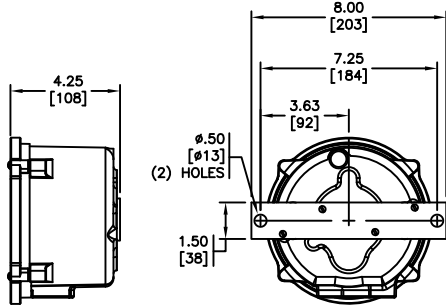
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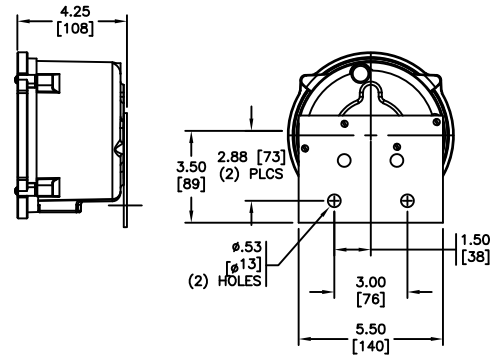
STUD3/4



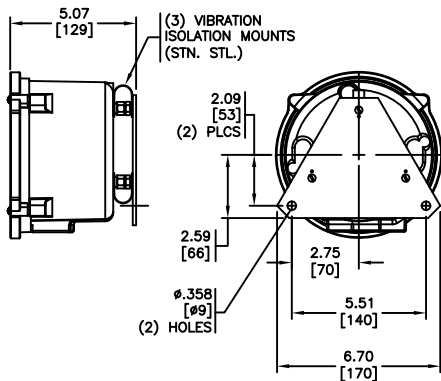
INT1/2THD



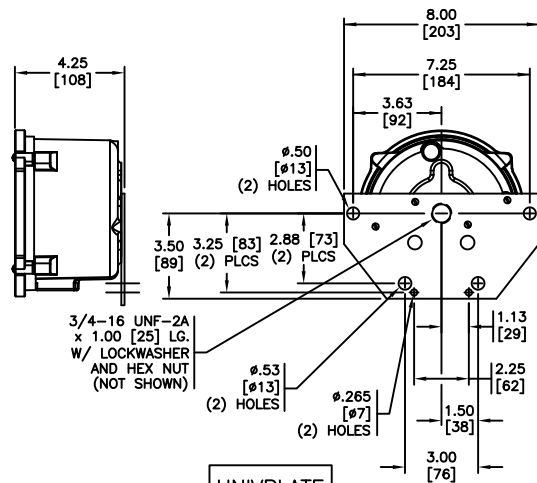
STDPLATE



BTMMTPLT



EUROVIB



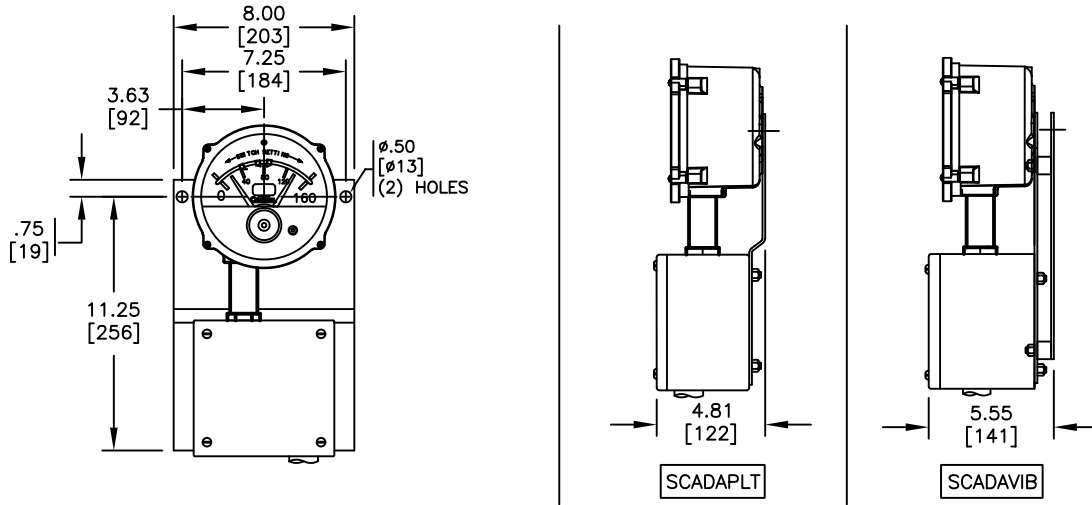
UNIVPLATE

# Product Information

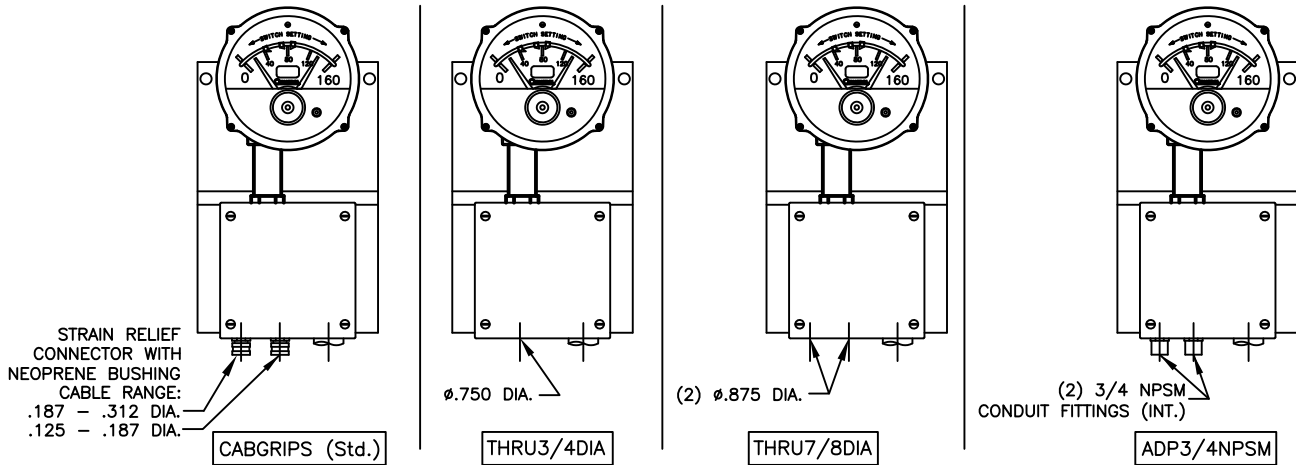
## 6" Remote Thermometer

### Scada Thermometer Mounting/Cable Entry

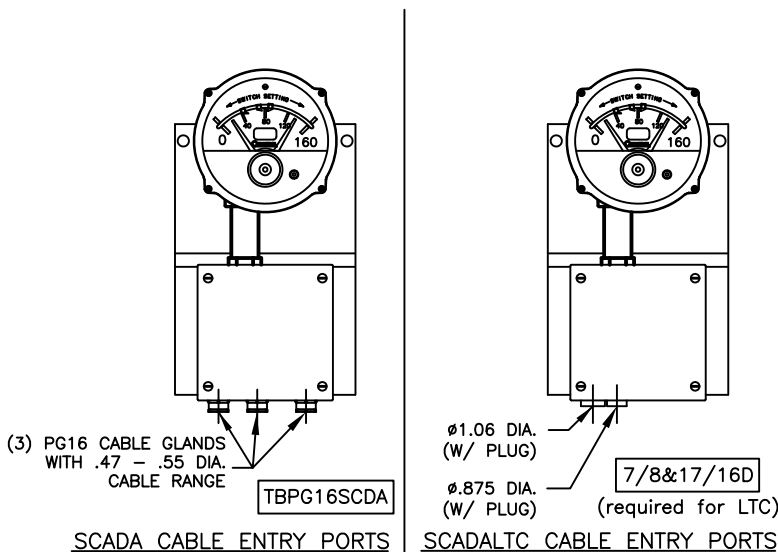
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SCADA AND SCADALTC GAGE MOUNTING STYLES



SCADA CABLE ENTRY PORTS  
FOR DETACHABLE OR PERM ATT. CONNECTOR MODELS ONLY



FOR TERMINAL BOX MODELS ONLY

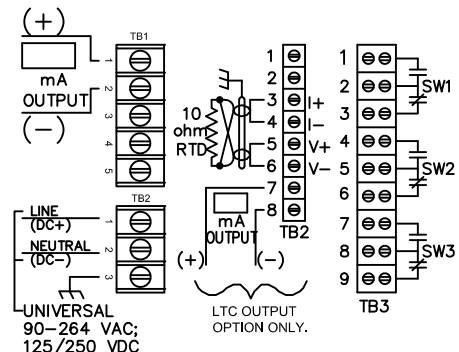
#### SCADA TERMINAL BLOCK CONNECTIONS

POWER SUPPLY INPUTS, THERMOMETER mA OUTPUTS:  
12 AWG MAX., .31 WIDE RINGS/TERMINALS, #6-32 SCREWS

THERMOMETER SWITCH CONTACTS (SCADALTC ONLY):  
14 AWG MAX., .31 WIDE RINGS/TERMINALS, #6-32 SCREWS

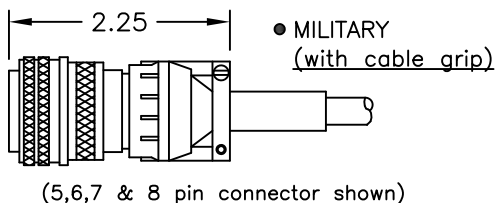
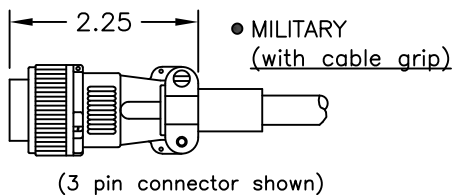
LTC RTD INPUTS AND mA OUTPUTS (SCADALTC ONLY):  
16 AWG MAX., SCREW-CLAMP CONNECTION

THERMOMETER SWITCH CONTACTS (SCADA TERMINAL BOX ONLY):  
12 AWG MAX., SCREW-CLAMP CONNECTION

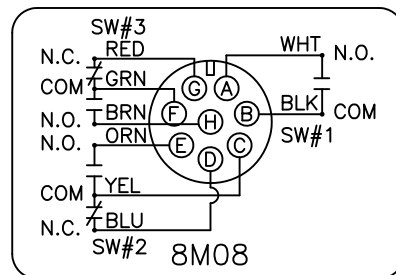
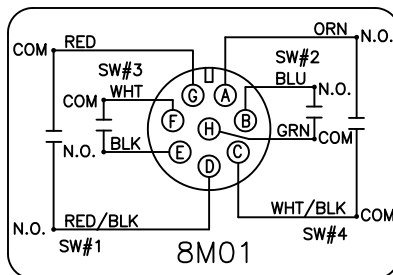
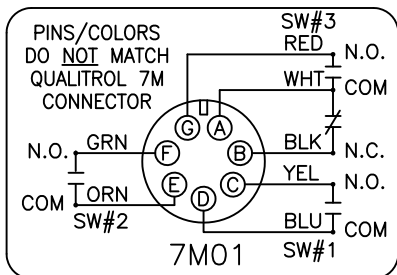
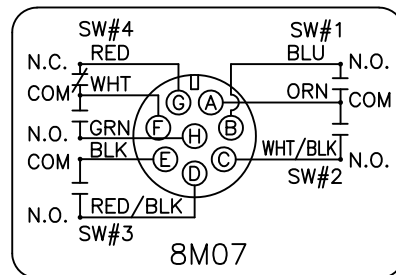
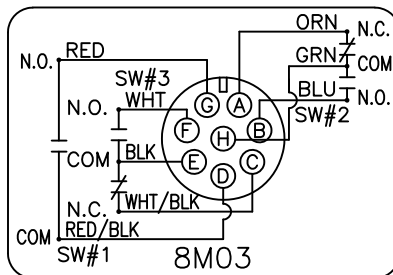
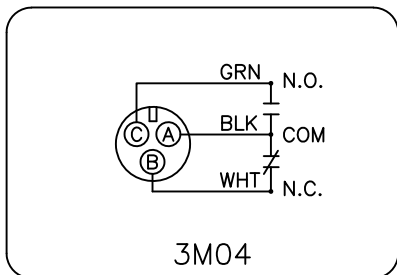




CONNECTOR NUT STYLES AND DEVICE WIRING  
 FOR MILITARY DETACHABLE CONNECTORS



MILITARY



NO CONNECTOR AVAILABLE

# Product Information

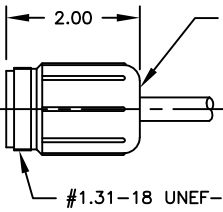
## 6" Remote Thermometer

### Device Wiring & Connector Styles

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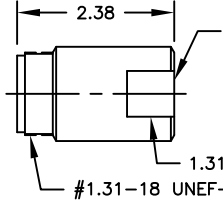
#### STANDARD NUT



- AVAILABLE SHELL OPTIONS:
- STDSHELL with Strain Relief (cable only) **F**
  - STD1/2NPT Standard Shell with 1/2" NPT **A**
  - STDW/PG16 Standard Shell with PG16 thread **A**

STDSHELL    STD1/2NPT    STDW/PG16

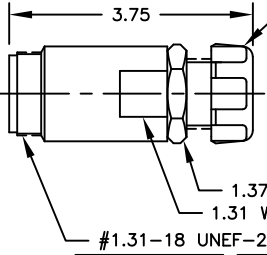
#### CONDUIT ADAPTOR



- AVAILABLE THREAD OPTIONS:
- ADP1/2NPT Conduit Adaptor with 1/2" NPT **A**
  - ADP3/4NPT Conduit Adaptor with 3/4" NPT **B**

ADP1/2NPT    ADP3/4NPT

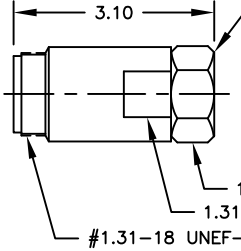
#### SPIN NUT (FLEX CONDUIT ADAPTOR)



- AVAILABLE CONDUIT SIZES:
- SPIN1/2FLX Spin Nut for 1/2" flexible conduit **C**
  - SPIN3/4FLX Spin Nut for 3/4" flexible conduit **D**

SPIN1/2FLX    SPIN3/4FLX

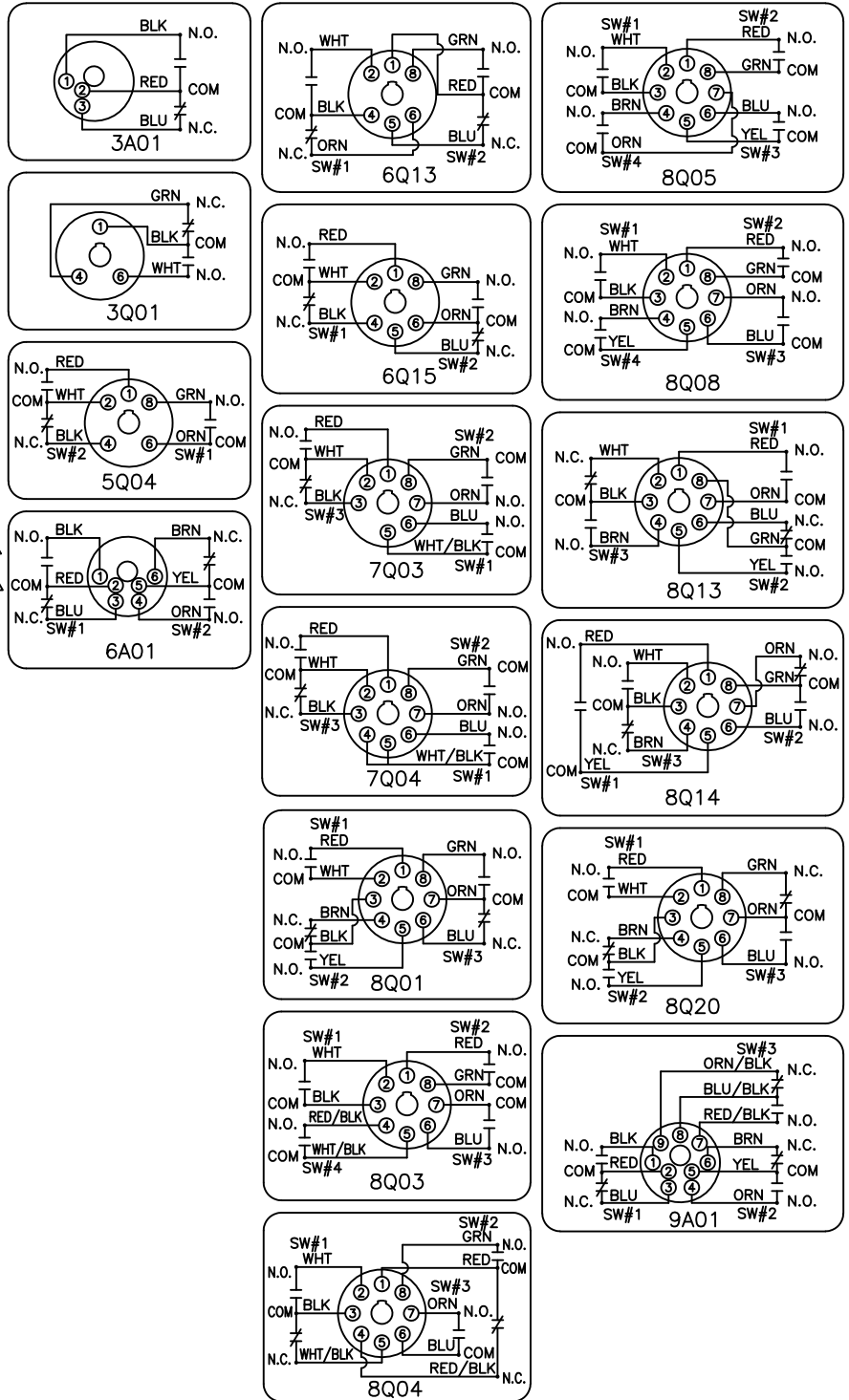
#### SPIN NUT (CONDUIT ADAPTOR)



- AVAILABLE THREAD OPTIONS:
- SPIN1/2NPT Spin Nut with 1/2" NPT **A**
  - SPIN3/4NPT Spin Nut with 3/4" NPT **E**
  - SPINW/M20 Spin Nut with M20 thread **A**

SPIN1/2NPT    SPIN3/4NPT    SPINW/M20

### CONNECTOR NUT STYLES AND DEVICE WIRING FOR QUALITROL AND ANSI DETACHABLE CONNECTORS (UP TO 9 LEADS - SEE CHART FOR WIRE SIZE LIMITS)



	CABLE SIZE	# FLYING LEADS LIMIT
<b>A</b>	#14/4 MAX.	#14 GA. 9 LEADS MAX.
	#16/8 MAX.	#16 GA. 9 LEADS MAX.
<b>B</b>	#14/8 MAX.	#14 GA. 9 LEADS MAX.
	#16/9 MAX.	#16 GA. 9 LEADS MAX.
<b>C</b>	#16/5 MAX.	#14 GA. 9 LEADS MAX.
		#16 GA. 9 LEADS MAX.
<b>D</b>	#14/6 MAX.	#14 GA. 9 LEADS MAX.
	#16/9 MAX.	#16 GA. 9 LEADS MAX.
<b>E</b>	#14/4 MAX.	#14 GA. 9 LEADS MAX.
	#16/9 MAX.	#16 GA. 9 LEADS MAX.
<b>F</b>	#14/8 MAX.	#14 GA. 9 LEADS MAX.
	#16/9 MAX.	#16 GA. 9 LEADS MAX.

# Product Information

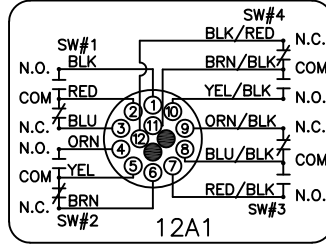
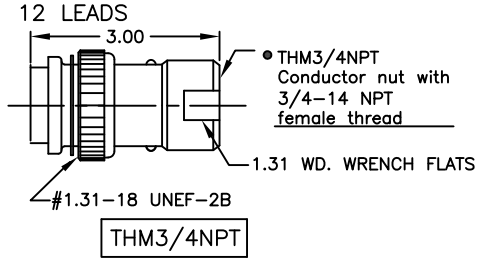
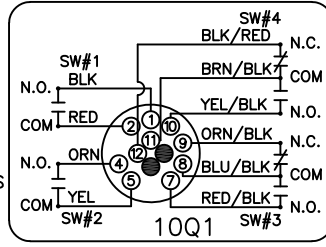
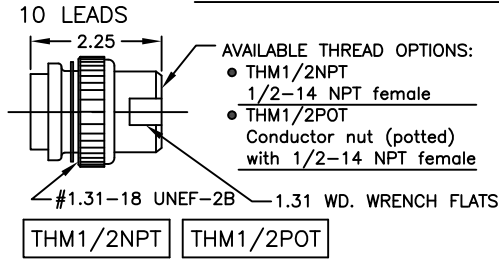
## 6" Remote Thermometer

### Device Wiring & Connector Styles

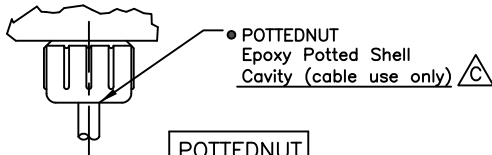
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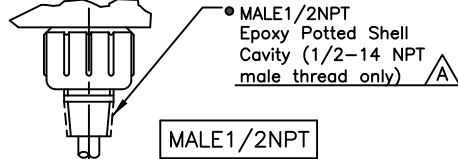
#### QUALITROL 10 CONDUCTOR/ANSI 12 CONDUCTOR NUT STYLES AND DEVICE WIRING



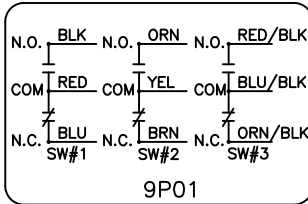
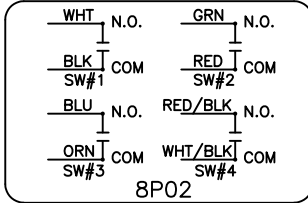
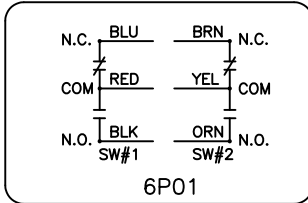
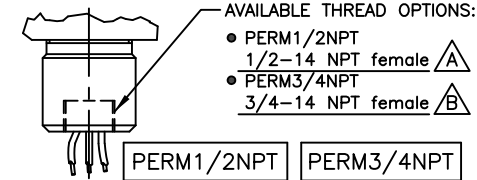
#### POTTED CABLE CONNECTION



#### MALE CONDUIT CONNECTION

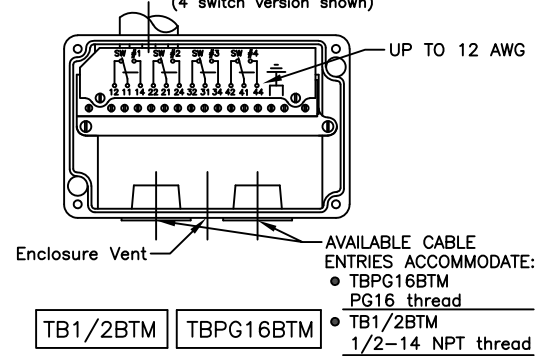


#### FEMALE CONDUIT CONNECTION

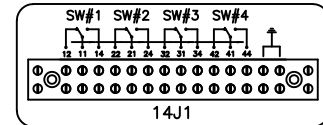
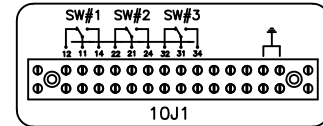
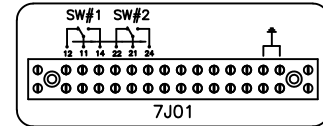
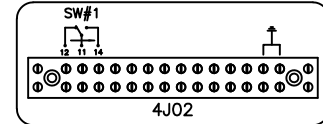
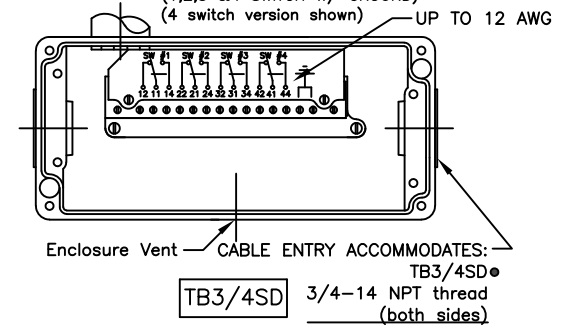


#### DEVICE WIRING FOR TERMINAL BOX (SEE SH. 4 FOR SCADA ENCLOSURE)

##### TERMINAL BOX – BOTTOM ENTRY (1,2,3 & 4 SWITCH W/ GROUND) (4 switch version shown)



##### TERMINAL BOX – SIDE ENTRY (1,2,3 & 4 SWITCH W/ GROUND) (4 switch version shown)



#### CONNECTOR NUT STYLES AND DEVICE WIRING FOR PERMANENTLY ATTACHED CABLES AND WIRES (SEE CHART FOR WIRE SIZE LIMITS)

	CABLE SIZE	FLYING LEAD SIZE
⚠	#16/8 MAX.	#14 GA. 9 LEADS MAX. #16 GA. 9 LEADS MAX.
⚠	#14/8 MAX. #16/9 MAX.	#14 GA. 9 LEADS MAX. #16 GA. 9 LEADS MAX.
⚠	#16/9 MAX.	

