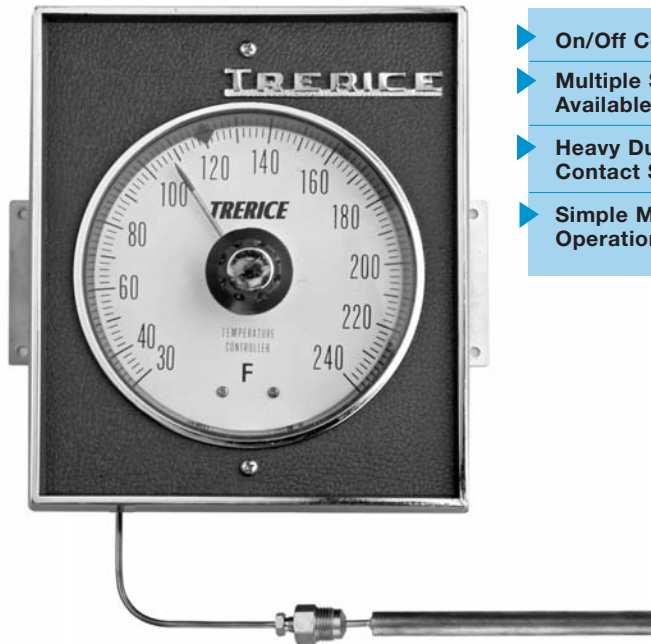


L84000 Series Electric Contact Controller

CONTROLLERS



- ▶ On/Off Control
- ▶ Multiple Switches Available
- ▶ Heavy Duty Contact Switches
- ▶ Simple Mechanical Operation

L84000 shown

The Trerice **L84000 Series** Electric Contact Controller is designed for applications that require the opening and closing of electric solenoid valves, heaters, and other electrical devices. It is a rugged and versatile controller, capable of producing "On/Off" control over a wide range of temperatures from -100°F to 700°F. This controller includes a setting adjustment knob and one or more SPDT electric contact switches.

For applications where the process media may be corrosive or contained under pressure, the use of a thermowell is required to prevent damage to the controller and facilitate its removal from the process. (Refer to page 212)

Specifications

Models

- L84000** (1 switch)
- L84100** (2 switch)
- L84200** (3 switch)
- L84300** (4 switch)

Control On/Off, via electric contact switch

Dial Size 6"

Movement Stainless Steel and Brass

Case Blue ABS plastic, panel mounted

Cover Blue ABS plastic, close cell rubber gasketed

Window Acrylic

Pointer Brass

Switch Ratings

L84000, L84100:
10 A @ 125/250 VAC,
0.25 A @ 120 VDC

L84200, L84300:
5 A @ 250 VAC,
5 A res./3 A ind. @ 28 VDC

Dialface Aluminum, white background with black graduations and markings

Accuracy ± One Scale Division

Approximate Shipping Weight

9.0 lbs [4.09 kg]

HOW TO ORDER

Sample Order Number: **L 84100 145 B10 10 W02**

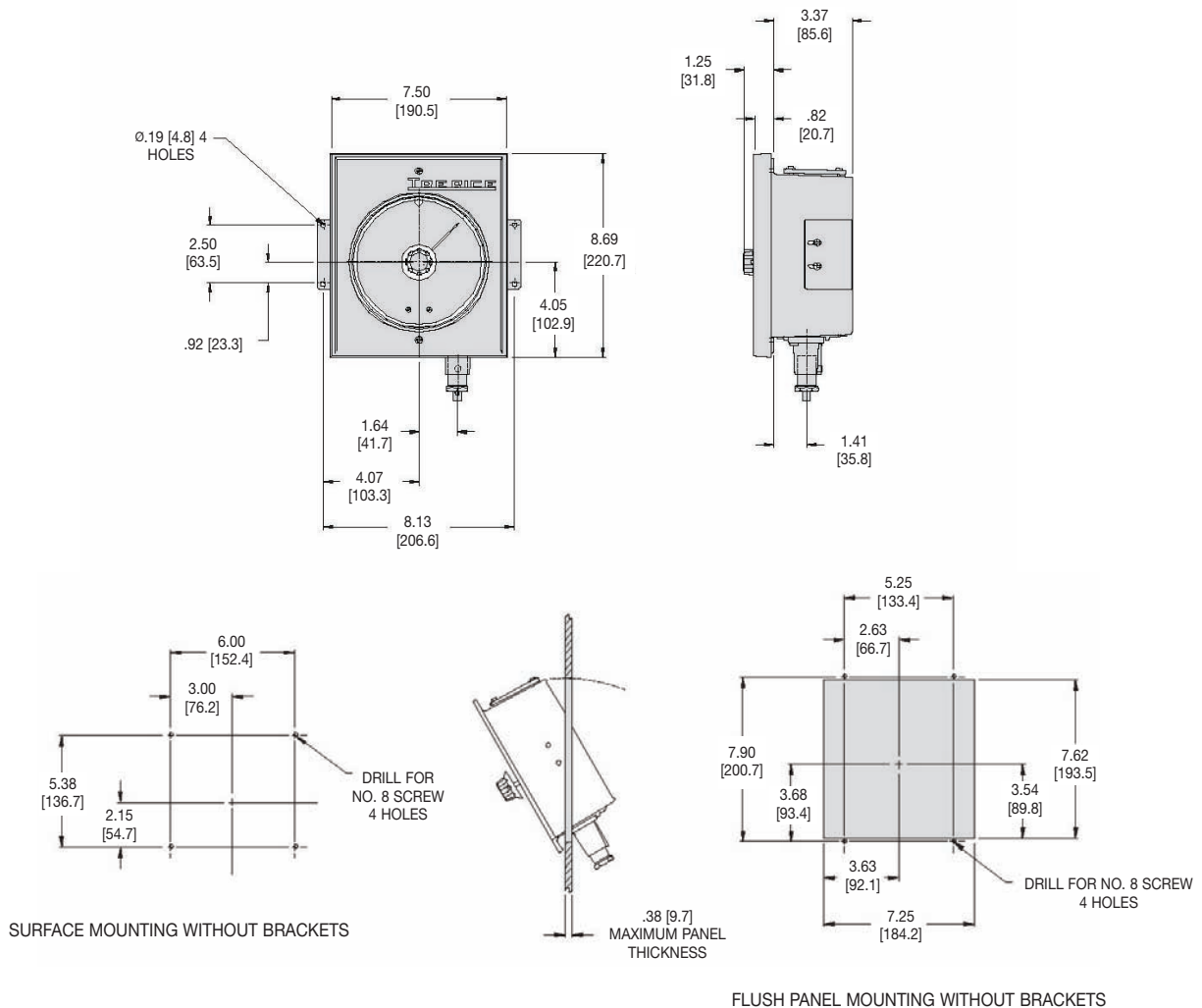
Actuation	Model	Specific Range	Thermal System	Capillary Length	Thermowell
L Liquid	84000 1 Switch	Refer to Standard Ranges (page 209)	Refer to Thermal System Selection (pages 210-211)	05 5 Feet	W02 Brass W05 304 SS W06 316 SS
	84100 2 Switch			10 10 Feet	
	84200 3 Switch			15 15 Feet	
	84300 4 Switch			20 20 Feet	W12 Brass W15 304 SS W16 316 SS
	20 Feet Maximum				

L84000 Series

Electric Contact Controller

All dimensions are nominal. Dimensions in [] are in millimeters

CONTROLLERS



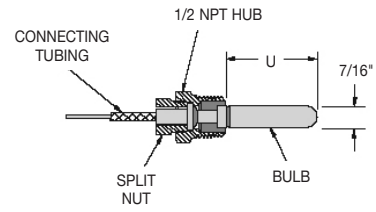
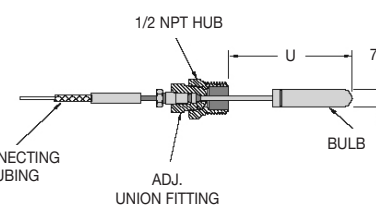
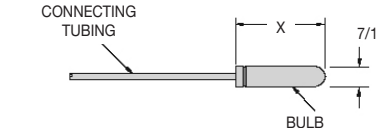
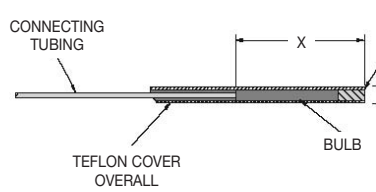
Standard Ranges

Fahrenheit Ranges		Celsius Ranges		Fahrenheit & Celsius Ranges	
Range Code	Range	Range Code	Range	Range Code	Range
105	-100° to 100°F	225	-70° to 40°C	325	-30° to 170°F & -35° to 75°C
125	-30° to 170°F	245	-35° to 75°C	345	50° to 350°F & 10° to 75°C
145	0° to 200°F	265	0° to 115°C	355	50° to 700°F & 10° to 370°C
165	30° to 240°F	295	10° to 175°C		
175	50° to 350°F	305	10° to 370°C		
195	50° to 700°F				
215	200° to 400°F				

Thermal System Selection

for L84000 Series Electronic Contact Controller

CONTROLLERS

Bulb and Capillary Style	Order Code	Connection Style & Material	Bulb Material	Capillary Tubing Material
Union Connection 	B01*	Brass, 1/2 NPT	Copper	Copper with Bronze Braided Armor
	B10	Stainless Steel, 1/2 NPT	Stainless Steel	Stainless Steel
	B15*	Brass, 1/2 NPT	Copper	Copper with Bronze Braid and Stainless Steel Spiral Armor
	B16	Stainless Steel, 1/2 NPT	Stainless Steel	Stainless Steel with Stainless Steel Spiral Armor
Adjustable Union Connection 	B02*	Brass, 1/2 NPT	Copper	Copper with Bronze Braided Armor
	B04**	Stainless Steel, 1/2 NPT	Stainless Steel	Stainless Steel
Plain Bulb 	B05*	None	Copper	Copper with Bronze Braided Armor
	B06	None	Stainless Steel	Stainless Steel
Teflon Covered Bulb 	B08*	None	Copper with Teflon Covering	Copper with Teflon Covering
	B07*	None	Stainless Steel with Teflon Covering	Stainless Steel with Teflon Covering

*Not available with Temperature Ranges over 450°F (232°C).

**Ranges over 450°F (232°C), one-time adjustment only.

Thermal System Selection

for L84000 Series Electronic Contact Controller

Minimum Bulb Insertion Length (U/X)

Liquid Actuated

Temperature Range

-100° to 100°F	-30° to 170°F 0° to 200°F 30° to 240°F 200° to 400°C	50° to 350°F	50° to 700°F
37/8" (Use 6" thermowell)	53/8"	37/8" (Use 6" thermowell)	N/A
37/8" (Use 6" thermowell)	53/8"	37/8" (Use 6" thermowell)	15/8"
37/8" (Use 6" thermowell)	53/8"	37/8" (Use 6" thermowell)	N/A
37/8" (Use 6" thermowell)	53/8"	37/8" (Use 6" thermowell)	15/8"
37/8"	53/8"	37/8"	N/A
Adjustable up to 24"			
37/8"	53/8"	37/8"	15/8"
Adjustable up to 24"			
4"	51/2"	4"	N/A
4"	51/2"	4"	111/16"
N/A	22"	15"	N/A
N/A	22"	15"	N/A

CONTROLLERS

Thermowells

for L84000 Electric Contact Controllers

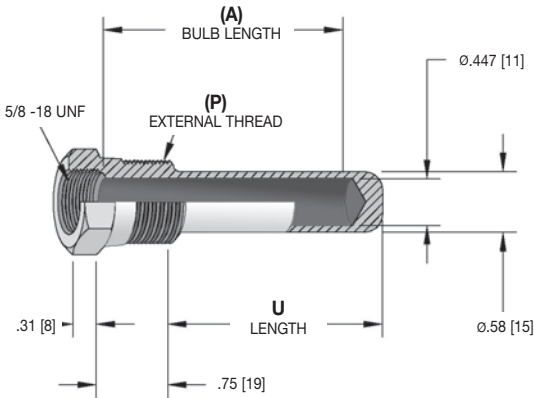
All dimensions are nominal. Dimensions in [] are in millimeters.

If Thermowells are to be purchased as a separate item, or if a Special Thermowell is required, please refer to this page. If a complete Electric Contact Controller is purchased, the proper Thermowell to match the sensing bulb ordered will be supplied. Please note sensing bulb size is affected by temperature range.

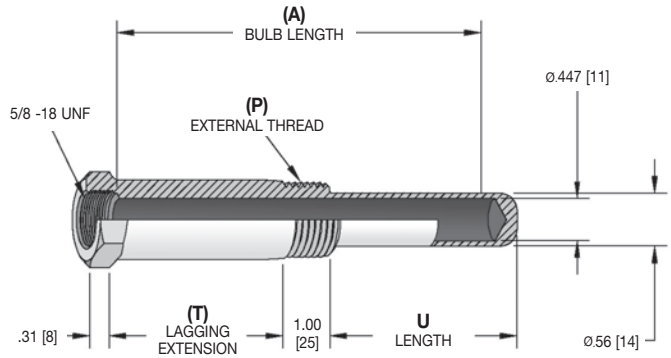
Indicate W02 for 1/2 NPT Brass, W05 for 1/2 NPT 304 SS or W06 for 1/2 NPT 316SS.
Indicate W12 for 3/4 NPT Brass, W15 for 3/4 NPT 304 SS or W16 for 3/4 NPT 316SS.

CONTROLLERS

Standard



with Lagging Extension



Lengths

(A) Bulb Length	Standard		Lagging	
	U Length	(T) Lagging Extension	U Length	
2"	2.13 [54]	—	—	
4"	3.88 [99]	1.50 [38]	2.13 [54]	
6"	5.75 [146]	1.50 [38]	3.88 [99]	
8"	7.75 [197]	1.50 [38]	5.75 [146]	
12"	11.75 [299]	1.50 [38]	7.50 [191]	
18"	17.75 [451]	1.50 [38]	15.75 [400]	
24"	23.75 [603]	1.50 [38]	21.75 [552]	

Pressure Rating (PSI)

Material	Operating Temperature					
	70°F	200°F	400°F	600°F	800°F	1000°F
Brass	1200	1000	200	—	—	—
Carbon steel	1600	1470	1430	1275	900	430
304 stainless steel	2100	1940	1600	1340	1140	1000
316 stainless steel	2100	2000	1900	1770	1630	1480

Selection of the proper thermowell is the sole responsibility of the user. Temperature and pressure limitations must be considered. Improper application may cause failure of the thermowell, resulting in possible personal injury or property damage.

HOW TO ORDER

Sample Order Number: **7-3 G 2**

Thermowell Style	(P) External Thread	Bulb Length**	(T) Lagging Extension	Material
7- Controller	3 1/2 NPT 4 3/4 NPT	D 2" Bulb	C 1 1/2" Extension (4" and longer Stem only) Omit if None	2 Brass 5 304SS 6 316SS
		G 4" Bulb		
	J 6" Bulb			
	L 8" Bulb			
	R 12" Bulb*			
	Wa 18" Bulb*			
	Wk 24" Bulb*			

*Not available with 1/2 NPT external thread.

**Controller Thermowells with Bulb Lengths over 6" are typically for use with Adjustable Union or Bendable Extension Connections.