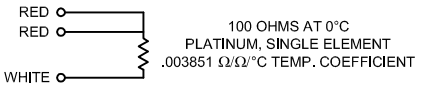
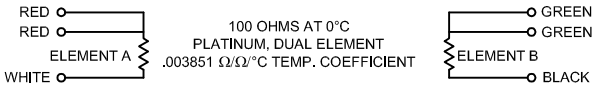
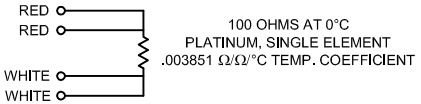
SYM	ECO NUMBER	DATE	APPD
A	ECO 6544	1-21-11	RJT
B	ECO 6565	2-15-11	TSH
C	ECO 6592	4-5-11	PAC



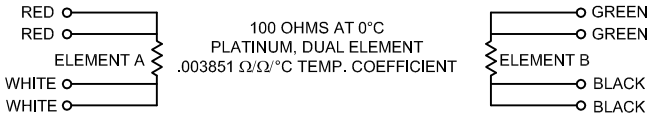
SINGLE ELEMENT, 3 WIRE



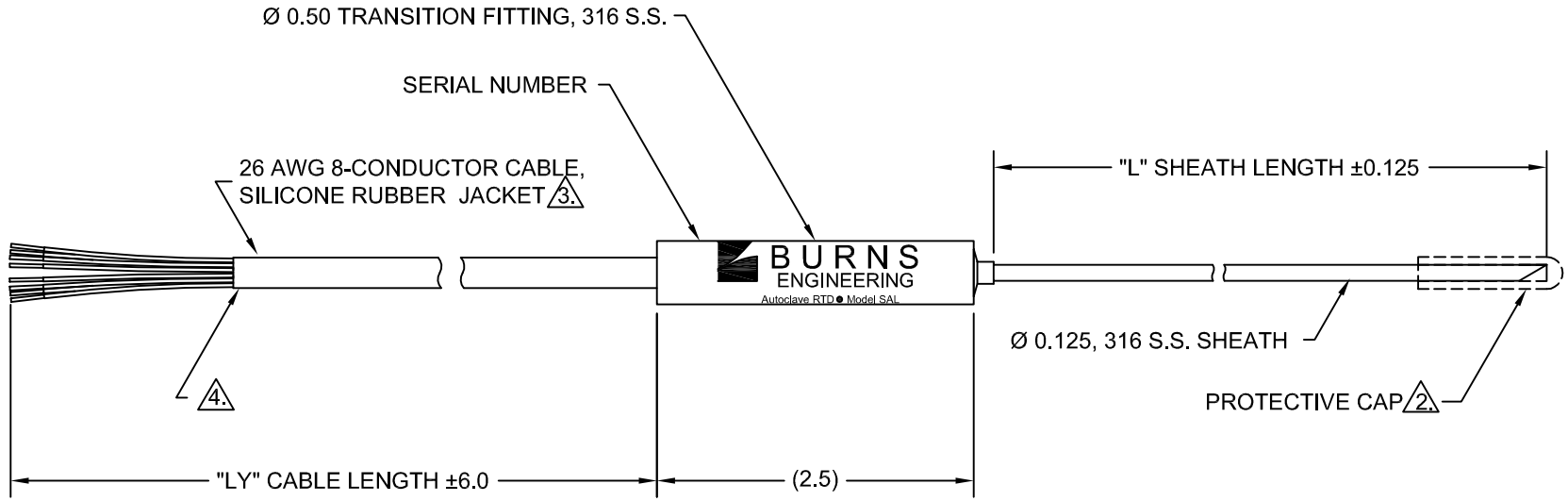
DUAL ELEMENT, 3 WIRE



SINGLE ELEMENT, 4 WIRE



DUAL ELEMENT, 4 WIRE



NOTES:

1. SEE SHEET #2 FOR ORDERING INFORMATION.
   SEE SHEET #4 FOR PERFORMANCE INFORMATION

2. REMOVE PROTECTIVE CAP BEFORE USE.

3. FOR CONFIGURATIONS USING LESS THAN 8 LEAD WIRE, THE REMAINING WIRES WILL BE TRIMMED BACK TO THE CABLE JACKET.

4. THIS SENSOR IS DESIGNED FOR USE IN STEAM AUTO-CLAVES. THE END OF THE SILICONE CABLE JACKET MUST REMAIN OUTSIDE OF THE AUTOCLAVE TO MAINTAIN THE MOISTURE SEAL.

5. TEMPERATURE RANGE: THE ENTIRE SENSOR IS CAPABLE OF CONTINUOUS EXPOSURE TO TEMPERATURES FROM -50°C TO 135°C.

-TOLERANCES-
UNLESS OTHERWISE SPECIFIED

ALL DIMENSION IN INCHES

FRACTIONS = ±1/16
ONE PLACE .X = ±.050
TWO PLACE .XX = ±.010
THREE PLACE.XXX = ±.005

ALL ANGLES ARE ± 0°30'

SHEATH AND LEAD LENGTHS PER BURNS P/N 17026

UNLESS OTHERWISE NOTED:
ALL SURFACES 125

ALL FINISHES IN MICRO INCHES

BURNS ENGINEERING

SCALE	N.T.S.	
DFTM	TSH	1-21-11
CHKD	PAC	1-21-11
APPD	RJT	1-21-11

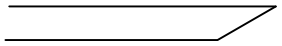
DIMENSIONS IN INCHES

MOUNTING AND OUTLINE DRAWING,
SANITARY AUTOCLAVE LOAD PROBE
RTD ASSEMBLY

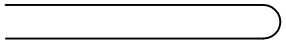
SHEET	SIZE	DRAWING NUMBER	REV
1 OF 4	A	SAL	C

ORDERING INFORMATION:

SAL	Sanitary Autoclave Classic						
	Accuracy options						
	-10	Standard RTD +/-0.10% of resistance at 0 degrees C					
	-05	Precision RTD +/-0.05% of resistance at 0 degrees C					
		Element / Wire configuration and sensor diameter					
		A	*Three wire single element				
		B	Four wire single element				
		C	*Three wire dual element				
		D	Four wire dual element				
			"L" Sensor Sheath Length, 3.5 inch Minimum, 7.0 inches Maximum				
			035	3.5 inches Minimum			
			045	4.5 inch Sheath Length			
			060	6.0 inch Sheath Length			
			070	7.0 inch Sheath Length			
				Specify in 0.5 inch increments (3.5 Min., 7.0 Max.)			
				Tip configuration			
				S	Sharp tip		
				R	Rounded Tip		
					90 Degree Bend option		
					S	Straight - No Bend	
					B	90 Degree Bend - see sheet #3	
						"LY" Cable Length, select or specify in 12 inch increments	
						060	60.0 inch cable length
						120	120.0 inch cable length
						180	180.0 inch cable length
							Specify Cable length in inches (12 inch increments)
SAL	-5	C	045	S	S	120	SAL-05C045SS120 Typical Part Number



TIP CONFIGURATION "S"

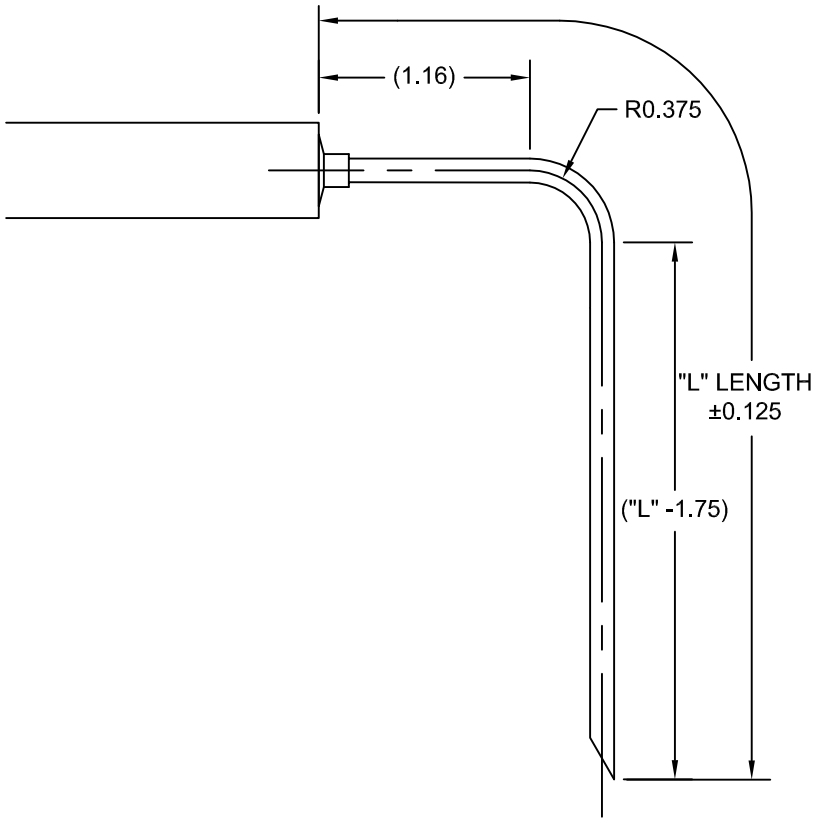


TIP CONFIGURATION "R"

For **three wire probes** in the following configurations the specified cable length must be maintained i.e. the cable cannot be cut to a shorter length without adversely affecting the accuracy of the probe.

*Single and dual element, 0.10% accuracy probes with cable lengths 120 inches (10ft) and longer

*Single and dual element, 0.05% accuracy probes all cable lengths



BURNS ENGINEERING	SHEET 3 OF 4	SIZE A	DRAWING NUMBER SAL	REV C

PERFORMANCE SPECIFICATIONS:

- NOMINAL ICE POINT RESISTANCE (R0): 100.00 Ω
- R0 INTERCHANGEABILITY: R0 ± 0.10 Ω OR R0 ± 0.05 Ω
- TYPICAL ALPHA VALUE: 0.0038500 Ω/Ω/°C
- TEMPERATURE RATING: -40 °C TO 135°C
- ELEMENT CONFIGURATION: SINGLE OR DUAL
- LONG-TERM STABILITY: ± 0.05 °C (0.02 Ω) MAXIMUM SHIFT AT 0 °C AFTER 1000 HOURS AT 135 °C
- LONG-TERM REPEATABILITY: ± 0.025 °C (0.01 Ω) MAXIMUM SHIFT AT 0 °C AFTER 20 CYCLES BETWEEN 21 °C AND 135 °C
- SHORT-TERM REPEATABILITY AND HYSTERESIS: ± 0.025 °C (0.01 Ω) MAXIMUM CHANGE AT 0 °C OVER ANY 5 CONSECUTIVE THERMAL CYCLES FROM 0 °C TO 135 °C
- RATED PRESSURE: 1 psia TO 35 psia
- TRANSITION FITTING AND CABLE LIMITS: -40 °C TO 135 °C CONTINUOUS EXPOSURE
- INSULATION RESISTANCE: 500 MΩ MINIMUM AT 100 VDC AT ROOM TEMPERATURE