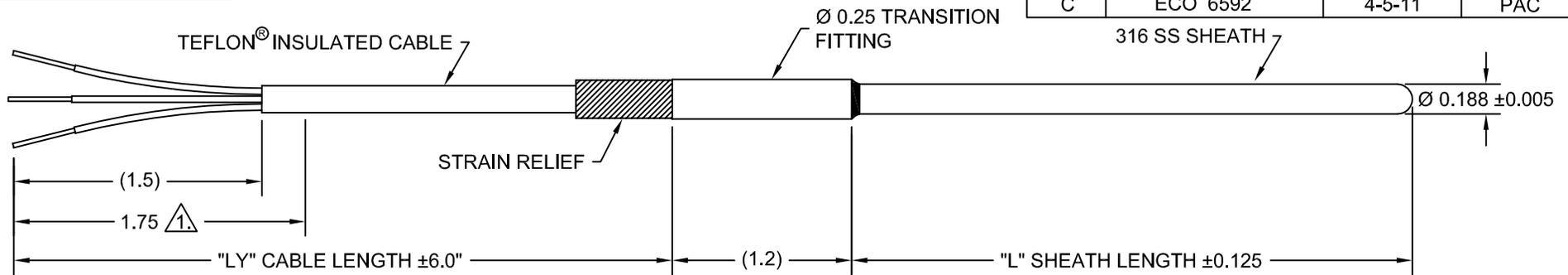
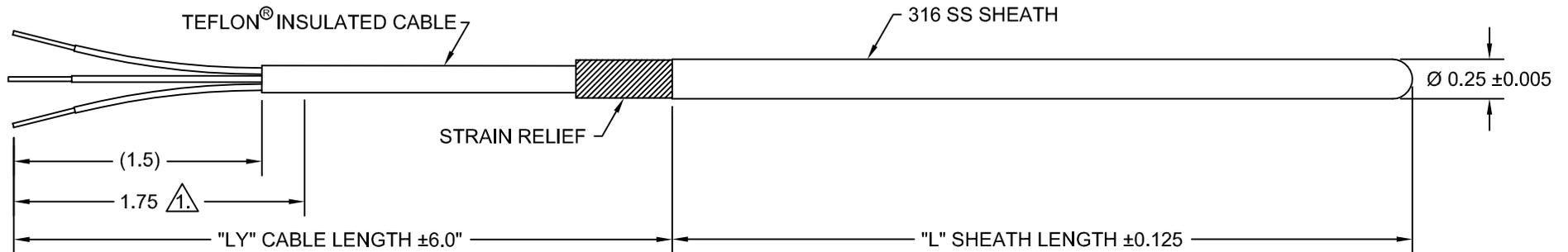


SYM	ECO NUMBER	DATE	APPD
A	ECO 6544	1-21-11	RJT
B	ECO 6565	2-15-11	TSH
C	ECO 6592	4-5-11	PAC

Ø 0.188 SHEATH DESIGN



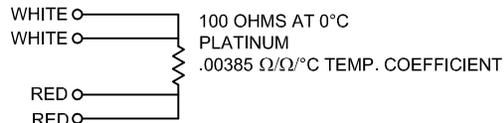
Ø 0.25 SHEATH DESIGN



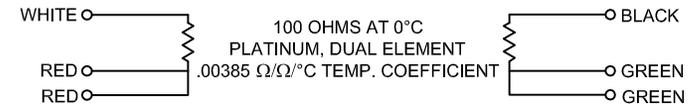
ELEMENT/LEAD WIRE CONFIGURATION: A3, A4 (SINGLE THREE WIRE)



ELEMENT/LEAD WIRE CONFIGURATION: B3, B4 (SINGLE FOUR WIRE)



ELEMENT/LEAD WIRE CONFIGURATION: C4 (DUAL THREE WIRE)



NOTES:

- 1. END OF CABLE MUST REMAIN OUTSIDE OF AUTOCLAVE TO MAINTAIN MOISTURE SEAL.
- 2. PROBE IS SPECIALLY SEALED FOR USE IN AUTOCLAVES AND IN OTHER LOCATIONS WHERE EXPOSED TO LIQUID WATER.
- 3. SEE SHEET #2 FOR ORDERING INFORMATION. SEE SHEET #3 FOR PERFORMANCE INFORMATION
- 4. TEMPERATURE LIMIT: -50 TO 200°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

MOUNTING AND OUTLINE DRAWING,
 SANITARY AUTOCLAVE CLASSIC
 RTD ASSEMBLY

DIMENSIONS IN INCHES

SHEET 1 OF 3	SIZE A	DRAWING NUMBER SAC	REV C
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ORDERING INFORMATION:

SAC		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			
A3	*Three wire single element, 0.188 Dia. sensor sheath		
A4	*Three wire single element, 0.25 Dia. sensor sheath		
B3	Four wire single element, 0.188 Dia. sensor sheath		
B4	Four wire single element, 0.25 Dia. sensor sheath		
C4	**Three wire dual element, 0.25 Dia. sensor sheath		
"L" Sensor Sheath Length			
-035	3.5 inch sensor length		
-040	4.0 inch sensor length		
-050	5.0 inch sensor length		
-060	6.0 inch sensor length		
"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		
-240	240.0 inch cable length		
Specify Cable length in inches (12 inch increments)			
SAC	-10	A4	-040 -120 SAC-10A4-040-120 Typical Part Number

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 element, 0.10% accuracy probes with cable lengths 320 inches (26.6ft) and longer

*Single element, 0.05% accuracy probes with cable lengths 180 inches (15ft) and longer

**Dual element, 0.5% and 0.10% accuracy probes all cable lengths



BURNS
ENGINEERING

SHEET 2
OF 3

SIZE
A

DRAWING NUMBER
SAC

REV
C

PERFORMANCE SPECIFICATIONS:

- NOMINAL ICE POINT RESISTANCE (R0): 100.00 Ω
- R0 INTERCHANGEABILITY: $R0 \pm 0.10 \Omega$ OR $R0 \pm 0.05 \Omega$
- TYPICAL ALPHA VALUE: 0.0038500 $\Omega/\Omega/^{\circ}\text{C}$
- TEMPERATURE RATING: -50 $^{\circ}\text{C}$ TO 200 $^{\circ}\text{C}$
- ELEMENT CONFIGURATION: SINGLE OR DUAL
- LONG-TERM STABILITY: $\pm 0.05 \text{ }^{\circ}\text{C}$ (0.02 Ω) MAXIMUM SHIFT AT 0 $^{\circ}\text{C}$ AFTER 1000 HOURS AT 135 $^{\circ}\text{C}$
- LONG-TERM REPEATABILITY: $\pm 0.025 \text{ }^{\circ}\text{C}$ (0.01 Ω) MAXIMUM SHIFT AT 0 $^{\circ}\text{C}$ AFTER 10 CYCLES BETWEEN -38 $^{\circ}\text{C}$ AND 200 $^{\circ}\text{C}$
- SHORT-TERM REPEATABILITY AND HYSTERESIS: $\pm 0.025 \text{ }^{\circ}\text{C}$ (0.01 Ω) MAXIMUM CHANGE AT 0 $^{\circ}\text{C}$ OVER ANY 5 CONSECUTIVE THERMAL CYCLES FROM -38 $^{\circ}\text{C}$ TO 135 $^{\circ}\text{C}$
- RATED PRESSURE: 1 psia TO 35 psia
- TRANSITION FITTING AND CABLE LIMITS: -50 $^{\circ}\text{C}$ TO 200 $^{\circ}\text{C}$ CONTINUOUS EXPOSURE
- INSULATION RESISTANCE: 100 M Ω MINIMUM AT 100 VDC AT ROOM TEMPERATURE



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SHEET 3
OF 3

SIZE
A

DRAWING NUMBER
SAC

REV
C