



## PRE-FILLED GLYCOL BOTTLE

## **Temperature Sensor with Thermal Buffer**

The ACI Prefilled Glycol Kit comes with a standard 4 inch probe, 10 foot or 20 foot long Plenum rated FEP/FEP (Teflon) cable installed in a Nalgene bottle with Food Grade Glycol. The Platinum, Nickel and thermistor sensors are manufactured using ACI's proven double encapsulation process and dual wall heat shrinking process to eliminate the effects of moisture on the sensors using our high quality, thermally conductive epoxy. The sensor should be installed inside the bottle such that the tip of the sensor is suspended approximately  $\frac{1}{2}$  inch above the bottom of the bottle. A Velcro strap is included for easy mounting with an optional 304 Stainless Steel mounting bracket. Optional mounting brackets and NIST Certificates are available as referenced in the product ordering grid on the back of the product data sheet.

Applications: Monitor Freezer and Refrigerator Temperatures, Pharmaceuticals, Thermal Buffer

The ACI Prefilled Glycol Kit Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.

Sensor Type   Curve Type   Sensing Points:	Platinum RTD   PTC (Positive Temperature Coefficient)   One		
Number Wires:	A/100/1K-2W-PO-4": Two (Non-Polarity Sensitive)   A/100/1K-3W-PO-4": Three (Polarity Sensitive		
RTD Sensor Output @ 0°C (32°F):	A/100-xW-PO-4": 100 Ohms nominal   A/1K-xW-PO-4": 1000 Ohms nominal		
RTD Sensor Accuracy:	+/- 0.06% Class A ( <b>Tolerance Formula:</b> +/- °C = (0.15°C + (0.002 *  t ))		
,	where $ t $ is the absolute value of Temperature above or below 0°C in °C)		
	-40°C (-40°F): +/-0.23°C (+/-0.414°F)   0°C (32°F): +/-0.15°C (+/-0.27°F)		
	<b>120°C (248°F):</b> +/-0.39°C (+/-0.71°F)		
Din Standard   Temperature Coefficient:	Din EN 60751 (IEC 751)   3850 ppm / °C		
Sensor Stability:	+/- 0.03% after 1000 Hours @ 300°C (572°F)		
Self-Heating   Maximum Operating Current	100 Ohm RTD: 7 mW/°C (Still	Air)   5 mA; <b>1K Ohm RTD:</b> 4m	W/°C (Still Air)   3 mA
Sensor Type   Curve Type   Sensing Points:	Nickel RTD   PTC (Positive Temperature Coefficient)   One		
Number Wires:	Two (Non-Polarity Sensitive)		
Sensor Output @ 21.1°C (70°F):	1000 Ohms nominal		
Sensor Accuracy:	-40°C (-40°F): +/-1.52°C (+/-2.73°F)   0°C (32°F): +/-0.4°C (+/-0.72°F)   21.1°C (70°F): +/-0.17°		
	(+/-0.34°F)   <b>54.4°C (130°F):</b> +/-0.56°C (+/-1.00°F)   <b>121°C (250°F):</b> +/-1.25°C (+/-2.25°F)		
Din Standard   Temp. Coefficient (0-100°C):			
Sensor Stability:	+/- 0.05% after 1000 Hours @ 150°C (302°F)		
Self-Heating   Maximum Operating Current	: 0.3°C/mW (Still Air)   5 mA		
Sensor Type   Curve Type   Sensing Points:	Thermistor   NTC (Negative Te	emperature Coefficient)   One	
Thermistor Output @ 25°C (77°F)	<b>A/1.8K:</b> 1.8KΩ nom.	<b>A/CP (Type II):</b> 10KΩ nom.	<b>A/10KS:</b> 10KΩ nom.
	<b>A/3K:</b> 3KΩ nom.	<b>A/AN-BC:</b> 5.238KΩ nom.	<b>A/100KS:</b> 100KΩ nom.
	<b>A/AN (Type III):</b> 10KΩ nom.	<b>A/CSI:</b> 10KΩ nom.	<b>A/20K:</b> 20KΩ nom.
Thermistor Accuracy 0-70°C (32-158°F):	+/-0.2°C (+/-0.36°F)   <b>A/1.8K:</b> +/-0.5°C @ 25°C (77°F) & (+/-1.0°C) (+/-1.8°F)		
Stability:	Sensor Dependent; Contact ACI for more information on the sensor in question		
Power Dissipation Constant:	3 mW/°C except <b>A/1.8K:</b> 1 mW/°C		
Response Time (63% Step Change):	25 Seconds Nominal		
Operating   Storage Temperature Range:	-40 to 120°C (-40 to 248°F)   -40 to 85°C (-40 to 185°F)		
Operating Humidity Range:	10 to 95% RH, condensing		
Lead Length   Conductor Size   Material:	10 Feet (3.05m) or 20 Feet (6.10m)**   22 AWG (0.65mm)   Tin Plated Copper		
Lead Wire Insulation   Wire Rating:	FEP/FEP (Teflon) Cable   CL2P/CMP Plenum Rated Cable (minimum)		
Probe Material   Probe Diameter:	304 Stainless Steel   0.250" (6.35mm)		
Bottle Material   Chemical Resistance:	Nalgene ((HDPE) High Density Polyethylene)   Resistant to most acids, bases, and alcohols		
Bottle Sterility   Fluid Capacity:	Lab Quality, Non-Sterile   67 ml (2 oz.)		
Nalgene Bottle Operating Temperature:	-100°C (-73.2°F) to 120°C (248°F)		
Glycol Properties   Glycol Freezing Point:	Food Grade USP (Propylene Glycol); Non-Toxic   -59°C (-74.2°F)		
Standard Mounting (L x W x Dia.)	7" (17.78 cm) x 1" (2.54 cm) x 2 1/8 (5.40 cm) Velcro Strap;		
Product Dimensions:	Bottle: 3.40" (86mm) (H) x 1.535" (39.00 mm) (O.D.)   Probe: 4" (101.6 mm) Length		
Product Weight:	A/xx-PO-4"-10'CL2P: 0.015 lbs. (68.1g)   A/xx-PO-4"-20'CL2P: 0.025 lbs. (113.4g)		
Agency Approvals:	CE, RoHS2, WEEE		

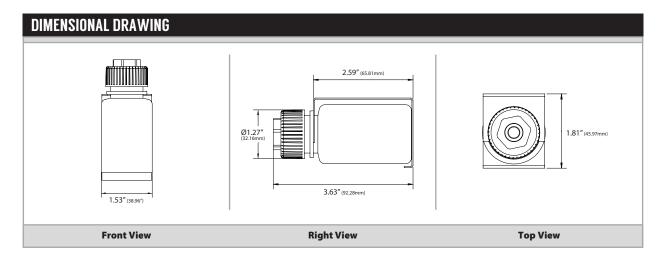


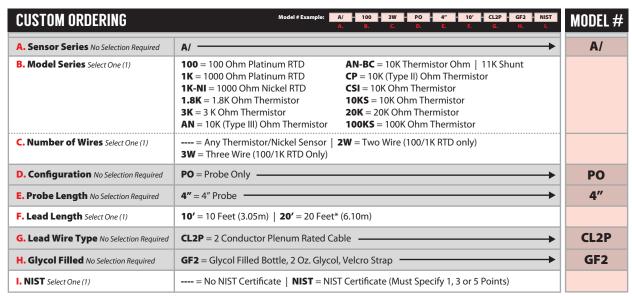




## TEMPERATURE | PRE-FILLED GLYCOL BOTTLE







Note\*: All 20' Sensors are not CE compliant, but are RoHS2 compliant

ACCESSORIES ORDERING  Model # Example: A/GLYCOL KIT - OR- 130127				
Model #	Item #	Description		
A/GLYCOL BRACKET	130126	304 SS Steel Mounting Bracket for 2 oz. bottle with Stainless Screws		
A/GLYCOL KIT	130127	2 oz. Glycol Bottle, 304 SS Mounting Bracket, Water Tight Fitting, Screws, No Glycol		





