RTA-100

REFRACTING INDEX SENSOR

REFRACTING INDEX:

% Mono Ethylene Glycol (MEG)
% Mono Propylene Glycol (MPG)
% BRIX (Sugar Content)
% ALV (Low Viscosity)

KEY FEATURES

- Live Data Display
- 4-20mA Output
- RS-485 Modbus Output
- 316L Stainless Steel Body
- Stainless Steel Tri-Clamp Flow Cell
- 24 VDC Power Supply

PRODUCT OVERVIEW

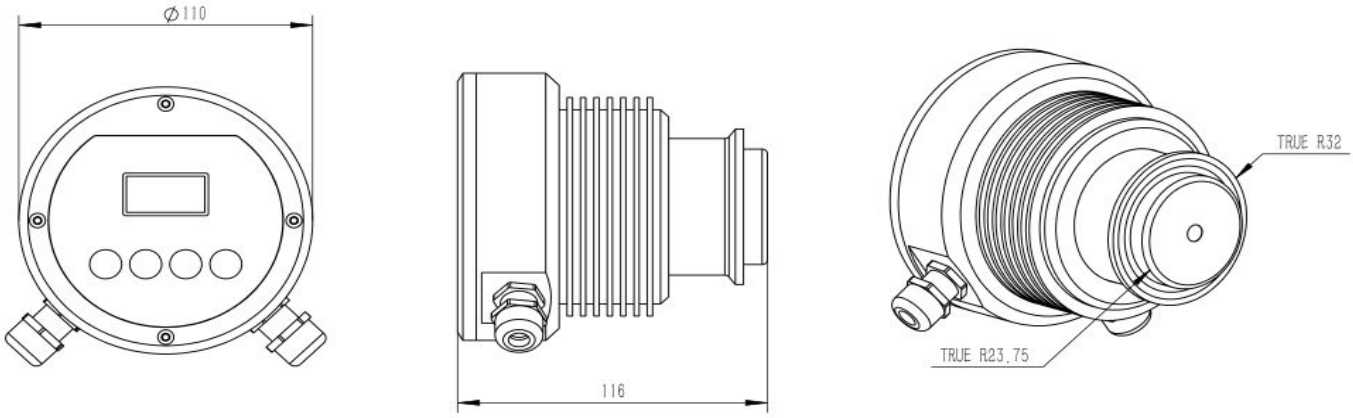
The RTA-100 is an inline digital refractometer that measures the refractive index of a liquid sample and provides a direct reading of highly accurate concentration values for a wide variety of water and process related applications.

This standalone device provides a live data display with a 4-20mA and RS-485 Modbus output for connectivity to micro-processor based controllers.

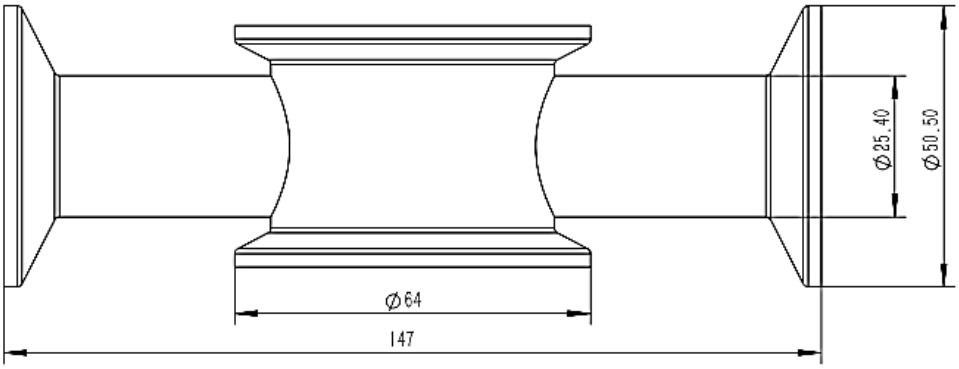
The RTA-100 also offers fully integrated 4-20mA and RS-485 Modbus output signals for connectivity to any microprocessor-based controller, display, PLC or DCS network. The RTA-100 has built-in temperature dependent equations to convert the measured sample temperature and refractive index to the percentage concentration of Mono Ethylene Glycol (MEG), Mono Propylene Glycol (MPG), Sugar Content (Brix) and Advanced Low Viscosity Fluid (ALV).

Models Available

RTA-100-1X.....Includes sensor, flow cell and 24-volt power supply.
RTA-100-3X.....Includes sensor, flow cell and 24-volt power supply with 4-20mA output wired to separately ordered controller.



Measurements in mm.



Specifications

Model Number	RTA-100
Sample Temp	-4 to 158°F (-20 to 70°C)
Max Sample Pressure / Flow	<142 psi (0.98 MPa) / <13.5 GPM (9.8 ft/s)
Environmental Temperature	14 to 104°F (-10 to 40°C)
Weight	3.7 lbs (1.7 kg)
Dimension	4.33" x 4.57" (110 x 116 mm)
Protection	IP-67
Light Source	LED
Wet Materials	Sapphire, 316L Stainless Steel
Signal Output	(2) 4-20 mA and RS-485 Modbus
Power	24 VDC (1.5W)
Regulation	CE / RoHS Marked

Range of Measurement	(% is by mass)
Refracting Index	1.31700 – 1.5100
Brix	0.00 – 85.00%
Mono Ethylene Glycol	0.00 – 100.00%
Mono Propylene Glycol	0.00 – 100.00%
Advance Low Viscosity Fluid	0.00 – 100.00%
Temperature	-20°C to 80°C

Resolution	
Refracting Index	0.00001
Brix & Glycol	0.01%

Accuracy	
Refracting Index	±0.0001
Brix & Glycol	±0.1%

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