

Foxboro® EP307G Series Electrodeless Conductivity Sensors

Borosilicate Glass

Model EP307G Series Description

The EP307G Series glass sensors are designed to provide a uniquely compatible sensor material for many of the most aggressive electrodeless conductivity applications encountered. Applications of this type include high-concentration sulfuric acid, oleum, nitric acid, and others where standard sensor materials simply will not last.

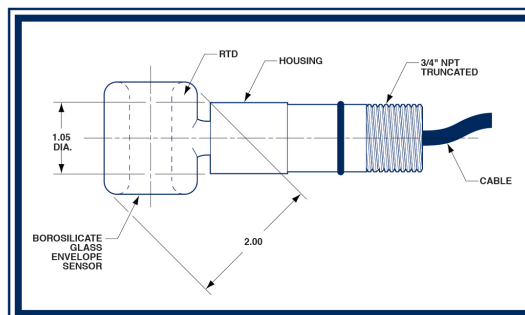
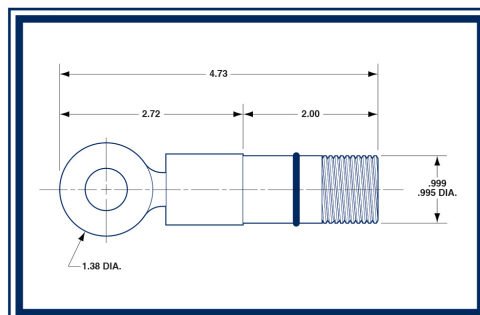
The ability to select from a wide list of wetted materials (e.g., housing and O-ring) permits the EP307G Series glass sensors to be tailored to the specific application at hand. Choose from Hastelloy C, titanium, C-20, 316 ss, and other metals. Or select PVDF, PCTFE, glass-filled Teflon, and other thermoplastics for those applications sensitive to metal exposure.

Optional bushing and flange mounting equipment is available as specials in many of the sensor materials listed.



Features / Benefits

- Borosilicate glass sensor provides uniquely compatible body material
- Selectable metal or thermoplastic wetted housing materials
- Selectable wetted O-ring materials
- Nonfouling
- Wide range
- Reliable design
- Integral temperature element



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Specifications

Conductivity Range:	Minimum full scale 1000 microsiemens; maximum full scale 2000 millisiemens
Temperature Range:	0°–180°C (material-specific, linear de-rating). Metals = 350°F @ 50 psi linearly de-rated to 150°F @ 150 psi. Plastics = range from 350°F to 140°F at varying pressures — material-specific. O-ring = EPR 300°F max., other materials greater
Pressure Limit:	150 psi (material-specific, linear de-rating — see above)
Process-Wetted Material:	Borosilicate glass and selectable housing and O-ring materials including metals — 316 ss, 304 ss, C-20, Hastelloy C-276, Monel, titanium, etc.; and thermoplastics — PVDF, PCTFE, PEEK, and glass-filled Teflon, etc.; and O-ring — ChemRaz, Viton, Kalrez, or EPR
Cable:	20 foot integral (std.) of either Teflon or PVC (longer lengths optional)
Temperature Compensation Element:	Selectable as either 100Ω or 1000Ω RTD, or 100 K thermistor
Cell Factor:	2.49 cm ⁻¹
Analyzer/Transmitter Compatibility:	Function with the 870ITEC intelligent transmitter or 873EC analyzer

Ordering Information

Construct your model code by selecting the materials most appropriate for your electrodeless conductivity application, with the right code number or letter for each choice. Here, the first part of the code would be EP307, plus G for Sensor Style (G = Glass, Borosilicate). Then select a choice from 1–4 for O-Ring; from A–R for Housing Material; from 1–4 for Temperature Element; from T or P for Cable Type; from 1–9 for Cable Length; from S or P for Cable Termination; and 1 for Additional Insertion (1 = Standard insertion length). Example — EP307G2Q1T2S1.

Example — EP307B1P1T2S1.

O-ring	Housing Material	Temperature Element	Cable Type	Cable Length
1 ChemRaz	A 316 ss	1 100Ω RTD	T Teflon	1 10 feet, integral cable
2 Viton	C Carp 20	3 1000Ω RTD	P PVC	2 20 feet, integral cable (std. length)
3 Kalrez	H Hastelloy C-276	4 100 K thermistor		3 Nonstandard length, specify
4 EPR	M Monel			9 99 feet (max. recommended length)
	S 304 ss			
	T Titanium			
	G PCTFE			
	P PVDF			
	Q Glass-filled Teflon			
	R PEEK, glass-filled			
Cable Termination		Additional Insertion		
S Spade lug terminals		1 Standard insertion length		
P Stripped & tinned leads				

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