

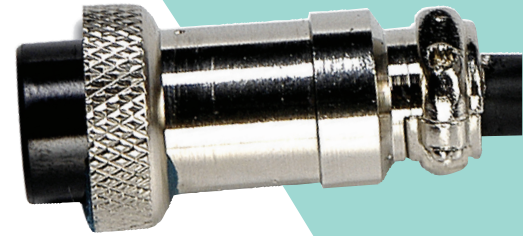
pH Electrode basics

Temperature compensation: When measuring pH using a pH electrode the temperature error from the electrode varies based on the Nernst Equation as 0.03pH/10C/unit of pH away from pH7. The error due to temperature is a function of both temperature and the pH being measured. Temperature compensation can be achieved manually or automatically. Manual temperature compensation is usually achieved by entering the temperature of the fluid being measured into the instruments menu and then the instrument will display a "Temperature Compensated" pH reading.

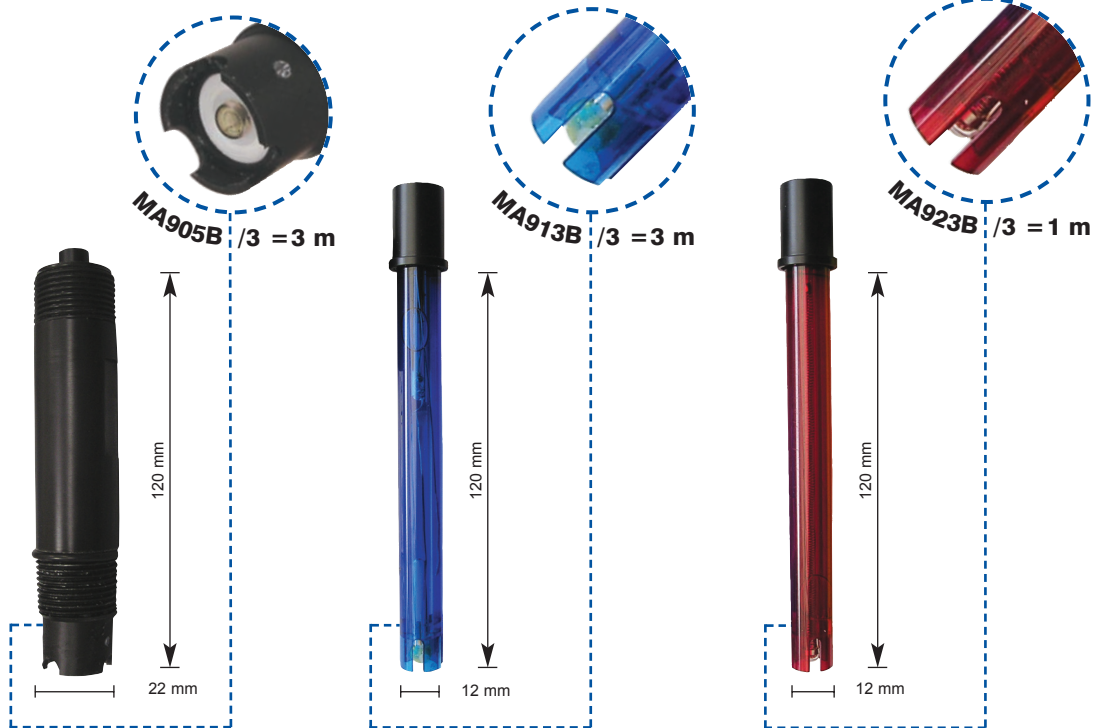
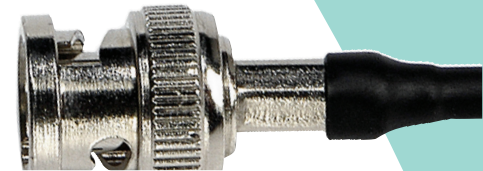
This means that the temperature is corrected to the value expected at 25 Deg C. Automatic temperature compensation requires input from a temperature sensor and constantly sends a compensated pH signal to the display. Automatic temperature compensation is useful for measuring pH in systems with wide variations in temperature.

CE

DIN Connector



BNC Connector



Model	MA905B/3	MA913B/3	MA923B/3
Measuring Range	0 to 13 pH	0 to 13 pH	± 1999 mV
Temperature Range	-5 to 95°C	0 to 60°C (32 to 140°F)	0 to 80°C (32 to 176°F)
Shaft Material		Epoxy	Epoxy
Reference Electrolyte	polymer	gel	gel
Reference Junction	double, Teflon	ceramic, single	cloth
Reference Type		single, Ag/AgCl	single, Ag/AgCl
Shape of membrane		spheric	spheric
Max pressure	6 bar	2 bar	3 bar
Connector Type	3/4" NPT - BNC	BNC	DIN
Cable length	3 m	coaxial, 3 m	7-pole, 1 m
Shaft length	120 mm	120 mm	120 mm
Diameter	22 mm	12 mm	14 mm
Application	industrial applications	water, waste water	water, waste water