



Code	HI1143B	HI1110 []	HI1331B	HI1230 []
Description	refillable, combination pH electrode for fluoride applications	combination pH electrode	combination pH electrode	combination pH electrode
Reference	double, Ag/AgCl	single, Ag/AgCl	single, Ag/AgCl	double, Ag/AgCl
Junction / Flow Rate	ceramic, single / 15-20 µL/h	ceramic, single / 15-20 µL/h	ceramic, single / 15-20 µL/h	ceramic, single / 15-20 µL/h
Electrolyte	KCl 3.5M	gel	KCl 3.5M + AgCl	gel
Max Pressure	0.1 bar	0.1 bar	0.1 bar	2 bar
Range	pH: 0 to 10	pH: 0 to 13	pH: 0 to 13	pH: 0 to 12
Recommended Operating Temp.	-5 to 60°C (23 to 140°F) – HF	0 to 80°C (32 to 176°F) – GP	0 to 70°C (32 to 158°F) – GP	-5 to 70°C (23 to 158°F) – LT
Glass Type	HF (hydrofluoric acid resistant)	GP (general purpose)	GP (general purpose)	LT (low temperature)
Tip/Shape	spheric (dia: 9.5 mm)	spheric (dia: 9.5 mm)	spheric (dia: 7.5 mm)	spheric (dia: 7.5 mm)
Temperature Sensor	no	DIN model only	no	DIN model only
Amplifier	no	DIN model only	no	DIN model only
Body Material	glass	glass	glass	PEI
Cable	coaxial; 1 m (3.3')	coaxial; 1 m (3.3')	coaxial; 1 m (3.3')	coaxial; 1 m (3.3')
Recommended Use	samples with fluoride (max 2 g/L @ pH 2 and temperature < 60°C)	general purpose	specific for flasks	field applications, soil solution, photographic chemicals, laboratory (general use)
Connection	HI1143B BNC	HI1110B BNC HI11103 Quick Connect DIN	HI1331B BNC	HI1230B BNC HI12303 Quick Connect DIN