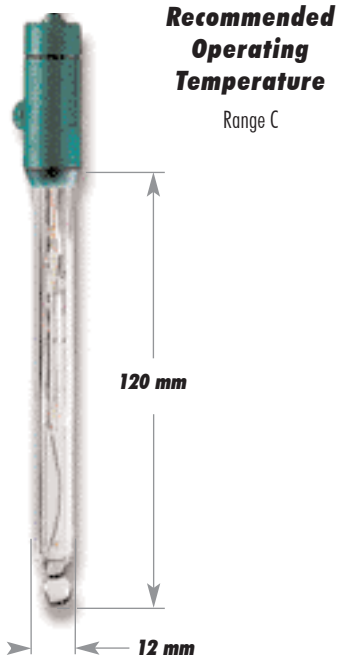


Laboratory • Combination pH & ORP Electrodes

HI 104X Connector

- HI 1043 **B** BNC
- HI 1043 **D** DIN
- HI 1040 **S** Screw Cap
- HI 1043 **P** BNC + PIN*



Reference

Double, Ag/AgCl

Junction

Ceramic, single

Electrolyte

KCl 3.5M

Max Pressure

0.1 bar

Range

pH: 0 to 14 T: 0 to 100°C (32 to 212°F)

Tip Shape

Spheric (dia: 9.5 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable**

Coaxial; 1 m (3.3')

Recommended Use

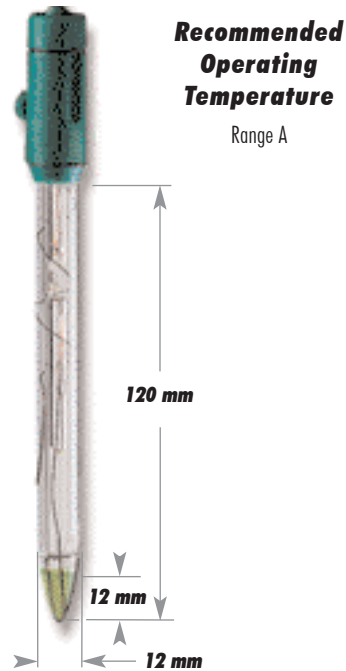
Hydrocarbon, paints, solvents, sea water, strong acid and base, high conductivity samples, Tris buffer

* For pH meters with CAL CHECK system (see section D)

** Not for models with screw cap.

HI 105X Connector

- HI 1053 **B** BNC
- HI 1053 **D** DIN
- HI 1050 **S** Screw Cap
- HI 1053 **P** BNC + PIN*



Reference

Single, Ag/AgCl

Junction

Ceramic, triple

Electrolyte

KCl 3.5M + AgCl

Max Pressure

0.1 bar

Range

pH: 0 to 12 T: -5 to 100°C (23 to 212°F)

Tip Shape

Conic (12 x 12 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable**

Coaxial; 1 m (3.3')

Recommended Use

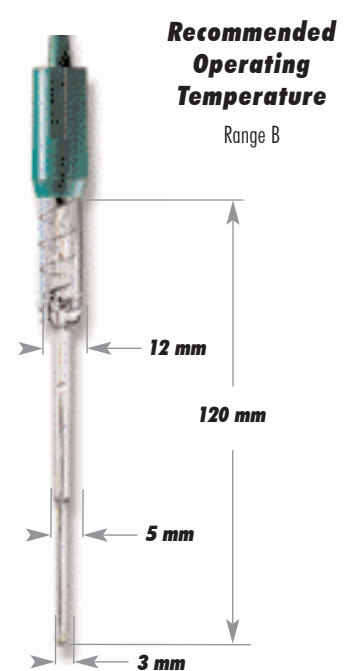
Fats and creams, soil samples, potable water, semi solid products, low conductivity solutions, emulsions

* For pH meters with CAL CHECK system (see section D)

** Not for models with screw cap.

HI 1083 Connector

- HI 1083 **B** BNC
- HI 1083 **D** DIN
- HI 1083 **P** BNC + PIN*



Reference

Single, Ag/AgCl

Junction

Open

Electrolyte

Viscolene

Max Pressure

0.1 bar

Range

pH: 0 to 13 T: 0 to 50°C (32 to 122°F)

Tip Shape

Spheric (dia: 3 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable**

Coaxial; 1 m (3.3')

Recommended Use

Biotechnology, samples < 100 µl

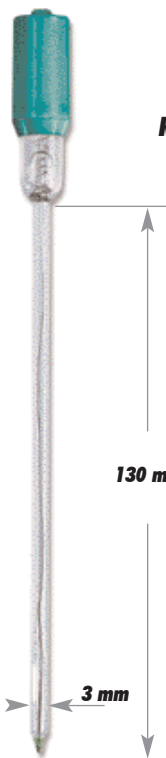
* For pH meters with CAL CHECK system (see section D)

** Not for models with screw cap.

Laboratory • Combination pH & ORP Electrodes

HI 1093 Connector

HI 1093 B BNC



Recommended Operating Temperature

Range B

Reference

Single, Ag/AgCl

Junction

Open

Electrolyte

Viscolene

Max Pressure

0.1 bar

Range

pH: 0 to 13 T: -5 to 50°C (23 to 122°F)

Tip Shape

Spheric (dia: 3 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable

Coaxial; 1 m (3.3')

Recommended Use

NMR tubes

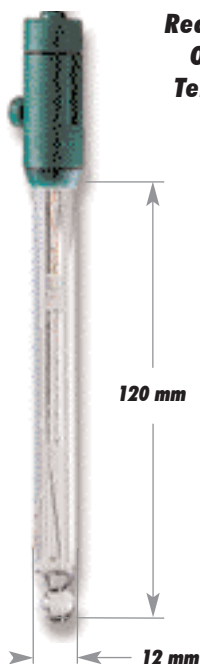
HI 11X1 Connector

HI 1131 B BNC

HI 1131 D DIN

HI 1111 S Screw Cap

HI 1131 P BNC + PIN*



Recommended Operating Temperature

Range B

Reference

Single, Ag/AgCl

Junction

Ceramic, single

Electrolyte

KCl 3.5M + AgCl

Max Pressure

0.1 bar

Range

pH: 0 to 13 T: -5 to 100°C (23 to 212°F)

Tip Shape

Spheric (dia: 9.5 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable**

Coaxial; 1 m (3.3')

Recommended Use

Laboratory general purpose, beer

HI 1135 Connector

HI 1135 B BNC



Recommended Operating Temperature

Range C

Reference

Double, Ag/AgCl

Junction

Ceramic, double

Electrolyte

KCl 3.5M

Max Pressure

3 bar with back pressure

Range

pH: 0 to 14 T: -5 to 100°C (23 to 212°F)

Tip Shape

Spheric (dia: 9.5 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable

Coaxial; 1 m (3.3')

Recommended Use

Continuous monitoring with remote filling

* For pH meters with CAL CHECK system (see section D)

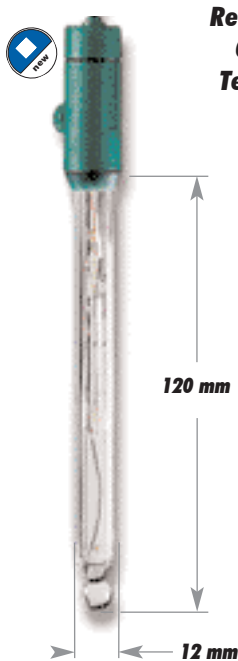
** Not for models with screw cap.

Laboratory • Combination pH & ORP Electrodes

HI 1143 Connector

HI 1143  BNC

HI 1143  DIN



Recommended Operating Temperature

Range A

Reference

Double, Ag/AgCl

Junction

Ceramic, single

Electrolyte

KCl 3.5M

Max Pressure

0.1 bar

Range

pH: 0 to 14 T: -5 to 60°C (23 to 140°F)

Tip Shape

Spheric (dia: 9.5 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable

Coaxial; 1 m (3.3')

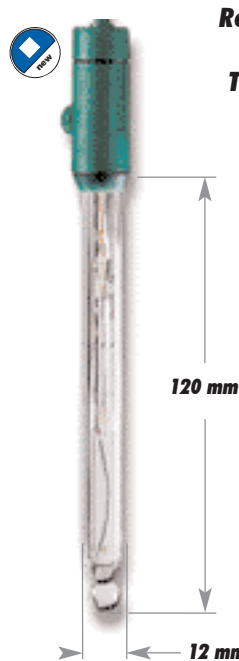
Recommended Use

Samples with fluoride (max 2 g/L @ pH 2 and temperature < 60°C)

HI 1144 Connector

HI 1144  BNC

HI 1144  DIN



Recommended Operating Temperature

Range B

Reference

Single, Hg/Hg₂Cl₂

Junction

Ceramic

Electrolyte

KCl 3.5M

Max Pressure

0.1 bar

Range

pH: 0 to 14 T: 0 to 60°C (32 to 140°F)

Tip Shape

Spheric (dia: 9.5 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable

Coaxial; 1 m (3.3')

Recommended Use

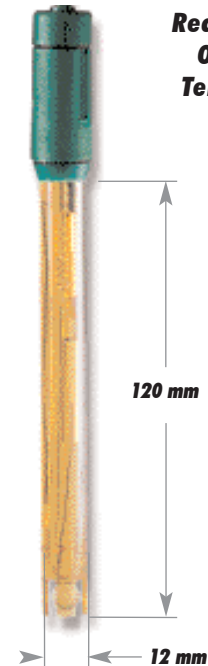
Tris buffer

HI 12X0 Connector

HI 1230  BNC

HI 1230  DIN

HI 1210  Screw Cap



Recommended Operating Temperature

Range B

Reference

Double, Ag/AgCl

Junction

Ceramic, single

Electrolyte

Gel

Max Pressure

2 bar

Range

pH: 0 to 13 T: 0 to 80°C (32 to 176°F)

Tip Shape

Spheric (dia: 7.5 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Ultem®

Cable**

Coaxial; 1 m (3.3')

Recommended Use

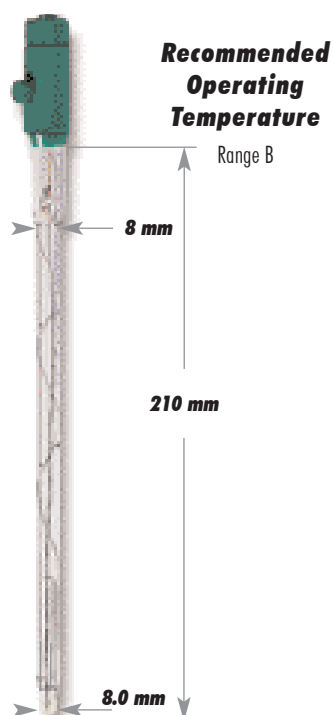
Field applications

** Not for models with screw cap.

Laboratory • Combination pH & ORP Electrodes

HI 13X1 Connector

- HI 1331 B BNC
- HI 1331 D DIN
- HI 1311 S Screw Cap



Reference

Single, Ag/AgCl

Junction

Ceramic, single

Electrolyte

KCl 3.5M + AgCl

Max Pressure

0.1 bar

Range

pH: 0 to 13 T: -5 to 100°C (23 to 212°F)

Tip Shape

Spheric (dia: 7.5 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable**

Coaxial; 1 m (3.3')

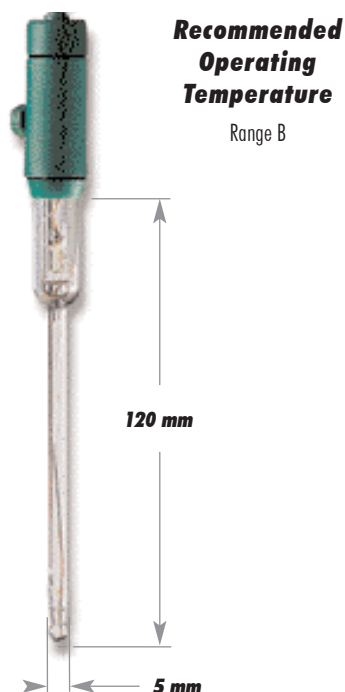
Recommended Use

Specific for flasks

** Not for models with screw cap.

HI 13X0 Connector

- HI 1330 B BNC
- HI 1330 D DIN
- HI 1310 S Screw Cap
- HI 1330 P BNC + PIN



Reference

Single, Ag/AgCl

Junction

Ceramic, single

Electrolyte

KCl 3.5M + AgCl

Max Pressure

0.1 bar

Range

pH: 0 to 13 T: -5 to 100°C (23 to 212°F)

Tip Shape

Spheric (dia: 5 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable**

Coaxial; 1 m (3.3')

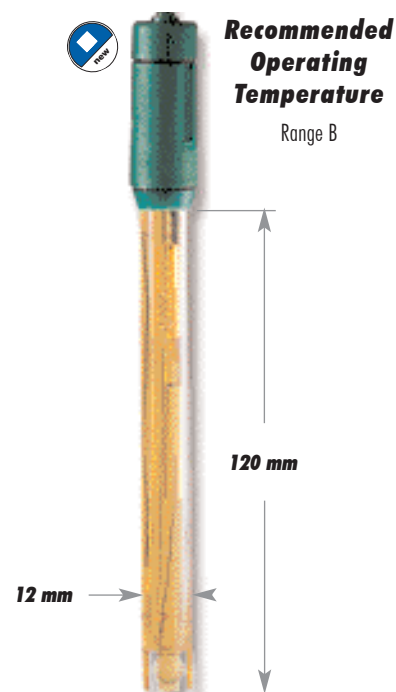
Recommended Use

Specific for vials and test tubes

** Not for models with screw cap.

HI 1343 Connector

- HI 1343 B BNC
- HI 1343 D DIN



Reference

Single, Hg/Hg₂Cl₂

Junction

Ceramic, single

Electrolyte

KCl 3.5M

Max Pressure

0.1 bar

Range

pH: 0 to 14 T: -5 to 60°C (23 to 140°F)

Tip Shape

Spheric (dia: 7.5 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Ultem®

Cable

Coaxial; 1 m (3.3')

Recommended Use

Specific for Tris buffer

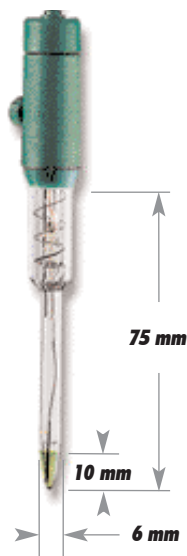
Laboratory • Combination pH & ORP Electrodes

HI 20XX Connector

- HI 2031 **B** BNC
- HI 2031 **D** DIN
- HI 2020 **S** Screw Cap

Recommended Operating Temperature

Range A



Reference

Single, Ag/AgCl

Junction

Ceramic, single

Electrolyte

KCl 3.5M + AgCl

Max Pressure

0.1 bar

Range

pH: 0 to 12 T: -5 to 100°C (23 to 212°F)

Tip Shape

Conic (6 x 10 mm)

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable**

Coaxial; 1 m (3.3')

Recommended Use

Dairy and semi solid products

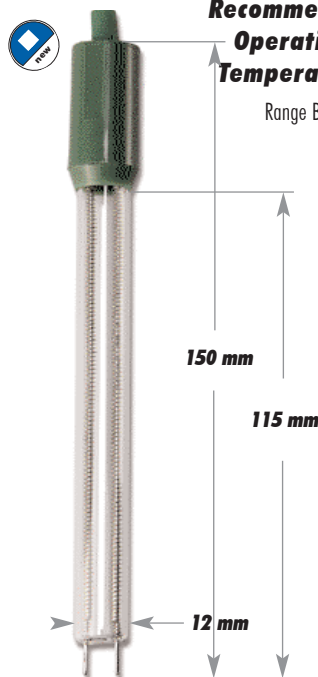
** Not for models with screw cap.

HI 3118 Connector

- HI 3118 **B** BNC

Recommended Operating Temperature

Range B



Amperometric Cell

Platinum-Platinum

Range

T: -5 to 100°C (23 to 212°F)

Tip

2-pin platinum

Temperature Sensor

—

Amplifier

—

Body Material

Glass

Cable

Bipolar

Recommended Use

Chlorine titration

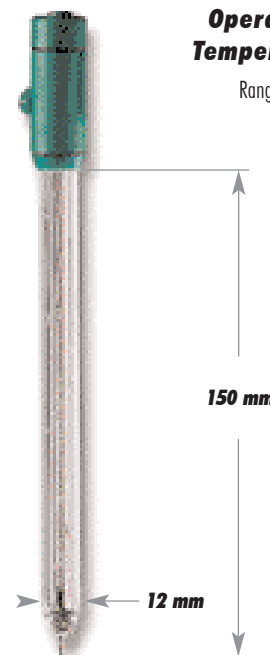
HI 31X1 Connector

- HI 3131 **B** BNC
- HI 3131 **D** DIN
- HI 3111 **S** Screw Cap
- HI 3131 **P** BNC + PIN



Recommended Operating Temperature

Range B



Reference

Single, Ag/AgCl

Junction

Ceramic, single

Electrolyte

KCl 3.5M + AgCl

Max Pressure

0.1 bar

Range

ORP T: -5 to 100°C (23 to 212°F)

Tip

Platinum pin

Temperature Sensor

No

Amplifier

No

Body Material

Glass

Cable**

Coaxial; 1 m (3.3')

Recommended Use

Laboratory general use, ORP titrations

** Not for models with screw cap.