

Selecting the right pH electrode

Selecting the right pH electrode for an application can make all the difference to the response time, accuracy and life of your electrode.

To get the best out of your electrode, consider the following points before you make your choice:

General purpose electrodes are suitable for aqueous solutions with a relatively high water content and either no aggressive substances, or relative low concentrations.

If you are working with solutions containing heavy metals, proteins or TRIS buffers, a **calomel electrode** or one with a **double junction** will give you the best results.

For solutions that contain oils, paints or food products, select a **PTFE junction** or **junction free** electrode for best results.

Last but not least, think about the **temperature of the solution** as not all electrodes can withstand the same temperature range. This is especially important if the solution to be measured is above 60°C.

The electrodes featured on these pages offer a small selection from our range of over 100. If you can't find what you are looking for or would like advice on choosing the best electrode, why not contact us direct? We'll be happy to help.



Ideal for field use

HI 1230B

diam: 12mm
length: 120mm
temp: 20 to 40°C

Good all-rounder for general pH measurement; plastic body good for field use



General purpose

HI 1131B

diam: 8mm
length: 210mm
temp: 20 to 40°C

Glass body equivalent of HI 1332B – good general purpose glass laboratory electrode



Use on flat surfaces

HI 1413B

diam: 12mm
length: 50mm
temp: 20 to 40°C

Flat tipped glass body electrode ideal for taking pH of flat surfaces such as paper, leather, skin



Ideal for chemicals

HI 1332B

diam: 12mm
length: 120mm
temp: 20 to 40°C

Plastic body electrode with double reference junction good for chemical applications



Perfect for the laboratory

HI 1110B

diam: 12mm
length: 150mm
temp: 20 to 40°C

Gel filled glass body general purpose electrode for laboratory use



Ideal for high humidity

HI 2910B

diam: 12mm
length: 110mm
temp: -5 to +80°C

Amplified electrode with own power supply eliminates problems associated with damp and signal loss



Ideal for education
HI 1333B

diam: 12mm
length: 120mm
temp: 20 to 40°C

Plastic body electrode probe ideal for education with double junction and refillable to ensure longer life



Ideal for Tris buffers
HI 1043B

diam: 12mm
length: 120 mm
temp: 30 to 85°C

Glass body electrode ideal for tris buffer use, strong acid or alkaline solutions, high conductivity samples



Ideal for semi-solids
HI 1053B

diam: 12mm
length: 120mm
temp: -5 to +30°C

Conical tipped glass body electrode with triple junction good for low conductivity solutions, emulsions, semi-solid products



Ideal for small sample sizes
HI 1083B

diam: 3mm
length: 120mm
temp: 20 to 40°C

Thin bodied glass electrode is ideal for small sample sizes such as in biotechnology applications <100 uL



For use with NMR tubes
HI 1093B

diam: 3mm
length: 130mm
temp: 20 to 40°C

Extra long/thin body glass electrode for use in NMR tubes



Perfect for long neck flasks
HI 1331B

diam: 8mm
length: 210mm
temp: 20 to 40°C

210mm long glass electrode for use in long neck flasks ie:- it's long enough to reach the bottom and get to the sample!



Ideal for dairy products
FC240B

diam: 5mm
length: 150mm
temp: 20 to 40°C

Stainless steel bodied glass spear electrode only 5mm long - ideal for dairy products and soft and semi-solid cheese testing



Perfect for semi-solid foods
FC200B

diam: 6mm
length: 75mm
temp: 20 to 40°C

Spear pointed PTFE body with glass tip food electrode ideal for milk, yoghurt, soft cheese and other semi solid foods – easy to clean



Ideal for dairy products
FC100B

diam: 12mm
length: 120mm
temp: 20 to 40°C

PTFE bodied food electrode for general purpose dairy product testing eg milk, yoghurt



General purpose ORP/Redox electrode
HI 3230B

diam: 12mm
length: 120mm
temp: 20 to 40°C

Glass body ORP/Redox probe for use with pH meters with a mV volt scale