pH probes

pH

pH measurement is important in many processes. There is almost none where pH value does not play a dominant role

The rate and outcome of chemical reactions taking place in water often depends on the acidity of the water, and it is therefore useful to know the acidity of the water, typically measured by means of a pH meter. Knowledge of pH is useful or critical in many situations, including chemical laboratory analyses. pH meters are used in water quality for municipal water supplies, swimming pools, environmental remediation but also brewing of wine or beer and manufacturing amongst other applications.

A pH meter measures the hydrogen-ion activity in water-based solutions, indicating its acidity or alkalinity expressed as pH. The pH meter measures the difference in electrical potential between a pH electrode and a reference electrode, and so the pH meter is sometimes referred to as a "potentiometric pH meter". The difference in electrical potential relates to the acidity or pH of the solution.

Potentiometric pH meters measure the voltage between two electrodes and display the result converted into the corresponding pH value. They comprise a simple electronic amplifier and a pair of electrodes, or alternatively a combination electrode, and some form of display calibrated in pH units. It usually has a glass electrode and a reference electrode, or a combination electrode. The electrodes, or probes, are inserted into the solution to be tested. A glass electrode is a ion-selective electrode made of a doped glass membrane that is sensitive to a specific ion. These are most commonly used for pH measurement, where the glass electrode is sensitive to hydrogen ions.

SPH1

Low maintenance sealed unit with **gel filled reference cell** suitable for **general laboratory, swimming pools and water monitoring and control plan.**

Technical features

Measuring range 2 – 12 pH

Process temperature 0 – 60° C

Pressure range (relative to ambient) 0 – 6 Bar

Body material Plastic ; **pH element** Glass ;
Ceramic diaphragm high accuracy

Connection 6 or 1.5 m cable with BNC and boot plastic cover

Single and double junction with KCL Gel

SPH2

Low maintenance sealed unit with **gel filled reference cell** suitable for **waste water, drinking water, cooling water treatment and irrigation.**

Technical features

Measuring range 2 – 12 pH

Process temperature 0 – 60° C

Pressure range (relative to ambient) 0 – 6 Bar

Body material Plastic ; **pH** Glass ;
Pellon PTFE diaphragm high accuracy

S8 connector (PG13.5 mm mechanical and S7 electrical)

Single junction with KCL Gel

SPH3 WW

Low maintenance sealed unit with **gel filled reference cell** suitable for **waste water, drinking water, cooling water treatment, fish farming and galvanic process.**

Technical features

Measuring range 2 – 12 pH

Process temperature 0 – 80° C

Pressure range (relative to ambient) 0 – 6 Bar

Body material Plastic ; **pH element** Glass ;
Diaphragm open hole

S8 connector (PG13.5 mm mechanical and S7 electrical)

Double junction with KCL Gel

SPH4 HP

Low maintenance sealed unit with **gel filled reference cell** suitable for **waste water, drinking water, fish farming, ground water and galvanic process.**

Technical features

Measuring range 0 -14 pH

Process temperature 0 – 60° C

Pressure range (relative to ambient) 0 – 6 bar

Body material glass for high temperature environmental;
pH element Glass ; **2 single pore diaphragms**

S8 connector (PG13.5 mm mechanical and S7 electrical)

Double junction with KCL Gel

SPH4 HT

Low maintenance sealed unit with **gel filled reference cell** suitable for **ammonia application, chromium plating, reverse osmosis, galvanic process and bisulphite application.**

Technical features

Measuring range 0 – 14 pH

Process temperature 0 – 130° C

Pressure range (relative to ambient) 0 – 16 bar (25° C) / 0 – 6 bar (130° C)

Body material Glass ; **pH element** Glass ;
3 ceramic diaphragms high performance

S8 connector (PG13.5 mm mechanical and S7 electrical)

Double junction with KCL Gel

SPH4 LC

Low maintenance sealed unit with **gel filled reference cell by external refill** suitable for **highly acidic solutions, chromium plating, reverse osmosis, bisulphite application, boiler feed water.**

Technical features

Measuring range 0 -14 pH

Process temperature -10 – 40° C

Pressure range (relative to ambient) 0 – 0.5 bar or higher if pressurization by side-arm

Body material glass for low pressure environmental ;
pH element Glass ; **One sleeve diaphragm**

S8 connector (PG13.5 mm mechanical and S7 electrical)

Double junction with KCL Gel