

FEATURES

EMEC pH electrodes assures long-time stability and accuracy.

pH easy-maintenance electrodes provides accurate reading value and fast response, performances required for the most accurate measurements.

Single and double junction models are available. pH electrodes double junction models only are suitable for sea-water. Double junction system offers better electrode protection and guarantees a longer service life. Choose double junction models if you are working with materials like *sulphide*, *sulfur* and *silver*.

DURABILITY

Electrode's lifetime is affected by the working conditions: such as temperature, solution type (acid or alkaline). Usually working at room temperature with a weak solution the electrode's lifetime is around 2 years. Increasing temperature drastically changes the lifetime. Electrodes get old quickly while stocked.

CALIBRATION

Wash the electrode and dry it without wipes, just shaking it. Don't wipe or brush, this would create electrostatic charges that can influence the reading of the electrode. Follow the controller's electrode calibration procedure, always use new buffer solutions.

MAINTENANCE

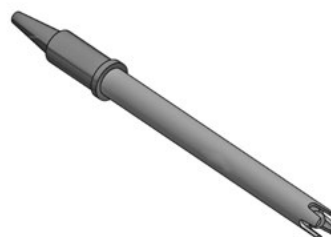
When the reading of the electrode is slow or unstable it may be because it's dirty, cleaning is needed at fixed intervals to remove the dust. Remove the electrode from the system, wash it with clean fresh water and then dip it in to an acid solution of HCl (max 10%) for five minutes. Abundantly rinse it with fresh water and perform a new calibration.

STOCKING

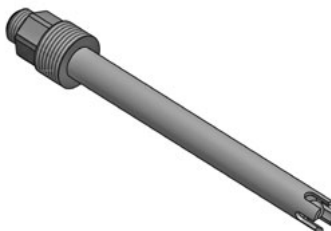
Always keep the electrodes in the original stocking bottles, the liquid inside is a transparent KCl at pH4. Never leave the electrodes dry, keep it in water for short time stocking.

The section below shows the electrode's differences so that you can select the electrode that best fit in your application.

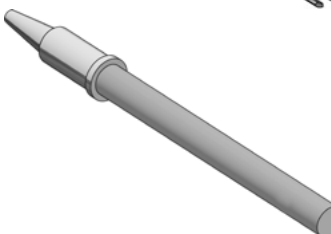
EPHS
EPHM
EPHL
EPHMD
EPHMD/100
EPHM/HF



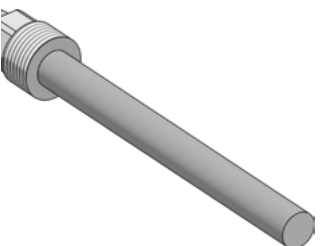
EPHSN6



EPHSC



EPHSC/SN6



	EPHS	EPHM	EPHL	EPHMD	EPHM/HF	EPHSN6	EPHMD/100	EPHSC	EPHSC/SN6
Measuring Range	0-14 pH	0-14 pH	0-14 pH	0-14 pH	0-14 pH	0-14 pH	0-14 pH	0-14 pH	0-14 pH
Resolution	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01
Max pressure / temp.	7 bar/70°C (3,5 bar / 80°C)	7 bar/70°C (3,5 bar / 80°C)	7 bar/70°C (3,5 bar / 80°C)	7 bar/70°C (3,5 bar / 80°C)	7 bar/70°C (3,5 bar / 80°C)	7 bar/70°C (3,5 bar / 80°C)	7 bar / 100°C	7 bar/70°C (3,5 bar / 80°C)	7 bar/70°C (3,5 bar / 80°C)
Body	EPOXY	EPOXY	EPOXY	EPOXY	EPOXY	EPOXY	EPOXY	EPOXY	EPOXY
Installation Diameter	12 mm	12 mm	12 mm	12 mm	12 mm	PG13,5	12 mm	12 mm	PG13,5
Electrical Connection	BNC	BNC	BNC	BNC	BNC	SN6	BNC	BNC	SN6
Cable length	0,8 m	4,5 m	15 m	4,5 m	4,5 m	without cable	4,5 m	4,5 m	without cable
Minimum working conductivity	100 µS	100 µS	100 µS	1 µS	100 µS	100 µS	100 µS	100 µS	100 µS
Features	-	-	-	Low ionic Double junction	Hydrofluoric acid resistant (1%)	-	Double junction	Self cleaning Double junction	Self cleaning Double junction

ACCESSORIES

This section lists accessories available at the time of issue of this document. For not listed accessories refer to technical datasheet.

ASSEMBLIES

- PEF1 off-line probe holder
For pH, ORP, chlorine amperometric cells and temperature electrodes. Flow level control and proximity switch (mod. SEPR). Max 50°C. Fittings 6x8.
- PEF5 off-line probe holder
For pH, ORP (PG13,5 thread), chlorine amperometric cells and temperature electrodes. Flow level control and proximity switch (mod. SEPR). Max 50°C. Fittings 6x8.
- PEF2 off-line probe holder
For pH, ORP, chlorine open amperometric cells and temperature electrodes. Flow level control and proximity switch (mod. SEPR). Max 50°C. Fittings 6x8.
- PEF3 off-line probe holder
For pH, ORP (PG13,5 thread) chlorine open amperometric cells and temperature electrodes. Flow level control and proximity switch (mod. SEPR). Max 50°C. Fittings 6x8.
- PEF22 and PEF23 off-line probe holder for MAX5 connection
- NPED1 off-line probe holder
For Ø12 electrodes, with PG13,5 thread. Max 50° C, 5bar. Fittings 6x8.
- NPED2 off-line probe holder
For two electrodes, epoxy Ø12. Max 50° C, 5bar. Fittings 6x8.
- NPED3 off-line probe holder
For pH and ORP Ø12 electrodes and conductivity probes with 3/4" threading. Max 50° C, 5bar. Fittings 6x8.
- NPED4 off-line probe holder
For two EPH, ERH electrodes, epoxy Ø12. Max 50° C, 5bar, flow sensor with N.O. contact. Fittings 6x8.
- NPED4/2F Two wires version for instruments with N.C. contact.
- NPED4-3/4 off-line probe holder
For two EPH, ERH electrodes, 3/4" threading, epoxy body Ø12. Max 50° C, 5bar, flow sensor with N.O. contact. Fittings 6x8.
- PEA in-line probe holder
For pH and ORP electrodes, Ø12. 1/2" connection, max 65°C. PVDF body.
- PEB in-line probe holder
For pH and ORP electrodes, Ø12. 3/4" connection, max 65°C.
- PEL PVDF in-line probe holder for "T" connection.
For pH and ORP electrodes with 1/2" or 3/4" thread. Max 90°C, 7 bar (130°C, 3 bar).
- PELC PVDF in-line probe holder for saddle connection
For pH and ORP electrodes with 1/2" or 3/4" thread. Max 90°C, 7 bar (130°C, 3 bar).
- PEC PVC Immersion probe holder
For pH and ORP electrodes, Ø12. Length 100 cm.
- PEC/SN6 PVC Immersion probe holder
For pH and ORP electrodes, with PG13,5 thread. Length 100 cm.

BUFFER SOLUTIONS

Technical buffer solutions for pH electrodes:

- BSA: pH 4, 50ml.
- BSB: pH 7, 50ml.
- BSC: pH 9, 50ml.

AMPLIFIER

- ADI1 PH: Amplifier for pH electrodes with galvanic isolation. Max distance 150m. 1 channel.
- ADI2: Amplifier for pH electrodes with galvanic isolation. Max distance 150m. 2 channels.

CABLES

- CASN6S: Cable BNC/SN6 for probe EPHSN6. Length 5mt.
- CASN6M: Cable BNC/SN6 for probe EPHSN6. Length 10mt.
- CASN6L: Cable BNC/SN6 for probe EPHSN6. Length 15mt.