



## PH8012 Industrial pH Electrode

### Basic Principle of pH Electrode

In PH measurement, the used electrode is also known as the primary battery. The primary battery is a system, whose role is to transfer chemical energy into electrical energy. The voltage of the battery is called the electromotive force (EMF). This electromotive force (EMF) is composed of two half-batteries. One half-battery is called the measuring electrode, and its potential is related to the specific ion activity; the other half-battery is the reference battery, often called the reference electrode, which is generally interlinked with the measurement solution, and connected to the measuring instrument.

#### Model No.: PH8012

Measuring range: 0-14pH

Temperature range: 0-60°C

Compressive strength: 0.3MPa

Slope:  $\geq 96\%$

Zero point potential:  $E_0 = 7\text{PH} \pm 0.3$

Internal impedance: 150-250 M $\Omega$  (25°C)

Profile: 3-in-1 Electrode (Integrating the temperature compensation and the solution grounding)

Installation size: Upper and Lower 3/4NPT Pipe Thread

Connection: Low-noise cable goes out directly.

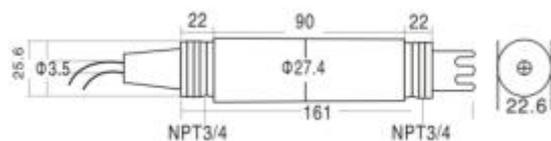
Application: Applicable to various industrial sewages, environmental protection and water treatment.



### Features of PH Electrode

- It adopts the world-class solid dielectric and a large area of PTFE liquid for junction, non-block and easy maintenance.
- Long-distance reference diffusion channel greatly extends the service life of electrodes in the harsh environment
- It adopts PPS/PC casing and the upper and lower 3/4NPT pipe thread, so it is easy for installation and there is no need of the jacket, thus saving the installation cost.
- The electrode adopts the high-quality low-noise cable, which makes the signal output length more than 20 meters free of interference.
- There is no need for additional dielectric and there is a little amount of maintenance.
- High measurement accuracy, fast responding and good repeatability.
- Reference electrode with silver ions Ag/AgCL
- Proper operation shall make service life longer.
- It can be installed in the reaction tank or pipe laterally or vertically.
- The electrode can be replaced by a similar electrode made by any other country.

#### Electrode Structure Chart



#### Electrode Wiring Plug

BNC (Q9) Plug    Pin    Y Plate

