

# INDUSTRIAL APPLICATION ELECTRODES

## pH - ORP



### REFERENCE SYSTEM

If there is not a special mention, all our electrodes use a reference system as Ag/AgCl with a porous reference junction in ceramic: theoretical zero is at pH 7 (0 mV).

Theoretical gain is close to 58 mV per pH units (at 20°C).

### pH COMBINATION ELECTRODES

Glass and reference electrodes are always as a combination system.

The glass electrode is totally protected by the surrounding low resistance electrolyte from the reference electrode.

The measurement area corresponds to axial centered wire.

### ORP COMBINATION ELECTRODES

For these electrodes, the glass bulb is replaced by a metallic ring, Platinum or Gold, according to the application.

Gold ring electrodes are mainly used for ORP measurement in liquids containing cyanides.

All Other information about combination pH electrodes is applicable on ORP combination electrodes.

### ELECTROLYTE

Generally, the electrolyte in the reference electrode is KCl 3,5M, saturated, in state of a jelly (no filling up is necessary).

### DIMENSIONS

All electrodes are 12 ±0.5 mm external diameter, fitting with thread connection and electrical plug for a specific 9054 connector.

A Pg 13.5 connection insures the perfect sealing.

### MOUNTING

Any industrial electrode must fit on an adapted electrode holder, in order to protection it and to optimize the measurements.

- For immersion in tank or open channel flume, please see the documentation 130, 135 and 145.

- For in-line flow through cells please see the documentation 140 and 141.

Type	Code	Parameter	KCl electrolyte	Application	Max. pressure	Max. Temperature	Sealing
9308 RP	150 112	pH	Gel	0 - 14 pH	6 bar	+ 60 °C	Pg 13,5
9387	150 342	pH	Gel	0 - 14 pH	6 bar	+ 100 °C	Pg 13,5
9318 RD	150 117	Redox	Gel	Élément platine	6 bar	+ 60 °C	Pg 13,5
9319 R	150 118	Redox	Gel	Élément or	0,05 bar	+ 60 °C	Pg 13,5

**Note:** pressure and temperature limits are not simultaneous limits.