

# Standard pH and Redox Single Rod Electrodes



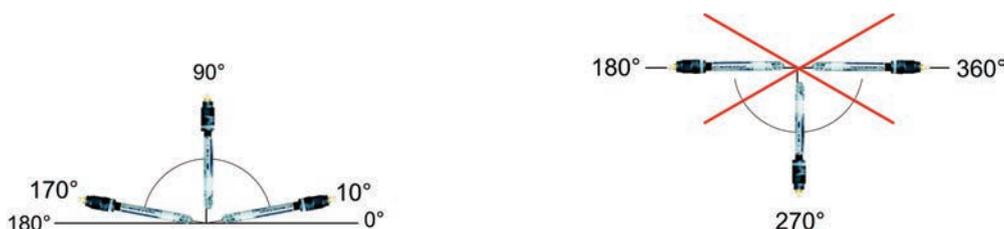
## pH single rod electrodes

### Technical data

Type	AL70pH-00	EGA142-VP	EGAT173-VP-X	SL81-120pHT-VP	APS-X1Q2K1A-00	L9080
Range of application	2 - 13 pH	0 - 14 pH	0 - 14 pH	0 - 14 pH	1 - 12 pH	0 - 12 pH
Area of application	water	water, swimming pool, sewer	heavily contaminated waste water electroplating	foods (sterilisable) water, waste water	refrigeration	purest water boiler feed water
Working temperature	-5..+80 °C	-5..+80 °C	-5..+80 °C	0..135 °C	-15..+80 °C	-30..+80 °C
Max. pressure	3 bar	6 bar	6 bar	10 bar	6 bar	6 bar
Installation location	120 mm	120 mm	120 mm	120 mm	120 mm	120 mm
Process connection	PG13.5	PG13.5	PG13.5	PG13.5	PG13.5	PG13.5
Temperature sensor	-	Pt1000	Pt1000	Pt1000	-	-
Electrical connection*	S7	VP	VP	VP	S7	S7
Reference system	Silver/silver chloride (Ag/AGCl) electrode zero point pH7.00					
Reference electrodes Electrolyte	Gel	Gel	Gel	Gel	Gel	Liquid
Diaphragm	ceramic	ceramic	cut	ceramic	PTFE	ceramic
Min. media conductivity	50 µS/cm	100 µS/cm	50 µS/cm	50 µS/cm	50 µS/cm	< 1 µS/cm
Installation location	10..170°	30..150°	30..150°	10..170°	10..170°	10..170°

Patch cords, refer to page 18

### Installation location



**Redox Redox Single Rod Electrodes**
**Technical data**

Type	AL79Pt-00	Pt8281HD-00
Range of application	2 - 13 pH	2 - 13 pH
Area of application	Environmental technology, disinfection	Environmental technology, disinfection
Working temperature	-5..+80 °C	-5..+100 °C
Max. pressure	3 bar	10 bar
Installation location	120 mm	120 mm
Process connection	PG13.5	PG13.5
Temperature sensor	-	-
Electrical connection*	S7	S7
Reference system	Silver/silver chloride (Ag/AGCl) electrode zero point pH7.00	
Reference electrodes	Polymer (Referid)	Polymer (Referid)
Electrolyte		
Diaphragm	ceramic	KPG
Min. media conductivity	50 µS/cm	50 µS/cm
Installation location (see previous page)	10..170°	10..170°

Patch cords, refer to page 18

**pH and Redox Single Rod Electrodes Instructions for Use**

- 1.) pH and Redox Single Rod Electrodes are delivered with a protective cap filled with a 3 mole KCL solution. The electrodes can be stored for up to 1 year in this state. Therefore, the protective cap should only be removed immediately before installation and use.
- 2.) The shaft of the single rod electrodes is made of glass and breaks easily. It must be ensured that the tips do not strike against anything during installation.
- 3.) Since the characteristics of single rod electrodes deviate from the ideal line, they must be calibrated at the time of commissioning and on a regular basis thereafter in order to provide exact measurements.
- 4.) The tip of single rod electrodes must not dry out; otherwise they are unusable. The active area of the electrode is immersed in a 3 mole KCL storage solution for approximately 24 hours for regeneration. Then calibration is necessary, because the zero point and transmittance may have shifted.
- 5.) The electrodes must be cleaned from time to time when used in dirty media and media containing proteins. We offer a special cleaning solution for this purpose. The electrodes must be rinsed off with water after cleaning.

**Important!**

pH and Redox electrodes have a limited service life. This depends on the usage conditions, such as medium, pressure, and temperature, and can vary from a few weeks to several years. There are special cases in which a service life of only a few days can be achieved due to extreme usage conditions. The characteristic and adjusting time of the electrode shaft due to ageing. The resulting error due to recalibration in combination with downstream electronics (e.g. UNICON-pH converter) can be compensated up to a certain degree of ageing.

*pH and Redox single rod electrodes are consumables and not subject to the normal guarantee. No returns or exchanges are accepted.*

Our offer also includes technical advice on the selection of the optimal pH and Redox single rod electrodes, free of charge. In addition to the standard electrodes indicated in the list, we also provide versions specially adapted to the respective usage conditions.