

pH electrodes



	GE 100	GE 101	GE 104	GE 108	GE 114	GE 117	GE 120	GE 125	GE 151	GE 171	GE 173
Measuring range	0 ... 14 pH 0 ... 80 °C	2 ... 11 pH 0 ... 60 °C	0 ... 14 pH 0 ... 80 °C	0 ... 14 pH 0 ... 80 °C	0 ... 14 pH 0 ... 60 °C	0 ... 14 pH 0 ... 80 °C	0 ... 14 pH 0 ... 60 °C	0 ... 14 pH 0 ... 70 °C	0 ... 14 pH 0 ... 80 °C	0 ... 14 pH 0 ... 140 °C	0 ... 14 pH 0 ... 80 °C
Conductivity	> 100 µS/cm	> 100 µS/cm	> 20 µS/cm	> 100 µS/cm	> 200 µS/cm	> 100 µS/cm	> 200 µS/cm	> 200 µS/cm	> 100 µS/cm	> 100 µS/cm	> 50 µS/cm
Temperature measuring	no	no	no	no	no	integr. Pt1000 4 mm banana	no	integr. Pt1000 4 mm banana	no	no	no
Water-proof	no	no	no	no	no	no	no	ja	no	no	no
Pressure resistant	no	no	no	6 bar	no	6 bar	no	1 bar	no	10 bar	6 bar
Cable	1 m ¹⁾	1 m ¹⁾	1 m ¹⁾	2 m ¹⁾	1 m	2 m ²⁾	1 m	2 m	1 m ¹⁾	ohne	1 m ¹⁾
Electrolyte	3 mol/l KCl	3 mol/l KCl	3 mol/l KCl	gel electrolyte	gel electrolyte	gel electrolyte	gel electrolyte	gel electrolyte	3 mol/l KCl	gel electrolyte	gel electrolyte
Diaphragm	2 x ceramic	2 x ceramic	moving joint	2 x ceramic	1 x Pellon	2 x ceramic	2 x ceramic	1 x ceramic	1 x ceramic	2 x ceramic	joint
Thread	without	without	without	PG 13.5	without	PG 13.5	without	without	without	PG 13.5	PG 13.5
Electrode shaft	Tyrl, Ø 12 mm x 120 mm	glass, Ø 12 bzw. 6 mm x 120 mm	glass, Ø 12 mm x 120 mm	PSU, Ø 12 mm x 120 mm	epoxide, Ø 12 mm x 120 mm	PSU, Ø 12 mm x 120 mm	PVC, Ø 22 mm x 110 mm	epoxide, Ø 12 mm x 120 mm	glass, Ø 12 mm x 120 mm	glass, Ø 12 mm x 120 mm	glass, Ø 12 mm x 120 mm
Features	universal electrode	tip Ø 6 mm, small sample volume	for low-ion media	low- maintenance	Low-cost low- maintenance	temperature compensated	insertion electrode, blade Ø 13 mm x 60 mm	submersible, water-proof IP67 (also BNC-plug)	chemicals- resistant glass shaft	for extreme conditions, sterilizable, autoclavable	for process chemistry, bio-chemistry, alkali-resistant
Connection:											
BNC Art. no.	600704	600693	602063	600713	604701	600730	600698	600732	600727	-	600735
Cinch Art. no.	600702	600690	604504	600711	-	-	600696	-	600724	-	600734
S7*) Art. no.	-	-	-	606089	-	-	-	-	-	606375	606572

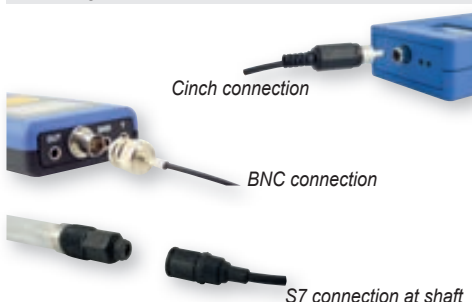
*) Note: cable GEAK-2S7-BNC or GEAK-5S7-BNC is needed for connection S7, for devices with cinch connection adapter GAD 1 BNC is necessary. Electrodes are consumption objects. Lifetime under careful treatment: > 2 years; warranty: 12 months

Optionen:

Longer cable for ¹⁾²⁾
(available cable lengths: up to 5 m)
Special designs
(electrodes with thread, other lengths,
special applications etc.)

Accessories and spare parts:**Kabel-BNCM/BNCF**

Art. no. 606158
Extension cables for electrodes with BNC connector,
Cable length: 3 m

**Diaphragma:**

The diaphragm makes the electric connection between reference system and sample. Additionally it should prevent the spoiling of the reference electrolyte by the measured medium.

Ceramic diaphragm

Porous ceramic rods ensure low leak rates.

Application:

General applications in clean till lightly soiled media.

Joint / movable joint

The roughened surface between the cut glass of the electrode and a cut glass sleeve permits a electrolyte flow of several ml/h.

Application:

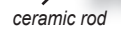
low-ion or heavily soiled samples

Pellon diaphragm

A permeable diaphragm made of Pellon texture is used for fast response times and stable measuring values

Application:

Clean till lightly soiled media.

**Reference electrolyte:**

The reference electrolyte offers a constant voltage of the reference system and makes the electrical connection between sample and reference electrode.

Liquid electrolyte

Mainly 3 mol/l KCl is used. Liquid electrolytes offer fast response times in general and can be replaced if contaminated.

Gel electrolyte

The electrolyte is solidified for low-maintenance electrodes able to measure irrespective to its position. Under normal measurement conditions no noticeable electrolyte leakage is observable.

Electrodes with S7 connection:

The electrodes are offered with an S7 industrial screw plug fitted, also known as industrial-S8 Plug head. In contrast to S7 lab plug head this one is for direct installation in fittings with PG 13.5 suitable thread.