



pH mV μ S mS O₂ Cl₂ ISE NTU



Meinsberg Electrodes

for Laboratory and Process

Order key for reference electrodes and pH combination electrodes

reference electrodes

There is a plug head or a fixed cable with plug available. Please set your choice according to the following:

SE/KE... - X - X000 - X - X

P	= screwable thread PG 13.5
H	= 4 mm banana plug
F	= stripped ends
K	= standard cable length ¹ (additional setting of wished standard cable length, e. g. K010 for 1 m or K100 for 10 m)
SK	= special cable length (additional setting of wished special cable length, e. g. SK015 for 1.50 m or SK155 for 15.50 m)
L	= S7 coaxial lab plug head
	Marking of basic type

Example: SE 20 with 3 m special cable length, banana plug and screwable thread PG 13.5 = **SE 20-SK030-H-P**

pH combination electrodes without temperature sensor

There is a plug head or a fixed cable with plug available for choice. Please set your choice according to the following:

EG... XXX - X - X000 - X - X

P	= screwable thread PG 13.5
B	= BNC plug
G	= Cinch plug
D	= German DIN plug
F	= stripped ends
K	= standard cable length ¹ (additional setting of wished standard cable length, e. g. K010 for 1 m or K100 for 10 m)
SK	= special cable length (additional setting of wished special cable length, e. g. SK015 for 1.50 m or SK155 for 15.50 m)
L	= S7 coaxial lab plug head
	Continuation of the marking (e. g. 153)
	Marking of basic type (EGA/EGC)
A	= standard glass
C	= HT-glass (for strong alkaline mediums)

Example: EGA 151 with 3 m special cable length and BNC plug = **EGA 151-SK030-B**

pH combination electrodes with temperature sensor

There is a plug head or a fixed cable with plug available. Please set your choice according to the following:

EG... XXX - X - X - X000 - X - X

P	= screwable thread PG 13.5
BH	= BNC plug and 4 mm banana plug
BG	= BNC plug and Cinch plug
BM	= BNC plug and German MiniDIN plug
DH	= German DIN plug and 4 mm banana plug
F	= stripped ends
K	= standard cable length ¹ (additional setting of wished standard cable length, e. g. K010 for 1 m or K100 for 10 m)
SK	= special cable length (additional setting of wished special cable length, e. g. SK015 for 1.50 m or SK155 for 15.50 m)
E	= SMEK lab plug head ²
X	= with Pt 1000
Y	= with Pt 100
Z30	= with NTC 30 kΩ
	Continuation of the marking (e. g. 143)
	Marking of basic type (EGA/EGC)
A	= standard glass
C	= HT-glass (for strong alkaline mediums)

Example: EGA 143 with Pt 100, 12.50 m special cable length and stripped ends = **EGA 143-Y-SK125-F**

¹ The following standard cable lengths are available: 1 m, 2 m, 5 m, 10 m and 15 m

² „SMEK“ is another description for „SixPlug“.

1. Electrode selection table for application in laboratory and process (pH, redox, conductivity, oxygen and chlorine)

	aquariums	aqueous solutions	biotechnology (fermenter)	cosmetics	drinking water	drinks	electroplating	field measurements	high pH values	low ionic mediums
EGA 121	•	•								
EGA 131	•									
EGA 133	•							•		
EGA 140						•				
EGA 141						•				
EGA 142	•							•		
EGA 143					•	•				
EGA 150		•								
EGA 151	•	•				•				
EGA 153									•	•
EGA 161				•	•					•
EGA 173					•	•	•			
EGA 184										
EGA 186										
EGA 233							•			
EGA 81										
EGC 151									•	
EGC 151 I/S									•	•
EGP 150										
EGV 150			•							
OGA 201										
EMC 133	•							•		
EMC 173		•			•	•	•			
EMC 30										
EMC 33		•				•	•			
LTC 0,35/23								•		
LTC 1/23	•					•		•		
LTG 0,1/23					•					•
LTG 1/23		•			•	•				
LVV 0,1/23					•					•
MF 39										
MF 39-T										
MF 41	•				•			•		
CL 4					•					•
CS 2, CP 2					•					
MCL 10					•					•

2. Technical data of pH- and redox combination electrodes

All combination electrodes which are shown in the following table are equipped with a Ag/AgCl reference electrode.

pH combination electrodes

type	shaft material	shaft length (standard) in mm	shaft diameter (mm)	shaft diameter below (mm)	temperature sensor	membrane shape	reference electrolyte (KCl concentration)
EGA 121	glass	120	12	12	yes	cylinder	fluid (3 M)
EGA 131	plastic	120	12	12	no	ball	fluid (3 M)
EGA 133	plastic	120	12	12	no	cylinder	gel (3 M)
EGA 140	glass	120	12	12	yes	cylinder	gel (3 M)
EGA 141	glass	120	12	12	yes	cylinder	fluid (3 M)
EGA 142	plastic	120	12	12	yes	cylinder	gel (3 M)
EGA 143	glass	120	12	12	yes	cylinder	gel (3 M)
EGA 150	glass	120	12	12	no	cylinder	gel (3 M)
EGA 151	glass	120	12	12	no	cylinder	fluid (3 M)
EGA 153	glass	120	12	12	no	cylinder	gel (3 M)
EGA 161	glass	120	12	12	no	cylinder	fluid (3 M)
EGA 173	glass	120	12	12	no	cylinder	gel (3 M)
EGA 184	glass	120	12	6	no	spear	gel (3 M)
EGA 186	glass	170	12	6	no	cylinder	fluid (3 M)
EGA 233	plastic	120	12	12	no	cylinder	gel (3 M)
EGA 81	glass	120	12	12	no	spear	fluid (3 M)
EGC 151	glass	120	12	12	no	cylinder	fluid (3 M)
EGC 151 I/S	glass	120	12	12	no	cylinder	fluid (saturated)
EGP 150	glass	120	12	12	no	cylinder	gel (3 M)
EGV 150	glass	120	12	12	no	cylinder	gel (3 M)
OGA 201	glass	120	12	17	no	flat	fluid (3 M)

redox combination electrodes

type	shaft material	shaft length (standard) in mm	shaft diameter (mm)	metall electrode	reference electrolyte (KCl concentration)
EMC 133	plastic	120	12	platinum disc	gel (3 M)
EMC 173	glass	120	12	platinum disc	gel (3 M)
EMC 30	glass	120	12	platinum disc	fluid (3 M)
EMC 33	glass	120	12	platinum disc	gel (3 M)

EGA 141



EGA 141-X-E

- pH combination electrode for pocket meters
- integrated temperature sensor
- refillable electrolyte
- glass shaft can be cleaned very well

EGA 142



EGA 142-X-E

- pH combination electrode for pocket meters
- integrated temperature sensor
- low maintenance
- robust plastic shaft with integrated pH membrane protection

EGA 161



EGA 161-L

- pH combination electrode for measurements in low ionic mediums and cosmetics
- refillable electrolyte
- flexible sleeve junction

EGA 141

glass, Ø 12 mm
120 mm
Pt 1000 or Pt 100 or
NTC 30 kΩ

cylinder
Ag/AgCl
fluid (3 M)
2 x ceramic

7.0 ± 0.3
0 ... 14
-5 ... 80 °C
22 mm

aquarium water, surface water,
swimming pools, waste water,
environmental analysis

SMEK lab plug head, fixed cable

Refer to the left book cover!

EGA 142

plastic, Ø 12 mm
120 mm
Pt 1000 or Pt 100 or
NTC 30 kΩ

cylinder
Ag/AgCl
gel (3 M)
2 x ceramic

7.0 ± 0.3
0 ... 14
-5 ... 80 °C
15 mm

field measurements, aquarium water,
surface water, swimming pools, waste
water, environmental analysis

SMEK lab plug head, fixed cable

Refer to the left book cover!

EGA 161

glass, Ø 12 mm
120 mm
-

cylinder
Ag/AgCl
fluid (3 M)
flexible sleeve junction

7.0 ± 0.3
0 ... 14
-5 ... 80 °C
32 mm

low ionic mediums, cosmetics

S7 coaxial lab plug head, fixed cable

Refer to the left book cover!

The pH combination electrode EGA 141 is also available with HT-glass (EGC 141). EGC 141 can be used in hot (100 °C) mediums with extreme pH values.

All electrodes can be configured according to plug connector, cable length, plug and thread PG 13.5 (Refer to the left book cover!).

The connection cable for the S7 coaxial lab plug head is illustrated on page 16. The connection cable for the SMEK lab plug head is illustrated on page 16 and 30.