

MultiSens electrodes pH, °C

	PET 10-170 HD	PET 50-120 HD	PET 50-225 HD	PET 60-170	PET 80-120	PET 80-225	PET 30-120
temperature sensor	Pt 1000	Pt 1000	Pt 1000	Pt 1000	Pt 1000	Pt 1000	Pt 1000
membrane glass	A	A	A	A	A	A	S
membrane resistance (25°C) [MΩ]	500	500	500	500	500	500	900
temperature range [°C]	0 ... 135	0 ... 100	0 ... 100	0 ... 135	0 ... 100	0 ... 100	0 ... 135
pH range	0 ... 14	2 ... 13	2 ... 13	0 ... 14	2 ... 13	2 ... 13	2 ... 14
pressure range [bar]	10	10	10	6	6	6	6
length L [mm]	170	120	225	170	120	225	120
sterilizable							●
diaphragm	ceramic			●			●
platinum	●						
hole		●	●		●	●	
electrolyte	liquid, refillable (L 300)						●
	liquid, refillable (L 310)	●		●			
	Referid®, low-maintenance	●	●		●	●	
certified pressure and temperature consistency ¹⁾	●	●	●				
connection	SMEK	SMEK	SMEK	VP	VP	VP	SMEK
design corresponding illustration	A	A	A	B	B	B	C
type no. of variant with VP plug head							PET 20-120

¹⁾ These types are supplied in series with Works Certificate 2.1 according to DIN EN 10204 regarding resistance to pressure and temperature.

	PET 30-200	PET 30-250	PET 36-120	PET 36-200
Pt 1000				
S	S	S	S	
900	900	900	900	
0 ... 135	0 ... 135	0 ... 135	0 ... 135	
2 ... 14	2 ... 14	2 ... 14	2 ... 14	
6	6	6	6	
200	250	120	200	
●	●	●	●	
●	●	●	●	
●	●	●	●	
●	●	●	●	
SMEK	SMEK	SMEK	SMEK	
C	C	D	D	
PET 20-200	PET 20-250	PET 26-120	PET 26-200	

MultiSens electrodes
More information from a single measuring point.
Type series PET: pH combination electrode with integrated temperature sensor.

- Zero point:**
 ▶ pH = 7.0
Connection (design A+B):
 ▶ screw plug head with thread Pg 13.5
Connection (design C+D):
 ▶ smooth plug head for sterilizable electrode holders
Supply (design A):
 ▶ HD sealing type 9980/51
Supply (design B):
 ▶ washer 9980/52
 ▶ O-ring type 9932/07
Connecting cable:
 ▶ SMEK: e.g. type SMEK 19/05
 (length 5 m with free end)
 ▶ VP: e.g. type VP6-19/05
 (length 5 m with free end)

For additional connecting cables, see under Accessories on page 52.



MultiSens electrodes pH, mV, °C

	PETR 10-170 HD	PETR 50-120 HD	PETR 50-225 HD	PETR 60-170	PETR 80-120	PETR 80-225	PETR 30-120
redox sensor platinum ring	●	●	●	●	●	●	●
temperature sensor	Pt 1000	Pt 1000	Pt 1000	Pt 1000	Pt 1000	Pt 1000	Pt 1000
membrane glass	A	A	A	A	A	A	S
membrane resistance (25°C) [MΩ]	500	500	500	500	500	500	900
temperature range [°C]	0...135	0...100	0...100	0...135	0...100	0...100	0...135
pH range	0...14	2...13	2...13	0...14	2...13	2...13	2...14
pressure range [bar]	10	10	10	6	6	6	6
length L [mm]	170	120	225	170	120	225	120
sterilizable						●	
diaphragm	ceramic			●			●
	platinum	●					
	hole	●	●		●	●	
electrolyte	liquid, refillable (L 300)					●	
	liquid, refillable (L 310)	●		●			
	Referid®, low-maintenance	●	●		●	●	
certified pressure and temperature consistency ¹⁾	●	●	●				
connection	SMEK	SMEK	SMEK	VP	VP	VP	SMEK
design corresponding illustration	A	A	A	B	B	B	C
type no. of variant with VP plug head					PETR 20-120		

¹⁾ These types are supplied in series with Works Certificate 2.1 according to DIN EN 10204 regarding resistance to pressure and temperature.

	PETR 30-200	PETR 36-120	PETR 36-200
redox sensor platinum ring	●	●	●
temperature sensor	Pt 1000	Pt 1000	Pt 1000
membrane glass	S	S	S
membrane resistance (25°C) [MΩ]	900	900	900
temperature range [°C]	0...135	0...135	0...135
pH range	2...14	2...14	2...14
pressure range [bar]	6	6	6
length L [mm]	200	120	200
sterilizable	●	●	●
diaphragm	●	●	●
electrolyte	●	●	●
connection	SMEK	SMEK	SMEK
design corresponding illustration	C	D	D
type no. of variant with VP plug head	PETR 20-200	PETR 26-120	PETR 26-200

MultiSens electrodes

Supply (design A):

► HD sealing type 9980/51

Supply (design B):

► washer 9980/52

► O-ring type 9932/07

Connecting cable:

► SMEK: e.g. type SMEK 19/05

(length 5 m with free end)

► VP: e.g. type VP6-19/05

(length 5 m with free end)

For additional connecting cables, see under Accessories on page 52.

Zero point:

► pH = 7.0

Connection (design A+B):

► screw plug head with thread Pg 13.5

Connection (design C+D):

► smooth plug head for sterilizable electrode holders.



A PETR 50-120 HD
PETR 10-170 HD
PETR 50-225 HD



B PETR 80-120
PETR 60-170
PETR 80-225



C PETR 20-120
PETR 20-200
PETR 30-120
PETR 30-200



D PETR 26-120
PETR 26-200
PETR 36-120
PETR 36-200



MultiSens electrodes pH, mV, µS, °C

	PETL 10-170 HD	PETL 50-120 HD	PETL 50-225 HD	PETL 60-170	PETL 80-120	PETL 80-225	PETL 30-200
redox sensor: 2 platinum rings	●	●	●	●	●	●	●
temperature sensor	Pt 1000	Pt 1000	Pt 1000	Pt 1000	Pt 1000	Pt 1000	Pt 1000
membrane glass	A	A	A	A	A	A	S
membrane resistance (25°C) [MΩ]	500	500	500	500	500	500	900
temperature range [°C]	0...135	0...100	0...100	0...135	0...100	0...100	0...135
pH range	0...14	2...13	2...13	0...14	2...13	2...13	2...14
pressure range [bar]	10	10	10	6	6	6	6
recommended conductivity range (25°C)	10	10	10	10	10	10	10
up to [mS/cm ²)							
cell constant about [cm ⁻¹]	0.6	0.6	0.6	0.6	0.6	0.6	0.6
length L [mm]	170	120	225	170	120	225	200
sterilizable							●
diaphragm	ceramic						●
platinum	●						●
hole		●	●		●	●	
electrolyte	liquid, refillable (L 300)						●
liquid, refillable (L 310)	●			●			
Referid®, low-maintenance	●	●	●	●	●	●	
certified pressure and temperature consistency ¹⁾	●	●	●				
connection	SMEK	SMEK	SMEK	VP	VP	VP	SMEK
design corresponding illustration	A	A	A	B	B	B	C
type no. of variant with VP plug head							PETL 20-200

¹⁾ These types are supplied in series with Works Certificate 2.1 according to DIN EN 10204 regarding resistance to pressure and temperature.

²⁾ Out of the recommended conductivity range the error of measurement can be >10%, also depending on conductivity meter.

PETL 36-200
●
Pt 1000
S
900
0...135
2...14
6
10
0.6
200
●
●
●
●
SMEK
D
PETL 26-200

MultiSens electrodes

Five parameters from one MultiSens electrode:

pH, redox, conductivity, temperature and reference system.

Zero point:

► pH=7.0

Connection (design A+B):

► screw plug head with thread Pg 13.5

Connection (design C+D):

► smooth plug head for sterilizable electrode holders

Supply (design A):

► HD sealing type 9980/51

Supply (design B):

► washer 9980/52

► O-ring type 9932/07

Connecting cable:

► SMEK: e.g. type SMEK 18/05

(length 5 m with free end)

► VP: e.g. type VP6-18/05

(length 5 m with free end)

For additional connecting cables, see under Accessories on page 52.

L

A PETL 50-120 HD
PETL 10-170 HD
PETL 50-225 HD



B PETL 80-120
PETL 60-170
PETL 80-225



C PETL 20-200
PETL 30-200

L

D PETL 26-200
PETL 36-200



MultiSens electrodes double pH, °C

	DPET 10-170 HD	DPET 50-120 HD	DPET 50-225 HD	DPET 30-120	DPET 30-200	DPET 36-200
temperature sensor	NTC 30KΩ	NTC 30KΩ	NTC 30KΩ	NTC 30KΩ	NTC 30KΩ	NTC 30KΩ
membrane glass	A	A	A	S	S	S
membrane resistance (25°C) [MΩ]	500	500	500	900	900	900
temperature range [°C]	0 ... 135	0 ... 100	0 ... 100	0 ... 135	0 ... 135	0 ... 135
pH range	0 ... 14	2 ... 13	2 ... 13	2 ... 14	2 ... 14	2 ... 14
pressure range [bar]	10	10	10	6	6	6
length L [mm]	170	120	225	120	200	200
sterilizable				●	●	●
diaphragm	ceramic			●	●	●
	platinum	●				
	hole		●	●		
electrolyte	liquid, refillable (L 300)			●	●	●
	liquid, refillable (L 310)	●				
	Referid®, low-maintenance		●	●		
certified pressure and temperature consistency ¹⁾	●	●	●			
connection	SMEK	SMEK	SMEK	SMEK	SMEK	SMEK
design corresponding illustration	A	A	A	B	B	C
type no. of variant with VP plug head				DPET 20-120	DPET 20-200	DPET 26-200

¹⁾ These types are supplied in series with Works Certificate 2.1 according to DIN EN 10204 regarding resistance to pressure and temperature.

A
DPET 50-120 HD
DPET 10-170 HD
DPET 50-225 HD



B
DPET 20-120
DPET 30-120
DPET 30-200
DPET 20-200



MultiSens electrodes

Double pH measuring technology for measurement point monitoring. Integrated temperature sensor.

Supply (design A):

► HD sealing type 9980/51

Connecting cable:

► SMEK: e.g. type SMEK 18/05

(length 5 m with free end)

► VP: e.g. type VP6-18/05

(length 5 m with free end)

For additional connecting cables, see under Accessories on page 52.

Zero points:

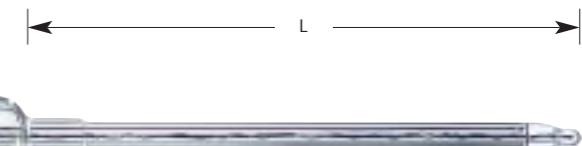
► pH = 7.0 and pH = 4.6

Connection (design A):

► screw plug head with thread Pg 13.5

Connection (design B+C):

► smooth plug head for sterilizable electrode holders



MultiSens electrodes μS , °C

LF 4TH 10-120 LF 4TH 60-120

conductivity sensor: 4 platinum rings	●	●
temperature sensor	Pt 1000	Pt 1000
temperature range [°C]	-5 ... +80	-5 ... +80
pressure range [bar]	10	6
recommended conductivity range (25°C)	1000	1000
up to [mS/cm] ¹⁾		
cell constant about [cm^{-1}]	1.0	1.0
length L [mm]	120	120
connection	SMEK	VP
design corresponding illustration	A	B

¹⁾ Out of the recommended conductivity range the error of measurement can be >10%, also depending on type of conductivity meter.



A LF 4TH 10-120



B LF 4TH 60-120



MultiSens electrodes

4-pole conductivity cells with integrated temperature sensor.

Connection:

- screw plug head with thread Pg 13.5

Supply:

- washer 9980/52

- O-ring type 9932/07

Connecting cable:

- SMEK: e.g. type SMEK 18/05
(length 5 m with free end)

- VP: e.g. type VP6-18/05
(length 5 m with free end)

For additional connecting cables, see under Accessories on page 52.