

2.2.2 ScienceLine pH combination electrodes

pH combination electrodes
with plug head and fixed cable

Reference system: Silamid®
 Shaft material: glass
 Zero point: pH= 7.0± 0.3
 Electrolyte: KCl 3 mol/l
 (except
 N 6250: KCl
 4.2 mol/l,
 A 7780 and
 L 7780: gel
 electrolyte,
 L 8280:
 Referid®
 electrolyte)
 Membrane shape: sphere
 pH range: 0 to 14
 Connection cable
 for plug head: e.g. L 1 A
 (See also page
 with connec-
 tion cables)
 fixed cable: 1 m long, with
 plug A acc.to
 DIN 19262 or
 with BNC plug



H 61
H 62
H 63
N 61
N 62
H 6180
H 6280
H 6380
N 6180
N 6250
N 6280
N 42 A
N 42 BNC
N 50 A
N 52 A
N 52 BNC
N 61 eis
H 61-500
H 61-600

H 64
H 64 1M-DIN-ID
H 64
1M-BNC-ID
N 64
N 6480 eis
N 6480 eth

N 65
H 65
H 6580
N 6580

L 32

A 7780
L 7780

N 6980

L 8280

Order No.	Type No.	Length L [mm]	Ø [mm]	Junction	pH- glass	Temp. range [°C]	Connection	Remarks
285101260	A 7780	120	12	3 x ceramic	A	-5 to +80	plug head	gel electrolyte
285100207	H 61	170	12	platinum	H	+10 to +100	plug head	
285092583	H 61-500	500	12	platinum	H	0 to +100	plug head	
285092591	H 61-600	600	12	platinum	H	0 to +100	plug head	
285102524	H 6180	170	12	ceramic	H	+10 to +100	plug head	
285100215	H 62	120	12	platinum	H	+10 to +100	plug head	
285102532	H 6280	120	12	ceramic	H	+10 to +100	plug head	
285100223	H 63	320	12	platinum	H	+10 to +100	plug head	
285102549	H 6380	320	12	ceramic	H	+10 to +100	plug head	
285100231	H 64	170	12	ground joint	H	+10 to +100	plug head	
285130220	H 64 1M-DIN-ID	170	12	ground joint	H	+10 to +100	DIN plug ²⁾	ID function
285130230	H 64 1M-BNC-ID	170	12	ground joint	H	+10 to +100	BNC plug ²⁾	ID function
285100248	H 65	103 ¹⁾	10	platinum	H	+10 to +100	plug head	standard taper NS14.5
285102565	H 6580	103 ¹⁾	10	ceramic	H	+10 to +100	plug head	standard taper NS14.5
1061093	L 32	120	12	ibre	A	-5 to +50	plug head	plastic shaft
285101252	L 7780	120	12	ceramic	A	-5 to +80	plug head	gel electrolyte
285101277	L 8280	120	12	KPG®	A	-5 to +80	plug head	Referid®electrolyte
285100437	N 42 A	120	12	ceramic	A	-5 to +100	DIN plug ²⁾	
285101544	N 42 BNC	120	12	ceramic	A	-5 to +100	BNC plug ²⁾	
285100453	N 50 A	108	12	ceramic	A	-5 to +100	DIN plug ²⁾	for portable KnickpH meters
285100494	N 52 A	120	12	platinum	A	-5 to +100	DIN plug ²⁾	
285105451	N 52 BNC	120	12	platinum	A	-5 to +100	BNC plug ²⁾	
285100001	N 61	170	12	platinum	A	-5 to +100	plug head	
285100018	N 6180	170	12	ceramic	A	-5 to +100	plug head	
285100034	N 62	120	12	platinum	A	-5 to +100	plug head	
285100112	N 6250	120	12	ceramic	A	+15 to +40	plug head	calomel ref., for TRISbuf ers
285100042	N 6280	120	12	ceramic	A	-5 to +100	plug head	
285100059	N 64	170	12	ground joint	A	-5 to +100	plug head	
285100067	N 65	103 ¹⁾	10	platinum	A	-5 to +100	plug head	standard taper NS14.5
285102516	N 6580	103 ¹⁾	10	ceramic	A	-5 to +100	plug head	standard taper NS14.5
285101709	N 6980	103 ¹⁾	10	ground joint	A	-5 to +100	plug head	standard taper NS14.5
285092661	N 61eis	170	12	3 x platinum	A	+10 to +40	plug head	electrolyte L5014, Ag/AgCl ref.
285092337	N 6480 eis	170	12	ground joint	A	+10 to +40	plug head	electrolyte L5014, Ag/AgCl ref.
285092329	N 6480 eth	170	12	ground joint	A	0 to +40	plug head	electrolyte L5014, Ag/AgCl ref.

¹⁾ Length from upper end of standard taper
²⁾ with 1 m fixed cable

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2.2.2.1 ScienceLinepH combination sensor

pH combination electrodes with temperature sensor

Reference system: Silamid®
 Shaft material: glass
 Diameter: 12 mm
 Zero point: pH= 7.0± 0.3
 Electrolyte: KCl 3 mol/l
 Temperature sensor: Pt 1000
 Membrane shape: sphere
 pH range: 0 to 14
 Connection cable:
 for SMEK-plug head: e.g. LS 1 ANN
 (See also page with connection cables)
 Fixed cable: 1 m long, with plug A acc. to DIN 19262 or with BNC plug, as well as plug for temperature sensor



N 1042 A
 N 1041 A
 N 1041 BNC
 N 1042 BNC
 N 1050 A
 N 1051 A
 N 1051 BNC
 N 1052 A
 N 1052 BNC
 N 2041 A
 N 2042 A
 N 1041 A - 600
 N 1043 A

A 161 1M DIN ID
 A 161 1M BNC ID
 A 161 IDS
 A 162 IDS
 H 161 1M DIN ID
 H 161 1M BNC ID

A 164 1M DIN ID
 A 164 1M BNC ID

A 7780 1M DIN ID
 A 7780 1M BNC ID
 A 7780 IDS

electrodes with temperature

Order No.	Type No.	Length L [mm]	Junction	pH-glass	Temp.-range [°C]	Connection	Remarks
85100090	A 161 IDS	170	platinum	A	-5 to +100	IDSplug	IDSfunction
285130240	A 161 1M-DIN-ID	170	platinum	A	-5 to +100	DIN ¹⁾ + 4-mm plug	ID function
285130250	A 161 1M-BNC-ID	170	platinum	A	-5 to +100	BNC ¹⁾ + 4-mm plug	ID function
285100120	A 162 IDS	120	platinum	A	-5 to +100	IDSplug	IDSfunction
285130280	A 164 1M-DIN-ID	170	ground joint	A	-5 to +100	DIN ¹⁾ + 4-mm plug	ID function
285130290	A 164 1M-BNC-ID	170	ground joint	A	-5 to +100	BNC ¹⁾ + 4-mm plug	ID function
285101080	A 7780 IDS	120	3 x ceramic	A	-5 to +80	IDSplug	IDSfunction
285130200	A 7780 1M-DIN-ID	120	3 x ceramic	A	-5 to +80	DIN ¹⁾ + 4-mm plug	ID function
285130210	A 7780 1M-BNC-ID	120	3 x ceramic	A	-5 to +80	BNC ¹⁾ + 4-mm plug	ID function
285130260	H 161 1M-DIN-ID	170	platinum	H	+10 to +100	DIN ¹⁾ + 4-mm plug	ID function
285130270	H 161 1M-BNC-ID	170	platinum	H	+10 to +100	BNC ¹⁾ + 4-mm plug	ID function
285100486	N 1041 A	170	ceramic	A	-5 to +100	DIN ¹⁾ + 4-mm plug	
285093111	N 1041 A-600	600	ceramic	A	-5 to +100	DIN ¹⁾ + 4-mm plug	Ag/AgCl ref.
285100531	N 1041 BNC	170	ceramic	A	-5 to +100	BNC ¹⁾ + 4-mm plug	
285104541	N 1042 A	120	ceramic	A	-5 to +100	DIN ¹⁾ + 4-mm plug	
285105476	N 1042 BNC	120	ceramic	A	-5 to +100	BNC ¹⁾ + 4-mm plug	
285093009	N 1043 A	320	ceramic	A	-5 to +100	DIN ¹⁾ + 4-mm plug	
285100375	N 1050 A	108	ceramic	A	-5 to +100	DIN ¹⁾ + 4-mm plug	for portable KnickpH Meter
285100510	N 1051 A	170	platinum	A	-5 to +100	DIN ¹⁾ + 4-mm plug	
285100500	N 1051 BNC	170	platinum	A	-5 to +100	BNC ¹⁾ + 4-mm plug	
1054512	N 1052 A	120	platinum	A	-5 to +100	DIN ¹⁾ + 4-mm plug	
285100380	N 1052 BNC	120	platinum	A	-5 to +100	BNC ¹⁾ + 4-mm plug	
285100342	N 2041 A	170	ceramic	A	-5 to +100	DIN ¹⁾ + 2-mm plug	
285100359	N 2042 A	120	ceramic	A	-5 to +100	DIN ¹⁾ + 2-mm plug	

ScienceLine

¹⁾ with 1 m fixed cable

2.2.2.2 ScienceLine micro, spear tip

pH combination electrodes with temperature sensor

Reference system: Silamid®
 Shaft material: glass
 Diameter: 12 mm
 Zero point: pH= 7.0±0.3
 Electrolyte: KCl 3 mol/l
 Temperature sensor: Pt 1000
 Membrane shape: sphere
 pH range: 0 to 14
 Connection cable: for SMEK-plug head: e.g. LS 1 ANN (See also page with connection cables)
 Fixed cable: 1 m long, with plug A acc. to DIN 19262 or with BNC plug, as well as plug for temperature sensor



A 157 1M BNC ID
 A 157
 A 157 1M DIN ID
 A 157 IDS
 N 5800 A
 N 5800 BNC
 N 5900 A
 N 6000 1M DIN ID
 N 6000 1M BNC ID
 N 6000 A
 N 6000 BNC
 N 6003

A 6880 IDS
 L 6880
 L 6880 1M-DIN-ID
 L 6880 1M-BNC-ID
 L 8880
 N 1048 A
 N 1048 1M BNC ID
 N 1048 1M DIN ID
 N 48 A
 N 48 BNC
 L 39
 L 39 1M DIN ID
 L 39 1M DIN ID

and surface combination electrodes

Order No.	Type No.	Length L [mm]	Ø [mm]	Junction	pH-glass	Membrane shape	Temp.-range [°C]	Range [pH]	Connection	Remarks
Micro										
285100080	A 157 IDS	70/130	12/5	platinum	A	cylindrical	-5 to +100	0 to 14	IDSplug	IDSfunction
285130160	A 157 1M-DIN-ID ¹⁾	70/130	12/5	platinum	A	cylindrical	-5 to +100	0 to 14	DIN plug ³⁾	ID function
285130170	A 157 1M-BNC-ID ¹⁾	70/130	12/5	platinum	A	cylindrical	-5 to +100	0 to 14	BNC plug ³⁾	ID function
285105127	N 5800 A	96 ²⁾	5	3 x platinum	A	spear	-5 to +100	0 to 14	DIN plug ³⁾	Ag/AgCl ref.
285105579	N 5800 BNC	96 ²⁾	5	3 x platinum	A	spear	-5 to +100	0 to 14	BNC plug ³⁾	Ag/AgCl ref.
285105135	N 5900 A	96 ²⁾	5	platinum	A	sphere	-5 to +100	0 to 14	DIN plug ³⁾	Ag/AgCl ref.
285105151	N 6000 A	96 ²⁾	3	platinum	A	cylindrical	-5 to +100	0 to 14	DIN plug ³⁾	Ag/AgCl ref.
285105632	N 6000 BNC	96 ²⁾	3	platinum	A	cylindrical	-5 to +100	0 to 14	BNC plug ³⁾	Ag/AgCl ref.
285130180	N 6000 1M-DIN-ID	96 ²⁾	3	platinum	A	cylindrical	-5 to +100	0 to 14	DIN plug ³⁾	ID function, Ag/AgCl ref.
285130190	N 6000 1M-BNC-ID	96 ²⁾	3	platinum	A	cylindrical	-5 to +100	0 to 14	BNC plug ³⁾	ID function, Ag/AgCl ref.
285105176	N 6003	70/180	12/3	ceramic	A	cylindrical	-5 to +100	0 to 14	plug head	Ag/AgCl ref.
Spear tip										
285100100	A 6880 IDS	70/50	12/8	3 x ceramic	A	spear	-5 to +100	0 to 14	IDSplug	IDSfunction
285101211	L 6880	70/50	12/8	3 x ceramic	A	spear	-5 to +100	0 to 14	plug head	
285130100	L 6880 1M-DIN-ID	70/50	12/8	3 x ceramic	A	spear	-5 to +100	0 to 14	DIN plug ³⁾	ID function
285130110	L 6880 1M-BNC-ID	70/50	12/8	3 x ceramic	A	spear	-5 to +100	0 to 14	BNC plug ³⁾	ID function
285101285	L 8880	70/50	12/8	hole	A	spear	-5 to +80	2 to 13	plug head	
285104611	N 1048 A ¹⁾	120	12	ceramic	A	spear	-5 to +100	0 to 14	DIN- ³⁾ + 4-mm plug	
285130120	N 1048 1M-DIN-ID ¹⁾	120	12	ceramic	A	spear	-5 to +100	0 to 14	DIN- ³⁾ + 4-mm plug	ID function
285130130	N 1048 1M-BNC-ID ¹⁾	120	12	ceramic	A	spear	-5 to +100	0 to 14	BNC- ³⁾ + 4-mm plug	ID function
285100445	N 48 A	120	12	ceramic	A	spear	-5 to +100	0 to 14	DIN plug ³⁾	
285101569	N 48 BNC	120	12	ceramic	A	spear	-5 to +100	0 to 14	BNC plug ³⁾	
Surface										
1061094	L 39	120	12	ibre	A	l at	-5 to +50	1 to 13	plug head	
285130140	L 39 1M-DIN-ID	120	12	ibre	A	l at	-5 to +50	1 to 13	DIN plug ³⁾	ID function
285130150	L 39 1M-BNC-ID	120	12	ibre	A	l at	-5 to +50	1 to 13	BNC plug ³⁾	ID function

ScienceLine

¹⁾ with integrated temperature sensor Pt 1000
²⁾ Length from upper end of standard taper (Standardtaper NS7.5)
³⁾ with 1 m fixed cable

2.2.2.3 ScienceLine

Metal combination electrodes with Silver/Silverchloride reference system, plug head and connection cable

Temperature range: -5 to +100 °C
(except Pt 6140: +10 to +40 °C)

Reference system: Silamid®
Shaft material: glass
Electrolyte: KCl 3 mol/l
(See also remarks)

Connection cable: e.g. L 1 A
for plug head: (See also page with connection cables)

Fixed cable: 1 m long, with plug A acc. to DIN 19262 or with BNC plug



Metal-Reference electrodes with pH glass membrane reference system and plug head for titrations

Temperature range: -5 to +100 °C
Reference system: pH glass membrane Type A

Shaft material: glass
Length: 120 mm
Diameter: 12 mm

Connection cable for plug head: z.B. L 1 A
(please refer to the page "connection cables")

AgCl 62
AgCl 65
Ag 42 A
Ag 6180
Ag 6280
Ag 6580
AgCl 6280
Au 6280

Pt 61
Pt 62
Pt 6180
Pt 6280
Pt 6580
Pt 42 A

Pt 6880
Pt 6980
Pt 48 A

Pt 6140

Pt 8280

Pt 5900 A
Pt 5900 BNC
Pt 5901

Pt 62 RG
Ag 62 RG
AgCl 62 RG
AgS 62 RG

Metal combination electrodes

Order No.	Type No.	Length L [mm]	Junction	Ø [mm]	Sensor Metal, shape	Connection	Remarks
285102051	Ag 42 A	120	ceramic	12	Ag, cap, 5 mm Ø	DIN plug ⁴⁾	electrolyte L2114, Ag/AgCl ref.
285102208	Ag 6180	170	ceramic	12	Ag, cap, 5 mm Ø	plug head	electrolyte L2114, Ag/AgCl ref.
285102343	Ag 6280	120	ceramic	12	Ag, cap, 5 mm Ø	plug head	electrolyte L2114, Ag/AgCl ref.
285102216	Ag 6580	103 ¹⁾	ceramic	10	Ag, cap, 5 mm Ø	plug head	electrolyte L2114, Ag/AgCl ref.
285102351	AgCl 6280 ³⁾	120	ceramic	12	Ag, cap, 5 mm Ø	plug head	electrolyte L2114, Ag/AgCl ref.
285102413	AgCl 62 ³⁾	120	platinum	12	Ag, cap, 5 mm Ø	plug head	electrolyte L2114, Ag/AgCl ref.
1061051	AgCl 65 ³⁾	103 ¹⁾	platinum	12	Ag, cap, 5 mm Ø	plug head	electrolyte L2114, Ag/AgCl ref.
285102121	Au 6280	120	ceramic	12	Au, pole, 2 mm Ø	plug head	
285102302	Pt 42 A	120	ceramic	12	Pt, pole, 1 mm Ø	DIN plug ⁴⁾	
285102224	Pt 48 A	120	ceramic	12	Pt, ring, 6 mm Ø	DIN plug ⁴⁾	Ag/AgCl ref.
285105192	Pt 5900 A	96 ²⁾	platinum	5	Pt, pole, 1 mm Ø	DIN plug ⁴⁾	Ag/AgCl ref.
285105702	Pt 5900 BNC	96 ²⁾	platinum	5	Pt, pole, 1 mm Ø	BNC plug ⁴⁾	Ag/AgCl ref.
285105065	Pt 5901	160 ²⁾	platinum	5	Pt, pole, 1 mm Ø	plug head	
285102002	Pt 61	170	platinum	12	Pt, pole, 1 mm Ø	plug head	
285102019	Pt 62	120	platinum	12	Pt, pole, 1 mm Ø	plug head	
285097162	Pt 6140	150/20	platinum	12/5	Pt, pole, 1 mm Ø	plug head	for spear tip, electrolyte L420
285102232	Pt 6180	170	ceramic	12	Pt, pole, 1 mm Ø	plug head	
285102249	Pt 6280	120	ceramic	12	Pt, pole, 1 mm Ø	plug head	
285102257	Pt 6580	103 ¹⁾	ceramic	10	Pt, pole, 1 mm Ø	plug head	
285100075	Pt 6880	120	ceramic	12	Pt, ring, 6 mm Ø	plug head	
285102265	Pt 6980	170	ceramic	12	Pt, ring, 6 mm Ø	plug head	
285102281	Pt 8280	120	KPG®	12	Pt, round, 6 mm Ø	plug head	electrolyte Referid®
285102090	Ag 62 RG	120	-	12	Pt bearing -silver coated, ring, 6 mm Ø	plug head	
285102100	AgCl 62 RG	120	-	12	Pt-bearing -silver coated, chlorinated, ring, 6 mm Ø	plug head	
285102110	AgS62 RG	120	-	12	Pt bearing -silver coated, sulfidized, ring, 6 mm Ø	plug head	
285102070	Pt 62 RG	120	-	12	Pt, ring, 6 mm Ø	plug head	

ScienceLine

¹⁾ Length from upper end of standard taper; standard taper NS14.5

²⁾ Length from upper end of standard taper; standard taper NS7.5

³⁾ Sensor coated with AgCl

⁴⁾ with 1 m fixed cable

2.2.2.4 ScienceLine Single electrodes:

pH glass and metal electrodes

ScienceLine single electrodes

pH glass electrodes

Reference system: Silamid®
 Shaft material: glass, 12 mm Ø
 Zero point: pH= 7.0 ± 0.3
 Membrane shape: sphere
 Connection cable: e.g. L 1 A

Metal electrodes

Shaft material: glass, 12 mm Ø
 (See remarks)



A 1180
H 1180

Ag 1100

KF 1100

Pt 1400
Pt 1200

Pt 1800

Order No.	Type No.	Length L [mm]	pH Glass	Range [pH]	Temp.-range [°C]	Remarks
1057997	A 1180 ¹⁾	120	H	0 to 14	0 to +80	plug head
285103212	H 1180	120	H	0 to 14	10 to +100	plug head

Order No.	Type No.	Length L [mm]	Sensor Metal	Sensor shape	Temp. range [°C]	Remarks
285103607	Ag 1100	120	Ag	cap, 4 mm Ø	-5 to +100	plug head, cable e.g. L 1 A
285102030	KF 1100	96 ¹⁾	Pt ²⁾	2 pole, 1 mm Ø	-30 to +135	shaft 5 mm Ø, standard taper NS7.5, fixed cable, 2 x 4-mm plug
285103512	Pt 1200	120	Pt ²⁾	2 pole, 1 mm Ø	-30 to +135	plug head, cable e.g. L 1 NN
285103537	Pt 1400	103 ¹⁾	Pt ²⁾	2 pole, 1 mm Ø	-30 to +135	shaft 10 mm Ø, standard taper NS14.5, cable e.g. L 1 NN
285103553	Pt 1800	120	Pt	ring, 6 mm Ø	-30 to +135	plug head, cable e.g. L 1 A

ScienceLine

¹⁾ Length from upper end of standard taper
²⁾ Double platinum electrode

2.2.2.5 ScienceLine Single electrodes: electrodes

Reference electrodes

Shaft material: glass
 Electrolyte depending on reference system:
 Ag/AgCl: KCl 3 mol/l, e.g. L 300
 Calomel: KCl 4.2 mol/l, e.g. L 420
 Hg/Hg₂SO₄: K₂SO₄ 0.6 mol/l, e.g. L 1254
 pH range: 0 to 14
 Connection cable: e.g. L 1 N



B 2220+

B 2420+

B 2810+
 B 2820+
 B 2910+
 B 2920+

B 3420+
 B 3410+
 B 3510+
 B 3520+
 B 3610+

B 3920+

Reference

Order No.	Type No.	Length L [mm]	Ø [mm]	Temp. range [°C]	Junction	Reference system	Remarks
1069994	B 2220+	120	12	-5 to +100	platinum	Ag/AgCl	double electrolyte system
1070028	B 2420+	120	12	-5 to +100	ground joint	Ag/AgCl	
1070029	B 2810+	120	12	+15 to +40	ceramic	Calomel	
1070044	B 2820+	120	12	-5 to +100	ceramic	Ag/AgCl	
1070077	B 2910+	120	12	+15 to +40	platinum	Calomel	
1070046	B 2920+	120	12	-5 to +100	platinum	Ag/AgCl	
1070048	B 3410+	103 ¹⁾	10	+15 to +40	ceramic	Calomel	standard taper NS14.5
1070070	B 3420+	103 ¹⁾	10	-5 to +100	ceramic	Ag/AgCl	standard taper NS14.5
1070100	B 3510+	103 ¹⁾	10	+15 to +40	platinum	Calomel	standard taper NS14.5
1070073	B 3520+	103 ¹⁾	10	-5 to +100	platinum	Ag/AgCl	standard taper NS14.5
1070074	B 3610+	103 ¹⁾	10	+15 to +40	ceramic	Hg/Hg ₂ SO ₄	standard taper NS14.5
1070075	B 3920+	103 ¹⁾	10	-5 to +100	ground joint	Ag/AgCl	double electrolyte system, standard taper NS14.5

ScienceLine

¹⁾ Length from upper end of standard taper

2.2.2.6 ScienceLine

Conductivity measuring cells
with fixed cable and 8-pole plug

Temperature sensor: NTC 30 k



LF 213 T
LF 213 T ID

LF 313 T NTFC
LF 313 T
LF 313 T ID
LF 313 T IDS

LF 413 T-3
LF 413 T
LF 413 T ID
LF 413 T IDS
LF 413 T3MIDS

LF 513 T
LF 613 T
LF 813 T

LF 713 T
LF 713 T-250

LF 913 T
LF 913 T ID

LFOX 1400
LFOX 1400 ID

LF 413 T 3M Fork
LF 413 T 3M Fork IDS

LF 435 T

conductivity cells with cable

Order No.	Type No.	Length L [mm]	Ø [mm]	Sensor	Cell const. ~ [cm ⁻¹]	Temp. range [°C]	Meas. range ¹⁾ [µS/cm] .. [mS/cm]	Remarks
285106150	LF 213 T	120	12	Stainless steel	0.01	0 to +100	0 to 0.03	Traceconductivity cell with integrated low-through vessel, stainless steel, 1.5 m cable
285106160	LF 213 T ID	120	12	Stainless steel	0.01	0 to +100	0 to 0.03	Traceconductivity cell with integrated low-through vessel, stainless steel, 1.5 m cable, ID function
285414360	LF 313 T	120	12	Stainless steel	0.1	0 to +100	0 to 0.2	Ultrapure water conductivity cell with low-through vessel, stainless steel shaft, fixed cable 1.5 m
285130300	LF 313 T-ID	120	12	Stainless steel	0.1	0 to +100	0 to 0.2	Ultrapure water conductivity cell with low-through vessel, stainless steel shaft, cable 1.5 m, ID function
285414351	LF 313 T NTFC	120	12	Stainless steel	0.1	0 to +100	0 to 0.2	Ultrapure water conductivity cell without low-through vessel, stainless steel shaft, fixed cable 1.5 m
285202430	LF 313 T IDS	120	12	Stainless steel	0.1	-5 to +100	0 to 0.2	Ultrapure water conductivity cell with low-through vessel, stainless steel shaft, cable 1.5 m, IDSfunction
285106172	LF 413 T	120	15.3	4 x Graphite	0.475	-5 to +80	1 to 2,000	Plasticshaft, 1.5 m cable
285130310	LF 413 T-ID	120	15.3	4 x Graphite	0.475	-5 to +80	1 to 2,000	Plasticshaft, 1.5 m cable, ID function
2852024410	LF 413 T-IDS	120	15.3	4 x Graphite	0.475	-5 to +80	1 to 2,000	Plasticshaft, 1.5 m cable, IDSfunction
285106148	LF 413 T-3	120	15.3	4 x Graphite	0.475	-5 to +80	1 to 2,000	Plasticshaft, fixed cable 3 m
285106280	LF 413 T 3M FORK	120	15.3	4 x Graphite	0.47	-5 to +80	1 to 2,000	Plasticshaft, fixed cable 3 m
285106290	LF 413 T 3M FORK IDS	120	15.3	4 x Graphite	0.47	-5 to +80	1 to 2,000	Plasticshaft, 3 m cable
285206420	LF 435 T	120	15.3	Graphite	0.33	-5 to +80	1 to 500	Plasticshaft, 3 m cable
285106037	LF 513 T	120	12	2 Pt rings	1.0	-5 to +80	1 to 200	Plasticshaft, 1 m cable
285106131	LF 613 T	120	12	4 Pt rings	1.0	-5 to +80	1 to 2,000	Plasticshaft, 1 m cable
285106189	LF 713 T	120	12	4 Pt rings	1.0	-30 to +135	1 to 2,000	Glassshaft, 1 m cable
285106190	LF 713 T-250	250	12	4 Pt rings	1.0	-30 to +135	1 to 2,000	Glassshaft, 1 m cable
285106250	LF 813 T	120	12	5 Pt rings	0.650	-5 to +80	1 to 2,000	Plasticshaft, 1 m cable
285106260	LF 913 T	120	12	5 Pt rings	0.650	-30 to +135	1 to 2,000	Glassshaft, 1 m cable
285130320	LF 913 T-ID	120	12	5 Pt rings	0.650	-30 to +135	1 to 2,000	glass shaft, 1 m cable, ID function
285104630	LFOX 1400	145	15.3	Graphite	0.475	0 to +50	1 to 2,000	Combined 4-pole conductivity cell and galvanic D.O. sensor LFOX 1400 ID, plastic shaft, fixed cable 3 m
285130330	LFOX 1400 ID	145	15.3	Graphite	0.475	0 to +50	1 to 2,000	Combined 4-pole conductivity cell and galvanic D.O. sensor LFOX 1400 ID, plastic shaft, fixed cable 3 m, ID function

¹⁾ Outside the recommended ranges measuring errors >10% can occur with these conductivity measuring cells.

2.2.2.7 ScienceLine Sensors for

Ammonia combination electrode with plug head

Shaft material: plastic, 12 mm Ø
Connection cable: e.g. L 1 A

Sodium combination electrode with plug head

Reference system: Silamid®
Shaft material: glass, 12 mm Ø
Zero point: pNa= 2.0
Membrane shape: sphere
Connection cable: e.g. L 1 A

ISE measuring cells

Shaft material: plastic
Length: 120 mm
Fixed cable: 1 m long, with DIN plug

ISE combination electrodes with plug head

Shaft material: plastic
Length: 120 mm



ammonia, sodium, oxygen, ion-selective indicator electrodes

Order No.	Type No.	Length L [mm]	Temp. range [°C]	Meas. range [mg/l]	Remarks
285102808	NH 1100	120	0 to +50	0.1 to 1,000	membrane module replaceable

Order No.	Type No.	Length L [mm]	Junction	Membrane Glass	Temp. range [°C]	Meas. range [pNa]	Remarks
285100026	Na 61	170	platinum	Na	-10 to +80	0 to 6	electrolyte KCl 3 mol/l, aqueous solution NaCl 0.1 mol/l

Order No.	Type No.	Length L [mm]	Temp. range [°C]	Meas. range [mg/l]	Remarks
285111664	9009/61	145	0 to +50	0 to 50	amperometric sensor, Au cathode, Pb anode, fixed cable 1.5 m ¹⁾ with 8-pole plug, IMT temperature compensation, shaft 15.25 mm Ø, membrane FEP, 13 µm thick, accuracy 1% at 18 cm/s low rate.
285206410	OX 1113 T	120	-5 to +45	0 to 20	Membrane covered amperometric sensor, plastic shaft, with temperature compensation, 1 m fixed cable with 8-pole plug
285202440	FDO 1100 IDS	150	0 to +50	0 to 20	IDSOptical oxygen sensor (photoluminescence), plastic shaft, temperature sensor NTC30kOhm, 1.5 m fixed cable with digital plug
285202450	FDO 1100 3M IDS	150	0 to +50	0 to 20	IDSOptical oxygen sensor (photoluminescence), plastic shaft, temperature sensor NTC30kOhm, 3 m fixed cable with digital plug

Order No.	Type No.	Parameter	Temp. range [°C]	pH-range	Measuring range [mg/l]
285216314	Ca 1100 A	Calcium	0 to +40	2.5 to 11	0.02 to 40,000
285216312	Cu 1100 A	Copper	0 to +80	2 to 6	0.0006 to 6,400
285216313	F 1100 A	Fluoride	0 to +80	5 to 7	0.02 to saturated
285216315	Pb 1100 A	Lead	0 to +80	4 to 7	0.1 to 20,000

Order No.	Type No.	Parameter	Temp. range [°C]	pH-range	Measuring range [mg/l]
285130340	F 60	Fluoride	0 to +80	5 to 7	0.02 to saturated
285130350	Cl 60	Chloride	0 to +80	2 to 12	2 to 35,000
285130360	NO 60	Nitrate	0 to +40	2.5 to 11	0.4 to 62,000
285130370	K 60	Potassium	0 to +40	2 to 12	0.04 to 39,000
285130380	CA 60	Calcium	0 to +40	2.5 to 11	0.02 to 40,000
285130390	CN 60	Cyanide	0 to +80	0 to 14	0.2 to 260
285130400	AG-S60	Sulfide/silver	0 to +80	2 to 12	0.003 to 32,000/ 0.01 to 108,000
285130410	I 60	Iodide	0 to +80	0 to 14	0.006 to 127,000
285130420	BR60	Bromide	0 to +80	1 to 12	0.4 to 79,000
285130430	CU 60	Copper	0 to +80	2 to 6	0.0006 to 6400
285130440	PB60	Lead	0 to +80	4 to 7	0.2 to 20,000

¹⁾ Other cable lengths available on request