

ECL

Closed amperometric cells

Data Sheet

- Chlorine probes for chlorine and chlorine bioxide measurement.
- Stables and reliables measurement even for low chlorine concentration.
- Low pH dependency for chlorine bioxide measurement

They are equipped with a special membrane system, except for ECL17 and ECL 18.

ECL models work in chlorine water system.

Absence of chlorine could damage the probe except for ECL SC probe.

The probe has to be installed into a probe holder and connected to a measuring and control instrument.



ECL 1
ECL2
ECL 3/S
ECL 3/N
ECL 8
EBR
ECL SC



ECL2H
ECL 9
ECL 10
ECL 11



ECL 17
ECL 18

Dissolved chlorine into water may have many features:

FREE CHLORINE (ACTIVE): HOCl (hypochlorous acid). Use of ECL1/x amperometric cells is recommended (DPD1 analysis system)

COMBINED CHLORINE: Monochloramine, dichloramine, trichloramine (DPD4-DPD1 analysis system)

FREE ORGANIC CHLORINE: Free chlorine with isocyanuric/isocyanurate (DPD1 analysis system)

FREE CHLORINE INORGANIC: Free chlorine Use fo ECL3N amperometric cells is recommended (DPD1 analysis system)

TOTAL CHLORINE: Free chlorine and combined chlorine. Use of ECL8 amperometric cells is recommended (DPD4 analysis system)

MODELS

- ECL1/x for free chlorine (inorganic)
- ECL3S/10 for free chlorine (organic and inorganic) for fresh water
- ECL3N/x for free chlorine (inorganic) for fresh water
- ECL8/x for total chlorine
- ECL2/x for chlorine dioxide
- ECL2H/x for chlorine dioxide
- ECL9/x for hydrogen peroxyde
- ECL10/x for ozone
- ECL 11/x for peracetic acid
- EBR for bromine
- ECL SC for chlorine absence
- ECL17 for free chlorine (inorganic) - with automatic cleaning system
- ECL18 for free chlorine (inorganic) - with automatic cleaning system

EMEC

ISO 9001:2008
ISO 14001:2004
OHSAS 18001:2007



Via Donatori di sangue, 1 - 02100 Rieti - Italy
Tel. +39 0746 2284 1 - Tel. +39 0746 1725114 - Fax +39 0746 2284 2 - <http://www.emec.it>

Specifications subject to change without notice.
EN R1-08-14

ECL

Data Sheet

Closed amperometric cells

ECL1/x

	ECL1/x	ECL1/x mA
Parameter	FREE CHLORINE (INORGANIC)	
Measuring range	ECL1/2: 0-2 mg/l (0-2 ppm) resolution: ± 0.001 ECL1/5: 0-5 mg/l (0-5 ppm) resolution: ± 0.001 ECL1/20: 0-20 mg/l (0-20 ppm) resolution: ± 0.01 ECL1/200: 0-200 mg/l (0-200 ppm) resolution: ± 0.1	
Output (Output resistance)	0 / -2000 mV (1k Ω)	4 / 20mA uncalibrated
Voltage supply	$\pm 5 - \pm 15$ VDC (10 mA)	12 / 30 VDC
Connection	4-pole screw connector	2-pole terminal
Measuring system	membrane covered, amperometric 2-electrode system	
Ph working range	6-8 pH	
Run-in-time	first start up: 1 h approx.	
Response time	T ₉₀ : 30 sec. approx.	
Zero point adjustment	See Operating manual: "Probe alignment"	
Slope calibration	See Operating manual: "Probe alignment" DPD1 method	
Alcalinity	80 ppm	
Working temperature	1-40° C (34-104°F)	
Temperature compensation	automatically, by an integrated temperature sensor	
Max pressure	1 bar (14.5 PSI) - 10 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure	
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)	2 wires
Cable (standard)	1 m (3.28 ft)	no cable
Electrolyte mod.	ELECL1	
Membrane mod.	MECL1-2	
Working flow	30 l/h	
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23	
Material	semipermeable membrane, PVC-U	
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)	
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.	
Dimension	Diam.: 25 mm Length: 175 mm	

ECL

Data Sheet

Closed amperometric cells

ECL3S/10

	ECL3S/10	ECL3S/10 mA
Parameter	FREE CHLORINE (ORGANIC AND INORGANIC) FOR FRESH WATER	
Measuring range	0-20 mg/l (0-20 ppm) resolution: ± 0.01	
Output (Output resistance)	0 / -2000 mV (1k Ω)	4 / 20mA uncalibrated
Voltage supply	$\pm 5 - \pm 15$ VDC (10 mA)	12 / 30 VDC
Connection	4-pole screw connector	2-pole terminal
Measuring system	membrane covered, amperometric potentiostatic 3-electrode system	
Ph working range	4-12 pH, highly reduced dependance on pH value	
Run-in-time	first start up: 2 h approx.	
Response time	T ₉₀ : 2 min. approx.	
Zero point adjustment	See Operating manual: "Probe alignment"	
Slope calibration	See Operating manual: "Probe alignment" DPD1 method	
Alcalinity	80 ppm	
Working temperature	1-40° C (34-104°F)	
Temperature compensation	automatically, by an integrated temperature sensor	
Max pressure	0.5 bar (7 PSI) - 5 mwc [mH2O] no pressure impulses and/or vibration, no depressure	
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)	2 wires
Cable (standard)	1 m (3.28 ft)	no cable
Electrolyte mod.	ELECL3S (for ECL3S probe for salt water ECL3S/SEA)	
Membrane mod.	MECL3	
Working flow	30 l/h	
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23	
Material	microporous hydrophilic membrane, PVC-U, stainless steel 1.4571	
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)	
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.	
Dimension	Diam.: 25 mm Length: 175 mm	

Closed amperometric cells

ECL3N/x

	ECL3N/x	ECL3N/x mA
Parameter	FREE CHLORINE (INORGANIC) FOR FRESH WATER	
Measuring range	ECL3N/2: 0-2 mg/l (0-2 ppm) resolution: ± 0.001 ECL3N/10: 0-20 mg/l (0-20 ppm) resolution: ± 0.01 ECL3N/200: 0-200 mg/l (0-200 ppm) resolution: ± 0.1	
Output (Output resistance)	ECL3N/2: 0 / -2000 mV (1k Ω) ECL3N/10: 0 / -2000 mV (1k Ω) ECL3N/200: 0 / -2000 mV (1k Ω)	4 / 20mA uncalibrated
Voltage supply	$\pm 5 - \pm 15$ VDC (10 mA)	12 / 30 VDC
Connection	4-pole screw connector	2-pole terminal
Measuring system	membrane covered, amperometric potentiostatic 3-electrode system	
Ph working range	4-9 pH, reduced dependance on pH value. When the pH value increases, the measured signal decreases at about 10% per pH unit.	
Run-in-time	first start up: 2 h approx.	
Response time	T ₉₀ : 2 min. approx.	
Zero point adjustment	See Operating manual: "Probe alignment"	
Slope calibration	See Operating manual: "Probe alignment" DPD1 method	
Alcalinity	80 ppm	
Working temperature	1-40° C (34-104°F)	
Temperature compensation	automatically, by an integrated temperature sensor	
Max pressure	0.5 bar (7 PSI) - 5 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure	
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)	2 wires
Cable (standard)	1 m (3.28 ft)	no cable
Electrolyte mod.	ELECL3N	
Membrane mod.	MECL3	
Working flow	30 l/h	
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23	
Material	microporous hydrophilic membrane, PVC-U, stainless steel 1.4571	
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)	
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.	
Dimension	Diam.: 25 mm Length: 175 mm	

Closed amperometric cells

ECL8/x

	ECL8/x	ECL8/x mA
Parameter	TOTAL CHLORINE	
Measuring range	ECL8/2: 0-2 mg/l (0-2 ppm) resolution: ± 0.001 ECL8/20: 0-20 mg/l (0-20 ppm) resolution: ± 0.01	
Output (Output resistance)	ECL8/2: 0 / -2000 mV (1k Ω) ECL8/20: 0 / -2000 mV (1k Ω)	4 / 20mA uncalibrated
Voltage supply	$\pm 5 - \pm 15$ VDC (10 mA)	12 / 30 VDC
Connection	4-pole screw connector	2-pole terminal
Measuring system	membrane covered, amperometric potentiostatic 3-electrode system	
Ph working range	4-12 pH, reduced dependance on pH value. When the pH value increases, the measured signal decreases at about 10% per pH unit.	
Run-in-time	first start up: 2 h approx.	
Response time	T_{90} : 2 min. approx.	
Zero point adjustment	See Operating manual: "Probe alignment"	
Slope calibration	See Operating manual: "Probe alignment" DPD4 method	
Alcalinity	80 ppm	
Working temperature	1-40° C (34-104°F)	
Temperature compensation	automatically, by an integrated temperature sensor	
Max pressure	0.5 bar (7 PSI) - 5 mwc [mH2O] no pressure impulses and/or vibration, no depressure	
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)	2 wires
Cable (standard)	1 m (3.28 ft)	no cable
Electrolyte mod.	ELECL8	
Membrane mod.	MECL8/2 or MECL8/20	
Working flow	30 l/h	
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23	
Material	microporous hydrophilic membrane, PVC-U, stainless steel 1.4571	
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)	
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.	
Dimension	Diam.: 25 mm Length: 175 mm	

ECL

Data Sheet

Closed amperometric cells

ECL2/x

Parameter	CHLORINE DIOXIDE
Measuring range	ECL2/2: 0-2 mg/l (0-2 ppm) resolution: ± 0.001 ECL2/20: 0-20 mg/l (0-20 ppm) resolution: ± 0.01
Output (Output resistance)	ECL2/2: 0 / -2000 mV (1k Ω) ECL2/20: 0 / -2000 mV (1k Ω)
Voltage supply	$\pm 5 - \pm 15$ VDC (10 mA)
Connection	4-pole screw connector
Measuring system	membrane covered, amperometric 2-electrode system
Ph working range	1-11 pH
Run-in-time	first start up: 1 h approx.
Response time	T ₉₀ : 15 sec.. approx.
Zero point adjustment	See Operating manual: "Probe alignment"
Slope calibration	See Operating manual: "Probe alignment"
Alcalinity	80 ppm
Working temperature	1-40° C (34-104°F)
Temperature compensation	automatically, by an integrated temperature sensor
Max pressure	1 bar (14.5 PSI) - 10 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)
Cable (standard)	1 m (3.28 ft)
Electrolyte mod.	ELECL2
Membrane mod.	MECL1-2
Working flow	30 l/h
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23
Material	semipermeable membrane, PVC-U
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.
Dimension	Diam.: 25 mm Length: 175 mm

ECL

Data Sheet

Closed amperometric cells

ECL2H/x

Parameter	CHLORINE DIOXIDE
Measuring range	ECL2H/2: 0-2 mg/l (0-2 ppm) resolution: ± 0.001
Output (Output resistance)	0 / -2000 mV (1k Ω)
Voltage supply	$\pm 5 - \pm 15$ VDC (10 mA)
Connection	4-pole screw connector
Measuring system	membrane covered, amperometric 2-electrode system
Ph working range	1-11 pH
Run-in-time	first start up: 1 h approx.
Response time	T ₉₀ : 1.5 min. approx.
Zero point adjustment	See Operating manual: "Probe alignment"
Slope calibration	See Operating manual: "Probe alignment"
Alcalinity	80 ppm
Working temperature	1-40° C (34-104°F)
Temperature compensation	automatically, by an integrated temperature sensor. Temperature changes <5°C
Max pressure	1 bar (14.5 PSI) - 10 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)
Cable (standard)	1 m (3.28 ft)
Electrolyte mod.	ELECL2H
Membrane mod.	MECL2H
Working flow	30 l/h
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23
Material	PVC-U, stainless steel 1.4571
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.
Dimension	Diam.: 25 mm Length: 175 mm

ECL

Data Sheet

Closed amperometric cells

ECL9/x

Parameter	HYDROGEN PEROXIDE
Measuring range	ECL9/200: 0-200 mg/l (0-200 ppm) resolution: ± 0.1 ECL9/2000: 0-2000 mg/l (0-2000 ppm) resolution: ± 1
Output (Output resistance)	0 / -2000 mV (1k Ω)
Voltage supply	$\pm 5 - \pm 12.5$ VDC 10 - 25 VDC 25 mA
Connection	4-pole screw connector
Measuring system	membrane covered, amperometric 2-electrode system
Ph working range	2-11 pH
Run-in-time	first start up: 3 h approx.
Response time	T ₉₀ : 10 min. approx.
Zero point adjustment	See Operating manual: "Probe alignment"
Slope calibration	See Operating manual: "Probe alignment"
Alcalinity	80 ppm
Working temperature	1-40° C (34-104°F)
Temperature compensation	automatically, by an integrated temperature sensor
Max pressure	1 bar (14.5 PSI) - 10 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)
Cable (standard)	1 m (3.28 ft)
Electrolyte mod.	ELECL9
Membrane mod.	MECL9
Working flow	30 l/h
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23
Material	PVC-U, stainless steel 1.4571
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.
Dimension	Diam.: 25 mm Length: 175 mm

ECL

Data Sheet

Closed amperometric cells

ECL10/x

Parameter	OZONE
Measuring range	ECL10/1: 0-0,5 mg/l (0-0,5 ppm) resolution: ± 0.001 ECL10/10: 0-10 mg/l (0-10 ppm) resolution: ± 0.01
Output (Output resistance)	ECL10/1: 0 / -1000 mV (1k Ω) ECL10/10: 0 / -1000 mV (1k Ω)
Voltage supply	$\pm 5 - \pm 15$ VDC 10 mA
Connection	4-pole screw connector
Measuring system	membrane covered, amperometric 2-electrode system
Ph working range	2-11 pH
Run-in-time	first start up: 1 h approx.
Response time	T ₉₀ : 50 sec. approx.
Zero point adjustment	See Operating manual: "Probe alignment"
Slope calibration	See Operating manual: "Probe alignment"
Alcalinity	80 ppm
Working temperature	1-40° C (34-104°F)
Temperature compensation	automatically, by an integrated temperature sensor
Max pressure	1 bar (14.5 PSI) - 10 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)
Cable (standard)	1 m (3.28 ft)
Electrolyte mod.	ELECL10
Membrane mod.	MECL10
Working flow	30 l/h
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23
Material	PVC-U, stainless steel 1.4571
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.
Dimension	Diam.: 25 mm Length: 175 mm

ECL

Closed amperometric cells

Data Sheet

ECL11/x

Parameter	PERACETIC ACID
Measuring range	ECL11/200: 0-200mg/l (0-200 ppm) resolution: ± 0.1 ECL11/2000: 0-2000 mg/l (0-2000 ppm) resolution: ± 1
Output (Output resistance)	0 / -2000 mV (1k Ω)
Voltage supply	$\pm 5 - \pm 15$ VDC 10 mA
Connection	4-pole screw connector
Measuring system	membrane covered, amperometric 2-electrode system
Ph working range	1-6 pH
Run-in-time	first start up: 1 h approx.
Response time	T ₉₀ : 3 min. approx.
Zero point adjustment	See Operating manual: "Probe alignment"
Slope calibration	See Operating manual: "Probe alignment"
Alcalinity	80 ppm
Working temperature	1-40° C (34-104°F)
Temperature compensation	automatically, by an integrated temperature sensor
Max pressure	1 bar (14.5 PSI) - 10 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)
Cable (standard)	1 m (3.28 ft)
Electrolyte mod.	ELECL11
Membrane mod.	MECL11
Working flow	30 l/h
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23
Material	PVC-U, stainless steel 1.4571
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.
Dimension	Diam.: 25 mm Length: 175 mm

ECL

Data Sheet

Closed amperometric cells

EBR

Parameter	BROMINE
Measuring range	EBR1/20: 0-20mg/l (0-20 ppm) resolution: ± 0.01
Output (Output resistance)	0 / -2000 mV (1k Ω)
Voltage supply	$\pm 5 - \pm 15$ VDC 10 mA
Connection	4-pole screw connector
Measuring system	membrane covered, amperometric potentiostatic 3-electrode system
Ph working range	6.5-9.5 pH
Run-in-time	first start up: 2 h approx.
Response time	T ₉₀ : 2 min. approx.
Zero point adjustment	See Operating manual: "Probe alignment"
Slope calibration	See Operating manual: "Probe alignment"
Alcalinity	80 ppm
Working temperature	1-40° C (34-104°F)
Temperature compensation	automatically, by an integrated temperature sensor
Max pressure	0.5 bar (7 PSI) - 5 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)
Cable (standard)	1 m (3.28 ft)
Electrolyte mod.	ELEBR
Membrane mod.	MEBR
Working flow	30 l/h
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23
Material	Microporous hydrophilic membrane, PVC-U, stainless steel 1.4571
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.
Dimension	Diam.: 25 mm Length: 195 mm

ECL

Data Sheet

Closed amperometric cells

ECLSC

Parameter	FREE CHLORINE- FOR MONITORING THE ABSENCE OF CHLORINE
Measuring range	ECLSC: 0-2mg/l (0-2 ppm) resolution: ± 0.001
Output (Output resistance)	0 / -2 mV (max -2.5 V) (1k Ω)
Voltage supply	24 VDC (+22.5...26 VDC) ± 12 VDC 20 mA
Connection	4-pole screw connector
Measuring system	membrane covered, amperometric potentiostatic 3-electrode system
Ph working range	6.5-9 pH
Run-in-time	first start up: 24 h approx. after maintenance: 6h approx.
Response time	T ₉₀ : 2 min. approx.
Zero point adjustment	See Operating manual: "Probe alignment"
Slope calibration	See Operating manual: "Probe alignment"
Alcalinity	80 ppm
Working temperature	1-40° C (34-104°F)
Temperature compensation	automatically, by an integrated temperature sensor
Max pressure	0.5 bar (7 PSI) - 5 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)
Cable (standard)	1 m (3.28 ft)
Electrolyte mod.	ELECLSC
Membrane mod.	MECLSC
Working flow	30 l/h
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23
Material	microporous hydrophilic membrane, PVC-U, stainless steel 1.4571
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) membrane cap: used membrane cap can not be stored electrolyte: in original bottle, protect from sunlight (5-25°C)
Maintenance	regular control of measuring signal change of the membrane cap: once a year at min. change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.
Dimension	Diam.: 25 mm Length: 195 mm

ECL

Closed amperometric cells

Data Sheet

ECL17/x

	ECL17
Parameter	CHLORINE DIOXIDE
Measuring range	ECL17/2: 0-2 mg/l (0-2 ppm) resolution: ± 0.001 ECL17/10: 0-10 mg/l (0-10 ppm) resolution: ± 0.001
Output (Output resistance)	0 / -2000 mV (1k Ω)
Voltage supply	± 5 - ± 15 VDC (10 mA)
Connection	4-pole screw connector
Measuring system	amperometric potentiostatic 3-electrode system
Ph working range	5-9 pH (ref. HOCl dissociation curve)
Run-in-time	first start up: from 1 h to 2 days depending on water quality
Response time	T ₉₀ : 30 sec. approx
Zero point adjustment	See Operating manual: "Probe alignment"
Slope calibration	See Operating manual: "Probe alignment" - DPD1
Alcalinity	80 ppm
Working temperature	5-70° C (41-158°F)
Temperature compensation	automatically, by an integrated temperature sensor
Max pressure	8 bar (116 PSI) - 80 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)
Cable (standard)	1 m (3.28 ft)
Electrolyte mod.	ELECL17
Working flow	40 l/h
Cleaning system	selfcleaning with 3-balls systems
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23
Material	PEEK
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) electrolyte: in original bottle, protect from sunlight (5-25°C)
Maintenance	regular control of measuring signal change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.
Dimension	Diam.: 25 mm Length: 175 mm

ECL

Data Sheet

Closed amperometric cells

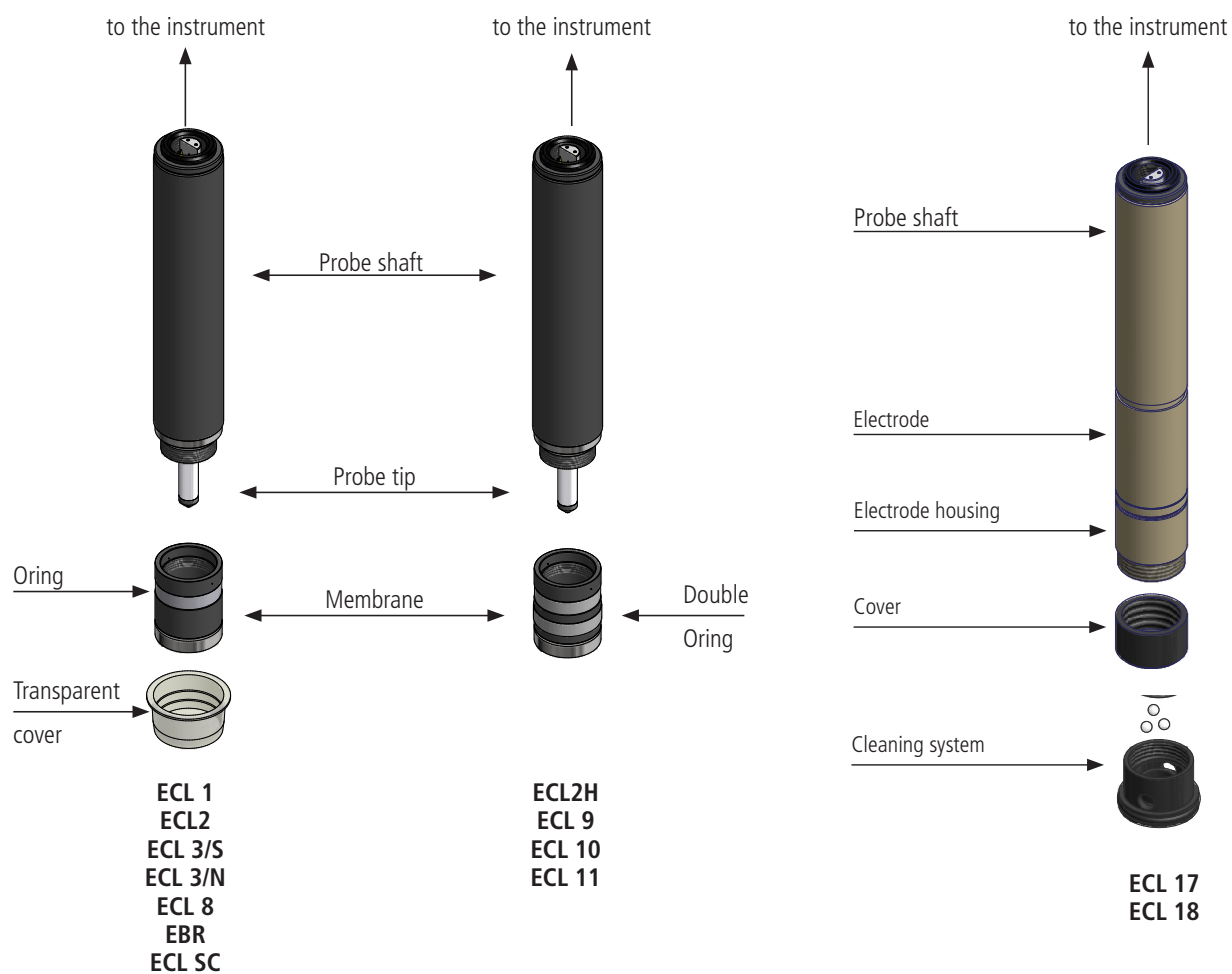
ECL18/x

	ECL18
Parameter	COLORO LIBERO INORGANICO
Measuring range	ECL18/2: 0-2 mg/l (0-2 ppm) resolution: ± 0.001 ECL18/10: 0-10 mg/l (0-10 ppm) resolution: ± 0.001
Output (Output resistance)	0 / -2000 mV (1k Ω)
Voltage supply	± 5 - ± 15 VDC (10 mA)
Connection	connettore a 4 poli
Measuring system	amperometrico potenziostatico a 3 elettrodi
Ph working range	5-9 pH (ref. HOCl dissociation curve)
Run-in-time	first start up: from 1 h to 2 days depending on water quality
Response time	T ₉₀ : 30 sec. approx
Zero point adjustment	See Operating manual: "Probe alignment"
Slope calibration	See Operating manual: "Probe alignment" - DPD1
Alcalinity	80 ppm
Working temperature	5-70° C (41-158°F)
Temperature compensation	automatically, by an integrated temperature sensor
Max pressure	8 bar (116 PSI) - 80 mwc [mH ₂ O] no pressure impulses and/or vibration, no depressure
Power supply	4 wires (brown +; white -; green OUT signal; yellow GND)
Cable (standard)	1 m (3.28 ft)
Electrolyte mod.	ELECL18
Working flow	40 l/h
Cleaning system	selfcleaning with 3-balls systems
Suitable for probe holder mod.	PEF1, PEF1/E, PEF5, PEF23
Material	PEEK
Storage	probe: frost-protected, dry and without electrolyte (5-40° C) electrolyte: in original bottle, protect from sunlight (5-25°C)
Maintenance	regular control of measuring signal change electrolyte: every 3-6 months SHORTEN THE MAINTENANCE INTERVALS APPROPRIATELY DEPENDING ON WATER QUALITY.
Dimension	Diam.: 25 mm Length: 175 mm

ECL

Closed amperometric cells

Data Sheet



EMEC

ISO 9001:2008
ISO 14001:2004
OHSAS 18001:2007



Via Donatori di sangue, 1 - 02100 Rieti - Italy
Tel. +39 0746 2284 1 - Tel. +39 0746 1725114 - Fax +39 0746 2284 2 - <http://www.emec.it>

Specifications subject to change without notice.
EN R1-08-14