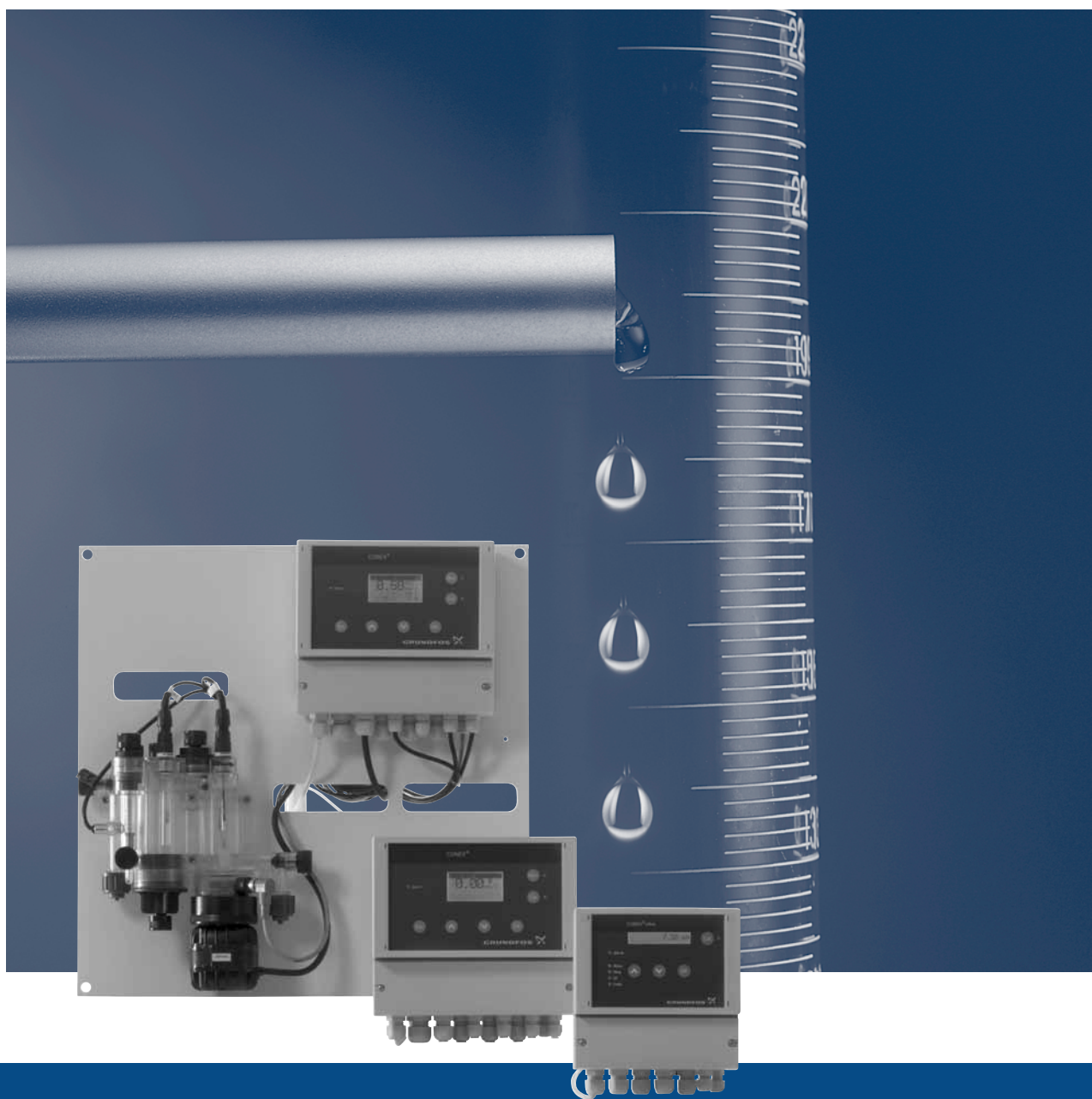


Instrumentation

Dosing
50/60 Hz



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Grundfos instrumentation

Measurement and control

User-friendly units for every need

To complement the Grundfos range of dosing technology, you can choose from a full range of controllers and measuring cells to ensure precision performance and full system integration. Special attention has been paid to making everything user-friendly and flexible - a single unit will often be enough to cover all your measuring and control needs.

From electrodes to complete preassembled systems

The dosing instrumentation range extends from simple electrodes to preassembled measuring and control systems mounted on a single plate for easy and immediate installation. Within this range, you can also find everything from buffer solutions to hand-held photometric test units to optimize your dosing applications.

Controllers

Controllers come in three categories:

- Conex[®] DIA
- DIP
- Conex[®] DIS.

Conex[®] DIA

Straight talk for everyone

The Conex[®] DIA (Dosing Instrumentation Advanced) series is designed to be easy to use for non-experts. A simple plain-text menu lets you complete your tasks quickly and easily without wasting any time on learning and deciphering codes. The units speak no less than seven languages, allowing virtually anyone to navigate the self-explanatory menus.

Conex[®] units monitor themselves, ensuring high water quality at all time. During calibration, they carry out a plausibility check to prevent mishaps. And the logbook function records sensor data and calibration values complete with date and time. The units also keep an eye on the temperature and make adjustments as necessary.

Conex[®] DIA-1

Universal measuring amplifier and controller

The Conex[®] DIA-1 is a sophisticated unit, ideal for use in many disinfection applications.

The easy-to-navigate user interface speaks seven languages. You also get access to

- an automatic self-adaption calibration feature
- manual or automatic temperature compensation
- a logbook function, among other features.

The Conex[®] DIA-1 can be incorporated in compact, wall-mounted preassembled systems with the measuring cells that suit you.

Monitoring and control parameters

- chlorine
- chlorine dioxide
- ozone
- hydrogen peroxide
- peracetic acid
- pH
- redox
- fluoride.



Fig. 1 Conex[®] DIA-1

GRA1029

Conex® DIA-2

Dual measuring amplifier and controller

The Conex® DIA-2 essentially functions like two DIA-1 models combined in a single unit, allowing you to measure and control two parameters at the same time.

Both parameters are shown on the display. This two-in-one approach minimizes space requirements and installation time - and gives you all the Conex® benefits.

Monitoring and control parameters

Parameter 1

- chlorine
- chlorine dioxide
- ozone
- hydrogen peroxide.

Parameter 2

- pH.



Fig. 2 Conex® DIA-2

GrA1029

Conex® DIA-2Q

Dual measuring amplifier and multi-functional controller

The Conex® DIA-2Q is a special version of the DIA-2, particularly suitable for variable flow rates. It has all the features of the DIA-2, but allows you to measure and control more parameters.

Monitoring and control parameters

Parameter 1

- chlorine
- chlorine dioxide
- ozone
- hydrogen peroxide
- peracetic acid.

Parameter 2

- pH
- fluoride
- redox.



Fig. 3 Conex® DIA-2Q

GrA1029

DIP

Triple measuring amplifier and controller for pools

The DIP (Dosing Instrumentation Pool) is specially designed for swimming pool applications. It measures up to three parameters and controls two parameters at the same time, giving you perfect control of the water quality of your pool.

The DIP speaks three languages (english, german and french), making it easy for non-experts to carry out all operations - particularly as a built-in plausibility check prevents operating errors.

Other highlights include maintenance-free measuring electrodes, a sample-water sensor to prevent overdosing, and a choice of control functions.

Monitoring and control parameters

The DIP measures up to three parameters at the same time:

- chlorine or chlorine dioxide or ozone
- pH
- redox.

The DIP controls two parameters at the same time:

- chlorine, chlorine dioxide or ozone
- pH.



GrA2482p

Fig. 4 DIP

Conex® DIS

For instrumentation specialists

The Conex® DIS (Dosing Instrumentation Standard) is a simpler unit for amplifying and control. The controller is designed for those who want cost-efficient units and do not need the extra functionalities of the DIA series. Fitted with a powerful 16-bit microprocessor system and offering a choice of settings, the DIS models ensure high water quality while reducing the volumes of chemicals dosed. Simplicity and efficiency combined.

Conex® DIS-C

Measuring amplifier and controller for conductivity

The Conex® DIS-C measures conductivity in a range of applications from bottle-washing to harsh desalination applications. This is because the DIS-C is available with a choice of conductive or inductive probes.

When fitted with conductive probes, the DIS-C is suitable for pressures of up to 232 psi at 77°F. The maximum operating temperature is 275 °F.

DIS-C models with inductive electrodes are ideal for aggressive media because the measuring loops do not come into contact with the sample water.

Monitoring and control parameters

Conductivity (using either conductive or inductive measuring probes).



Fig. 5 Conex® DIS-C

GrA2292

Conex® DIS-PR

Measuring amplifier and controller for pH and redox

The Conex® DIS-PR is designed for pH and redox measuring and control. It is a compact, cost-efficient unit aimed at users who are familiar with measuring and control processes and wish to use numerical programming to manage them. The DIS-PR features an inte-

grated temperature function for added reliability.

Monitoring and control parameters

- pH
- redox.



Fig. 6 Conex® DIS-PR

GrA1027

Conex® DIS-D

Measuring amplifier and controller for disinfection

The Conex® DIS-D is designed to control disinfection processes that use chlorine, chlorine dioxide, or ozone.

To ensure reliable operation, the DIS-D can be supplied with a separate sample water sensor that will immediately detect any shortage of sample water and give an alarm.

Monitoring and control parameters

- chlorine
- chlorine dioxide
- ozone.



Fig. 7 Conex® DIS-D

GrA1027

Preassembled systems

Our preassembled systems take our tried-and-tested electrodes and Conex[®] controllers, combine them to suit specific applications, and mount them on a plate ready for quick installation.

Each combination is available with a choice of measuring cells and cleaning methods.

Preassembled systems can be fitted with these controllers:

- Conex[®] DIA-1
- Conex[®] DIA-2
- Conex[®] DIA-2Q
- DIP
- Conex[®] DIS-PR
- Conex[®] DIS-D.

For additional information on preassembled systems, see page 23.

Measuring cells and electrodes

Our measuring cells and electrodes for dosing applications are made especially for all aspects of water treatment - eg for drinking water, boiler feed water, pure water, swimming pools and food industries such as dairies and breweries.

AquaCell measuring cells for chlorine, chlorine dioxide or ozone

The modular potentiostatic measuring cells are specially developed for disinfection processes.

The units feature integrated filter cartridges, regulating devices and temperature measurement. Cleaning is hydro-mechanical or carried out by an electric cleaning motor - and with a simple conversion kit you can always switch to motor cleaning later if you choose hydro-mechanical versions now.

The measuring cells are also available in pressure-proof versions for applications where no loss of sample water is acceptable.

Monitoring parameters

- chlorine
- chlorine dioxide
- ozone
- pH
- redox
- temperature.

Single-rod probes and electrodes

Grundfos offers a range of simple sensors - single-rod probes and electrodes - for specific measuring needs. The wide choice ensures that you can always find a sensor to match your application.

Monitoring parameters

- pH
- redox potential
- temperature
- conductivity
- hydrogen peroxide
- peracetic acid
- fluoride.

Wide range of electrode holders and accessories

Grundfos offers a wide range of equipment to assist your processes. Examples include single or complete electrode holders and flow-through fittings with electrode cables. Other accessories include buffer solutions, starting reagents, etc.

Monitoring parameters

- hydrogen peroxide
- peracetic acid
- pH
- redox
- temperature.

DIT photometer

The DIT photometer is a compact and hand-held unit that lets you test a number of water parameters quickly and accurately.

The patented two-beam principle ensures that you get precise results within very short time.

You do not need to carry out zero-point adjustments for subsequent measurements; the results remain accurate even after repeated measuring.

Monitoring parameters

- aluminum
- ammonium
- chlorine (free)
- chlorine (combined)
- chlorine dioxide
- chromium
- cyanide
- cyanuric acid
- iron
- fluoride
- hydrazine
- manganese
- nickel
- nitrate
- nitrite
- ozone
- pH
- phosphate
- redox
- temperature.

Type key, controllers

Type key example: DIA-2Q 1-D/HP/PA 2-P/R/F Q-W-H

Example:	DIA	-2Q	1-D/HP/PA	2-P/R/F	Q	-W	-H
Measuring amplifier and controller							
DIA-1	Dosing Instrumentation Advanced with 1 input						
DIA-2	Dosing Instrumentation Advanced with 2 inputs						
DIA-2Q	Dosing Instrumentation Advanced with 2 inputs + flow measurement						
DIP	Dosing Instrumentation Pool						
DIS-C	Dosing Instrumentation Standard for conductive measurement						
DIS-PR	Dosing Instrumentation Standard for pH/redox measurement						
DIS-D	Dosing Instrumentation Standard for Cl ₂ / ClO ₂ / O ₃						
Input parameter 1							
CC	Conductivity - conductive						
CI	Conductivity - inductive						
P	pH						
R	Redox (ORP)						
D	Chlorine (Cl ₂), chlorine dioxide (ClO ₂) or ozone (O ₃)						
HP	Hydrogen peroxide (H ₂ O ₂)						
PA	Peracetic acid (PAA)						
F	Fluoride (F ⁻)						
Input parameter 2							
P	pH						
R	Redox (ORP)						
F	Fluoride (F ⁻)						
Input parameter 3							
R	Redox (ORP)						
Variant							
Q	Flow compensation						
Mounting							
W	Wall-mounted						
P	Panel-mounted						
Voltage							
G	1 x 230 V, 50/60 Hz						
H	1 x 120 V, 50/60 Hz						
I	24 VDC						

Type key, preassembled systems

Type key example: DIA-1-A, D1-AU-PC-QS-T, W-H

Example:	DIA	-1	-A	D1	-AU	-PC	-QS	-T	W	-H
Units for measurement and control										
DIA-1	Dosing Instrumentation Advanced with 1 input									
DIA-2	Dosing Instrumentation Advanced with 2 inputs									
DIA-2Q	Dosing Instrumentation Advanced with 1 inputs + flow measurement									
DIP	Dosing Instrumentation Pool									
DIS-PR	Dosing Instrumentation Standard for pH/redox measurement									
DIS-D	Dosing Instrumentation Standard for Cl ₂ / ClO ₂ / O ₃									
Assembly										
A	Preassembled									
Cell type										
D1	Pressure-proof, with cleaning motor									
D2	Pressure-proof, with hydro-mechanical cleaning									
D3	Pressureless, with hydro-mechanical cleaning									
P/R	pH or redox only									
F	Fluoride only									
PA/HP	Peracetic acid or hydrogen peroxide only									
Electrodes										
Disinfection										
AU	Gold (for cell types D1, D2 and D3 only)									
PT	Platinum (for cell types D1, D2 and D3 only)									
X	No disinfection measuring									
Other electrodes										
PC	pH, ceramic diaphragm									
PT	pH, PTFE diaphragm									
PK	pH, KCl diaphragm									
PG	pH, gel filling									
RC	Redox, ceramic diaphragm									
RT	Redox, PTFE									
RR	Redox without reference system									
F	Fluoride									
PA	Peracetic acid									
HP	Hydrogen peroxide									
X	No electrode									
Voltage										
G	1 x 230 V, 50/60 Hz									
H	1 x 120 V, 50/60 Hz									
I	24 VDC									
Mounting										
W	Wall-mounted									
P	Panel-mounted									
Temperature sensor										
T	With Pt100									
X	No temperature sensor									
Flow sensor										
QS	Flow sensor integrated									
X	No flow sensor									

Type key, AquaCell

Type key example: AQC-D1, AU-PC-RC, QS-T, H

Example:	AQC	-D1	AU-PC-RC	QS	T	H
Model						
AQC	AquaCell					
Application						
D1	Pressure-proof, with cleaning motor (Cl ₂ , ClO ₂ , O ₃)					
D2	Pressure-proof, with hydro-mechanical cleaning (Cl ₂ , ClO ₂ , O ₃)					
D3	Pressureless, with hydro-mechanical cleaning (Cl ₂ , ClO ₂ , O ₃)					
Electrodes						
AU	Gold					
PT	Platinum					
PC	pH, ceramic diaphragm					
RC	Redox, ceramic diaphragm					
X	No electrode					
Flow sensor						
QS	Flow sensor					
X	No flow sensor					
Temperature sensor						
T	With Pt100					
Voltage						
G	1 x 230/240 V, 50/60 Hz					
H	1 x 115/120 V, 50/60 Hz					
I	24 VDC					
X	No voltage					

Controllers

Conex[®] DIA, DIP and Conex[®] DIS

Features	Conex [®] DIA-1	Conex [®] DIA-2	Conex [®] DIA-2Q	DIP	Conex [®] DIS-C	Conex [®] DIS-PR	Conex [®] DIS-D
Input parameter 1							
Conductivity, conductive measurement					●		
Conductivity, inductive measurement					●		
pH	●					●	
Redox (ORP)	●					●	
Chlorine (Cl ₂)	●	●	●	●			●
Chlorine dioxide (ClO ₂)	●	●	●	●			●
Ozone (O ₃)	●	●	●	●			●
Hydrogen peroxide (H ₂ O ₂)	●	●	●				
Peracetic acid (PAA)	●		●				
Fluoride (F ⁻)	●						
Input parameter 2							
pH		●	●	●			
Redox (ORP)			●				
Fluoride (F ⁻)			●				
Input parameter 3							
Redox (ORP)				●			
Variant							
Flow sensor	●	●	●	●			●
Flow compensation			●				
Remote on/off	●	●	●	●			
Mounting options							
Wall-mounted	●	●	●	●	●	●	●
Panel-mounted	●	●	●		●		
Voltage							
1 x 230 V, 50/60 Hz	●	●	●	●	●	●	●
1 x 120 V, 50/60 Hz	●	●	●	●	●	●	●
24 VDC	●	●	●			●	●

Preassembled systems

Features	Conex® DIA-1-A	Conex® DIA-2-A	Conex® DIA-2Q-A	DIP-A	Conex® DIS-PR-A	Conex® DIS-D-A
Cell type						
Pressure-proof, with cleaning motor	●	●	●	●		●
Pressure-proof, with hydro-mechanical cleaning	●	●	●	●		●
Pressureless, with hydro-mechanical cleaning	●	●	●	●		●
pH or redox (ORP) only	●	●	●		●	
Fluoride (F ⁻) only	●					
Peracetic acid (PAA) or hydrogen peroxide (H ₂ O ₂) only	●					
Electrodes						
Gold (disinfection only)	●	●	●	●		●
Platinum (disinfection only)	●	●	●	●		●
pH, ceramic diaphragm	●	●	●	●	●	
Redox (ORP)	●		●		●	
Redox (ORP), no reference system				●		
Fluoride (F ⁻)	●					
Peracetic acid (PAA)	●					
Hydrogen peroxide (H ₂ O ₂)	●					
Variant						
Flow sensor	●	●	●	●		●
Flow compensation			●			
Remote on/off	●	●	●	●		
Temperature sensor						
Pt100	●	●	●	●	●	
Voltage						
1 x 230 V, 50/60 Hz	●	●	●	●	●	●
1 x 120 V, 50/60 Hz	●	●	●	●	●	●
24 VDC	●	●	●		●	●

Controllers

Conex® DIA-1, Conex® DIA-2 and Conex® DIA-2Q

General data

Electronics	16-bit microprocessor system					
Display	High resolution, plain-text LCD					
Indication mode	Measured value as a physical variable					
Enclosure class						
Wall-mounting:	IP 65					
Control panel installation:	IP 54					
Separate sensor interface:	IP 65					
Max. cable length						
Wall-mounting:	3 meters					
Control panel installation:	100 meters between panel and sensor interface 3 meters between sensor and sensor interface					
Relay outputs	1 alarm relay, 2 controller relays (250 V/6 A, max. 550 VA)					
Galvanically isolated from the inputs; max. load: 500 Ohm	Conex® DIA-1	Conex® DIA-2				
Parameter group		Conex® DIA-2Q				
		1 2				
		1 2				
4 analog signal outputs (0-20 mA or 4-20 mA)	Signal transmission directly from input signal	Measured value/control value	1	1	1	1
		pH for pH compensation	1			
		Temperature	1	1*		1*
		Output from PI(D) controller	1	1	1*	1
Temperature compensation	Manually or automatically by Pt100 sensor (23 to 248 °F, measured in °C or °F)					
pH compensation	Chlorine (Cl ₂) measurement: automatically by pH measurement					
Calibration	With plausibility check and buffer recognition					
Permissible temperature	Operation: 32 to 122 °F Storage: -4 to 149 °F					
Permissible relative air humidity	Max. 90% at 104 °F (non-condensing)					
Power consumption	Approx. 15 VA					
Weight	Approx. 3.3 lbs					

* Signal output applicable for temperature or continuous controller (parameter group PG 2)

Measuring parameters and ranges

Parameter group	Parameter	Possible measuring ranges	Available with		
			Conex® DIA-1	Conex® DIA-2	Conex® DIA-2Q
PG 1	Chlorine (Cl ₂) [mg/l]	0.00 - 0.50			
		0.00 - 1.00			
		0.00 - 2.00			
		0.00 - 5.00	•	•	•
		0.0 - 10.0			
		0.0 - 20.0			
		0.0 - 50.0			
	Chlorine dioxide (ClO ₂) [mg/l]	0.00 - 0.50			
		0.00 - 1.00			
		0.00 - 2.00	•	•	•
		0.00 - 5.00			
	Ozone (O ₃) [mg/l]	0.0 - 10.0			
		0.0 - 50.0			
	Hydrogen peroxide (H ₂ O ₂) [mg/l]	0 - 100			
		0 - 500	•	•	•
0 - 1000					
0 - 2000					
Peracetic acid (PAA) [mg/l]	0 - 100				
	0 - 500	•		•	
	0 - 1000				
	0 - 2000				
pH	0.00 - 14.00				
	2.00 - 12.00	•			
	5.00 - 9.00				
Redox (ORP) [mV]	-1500 - +1500	•			
	0 - 1000				
Fluoride (F ⁻) [mg/l]	0.00 - 2.00	•			
PG 2	pH	0.00 - 14.00			
		2.00 - 12.00		•	•
		5.00 - 9.00			
	Redox (ORP) [mV]	-1500 - +1500			•
		0 - 1000			
	Fluoride (F ⁻) [mg/l]	0.00 - 2.00			•

Control data

Description	Value
Limit values	Adjustable as physical variable within the measuring range
Hysteresis	0 to 50% of the upper limit of the measuring range
Setpoint selection	0 to 100% of the measuring range
Proportional band, X _p	0.1 to 3000%
Reset time, T _N	1 to 3000 s, resolution 1 s
Derivative action time, T _V	1 to 1000 s, resolution 1 s
Constant load	0 to 50%
Limitation of the maximum dosing capacity	From the adjusted constant load up to 100%
Control direction	Adjustable: Upward or downward control

Adjustable control functions

Description	Conex® DIA-1	Conex® DIA-2		Conex® DIA-2Q	
		PG 1	PG 2	PG 1	PG 2
Parameter group					
Number of measured values + control parameters	1	1	1	1	1
Potential-free control relays adjustable as	2	1	1	1	1
Limit switch	●	●	●	●	●
2-position controller (P / PI / PID)	●	●	●	●	●
• pulse pause	●	●	●	●	●
• pulse frequency	●	●	●	●	●
3-position controller	●				
Setpoint controller	●	●	●	●	●
Proportional controller				●	●
Combined controller (for compound loop control)				●	●
	and	or		or	
Analog continuous controller (0-20 mA or 4-20 mA)	1	1	1	1	1

Dimensions inches (mm)

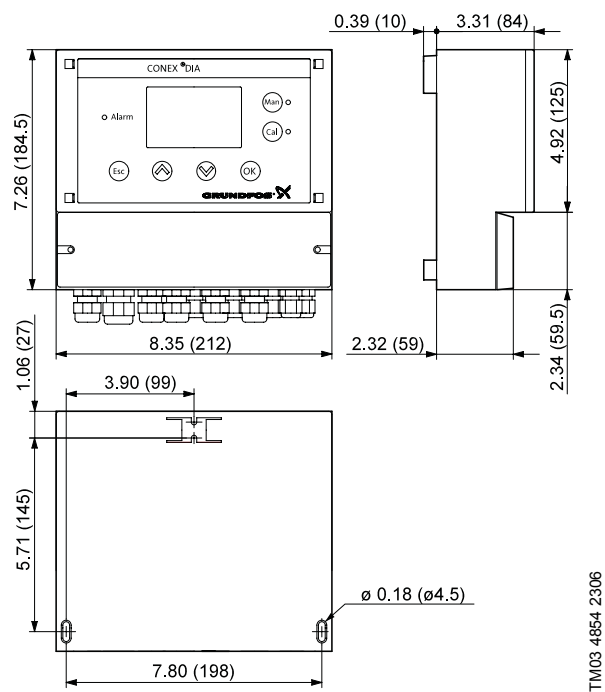


Fig. 8 Dimensions, Conex® DIA for wall-mounting

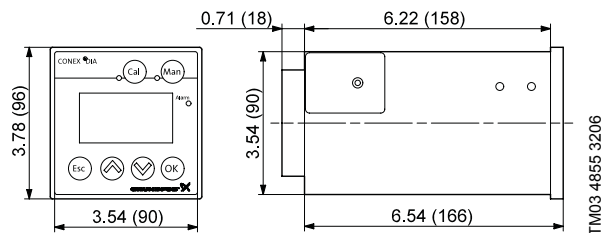


Fig. 9 Dimension, inches (mm), Conex® DIA for installation in control panel

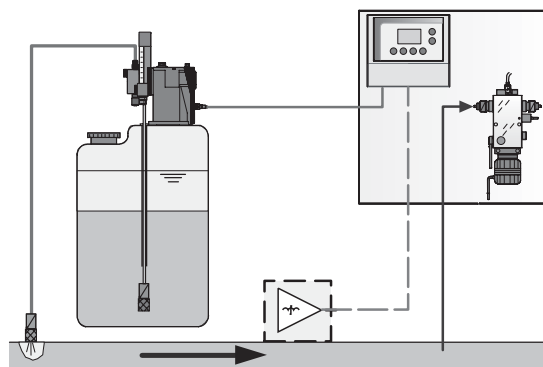


Fig. 10 Compound-loop control for Conex® DIA-2Q (combined controller)

Conex® DIS-C

General data

Electronics	Microcontroller-operated
Display	Two-line, alphanumeric LCD
Display mode	<ul style="list-style-type: none"> • measurement values as physical variables • temperature indication • operational and status messages.
Operation	<ul style="list-style-type: none"> • five membrane keys • plain-text menu control
Languages	English, German, French
Password	Operational protection with code
Compensation	Temperature compensation with Pt100
Measuring range	Automatic internal selection of the <ul style="list-style-type: none"> • measuring range • measuring frequency • measuring tension.
Cell constant	Adjustable
Inputs/outputs	Galvanic separation
Analog output (0-20 mA or 4-20 mA)	Galvanic separation, can be used as measured value or continuous controller
Digital input	Controller stop input
Enclosure class	Wall-mounted: IP 65 Panel-mounted: IP 54
Permissible temperature range	Operation: 32 to 122 °F Storage: -4 to 149 °F
Permissible relative air humidity	Max. 90% at 104 °F (non-condensing)
Mains voltage	230 V -10%/+6% or 130 V -10%/+6%
Weight	Approx. 1.8 lbs

Control functions

Operation modes	Manual or automatic
Relays	<ul style="list-style-type: none"> • Alarm relay • Control relays 1 + 2: Limit-value controller Pulse-pause controller Pulse-frequency controller Continuous controller (analog output: 4-20 mA)
Limit values	Adjustable to physical variable within the measuring range
Setpoint selection	0 to 100% of the measuring range
Proportional band, X_p	0.1 to 3000%
Reset time, T_N	1 to 3000 s, resolution 1 s
Control direction	Upward or downward control, with the corresponding controller types
Alarm relay delay	0 to 999 seconds

Measuring ranges, Conex® DIS-C, conductive

Measuring range	Resolution
0.05 to 200 μ S/cm	0.01 μ S/cm
1 to 2000 μ S/cm	1 μ S/cm
50 to 20000 μ S/cm	10 μ S/cm
Temperature coefficient: Adjustable from 0.0 to 8.0%/°F	
Accuracy: \pm 1% of the range limit value	
Temperature indication	86 to 284 °F

Measuring ranges, Conex® DIS-C, inductive

Measuring range	Resolution
0-20.00 mS/cm	0.01 mS/cm
0-200.0 mS/cm	0.1 mS/cm
0-2000 S/cm	1 mS/cm
Temperature coefficient: Adjustable from 0.0 to 8.0%/°F	
Accuracy: \pm 1% of the range limit value	
Temperature indication: -22 to 284 °F	

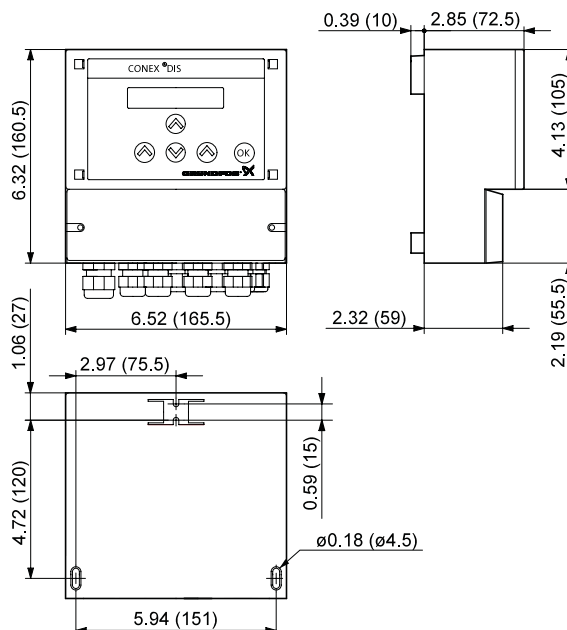


Fig. 11 Dimensions, inches (mm), Conex® DIS-C for wall-mounting

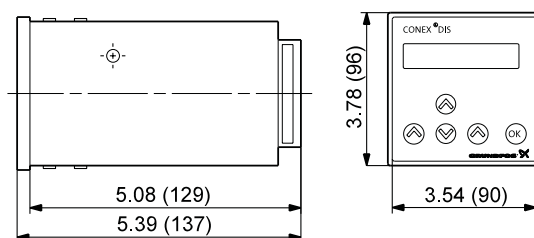


Fig. 12 Dimensions, inches (mm), Conex® DIS-C for control panel installation

TM03 4856 3206

TM03 4857 3206

Conex® DIS-PR and Conex® DIS-D

General data

Electronics	Powerful 16 bit microprocessor
Display	One-line display
Indication mode	Measured value as a physical variable
Controllers	PI
Relay output	250 V max. load 1 A • Limit monitor, pulse-pause controller or pulse-frequency controller • Alarm relay (change-over contact)
Current output	1 analog output (0-20 mA or 4-20 mA); max. load: 400 Ohm; • continuous controller or • measured value
Temperature compensation	Manually or automatically by Pt100 temperature sensor, measuring range 32 to 212 °F (Conex® DIS-PR only)
Enclosure class	Wall-mounted: IP 65
Permissible temperature	Operation: 32 to 122 °F Storage: -4 to 149 °F
Permissible relative air humidity	Max. 90% at 104 °F (non-condensing)
Mains voltage	230/240 V ±10%, (50/60 Hz) or 115/120 V ±10%, (50/60 Hz) or 24 VDC
Power consumption	Approx. 10 VA
Weight	Approx. 2.2 lbs

Measuring parameters

	Possible measuring ranges	Conex® DIS-PR	Conex® DIS-D
Chlorine (Cl ₂) / Chlorine dioxide (ClO ₂) / Ozone (O ₃)	0.00 - 2.00 mg/l 0.0 - 20.0 mg/l		●
pH	pH 0.0 - 14.00 pH 2.0 - 12.00 pH 5.00 - 9.00	●	
Redox	0 - 1000 mV 0 - 1500 mV	●	

Control functions

Setpoint	Adjustable within the measuring range, with the resolution of the measured value
Alarm setpoints	Adjustable within the measuring range
Hysteresis	0 to 50% of the measuring range limit value
Control response	Pulse-pause / pulse-frequency control (P, PI), limit monitor
Proportional band, X _P (pulse-pause controller, pulse-frequency controller, continuous controller)	Adjustable from 0.0 to 3000% resolution 0.1% for range 0.1 to 100.0% resolution 1% for range 101 to 3000%
Reset time, T _N (pulse-pause controller, pulse-frequency controller, continuous controller)	Adjustable from 0 to 3000 s resolution 1 s
Control direction	Adjustable: Upward or downward control
Pulse + pause time (pulse-pause controller)	Adjustable from 1 to 100 s resolution 1
On-time, T _{min} (pulse-pause controller)	Initial pulse adjustable between 0.1 and 10.0 s, resolution 0.1 s
Max. frequency (pulse-frequency controller)	Adjustable from 1 to 220 pulses/min., one pulse width = 50 ms
Continuous controller	0-20 mA or 4-20 mA

Dimensions

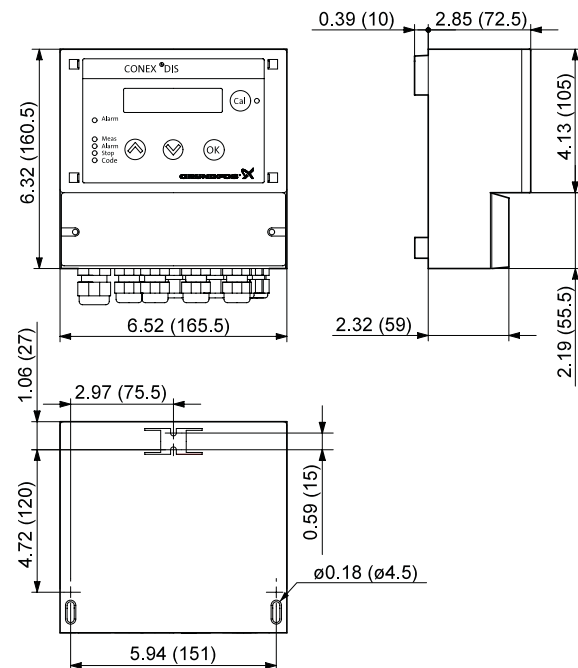


Fig. 13 Dimensions, inches (mm), Conex® DIS-PR and Conex® DIS-D

TM03 4858 3206

DIP

General data

Electronics	16 bit microprocessor system
Distance of sensors	Max. 3 meters
Display	2 x high resolution plain-text LCD
Indication mode	measured value as a physical variable
Relay outputs (max. relay load 250 V/ 6 A, max. 550 VA)	1 collective alarm relay 1 stand-by relay
	For each parameter of groups 1 and 2: 1 alarm relay and 2 potential-free controller switch relays for chlorine (Cl ₂) (or chlorine dioxide (ClO ₂) or ozone (O ₃)) and for pH, adjustable to: <ul style="list-style-type: none"> • limit switch • or 2-position controller (pulse pause, pulse frequency) • or 3-position step controller <ul style="list-style-type: none"> - for chlorine (Cl₂) - or chlorine dioxide (ClO₂) - or ozone (O₃) with or without return - for pH without return.
Signal outputs (max. load: 500 Ohm)	4 analog outputs (0-20 mA or 4-20 mA), galvanically isolated from the inputs, for the measuring parameters: <ul style="list-style-type: none"> • disinfection parameter chlorine (Cl₂) / chlorine dioxide (ClO₂) / ozone (O₃) • pH • redox • temperature.
	2 analog outputs (0-20 mA or 4-20 mA) for continuous controller <ul style="list-style-type: none"> • disinfection parameter chlorine (Cl₂) / chlorine dioxide (ClO₂) / ozone (O₃) • pH (chlorine and pH)
Interface	CAN bus
Temperature compensation	Manually or automatically by Pt100 sensor (23 to 248 °F, measured in °C or °F)
pH compensation	Automatically by pH measurement
Calibration	With plausibility check and buffer recognition
Permissible temperature	Operation: 32 to 122 °F Storage: -4 to 149 °F
Permissible relative humidity	Max. 90% at 104 °F (non-condensing)
Power consumption	Approx. 15 VA
Enclosure class	IP 65
Weight	Approx. 4.4 lbs

Measuring parameters and ranges

Parameter group	Parameter	Possible measuring ranges
PG 1	Chlorine (Cl ₂) [mg/l]	0.00 - 0.50
		0.00 - 2.00
		0.00 - 5.00
		0.0 - 10.0
		0.0 - 20.0
	0.0 - 50.0	
PG 1	Chlorine dioxide (ClO ₂) [mg/l]	0.00 - 0.50
		0.00 - 1.00
		0.00 - 2.00
		0.00 - 5.00
		0.0 - 10.0
	0.0 - 50.0	
PG 1	Ozone (O ₃) [mg/l]	0.00 - 0.50
		0.00 - 1.00
		0.00 - 2.00
		0.00 - 5.00
		0.0 - 10.0
	0.0 - 50.0	
PG 2	pH	0.00 - 14.00
		2.00 - 12.00
		5.00 - 9.00
	Redox [mV]	-1500 - +1500 0 - 1000

Control data

Description	Value
Setpoint	Adjustable as physical variable within the measuring range (eg: mg/l)
Hysteresis	0 to 50% of the upper limit of the measuring range
Setpoint selection	0 to 100% of the measuring range
Proportional band, X _p	0.1 to 3000%
Reset time, T _N	1 to 3000 s, resolution 1 s
Derivative action time, T _V	1 to 1000 s, resolution 1 s
Constant load	0 to 50%
Limitation of the maximum dosing capacity	From the adjusted constant load up to 100%
Control direction	Upward or downward control

Preassembled systems

Conex[®] preassembled systems for chlorine (Cl₂), chlorine dioxide (ClO₂), ozone (O₃), pH and redox (ORP)



GRA1026

Fig. 14 Conex[®] DIA-1 preassembled system

The system is equipped with one of these controllers:

- Conex[®] DIA-1
- Conex[®] DIA-2
- Conex[®] DIA-2Q.

The system is equipped with one of these AquaCells:

- D1, pressure-proof, with cleaning motor
- D2, pressure-proof, with hydro-mechanical cleaning
- D3, pressureless, with hydro-mechanical cleaning.

See page 24.

Features

- Mounted on a base plate and wired ready for connection
- With prepared cable sets
- With Cl₂ electrode
- Optionally with pH electrode
- With a measuring range of 0 to 50 mg/l for Cl₂, ClO₂ or O₃ (DIA-2: pH 0 to 14)
- With temperature compensation.

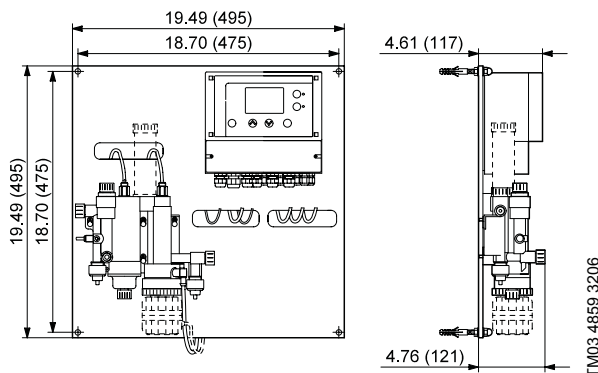


Fig. 15 Dimensions, inches (mm), Conex[®] DIA preassembled system

Conex[®] preassembled system for chlorine (Cl₂), chlorine dioxide (ClO₂), ozone (O₃)

The system is equipped with Conex[®] DIS-D controller.

The system is equipped with one of these AquaCells:

- D1, pressure-proof, with cleaning motor
- D2, pressure-proof, with hydro-mechanical cleaning
- D3, pressureless, with hydro-mechanical cleaning.

See page 24.

Features

- Mounted on a base plate and wired, ready for connection.
- With prepared cable sets
- With electrode for Cl₂, ClO₂ and O₃
- With a measuring range of 0-20 mg/l for Cl₂, ClO₂ or O₃
- Optional water sensor (1 meter of prepared cable).

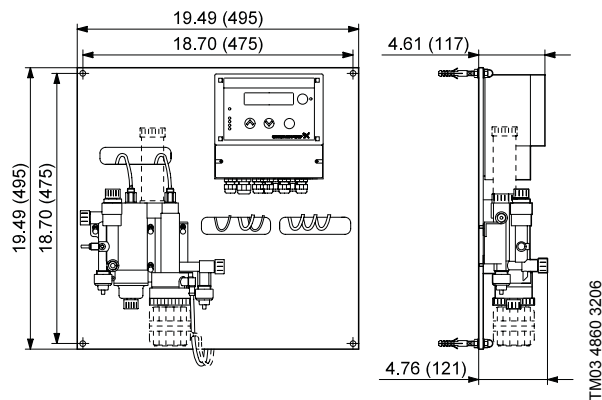


Fig. 16 Conex[®] DIS-D preassembled system for Cl₂, ClO₂ and O₃

DIP preassembled system for chlorine (Cl_2), chlorine dioxide (ClO_2), ozone (O_3), pH and redox (ORP)

The system is equipped with a DIP controller and particularly suitable for swimming pool water disinfection.

The system is equipped with one of these AquaCells:

- D1, pressure-proof, with cleaning motor
- D2, pressure-proof, with hydro-mechanical cleaning
- D3, pressureless, with hydro-mechanical cleaning.

See page 24.

Features

- Mounted on a base plate and wired ready for connection
- With prepared cable sets
- With Cl_2 electrode
- With a measuring range of 0 to 30 mg/l for Cl_2 , ClO_2 or O_3
- With temperature compensation.

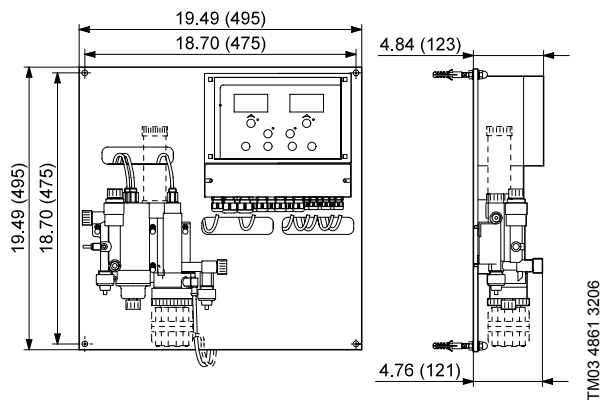


Fig. 17 Dimensions, inches (mm), DIP preassembled system

Conex® preassembled system for hydrogen peroxide (H_2O_2) and peracetic acid (PAA)

The system is equipped with Conex® DIA-1 controller.

Features

- With Conex® DIA-1 and diaphragm-covered measuring cell
- Mounted on a base plate and wired ready for connection
- With a measuring range of 0 to 2000 mg/l for H_2O_2 or PAA.

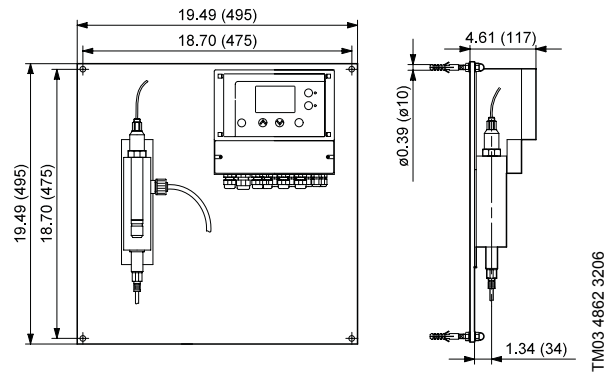


Fig. 18 Dimensions, inches (mm), Conex® DIA-1 preassembled system for H_2O_2 or PAA

Conex® preassembled system for pH or redox (ORP)

The system is equipped with one of these controllers:

- Conex® DIA-1
- Conex® DIS-PR.

Features

- With sensors for pH or redox
- Mounted on a base plate and wired ready for connection
- With prepared cable sets
- With temperature compensation.

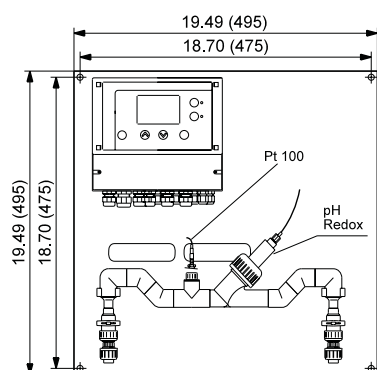


Fig. 19 Dimensions, inches (mm)

Mains voltage of the controller;

- 230/240 V (50/60 Hz)
- 115/120 V (50/60 Hz)
- 24 VDC.

This preassembled system incorporates:

- temperature sensor, with 1-meter cable
- pH single-rod probe, with 1-meter cable and ceramic or PTFE diaphragm.

TM03 4863 3206

Conex® preassembled systems for fluoride (F⁻)

The system is equipped with Conex® DIA-1 controller.

Features

- With Conex® DIA-1 and with fluoride single-rod probe in a flow-type holder
- Mounted on a base plate and wired ready for connection
- With a measuring range of 0 to 2 mg/l for fluoride.

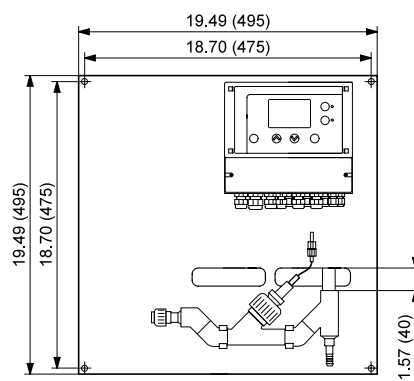


Fig. 20 Dimensions, inches (mm)

TM03 4864 3206

AquaCells

AquaCells are modular, potentiostatic, combined measuring cells for chlorine (Cl₂), chlorine dioxide (ClO₂) and ozone (O₃).

Features

- Proven potentiostatic three-electrode measuring method for measurement directly in the sample water
- Optimised electrode cleaning
- Integrated filter cartridge and regulating device
- Integrated temperature measurement
- Special measuring chamber with calibration cup for pH single-rod probe and redox electrode
- Excellent flow characteristics
- Maintenance-friendly design
- Non-wearing measuring and counter electrode for free chlorine (Cl₂), chlorine dioxide (ClO₂) or ozone (O₃).
- Easy exchange of the reference electrode
- Conversion from hydro-mechanical to motor cleaning possible at any time with a conversion set
- Ready for wall-mounting connection, fastening kit included.

Types

Model	Description	Benefits
D1	Pressure-proof cell with cleaning motor	<ul style="list-style-type: none"> • No loss of sample water in case of closed cycles • For drinking water, waste water, industrial water and brewery.
D2	Pressure-proof cell with hydro-mechanical cleaning (with integrated water sensor)	<ul style="list-style-type: none"> • No loss of sample water in case of closed cycles • For swimming pool, hotel pool, therapeutic clinic pool water.
D3	Pressureless cell with hydro-mechanical cleaning	<ul style="list-style-type: none"> • Particularly suitable for swimming pool water disinfection • Note: A free sample water outlet is required.

Measuring data

Measuring parameters - Cl ₂ , ClO ₂ , O ₃			
Measuring range	0.05 - 50 mg/l (according to controller settings)		
Measuring sensitivity	< 20 ppb (the equivalent of 0.02 mg/l)		
Measuring accuracy	< ±5% of upper end of measuring range		
Reproducibility	D1	D2	D3
	< ±3%	< ±5%	< ±4%
Response time t90	< 60 s		
Measuring parameters - pH, redox, temperature			
pH	pH 0.00 - 14.00 (see controller)		
Redox	-1500 to +1500 mV (see controller)		
Temperature	-5 to +120°C / 23 to 248°F		



Fig. 21 AquaCell, D1

TM03 4136 1706

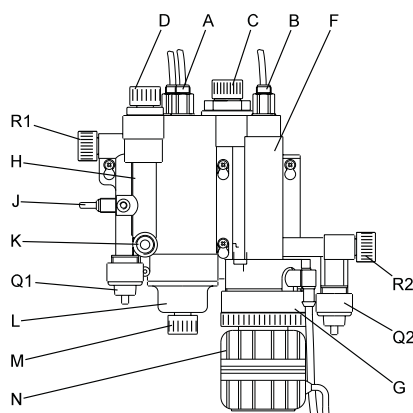
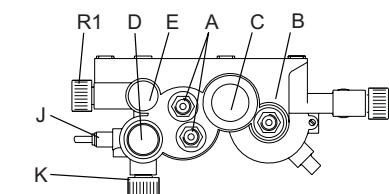
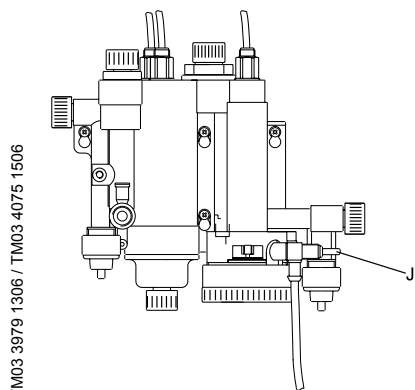
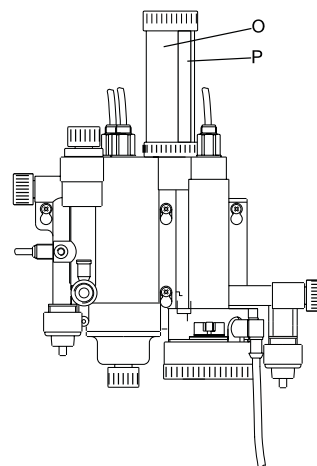


Fig. 22 Pressure-proof cell with cleaning motor (D1)



TM03 3979 1306 / TM03 4075 1506

Fig. 23 Pressure-proof cell with hydro-mechanical cleaning (integrated water sensor) (D2)



TM03 3981 1306

TM03 3980 1306

Fig. 24 Pressureless cell with hydro-mechanical cleaning (D3)

Legend

Pos.	Component
A	Holders for pH single-rod probe and redox electrode
B	Holder for the reference electrode (Cl ₂ , ClO ₂ , O ₃)
C	Deaeration
D	Sample water regulating device
E	Filter cartridge
F	Flow-type electrode holder
G	Screw-in part with ring, measuring electrode (Cl ₂ , ClO ₂ , O ₃) and integrated Pt100 temperature sensor
H	Measuring tube
J	Water sensor (incorporated in D2, available as an option for D1 and D3)
K	Sample water extraction device with extraction spindle
L	Calibration cup with sample water outlet
M	Draining spindle (at the calibration cup)
N	Cleaning motor (only D1)
O	Enclosure cylinder (only D3)
P	Stand pipe (only D3)
Q1/Q2	Connection for sample water inlet/outlet
R1/R2	Shut-off spindle for sample water inlet/outlet

Technical data

AquaCell body	<ul style="list-style-type: none"> Flow-type holder made of Plexiglass
Measuring parameters	<ul style="list-style-type: none"> Free chlorine (Cl₂), chlorine dioxide (ClO₂) and ozone (O₃) Options: pH value, redox potential Temperature (compensation of temperature variations during pH, Cl₂, ClO₂ and O₃ measurements)
Sample water	<ul style="list-style-type: none"> Temperature: 0 to 50°C pH value: pH 4.5 to 8.5 Admission pressure: 0.3 to 4 bar Free from solids <p>Pressureless AquaCell:</p> <ul style="list-style-type: none"> Free outlet required. <p>Pressure-proof AquaCells:</p> <ul style="list-style-type: none"> Counter pressure: max. 2.7 bar Pressure difference: max. 0.3 bar.
Permissible ambient temperature	0 to 40°C
Permissible storage temperature	AquaCell: -20 to +65°C Electrodes: -10 to +30°C
Permissible relative air humidity	Max. 90% (not condensing)
Water flow	Min. 20 up to approx. 60 l/h
Parts in contact with the liquid	PMMA, PVC, steel, PTFE, EPDM
Materials of electrodes	Gold or platinum (electrode Cl ₂ , ClO ₂ , O ₃) glass, stainless steel, PVC
Connections, inlet/outlet	For PVC tube 6/12 or PVC pipe 12 x 1.2
Mains voltage of cleaning motor	230/240 V (50/60 Hz) 115/120 V (50/60 Hz) 24 VDC
Weight	Approx. 3.3 lbs (approx. 4.4 lbs including cleaning motor)

Options

Measuring electrode for Cl_2 , ClO_2 , O_3

- Gold or platinum material

Sensors for temperature, lack of sample water, pH, redox (non-prepared cables)

- Water sensor, with 3-meter cable
- pH single-rod probe, with 3-meter cable with ceramic or PTFE diaphragm
- Redox single-rod probe/electrode, with 3-meter cable with ceramic or PTFE diaphragm

Dimensions

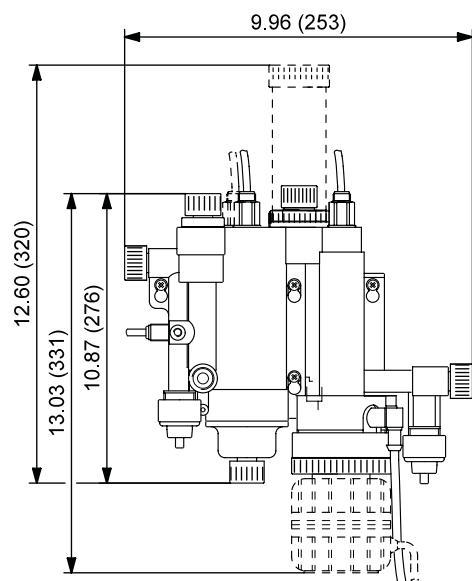


Fig. 25 Dimensions, inches (mm), modular, potentiostatic, combined AquaCells for Cl_2 , ClO_2 and O_3

TM03 4865 3206

Measuring cells

Measuring cells for hydrogen peroxide (H₂O₂), peracetic acid (PAA) and fluoride (F⁻)

Diaphragm-covered measuring cells are available:

- for hydrogen peroxide
- for peracetic acid.

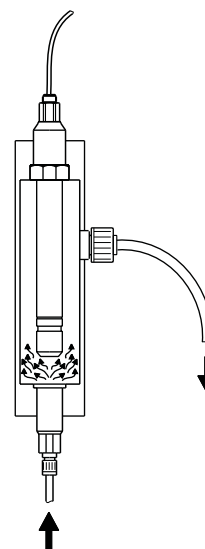
The cells are particularly suitable for disinfection in bottling plants (beverages and liquid food).

The cells consist of a flow-type holder and a diaphragm-covered measuring electrode. They have cable and plug.



Fig. 26 Measuring cell for hydrogen peroxide and peracetic acid

TM03 4135 1706



TM03 4042 1406

Fig. 27 Flow direction, measuring cell for hydrogen peroxide and peracetic acid

Technical data

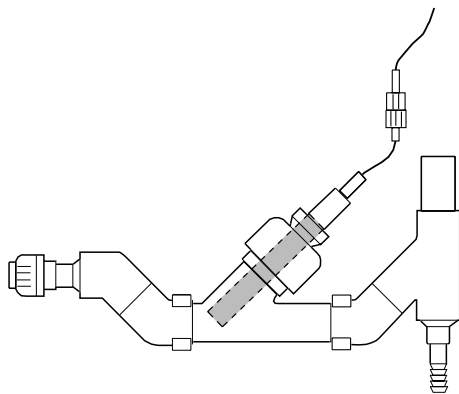
Description	Hydrogen peroxide (H ₂ O ₂)	Peracetic acid (PAA)
Disturbances: no disturbances caused by tensides	Violent disturbances by PAA	Negligible disturbances by H ₂ O ₂ , selectivity factor of 0.005
Response time, T90	~ 5 minutes	~ 3 minutes
Permissible ambient temperature	32 to 113 °F	32 to 122 °F
Sample water temperature.	32 to 131 °F	
Sample water flow	minimum 8 GPH	
Enclosure material	PVC, polycarbonate, stainless steel and silicone rubber, resistant to tensides and common water additives	
Connections, inlet	For 6/8 hose	
Weight	Approx. 0.2 lbs	
Resolution	1 mg/l	
Temperature drift	Negligible	
Product numbers	96622972	96622954

Spare parts

Description	Product number	
	Hydrogen peroxide (H ₂ O ₂)	Peracetic acid (PAA)
Diaphragm-covered electrode	96622973	96622959
Diaphragm cap incl. electrolyte, 100 ml	96622974	96622962
Electrolyte, 100 ml	96622975	96622966

Measuring sensor for fluoride (F⁻)

The sensor is suitable for applications where fluoride is added to the drinking water for the sake of health (caries prophylaxis).



TM03 4043 1406

Fig. 28 Flow-type holder

Description

Fluoride, single-rod probe with lanthanum, fluoride, monocrystal diaphragm, including cable and plug.

Technical data

Description	Data
Measuring parameters	Fluoride, not complexed (eg of sodium fluoride (NaF), hexafluorosilicic acid (H ₂ SiF ₆) or sodium silica fluoride (Na ₂ SiF ₆))
Sample water	Temperature: 32 to 122 °F pH: 5 to 8.5
Measuring range	0 to 2 ppm fluoride
Permissible ambient temperature	32 to 122 °F
Sample water flow	Approx. 86 to 122 °F
Material of flow-type holder	PVC
Temperature drift	Approx 1.1% per 1 °F (approx 2% per 1 °C)
Weight	Approx. 4.4 lbs

Accessories

Description	Product number
Filling solution for fluoride probe, 50 ml	96622990
Fluoride standard solution 0.5 ppm effective, 100 ml	96622978
Fluoride standard solution 2.0 ppm effective, 100 ml	96622979

Order data

Description	Product number
Fluoride single-rod probe	96622977

Measuring cells for conductive conductivity measurement

Description

- PVC body or stainless steel body with inserts made of PVDF and FKM
- Two coaxial stainless steel electrodes
- Integrated platinum resistance thermometer
- Screw-in, 3/4" thread
- High-quality product for a long service life.

General data

Temperature range	32 to 275 °F
Maximum operating pressure	232 psi at 77 °F 131 psi at 140 °F
Connecting cable, 4 x 0.5 mm ² , screened (max. 328 ft)	
Material of sensor body	PVC
Material of electrode	Stainless steel (AISI 316 Ti)
Temperature sensor	Pt100

Order data

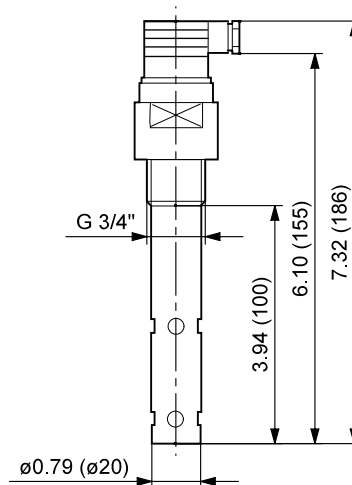
Measuring range	Cell constant	Product number
0.05-200 µS/cm	c = 0.05	96609150
1-2000 µS/cm	c = 0.2	96609151
50-20000 µS/cm	c = 1.0	96609152
	Length	
	16 ft	96611925
	49 ft	96611928
	82 ft	96611929

Connecting cable, 4 x 0.5 mm², screened (max. 328 feet)



GrA1025

Fig. 29 Measuring cell for conductive conductivity measurement



TM03 4866 3206

Fig. 30 Dimensions, inches (mm), measuring cell for conductive conductivity measurement

Measuring cell for inductive conductivity measurement

Description

- PVC-C body
- Internal ring-shaped measuring loops
- Full PVC enclosure
- Integrated Pt100 sensor
- 10-meter connection cable
- Screw-in, 3/4" thread
- Suitable especially for aggressive liquids
- High chemical resistance
- Dirt-proof
- Sensor not in contact with liquid
- Compact design.



GrA1035p_w

Fig. 31 Measuring cell for inductive conductivity measurement

Technical data

Max. temperature	194 °F
Max. pressure at 20°C	87 PSI
Accuracy	±2%
Integrated temperature sensor	Pt100
Max. cable length	<ul style="list-style-type: none"> • 100 meter • 20 meter at 0-2.000 mS/cm
Connection cable	10 meter
Cell constant	c = 3.45

Order data

Description	Measuring range	Product number
	0 - 2.000 mS/cm ±2%	
• PVC-C body	0 - 20.00 mS/cm ±2%	96609157
• Pt100 temperature sensor	0 - 200.0 mS/cm ±2%	
	0 - 2.000 S/cm ±2%	

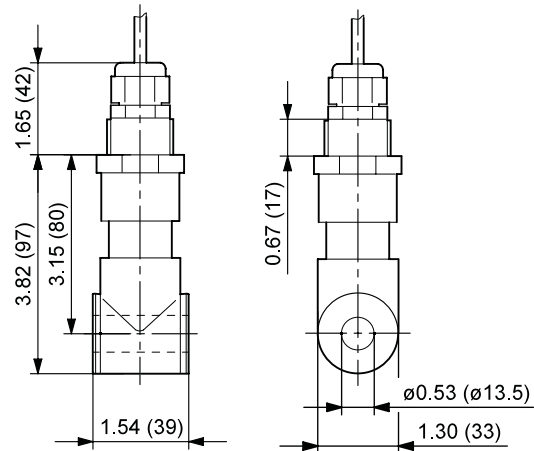


Fig. 32 Dimensions, inches (mm), measuring, cell for inductive conductivity measurement

TM03 4867 3206

Technical data

Electrodes and sensors

Electrodes for pH, redox and temperature

pH single-rod probes

- in a 12 mm diameter glass shaft with threaded socket, PG 13.5 N
- reference and derivation system Ag/AgCl, zero point at pH 7.

Redox, single-rod probes/electrode

- in a 12 mm diameter glass shaft with threaded socket, PG 13.5 N
- reference and derivation system Ag/AgCl (except product no. 96622944).



GrA1046

Fig. 33 Probes for pH and Cl₂

Description	pH				Redox		
	96609158	96609160	96609159	96609161	96609162	96609163	96622944
Equipment	• ceramic diaphragm	• Filling opening for connection to a KCl tank	• PTFE diaphragm	• hole diaphragm • reference system of solid plastic containing KCl	• ceramic diaphragm	• PTFE diaphragm	Electrode: • no reference or derivation system
Suitable for Conex®	•	•	•	•	•	•	-
Suitable for DIP	•	•	•	•	-	-	•
Measuring range	pH 0-12 (14)	pH 0-12 (14)	pH 0-12 (14)	pH 0-14	±1500 mV	±1500 mV	±1500 mV
Permissible pressure	0-87 PSI	0-7.25 PSI	0-87 PSI	• max 232 PSI (up to 77 °F) • max 87 PSI (up to 212 °F)	0-87 PSI	0-87 PSI	0-87 PSI
Permissible temperature	23 to 176 °F	23 to 176 °F	23 to 176 °F	0 to 212 °F	23 to 176 °F	23 to 176 °F	23 to 176 °F
Suitable for these water treatment applications (among others)							
Swimming pools	•		•		•	•	•
Drinking water	•		•	•	•	•	•
Boiler-feed water		•					
Pure water (cond. <100 µS)		•					
High temperature				•			•
Wastewater, municipal			•	•		•	•*
Wastewater, industrial			•	•		•	•*
Wastewater, breweries/dairies		•	•	•		•	•*

* = on request

Sensors for temperature measurement and compensation

Description	Product number
Pt100 for temperature measurement with a PG 13.5 N screw plug	96623001

Controllers

Controller	Voltage	Controller mounting	Enclosure material	Enclosure class	Input parameter			Variant	Type designation	Product number
					1	2	3			
	24 VDC 115/120 V 230/240 V	Panel-mounted Wall-mounted	Polystyrene Noryl (enclosure) ABS (sensor interface)	IP 65 IP 54 (enclosure), IP 65 (sensor interface)	Chlorine (Cl ₂), chlorine dioxide (ClO ₂) or ozone (O ₃) pH Redox (ORP) Hydrogen peroxide (H ₂ O ₂) Peracetic acid (PAA) Fluoride (F ⁻) Conductivity, conductive measurement Conductivity, inductive measurement	pH Redox (ORP) Fluoride (F ⁻) Redox (ORP)		Flow compensation		
Conex® DIA-1									DIA-1. 1-P/R/D/HP/PA/F. P-I	96622365
									DIA-1. 1-P/R/D/HP/PA/F. W-I	96622361
									DIA-1. 1-P/R/D/HP/PA/F. P-H	96622364
									DIA-1. 1-P/R/D/HP/PA/F. W-H	96622360
									DIA-1. 1-P/R/D/HP/PA/F. P-G	96622363
									DIA-1. 1-P/R/D/HP/PA/F. W-G	96622359
Conex® DIA-2									DIA-2. 1-D/HP. 2-P. P-I	96622374
									DIA-2. 1-D/HP. 2-P. W-I	96622370
									DIA-2. 1-D/HP. 2-P. P-H	96622373
									DIA-2. 1-D/HP. 2-P. W-H	96622369
									DIA-2. 1-D/HP. 2-P. P-G	96622371
									DIA-2. 1-D/HP. 2-P. W-G	96622366
Conex® DIA-2Q									DIA-2Q. 1-D/HP/PA. 2-P/R/F. Q-P-I	96622391
									DIA-2Q. 1-D/HP/PA. 2-P/R/F. Q-W-I	96622388
									DIA-2Q. 1-D/HP/PA. 2-P/R/F. Q-P-H	96622390
									DIA-2Q. 1-D/HP/PA. 2-P/R/F. Q-W-H	96609141
									DIA-2Q. 1-D/HP/PA. 2-P/R/F. Q-P-G	96622389
									DIA-2Q. 1-D/HP/PA. 2-P/R/F. Q-W-G	96609140
DIP									DIP. 1-D 2-P 3-R. W-H	96622358
									DIP. 1-D 2-P 3-R. W-G	96622357

Controller	Voltage	Controller mounting	Enclosure material	Enclosure class	Input parameter			Variant	Type designation	Product number
					1	2	3			
	24 VDC 115/120 V 230/240 V	Panel-mounted Wall-mounted	Polystyrene Noryl (enclosure) ABS (sensor interface)	IP 65 IP 54 (enclosure), IP 65 (sensor interface)	Chlorine (Cl ₂), chlorine dioxide (ClO ₂) or ozone (O ₃) pH Redox (ORP) Hydrogen peroxide (H ₂ O ₂) Peracetic acid (PAA) Fluoride (F ⁻) Conductivity, conductive measurement Conductivity, inductive measurement	pH Redox (ORP) Fluoride (F ⁻) Redox (ORP)	Flow compensation			
Conex® DIS-C										
									DIS-C. 1-CC. P-H	96622410
									DIS-C. 1-CI. P-H	96622412
									DIS-C. 1-CC. W-H	96609127
									DIS-C. 1-CI. W-H	96609129
									DIS-C. 1-CC. P-G	96622409
									DIS-C. 1-CI. P-G	96622411
									DIS-C. 1-CC. W-G	96609125
									DIS-C. 1-CI. W-G	96609128
Conex® DIS-PR										
									DIS-PR. 1P/R. W-I	96609124
									DIS-PR. 1P/R. W-H	96609123
									DIS-PR. 1P/R. W-G	96609122
Conex® DIS-D										
									DIS-D. 1-D. W-I	96622394
									DIS-D. 1-D. W-H	96622393
									DIS-D. 1-D. W-G	96622392

Preassembled systems

	Voltage	Cell type	Electrode			Sensor	Type designation	Product number
			1	2	3			
Controller	24 VDC 115/120 V 230/240 V	Pressure-proof, w. cleaning motor Pressure-proof, w. hydro-mechanical cleaning Pressureless, w. hydro-mechanical cleaning Fluoride only Peracetic acid/hydrogen peroxide pH or redox only	Gold (Cl ₂ , ClO ₂ , O ₃) (disinfection) Platinum (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Fluoride (F ⁻) Peracetic acid (PAA) Hydrogen peroxide (H ₂ O ₂) pH ceramic diaphragm Redox (ORP) ceramic diaphragm Redox (ORP) without reference system		Flow sensor Temperature sensor		
Conex® DIA-1-A	•	•	•	•		• •	DIA-1-A. D1-AU-PC-QS-T. W-I	96622416
	•	•	•	•		• •	DIA-1-A. D1-AU-PC-X-T. W-I	96622429
	•	•	•			• •	DIA-1-A. D1-AU-X-QS-T. W-I	96622423
	•	•	•			• •	DIA-1-A. D1-AU-X-X-T. W-I	96622435
	•	•	•	•		• •	DIA-1-A. D1-PT-PC-QS-T. W-I	96622419
	•	•	•	•		• •	DIA-1-A. D1-PT-PC-X-T. W-I	96622432
	•	•	•			• •	DIA-1-A. D1-PT-X-QS-T. W-I	96622426
	•	•	•			• •	DIA-1-A. D1-PT-X-X-T. W-I	96622438
	•	•	•	•		• •	DIA-1-A. D2-AU-PC-QS-T. W-I	96622678
	•	•	•			• •	DIA-1-A. D2-AU-X-QS-T. W-I	96622684
	•	•	•	•		• •	DIA-1-A. D2-PT-PC-QS-T. W-I	96622681
	•	•	•	•		• •	DIA-1-A. D2-PT-X-QS-T. W-I	96622687
	•	•	•			• •	DIA-1-A. D3-AU-PC-QS-T. W-I	96622573
	•	•	•	•		• •	DIA-1-A. D3-AU-PC-X-T. W-I	96622585
	•	•	•			• •	DIA-1-A. D3-AU-X-QS-T. W-I	96622579
	•	•	•			• •	DIA-1-A. D3-AU-X-X-T. W-I	96622592
	•	•	•	•		• •	DIA-1-A. D3-PT-PC-QS-T. W-I	96622576
	•	•	•	•		• •	DIA-1-A. D3-PT-PC-X-T. W-I	96622588
	•	•	•			• •	DIA-1-A. D3-PT-X-QS-T. W-I	96622582
	•	•	•			• •	DIA-1-A. D3-PT-X-X-T. W-I	96622595
	•	•		•			DIA-1-A. F-X-F-X-X. W-I	96622747
	•	•		•			DIA-1-A. PA/HP-PA-X-X. W-I	96622760
	•	•		•			DIA-1-A. PA/HP-HP-X-X. W-I	96622764
	•	•		•		•	DIA-1-A. P/R-PC-X-T. W-I	96622768
	•	•		•			DIA-1-A. P/R-PC-X-X. W-I	96622773
	•	•		•	•	•	DIA-1-A. P/R-RC-X-T. W-I	96622777
	•	•		•	•		DIA-1-A. P/R-RC-X-X. W-I	96622785
	•	•	•	•		• •	DIA-1-A. D1-AU-PC-QS-T. W-H	96622414
	•	•	•	•		• •	DIA-1-A. D1-AU-PC-X-T. W-H	96622428
	•	•	•			• •	DIA-1-A. D1-AU-X-QS-T. W-H	96622422
	•	•	•			• •	DIA-1-A. D1-AU-X-X-T. W-H	96622434
	•	•	•	•		• •	DIA-1-A. D1-PT-PC-QS-T. W-H	96622418
	•	•	•	•		• •	DIA-1-A. D1-PT-PC-X-T. W-H	96622431
	•	•	•			• •	DIA-1-A. D1-PT-X-QS-T. W-H	96622425
	•	•	•			• •	DIA-1-A. D1-PT-X-X-T. W-H	96622437
	•	•	•	•		• •	DIA-1-A. D2-AU-PC-QS-T. W-H	96622677

Controller	Voltage	Cell type	Electrode			Sensor	Type designation	Product number	
			1	2	3				
	24 VDC	Pressure-proof, w. cleaning motor Pressure-proof, w. hydro-mechanical cleaning Pressureless, w. hydro-mechanical cleaning Fluoride only Peracetic acid/hydrogen peroxide pH or redox only	Gold (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Platinum (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Fluoride (F ⁻) Peracetic acid (PAA) Hydrogen peroxide (H ₂ O ₂) pH ceramic diaphragm Redox (ORP) ceramic diaphragm	Redox (ORP) without reference system	Flow sensor Temperature sensor		
	115/120 V 230/240 V								
•	•	•	•				• •	DIA-1-A. D2-AU-X-QS-T. W-H	96622683
•	•	•	•		•		• •	DIA-1-A. D2-PT-PC-QS-T. W-H	96622680
•	•	•	•				• •	DIA-1-A. D2-PT-X-QS-T. W-H	96622686
•	•	•	•		•		• •	DIA-1-A. D3-AU-PC-QS-T. W-H	96622572
•	•	•	•		•		• •	DIA-1-A. D3-AU-PC-X-T. W-H	96622584
•	•	•	•				• •	DIA-1-A. D3-AU-X-QS-T. W-H	96622578
•	•	•	•				• •	DIA-1-A. D3-AU-X-X-T. W-H	96622591
•	•	•	•	•			• •	DIA-1-A. D3-PT-PC-QS-T. W-H	96622575
•	•	•	•		•		• •	DIA-1-A. D3-PT-PC-X-T. W-H	96622587
•	•	•	•				• •	DIA-1-A. D3-PT-X-QS-T. W-H	96622581
•	•	•	•				• •	DIA-1-A. D3-PT-X-X-T. W-H	96622594
•	•	•		•				DIA-1-A. F-X-F-X-X. W-H	96622746
•	•	•			•			DIA-1-A. PA/HP-HP-X-X. W-H	96622762
•	•	•			•			DIA-1-A. PA/HP-PA-X-X. W-H	96622749
•	•	•				•	• •	DIA-1-A. P/R-PC-X-T. W-H	96622766
•	•	•				•	• •	DIA-1-A. P/R-PC-X-X. W-H	96622772
•	•	•				•	• •	DIA-1-A. P/R-RC-X-T. W-H	96622775
•	•	•				•	• •	DIA-1-A. P/R-RC-X-X. W-H	96622779
•	•	•	•		•		• •	DIA-1-A. D1-AU-PC-QS-T. W-G	96622413
•	•	•	•		•		• •	DIA-1-A. D1-AU-PC-X-T. W-G	96622427
•	•	•	•				• •	DIA-1-A. D1-AU-X-QS-T. W-G	96622420
•	•	•	•				• •	DIA-1-A. D1-AU-X-X-T. W-G	96622433
•	•	•	•	•			• •	DIA-1-A. D1-PT-PC-QS-T. W-G	96622417
•	•	•	•		•		• •	DIA-1-A. D1-PT-PC-X-T. W-G	96622430
•	•	•	•				• •	DIA-1-A. D1-PT-X-QS-T. W-G	96622424
•	•	•	•				• •	DIA-1-A. D1-PT-X-X-T. W-G	96622436
•	•	•	•		•		• •	DIA-1-A. D2-AU-PC-QS-T. W-G	96622676
•	•	•	•				• •	DIA-1-A. D2-AU-X-QS-T. W-G	96622682
•	•	•	•		•		• •	DIA-1-A. D2-PT-PC-QS-T. W-G	96622679
•	•	•	•				• •	DIA-1-A. D2-PT-X-QS-T. W-G	96622685
•	•	•	•		•		• •	DIA-1-A. D3-AU-PC-QS-T. W-G	96622571
•	•	•	•		•		• •	DIA-1-A. D3-AU-PC-X-T. W-G	96622583
•	•	•	•				• •	DIA-1-A. D3-AU-X-QS-T. W-G	96622577
•	•	•	•				• •	DIA-1-A. D3-AU-X-X-T. W-G	96622590
•	•	•	•		•		• •	DIA-1-A. D3-PT-PC-QS-T. W-G	96622574
•	•	•	•		•		• •	DIA-1-A. D3-PT-PC-X-T. W-G	96622586
•	•	•	•				• •	DIA-1-A. D3-PT-X-QS-T. W-G	96622580
•	•	•	•				• •	DIA-1-A. D3-PT-X-X-T. W-G	96622593
•	•	•		•				DIA-1-A. F-X-F-X-X. W-G	96622728
•	•	•			•		• •	DIA-1-A. P/R-PC-X-T. W-G	96622765

Controller	Voltage	Cell type	Electrode			Sensor	Type designation	Product number					
			1	2	3								
	24 VDC	Pressure-proof, w. cleaning motor Pressure-proof, w. hydro-mechanical cleaning Pressureless, w. hydro-mechanical cleaning Fluoride only Peracetic acid/hydrogen peroxide pH or redox only	Gold (Cl ₂ , ClO ₂ , O ₃) (disinfection) Platinum (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Fluoride (F ⁻) Peracetic acid (PAA) Hydrogen peroxide (H ₂ O ₂) pH ceramic diaphragm Redox (ORP) ceramic diaphragm	Redox (ORP) without reference system	Flow sensor Temperature sensor							
	115/120 V										DIA-1-A. P/R-PC-X-X. W-G	96622769	
	230/240 V												
												DIA-1-A. P/R-RC-X-T. W-G	96622774
												DIA-1-A. P/R-RC-X-X. W-G	96622778
							DIA-1-A. PA/HP-HP-X-X. W-G	96622761					
							DIA-1-A. PA/HP-PA-X-X. W-G	96622748					
Conex® DIA-2-A													
							DIA-2-A. D1-AU-PC-QS-T. W-I	96622441					
							DIA-2-A. D1-AU-PC-X-T. W-I	96622463					
							DIA-2-A. D1-AU-X-QS-T. W-I	96622447					
							DIA-2-A. D1-AU-X-X-T. W-I	96622471					
							DIA-2-A. D1-PT-PC-QS-T. W-I	96622444					
							DIA-2-A. D1-PT-PC-X-T. W-I	96622467					
							DIA-2-A. D1-PT-X-QS-T. W-I	96622460					
							DIA-2-A. D1-PT-X-X-T. W-I	96622475					
							DIA-2-A. D2-AU-PC-QS-T. W-I	96622690					
							DIA-2-A. D2-AU-X-QS-T. W-I	96622696					
							DIA-2-A. D2-PT-PC-QS-T. W-I	96622693					
							DIA-2-A. D2-PT-X-QS-T. W-I	96622699					
							DIA-2-A. D3-AU-PC-QS-T. W-I	96622598					
							DIA-2-A. D3-AU-PC-X-T. W-I	96622610					
							DIA-2-A. D3-AU-X-QS-T. W-I	96622604					
							DIA-2-A. D3-AU-X-X-T. W-I	96622616					
							DIA-2-A. D3-PT-PC-QS-T. W-I	96622601					
							DIA-2-A. D3-PT-PC-X-T. W-I	96622613					
							DIA-2-A. D3-PT-X-QS-T. W-I	96622607					
							DIA-2-A. D3-PT-X-X-T. W-I	96622619					
							DIA-2-A. P/R-PC-X-T. W-I	96622788					
							DIA-2-A. P/R-PC-X-X. W-I	96622796					
							DIA-2-A. D1-AU-PC-QS-T. W-H	96622440					
							DIA-2-A. D1-AU-PC-X-T. W-H	96622462					
							DIA-2-A. D1-AU-X-QS-T. W-H	96622446					
							DIA-2-A. D1-AU-X-X-T. W-H	96622470					
							DIA-2-A. D1-PT-PC-QS-T. W-H	96622443					
							DIA-2-A. D1-PT-PC-X-T. W-H	96622465					
							DIA-2-A. D1-PT-X-QS-T. W-H	96622449					
							DIA-2-A. D1-PT-X-X-T. W-H	96622473					
							DIA-2-A. D2-AU-PC-QS-T. W-H	96622689					
						DIA-2-A. D2-AU-X-QS-T. W-H	96622695						
						DIA-2-A. D2-PT-PC-QS-T. W-H	96622692						

Controller	Voltage	Cell type	Electrode			Sensor	Type designation	Product number				
			1	2	3							
	24 VDC	Pressure-proof, w. cleaning motor Pressure-proof, w. hydro-mechanical cleaning Pressureless, w. hydro-mechanical cleaning Fluoride only Peracetic acid/hydrogen peroxide pH or redox only	Gold (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Platinum (Cl ₂ , ClO ₂ , O ₃) (disinfection) Fluoride (F ⁻) Peracetic acid (PAA) Hydrogen peroxide (H ₂ O ₂) pH ceramic diaphragm Redox (ORP) ceramic diaphragm Redox (ORP) without reference system		Flow sensor						
	115/120 V								Temperature sensor			
	230/240 V											
	•		•		•	•			•	•	DIA-2-A. D2-PT-X-QS-T. W-H	96622698
	•		•		•	•			•	•	DIA-2-A. D3-AU-PC-QS-T. W-H	96622597
	•		•		•	•			•	•	DIA-2-A. D3-AU-PC-X-T. W-H	96622609
	•		•		•	•			•	•	DIA-2-A. D3-AU-X-QS-T. W-H	96622603
	•		•		•	•			•	•	DIA-2-A. D3-AU-X-X-T. W-H	96622615
	•		•		•	•			•	•	DIA-2-A. D3-PT-PC-QS-T. W-H	96622600
	•		•		•	•			•	•	DIA-2-A. D3-PT-PC-X-T. W-H	96622612
	•		•		•	•			•	•	DIA-2-A. D3-PT-X-QS-T. W-H	96622606
	•		•		•	•			•	•	DIA-2-A. D3-PT-X-X-T. W-H	96622618
	•		•		•	•			•	•	DIA-2-A. P/R-PC-X-T. W-H	96622787
	•		•		•	•			•	•	DIA-2-A. P/R-PC-X-X. W-H	96622795
	•		•		•	•			•	•	DIA-2-A. D1-AU-PC-QS-T. W-G	96622439
	•		•		•	•			•	•	DIA-2-A. D1-AU-PC-X-T. W-G	96622461
	•		•		•	•			•	•	DIA-2-A. D1-AU-X-QS-T. W-G	96622445
	•		•		•	•			•	•	DIA-2-A. D1-AU-X-X-T. W-G	96622468
	•		•		•	•			•	•	DIA-2-A. D1-PT-PC-QS-T. W-G	96622442
	•		•		•	•			•	•	DIA-2-A. D1-PT-PC-X-T. W-G	96622464
	•		•		•	•			•	•	DIA-2-A. D1-PT-X-QS-T. W-G	96622448
	•		•		•	•			•	•	DIA-2-A. D1-PT-X-X-T. W-G	96622472
	•		•		•	•			•	•	DIA-2-A. D2-AU-PC-QS-T. W-G	96622688
	•		•		•	•			•	•	DIA-2-A. D2-AU-X-QS-T. W-G	96622694
	•		•		•	•			•	•	DIA-2-A. D2-PT-PC-QS-T. W-G	96622691
	•		•		•	•			•	•	DIA-2-A. D2-PT-X-QS-T. W-G	96622697
	•		•		•	•			•	•	DIA-2-A. D3-AU-PC-QS-T. W-G	96622596
	•		•		•	•			•	•	DIA-2-A. D3-AU-PC-X-T. W-G	96622608
	•		•		•	•			•	•	DIA-2-A. D3-AU-X-QS-T. W-G	96622602
	•		•		•	•			•	•	DIA-2-A. D3-AU-X-X-T. W-G	96622614
•	•	•	•	•	•	DIA-2-A. D3-PT-PC-QS-T. W-G	96622599					
•	•	•	•	•	•	DIA-2-A. D3-PT-PC-X-T. W-G	96622611					
•	•	•	•	•	•	DIA-2-A. D3-PT-X-QS-T. W-G	96622605					
•	•	•	•	•	•	DIA-2-A. D3-PT-X-X-T. W-G	96622617					
•	•	•	•	•	•	DIA-2-A. P/R-PC-X-T. W-G	96622786					
•	•	•	•	•	•	DIA-2-A. P/R-PC-X-X. W-G	96622794					
Conex® DIA-2Q-A	•	•	•	•	•	DIA-2Q-A. D1-AU-PC-QS-T. W-I	96622477					
	•	•	•	•	•	DIA-2Q-A. D1-AU-PC-X-T. W-I	96622493					
	•	•	•	•	•	DIA-2Q-A. D1-AU-RC-QS-T. W-I	96622482					
	•	•	•	•	•	DIA-2Q-A. D1-AU-RC-X-T. W-I	96622501					
	•	•	•	•	•	DIA-2Q-A. D1-AU-X-QS-T. W-I	96622486					

Controller	Voltage	Cell type	Electrode			Sensor	Type designation	Product number	
			1	2	3				
	24 VDC	Pressure-proof, w. cleaning motor Pressure-proof, w. hydro-mechanical cleaning Pressureless, w. hydro-mechanical cleaning Fluoride only Peracetic acid/hydrogen peroxide pH or redox only	Gold (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Platinum (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Fluoride (F ⁻) Peracetic acid (PAA) Hydrogen peroxide (H ₂ O ₂) pH ceramic diaphragm Redox (ORP) ceramic diaphragm	Redox (ORP) without reference system	Flow sensor Temperature sensor		
	115/120 V 230/240 V								
•			•				•	DIA-2Q-A. D1-AU-X-X-T. W-I	96622507
•			•		•		•	DIA-2Q-A. D1-PT-PC-QS-T. W-I	96622481
•			•		•		•	DIA-2Q-A. D1-PT-PC-X-T. W-I	96622497
•			•		•		•	DIA-2Q-A. D1-PT-RC-QS-T. W-I	96622485
•			•		•		•	DIA-2Q-A. D1-PT-RC-X-T. W-I	96622504
•			•				•	DIA-2Q-A. D1-PT-X-QS-T. W-I	96622490
•			•				•	DIA-2Q-A. D1-PT-X-X-T. W-I	96622511
•		•	•		•		•	DIA-2Q-A. D2-AU-PC-QS-T. W-I	96622702
•		•	•		•		•	DIA-2Q-A. D2-AU-RC-QS-T. W-I	96622708
•		•	•				•	DIA-2Q-A. D2-AU-X-QS-T. W-I	96622714
•		•	•		•		•	DIA-2Q-A. D2-PT-PC-QS-T. W-I	96622705
•		•	•		•		•	DIA-2Q-A. D2-PT-RC-QS-T. W-I	96622711
•		•	•				•	DIA-2Q-A. D2-PT-X-QS-T. W-I	96622717
•		•	•		•		•	DIA-2Q-A. D3-AU-PC-QS-T. W-I	96622622
•		•	•		•		•	DIA-2Q-A. D3-AU-PC-X-T. W-I	96622640
•		•	•		•		•	DIA-2Q-A. D3-AU-RC-QS-T. W-I	96622628
•		•	•		•		•	DIA-2Q-A. D3-AU-RC-X-T. W-I	96622646
•		•	•				•	DIA-2Q-A. D3-AU-X-QS-T. W-I	96622634
•		•	•				•	DIA-2Q-A. D3-AU-X-X-T. W-I	96622652
•		•	•		•		•	DIA-2Q-A. D3-PT-PC-QS-T. W-I	96622625
•		•	•		•		•	DIA-2Q-A. D3-PT-PC-X-T. W-I	96622643
•		•	•		•		•	DIA-2Q-A. D3-PT-RC-QS-T. W-I	96622631
•		•	•		•		•	DIA-2Q-A. D3-PT-RC-X-T. W-I	96622649
•		•	•				•	DIA-2Q-A. D3-PT-X-QS-T. W-I	96622637
•		•	•				•	DIA-2Q-A. D3-PT-X-X-T. W-I	96622655
•		•			•		•	DIA-2Q-A. P/R-PC-X-T. W-I	96622799
•		•			•			DIA-2Q-A. P/R-PC-X-X. W-I	96622803
•		•			•		•	DIA-2Q-A. P/R-RC-X-T. W-I	96622806
•		•			•			DIA-2Q-A. P/R-RC-X-X. W-I	96622809
•	•	•	•		•		•	DIA-2Q-A. D1-AU-PC-QS-T. W-H	96609148
•	•	•	•		•		•	DIA-2Q-A. D1-AU-PC-X-T. W-H	96622492
•	•	•	•		•		•	DIA-2Q-A. D1-AU-RC-QS-T. W-H	96609149
•	•	•	•		•		•	DIA-2Q-A. D1-AU-RC-X-T. W-H	96622500
•	•	•	•				•	DIA-2Q-A. D1-AU-X-QS-T. W-H	96609146
•	•	•	•				•	DIA-2Q-A. D1-AU-X-X-T. W-H	96622506
•	•	•	•		•		•	DIA-2Q-A. D1-PT-PC-QS-T. W-H	96622480
•	•	•	•		•		•	DIA-2Q-A. D1-PT-PC-X-T. W-H	96622496
•	•	•	•		•		•	DIA-2Q-A. D1-PT-RC-QS-T. W-H	96622484
•	•	•	•		•		•	DIA-2Q-A. D1-PT-RC-X-T. W-H	96622503
•	•	•	•				•	DIA-2Q-A. D1-PT-X-QS-T. W-H	96622488

Controller	Voltage	Cell type	Electrode			Sensor	Type designation	Product number
			1	2	3			
	24 VDC	Pressure-proof, w. cleaning motor	Gold (Cl ₂ , ClO ₂ , O ₃) (disinfection)					
	115/120 V	Pressure-proof, w. hydro-mechanical cleaning	Platinum (Cl ₂ , ClO ₂ , O ₃) (disinfection)					
	230/240 V	Pressureless, w. hydro-mechanical cleaning	Fluoride (F ⁻)					
		Fluoride only	Peracetic acid (PAA)					
		Peracetic acid/hydrogen peroxide	Hydrogen peroxide (H ₂ O ₂)					
		pH or redox only	pH ceramic diaphragm					
			Redox (ORP) ceramic diaphragm					
			Redox (ORP) without reference system					
						Flow sensor		
						Temperature sensor		
							DIA-2Q-A. D1-PT-X-X-T. W-H	96622510
							DIA-2Q-A. D2-AU-PC-QS-T. W-H	96622701
							DIA-2Q-A. D2-AU-RC-QS-T. W-H	96622707
							DIA-2Q-A. D2-AU-X-QS-T. W-H	96622713
							DIA-2Q-A. D2-PT-PC-QS-T. W-H	96622704
							DIA-2Q-A. D2-PT-RC-QS-T. W-H	96622710
							DIA-2Q-A. D2-PT-X-QS-T. W-H	96622716
							DIA-2Q-A. D3-AU-PC-QS-T. W-H	96622621
							DIA-2Q-A. D3-AU-PC-X-T. W-H	96622639
							DIA-2Q-A. D3-AU-RC-QS-T. W-H	96622627
							DIA-2Q-A. D3-AU-RC-X-T. W-H	96622645
							DIA-2Q-A. D3-AU-X-QS-T. W-H	96622633
							DIA-2Q-A. D3-AU-X-X-T. W-H	96622651
							DIA-2Q-A. D3-PT-PC-QS-T. W-H	96622624
							DIA-2Q-A. D3-PT-PC-X-T. W-H	96622642
							DIA-2Q-A. D3-PT-RC-QS-T. W-H	96622630
							DIA-2Q-A. D3-PT-RC-X-T. W-H	96622648
							DIA-2Q-A. D3-PT-X-QS-T. W-H	96622636
							DIA-2Q-A. D3-PT-X-X-T. W-H	96622654
							DIA-2Q-A. P/R-PC-X-T. W-H	96622798
							DIA-2Q-A. P/R-PC-X-X. W-H	96622801
							DIA-2Q-A. P/R-RC-X-T. W-H	96622805
							DIA-2Q-A. P/R-RC-X-X. W-H	96622808
							DIA-2Q-A. D1-AU-PC-QS-T. W-G	96609143
							DIA-2Q-A. D1-AU-PC-X-T. W-G	96622491
							DIA-2Q-A. D1-AU-RC-QS-T. W-G	96609144
							DIA-2Q-A. D1-AU-RC-X-T. W-G	96622499
							DIA-2Q-A. D1-AU-X-QS-T. W-G	96609142
							DIA-2Q-A. D1-AU-X-X-T. W-G	96622505
							DIA-2Q-A. D1-PT-PC-QS-T. W-G	96622479
							DIA-2Q-A. D1-PT-PC-X-T. W-G	96622495
							DIA-2Q-A. D1-PT-RC-QS-T. W-G	96622483
							DIA-2Q-A. D1-PT-RC-X-T. W-G	96622502
							DIA-2Q-A. D1-PT-X-QS-T. W-G	96622487
							DIA-2Q-A. D1-PT-X-X-T. W-G	96622508
							DIA-2Q-A. D2-AU-PC-QS-T. W-G	96622700
							DIA-2Q-A. D2-AU-RC-QS-T. W-G	96622706
							DIA-2Q-A. D2-AU-X-QS-T. W-G	96622712
							DIA-2Q-A. D2-PT-PC-QS-T. W-G	96622703
							DIA-2Q-A. D2-PT-RC-QS-T. W-G	96622709

Controller	Voltage	Cell type	Electrode			Sensor	Type designation	Product number			
			1	2	3						
Controller	24 VDC	Pressure-proof, w. cleaning motor Pressure-proof, w. hydro-mechanical cleaning Pressureless, w. hydro-mechanical cleaning Fluoride only Peracetic acid/hydrogen peroxide pH or redox only	Gold (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Platinum (Cl ₂ , ClO ₂ , O ₃) (disinfection) Fluoride (F ⁻) Peracetic acid (PAA) Hydrogen peroxide (H ₂ O ₂) pH ceramic diaphragm Redox (ORP) ceramic diaphragm Redox (ORP) without reference system			Flow sensor Temperature sensor				
	115/120 V		●		●			● ●	DIA-2Q-A. D2-PT-X-QS-T. W-G	96622715	
	230/240 V		●		●	●		●	● ●	DIA-2Q-A. D3-AU-PC-QS-T. W-G	96622620
	●		●		●	●		●	● ●	DIA-2Q-A. D3-AU-PC-X-T. W-G	96622638
	●		●		●	●		●	● ●	DIA-2Q-A. D3-AU-RC-QS-T. W-G	96622626
	●		●		●	●		●	● ●	DIA-2Q-A. D3-AU-RC-X-T. W-G	96622644
	●		●		●	●			● ●	DIA-2Q-A. D3-AU-X-QS-T. W-G	96622632
	●		●		●	●			● ●	DIA-2Q-A. D3-AU-X-X-T. W-G	96622650
	●		●		●	●		●	● ●	DIA-2Q-A. D3-PT-PC-QS-T. W-G	96622623
	●		●		●	●		●	● ●	DIA-2Q-A. D3-PT-PC-X-T. W-G	96622641
	●		●		●	●		●	● ●	DIA-2Q-A. D3-PT-RC-QS-T. W-G	96622629
	●		●		●	●		●	● ●	DIA-2Q-A. D3-PT-RC-X-T. W-G	96622647
	●		●		●	●			● ●	DIA-2Q-A. D3-PT-X-QS-T. W-G	96622635
	●		●		●	●			● ●	DIA-2Q-A. D3-PT-X-X-T. W-G	96622653
	●		●		●			●	● ●	DIA-2Q-A. P/R-PC-X-T. W-G	96622797
	●		●		●			●	● ●	DIA-2Q-A. P/R-PC-X-X. W-G	96622800
	●		●		●			●	● ●	DIA-2Q-A. P/R-RC-X-T. W-G	96622804
	●		●		●			●	● ●	DIA-2Q-A. P/R-RC-X-X. W-G	96622807
DIP-A	●	●	●	●	● ● ●	DIP-A. D1-AU-PC-RR-QS-T. W-H	96622514				
	●	●	●	●	● ●	DIP-A. D1-AU-PC-RR-X-T. W-H	96622519				
	●	●	●	●	● ● ●	DIP-A. D1-PT-PC-RR-QS-T. W-H	96622516				
	●	●	●	●	● ●	DIP-A. D1-PT-PC-RR-X-T. W-H	96622522				
	●	●	●	●	● ● ●	DIP-A. D2-AU-PC-RR-QS-T. W-H	96622719				
	●	●	●	●	● ● ●	DIP-A. D2-PT-PC-RR-QS-T. W-H	96622721				
	●	●	●	●	● ● ●	DIP-A. D3-AU-PC-RR-QS-T. W-H	96622657				
	●	●	●	●	● ●	DIP-A. D3-AU-PC-RR-X-T. W-H	96622661				
	●	●	●	●	● ● ●	DIP-A. D3-PT-PC-RR-QS-T. W-H	96622659				
	●	●	●	●	● ●	DIP-A. D3-PT-PC-RR-X-T. W-H	96622663				
	●	●	●	●	● ● ●	DIP-A. D1-AU-PC-RR-QS-T. W-G	96622512				
	●	●	●	●	● ●	DIP-A. D1-AU-PC-RR-X-T. W-G	96622518				
	●	●	●	●	● ● ●	DIP-A. D1-PT-PC-RR-QS-T. W-G	96622515				
	●	●	●	●	● ●	DIP-A. D1-PT-PC-RR-X-T. W-G	96622520				
	●	●	●	●	● ● ●	DIP-A. D2-AU-PC-RR-QS-T. W-G	96622718				
	●	●	●	●	● ● ●	DIP-A. D2-PT-PC-RR-QS-T. W-G	96622720				
	●	●	●	●	● ●	DIP-A. D3-AU-PC-RR-QS-T. W-G	96622656				
	●	●	●	●	● ●	DIP-A. D3-AU-PC-RR-X-T. W-G	96622660				
	●	●	●	●	● ● ●	DIP-A. D3-PT-PC-RR-QS-T. W-G	96622658				
	●	●	●	●	● ●	DIP-A. D3-PT-PC-RR-X-T. W-G	96622662				

	Voltage	Cell type	Electrode			Sensor		Type designation	Product number	
			1	2	3					
Controller	24 VDC	Pressure-proof, w. cleaning motor Pressure-proof, w. hydro-mechanical cleaning Pressureless, w. hydro-mechanical cleaning Fluoride only Peracetic acid/hydrogen peroxide pH or redox only	Gold (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Platinum (Cl ₂ , ClO ₂ , O ₃) (disinfection) Fluoride (F ⁻) Peracetic acid (PAA) Hydrogen peroxide (H ₂ O ₂) pH ceramic diaphragm Redox (ORP) ceramic diaphragm Redox (ORP) without reference system		Flow sensor Temperature sensor				
	115/120 V									
	230/240 V									
	●		●				●	●	DIS-PR-A. P/R-PC-X-T. W-I	96622812
	●		●				●		DIS-PR-A. P/R-PC-X-X. W-I	96622817
	●		●					●	DIS-PR-A. P/R-RC-X-X. W-I	96622825
	●		●					●	DIS-PR-A. P/R-RC-X-T. W-I	96622822
	●		●					●	DIS-PR-A. P/R-PC-X-T. W-H	96622811
	●		●					●	DIS-PR-A. P/R-PC-X-X. W-H	96622815
	●		●					●	DIS-PR-A. P/R-RC-X-T. W-H	96622821
Conex® DIS-PR-A	●	●			●		DIS-PR-A. P/R-RC-X-X. W-H	96622824		
	●	●			●		DIS-PR-A. P/R-PC-X-T. W-G	96622810		
	●	●			●		DIS-PR-A. P/R-PC-X-X. W-G	96622814		
	●	●			●		DIS-PR-A. P/R-RC-X-T. W-G	96622820		
	●	●			●		DIS-PR-A. P/R-RC-X-X. W-G	96622823		
	Conex® DIS-D-A	●	●	●			●	DIS-D-A. D1-AU-QS. W-I	96622525	
		●	●	●				DIS-D-A. D1-AU-X. W-I	96622531	
		●	●	●			●	DIS-D-A. D1-PT-QS. W-I	96622528	
		●	●	●				DIS-D-A. D1-PT-X. W-I	96622535	
		●	●	●			●	DIS-D-A. D2-AU-QS. W-I	96622724	
●		●	●			●	DIS-D-A. D2-PT-QS. W-I	96622727		
●		●	●			●	DIS-D-A. D3-AU-QS. W-I	96622666		
●		●	●				DIS-D-A. D3-AU-X. W-I	96622672		
●		●	●			●	DIS-D-A. D3-PT-QS. W-I	96622669		
●		●	●				DIS-D-A. D3-PT-X. W-I	96622675		
●		●	●			●	DIS-D-A. D1-AU-QS. W-H	96622524		
●		●	●				DIS-D-A. D1-AU-X. W-H	96622530		
●		●	●			●	DIS-D-A. D1-PT-QS. W-H	96622527		
●		●	●				DIS-D-A. D1-PT-X. W-H	96622533		
●		●	●			●	DIS-D-A. D2-AU-QS. W-H	96622723		
●		●	●			●	DIS-D-A. D2-PT-QS. W-H	96622726		
●		●	●			●	DIS-D-A. D3-AU-QS. W-H	96622665		
●		●	●				DIS-D-A. D3-AU-X. W-H	96622671		
●	●	●			●	DIS-D-A. D3-PT-QS. W-H	96622668			
●	●	●				DIS-D-A. D3-PT-X. W-H	96622674			
●	●	●			●	DIS-D-A. D1-AU-QS. W-G	96622523			

Controller	Voltage	Cell type	Electrode			Sensor	Type designation	Product number
			1	2	3			
	24 VDC	Pressure-proof, w. cleaning motor	Gold (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Fluoride (F ⁻)		Flow sensor		
	115/120 V	Pressure-proof, w. hydro-mechanical cleaning	Platinum (Cl ₂ , ClO ₂ , O ₃) (disinfection)	Peracetic acid (PAA)		Temperature sensor		
	230/240 V	Pressureless, w. hydro-mechanical cleaning		Hydrogen peroxide (H ₂ O ₂)				
		Fluoride only		pH ceramic diaphragm				
		Peracetic acid/hydrogen peroxide		Redox (ORP) ceramic diaphragm				
		pH or redox only		Redox (ORP) without reference system				
	●	●	●				DIS-D-A. D1-AU-X. W-G	96622529
	●	●	●			●	DIS-D-A. D1-PT-QS. W-G	96622526
	●	●	●				DIS-D-A. D1-PT-X. W-G	96622532
	●	●	●			●	DIS-D-A. D2-AU-QS. W-G	96622722
	●	●	●			●	DIS-D-A. D2-PT-QS. W-G	96622725
	●	●	●			●	DIS-D-A. D3-AU-QS. W-G	96622664
	●	●	●				DIS-D-A. D3-AU-X. W-G	96622670
	●	●	●			●	DIS-D-A. D3-PT-QS. W-G	96622667
	●	●	●				DIS-D-A. D3-PT-X. W-G	96622673

AquaCells

Voltage	Cell type				Measurement			Type designation	Product number		
					Chlorine (Cl ₂), chlorine dioxide (ClO ₂) or ozone (O ₃)	pH	Redox (ORP)				
24 VDC	Pressure-proof, with cleaning motor	Pressure-proof, with hydro-mechanical cleaning	Pressureless, with hydro-mechanical cleaning	Gold (disinfection)	pH ceramic diaphragm	Redox ceramic diaphragm	Flow sensor integrated	AQC-D1. AU-PC-RC. QS-T. I	96622846		
115/120 V				Platinum (disinfection)						AQC-D1. AU-PC-RC. X-T. I	96622873
230/240 V											
								AQC-D1. AU-PC-X. X-T. I	96622890		
								AQC-D1. AU-X-RC. QS-T. I	96622854		
								AQC-D1. AU-X-RC. X-T. I	96622896		
								AQC-D1. AU-X-X. QS-T. I	96622834		
								AQC-D1. AU-X-X. X-T. I	96622828		
								AQC-D1. PT-PC-RC. QS-T. I	96622850		
								AQC-D1. PT-PC-RC. X-T. I	96622877		
								AQC-D1. PT-PC-X. QS-T. I	96622843		
								AQC-D1. PT-PC-X. X-T. I	96622893		
								AQC-D1. PT-X-RC. QS-T. I	96622870		
								AQC-D1. PT-X-RC. X-T. I	96622899		
								AQC-D1. PT-X-X. QS-T. I	96622837		
								AQC-D1. PT-X-X. X-T. I	96622831		
								AQC-D1. AU-PC-RC. QS-T. H	96622845		
								AQC-D1. AU-PC-RC. X-T. H	96622872		
								AQC-D1. AU-PC-X. QS-T. H	96622839		
								AQC-D1. AU-PC-X. X-T. H	96622879		
								AQC-D1. AU-X-RC. QS-T. H	96622852		
								AQC-D1. AU-X-RC. X-T. H	96622895		
								AQC-D1. AU-X-X. QS-T. H	96622833		
								AQC-D1. AU-X-X. X-T. H	96622827		
								AQC-D1. PT-PC-RC. QS-T. H	96622848		
								AQC-D1. PT-PC-RC. X-T. H	96622876		
								AQC-D1. PT-PC-X. QS-T. H	96622842		
								AQC-D1. PT-PC-X. X-T. H	96622892		
								AQC-D1. PT-X-RC. QS-T. H	96622859		
								AQC-D1. PT-X-RC. X-T. H	96622898		
								AQC-D1. PT-X-X. QS-T. H	96622836		
								AQC-D1. PT-X-X. X-T. H	96622830		
								AQC-D1. AU-PC-RC. QS-T. G	96622844		
								AQC-D1. AU-PC-RC. X-T. G	96622871		
								AQC-D1. AU-PC-X. QS-T. G	96622838		
								AQC-D1. AU-PC-X. X-T. G	96622878		
								AQC-D1. AU-X-RC. QS-T. G	96622851		
								AQC-D1. AU-X-RC. X-T. G	96622894		
								AQC-D1. AU-X-X. QS-T. G	96622832		
								AQC-D1. AU-X-X. X-T. G	96622826		
								AQC-D1. PT-PC-RC. QS-T. G	96622847		
								AQC-D1. PT-PC-RC. X-T. G	96622874		
								AQC-D1. PT-PC-X. QS-T. G	96622841		

Voltage	Cell type			Measurement				Type designation	Product number			
	24 VDC	115/120 V	230/240 V	Gold (disinfection)	Platinum (disinfection)	pH ceramic diaphragm	Redox ceramic diaphragm			Flow sensor integrated	Chlorine (Cl ₂), chlorine dioxide (ClO ₂) or ozone (O ₃)	pH
•	•	•	•	•	•	•	•	•	•	•	AQC-D1. PT-PC-X. X-T. G	96622891
•	•	•	•	•	•	•	•	•	•	•	AQC-D1. PT-X-RC. QS-T. G	96622858
•	•	•	•	•	•	•	•	•	•	•	AQC-D1. PT-X-RC. X-T. G	96622897
•	•	•	•	•	•	•	•	•	•	•	AQC-D1. PT-X-X. QS-T. G	96622835
•	•	•	•	•	•	•	•	•	•	•	AQC-D1. PT-X-X. X-T. G	96622829
		•	•	•	•	•	•	•	•	•	AQC-D2. AU-PC-RC. QS-T. X	96622920
		•	•	•	•	•	•	•	•	•	AQC-D2. AU-PC-X. QS-T. X	96622918
		•	•	•	•	•	•	•	•	•	AQC-D2. AU-X-RC. QS-T. X	96622922
		•	•	•	•	•	•	•	•	•	AQC-D2. AU-X-X. QS-T. X	96622916
		•	•	•	•	•	•	•	•	•	AQC-D2. PT-PC-RC. QS-T. X	96622921
		•	•	•	•	•	•	•	•	•	AQC-D2. PT-PC-X. QS-T. X	96622919
		•	•	•	•	•	•	•	•	•	AQC-D2. PT-X-RC. QS-T. X	96622923
		•	•	•	•	•	•	•	•	•	AQC-D2. PT-X-X. QS-T. X	96622917
		•	•	•	•	•	•	•	•	•	AQC-D3. AU-PC-RC. QS-T. X	96622906
		•	•	•	•	•	•	•	•	•	AQC-D3. AU-PC-RC. X-T. X	96622910
		•	•	•	•	•	•	•	•	•	AQC-D3. AU-PC-X. QS-T. X	96622904
		•	•	•	•	•	•	•	•	•	AQC-D3. AU-PC-X. X-T. X	96622912
		•	•	•	•	•	•	•	•	•	AQC-D3. AU-X-RC. QS-T. X	96622908
		•	•	•	•	•	•	•	•	•	AQC-D3. AU-X-RC. X-T. X	96622914
		•	•	•	•	•	•	•	•	•	AQC-D3. AU-X-X. QS-T. X	96622902
		•	•	•	•	•	•	•	•	•	AQC-D3. AU-X-X. X-T. X	96622900
		•	•	•	•	•	•	•	•	•	AQC-D3. PT-PC-RC. QS-T. X	96622907
		•	•	•	•	•	•	•	•	•	AQC-D3. PT-PC-RC. X-T. X	96622911
		•	•	•	•	•	•	•	•	•	AQC-D3. PT-PC-X. QS-T. X	96622905
		•	•	•	•	•	•	•	•	•	AQC-D3. PT-PC-X. X-T. X	96622913
		•	•	•	•	•	•	•	•	•	AQC-D3. PT-X-RC. QS-T. X	96622909
		•	•	•	•	•	•	•	•	•	AQC-D3. PT-X-RC. X-T. X	96622915
		•	•	•	•	•	•	•	•	•	AQC-D3. PT-X-X. QS-T. X	96622903
		•	•	•	•	•	•	•	•	•	AQC-D3. PT-X-X. X-T. X	96622901

Measuring cells

Description	DIA			DIP	DIS			Product number
	DIA-1	DIA-2	DIA-2Q		DIS-C	DIS-D	DIS-PR	
Flow-type electrode holder, PVC, for pH/redox	●	●	●				●	96609169
Flow-type electrode holder, stainless steel, for pH/redox	●	●	●				●	96609170
H ₂ O ₂ measuring cell complete	●	●	●					96622972
PAA / H ₂ O ₂ holder for measuring cell	●	●	●					96622971
PAA measuring cell complete	●		●					96622954

Electrodes

Description	DIA			DIP	DIS			Product number
	DIA-1	DIA-2	DIA-2Q		DIS-C	DIS-D	DIS-PR	
Conductivity probe, 0.05-200 µS/cm					●			96609150
Conductivity probe, 1-2000 µS/cm					●			96609151
Conductivity probe, 50-2000 µS/cm					●			96609157
Conductivity probe, 50-20000 µS/cm					●			96609152
Fluoride electrode, including 1-meter cable	●		●					96622977
H ₂ O ₂ electrode with diaphragm cap/electrode	●	●	●					96622973
pH electrode for KCl connection	●	●	●	●			●	96609160
pH electrode with ceramic diaphragm	●	●	●	●			●	96609158
pH electrode with hole diaphragm	●	●	●	●			●	96609161
pH electrode with PTFE diaphragm	●	●	●	●			●	96609159
Pt100 PG 13.5 screw thread							●	96623001
PAA electrode with diaphragm cap/electrode	●		●					96622959
Redox electrode, DIP only				●				96622944
Redox electrode with ceramic diaphragm	●		●				●	96609162
Redox electrode with PTFE diaphragm	●		●				●	96609163

Accessories and spare parts

Accessories for AquaCells (AQC)

Description	D1	D2	D3	Product number
External water filter for AQC	●	●	●	96622995
Pressure retention valve for AQC D1 and D2 (required if counter pressure is below 0.3 bar)	●	●		96609179

Spare parts for measuring cells

Description	Measuring cells						Product number
	AQC			Other types of measuring cells			
	D1	D2	D3	PAA	H ₂ O ₂	F ⁻	
Chlorine electrode, gold	●	●	●				96609175
Chlorine electrode, platinum	●	●	●				96609176
Chlorine electrode, reference (Cl ₂ , ClO ₂ and O ₃)	●	●	●				96609174
Gasket parts kit for AQC D1-D3 cells	●	●	●				96609171
Lockscrew partsset for AQC D1-D3 cells	●	●	●				96624812
Water sensor with 1-meter cable	●	●	●				96609172
Water sensor with 3-meter cable	●	●	●				96609173
Filter strainer, AQC D1-D3	●	●	●				96609180
Cable, 1 meter, AQC AU/PT electrode	●	●	●				96609184
Cable, 3 meter, AQC AU/PT electrode	●	●	●				96609185
Cleaning blade for AQC-D2/D3		●	●				96622950
Cleaning blade for AQC-D1	●						96609181
Motor for AQC-D1, 1x230V, 50/60 Hz	●						96622998
Motor for AQC-D1, 1x120V, 50/60 Hz	●						96622999
Motor for AQC-D1, 24VDC	●						96623000
PAA diaphragm cap with electrolyte				●			96622962
PAA electrolyte for measuring cell				●			96622966
H ₂ O ₂ diaphragm cap with electrolyte					●		96622974
H ₂ O ₂ electrolyte for measuring cell					●		96622975
Solution, 0.5 ppm/100 ml fluoride						●	96622978
Solution, 2.0 ppm/100ml fluoride						●	96622979
Filling solution for fluoride electrode						●	96622990

DIT photometer

Description

A compact photometer.

Features

- Multi-lingual plain-text operator prompting
- Up to 17 parameters can be measured
- Patented, two-beam principle with carrier frequency technology compensates for the effects of turbidity or external light.

Type key

Example:	DIT	-B	C	-PT	GEF	G
Model						
DIT	Test photometer					
Application						
B	Pool water					
S	Drinking water					
N	Universal					
Casing						
C	With suitcase					
X	Without suitcase					
Electrodes						
PT	Hand-held pH probe					
RT	Portable redox probe					
X	No electrodes					
Languages						
GEF	German/English/French (standard version)					
GED	German/English/Danish					
GFD	German/French/Dutch					
Voltage						
G	1 x 230 V, 50/60 Hz, Euro plug					
I	9 V battery (model B and N only)					



Fig. 34 DIT photometer

GRA1020 / GRA1022

Measuring principle

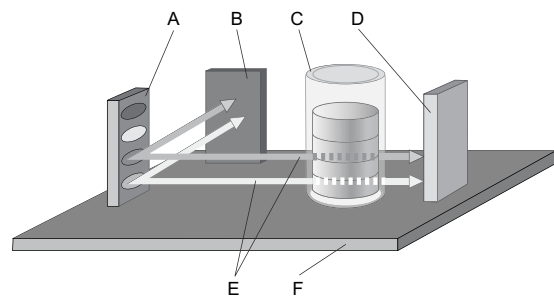


Fig. 35 DIT photometer, opto-electric, two-beam carrier frequency measuring principle

TM03 4049 1406

Legend

Pos.	Component
A	Light sources
B	Reference receiver
C	Vial
D	Measurement receiver
E	Light rays
F	Electronic plating

Accessories

Description	Product number
5 x vial/sealing plug for DIT	96623003
Chlorine reagent for DIT	96609167
Chlorine test vials for DIT	96623005
pH buffer solution	96609165
pH electrode for DIT	96609164
pH reagent for DIT	96609168
Redox buffer solution	96609166
Redox electrode for DIT	96623006

Technical data

Optics	Patented two-beam principle with carrier frequency technology
Electronics	Microprocessor-operated with energy-saving CMOS technology
Display	Large alphanumeric, four-line LCD
Operation	Membrane keyboard with 4 keys, plain-text operator prompting
Memory	Approx. 100 measurements are memorised
Vials	Round vials of ø22 mm
Dimension	52 x 121 x 252 mm
Enclosure material	ABS
Enclosure class	IP 65
Permissible ambient temperature	41 to 113 °F
Temperature for storage of reagents	59 to 77 °F
Weight	Approx. 1.3 lbs

Functions

Automatic stop (power down)	<ul style="list-style-type: none"> • After 45 s (photometrical measurement) • After 80 s (electro-chemical measurement).
Additional functions	<ul style="list-style-type: none"> • Real-time clock • Zero-point adjustment by a keystroke • Indication in mg/l or ppm.

Electronic data

Power supply	<p>DIT-B and DIT-N: 9 V alkaline monoblock battery, plain-text display for battery exchange</p> <p>DIT-S: rechargeable accumulator set, plain-text display for accumulator recharge</p>
Interfaces	<p>DIT-S: RS 232, 4800 baud, 8 bit for log printer or PC connection</p>
Additional equipment for electro-chemical measurement	<p>DIT-S: BNC socket for pH and redox single-rod probes, socket for temperature sensor for measurement of:</p> <ul style="list-style-type: none"> • pH value with temperature compensation • redox potential (ORP).

Measuring parameters

Photometrical measurement

Parameter	Measuring range	Model		
		B	N	S
Aluminium	0.02–0.5 mg/l (ppm)	●	●	●
Ammonium	0.2–3.0 mg/l (ppm)		●	●
Chlorine (free or combined)	0.03–5.0 mg/l (ppm)	●	●	●
Chlorine dioxide	0.05–10.0 mg/l (ppm)	●	●	●
Chloride	1–25 mg/l (ppm)	●	●	●
Chromium	0.03–0.5 mg/l (ppm)			●
Cyanide	0.01–0.7 mg/l (ppm)			●
Cyanuric acid	1–200 mg/l (ppm)	●	●	●
Iron	0.1–1.2 mg/l (ppm)	●	●	●
Fluoride	0.1–2.0 mg/l (ppm)		●	●
Hydrazine	0.05–3.0 mg/l (ppm)			●
Manganese	0.05–4.0 mg/l (ppm)			●
Nickel	0.05–4.0 mg/l (ppm)			●
Nitrate	0.5–30.0 mg/l (ppm)		●	●
Nitrite	0.02–1.0 mg/l (ppm)			●
Ozone	0.03–3.0 mg/l (ppm)	●	●	●
pH	6–8.5 pH	●	●	●
Phosphate	0.07–4.5 mg/l (ppm)			●

Electro-chemical measurement

Parameter	Measuring range	Model		
		B	N	S
pH	0–14 pH	●	●	●
Redox (ORP)	–1190 to +1190 mV			●
Temperature	–4 to 176 °F	●	●	●

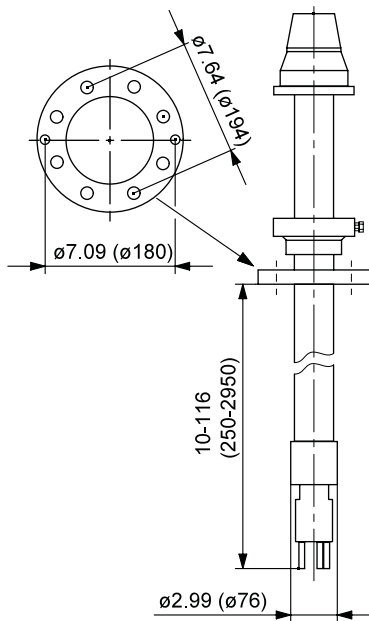
Product selection

Application			Casing	Electrodes		Power supply		Type designation	Product number
Pool water	Drinking water	Universal	With suitcase	Hand-held pH probe	Portable redox probe	9 V battery	Accumulator, including 230 V, 50/60 Hz charger		
•			•			•		DIT-B. C. GEF. I	96609108
•						•		DIT-B. X. GEF. I	96622924
	•		•	•	•		•	DIT-S. C-PT-RT. GEF. G	96622932
	•		•	•			•	DIT-S. C-PT-X. GEF. G	96609120
	•		•		•		•	DIT-S. C-X-RT. GEF. G	96622933
	•		•				•	DIT-S. C-X-X. GEF. G	96609109
	•			•	•		•	DIT-S. X-PT-RT. GEF. G	96622934
	•			•			•	DIT-S. X-PT-X. GEF. G	96622935
	•				•		•	DIT-S. X-X-RT. GEF. G	96622936
	•						•	DIT-S. X-X-X. GEF. G	96622929
		•	•			•		DIT-N. C. GEF. I	96622928
		•				•		DIT-N. X. GEF. I	96622927

Electrode holders

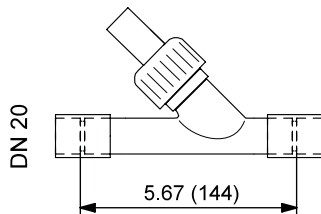
Electrode holders for pH, redox and temperature measurement

Description	Product number
Immersion electrode holder, PP, for up to three electrodes, adjustable length up to 1000 mm	96627432
Immersion electrode holder, PP, for up to three electrodes, adjustable length up to 2000 mm	96627433
Flow-type electrode holder, PVC, for one electrode (pH or redox), electrode protection, DN 20 connection, PN 10, max. 122 °F (50 °C)	96609169
Flow-type electrode holder, stainless steel AISI 316 Ti, for one electrode (pH or redox), electrode protection, 3/4" outer thread, PN 10, -20 to 275 °F (-30 to 135 °C)	96609170



TM03 4868 3206

Fig. 36 Dimensions, inches (mm), Immrsion electrode holder



TM03 4869 3206

Fig. 37 Flow-type electrode holder

Electrode holders for conductivity measuring cells

For conductive measuring cells

- Easy installation and commissioning
- Reliable measurement
- Quick dismantling of the electrode for cleaning or maintenance.

Order data

Description	Max. temperature/ pressure	Product number
Flow-type holder, PVC, DN 25	122°F / 87 psi (50°C / 6 bar)	96627404
Flow-type holder, stainless steel, DN 25	212°F / 145 psi (100°C / 10 bar)	96627405

For inductive measuring cells

- Easy installation and commissioning
- Reliable measurement
- Quick dismantling of the electrode for cleaning or maintenance.

Order data

Description	Max. temperature	Product number
Flow-type holder, PVC, DN 25	122°F (50°C)	96627408
Flow-type holder, PP, DN 25	194°F (90°C)	96627409
Immersion holder, PVC	122°F (50°C)	96627430
Immersion holder, PP	194°F (90°C)	96627431

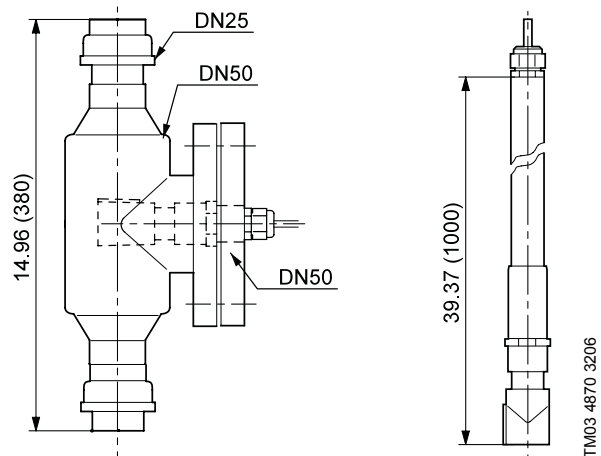


Fig. 38 Dimensions, inches (mm), electrode holders for inductive measuring cells

Electrode holders

Description	DIA			DIP	DIS			Product number
	DIA-1	DIA-2	DIA-2Q		DIS-C	DIS-D	DIS-PR	
Flow-type holder, PVC, DN 25, 122°F / 87 psi (50°C / 6 bar)					●			96627404
Flow-type holder, stainless steel, DN 25, 212°F / 145 psi (100°C / 10 bar)					●			96627405
Flow-type holder, PVC, DN 25, 122°F (50°C)					●			96627408
Flow-type holder, PP, DN 25, 194°F (90°C)					●			96627409
Immersion holder, PVC, 122°F (50°C)					●			96627430
Immersion holder, PP, 194°F (90°C)					●			96627431

Cables

Description	DIA			DIP	DIS			Product number
	DIA-1	DIA-2	DIA-2Q		DIS-C	DIS-D	DIS-PR	
Cable, 5 meters, for conductive conductivity probe					●			96611925
Cable, 15 meters, for conductive conductivity probe					●			96611928
Cable, 25 meters, for conductive conductivity probe					●			96611929
Cable, 5 meters, for inductive conductivity probe					●			96611940
Cable, 15 meters, for inductive conductivity probe					●			96611941
Cable, 25 meters, for inductive conductivity probe					●			96611942
Cable, 1 meter, for reference, pH and ORP electrode	●	●	●	●		●	●	96609182
Cable, 3 meters, for reference, pH and ORP electrode	●	●	●	●		●	●	96609183
Cable, 2 meters, for PAA/H ₂ O ₂ electrode	●	●	●					96622969

Buffer solutions

for pH and redox

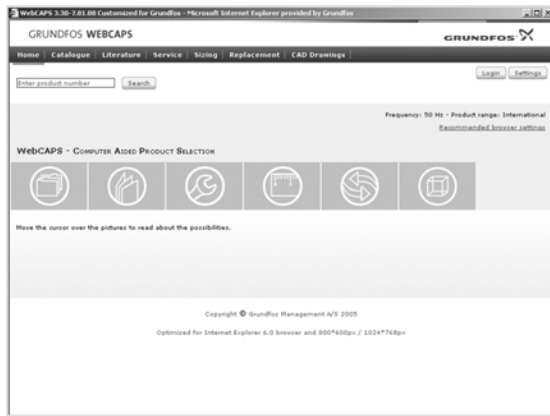
Description	pH	Redox	Product number
Buffer solutions for calibrating the pH single-rod probes, 1 set per 100 ml for pH 4.01 / 7.00 / 9.18	●		96609165
Buffer solutions for checking the redox single-rod probes / electrodes, 100 ml (+225 mV)		●	96609166



Gra1023

Fig. 39 Buffer solutions

WebCAPS

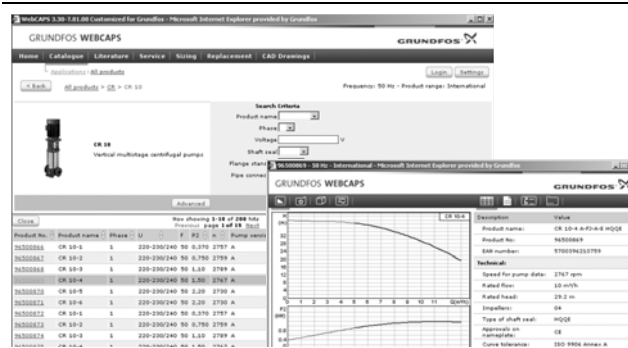


WebCAPS is a **Web-based Computer Aided Product Selection** program available on www.grundfos.com.

WebCAPS contains detailed information on more than 185,000 Grundfos products in more than 20 languages.

In WebCAPS, all information is divided into 6 sections:

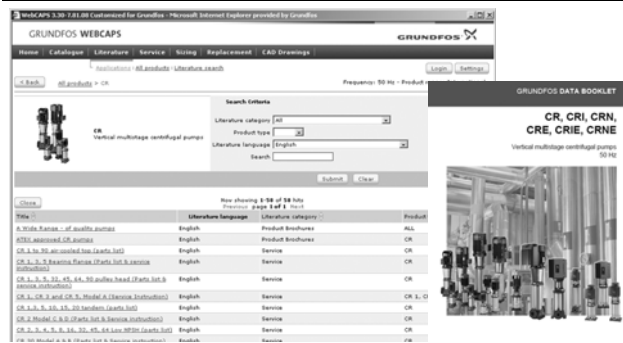
- Catalogue
- Literature
- Service
- Sizing
- Replacement
- CAD drawings.



Catalogue

This section is based on fields of application and pump types, and contains

- technical data
- curves (QH, Eta, P1, P2, etc) which can be adapted to the density and viscosity of the pumped liquid and show the number of pumps in operation
- product photos
- dimensional drawings
- wiring diagrams
- quotation texts, etc.



Literature

In this section you can access all the latest documents of a given pump, such as

- data booklets
- installation and operating instructions
- service documentation, such as Service kit catalogue and Service kit instructions
- quick guides
- product brochures, etc.



Service

This section contains an easy-to-use interactive service catalogue. Here you can find and identify service parts of both existing and discontinued Grundfos pumps.

Furthermore, this section contains service videos showing you how to replace service parts.



Sizing

This section is based on different fields of application and installation examples, and gives easy step-by-step instructions in how to

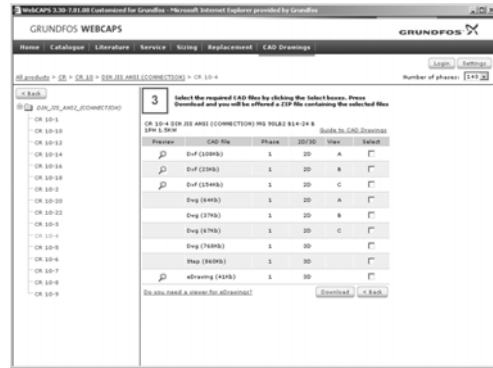
- select the most suitable and efficient pump for your installation
- carry out advanced calculations based on energy consumption, payback periods, load profiles, life cycle costs, etc.
- analyse your selected pump via the built-in life cycle cost tool
- determine the flow velocity in wastewater applications, etc.



Replacement

In this section you find a guide to selecting and comparing replacement data of an installed pump in order to replace the pump with a more efficient Grundfos pump. The section contains replacement data of a wide range of pumps produced by other manufacturers than Grundfos.

Based on an easy step-by-step guide, you can compare Grundfos pumps with the one you have installed on your site. When you have specified the installed pump, the guide will suggest a number of Grundfos pumps which can improve both comfort and efficiency.



CAD drawings

In this section it is possible to download 2-dimensional (2D) and 3-dimensional (3D) CAD drawings of most Grundfos pumps.

These formats are available in WebCAPS:

2-dimensional drawings:

- .dxf, wireframe drawings
- .dwg, wireframe drawings.

3-dimensional drawings:

- .dwg, wireframe drawings (without surfaces)
- .stp, solid drawings (with surfaces)
- .eprt, E-drawings.

WinCAPS



Fig. 40 WinCAPS CD-ROM

WinCAPS is a **Windows-based Computer Aided Product Selection** program containing detailed information on more than 185,000 Grundfos products in more than 20 languages.

The program contains the same features and functions as WebCAPS, but is an ideal solution if no Internet connection is available.

WinCAPS is available on CD-ROM and updated once a year.

L-INS-PG-01 10/06 (US)
Subject to alterations