

6.3 DSR Swimming Pool Controller

The DSR is a combination controller for the measuring values pH and redox. The disinfecting power of oxidizing disinfectants (e.g. chlorine, bromine) can be measured and controlled via the redox voltage, in case they produce a sufficiently high redox-voltage.

Both measuring parameters pH and mV are largely displayed on the large, i1018368 Chlorinesensor CLE 3.1-mA-10ppm are available 2 relay outputs for the direct switching of the operating voltage. There are no further available inputs or outputs on the DSR.

TECHNICAL DATA

Measurement and control range:	pH 2-12, 100-1000 mV
Control function:	impulse length control with P-control function, reversible to 2-point control.
Control outputs:	2 N/O control relays for the control of metering pumps, std powered optional unpowered.
Electrodes connections:	directly on terminals
Operating voltage:	230 Volt (or 115 Volt) 50/60 Hz
Display:	illuminated LCD graphic display 100 x 32 dots 2 lines 14 mm high for measuring variables 4 lines 5 mm high for text readings
Display resolution:	0.01 pH, 1 mV, 0.01 ppm
Housing:	PPE glass fibre reinforced for wall mounting 198 x 200 x 76 mm (b x h x d), colour light-grey
Ambient temperature:	-5...+50°C in operation -10...+70°C storage / transport
Degree of protection:	IP 65 (IP 54 mounted in switchboard) language of text on LCD English housing light-grey; 230 Volt; English; display pH/mV
Identcode for Std language	



DSR Swimming Pool Controller

DSRa	W	Housing												
		0	Light grey, foil with ProMinent logo											
		0	230 V 50/60 Hz Supply Voltage											
			PR	5	0	2	0	N	0	1	Standard configuration			
											0 R V	240 volt switching - standard 240 volt switching - with additional relays volt free switching		
												E	Preset Language = English	
													0 1	pH/mV pH/ppm
DSRa	W	0	0	PR	5	0	2	0	N	0	1	0	E	1

6.4 Pool Packages

6.4 Swimming Pool Accessories



PA31002458
CO₂ Controller



PA31921314
Withdrawable CO₂ Injection Assembly



PA03022425
Sample Flow Switch



SP100-4330-DH
pH Sensor



SP100-4PBO-DH
ORP Sensor



DGMa in-Line
Probe Holder & Flow Switch

Optional Equipment

Metering Pumps - see 'Yellow Pages' - select from the ProMinent range.

Probes - select from the ProMinent range, see 'Yellow Pages' section 5 and 'Green Pages' section 4.

Probe holders - select from the ProMinent range, see section 6 'Yellow Pages' for DGMa holders and section 4 'Green Pages' for low cost alternatives.

CO₂ Flow Regulator 25 l/m with Flow Meter and 240v Solenoid (as above) in enclosure with lighted on/off switch.

PA31002458

Sample Flow switch (low volt).

PA03022425

CO₂ Fixed In-line Injection Assy with 1/2" Bspt Male Connection.

PA09751676

CO₂ Withdrawable Injection Assembly to suit 100mm (4" dia.) pipe & over.

PA31921314

CO₂ Bottle Regulator with dual gauge.

A31001428

CO₂ Auto Changeover Unit 2x2 Bottles 1x M120B150 + 2x MC444
includes regulator & pressure gauge.

A31001838

Safety Chains & Brackets for single CO₂ bottle.

A31001935

Safety Chains & Brackets for dual CO₂ bottles.

A31001936

6.1 DSR & D2C pH/ORP Pool Packages

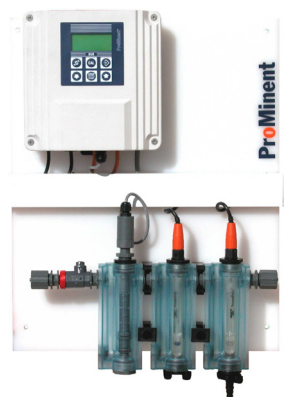
6.1 Pool Packages

DSR pH/ORP Pool Packages



DSR200 pH/ORP Pool Control System

Part No	Description	Qty
DSRaW00PR5020N010E0	Proportional Controller	1
SP100-4330-DH	pH probe	1
SP100-4PB0-DH	ORP probe	1
PA03022958	Probe holder assembly	1
P20-C	Flow Switch Assembly	1
305030	Probe cable	2
A04001289	cable 2 core	1
PA07221061	PVC 1/2" to 8x5 mm	2
A25251004	PE tube 25m 8 x 5mm	1
3240T0235	Filter Assembly	1
A35082644	Backboard 600 x 500 & fitting	1
506253	pH 7 buffer	1
506251	pH 4 buffer	1
Switched GPO,s		



DSR300 pH/ORP Pool Control System

Part No	Description	Qty
DSRaW00PR5020N010E0	Proportional Controller	1
SP100-4330-DH	pH probe	1
SP100-4PB0-DH	ORP probe	1
DGMA320T000	Probe holder & flow switch assembly	1
305030	Probe cable	2
A04001289	cable 2 core	1
PA07221061	PVC 1/2" to 8x5 mm	2
A25251004	PE tube 25m 8 x 5mm	1
P3240T0235-D	Filter Assembly	1
A35082644	Backboard 600 x 500 & fitting	1
506253	pH 7 buffer	1
506251	pH 4 buffer	1



DSR400 pH/ORP Pool Control System

Part No	Description	Qty
DSRaW00PR5020N010E0	Proportional Controller	1
PA31002458	CO ₂ Controller	1
SP100-4330-DH	pH probe	1
SP100-4PB0-DH	ORP probe	1
DGMA320T000	Probe holder & flow switch assembly	1
305030	Probe cable	2
A04001289	cable 2 core	1
PA07221061	PVC 1/2" to 8x5 mm	2
A25251004	PE tube 25m 8 x 5mm	1
A35082644	Backboard 600 x 500 & fitting	1
P3240T0235-D	Filter Assembly	1
PA09751676	Fixed in-line CO ₂ Injection 1/2" BSPM	1
506253	pH 7 buffer	1
506251	pH 4 buffer	1

OPTIONS for DSR or D2C

PA55003052	Volt Free relays for external stop/start of any Beta, Gamma L, Delta, Sigma via pump control cable. This assembly includes 2 relays in a single enclosure mounted on the backboard and into the DSR.
PA55003053	240 volt relay switched output for control of other equipment. (e.g. hard wired Beta pump). This includes 2 relays in a single enclosure mounted on the backboard and into the DSR.
PA55003054	240 volt relay switched output for control of other equipment. This includes 2 relays with GPO's mounted on the backboard and into the DSR.

OPTIONS for DSR or D2C

PA55003055	Volt Free relays for external stop/start of any Beta, Gamma L, Delta, Sigma via pump control cable. This assembly includes 1 relay in a single enclosure mounted on the backboard and into the DSR.
PA55003056	240 volt relay switched output for control of other equipment. (e.g. hard wired Beta pump). This includes 1 relay in a single enclosure mounted on the backboard and into the DSR.
PA55003057	240 volt relay switched output for control of other equipment. This includes 1 relay with GPO mounted on the backboard and into the DSR.

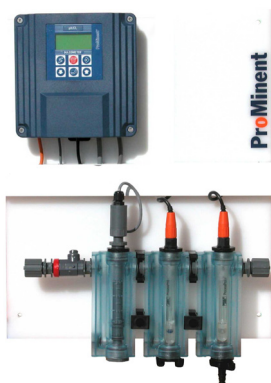
6.2 D2C pH/Cl₂ Pool Packages

6.2 Pool Packages

D2C pH/ORP Pool Packages

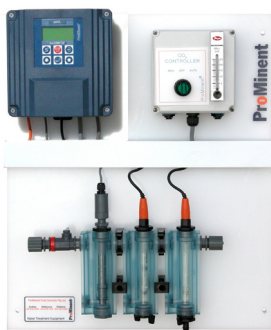
D2C300 pH/ORP Pool Control System

Part No	Description	Qty
D2CAW0PR5000G10E	Proportional Controller	1
SP100-4330-DH	pH probe	1
SP100-4PB0-DH	ORP probe	1
809127	ORP transducer	1
DGMA320T000	Probe holder & flow switch assembly	1
305030	Probe cable	1
A04001289	cable 2 core	2
PA07221061	PVC 1/2" to 8x5 mm	2
A25251004	PE tube 25m 8 x 5mm	1
P3240T0235-D	Filter Assembly	1
A35082644	Backboard 600 x 500 & fitting	1
506253	pH 7 buffer	1
506251	pH 4 buffer	1



D2C400 pH/ORP Pool Control System

Part No	Description	Qty
D2CAW0PR5000G10E	Proportional Controller	1
PA31002458	CO2 flow regulator assembly	1
SP100-4330-DH	pH probe	1
SP100-4PB0-DH	ORP probe	1
809127	ORP transducer	1
DGMA320T000	Probe holder & flow switch assembly	1
305030	Probe cable	1
A04001289	cable 2 core	2
PA07221061	PVC 1/2" to 8x5 mm	2
A25251004	PE tube 25m 8 x 5mm	1
P3240T0235-A	Filter Assembly	1
A35082644	Backboard 600 x 500 & fitting	1
PA09751676	Fixed in-line CO2 injection 1/2" BSPM	1
506253	pH 7 buffer	1
506251	pH 4 buffer	1



D2C500 pH/Cl₂ Pool Control System

Part No	Description	Qty
D2CAW0PC5000G10E	Proportional Controller	1
792919	Chlorine sensor CLE 3-mA-10ppm	1
SP100-4330-DH	pH probe	1
DGMA311T000	Probe holder & flow switch assembly	1
305030	Probe cable	1
A04001289	cable 2 core	2
PA07221061	PVC 1/2" to 8x5 mm	2
A25251004	PE tube 25m 8 x 5mm	1
P3240T0235-D	Filter Assembly	1
A35082644	Backboard 600 x 500 & fitting	1
506253	pH 7 buffer	1
506251	pH 4 buffer	1



D2C600 pH/Cl₂ Pool Control System

Part No	Description	Qty
D2CAW0PC5000M10E	Proportional Controller	1
PA31002458	CO2 flow regulator assembly	1
792919	Chlorine sensor CLE 3-mA-10ppm	1
SP100-4330-DH	pH probe	1
DGMA311T000	Probe holder & flow switch assembly	1
305030	Probe cable	1
A04001289	cable 2 core	2
PA07221061	PVC 1/2" to 8x5 mm	2
A25251004	PE tube 25m 8 x 5mm	1
P3240T0235-D	Filter Assembly	1
A35082644	Backboard 600 x 500 & fitting	1
PA09751676	Fixed in-line CO2 injection 1/2" BSPM	1
506253	pH 7 buffer	1
506251	pH 4 buffer	1



6.2 D2C pH/Cl₂ Pool Packages

6.2 Pool Packages

D2C pH/Cl₂ Pool Packages



D2C700 pH/Cl₂ Pool Control System

Part No	Description	Qty
D2CAW0PC5000G10E	Proportional Controller	1
740684	Chlorine sensor CTE1-mA-10ppm	1
SP100-4330-DH	pH probe	1
DGMA311T000	Probe holder & flow switch assembly	1
305030	Probe cable	1
A04001289	cable 2 core	2
PA07221061	PVC 1/2" to 8x5 mm	2
A25251004	PE tube 25m 8 x 5mm	1
P3240T0235-D	Filter Assembly	1
A35082644	Backboard 600 x 500 & fitting	1
506253	pH 7 buffer	1
506251	pH 4 buffer	1



D2C800 pH/Cl₂ Pool Control System

Part No	Description	Qty
D2CAW0PC5000M10E	Proportional Controller	1
PA31002458	CO2 flow regulator assembly	1
740684	Chlorine sensor CTE1-mA-10ppm	1
SP100-4330-DH	pH probe	1
DGMA311T000	Probe holder & flow switch assembly	1
305030	Probe cable	1
A04001289	cable 2 core	2
PA07221061	PVC 1/2" to 8x5 mm	2
A25251004	PE tube 25m 8 x 5mm	1
P3240T0235-D	Filter Assembly	1
A35082644	Backboard 600 x 500 & fitting	1
PA09751676	Fixed in-line CO2 injection 1/2" BSPM	1
506253	pH 7 buffer	1
506251	pH 4 buffer	1

6.5 Dulcomarin II Compact Pool Packages

6.5 Pool Packages



DULCOMARIN-300

Dulcomarin II Compact Pool System

pH / Redox / Acid

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa320T000	Probe holder	1
SP100-4330-DH	pH electrode	1
SP100-4PB0-DH	Redox Electrode	1
1024105	Coax Cable 0.8m	2
A35051307	Mounting Board 750H x 600W	1
724009	Power Cable	1
A04001289	2 Core Cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
P3240T0235-D	Filter Assembly	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25 m	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1



DULCOMARIN-400

Dulcomarin II Compact Pool System

pH / Redox / CO₂

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa320T000	Probe holder	1
SP100-4330-DH	pH sensor	1
SP100-4PB0-DH	Redox sensor	1
1024105	Coax Cable 0.8m	2
A35051307	Mounting Board 750H x 600W	1
724009	Power Cable	1
A04001289	2 Core Cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
P3240T0235-D	Filter Assembly	1
PA31002458	CO2 Controller	1
PA09751676	CO2 Injection quill - 1/2" BSPM	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1



DULCOMARIN-500

Dulcomarin II Compact Indoor Pool System

pH / CLE 3 / Acid

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa311T000	Probe holder	1
SP100-4330-DH	pH electrode	1
1024105	Coax Cable 0.8m	1
A35051307	Mounting Board 750H x 600W	1
724009	Power Cable	1
A04001289	2 Core Cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
1023425	Chlorine Sensor CLE3-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1

6.5 Dulcomarin II Compact Pool Packages

6.5 Pool Packages



DULCOMARIN-510

pH / CLE 3 / Redox / Acid Compact Indoor Pool System

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin II	1
DGMa321T000	Probe holder	1
SP100-4330-DH	pH sensor	1
SP100-4PB0-DH	Redox sensor	1
1024105	Coax Cable 0.8m	2
A35051307	Mounting Board 750H x 600W	1
724009	Power Cable	1
A04001289	2 Core Cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
1023425	Chlorine sensor CLE3-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
506253	pH Buffer 7	1
P3240T0235-D	Filter Assembly	1
506251	pH Buffer 4	1



DULCOMARIN-520

Dulcomarin II Compact Indoor Pool System

pH / CLE 3 / CTE / Acid

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa312T000	Probe holder	1
SP100-4330-DH	pH sensor	1
1024105	Coax Cable 0.8m	1
A35051307	Mounting Board 750H x 600W	1
724009	Power Cable	1
A04001289	2 Core Cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
1023425	Chlorine sensor CLE3-CAN-10ppm	1
1023427	Chlorine sensor CTE1-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1



DULCOMARIN-530

Dulcomarin II Compact Indoor Pool System

pH / CLE 3 / CTE / Redox / Acid

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa322T000	Probe holder	1
SP100-4330-DH	pH sensor	1
SP100-4PB0-DH	Redox sensor	1
1024105	Coax Cable 0.8m	2
A35051307	Mounting Board 750H x 600W	1
724009	Power Cable	1
A04001289	2 Core Cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
1023425	Chlorine sensor CLE3-CAN-10ppm	1
1023427	Chlorine sensor CTE1-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1

6.5 Dulcomarin II Compact Pool Packages

6.5 Pool Packages



DULCOMARIN-600

Dulcomarin II Compact Indoor Pool System

pH / CLE 3 / CO₂

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa311T000	Probe holder	1
SP100-4330-DH	pH sensor	1
1024105	Coax cable 0.8m	1
A35051307	Mounting board 750H x 600W	1
724009	Power cable	1
A04001289	2 Core cable for Flow Switch	1
PROMLABEL150	ProMinent label 150mm	1
PA31002458	CO2 Controller	1
PA09751676	CO2 Injection quill - 1/2" BSPM	1
1023425	Chlorine sensor CLE3-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1



DULCOMARIN-610

Dulcomarin II Compact Indoor Pool System

pH / CLE 3 / Redox / CO₂

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa321T000	Probe holder	1
SP100-4330-DH	pH sensor	1
SP100-4PB0-DH	Redox sensor	1
1024105	Coax cable 0.8m	2
A35051307	Mounting board 750H x 600W	1
724009	Power cable	1
A04001289	2 Core cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
PA31002458	CO2 Controller	1
PA09751676	CO2 Injection quill - 1/2" BSPM	1
1023425	Chlorine sensor CLE3-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1



DULCOMARIN-620

Dulcomarin II Compact Indoor Pool System

pH / CLE 3 / CTE / CO₂

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa312T000	Probe holder	1
SP100-4330-DH	pH sensor	1
1024105	Coax cable 0.8m	1
A35051307	Mounting board 750H x 600W	1
724009	Power cable	1
A04001289	2 Core cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
PA31002458	CO2 Controller	1
PA09751676	CO2 Injection quill - 1/2" BSPM	1
1023425	Chlorine sensor CLE3-CAN-10ppm	1
1023427	Chlorine sensor CTE1-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1

6.5 Dulcomarin II Compact Pool Packages

6.5 Pool Packages



DULCOMARIN-630

Dulcomarin II Compact Indoor Pool System

pH / CLE 3 / CTE / Redox / CO₂

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa322T000	Probe holder	1
SP100-4330-DH	pH electrode	1
SP100-4PB0-DH	Redox Electrode	1
1024105	Coax Cable 0.8m	2
A35051307	Mounting Board 750H x 600W	1
724009	Power Cable	1
A04001289	2 Core Cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
PA31002458	CO2 Controller	1
PA09751676	CO2 Injection quill - 1/2" BSPM	1
1023425	Chlorine sensor CLE3-CAN-10ppm	1
1023427	Chlorine sensor CTE1-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m length	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1



DULCOMARIN-700

Dulcomarin II Compact Outdoor Pool System

pH / CGE / Acid

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa311T000	Probe holder	1
SP100-4330-DH	pH sensor	1
1024105	Coax cable 0.8m	1
A35051307	Mounting board 750H x 600W	1
724009	Power cable	1
A04001289	2 Core cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
1024420	Chlorine sensor CGE2-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1



DULCOMARIN-710

Dulcomarin II Compact Outdoor Pool System

pH / CGE / Redox / Acid

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa321T000	Probe holder	1
SP100-4330-DH	pH sensor	1
SP100-4PB0-DH	Redox sensor	1
1024105	Coax cable 0.8m	2
A35051307	Mounting board 750H x 600W	1
724009	Power cable	1
A04001289	2 Core cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
1024420	Chlorine sensor CGE2-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1

6.5 Dulcomarin II Compact Pool Packages

6.5 Pool Packages



DULCOMARIN-800

Dulcomarin II Compact Indoor Pool System

pH / CGE / CO₂

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa311T000	Probe holder	1
SP100-4330-DH	pH sensor	1
1024105	Coax cable 0.8m	1
A35051307	Mounting board 750H x 600W	1
724009	Power cable	1
A04001289	2 Core cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
PA31002458	CO2 Controller	1
PA09751676	CO2 Injection quill - 1/2"BSPM	1
1024420	Chlorine sensor CGE2-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1



DULCOMARIN-810

Dulcomarin II Compact Indoor Pool System

pH / CGE / Redox / CO₂

Part No	Description	Qty
DXCaW051M0PSEN	Dulcomarin	1
DGMa321T000	Probe holder	1
SP100-4330-DH	pH sensor	1
SP100-4PB0-DH	Redox sensor	1
1024105	Coax cable 0.8m	2
A35051307	Mounting board 750H x 600W	1
724009	Power cable	1
A04001289	2 Core cable for Flow Switch	1
PROMLABEL150	ProMinent Label 150mm	1
PA31002458	CO2 Controller	1
PA09751676	CO2 Injection quill - 1/2"BSPM	1
1024420	Chlorine sensor CGE2-CAN-10ppm	1
PA07221061	1/2" to 8 x 5 PVC Adaptor	2
A25251004	8 x 5 mm LDPE tubing - 25m	1
P3240T0235-D	Filter Assembly	1
506253	pH Buffer 7	1
506251	pH Buffer 4	1

Note:

Extra for OPC Server

Extra for A Module for pump activation or mA output

Extra for G Module for individual alarms

Note:

All Dulcomarin controllers include embedded web server and screen recorder which has 128 Mb SD card at N/C

6.5 Dulcomarin II Accessories

6.5 Pool Package Accessories

Chlorine sensor CLE 3-CAN-10 ppm	1023425.
Chlorine sensor CLE 3.1-CAN-10 ppm	1023426.
Chlorine sensor CTE 1-CAN-10 ppm	1023427.
Chlorine sensor CGE 2-CAN-10 ppm	1024420.
Chlorine sensor BRE 3-CAN-10 ppm	1029660.
Cable connection-CAN M12 5pol. 0,5m	1022137.
Cable connection-CAN M12 5pol. 1m	1022139.
Cable connection-CAN M12 5pol. 2m	1022140.
Cable connection-CAN M12 5pol. 5m	1022141.
T-splitter M12 5pol. CAN	1022155.
Terminator M12-female 120R(4-5)	1022154.
Terminator M12-male 120R(4-5)	1022592.
CAN-BUS-Cable	1022160.
Joining Kit CAN-BUS-Cable	1026589.
CAN Connection Cable - Green - CSN M12 to RJ45	1026715.
Cross Over Cable - Grey - RJ45 to RJ45	1027859.
LAN Coupling - Silver - RJ45	1027860.

BUFFERS

Vial of 10 Capsules pH4 Buffer Kit	A12001261
Vial of 10 Capsules pH7 Buffer Kit	A12001262
Vial of 10 Capsules pH10 Buffer Kit	A12001263

Each Capsule makes 100 mls Buffer

Note: Above part numbers and prices do not include distilled water.

BUFFER SOLUTION

3-molar KCl solution, 50 ml	505533.
3-molar KCl solution, 250 ml	791440.
3-molar KCl solution, 1000 ml	791441.
Buffer solution 465 mV, 50 ml	506240.
Buffer solution 220 mV, 50 ml	506244.
Buffer solution pH 4.0 - red, 50 ml	506251.
Buffer solution pH 7.0 - green, 50 ml	506253.
Buffer solution pH 10.0 - blue, 50 ml	506255.

6.6 Chlorine Analyser Packages

6.6 Chlorine Analyser Packages



Chlorine Analyser Package

PA51002880

Part No	Description	Qty
D1CBW00601000VC1001G21EN	Monitor	1
1003203	CTE 1-mA-5 ppm	1
A04001289	2core cable	2
PA03022502	By-pass sensor holder DLG2	1
P3240T0235-B	Filter with maric valve kit	1
PA07221061	1/2 inch to 8x5 mm PVC	2
DGMA300T000	Rotameter & flowswitch	
A25251004	25m, 8 x 5mm PE tube	1
A35082644	Backboard mounted	1

Note: With 1/2" BSPM or 8x5 on inlet, Maric valve, filter, CTE - 5 ppm

Chlorine Analyser Package

PA51002881

Part No	Description	Qty
D1CBW00601000VC1001G21EN	Monitor	1
740685	CTE 1-mA-2 ppm	1
A04001289	2core cable	2
PA03022502	By-pass sensor holder DLG2	1
P3240T0235-B	Filter with maric valve kit	1
PA07221061	1/2 inch to 8x5 mm PVC	2
DGMA300T000	Rotameter & flowswitch	1
A25251004	25m, 8 x 5mm PE tube	1
A35082644	Backboard mounted	1

Note: With 1/2" BSPM or 8x5 on inlet, Maric valve, filter, CTE - 2 ppm

Chlorine Analyser Package

PA51002878

Part No	Description	Qty
D1CBW00601000VC1001G21EN	Monitor	1
1003203	CTE 1-mA-5 ppm	1
A04001289	2core cable	2
PA03022502	By-pass sensor holder DLG2	1
PA27002656	Maric valve	1
PA07221061	1/2 inch to 8x5 mm PVC	2
DGMA300T000	Rotameter & flowswitch	1
A25251004	25m, 8 x 5mm PE tube	1
A35082644	Backboard mounted	1

Note: With 1/2" BSPM on inlet, Maric valve, no filter, CTE - 5 ppm

Chlorine Analyser Package

PA51002879

Part No	Description	Qty
D1CBW00601000VC1001G21EN	Monitor	1
740685	CTE 1-mA-2 ppm	1
A04001289	2core cable	2
PA03022502	By-pass sensor holder DLG2	1
PA27002656	Maric valve	1
PA07221061	1/2 inch to 8x5 mm PVC	2
DGMA300T000	Rotameter & flowswitch	1
A25251004	25m, 8 x 5mm PE tube	1
A35082644	Backboard mounted	1

Note: With 1/2" BSPM on inlet, Maric valve, no filter, CTE - 2 ppm

6.6 Chlorine Analyser Packages

6.6 Chlorine Analyser Packages



Chlorine Analyser Package

PA51002882

Part No	Description	Qty
D1CBW00601000VC1001G21EN	Monitor	1
1003203	CTE 1-mA-5 ppm	1
A04001289	2core cable	2
PA03002885	By-pass sensor holder DLG5	1
A07051045	Bracket	1
86515T	Gemu Rotameter	1
1257000Z	Flowswitch	1
PA07221061	1/2 inch to 8x5 mm PVC	2
A25251004	25m, 8 x 5mm PE tube	1
A01721802	5m, 16mm braided hose	5
A35082644	Backboard mounted	1

Note: With 1/2" BSPM on inlet, 16mm hosetail outlet, no Maric valve, no filter, CTE - 5 ppm ... for High iron / particle applications

Chlorine Analyser Package

PA51002883

Part No	Description	Qty
D1CBW00601000VC1001G21EN	Monitor	1
740685	CTE 1-mA-2 ppm	1
A04001289	2core cable	2
PA03002885	By-pass sensor holder DLG5	1
A07051045	Bracket	1
86515T	Gemu Rotameter	1
1257000Z	Flowswitch	1
PA07221061	1/2 inch to 8x5 mm PVC	2
A25251004	25m, 8 x 5mm PE tube	1
A01721802	5m, 16mm braided hose	5
A35082644	Backboard mounted	1

Note: With 1/2" BSPM on inlet, 16mm hosetail outlet, no Maric valve, no filter, CTE - 2 ppm ... for High iron / particle applications

6.7 Chlorine Analyser Packages

6.7 Chlorine Analyser Packages



D1C CHLORINE ANALYSER PACKAGE

pH Corrected Free Residual Chlorine

PA51002903

Part No	Description	
Qty		
D1CAW0C11014G000E	D1CAW0C11014G000E DULCOMETER	1
1018369	SENSOR Dulcotest CLE 3.1-mA-2ppm	1
SP200-2330-DH	Probe pH 0-12 pH -5 To 110°C HT3 Glass	1
809126	Transducer pH Sensor Pre-amp	1
A04001289	Cable 2x16/0.20 Copper, grey Cover	2
PA03022502	DLG2 Probe Holder Rev.4 In-line Type	1
P3240T0235-B	Sample Bypass Filter 8x5 - 20x1.5F Maric	1
DGMA300T000	DGMA300T000 Flow Control Unit	1
PA07221061	Adaptor Assembly 1/2" BSP to 8x5 tube PVC	2
A25221801	Tubing 8x5 Pvc Soft Clear X 25m Roll	1
A35082644	Mounting Board - 500x600x12mm LDPE White	1
	Assembled and tested	

D1C CHLORINE CONTROL PACKAGE

pH Corrected Free Chlorine

with Feed Forward Control

PA51002904

Part No	Description	
Qty		
D1CAW0C11214G220E	D1CAW0C11214G220E DULCOMETER	1
1018369	SENSOR Dulcotest CLE 3.1-mA-2ppm	1
SP200-2330-DH	Probe pH 0-12 pH -5 To 110°C HT3 Glass	1
809126	Transducer pH Sensor Pre-amp	1
A04001289	Cable 2x16/0.20 Copper, grey Cover	2
PA03022502	DLG2 Probe Holder Rev.4 In-line Type	1
P3240T0235-B	Sample Bypass Filter 8x5 - 20x1.5F Maric	1
DGMA300T000	DGMA300T000 Flow Control Unit	1
PA07221061	Adaptor Assembly 1/2" BSP to 8x5 tube PVC	2
A25221801	Tubing 8x5 Pvc Soft Clear X 25m Roll	1
A35082644	Mounting Board - 500x600x12mm LDPE White	1
	Assembled and tested	

6.8 ProCal Granular Calcium Hypochlorite Feeder

6.8 ProCal Granular Hypochlorite Feeder

ProCal_3240A Series Granular
Calcium Hypochlorite System
from ProMinent

ProMinent®

Description of Operation

The ProMinent ProCal series system generates a dilute Calcium Hypochlorite solution from granulated dry chemical. The granules are stored in a chamber, up to 40kg, where it is held until required.

The granules are transferred into a mixing tank where it is blended with the incoming water. The feeder is operated in manual or pulse duration mode in response to the amount of chlorine in the pool water.

Automatic acid clean is incorporated.

Suitable for pools up to 1,000,000 litres
Capacity to 4kg/hr, (adjustable).

Dimensions: 900 L x 500 W x 1170 H mm

Benefits and Features

- The ProMinent unique compact design allows the use of granular Calcium Hypochlorite as your pool chlorine source.
- Reduced OH&S requirements.
- The ProCal series comes pre-wired and pre-plumbed for easy installation.
- Interface with ProMinent controllers or other pulse duration controller provides accurate and reliable chlorine control.
- Lower TDS, when compared to liquid chlorine.
- Granular Calcium Hypochlorite is less expensive and more readily available than tablets.
- Less impact on pH.
- Automatic acid clean.

Note: For best performance we recommend the use of Granuchlor® Calcium Hypochlorite with these systems.



Model	Pool Size	List Price
ProCal_3240A	1,000,000 litres	

