

ProMinent® 5.6 ProMinent DULCOMARIN® II Multi-Channel Measuring & Control System

5.6.1 DULCOMARIN® II



- The multi-channel measuring and control system DULCOMARIN®II is characterised by the following features:
- 5.7", 1/4 VGA colour display for easy operation
- Integrated data logger with screen recorder: directly view the measuring data at the controller
- SD card and card reader for PC included: simply transfer measuring data to the PC as standard
- Control of up to 16 drinking water systems or filtration circuits in swimming pools
- CAN bus system: simple wiring and subsequent upgradability
- Visualisation*: easy with embedded Web server* and standard Web browser
- LAN interface*: easy connection to PC or PC network or Internet
- Intelligent sensors: with CANopen bus, save the sensor data and are always within the optimal measuring range thanks to auto ranging
- Intelligent metering pumps: with CANopen bus, inform about the operating parameters such as e.g.: chemicals levels and output in the metering range of 0.74 l/h to 1,030 l/h
- Standby metering pump for disinfectant (automatic switching in case of low level and pump failure)

Area of application drinking water (and general applications)

- Using a power input module (I module), the following measuring parameters can be measured via 0/4...20 mA and displayed. These values are also available on the data logger/screen recorder, the Web and OPC server:
- Flow rate (as disturbance for pH and chlorine control)
- UV intensity
- Conductivity
- Chlorine dioxide
- Chlorite
- Ammonia
- Fluoride (via D1Ca)
- Pt100 resistance thermometer via transducer
- Display and controlling of free chlorine and total available chlorine
- OPC server*: easy connection to superordinated visualisation systems

*optional

Area of application swimming pool

- Combined chlorine: is safely minimised via controller output and corresponding systems
- OPC server*: easy connection to superordinated visualisation systems
- Controlling of pool temperature via standard temperature controller
- High chlorination or off-peak reduction by contact via second parameter set
- The decentral modular DULCOMARIN®II system is designed for use in public swimming pools in accordance with DIN 19643. Depending on requirements, the system can be supplied as compact system DULCOMARIN®II compact or as decentral modular system DULCOMARIN®II DULCO®-Net.

5.6 ProMinent DULCOMARIN® II DULCO® - net Swimming Pool Controllers

5.6.2 DULCOMARIN® II DULCO® - net

The **DULCOMARIN® II - DULCO®-Net** swimming pool control system uses the CANopen –BUS as the medium for transmission of the data between the measurement and actuator units and the sensors and the central unit.

In its maximum expanded form the system can control up to 16 filtration cycles, i.e. 16 measurement units and 16 dosing units and corresponding sensors can be operated from a single central unit.

For this purpose a central unit is combined with the number of measurement and dosing units required for the application.

A M12 T-distributor is required for connection to any CANopen device (sensors module, actuator module, metering pumps and chlorine sensors). This connects the device to the main bus train via a stub cable.

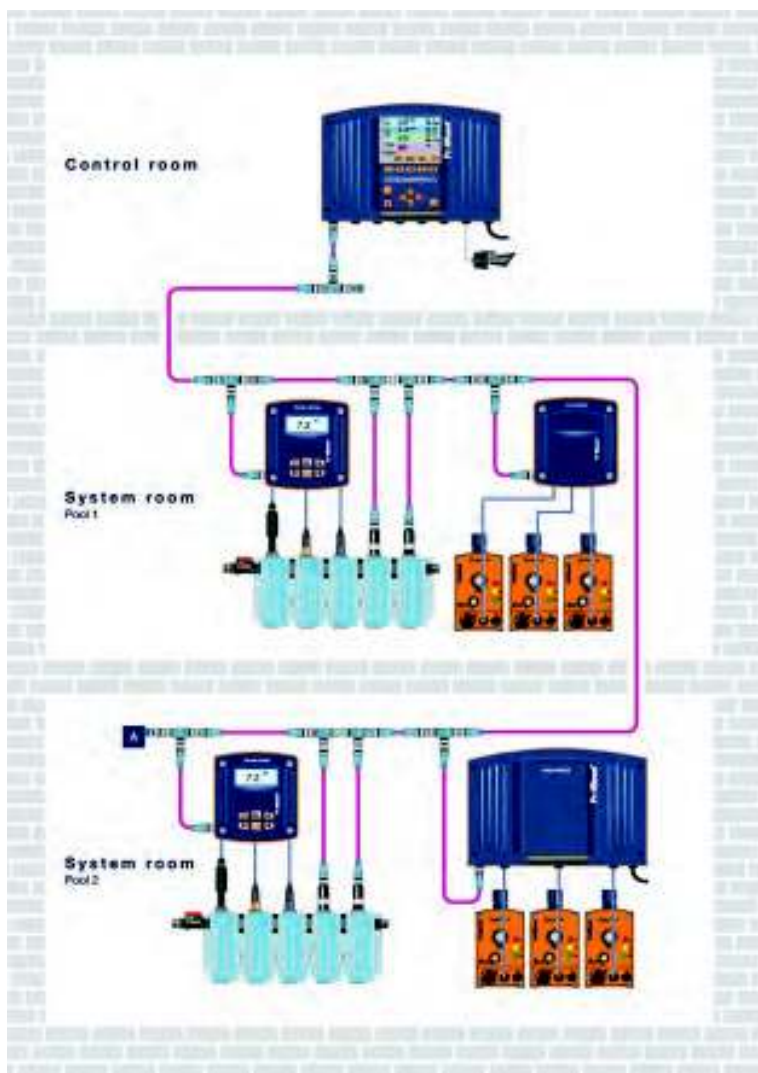
The sum of the lengths of all stub cables in a CANopen - system cannot exceed 15 m.

DULCOMARIN® II DULCO®-Net and compact can both be easily expanded later.

What components make up a DULCOMARIN® II DULCO®-Net system?

A DULCOMARIN® II DULCO®-Net system comprises:

- a central unit and an individual combination of the following components:
- measurement unit
- dosing unit without mains power module
- dosing unit with mains power module (optional)



Central unit

The central unit can be installed anywhere, e.g. in a control room or in the office. It serves as an in/output module (for viewing and configuring individual modules) and has the following functions: screen recorder, interfaces, Embedded Web Server and the power supply. The central unit may optionally incorporate a sensor and an actuator module. The central unit is connected with the other units via the main Bus train. CAN connection cables are used for this purpose. The main Bus train of the first unit must be connected with a M 12 load resistor coupling and the final unit by a M 12 load resistor plug. You can find these components in section 5 Accessories.

The central unit in the above example comprises the following components:

Accessories

Description:	Part no.
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

See Green Pages PriceList for above components and complete POOL Systems

5.6 Identity Code for ProMinent DULCOMARIN® II DULCO®-net Swimming Pool Controllers

5.6.3 Identity Code Ordering System for DULCOMARIN® II DULCO® - net

Central unit:

DXCa	DULCOMARIN® II Swimming Pool Controller, DXC Series											
	Mounting type:											
	W	Wall mounted (IP 65)										
	S	Control cabinet (IP 54)										
		Design:										
		0	With controls									
			Communication interfaces:									
			0	None								
			5	LAN incl. plug M12								
			6	OPC Server								
				Optional:								
				1	Measurement data archiving incl. 128 MB MMC							
					Module 1:							
					0	Not in use						
					M	Sensor module - pH, Redox, temperature						
					A	Actuator module - pump and analogue output						
						Module 2:						
					0	Not in use						
					M	Sensor module - pH, Redox, temperature						
					A	Actuator module - pump and analogue output						
						Module 3:						
					P	Mains power supply, alarm relay, solenoid valve relay						
					N	Mains power module without relay						
						Applications:						
					S	Swimming pool						
						Preset language:						
						DE	German					
						EN	English					
						ES	Spanish					
						FR	French					
						IT	Italian					
							Approvals:					
							01	CE-mark				

DXCa W 0 0 1 0 0 P S EN 01

See Section 6
 GREEN PAGE PRICELIST
 for complete pool packages
 and accessories
 or consult Sydney office