

## 1 UV System Dulcodes M, type 1\*3ML/22/DN150

The system consists of following standard parts:

- 1 **Stainless steel glass bead blasted radiation chamber** with optimized inlet in order to achieve a even radiation of the whole water flow:

Steel quality of the radiation chamber:	AISI 316Ti
Installation:	horizontal according to dimension sheet
Nominal connection width:	DN 150
Maximum operating pressure:	10 bar
Length of radiation chamber:	850 mm
Minimum clearance for lamp replacement:	1.750 mm
Diameter:	219 mm
Weight when empty:	approx. 65 kg
Operating weight:	approx. 100 kg

- 1 **High grade quartz lamp protection tube**, easy to remove for cleaning purposes. With stainless steel cap. Enclosure rating IP65.

- 1 **Medium pressure UVC lamp, type Powerline 3 kW**  
Expected lamp lifetime approx. 10.000 operating hours.

- 1 **Highly selective UVC sensor** (can be calibrated, temperature and ageing stable)

- 1 **Motor driven wiper** for cleaning the lamp protection tube

- 1 **UV system controller:**

Processor controlled  
 Large, backlight LCD display  
 Multi-lingual display (English, French, German, Italian, Spanish)  
 Clear indication of operation status  
 Wiper control  
 Automatic rinsing in case of too high water temperature in the radiation chamber  
 Switch off of the UV system in case of too high water temperature  
 Automatic start-up rinse  
 Automatic lamp afterburning  
 Automatic free rinse  
 Calibration of UVC sensor, choice of relative (in %) or absolute (in W/m<sup>2</sup>)  
 Display of UV intensity  
 UV intensity trend display  
 UV intensity monitoring  
 Adjustable lamp power (3 steps)  
 Lamp current monitoring

Display of the water temperature  
Display of operating hours since last lamp replacement  
Display of entire operating hours  
Display of number of ignitions since last lamp replacement  
Display of entire number of ignitions  
In the event of a fault: Cause of fault displayed in plaintext  
Password protected keypad

**Operating and alarm outputs:**

Stop valve (output voltage 230 V / 0.2 A)  
Rinse valve (output voltage 230 V / 0.2 A)  
Booster pump (switch output 230 V / 2.5 A)  
Pre-alarm: Below UV intensity pre-alarm threshold (switch output 230 V / 2.5 A)  
Alarm: Below UV intensity minimum threshold (switch output 230 V / 2.5 A)  
Combined fault indicator (switch output 230 V / 2.5 A)  
UV intensity (Standard output 0/4 - 20 mA)

**Operating inputs:**

Fault (e.g. flow monitor)  
Pause

**1 Ballast:**

Lamp monitoring  
Adjustable lamp power (3 steps)

**1 Switch cabinet**

Height: 1.400 mm  
Width: 600 mm  
Depth: 300 mm  
Cable length: approx. 8 m  
Weight: approx. 100 kg  
Enclosure rating: IP 43

**System electrical data**

Power supply: 3 ~ PEN 400/230 V, 50 or 60 Hz  
Power: 3.200 W

**Permissible operating temperatures**

Ambient temperature: 5 to 40 °C  
Water temperature: 5 to 40 °C