ULTRAAQUA.COM

NEW UV SENSOR DEDICATED FOR POOL WATER

THE WORLD'S MOST EFFICIENT UV FOR SWIMMING POOL WATER

MULTIRAY SERIES

FOR POOL WATER

ULTRAAQUA
UV DISINFECTION SYSTEMS

ULTRAAQUA MULTIRAY MEDIUM-PRESSURE SYSTEMS ARE DESIGNED AND OPTIMIZED FOR DISINFECTION AND CHLORAMINE REDUCTION IN POOLS.

- Lamps scientifically optimized for pools. Chloramine, Cryptosporidium and Giardia excellence
- Electropolished high grade steel or plastic for excellent ressistance against chlorides
- Energy saving due to electronic ballast capable of lamp dimming based on sensor value, combined chlorine level or timer
- Insignificant head loss
- PLC control module with touchscreen
- Double security against overheating
- Operating pressure up to 10 bar

Scientific research conducted over the last 10 years have shown that during normal operation of a swimming pool the majority of the combined chlorine measured is composed of organic chloramine compounds. Based on this knowledge, ULTRAAQUA has conducted research into developing dedicated medium pressure UV lamps and reactors to continuously photolyze the organic combined chlorine from the swimming pool water to maintain a low level. By synthesizing organic chloramines from the majority of the nitrogen precursors introduced into swimming pool water, ULTRAAQUA has conducted experimental investigations and process modelling studies to quantify the photolysis process in the MP-UV reactors providing proprietary kinetic data for photolysis of several organic combined chlorine compounds:

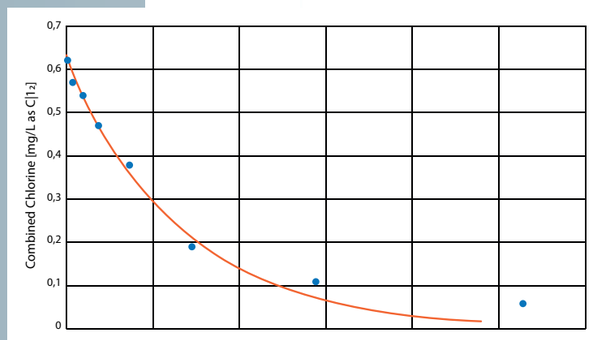


Figure 1 Measured and modelled photolysis of a specific organic chloramine with an Ultraaqua 3kW medium pressure UV reactor.

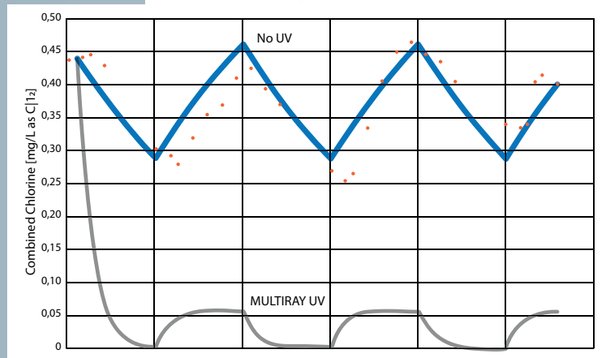
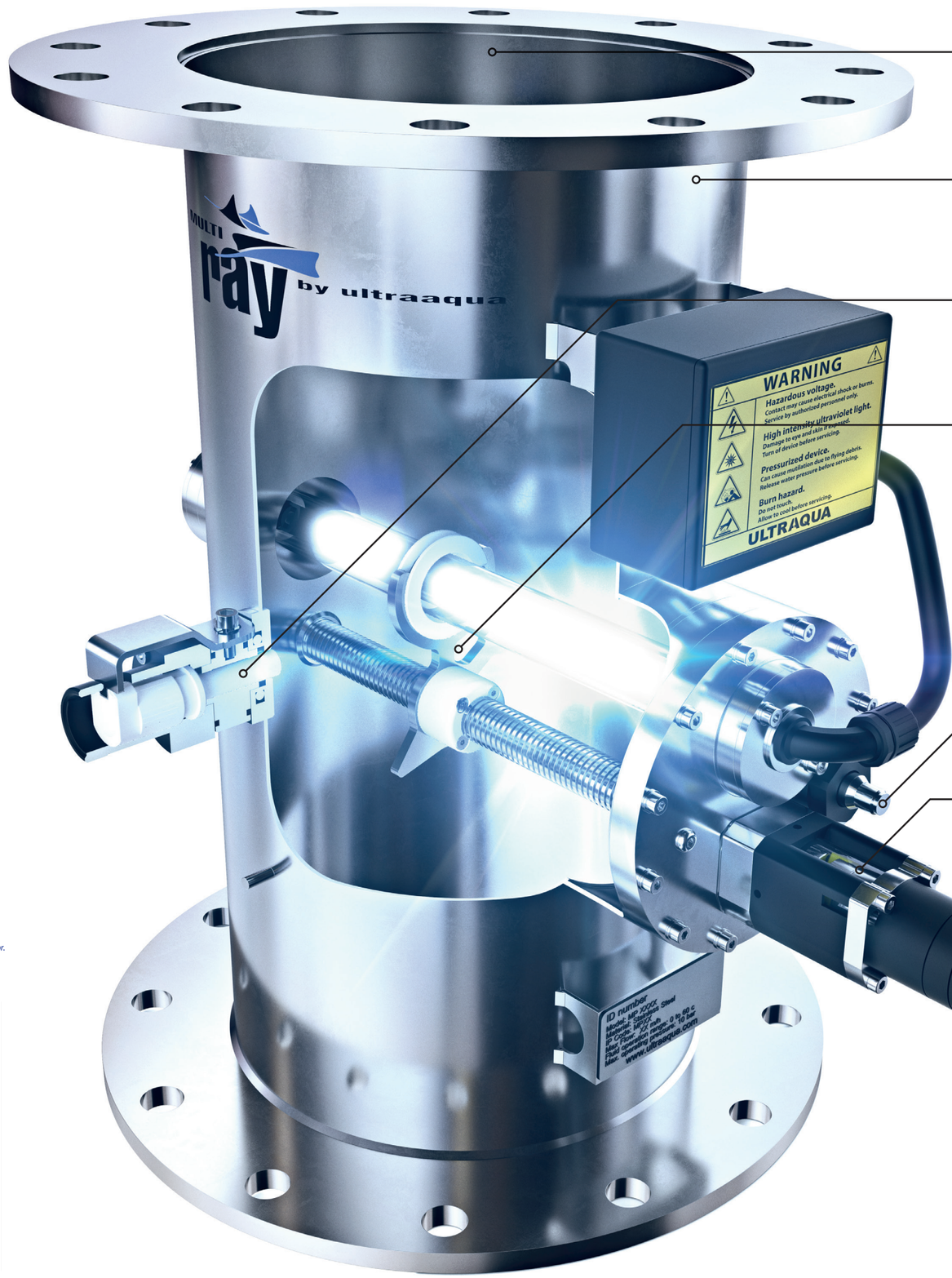


Figure 2 Effect of MP-UV treatment on the combined chlorine level of a pool.



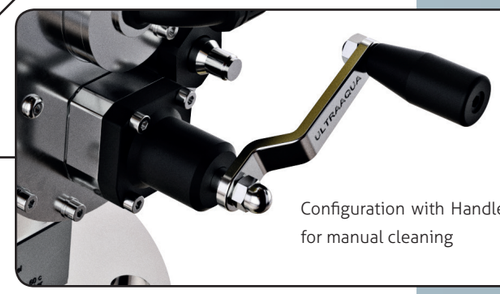
All Internal parts from UV resistant PTFE or high grade chloride resistant steel

Total blockage of UV leaving reactor for PVC system protection (optional)

Sensor easily cleaned, serviced or replaced under operation due to integrated valve

High quality automatic wiper mechanism design

Fail proof cleaning operation with proximity sensor



Configuration with Handle for manual cleaning

STANDARD SYSTEMS UP TO 12KW

Larger systems upon request

ULTRAAQUA UV ON DUTY IN POOLS WORLDWIDE

MODEL OVERVIEW

GENERAL SPICIFICATIONS

	Max flow for disinfection*	Max. chloramine reduction flow**	Lamp type	Max power consumption	Connection flange PN10 / corresponding plastic pipe	UV Reactor dimension H W D
MP1000	88 m³/h	55 m³/h	Ultraswim 1000W	1.1 kW	DN 150 / D160 / ANSI 6"	350 x 650 x 400 mm
MP2000	248 m³/h	155 m³/h	Ultraswim 2000W	2.2 kW	DN 250 / D250 / ANSI 10"	350 x 550 x 400 mm
MP3000	344 m³/h	220 m³/h	Ultraswim 3000W	3.1 kW	DN 250 / D250 / ANSI 10"	520 x 600 x 400 mm
MP6000	792 m³/h	510 m³/h	2 x Ultraswim 3000W	6.2 kW	DN 300 / D315 / ANSI 12"	520 x 850 x 500 mm
MP9000	1200 m³/h	800 m³/h	3 x Ultraswim 3000W	9.3 kW	DN 300 / D315 / ANSI 12"	520 x 850 x 500 mm
MP12000	1680 m³/h	1100 m³/h	4 x Ultraswim 3000W	12.4 kW	DN 300 / D315 / ANSI 12"	520 x 850 x 500 mm

* Max. flow for general disinfection calculated at UVT 96%, min. UV dose 30 mJ/cm2

** Max. flow for chloramine reduction calculated at UVT 96%, min. UV dose 60 mJ/cm2

BETTER THAN THE COMPETITION

Robust automatic wiper system(optional)
Reduces the downtime and keeps the UV running optimal.

Protection against chlorine resistant organisms
Excellenct protection against Cryptosporidium and Giardia.

Excellent corrosion resistance
Designed for optimal chloride resistance

Low headloss design
Minimizes the need for additional pumping.

Complete removal of combined chlorine
Lamp optimized for combined chlorine removal

8.000h lamp lifetime
Guaranteed lifetime with full payback reduction.

Excact precalculation
Scientificly validated design tool for all pool designs determines final combined chlorine result

PLC control with touch screen
Advanced dimming functionality.
All relevant interfaces and connectors available

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