ON DUTY IN POOLS WORLDWIDE

MULTIRAY SERIES

THE WORLD'S MOST EFFICIENT POOL WATER UV

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 x W x D
MP1-1000SS	120 m^3/h	65 m^3/h	ULTRATHERM 1000W	1.0 kW	DN 150 / D160 / ANSI 6"	500 x 650 x 400 mm
MP1-2000SS	248 m^3/h	155 m^3/h	ULTRATHERM 2000W	2.0 kW	DN 200 / D215 / ANSI 8"	500 x 650 x 400 mm
MP1-3500SS	344 m^3/h	250 m^3/h	ULTRATHERM 3500W	3.5 kW	DN 250 / D250 / ANSI 10"	500 x 700 x 450 mm
MP2-3500SS	792 m^3/h	600 m^3/h	2x ULTRATHERM 3500W	7.0 kW	DN 300 / D315 / ANSI 12"	650 x 850 x 500 mm
MP3-3500SS	1200 m^3/h	900 m^3/h	3x ULTRATHERM 3500W	10.5 kW	DN 300 / D315 / ANSI 12"	650 x 850 x 500 mm
MP4-3500SS	1680 m^3/h	1200 m^3/h	4x ULTRATHERM 3500W	14.0 kW	DN 300 / D315 / ANSI 12"	650 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

BENEFITS OF ULTRAAQUA MEDIUM-PRESSURE UV SYSTEMS

ROBUST AUTOMATIC WIPER SYSTEM(OPTIONAL)
Reduces the downtime and keeps the UV running optimally

PROTECTION AGAINST CHLORINE-RESISTANT ORGANISMS
Excellent protection against Cryptosporidium and Giardia

LOW HEADLOSS DESIGN
Minimizes the need for additional pumping

9.000H LAMP LIFETIME
Guaranteed lifetime with full payback reduction

PLC CONTROL WITH TOUCH SCREEN
Advanced dimming functionality.
All relevant interfaces and connectors available

EXACT PRECALCULATION
Scientifically validated design tool for all pool designs determines final combined chlorine result

COMPLETE REMOVAL OF COMBINED CHLORINE
Lamp optimized for combined chlorine removal

EXCELLENT CORROSION RESISTANCE
Designed for optimal chloride resistance

ULTRAAQUA
UV DISINFECTION SYSTEMS

WWW.ULTRAAQUA.COM

EXCELLENT PROTECTION AGAINST CRYPTOSPORIDIUM & GIARDIA AND COMPLETE REMOVAL OF COMBINED CHLORINE

CONTACT ULTRAAQUA • +45 7023 1020 • SALES@ULTRAAQUA.COM • WWW.ULTRAAQUA.COM

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 for excellent resistance 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 modeling studies to quantify the photolysis process in the MP-UV reactors providing proprietary kinetic data for photolysis of several organic combined chlorine compounds:

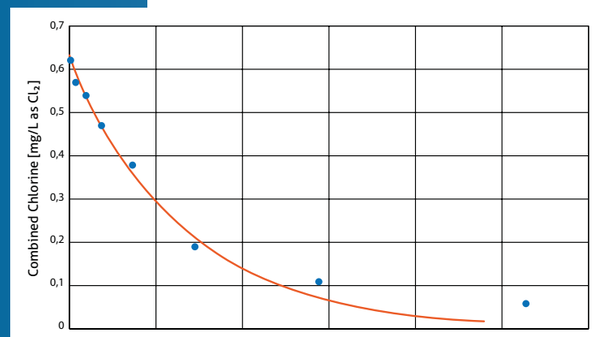


Figure 1 Measured and modelled photolysis of a specific organic chloramine with an Ultraaqua 3kW medium pressure UV reactor.

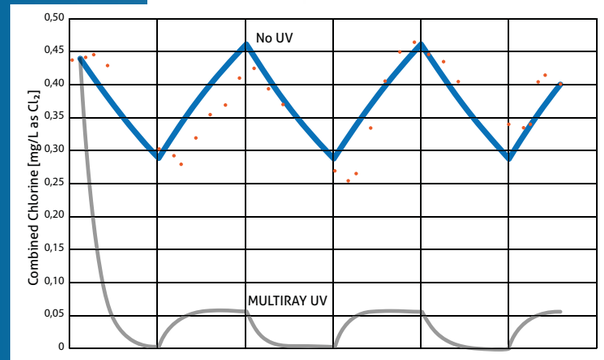
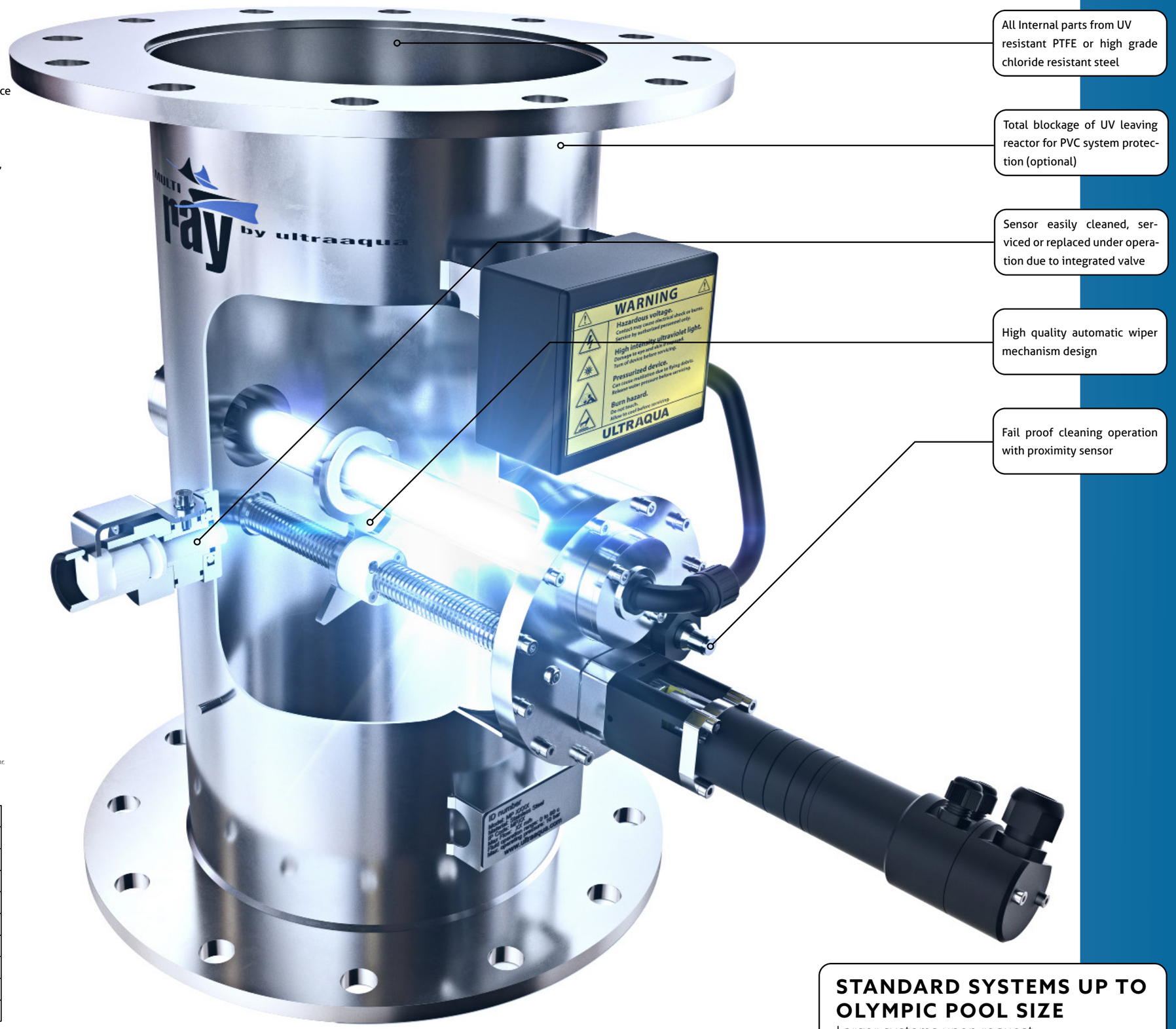


Figure 2 Effect of MP-UV treatment on the combined chlorine level of a pool.



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

STANDARD SYSTEMS UP TO OLYMPIC POOL SIZE
Larger systems upon request