



# UV Disinfection in Wastewater Treatment Systems

UV disinfection is the process of choice for numerous applications involving the disinfection of wastewater. The disinfection as an additional purification step is required for water reuse purposes like irrigation or for stricter requirements on the effluent quality of the wastewater treatment system.

## Applications

- Disinfection of effluent water from a wastewater treatment plant to reduce faecal bacteria
- Water reuse for gardening or other purposes
- Direct disinfection of outflow water or disinfection of additional water storage tank

## Consisting of

- Stainless steel reactor with UV low pressure lamps
- Control unit in plastic or steel case with hour meter and function display
- Connections for in- and outflow
- Fastening materials and operating manual

## Technical Data

- Minimum dose rate: 400 J/m<sup>2</sup>
- Lifetime: in a range of 8000 h – 9000 h at 1 – 3 switching operations per day
- Lamp power: 40 – 400 W
- Flow rate: up to approx. 20 m<sup>3</sup>/h (1000 PT) depending on UV lamp power and water transmission (other sizes on request)
- Transmittance range: from 50 – 99%/1 cm
- Water temperature: 5 – 50 °C
- Maximum pressure: 9 bar
- Power supply: 115 – 230V 50/60Hz
- Protection class: IP65

## Advantages of UV disinfection

- Killing germs within seconds
- Low operating costs
- No modified chemical composition of the water
- No use of chemicals
- Highest operational safety
- Low maintenance, easy operation

