

Wallace & Tiernan® UV Disinfection Systems

Barrier® A UV Systems

Product Overview

Barrier® A UV systems, equipped with low-pressure amalgam lamps, provide a cost-effective, operator-friendly solution for low-and-medium flow rate disinfection applications ranging from 10 to 150 m³/h (44 to 660 US gpm). The amalgam UV lamp-based systems result in small-sized installations with the lowest life-cycle cost. These powerful, high efficiency lamps emit UV-C light at a wavelength of 253.7 nm. Adding the Barrier® UV system to other disinfection processes provides a multi-barrier approach, and ensures complete inactivation of all waterborne pathogens. The Barrier® A reaction chamber is characterized by optimal hydraulics and low pressure loss, ensuring a high efficiency of the UV system.

Applications

- Potable water
- Swimming pool water
- Industrial process and wastewater, e.g. food & beverage, pharmaceutical, and fish hatcheries

Standard Features

- Absolute calibrated UV sensor for optimal performance control
- Hydrodynamically optimized chamber design
- Freely selectable operating language and adjustable units for worldwide use
- Reaction chamber made of stainless steel AISI SS 316L

Key Benefits

- Energy efficient with low-pressure amalgam UV lamps and electronic ballasts
- Extremely low pressure loss
- Long service life of the UV lamps and components
- Low life-cycle cost with hydrodynamically optimized chamber design
- Ease of installation, maintenance and operation
- Effective cleaning mechanism; no need to interrupt operation of the UV system
- Easy user interface

Optional Features

- Manual or automatic cleaning system (automatic for Barrier® A 45 system or larger)
- DVGW certification for Barrier® A 45 and A 120 systems
- Chemical cleaning system



Product Line Sheet

Technical Data

Barrier® A Series of UV Systems

Model	Capacity ¹	Connection	Power consumption	Electrical supply	WTL Lamps	Weight dry	Dimensions UV chamber (A x H x L)	Dimensions control panel (H x W x D)
A 25	23 m ³ /h 101 US gpm	RP 2" NPT 2"	230 W	1/N/PE AC 230 V, 50 Hz 120 or 240 V, 60 Hz, 1 phase, 2-wire	1 x 200	10 kg 22 lbs	280 x 214 x 990 mm 11" x 8-7/16" x 25-4/10"	600 x 380 x 210 mm 23-5/8" x 15" x 8-3/10"
A 45 ²	41 m ³ /h 181 US gpm	DN 125 acc. DIN 2576 5" 150-lb ANSI flange	230 W	1/N/PE AC 230 V, 50 Hz 120 or 240 V, 60 Hz, 1 phase, 2-wire	1 x 200	46 kg 101 lbs	430 x 406 x 1300 mm 16-15/16" x 16" x 51-3/16"	600 x 380 x 210 mm 23-5/8" x 15" x 8-3/10"
A 75	65 m ³ /h 286 US gpm	DN 125 acc. DIN 2576 5" 150-lb ANSI flange	440 W	1/N/PE AC 230 V, 50 Hz 120 or 240 V, 60 Hz, 1 phase, 2-wire	2 x 200	46 kg 101 lbs	430 x 406 x 1300 mm 16-15/16" x 16" x 51-3/16"	600 x 380 x 210 mm 23-5/8" x 15" x 8-3/10"
A 120 ²	97 m ³ /h 427 US gpm	DN 125 acc. DIN 2576 5" 150-lb ANSI flange	650 W	1/N/PE AC 230 V, 50 Hz 120 or 240 V, 60 Hz, 1 phase, 2-wire	3 x 200	46 kg 101 lbs	430 x 406 x 1300 mm 16-15/16" x 16" x 51-3/16"	760 x 600 x 210 mm 30" x 23-5/8" x 8-5/16"
A 150	127 m ³ /h 559 US gpm	DN 125 acc. DIN 2576 5" 150-lb ANSI flange	860 W	1/N/PE AC 230 V, 50 Hz 120 or 240 V, 60 Hz, 1 phase, 2-wire	4 x 200	46 kg 101 lbs	430 x 406 x 1300 mm 16-15/16" x 16" x 51-3/16"	760 x 600 x 210 mm 30" x 23-5/8" x 8-5/16"

¹ Capacity at a UV dose of 400 J/m², end of lamp life, a UV Transmittance (254 nm; 1 cm cell) of 98 %, and based on the multiple point source summation method

² Also available in DVGW certified execution; please consult factory or individual datasheet for biosimetrical certified capacities (DVGW - Internationally recognized authority on certification of UV disinfection systems. DVGW - German Technical and Scientific Association for Gas and Water)

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