Wedeco Acton PE

UV DISINFECTION SYSTEM
FOR CHALLENGING WATER CONDITIONS



Wedeco Acton PE is a closed UV disinfection reactor designed to withstand the corrosive conditions in applications like aquaculture farms, aquaria, saltwater thermal pools and well boats. It is made of polyethylene HD-PE (PE100) to endure saltwater and biological elements in such environments, guaranteeing resiliency and performance also in demanding conditions.

Excellent disinfection rate

The Wedeco Acton PE ensures aquaculture biosecurity and maintains ideal hygienic conditions for water intake, outflow and recirculation to prevent growth of pathogenic bacteria, fungi and viruses. This guarantees higher productivity rate, lower fish mortality and better quality fish.

High capacity at low energy consumption

The Acton PE uses Wedeco EcoRay® lamps. This technology provides high power per lamp (600 W) and emits proportionally high UVC in both dimmed mode and at high power level, allowing for signifi cant energy savings. The sensor-driven OptiDose function monitors real-time conditions and optimizes the dose to meet current demand.

Assured compliance

• Micro-biologically tested by independent third party in accordance with US EPA - UVGDM*
• Pending approval by the Norwegian Veterinarian Institute (NVI)
• Germicidal, ÖNORM compliant UV intensity monitoring
• CE and UL compliant

Flexibility and easy operation

The Acton PE covers high fl ows up to 829 m³/h in one single reactor. It allows for various standardized installation options and fl ange positions. Lamp replacement is easy and does not require any tools. Thanks to the high power per lamp, fewer lamps are needed and associated maintenance is reduced. Acton PE units are equipped with the unique EcoTouch controller with a user-friendly graphic touch panel, optionally connecting to SCADA systems (via bus).

Designed to last

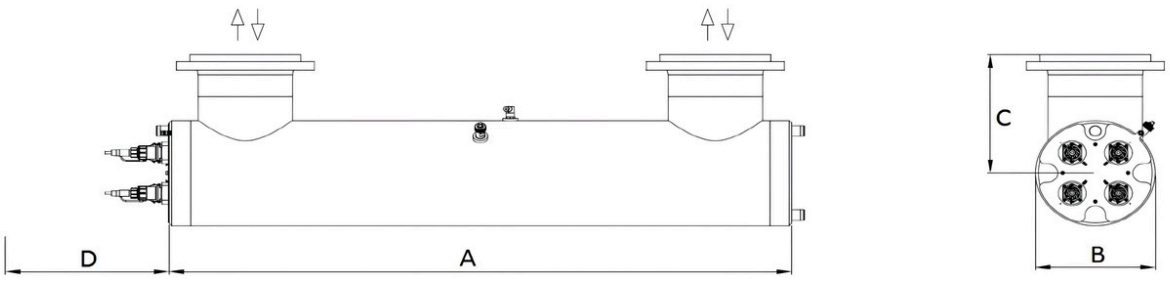
The Acton PE is made of high quality polyethylene which is non-corrosive and very reliable in harsh water conditions. The design, including lamps and quartz sleeves, is tested for rough conditions and vibration. The EcoRay® lamp technology guarantees 14,000 operating hours per lamp.

*160e, 260e, 460e and 660e

Xylem has decades of experience of providing UV systems to the aquaculture industry. UV has been proven highly effective against aquaculture-specifi c pathogens, e.g. ISA virus and Aeromonas Salmonicida, without negative effects on the process water quality.

	Acton 27e PE	Acton 160e PE	Acton 260e PE	Acton 460e PE	Acton 660e PE
UV Transmittance, Flowrate and Certifications					
UV transmittance range in % (1cm)			> 70%		
Maximum flow rate (m³/h) *	80	169	399	653	829
(MGD) *	0.5	1.1	2.5	4.1	5.3
UV Lamps and Monitoring Systems					
Lamp Technology			Ecoray®		
Power per Lamp (W)	350		600		
(MGD) *	1	1	2	4	6
Lamp life (hours)			14,000		
UV intensity monitoring			Germicidal, ÖNORM compliant		
Individual lamp monitoring			Yes		
UV Reactor					
Protection class			IP 65		
Cleaning system			Manual, Optional: CIP system		
Reactor material			High Quality HD-PE (PE100)		
Maximum operating pressure (bar/PSI) ***			6 / 87		
Flange sizes (DN)	100	150	250	300	350
Dimensions (A) (mm)	890	1580	1580	2078	2100
Dimensions (B) (mm)	355	355	355	400	500
Dimensions (C) (mm)	290	308	328	450	400
Dimensions (D) (mm)	910	1600	1600	2100	2100
Electrical Cabinets					
Ballast type			Electronic, high-efficiency, variable output		
Control philosophy			fix power or dose-pacing		
Controller			EcoTouch, optional with bus interface or PLC		
Material construction			Painted sheet steel; Optional: stainless steel 304/1.4301		
Electrical Standards			CE, UL/cUL		
Common outputs			System status, Lamp status, Alarm messages, Process values		
SCADA communication			Optional: via bus interface		
Protection class / Cooling			Ventilated: IP 54 / cUL type 12; optional: A/C		
Supply voltage / Frequency / Net			CE: 230 V / 50 – 60 Hz, (TNS/TNC net); 1L / N / GND UL/cUL: 277/480 V, 60 Hz, (5 Wire WYE); 3L / N / GND		400 - 480 / 50 - 60; 3L / N / GND (CE: TNS/TNC net)
Power consumption (kW), ventilated; approx	0.46	0.71	1.38	2.62	3.90

*According to ISO 21630:2007



SPECTRA®
PROFESSIONAL UV SOLUTIONS

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