

VXM RANGE - ULTRAVIOLET DISINFECTION SYSTEMS

DESIGNED FOR INDUSTRIAL APPLICATIONS



Evoqua's VXM range from the ETS-UV™ family of products is designed for superior disinfection of industrial water in applications requiring performance at low UV transmittance or requiring high doses. The environmentally friendly, chemical-free technology is fully configurable to meet individual system needs whether the application is food & beverage, pharmaceutical manufacture, healthcare, electronics, beverage production or aquaculture disinfection.

HIGHLY EFFICIENT & COST EFFECTIVE

Using energy efficient UV lamps and the latest variable power electronic ballasts, Evoqua's VXM range provides cost-effective and efficient water treatment with flexible options for easy integration. The medium pressure polychromatic lamps, combined with the variable power option allows the operator to minimize OPEX costs while still delivering the required treatment effectiveness.

The range of options, from surface finishes to pipe connections allows the user to configure the product easily to their specific requirements. Where required, the highly efficient automatic wiper system can be added as an option, reducing maintenance downtime even further for applications with poor water quality.

SOPHISTICATED CONTROL SYSTEM

The Spectra 3 control system is a sophisticated microprocessor designed for control flexibility and system integration. A range of user-selectable analog and digital inputs and outputs, combined with Modbus® capability, allow simple connection to a SCADA or BMS system. The Spectra 3 also provides a data logging capability.

INCREASE PRODUCTION UPTIME

Operators will benefit from the patent-pending* TwistLok™ lamp configuration, combining a simple lamp connection with a mechanical safety interlock for safe and speedy lamp replacement. In addition, the V-Clamp quartz seal system ensures that the seal can be fitted accurately without stressing the quartz sleeve or having a leaking seal. The systems use the latest AT-900 UV intensity system, traceable to NIST standards to provide an effective method of monitoring performance, ensuring confidence in the system operation at all times. Using the feedback from the AT-900 also enables the power to the lamps to be varied depending on the quality of water to be treated, allowing power savings and increased lamp life for larger systems.

SPECIFICATIONS

- Efficient and enhanced power control
- High performance lamps
- Simple, fast, and reliable maintenance
- Enhanced performance monitoring by sophisticated control system
- Suitable for high doses (> 1000 mJ/cm²) and low UVT's (< 45% UVT)
- Built in safety features
- MODBUS or PROFIBUS connectivity

CHAMBER SPECIFICATIONS

Features	Standard Chamber Specification	Options
Lamp Life	9,000 Hours	
Lamp Design	TwistLok™ Quick Release, Enhanced Safety, Medium Pressure Lamp	
Lamp and Wiper Access	Single Ended Access (Excl VXM-125-4 + VXM-180-3/4)	
Design Pressure	150 psi Design (225 psi Test)	
Variable Power	100% to 30% Power (Automatic Dose Pacing)	
Connection Type	ASME Class 150	EN 1092 PN10, EN 1092 PN16, DIN 32676, ASME BPE DIN 11851 (VXM-180-3 Only)
Material Construction	316L Stainless Steel	
Internal Surface Finish	32 Ra (VXM-25-4/6, VXM-180-3/4 Only) 63 Ra (VXM-260-10, VXM-460-10, VXM-660-10, VXM-860-12 Only)	0.4 Ra (VXM-25-4/6, VXM-73-4 Only) 0.8 Ra (VXM-260-10, VXM-460-10, VXM-660-10, VXM-860-12 Only)
Internal / External Surface Treatment	Machine Polish	Electropolish (VXM-25-4/6, VXM-180-3/4 Only)
Quartz Type	High Purity Quartz Thimble/Sleeve	TiO2 Doped Quartz Thimble/Sleeve
Installation / Mounting	Adjustable Inlet/Outlet Orientation	Z-type (VXM-180-3/4 Only)
Wiper System	Not Included as Standard	Automatic Wiper System (Excl VXM-180-3)
Sensors	1 Monitor Package Incl NIST UV Sensor + PT100 Temp Sensor	
Vent Port	NPT	BSP, DIN 32676, ASME BPE DIN 11851
Drain Port	NPT	BSP, DIN 32676, ASME BPE DIN 11851
Seals	EPDM	

CONTROL PANEL SPECIFICATIONS

Features	Standard Control Panel Specification	Options
Material	Epoxy Coated Mild Steel - RAL 7035	Stainless Steel (304)
Control Type	Microprocessor	
Power Supply	Electronic Ballast	
Panel Rating	NEMA12	
Ventilation	Forced Air Cooled (Fan)	
Interface	Spectra Membrane	Spectra Touch
Communication	Modbus (RS-422 / RS-485)	Profibus DP
Protection	Door Locked Isolator	
Operating Temperature	Max Working Ambient +113°F	
Digital Inputs / Outputs	3 selectable	Additional 3
Analogue Inputs / Outputs	1 selectable	Additional 1

TRANSFORMING
WATER
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LIFE



558 Clark Road Tewksbury, MA 01876

+1 (866) 926-8420 evoqua.com

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Disinfection performance will vary based on product, system design, facility operating conditions, water quality, and maintenance protocols. Refer to product, system, installation and validation documentation for details.

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