xylem + ● evoqua

VXM RANGE - ULTRAVIOLET DISINFECTION SYSTEMS

DESIGNED FOR INDUSTRIAL APPLICATIONS

Evoqua's VXM range from the ATG™ 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 light sources 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 configurable 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 of 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 analogue and digital input and outputs, combined with Modbus® capability, allow simple connection to a SCADA or BMS system. The Spectra 3 also provides a data logging facility.

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.

*Patent pending in some countries.

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 (>1000mJ/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	10 Barg Design (15 Barg Test)	
Variable Power	100% to 30% Power (Automatic Dose Pacing)	
Connection Type	EN 1092 PN10	DIN 32676 EN 1092 PN16, ASME Class 150, DIN 32676, ASME BPE DIN 11851 (VXM-180-3 Only)
Material Construction	316L Stainless Steel	
Internal Surface Finish	0.8 Ra (VXM-25-4/6, VXM-180-3/4 Only) 1.6 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 Sleeves	TiO2 Doped Quartz
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	BSP	NPT, DIN 32676, ASME BPE DIN 11851
Drain Port	BSP	NPT, 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	
Ingress Protection	IP54	
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 +45°C	
Digital Inputs / Outputs	3 selectable	Additional 3
Analogue Inputs / Outputs	1 selectable	Additional 1

Evoqua UV disinfection generator systems undergo third-party validation testing in accordance with the UVDGM (USEPA, 2006). Validated products are tested to confirm a minimum inactivation equivalent of 3 log (99.9%) for microorganisms in accordance with NSF/ANSI 50 and the UVDGM. Performance is not claimed nor implied for any product not yet validated; unvalidated products use single point summation calculations to provide delivered dose recommendations. Performance limitations depend on feed conditions, overall installed system design, and operation and maintenance processes; please refer to Operations Manuals. For more information: Contactus@evoqua.com