

# VX RANGE - MINI & MIDI ULTRAVIOLET DISINFECTION SYSTEMS



# **DESIGNED FOR INDUSTRIAL APPLICATIONS**

Evoqua's VX range from the ETS-UV™ family of products is designed for superior disinfection of industrial water in applications requiring flexibility and performance. The environmentally friendly, chemical-free technology is fully configurable to meet individual system needs whether the application is 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 VX Mini and Midi provide cost-effective and efficient disinfection with flexible options for easy integration. The low pressure, high output lamps, combined with the variable power\* option allows the operator to minimize OPEX costs while still delivering the required disinfection 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. With a range of user-selectable analog, 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 with the ability to remotely check the performance from a mobile phone or tablet when the equipment is connected to the internet.

#### **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**

- Horizontal or vertical installation options available
- Efficient and enhanced power control
- High performance, low energy consumption lamps
- Simple, fast, and reliable maintenance
- Enhanced performance monitoring by sophisticated control system
- Up to 1,400 GPM maximum flow rate
- Built in safety features
- MODBUS or Ethernet connectivity

<sup>\*</sup>Variable power is available on Midi products only.

<sup>\*\*</sup>Patent pending in some countries.

#### **CHAMBER SPECIFICATIONS**

Features	Standard Chamber Specification	Options
Lamp Life	Mini - 9,000 hours Midi - 12,000 hours (340w lamps) 16,000 hours (200w lamps)	
Lamp design	TWISTLOK™ Quick Release, Enhanced Safety	
Lamp and Wiper Access	Single Ended Access (Excl VX-1200-4 + VX-1340-4)	
Design Pressure	150 psi Design (225 psi test)	
Variable Power	Mini - Fixed Midi - 100% to 60% Power (Automatic Dose Pacing)	
Connection Type	ANSI 150	ASME BPE
Material Construction	316L Stainless Steel	
Internal Surface Finish	Mini - 16 Ra Midi - 32 Ra	Midi - 16 Ra
Internal / External Surface Treatment	Machine Polish	Electropolish
Quartz Type	High Purity Quartz Sleeves	
Installation / Mounting	Adjustable Inlet/Outlet Orientation Suitable for Vertical Mounting	
Wiper System	Not as standard	Automatic Wiper System
Temperature Probe	Mini - Not as Standard Midi - 1 Temperature Monitor Package	Mini - 1 Temperature Monitor Package
Vent Port	Yes	
Drain Port	Yes	
Seals	EPDM	FDA Viton

## **CONTROL PANEL SPECIFICATIONS**

Standard Control Panel Specification	Options
Epoxy Coated Mild steel - RAL 7035	Stainless Steel (304)
Microprocessor	
Electronic Ballast	
NEMA12	NEMA4X
Modbus (RS-422 / RS-485)	Modbus TCP, Ethernet IP
Door Locked MCCB Isolator	
Max Working Ambient +104°F	
120-240V (50/60 Hz)	
30ft	45ft, 90ft
	Epoxy Coated Mild steel - RAL 7035  Microprocessor  Electronic Ballast  NEMA12  Modbus (RS-422 / RS-485)  Door Locked MCCB Isolator  Max Working Ambient +104°F  120-240V (50/60 Hz)



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