

A black Davey AquaShield UV system is shown against a background of blue water splashes. The system consists of a top control box, a central manifold with a digital display, and two vertical filter housings at the bottom. A grey optional model cover is shown to the left of the main unit.

DAVEY

* KAQS-XS optional model cover shown



ASNZS 3497
Lic. 23355/1

Model Number:
AQS-S, AQS-XS
KAQS-S, KAQS-XS

WARRANTY
10 YEARS on stainless steel chamber
3 YEARS on electronic controller
12 MONTHS on UV Lamps and UV Sensors
12 MONTHS on Filter Housings

DAVEY AquaShield™

AQUASHIELD 3-STAGE UV SYSTEMS

FEATURES & BENEFITS

High Flow and Capacity

The system can handle up to 7 outlets turned on at the same time, disinfecting to the minimum recommended industry standard UV dose of 30mj@cm² @ 95% UVT at a high flow rate of 56.8 lpm. Most households seldom exceed 3 outlets on at one time.

Extended UV Lamp Life PLUS tool-free lamp changeover

Enjoy up to 14 months of UV lamp life - which is 2 months longer than any other system, reducing maintenance frequency and maintenance cost. The bayonet style lamp connector, allows for a convenient, easy tool-free lamp change.

Filter Housing Drain Plug

Allows you to drain all water from the housing making replacing cartridges lighter, easier and cleaner, saving time and effort.

Single Manifold Filter Housing Cap

Manifold cap reduces risk of leaks due to single piece design with no joins.

Flexible Installation Options

The systems horizontal UV chamber provides a more compact footprint and can be turned to allow inlet/outlet from left or right as required.

Smart Control Box for real time information

Fully enclosed control box with either LED (on model AQS-S) or LCD (on model AQS-XS) screens with lamp life count down, alarm and service codes.

Protection against Voltage Fluctuations

90 – 265V Wide input voltage protects against voltage fluctuations.

Upgrade Anytime

The AQS-XS Controller enables upgrading anytime with add on modules to allow for higher control, monitoring and reporting capabilities. Choose from the Remote Monitoring and Alarm Module, Solenoid shut off valve and many more.

Lamp Key (AQS-XS model only)

Peace of mind the water is being disinfected and safe for consumption with a genuine UV lamp, keys provided with every new lamp.

Note: Cannot treat water contaminated by metals, chemicals or algal toxins.

UV Water Disinfection

DAVEY

MODEL DESCRIPTIONS	
AQS-S	Includes, UV System, 20 micron poly pleated cartridge, 1 micron polyspun cartridge, smart controller
KAQS-S	Includes, UV System, 20 micron poly pleated cartridge, 1 micron polyspun cartridge, smart controller, wall mount cover
AQS-XS	Includes, UV System, 20 micron poly pleated cartridge, 1 micron polyspun cartridge, Xtra smart controller
KAQS-XS	Includes, UV System, 20 micron poly pleated cartridge, 1 micron polyspun cartridge, Xtra smart controller, wall mount cover

OPERATING LIMITS	
Flow Rates (subject to dosage, UVT and demand %UVT)	Recommended 56.8 l/min @ 30mj As a general guide, most households do not exceed 50 lpm demand at the same time.
Maximum system pressure	827kPa (120 PSI)
Water temperature range	0 – 40°C
Maximum ambient temperature	50°C
Lamp life	10,000 hrs (14 months)

ELECTRICAL DATA	
Supply Voltage	90-265V ~
Supply frequency	50-60Hz
Power (Total)	57W
Phase	1
Lamp	45W
Max input current	0.24A
Max output current	800mA

MATERIALS OF CONSTRUCTION	
PART	MATERIAL
Chamber	Polished 316L Stainless Steel
Wall mounting bracket	Powder coated steel
Chamber connections	1" Male NPT Supplied with BSP to NPT connections
Filter Housing connections	1" Female NPT Supplied with BSP to NPT connections

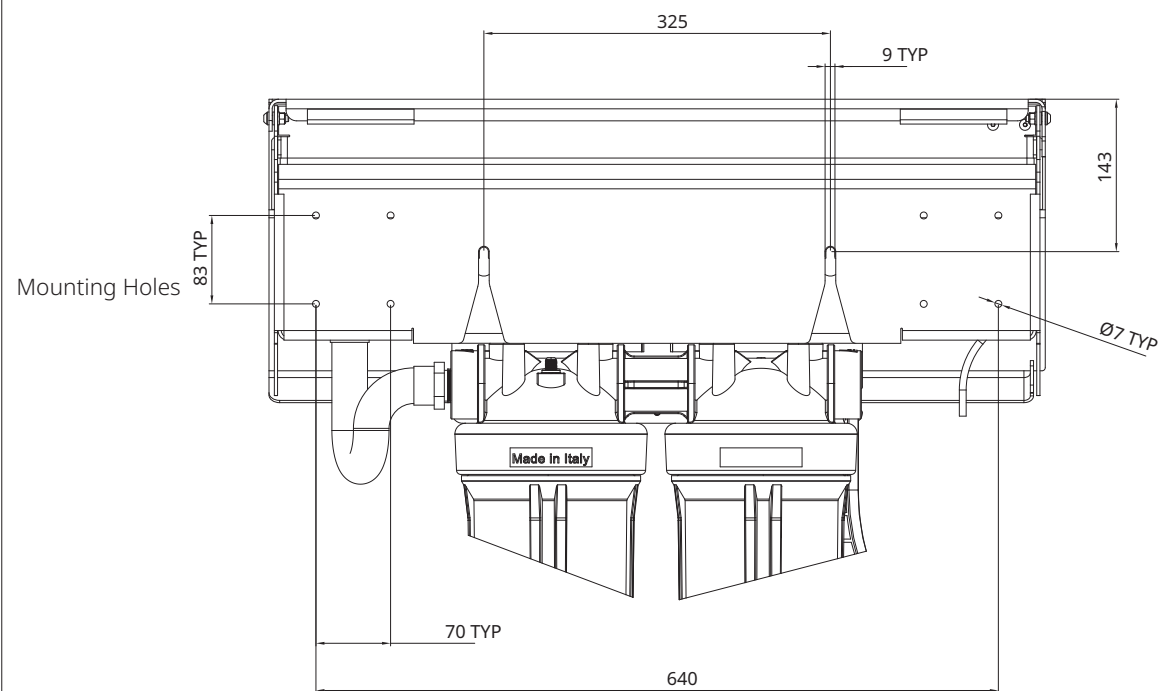
SERVICE INTERVALS	
UV lamp	Replace 14 months
UV quartz sleeve	Replace 14 months
Cartridge filters	Replace 6 - 12 months

WATER QUALITY	
Water quality is extremely important for optimum UV performance. Maximum recommended parameters are as follows:	
Hardness	120 mg/L – if hardness level is 120 mg/l or slightly below the quartz sleeve must be cleaned periodically in order to ensure efficient UV penetration; if above the water must be softened.
Iron (Fe)	<0.3 ppm (0.3mg/l)
Manganese (Mn)	<0.5 ppm (0.5mg/l)
Turbidity	<1 NTU
Tannins (organics)	<0.1 ppm (0.1mg/l)
UVT (transmittance)	>85% (Please contact Davey if water has a UVT that is less than 80% for pre-treatment recommendations)

UV DISINFECTION SYSTEMS	
Model	AQS-S / KAQS-S / AQS-XS / KAQS-XS
Flow Rate (@ 16 mj/cm² @ 95% UVT)	114 L/min
Flow Rate (@24.2 mj/cm² @ 95% UVT)	70 l/min
Flow Rate (@ 30 mj/cm² @ 95% UVT)	56.8 L/min
Flow Rate (@ 40 mj/cm² @ 95% UVT)	45.4 L/min
NOTE: Flow rates are based on flow velocity of 8.2 ft/sec (2.5 m/sec), flow rate limited to 84 L/min for 1" port before significant pressure drop is realised.	

PROTECTIVE COVER	
	- Protects the chamber and controller from rain and direct elements for outdoor installations - Enables the 3 Stage UV system to be set up left to right or right to left for ease of installation - Mounting holes are aligned with the UV rack AQS-S and AQS-XS for ease of installation - Slotted mounting design for easy installation - Lamp change through side of the cover holes, no disassembling of cover required - Powdercoated with matt satin black finish - Locking holes on the side for applying a pad lock (not supplied) to prevent unauthorised access or tampering with the controller

MOUNTING SPECIFICATIONS (mm)



DIMENSIONS (mm)

