


Technical data sheet

Manufacturer	AQUAFIDES
UV Disinfectionsystem	Multi-lamp system
Productfamily	COMPACT
System type	8 AF400 T



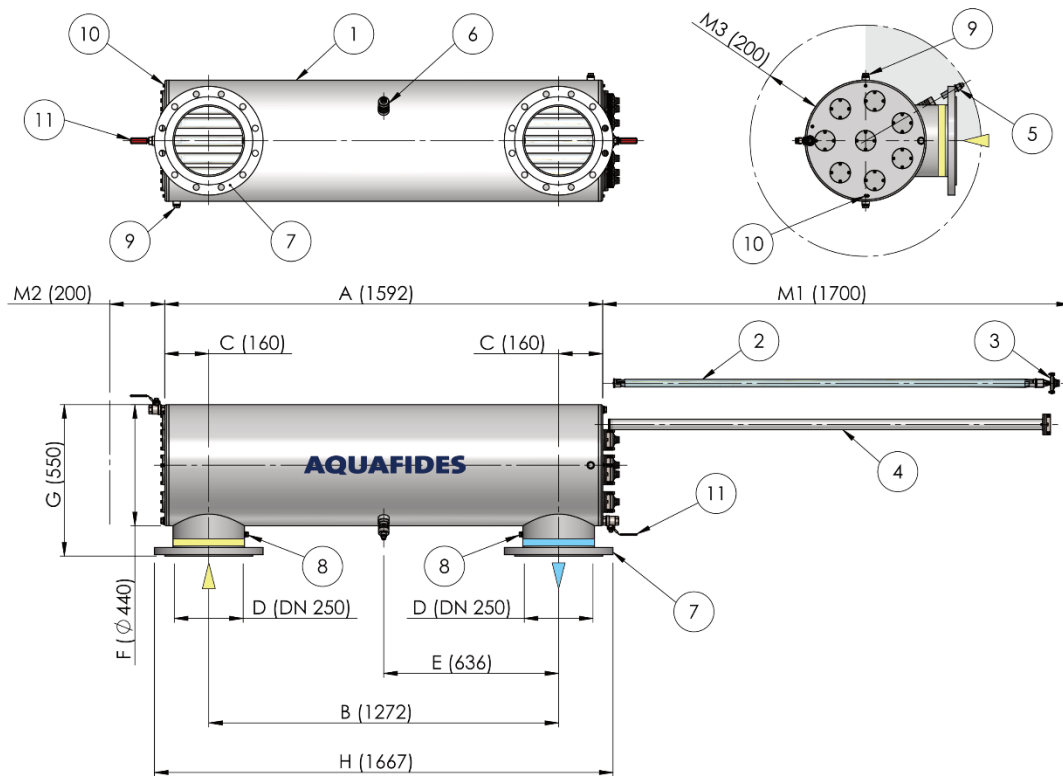
Irradiation chamber

Connection dimension	DN250 (10") PN 10	shape	U
Connectionsystem	Loose flange (EN 1092-1 type 02)	Material	
Vent valve and drainage square plug	G 1/2"	<i>DIN EN 10088-3</i>	1.4404
Sampling valve at inlet and outlet	G 1/4"	<i>EN Material designation</i>	X2CrNiMo17-12-2
Socket sensor connection system	COMPACT	<i>AISI</i>	316 L
Mounting thread	1"	<i>B.S.</i>	316S11
Irradiation chamber volume	206 l	Surface irradiation chamber	bath pickled
Weight without medium	175 kg	Design	
Weight with medium	381 kg	Operating pressure (MOP)	PN 10 EN 13445-3
Protection class	IP65	Installation position	horizontal, vertical (any)
Wiper system	-	Inlet/outlet distance	none
Wiper composition adaptable to pavement situation	-	Interior cleanable without disassembly	☉

Details wiper system

Material - Spindle nut	-	Drive mechanism	-
Quantity	-	AF-No. Actuator	-
AF-No. Spindle nut	-	AF-No. Sealing and bearing flange with spindle	-
Material - Guide bush	-	Protection class actuator	-
Quantity	-	Wiper system	
AF-No. Guide bush	-	HybridWiper configuration	-
Material - Sliding cap on basket	-	Quantity	-
Quantity	-	AF-No. HybridWiper	-
AF-No. Sliding cap on basket	-	Cleaning element sensor window	
Material - Retaining and positioning ring	-	Quantity	-
Quantity	-	Cleaning element configuration	-
AF-No. Retaining and positioning ring	-	AF-No. Cleaning element sensor window	-

Dimensions



Symbolic representation - No dimensional drawing

A - Length irradiation chamber	1592 mm	M1 - Maintenance area lamp	1700 mm
B - Centre distance inlet/outlet	1272 mm	M2 - Maintenance area	200 mm
C - Centre distance to reactor outer edge	160 mm	M3 - Maintenance area sensor	200 mm
D - Connection dimension	DN250 (10")		
E - Sensor position	636 mm		
F - Outer diameter irradiation chamber	440 mm		
G - Width irradiation chamber	550 mm		
H - Total length	1667 mm		

Should the maintenance ranges be undershot, please contact AQUAFIDES.

Quarz sleeve

Manufacturer	AQUAFIDES
Number of quartz sleeves	8
AF-No. quartz sleeves	A20400
Type of construction	Quartz tube with end cap
Design	Standard
Quartz sleeve installation	double-sided
Material quartz sleeve flange	
Quartz quality	Quality quartz glass
Quarz coating	-
O-Rings	EPDM

¹ measured with a wall thickness of 1mm

Quarz sleeve flange	1.4404
Dimensions	
Diameter quartz sleeve flange	38 mm
Wall thickness	2 mm
Length	1607 mm
Outer diameter flange	75 mm
Transmittance ¹	
Min. Transmittance @ λ_{254}	$\geq 87\%$
Min. Transmittance @ λ_{185}	$\geq 65\%$
Quarzcleaner	A80050

UV lamp

Manufacturer	AQUAFIDES
Number of lamps	8
Lamp type	AF400A
Technology	Low pressure amalgam lamp
Amalgamposition	Spot
AF-No. lamps	A00400
Power consumption (per lamp, including electronic ballast)	395 W
UV lamp current (normal operation per lamp)	3,4 A
Lamp efficiency	
Highest efficiency - λ_{254}	40,5 %
Highest efficiency - λ_{185}	0 %
UVC lamp output (new/lamp)	130,7 W
UVC lamp output (8.760 h/lamp)	91,5 W
Lamp connection	4-pin

Emitted spectrum	
Wavelength - λ_{254}	$\geq 85\%$
Wavelength - λ_{185}	0 %
Wavelength - $\leq \lambda_{240}$	filtered
Dimmability and control mode	
Power controlled	☉
Dimming range power	50
Current controlled	-
Dimming range current	-
Amalgam temperature stabilised	-
OptiBoost	-
Guaranteed lamp service life	see GTC
Expected lamp service life	14000 h
Medium temperature	0 ... 70 °C

Lamp flange

Material	PE-UHMW black
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Item no.	A40400
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Sensor connection system

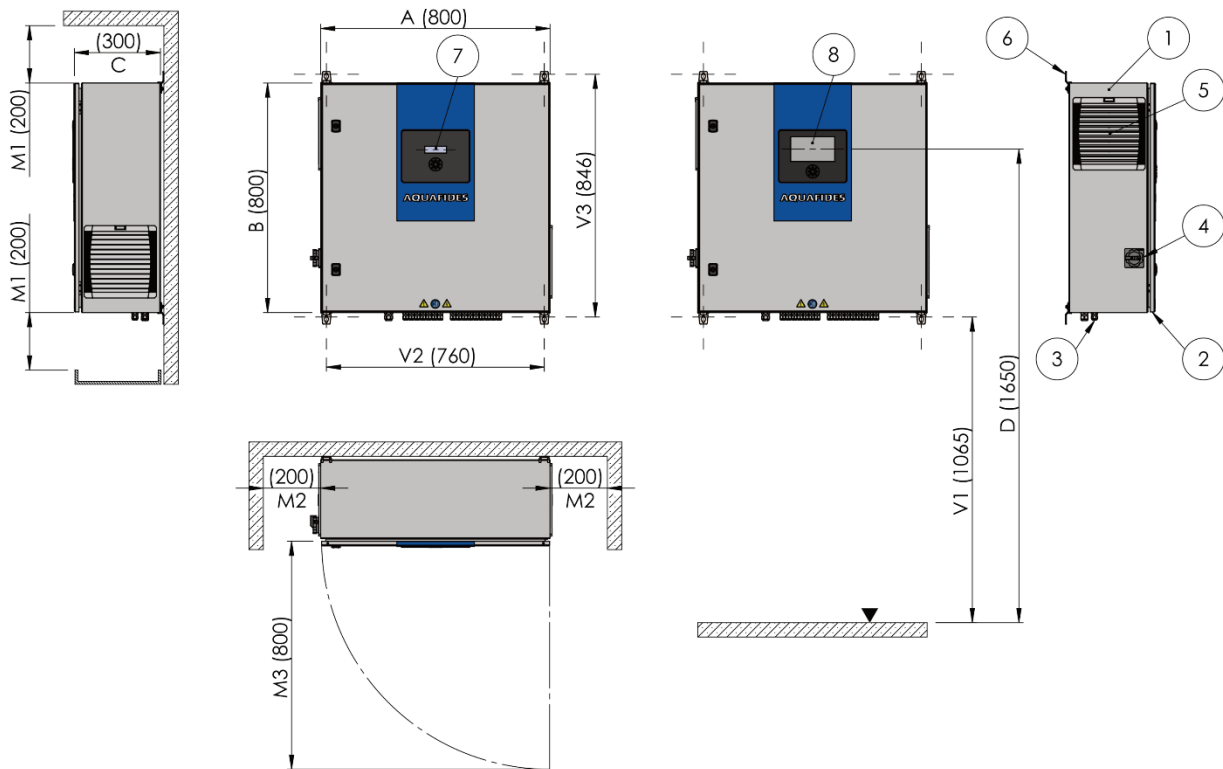
Sensor connection system type	COMPACT
Material	
Material housing	1.4404
Material O-ring	EPDM
Material quartz	High purity quartz glass

Low-gap	-
Wipeable	-
Wrench size WS	30
Mounting thread	1"
Article no.	A30100

UV sensor system

Manufacturer	AQUAFIDES	Recalibration period	1 Year
UV sensor type	DigiNorm	System structure	Bus RS485
Article no.	A30000	Operating mode	digital
Number of UV sensors	2	UV Measuring range	2 ... 500 W/m ²
Opening angle	160°	Standard signal output (switchable)	0/4 ... 20 mA
Version	ÖNORM M 5873-1:2020, DIN 19294-1:2020	Measuring accuracy	± 2 %
Type-tested	●	Selectivity - λ_{254}	≥ 99 %
Calibrated	●	Temperature stability	0 ... 75 °C
Recalibrated	●		

Control cabinet



Symbolic representation - No dimensional drawing

Type	Wallmount enclosures	Installation conditions ²	
Height	800 mm	Ambient temperature of control cabinet	+1°C ... +35°C
Width	800 mm	Ambient temperature Storage	-20°C ... +60 °C
Depth	300 mm	Humidity	max. 95%
Weight	0 kg	Outdoor installation	-
Material	Coated sheet steel	Protection class	IP54
Surface colour	RAL7035 Light gray	Thermal management	Active ventilation
Surface structure	Structured powder coating		

² For details, please refer to the "General installation and operating instructions" (6.2 Permissible ambient conditions).

Electrical specifications

Operating voltage	210 ... 250 V/AC	External fuse protection	D16 (3-pol.)
Mains frequency	50 ... 60 Hz	Power factor (normal operation)	0,99 cos ϕ
Maximum connected load	3250 W	EMC tested	●
Nominal connected load	-	Safe to touch	●
Power consumption	7,2 / 7,2 / 0,1 A	Connection cable	
Operating connection	3L/N/PE	Length	on site
Internal fuse protection	2x D13, 1x C6	Connector plug	-

Ballast

Manufacturer	AQUAFIDES	Operating mode	digital
Ballast type	Electronic	Current control (PHplus)	●
Design	Single	Power control	○
SlaveCard	●	Brownout/blackout detection	●
Item no.	A10400	Protection class	0
Weight	1,5 kg	Safe to touch	●
Number of ballasts	4	Cooling	passive
System structure	Internal BUS		

HMI and functions

Dimming Modus	off	Display	4-lines MasterCard
Dimming range	100%	Operation	5 push buttons
Permanent dimming	-	Main valve control	●
Dynamic dimming	-	Flush valve control	●
OptiBoost	-	Dose display	-
Wiper control	-	Flow control	-
Data logging	●	Multi-unit control	-
Trend monitoring	-	IO modules	-

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Internal	Internal BUS	Operating message	●
Modbus/TCP	-	External	0
FTP	-		

Device cable

Cable type	Lamp cable	Halogen-free	●
Article no.	A70021	Flame retardant	●
Connection/design	7/8" coupling 5-pole	Protection class (mounted)	IP68
Cores	17 x 1,5mm ²	Cable length	9 m
Sheath material	Polyurethane (PUR)		
Cable type	UV sensor cable	Halogen-free	●
Article no.	A70011	Flame retardant	●
Connection/design	M12x1 plug with vibration protection	Protection class (mounted)	IP68
Cores	17 x 0,34mm ²	Cable length	10,5 m
Sheathing material	Polyurethane (PUR)		
Cable type	Temperature sensor	Halogen-free	●
Article no.	A70105	Flame retardant	●
Connection/design	KTY210 on the irradiation chamber	Protection class (mounted)	IP68
Cores	14 x 0,34mm ²	Cable length	- m
Sheath material	Polyurethane (PUR)		
Cable type	○	Halogen-free	○
Article no.	○	Flame retardant	○
Connection/design	○	Protection class (mounted)	○
Cores	○	Cable length	○ m
Sheath material	○		
Cable type	-	Halogen-free	-
Article no.	-	Flame retardant	-
Connection/design	-	Protection class (mounted)	-
Cores	-	Cable length	- m
Sheathing material	-		
Cable type	-	Halogen-free	-
Article no.	-	Flame retardant	-
Connection/design	-	Protection class (mounted)	-
Cores	-	Cable length	- m
Sheathing material	-		
Cable type	-	Halogen-free	-
Article no.	-	Flame-retardant	-
Connection/design	-	Protection class (mounted)	-
cores	-	Cable length	- m
Sheath material	-		

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