



VGE Pro UV reactors

INOX and HDPE - Installation and user manual



MEMBER OF:  Sinvest Group BV





Important safety notes:

Make sure, that all of the following safety rules are fulfilled. The device must only be installed by qualified personnel to make sure all applicable safety rules are fulfilled. Additional safety rules and legal restrictions may apply depending on the country of operation.

- Risk of electric shock!
- Lethal high voltage is present inside the unit and at the terminals. Due to high voltage storage devices lethal voltages may be present inside the unit and at the terminals if the unit is switched off or disconnected from supply voltage.
- The unit must not be operated if there is any damage (e.g. mechanical damage after transport).
- The unit is intended for use in dry and chemically and biologically inactive environment only. Keep water and humidity away from the whole electrical assembly. Lethal voltages across the complete system can result from contact between lamp and water. A separate protective earthing of the complete system is mandatory.
- Disconnect unit from mains before any maintenance operation. Dangerous voltage may be present inside the unit energy storage devices even if the unit is disconnected from mains. Wait at least 10 minutes after disconnecting the unit from mains voltage before starting any service actions.
- Repeated rapid switching might lead to a fault. Do not turn off and on the unit within less than 10 seconds.
- During ballast section start up, in case of lamp defects or due to wrong lamp wiring high voltages up to 1200Veff may occur at the lamp terminals. This high voltage may be present for a couple of milliseconds until the internal protection circuits shuts down the ballast. At each ballast restart, after any temporary disconnection from mains voltage, the ballast will try to ignite the lamp once more, so again, high voltages may occur.
- The ballast does not provide galvanic insulation from mains at the lamp terminals.
- Harmful voltage occurs at the lamp terminals even if the ballast is in standby mode and the lamps are switched off.
- Never cut the lamp wires while the ballast is in operation. Risk of serious injury or death!
- The load for the fault detecting contacts has to be kept within the limits specified in the datasheet. It is recommended to use parallel operation of contacts instead of serial operation in case of summarizing fault detection.
- The insulated contacts of the status relays do not provide protection against electric shock. All wires of the error control loop have to be installed with appropriate protection against contact according to applicable regulations. The wires of the error control loop must never be accessed from outside the earthed cabinet without protection against contact. You may use insulation relays to access the control loop from outside the cabinet.

This device produces harmful radiation. Direct contact can pose a hazard to eyes and skin. Only check the operation of the UV-C lamp through the transparent parts of the unit.









- Warning - Due to the risk of injury, this product is not suitable for use by children or persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they are supervised or instructed on the use of the device by a person responsible for their safety.
- Warning - Risk of electric shock. If in doubt as to whether you have sufficient knowledge and experience, this device must always be connected by a certified electrician, according to the locally applicable standards and laws, with a properly earthed connection protected by a residual-current device.
- Warning - To reduce the risk of electric shock, a damaged cable should be replaced immediately if possible (Read also number 16).
- Warning - To reduce the risk of electric shock, the use of an extension lead is not recommended. Connect the device to an easily accessible mains outlet.
- Do not bury the connection lead. Never share connections and/or connection leads with lawn mowers, hedge trimmers or other equipment.
- Never install the unit at a location where it will be exposed to direct sunlight.
- Keep children away from this device and the electrical lead.
- During and after commissioning, the unit is operating and filled with water. Therefore, to reduce the risk of electric shock, be careful during repairs and/or service work. If you lack the necessary knowledge and experience, repair and/or service activities should be performed by authorized/accredited technicians.

- Never touch the appliance if it falls into the water! Disconnect the connection lead first, before removing the unit from the water. Because electrical components are damaged by water and therefore become unsafe, the device must be submitted to authorized/accredited technicians for repair/maintenance.
- The device must not be switched on if it has been damaged during or as a result of transport, a fall, a production defect or other cause (particularly the quartz glass sleeve and the UV-C bulb).
- Always connect the device to an undamaged, earthed mains outlet with hinged cover.
- Always remove the plug from the outlet when the device is not in use and/or during cleaning and maintenance activities. The plug must be removed from the mains outlet by pulling on the plug itself. Never pull on the lead to remove the plug from the outlet.
- The UV-C lamp must be switched off temporarily if chemicals and/or medications are (manually) added to the water. Chemicals added (manually), such as chlorine and acid, must be poured directly into the water in dissolved form.
- To reduce the risk of electric shock, the plug must not be inserted into or removed from the mains outlet with wet hands and/or while you are standing in the water.
- The device should never be immersed, in whole or in part, in water or any other liquid.
- The connection lead of the appliance may not be shortened and/or connected directly without a plug. If the lead becomes damaged, the entire device must be submitted to authorized/accredited technicians. Devices with cut-off/shortened cables are excluded from warranty coverage.
- After the device is switched off the bulb will remain warm for ten minutes.
- Use of the equipment for any purpose other than that for which it was designed or developed is not permitted. Use of the equipment for a purpose other than that for which it was developed by the manufacturer may lead to unsafe situations.
- If there is a seasonal risk of freezing of the device, or parts thereof, appropriate measures must be taken to prevent freezing damage. Damage caused by freezing is always excluded from warranty coverage.
- Devices with a stainless steel housing are not suitable for water with a high salt content. If the salt content is too high, the steel can oxidize and damage the housing.
- The unit should never be placed downstream of a heat exchanger or other heating source. If the bulb is not cooled by the water sufficiently, it may be damaged.
- This device may only be used in accordance with the guidelines described in this manual. You must also adhere to the instructions provided on the device.
- Unintended use of the device or damage to the housing can lead to the escape of harmful UV-C radiation. Exposure to UV-C radiation, even in small doses, cause damage to the eyes and skin.
- If you intend to use of the device in combination with chemicals and/or medications, always consult the manual(s) for this/these product(s). Pay particular attention to the safety instructions. When using medicines, the device must be disconnected
- It is not permitted to flow an aggressive liquid through the reactor or add additives to the treated water which may have a negative effect on corrosion or degradation of the materials that are used. This to prevent dangerous situations and damage to the reactor and surrounding installations and / or flora and fauna.



CAUTION:

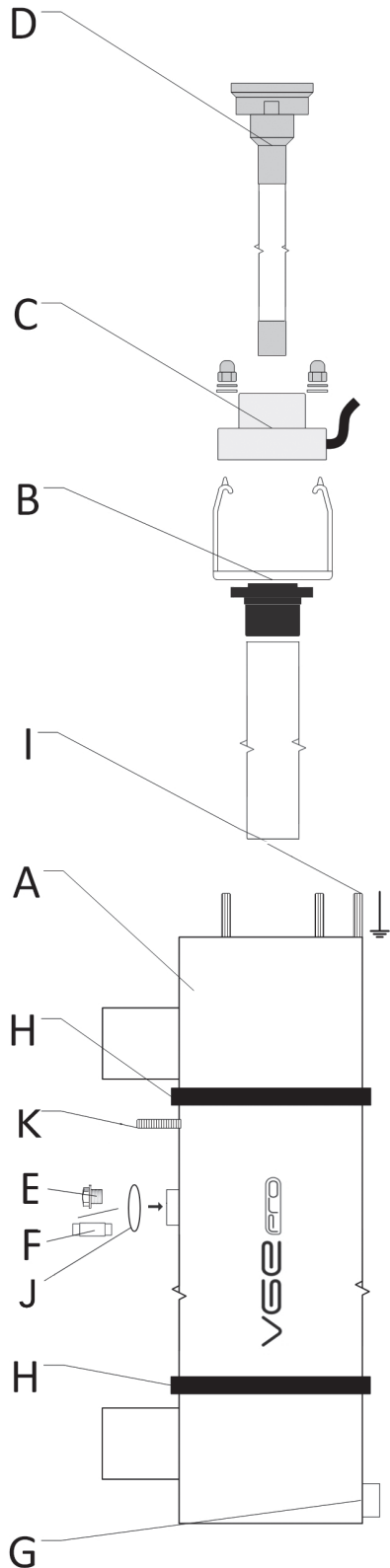
Carefully read these instructions before installing this device.

 <p>Always make sure to have a correct grounding. When in doubt about the grounding of the electrotechnical installation in general, always consult a licensed electrotechnical mechanic. Faulty grounding can be dangerous, and/or lead to corrosion of stainless steel or aluminium reactors.</p>	 <p>It's not permitted to flow a liquid through the reactor or to add additions to the water that has to be treated, which can have a negative effect on corrosion or degradation on the used materials. This to avoid dangerous situations or damage to the reactor and surrounding installations and/or to the flora and fauna.</p>
 <p>Radiation of this ultraviolet lamp is dangerous for eyes and skin.</p>	 <p>Always free the device of tension first during maintenance! Risk of an electric shock. Connect only to a grounding type receptacle protected by a ground-fault circuit-interrupter (GFCI). Do not use an extension cord.</p>
 <p>The quartz glass and the UV-C lamp will stay warm for quite some time after the device has been switched off. It has a cooling time of at least 15 minutes.</p>	 <p>Wear gloves to protect the quartz glass and UV-C lamp against fingerprints. Fingerprints can burn into the quartz glass and UV-C lamp while turned on, causing reduction of the disinfection.</p>
 <p>The UV-C lamp should never be turned on when there's no flow.</p>	 <p>Wear safety glasses during maintenance and installation.</p>

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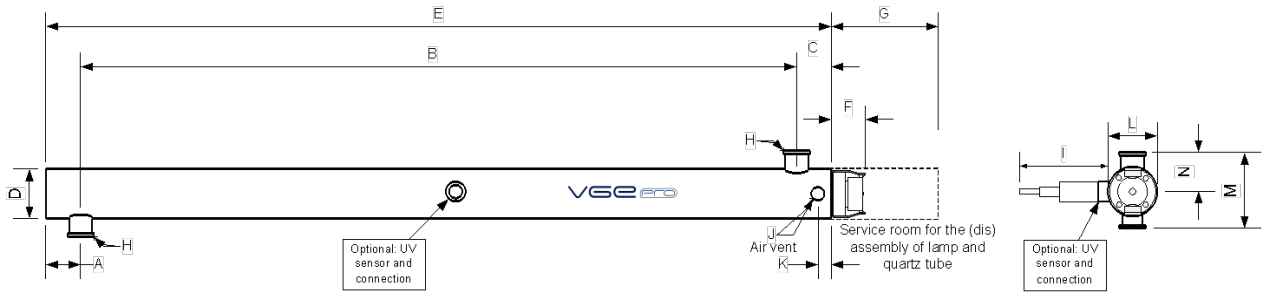
1. General



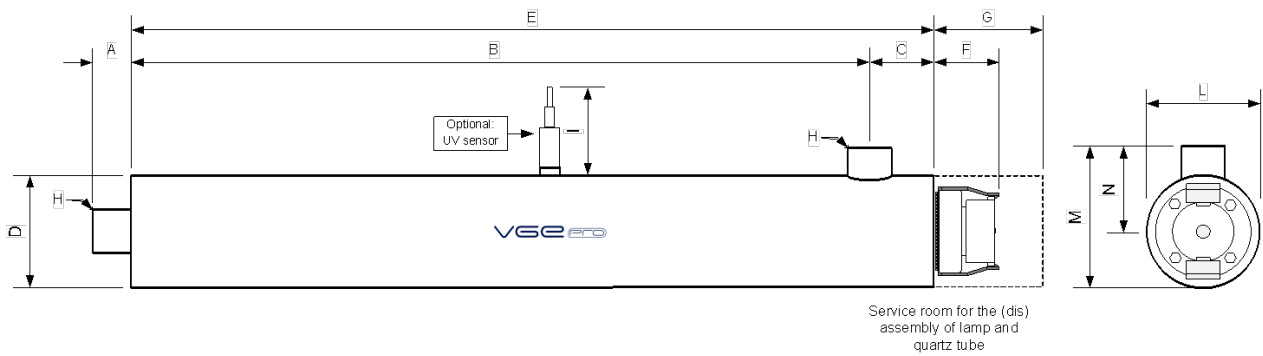
		Art. Number	Description
A	Reactor	VI00400762H	Reactor VGE Pro UV INOX 40-76
		VI00750762H	Reactor VGE Pro UV INOX 75-76
		VI00751142H	Reactor VGE Pro UV INOX 75-114
		VI01400762H	Reactor VGE Pro UV INOX 140-114
		VI01401142H	Reactor VGE Pro UV INOX 140-76
		VI02000762H	Reactor VGE Pro UV INOX 200-76
		VI02001542H	Reactor VGE Pro UV INOX 200-154
		VI04002042H	Reactor VGE Pro UV INOX 400-204
		VI04201682H	Reactor VGE Pro UV INOX 420-168
		VI19503062H	Reactor VGE Pro UV INOX 975-306
		VI19503062H	Reactor VGE Pro UV INOX 1950-306
		VI06002192H	Reactor VGE Pro UV INOX 600-219
		VH01401102H	Reactor VGE Pro UV HDPE 140-110
		VH02001102H	Reactor VGE Pro UV HDPE 200-110
		VH02001602H	Reactor VGE Pro UV HDPE 200-160
		VH04002002H	Reactor VGE Pro UV HDPE 400-200
		VH06002252H	Reactor VGE Pro UV HDPE 600-225
VH09753152H	Reactor VGE Pro UV HDPE 975-315		
VH19503152H	Reactor VGE Pro UV HDPE 1950-315		
B	Quartz Glass	QG040	Quartz Glass SPT 355x25 AM
		QG043	Quartz Glass SPT 645x25 AM
		QG049	Quartz Glass SPT 835x30 AM
		QG052	Quartz Glass SPT 1080x30 AM
		QG055	Quartz Glass SPT 1565x30 AM
		QG085	Quartz Glass SPT 1970x30 AM
C	SPT socket	CA020	SPT socket + 2 meter cable
		CA056	SPT socket + 3 meter cable
		CA054	SPT socket + 5 meter cable
		CA059	SPT socket + 9 meter cable
D	SPT Lamp	F980102	Lamp VGE Pro T6 140W 867 SPT
		F980103	Lamp VGE Pro T6 200W 1115 SPT
		F980107	Lamp VGE Pro T5 40W 389 SPT
		F980108	Lamp VGE Pro T5 75W 867 SPT
		F980109	Lamp VGE Pro T5 75W 680 SPT
		F980104	Lamp VGE Pro T6 325W 1588 SPT
		F980112	Lamp VGE Pro T6 400W 2000 SPT
E		B212103	INOX plug 1/4"
F	Sensors (optional)	B212021	Digital UV Sensor Teflon
		B212049	Digital UV Sensor Inox
		B212035	Temperature sensor
G	Drain (optional)	*	Not available on all models
H	Pipe clamps and HDPE support set (optional)	B299500	Pipe clamp FRS 72-78mm 2,5" Stainless Steel A4
		B229501	Pipe clamp FRS 102-116mm 4" Stainless Steel A4
		B299502	Pipe clamp FRS 159-168mm Stainless Steel A4
		B212084	Set brackets Ø110 HDPE
		B212083	Set brackets Ø160 HDPE
		B212082	Set brackets Ø200 HDPE
		B212081	Set brackets Ø225 HDPE
B212023	Set brackets Ø315 HDPE		
I	Grounding		
J	O-ring for sensor or plug	3902109	O-ring NBR 20x3
		B212104	O-ring EPDM 12x3
K	Sensor (optional)		Threaded rod for mounting temperature sensors and switch on INOX reactors.

1.1 Dimensions

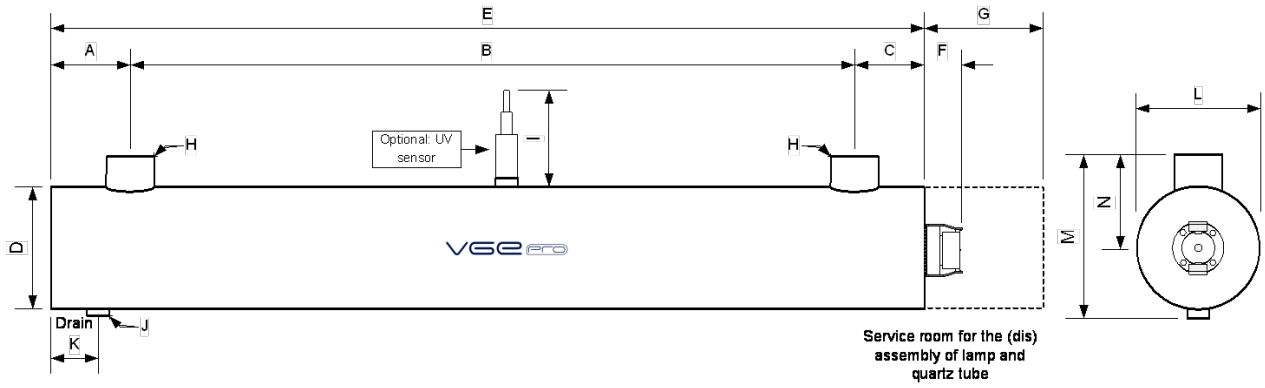
VGE Pro UV INOX LP



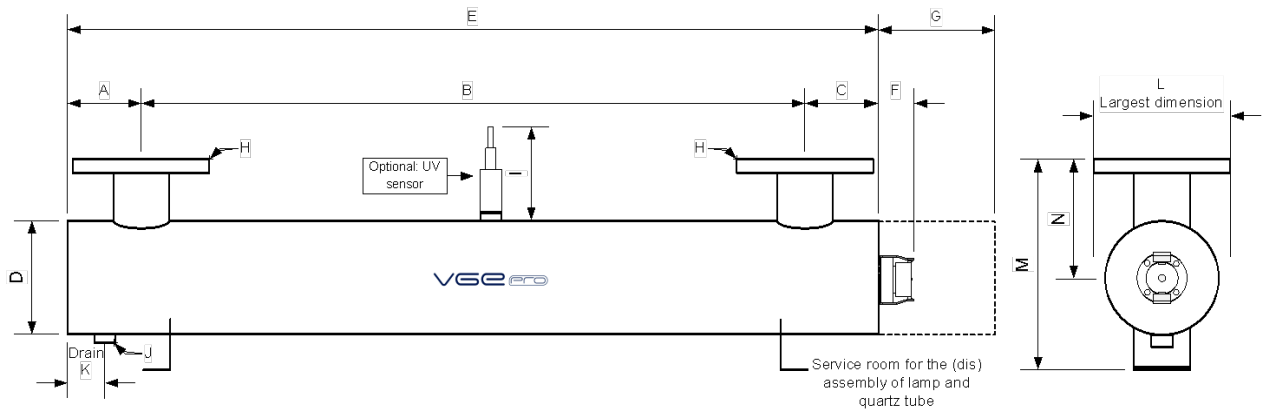
VGE Pro UV INOX						Dimensions													
Type	Shape	Maximum working pressure [bar]	Connection	Weight dry [kg]	Weight wet [kg]	A	B	C	D	E	F	G	H	I	J	K	L	M	N
						[mm]													
400-54	Z	6 bar	DN25 tri clamp	6	8	34	1909	32,5	54	1975	60	2040	DN25 tri clamp	109	1/4" BSP female	18	54	105,0	52,5
400-76	Z	6 bar	2" tri clamp	8	11	34	1909	32,5	76	1975	60	2040	2" tri clamp	109	1/4" BSP female	18	76	130,0	65,0



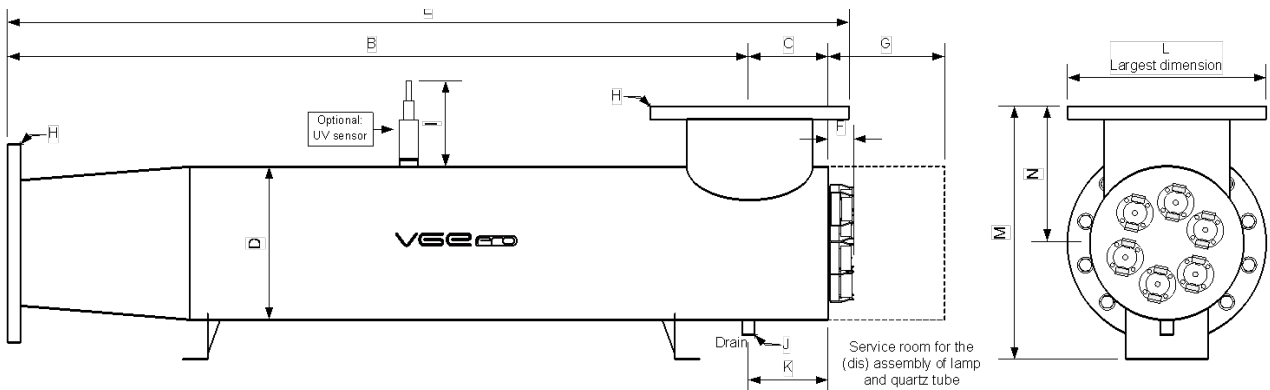
VGE Pro UV INOX						Dimensions													
Type	Shape	Maximum working pressure [bar]	Connection	Weight dry [kg]	Weight wet [kg]	A	B	C	D	E	F	G	H	I	J	K	L	M	N
						[mm]													
40-76	L	6 bar	3/4"	3	4	30	350	20	76	370	60	420	3/4" BSP male	109	-	-	76	100	65
75-76	L	6 bar	1 1/2"	4	6	30	645	20	76	655	60	705	1 1/2" BSP male	109	-	-	76	100	65



VGE Pro INOX						Dimensions													
Type	Shape	Maximum working pressure [bar]	Connection	Weight dry [kg]	Weight wet [kg]	A	B	C	D	E	F	G	H	I	J	K	L	M	N
						[mm]													
140-76	U	6 bar	2"	5,4	8,3	60	755	35	76	850	60	905	2" BSP male	109	-	-	76	108	70
200-76	U	6 bar	2"	6,3	10,0	60	1000	40	76	1100	60	1150	2" BSP male	109	-	-	76	108	70
75-114	U	6 bar	2"	9,2	16,3	60	750	40	114	850	60	905	2" BSP male	109	-	-	114	152	95
140-114	U	6 bar	2"	9,1	16,2	60	750	40	114	850	60	905	2" BSP male	109	-	-	114	152	95
420-168	U	6 bar	3"	16,6	32,3	63	730	58	168	850	60	905	3" BSP male	109	1/2" BSP female	50	168	236	140

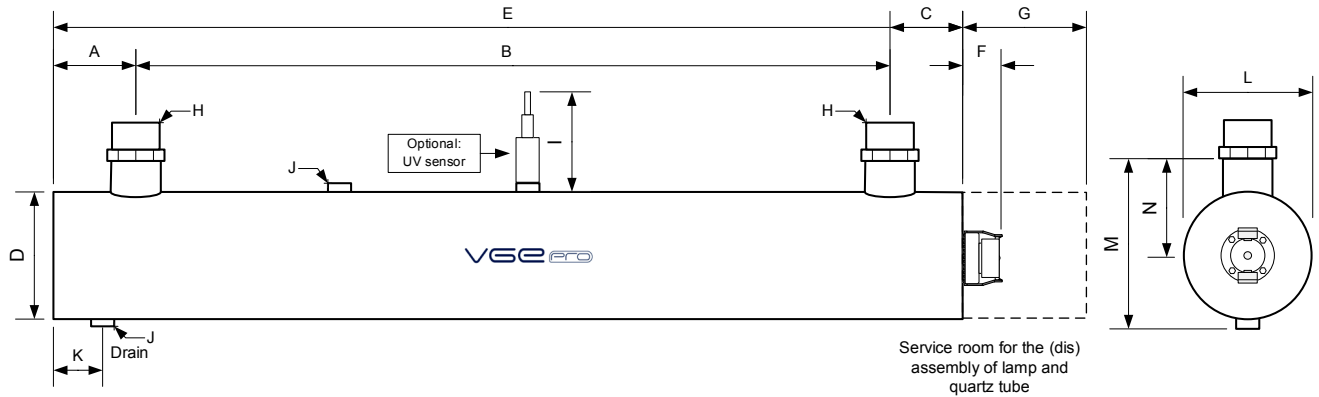


VGE Pro INOX						Dimensions													
Type	Shape	Maximum working pressure [bar]	Connection	Weight dry [kg]	Weight wet [kg]	A	B	C	D	E	F	G	H	I	J	K	L	M	N
						[mm]													
200-154	U	6 bar	DN65	19,2	37,7	100	900	100	154	1100	60	1150	DN65	109	1/2" BSP female	50	190	323	180
400-204	U	6 bar	DN100	26,4	59,1	125	850	125	204	1100	60	1150	DN100	109	1/2" BSP female	50	210	370	180
600-219	U	6 bar	DN125	37,4	74,6	125	850	125	219	1100	60	1150	DN125	109	1/2" BSP female	50	240	380	180

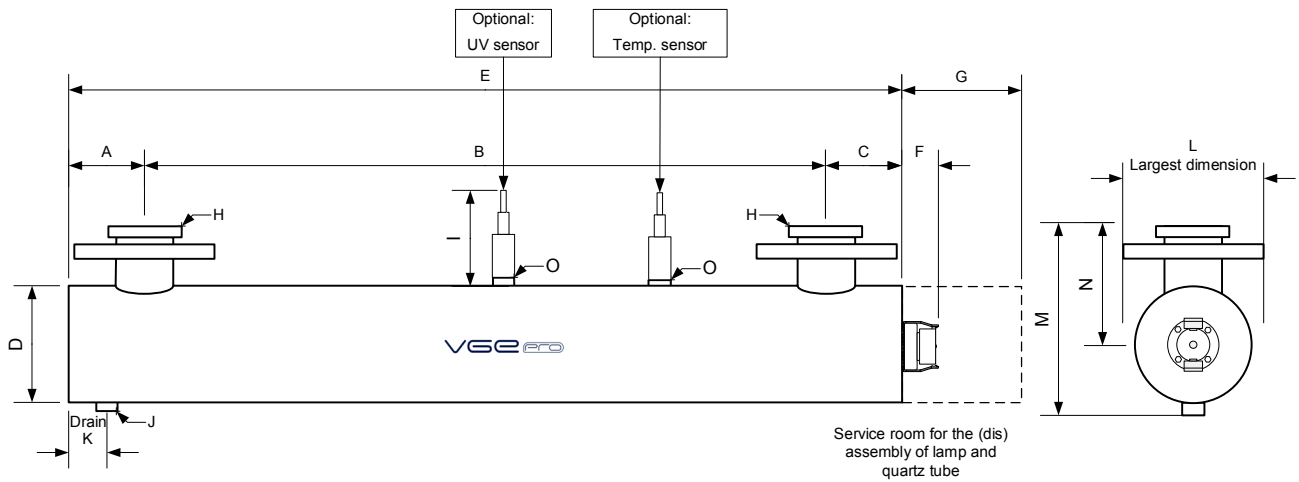


VGE Pro INOX						Dimensions													
Type	Shape	Maximum working pressure [bar]	Connection	Weight dry [kg]	Weight wet [kg]	A	B	C	D	E	F	G	H	I	J	K	L	M	N
						[mm]													
975-306	L	6 bar	DN250	68,8	178,5	-	1446	159	306	1616	60	1635	DN250	109	1" BSP female	138	405	520	275
1950-306	L	6 bar	DN250	76,7	183,0	-	1446	159	306	1616	60	1635	DN250	109	1" BSP female	138	405	520	275

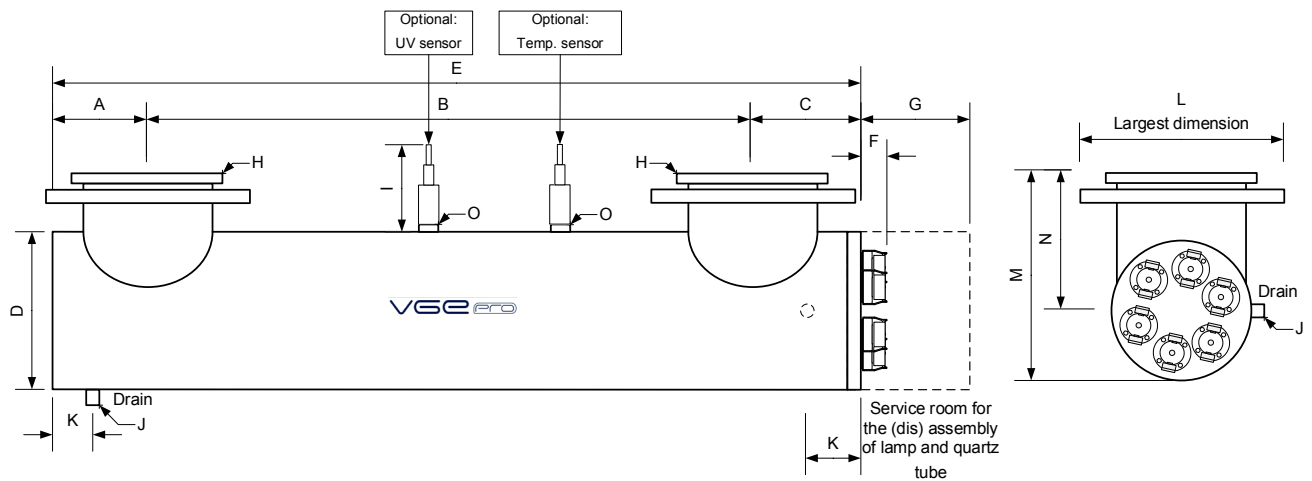
VGE Pro UV HDPE LP



VGE Pro UV HDPE						Dimensions													
Type	Shape	Maximum working pressure [bar]	Connection	Weight dry [kg]	Weight wet [kg]	A	B	C	D	E	F	G	H	I	J	K	L	M	N
[mm]																			
75-110	U	6 bar	2"	4	9	85	685	85	110	855	60	905	2" BSP male	109	1/2" BSP female	65	65	181	105
140-110	U	6 bar	2"	4	9	85	685	85	110	855	60	905	2" BSP male	109	1/2" BSP female	65	65	181	105
200-110	U	6 bar	2"	4	11	85	930	85	110	1100	60	1150	2" BSP male	109	1/2" BSP female	65	65	181	105



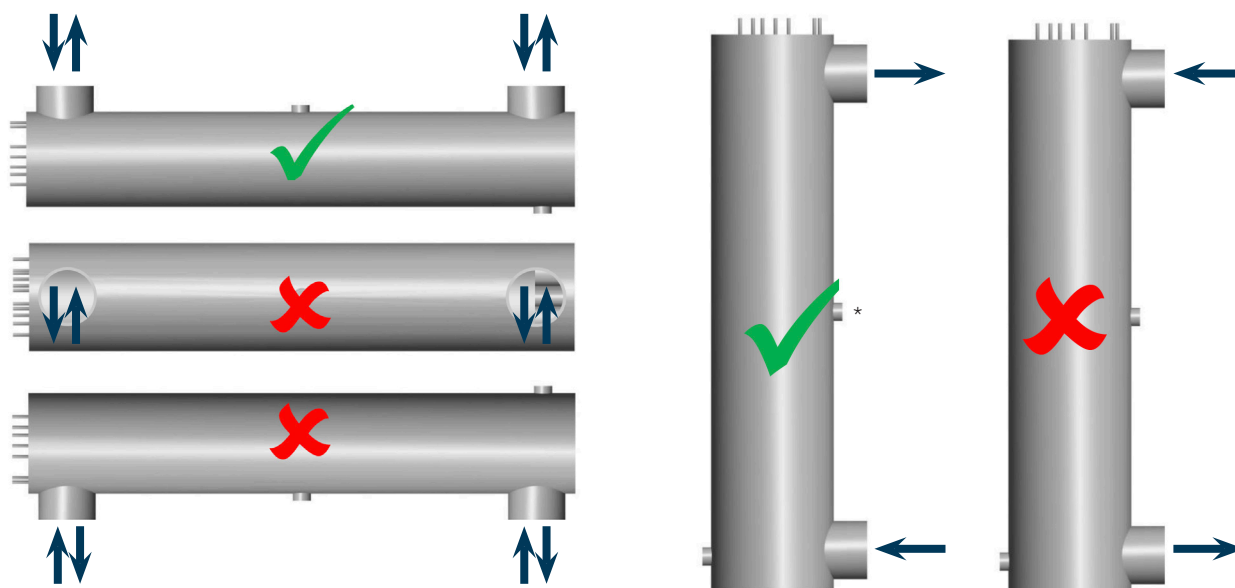
VGE Pro UV HDPE						Dimensions														
Type	Shape	Maximum working pressure [bar]	Connection	Weight dry [kg]	Weight wet [kg]	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
[mm]																				
200-160	U	6 bar	DN65	8	23	100	900	100	160	1100	60	1150	DN75	109	1/2" BSP female	65	185	276	175	1/4" BSP female
400-200	U	6 bar	DN100	15	38	125	850	125	200	1100	60	1150	DN110	109	1/2" BSP female	65	220	316	195	1/4" BSP female
600-225	U	6 bar	DN125	18	48	125	850	125	225	1100	60	1150	DN140	109	1/2" BSP female	65	250	351	218	1/4" BSP female



VGE Pro UV HDPE						Dimensions														
Type	Shape	Maximum working pressure	Connection	Weight dry	Weight wet	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
		[bar]		[kg]	[kg]															
975-315	U	4 bar	DN250	82	175	229	1125	230	315	1584	60	1635	DN250	109	1/2" BSP female	104	395	478	300	1/4" BSP female
1950-315	U	4 bar	DN250	85	176	229	1125	230	315	1584	60	1635	DN250	109	1/2" BSP female	104	395	478	300	1/4" BSP female

2. Installation instructions

2.1 Flow direction



For vertical installation, the lower terminal is the water inlet. The upper will be the outlet. RECOMMENDED SETUP: For horizontal installation, the connections should point upwards. Residual air always must disappear from the reactor (naturally).

* Not recommended for HDPE units

2.2 Reactor

Determine where the device will be installed. The VGE PRO UV reactor must never be installed behind a Ph regulator or a salt electrolysis system in your installation. Ensure that there is always water flowing through the unit when the lamp is on. The installation must always take place in a dry and well-ventilated area.

It is not permitted to flow an aggressive liquid through the reactor or add additives to the treated water which may have a negative effect on corrosion or degradation of the materials that are used. This to prevent dangerous situations and damage to the reactor and surrounding installations and / or flora and fauna.

An area of approximately 0.75 - 1.80m must be available at the top in order to be able to replace the lamp smoothly without having to dismantle the complete device.

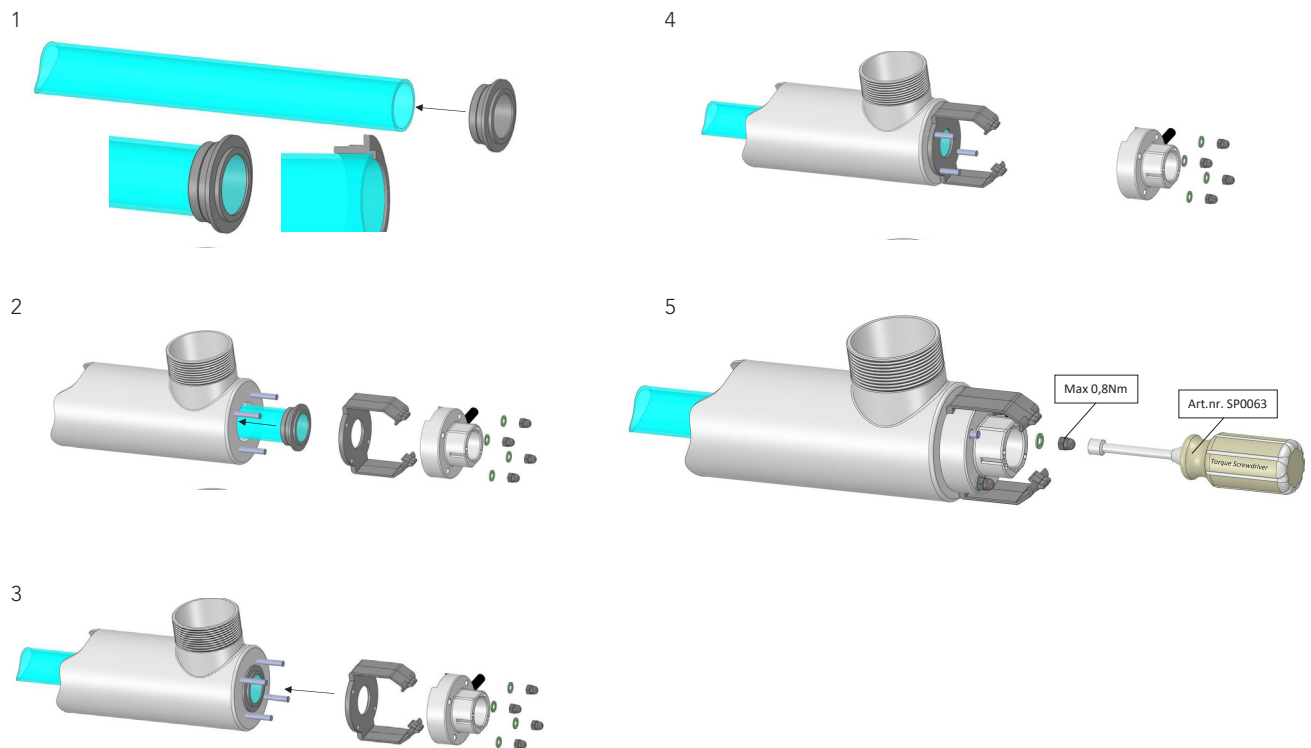


Make sure the reactor is always grounded!



Recommendation: install the reactor in a bypass so maintenance is easier.

2.3 Montage Quartz Glass SPT and SPT socket



The VGE Pro UV-C Disinfection systems are equipped with the unique Smart Pin Technology (SPT). This innovative system is a reliable way to integrate the UV-C lamp(s) in a safe, efficient and smart way in a reactor. The SPT makes it possible to replace the lamp safely, although the system is filled with water and pressurized.

BENEFITS

- Prevents the release of harmful UV-C radiation
- Changing the UV-C lamp with water in the system
- Resistant to corrosion
- Splash proof
- Visual inspection for operation of the lamp
- Clamping system for optimal seal function
- Lamp replacement without tools

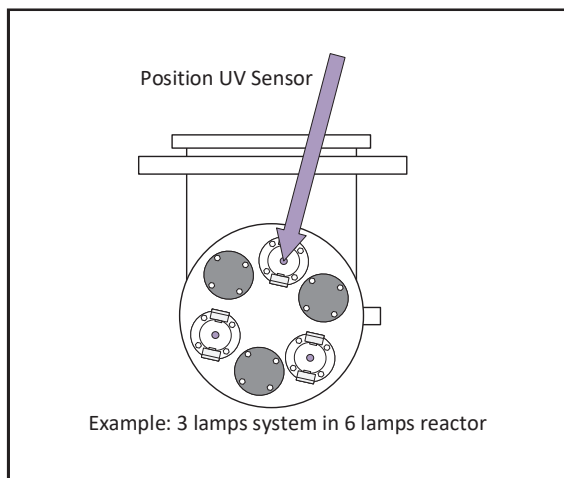
NOTE: Make sure that the end of the quartz glass is in the appropriate glass container. If the glass is not placed correctly, it will be tilted and under tension in the reactor. With possible breakage as a result.

TIP for horizontal installation: By filling the reactor up to the quartz glass opening with water, the glass will float approximately at the level of the collection and can be controlled more easily.

2.4 Mounting Blind plate/emergency seal

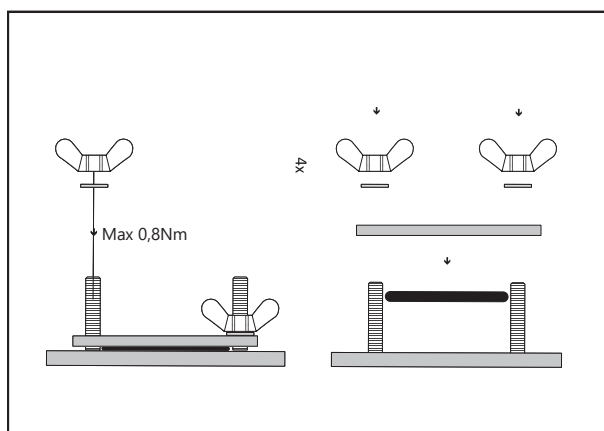
In case of glass breakage, or when not all lamps are used, a blind plate or emergency seal can be used to temporarily or permanently close one or more lamp connections. In case of glass breakage, all glass must first be removed from the reactor. Wear suitable gloves and safety goggles! Note quartz glass shards are razor sharp!

For example: a reactor with six lamp connections can run with three lamps. It is then always possible to expand the reactor again with multiple lamps. The lamp connections that are not used, we close with a blind plate/emergency seal. If a UV sensor is used, at least the lamp connection must be used, which is located directly at the sensor connection. If possible, work alternately clockwise. (lamp - blind plate - lamp etc.)

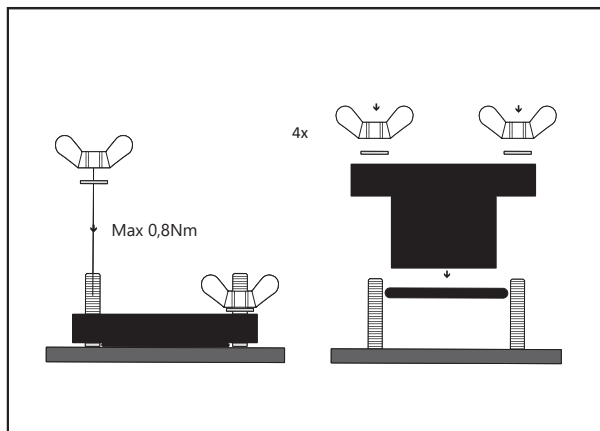


Place the O-ring in the groove provided in the blind plate/emergency seal. Make sure the O-ring and groove are clean. Place the blind plate / emergency seal with O-ring over the four threaded ends until the O-ring touches the reactor. Check if the O-ring is still in the groove. Then install the washers and wing nuts. Tighten the wing nuts crosswise until this hand is tight. (MAX 0.8Nm) Check the system for leaks, and tighten the wing nuts if necessary.

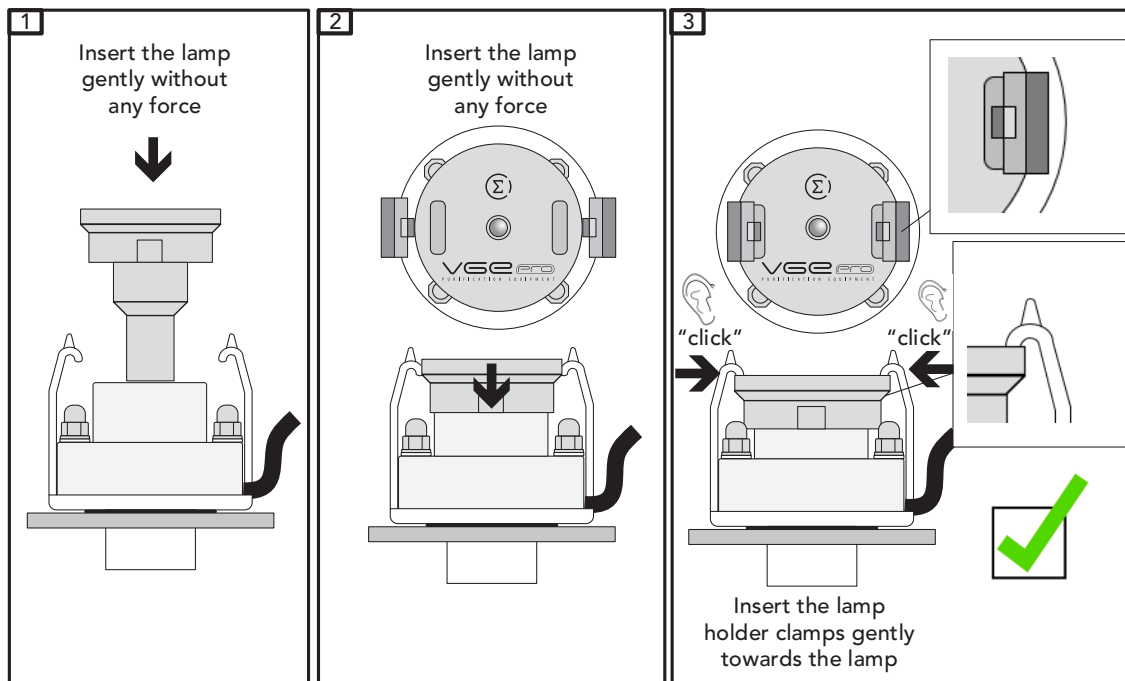
2.4.1 INOX Blind plate



2.4.2 HDPE Blind plate



2.5 Smart Pin Technology



2.6 Sensor

2.6.1 Digital UV sensor

VGE Pro UV-C units can be equipped with a UV-C sensor. These digital sensors can be delivered in teflon or stainless steel. The VGE Pro control monitors are designed to work with these UV-C sensors.

B212021 - Digital UV sensor Teflon - 1/4" male thread

B212049 - Digital UV sensor Inox - 1/4" male thread

2.6.2 Temperature sensor

VGE Pro UV-C units can be equipped with a Temperature sensor. These sensors can be delivered in HDPE or stainless steel. The VGE Pro control monitors are designed to work with these UV-C sensors.

B212114 Temp. Sensor HDPE KTY 5 meter cable - 1/4" male thread

B212112 Digital Temp. Sensor INOX KTY 5 meter - cable for metal stud

B212035 Temp. Sensor INOX KTY 5 meter - 1/4" male thread

2.7 Wiring

2.7.1 Basic ($\geq 200W$)

Lamp 1:

1. Filament 1: (wire white)
2. Filament 1: (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Lamp 2:

1. Filament 1: (wire white)
2. Filament 1: (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Lamp 3:

1. Filament 1: (wire white)
2. Filament 1: (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

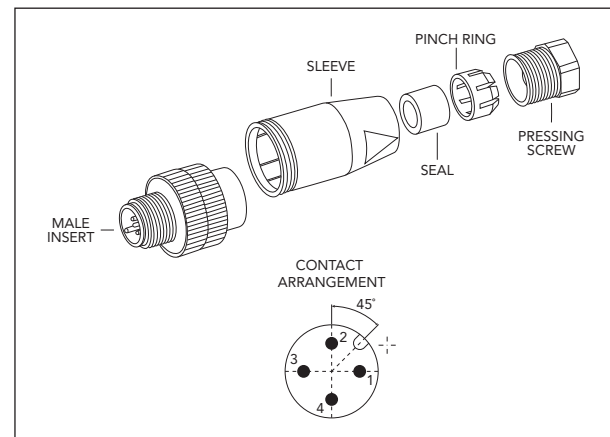
Supply voltage

- * mains 230V AC (L)
- * mains 230V AC (N)
- * protective earth

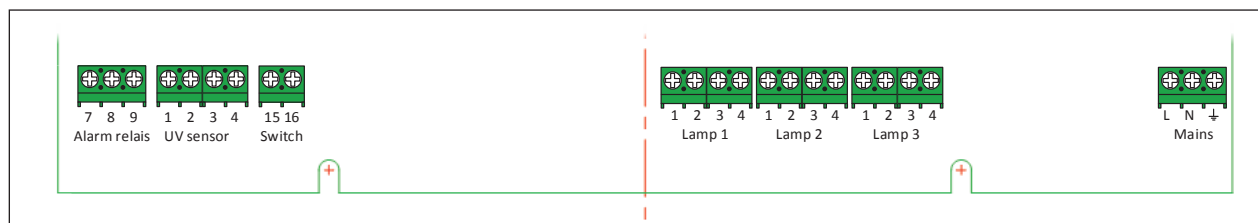
2.7.2 Basic ($\leq 140W$) and Control Timer

Lamp 1:

1. Filament 1: Brown or green
2. Filament 2: White
3. Filament 2: Red or blue
4. Filament 1: Black



2.7.3 Control Monitor



Alarm relays (optional)

7. Active contact (OK = closed to PIN8)
8. Change over contact
9. Rest contact (main alarm, off = closed to PIN7)

Digital UV sensor (optional)

1. Sensor supply voltage (wire: brown/red)
2. Signal B (-) (wire: white)
3. Signal A (+) (wire: blue)
4. Sensor supply voltage GND (wire: black)

Flow switch (optional) 15 + 16

Insert wire bridge if flow switch is not used.

Lamp 1:

1. Filament 1; (wire white)
2. Filament 1; (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Lamp 2:

1. Filament 1; (wire white)
2. Filament 1; (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Lamp 3:

1. Filament 1; (wire white)
2. Filament 1; (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Supply voltage

- mains 230V AC (L)
- mains 230V AC (N)
- protective earth

2.7.4 Control Monitor Plus (≤ 600W)

X1 supply voltage terminal

230V AC +/-10%

X2 main switch terminal (for bipolar main switches)

Contacts have to be closed as shown to power system

X3 / x4 / x5 lamp terminals

The connection wires to the lamp electrodes must never be mixed up

1 = White

2 = Red or blue

3 = Brown or green

4 = Black

X7 digital sensor terminal

1 = Brown

2 = White

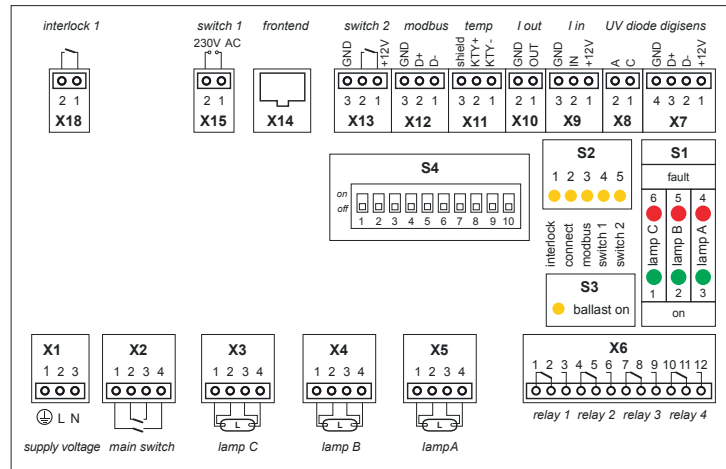
3 = Blue

4 = Black

X8 uv diode sensor terminal

1 = Blue

2 = Black



X11 temperature sensor terminal

X11.1 = KTY – (black wire + shield)

X11.2 = KTY + (white wire)

X11.3 = n/a

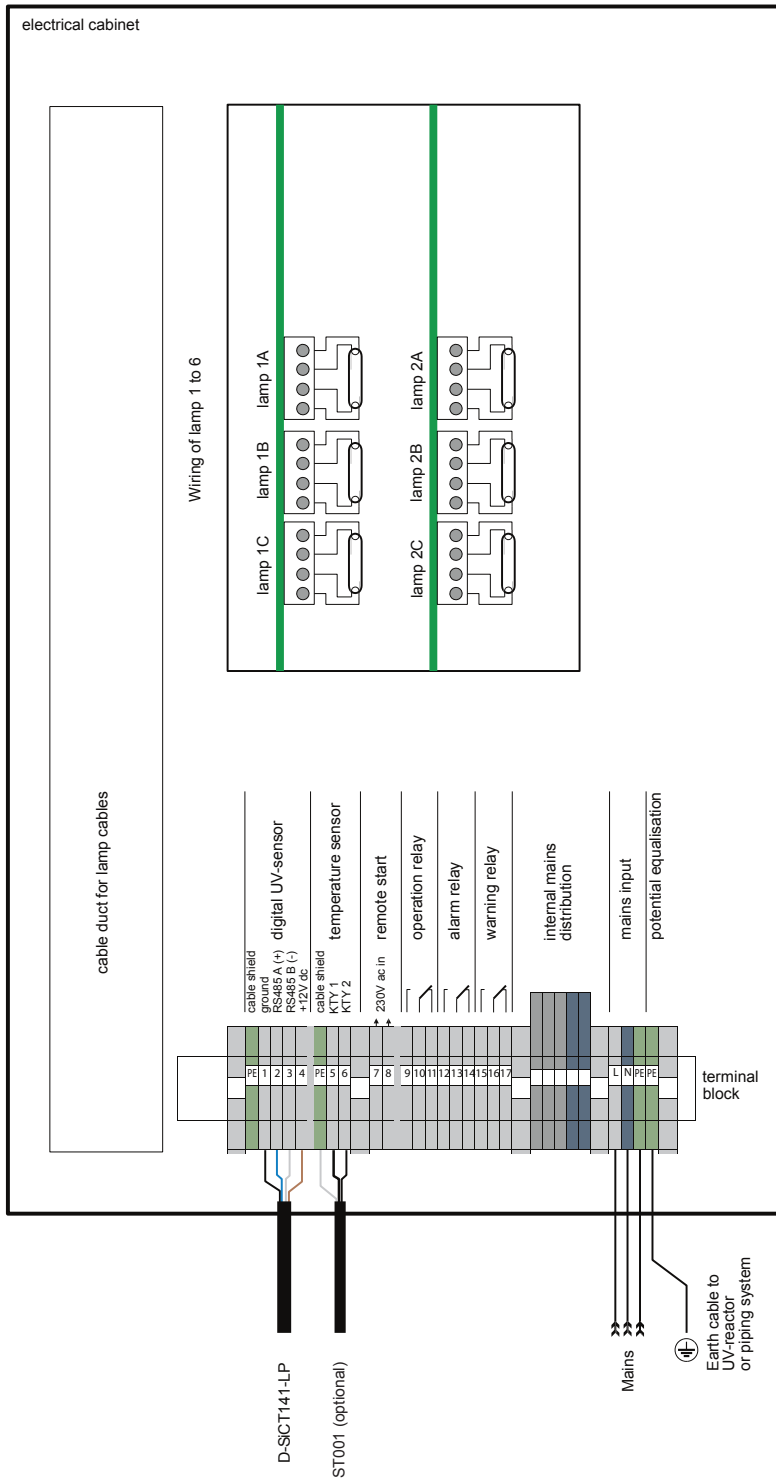
X13 (Flow) switch 2 terminal

Including 12V DC supply for external module

Function depends on operating software

For connecting a passive switch use 1 and 2

2.7.5 Control Monitor Plus (≥ 975W)



Temperature sensor (optional)

5. KTY 1
6. KTY 2

Digital UV sensor (optional)

1. Sensor supply voltage GND (wire: black)
2. Signal A (+) (wire: blue)
3. Signal B (-) (wire: white)
4. Sensor supply voltage (wire: brown/red)

Lamp 1C

1. Filament 1: (wire white)
2. Filament 1: (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Lamp 1B

1. Filament 1: (wire white)
2. Filament 1: (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Lamp 1A

1. Filament 1: (wire white)
2. Filament 1: (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Lamp 2C

1. Filament 1: (wire white)
2. Filament 1: (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Lamp 2B

1. Filament 1: (wire white)
2. Filament 1: (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Lamp 2A

1. Filament 1: (wire white)
2. Filament 1: (wire red or blue)
3. Filament 2: (wire brown or green)
4. Filament 2: (wire black)

Supply voltage

- Protective earth
- Mains 230V AC (L)
- Mains 230V AC (N)

3. Maintenance

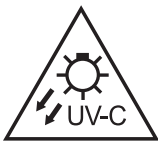
Always switch off the power supply during maintenance/dismantling of the device. The device must be cleaned twice a year or more often depending on the quality of the water. If there are (an increase in) algae and/or scale, the quartz glass in which the lamp is positioned must be cleaned. The SPT lamp must be replaced after 16.000 operating hours. The stainless steel interior can be cleaned with a soft brush.



Always wear gloves during installation and maintenance.

1. Drain the water from the device.
2. Disconnect the lamp from the lamp holder. Remove the lamp from the quartz glass and, if necessary, replace the special lamp. As these parts are very fragile, caution is essential.
3. Carefully remove the quartz glass and SPT socket. Never use force!
4. Clean the quartz glass with a suitable agent. Always use a soft cloth to clean the glass in order to prevent scratches.
5. Carefully replace the quartz glass, put the SPT socket back on the quartz glass and connect the lamp to the lamp holder.

If the housing or the electrical section must be replaced then the earthing should first be disconnected from the housing. When assembling a new housing or electrical section then please read Installation and Dismantling first. Make sure that you keep the various bits of the earthing properly. These are not supplied with a new housing or electrical section. If there is any doubt about the connection, consult a certified electrician.



Installation and maintenance

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