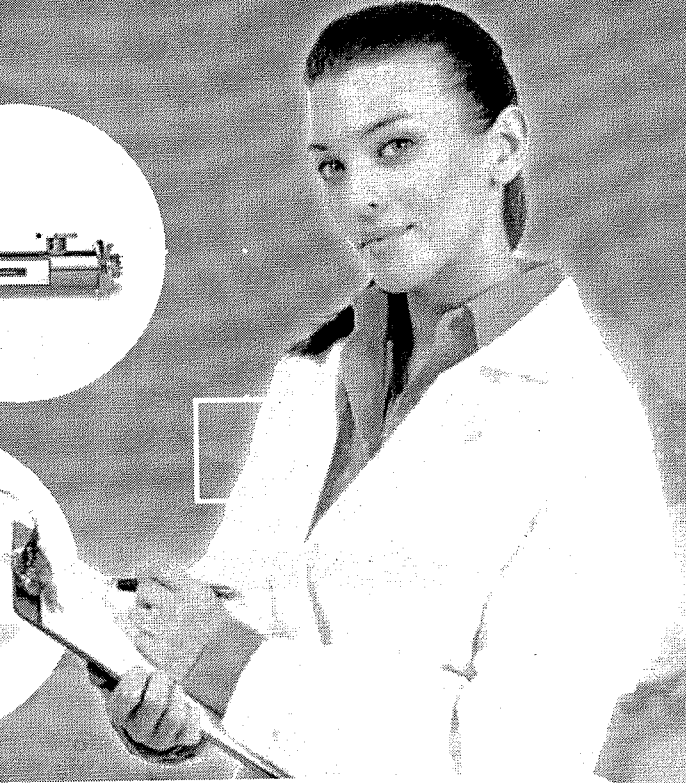
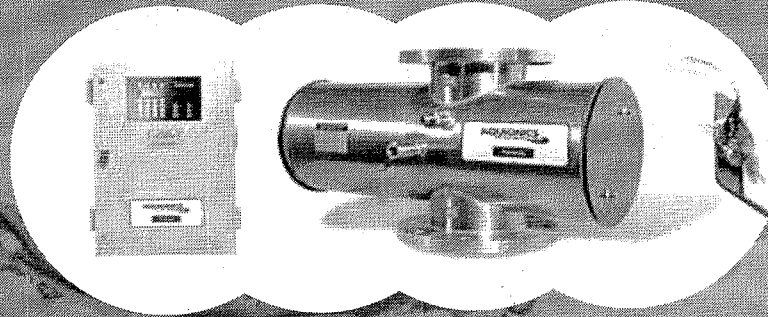
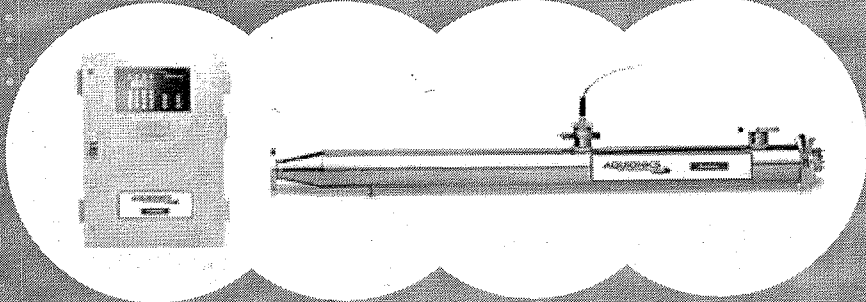


PureLine PQ

Complete Range



Technical Specification

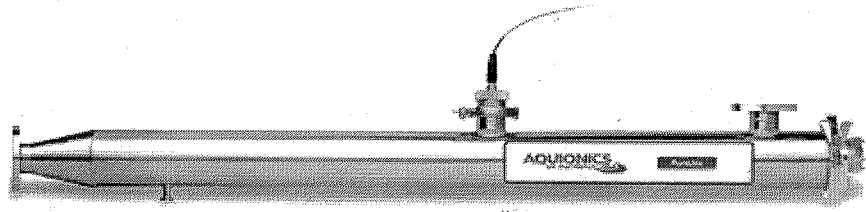
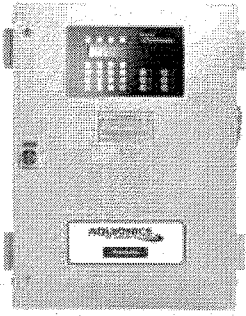
Model	Maximum Disinfection Capacity * (usgpm) 32mJ/cm ² RED	Maximum Disinfection Capacity ** (usgpm) 120mJ/cm ² RED	Min. T ₁₀ (%)	Flange Size DN	Approx Weight (lb)		
					Chamber (Empty)	Power Supply	Power (kW)
PureLine PQ 0005	22.4	3.96	60	1.6	19.8	81.6	0.08
PureLine PQ 0008	35.6	7.48	60	2	19.8	81.6	0.14
PureLine PQ 00016	70.4	17.16	60	2	19.8	81.6	0.27
PureLine PQ 0030	140.8	22.44	60	3.1	55.1	81.6	0.27
PureLine PQ 0090	387.2	70.4	60	5.9	101.4	81.6	0.55
PureLine PQ 0200	902	220	50	7.9	110.2	297.6	5.4
PureLine PQ 0360	1716	431.2	50	7.9	110.2	396.8	10.7
PureLine PQ 1100	4004	990	50	13.8	286.6	485	17.1

* The maximum disinfection capacity is based on a dose of 32mJ/cm² RED MS2 phage T₁₀ 95% fouling factor 0.95 and end of lamp life (EOLL) 0.9

** The maximum disinfection capacity is based on a dose of 120mJ/cm² RED MS2 phage T₁₀ 95% fouling factor 0.95 and end of lamp life (EOLL) 0.9

PureLine PQ

PureLine PQ (Disinfection) Models
PQ 0005 - PQ 0090



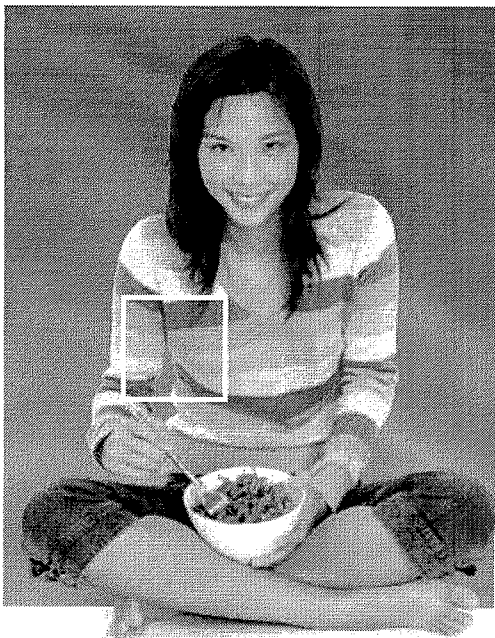
Technical Specification

UV Chamber

Material:	StSt 316L / 1.4404
Internal finish:	As made pipe and tube, welds left as laid electropolished and passivated
External finish:	Sateen polish (120 grit) electropolished and passivated
Process (mating) connections:	Flange DN series PN16 rated
Drain connection:	BSPT
End plate:	Removable tri-clamp except PQ 0090 which is a bolted plate
Degree of protection:	IP65 equivalent to NEMA 4 but not suitable for outside use
Arc tube (lamp):	Low pressure amalgam / high purity quartz
Arc tube enclosure:	High purity quartz
Number of lamps:	1
Expected lamp life:	12000-16000 hours
Temperature sensor:	Yes
UV monitor:	Pre calibrated DVGW compliant dry UV monitor
Working fluid temperature:	+41°F to +104°F
Maximum CIP temperature:	203°F with control cabinet electrically isolated
Hydrostatically pressure tested:	Yes to PED requirements EN13445
Operating / Design pressure:	6 bar / 7 bar
Pressure Loss:	Typically < 20 mbar including wiper
Seals:	EPDM FDA approved WQA certified to NSF61 except PQ 0005

Cabinet

Material:	Polyester coated carbon steel
Degree of protection:	IP66 / NEMA 4
Supply voltages:	230V (207V to 263V) 50/60Hz
Operating temperature range:	+41°F to +104°F
Relative humidity:	<90%
Cooling fans:	No
Cable length:	32 ft
External contacts:	4-20mA signal for UV dose and UV intensity, 24V dc 10mA max for trip, warning, system available, system remote, lamp running, replace lamp and Modbus for complete remote control



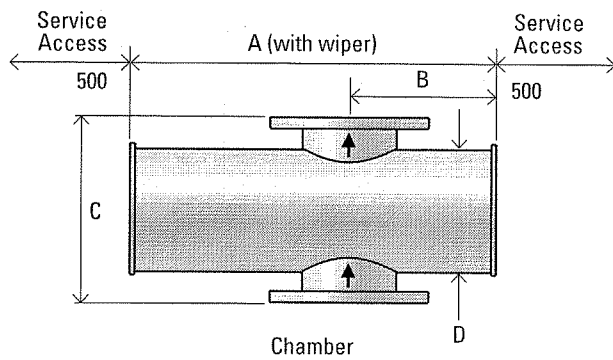
PureLine PQ

PureLine PQ 0200 - PQ 1100

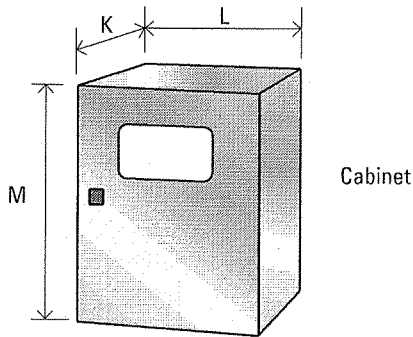
Product Specific Data

Dimensions (mm)

Chamber:



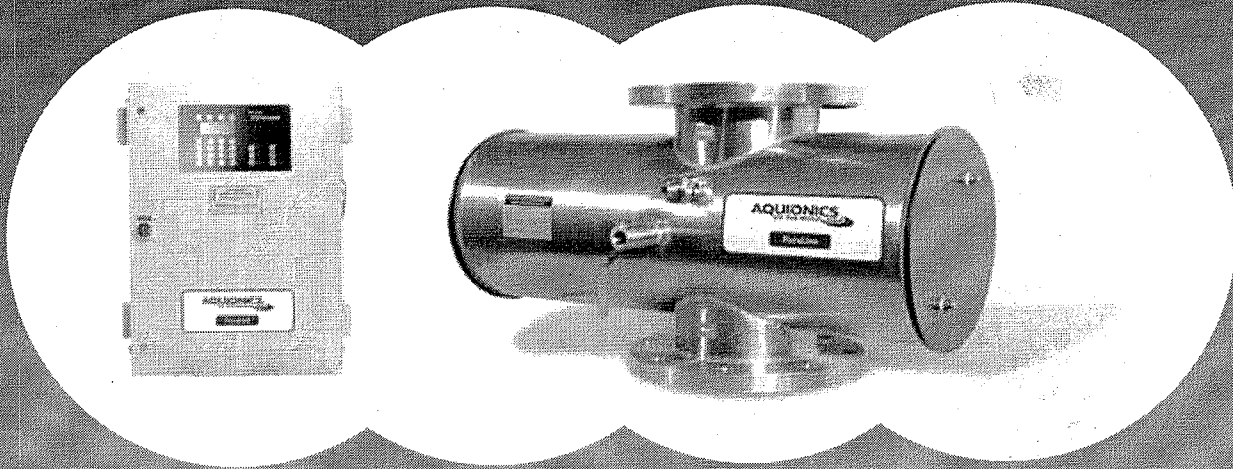
Cabinet:



Model	Maximum Disinfection Capacity* (usgpm)	Min. T ₁₀ (%)	Dimensions in inches								Approx Weight (lb)		
			A	B	C	D	DN	K**	L**	M**	Chamber (Empty)	Power Supply	Power (kW)
PureLine PQ 0200	902	50	30.7	12.2	15.7	10.7	7.9	15.7	31.5	39.4	110.2	297.6	5.4
PureLine PQ 0360	1716	50	30.7	12.2	15.7	10.7	7.9	15.7	47.2	47.2	110.2	396.8	10.7
PureLine PQ 1100	4004	50	35.2	14.5	21.7	16	13.8	15.7	47.2	47.2	286.6	485	17.1

* The maximum disinfection capacity is based on a dose of 32mJ/cm² RED-MS2 phage T₁₀ 95%

** Cabinet dimensions do not allow for door isolator, cable entry and bracket space. For cooling add 600mm to L and M dimensions (300mm each side)



Features

Operational Features

- Lamp on/off
- Remote / local operation
- Validated dose calculation from fixed or variable flow with or without UVT input
- Auto-wiper electric operation
- Stepless lamp power 33% to 100%
- 4 level operating menu
- Pre calibrated DVGW compliant dry UV monitors one per lamp
- Dry monitor port

Screen Display Features:

- 4 line x 20 character backlit LCD with indication of System Status
- Remote / local mode
- UV dose or intensity
- Alarms and warning list
- Date and time
- English language

Alarm Message Features:

- Lamp fail
- Low UV dose or intensity
- System warning and trip messages

Safety Features:

- Door interlocked cabinet isolator
- Separate door locks
- Ballast thermal cut out
- Resettable circuit breaker

Options

- Validation support pack
- Stainless steel cabinet (304)
- 98 ft lead lengths
- Printed operating, menu and safety guides in Chinese, French and German
- ANSI 150 flanges and NPT drain
- In field reference monitor and intensity meter (MP)

Approvals

- UL 508A Shop Approval (except PQ 1100)
- CE following the machine directive 2006/42/EC, EMC directive 2004/108/EC, low voltage directive 2006/95/EC and 93/68/EEC including NEN-EN-ISO 12100-1:2003, 12100-2:2003, 13857:2008, 13850:2006, NEN-EN 349+A1:2008, EN 61000-6-3:2007 and 61000-6-2:2005
- Carollo tested in accordance with USEPA
- UV monitor is DVGW W294-3 approved
- All wetted materials WQA certified to NSF 61

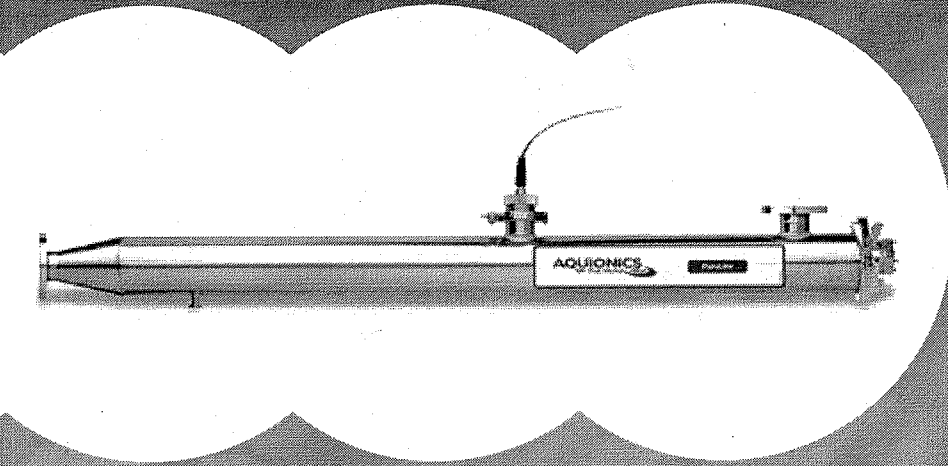
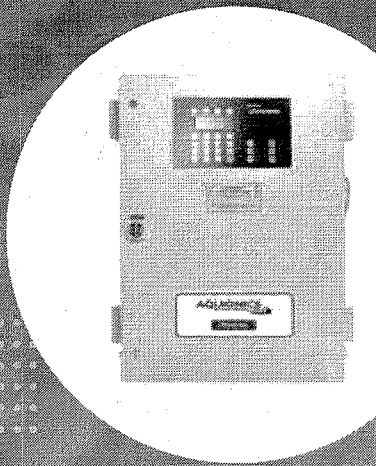
Additional Information

All dimensions are approximate for clearance purposes only. Hanovia has a policy of continuous product development, exact drawings are available on request. All specifications are subject to change without notification. Your Distributor or Hanovia Account Manager can advise on correct dosage and specific requirements.

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Features

Operational Features:

- Lamp on/off
- Remote / local operation
- Validated dose calculation from fixed or variable flow with or without UVT input
- Option of running with default algorithm which automatically compensates for dry changes in UV transmittance
- Selectable auto restart following power failure
- Event log (2000), 3 level operating menu
- Pre calibrated DVGW compliant dry UV monitor
- Dry monitor port with light trap

Screen Display Features:

- 4 line x 20 character backlit LCD with indication of System Status
- Remote / local mode
- UV dose or intensity
- Alarms and warning list
- Date and time
- English language

Alarm Message Features:

- Lamp fail
- Low UV dose or intensity
- Operating outside validated conditions
- System warning and trip messages

Safety Features:

- Door interlocked cabinet isolator
- Separate door locks
- Ballast thermal cut out
- Resettable circuit breaker
- UV monitor port shutters (light trap)

Options

- Validation support pack
- Stainless steel cabinet (304)
- 98 ft lead lengths
- Printed operating menu and safety guides in Chinese, French and German
- Auto-wiper pneumatic operation
- ANSI 150 flanges and NPT drain
- Tri-clamp connections to BS 4825 with tri-clamp drain internal finish <math><0.38\mu\text{m}</math> Ra maximum welds as laid electropolished and passivated
- CIP maximum 266°F with cabinet electrically isolated
- In field reference monitor and intensity meter (LP)

Approvals

- UL 61010-1 and IEC 61010-1
- CE following the low voltage directive and EMC directives conforming to EN61000-3-2,3-3, 4-2, 4-3, 4-4, 4-5, 4-6, 4-8 and 4-11 and 61326-1 class A
- Carollo certified to USEPA / UVDGM (2006)
- UV monitor is DVGW W294-3 approved
- All wetted materials WQA certified to NSF 61 except PQ 0005

Additional Information

All dimensions are approximate for clearance purposes only. Hanovia has a policy of continuous product development, exact drawings are available on request. All specifications are subject to change without notification. Your Distributor or Hanovia Account Manager can advise on correct dosage and specific requirements.

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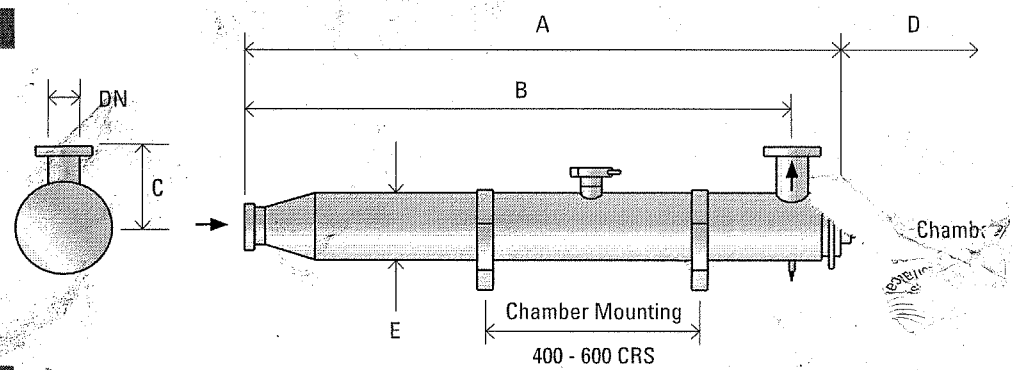
PureLine PQ

PureLine PQ 0005 - PQ 0090

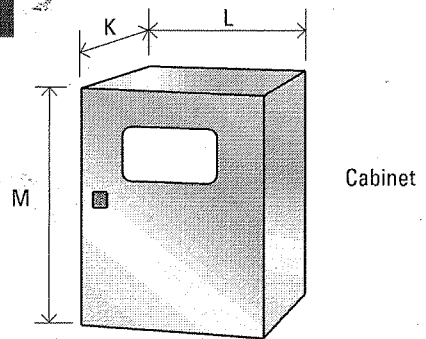
Product Specific Data

Dimensions (mm)

Chamber:



Cabinet:



Model	Maximum Disinfection Capacity* (usgpm)	Min. T ₁₀ (%)	Dimensions in inches unwiped dimensions							Approx Weight (lb)				
			A	B	C	D	E	DN	K**	L**	Chamber M**	Power (Empty)	Power Supply	(kW)
PureLine PQ 0005	22.4	60	54.5	50.1	5.9	51.2	4	1.6	10.2	23.6	37.4	19.8	81.6	0.08
PureLine PQ 0008	35.6	60	54.5	50.1	5.9	51.2	4	2	10.2	23.6	37.4	19.8	81.6	0.14
PureLine PQ 0016	70.4	60	54.5	50.1	5.9	51.2	4	2	10.2	23.6	37.4	19.8	81.6	0.27
PureLine PQ 0030	140.8	60	54.6	51.2	7.0	51.2	6.6	3.1	10.2	23.6	37.4	55.1	81.6	0.27
PureLine PQ 0090	387.2	60	78.1	71.9	9.8	74.8	8.1	5.9	10.2	23.6	37.4	101.4	81.6	0.55

* The maximum disinfection capacity is based on a dose of 32mJ/cm² RED MS2 phage T₁₀ 95% fouling factor 0.95 and end of lamp life (EOLL) 0.9

** Cabinet dimensions allow for door isolator, bottom cable entry and bracket space. For cooling add 11.8 inches to L and 5.9 inches to M dimensions