

Hanovia



PHARMACEUTICALS



COSMETICS+TOILETRIES



MEDICAL+OPHTHALMIC

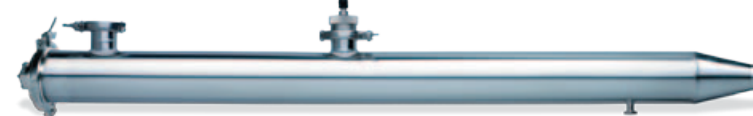


NUTRACEUTICALS

Hanovia

PharmaLine PQL

Performance qualified disinfection
for process water loops



Technical Specification

UV Chamber

Material:	StSt 316L / 1.4404
Internal finish:	<0.38µm Ra max welds left as laid electropolished and passivated
External finish:	Sateen polish (120 grit) electropolished and passivated
Process (mating) connections:	Tri-clamp to BS 4825
Drain connection:	Tri-clamp to BS 4825
End plate:	Removable Tri-clamp
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 arc tubes (lamps):	1
Expected lamp life:	12000-16000 hours
Temperature sensor:	No
UV monitor:	Pre calibrated DVGW compliant dry UV monitor.
Working fluid temperature:	+5°C to +40°C
Maximum CIP temperature:	95°C with lamp off
Hydrostatically pressure tested:	Yes to PED requirements EN13445
Operating / Design pressure:	6 bar / 7 bar
Pressure Loss:	Typically < 20 mbar
Seals:	EPDM FDA approved WQA certified to NSF 61 except PQL 0005

Cabinet

Material:	Polyester coated carbon steel
Degree of protection:	IP66 / NEMA 4
Supply voltages:	230V (207V to 263V) 50/60Hz
Operating temperature range:	+5°C to +40°C
Relative humidity:	<90%
Cooling fans:	No
Interconnecting cable lengths:	10m
External interface:	4-20mA signals 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

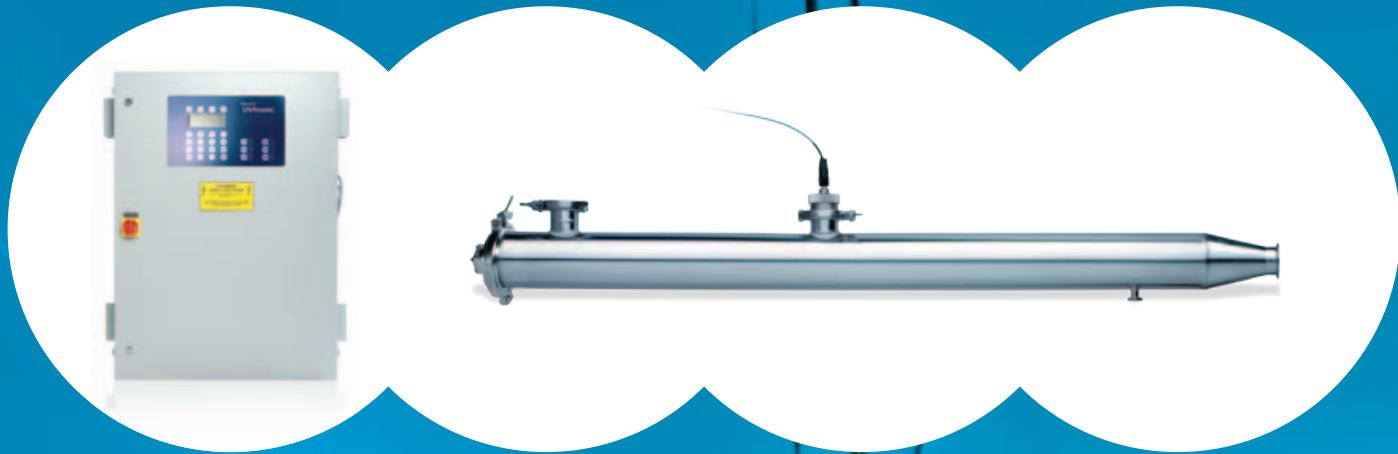


t: +44 (0) 1753 515 300 f: +44 (0) 1753 515301 e: sales@hanovia.com
Hanovia Ltd, 780 Buckingham Avenue, Slough, Berkshire, SL1 4LA United Kingdom

Visit our website for further information at www.hanovia.com

Follow us on





PharmaLine PQL

Performance qualified disinfection
for process water loops

Product Specific Data

Features

Operational Features:	Screen Display Features:	Alarm Message Features:	Safety Features:
<ul style="list-style-type: none">Lamp on/offRemote/local operationValidated dose calculation from fixed or variable flow with or without UVT inputOption of running with dose algorithm which automatically compensates for changes in UV transmittanceSelectable auto restart following power failureEvent log (2000)3 level operating menuPre calibrated DVGW compliant dry UV monitorDry monitor port with light trap	<ul style="list-style-type: none">4 line x 20 character backlit LCD with indication of System StatusRemote / local modeDose or intensityAlarms and warnings listDate and timeEnglish language	<ul style="list-style-type: none">Lamp failLow UV dose or intensityOperation outside validated conditions	<ul style="list-style-type: none">Door interlocked cabinet isolatorSeparate door locksBallast thermal cut outResettable circuit breakersUV monitor port shutters (light trap)

Options

- Validation Support Pack
- Stainless Steel cabinet (304)
- 30m lead lengths
- Printed operating, menu and safety guides available in Chinese, French and German
- CIP maximum 130°C with lamp off
- In field UV reference monitor and intensity meter

Approvals

- UL 61010-1 and IEC 61010-1
- CE following the low voltage 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 monior is DVGW W294-3 approved
- All wetted materials WQA certified to NSF 61 except PQL 0005

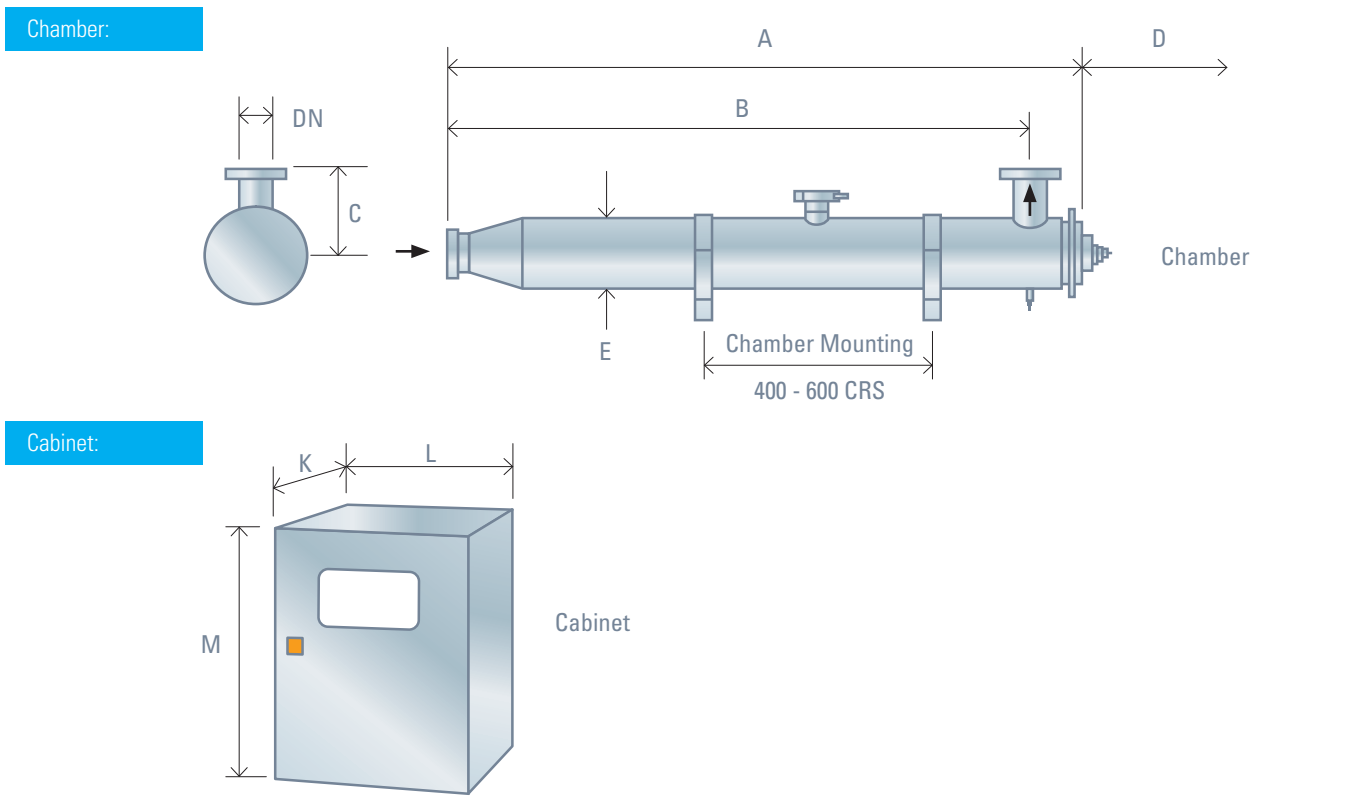
Additional Information

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.

A HALMA COMPANY



Dimensions (mm)



Model	Maximum Disinfection Capacity * (m³/hr)	Min. T ₁₀ (%)	Dimensions (mm)									Approx Weight (Kg)		
			A	B	C	D	E	DN	K**	L**	M**	Chamber (Empty)	Power Supply	Power (W)
PharmaLine PQL 0005	5.3	60	1385	1273	82	1300	102	1.5"	260	600	950	9	37	80
PharmaLine PQL 0009	8.2	60	1385	1273	82	1300	102	2"	260	600	950	9	37	140
PharmaLine PQL 0016	16	60	1385	1273	82	1300	102	2"	260	600	950	9	37	270
PharmaLine PQL 0036	36	60	1437	1300	150	1300	168	3"	260	600	950	20	37	270

* The maximum disinfection capacity is based on a dose of 32mJ/cm² RED MS2 phage T₁₀ 98% 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 300mm to L and 150mm to M dimensions