

Demitec-UV®

BM 120

Technical specification sheet

UV chamber type BM

Material: stainless steel 316L (1.4404)

(optional: HDPE)

max. o.6 to 1.0 micron Roughness, internal:

Shape of construction: L-shape

1½" BSP-M (optional: 1" and 2") Connection, standard:

Mounting: vertical (alt. horizontal)

Max. water pressure: 10 bar

(higher water pressure on request)

Number of UV lamps and quartz sleeves: 1

UV lamp connection: one-sided Quartz sleeve(s): one-side closed Fixation of quartz sleeves: two-sides fixed

Type of quartz, standard: Q200 Protection class: IP₅4

option 'CxBM' External coating: option 'Us1' UV sensor: Anti-fouling mechanism, manual: option 'AF-McBM' Anti-fouling mechanism, electrical: option 'AF-EcBM'

Drain/de-aeration connection (1/4"): included

Flange construction for easy access

into the chamber: included **Dimensions:** see drawing

Control cabinet (standard)

Material: painted steel

Dimensions at standard power supply $(h \times w \times d)$: 400 X 400 X 200 mm

Power supply, standard: 230Volt 1L+N

Connected power: 40W

Power supply

(110V, 230V 2L or 400V 3L): option Frequency: 50 or 60 Hz Protection class: IP54 Mounting: wall or skid

Electrical cables between

chamber and cabinet: included (5 meters)

Sizes of control cabinet in other material (h x w x d)

Stainless steel 304: 400 x 400 x 200 mm Plastic: 500 X 500 X 320 mm

Controller type (Lambda 2)

ON/OFF-switch: included Individual lamp failure detection: included Individual lamp control: included Hour counter: included 'UV system on' indication: included Remote ON/OFF: option

In case of option 'UV sensor'

Alarm contact (3A): included Indication "good/warning/failure": included Low UV output signal: included UV intensity output (4-20 mA): included

In case of option 'AF-EcBM' Lambda 4:

see 'Controllers overview Lambda 4' Dimensions control cabinet: 600 x 600 x 200 mm

Optional controller

Lambda 3 controller:

see 'Controllers overview Lambda 3' Dimensions control cabinet:

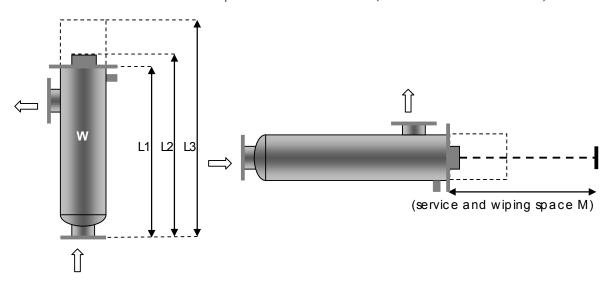
600 x 600 x 200 mm



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BM 120 Dimensions

L-shape of UV irradiation chamber (vertical and horizontal mounted)



Connection1.5" BSP	mm
L1 = distance top-bottom, without anti-fouling mechanism	620
L2 = distance top-bottom, with manual anti-fouling mechanism	718
L ₃ = distance top-bottom, with electrical anti-fouling mechanism	816
M = service and manual anti-fouling space	500
M = service and electrical anti-fouling space	600
W = outer diameter	114

Capacity table in m³/h* as a function of the expected lamp life:

UV dose	25 mJ/cm ²				
UV transmission (%10mm)	100%	95%	90%	85%	80%
4,000 – 6,000 hours	5	4.5	4	3.5	3
6,000 – 8,000 hours	4.5	4	3.5	3	2.5
8,000 – 10,000 hours	4	3.5	3	2.5	2

40 mJ/cm ²							
100%	95%	90%	85%	80%			
3	2.7	2.5	2.2	2			
2.7	2.5	2.2	2	1.7			
2.5	2.2	2	1.7	1.5			

Higher or lower UV dose can be calculated from above table or on request to be indicated.

Maximum hydraulic capacity**

Connection size Capacity in m^3/h 1" 5

1 $\frac{1}{2}$ " 12

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^{**} Max capacity is based on a maximum velocity over the in and outlet connections of abt. 3 m/s.