nx filtration

Technical datasheet

WMC225 HYDRAcapLD series

Hollow fiber ultrafiltration module for water and wastewater applications

Release TDS014 – WMC225 HYDRAcapLD series Rev. 01 – 20240704

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General Information

The WMC225 HYDRAcapLD (Large Diameter) UF modules are designed for water treatment, as well as industrial and municipal wastewater reuse. The larger inner fiber diameter of these series makes these modules ideal for high turbidity application, allowing more efficient cleaning. They excel in removing turbidity, suspended solids, and virus and bacteria. The modules offer outstanding pH and chlorine resistance. The WMC225 HYDRAcapLD series is available in different membrane surface areas.

Membrane characteristics

Membrane material	Modified PES
Membrane fiber inner diameter	1.2 mm (0.047”)
Pore size	0.02 µm
MWCO [1]	150 kDa
Filtration mode	Inside-Out; Vertical
Operation mode	Dead-end or cross-flow

Operating Conditions [2]

Typical flux	50 – 100 l/m^2/h (30 – 60 gfd)
Backwash flux	100 – 250 l/m^2/h (60 - 150 gfd)
Max. system pressure [3]	5 bar (72 psi)
Max. transmembrane pressure [3]	2 bar (29 psi)
Max. backwash pressure [3]	2 bar (29 psi)
Max. active chlorine concentration	500 ppm @ pH>10
Max. cumulative active chlorine exposure	250,000 ppm-hours @ pH>10
Max. turbidity	200 NTU
Max. Temperature during operation & cleaning	40°C (104°F)
pH range during operation	2-12
pH range during cleaning	1-13

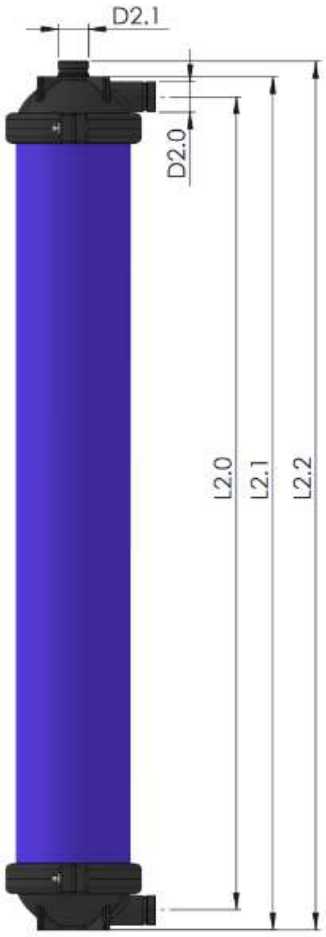
[1] Molecular Weight Cut Off (MWCO) is an estimation as it depends on size, shape, charge and polarity of the compound being tested, as well as test conditions. Measured with dextran.
[2] The limitations shown here are for general use. The values may be more conservative for specific projects to ensure the best performance and longest life.
[3] Maximum pressures at 20°C (68°F).

WMC225 HYDRAcapLD series

Module Specification

Materials of Construction	HYDRAcap40LD	HYDRAcap60LD
Housing	PVC-U	PVC-U
Internals	ABS, PP, PVC-U	MBS, PP, Noryl
Potting	Epoxy resin	Epoxy resin

Dimensions	HYDRAcap40LD	HYDRAcap60LD
Membrane Surface Area	19.3 m² (208 ft2)	30 m² (323 ft2)
L2.0	1092 mm (43”)	1600 mm (63”)
L2.1	1172 mm (46.13”)	1680 mm (66.13”)
L2.2	1202 mm (47.32”)	1710 mm (67.32”)
D2.0	60.3 mm (2.37”)	60.3 mm (2.37”)
D2.1	60.3 mm (2.37”)	60.3 mm (2.37”)



Available Module types	WMC225 HYDRAcap40LD	WMC225 HYDRAcap60LD
Product-Code	SETUF0031	SETUF0034

Storage Information

New modules in original packaging can be stored for max. 1 year from shipping date in a dry place, protected from sunlight or any heat source, at temperatures between 1 and 40°C (33 and 104°F);

Ex-factory storage solution: 84wt% water, 15wt% glycerin and 1wt% sodium metabisulfite;

WMC225 HYDRAcapLD series

Weight Information

Weight	WMC225 HYDRAcap40LD	WMC225 HYDRAcap60LD
Dry weight Module including assembly components	23 kg (51 lbs)	34.5 kg (76 lbs)
Filled module including assembly components	54 kg (119 lbs)	84.5 kg (186 lbs)

Shipping Information

Each module is individually packed in a vacuum sealed plastic bag. For small quantities, modules are shipped in separate cardboard boxes.

For large shipments, modules are loaded in a wooden crate with a max. of 12 modules per crate:
- Crate dimensions WMC225 HYDRAcap40LD: 100 x 126 x 173 cm; 40 x 50 x 68 in (L x W x H)
- Crate dimensions WMC225 HYDRAcap60LD: 100 x 126 x 191 cm; 40 x 50 x 75 in (L x W x H)

Weight stated is shipping weight including preservative solution.

Shipping weight	WMC225 HYDRAcap40LD	WMC225 HYDRAcap60LD
Shipping weight per module	28 kg (62 lbs)	40 kg (88 lbs)
Shipping weight per crate (12 modules)	465 kg (1025 lbs)	590 kg (1300 lbs)

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