

DATASHEET

X-LINE RACK

GENERAL INFORMATION

X-line is a revolutionary pre-engineered ultrafiltration (UF) membrane solution, with a minimized footprint and maximized flow through smart flow optimization. Due to its robust and optimal design the X-line Rack is applicable to a wide range of industrial and municipal challenges. Mode of operation is dead-end with regular hydraulic clean and chemically enhanced backwash. The X-line Rack is developed in conjunction with the Aquaflex module.

FEATURES

The X-line Rack features a number of advantages:

- Highly flexible
- Highly scalable
- Integrated headers for rapid assembly on site
- Pre-engineered, plug and play
- Optimized flow ratio due to OptiFlow Caps
- Optimized footprint
- Low cost

OPERATING SPECIFICATIONS

- Maximum static pressure of 5 Bar(g)
- Maximum dynamic operating pressure of 3 Bar(g)
- Headloss, across UF during rack filtration
 0.1 1.0 Bar
- Headloss, across UF rack during backwash 0.7 – 2.5 Bar
- 0-40 °C (non-freezing)

No. of Racks on a manifold

NOMENCLATURE

A rack consists of multiple modules linked together with caps. Racks are connected to a manifold either single sided or two-sided. The total assembly is a skid. Multiple skids are combined into a plant.

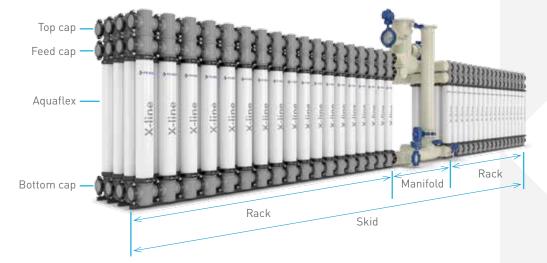
X-line – 2 x 4 x 18 - C / N (one skid is shown in the picture)

Option Frame (F = yes/N = No)

Option Couplings (C = yes/N = No)

No. of modules in a row

No. of rows on a rack



DATASHEET

CERTIFICATIONS

• USA: ANSI/NSF, Standard 61

- UK: DWI Regulation 31
- France: ACS
- Germany: KTW and DVGW
- The Netherlands: KIWA-ATA

COUPLINGS

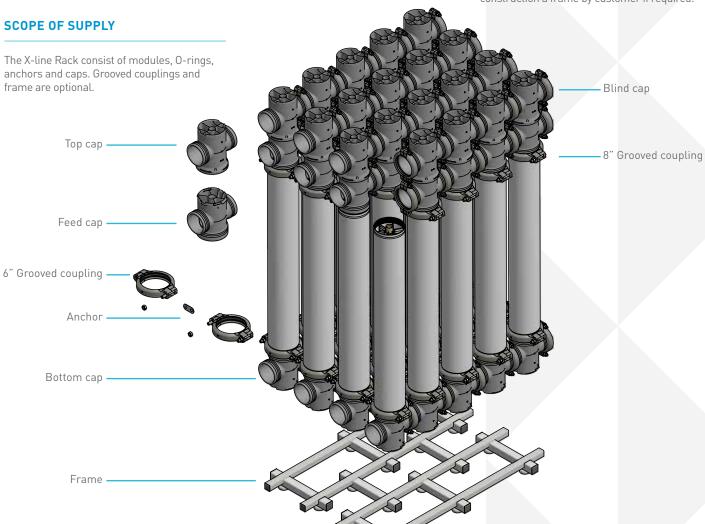
Required couplings are DN200 and DN150, where the Pentair standard DN200 has a width of 350 mm. Please note that by using different couplings the width and/or bolt diameter may vary, therefore the supplied anchor may not fit.

FRAME

Pentair offers a height adjustable frame to be set on a flat smooth surface:

- Adjustable frame height 115-140 mm
- Pentair standard couplings (or equal) are mandatory

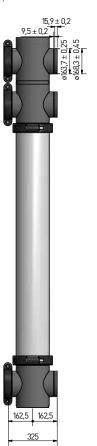
Typical specifications can be provided for construction a frame by customer if required.

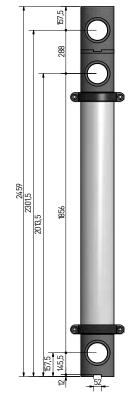


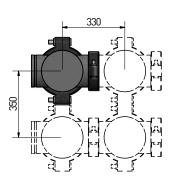
DATASHEET

GENERAL DIMENSIONS AND WEIGHT

General dimensions and weights are given in this document. If more dimensions are needed please contact PENTAIR SALES.







WEIGHT PER MODULE	KG	[LBS]
Dry weight including grooved couplings	75	[165]
Filled weight including grooved couplings	135	[297]
SS Frame per module	2	[4.4]

MANIFOLD

Due to the flexible design a manifold is not supplied as a standard product, nevertheless Pentair is able to provide an engineered solution.

RACK CONFIGURATION

The X-line Rack can be tailored to the requirements of the customer. In order to configure a X-line Rack the following rules need to be considered:

- Maximum number of modules in line is 18 per rack
- Minimum number of modules in width is 2 per rack, with no maximum*
- All module lines of the rack must have the same length
- All racks must be symmetrical
- * Limiting width to 4 modules, will provide a high degree of accessibility while optimizing the footprint.

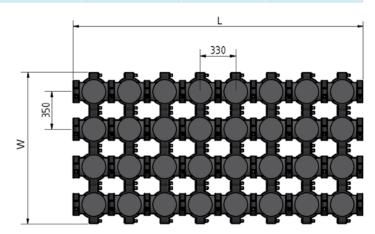
SHIPPING, HANDLING AND STORAGE

All components should be handled with care, by the certified personnel. During assembly personnel must work according to the assembly instructions as provided by Pentair. The X-line Rack should be stored in a dry, wind shielded place and away from direct sunlight. Reference is made to the membrane elements in the X-line Rack datasheet and storage guidelines for the membrane modules.

DATASHEET

NUMBER OF MODULES LENGTH X WIDTH MM [INCH]	DIMENSIONS OF A X-LINE RACK**					
	2	2	3	3	4	4
1	330 x 700	[13 x 28]	330 x 1050	[13 x 41]	330 x 1400	[13 x 55]
2	660 x 700	[26 x 28]	660 x 1050	[26 x 41]	660 x 1400	[26 x 55]
3	990 x 700	[39 x28]	990 x 1050	[39 x41]	990 x 1400	[39 x55]
4	1320 x 700	[52 x 28]	1320 x 1050	[52 x 41]	1320 x 1400	[52 x 55]
5	1650 x 700	[65 x 28]	1650 x 1050	[65 x 41]	1650 x 1400	[65 x 55]
6	1980 x 700	[78 x 28]	1980 x 1050	[78 x 41]	1980 x 1400	[78 x 55]
7	2310 x 700	[91 x 28]	2310 x 1050	[91 x 41]	2310 x 1400	[91 x 55]
8	2640 x 700	[104 x28]	2640 x 1050	[104 x41]	2640 x 1400	[104 x55]
9	2970 x 700	[117 x 28]	2970 x 1050	[117 x 41]	2970 x 1400	[117 x 55]
10	3300 x 700	[130 x 28]	3300 x 1050	[130 x 41]	3300 x 1400	[130 x 55]
11	3630 x 700	[143 x 28]	3630 x 1050	[143 x 41]	3630 x 1400	[143 x 55]
12	3960 x 700	[156 x 28]	3960 x 1050	[156 x 41]	3960 x 1400	[156 x 55]
13	4290 x 700	[169 x 28]	4290 x 1050	[169 x 41]	4290 x 1400	[169 x 55]
14	4620 x 700	[182 x 28]	4620 x 1050	[182 x 41]	4620 x 1400	[182 x 55]
15	4950 x 700	[195 x 28]	4950 x 1050	[195 x 41]	4950 x 1400	[195 x 55]
16	5280 x 700	[208 x 28]	5280 x 1050	[208 x 41]	5280 x 1400	[208 x 55]
17	5610 x 700	[221 x 28]	5610 x 1050	[221 x 41]	5610 x 1400	[221 x 55]
18	5940 x 700	[234 x 28]	5940 x 1050	[234 x 41]	5940 x 1400	[234 x 55]

^{**} Width may vary, due to the couplings used. Sizes indicated are Pentair standard.





ATS Water technology

54/18 Bùi Quang Là, P.12, Q.Gò Vấp, HCM ats@ats-water.com Tel. +(028) 3588 8961 www.ats-water.com Fax. +84 835.888.96