

PURON[®] HOLLOW FIBER ROWS

Hollow Fiber Submerged Membrane Row for MBR Applications

PRODUCT DESCRIPTION

Membrane Chemistry:	Proprietary PVDF
Membrane Type:	PVDF-1 braided hollow fiber for outside-in operation
Fiber Support Chemistry:	Polyester
Nominal Pore Size:	0.03 μ m
Outside Fiber Diameter:	0.1 inch (2.6 mm)
Potting Material:	Proprietary epoxy compound
Storage Solution:	Glycerin

PRODUCT SPECIFICATIONS

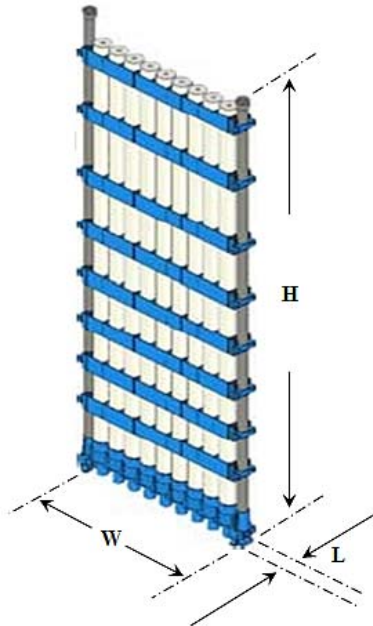
Model	Part Number	Membrane Area ft ² (m ²)
PSH 37	PUR-PSH37	400 (37)
PSH 41	PUR-PSH41	440 (41)

OPERATING & DESIGN INFORMATION*

Temperature Range:	41 - 104°F (5 - 40°C)
Maximum Filtration Transmembrane Pressure:	9 psi (0.6 bar)
Maximum Backflush Transmembrane Pressure:	9 psi (0.6 bar)
Allowed Instantaneous Air Flow Rates:	
PSH 37:	0.016 – 0.034 scfm/ft ² (0.30 - 0.63 Nm ³ /hr·m ²)
PSH 41:	0.015 – 0.030 scfm/ft ² (0.27 - 0.55 Nm ³ /hr·m ²)
Allowable pH Range for Cleaning	2.0 – 10.5
Maximum Allowed Total Chlorine @ 95°F (35°C) or Lower:	1,000 ppm @ pH 9 or higher during backflush
Maximum Allowed Total Chlorine @ 95°F (35°C) or Lower:	2,000 ppm @ pH 9 or higher during recovery cleaning
Maximum Allowed Total Chlorine Contact:	500,000 ppm-hrs cumulative

* Consult Process Technology Group for specific applications.

NOMINAL DIMENSIONS & WEIGHT



Model	L Inches (mm)	W Inches (mm)	H Inches (mm)	Dry Weight Pounds (kg)
PSH 37	3.62 (92)	32.60 (828)	84.68 (2,151)	50.7 (23)
PSH 41	3.62 (92)	32.60 (828)	91.30 (2,319)	55.1 (25)

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PURON® Row Transport and Storage Conditions:

Storage of PURON Rows

Storage of PURON rows should be carried out at ambient temperature (41 to 77°F / 5 to 25°C). Extended exposure to UV source must be avoided. The PURON rows must not be stored for longer than 3 months on site.

Transport of PURON Rows

Transport of PURON rows should be carried out at ambient temperature (23 to 113°F / -5 to 45°C).

When the PURON rows are being transported by ship, the PURON row should be placed in seaworthy packaging and stored at ambient temperature, provided that such temperature is between 23 and 113°F (-5 and 45°C).

Dry-up Protection

Once the PURON hollow fiber row has been commissioned with an aqueous medium, it should never be stored dry. If the membrane plant is not operated for 7 days or less, the row may be kept wet by keeping it submerged in the biomass, provided the following conditions are met:

- The biomass is healthy and is aerated and the recirculation of biomass over the membrane chamber is functioning properly.
- The row is fully submerged in the biomass.
- The row aeration is switched on every 30 minutes for a period of 1 minute to assure mixing of sludge inside the row.

Storage of Used PURON Rows

If the idle period is between 7 and 21 days, immersion in a storage solution is required. Proceed as follows:

- Submerge the row fully in potable water. Run the aeration for at least 4 hours, drain the tank and refill with fresh water again.
- Add sodium hypochlorite to form a solution of concentration of 10 mg/l total chlorine at pH between 5.5 and 7.5.
- Check the chlorine concentration daily. If the concentration of total chlorine drops below 5 mg/l, additional dosage of sodium hypochlorite is necessary.

Long-Term Storage

If the idle period is longer than 21 days, the row has to be conditioned. Please consult KMS for more details.

Proper Handling

Utmost care at any time should be taken when handling the row. Rough handling (e.g. dropping, collisions, etc.) may damage rows or connections.

Precautions When Working Near the PURON Hollow Fiber Row

Keep the PURON hollow fiber rows free from contact with sharp objects or exposure to heat sources. Actions that may cause sparks (e.g. welding, grinding) should be strictly prohibited in proximity to the PURON hollow fiber rows.

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Koch Membrane Systems, Inc., www.kochmembrane.com

Corporate Headquarters: 850 Main Street, Wilmington, Massachusetts 01887-3388, US, Tel. Toll Free: 1-888-677-5624, Telephone: 1-978-694-7000, Fax: 1-978-657-5208
European Headquarters: Koch Chemical Technology Group Ltd., Units 3-6, Frank Foley Way, Stafford ST16 2ST, GB, Telephone: +44-178-527-2500, Fax: +44-178-522-3149

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