SEPRODYN®

Modules for Fine Filtration

SEPRODYN® filters are crossflow microfiltration modules used to separate suspended solids larger than 1.0 micron. The highly porous membrane contributes to a very high product flux and, with the ability to employ periodic backflush, stable and efficient processes are achievable.

SEPRODYN® tubular modules use a newly developed processing technique that allows membranes to be used in applications which require highly stable polymer materials. These membrane modules can be used across the entire pH-range from 0 to 14 and are especially recommended in applications that require a high resistance against abrasive substances.

SEPRODYN® membranes are self-supporting and extremely robust tubular membranes. Because of their large inner diameter of 5.5 mm, liquids with a high percentage of suspended solids can be filtered.

The tubular membranes are made of ultra-high molecular polyethylene made in a patented process by MICRODYN-NADIR. The membrane structure is symmetrical across the entire wall thickness. This ensures that the membrane separation performance is not affected when the membrane surface is damaged by abrasive material. The membranes are welded together with the housing. Since the housing and the membrane are both polyethylene a very stable bond between the membranes and the housing is achieved.

ADVANTAGES

- » extremely resistant to chemicals and abrasion
- » high packing density per module
- » filtration can be performed in both directions
- » high solids tolerance
- » backflushing with chemical solutions
- » minimized dead zones

SEPRODYN® Membrane Characteristics

Membrane Characteristics	
Membrane geometry	Tubular
Inner diameter	5.5 mm
Membrane material	Polyethylene
Pore size	1 µm

1 m² ≙ 10.764 ft² | 1L ≙ 0.26 us-gal. | 1" ≙ 2.54 cm

SEPRODYN® Tubular Modules

Decoding of the product code: **SE-150-TP-1N/DF**

Module Type	Module Size	Membrane Geometry	Shell Material	Pore Size	Module Constr. Length	Module Connection
SEPRODYN®	(⌀ diameter of shell in mm) 020 laboratory module 090 module 150 module 220 module	T Tubular membrane	P Polypropylene O without shell (exchange cartridge)	1 µm	M medium N normal L long	AF: ANSI flange DF: DIN flange

Other module configurations and sizes can be supplied upon request. The connections are available according to DIN nomenclature, JIS and ANSI. Not all kinds of combinations are available. Further information can be found in our technical data sheet.

Final sizing and selection has to be approved by an official MICRODYN-NADIR representative. Please contact **phone + 49 611 962 6001** or **www.microdyn-nadir.de**

SEPRODYN® Tubular Modules

Module Type	SE 020 TP 1N	SE 090 TP 1M	SE 150 TP 1N	SE 150 TP 1L	SE 220 TP 1L
Membrane surface in m² 1)	0.01	1.0	4.0	8.0	16.0
Shell material	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Module length in m	0.75	1.40	1.65	3.00	3.10
Number of tubes	1	46	174	174	336
Crossflow for 1m/sec 2)	71 l/h	3 200 l/h	12 300 l/h	12 300 l/h	30 000 l/h

Note: (1) Based on inner diameter // (2) Recommended flow velocity: 2-3 m/sec