

## Datasheet

# INDUSTRIAL SCALE MODULE PVM-050-300-AS

The stainless steel PVM-050-300 industrial scale module is designed to hold 300 1-channel tubular membranes of 500 mm length each, for use in pervaporation or vapor permeation applications. The module is designed and manufactured according to the European Pressure Equipment Directive (PED) 2014/68/EU or the ASME standard (depending on customer requirements).

### MODULE DATA

Module housing material	SS316L
Design standard	2014/68/EU
Design details	see table with Design data on next page
Feed connection	3" WNF 150
Retentate connection	3" WNF 150
Permeate connection	4" WNF 150
Pressure gauge connection	1" NPT
Sealing of membrane tubes	O-ring (EPDM-PC, VITON, FFKM)
Sealing of flanges	Gasket or O-ring (EPDM-PC, VITON, FFKM, Teflon)

### MEMBRANE DATA

Standard membranes	Tubular Hybrid silica, PDMS, PEBA or POMS
Membrane dimensions	L x OD x ID = 500 x 10 x 7 mm (tubular)
Membrane surface area	3,17 m <sup>2</sup>

### MODULE CONFIGURATION

Membranes are placed in series

### NOZZLE LIST

Item	Dim.	Description
N1	3" WNF 150	Inlet
N2	3" WNF 150	Outlet
N3	4" WNF 150	Vacuum piping connection
N4	1/4" NPT	Instrument connection



## OPERATIONAL WINDOW

Operating pressure	Maximum 10 barg
Process temperature	Maximum 180 °C (depending on membrane and sealing type)
Vacuum	1 mbar
Feed pump capacity	Up to 75000 L/h

## CLEANING

Use general cleaning products for SS316.  
Further depending on membrane and sealing.

## DESIGN DATA

PED Medium group	1	Dangerous
PED Phase	Gas	
Hydrostatic test pressure	14,3	barg
Operating pressure	10	barg
Operating Temperature	180	°C
Design pressure	10	barg
Design Temperature	200	°C
Volume	151	liter
Weight of vessel empty	345	kg
Corrosion allowance	N/A	mm
Classification acc. PED 2014/68/EU	IV	
Design code	EN1344	
or		
Classification acc. ASME	VIII, div. 1	
Design code	ASME	
Inspection	Notified Body	
Certificate	CE or U-Stamp	

## Remarks:

- \* These products are generally designed according to customer process, media and regulatory requirements
- \* Materials produced according to European Harmonized Standards
- \* Material certificates according to EN10204:2004
- \* Surface treatment inside Clean and dry, outside Pickled and passivated

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