PRODUCT SHEET

PCI Membranes

Ultrafiltration Test Modules



PROVEN MEMBRANES

With applications in the food, beverage chemical, MBR and pharmaceutical industries.

COMPACT MODULAR DESIGN

Quick and easy plant construction.

TUBULAR MODULE

Minimal prefiltration required, suited to viscous liquids and high levels of suspended solids.



A Series Mini Module

The Mini-module is a low cost module for testing and evaluating A Series membranes (A5, A8, A19/A37 membranes), which are ideally used for applications containing suspended solids. Specifically designed to be compatible with the PCI BRO pilot plant, it is also suitable for fitting to a range of other test units.

This enables the client to test the suitability of one of the standard A Series membranes or an experimental membrane in the laboratory or pilot hall, before going to the expense of full-scale modules.

When using an A5 membrane type, the 1.2m long module can be fitted with 5 membrane tubes of 6mm diameter each and yielding a membrane area of $0.1 \, \mathrm{m}^2$.

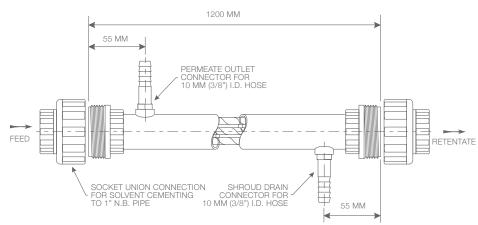
With an A8 membrane type, the mini module can be fitted with 4 membrane tubes of 8mm diameter each and yielding a membrane area of 0.12m².

For the case of an A19/A37 membrane type, the mini module can be fitted with a single 12.5mm diameter membrane tube and yielding a membrane area of 0.05m².

The module shell is constructed in ABS or PVC and the membrane tubes are bonded into the shell with epoxy resin.

All types of commercial A Series membranes are available, and where appropriate, development membranes can be supplied.

Modules may be used individually, or be connected in series or parallel, subject to the flows and pressures available from the test rig to which they are fitted.



Dimensions: A5 with 5 off 6mm tubes	
Length (m)	1.2m
Membrane Area (m²)	$0.1m^{2}$
Module Volume (L)	0.6L
Membrane Tube Volume (L)	0.17L
Shroud Volume (L)	0.43L

Dimensions: A8 with 4 off 8mm tubes		
Length (m)	1.2m	
Membrane Area (m²)	0.12m ²	
Module Volume (L)	0.6L	
Membrane Tube Volume (L)	0.24L	
Shroud Volume (L)	0.36L	

Dimensions: A19/A37 with 1 off 12.5mm tubes	
Length (m)	1.2m
Membrane Area (m²)	$0.05\mathrm{m}^2$
Module Volume (L)	0.6L
Membrane Tube Volume (L)	0.15L
Shroud Volume (L)	0.45L

Additional Details		
Operating Pressure	Up to 10 bar max	
Operating Temperature	Up to 60°C	
Typical Flow Rates	20-30 l/min/tube	
Shroud Material	ABS or PVC	
Membrane Type	A range of UF membranes in PVDF	
pH Range	1.5-10.5	

Connection	
Fittings	1" socket union for inlet/outlet 10mm (3/8") hose tail for permeate outlets

