

PCI Membranes®

Ultrafiltration Modules Parallel Flow Arrangement

Pilot Units

Pump, Pipe Work

The feed pump is a stainless steel triplex plunger type, usually variable speed, producing a maximum operating pressure of 80 bar. Most pipe-work in contact with feed fluid is of 316 stainless steel construction. Various pipework options are available, including recycle for high recoveries and additional pressure, temperature and flow indicators.

Heat Exchanger

A heat exchanger is fitted to maintain the temperature of the recycled liquor at the desired value. The shell and tube design is of similar construction to the B1 module, 0.6m in length and constructed of AISI 316 stainless steel.

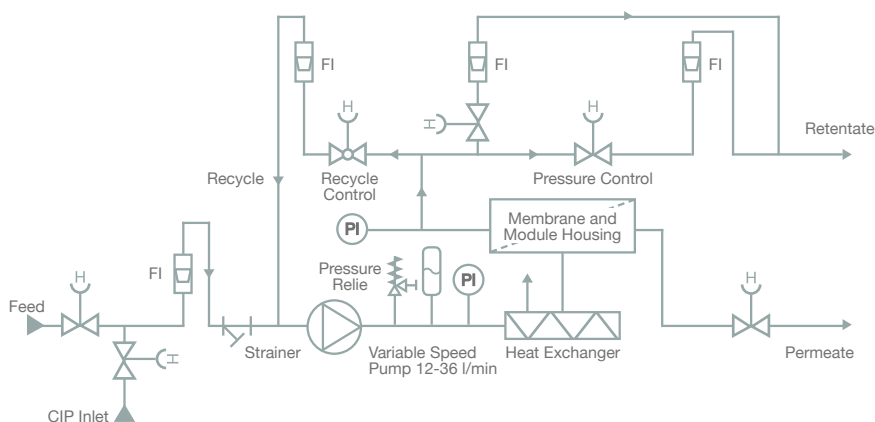
The Membranes and Modules

The unit can be fitted with:

- 1 x 1.2m long B1 tubular module of 0.9m² membrane area (all applications).
 - Single 2.5" spiral elements and housing.
 - Single tube tester for membrane selection.
- Unit has 6 x 1.2m long single tubes fitted in series.

Cleaning

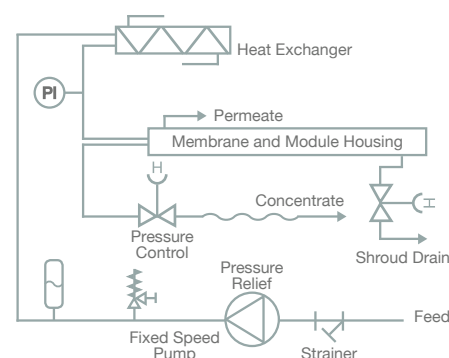
All membranes are easy to clean by simple clean in place procedures at low pressures. An optional cleaning tank can be supplied. We can recommend the most suitable membrane and module type for your application. We can also provide test programmes, and from the data collected design full-scale plants and supply budget or firm quotations.



Dimensions	
Length (m)	2m (approx)
Height (m)	1.5m
Width (m)	0.8 when fitted with 1.2m B1 modules
Membrane Area (m ²)	Depending on membrane and module type

Connection	
Power Requirements	4.0/5.5 kW (fixed/variable speed) 380 or 415 V/3 ph & earth, 50 Hz
Weight	150kg approximately when fitted with 1.2m B1 module

Additional Details	
Operating Pressure	Up to 64 bar depending on membrane type fitted
Operating Temperature	1-80°C depending on membrane type fitted
Membrane Type	A range of RO, UF or NF membranes
pH Range	1-14 (to suit membrane type fitted)



PROVEN MEMBRANES

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

COMPACT MODULAR DESIGN

Quick and easy laboratory setup.

TUBULAR MODULE

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

Pilot Unit Description

The unit is designed for pilot scale work and may be used to process a wide variety of aqueous solutions using reverse osmosis (RO), nanofiltration (NF) or ultrafiltration (UF). A wide range of membranes is available to suit the required application.

Both designs are supplied with instrumentation necessary for scale up data to be collected accurately and easily. Customisation is available to allow use for small production requirements in continuous, semi continuous or batch operation."