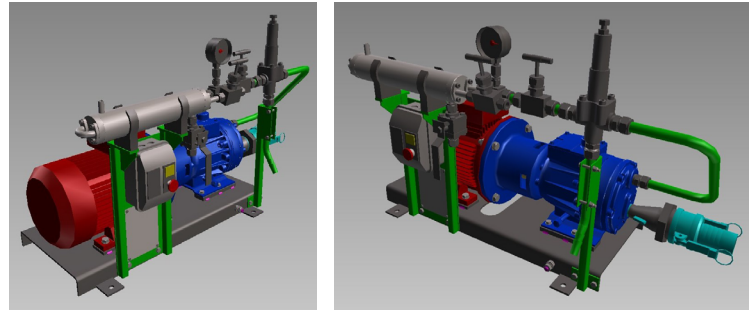


## Micro 240

A laboratory pilot plant designed for process development, membranes scale up testing, quality assurance and small-scale production.

A simple self-contained unit of minimum hold-up volume (depending on the type of module mounted). With Hydra Cell G10 high pressure pump, electric motor, pressure gauge and a pressure relief valve. All mounted on a welded stainless-steel framework. Equipped with a support stand for either Micro 240/960 module or a B1 module.



### Application Range

Microfiltration (MF)	Ultrafiltration (UF)	Nanofiltration (NF)	Reverse Osmosis (RO)
up to 30 L/min	up to 30 L/min	18 – 22 L/min	18 – 22 L/min

Electrical Power Supply	Connections
400 Volts	Inlet to feed pump: 1" OD hose tail
3-phase (5 pins)	Permeate & Shroud outlet: 1/2" OD hose
Motor rating: 4 KW	Concentrate outlet: 1/2" hose
	PRV vent: 3/4" OD

### Size & Weight

Dimension			Unit & Package	Unit Only
Length	Height	Width		
120 cm	60 cm	77 cm	127 kg	80 kg

### Module

Any of the following modules can be used with this unit.

#### 4 ft (1.2 m) B1 Module

Comprised of 18 perforated stainless-steel tubes in the form of a shell & tube, each tube fitted with a membrane element. The module is designed with a series flow end caps; connecting all 18 tubes in series.

- Membrane area: 0.88 m<sup>2</sup>. Module weight: 14.4 kg
- Hold-up volume: Tube-side 2.8 L, Shroud-side 6.7L
- Membrane tube ID: 12.7 mm

#### Micro 240 & 960

- Both are constructed in 316 stainless steel material

#### Micro 240

- 0.024 m<sup>2</sup> membrane area
- 75 ml tube side volume
- 514 ml shroud side volume
- 2 off 1.25 cm (D) x 30 cm (L) tubes connected in series

#### Micro 960

- 0.096 m<sup>2</sup> membrane area
- 295 ml tube side volume
- 2061.2 ml shroud side volume
- 2 off 1.25 cm (D) x 1.2 m (L) tubes connected in series

### Module tube side mechanical operating limit

#### B1 Module

- Max operating pressure: up to 64 bar
- Max pressure drop: 10 bar
- Max operating temperature: up to 80°C

#### Micro 240/960

- Max operating pressure: Up to 55 bar with max operating temperature: 70°C
- Max operating pressure: Up to 70 bar with max operating temperature: 20°C
- Max pressure drop: 0.15 bar @ 2 m/s – 0.5 bar @ 4 m/s

#### Corporate Office

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#### Online

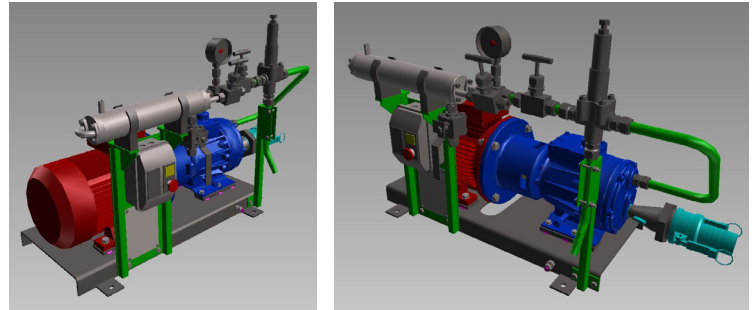
Website: [www.pcimembranes.com](http://www.pcimembranes.com)

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## Micro 240

A laboratory pilot plant designed for process development, membranes scale up testing, quality assurance and small-scale production.

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### Pump

- Hydra Cell G10 HP (diaphragm pump) is fitted. With maximum flowrate of 33.4 L/min.
- Pump starting: Control panel with DOL starter with overloads – manual.

### Motor & Drive Guard

- 4 KW motor with 3 phase, 1 earth and 1 neutral (5 pins). TEFC inverter rated motor mounted.

### Pressure Relief Valve

- The plant is fitted with a pressure relief valve set at 70 bar for all operation.

### Flowmeter

- None. Flow is manually checked by adding both reject and permeate flow together in a suitable graduated container.

### Pressure Sensor & Pressure Control Valve

- Module inlet pressure is constantly monitor and display on a pressure gauge.
- The unit is equipped with 3 independent hand operated needle valves, which are used for regulating the module inlet flow, bypass flow and the back pressure.

### Safety

- The unit is designed to the principles of Supply of Machinery (Safety) Regulations 1992 and are safe if operated in accordance with the procedures in the operating manual.

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