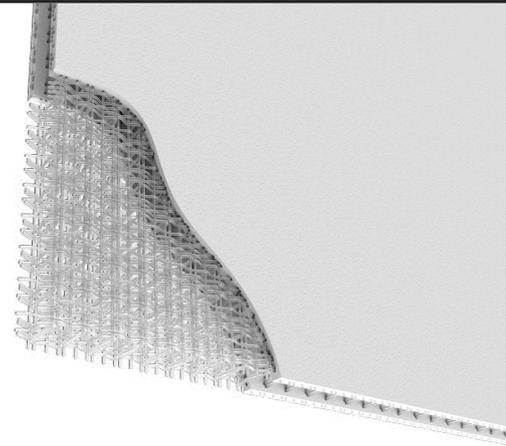


The IPC® Smart module is designed for medium capacity MBR applications to optimise the treatment and reuse of industrial and municipal wastewater.

It combines the advantages of the patented IPC® membrane technology in a compact and robust standalone format and enables a fast and efficient upgrade for classic activated sludge systems or for existing MBR applications. The unbreakable membranes inside each unit optimizes MBR's flux rate, footprint and uptime, while limiting the aeration demand and operational costs. IPC® Smart is robust, reliable and an efficient add-on or upgrade solution.



## MEMBRANE SPECIFICATIONS

### Membrane material

PVDF, proprietary blend

### Nominal pore size

40 nm

### Backwash

Up to 2.000 mbar

### Membrane layer thickness

> 600 µm

### Total membrane thickness

> 3,5 mm

### Sheet construction

Integrated Permeate Channel- IPC®

### Preservative

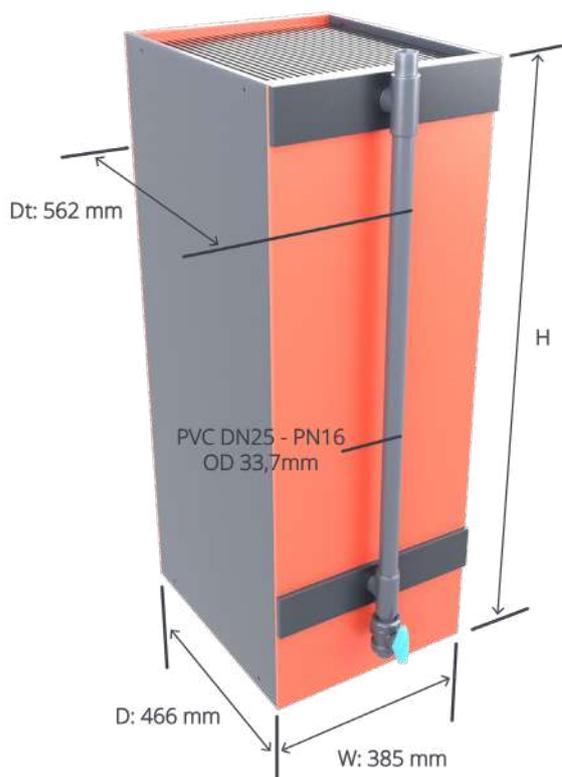
Glycerol + conservative additive

### Mechanical stability

Incompressible under operating conditions

### Chemical stability

1.000.000 ppmh NaClO @ pH < 11



## MODULE SPECIFICATIONS

	IPC® Smart
Height (mm)	1058
Unit size	1
Net membrane area (m²)	24
Weight dry (kg)	43
Weight wet max* (kg)	160
Module materials	PVC, PUR, SS

\*Estimation based on assumption of 100% sludge deposit between membrane plates



## OPERATING PARAMETERS

### FILTRATION

**Flux**

20 - 60 l/m<sup>2</sup>.h

**Transmembrane pressure**

- 20 to - 500 mbar

**MLSS**

4- 15 g/l

**Operating temperature range**

1 to 40°C

### CLEANING

**Physical cleaning**

Aeration and backwash

**Chemical cleaning via permeate channel****Chemically Enhanced Backwash (CEB)**

NaClO: 200- 800 ppm- 1 to 4 times per month

Citric acid: 2.000 ppm- 2 to 4 times per year

**Cleaning in Place (CIP)**

NaClO: 1.000- 2.000 ppm- 2 to 4 times per year

Citric acid: 5.000 - 10.000 ppm- 2 to 4 times per year

**pH-range cleaning**

2- 11 (max. 30°C)

### BACKWASH

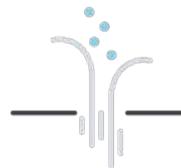
**Flux**

40- 120 l/m<sup>2</sup>.h

**Transmembrane pressure**

+ 50 to + 1.000 mbar

### AERATION

**Membrane diffuser,  
medium size bubble aeration****Airflow**

16 m<sup>3</sup>/h per aeration unit

*Typical range definition with regards to flux and TMP for filtration and backwash. Defined operating parameters for nominal process conditions, these may differ depending on application and specific project conditions*

## CONTACT

bluefootmembranes.com  
info@bluefootmembranes.com  
Tel.: + 32 (0) 11 73 66 96

Blue Foot Membranes NV  
Gerard Mercatorstraat 31  
3920 Lommel - Belgium

**BLUE FOOT**   
unbreakable membranes™