Water Technologies & Solutions
**fact sheet**

# ZeeWeed* immersed ultrafiltration

## model ZW1000

### description and use

As a pioneer of membrane technology, SUEZ leverages decades of research, development, and operational experience in developing one of the most advanced submerged ultrafiltration technology in the market, ZeeWeed 1000. ZeeWeed systems are proven to consistently outperform conventional filtration technology while meeting or exceeding regulatory requirements, regardless of source water quality.

### typical applications

Versatile and reliable, the ZeeWeed 1000 (Figure 1) is ideally suited for use in numerous applications including drinking water treatment, tertiary filtration and RO pre-treatment for brackish water. Compared to granular filter media, ZeeWeed membranes produce superior water quality and are virtually unaffected by variable raw water quality – all at a cost comparable to conventional filtration technology.

### general properties

- 0.02 µm nominal pore diameter - for optimal removal of particulates, bacteria and viruses
- PVDF hollow fiber membrane - provides high mechanical strength and chemical resistance
- Outside-in filtration - provides uniform flow distribution and high solids tolerance

**Figure 1: ZeeWeed 1000 module**

### storage and handling

Modules may be stored in the original factory packaging for up to one year prior to installation. Modules must be stored between 5°C and 35°C (41°F to 95°F). Do not expose the membrane module to direct sunlight (UV light). The module housing and other plastic components may degrade with extended UV exposure.

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## product specifications

| Specification | Measurement |
|---|---|
| **Model** | ZeeWeed 1000 |
| **Nominal membrane surface area** | 41.8 $m^2$ (450 $ft^2$)<br>51.1 $m^2$ (550 $ft^2$) |
| **Shipping weight**[1] | 23 kg (50 lb) |
| **Typical lifting weight**[2] | 21-27 kg (46-60 lb) |
| **Membrane material** | PVDF |
| **Nominal pore size** | 0.02 micron |
| **Nominal fiber diameter** | OD: 0.95 mm, ID: 0.47 mm |
| **Flow path** | Outside-in |
| **Housing material** | ABS, PPE/PPO |

[1]Packaged
[2]Will vary with solids accumulation

| Module Dimensions (Figure 2) | | |
|---|---|---|
| **Height (A)** | **Length (B)** | **Width (C)** |
| **685 mm (27.0 in)** | 691 mm (27.2 in) | 107 mm (4.2 in) |

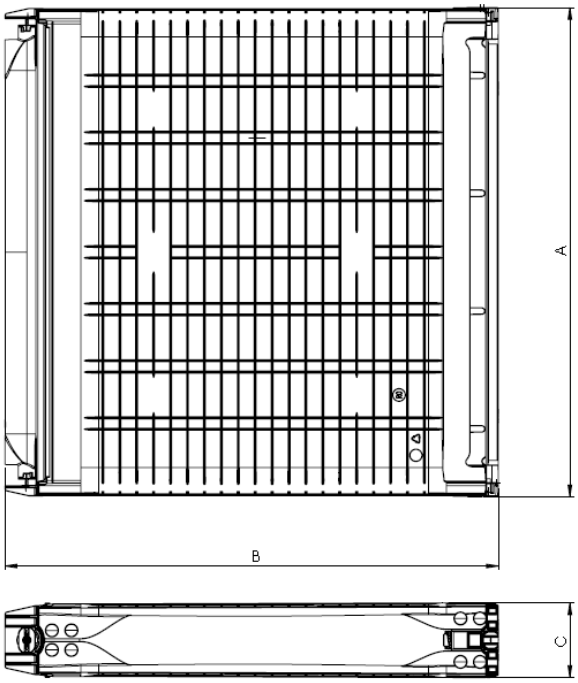


**Figure 2: ZW1000 Module Dimensions**

## operating parameters

| Parameters | Item Description | Measurement |
|---|---|---|
| **Performance** | Flow range | 55 – 110 $m^3$/day (10-20 gpm) |
| **Operating conditions** | TMP range | 0-90 kPa (0-13 psi) |
| | Max temperature | 40°C (104°F) |
| | Operating pH | 5.0-10.0 |
| | Max air scour flow | 5 $dm^3$/hr (3 dcfm) / stack |
| **Cleaning** | Cleaning pH range | 2.0-12.0 |
| | Max chlorine concentration per cleaning[3] | 1,000 mg/L (as $Cl_2$) |

[3]NOTE: Higher concentrations are possible depending on feedwater and pH.