

## FG-SpiraCore™ U005 & U010 HT Ultrafiltration Membrane Element Series

### FG-SpiraCore™ U005 & U010 HT Series

PCI Membranes® sanitary U005 & U010 HT ultrafiltration (UF) membranes are suited for process separations, particularly applications involving protein concentration to high solids levels. In these applications, a tighter ultrafiltration membrane is often used to maximize product yield. It is available in a wide variety of element designs for food, dairy and process separations as well as water purification. The U005 & U010 HT Series are designed with continuous high temperature operation up to 80°C (176 °F).



### Characteristics

| Membrane    | Material         | MWCO (Da) | Outer wrap |
|-------------|------------------|-----------|------------|
| <b>U005</b> | Polyethersulfone | 5,000     | Net wrap   |
| <b>U010</b> | Polyethersulfone | 10,000    | Net wrap   |

### Regulatory Status

Compliant with US FDA CFR Title 21, EC Reg. No. 1935/2004, and EU Reg. No. 10/2011. Halal certificate by the Islamic Food and Nutrition Council of America (IFANCA). Kosher certificate by Committee of Kashrut.

### Limits

|                                    |                                              |
|------------------------------------|----------------------------------------------|
| <b>Max Operating Pressure</b>      | 6.9 bar (100 psi) at 80°C (176°F)            |
| <b>Max Pressure Drop</b>           | 1.0 bar (14.5 psi) per element @30°C (86°F)  |
|                                    | 0.8 bar (11.6 psi) per element @70°C (158°F) |
|                                    | 0.6 bar (8.7 psi) per element @80°C (176°F)  |
|                                    | 0.3 bar (5 psi) per element @70°C (158°F)    |
| <b>Max. Operating Temperature</b>  | 80 °C (176 °F)                               |
| <b>Operating pH Range</b>          | 3 - 11                                       |
| <b>Cleaning pH Range</b>           | 2 - 12                                       |
| <b>Cleaning Chlorine Tolerance</b> | 200ppm for disinfection at pH ≥ 10.5         |

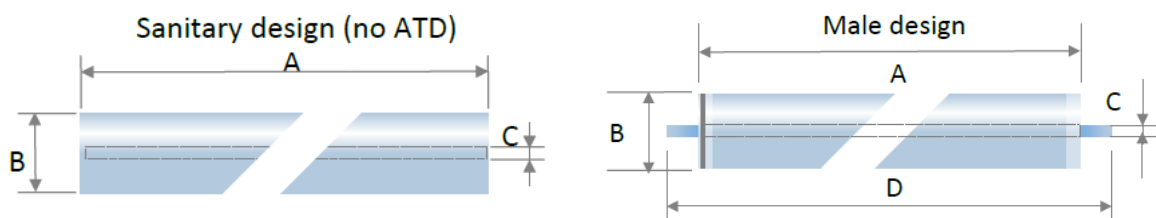
### Area ft<sup>2</sup> (m<sup>2</sup>)

| Spacer        | U2540    | U3838    | U6338      | U6438      | U8038      |
|---------------|----------|----------|------------|------------|------------|
| <b>31 mil</b> | 24 (2.2) | 72 (6.7) | 226 (21)   | 226 (21)   | 370 (34)   |
| <b>46 mil</b> | 19 (1.8) | 58 (5.4) | 172 (16)   | 172 (16)   | 290 (27)   |
| <b>65 mil</b> | /        | 45 (4.2) | 142 (13.2) | 142 (13.2) | 225 (20.9) |
| <b>80 mil</b> | /        | /        | 119 (11.1) | 119 (11.1) | 180 (16.7) |

Updated 28 September 2026

#### Notes:

- (1) For the purpose of improvement, specifications may be updated periodically
- (2) Consult PCI Membranes® when intending to operate at elevated pressure, temperature, or concentration.
- (3) For the product name, please refer to the annex in the last page.



#### Dimensions

| Size                                | A <sup>[1]</sup><br>[mm (inch)] | øB <sup>[2]</sup><br>[mm (inch)] | øC <sup>[3]</sup><br>[mm (inch)] | D<br>[mm (inch)] |
|-------------------------------------|---------------------------------|----------------------------------|----------------------------------|------------------|
| U2540-XXX-010-XX-S00 <sup>[4]</sup> | 965 (38)                        | 62 (2.4)                         | 19.1 (0.748)                     | 1016 (40)        |
| U3838-XXX-010-XX-S02 <sup>[4]</sup> | 965 (38)                        | 96 (3.8)                         | 21.1 (0.831)                     | /                |
| U6338-XXX-010-XX-S02 <sup>[4]</sup> | 965 (38)                        | 160 (6.3)                        | 28.9 (1.138)                     | /                |
| U6438-XXX-010-XX-S02 <sup>[4]</sup> | 965 (38)                        | 162 (6.4)                        | 28.9 (1.138)                     | /                |
| U8038-XXX-010-XX-S02 <sup>[4]</sup> | 965 (38)                        | 200.5 (7.9)                      | 28.9 (1.138)                     | /                |

[1] Tolerance: -2~0 mm

[2] Tolerance: -2~0 mm

[3] 3838 tolerance: ±0.1mm., 6338/8038 tolerance: -0.2~0mm

[4] XXX: 005 or 010 and XX: 31 mil, 46 mil, 65 mil or 80 mil

#### Handling

**Operation.** Stated operational conditions are valid and the rules for installation, cleaning, water and preservation have to be adhered. PCI Membranes® approved cleaning detergent, anti-foam, polymers, other chemicals and filter-aids lubricants can be applied only. For further questions, do not hesitate to contact our service engineer.

**Lubricants.** During installation, use only water or glycerin to lubricate seals. The use of petroleum or vegetable-based oils or solvents may damage the element and void any warranty.

**Preservation and Storage.** Plan ahead to use new membranes. The element should be stored in a sealed bag, at 4 – 30 °C (39 – 86 °F). Storage solutions should be made with: 1 % w/w sodium metabisulfite.

**Chemical Exposure.** Residual chlorine concentration during cleaning cycle (CIP) should be 150 ppm @ pH 10.5 or higher. Chlorine concentration should never exceed 200 ppm.

**Cleaning.** PCI Membranes® modules may be put into production after having gone through the first cleaning prescribed by PCI Membranes® on product packing notes or given differently by PCI Membranes®.

Updated 28 September 2026