**Description**
Identical to the TA0.2, the hydrophobic, liquid-rated sterilizing grade Ultradyne® TT0.2 PTFE filter capsule provides the added benefit of certification that meets the critical demands of the pharmaceutical, biotechnology and related industries.

**Materials of Construction**
All components of the Ultradyne® filter capsule are either animal free or in compliance with EMEA/410/01 Rev. 3 (EDQM 5.2.8 07/2011:50208), and US Code of Federal Regulations 9 CFR 94.18 and 21 CFR 189.5. These materials are listed for food contact use in the Code of Federal Regulations (CFR), Title 21, as below:

- **Membrane:** Polytetrafluoroethylene
- **Upstream support:** Polypropylene
- **Downstream support:** Polypropylene
- **Outer guard:** Polypropylene
- **Core:** Polypropylene
- **End caps:** Polypropylene
- **Capsule housing:** Polypropylene
- **Sealing method:** Thermal bonding

**Pore Size**
0.2 μm

**Minimum Bubble Point**
16 psi (1,1 bar), 60% IPA / 40% water

**Maximum Diffusion Rate**
1.2 ft²: 2.0 mL/min @ 10 psi, 60% IPA (2.0 mL/min @ 0.7 bar, 60% IPA)
2.5 ft²: 4.2 mL/min @ 10 psi, 60% IPA (4.2 mL/min @ 0.7 bar, 60% IPA)

**Maximum WIT Rate**
1.2 ft²: 0.12 mL/min water @ 36 psi (0.12 mL/min water @ 2.48 bar)
2.5 ft²: 0.25 mL/min water @ 36 psi (0.25 mL/min water @ 2.48 bar)

**Bacterial Retention**
>10⁻⁷ per cm² removal of *Brevundimonas diminuta* per ASTM F838

**Typical Air Flow Rate**
1.2 ft²: 7 scfm @ 1 psid (8.62 Nm⁻³h⁻¹ @ Δp 50 mbar)
2.5 ft²: 12.5 scfm @ 1 psid (15.4 Nm⁻³h⁻¹ @ Δp 50 mbar)

**Operating Characteristics**
Normal operating temperature range: 32 °F to 100 °F (0 °C to 38 °C)
Maximum operating temperature rating: 160 °F @ 35 psig (71 °C @ 2.4 bar)
Maximum operating pressure (liquid service): 75 psig @ 100 °F (5.2 bar @ 38 °C)
Maximum operating pressure (gas service): 50 psig @ 100 °F (3.4 bar @ 38 °C)
Maximum reverse operating pressure (gas service): 15 psig @ 100 °F (1.0 bar @ 38 °C)

**Sterilization**
Autoclave: 121 to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles.
Capsules must not be steamed in place (SIP). Gamma irradiation is not recommended.

**Biological Safety**
Ultradyne® filters meet the requirements as specified in the current USP Class VI plastics, cytotoxicity and pyrogenicity tests. No binders, adhesives or surfactants are used in its construction. Filters comply with Commission Regulation (EU) No 10/2011.

**Quality Assurance**
Each Ultradyne® TT0.2 is supplied with a Certificate of Quality verifying the high standards and superior performance of the product. Ultradyne® filters comply with the Food and Drug Administration Code of Federal Regulations, Title 21, Parts 210 and 211. Product is manufactured and packaged in a cleanroom facility that, through voluntary compliance, meets or exceeds FDA Good Manufacturing Practice Standards. To ensure product reliability, Meissner’s Quality Assurance staff continually audits the manufacturing process for conformance to its Quality Management System. Each Ultradyne® filter is integrity tested during manufacture and is clearly marked with filter type, lot number and serial number.
### Ordering Guide

**Effective Filtration Area (nominal)**
- 2.5 ft² (0.23 m²) L
- 1.2 ft² (0.11 m²) S

**Housing Material Designator**
- Standard polypropylene (blank)
- Polypropylene, animal component free (ACF) 2

**Capsule Options**
- Standard capsule C

**Vent / Drain Ports**
- 0: No vent / drain port
- 1: One luer port with cap, outlet side
- 2: Standard; two luer ports with caps
- 4: Two sanitary valves with hose barbs
- 5: One sanitary valve with hose barb, outlet side

**Inlet / Outlet Connections**

<table>
<thead>
<tr>
<th>Housing Material Designator</th>
<th>Inlet / Outlet Connections</th>
<th>Filter Media Grade</th>
<th>Retention Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard polypropylene</td>
<td>00: 1&quot; sanitary (TC) flange</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td>Polypropylene, ACF</td>
<td>02: 1&quot; sanitary flange in; 3/8&quot; hose barb out</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>0C: 1&quot; sanitary flange in; 1/2&quot; hose barb out</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>CC: 1/2&quot; hose barb (rigid tubing)</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>22: 3/8&quot; hose barb</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2B: 3/8&quot; hose barb w/filling-bell</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>44: 1/4&quot; MNPT</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>55: 3/8&quot; FNPT</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>66: 3/8&quot; MNPT</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>77: 3/4&quot; sanitary flange</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>88: 3/4&quot; hose barb</td>
<td>TT</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>99: 1/2&quot; hose barb (flexible tubing)</td>
<td>TT</td>
<td>0.2</td>
</tr>
</tbody>
</table>

**Product**
- Ultradyne® hydrophobic PTFE membrane

Additional information about Ultradyne® filter products is available in the Green Docs document which is viewable at [https://www.meissner.com/downloads/ultradyne-gd006.pdf](https://www.meissner.com/downloads/ultradyne-gd006.pdf)

Ultradyne is a registered trademark of Meissner Filtration Products.