Description

- MCC1401 style filter constructed of polyphenylene sulphide (PPS) medium
- Proprietary, depth media construction with an absolute-rated downstream section, and a continuously profiled-pore upstream section
- PPS medium is chemically resistant for use in aggressive service at elevated temperatures
- Tin plated carbon steel core and stainless steel end-caps provide excellent mechanical strength
- Internally captured O-ring seal provides a positive and independent 360° element-to-housing seal
- Outside to inside flow

Applications

The media and filter format provide wide compatibility and durability and have proven very beneficial for such service spanning the refining, petrochemical, and chemical industries. Fluids used in these industries are often contaminated with harmful particles that must be removed through filtration:

- Solvents
- Acids
- Chemicals
- Hydrocarbons
- Water
- Other fluids

High Void Volume

Void volume is defined as that fraction of the media not occupied by media fibers. Pall’s proprietary construction yields a media with over 80% void space, allowing the greatest dirt-holding capacity (DHC), and consequently long filter life, which translates into fewer element change-outs, reduced operator exposure, and lower overall operating costs.

Functional Design

As all 1401 element formats provide an intrinsic 360° positive seal utilizing an O-ring, there is no need for costly internal hardware to seal the element to the filter housing. As well, the single open-end O-ring seal permits rapid and easy filter change-out simplifying the filter replacement task for operators.

Performance Specifications

Filter Grades:

<table>
<thead>
<tr>
<th>Service</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Liquid</td>
<td>60 micron¹</td>
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</tbody>
</table>

Maximum Operating Pressure:

- 2.0 bar (30 psid) @ 190°C (375°F)
- 2.8 bar (40 psid) @ 93°C (200°F)

Maximum Temperature Ratings:

190°C (375°F) in most fluids, excluding strong acids and bases.² Soak testing in the process fluid is generally recommended for all services where temperatures exceed 121°C (250°F) as a verification step.

¹ Beta 1000 (Modified Oil F-2 Test, using AC coarse test dust in MIL-H-5606 – single pass mode).
² Users to check compatibility with process fluids prior to use.
Product Specifications

Materials of Construction:
Filter Media: Polyphenylene Sulphide
Center Core: Tin Plated Carbon Steel
End Caps: Stainless Steel

Dimensions (nominal):
Outside Diameter: 8.9 cm (3.5")
Inside Diameter: 5.7 cm (2.25")
Length: 98.5 cm (38.75")

Particle Retention

<table>
<thead>
<tr>
<th>Cartridge Designation/ Part#</th>
<th>Removal Rating Micron at 99.9% Efficiency</th>
<th>Typical Clean Pressure Drop Aqueous Service¹</th>
<th>MBARD/LPM</th>
<th>PSID/GPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCC1401FPS600</td>
<td>60</td>
<td>0.0285</td>
<td>0.016</td>
<td></td>
</tr>
</tbody>
</table>

¹ Pressure drop in PSID per GPM water for a single element. Multiply this value by the required flow to determine the total aqueous pressure drop. Next, for fluids other than water, multiply by viscosity in centipoise. If this calculated pressure drop is excessive, then divide this value by the number of filters required to reduce this pressure drop to an acceptable level.