FPK02 In-Line Cartridge Filters

**Working Pressures to:**
6090 psi / 42,021 kPa / 420 bar

**Rated Static Burst to:**
9135 psi / 63,000 kPa / 630 bar

**Flow Range To:**
25 gpm / 95 lpm

**Features**
The FPK02 is built to withstand pressures of over 6000 psi (420 bar). It features a cast iron head and cold-extruded steel housing for ultimate strength and durability. This filter meets the HF2 in-plant automotive specification. Bypass options include 87 psi/6 bar bypass, bypass with reverse-flow check valve, or no bypass.

Take advantage of our mix and match system of in-stock heads, housings and cartridges, so you can get exactly what you need. You can also choose the media type and configuration that's best for your application. All FPK02 filters contain Synteq™, Donaldson’s exclusive synthetic fiber media formulated especially for hydraulic filtration.

**Applications**
- High Pressure Circuits
- In-Plant Systems
- Meets HF2 Specification
- Mobile Equipment
- Power Steering Circuits
- Servo Valve Circuits

**Beta Rating**
- Performance to $\beta_{1000}=1000$

**Porting Size Options**
- SAE-12 O-Ring

**Replacement Filter Lengths**
- 4.41” / 111.9mm
- 4.46” / 113.2mm
- 8.16” / 207.2mm
- 8.28” / 210.3mm

**Assembly Weight**
- 4.41” Assembly: 9.2 lbs / 4.2 kg
- 8.28” Assembly: 13.2 lbs / 6.0 kg

**Operating Temperatures**
- -20°F to 250°F / -29°C to 120°C

**Filter Collapse Ratings**
- 290 psi / 2000 kPa / 20 bar (standard)
- 3000 psi / 20,700 kPa / 207 bar (high collapse)
FPK02 Specification Illustrations

ASSEMBLY - SIDE VIEW

All dimensions are shown in inches [millimeters].

HEAD - TOP VIEW

HEAD - SIDE VIEW

Indicator Plug
Remove plug to install visual or electrical indicator.
FPK02
Max Flow: 25 gpm (95 lpm)

FPK02 Components

Filter Choices

<table>
<thead>
<tr>
<th>Media Type</th>
<th>$\beta_{50} = 1000$</th>
<th>Length</th>
<th>Part No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rating based on ISO 16889</td>
<td>in</td>
<td>mm</td>
<td></td>
</tr>
<tr>
<td>DT Synthetic</td>
<td></td>
<td>4.39</td>
<td>112</td>
<td>P566194</td>
</tr>
<tr>
<td>&lt;4 µm</td>
<td></td>
<td>4.39</td>
<td>112</td>
<td>P566195</td>
</tr>
<tr>
<td>5 µm</td>
<td></td>
<td>4.46</td>
<td>113</td>
<td>P167180</td>
</tr>
<tr>
<td>8 µm</td>
<td></td>
<td>4.39</td>
<td>112</td>
<td>P566196</td>
</tr>
<tr>
<td>12 µm</td>
<td></td>
<td>4.39</td>
<td>112</td>
<td>P566197</td>
</tr>
<tr>
<td>12 µm</td>
<td></td>
<td>4.46</td>
<td>113</td>
<td>P167181</td>
</tr>
<tr>
<td>23 µm</td>
<td></td>
<td>4.39</td>
<td>112</td>
<td>P566198</td>
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<tr>
<td>&lt;4 µm</td>
<td></td>
<td>8.18</td>
<td>208</td>
<td>P566199</td>
</tr>
<tr>
<td>5 µm</td>
<td></td>
<td>8.18</td>
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<td>8.18</td>
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<td>P167182</td>
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<td>8 µm</td>
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<td>8.18</td>
<td>208</td>
<td>P566201</td>
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<tr>
<td>12 µm</td>
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<td>P566202</td>
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<td>8.18</td>
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<td>P167183</td>
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<tr>
<td>23 µm</td>
<td></td>
<td>8.18</td>
<td>208</td>
<td>P566203</td>
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</table>

Filter Notes: All Donaldson DT filters utilize glass fiber media with an epoxy-based resin system for the ultimate in chemical compatibility. All Donaldson DT filters are potted with epoxy-based adhesives. Standard collapse DT designs are double wire-backed using epoxy-coated steel mesh for maximum pleat support and dirt capacity. Fluorocarbon seals are standard on all Donaldson DT filters. Refer to the table in the Technical Reference Guide for fluid compatibility with our filter media. If you’re filtering diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF over 100°F/83°C, use filters with seals made of fluorocarbon. Donaldson “high collapse” filters, with their steel end caps and wire-backed media, are rated to withstand up to 3000 psi/20,700 kPa before collapsing. High collapse designs are double wire-backed using stainless steel mesh and are potted into machined aluminum endcaps for greater filter integrity in critical applications. The fluorocarbon sealed high collapse filters also use epoxy potting and media seam seals for added chemical compatibility.

Housing Choices

<table>
<thead>
<tr>
<th>Length (in)</th>
<th>Part No.</th>
</tr>
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<tbody>
<tr>
<td>4.4” filter</td>
<td>P762769</td>
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<tr>
<td>8.2” filter</td>
<td>P762770</td>
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Head Choices

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Bypass Rating</th>
<th>Part No.</th>
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<tbody>
<tr>
<td>SAE-12 O-Ring</td>
<td>87 psi / 6 bar</td>
<td>P762766</td>
</tr>
<tr>
<td>SAE-12 O-Ring with reverse-flow check valve</td>
<td>87 psi / 6 bar</td>
<td>P762767</td>
</tr>
<tr>
<td>SAE-12 O-Ring</td>
<td>No Bypass</td>
<td>P762768</td>
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</tbody>
</table>

NOTE: Indicator port is machined and plugged. Replace plug with indicator of choice: P171945 (visual) or P761056 (electrical).
Performance Data

FPK02 Housing Only
Flow Rate (gpm) vs Pressure Drop (psi)

FPK02 4" DT Filter Only
DT-3020-6, 4.49"/310.8mm
Flow Rate (gpm) vs Pressure Drop (psi)

FPK02 8" DT Filter Only
DT-3020-8, 4.33"/210.3mm
Flow Rate (gpm) vs Pressure Drop (psi)

Max Flow: 25 gpm (95 lpm)
FPK02 Service Parts

SERVICE PARTS NOTE:
Some service parts may not be stocked. Please contact your Donaldson sales representative for lead time details.

When installing the FPK02 housing onto an installed head, torque it to 15 ft-lbs./2.1 kg-m.
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- Visual Indicator
  P171945
  5 bar, 72.5 psid

- Plug
  remove only when installing indicator.

- AC/DC Electrical Indicator
  P761056
  5 bar, 72.5 psid

- O-Ring 2-140
  P173382
  Non-stock item

- Back-up Ring
  P173380
  Non-stock item

- Filter

- Housing

- Head

- Oil before assembling