HPK05 In-Line Cartridge Filters

**Working Pressures to:**
3000 psi / 20,700 kPa / 206.9 bar

**Rated Static Burst to:**
6000 psi / 41,400 kPa / 413.8 bar

**Flow Range To:**
200 gpm / 757 lpm

**Features**
The HPK05 high pressure filter series is made of ductile iron and steel for strength and durability. Machined bypass valves are case-hardened at critical points to provide maximum strength and reliability. Reverse flow bypass valve allows bi-directional flow through the filter head, with head-up or head-down mounting capabilities. Available with your choice of visual or AC/DC electrical service indicator; choose fluorocarbon or nitrile seals. The HPK05 filters contain Synteq™, Donaldson’s exclusive synthetic fiber media formulated especially for hydraulic filtration. Upgraded Donaldson high-performance DT filters are also offered for superior performance.

**Applications**
- High Pressure Circuits
- Hydrostatic Transmission
- In-Plant Systems
- Lube Oil Systems
- Mobile Equipment

**Beta Rating**
- Performance to $\beta_{100} = 1000$

**Porting Size Options**
- 2” SAE 4-Bolt Flange Code 61

**Replacement Filter Lengths**
- 25.53”/648mm
- 25.9”/657.9mm

**Standard Bypass Ratings**
- 60 psi / 414 kPa / 4.1 bar
  with reverse-flow check valve
- No Bypass

**Assembly Weight**
- 63 lbs / 28.5

**Operating Temperatures**
- -20°F to 250°F / -29°C to 121°C

**Filter Collapse Ratings**
- 200 psi / 1380 kPa / 13.8 bar (standard)
- 3000 psi / 20,700 kPa / 206.9 bar (high collapse)
HPK05 Specification Illustrations

ASSEMBLY - SIDE VIEW

All dimensions are shown in inches [millimeters].

HEAD - TOP VIEW

HPK05 with Visual Service Indicator

HPK05 with AC/DC Electrical Service Indicator

BYPASS VALVE ALTERNATIVES

60 psi /414 kPa Bypass Valve with Reverse Flow Check Valve

No Bypass
HPK05 Components

Filter Choices

<table>
<thead>
<tr>
<th>Media Type</th>
<th>( \beta_{\text{pol}} = 1000 )</th>
<th>Length</th>
<th>Part No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT Synthetic</td>
<td>(&lt; 4 \mu m )</td>
<td>25.9</td>
<td>658 P566449</td>
<td>DT-9400-26-2UM</td>
</tr>
<tr>
<td></td>
<td>( 5 \mu m )</td>
<td>25.9</td>
<td>658 P566450</td>
<td>DT-9400-26-5UM</td>
</tr>
<tr>
<td></td>
<td>( 8 \mu m )</td>
<td>25.9</td>
<td>658 P566451</td>
<td>DT-9400-26-8UM</td>
</tr>
<tr>
<td></td>
<td>( 12 \mu m )</td>
<td>25.9</td>
<td>658 P566452</td>
<td>DT-9400-26-14UM</td>
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<tr>
<td></td>
<td>( 23 \mu m )</td>
<td>25.9</td>
<td>658 P566453</td>
<td>DT-9400-26-25UM</td>
</tr>
<tr>
<td></td>
<td>( 5 \mu m )</td>
<td>25.9</td>
<td>658 P566642</td>
<td>DT-9901-26-5UM, High collapse</td>
</tr>
<tr>
<td></td>
<td>( 12 \mu m )</td>
<td>25.9</td>
<td>658 P566643</td>
<td>DT-9901-26-14UM, High collapse</td>
</tr>
</tbody>
</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. High collapse designs are double wire-backed using stainless steel mesh. High collapse designs are also potted into machined aluminum endcaps for greater filter integrity in critical applications. Fluorocarbon seals are standard on all Donaldson DT filters.

Assembly Choices

Includes Standard Filter

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Bypass Rating</th>
<th>Indicator Style/Location</th>
<th>Assembly Number</th>
<th>Filter Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2” SAE 4-Bolt Flange (Code 61)</td>
<td>60 psi / 414 kPa / 4.1 bar Reverse flow check valve</td>
<td>Visual, Left side</td>
<td>K052024</td>
<td>P164229</td>
</tr>
<tr>
<td></td>
<td>No Bypass</td>
<td>Visual &amp; Electrical</td>
<td>K052039</td>
<td>P566643*</td>
</tr>
</tbody>
</table>

Assembly Notes

1. Donaldson uses the inlet port as the reference point. “Left side,” for instance, means that the indicator mounts on the side of the filter head that is on your left when you face the inlet port.
2. Visual indicator is mounted on left side of the head; electrical indicator (P170365) is mounted on the right side.
3. Rated as high collapse (3000 psi / 20700 kPa); has fluorocarbon seals.

Service Indicator Kits (All kits include indicator with mounting block)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Bypass Valve Pressure of.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P569632</td>
<td>60 psi / 4.1 bar</td>
<td>35 psi/2.4 bar indicator kit auto reset pop-out button</td>
</tr>
<tr>
<td>P569633</td>
<td>90 psi / 6.2 bar</td>
<td>70 psi/4.8 bar indicator kit auto reset pop-out button</td>
</tr>
<tr>
<td>P567988</td>
<td>60 psi / 4.1 bar</td>
<td>35 psi/2.4 bar indicator kit auto reset pop-out button with thermal lockout and surge control</td>
</tr>
<tr>
<td>P567989</td>
<td>90 psi / 6.2 bar</td>
<td>70 psi/4.8 bar indicator kit* auto reset pop-out button with thermal lockout and surge control</td>
</tr>
<tr>
<td>P569634</td>
<td>60 psi / 4.1 bar</td>
<td>35 psi/2.4 bar indicator kit Hirschmann receptacle 115 VAC/28 VDC, 2 amps</td>
</tr>
<tr>
<td>P569635</td>
<td>90 psi / 6.2 bar</td>
<td>70 psi/4.8 bar indicator kit Hirschmann receptacle 115 VAC/28 VDC, 2 amps</td>
</tr>
<tr>
<td>P567986</td>
<td>60 psi / 4.1 bar</td>
<td>35 psi/2.4 bar indicator kit with thermal lockout &amp; surge control, Hirschmann receptacle, 115 VAC/28 VDC, 2 amps, 4 pin DIN 43650</td>
</tr>
<tr>
<td>P567987</td>
<td>90 psi / 6.2 bar</td>
<td>70 psi/4.8 bar indicator kit with thermal lockout &amp; surge control, Hirschmann receptacle, 115 VAC/28 VDC, 2 amps, 4 pin DIN 43650</td>
</tr>
</tbody>
</table>

Indicator Choices (Replacement Indicator Only)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P567458</td>
<td>Visual/Electrical indicator with thermal lockout and surge, 35 psi/2.4 bar</td>
<td>P569638</td>
</tr>
<tr>
<td>P567459</td>
<td>Visual/Electrical indicator, with thermal lockout and surge, 70 psi/4.8 bar</td>
<td>P569639</td>
</tr>
<tr>
<td>P567456</td>
<td>Pop-Up Visual Indicator, with thermal lockout and surge, 35 psi/2.4 bar</td>
<td>P164315</td>
</tr>
<tr>
<td>P567457</td>
<td>Pop-Up Visual Indicator, with thermal lockout and surge, 70 psi/4.8 bar</td>
<td>P166603</td>
</tr>
<tr>
<td>P566636</td>
<td>Pop-Up Visual Indicator, 35 psi/2.4 bar</td>
<td>P166134</td>
</tr>
<tr>
<td>P569637</td>
<td>Pop-Up Visual Indicator, 70 psi/4.8 bar</td>
<td>P569637</td>
</tr>
</tbody>
</table>

Indicator Mounting Block

P573495 Mounting Block Assembly
Performance Data

HPK05 Housing Only
HPK05 26" DT Filter Only

Max Flow: 200 gpm (757 lpm)
**HPK05**

Max Flow: 200 gpm (757 lpm)

**HPK05 Service Parts**

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

- **Blanking Plate P166134**
  Includes O-Ring & Hardware

- **Set Screw**
  (for service options: service by head or bowl)

- **Optional Mounting Block Assembly P573495**
  (Primary Position)

- **Electrical / Visual Indicator**
  See Option Table
  (Includes Indicator O-Ring, Mounting Block & Hardware)

- **Pop Up Visual Indicator**
  See Option Table
  (Includes Indicator O-Ring, Mounting Block & Hardware)

- **Housing**
  26” length

- **O-Ring & Back-Up Kit**
  P162860 Nitrile

- **O-Ring (Size 006)**

- **Visual Service Indicator**
  (Includes O-ring & Hardware)
  Max Temp 180°F (82°C) / 345 kPa
  P184315 Normal Flow Model

- **Set Screw**
  (for service options: service by head or bowl)

- **O-Ring & Back-Up Kit**
  P162860 Nitrile

- **Drain Plug**
  (7/16-20 UNF SAE-4)

- **O-Ring**
  Size 904