

## 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 Viton® or Buna-N® 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.

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### Applications

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

### Beta Rating

- Performance to  $\beta_{<4(c)} = 1000$

### Porting Size Options

- 2" SAE 4-Bolt Flange Code 61

### Replacement Filter Lengths

- 25.53"/648mm
- 25.9"/657.9mm

### Operating Temperatures

- -20°F to 250°F / -29°C to 121°C

### Standard Bypass Ratings

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

### Assembly Weight

- 63 lbs / 28.5

### Filter Collapse Ratings

- 200 psi / 1380 kPa / 13.8 bar (standard)
- 3000 psi / 20,700 kPa / 206.9 bar (high collapse)



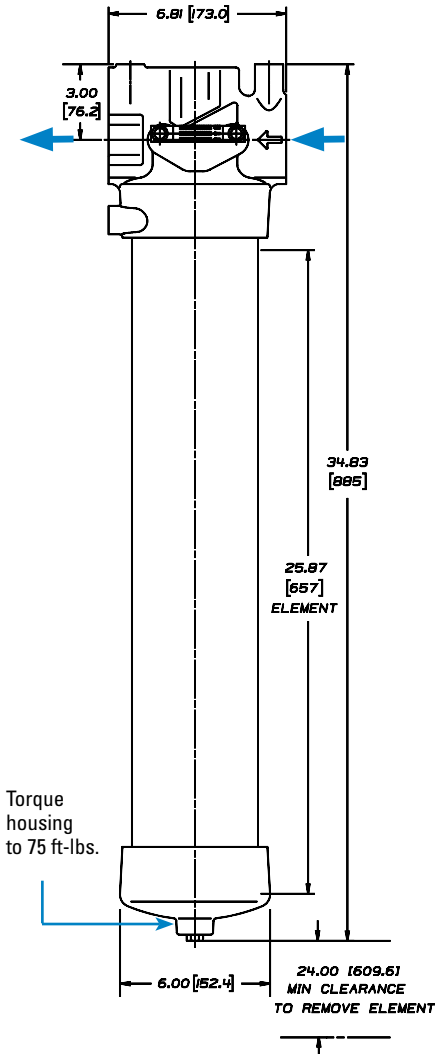
**HPK05**  
Max Flow: 200 gpm (757 lpm)



## HPK05 Specification Illustrations

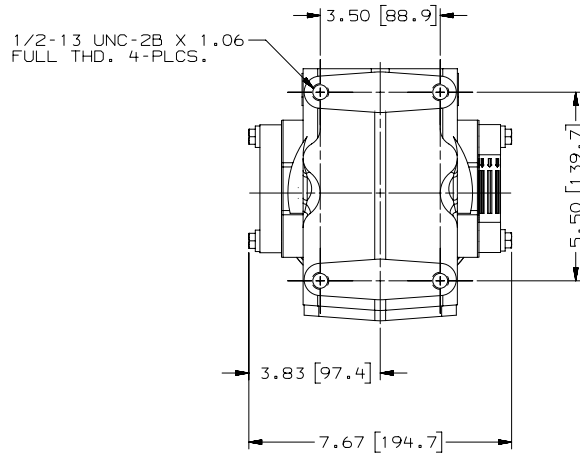
All dimensions are shown in inches [millimeters].

### Assembly - Side View

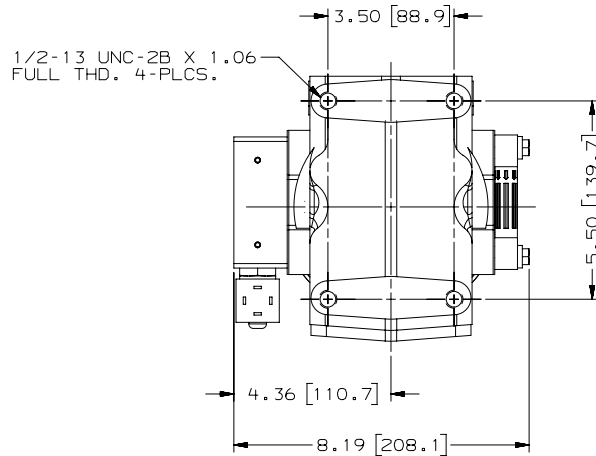


### Head - Top View

**HPK05 with Visual Service Indicator**

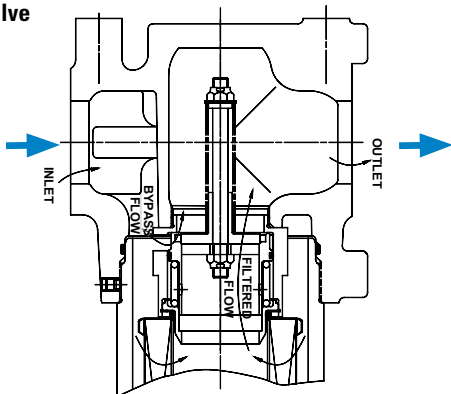


**HPK05 with AC/DC Electrical Service Indicator**

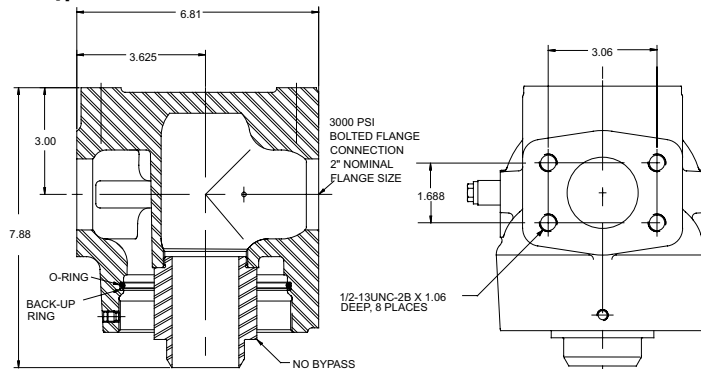


### Bypass Valve Alternatives

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



No Bypass



## HPK05 Components

### Assembly Choices

Includes Standard Filter

Port Size	Bypass Rating	Indicator Style/Location <sup>1</sup>	Assembly Number	Filter Part No.
2" SAE 4-Bolt Flange (Code 61)	60 psi / 414 kPa / 4.1 bar Reverse flow check valve	Visual, Left side	K052024	P164229
	No Bypass	Visual & Electrical <sup>2</sup>	K052039	P171037 <sup>3</sup>

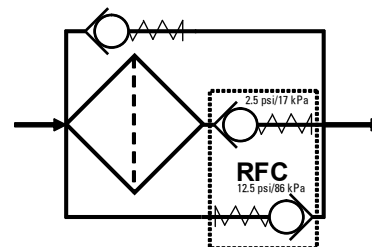
#### Assembly Notes

<sup>1</sup>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.

<sup>2</sup>Visual indicator is mounted on left side of the head; electrical indicator (P173929- 72 psid) is mounted on the right side.

<sup>3</sup>Rated as high collapse (3000 psi / 20700 kPa); has Viton® seals.

#### Reverse Flow Check Schematic



### High-Performance DT Filter Choices

Media Type	$\beta_{x(c)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.	Comments
		in	mm		
DT Synteq	<4 $\mu\text{m}$	25.9	658	P566449	DT-9400-26-2UM
Synthetic	5 $\mu\text{m}$	25.9	658	P566450	DT-9400-26-5UM
	8 $\mu\text{m}$	25.9	658	P566451	DT-9400-26-8UM
	12 $\mu\text{m}$	25.9	658	P566452	DT-9400-26-14UM
	23 $\mu\text{m}$	25.9	658	P566453	DT-9400-26-25UM
	5 $\mu\text{m}$	25.9	658	P566642	DT-9901-26-5UM, High collapse
	12 $\mu\text{m}$	25.9	658	P566643	DT-9901-26-14UM, High collapse

#### 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

Viton® seals are standard on all Donaldson DT filters.

### Standard Filter Choices

Media Type	$\beta_{x(c)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.	Comments
		in	mm		
Synteq	6 $\mu\text{m}$	25.5	648	P164585	Buna-N® Seal
Synthetic	11 $\mu\text{m}$	25.5	648	P164227	Buna-N Seal
	23 $\mu\text{m}$	25.5	648	P164229	Buna-N Seal

#### Filter Notes

Filters with seals made of Buna-N are appropriate for most applications involving petroleum oil. Filters with seals made of fluoroelastomer (such as Viton® or Fluorel®) are required when using diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF (high water content fluids) over 150°F/83°C.

Donaldson high collapse filters, with their steel end caps and reinforcing wire-backed media, are rated to withstand up to 3000 psi / 20,700 kPa before collapsing.

Refer to table in the Technical Reference Guide for fluid compatibility with our filter media.

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



## HPK05 Components

### Service Indicator Kits

All kits include indicator with mounting block

Part No.	Use with Bypass Valve Pressure of:	Description
<b>Visual Service Indicators</b>		
P569632	60 psi / 4.1 bar	35 psi/2.4 bar indicator kit auto reset pop-out button
P569633	90 psi / 6.2 bar	70 psi/4.8 bar indicator kit auto reset pop-out button
P567988	60 psi / 4.1 bar	35 psi/2.4 bar indicator kit auto reset pop-out button with thermal lockout and surge control
P567989	90 psi / 6.2 bar	70 psi/4.8 bar indicator kit* auto reset pop-out button with thermal lockout and surge control
<b>AC/DC Visual/Electrical Service Indicators</b>		
P569634	60 psi / 4.1 bar	35 psi/2.4 bar indicator kit Hirschmann receptacle 115 VAC/28 VDC, 2 amps
P569635	90 psi / 6.2 bar	70 psi/4.8 bar indicator kit Hirschmann receptacle 115 VAC/28 VDC, 2 amps
P567986	60 psi / 4.1 bar	35 psi/2.4 bar indicator kit with thermal lockout and surge control, Hirschmann receptacle, 115 VAC/28 VDC, 2 amps, 4 pin DIN 43650
P567987	90 psi / 6.2 bar	70 psi/4.8 bar indicator kit with thermal lockout and surge control, Hirschmann receptacle, 115 VAC/28 VDC, 2 amps, 4 pin DIN 43650

### Indicator Choices

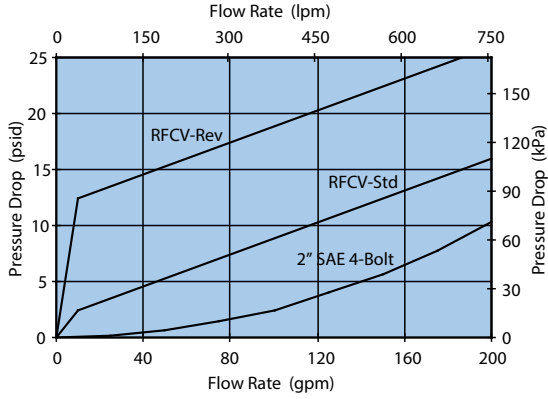
Replacement Indicator Only

Part No.	Description
P567458	Visual/Electrical indicator with thermal lockout and surge, 35 psid/2.4 bar
P567459	Visual/Electrical indicator, with thermal lockout and surge, 70 psid/4.8 bar
P567456	Pop-Up Visual Indicator, with thermal lockout and surge, 35 psid/2.4 bar
P567457	Pop-Up Visual Indicator, with thermal lockout and surge, 70 psid/4.8 bar
P569636	Pop-Up Visual Indicator, 35 psid/2.4 bar
P569637	Pop-Up Visual Indicator, 70 psid/4.8 bar
P569638	Visual/Electrical Indicator, 35 psid/2.4 bar
P569639	Visual/Electrical Indicator, 70 psid/4.8 bar
P164315	Visual Indicator, bar style, 35 psid/2.4 bar
P166603	Visual Indicator, bar style, 70 psid/4.8 bar
P166134	Blanking plate
<b>Indicator Mounting Block</b>	
P573495	Mounting Block Assembly

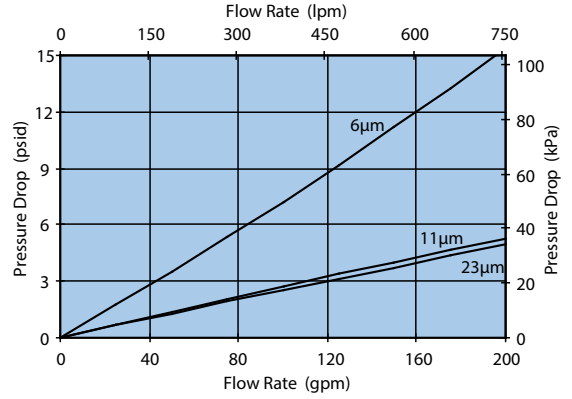


## Performance Data

HPK05 Housing Only

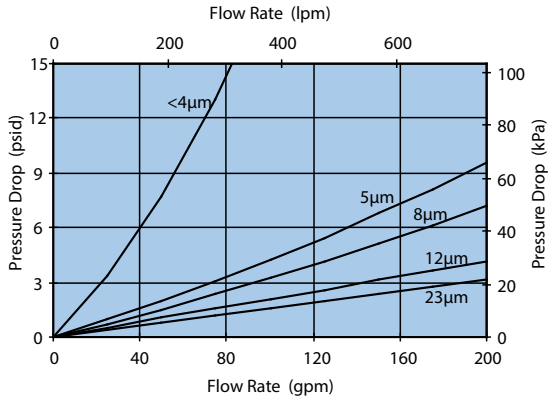


HPK05 26" Standard Filter Only



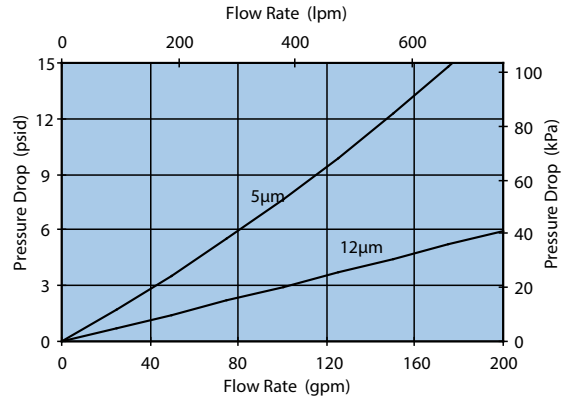
HPK05 26" DT Filter Only

DT-9400-26, 26"/660mm



HPK05 26" DT Filter Only

DT-9901-26, 26"/660mm





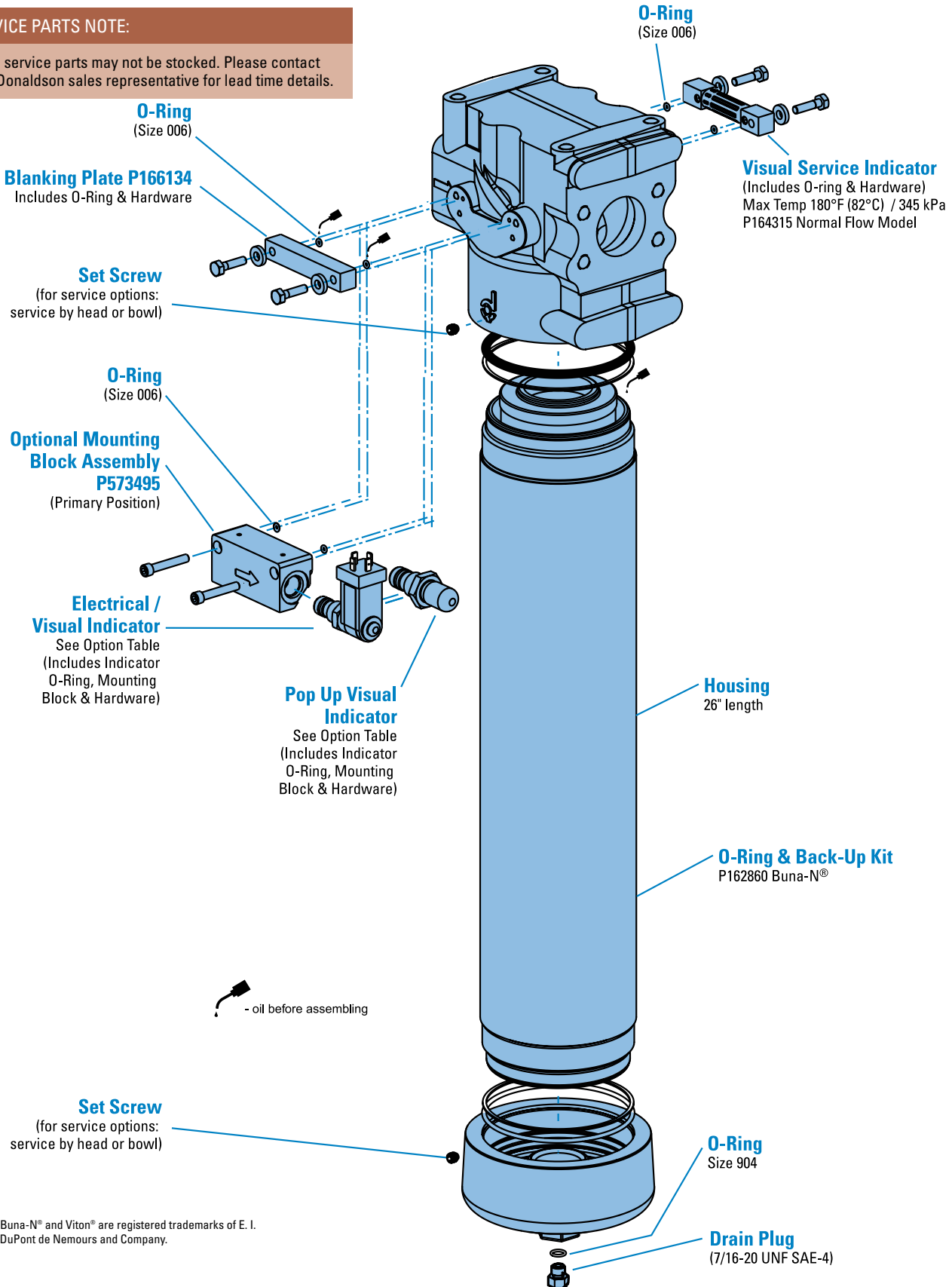
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## HPK05 Service Parts

### SERVICE PARTS NOTE:

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



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