

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

Assembly Weight

- 63 lbs / 28.5

Replacement Filter Length

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

Standard Bypass Ratings

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

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)



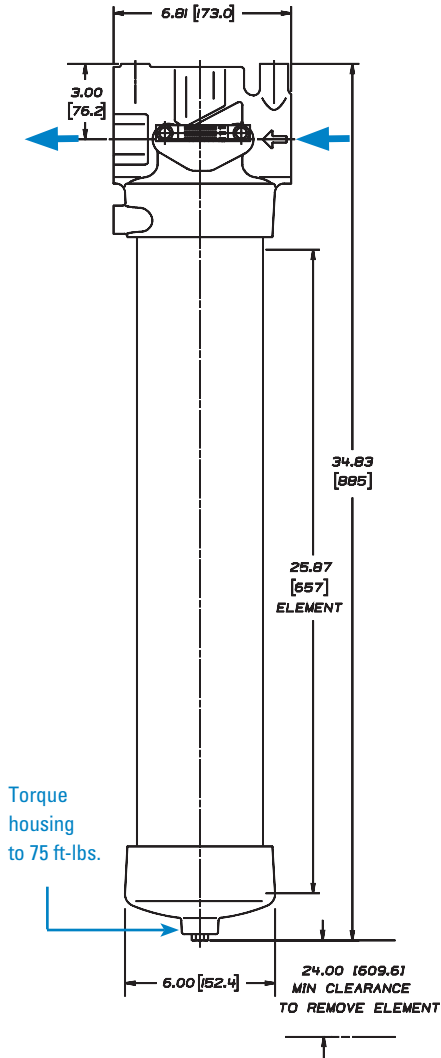
HPK05
 Max Flow: 200 gpm (757 lpm)



HPK05 Specification Illustrations

All dimensions are shown in inches [millimeters].

Assembly - Side View

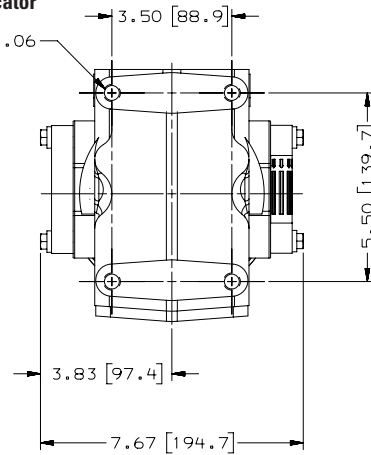


Head - Top View

HPK05

with Visual Service Indicator

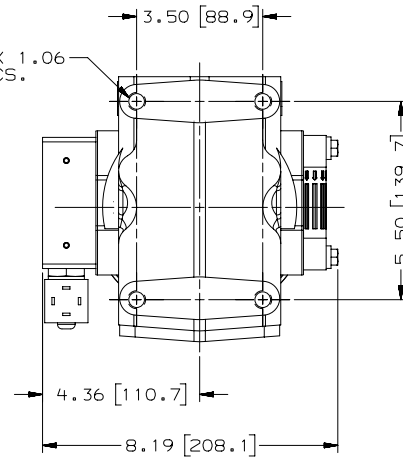
1/2-13 UNC-2B X 1.06 FULL THD. 4-PLCS.



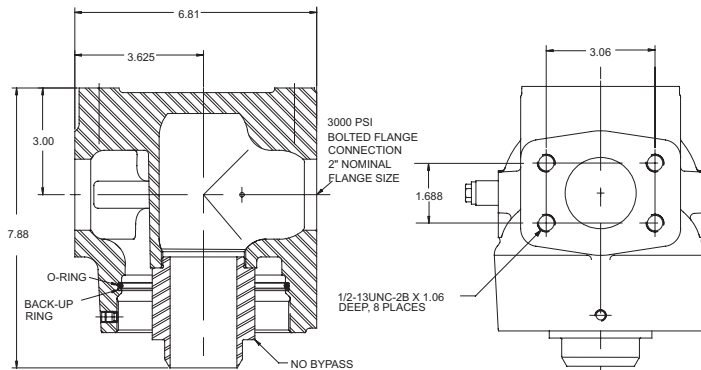
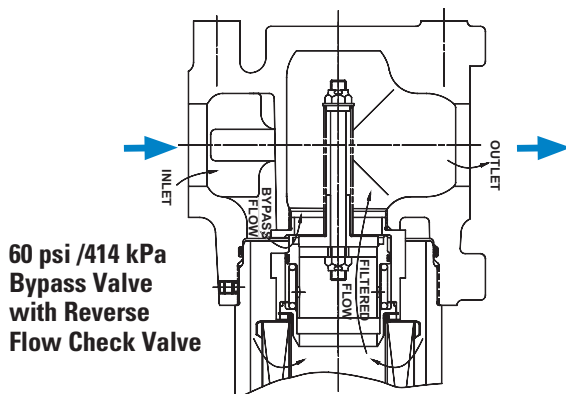
HPK05

with AC/DC Electrical Service Indicator

1/2-13 UNC-2B X 1.06 FULL THD. 4-PLCS.



Bypass Valve Alternatives



No Bypass

HPK05 Components

Assembly Choices

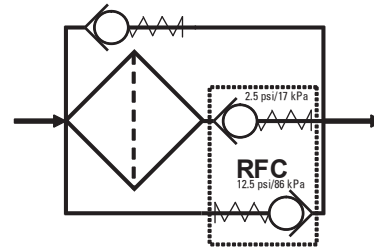
Includes Standard Filter

Port Size	Bypass Rating	Indicator Style/Location ¹	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 ²	K052039	P171037 ³

Assembly Notes

- 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.
- Visual indicator is mounted on left side of the head; electrical indicator (P173929- 72 psid) is mounted on the right side.
- 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 Synthetic	<4 μ m	25.9	657.9	P566449	DT-9400-26-2UM
	5 μ m	25.9	657.9	P566450	DT-9400-26-5UM
	8 μ m	25.9	657.9	P566451	DT-9400-26-8UM
	12 μ m	25.9	657.9	P566452	DT-9400-26-14UM
	23 μ m	25.9	657.9	P566453	DT-9400-26-25UM
	5 μ m	25.9	657.9	P566642	DT-9901-26-5UM, High collapse
	12 μ m	25.9	657.9	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 Synthetic	7 μ m	25.5	648	P167841	Buna-N® Seal
	7 μ m	25.5	648	P164585	Buna-N Seal
	9 μ m	25.5	648	P164227	Buna-N Seal
	23 μ 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.
- Some part numbers are offered with the same beta ratings to maintain customer ordering patterns.
- Buna-N® and Viton® are registered trademarks of E. I. DuPont de Nemours and Company.



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Max Flow: 200 gpm (757 lpm)



HPK05 Components

Service Indicator Kits

All kits include indicator with mounting block

Visual Service Indicators

Part No.	Use with Bypass Valve	
	Pressure of:	Description
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

AC/DC Visual/Electrical Service Indicators

Part No.	Use with Bypass Valve	
	Pressure of:	Description
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

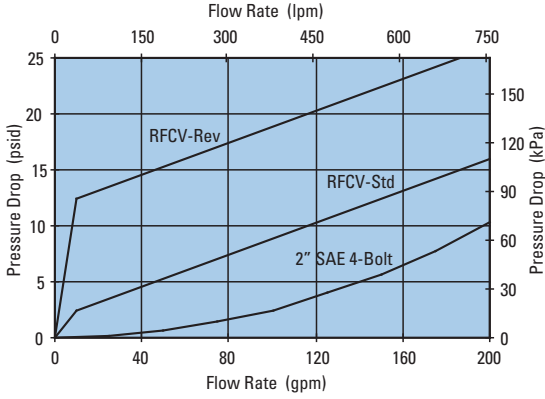
Indicator Mounting Block

Part No.	Description
P573495	Mounting Block Assembly

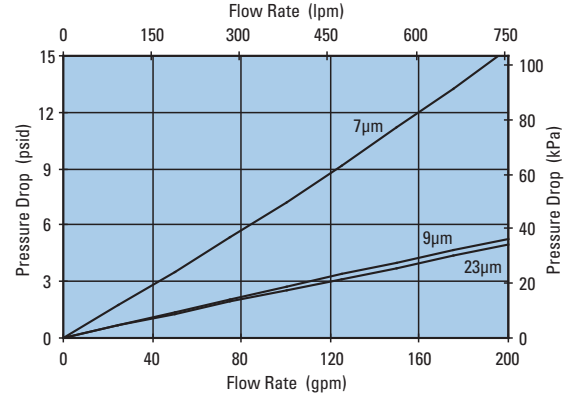


Performance Data

HPK05 Housing Only

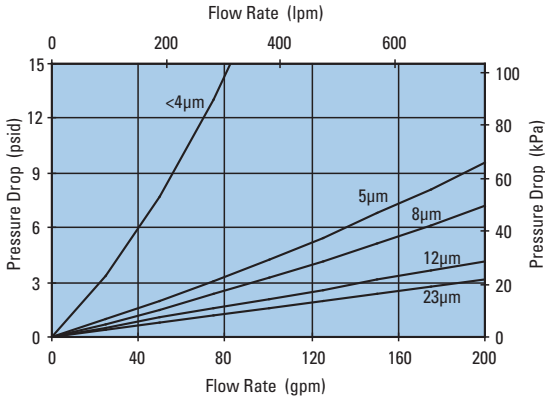


HPK05 26" Standard Filter Only



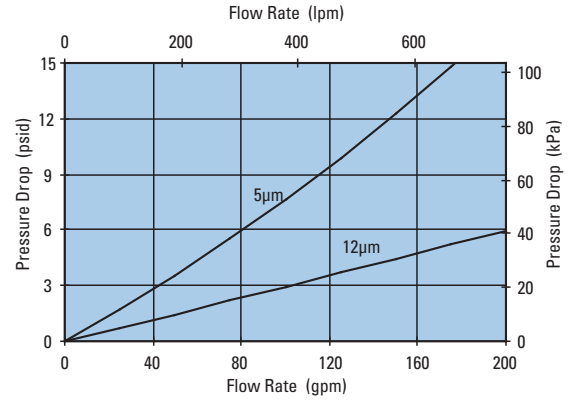
HPK05 26" DT Filter Only

DT-9400-26, 26"/660mm



HPK05 26" DT Filter Only

DT-9901-26, 26"/660mm

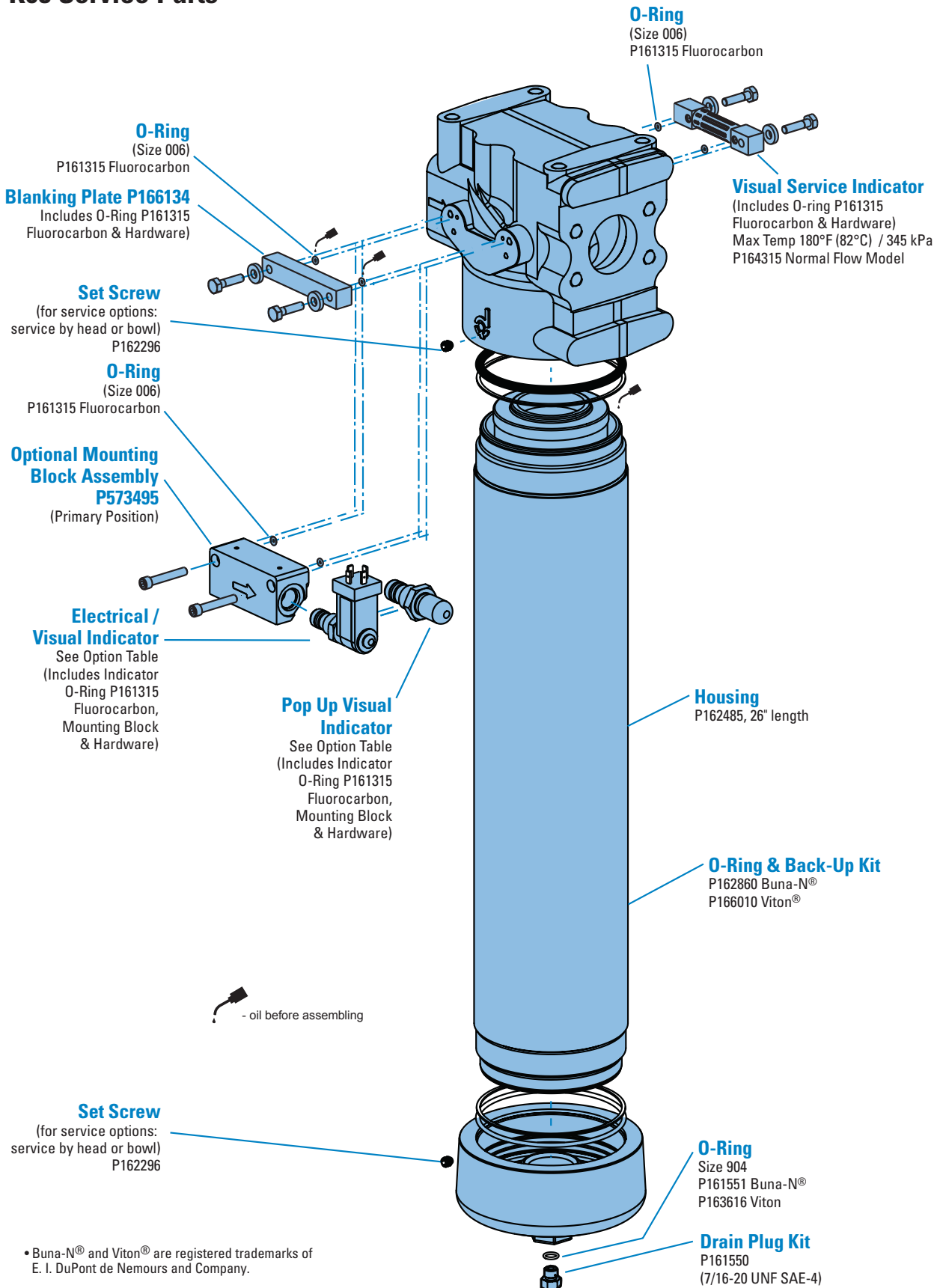




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HPK05 Service Parts



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