



**HPK03**  
Max Flow: 60 gpm (227 lpm)



## HPK03 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:** 60 gpm  
227 lpm



## Features

The sturdy HPK03 filter is constructed of ductile iron for durability in high pressure applications. Standard housing drain plug means simplified servicing. Housing includes a fluoroelastomer head-to-housing seal. Meets HF3 specification.

Take advantage of our mix and match system of in-stock heads and cartridges—so you can get exactly what you need. HPK03 is available with your choice of visual or AC/DC electrical indicators. Likewise, choose the bypass option that's right for your application—50 psi (3.5 bar) or no bypass. Seals made of fluorocarbon (such as Viton® and Fluorel®) or Buna-N are available with HPK03.

All HPK03 filters contain Synteq™, our synthetic filter media designed especially for hydraulic filtration. Upgraded Donaldson DT filters are also offered for superior performance.

Viton® is a registered trademark of E. I. DuPont de Nemours and Company.  
Fluorel® is a registered trademark of 3M Company.

### Beta Rating

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

### Porting Size Options

- SAE-12, -16 O-ring

### Replacement Filter Lengths

- 8.22" / 208.8mm

### Assembly Weight

- 26 lbs / 11.8 kg

### Standard Bypass Ratings

- 50 psi / 345 kPa / 3.5 bar
- 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)

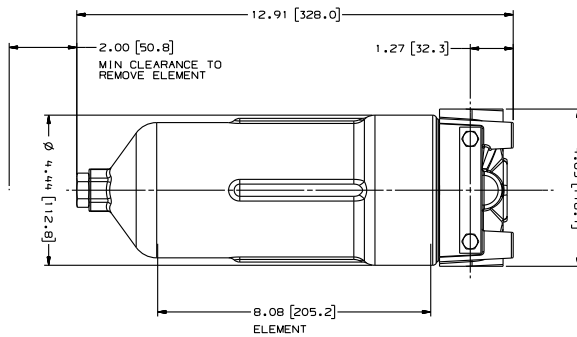
## HPK03 Specification Illustrations

All dimensions are shown in inches [millimeters].

### Applications

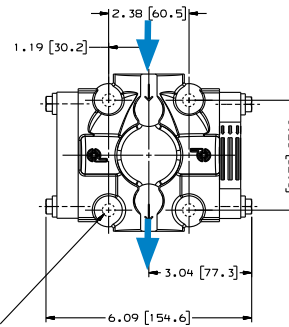
- High Pressure Circuits
- In-Plant Systems
- Meets HF3 Specification
- Mobile Equipment
- Servo Valve Circuits

### Assembly - Side View

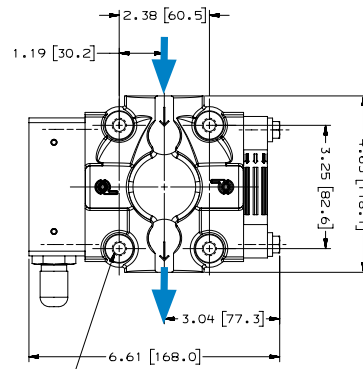
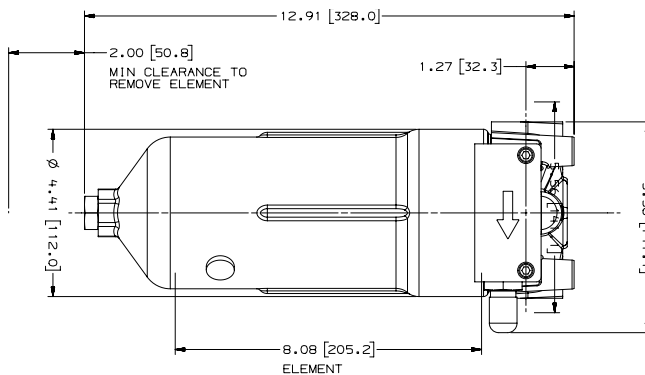


3/8-16 UNC-2B x .69 [17.5]  
MIN FULL THD 4 PLACES

### Head - Top View

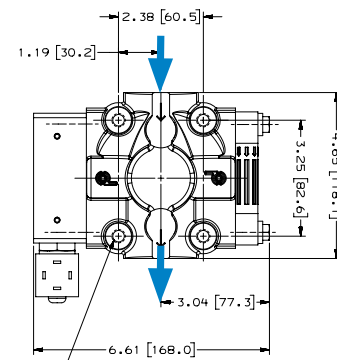
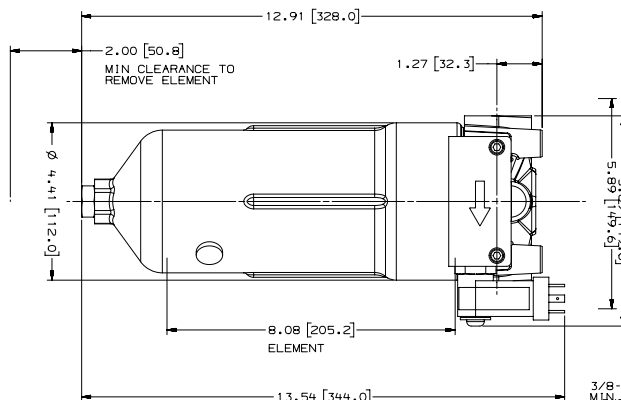


### HPK03 with Visual Service Indicator



3/8-16 UNC-2B x .69 [17.5]  
MIN FULL THD 4 PLACES

### HPK03 with AC/DC Electrical Service Indicator



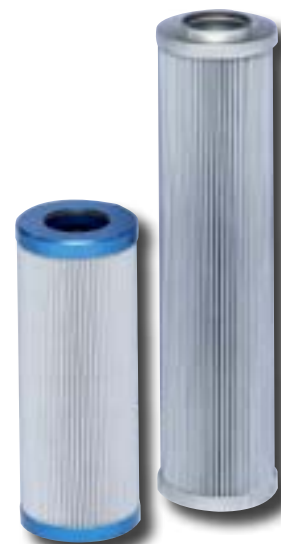
3/8-16 UNC-2B x .69 [17.5]  
MIN FULL THD 4 PLACES



## HPK03 Components

### 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 $\mu\text{m}$	8.22	209	P566209	DT-9600-8-2UM
Synthetic	5 $\mu\text{m}$	8.22	209	P566210	DT-9600-8-5UM
	8 $\mu\text{m}$	8.22	209	P566211	DT-9600-8-8UM
	12 $\mu\text{m}$	8.22	209	P566212	DT-9600-8-14UM
	23 $\mu\text{m}$	8.22	209	P566213	DT-9600-8-25UM
	5 $\mu\text{m}$	8.19	208	P566366	DT-9601-8-5UM, High collapse
	12 $\mu\text{m}$	8.19	208	P566367	DT-9601-8-14UM, High collapse
	<4 $\mu\text{m}$	8.22	209	P567875	DX2-9600-8-2UM
	5 $\mu\text{m}$	8.22	209	P565122	DX2-9600-8-5UM
	8 $\mu\text{m}$	8.22	209	P565123	DX2-9600-8-8UM
	12 $\mu\text{m}$	8.22	209	P564936	DX2-9600-8-14UM



#### Filter Notes

All Donaldson DT and DX2 filters utilize glass fiber media with an epoxy-based resin system for the ultimate in chemical compatibility. All Donaldson DT and DX2 filters are potted with epoxy-based adhesives. DX2 filters utilize nylon mesh for pleat support. 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 and DX2 filters. Viton® is a registered trademark of E. I. DuPont de Nemours and Company.

### Standard Filter Choices

Media Type	$\beta_{x(c)} = 2$ Rating based on ISO 16889	$\beta_{x(c)} = 1000$	Length		Donaldson Part No.	Comments
			in	mm		
Synteq Synthetic		5 $\mu\text{m}$	8.22	209	P167185*	Viton®, High collapse for no bypass applications
		6 $\mu\text{m}$	8.22	209	P164594	Buna-N
		11 $\mu\text{m}$	8.22	209	P164166	Buna-N
		12 $\mu\text{m}$	8.22	209	P167186*	Viton, High collapse for no bypass applications
		23 $\mu\text{m}$	8.22	209	P164174	Buna-N
		50 $\mu\text{m}$	8.22	209	P165319	Buna-N
Water Absorbing	10 $\mu\text{m}$		8.22	209	P569528	
Wire Mesh	75 $\mu\text{m}$		8.22	209	P162233	

#### Filter Notes

\* Utilizes DT Synteq synthetic media  
SEALS: Filters with seals made of Buna-N® are appropriate for most applications involving petroleum oil. Filters with seals made of Viton® (a fluor elastomer) are required when using diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF (high water content fluids) over 150°F/83°C. Refer to table in the Technical Reference Guide for fluid compatibility with our filter media. Donaldson high collapse filters are physically designed to withstand up to 3000 psi / 20,700 kPa before collapsing. The Viton® high collapse filter versions also use epoxy potting and media seam seals for added chemical compatibility. Viton® and Buna-N® registered trademarks of E. I. DuPont de Nemours and Company.





## Housing Choices

Length	Part No.
8.22" (208.8mm) filter	P179579

The **P179579** housing is 10.73 inches (273mm) long and accepts the filter that is 8.22 inches (208.8mm) long. It includes a head-to-housing seal.

## Head Choices

Port Size	Bypass Rating	Indicators <sup>1</sup>	Part No.
SAE-16 O-Ring	50 psi / 3.5 bar	Visual indicator, left side	P166353
SAE-12 O-Ring	50 psi / 3.5 bar	Visual indicator, left side	P170489
SAE-12 O-Ring	No bypass	Visual indicator, left side	P170491

### 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.

## 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	50 psi / 3.5 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	50 psi / 3.5 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	50 psi / 3.5 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	50 psi / 3.5 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

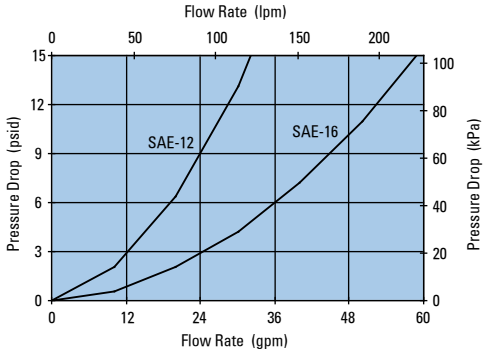
## Indicator Choices

Part No.	Description
<b>Replacement Indicator Only</b>	
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

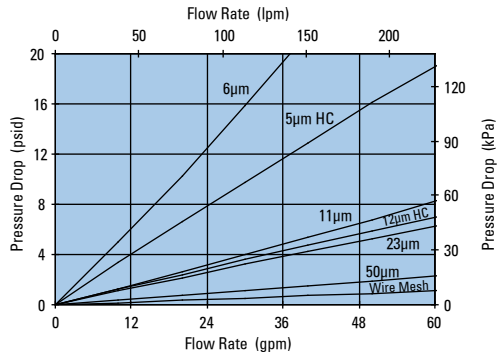


## Performance Data

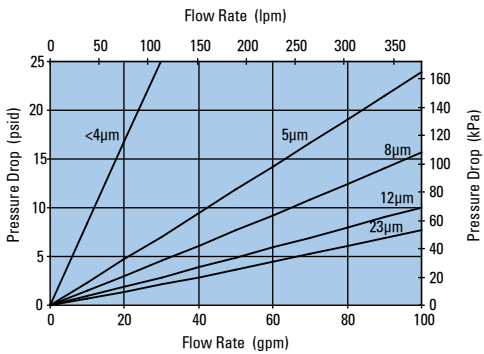
**HPK03 Housing Only**



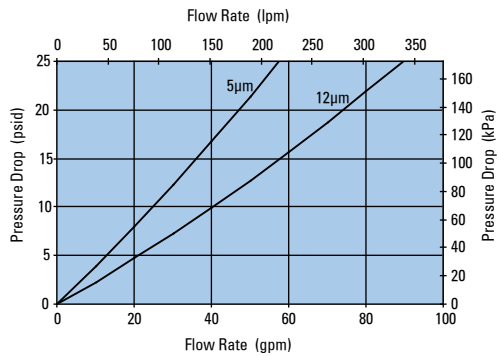
**HPK03 8" Standard Filter Only**



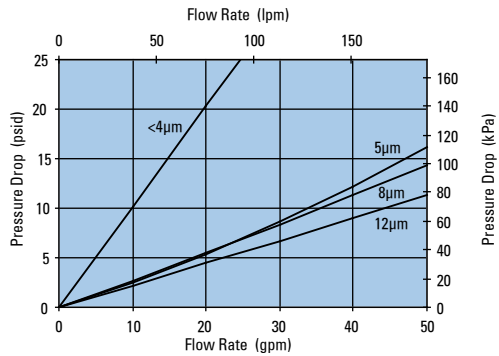
**HPK03 8" DT Filter Only**  
DT-9600-8, 8.22"/208.8mm



**HPK03 8" DT Filter Only**  
DT-9601-8, 8.22"/208.8mm



**W350 8" DX2 Filter Only**  
DX2-9600-8, 8.22"/208.8mm



## HPK03 Service Parts

### SERVICE PARTS NOTE:

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

