



High Pressure Filters

High pressure filters are positioned between pumps and critical components such as cylinders, motors and valves. They help protect these critical components from catastrophic failure.

Donaldson heavy-duty high pressure filters are rated for working pressures up to 6500 psi (44818 kPa). Various porting sizes and types, including manifold style, are available for a wide range of applications.



Section Index

Max Operating Pressure < 6500 psi (450 bar)

Models arranged from low to maximum flow rates

In-line Cartridge Filters

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HPK02
Max Flow: 20 gpm (76 lpm)

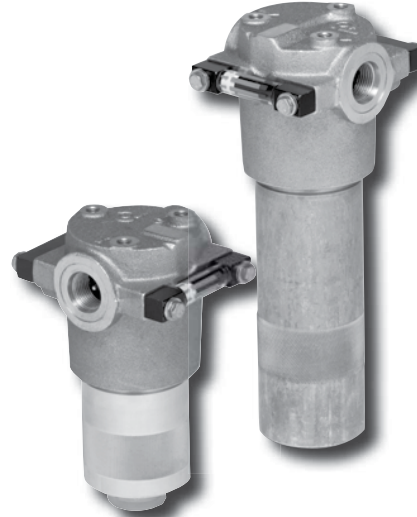


HPK02 In-Line Cartridge Filters

Working Pressures to: 2000 psi
13,790 kPa
137.9 bar

Rated Static Burst to: 4500 psi
31,030 kPa
310.3 bar

Flow Range To: 20 gpm
76 lpm



Features

The HPK02 is a heavy-duty filter built for high pressure applications, with cast aluminum head and impact-extruded aluminum housing for strength and durability at relatively lightweight.

Take advantage of our mix and match system of in-stock heads, housings and cartridges – so you can get exactly what you need. HPK02 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) bypass, or no bypass. Seals made of fluorocarbon (such as Viton® and Fluorel®) or Buna-N are available with HPK02.

All HF2-sized HPK02 filters contain Synteq™, our synthetic filter media designed especially for hydraulic filtration.

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 O-ring

Replacement Filter Lengths

- 4.37" / 111mm
- 8.12" / 206mm

Standard Bypass Ratings

- 50 psi / 345 kPa / 3.5 bar
- No Bypass

Assembly Weight

- 4.3 lbs / 1.95 kg (short)
- 5.5 lbs / 2.49 kg (long)

Operating Temperatures

- -45° to 250°F (-43° to 121°C)

Filter Collapse Ratings

- 150 psi / 1035 kPa / 10.6 bar (standard)
- 3000 psi / 20,700 kPa / 206.9 bar (high collapse)

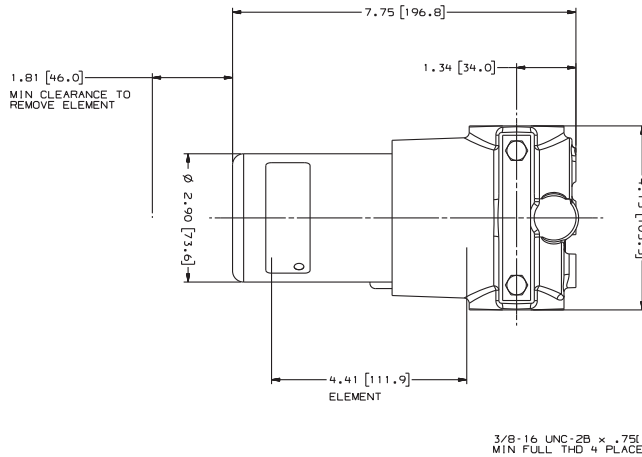
HPK02 Specification Illustrations

All dimensions are shown in inches [millimeters].

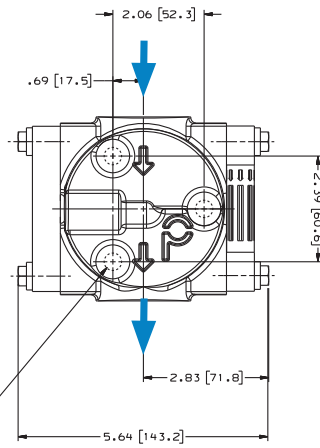
Applications

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

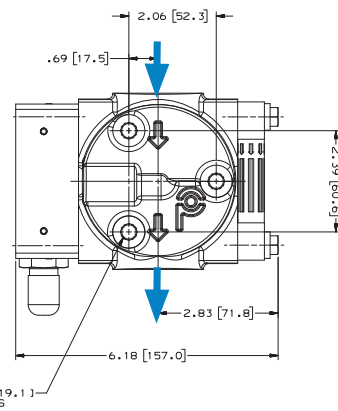
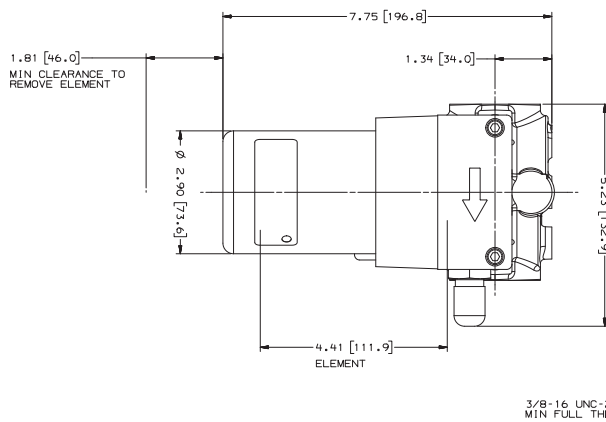
Assembly - Side View



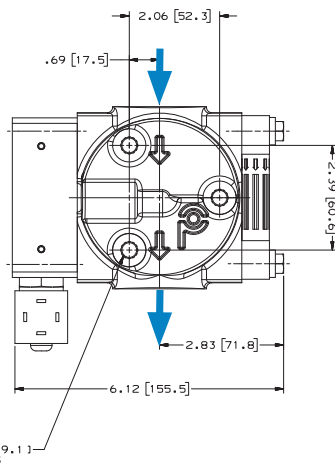
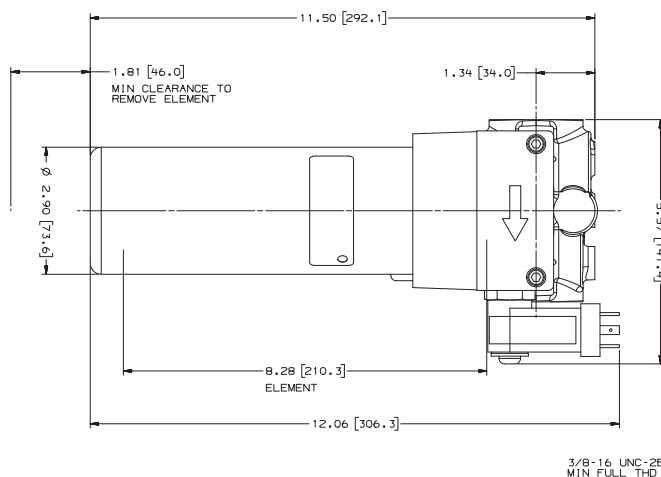
Head - Top View



HPK02 with Visual Service Indicator



HPK02 with AC/DC Electrical Service Indicator





HPK02
Max Flow: 20 gpm (76 lpm)



HPK02 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 Synthetic	<4 μm	4.41	112	P566194	DT-9020-4-2UM
	5 μm	4.41	112	P566195	DT-9020-4-5UM
	8 μm	4.41	112	P566196	DT-9020-4-8UM
	12 μm	4.41	112	P566197	DT-9020-4-14UM
	23 μm	4.41	112	P566198	DT-9020-4-25UM
	<4 μm	4.41	210	P566199	DT-9020-8-2UM
	5 μm	8.28	210	P566200	DT-9020-8-5UM
	8 μm	8.28	210	P566201	DT-9020-8-8UM
	12 μm	8.28	210	P566202	DT-9020-8-14UM
	23 μm	8.28	210	P566203	DT-9020-8-25UM
	5 μm	4.46	113	P566335	DT-9021-4-5UM, High collapse
	12 μm	4.46	113	P566336	DT-9021-4-14UM, High collapse
	5 μm	8.16	207	P566337	DT-9021-8-5UM, High collapse
	12 μm	8.16	207	P566338	DT-9021-8-14UM, 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. Viton® is a registered trademark of E. I. DuPont de Nemours and Company.

Standard Filter Choices

Media Type	$\beta_{x(c)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.	Comments
		in	mm		
Synteq Synthetic	5 μm	4.37	111	P167180*	Fluorocarbon Seal, High Collapse
	5 μm	8.12	203	P167182*	Fluorocarbon Seal, High Collapse
	6 μm	4.37	111	P165041	Buna-N Seal
	6 μm	8.12	203	P165043	Buna-N Seal
	11 μm	4.37	111	P165006	Buna-N Seal
	11 μm	8.12	203	P165015	Buna-N Seal
	12 μm	4.37	111	P167181*	Fluorocarbon Seal, High Collapse
	12 μm	8.12	203	P167183*	Fluorocarbon Seal, High Collapse
	23 μm	4.37	111	P165136	Buna-N Seal
	23 μm	8.12	203	P165138	Buna-N Seal

Filter Notes

*Utilizes DT Synteq synthetic media
Refer to the table in the Technical Reference Guide for fluid compatibility with our filter media.
If filtering petroleum-based oil, filters with seals made of Buna-N® are appropriate for most applications.
If filtering diester, phosphate ester fluids, water glycol, water/oil emulsions, or HWCF over 150°F/83°C, use filters with seals made of fluorocarbon, such as Viton®.
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.
The fluorocarbon seal/high collapse filters 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.
Short	P167443
Long	P167452

Head Choices

Port Size	Bypass Rating	Indicators ¹	Part No.
SAE-12 O-Ring	50 psi/3.5 bar	Visual indicator, left side	P167728
SAE-12 O-Ring	No bypass	Visual indicator, left side	P167730

Notes on Indicators

¹Donaldson 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
Visual Service Indicators		
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		
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	
P573495	Mounting Block Assembly

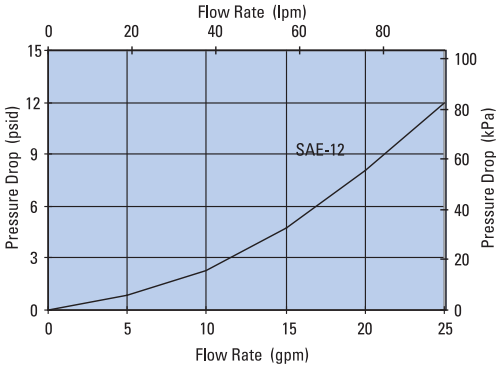


HPK02
Max Flow: 20 gpm (76 lpm)

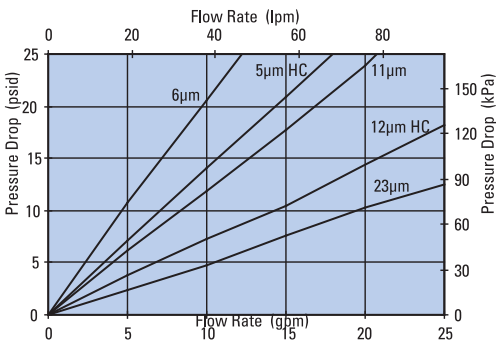


Performance Data

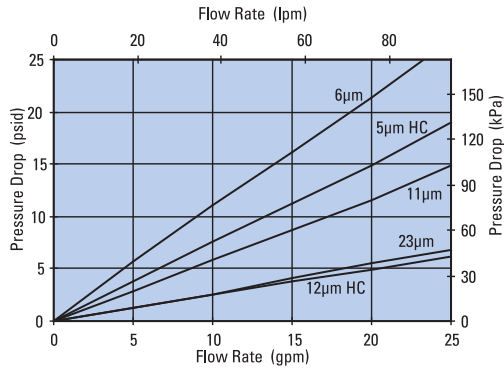
HPK02 Housing Only



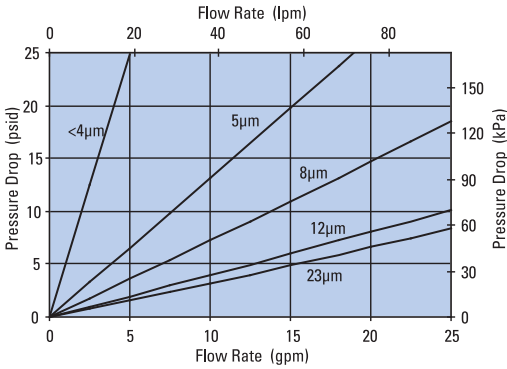
HPK02 Standard 4" Filter Only



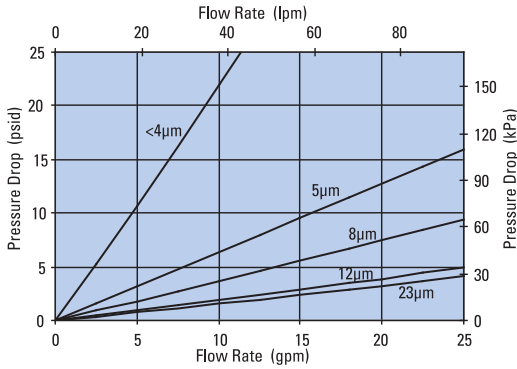
HPK02 Standard 8" Filter Only



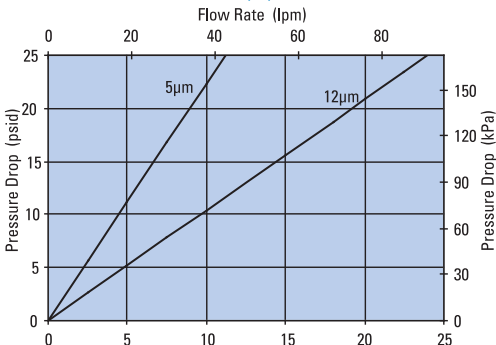
**HPK02 4" DT Filter Only
DT-9020-4, 4"/102mm**



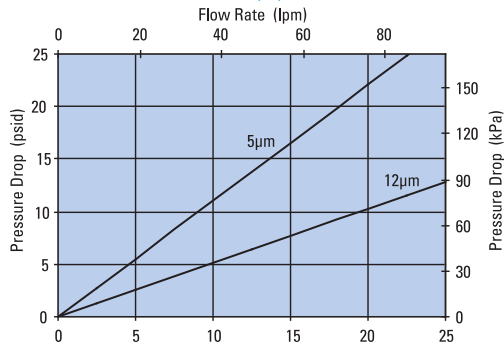
**HPK02 8" DT Filter Only
DT-9020-8, 8"/203mm**



**HPK02 4" DT Filter Only
DT-9021-4, 4"/102mm**



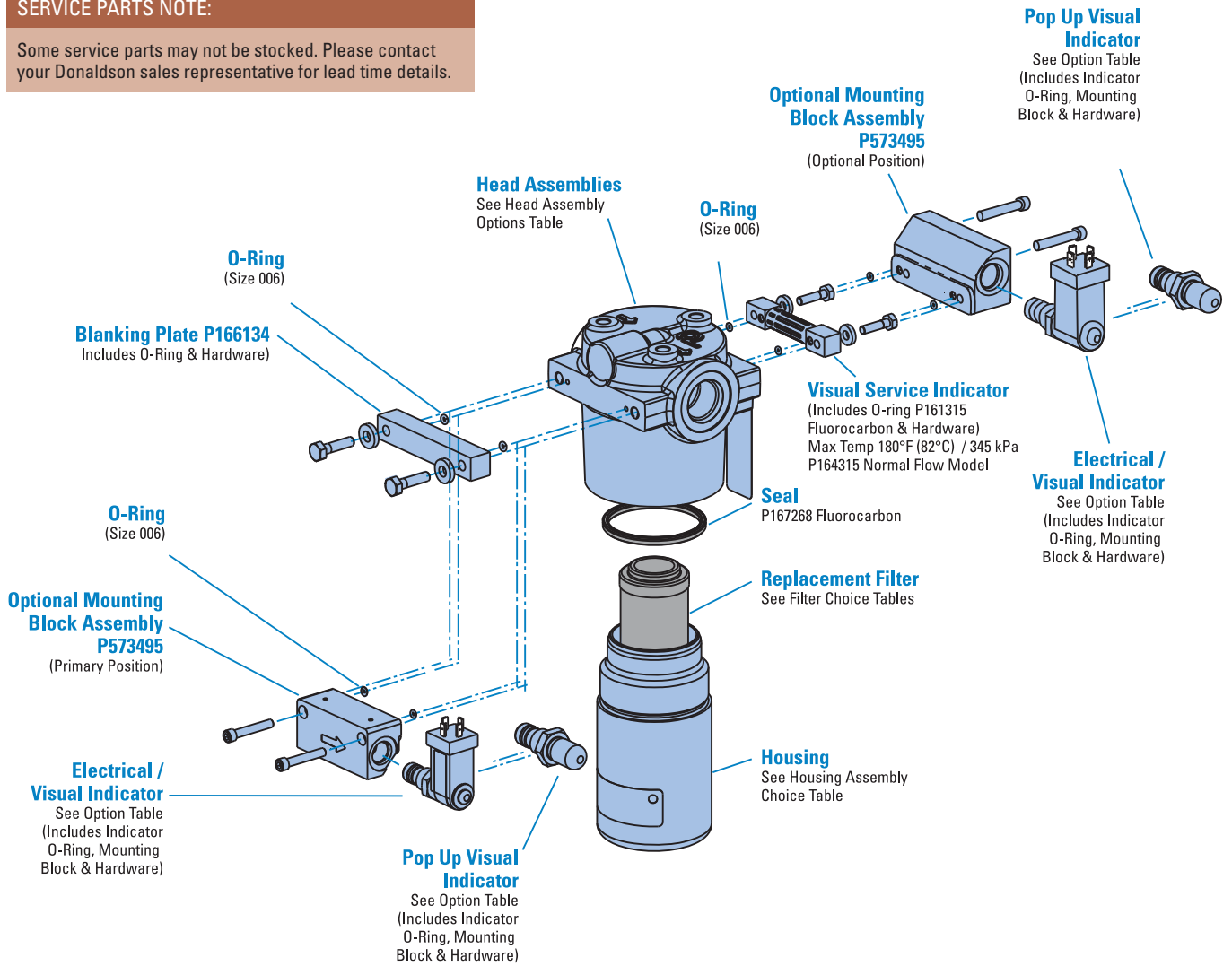
**HPK02 8" DT Filter Only
DT-9021-8, 8"/203mm**



HPK02 Service Parts

SERVICE PARTS NOTE:

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





DPK2400
Max Flow: 100 gpm (379 lpm)



DPK2400 In-Line Cartridge Filters

Working Pressures to: 2400 psi
16547 kPa
165.4 bar

Rated Static Burst to: 700 psi
4800 kPa
48 bar

Flow Range To: 100 gpm
379 lpm



Applications

- In-plant Systems
- Process Fluids
- Lube Oil Systems

Features

DPK2400 duplex filter assemblies allow continuous filtration during filter servicing to avoid machine shutdown. The DPK2400 duplex design combines durable iron heads and carbon steel bowls for superior, high-strength performance. Choose between optional features such as no bypass, bypass valve, visual indicators or combination electrical/visual indicators for a customized assembly that best fits the needs of your specific application. Filter performance ranges range from 5 μ to 25 μ at beta 1000 and high collapse elements are available at 5 μ and 27 μ , offering additional flexibility to achieve the filtration level your system requires.

- Head Material: Durable Iron
- Bowl Material: Carbon Steel
- Optional visual and visual / electric indicators
- Self locking transfer valve
- Automatic bleed-over valve

Beta Rating

- Performance to $\beta_{5(c)} = 1000$

Porting Size Options

- 1-1/2" SAE 4-Bolt Flange Code 61

Replacement Filter Lengths

- 14.62" / 371 mm

Filter Collapse Ratings

- 300 psid / 207 kPa / 20.7 bar (standard)
- 3045 psid / 2100 kPa / 210 bar (high collapse)

Assembly Weight

- 98 lbs / 20 kg

Operating Temperatures

- -40° to 250°F (-40° to 121°C)

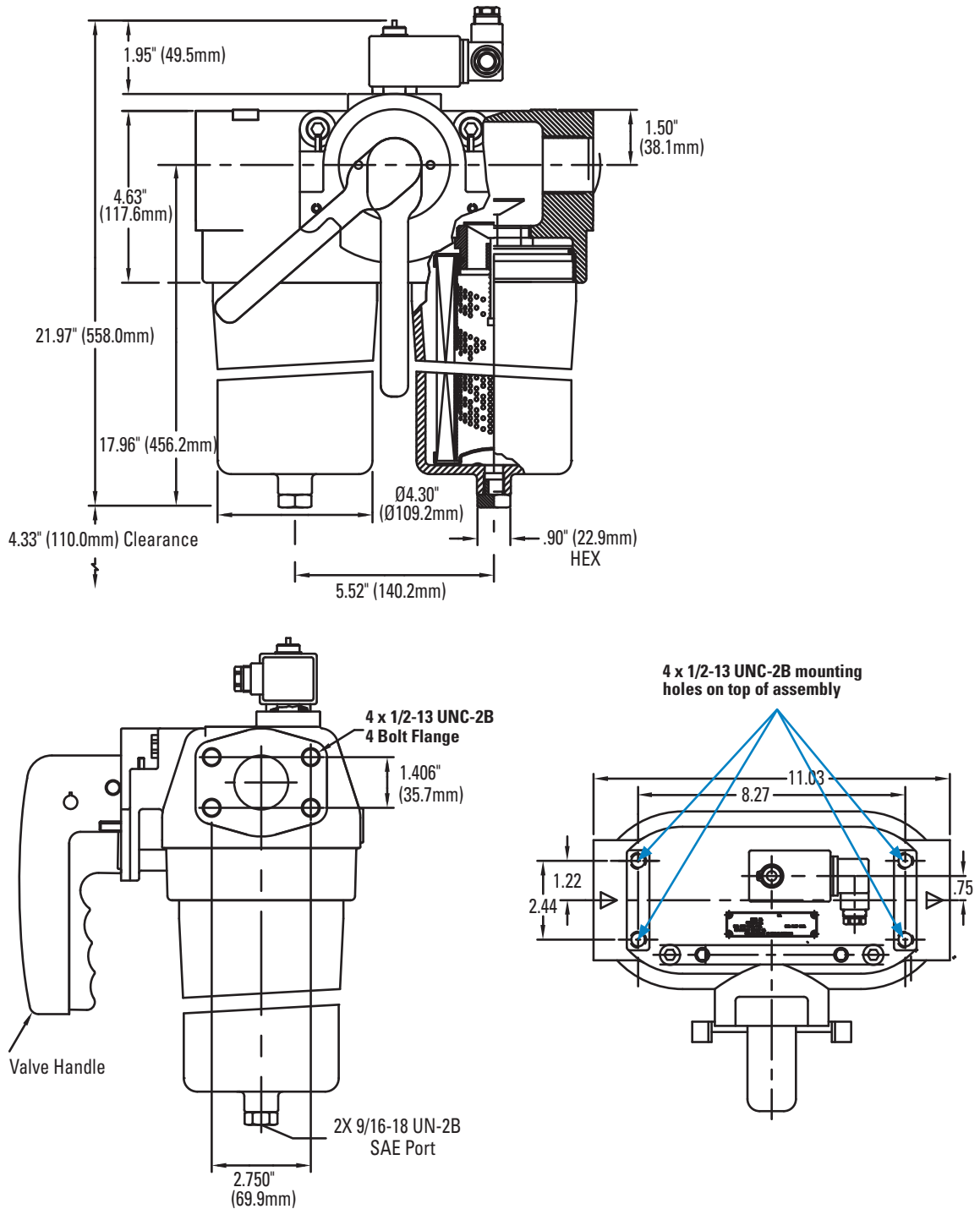
Standard Bypass Ratings

- 100 psi / 690 kPa / 6.9 bar
- No bypass



DPK2400 Specification Illustrations

DPK2400 Assembly - Side Views





DPK2400
Max Flow: 100 gpm (379 lpm)



DPK2400 Components

Assembly Choices

Part No.	Port Connections	Bypass Valve
P577026	1-½" SAE 4-bolt flange code 61	No bypass
P577027	1-½" SAE 4-bolt flange code 61	100 psi (6.9 bar) bypass

Filter Choices

Media Type	$\beta_{x(e)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.	Comments
		in	mm		
DT Synteq	5 µm	14.62	371	P567101	
Synthetic	8 µm	14.62	371	P567102	
	13 µm	14.62	371	P567103	
	23 µm	14.62	371	P567104	
	5 µm	14.69	373	P560716	High collapse
	27 µm	14.69	373	P560718	High collapse

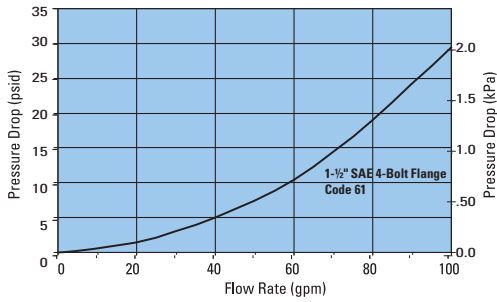
Service Indicator Choices

Use with Bypass Valve Pressure of:	Indicator Part No.	Seal Material	Connector Style
Visual / Electric Models			
100 psi / 690 kPa	P577030	Viton seal	Manual reset
Visual Models			
100 psi / 690 kPa	P577031	Viton seal	Hirschman

Performance Data

DPK2400 Housing Only

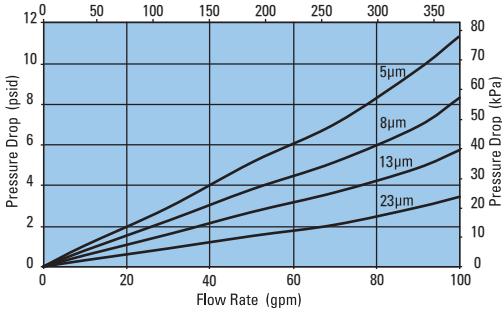
Flow Rate (lpm)



DPK2400 14" Filter Only

(DT Synthetic Synteq Media, 14.62"/371mm)

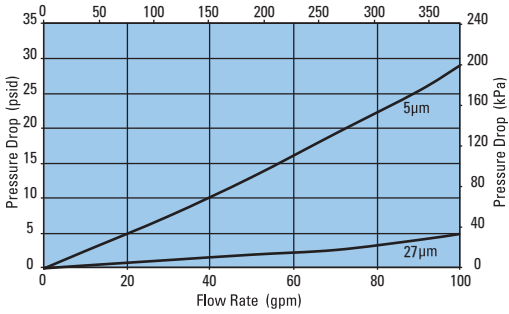
Flow Rate (lpm)



DPK240 14" High-Collapse Filter Only

(DT Synthetic Synteq Media, 14.68"/373mm)

Flow Rate (lpm)





W440
Max Flow: 20 gpm (76 lpm)



W440 In-Line Cartridge Filters

Working Pressures to: 4000 psi
27,600 kPa
276 bar

Rated Static Burst to: 10,000 psi
69,000 kPa
690 bar

Flow Range To: 20 gpm
76 lpm



Applications

- High Pressure Circuits
- In-Plant Systems
- Meets HF2 Specification
- Mobile Equipment

Features

The W440 filter assembly can be manifold mounted to the hydraulic system. The size and material configuration are well-suited for today's demanding proportional and servo valve applications. Our standard housing drain plug helps relieve system pressure during filter change-outs. DT 4-layer media is offered in a variety of designs. Five different media grades are offered. Donaldson filters core collapse options range from 150 to 3,000 psi. The differential pressure indicator line is designed to work with a wide assortment of bypass valves. Thermal lockout and surge control are two key features incorporated in many of the differential pressure indicators.

- Conforms to HF2 specifications
- High collapse filter available for use with non-bypass applications
- Positive sealing poppet bypass for reliability and zero leakage
- Wide range of indicator options
- Compact design for use with servo or proportional valve
- Two housing length options for design flexibility
- Head material: cast iron
- Housing material: steel
- Drain plug in housing

Beta Rating

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

Porting Size Options

- SAE-12 O-ring
- Manifold mounting

Replacement Filter Lengths

- 4.41" / 111.9mm
- 4.46" / 113.2mm
- 8.16" / 207.2mm
- 8.28" / 210.3mm

Top-ported for subplate mounting

- 0.69" (17.5 mm) holes
- 1.25" (31.8 mm) centers

Standard Bypass Ratings

- 50 psi / 345 kPa / 3.5 bar
- 90 psi / 621 kPa / 6.2 bar
- No Bypass

Assembly Weight

- 4.41": 8.4 lbs / 3.8 kg
- 8.28": 10.6 lbs / 4.8 kg

Operating Temperatures

- -20° to 250°F (-29° to 121°C)

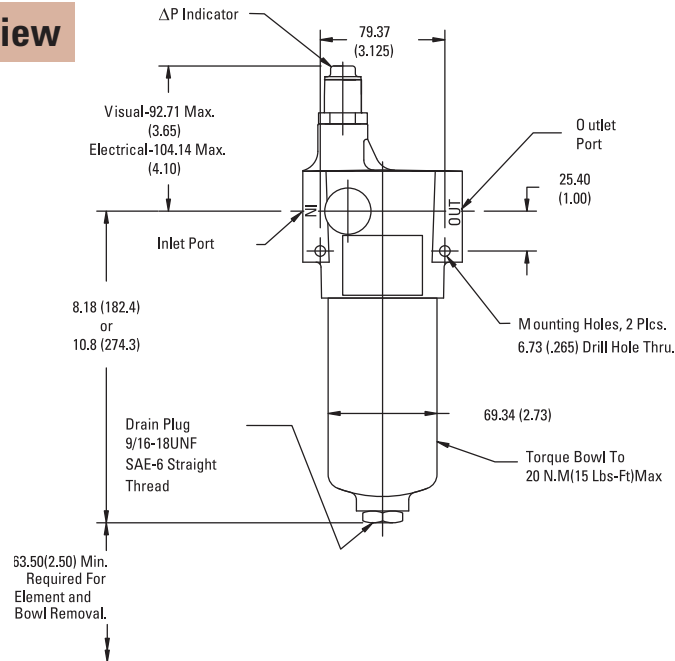
Filter Collapse Ratings

- 150 psi / 1034 kPa / 10.3 bar (standard)
- 3000 psi / 20,700 kPa / 206.8 bar (high collapse)

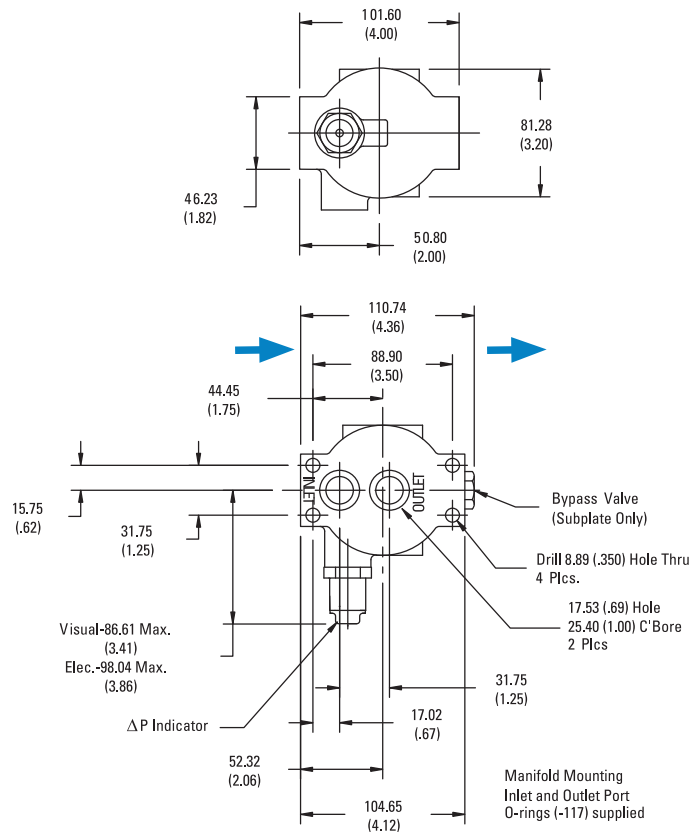
W440 Specification Illustrations

All dimensions are shown in millimeters [inches].

Assembly - Side View



Head - Top View





W440
Max Flow: 20 gpm (76 lpm)



W440 Components

High-Performance DT Filter Choices

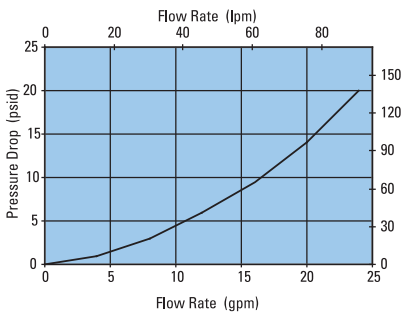
Media Type	$\beta_{x(c)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.	Comments
		in	mm		
DT Synteq Synthetic	<4 μm	4.41	112	P566194	DT-9020-4-2UM
	5 μm	4.41	112	P566195	DT-9020-4-5UM
	8 μm	4.41	112	P566196	DT-9020-4-8UM
	12 μm	4.41	112	P566197	DT-9020-4-14UM
	23 μm	4.41	112	P566198	DT-9020-4-25UM
	<4 μm	8.28	210	P566199	DT-9020-8-2UM
	5 μm	8.28	210	P566200	DT-9020-8-5UM
	8 μm	8.28	210	P566201	DT-9020-8-8UM
	12 μm	8.28	210	P566202	DT-9020-8-14UM
	23 μm	8.28	210	P566203	DT-9020-8-25UM
	5 μm	4.46	113	P566335	DT-9021-4-5UM, High collapse
	12 μm	4.46	113	P566336	DT-9021-4-14UM, High collapse
	5 μm	8.16	207	P566337	DT-9021-8-5UM, High collapse
	12 μm	8.16	207	P566338	DT-9021-8-14UM, 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. Viton® is a registered trademark of E. I. DuPont de Nemours and Company.

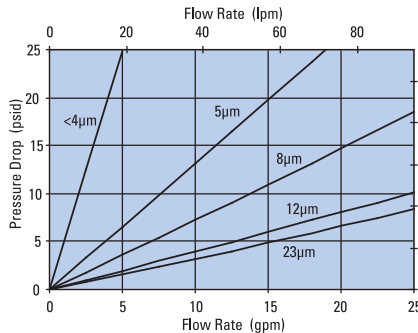
Performance Data

W440 Housing Only



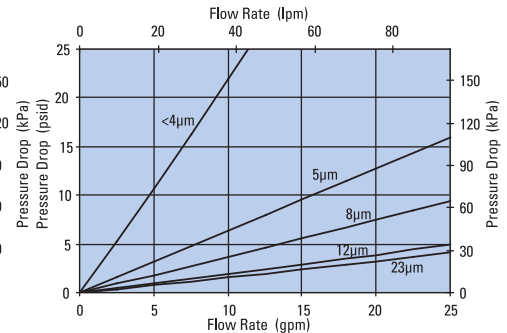
W440 4" DT Filter Only

DT-9020-4, 4.41"/111.9mm



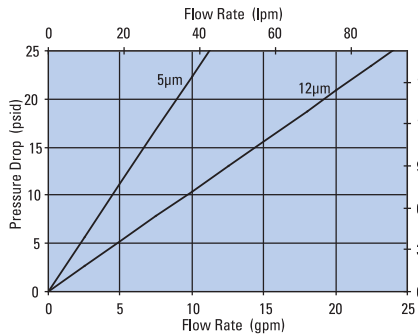
W440 8" DT Filter Only

DT-9020-8, 8.28"/210.3mm



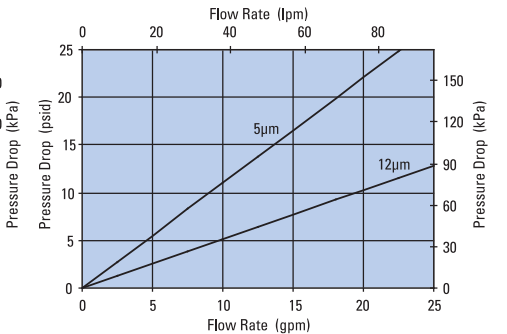
W440 4" DT Filter Only

DT-9021-4, 4.46"/113.2mm



W440 8" DT Filter Only

DT-9021-8, 8.16"/207.2mm





Head Assembly Choices

Port Size	Bypass Rating	Seal Material	Indicator Style & Location	Donaldson Part No.
SAE-12 O-ring	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	P574248
Manifold Mount	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	P574249
Manifold Mount	None	Viton	Port Machined & Plugged	P574250

Housing Choices

Housing Length	Seal Material	Donaldson Part No.
4" (101.6mm)	Buna-N	X011125
8" (203.2mm)	Buna-N	X011126

Indicator Choices

Indicator Pressure Setting	Connector Style	Seal Material	Donaldson Part No.	Thermal Lockout	Surge Control	Reset
Visual Pop-up Models						
35 psi / 241 kPa	NA	Buna-N	P572347	No	No	Auto
35 psi / 241 kPa	NA	Buna-N	P572348	Yes	Yes	Manual
35 psi / 241 kPa	NA	Viton	P567456	Yes	Yes	Manual
70 psi / 482 kPa	NA	Buna-N	P572319	Yes	Yes	Manual
70 psi / 482 kPa	NA	Viton	P567457	Yes	Yes	Manual
100 psi / 690 kPa	NA	Buna-N	P572353	Yes	Yes	Manual
100 psi / 690 kPa	NA	Viton	P572354	Yes	Yes	Manual
Electrical / Visual Models						
35 psi / 241 kPa	Hirschman	Buna-N	P572327	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Buna-N	P572329	No	No	Auto
35 psi / 241 kPa	Hirschman	Buna-N	P572384	Yes	Yes	Manual
35 psi / 241 kPa	Hirschman	Viton	P567458	Yes	Yes	Manual
35 psi / 241 kPa	Brad Harrison	Buna-N	P572385	Yes	Yes	Manual
35 psi / 241 kPa	3 wire flying leads	Buna-N	P572349	No	No	Auto
70 psi / 482 kPa	Hirschman	Buna-N	P572320	Yes	Yes	Manual
70 psi / 482 kPa	Brad Harrison	Buna-N	P567459	Yes	Yes	Manual
70 psi / 482 kPa	Hirschman	Buna-N	P572373	Yes	No	Manual
70 psi / 482 kPa	Hirschman	Viton	P569639	Yes	No	Manual
100 psi / 690 kPa	Hirschman	Buna-N	P572387	Yes	Yes	Manual
Electrical Models						
35 psi / 241 kPa	Hirschman	Buna-N	P572359	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Buna-N	P572361	No	No	Auto
70 psi / 482 kPa	Hirschman	Buna-N	P572369	No	No	Auto

Head/Bowl/Housing Seal Kits

Donaldson Part No.	Material
X011172	Buna
X011173	Viton



FPK02
Max Flow: 25 gpm (95 lpm)



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.

Beta Rating

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

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

Operating Temperatures

- -20°F to 250°F / -29°C to 120°C

Standard Bypass Ratings

- 87 psi / 600 kPa / 6 bar
- 87 psi Bypass with reverse-flow check valve
- No Bypass

Assembly Weight

- 4.41" Assembly: 9.2 lbs / 4.2 kg
- 8.28" Assembly: 13.2 lbs / 6.0 kg

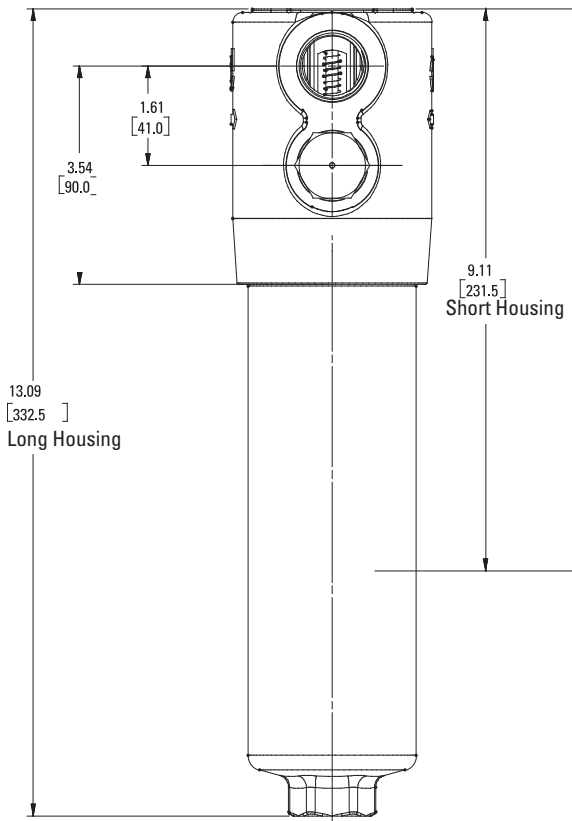
Filter Collapse Ratings

- 290 psi / 2000 kPa / 20 bar (standard)
- 3000 psi / 20,700 kPa / 207 bar (high collapse)

FPK02 Specification Illustrations

All dimensions are shown in inches [millimeters].

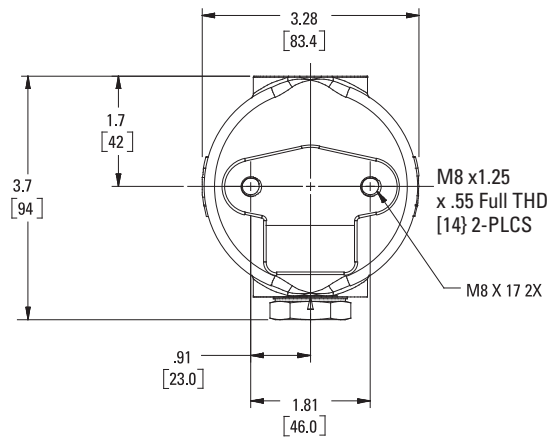
Assembly - Side View



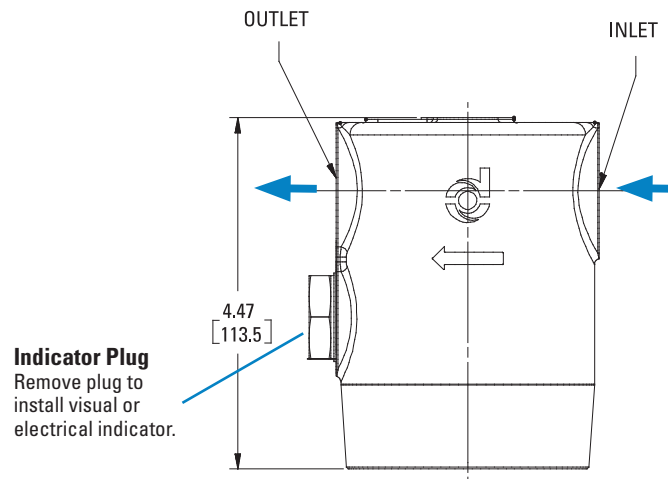
Applications

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

Head - Top View



Head - Side View



All dimensions above are shown in inches [millimeters]



FPK02
Max Flow: 25 gpm (95 lpm)



FPK02 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 Synthetic	<4 μm	4.41	112	P566194	DT-9020-4-2UM
	5 μm	4.41	112	P566195	DT-9020-4-5UM
	8 μm	4.41	112	P566196	DT-9020-4-8UM
	12 μm	4.41	112	P566197	DT-9020-4-14UM
	23 μm	4.41	112	P566198	DT-9020-4-25UM
	<4 μm	8.28	210	P566199	DT-9020-8-2UM
	5 μm	8.28	210	P566200	DT-9020-8-5UM
	8 μm	8.28	210	P566201	DT-9020-8-8UM
	12 μm	8.28	210	P566202	DT-9020-8-14UM
	23 μm	8.28	210	P566203	DT-9020-8-25UM
	5 μm	4.46	113	P566335	DT-9021-4-5UM, High collapse
	12 μm	4.46	113	P566336	DT-9021-4-14UM, High collapse
	5 μm	8.16	207	P566337	DT-9021-8-5UM, High collapse
	12 μm	8.16	207	P566338	DT-9021-8-14UM, 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. Viton® is a registered trademark of E. I. DuPont de Nemours and Company.



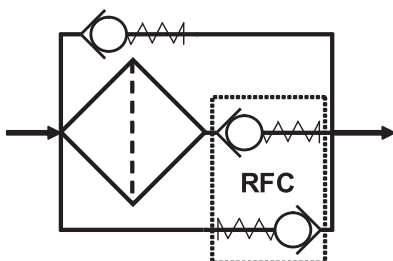
Housing Choices

Length (in.)	Part No.
4.4" filter	P762769
8.2" filter	P762770

Head Choices

Port Size	Bypass Rating	Part No.
SAE-12 O-Ring	87 psi / 6 bar	P762766
SAE-12 O-Ring with reverse-flow check valve	87 psi / 6 bar	P762767
SAE-12 O-Ring	No Bypass	P762768

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



Reverse Flow Check Schematic



Standard Filter Choices

Media Type	$\beta_{x(c)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.	Comments
		in	mm		
Synteq Synthetic	5 μm	4.37	111	P167180*	Fluorocarbon Seal, High Collapse
	5 μm	8.12	203	P167182*	Fluorocarbon Seal, High Collapse
	6 μm	4.37	111	P165041	Buna-N Seal
	6 μm	8.12	203	P165043	Buna-N Seal
	11 μm	4.37	111	P165006	Buna-N Seal
	11 μm	8.12	203	P165015	Buna-N Seal
	12 μm	4.37	111	P167181*	Fluorocarbon Seal, High Collapse
	12 μm	8.12	203	P167183*	Fluorocarbon Seal, High Collapse
	23 μm	4.37	111	P165136	Buna-N Seal
	23 μm	8.12	203	P165138	Buna-N Seal

Filter Notes

*Utilizes DT Synteq synthetic media

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

If you're filtering petroleum-based oil, filters with seals made of Buna-N are appropriate for most applications.

If you're filtering diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF over 150°F/83°C, use filters with seals made of fluorocarbon, such as Viton® from DuPont Dow Elastomers, or Fluorel® from 3M Company.

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.

The fluorocarbon seal/high collapse filters 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.



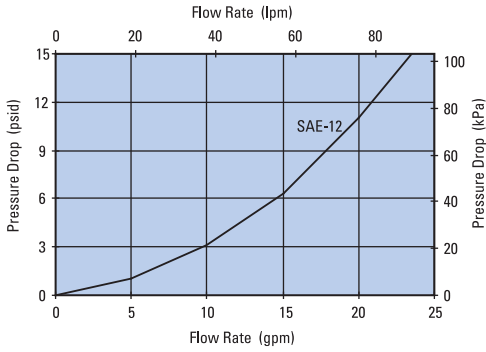


FPK02
Max Flow: 25 gpm (95 lpm)

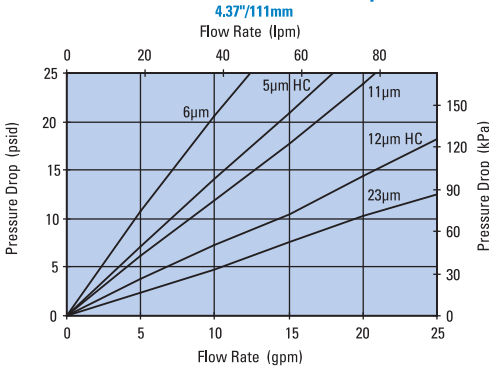


Performance Data

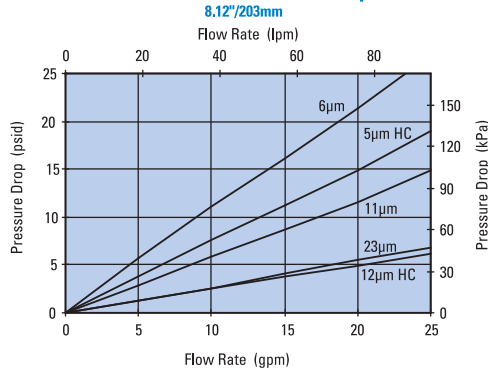
FPK02 Housing Only



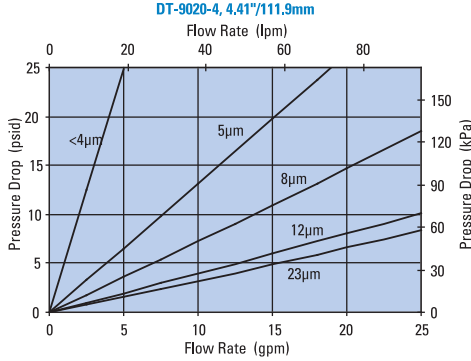
FPK02 Standard 4" Filter Only



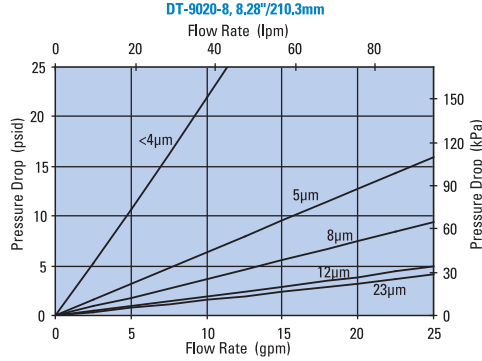
FPK02 Standard 8" Filter Only



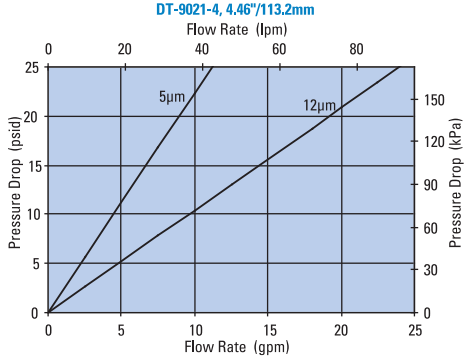
FPK02 4" DT Filter Only



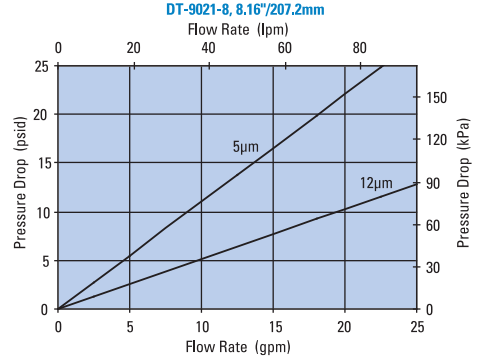
FPK02 8" DT Filter Only



FPK02 4" DT Filter Only



FPK02 8" DT Filter Only

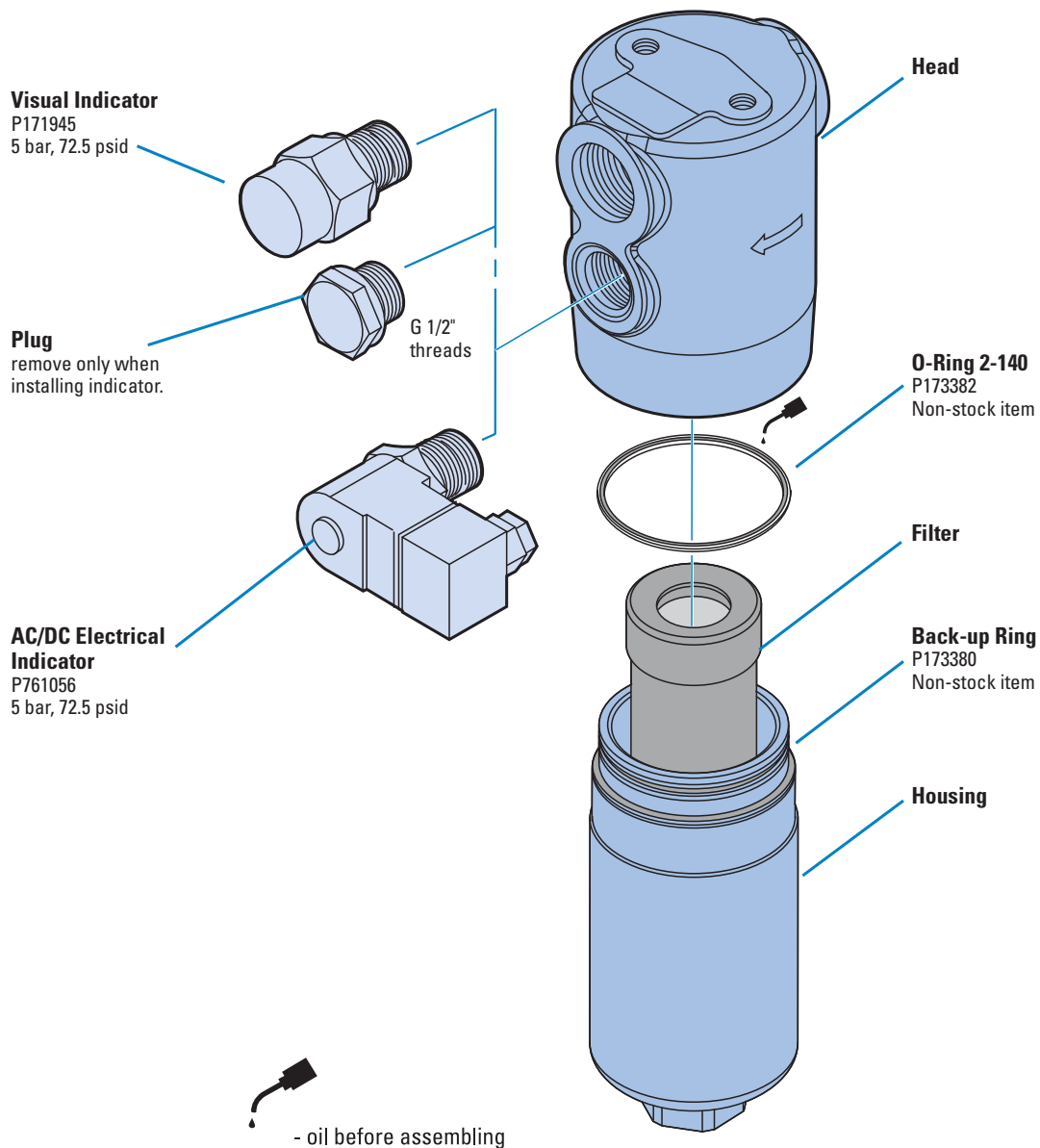


FPK02 Service Parts

When installing the FPK02 housing onto an installed head, torque it to 15 ft-lbs./2.1 kg-m.

SERVICE PARTS NOTE:

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





W350

Max Flow: 50 gpm (189 lpm)



W350 In-Line Cartridge Filters

Working Pressures to: 3000 psi
21,000 kPa
210 bar

Rated Static Burst to: 7500 psi
51,700 kPa
517 bar

Fatigue Pressure Rating: 1500 psi
10,000 kPa
100 bar

Flow Range To: 50 gpm
189 lpm



Applications

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

Features

The W350 T-type ported series offers flows up to 50 gpm (190 lpm) with 3 bypass options and conforms to the HF3 automotive standard. Our standard housing drain plug helps relieve system pressure during filter changeouts. DT 4-layer media is offered in a variety of designs. Five different media grades are offered. Donaldson filters core collapse options range from 150 to 3,000 psi (10 to 210 bar). The differential pressure indicator line is designed to work with the wide assortment of bypass valves. Thermal lockout and surge control are two key features incorporated in many of the differential pressure indicators.

- Conforms to HF3 specifications
- High collapse filter available for use with non-bypass applications
- Wide range of indicator options
- Two housing length options for design flexibility
- Head material: cast iron
- Housing material: steel
- Drain plug in housing
- Bleed plug in head

Beta Rating

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

Porting Size Options

- SAE-16 O-ring

Replacement Filter Lengths

- 4.59" / 116.7mm
- 8.22" / 208.8mm

Filter Collapse Ratings

- 150 psi / 1034 kPa / 10.3 bar (standard)
- 3000 psi / 20,700 kPa / 206.8 bar (high collapse)

Standard Bypass Ratings

- 25 psi / 173 kPa / 1.7 bar
- 50 psi / 345 kPa / 3.5 bar
- 90 psi / 621 kPa / 6.2 bar
- No Bypass

Assembly Weight

- 4.59": 20 lbs / 9.07 kg
- 8.22": 26 lbs / 11.79 kg

Operating Temperatures

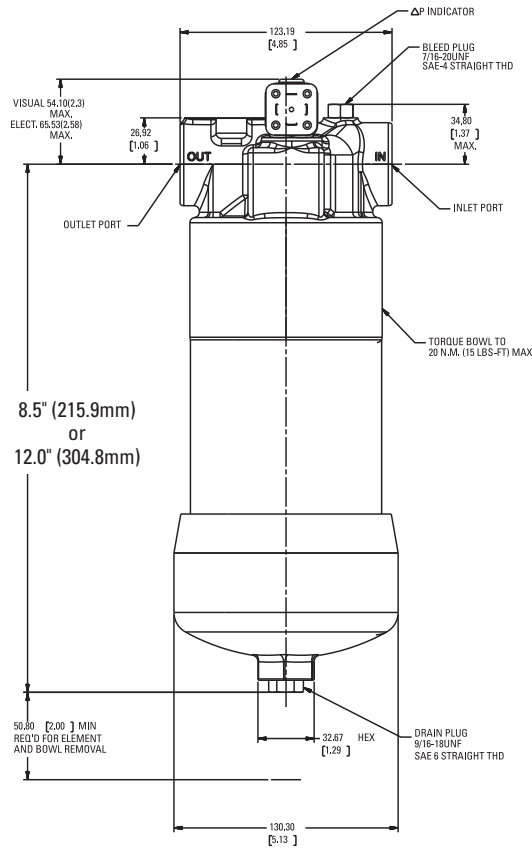
- -20° to 250°F (-29° to 121°C)



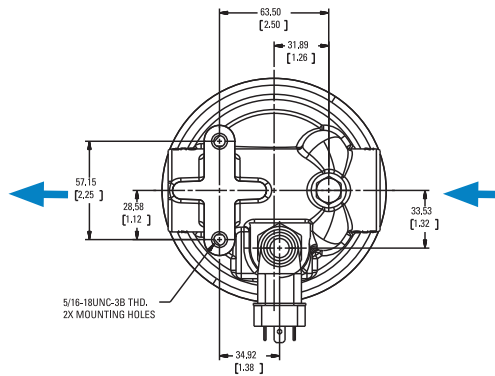
W350 Specification Illustrations

All dimensions are shown in millimeters [inches].

Assembly - Side View



Head - Top View





W350
Max Flow: 50 gpm (189 lpm)



W350 Components

High-Performance DT Filter Choices

Media Type	$\beta_{x(c)} = 2$ Rating based on ISO 16889	$\beta_{x(c)} = 1000$	Length in mm	Donaldson Part No.	Comments
DT Synteq Synthetic	<4 μm	4.59	117	P566204	DT-9600-4-2UM
	5 μm	4.59	117	P566205	DT-9600-4-5UM
	8 μm	4.59	117	P566206	DT-9600-4-8UM
	12 μm	4.59	117	P566207	DT-9600-4-14UM
	23 μm	4.59	117	P566208	DT-9600-4-25UM
	5 μm	4.56	116	P566364	DT-9601-4-5UM, High collapse
	12 μm	4.56	116	P566365	DT-9601-4-14UM, High collapse
	<4 μm	8.22	209	P566209	DT-9600-8-2UM
	5 μm	8.22	209	P566210	DT-9600-8-5UM
	8 μm	8.22	209	P566211	DT-9600-8-8UM
	12 μm	8.22	209	P566212	DT-9600-8-14UM
	23 μm	8.22	209	P566213	DT-9600-8-25UM
	5 μm	8.19	208	P566366	DT-9601-8-5UM, High collapse
	12 μm	8.19	208	P566367	DT-9601-8-14UM, High collapse
	<4 μm	8.22	209	P567875	DX2-9600-8-2UM
5 μm	8.22	209	P565122	DX2-9600-8-5UM	
8 μm	8.22	209	P565123	DX2-9600-8-8UM	
14 μm	8.22	209	P564936	DX2-9600-8-14UM	
Water Absorbing	10 μm	8	209	P569528	Absorbs 130 ml water @ 25 psid

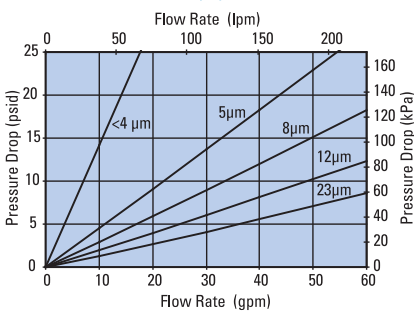


Filter Notes

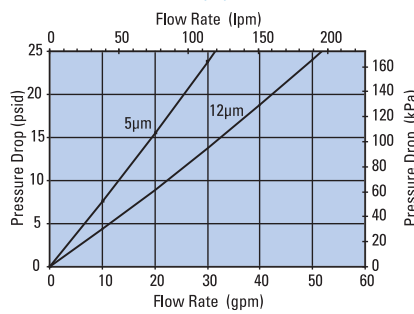
All Donaldson DT and DX2 filters utilize glass fiber media with an epoxy-based resin system for the ultimate in chemical compatibility. All Donaldson DT and DX2 filters are potted with epoxy-based adhesives. Standard collapse DT designs are double wire-backed using epoxy-coated steel mesh for maximum 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. DX2 filters utilize nylon mesh for pleat support.

Performance Data

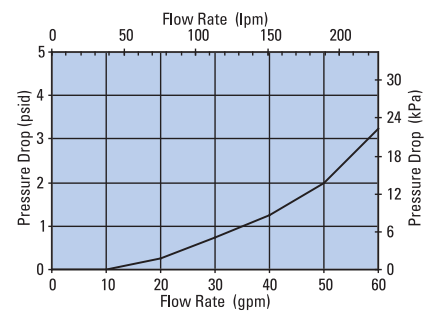
W350 4" DT Filter Only
DT-9600-4, 4"/102mm



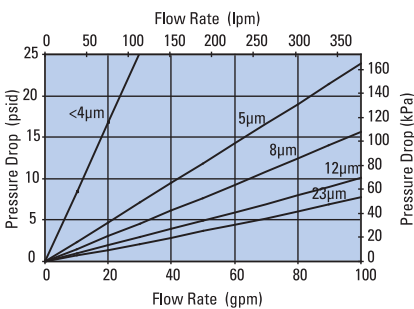
W350 4" DT Filter Only
DT-9601-4, 4"/102mm



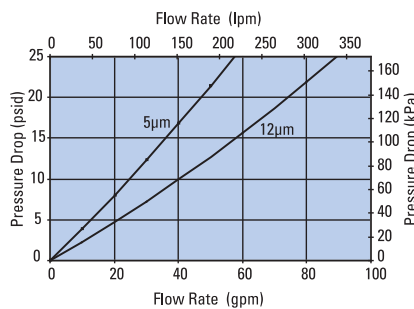
W350 Housing Only



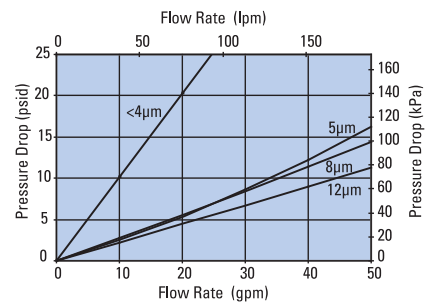
W350 8" DT Filter Only
DT-9600-8, 8"/203mm



W350 8" DT Filter Only
DT-9601-8, 8"/203mm



W350 8" DT Filter Only
DX2-9600-8, 8"/203mm





Head Assembly Choices

Port Size	Bypass Rating	Seal Material Material	Indicator Style & Location	Donaldson Part No.
SAE-16 O-ring	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	P574245
SAE-16 O-ring	90 psi / 6.21 bar	Buna-N	Port Machined & Plugged	P574246
SAE-16 O-ring	None	Buna-N	Port Machined & Plugged	P574247

Housing Choices

Housing Length	Seal Material	Donaldson Part No.
4" (101.6mm)	Buna-N	X011556
8" (203.2mm)	Buna-N	X011558

Indicator Choices

Indicator Pressure Setting	Connector Style	Seal Material	Donaldson Part No.	Thermal Lockout	Surge Control	Reset
Visual Pop-up Models						
35 psi / 241 kPa	NA	Buna-N	P572347	No	No	Auto
35 psi / 241 kPa	NA	Buna-N	P572348	Yes	Yes	Manual
35 psi / 241 kPa	NA	Viton	P567456	Yes	Yes	Manual
70 psi / 482 kPa	NA	Buna-N	P572319	Yes	Yes	Manual
70 psi / 482 kPa	NA	Viton	P567457	Yes	Yes	Manual
100 psi / 690 kPa	NA	Buna-N	P572353	Yes	Yes	Manual
100 psi / 690 kPa	NA	Viton	P572354	Yes	Yes	Manual
Electrical / Visual Models						
35 psi / 241 kPa	Hirschman	Buna-N	P572327	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Buna-N	P572329	No	No	Auto
35 psi / 241 kPa	Hirschman	Buna-N	P572384	Yes	Yes	Manual
35 psi / 241 kPa	Hirschman	Viton	P567458	Yes	Yes	Manual
35 psi / 241 kPa	Brad Harrison	Buna-N	P572385	Yes	Yes	Manual
35 psi / 241 kPa	3 wire flying leads	Buna-N	P572349	No	No	Auto
70 psi / 482 kPa	Hirschman	Buna-N	P572320	Yes	Yes	Manual
70 psi / 482 kPa	Brad Harrison	Buna-N	P567459	Yes	Yes	Manual
70 psi / 482 kPa	Hirschman	Buna-N	P572373	Yes	No	Manual
70 psi / 482 kPa	Hirschman	Viton	P569639	Yes	No	Manual
100 psi / 690 kPa	Hirschman	Buna-N	P572387	Yes	Yes	Manual
Electrical Models						
35 psi / 241 kPa	Hirschman	Buna-N	P572359	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Buna-N	P572361	No	No	Auto
70 psi / 482 kPa	Hirschman	Buna-N	P572369	No	No	Auto

Head/Bowl/Housing Seal Kits

Donaldson Part No.	Material
X011170	Buna
X011171	Viton



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, SAE-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)

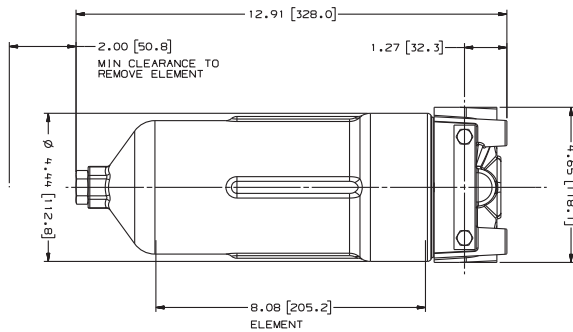
HPK03 Specification Illustrations

All dimensions are shown in inches [millimeters].

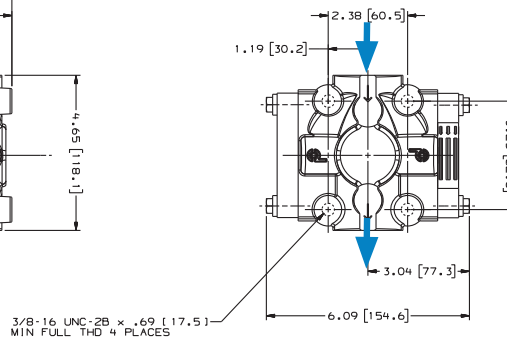
Applications

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

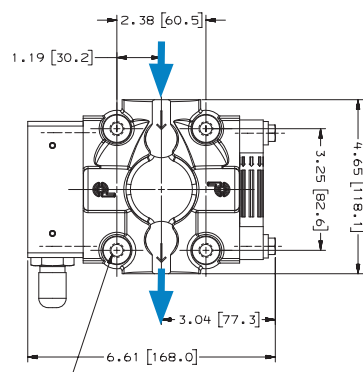
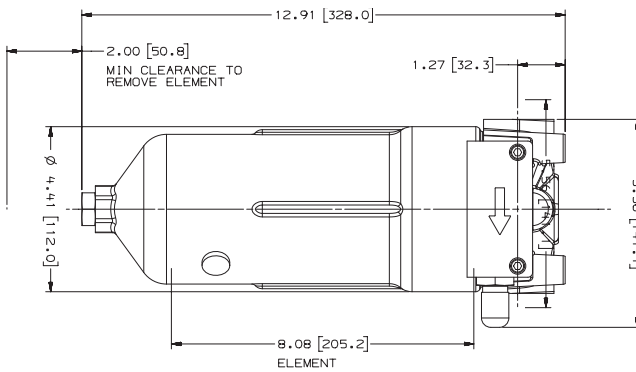
Assembly - Side View



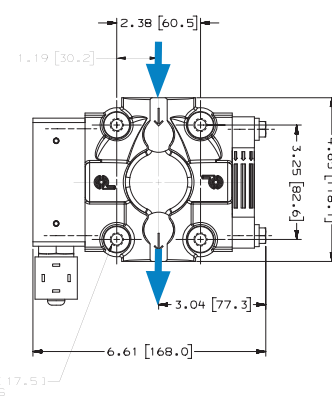
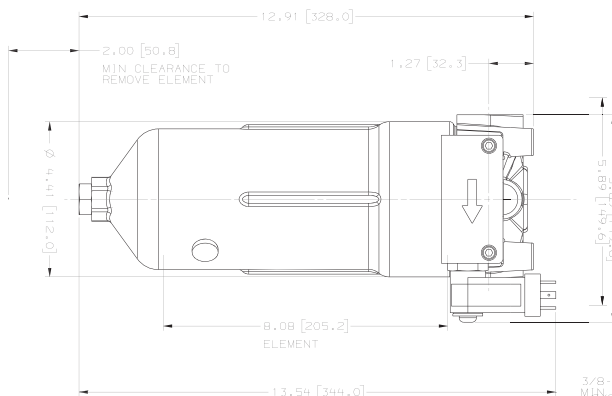
Head - Top View



HPK03 with Visual Service Indicator



HPK03 with AC/DC Electrical Service Indicator





HPK03
Max Flow: 60 gpm (227 lpm)



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 μm	8.22	209	P566209	DT-9600-8-2UM
Synthetic	5 μm	8.22	209	P566210	DT-9600-8-5UM
	8 μm	8.22	209	P566211	DT-9600-8-8UM
	12 μm	8.22	209	P566212	DT-9600-8-14UM
	23 μm	8.22	209	P566213	DT-9600-8-25UM
	5 μm	8.19	208	P566366	DT-9601-8-5UM, High collapse
	12 μm	8.19	208	P566367	DT-9601-8-14UM, High collapse
	<4 μm	8.22	209	P567875	DX2-9600-8-2UM
	5 μm	8.22	209	P565122	DX2-9600-8-5UM
	8 μm	8.22	209	P565123	DX2-9600-8-8UM
	12 μm	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 μm	8.22	209	P167185*	Viton®, High collapse for no bypass applications
		6 μm	8.22	209	P164594	Buna-N
		11 μm	8.22	209	P164166	Buna-N
		12 μm	8.22	209	P167186*	Viton, High collapse for no bypass applications
		23 μm	8.22	209	P164174	Buna-N
		50 μm	8.22	209	P165319	Buna-N
Water Absorbing	10 μm		8.22	209	P569528	
Wire Mesh	75 μm		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 fluoropolymer) 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 ¹	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

¹Donaldson 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
Visual Service Indicators		
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
AC/DC Visual/Electrical Service Indicators		
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
Replacement Indicator Only	
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	
P573495	Mounting Block Assembly

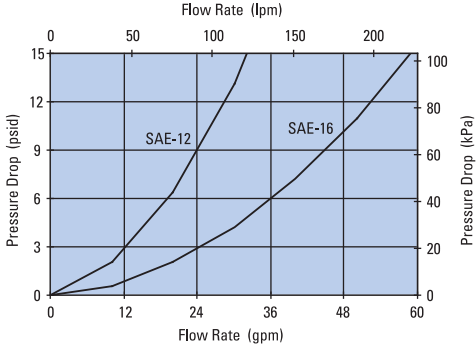


HPK03
Max Flow: 60 gpm (227 lpm)

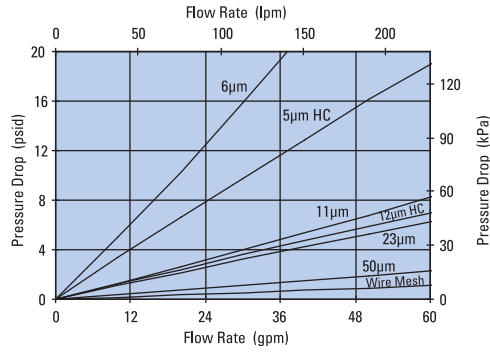


Performance Data

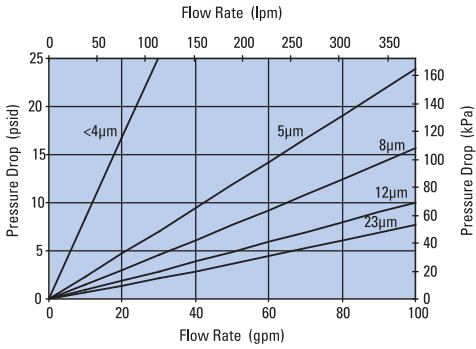
HPK03 Housing Only



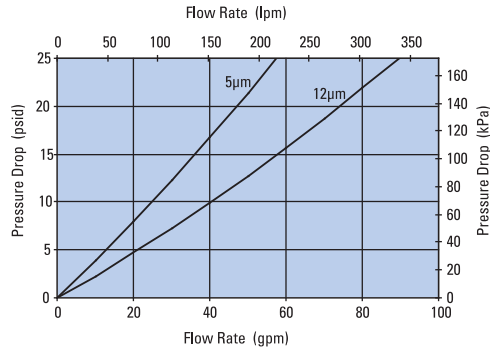
HPK03 8" Standard Filter Only



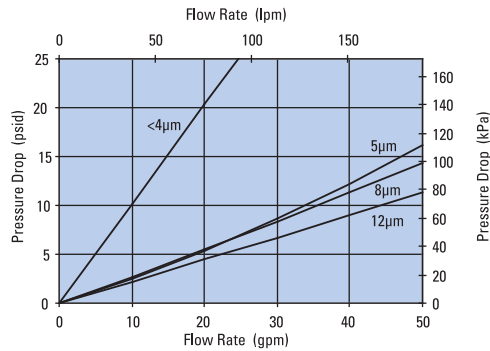
HPK03 8" DT Filter Only
DT-9600-8, 8.22"/208.8mm



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



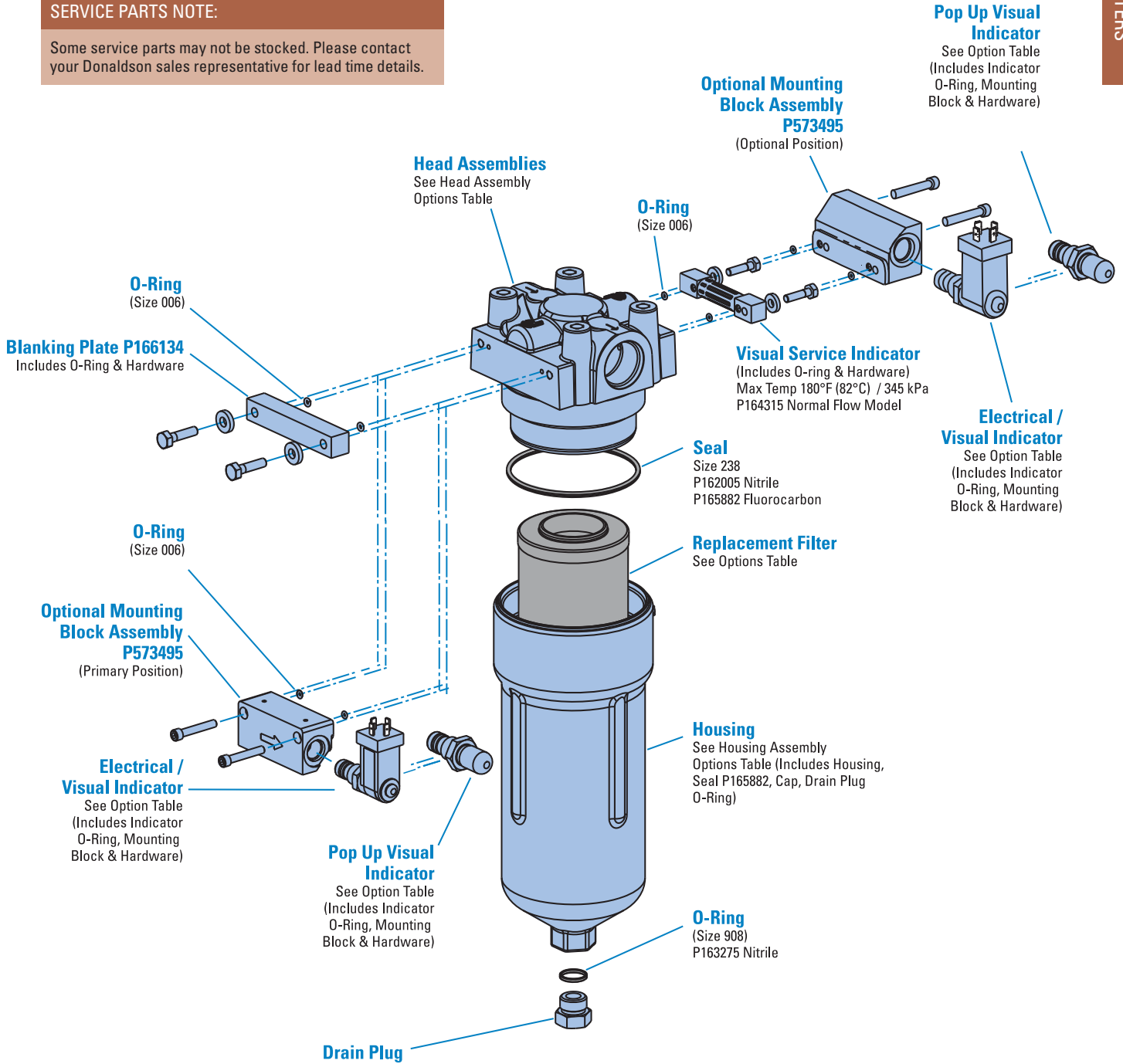
W350 8" DX2 Filter Only
DX2-9600-8, 8.22"/208.8mm



HPK03 Service Parts

SERVICE PARTS NOTE:

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





FPK04

Max Flow: 100 gpm (379 lpm)



FPK04 In-Line Cartridge Filters

Working Pressures to: 4350 psi
30,015 kPa
300 bar

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

Flow Range To: 100 gpm
379 lpm



Features

The FPK04 T-type ported series offers flows up to 100 gpm (379 lpm) with a bypass option and conforms to the HF3 automotive standard.

Donaldson Synteq™ media is offered in a variety of designs. Upgraded Donaldson high-performance DT filters are also offered for superior performance. The differential pressure indicator line is designed to work with the wide assortment of bypass valve options.

- Conforms to HF3 specifications
- High collapse filters available for use with non-bypass applications
- Wide range of indicator options
- Three housing length options for design flexibility
- Buna-N® seals standard, Viton® available
- Head material: cast iron
- Housing material: steel

Viton® and Buna-N® are registered trademarks of E. I. DuPont de Nemours and Company.

Beta Rating

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

Porting Size Options

- SAE-20 O-Ring

Standard Replacement Filter Lengths

- 4.58" / 116.3mm
- 4.62" / 117.3mm
- 8.20" / 208.3mm
- 12.88" / 327.2mm
- 12.93" / 328.4mm

Filter Collapse Ratings

- 150 psi / 1034 kPa / 10.3 bar (standard)
- 3000 psi / 20,700 kPa / 206.8 bar (high collapse)

DT Replacement Filter Lengths

- 4.56" / 116mm
- 4.59" / 117mm
- 8.19" / 208mm
- 8.22" / 209mm
- 8.23" / 209mm
- 12.85" / 326mm
- 12.87" / 327mm
- 12.91" / 328mm

Standard Bypass Ratings

- 87 psi / 600 kPa / 6.0 bar
- No Bypass

Assembly Weight

- 4.59": 26.4 lbs / 12.0 kg
- 8.22": 33 lbs / 15.0 kg
- 12.91": 33 lbs / 15.0 kg

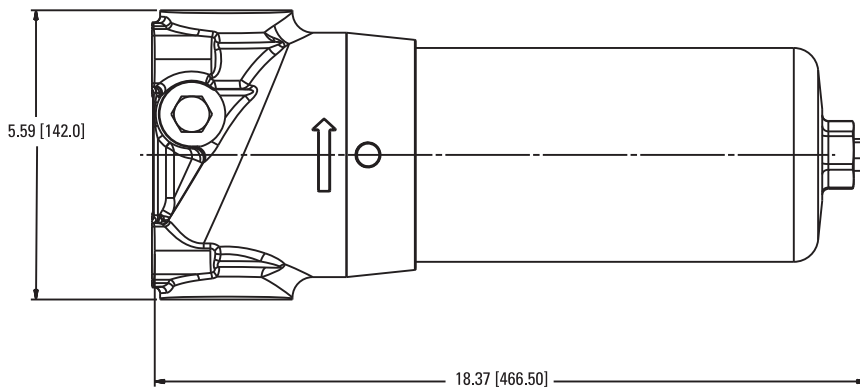
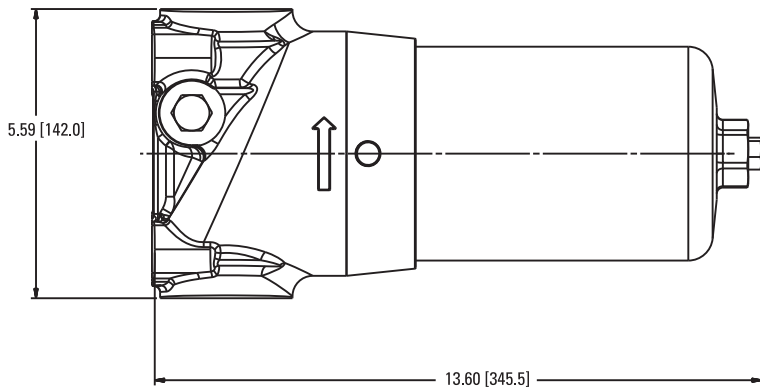
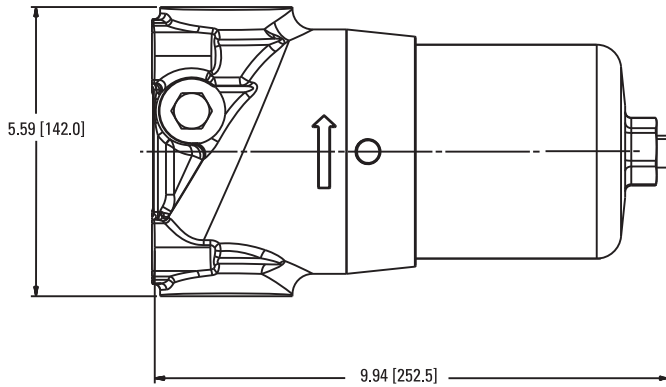
Operating Temperatures

- -4° to 248°F (-20° to 120°C)

FPK04 Specification Illustrations

All dimensions are shown in inches [millimeters].

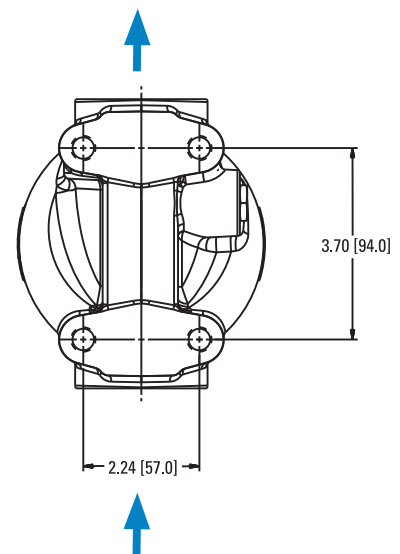
Assembly - Side View



Applications

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

Head - Top View





FPK04
Max Flow: 100 gpm (379 lpm)



FPK04 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 μm	4.59	117	P566204	DT-9600-4-2UM
Synthetic	5 μm	4.59	117	P566205	DT-9600-4-5UM
	8 μm	4.59	117	P566206	DT-9600-4-8UM
	12 μm	4.59	117	P566207	DT-9600-4-14UM
	23 μm	4.59	117	P566208	DT-9600-4-25UM
	5 μm	4.56	116	P566364	DT-9601-4-5UM, High collapse
	12 μm	4.56	116	P566365	DT-9601-4-14UM, High collapse
	<4 μm	8.22	209	P566209	DT-9600-8-2UM
	5 μm	8.22	209	P566210	DT-9600-8-5UM
	8 μm	8.22	209	P566211	DT-9600-8-8UM
	12 μm	8.22	209	P566212	DT-9600-8-14UM
	23 μm	8.22	209	P566213	DT-9600-8-25UM
	5 μm	8.19	208	P566366	DT-9601-8-5UM, High collapse
	12 μm	8.19	208	P566367	DT-9601-8-14UM, High collapse
	<4 μm	8.19	208	P567875	DX2-9600-8-2UM
	5 μm	8.23	209	P565122	DX2-9600-8-5UM
	8 μm	8.23	209	P565123	DX2-9600-8-8UM
	12 μm	8.23	209	P564936	DX2-9600-8-14UM
	<4 μm	12.91	328	P566214	DT-9600-13-2UM
	5 μm	12.91	328	P566215	DT-9600-13-5UM
	8 μm	12.91	328	P566216	DT-9600-13-8UM
	12 μm	12.91	328	P566217	DT-9600-13-14UM
	23 μm	12.91	328	P566218	DT-9600-13-25UM
	5 μm	12.85	326	P566368	DT-9601-13-5UM, High collapse
	12 μm	12.85	326	P566369	DT-9601-13-14UM, High collapse
	5 μm	12.87	327	P565188	DX2-9600-13-5UM
	8 μm	12.87	327	P565189	DX2-9600-13-8UM
	12 μm	12.87	327	P565187	DX2-9600-13-14UM



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.

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.

DX2 filters utilize nylon mesh for pleat support.

Head Choices

Port Size	Bypass Rating	Indicators	Part No.
SAE-20	87 psi / 6 bar	plugged only	P568720
SAE-20	No bypass	plugged only	P568721

Housing Choices

Filter Length	Part No.
4.6" (116.8mm)	P568722
8.2" (208.3mm)	P568723
12.9" (327.7mm)	P568724

Notes

Housings include the head to housing seal.

Indicator Choices

Set Point / Type	Part No.
39 psi/2.7 bar ele N.O.	P165194

Standard Filter Choices

Media Type	$\beta_{x(c)} = 2$	$\beta_{x(c)} = 1000$	Length		Donaldson Part No.	Comments
	Rating based on ISO 16889		in	mm		
Synteq		<4 μm	10.7	271	P167796	Viton® O-ring & square seal kit
Synthetic		5 μm	4.58	116.3	P167184*	9601 Series, Viton®, High collapse
		5 μm	8.20	208.3	P167185*	9601 Series, Viton, High collapse
		5 μm	12.88	327.2	P167411*	9601 Series, Viton, High collapse
		6 μm	4.62	117.3	P164592	9600 Series
		6 μm	8.20	208.3	P164594	9600 Buna-N®
		6 μm	12.93	328.4	P164596	9600 Buna-N
		11 μm	4.62	117.3	P164164	9600 Series
		11 μm	12.93	328.4	P164168	9600 Series, Buna-N
		12 μm	4.58	116.3	P167843*	9601 Series, Viton, High collapse
		12 μm	8.20	208.3	P167186*	9601 Series, Viton, High collapse
		12 μm	12.88	327.2	P167412*	9601 Series, Viton, High collapse
		23 μm	4.62	117.3	P164172	9600 Series
		23 μm	8.20	208.3	P164174	9600 Series, Buna-N
	23 μm	12.93	328.4	P164176	9600 Series, Buna-N	
	50 μm	8.20	208.3	P165319	9600 Series, Buna-N	
Water	10 μm		8.20	208.3	P569528	9600 Absorbs 180 ml of water @ 25 psid
Absorbing	10 μm		12.93	328.4	P569529	9600 Absorbs 220 ml of water @ 25 psid
Wire Mesh	75 μm		8.20	208.3	P162233	9600 Buna-N, Wire mesh

Filter Notes

* Utilizes DT Synteq synthetic media. Refer to the table in the Technical Reference Guide for fluid compatibility with our filter media.

If you're filtering petroleum-based oil, filters with seals made of Buna-N are appropriate for most applications.

If you're filtering diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF over 150°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.

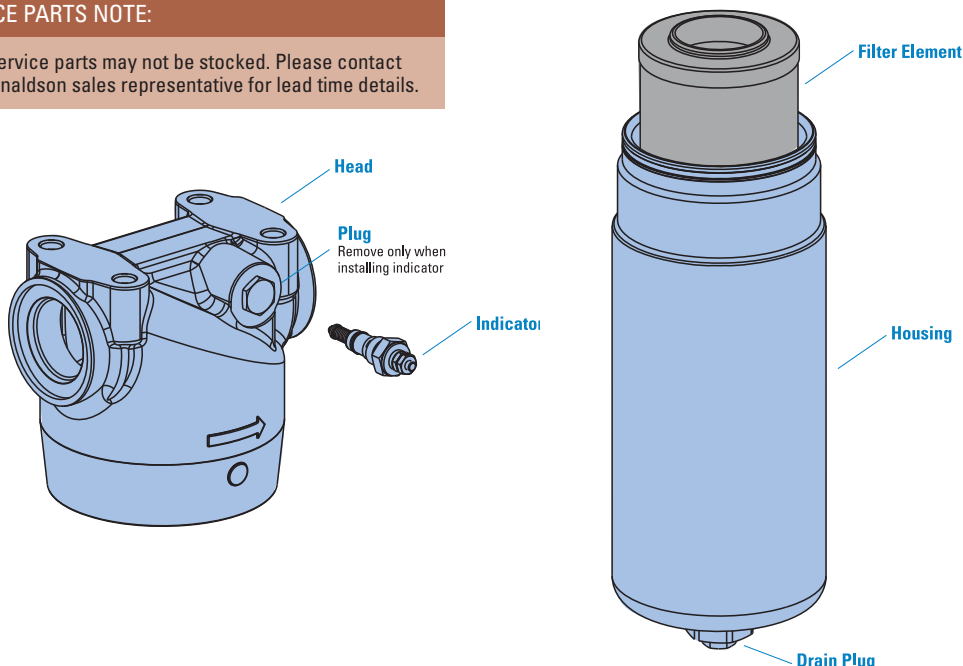
The fluorocarbon seal/high collapse filters also use epoxy potting and media seam seals for added chemical compatibility.

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

FPK04 Service Parts

SERVICE PARTS NOTE:

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



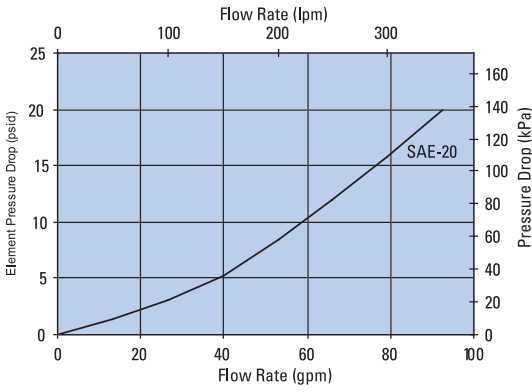


FPK04
Max Flow: 100 gpm (379 lpm)

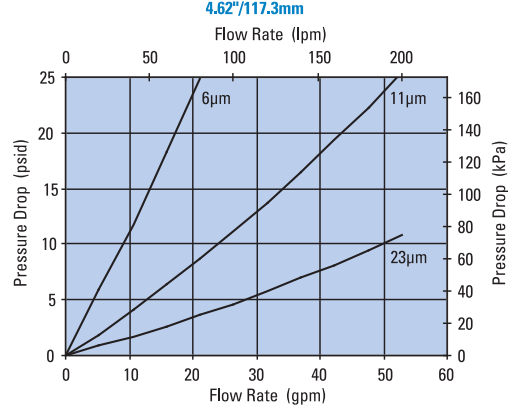


Performance Data

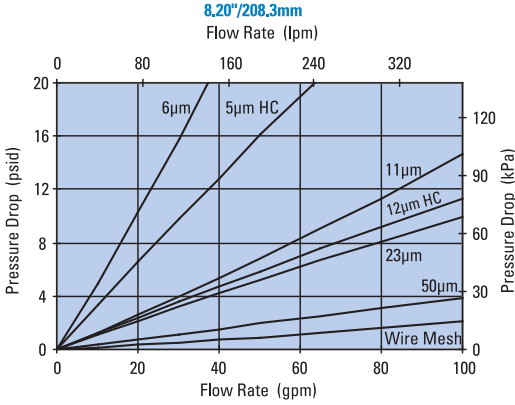
FPK04 Housing Only



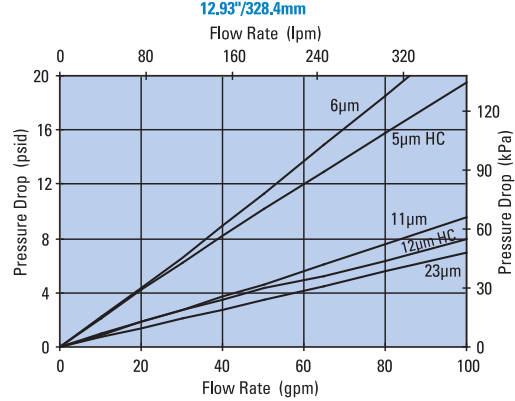
FPK04 4" Standard Filter Only



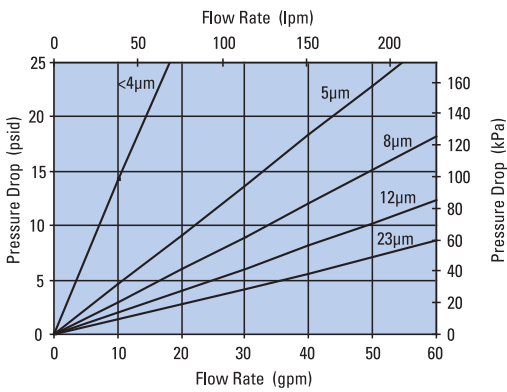
FPK04 8" Standard Filter Only



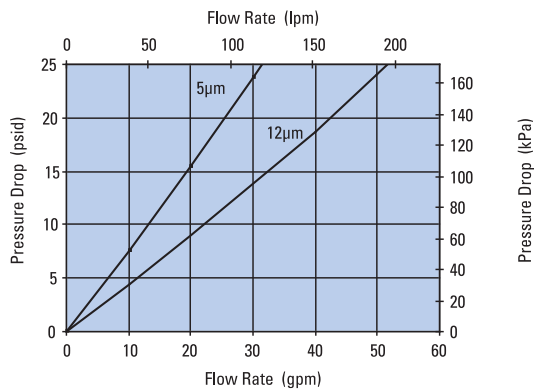
FPK04 13" Standard Filter Only



FPK04 4" DT Filter Only



FPK04 4" DT Filter Only

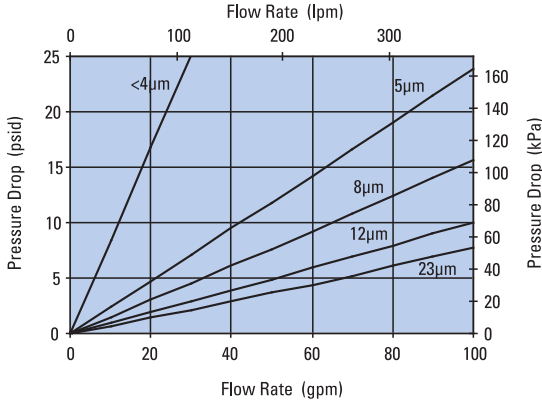




Performance Data

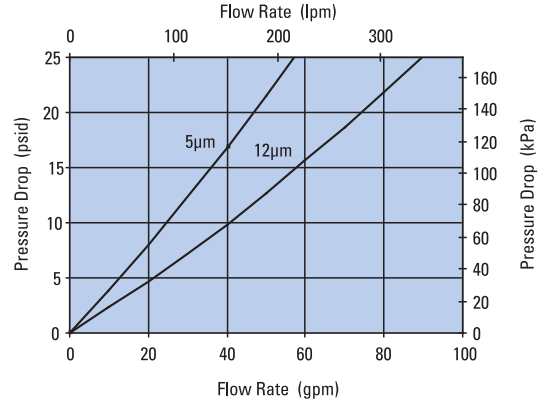
FPK04 8" DT Filter Only

DT-9600-8, 8.22"/208.8mm



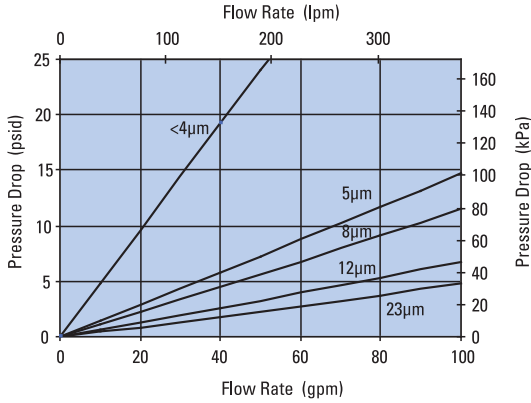
FPK04 8" DT Filter Only

DT-9601-8, 8.19"/208mm



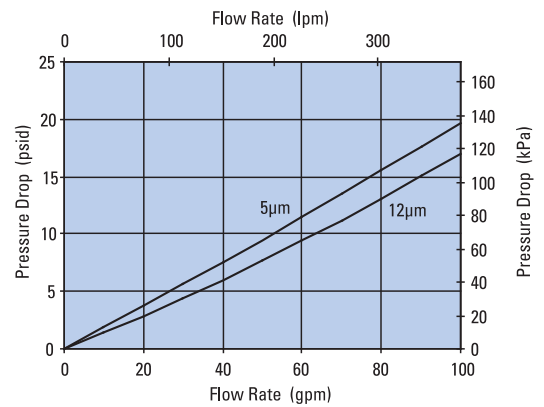
FPK04 13" DT Filter Only

DT-9600-13, 12.91"/327.8mm



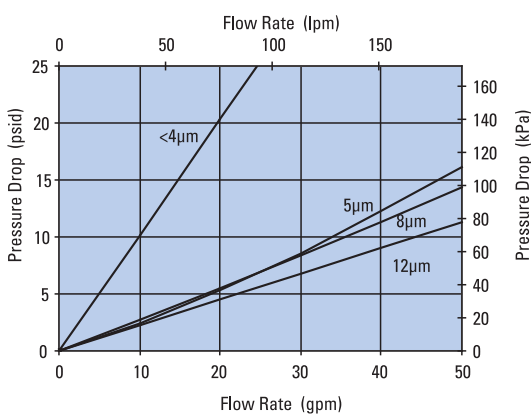
FPK04 13" DT Filter Only

DT-9601-13, 12.91"/327.8mm



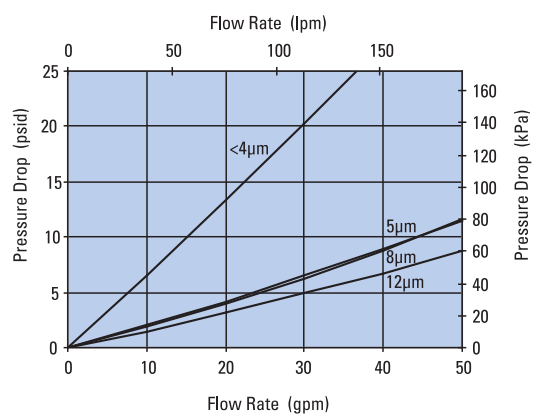
FPK04 8" DX2 Filter Only

DX2-9600-8, 8.22"/208.8mm



FPK04 13" DX2 Filter Only

DX2-9600-13, 12.87"/327mm





HPK04
Max Flow: 120 gpm (454 lpm)



HPK04 In-Line Cartridge Filters

Working Pressures to: 6000 psi
41,380 kPa
413.8 bar

Rated Static Burst to: 17000 psi
117,300 kPa
1173 bar

Flow Range To: 120 gpm
454 lpm



Features

The HPK04 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, and filter change out is simplified with standard housing drain plug. Meets HF3 specification.

Take advantage of our mix and match system of in-stock heads, housings and cartridges – so you can get exactly what you need. Likewise, choose the media type and configuration that's best for your application. Filter cartridges for HPK04 contain Synteq™, Donaldson's exclusive synthetic fiber media formulated specially for liquid filtration. Upgraded Donaldson high-performance DT filters are also offered for superior performance.

Beta Rating

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

Porting Size Options

- SAE-20 O-ring
- 1¼" or 1½" SAE 4-Bolt Flange Code 61 or 62

Replacement Filter Lengths

- 8.22" / 203mm
- 12.91" / 328mm
- 16.84" / 406mm

Operating Temperatures

- -20°F to 250°F / -27°C to 121°C

Standard Bypass Ratings

- 60 psi / 414 kPa / 4.1 bar
- 90 psi / 621 kPa / 6.2 bar with reverse-flow check valve
- No Bypass

Assembly Weight

- 8.22" Assembly: 41 lbs / 19 kg
- 12.91" Assembly: 48 lbs / 22 kg
- 16.84" Assembly: 52 lbs / 24 kg

Filter Collapse Ratings

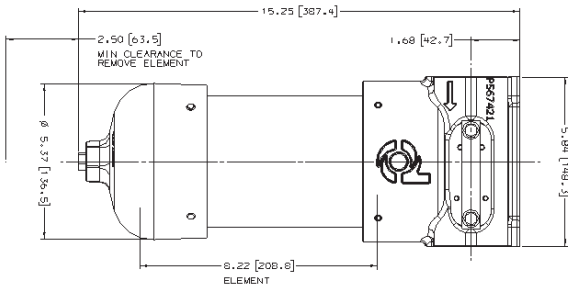
- 200 psi / 1380 kPa / 13.8 bar (standard)
- 3000 psi / 20,700 kPa / 206.9 bar (high collapse)



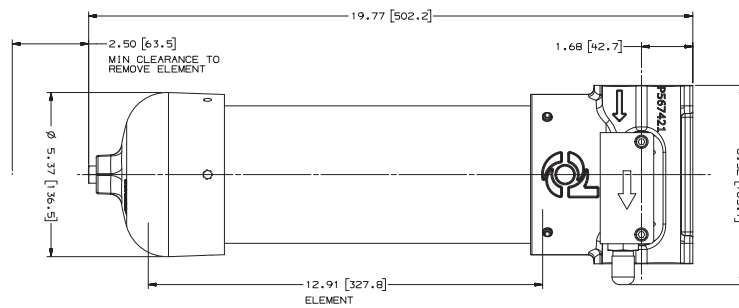
HPK04 Specification Illustrations

All dimensions are shown in inches [millimeters].

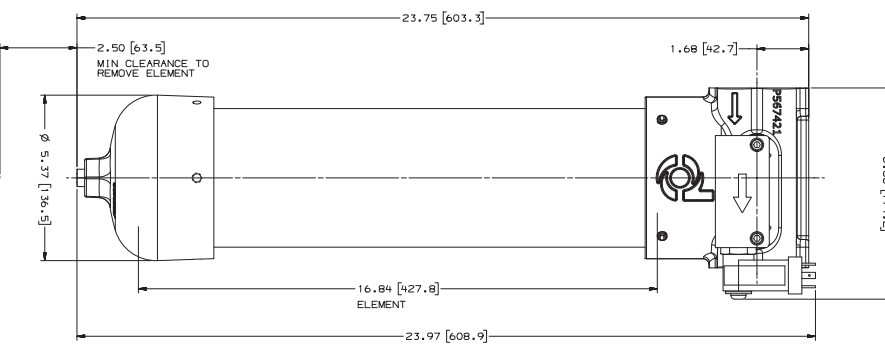
Assembly - Side Views



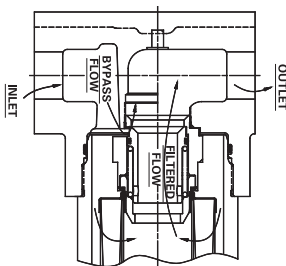
HPK04
with Visual Service Indicator



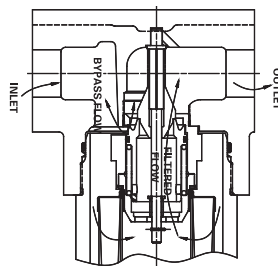
HPK04
with AC/DC Electrical Service Indicator



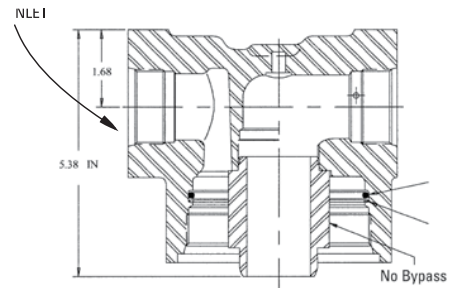
Bypass Valve Alternatives



60 psi / 414 kPa
Bypass Valve



90 psi / 621 kPa
Bypass Valve with
Reverse Flow Check Valve

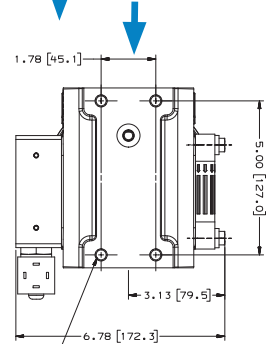
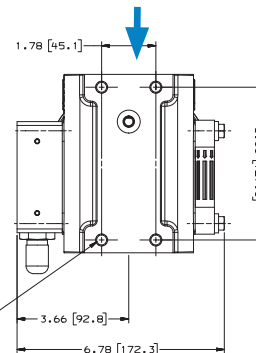
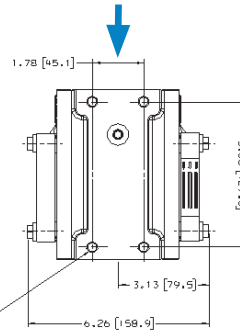


No Bypass

Applications

- High Pressure Circuits
- Hydrostatic Transmission
- Meets HF3 Specification
- Servo Valve Circuits

Head - Top Views



3/8-16 UNC-2B x .75 [19.1]
MIN FULL THD 4 PLACES



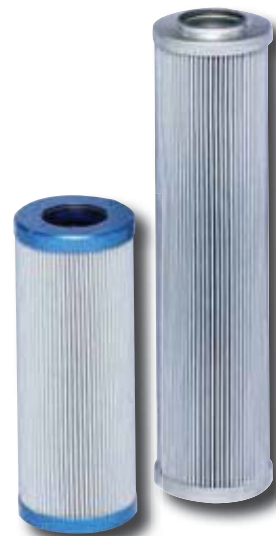
HPK04
Max Flow: 120 gpm (454 lpm)



HPK04 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 μm	8.22	209	P566209	DT-9600-8-2UM
Synthetic	5 μm	8.22	209	P566210	DT-9600-8-5UM
	8 μm	8.22	209	P566211	DT-9600-8-8UM
	12 μm	8.22	209	P566212	DT-9600-8-14UM
	23 μm	8.22	209	P566213	DT-9600-8-25UM
	5 μm	8.19	208	P566366	DT-9601-8-5UM, High collapse
	12 μm	8.19	208	P566367	DT-9601-8-14UM, High collapse
	<4 μm	8.22	209	P567875	DX2-9600-8-2UM
	5 μm	8.22	209	P565122	DX2-9600-8-5UM
	8 μm	8.22	209	P565123	DX2-9600-8-8UM
	12 μm	8.22	209	P564936	DX2-9600-8-14UM
	<4 μm	12.91	328	P566214	DT-9600-13-2UM
	5 μm	12.91	328	P566215	DT-9600-13-5UM
	8 μm	12.91	328	P566216	DT-9600-13-8UM
	12 μm	12.91	328	P566217	DT-9600-13-14UM
	23 μm	12.91	328	P566218	DT-9600-13-25UM
	5 μm	12.85	326	P566368	DT-9601-13-5UM, High collapse
	12 μm	12.85	326	P566369	DT-9601-13-14UM, High collapse
	<4 μm	12.91	328	P567876	DX2-9600-13-2UM
	5 μm	12.91	328	P565188	DX2-9600-13-5UM
	8 μm	12.91	328	P565189	DX2-9600-13-8UM
	12 μm	12.91	328	P565187	DX2-9600-13-14UM
	<4 μm	16.84	428	P566219	DT-9600-16-2UM
	5 μm	16.84	428	P566220	DT-9600-16-5UM
	8 μm	16.84	428	P566221	DT-9600-16-8UM
	12 μm	16.84	428	P566222	DT-9600-16-14UM
	23 μm	16.84	428	P566223	DT-9600-16-25UM
	5 μm	16.84	428	P566370	DT-9601-16-5UM, High collapse
	12 μm	16.84	428	P566371	DT-9601-16-14UM, High collapse
	<4 μm	16.81	427	P567877	DX2-9600-16-2UM
	5 μm	16.81	427	P565196	DX2-9600-16-5UM
	8 μm	16.81	427	P565197	DX2-9600-16-8UM
	12 μm	16.81	427	P565195	DX2-9600-16-14UM



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.

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.

DX2 filters utilize nylon mesh for pleat support.

Standard Filter Choices

Media Type	$\beta_{x(c)} = 2$	$\beta_{x(c)} = 1000$	Length		Donaldson Part No.	Comments
	Rating based on ISO 16889		in	mm		
Synteq	5 μ m		8.20	208	P167185*	9601 Series, Viton®, High collapse
Synthetic	5 μ m		12.88	327	P167411*	9601 Series, Viton, High collapse
	5 μ m		16.83	427	P167187*	9601 Series, Viton, High collapse
	6 μ m		8.20	208	P164594	9600 Series, Buna-N®
	6 μ m		12.93	328	P164596	9600 Series, Buna-N
	6 μ m		16.84	428	P164598	9600 Series, Buna-N
	11 μ m		8.20	208	P164166	9600 Series, Buna-N
	11 μ m		12.93	328	P164168	9600 Series, Buna-N
	11 μ m		16.84	428	P164170	9600 Series, Buna-N
	12 μ m		8.20	208	P167186*	9601 Series, Viton, High collapse
	12 μ m		12.88	327	P167412*	9601 Series, Viton, High collapse
	12 μ m		16.83	427	P167188*	9601 Series, Viton, High collapse
	23 μ m		8.20	208	P164174	9600 Series, Buna-N
	50 μ m		8.20	208	P165319	9600 Series, Buna-N
Water Absorbing	10 μ m		12.93	328	P569529	9600 Series, Absorbs 220 ml water @ 25 psid
	10 μ m		16.83	427	P569530	9600 Series, Absorbs 300 ml water @ 25 psid
Wire Mesh	75 μ m		8.20	208	P162233	9600 Series, Buna-N

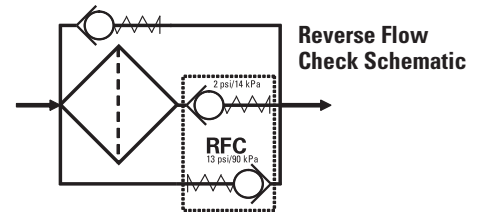
Filter Notes

* 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 fluoroelastomer) are required when using diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF (high water content fluids) over 150°F/83°C.
The Viton seal, high collapse filters also use epoxy potting and media seam seals for added chemical compatibility.
Donaldson high collapse filters are physically designed to withstand up to 3000 psi/ 20,700 kPa before collapsing.
Viton® and Buna-N® are registered trademarks of E. I. DuPont de Nemours and Company.

Housing Choices

Length	Donaldson	
	in	mm
8	203	P567650
13	330	P567649
16	406	P567648

Head assemblies include head to housing seal.



Head Choices

Port Size	Working Pressure	Bypass Rating	Indicators ¹	Part No.
1½" SAE 4-Bolt (Code 61) with SAE-20 O-Ring	3000 psi/207 bar	60 psi/4.1 bar	Visual left side, blank plate right side	P567639
1½" SAE 4-Bolt (Code 61) with SAE-20 O-Ring	3000 psi/207 bar	90 psi/6.2 bar with reverse flow check valve	Visual left side, blank plate right side	P567640
1½" SAE 4-Bolt (Code 61) with SAE-20 O-Ring	3000 psi/207 bar	no bypass	Visual left side, blank plate right side	P567641
1½" SAE 4-Bolt (Code 62)	6000 psi/414 bar	60 psi/4.1 bar	Visual left side, blank plate right side	P567642
1½" SAE 4-Bolt (Code 62)	6000 psi/414 bar	90 psi/6.2 bar with reverse flow check valve	Visual left side, blank plate right side	P567643
1¼" SAE 4-Bolt (Code 62)	6000 psi/414 bar	90 psi/6.2 bar with reverse flow check valve	Visual left side, blank plate right side	P567644
1¼" SAE 4-Bolt (Code 62)	6000 psi/414 bar	90 psi/6.2 bar with reverse flow check valve	Blank left side, blank plate right side	P574189

Notes on Indicators

¹Donaldson 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.

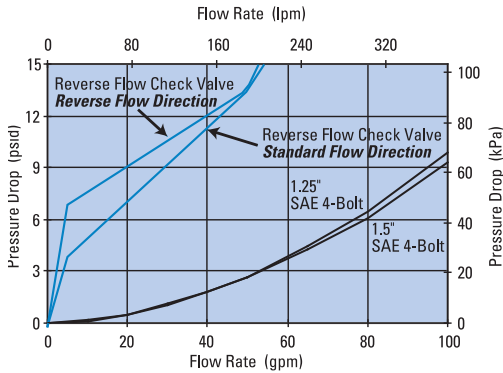


HPK04
Max Flow: 120 gpm (454 lpm)

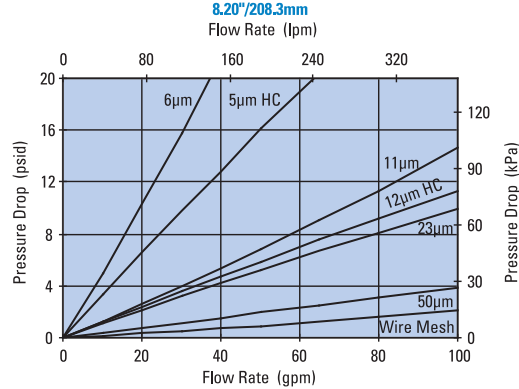


Performance Data

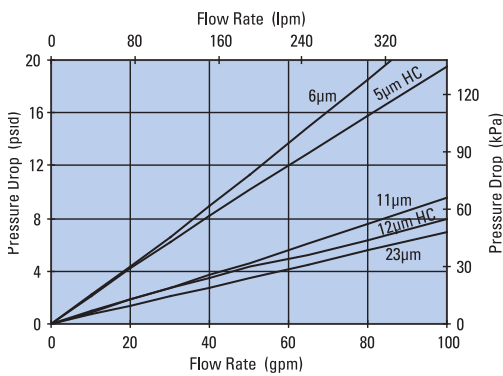
HPK04 Housing Only



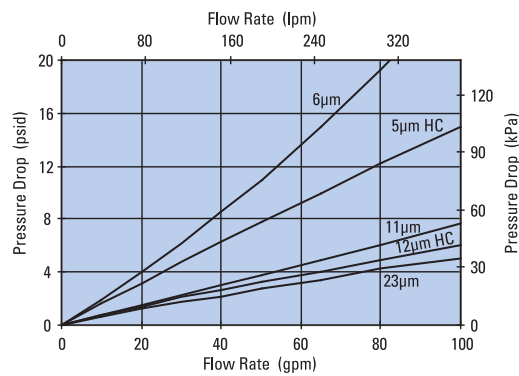
HPK04 8" Standard Filter Only



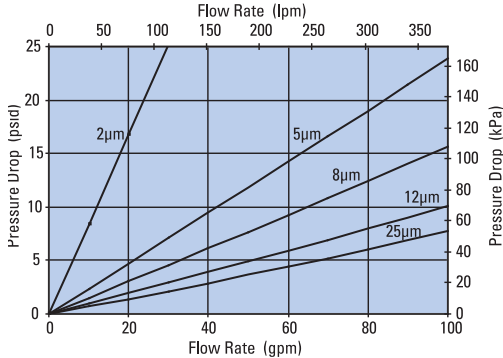
HPK04 13" Standard Filter Only



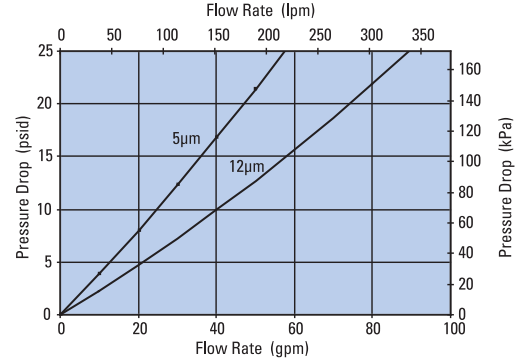
HPK04 16" Standard Filter Only



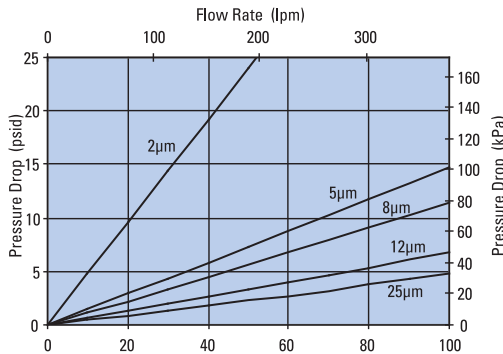
HPK04 8" DT Filter Only



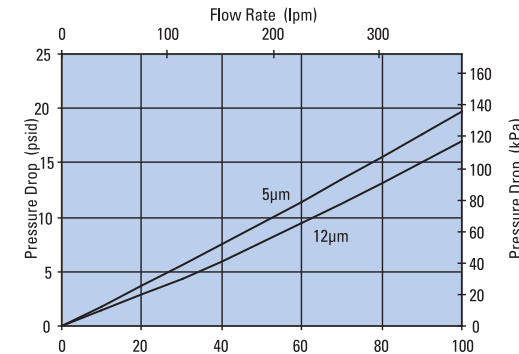
HPK04 8" DT Filter Only



HPK04 13" DT Filter Only



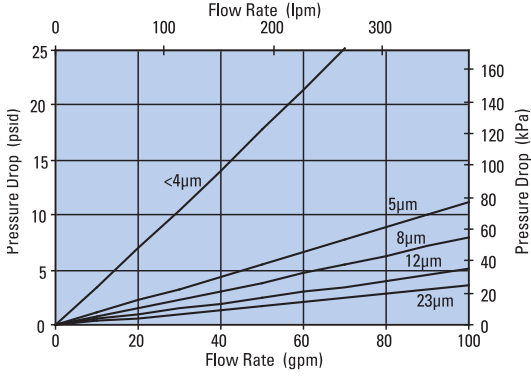
HPK04 13" DT Filter Only



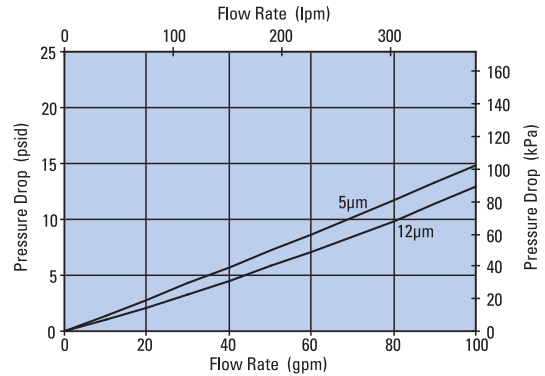


Performance Data

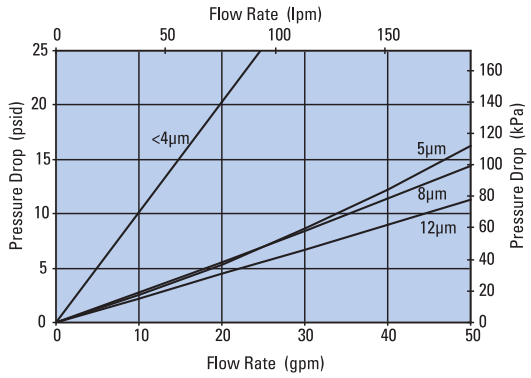
HPK04 16" DT Filter Only
DT-9600-16, 16.84"/427.8mm



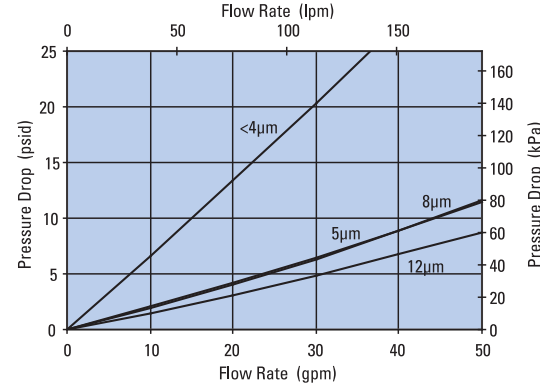
HPK04 16" DT Filter Only
DT-9601-16, 16.82"/427.1mm



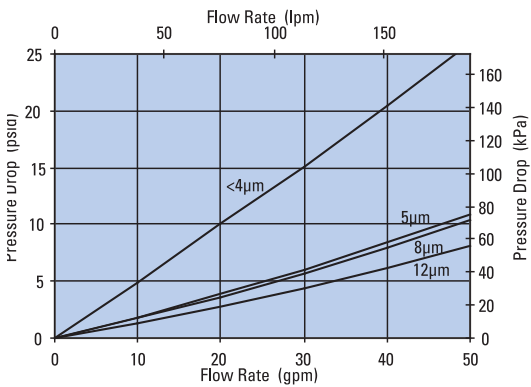
HPK04 8" DX2 Filter Only
DX2-9600-8, 8.19"/208mm



HPK04 13" DX2 Filter Only
DX2-9600-13, 12.87"/327mm



HPK04 16" DX2 Filter Only
DX2-9600-16, 16.81"/427mm





HPK04
Max Flow: 120 gpm (454 lpm)



HPK04 Components

Service Indicator Kits

All kits include indicator with mounting block

Part No.	Use with Bypass Valve Pressure of:	Description
Visual Service Indicators		
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		
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

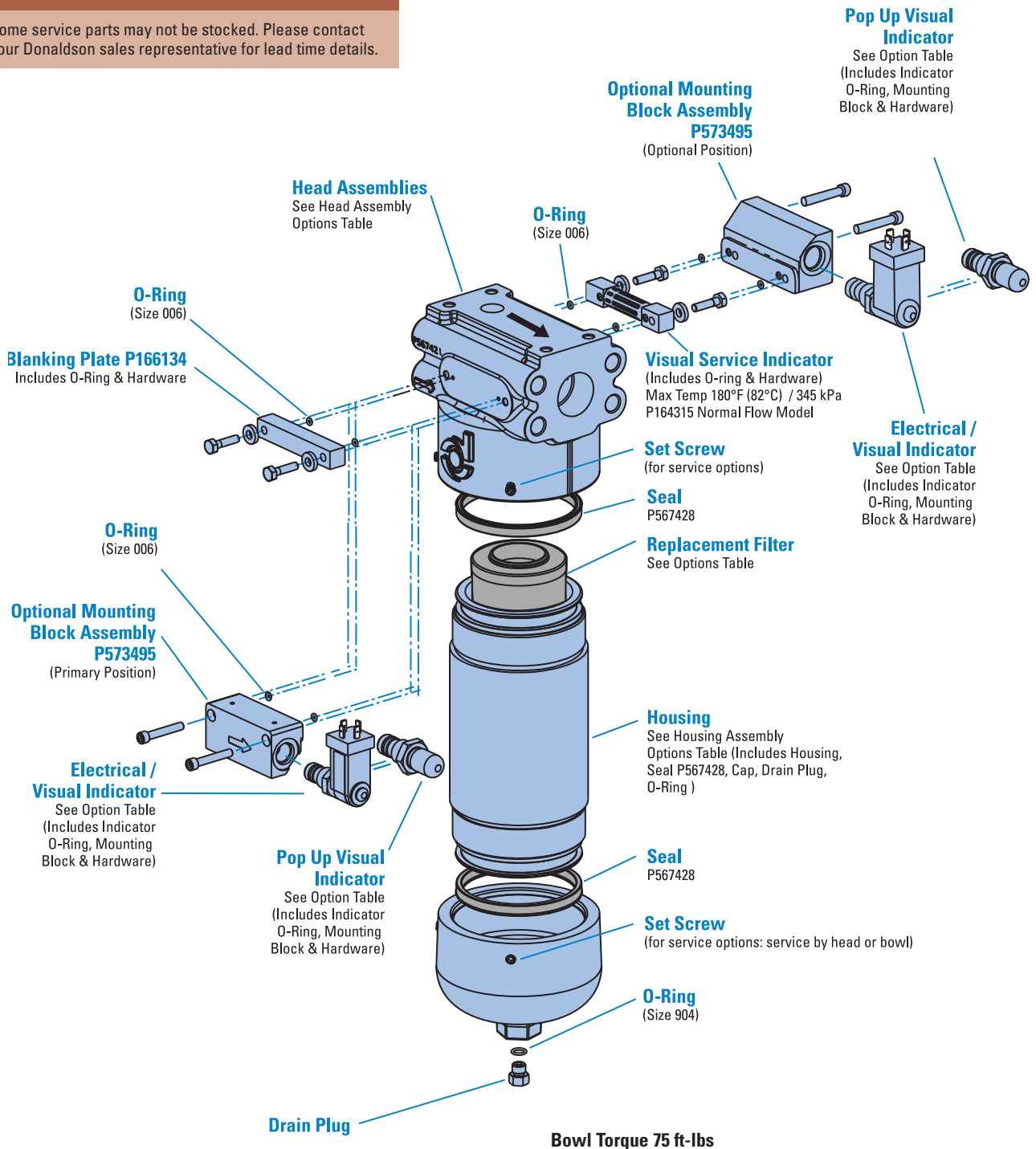
Replacement Indicator Only

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	
P573495	Mounting Block Assembly

HPK04 Service Parts

SERVICE PARTS NOTE:

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





W451

Max Flow: 150 gpm (568 lpm)



W451 In-Line Cartridge Filters

Working Pressures to: 4,500 psi
31,027 kPa
310 bar

Rated Static Burst to: 13,500 psi
93,100 kPa
931 bar

Fatigue Pressure Rating: 3000 psi
20,700 kPa
207 bar

Flow Range To: 150 gpm
568 lpm

Applications

- High Pressure Circuits
- In-Plant Systems
- Meets HF4 Specification
- Mobile Equipment



Features

The W451 base-mounted filter series provides for easy servicing featuring top cover access for filter changeout. The ductile iron filter head design provides for SAE ports along with optional space saving manifold mounting. This product features the popular HF4 automotive filter. DT 4-layer media is offered in a variety of designs. Four different media grades are offered. Filter core collapse options range from 150 to 3,000 psi. The differential pressure indicator line is designed to work with the wide assortment of bypass valves. Thermal lockout and surge control are two key features available in many of the differential pressure indicators.

- Conforms to HF4 specifications
- High collapse filter available for use with non-bypass applications
- Wide range of indicator options
- Three housing length options for design flexibility
- Base & cover material: cast iron
- Cylinder material: steel
- Drain plug in base
- Bleed/fill plug in cover

Beta Rating

- Performance to $\beta_{5(c)}=1000$

Porting Size Options

- SAE-24 O-ring
- 1½" SAE 4-Bolt Flange Code 61 or 62
- Manifold Mounting

Replacement Filter Lengths

- 9.12" / 231.8mm
- 18.20" / 462.3mm
- 27.66" / 702.5mm

Operating Temperatures

- -45° to 250°F (-43° to 121°C)

Standard Bypass Ratings

- 50 psi / 345 kPa / 3.5 bar
- 90 psi / 621 kPa / 6.2 bar
- No Bypass

Assembly Weight

- 9.28": 56 lbs / 25.4 kg
- 18.32": 82 lbs / 37.5 kg
- 27.75": 109 lbs / 49.5 kg

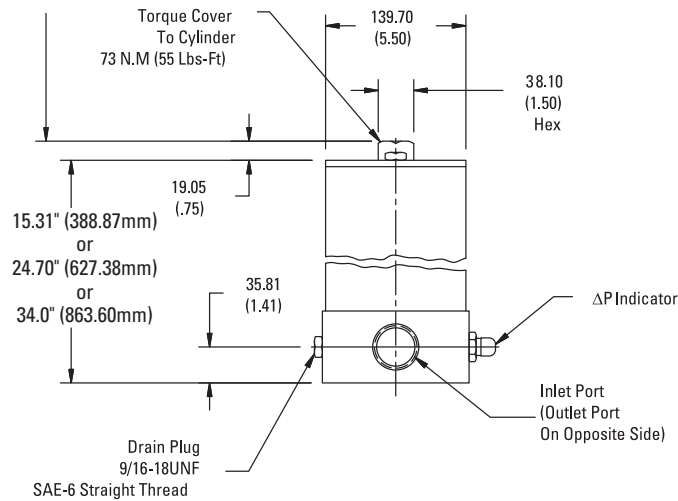
Filter Collapse Ratings

- 150 psi / 1034 kPa / 10.3 bar (standard)
- 3000 psi / 20,700 kPa / 206.8 bar (high collapse)

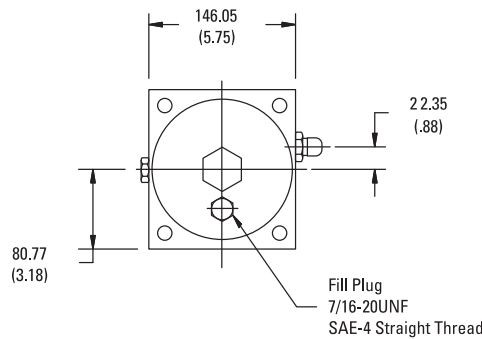
W451 Specification Illustrations

All dimensions are shown in millimeters [inches].

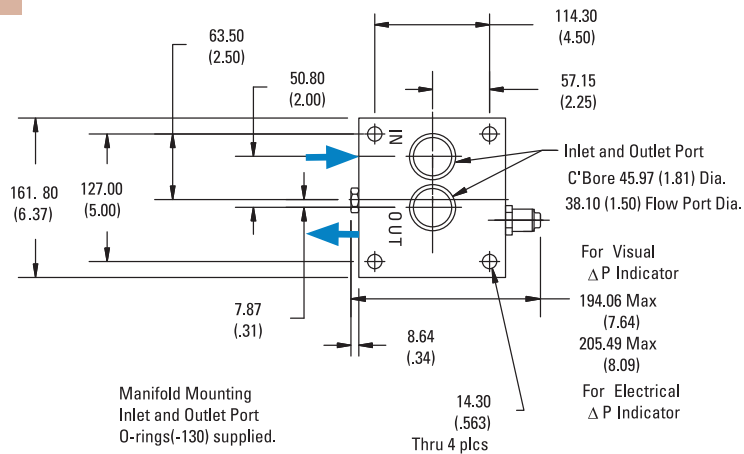
Assembly - Side View



Head - Side View



Head - Bottom View





W451
Max Flow: 150 gpm (568 lpm)



W451 Components

High-Performance DT Filter Choices

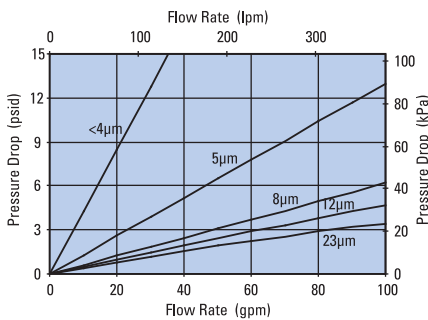
Media Type	$\beta_{x(c)} = 2$ Rating based on ISO 16889	$\beta_{x(c)} = 1000$	Length in mm	Donaldson Part No.	Comments
DT Synteq Synthetic	<4 μm	9.04 230	P568816	DT-HF4-9-2UM	
	5 μm	9.28 236	P566270	DT-HF4-9-5UM	
	8 μm	9.28 236	P566271	DT-HF4-9-8UM	
	12 μm	9.28 236	P566272	DT-HF4-9-14UM	
	23 μm	9.28 236	P566273	DT-HF4-9-25UM	
	5 μm	9.27 229	P566412	DT-HF4HC-9-5UM, High collapse	
	12 μm	9.27 229	P566413	DT-HF4HC-9-14UM, High collapse	
	<4 μm	18.19 232	P568817	DT-HF4-18-2UM	
	5 μm	18.32 465	P566274	DT-HF4-18-5UM	
	8 μm	18.32 465	P566275	DT-HF4-18-8UM	
	12 μm	18.32 465	P566276	DT-HF4-18-14UM	
	23 μm	18.32 465	P566277	DT-HF4-18-25UM	
	5 μm	18.60 472	P572309	DT-HF4HC-18-5UM, High collapse	
	12 μm	18.60 472	P572310	DT-HF4HC-18-14UM, High collapse	
	<4 μm	27.47 698	P568818	DT-HF4-27-2UM	
	5 μm	27.75 705	P566278	DT-HF4-27-5UM	
	8 μm	27.75 705	P566279	DT-HF4-27-8UM	
	12 μm	27.75 705	P566280	DT-HF4-27-14UM	
	23 μm	27.75 705	P566281	DT-HF4-27-25UM	
	5 μm	27.93 709	P572311	DT-HF4HC-27-5UM, High collapse	
	12 μm	27.93 709	P572312	DT-HF4HC-27-14UM, High collapse	
Water Absorbing	10 μm	9.27 236	P569527	Absorbs 250 ml water @ 25 psid	

Filter Notes

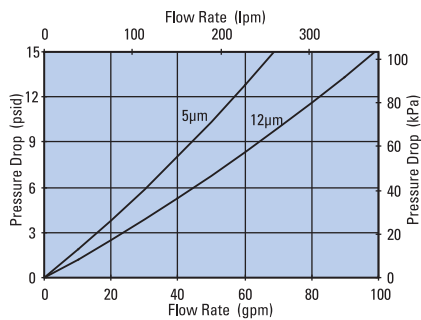
All Donaldson DT filters utilize glass fiber media with an epoxy-based resin system for the ultimate in chemical compatibility. All Donaldson DT filters are potted with epoxy-based adhesives. Standard collapse DT designs are double wire-backed using epoxy-coated steel mesh for maximum pleat support and dirt capacity. High collapse designs are double wire-backed using stainless steel mesh. High collapse designs are also potted into machined aluminum end caps for greater filter integrity in critical applications. May be stacked with two or three 9" long filters (P167324). Viton® seals are standard on all Donaldson DT filters. Viton® is a registered trademark of E. I. DuPont de Nemours and Company.

Performance Data

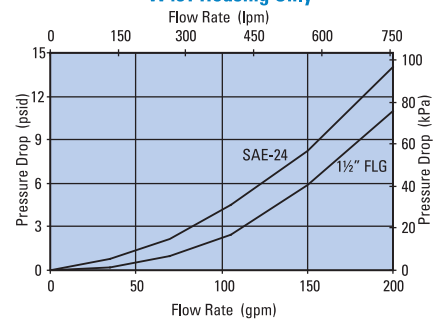
W451 9" DT Filter Only
DT-HF-9, 9.13"/231.8mm



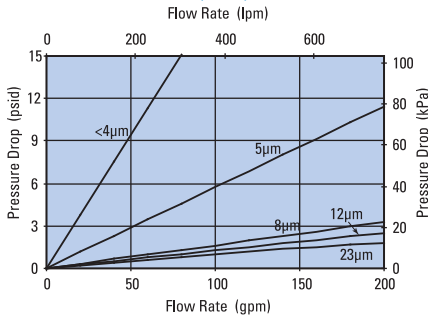
W451 9" DT High Collapse Filter Only
DT-HF4HC-9, 9.19"/233.5mm



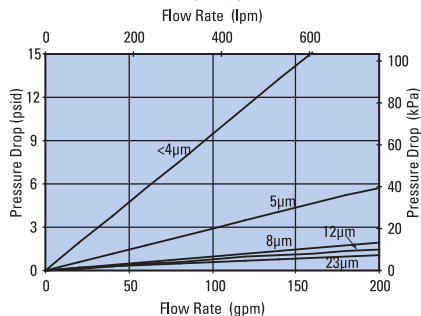
W451 Housing Only



W451 18" DT Filter Only
DT-HF4-18, 18.20"/462.3mm



W451 27" DT Filter Only
DT-HF4-27, 27.66"/702.5mm





Filter Assembly Choices

Port Size	Bypass Rating	Seal Material	Indicator Style & Location	Housing Length	Assembly Length	Donaldson Part No.
SAE-24 O-ring	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	9" (228.6mm)	15.31" (338.9mm)	P574220
SAE-24 O-ring	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	18" (457.2mm)	24.7" (627.3mm)	P574221
SAE-24 O-ring	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	27" (685.8mm)	34.0" (863.6mm)	P574222
1-1/2" SAE 4 Bolt Flange, Code 61	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	18" (457.2mm)	24.7" (627.3mm)	P574223
1-1/2" SAE 4 Bolt Flange, Code 61	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	27" (685.8mm)	34.0" (863.6mm)	P574224
1-1/2" SAE 4 Bolt Flange, Code 61	90 psi / 6.21 bar	Buna-N	Port Machined & Plugged	18" (457.2mm)	24.7" (627.3mm)	P574225
1-1/2" SAE 4 Bolt Flange, Code 62	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	18" (457.2mm)	24.7" (627.3mm)	P574226
Manifold Mount	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	18" (457.2mm)	24.7" (627.3mm)	P574227
Manifold Mount	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	27" (685.8mm)	34.0" (863.6mm)	P574228
Manifold Mount	None	Buna-N	Port Machined & Plugged	9" (228.6mm)	15.31" (338.9mm)	P574229
Manifold Mount	None	Buna-N	Port Machined & Plugged	18" (457.2mm)	24.7" (627.3mm)	P574230
SAE-24 O-ring	None	Viton	Port Machined & Plugged	18" (457.2mm)	24.7" (627.3mm)	P575915
SAE-24 O-ring	None	Viton	Port Machined & Plugged	27" (685.8mm)	34.0" (863.6mm)	P575916
SAE-24 O-ring	None	Viton	Port Machined & Plugged	9" (228.6mm)	15.31" (338.9mm)	P575917
1-1/2" SAE 4 Bolt Flange, Code 61	None	Viton	Port Machined & Plugged	18" (457.2mm)	24.7" (627.3mm)	P575918
1-1/2" SAE 4 Bolt Flange, Code 61	90 psi / 6.21 bar	Viton	Port Machined & Plugged	9" (228.6mm)	15.31" (338.9mm)	P575919

Indicator Choices

Indicator Pressure Setting	Connector Style	Seal Material	Donaldson Part No.	Thermal Lockout	Surge Control	Reset
Visual Pop-up Models						
35 psi / 241 kPa	NA	Buna-N	P572347	No	No	Auto
35 psi / 241 kPa	NA	Buna-N	P572348	Yes	Yes	Manual
35 psi / 241 kPa	NA	Viton	P567456	Yes	Yes	Manual
70 psid / 482 kPa	NA	Buna-N	P572319	Yes	Yes	Manual
70 psid / 482 kPa	NA	Viton	P567457	Yes	Yes	Manual
100 psid / 690 kPa	NA	Buna-N	P572353	Yes	Yes	Manual
100 psid / 690 kPa	NA	Viton	P572354	Yes	Yes	Manual
Electrical / Visual Models						
35 psi / 241 kPa	Hirschman	Buna-N	P572327	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Buna-N	P572329	No	No	Auto
35 psi / 241 kPa	Hirschman	Buna-N	P572384	Yes	Yes	Manual
35 psi / 241 kPa	Hirschman	Viton	P567458	Yes	Yes	Manual
35 psi / 241 kPa	Brad Harrison	Buna-N	P572385	Yes	Yes	Manual
35 psi / 241 kPa	3 wire flying leads	Buna-N	P572349	No	No	Auto
70 psi / 482 kPa	Hirschman	Buna-N	P572320	Yes	Yes	Manual
70 psi / 482 kPa	Brad Harrison	Buna-N	P567459	Yes	Yes	Manual
70 psi / 482 kPa	Hirschman	Buna-N	P572373	Yes	No	Manual
70 psi / 482 kPa	Hirschman	Viton	P569639	Yes	No	Manual
100 psi / 690 kPa	Hirschman	Buna-N	P572387	Yes	Yes	Manual
Electrical Models						
35 psi / 241 kPa	Hirschman	Buna-N	P572359	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Buna-N	P572361	No	No	Auto
70 psi / 482 kPa	Hirschman	Buna-N	P572369	No	No	Auto

Head/Bowl/Housing Seal Kits

Donaldson Part No.	Material
X011174	Buna
X011175	Viton



W620

Max Flow: 150 gpm (568 lpm)



W620 In-Line Cartridge Filters

Working Pressures to: 6000 psi
41,380 kPa
413.8 bar

Rated Static Burst to: 15,000 psi
103,400 kPa
1034 bar

Fatigue Pressure Rating: 3000 psi
20,700 kPa
207 bar

Flow Range To: 150 gpm
568 lpm



Applications

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

Features

The W620 filter assembly contains the popular HF3 filter. It offers a reverse flow bypass valve option available for hydrostatic transmissions. Donaldson DT high-performance 4-layer media is offered in five different media grades. The differential pressure indicator line is designed to work with the wide assortment of bypass valves. Thermal lockout and surge control are two key features incorporated in many of the differential pressure indicators.

- Conforms to HF3 specifications
- Housing material: steel
- Head material: cast iron
- Reverse flow bypass valve option available

Beta Rating

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

Porting Size Options

- SAE-16, SAE-20, SAE-24 O-ring
- 1¼" SAE 4-Bolt Flange Code 62
- 1½" SAE 4-Bolt Flange Code 61

Replacement Filter Lengths

- 8.22" / 203.2mm
- 12.91" / 330.2mm
- 16.84" / 406.4mm

Operating Temperatures

- -20° to 250°F (-29° to 121°C)

Standard Bypass Ratings

- 50 psi / 345 kPa / 3.5 bar
- 90 psi / 621 kPa / 6.2 bar
- No Bypass

Assembly Weight

- 12.91": 33 lbs / 14.97 kg
- 19.48": 42 lbs / 19.05 kg
- 22.00": 48 lbs / 21.77 kg

Filter Collapse Ratings

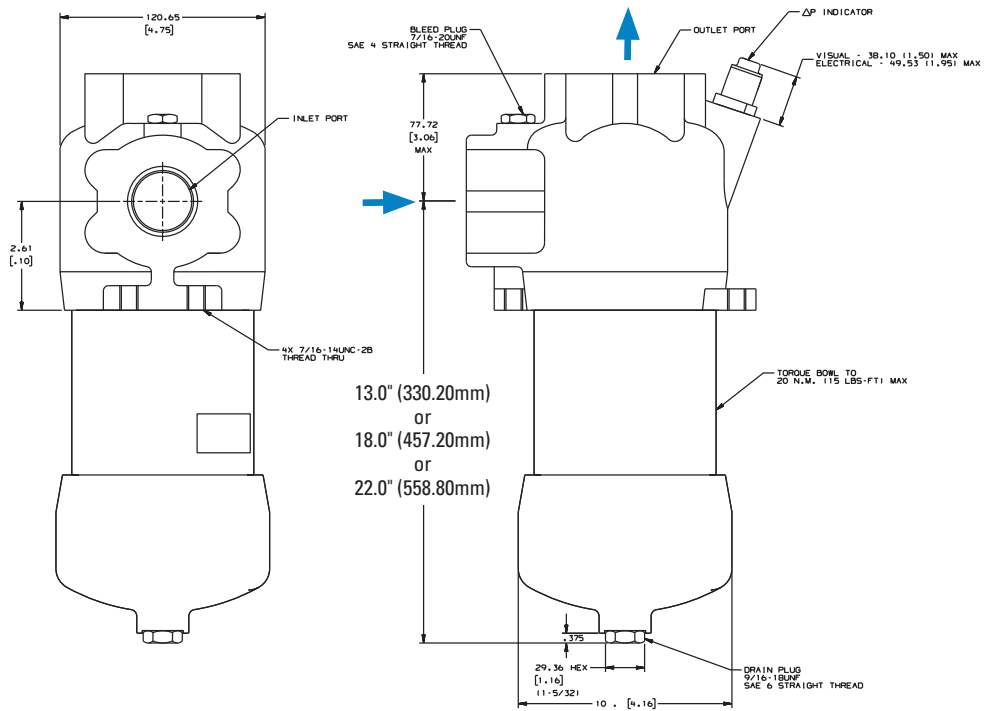
- 150 psi / 1034 kPa / 10.3 bar (standard)
- 3000 psi / 20,700 kPa / 206.8 bar (high collapse)



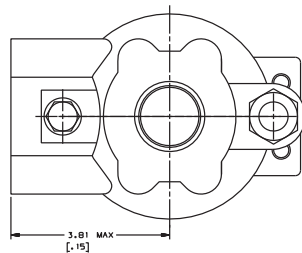
W620 Specification Illustrations

All dimensions are shown in millimeters [inches].

Assembly - Side View



Head - Top View





W620

Max Flow: 150 gpm (568 lpm)



W620 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 μ m	8.22	209	P566209	DT-9600-8-2UM
	Synthetic	5 μ m	8.22	209	P566210
	8 μ m	8.22	209	P566211	DT-9600-8-8UM
	12 μ m	8.22	209	P566212	DT-9600-8-14UM
	23 μ m	8.22	209	P566213	DT-9600-8-25UM
	5 μ m	8.19	208	P566366	DT-9601-8-5UM, High collapse
	12 μ m	8.19	208	P566367	DT-9601-8-14UM, High collapse
	<4 μ m	8.22	209	P567875	DX2-9600-8-2UM
	5 μ m	8.22	209	P565122	DX2-9600-8-5UM
	8 μ m	8.22	209	P565123	DX2-9600-8-8UM
	12 μ m	8.22	209	P564936	DX2-9600-8-14UM
	<4 μ m	12.91	328	P566214	DT-9600-13-2UM
	5 μ m	12.91	328	P566215	DT-9600-13-5UM
	8 μ m	12.91	328	P566216	DT-9600-13-8UM
	12 μ m	12.91	328	P566217	DT-9600-13-14UM
	23 μ m	12.91	328	P566218	DT-9600-13-25UM
	5 μ m	12.85	326	P566368	DT-9601-13-5UM, High collapse
	12 μ m	12.85	326	P566369	DT-9601-13-14UM, High collapse
	<4 μ m	12.91	328	P567876	DX2-9600-13-2UM
	5 μ m	12.91	328	P565188	DX2-9600-13-5UM
	8 μ m	12.91	328	P565189	DX2-9600-13-8UM
	12 μ m	12.91	328	P565187	DX2-9600-13-14UM
	<4 μ m	16.84	428	P566219	DT-9600-16-2UM
	5 μ m	16.84	428	P566220	DT-9600-16-5UM
	8 μ m	16.84	428	P566221	DT-9600-16-8UM
	12 μ m	16.84	428	P566222	DT-9600-16-14UM
	23 μ m	16.84	428	P566223	DT-9600-16-25UM
	5 μ m	16.84	428	P566370	DT-9601-16-5UM, High collapse
	12 μ m	16.84	428	P566371	DT-9601-16-14UM, High collapse
	<4 μ m	16.81	427	P567877	DX2-9600-16-2UM
	5 μ m	16.81	427	P565196	DX2-9600-16-5UM
	8 μ m	16.81	427	P565197	DX2-9600-16-8UM
	12 μ m	16.81	427	P565195	DX2-9600-16-14UM



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.
 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.
 DX2 filters utilize nylon mesh for pleat support.



Head Assembly Choices

Port Size	Bypass Rating	Seal Material	Indicator Style & Location	Donaldson Part No.	Comments
SAE-16 O-ring	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	P574252	
SAE-24 O-ring	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	P574253	
1-1/2" SAE 4 Bolt Flange, Code 61	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	P574254	3000 PSI Maximum Pressure
1-1/4" SAE 4 Bolt Flange, Code 62	50 psi / 3.45 bar	Viton	Port Machined & Plugged	P575931	Reverse flow check valve
1-1/4" SAE 4 Bolt Flange, Code 62	50 psi / 3.45 bar	Viton	Port Machined & Plugged	P575932	
SAE-16 O-ring	90 psi / 6.21 bar	Viton	Port Machined & Plugged	P575933	
SAE-20 O-ring	50 psi / 3.45 bar	Viton	Port Machined & Plugged	P575934	
SAE-20 O-ring	50 psi / 3.45 bar	Viton	Port Machined & Plugged	P575935	Reverse flow check valve

Housing Choices

Housing Length	Seal Material	Donaldson Part No.
4" (101.1mm)	Buna-N	X011557
8" (203.2mm)	Buna-N	X011559
13" (330.2mm)	Buna-N	X011554
16" (406.4mm)	Buna-N	X011555

Indicator Choices

Indicator Pressure Setting	Connector Style	Seal Material	Donaldson Part No.	Thermal Lockout	Surge Control	Reset
Visual Pop-up Models						
35 psi / 241 kPa	NA	Buna-N	P572347	No	No	Auto
35 psi / 241 kPa	NA	Buna-N	P572348	Yes	Yes	Manual
35 psi / 241 kPa	NA	Viton	P567456	Yes	Yes	Manual
70 psid / 482 kPa	NA	Buna-N	P572319	Yes	Yes	Manual
70 psid / 482 kPa	NA	Viton	P567457	Yes	Yes	Manual
Electrical / Visual Models						
35 psi / 241 kPa	Hirschman	Buna-N	P572327	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Buna-N	P572329	No	No	Auto
35 psi / 241 kPa	Hirschman	Buna-N	P572384	Yes	Yes	Manual
35 psi / 241 kPa	Hirschman	Viton	P567458	Yes	Yes	Manual
35 psi / 241 kPa	Brad Harrison	Buna-N	P572385	Yes	Yes	Manual
35 psi / 241 kPa	3 wire flying leads	Buna-N	P572349	No	No	Auto
70 psi / 482 kPa	Hirschman	Buna-N	P572320	Yes	Yes	Manual
70 psi / 482 kPa	Brad Harrison	Buna-N	P567459	Yes	Yes	Manual
70 psi / 482 kPa	Hirschman	Buna-N	P572373	Yes	No	Manual
70 psi / 482 kPa	Hirschman	Viton	P569639	Yes	No	Manual
Electrical Models						
35 psi / 241 kPa	Hirschman	Buna-N	P572359	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Buna-N	P572361	No	No	Auto
70 psi / 482 kPa	Hirschman	Buna-N	P572369	No	No	Auto

Head/Bowl/Housing Seal Kits

Donaldson Part No.	Material
X011182	Buna
X011183	Viton

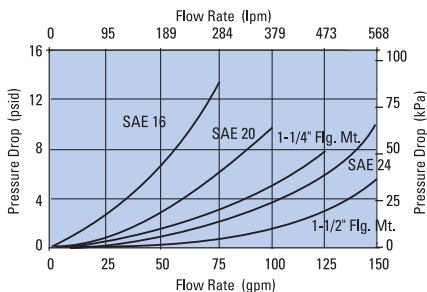


W620
Max Flow: 150 gpm (568 lpm)

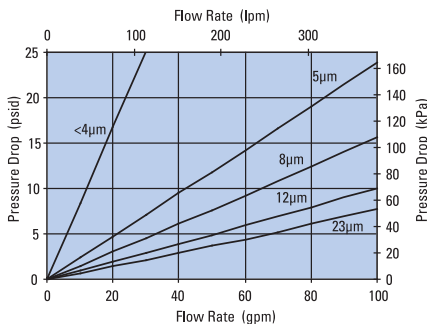


Performance Data

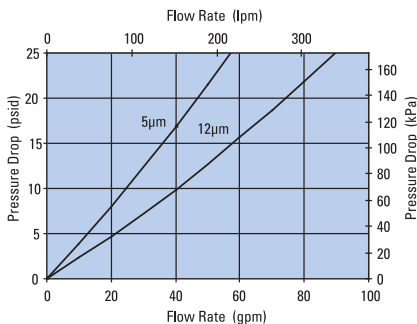
W620 Housing Only



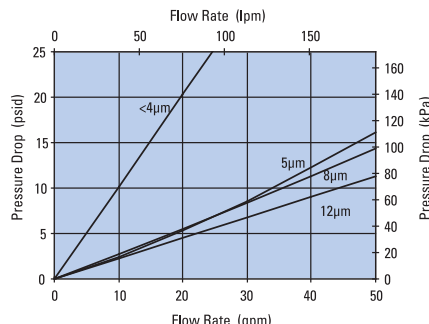
W620 8" DT Filter Only
DT-9600-8, 8.22"/208.8mm



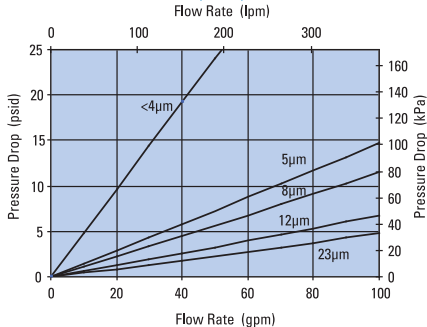
W620 8" DT Filter Only
DT-9601-8, 8.19"/208mm



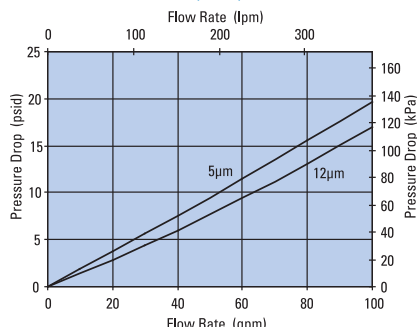
W620 8" DX2 Filter Only
DX2-9600-8, 8.19"/208mm



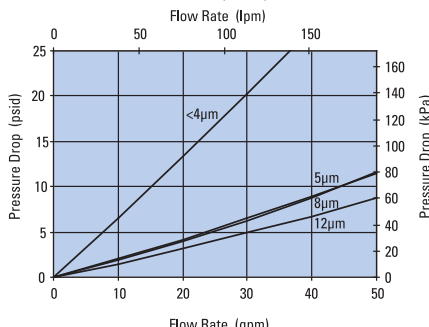
W620 13" DT Filter Only
DT-9600-13, 12.91"/327.8mm



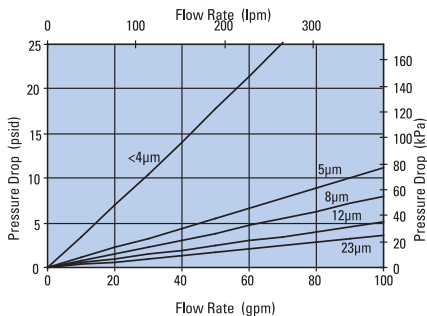
W620 13" DT Filter Only
DT-9601-13, 12.85"/326.3mm



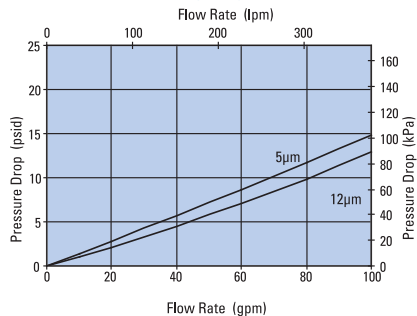
W620 13" DX2 Filter Only
DX2-9600-13, 12.87"/327mm



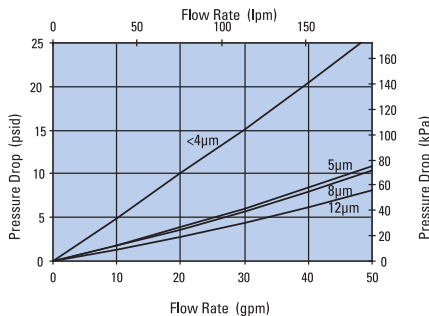
W620 16" DT Filter Only
DT-9600-16, 16.84"/427.8mm



W620 16" DT Filter Only
DT-9601-16, 16.82"/427.1mm



W620 16" DX2 Filter Only
DX2-9600-16, 16.81"/427mm



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.

Viton® and Buna-N® are registered trademarks of E. I. DuPont de Nemours and Company.



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)



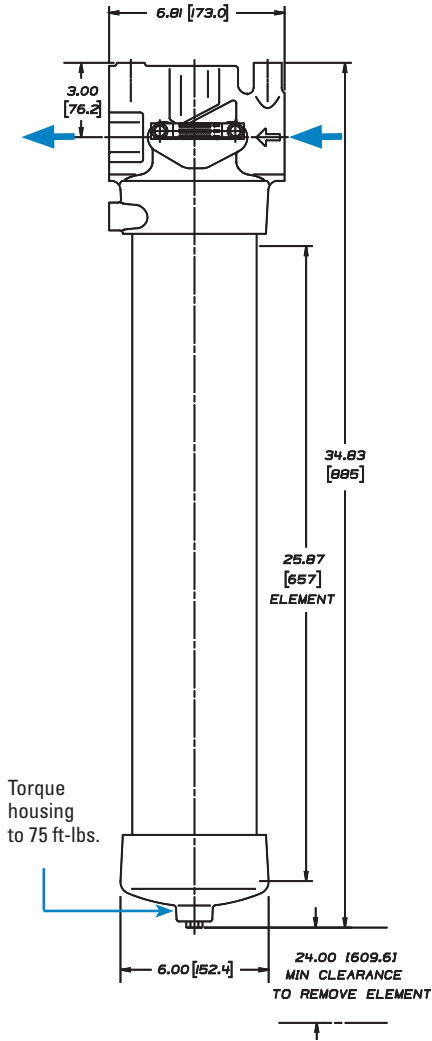
HPK05
Max Flow: 200 gpm (757 lpm)



HPK05 Specification Illustrations

All dimensions are shown in inches [millimeters].

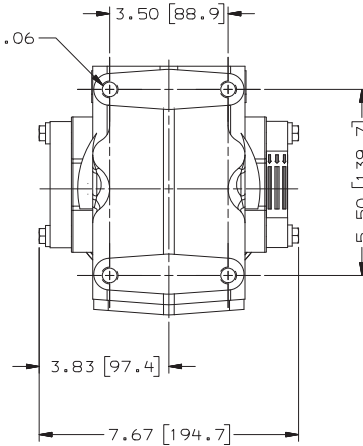
Assembly - Side View



Head - Top View

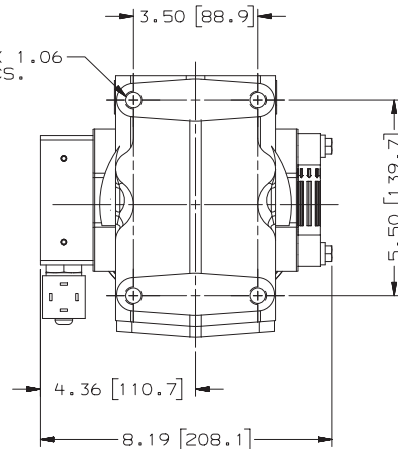
HPK05 with Visual Service Indicator

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



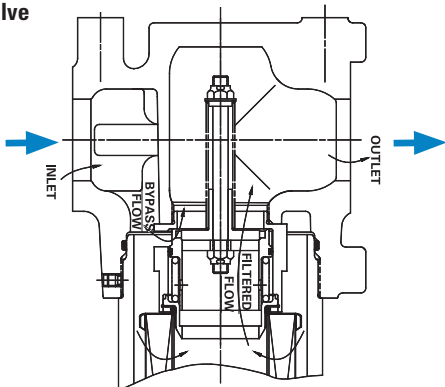
HPK05 with AC/DC Electrical Service Indicator

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

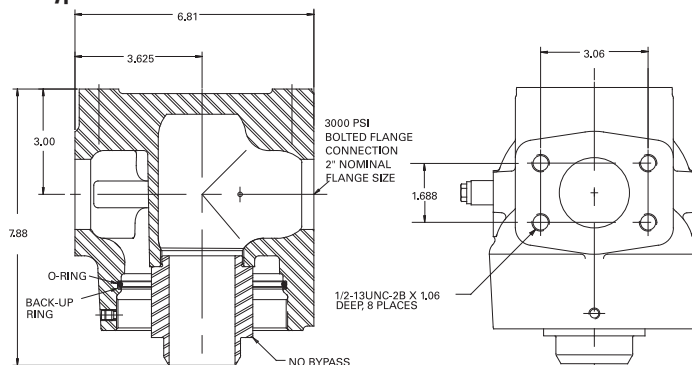


Bypass Valve Alternatives

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 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

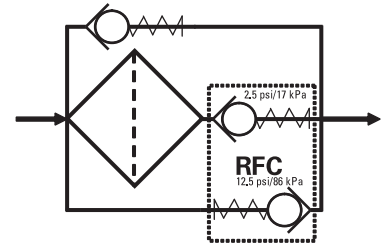
Assembly Notes

¹Donaldson 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.

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

³Rated 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 μm	25.9	658	P566449	DT-9400-26-2UM
Synthetic	5 μm	25.9	658	P566450	DT-9400-26-5UM
	8 μm	25.9	658	P566451	DT-9400-26-8UM
	12 μm	25.9	658	P566452	DT-9400-26-14UM
	23 μm	25.9	658	P566453	DT-9400-26-25UM
	5 μm	25.9	658	P566642	DT-9901-26-5UM, High collapse
	12 μm	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 μm	25.5	648	P164585	Buna-N® Seal
Synthetic	11 μm	25.5	648	P164227	Buna-N Seal
	23 μm	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.

Buna-N® and Viton® are registered trademarks of E. I. DuPont de Nemours and Company.



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
Visual Service Indicators		
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		
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

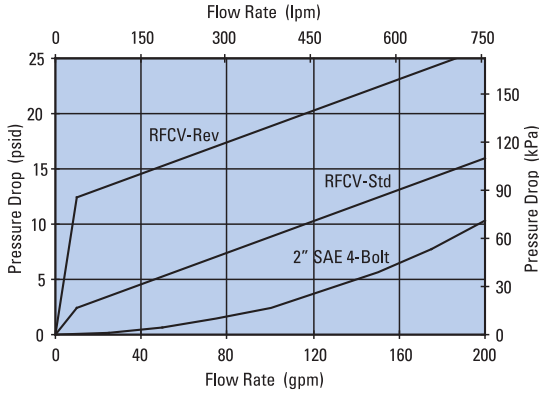
Replacement Indicator Only

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	
P573495	Mounting Block Assembly

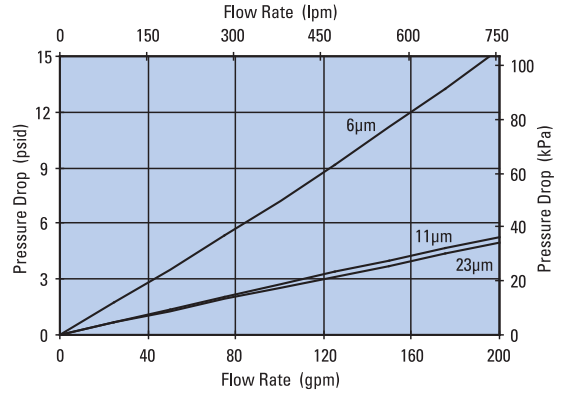


Performance Data

HPK05 Housing Only

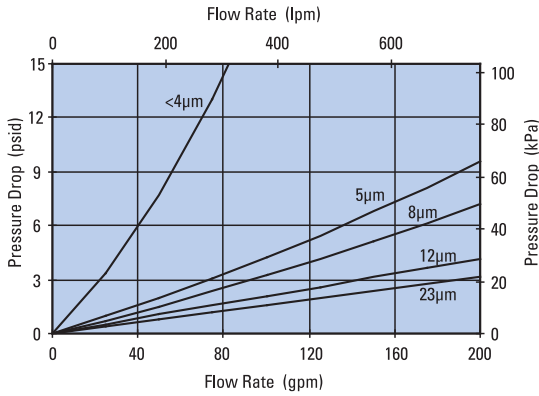


HPK05 26" Standard Filter Only



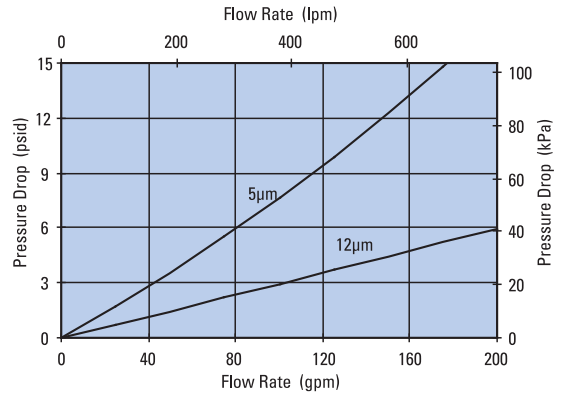
HPK05 26" DT Filter Only

DT-9400-26, 26"/660mm



HPK05 26" DT Filter Only

DT-9901-26, 26"/660mm





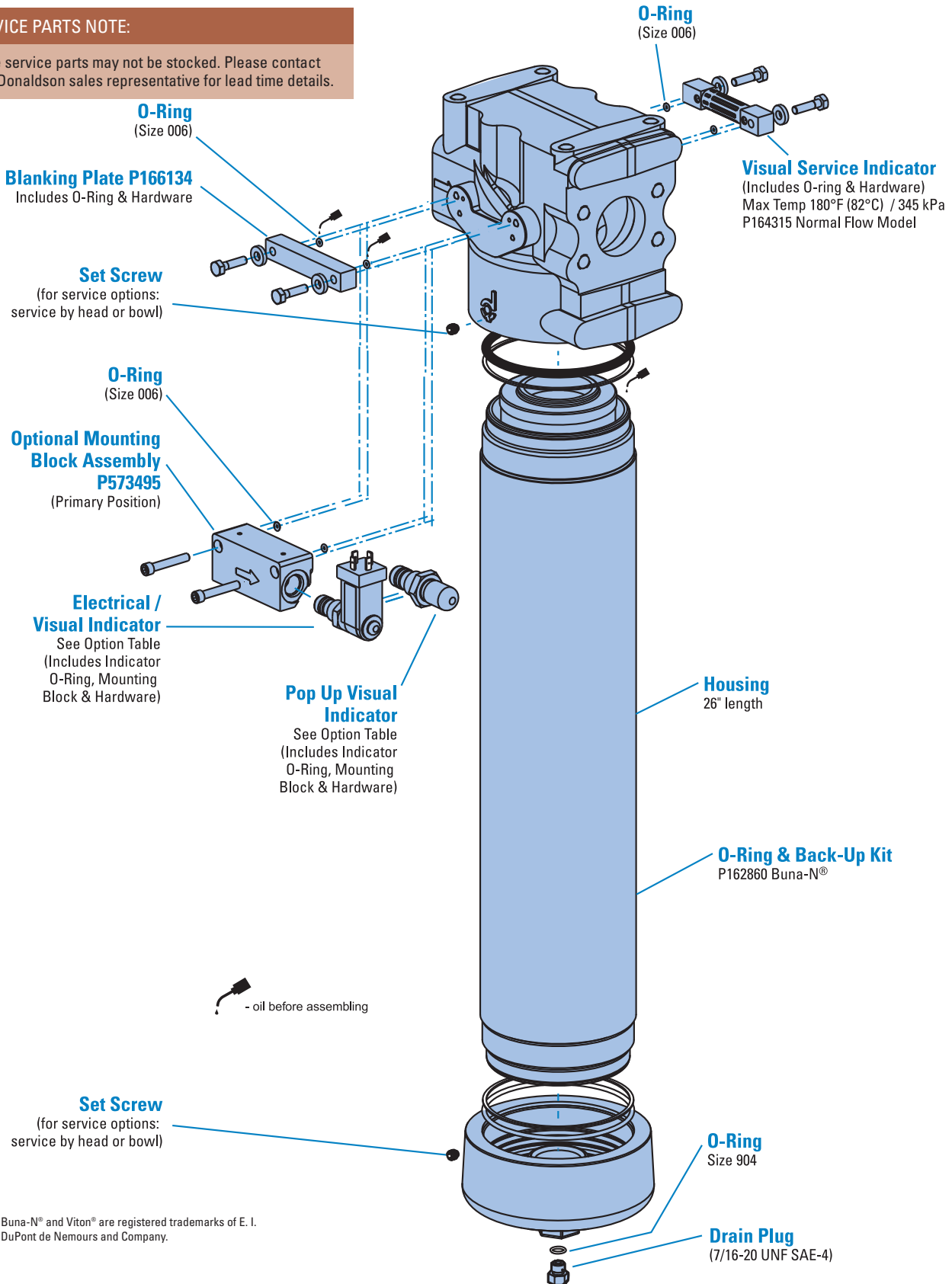
HPK05
Max Flow: 200 gpm (757 lpm)



HPK05 Service Parts

SERVICE PARTS NOTE:

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



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