



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

Applications

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

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 or nitrile are available with HPK02.

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



Beta Rating

- Performance to $\beta_{<40} = 1000$

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)

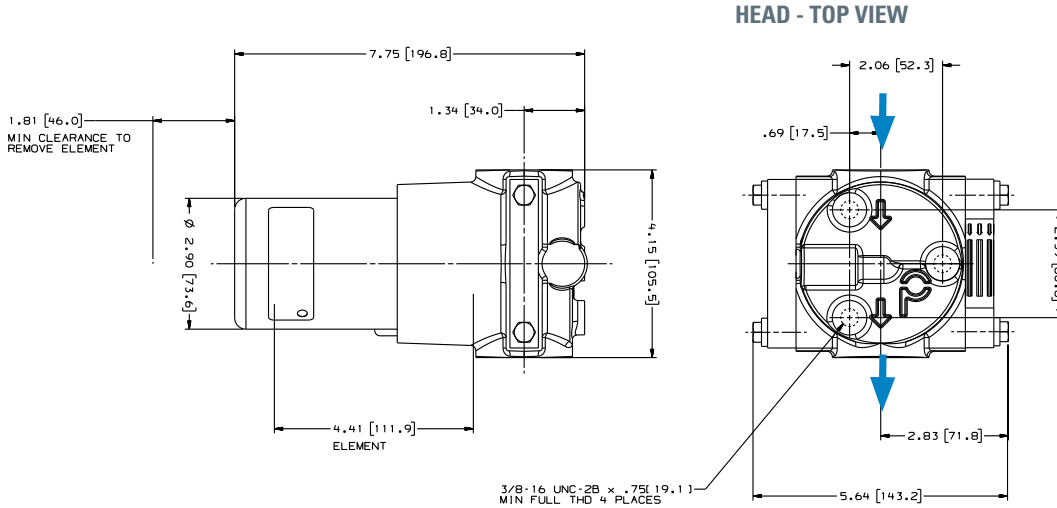
Filter Collapse Ratings

- 290 psi / 1999 kPa / 20.0 bar (standard)
- 3000 psi / 20,700 kPa / 206.9 bar (high collapse)

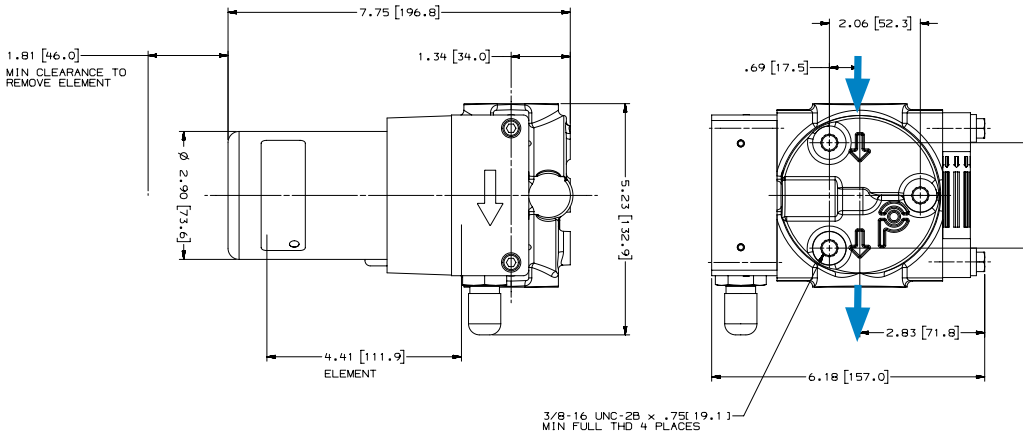
HPK02 Specification Illustrations

ASSEMBLY - SIDE VIEW

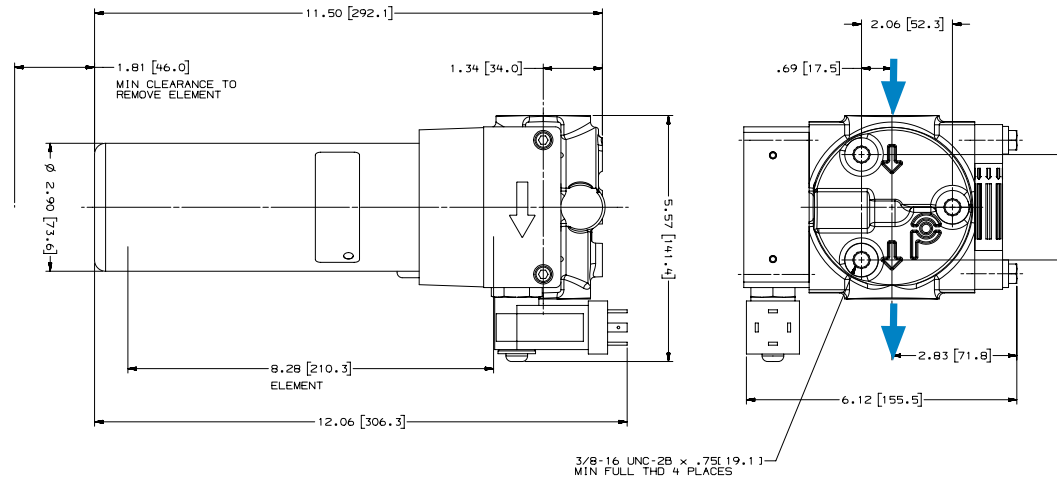
All dimensions are shown in inches [millimeters].



HPK02 with Visual Service Indicator



HPK02 with AC/DC Electrical Service Indicator





HPK02

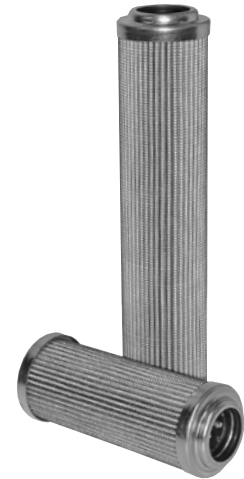
Max Flow: 20 gpm (76 lpm)



HPK02 Components

Filter Choices

Media Type	$\beta_{x(e)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889	in	mm		
DT Synthetic	<4 μm	4.39	112	P566194	DT-9020-4-2UM
	5 μm	4.39	112	P566195	DT-9020-4-5UM
	5 μm	4.46	113	P167180	DT-9021-4-5UM, High Collapse
	8 μm	4.39	112	P566196	DT-9020-4-8UM
	12 μm	4.39	112	P566197	DT-9020-4-14UM
	12 μm	4.46	113	P167181	DT-9021-4-14UM, High Collapse
	23 μm	4.39	112	P566198	DT-9020-4-25UM
	<4 μm	8.18	208	P566199	DT-9020-8-2UM
	5 μm	8.18	208	P566200	DT-9020-8-5UM
	5 μm	8.18	208	P167182	DT-9021-8-5UM, High Collapse
	8 μm	8.18	208	P566201	DT-9020-8-8UM
	12 μm	8.18	208	P566202	DT-9020-8-14UM
	12 μm	8.18	208	P167183	DT-9021-8-14UM, High Collapse
	23 μm	8.18	208	P566203	DT-9020-8-25UM



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. Refer to the table in the Technical Reference Guide for fluid compatibility with our filter media. 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. 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. High collapse designs are also potted into machined aluminum endcaps for greater filter integrity in critical applications. The fluorocarbon seal/high collapse filters also use epoxy potting and media seam seals for added chemical compatibility. High collapse designs are double wire-backed using stainless steel mesh.

Housing Choices

Length	Part No.
Short	P167443
Long	P167452

Head Choices

Port Size	Bypass Rating	Indicators'	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: Donaldson uses the inlet port as the reference point. "Left side," for instance, means that the indicator mounts on the side of the filter head that is on your left when you face the inlet port.

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

Part No.	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

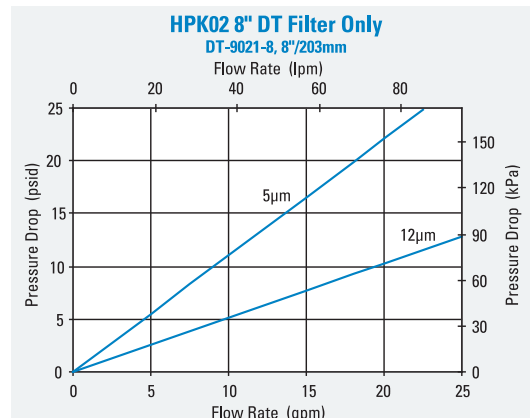
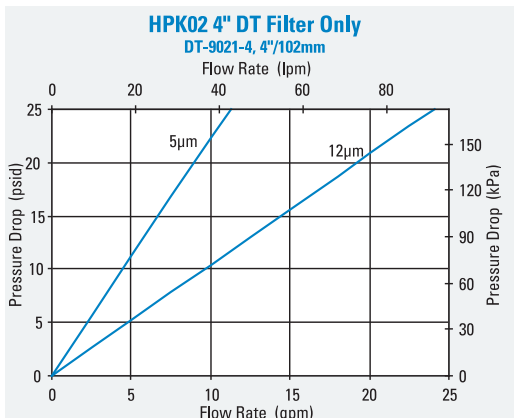
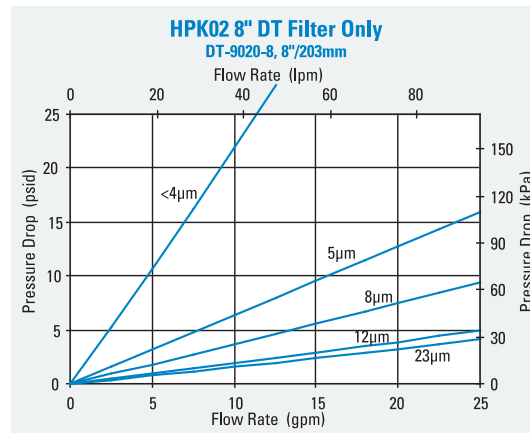
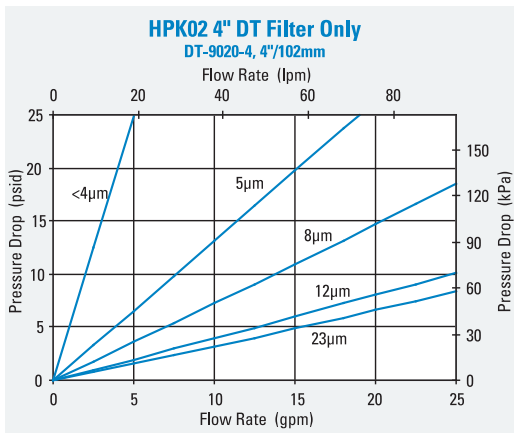
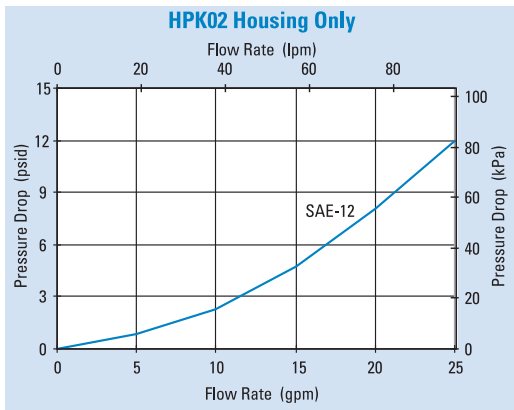


Indicator Choices (Replacement Indicator Only)

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

Indicator Mounting Block	
P573495	Mounting Block Assembly

Performance Data





HPK02

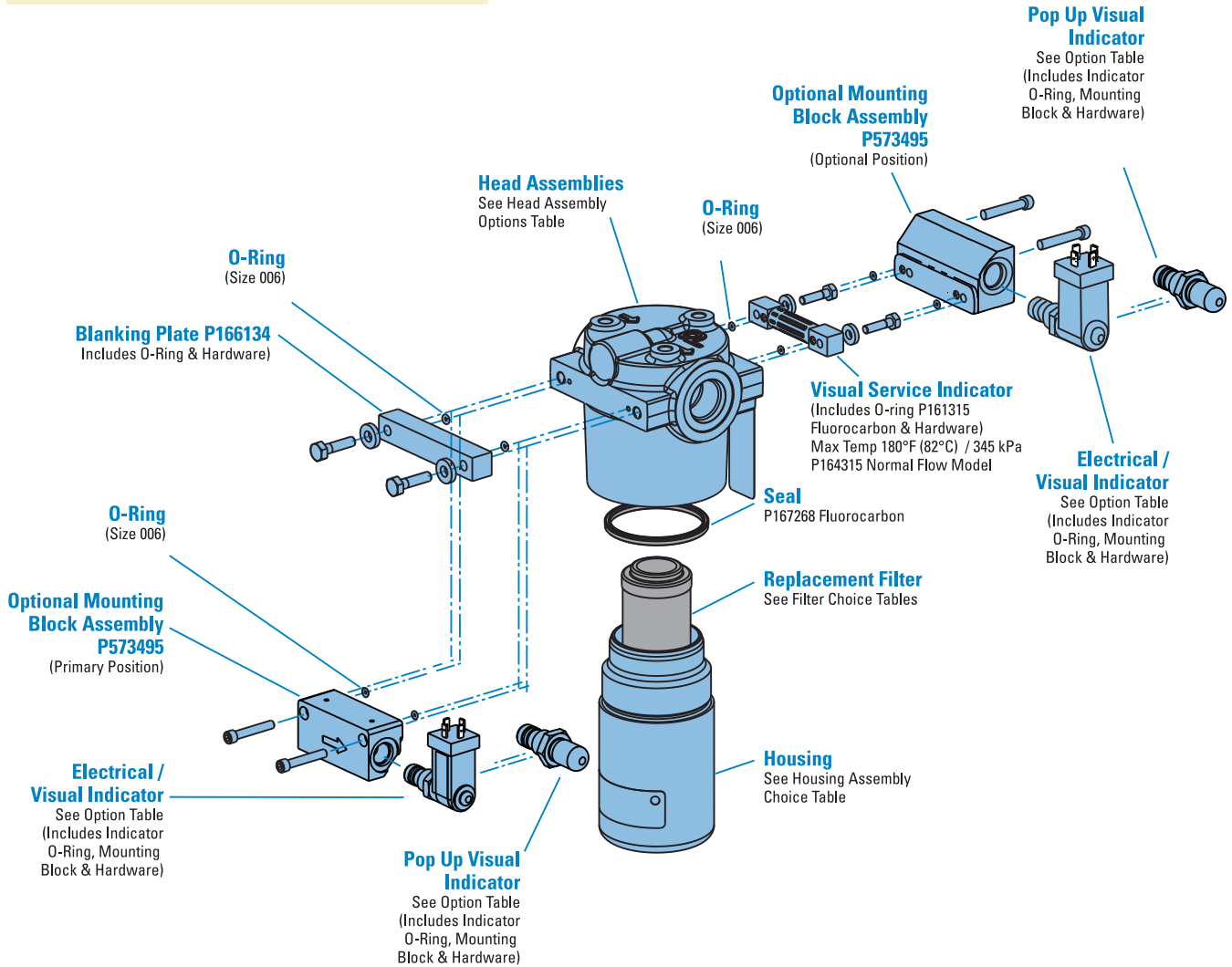
Max Flow: 20 gpm (76 lpm)



HPK02 Service Parts

SERVICE PARTS NOTE:

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



DPK2400 In-Line Cartridge Filters

Working Pressures to:

2400 psi / 16547 kPa / 165.4 bar

Rated Static Burst to:

8000 psi / 55157 kPa / 552 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 housings 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 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
- Housing Material: Carbon Steel
- Optional visual and visual / electric indicators
- Self locking transfer valve
- Automatic bleed-over valve



Beta Rating

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

Porting Size Options

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

Replacement Filter Lengths

- 14.62" / 371mm

Standard Bypass Ratings

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

Assembly Weight

- 98 lbs / 20 kg

Operating Temperatures

- -40° to 250°F (-40° to 121°C)

Filter Collapse Ratings

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



DPK2400

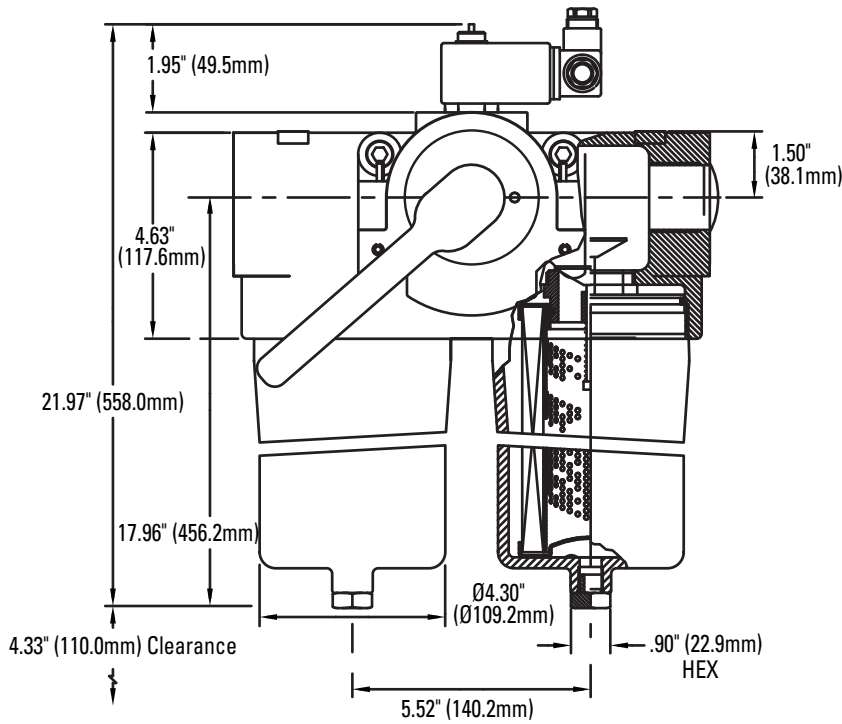
Max Flow: 100 gpm (379 lpm)



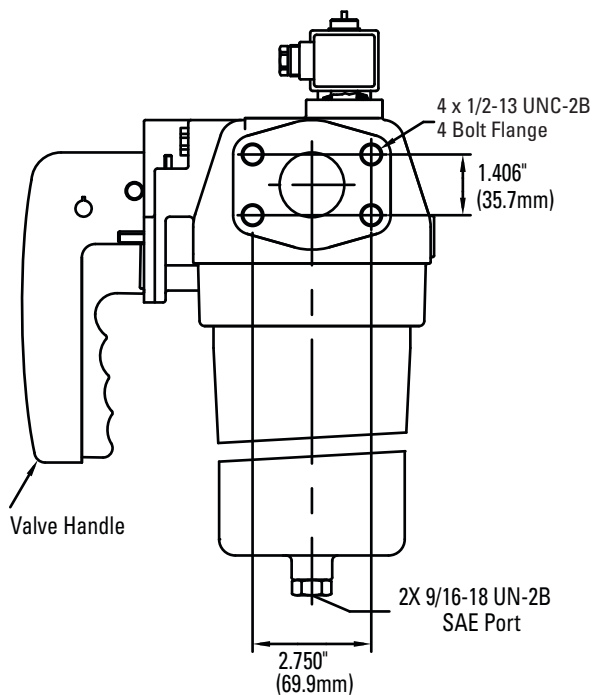
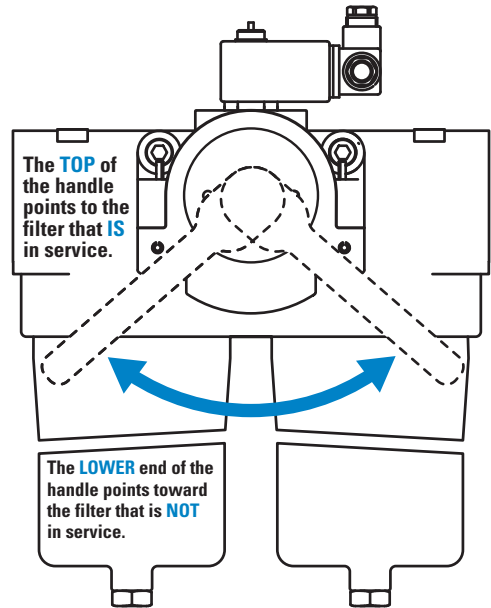
DPK2400 Specification Illustrations

ASSEMBLY - SIDE VIEW

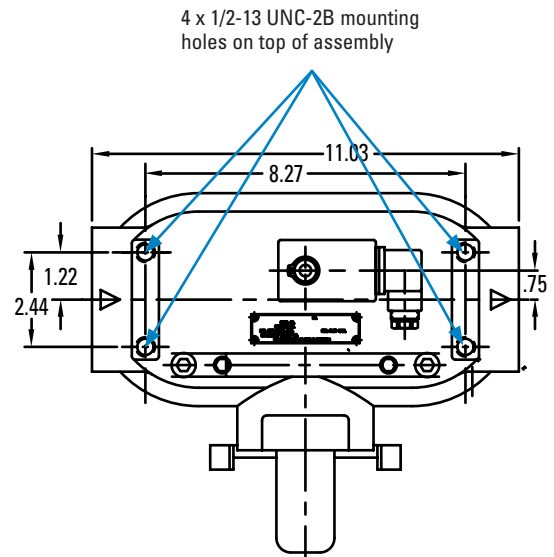
All dimensions are shown in inches [millimeters].



The handle shifts fluid flow from one filter to the other.



HEAD - TOP VIEW



DPK2400 Components

Filter Choices

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

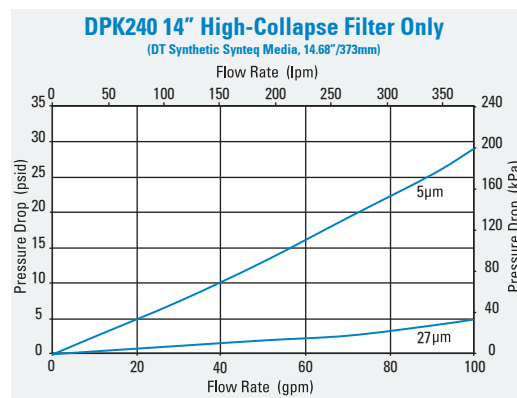
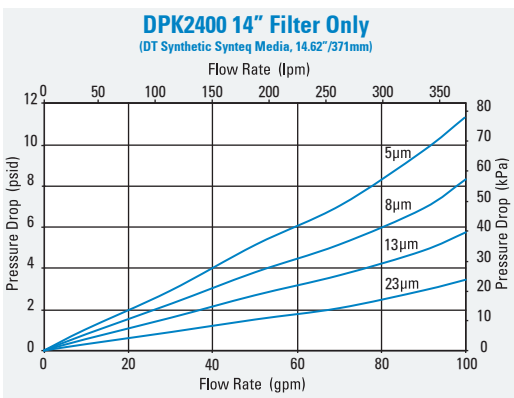
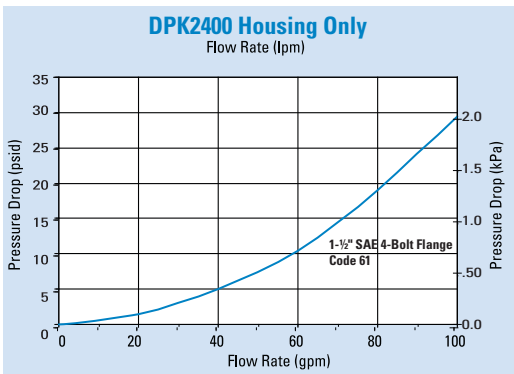
Assembly Choices

Part No.	Port Connections	Bypass Valve	Comments
P577026	1-1/2" SAE 4-bolt flange code 61	No bypass	Filter elements not included with assembly.
P577027	1-1/2" SAE 4-bolt flange code 61	100 psi (6.9 bar) bypass	Filter elements not included with assembly.

Service Indicator Choices

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

Performance Data





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 $\beta_{<4(\mu)}=1000$

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

Standard Bypass Ratings

- 50 psi / 345 kPa / 3.5 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

- 290 psi / 1999 kPa / 20.0 bar (standard)
- 3000 psi / 20,700 kPa / 206.8 bar (high collapse)

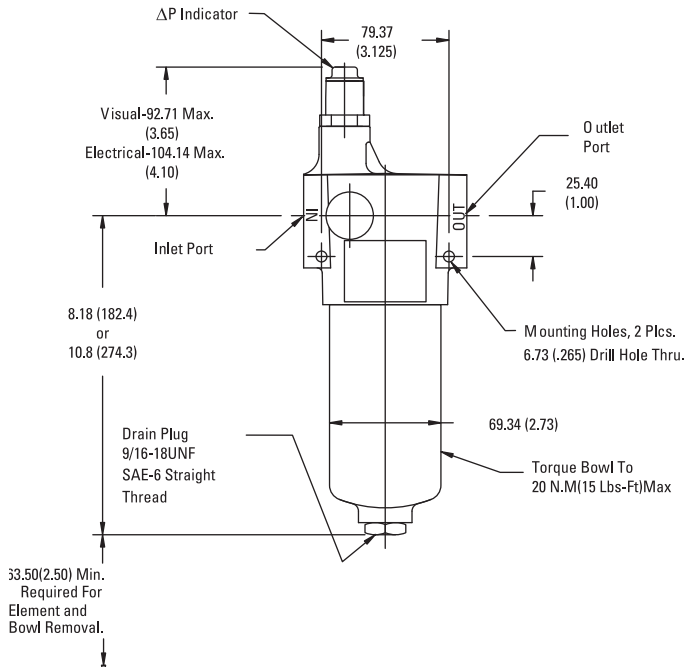
Top-ported for subplate mounting

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

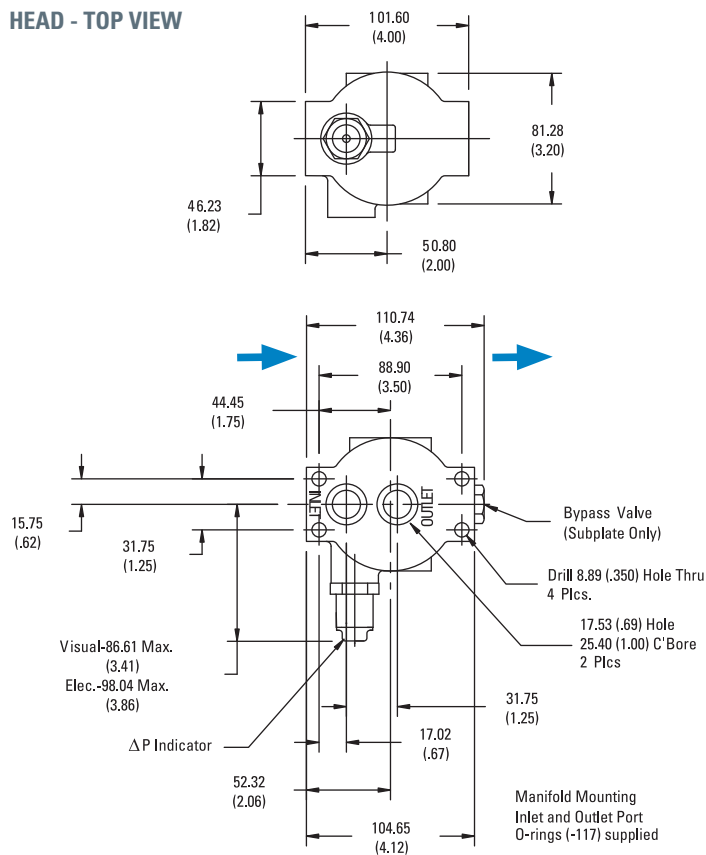
W440 Specification Illustrations

ASSEMBLY - SIDE VIEW

All dimensions are shown in millimeters [inches].



HEAD - TOP VIEW





W440

Max Flow: 20 gpm (76 lpm)



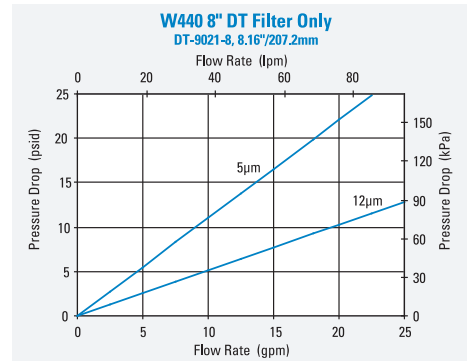
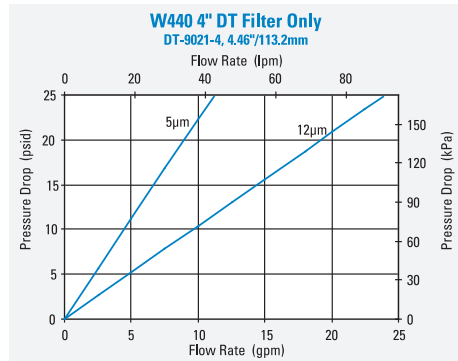
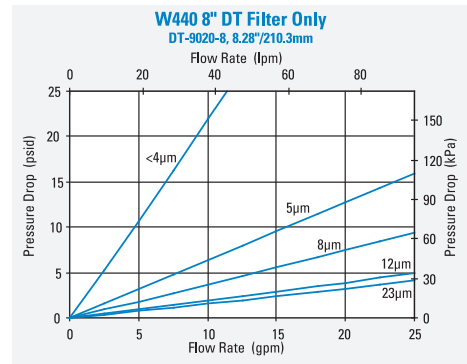
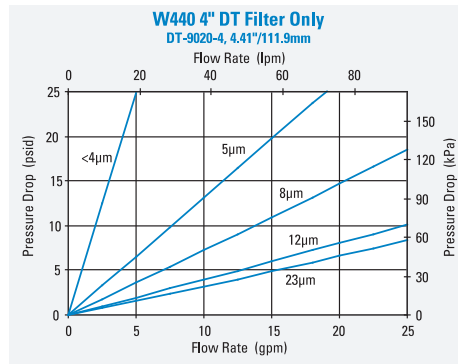
W440 Components

Filter Choices

Media Type	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889	in	mm		
DT Synthetic	<4 μm	4.39	112	P566194	DT-9020-4-2UM
	5 μm	4.39	112	P566195	DT-9020-4-5UM
	5 μm	4.46	113	P167180	DT-9021-4-5UM, High Collapse
	8 μm	4.39	112	P566196	DT-9020-4-8UM
	12 μm	4.39	112	P566197	DT-9020-4-14UM
	12 μm	4.46	113	P167181	DT-9021-4-14UM, High Collapse
	23 μm	4.39	112	P566198	DT-9020-4-25UM
	<4 μm	8.18	208	P566199	DT-9020-8-2UM
	5 μm	8.18	208	P566200	DT-9020-8-5UM
	5 μm	8.18	208	P167182	DT-9021-8-5UM, High Collapse
	8 μm	8.18	208	P566201	DT-9020-8-8UM
	12 μm	8.18	208	P566202	DT-9020-8-14UM
	12 μm	8.18	208	P167183	DT-9021-8-14UM, High Collapse
	23 μm	8.18	208	P566203	DT-9020-8-25UM

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 and are double wire-backed using epoxy-coated steel mesh for maximum pleat support and dirt capacity. Fluorocarbon seals are standard on all Donaldson DT filters. 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. High collapse designs are also potted into machined aluminum endcaps for greater filter integrity in critical applications. The fluorocarbon seal/high collapse filters also use epoxy potting and media seam seals for added chemical compatibility. High collapse designs are double wire-backed using stainless steel mesh.

Performance Data





Head Assembly Choices

Port Size	Bypass Rating	Seal Material	Indicator Style & Location	Part No.
SAE-12 O-Ring	50 psi / 3.45 bar	Nitrile	Port Machined & Plugged	P574248
Manifold Mount	50 psi / 3.45 bar	Nitrile	Port Machined & Plugged	P574249
Manifold Mount	None	Fluorocarbon	Port Machined & Plugged	P574250

Housing Choices

Housing Length	Seal Material	Part No.
4" (101.6mm)	Nitrile	X011125
8" (203.2mm)	Nitrile	X011126

Service Part Choices

Part No.	Description
X011172	Head/Bowl/Housing Seal Kit - nitrile
X011173	Head/Bowl/Housing Seal Kit - fluorocarbon

Indicator Choices

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



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

Applications

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



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 $\beta_{<40}₁₀₀₀$

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

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

Operating Temperatures

- -20°F to 250°F / -29°C to 120°C

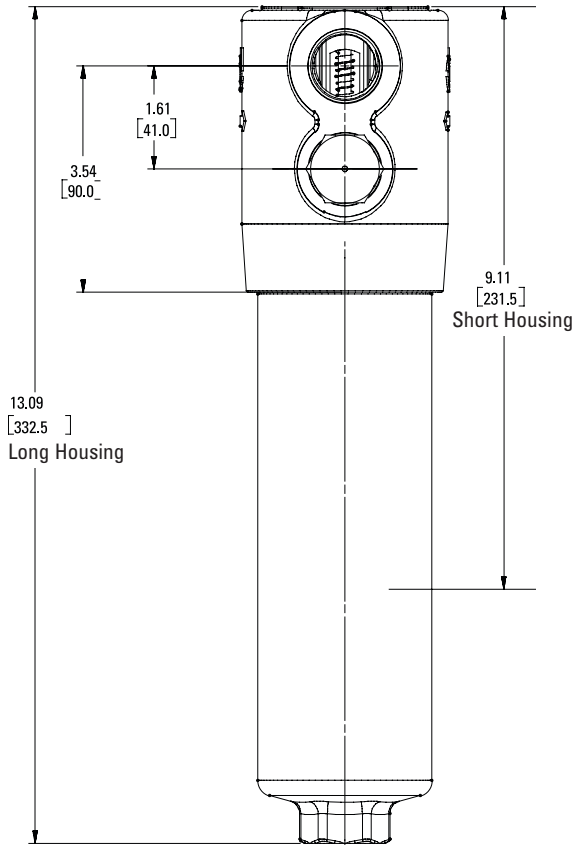
Filter Collapse Ratings

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

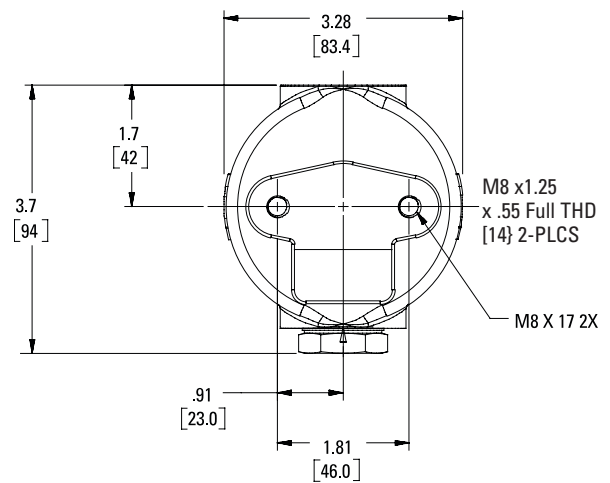
FPK02 Specification Illustrations

ASSEMBLY - SIDE VIEW

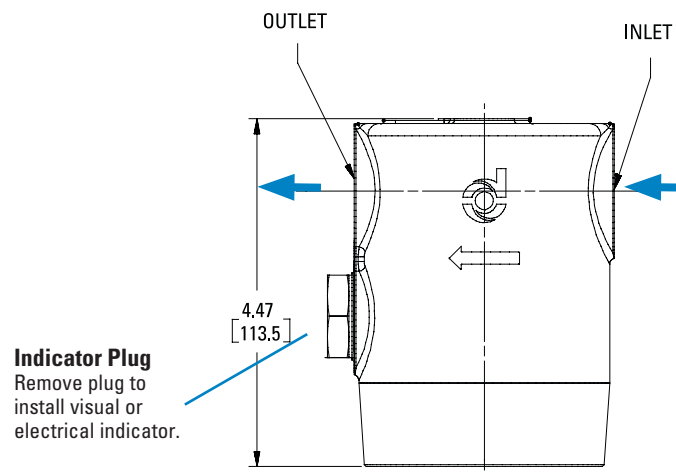
All dimensions are shown in inches [millimeters].



HEAD - TOP VIEW



HEAD - SIDE VIEW





FPK02

Max Flow: 25 gpm (95 lpm)

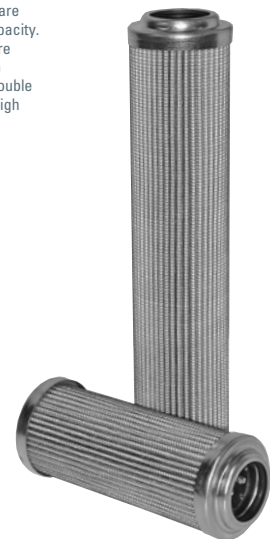


FPK02 Components

Filter Choices

Media Type	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889	in	mm		
DT Synthetic	<4 μm	4.39	112	P566194	DT-9020-4-2UM
	5 μm	4.39	112	P566195	DT-9020-4-5UM
	5 μm	4.46	113	P167180	DT-9021-4-5UM, High Collapse
	8 μm	4.39	112	P566196	DT-9020-4-8UM
	12 μm	4.39	112	P566197	DT-9020-4-14UM
	12 μm	4.46	113	P167181	DT-9021-4-14UM, High Collapse
	23 μm	4.39	112	P566198	DT-9020-4-25UM
	<4 μm	8.18	208	P566199	DT-9020-8-2UM
	5 μm	8.18	208	P566200	DT-9020-8-5UM
	5 μm	8.18	208	P167182	DT-9021-8-5UM, High Collapse
	8 μm	8.18	208	P566201	DT-9020-8-8UM
	12 μm	8.18	208	P566202	DT-9020-8-14UM
	12 μm	8.18	208	P167183	DT-9021-8-14UM, High Collapse
	23 μm	8.18	208	P566203	DT-9020-8-25UM

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. Fluorocarbon seals are standard on all Donaldson DT filters. Refer to the table in the Technical Reference Guide for fluid compatibility with our filter media. 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. High collapse designs are double wire-backed using stainless steel mesh and are potted into machined aluminum endcaps for greater filter integrity in critical applications. The fluorocarbon seal/high collapse filters also use epoxy potting and media seam seals for added chemical compatibility.



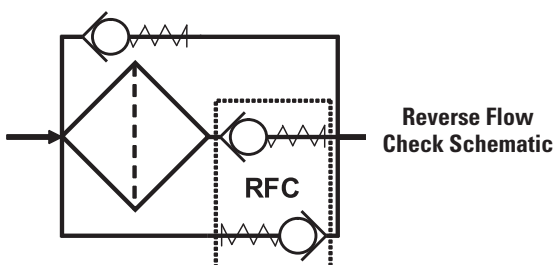
Housing Choices

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

Head Choices

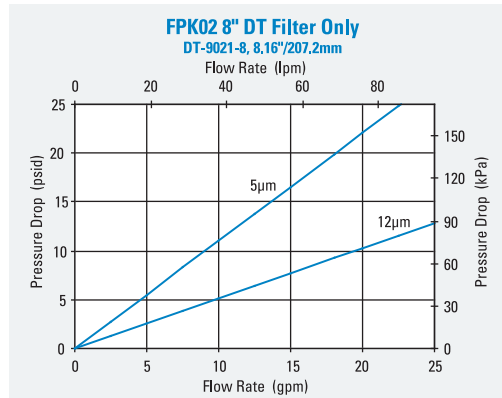
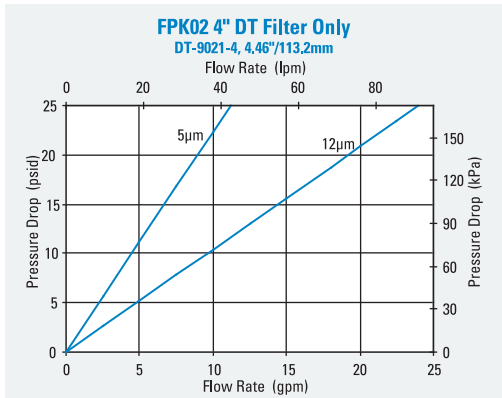
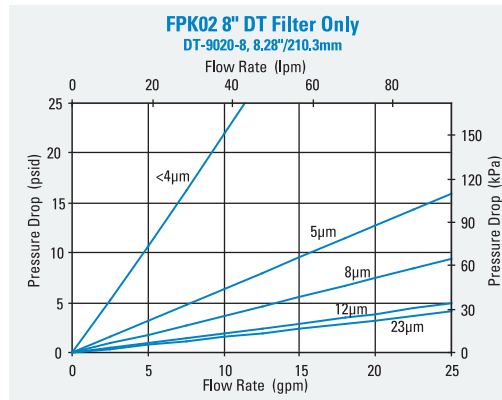
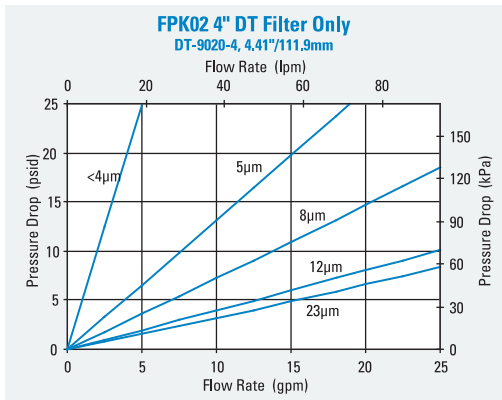
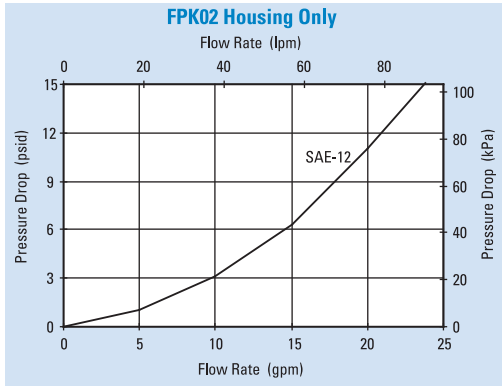
Port Size	Bypass Rating	Part No.
SAE-12 O-Ring	87 psi / 6 bar	P762766
SAE-12 O-Ring with reverse-flow check valve	87 psi / 6 bar	P762767
SAE-12 O-Ring	No Bypass	P762768

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





Performance Data





FPK02

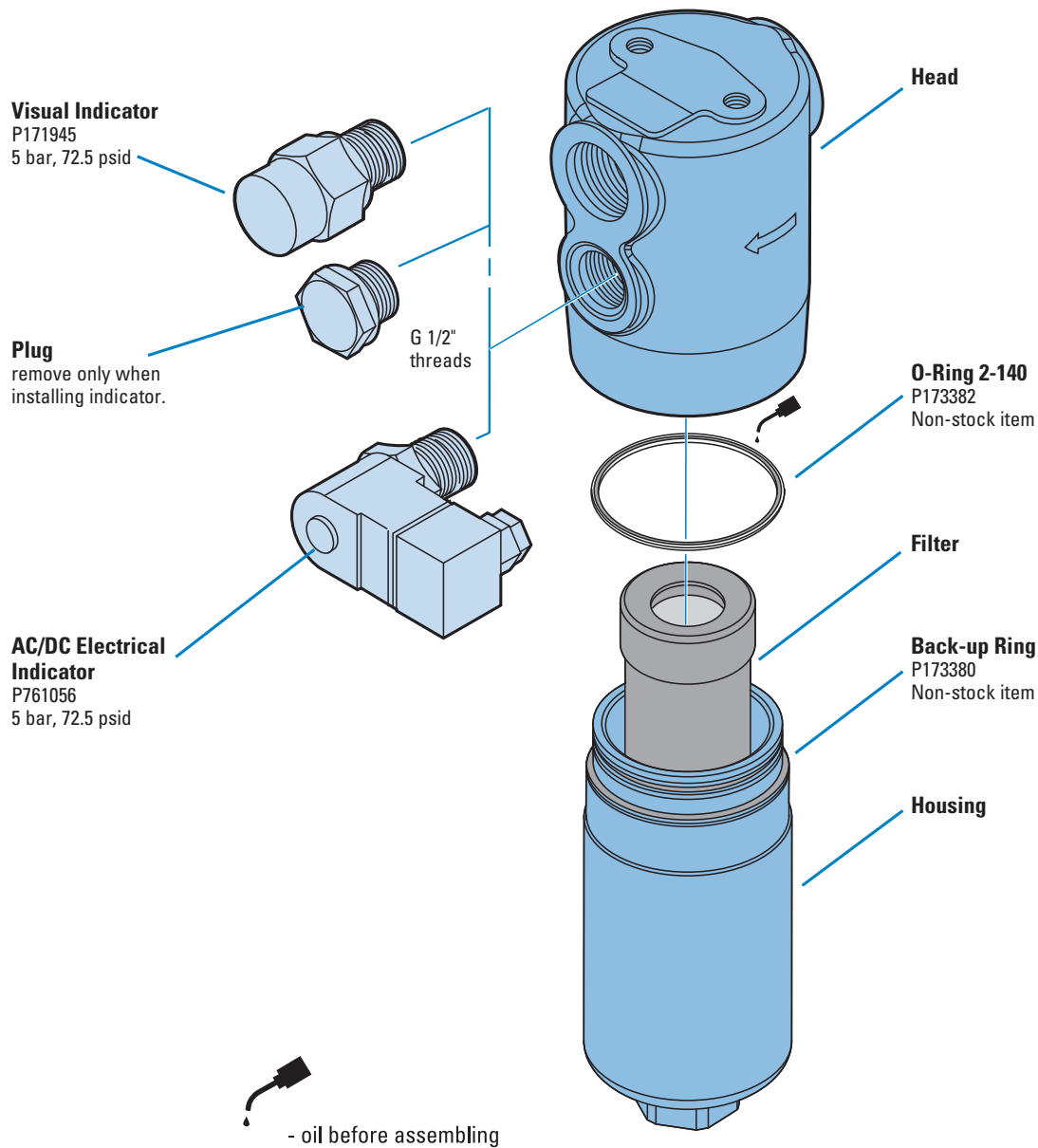
Max Flow: 25 gpm (95 lpm)

FPK02 Service Parts

SERVICE PARTS NOTE:

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

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



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 three 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. 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

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

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Assembly Weight

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

Operating Temperatures

- -20° to 250°F (-29° to 121°C)

Filter Collapse Ratings

- 290 psi / 1999 kPa / 20.0 bar (standard)
- 3000 psi / 20,700 kPa / 206.8 bar (high collapse)





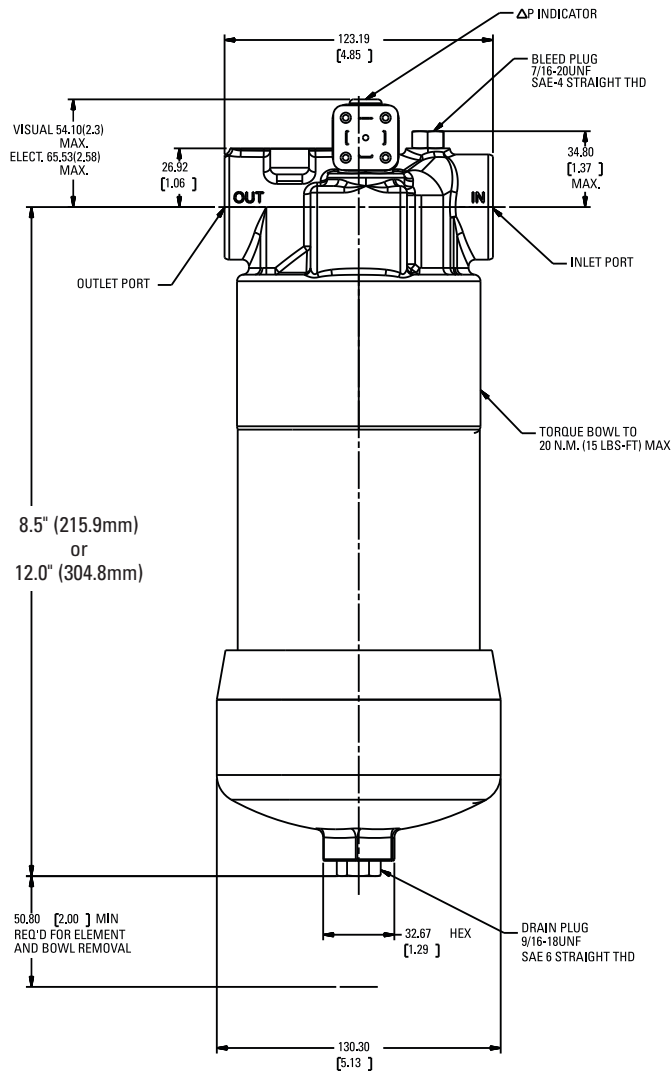
W350

Max Flow: 50 gpm (189 lpm)

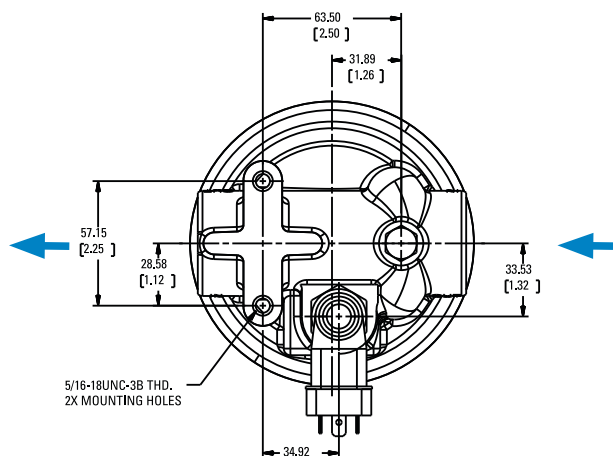
W350 Specification Illustrations

ASSEMBLY - SIDE VIEW

All dimensions are shown in millimeters [inches].



HEAD - TOP VIEW



W350 Components

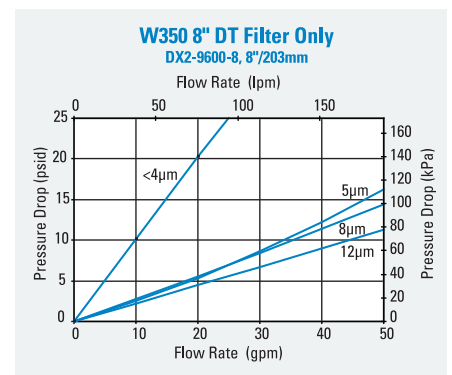
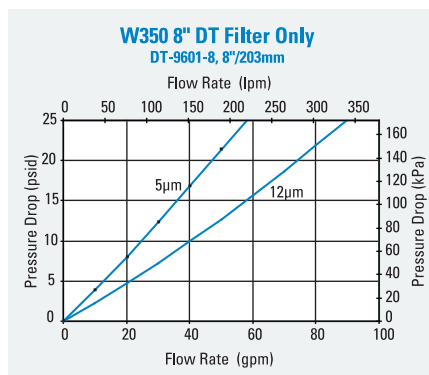
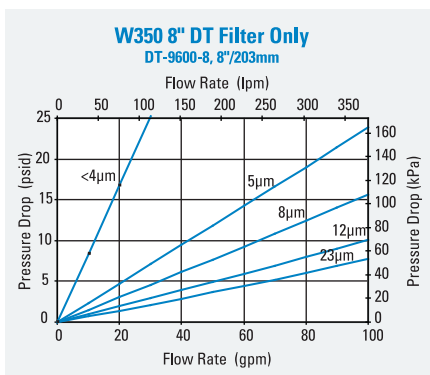
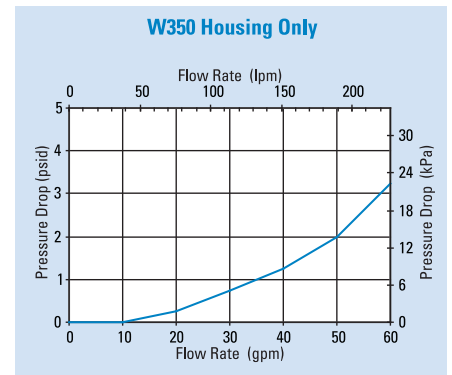
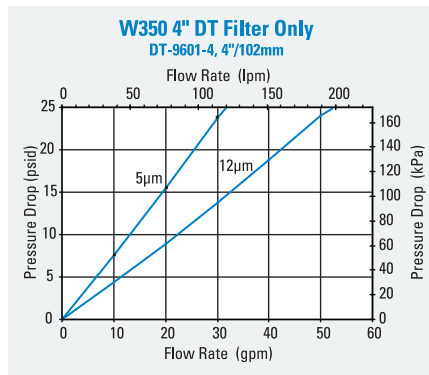
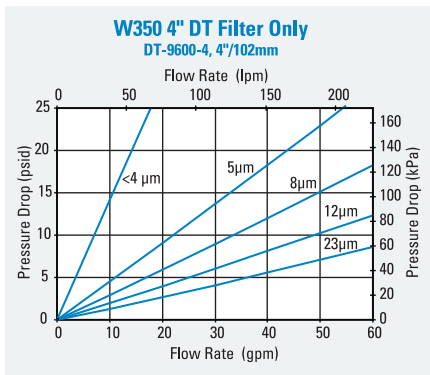
Filter Choices

Media Type	$\beta_{x(c)} = 2$	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889		in	mm		
DT Synthetic		<4 μm	4.59	117	P566204	DT-9600-4-2UM
		5 μm	4.59	117	P566205	DT-9600-4-5UM
		5 μm	4.56	116	P167184	DT-9601-4-5UM, High collapse
		8 μm	4.59	117	P566206	DT-9600-4-8UM
		12 μm	4.59	117	P566207	DT-9600-4-14UM
		12 μm	4.56	116	P167843	DT-9601-4-14UM, High collapse
		23 μm	4.59	117	P566208	DT-9600-4-25UM
		<4 μm	8.22	209	P566209	DT-9600-8-2UM
		5 μm	8.22	209	P566210	DT-9600-8-5UM
		5 μm	8.19	208	P167185	DT-9601-8-5UM, High collapse
		8 μm	8.22	209	P566211	DT-9600-8-8UM
		12 μm	8.22	209	P566212	DT-9600-8-14UM
		12 μm	8.19	208	P167186	DT-9601-8-14UM, High collapse
	23 μm	8.22	209	P566213	DT-9600-8-25UM	
Water Absorbing	10 μm		8	209	P569528	Absorbs 130 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 endcaps for greater filter integrity in critical applications. Fluorocarbon seals are standard on all Donaldson DT filters.

Performance Data





W350

Max Flow: 50 gpm (189 lpm)



Head Assembly Choices

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

Housing Choices

Housing Length	Seal Material	Part No.
4" (101.6mm)	Nitrile	X011556
8" (203.2mm)	Nitrile	X011558

Service Part Choices

Part No.	Description
X011170	Head/Bowl/Housing Seal Kit - nitrile
X011171	Head/Bowl/Housing Seal Kit - fluorocarbon

Indicator Choices

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

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

Applications

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

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 or nitrile 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.



Beta Rating

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

Porting Size Options

- SAE-12, SAE-16 O-Ring

Replacement Filter Lengths

- 8.22" / 208.8mm

Standard Bypass Ratings

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

Assembly Weight

- 26 lbs / 11.8 kg

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

Max Flow: 60 gpm (227 lpm)

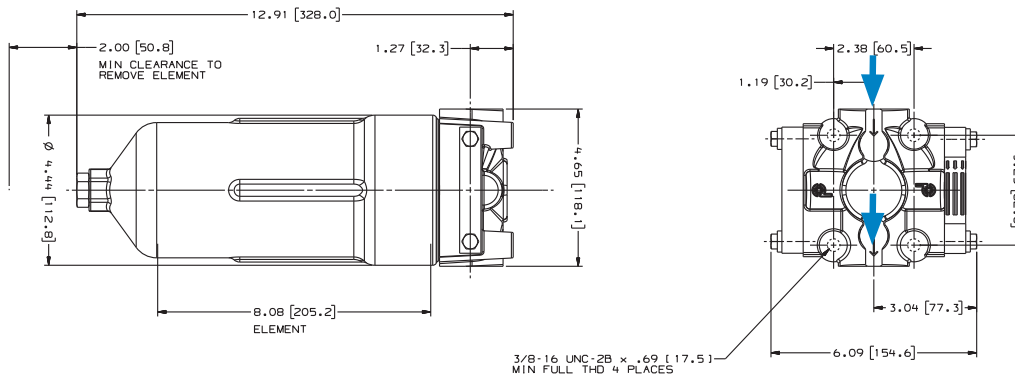


HPK03 Specification Illustrations

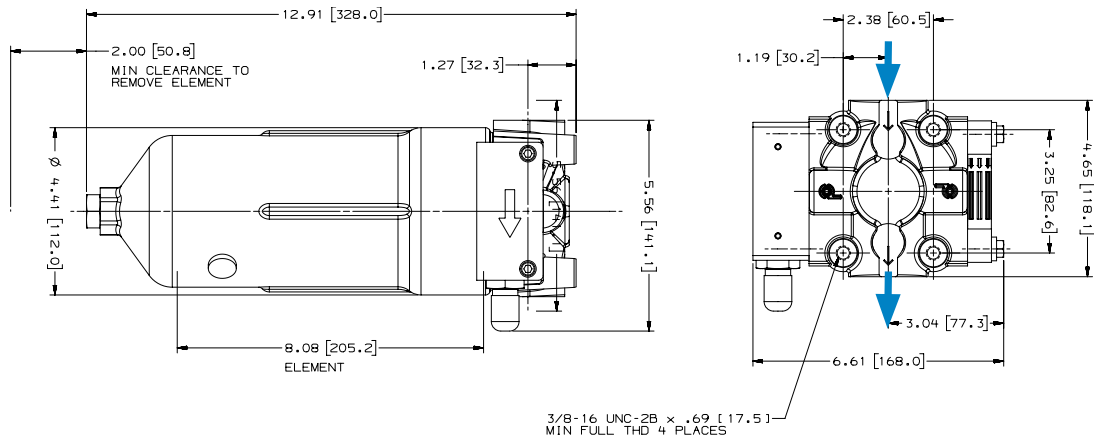
ASSEMBLY - SIDE VIEW

HEAD - TOP VIEW

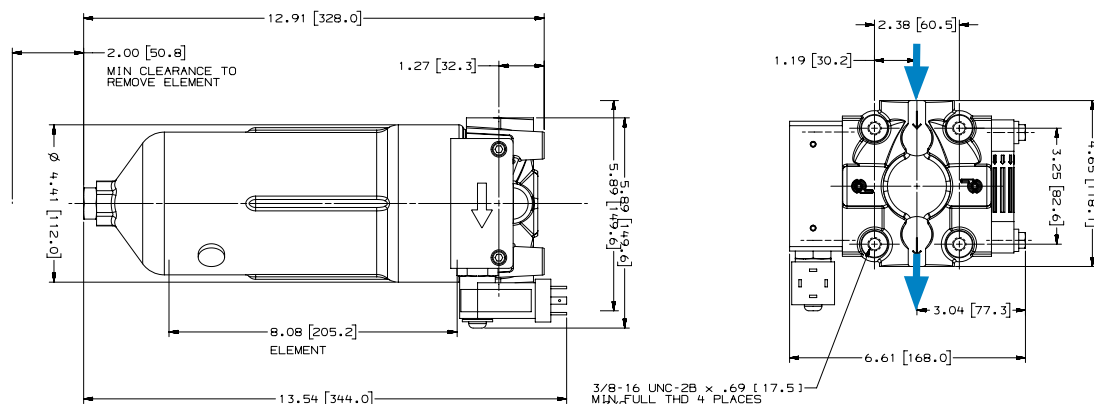
All dimensions are shown in inches [millimeters].



HPK03 with Visual Service Indicator



HPK03 with AC/DC Electrical Service Indicator



HPK03 Components

Filter Choices

Media Type	$\beta_{x(c)} = 1000$	$\beta_{x(c)} = 2$	Length		Part No.	Comments
	Rating based on ISO 16889		in	mm		
DT Synthetic	<4 μm		8.22	209	P566209	DT-9600-8-2UM
	5 μm		8.22	209	P566210	DT-9600-8-5UM
	5 μm		8.22	209	P167185	DT-9601-8-5UM, High Collapse
	8 μm		8.22	209	P566211	DT-9600-8-8UM
	12 μm		8.22	209	P566212	DT-9600-8-14UM
	12 μm		8.22	209	P167186	DT-9601-8-14UM, High Collapse
	23 μm		8.22	209	P566213	DT-9600-8-25UM
Water Absorbing		10 μm	8.22	209	P569528	
Wire Mesh		75 μm	8.22	209	P162233	

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. Fluorocarbon seals are standard on all Donaldson DT filters. Refer to the table in the Technical Reference Guide for fluid compatibility with our filter media. 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. 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. High collapse designs are also potted into machined aluminum endcaps for greater filter integrity in critical applications. The fluorocarbon seal/high collapse filters also use epoxy potting and media seam seals for added chemical compatibility.



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.



HPK03

Max Flow: 60 gpm (227 lpm)



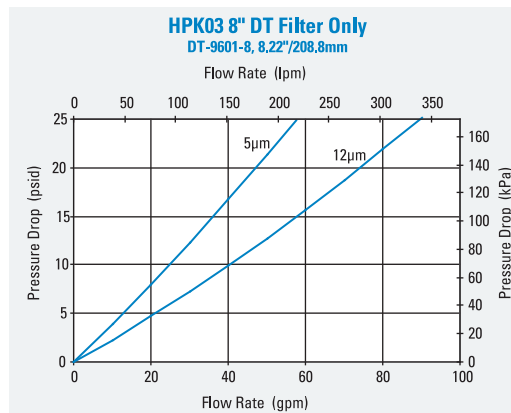
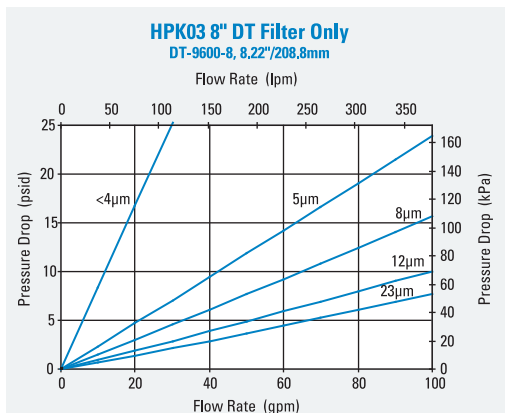
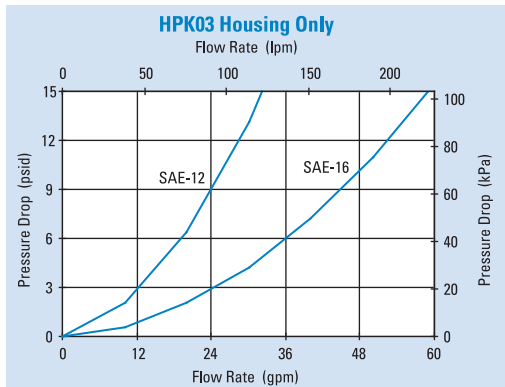
Service Indicator Kits (All kits include indicator with mounting block)

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

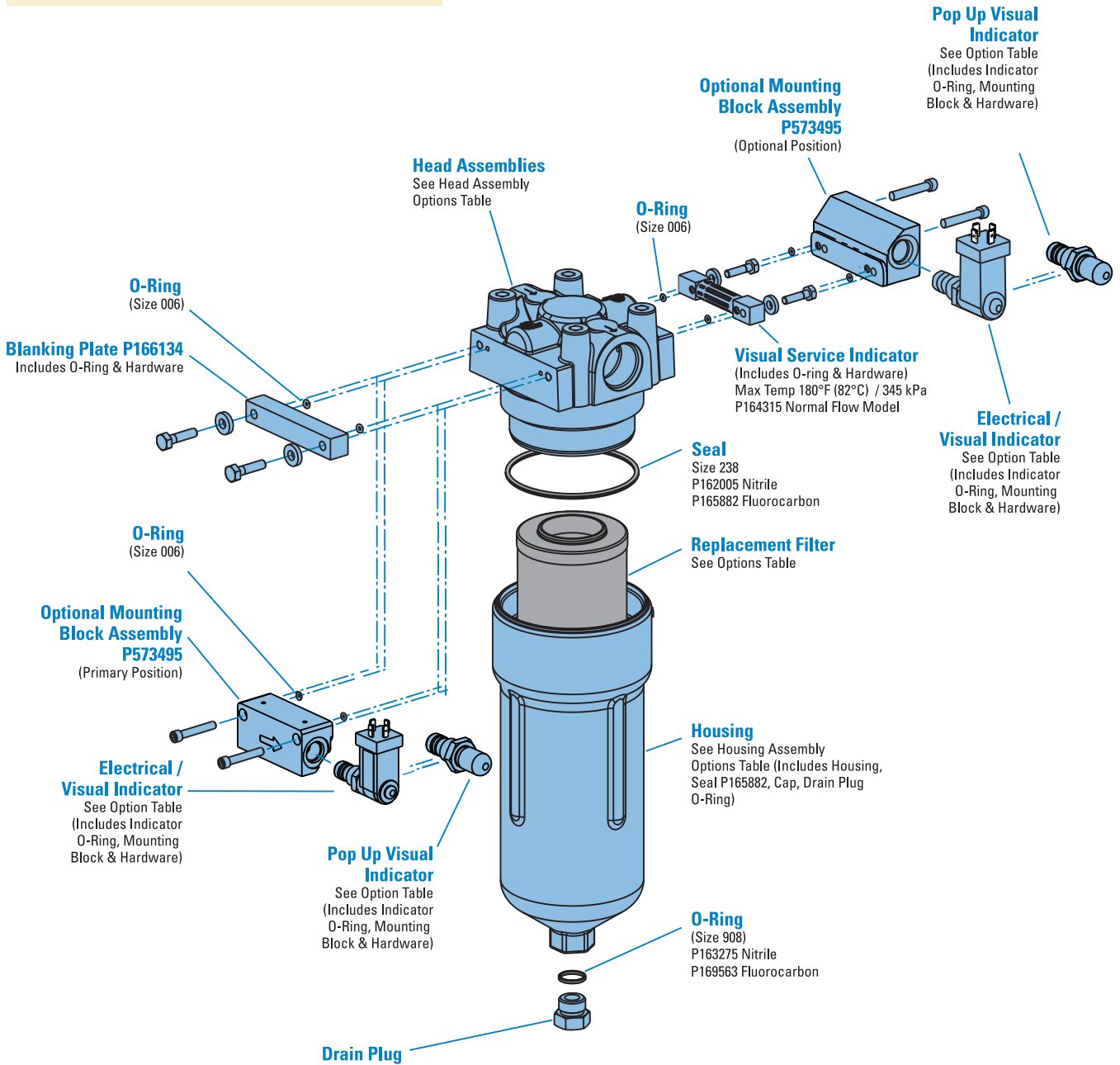
Performance Data



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

Applications

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



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
- Nitrile seals standard, fluorocarbon available
- Head material: cast iron
- Housing material: steel

Beta Rating

- Performance to $\beta_{<40}_(c)=1000$

Porting Size Options

- SAE-20 O-Ring

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)

Filter Collapse Ratings

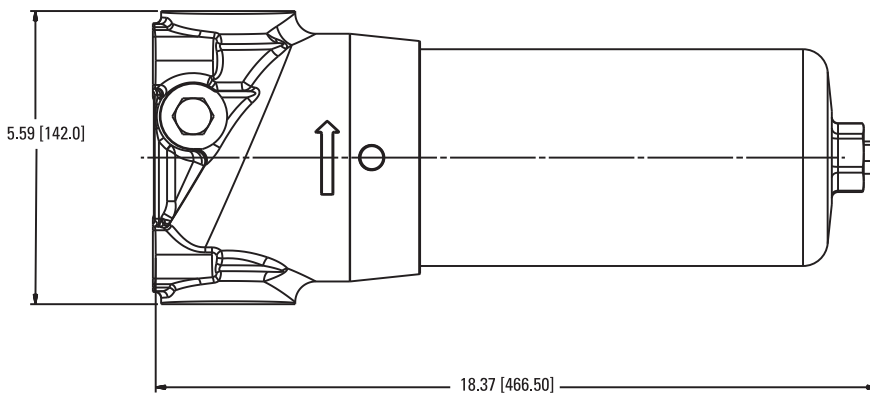
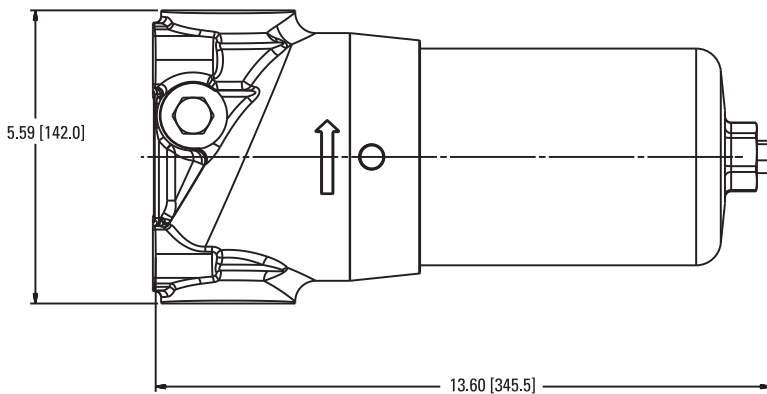
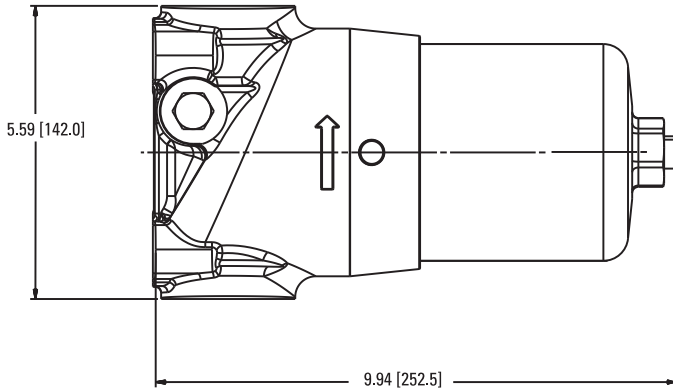
- 290 psi / 1999 kPa / 20.0 bar (standard)
- 3000 psi / 20,700 kPa / 206.8 bar (wire mesh)



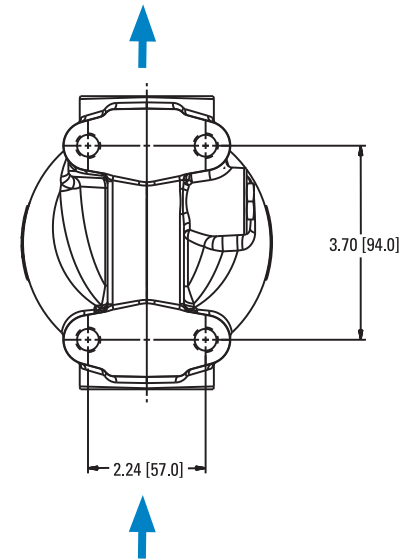
FPK04 Specification Illustrations

ASSEMBLY - SIDE VIEW

All dimensions are shown in inches [millimeters].



HEAD - TOP VIEW





FPK04 Components

Filter Choices

Media Type	$\beta_{x(c)} = 1000$	$\beta_{x(c)} = 2$	Length		Part No.	Comments
	Rating based on ISO 16889		in	mm		
DT Synthetic	<4 μm		4.59	117	P566204	DT-9600-4-2UM
	5 μm		4.59	117	P566205	DT-9600-4-5UM
	5 μm		4.58	116.3	P167184	DT-9601-4-5UM, High Collapse
	8 μm		4.59	117	P566206	DT-9600-4-8UM
	12 μm		4.59	117	P566207	DT-9600-4-14UM
	12 μm		4.58	116.3	P167843	DT-9601-8-14UM, High Collapse
	23 μm		4.59	117	P566208	DT-9600-4-25UM
	<4 μm		8.22	209	P566209	DT-9600-8-2UM
	5 μm		8.22	209	P566210	DT-9600-8-5UM
	5 μm		8.20	208.3	P167185	DT-9601-4-14UM, High Collapse
	8 μm		8.22	209	P566211	DT-9600-8-8UM
	12 μm		8.22	209	P566212	DT-9600-8-14UM
	12 μm		8.20	208.3	P167186	DT-9601-13-5UM, High Collapse
	23 μm		8.22	209	P566213	DT-9600-8-25UM
	<4 μm		12.91	328	P566214	DT-9600-13-2UM
	5 μm		12.91	328	P566215	DT-9600-13-5UM
	5 μm		12.88	327.2	P167411	DT-9601-8-5UM, High Collapse
	8 μm		12.91	328	P566216	DT-9600-13-8UM
	12 μm		12.91	328	P566217	DT-9600-13-14UM
	12 μm		12.88	327.2	P167412	DT-9601-13-14UM, High Collapse
23 μm		12.91	328	P566218	DT-9600-13-25UM	
Water Absorbing		10 μm	8.20	208.3	P569528	9600 Absorbs 180 ml of water @ 25 psid
		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 Nitrile, Wire mesh



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. Fluorocarbon seals are standard on all Donaldson DT filters. Refer to the table in the Technical Reference Guide for fluid compatibility with our filter media. 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. 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. 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.

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

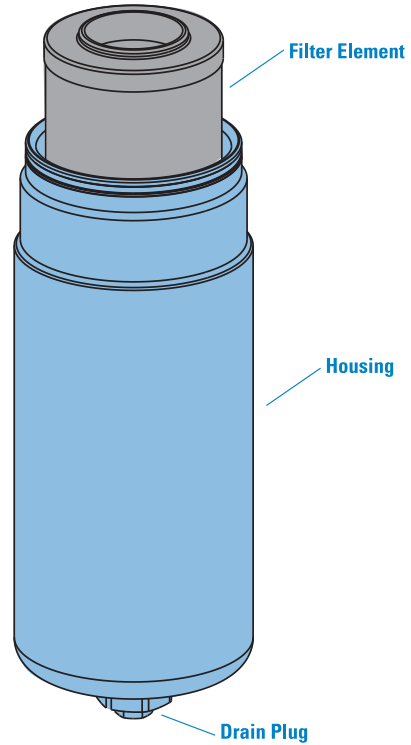
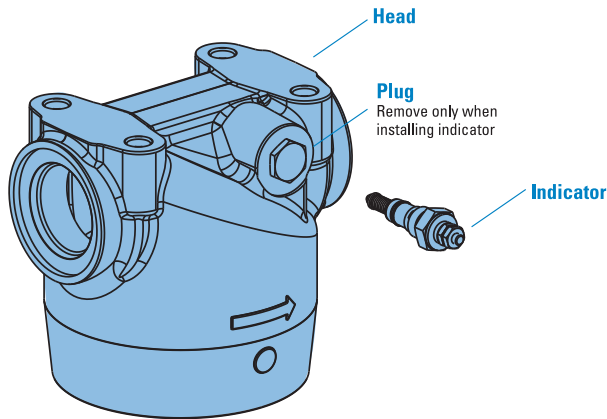
Set Point / Type	Part No.
39 psi / 2.7 bar, electrical, normally open.	P165194
39 psi / 2.7 bar, electrical, normally closed, D.C. two-wire	P574967
39 psi / 2.7 bar, electrical, normally open, D.C. two-wire	P574968



FPK04 Service Parts

SERVICE PARTS NOTE:

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

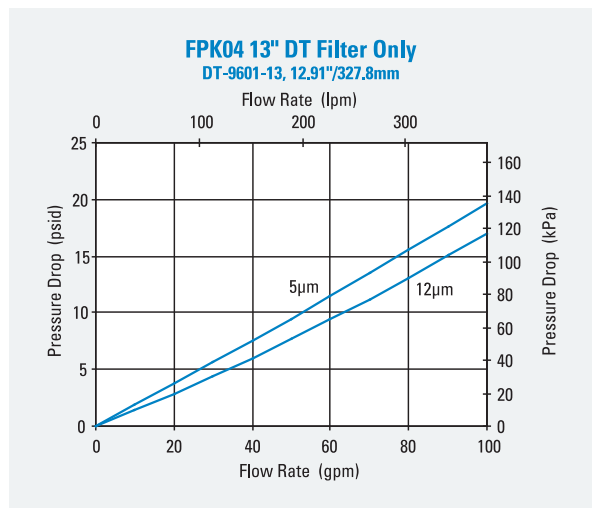
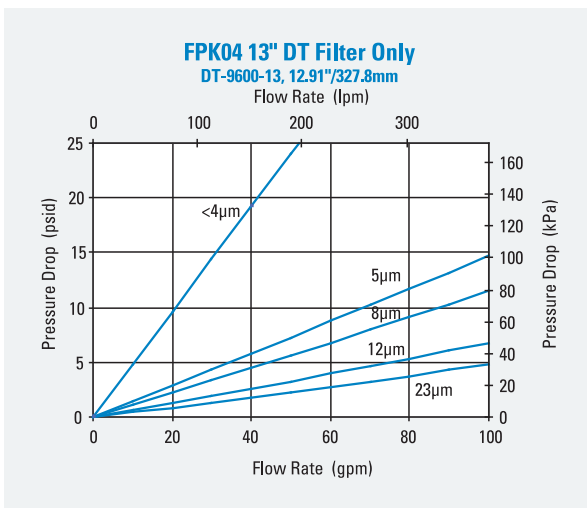
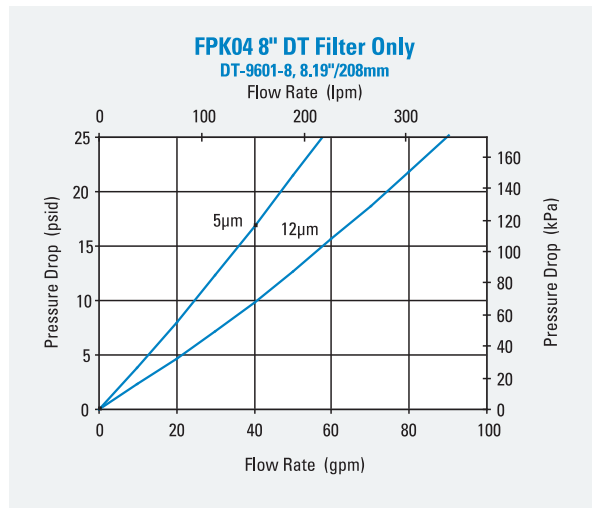
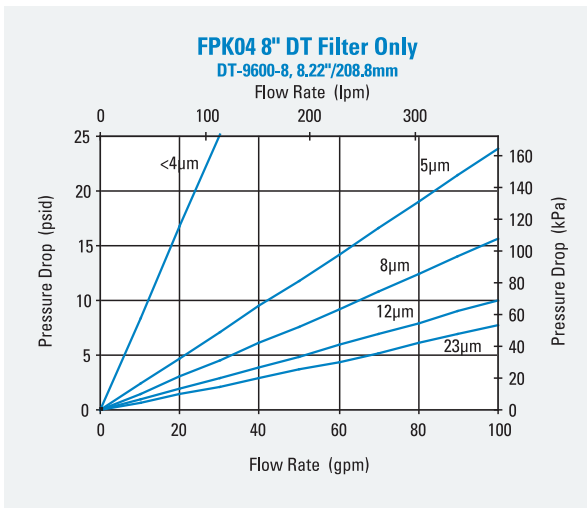
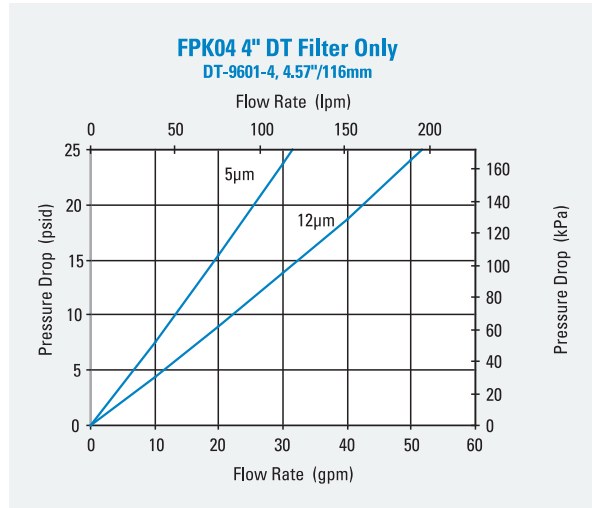
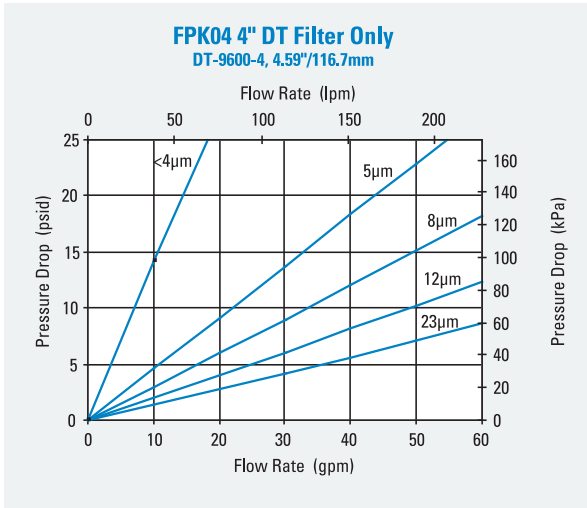


Performance Data





Performance Data



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

Applications

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



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 $\beta_{<4(\mu)}=1000$

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

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

Operating Temperatures

- -20°F to 250°F / -27°C to 121°C

Filter Collapse Ratings

- 290 psi / 1999 kPa / 20.0 bar (standard)
- 3000 psi / 20,700 kPa / 206.9 bar (high collapse)



HPK04

Max Flow: 120 gpm (454 lpm)

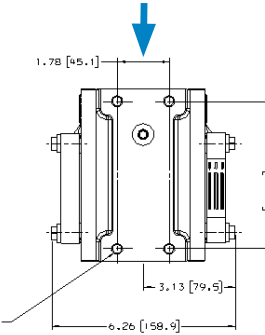
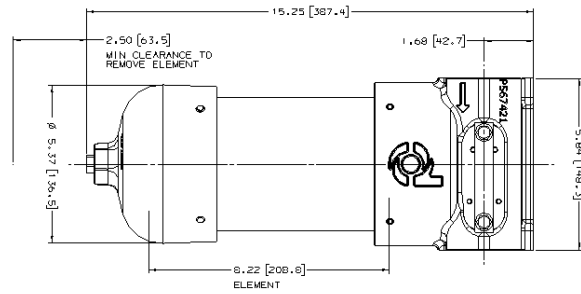


HPK04 Specification Illustrations

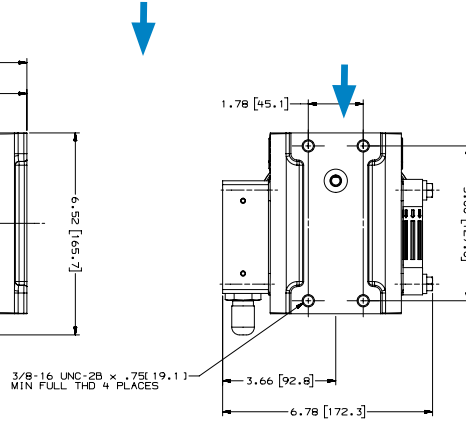
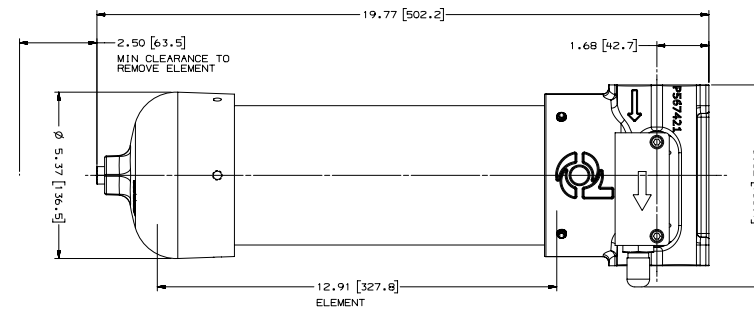
ASSEMBLY - SIDE VIEW

All dimensions are shown in inches [millimeters].

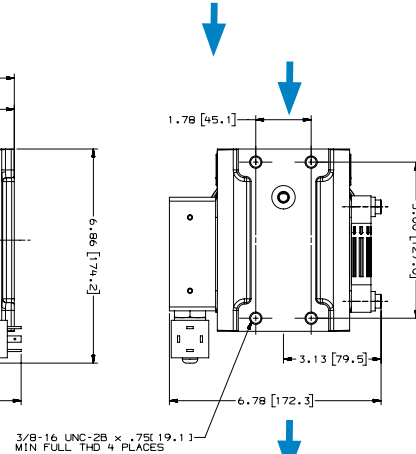
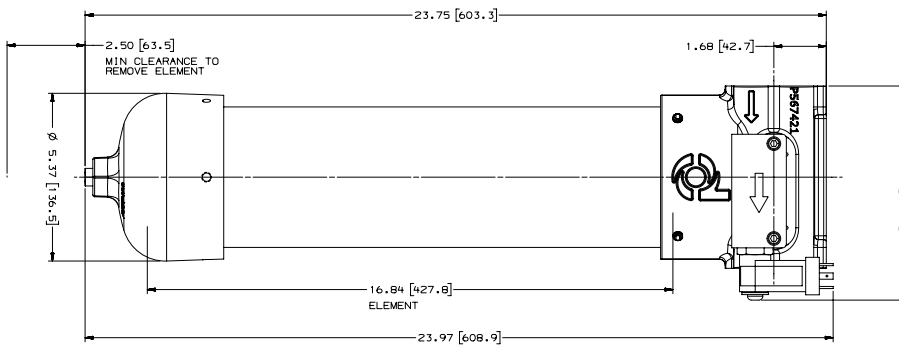
HEAD - TOP VIEW



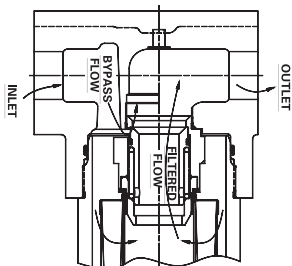
HPK04 with Visual Service Indicator



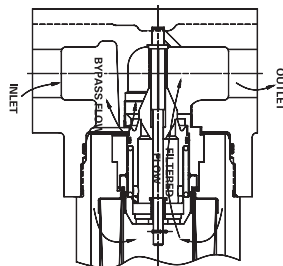
HPK04 with AC/DC Electrical Service Indicator



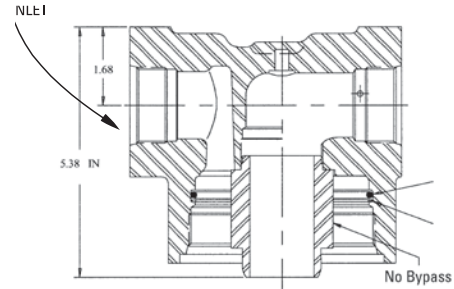
BYPASS VALVE ALTERNATIVES



60 psi / 414 kPa Bypass Valve



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



No Bypass

HPK04 Components

High-Performance DT Filter Choices

Media Type	$\beta_{x(c)} = 1000$	$\beta_{x(c)} = 2$	Length		Part No.	Comments
	Rating based on ISO 16889		in	mm		
DT Synthetic	<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
	5 μm		8.20	208	P167185	DT-9601-8-5UM, High Collapse
	12 μm		8.22	209	P566212	DT-9600-8-14UM
	12 μm		8.20	208	P167186	DT-9601-13-14UM, High Collapse
	23 μm		8.22	209	P566213	DT-9600-8-25UM
	<4 μm		12.91	328	P566214	DT-9600-13-2UM
	5 μm		12.91	328	P566215	DT-9600-13-5UM
	5 μm		12.88	327	P167411	DT-9601-8-14UM, High Collapse
	8 μm		12.91	328	P566216	DT-9600-13-8UM
	12 μm		12.91	328	P566217	DT-9600-13-14UM
	12 μm		12.88	327	P167412	DT-9601-16-5UM, High Collapse
	23 μm		12.91	328	P566218	DT-9600-13-25UM
	<4 μm		16.84	428	P566219	DT-9600-16-2UM
	5 μm		16.84	428	P566220	DT-9600-16-5UM
	5 μm		16.83	427	P167187	DT-9601-13-5UM, High Collapse
	8 μm		16.84	428	P566221	DT-9600-16-8UM
	12 μm		16.84	428	P566222	DT-9600-16-14UM
	12 μm		16.83	427	P167188	DT-9601-16-14UM, High Collapse
23 μm		16.84	428	P566223	DT-9600-16-25UM	
Water Absorbing		10 μm	8.20	208	P569528	9600 Series, Absorbs 180 ml water @ 25 psid
		10 μm	12.93	328	P569529	9600 Series, Absorbs 220 ml water @ 25 psid
		10 μm	16.83	427	P569530	9600 Series, Absorbs 300 ml water @ 25 psid
Wire Mesh		75 μm	8.20	208	P162233	9600 Series, Nitrile



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. Fluorocarbon seals are standard on all Donaldson DT filters. 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. Filters with seals made of fluorocarbon 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 fluorocarbon 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.



HPK04

Max Flow: 120 gpm (454 lpm)

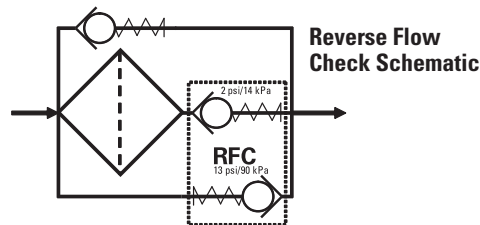


Housing Choices

Length		Part No.
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.

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

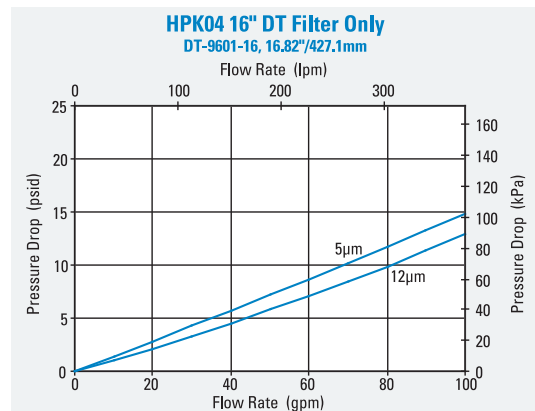
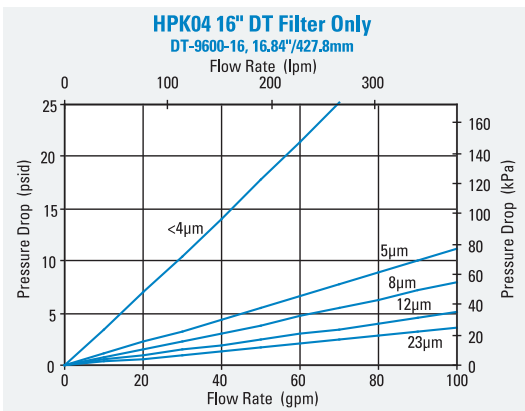
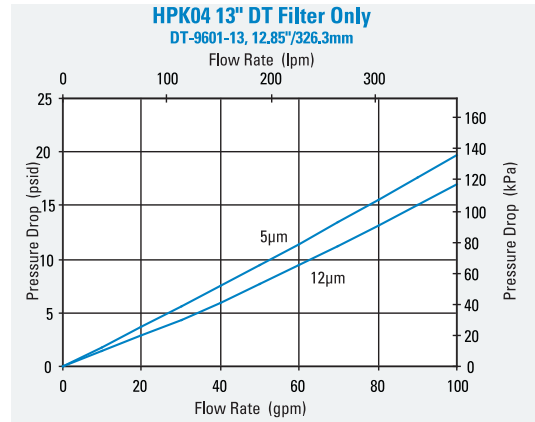
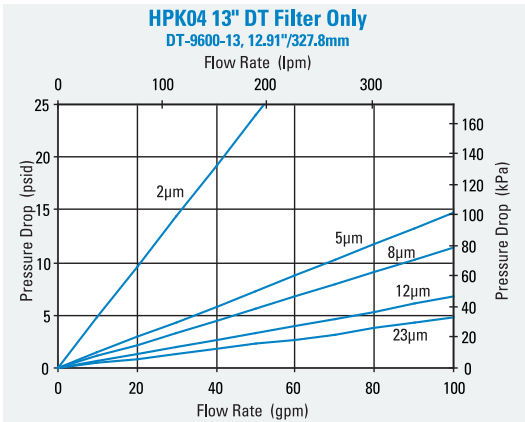
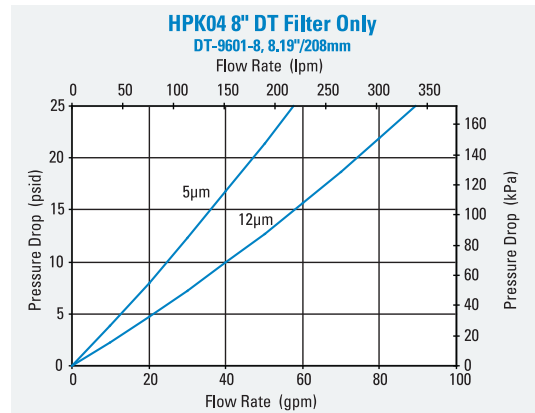
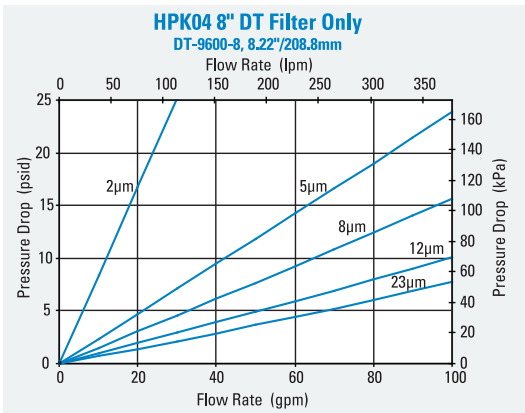
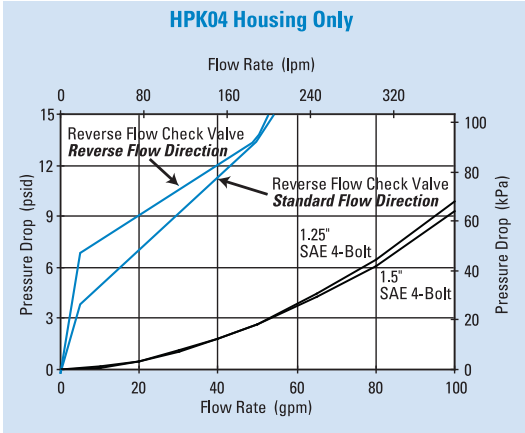
Part No.	Bypass Valve Pressure of:	Description
Visual Service Indicators		
P569632	60 psi / 4.1 bar	35 psi/2.4 bar indicator kit auto reset pop-out button
P569633	90 psi / 6.2 bar	70 psi/4.8 bar indicator kit auto reset pop-out button
P567988	60 psi / 4.1 bar	35 psi/2.4 bar indicator kit auto reset pop-out 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	Part No.	Description
P567458	Visual/Electrical indicator with thermal lockout and surge, 35 psid/2.4 bar	P569638	Visual/Electrical Indicator, 35 psid/2.4 bar
P567459	Visual/Electrical indicator, with thermal lockout and surge, 70 psid/4.8 bar	P569639	Visual/Electrical Indicator, 70 psid/4.8 bar
P567456	Pop-Up Visual Indicator, with thermal lockout and surge, 35 psid/2.4 bar	P164315	Visual Indicator, bar style, 35 psid/2.4 bar
P567457	Pop-Up Visual Indicator, with thermal lockout and surge, 70 psid/4.8 bar	P166603	Visual Indicator, bar style, 70 psid/4.8 bar
P569636	Pop-Up Visual Indicator, 35 psid/2.4 bar	P166134	Blanking plate
P569637	Pop-Up Visual Indicator, 70 psid/4.8 bar		
Indicator Mounting Block			
P573495	Mounting Block Assembly		



Performance Data





HPK04

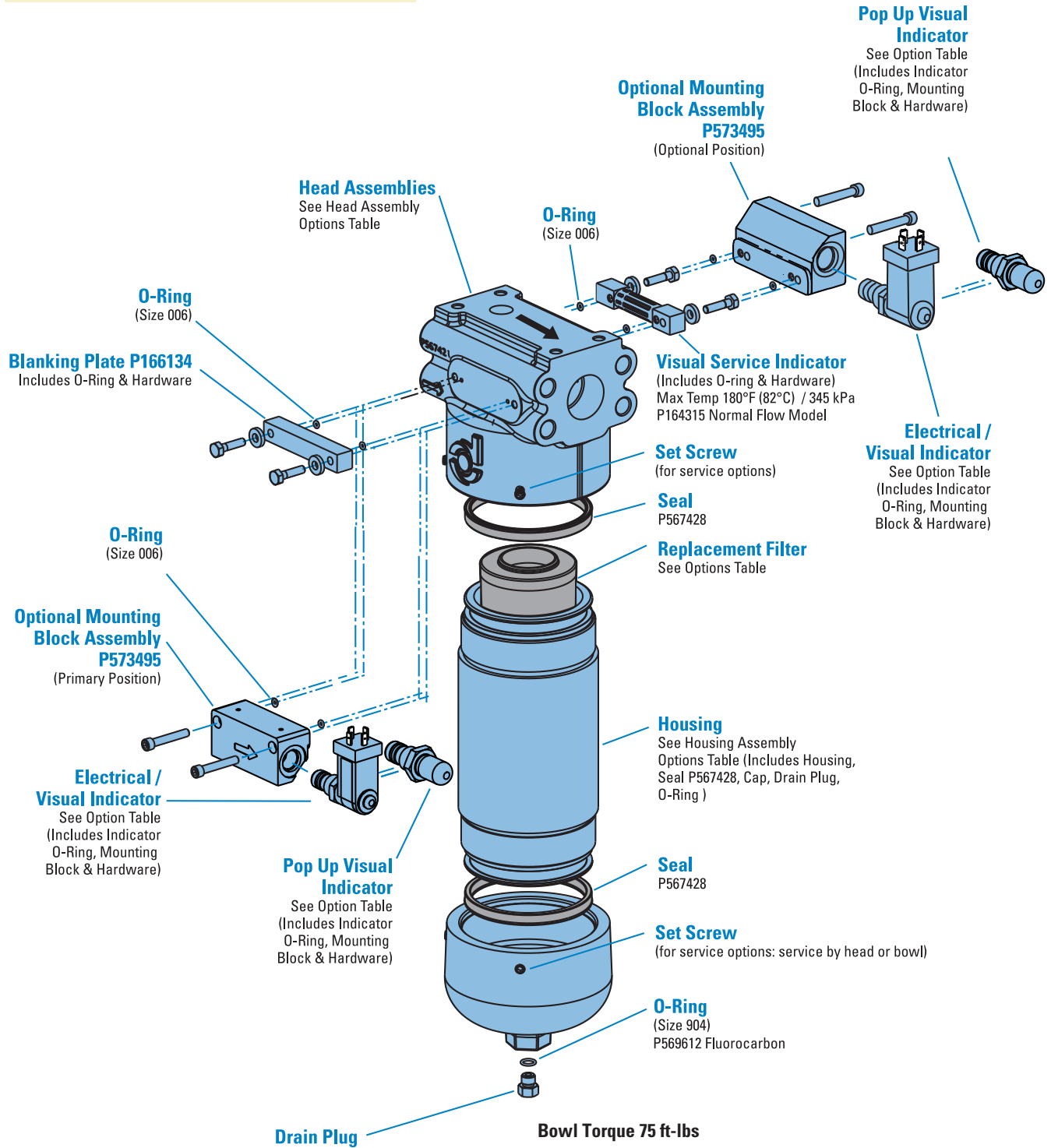
Max Flow: 120 gpm (454 lpm)



HPK04 Service Parts

SERVICE PARTS NOTE:

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



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 $\beta_{5(\mu)}=1000$

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

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

Operating Temperatures

- -45° to 250°F (-43° to 121°C)

Filter Collapse Ratings

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



W451

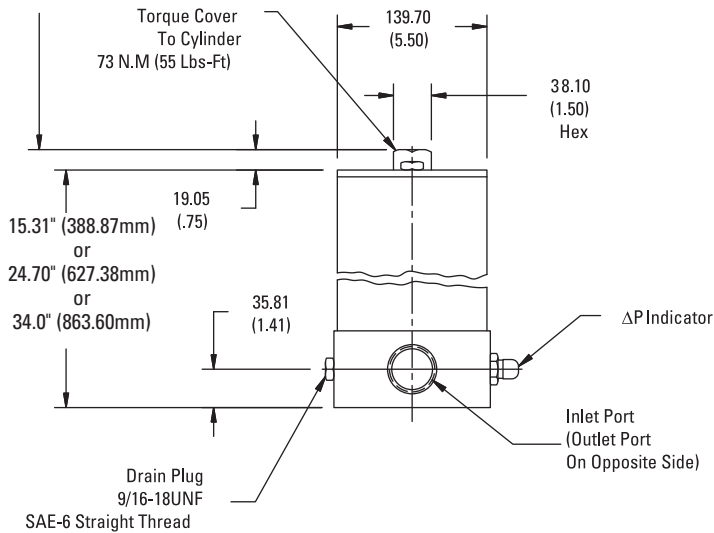
Max Flow: 150 gpm (568 lpm)



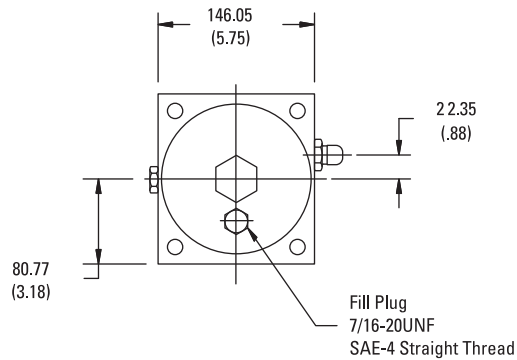
W451 Specification Illustrations

ASSEMBLY - SIDE VIEW

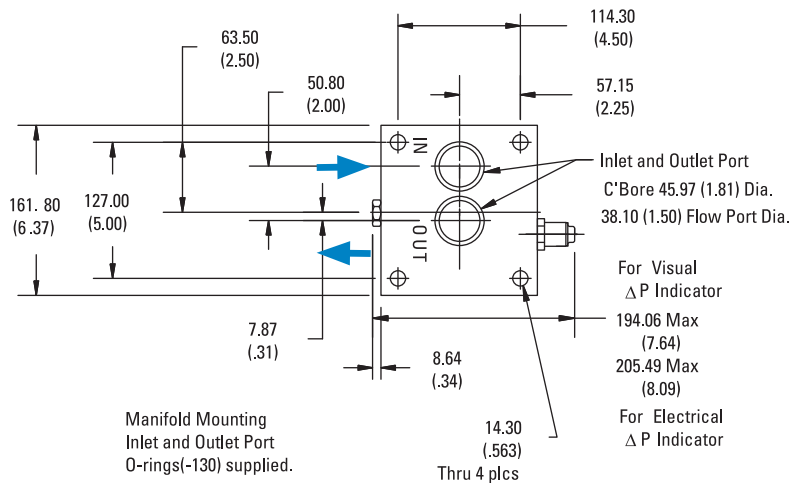
All dimensions are shown in millimeters [inches].



HEAD - SIDE VIEW



HEAD - BOTTOM VIEW





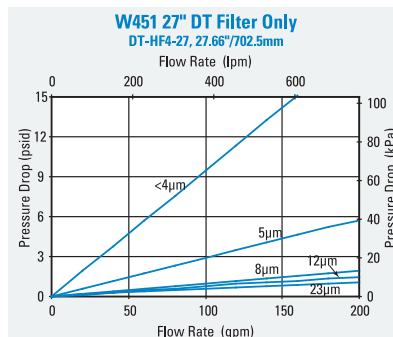
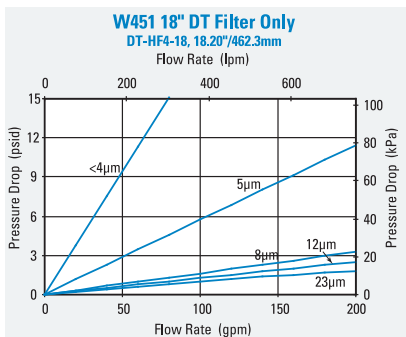
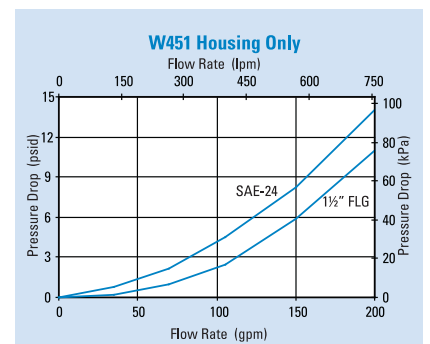
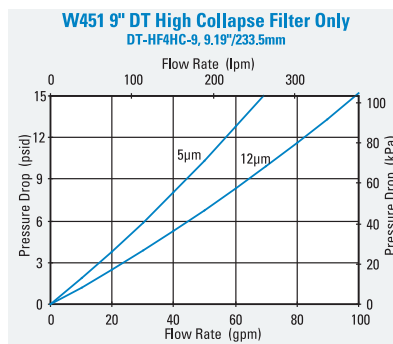
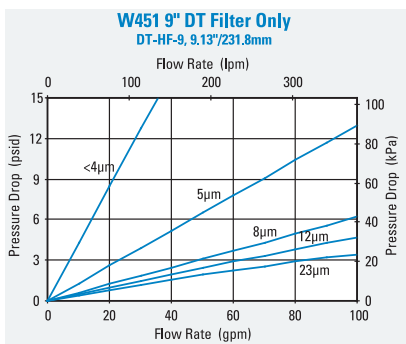
W451 Components

Filter Choices

Media Type	$\beta_{x(c)} = 2$	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889		in	mm		
DT 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). Fluorocarbon seals are standard on all Donaldson DT filters.

Performance Data





W451

Max Flow: 150 gpm (568 lpm)



Filter Assembly Choices

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

Indicator Choices

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

Service Part Choices

Part No.	Description
X011174	Head/Bowl/Housing seal kit - nitrile
X011175	Head/Bowl/Housing seal kit - fluorocarbon

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 a variety of designs. 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
- Head material: cast iron
- Housing material: steel
- Reverse flow bypass valve option available



Beta Rating

- Performance to $\beta_{<41(c)}=1000$

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

- 4.59" / 116.6mm
- 8.22" / 203.2mm
- 12.91" / 330.2mm
- 16.84" / 406.4mm

Standard Bypass Ratings

- 50 psi / 345 kPa / 3.5 bar
- 90 psi / 621 kPa / 6.2 bar

Assembly Weight

- 9.00": 23 lbs / 10.43 kg
- 13.00": 33 lbs / 14.97 kg
- 18.00": 42 lbs / 19.05 kg
- 22.00": 48 lbs / 21.77 kg

Operating Temperatures

- -20° to 250°F (-29° to 121°C)

Filter Collapse Ratings

- 290 psi / 1999 kPa / 20.0 bar (standard)
- 3000 psi / 20,700 kPa / 206.8 bar (high collapse)



W620

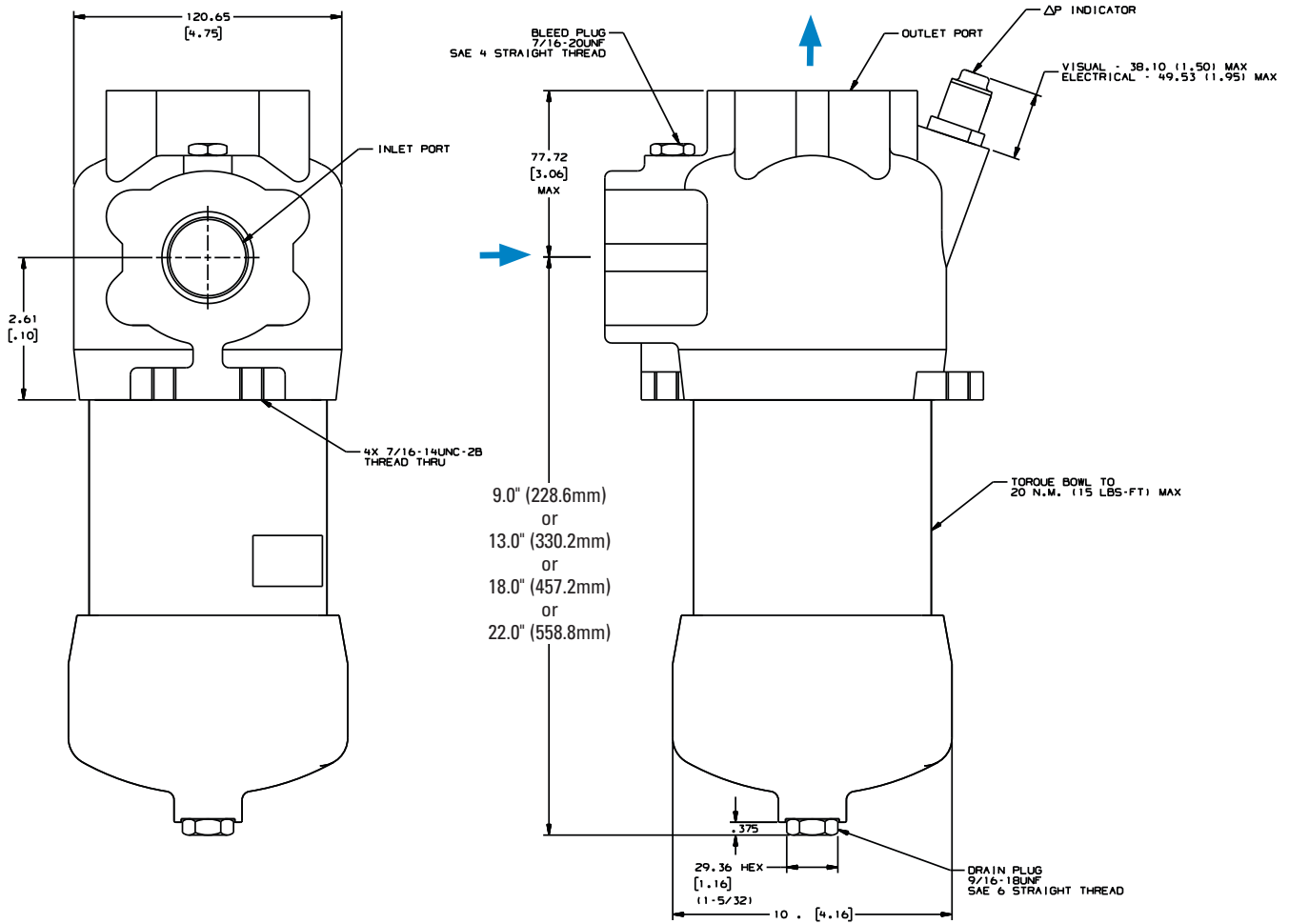
Max Flow: 150 gpm (568 lpm)



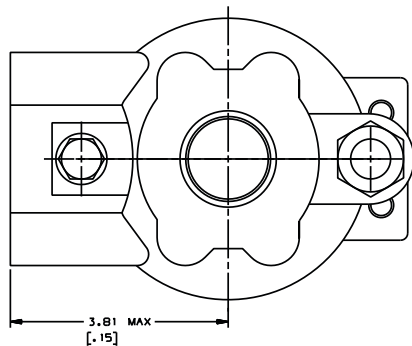
W620 Specification Illustrations

ASSEMBLY - SIDE VIEW

All dimensions are shown in millimeters [inches].



HEAD - TOP VIEW





W620 Components

Filter Choices

Media Type	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889	in	mm		
DT Synthetic	<4 μm	4.59	117	P566204	DT-9600-4-2UM
	5 μm	4.59	117	P566205	DT-9600-4-5UM
	5 μm	4.56	116	P167184	DT-9601-4-5UM, High Collapse
	8 μm	4.59	117	P566206	DT-9600-4-8UM
	12 μm	4.59	117	P566207	DT-9600-4-14UM
	12 μm	4.56	116	P167843	DT-9601-4-14UM, High Collapse
	23 μm	4.59	117	P566208	DT-9600-4-25UM
	<4 μm	8.22	209	P566209	DT-9600-8-2UM
	5 μm	8.22	209	P566210	DT-9600-8-5UM
	5 μm	8.19	208	P167185	DT-9601-8-5UM, High Collapse
	8 μm	8.22	209	P566211	DT-9600-8-8UM
	12 μm	8.22	209	P566212	DT-9600-8-14UM
	12 μm	8.19	208	P167186	DT-9601-8-14UM, High Collapse
	23 μm	8.22	209	P566213	DT-9600-8-25UM
	<4 μm	12.91	328	P566214	DT-9600-13-2UM
	5 μm	12.91	328	P566215	DT-9600-13-5UM
	5 μm	12.85	326	P167411	DT-9601-13-5UM, High Collapse
	8 μm	12.91	328	P566216	DT-9600-13-8UM
	12 μm	12.91	328	P566217	DT-9600-13-14UM
	12 μm	12.85	326	P167412	DT-9601-13-14UM, High Collapse
	23 μm	12.91	328	P566218	DT-9600-13-25UM
	<4 μm	16.84	428	P566219	DT-9600-16-2UM
	5 μm	16.84	428	P566220	DT-9600-16-5UM
	5 μm	16.84	428	P167187	DT-9601-16-5UM, High Collapse
	8 μm	16.84	428	P566221	DT-9600-16-8UM
	12 μm	16.84	428	P566222	DT-9600-16-14UM
	12 μm	16.84	428	P167188	DT-9601-16-14UM, High Collapse
	23 μm	16.84	428	P566223	DT-9600-16-25UM



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. Fluorocarbon seals are standard on all Donaldson DT filters. 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. High collapse designs are also potted into machined aluminum endcaps for greater filter integrity in critical applications. The fluorocarbon seal/high collapse filters also use epoxy potting and media seam seals for added chemical compatibility. High collapse designs are double wire-backed using stainless steel mesh. 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.



W620

Max Flow: 150 gpm (568 lpm)



Head Assembly Choices

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

Housing Choices

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

Service Part Choices

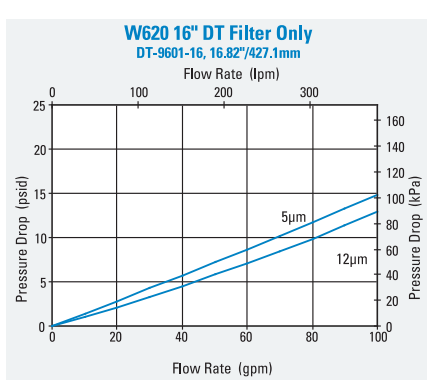
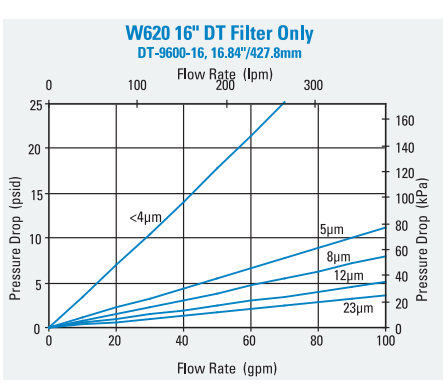
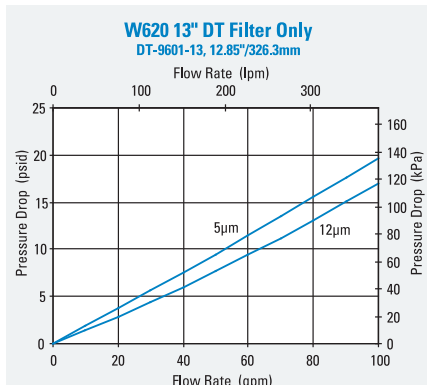
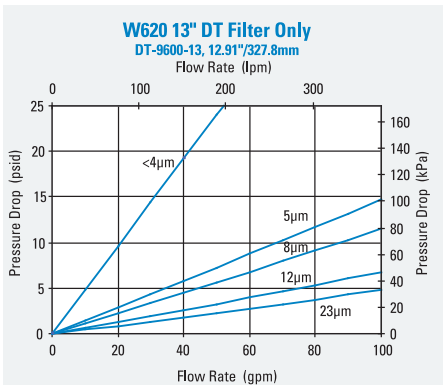
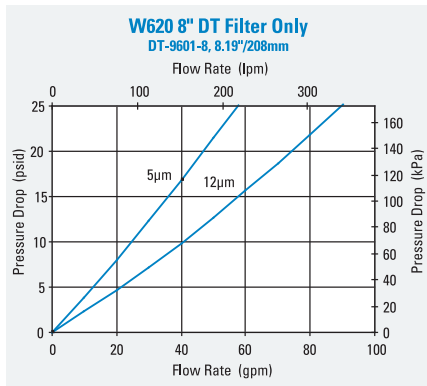
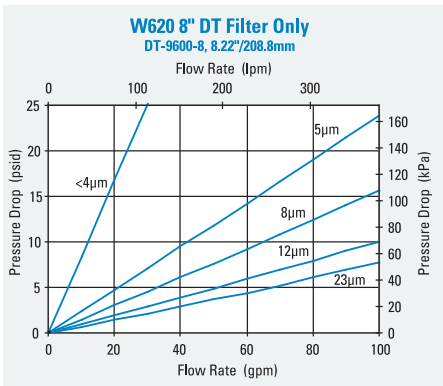
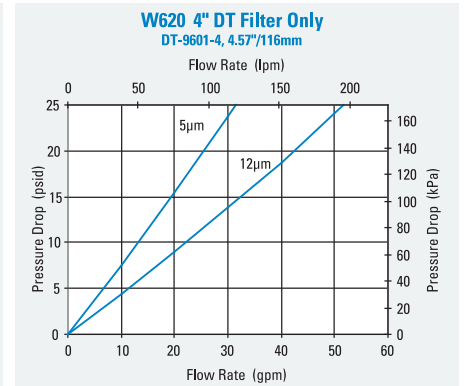
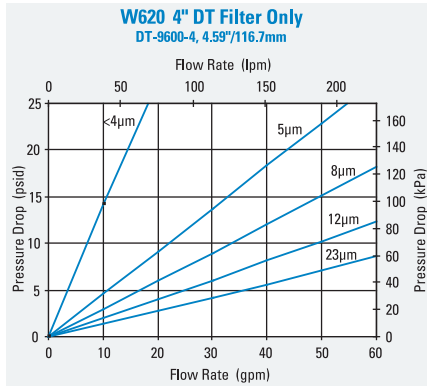
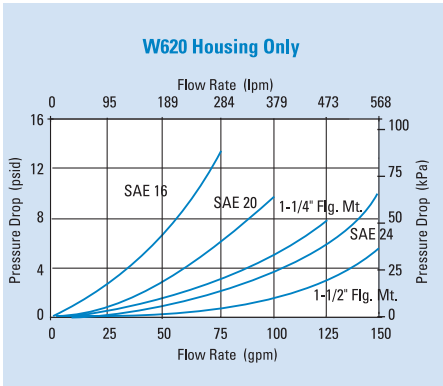
Part No.	Description
X011182	Head/Bowl/Housing Seal Kit - nitrile
X011183	Head/Bowl/Housing Seal Kit - fluorocarbon

Indicator Choices

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



Performance Data





HPK05

Max Flow: 200 gpm (757 lpm)



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

Applications

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



Features

The HPK05 high pressure filter series is made of ductile iron and steel for strength and durability. Machined bypass valves are case-hardened at critical points to provide maximum strength and reliability.

Reverse flow bypass valve allows bi-directional flow through the filter head, with head-up or head-down mounting capabilities. Available with your choice of visual or AC/DC electrical service indicator; choose fluorocarbon or nitrile seals. The HPK05 filters contain Synteq™, Donaldson's exclusive synthetic fiber media formulated especially for hydraulic filtration. Upgraded Donaldson high-performance DT filters are also offered for superior performance.

Beta Rating

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

Porting Size Options

- 2" SAE 4-Bolt Flange Code 61

Replacement Filter Lengths

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

Standard Bypass Ratings

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

Assembly Weight

- 63 lbs / 28.5

Operating Temperatures

- -20°F to 250°F / -29°C to 121°C

Filter Collapse Ratings

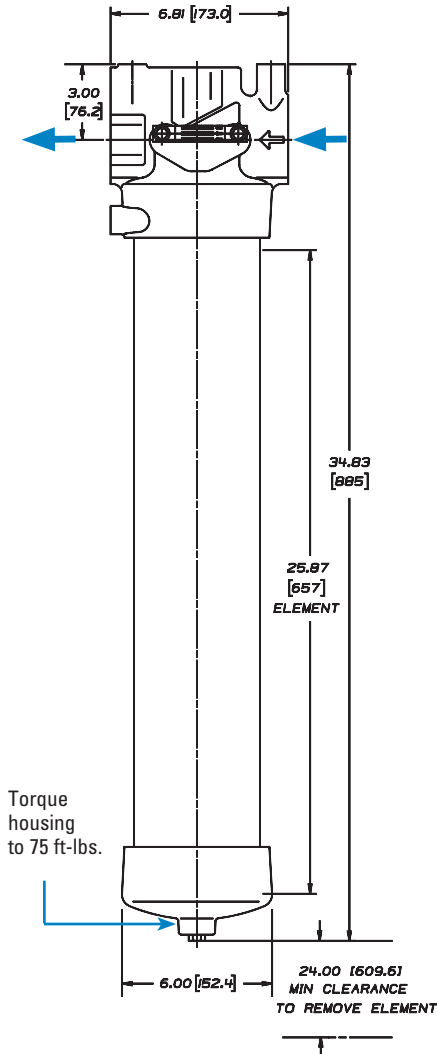
- 200 psi / 1380 kPa / 13.8 bar (standard)
- 3000 psi / 20,700 kPa / 206.9 bar (high collapse)



HPK05 Specification Illustrations

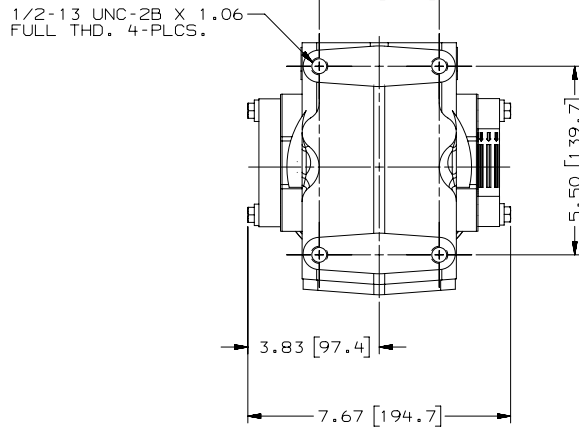
ASSEMBLY - SIDE VIEW

All dimensions are shown in inches [millimeters].

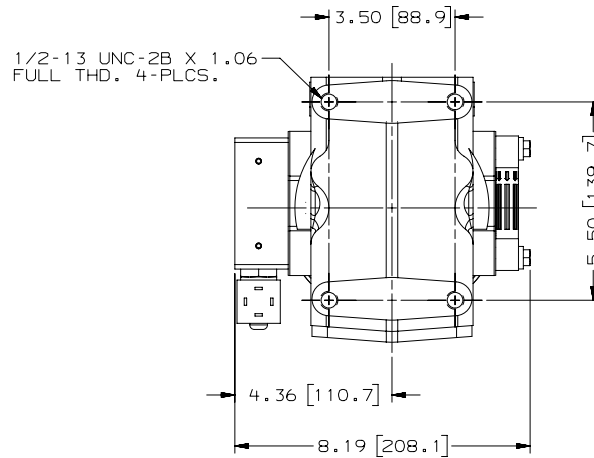


HEAD - TOP VIEW

HPK05
with Visual Service Indicator

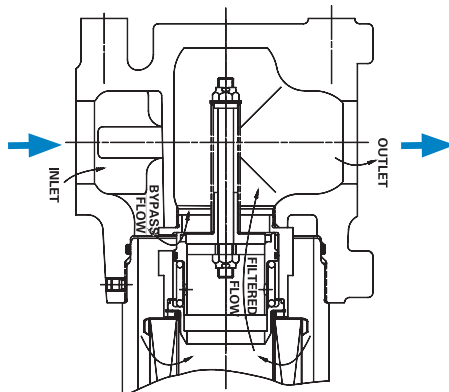


HPK05
with AC/DC Electrical Service Indicator

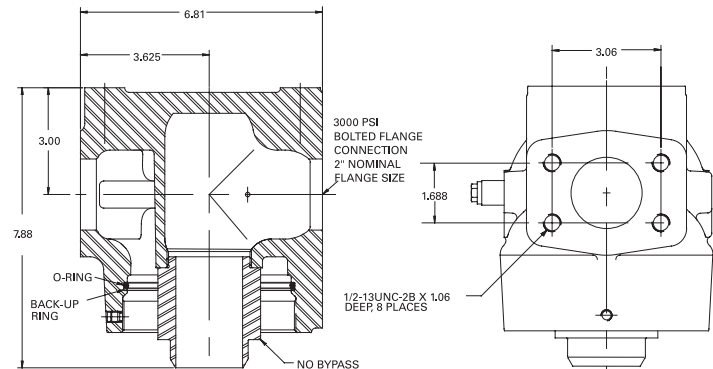


BYPASS VALVE ALTERNATIVES

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



No Bypass





HPK05

Max Flow: 200 gpm (757 lpm)



HPK05 Components

Filter Choices

Media Type	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889	in	mm		
DT Synthetic	<4 μm	25.9	658	P566449	DT-9400-26-2UM
	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. Fluorocarbon seals are standard on all Donaldson DT filters.

Assembly Choices

Includes Standard Filter

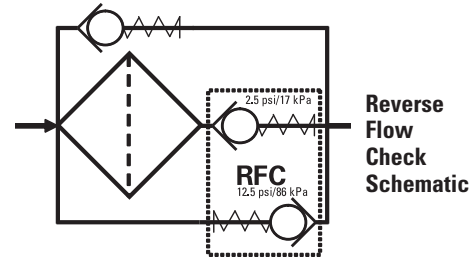
Port Size	Bypass Rating	Indicator Style/ Location ¹	Assembly Number	Filter Part No.
2" SAE 4-Bolt Flange (Code 61)	60 psi / 414 kPa / 4.1 bar Reverse flow check valve	Visual, Left side	K052024	P164229
	No Bypass	Visual & Electrical ²	K052039	P566643 ³

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 (P170365) is mounted on the right side.

³Rated as high collapse (3000 psi / 20700 kPa); has fluorocarbon seals.



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

Part No.	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 & 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 & surge control, Hirschmann receptacle, 115 VAC/28 VDC, 2 amps, 4 pin DIN 43650

Indicator Choices (Replacement Indicator Only)

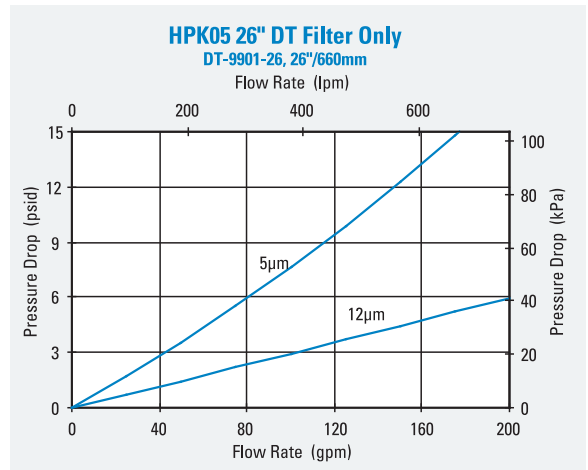
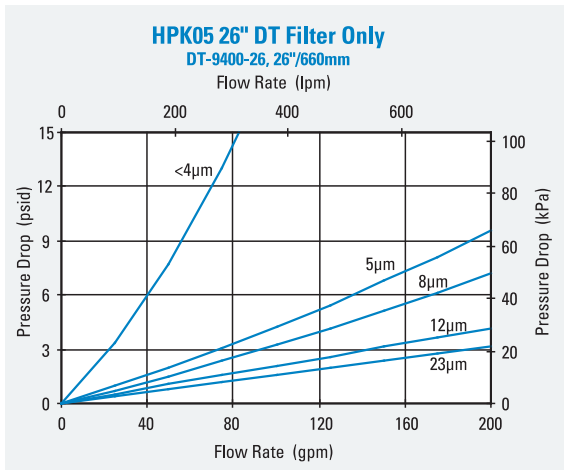
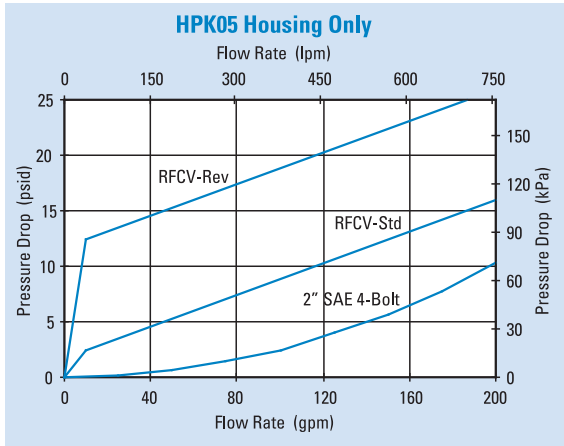
Part No.	Description	Part No.	Description
P567458	Visual/Electrical indicator with thermal lockout and surge, 35 psid/2.4 bar	P569638	Visual/Electrical Indicator, 35 psid/2.4 bar
P567459	Visual/Electrical indicator, with thermal lockout and surge, 70 psid/4.8 bar	P569639	Visual/Electrical Indicator,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

Indicator Mounting Block

P573495	Mounting Block Assembly
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Performance Data





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.

