

Head Choices for HMK05 (single)

Port Size	Bypass Rating	Standard Indicator Style & Location ¹	Indicator Options ²	Part No.
1¼" NPT	25 psi / 172 KPa	D (Visual), Both Sides (25 psi)	A, B, C, E, F	P167294
1¼" NPT	25 psi / 172 kPa	A (Electrical) (25 psi)	A, B, C, E, F	P167621
	25 psi / 172 KPa	D (Visual), Left Side (25 psi)	D	P167622
SAE-20 O-Ring	25 psi / 172 KPa	D (Visual), Both Sides (25 psi)	A, B, C, E, F	P165973
	25 psi / 172 KPa	None	None	P167619
	50 psi / 345 KPa	D (Visual), Left Side, Blank Plate Right Side	A, B, C, E, F	P561885
	No Bypass	D (Visual), Both Sides (25 psi)	A, B, C, E, F	P166663
	No Bypass	D (Visual), Right Side (25 psi)	D	P564486
No Bypass	D (Visual), Both Sides (50 psi)	A, B, C, E, F	P564858	



Single Head



Dual Head

Head Choices for HMK25 (dual)

Port Size	Bypass Rating	Indicator Style & Location ¹	Indicator Options ²	Part No.
1½" NPT	25 psi / 172 KPa	D (Visual), Left side only	A,B,C,E,F	P169985
1½" SAE 4-Bolt Flange	25 psi / 172 kPa	D (Visual), Both sides	A,B,C,E,F	P167296
	No Bypass	D (Visual), Both Sides	A,B,C,E,F	P169984
SAE-24 O-Ring	25 psi / 172 kPa	D (Visual), Both sides	A,B,C,E,F	P167297
1½" SAE 4-Bolt Flange	50 psi / 345 kPa	Visual RH	A,B,C,E,F	P560855*

* Ductile Iron Construction

NOTE:

Lubricate filter-to-head threads when installing new filter to prevent thread damage. Heavyweight gear lube is recommended.

Head Choice for HMK05 (3rd port return)

Port Size	Bypass Rating	Indicator Style & Location ¹	Indicator Options ²	Part No.
1¼" SAE 4-Bolt Flange (3rd port: 1" SAE 4-Bolt)	50 psi / 345 kPa	None	A,B,C,E,F	P561924

Head Notes

¹Donaldson uses the inlet port as the reference point. "Left side," for instance, means the indicator mounts on the Left side when you face the inlet port.

²May be purchased separately.

*Complete details on all service indicators can be found in the accessories section.

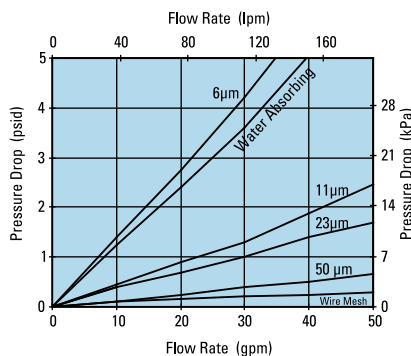
3-Port Head



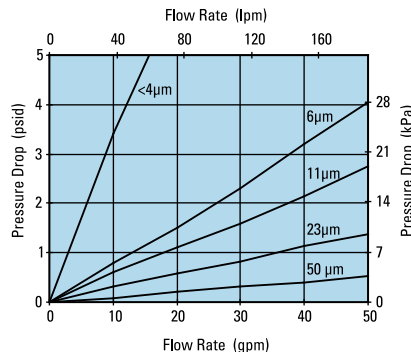
The **P561924** head is designed with a 50 psi / 3.45 bar third port bypass valve that diverts all bypass flow back to the reservoir, instead of going straight through the head and into the system as it does in 2-ported heads. Unfiltered fluid is NOT allowed into the system in the case of plugged filters. Designed primarily for charge pump applications.

Performance Data

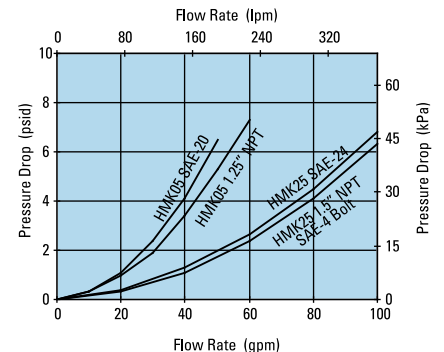
HMK05 Filter Only
(Synthetic, 11.6"/294mm)



HMK05 Filter Only
(Synthetic, 14.2"/361mm)



HMK05/25 Head Only





HNK04/05

Max Flow: 35 gpm (133 lpm) / 50 gpm (189 lpm)



HNK04/05 DURAMAX® Spin-On Filters

Working Pressures to:	HNK04	HNK05
	500 psi	350 psi
	3450 kPa	2415 kPa
	34.5 bar	24.1 bar

Rated Static Burst to:	1000 psi	800 psi
	6895 kPa	5515 kPa
	69 bar	55 bar

Flow Range To:	HNK04	HNK05
	35 gpm	50 gpm
	133 lpm	189 lpm



Features

HNK Duramax® filters utilize a RadialSeal™ design – making servicing easier and providing a more reliable seal without having to torque to specification.

- Applications include hydrostatic charge side filtration, pilot circuits, power shift transmissions and kidney loop circuits.
- Utilizes Synteq™ filter media for high filtration efficiency and higher dust-holding capacity.
- Improved performance including higher burst, greater fatigue strength and longer filter life.

Beta Rating

- Performance to $\beta_{6(c)}=1000$

Porting Size Options

- HNK04: SAE-12, SAE-16 O-ring
- HNK05: SAE-20 O-ring

Replacement Spin-On Lengths

- 04 short: 5.97" / 151.7 mm
- 04 long: 9.44" / 239.8 mm
- 05 short: 11.63" / 295.4 mm
- 05 long: 14.24" / 361.7 mm

Assembly Weight

- 04 short: 5.97" length - 3.95 lbs / 1.8 kg
- 04 long: 9.44" length - 4.7 lbs / 2.1 kg
- 05 short: 11.63" length - 7.35 lbs / 3.3 kg
- 05 long: 14.24" length - 8.0 lbs / 3.6 kg

Operating Temperatures

- -20° to 250°F (-29° to 121°C)

Standard Bypass Ratings

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

Filter Collapse Ratings

- 235 psi / 1621 kPa / 16.2 bar

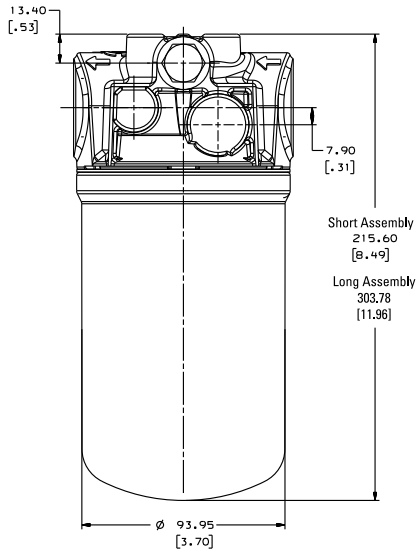
HNK04/05 Specification Illustrations

All dimensions are shown in inches [millimeters].

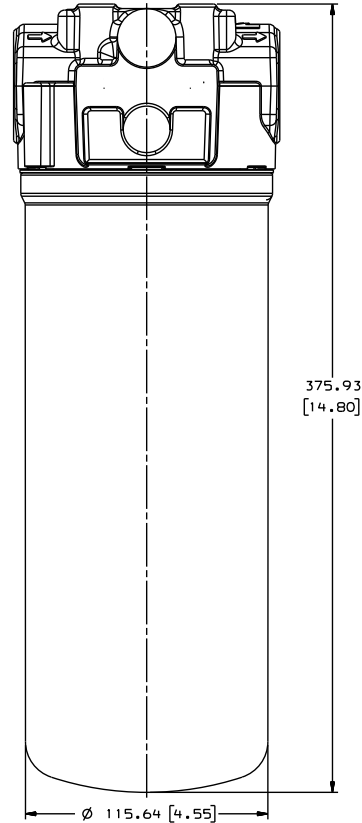
Applications

- Case Drains
- Cooling Circuits
- Fluid Conditioning Systems
- Fuel Transfer
- Hydrostatic Charge Pumps
- Lube Oil Systems
- Power Transmissions
- Return Lines
- Side Loop Systems

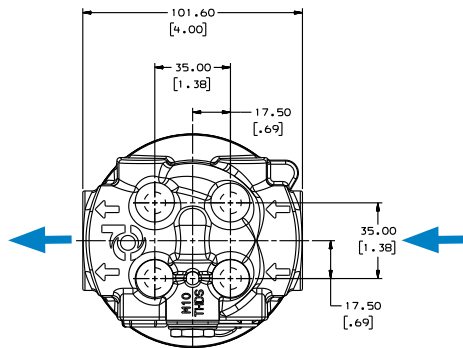
HNK04 Spin-on Assembly - Side View



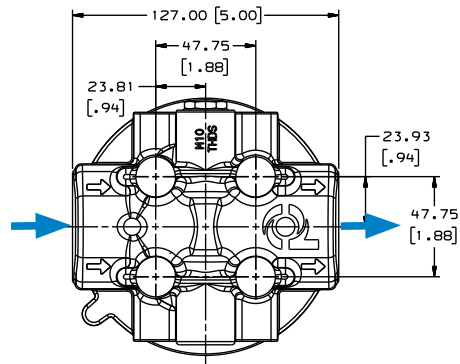
HNK05 Spin-on Assembly - Side View



HNK04 Head - Top View



HNK05 Head - Top View





HNK04/05

Max Flow: 35 gpm (133 lpm) / 50 gpm (189 lpm)



HNK04/05 Components

Head Choices for HNK04

Port Size	Bypass Rating	Part Number	Indicators	Style	Mounting Threads
SAE-12	50 psi / 3.5 bar	P568856	none	optional elect.	3/8"-16 UNC
SAE-12	No bypass	P568857	none	optional elect.	3/8"-16 UNC
SAE-16	50 psi / 3.5 bar	P568858	none	optional elect.	3/8"-16 UNC
SAE-16	No bypass	P568859	none	optional elect.	3/8"-16 UNC

Head Choices for HNK05

Port Size	Bypass Rating	Part Number	Indicators	Style	Mounting Threads
SAE-20	50 psi / 3.5 bar	P568860	none	optional elect.	3/8"-16 UNC
SAE-20	No bypass	P568861	none	optional elect.	3/8"-16 UNC

Indicator Choices

Set Point/Type	Part No.	Description
50 psi / 345 kPa	P165194	Electric Single post DC
25 psi / 172 kPa	P575334	Visual Indicator, Pop up
50 psi / 345 kPa	P575335	Visual Indicator, Pop up

Filter Choices for HNK04

Media Type	$\beta_{x(e)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.
		in	mm	
Synteq Synthetic	6 μ m	5.97	151.7	P569203
		9.44	239.8	P569204
	11 μ m	5.97	151.7	P569205
		9.44	239.8	P569206

Filter Choices for HNK05

Media Type	$\beta_{x(e)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.
		in	mm	
Synteq Synthetic	6 μ m	11.63	295.4	P569209
		14.24	361.7	P569210
	11 μ m	11.63	295.4	P569211
		14.24	361.7	P569212

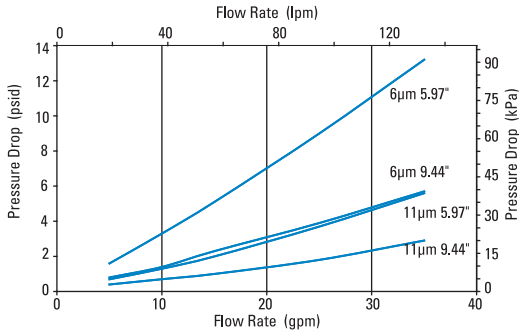
Filter Notes

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

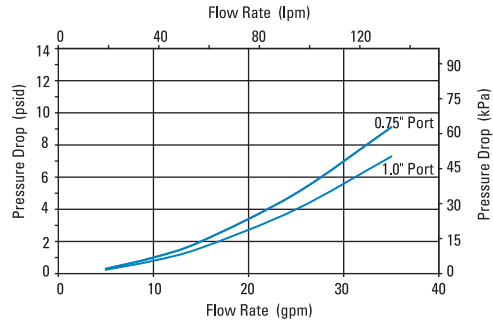


Performance Data

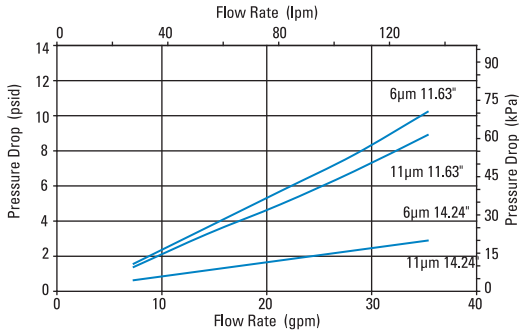
HNK04 Filter Only
(Synthetic, 5.97"/151.7mm & 9.44"/239.8 mm)



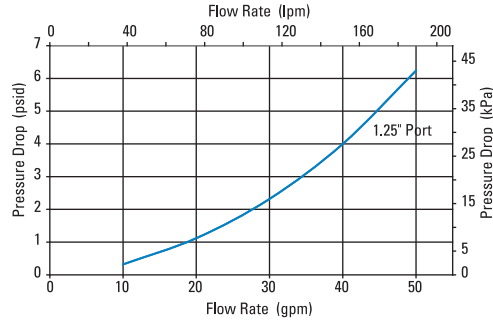
HNK04 Head Only



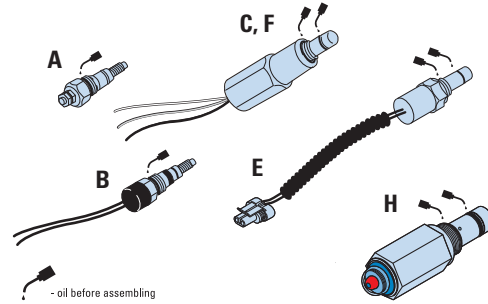
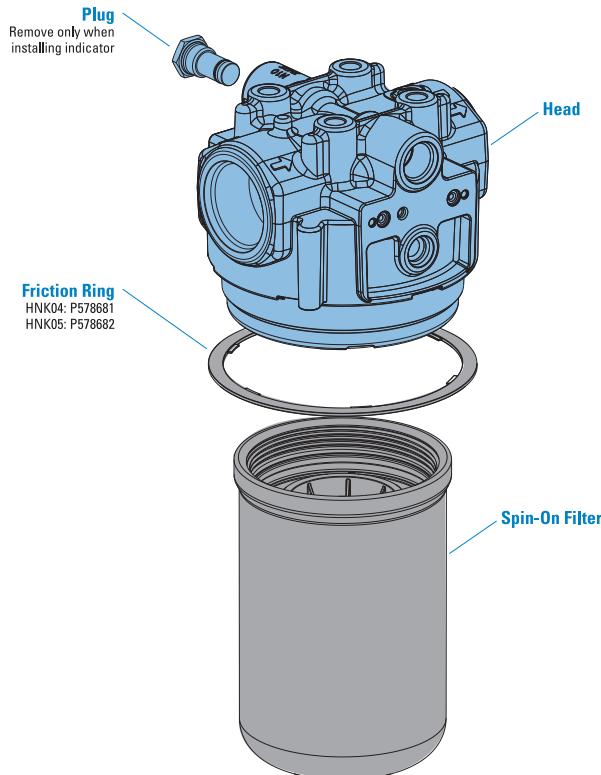
HNK05 Filter Only
(Synthetic, 11.63"/295.4mm & 14.24"/361.7 mm)



HNK05 Head Only



Service Parts



SERVICE PARTS NOTE:

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



Our FLK hydraulic filtration systems are packed with innovative features that will deliver cleaner, mistake-proof filter servicing.

Applications

- Hydrostatic Charge Pumps
- Hydrostatic Transmission
- Pilot Control Circuits

Integrated By-pass Valve

Robust, proven design

Unique Head to Cartridge Interface Connection

RadialSeal™ Sealing Technology

- No metal-to-metal contact – downstream flow
- Robust, reliable seal on clean side of filter – prevents cross contamination of oil

Filter Cartridge

- Double wire mesh support on outside of cartridge maintains pleat spacing under high pressure differential
- Locking grab handles makes for cleaner servicing and simplifies filter position during servicing

Industrial Hand Grips

No special servicing tools needed

RadialSeal™ Sealing Technology

- No metal-to-metal contact – upstream flow
- Easy-to-torque, mistake-proof sealing
- Robust, reliable seal

Anti-dust Seal

- Keeps threads free from contamination
- Easier to remove and reassemble during service

Synteq XP Media Technology

Delivers high performance – lower pressure drop, superior cold-start filtration and extended filter life

Closed End Cap

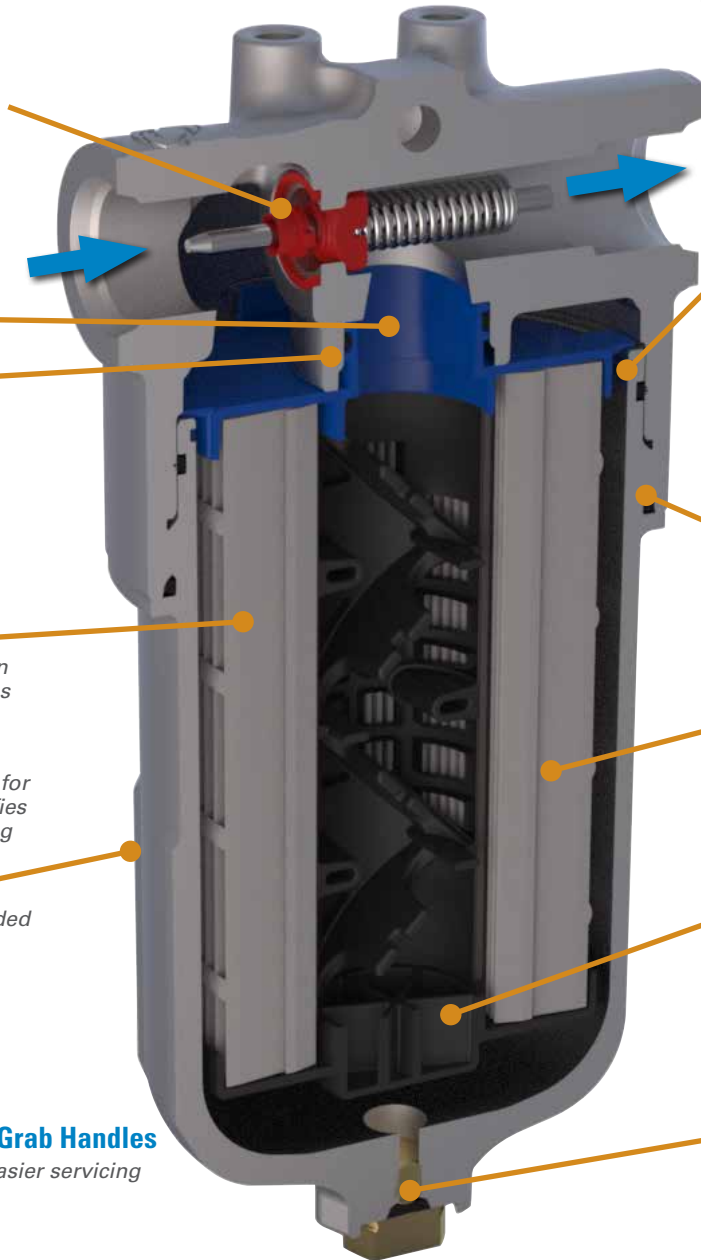
Eliminates the possibility of contamination to clean side of assembly during servicing

Oil Drain Port

Oil drain port used to drain oil during servicing

Locking Grab Handles

Cleaner, easier servicing



IMPORTANT SERVICE INSTRUCTIONS:

To prevent thread damage when installing new filter, fully lubricate the entire thread and o-ring surface with a Molybdenum-containing gear oil or anti-seize paste such as Schaeffer #214S Supreme One 80W-140 gear oil or Dow Corning Molykote P-37 anti-seize past.

FLK90 In-Line Cartridge Filters

Working Pressures to: 580 psi
4002 kPa
40 bar

Rated Static Burst to: 2000 psi
13,790 kPa
138 bar

Flow Range To: 40 gpm
151 lpm



IMPORTANT SERVICE INSTRUCTIONS:

To prevent thread damage when installing new filter, fully lubricate the entire thread and o-ring surface with a Molybdenum-containing gear oil or anti-seize paste such as Schaeffer #214S Supreme One 80W-140 gear oil or Dow Corning Molykote P-37 anti-seize past.

Features

The FLK assembly is a robust, reusable housing and disposable cartridge design. The versatile FLK filter head accommodates multiple housing lengths. Industrial, raised hand grips make it easy to remove the housing from the head without the need for special servicing tools. The oil drain port on the bottom of the housing and the locking grab handles on the filter cartridge allow for cleaner, easier servicing. The filter tabs lock into place – simplifying positioning during reassembly. Short removal clearance is needed for filter replacement means the assembly can easily fit into tight spaces.

These assemblies utilize a unique sealing technology that protects systems from harmful ingressed contaminants and cross contamination of oil. The RadialSeal™ interface increases the surface area which provides a robust connection with superior vibration resistance, a common challenge in today's heavy-duty applications.

The FLK filters are offered with Synteq XP™ media, Donaldson's most advanced media technology. Each filter has extended surface area for advanced filtration performance. Synteq XP delivers better pressure drop and better contaminant holding capacity than standard filter media.

- Robust 4-point mount
- Oil drain port
- Optional 2-point mount
- Heads features: - one side machined/plugged for indicator

Beta Rating

- Performance to $\beta_{<6(c)} = 1000$

Porting Size Options

- SAE-12 O-ring
- SAE-16 O-ring

Replacement Filter Lengths

- 4.21" / 107 mm
- 8.23" / 209 mm

Standard Bypass Ratings

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

Assembly Weight

- Long Housing: 2.33 kg / 5.14 lbs
- Short Housing: 1.82 kg / 4.01 lbs

Operating Temperatures

- -40° to 250°F (-40° to 121°C)

Filter Collapse Ratings

- 145 psid / 1000 kPa / 10 bar (standard)

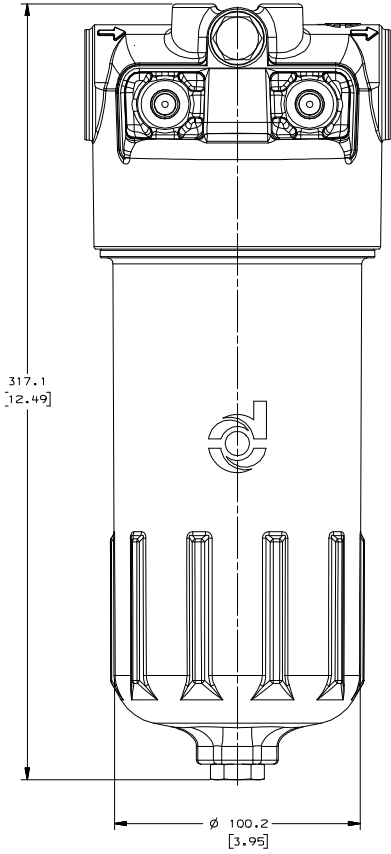


FLK90
Max Flow: 40 gpm (151 lpm)



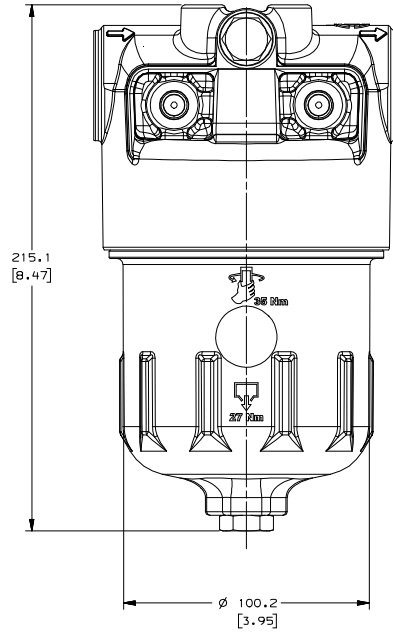
FLK Specification Illustrations

Long Assembly - Side View



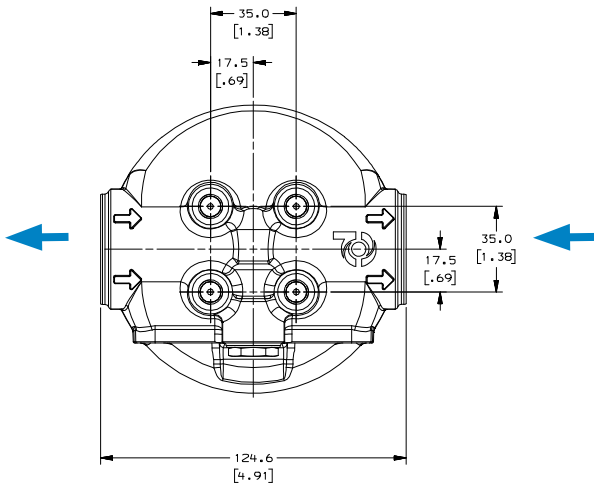
Minimum Service Clearance: 2.56" / 65mm

Short Assembly - Side View



Minimum Service Clearance: 2.56" / 65mm

Head - Top View





FLK90 Components

Head Choices

Part No.	Port Connections	Bypass Valve
P574994	SAE-12	50 psi (3.4 bar) bypass
P574995	SAE-12	No bypass
P574996	SAE-16	50 psi (3.4 bar) bypass
P574997	SAE-16	No bypass

Housing Choices

Part No.	Comments
P766990	Short length assembly
P766961	Long length assembly

Filter Choices

Media Type	$\beta_{x(c)} = 1000$ Rating based on ISO 16889	Length in mm	Donaldson Part No.
Short Length Assembly			
Synteq XP	6 μm	4.21 107	P767128
Synthetic	11 μm	4.21 107	P766987
	15 μm	4.21 107	P767129
Long Length Assembly			
Synteq XP	6 μm	8.23 209	P767130
Synthetic	11 μm	8.23 209	P766959
	15 μm	8.23 209	P767131

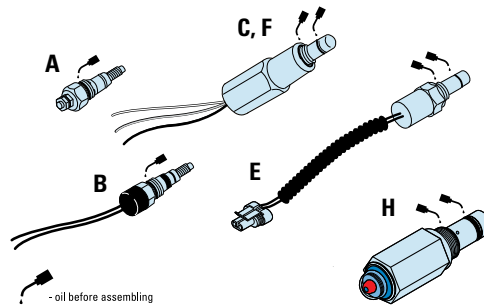
Service Indicator Choices

Use with Bypass Valve Pressure of:	Indicator Part No.	Style ²	Description
Electric Models¹			
50 psi / 345 kPa	P165194	A	Single post DC. N.O.
50 psi / 345 kPa	P574968	B	DC 2-wire.
50 psi / 345 kPa	P574967	E	DC 2-wire.
50 psi / 345 kPa	P575549	F	DC 3-wire.
50 psi / 345 kPa	P174396	C	AC/DC 3-wire.
25 psi / 172.5 kPa	P575334	H	Visual pop up
50 psi / 345 kPa	P575335	H	Visual pop up

Indicator Notes

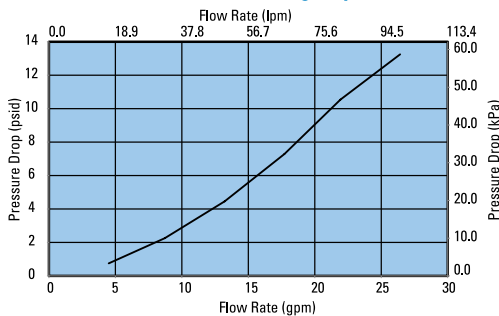
¹All electric models have a maximum operating temperature of 250°F / 121°C.

²Complete details on all service indicators can be found in the accessories section.

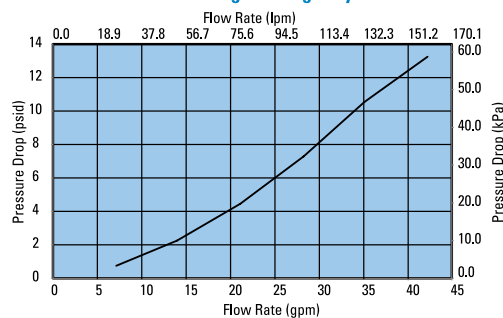


Performance Data

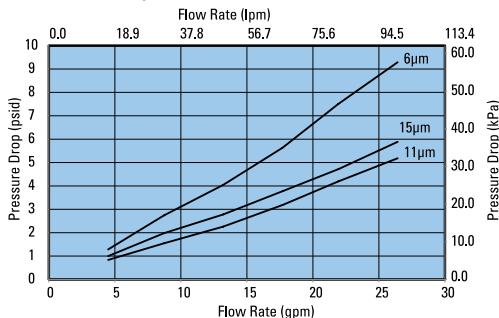
FLK90 Short Housing Only



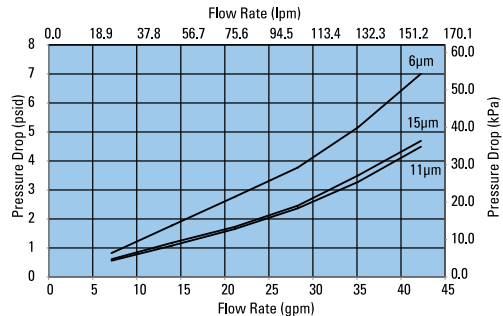
FLK90 Long Housing Only



FLK90 Short Filter only
(Synthetic Media, 10.43"/265mm)



FLK90 Long Filter only
(Synthetic Media, 10.43"/265mm)





FLK110
Max Flow: 42 gpm (159 lpm)



FLK110 In-Line Cartridge Filters

Working Pressures to: 435 psi
3001 kPa
30 bar

Rated Static Burst to: 1300 psi
8970 kPa
90 bar

Flow Range To: 42 gpm
159 lpm



IMPORTANT SERVICE INSTRUCTIONS:

To prevent thread damage when installing new filter, fully lubricate the entire thread and o-ring surface with a Molybdenum-containing gear oil or anti-seize paste such as Schaeffer #214S Supreme One 80W-140 gear oil or Dow Corning Molykote P-37 anti-seize past.

Features

The FLK assembly is a robust, reusable housing and disposable cartridge design. The versatile FLK filter head accommodates multiple housing lengths. Industrial, raised hand grips make it easy to remove the housing from the head without the need for special servicing tools. The oil drain port on the bottom of the housing and the locking grab handles on the filter cartridge allow for cleaner, easier servicing. The filter tabs lock into place – simplifying positioning during reassembly. Short removal clearance is needed for filter replacement means the assembly can easily fit into tight spaces.

These assemblies utilize a unique sealing technology that protects systems from harmful ingressed contaminants and cross contamination of oil. The RadialSeal™ interface increases the surface area which provides a robust connection with superior vibration resistance, a common challenge in today's heavy-duty applications.

The FLK filters are offered with Synteq XP™ media, Donaldson's most advanced media technology. Each filter has extended surface area for advanced filtration performance. Synteq XP delivers better pressure drop and better contaminant holding capacity than standard filter media.

- Robust 4-point mount
- Oil drain port
- Optional 2-point mount
- Heads features: - one side machined/plugged for indicator

Beta Rating

- Performance to $\beta_{<6(c)} = 1000$

Porting Size Options

- SAE-20 O-ring

Replacement Filter Lengths

- 7.4" / 187.9 mm
- 10.43" / 264.9 mm

Filter Collapse Ratings

- 145 psid / 1000 kPa / 10 bar (standard)

Standard Bypass Ratings

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

Assembly Weight

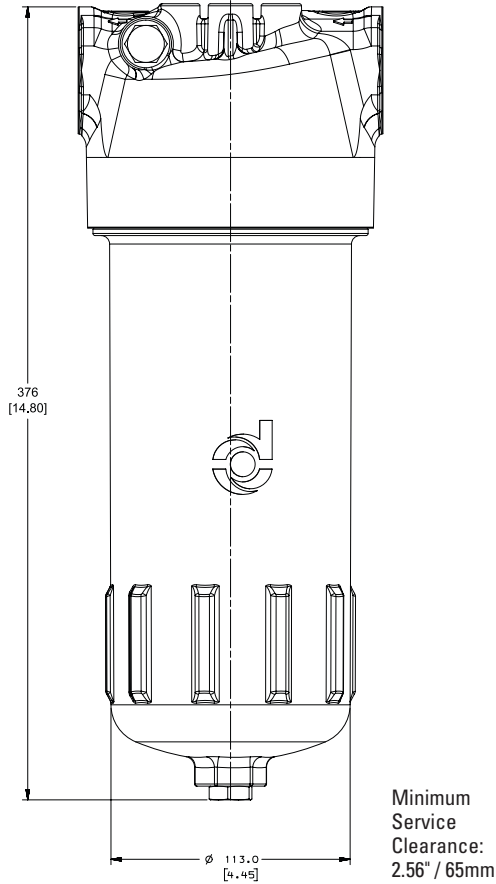
- Long Housing: 1.34 kg / 2.95 lb
- Short Housing: 1.01 kg / 2.22 lb

Operating Temperatures

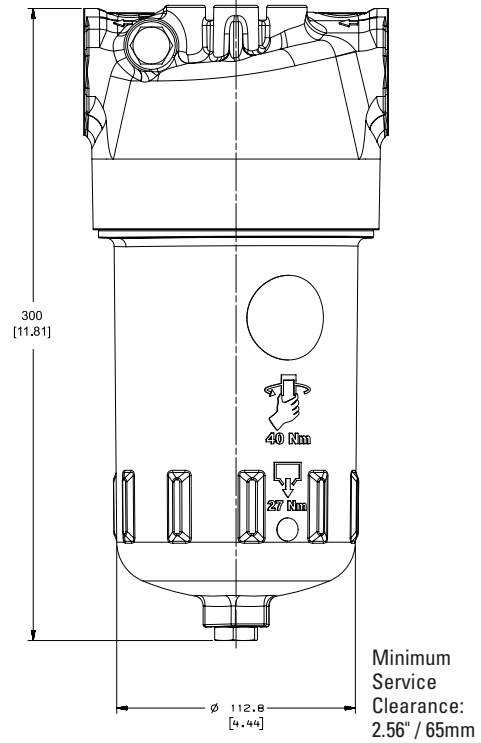
- -40° to 250°F (-40° to 121°C)

FLK Specification Illustrations

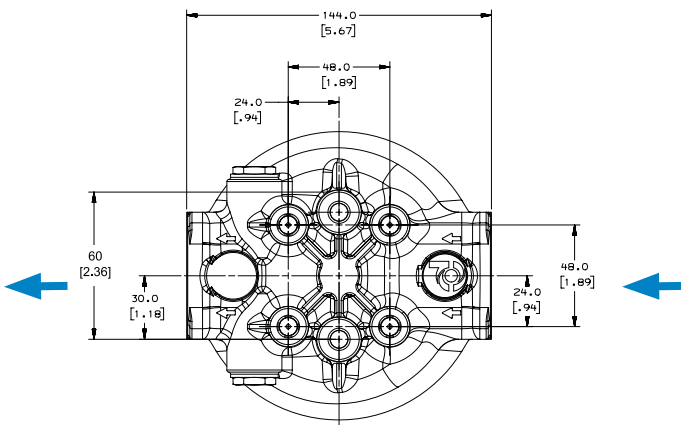
Long Assembly - Side View



Short Assembly - Side View



Head - Top View



Applications

- Hydrostatic Charge Pumps
- Hydrostatic Transmission
- Pilot Control Circuits



FLK110
Max Flow: 42 gpm (159 lpm)



FLK110 Components

Head Choices

Part No.	Port Connections	Bypass Valve
P766831	SAE-20	50 psi (3.4 bar) bypass
P767009	SAE-20	No bypass

Housing Choices

Part No.	Comments
P766812	Short length assembly
P766810	Long length assembly

Filter Choices

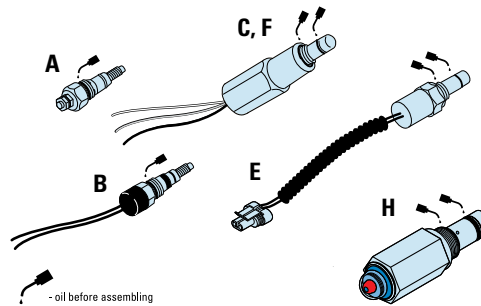
Media Type	$\beta_{x(c)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.
		in	mm	
Short Length Assembly				
Synteq XP	6 μ m	7.4	187	P766847
Synthetic	11 μ m	7.4	187	P766813
	15 μ m	7.4	187	P767012
Long Length Assembly				
Synteq XP	6 μ m	10.43	265	P767010
Synthetic	11 μ m	10.43	265	P766811
	15 μ m	10.43	265	P767011

Service Indicator Choices

Use with Bypass Valve Pressure of:	Indicator Part No.	Style ²	Description
Electric Models¹			
50 psi / 345 kPa	P165194	A	Single post DC. N.O.
50 psi / 345 kPa	P574968	B	DC 2-wire
50 psi / 345 kPa	P574967	E	DC 2-wire
50 psi / 345 kPa	P575549	F	DC 3-wire
50 psi / 345 kPa	P174396	C	AC/DC 3-wire
25 psi / 172.5 kPa	P575334	H	Visual pop up
50 psi / 345 kPa	P575335	H	Visual pop up

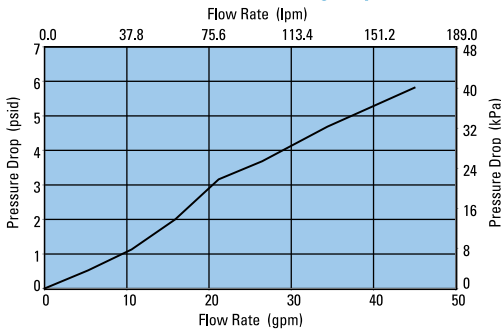
Indicator Notes

¹All electric models have a maximum operating temperature of 250°F / 121°C.
²Complete details on all service indicators can be found in the accessories section.

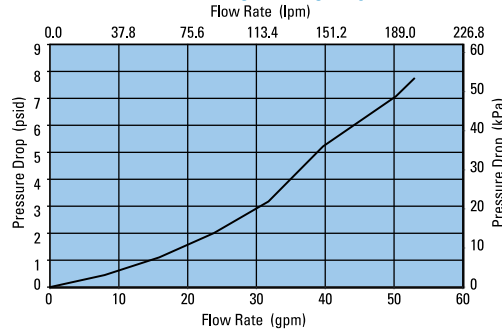


Performance Data

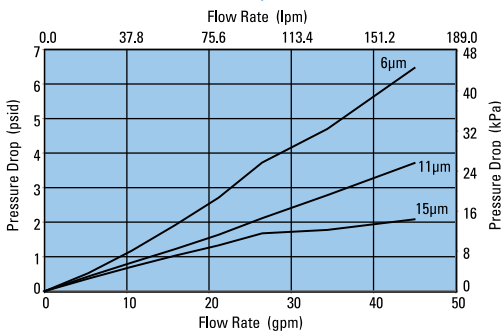
FLK110 Short Housing Only



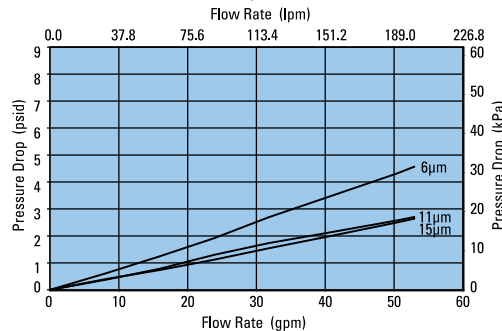
FLK110 Long Housing Only



FLK110 7" Filter Only
(Synthetic Synteq XP, 7.4"/187mm)



FLK110 10" Filter Only
(Synthetic Synteq XP, 10.43"/265mm)



FLK125 In-Line Cartridge Filters

Working Pressures to: 508 psi
3505 kPa
35.1 bar

Rated Static Burst to: 2000 psi
13,790 kPa
138 bar

Flow Range To: 85 gpm
322 lpm

Applications

- Hydrostatic Charge Pumps
- Hydrostatic Transmission
- Pilot Control Circuits



IMPORTANT SERVICE INSTRUCTIONS:

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These assemblies utilize a unique sealing technology that protects systems from harmful ingressed contaminants and cross contamination of oil. The RadialSeal™ interface increases the surface area which provides a robust connection with superior vibration resistance, a common challenge in today's heavy-duty applications.

The FLK filters are offered with Synteq XP™ media, Donaldson's most advanced media technology. Each filter has extended surface area for advanced filtration performance. Synteq XP delivers better pressure drop and better contaminant holding capacity than standard filter media.

- Robust 4-point mount
- Oil drain port
- Optional 2-point mount
- Heads features: - one side machined/plugged for indicator

Beta Rating

- Performance to $\beta_{-6(c)}=1000$

Porting Size Options

- 2" SAE 4 bolt flange code 61

Replacement Filter Lengths

- 10.85" / 275.7 mm

Standard Bypass Ratings

- 50 psi / 345 kPa / 3.5 bar

Assembly Weight

- Long Housing: 4.76 kg / 10.50 lbs

Operating Temperatures

- -40° to 250°F (-40° to 121°C)

Filter Collapse Ratings

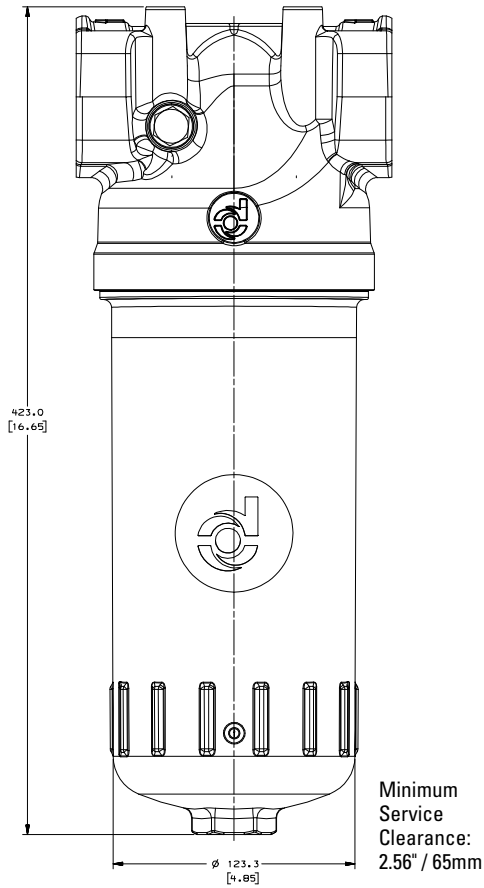
- 145 psid / 1000 kPa / 10 bar (standard)



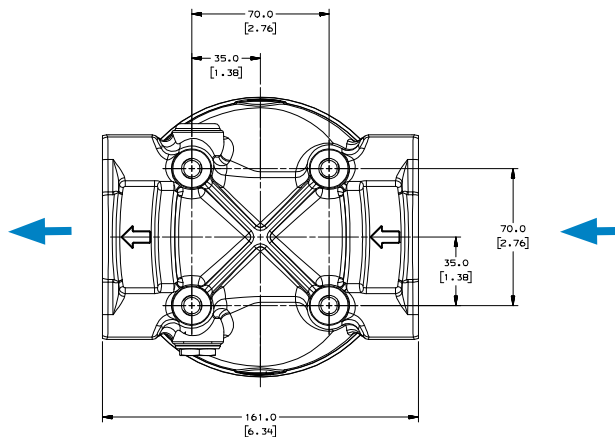
FLK125
 Max Flow: 85 gpm (322 lpm)

FLK Specification Illustrations

Long Assembly - Side View



Head - Top View





FLK125 Components

Head Choices

Part No.	Port Connections	Bypass Valve
P767095	2" SAE 4 bolt	50 psi (3.4 bar) bypass

Housing Choices

Part No.	Comments
P767089	Long length assembly

Filter Choices

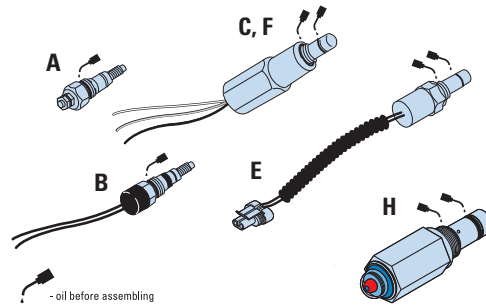
Media Type	$\beta_{x(c)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.
		in	mm	
Synteq XP	6 μ m	10.74	272.7	P767084
Synthetic	11 μ m	10.74	272.7	P767104
	15 μ m	10.74	272.7	P767106

Service Indicator Choices

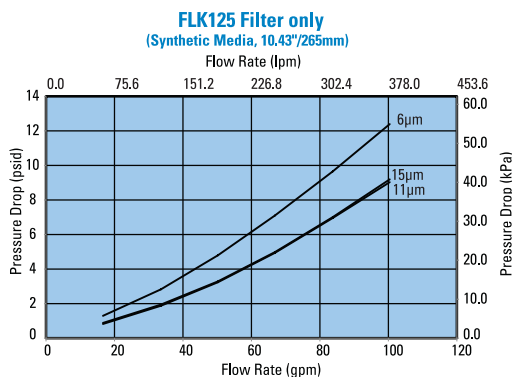
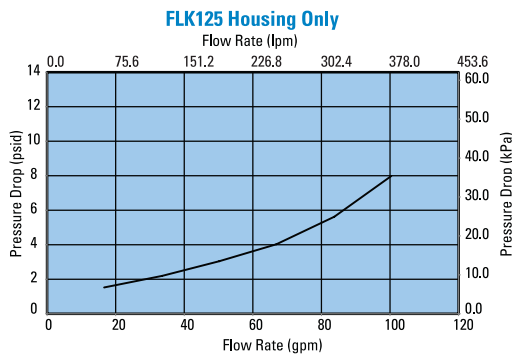
Use with Bypass Valve Pressure of:	Indicator Part No.	Style ²	Description
Electric Models¹			
50 psi / 345 kPa	P165194	A	Single post DC. N.O.
50 psi / 345 kPa	P574968	B	DC 2-wire
50 psi / 345 kPa	P574967	E	DC 2-wire
50 psi / 345 kPa	P575549	F	DC 3-wire
50 psi / 345 kPa	P174396	C	AC/DC 3-wire
25 psi / 172.5 kPa	P575334	H	Visual pop up
50 psi / 345 kPa	P575335	H	Visual pop up

Indicator Notes

¹All electric models have a maximum operating temperature of 250°F / 121°C.
²Complete details on all service indicators can be found in the accessories section.



Performance Data





DPK350

Max Flow: 100 gpm (379 lpm)

DPK350 In-Line Cartridge Filters

Working Pressures to: 350 psi
2400 kPa
24 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

DPK350 duplex filter assemblies allow continuous filtration during filter servicing to avoid machine shutdown. The DPK350 duplex design combines lighter weight aluminum heads with durable steel bowls for a high-performance assembly. Choose between optional features such as no by-pass, by-pass 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: Anodized Aluminum Alloy
- Bowl Material: 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 / 21 bar (standard)
- 3045 psid / 2100 kPa / 210 bar (high collapse)

Assembly Weight

- 44 lbs / 20 kg

Operating Temperatures

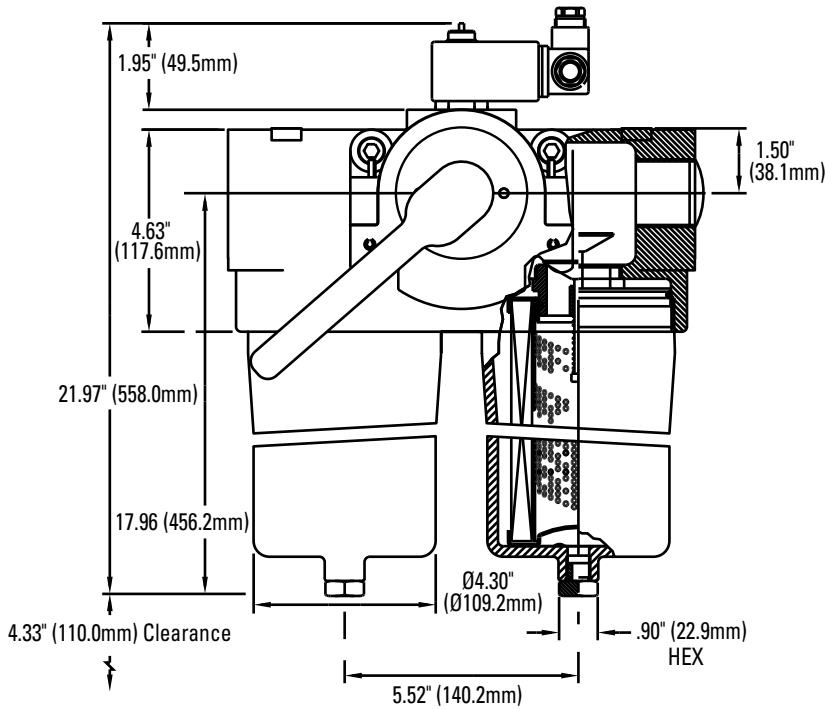
- -40° to 250°F (-40° to 121°C)

Standard Bypass Ratings

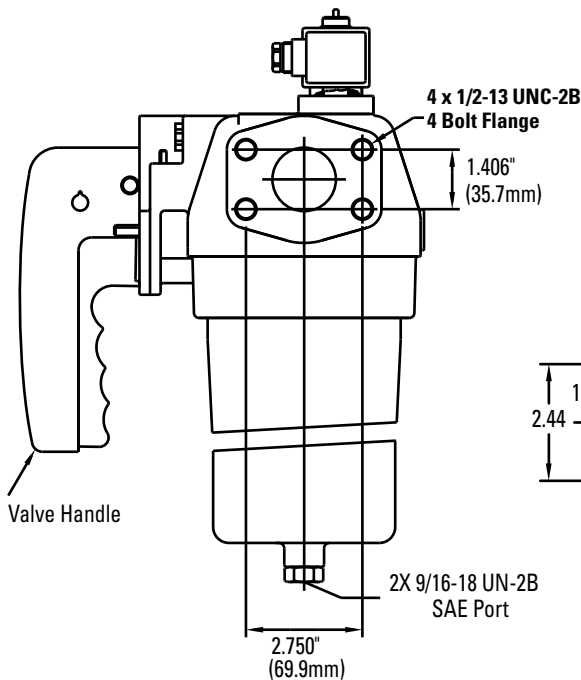
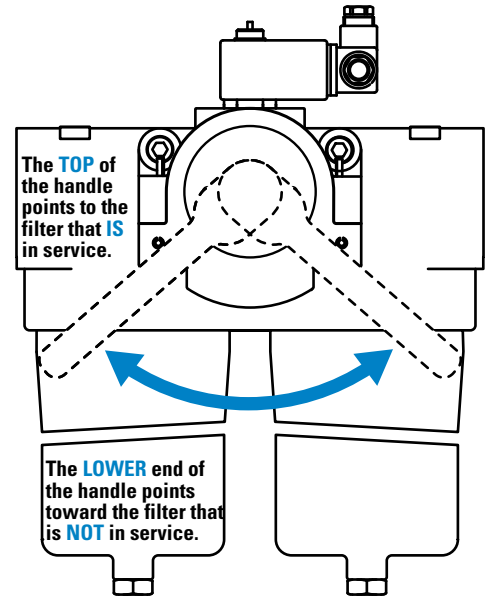
- 50 psi / 345 kPa / 3.5 bar
- No bypass

DPK350 Specification Illustrations

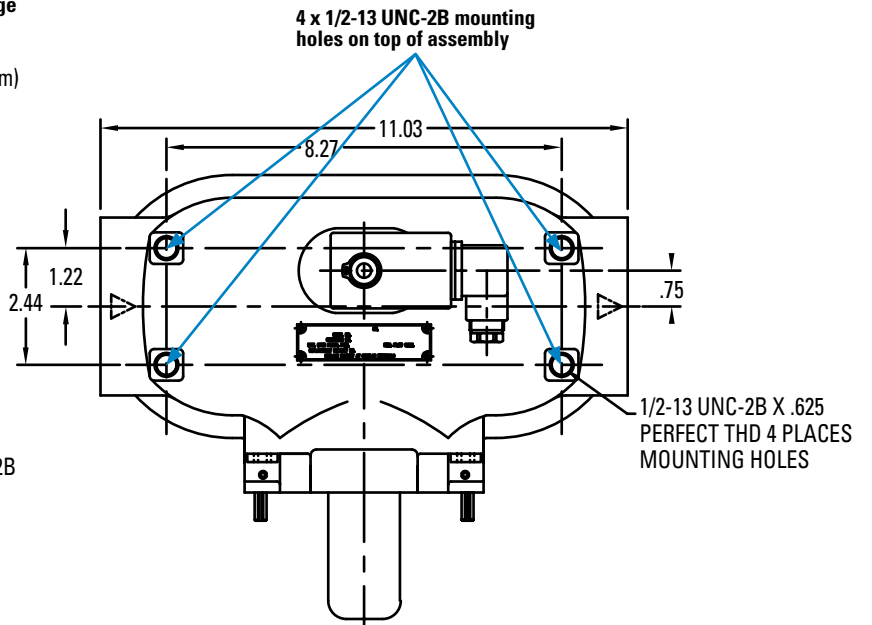
Assembly - Side Views



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



Head - Top View





DPK350
Max Flow: 100 gpm (379 lpm)



DPK350 Components

Assembly Choices

Part No.	Port Connections	Bypass Valve	Comments
P577024	1-½" SAE 4-bolt flange code 61	No bypass	Filter elements not included with assembly. Please select filter elements from list below
P577025	1-½" SAE 4-bolt flange code 61	50 psi (3.4 bar) bypass	Filter elements not included with assembly. Please select filter elements from list below

Filter Choices

Media Type	$\beta_{x(c)} = 1000$ 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

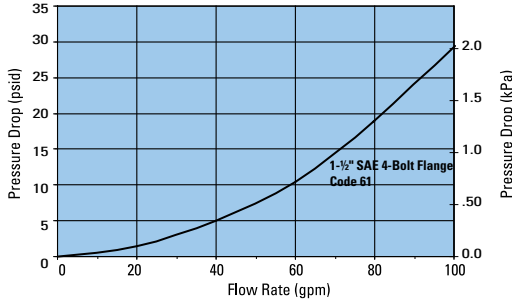
Service Indicator Choices

Use with Bypass Valve Pressure of:	Indicator Part No.	Seal Material	Connector Style
Visual / Electric Models			
50 psi / 345 kPa	P577029	Viton seal	Hirschman
Visual Models			
50 psi / 345 kPa	P577028	Viton seal	Manual reset

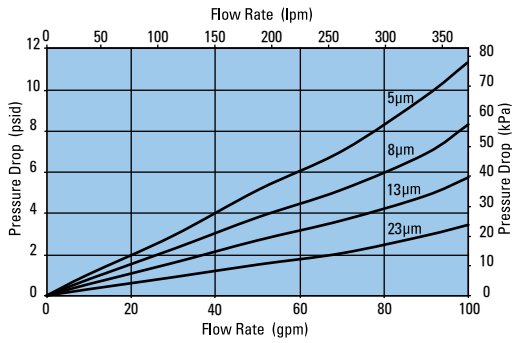


Performance Data

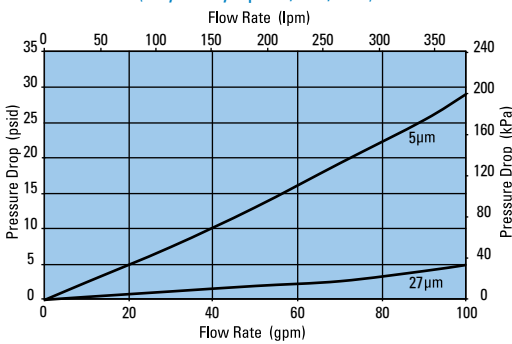
DPK350 Housing Only
Flow Rate (lpm)



DPK350 14" Filter Only
(DT Synthetic Synteq Media, 14.62"/371mm)



DPK350 14" High-Collapse Filter Only
(DT Synthetic Synteq Media, 14.68"/373mm)





W061

Max Flow: 100 gpm (379 lpm)

W061 In-Line Cartridge Filters

Working Pressures to: 600 psi
4140 kPa
41.4 bar

Rated Static Burst to: 1500 psi
10,342 kPa
103 bar

Fatigue Pressure Rating: 300 psi
2070 kPa
21 bar

Flow Range To: 100 gpm
379 lpm



Applications

- In-Plant Systems
- Meets HF3 Specification
- Mobile Equipment

Features

The W061 filter assembly contains the popular HF3 filter. Quick filter change outs are accomplished with the use of our easily serviceable ring assembly. Donaldson DT high-performance 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.

- Assembly length code 2 conforms to HF3 specifications
- Wide range of indicator options
- Three housing length options for design flexibility
- Head material: cast iron
- Housing material: steel
- Bleed plug in head

Beta Rating

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

Porting Size Options

- SAE-12, SAE-16 O-ring

Replacement Filter Lengths

- 4.59" / 116.7 mm
- 8.22" / 208.8 mm
- 12.91" / 327.8 mm

Filter Collapse Ratingsz

- 150 psi / 1034 kPa / 10.3 bar (standard)

Standard Bypass Ratings

- 25 psi / 173 kPa / 1.73 bar
- 50 psi / 345 kPa / 3.5 bar
- No Bypass

Assembly Weight

- 4.59": 7.9 lbs / 3.6 kg
- 8.22": 8.9 lbs / 4.0 kg
- 12.91": 10.2 lbs / 4.6 kg

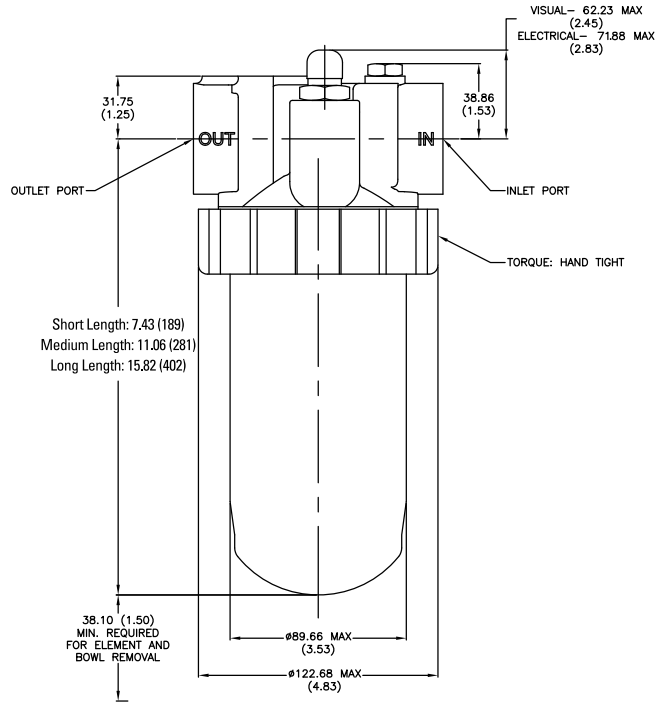
Operating Temperatures

- -20° to 250°F (-29° to 121°C)

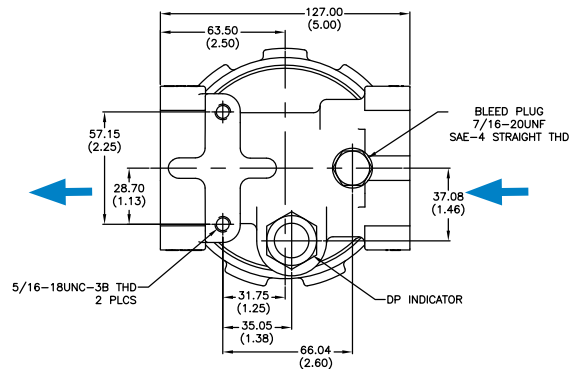
W061 Specification Illustrations

All dimensions are shown in millimeters [inches].

Assembly - Side View



Head - Top View





W061

Max Flow: 100 gpm (379 lpm)



W061 Components

High-Performance DT Filter Choices

Media Type	$\beta_{x(c)} = 2$ Rating based on ISO 16889	$\beta_{x(c)} = 1000$	Length		Donaldson Part No.	Comments
DT Synteq Synthetic	<4 μm	5 μm	4.59 in	117 mm	P566204	DT-9600-4-2UM
	5 μm	8 μm	4.59 in	117 mm	P566205	DT-9600-4-5UM
	8 μm	12 μm	4.59 in	117 mm	P566206	DT-9600-4-8UM
	12 μm	23 μm	4.59 in	117 mm	P566207	DT-9600-4-14UM
	23 μm	5 μm	4.59 in	117 mm	P566208	DT-9600-4-25UM
	5 μm	12 μm	4.59 in	117 mm	P566364	DT-9601-4-5UM, High collapse
	12 μm	<4 μm	4.59 in	117 mm	P566365	DT-9601-4-14UM, High collapse
	<4 μm	5 μm	8.22 in	209 mm	P566209	DT-9600-8-2UM
	5 μm	8 μm	8.22 in	209 mm	P566210	DT-9600-8-5UM
	8 μm	12 μm	8.22 in	209 mm	P566211	DT-9600-8-8UM
	12 μm	23 μm	8.22 in	209 mm	P566212	DT-9600-8-14UM
	23 μm	5 μm	8.22 in	209 mm	P566213	DT-9600-8-25UM
	5 μm	12 μm	8.22 in	209 mm	P566366	DT-9601-8-5UM, High collapse
	12 μm	<4 μm	8.22 in	209 mm	P566367	DT-9601-8-14UM, High collapse
	<4 μm	5 μm	12.91 in	328 mm	P566214	DT-9600-13-2UM
	5 μm	8 μm	12.91 in	328 mm	P566215	DT-9600-13-5UM
	8 μm	12 μm	12.91 in	328 mm	P566216	DT-9600-13-8UM
	12 μm	23 μm	12.91 in	328 mm	P566217	DT-9600-13-14UM
	23 μm	5 μm	12.91 in	328 mm	P566218	DT-9600-13-25UM
	5 μm	12 μm	12.87 in	327 mm	P566368	DT-9601-13-5UM, High collapse
	12 μm		12.87 in	327 mm	P566369	DT-9601-13-14UM, High collapse
Water	10 μm		8.23 in	209 mm	P569528	Absorbs 130 ml water @ 25 psid
Absorbing	10 μm		12.87 in	327 mm	P569529	Absorbs 220 ml water @ 25 psid



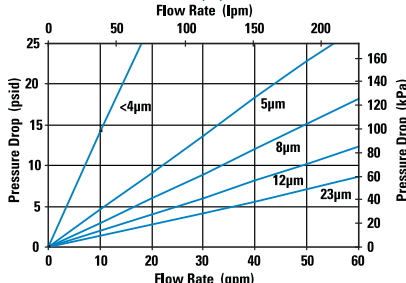
Filter Notes:

- 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.
- DT high collapse designs are potted into machined aluminum end caps for greater filter integrity in critical applications.
- Viton® seals are standard on all Donaldson DT filters.

Performance Data

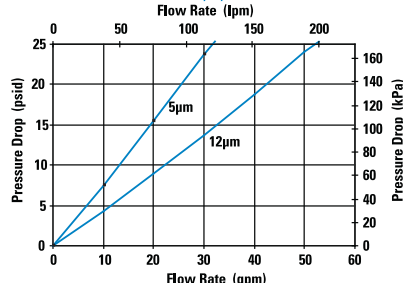
W061 4" DT Filter Only

DT-9600-4, 4"/102mm

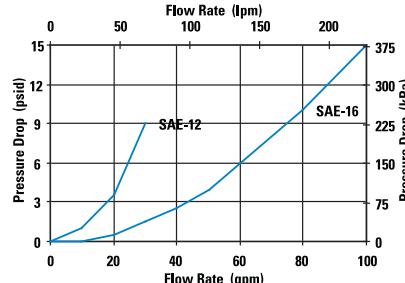


W061 4" DT Filter Only

DT-9601-4, 4"/102mm

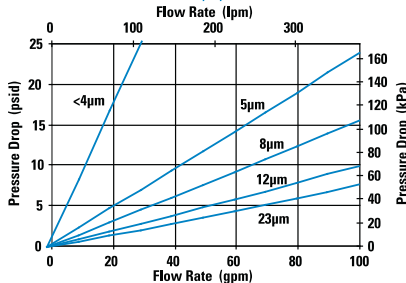


W061 Housing Only



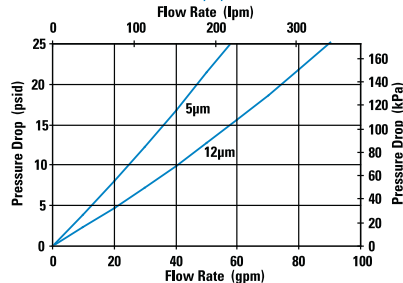
W061 8" DT Filter Only

DT-9600-8, 8"/203mm



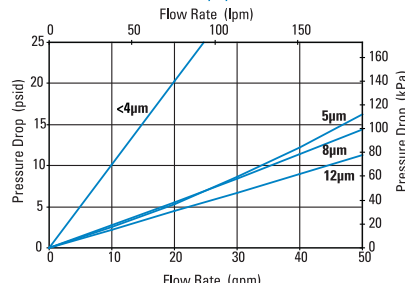
W061 8" DT Filter Only

DT-9601-8, 8"/203mm



W061 8" DX2 Filter Only

DX2-9600-8, 8"/203mm



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	P574242
SAE-16 O-Ring	50 psi / 3.45 bar	Buna-N	Port Machined & Plugged	P574243
SAE-16 O-Ring	25 psi / 1.72 bar	Viton	Port Machined & Plugged	P575929

Housing Choices

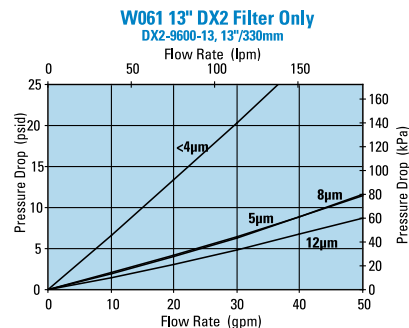
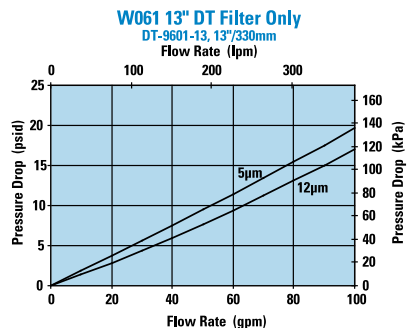
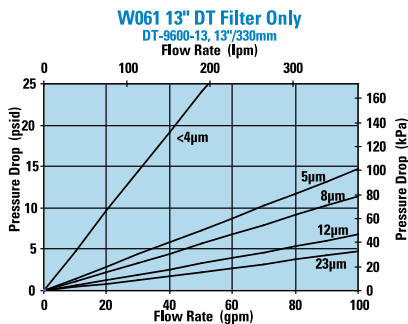
Housing Length	Seal Material	Donaldson Part No.
4" (101.6mm)	Buna-N	X011115
8" (203.2mm)	Buna-N	X011111
13" (330.2mm)	Buna-N	X011117

Indicator Choices

Indicator Pressure Setting	Connector Style	Seal Material	Donaldson Part No.	Thermal Lockout	Surge Control	Reset
Visual Pop-up Models						
15 psi / 103 kPa	NA	Buna-N	P572345	No	No	Auto
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
Electrical / Visual Models						
15 psi / 103 kPa	Hirschman	Buna-N	P572323	No	No	Auto
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
15 psi / 103 kPa	3 wire flying leads	Buna-N	P572342	No	No	Auto
35 psi / 241 kPa	3 wire flying leads	Buna-N	P572349	No	No	Auto
Electrical Models						
15 psi / 103 kPa	Hirschman	Buna-N	P572355	No	No	Auto
35 psi / 241 kPa	Hirschman	Buna-N	P572359	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Buna-N	P572361	No	No	Auto

Head/Bowl/Housing Seal Kits

Donaldson Part No.	Material
X011160	Buna
X011161	Viton





HDK06

Max Flow: 150 gpm (568 lpm)

HDK06 In-Line/Tank Mount Filters

Working Pressures to: 350 psi
2415 kPa
24.1 bar

Rated Static Burst to: 500 psi
3450 kPa
34.5 bar

Flow Range To: 150 gpm
568 lpm

Features

HDK06 filters come in two styles: In-line and tank mount. Both styles feature a die cast aluminum head and steel body for strength and durability; service is made easier with a single, center retention bolt on top of the head. Filter flow is inside to outside. Buna-N® seals are standard.

HDK06 assemblies come complete with our $\beta_{9(c)} = 1000$ rated Synteq™ filter cartridge. Other ratings are available, depending on your cleanliness requirements. HDK06 comes with an easy-to-read visual service indicator.



In-line model shown

Beta Rating

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

Porting Size Options

- 2½" NPT

Replacement Filter Lengths

- 16.00" / 406mm

Standard Bypass Ratings

- 25 psi / 172.5 kPa / 1.7 bar

Assembly Weight

- 39.25 lbs / 18 kg

Operating Temperatures

- -20°F to 250°F
- -29°C to 121°C

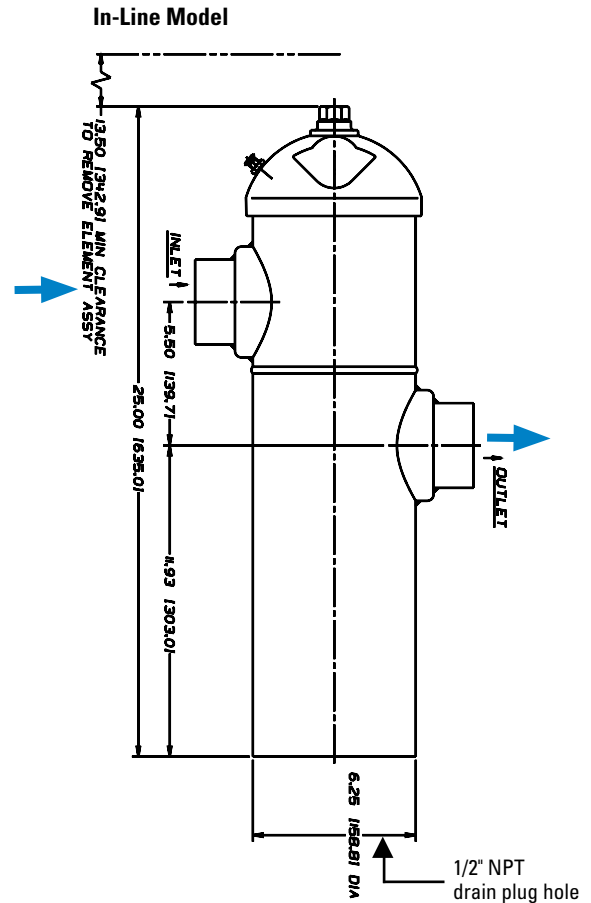
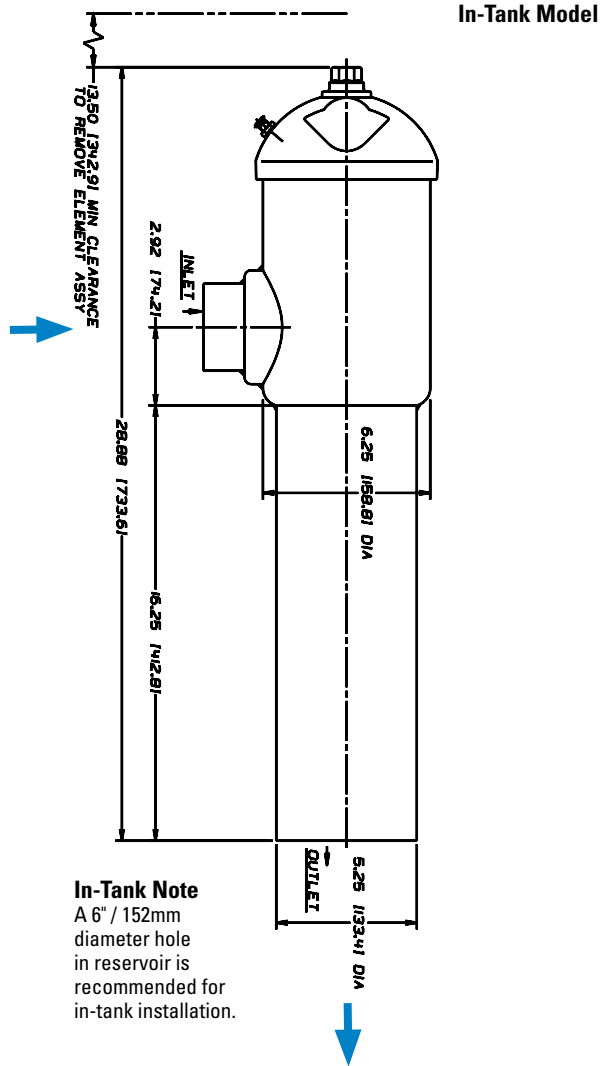
Filter Burst Ratings

- 100 psid / 690 kPa / 6.9 bar

HDK06 Specification Illustrations

All dimensions are shown in inches [millimeters].

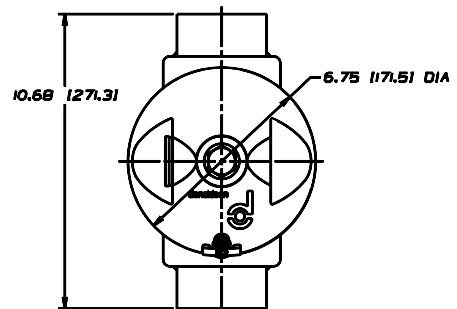
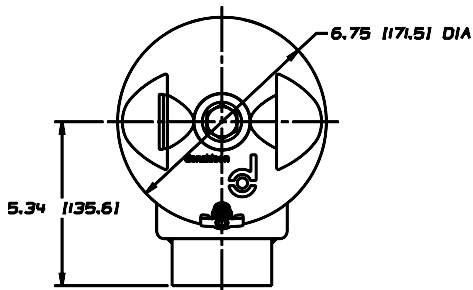
Assembly - Side Views



Applications

- Cooling Circuits
- Fluid Conditioning Systems
- Lube Oil Systems
- Return Lines
- Suction Lines

Head - Top Views





HDK06

Max Flow: 150 gpm (568 lpm)



HDK06 Components

Assembly Choices

Style	Part No.	Port Size	Bypass Rating	Indicator	Includes Filter Cartridge
In-Tank	K060173	2½" NPT	25 psi / 172.5 kPa	Visual	P176221
In-Line	K060160	2½" NPT	25 psi / 172.5 kPa	Visual	P176221

Filter Choices

Media Type	$\beta_{x(c)} = 2$ Rating based on ISO 16889	$\beta_{x(c)} = 1000$	Length		Donaldson Part No.
			in	mm	
Synteq		<4 µm	16.00	406	P161016
Synthetic		6 µm	16.00	406	P165628
		11 µm	16.00	406	P176221
		22 µm	16.00	406	P161571
		23 µm	16.00	406	P164699
		50 µm	16.00	406	P166597
Wire Mesh	150 µm		11.6	294	P160700

Filter Notes

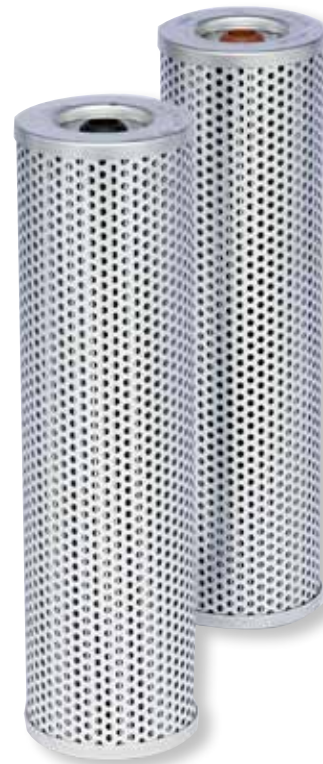
Standard HDK06 replacement filters have Buna-N® seals, which are appropriate for most applications involving petroleum oil. Filters with seals made of fluorocarbon elastomer (such as Viton® and Fluorel®) are required when using diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF (high water content fluids) over 150°F.

HDK06 filters are inside to outside reverse flow 4.39" (112mm) OD.

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

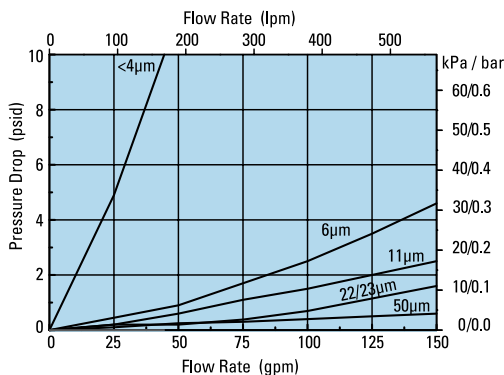
Viton® is a registered trademarks of E. I. DuPont de Nemours and Company.

Fluorel® is a registered trademark of 3M Company.

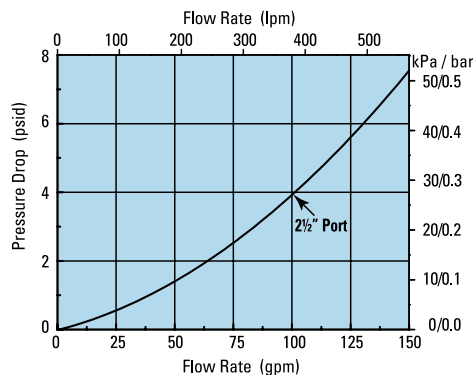


Performance Data

HDK06 Filters Only



HDK06 Head Only





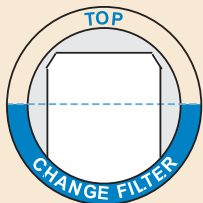
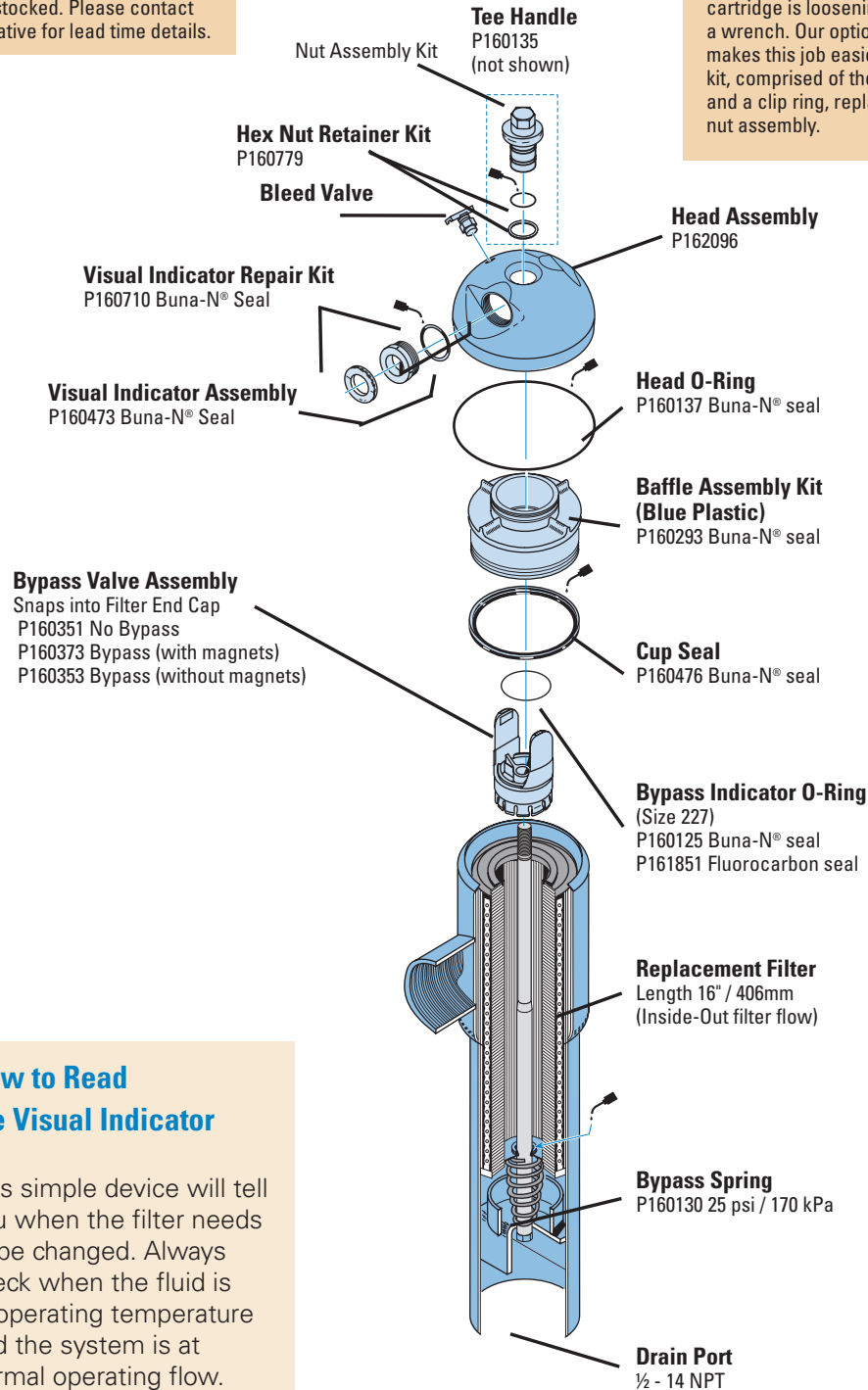
HDK06 Service Parts

SERVICE PARTS NOTE:

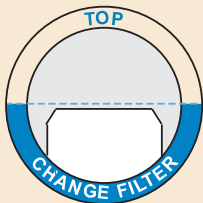
Some service parts may not be stocked. Please contact your Donaldson sales representative for lead time details.

Optional Tee Handle for Easier Servicing

The first step in changing the HDK06 cartridge is loosening the top nut with a wrench. Our optional tee handle makes this job easier. The P160135 kit, comprised of the handle, an o-ring, and a clip ring, replaces the entire top nut assembly.



Filter OK



Filter Needs Service

How to Read the Visual Indicator

This simple device will tell you when the filter needs to be changed. Always check when the fluid is at operating temperature and the system is at normal operating flow.

If the top of the white panel is below the lower half of the window, the filter needs servicing.



W041

Max Flow: 300 gpm (1135 lpm)



W041 In-Line Cartridge Filters

Working Pressures to: 500 psi
3450 kPa
34.5 bar

Rated Static Burst to: 1500 psi
10,342 kPa
103.5 bar

Flow Range To: 300 gpm
1135 lpm



Applications

- Fluid Conditioning Systems
- In-Plant Systems
- Lube Oil Systems

Features

The W041 high flow filter combines the best features of a base-mounted assembly; several inlet port options, top cover filter servicing for ease of maintenance and a wide selection of service indicators. The W041 all-aluminum head design and plated steel cylinder provides a strong, durable, and dependable unit. We offer standard features like deep pleat filters for higher dirt holding capacity and our standard Donaldson DT 4-layer media filter construction. This technology, combined with many other standard features, is ideal for today's applications in pulp and paper, power generation and steel mill applications. Five standard grades of media are offered. Thermal lockout and surge control are two key features incorporated in many of the differential pressure indicators.

- Large T-handle for fast servicing without tools
- Wide range of indicator options
- Two filter length options for design flexibility
- Base material: aluminum
- Cylinder material: steel
- Cover material: cast iron
- Two drain plugs in base
- Bleed/fill plug in cover

Beta Rating (per ISO 16889)

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

Porting Size Options

- 2" or 2½" SAE 4-Bolt Flange Code 61

Replacement Filter Lengths

- 16.74" / 425.3 mm
- 38.62" / 980.9 mm

Filter Collapse Ratings

- 150 psid / 1034 kPa / 10.3 bar (standard)

Housing Weight

- 16.74": 48.5 lbs / 22.0 kg
- 38.62": 86.2 lbs / 39.2 kg

Operating Temperatures

- -20°F to 250°F / -29° to 121°C

Standard Bypass Ratings

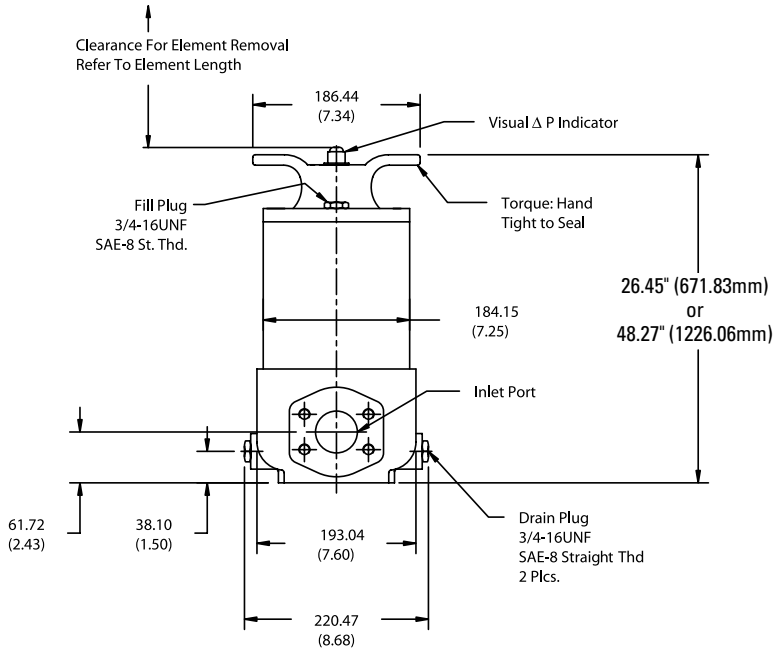
- 50 psi / 345 kPa / 3.5 bar



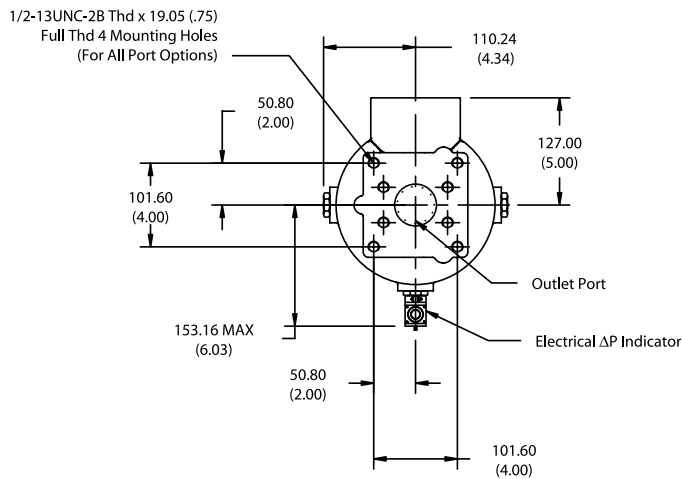
W041 Specification Illustrations

All dimensions are shown in millimeters [inches].

Assembly - Side View



Head - Bottom View





W041

Max Flow: 300 gpm (1135 lpm)



W041 Components

High-Performance DT Filter Choices

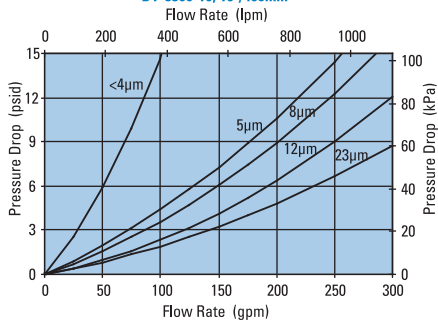
Media Type	$\beta_{xlc} = 1000$ Rating based on ISO 16889	Length		Donaldson	Comments
		in	mm	Part No.	
DT Synteq	<4 μ m	16.74	425	P566239	DT-8300-16-2UM
Synthetic	5 μ m	16.74	425	P566240	DT-8300-16-5UM
	8 μ m	16.74	425	P566241	DT-8300-16-8UM
	12 μ m	16.74	425	P566242	DT-8300-16-14UM
	23 μ m	16.74	425	P566243	DT-8300-16-25UM
	<4 μ m	38.62	981	P566244	DT-8300-39-2UM
	5 μ m	38.62	981	P566245	DT-8300-39-5UM
	8 μ m	38.62	981	P566246	DT-8300-39-8UM
	12 μ m	38.62	981	P566247	DT-8300-39-14UM
	23 μ m	38.62	981	P566248	DT-8300-39-25UM
	<4 μ m	16.10	409	P566249	DT-8310-16-2UM
	5 μ m	16.10	409	P566250	DT-8310-16-5UM
	8 μ m	16.10	409	P566251	DT-8310-16-8UM
	12 μ m	16.10	409	P566252	DT-8310-16-14UM
	23 μ m	16.10	409	P566253	DT-8310-16-25UM
	<4 μ m	37.94	964	P566254	DT-8310-39-2UM
5 μ m	37.94	964	P566255	DT-8310-39-5UM	
8 μ m	37.94	964	P566256	DT-8310-39-8UM	
12 μ m	37.94	964	P566257	DT-8310-39-14UM	
23 μ m	37.94	964	P566258	DT-8310-39-25UM	
Water Absorbing	10 μ m	37.94	964	P578277	

Filter Notes

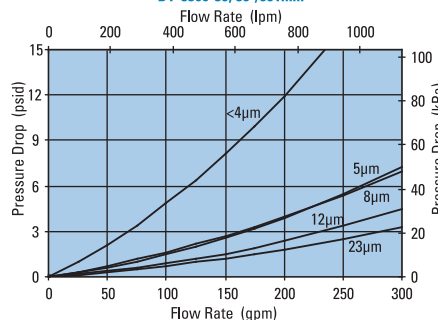
All Donaldson DT filters utilize glass fiber media with an epoxy-based resin system for the ultimate in chemical compatibility. All Donaldson DT filters are potted and seam-sealed with epoxy-based adhesives. Standard collapse designs are double wire-backed using epoxy-coated steel mesh for maximum pleat support and dirt capacity. Extended life designs are double wire-backed using epoxy-coated steel mesh. Viton® seals are standard on all Donaldson DT filters. Viton® is a registered trademark of E. I. DuPont de Nemours and Company.

Performance Data

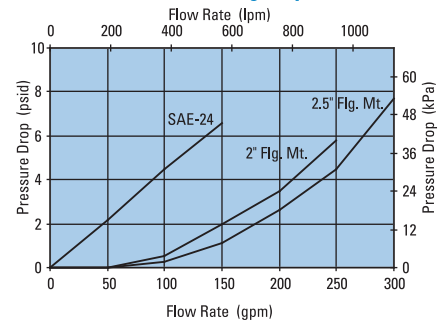
W041 16" DT Filter Only
DT-8300-16, 16"/406mm



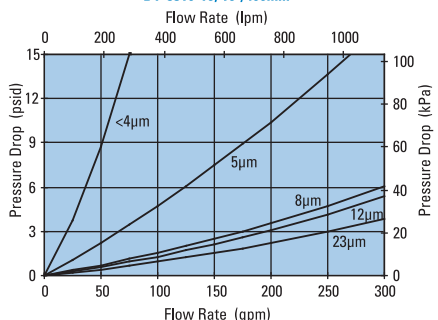
W041 39" DT Filter Only
DT-8300-39, 39"/991mm



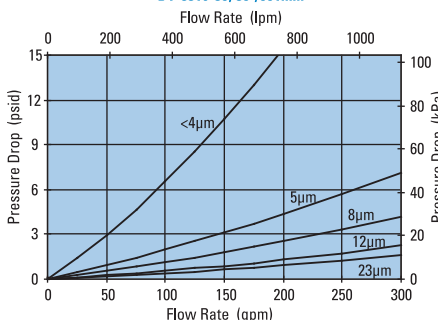
W041 Housing Only



W041 16" DT Filter Only
DT-8310-16, 16"/406mm



W041 39" DT Filter Only
DT-8310-39, 39"/991mm



Filter Assembly Choices

Size	Rating	Material	Indicator Port	Housing Length	Assembly Length	Part No.
2" SAE 4 Bolt Flange Code 61	50 psi / 3.45 bar	Viton	Port Machined & Plugged	16" (406.4mm)	26.45" (671.8mm)	P574218
2-1/2" SAE 4 Bolt Flange Code 61	50 psi / 3.45 bar	Viton	Port Machined & Plugged	39" (990.6mm)	48.27" (1226.1mm)	P574219
2" SAE 4 Bolt Flange Code 61	50 psi / 3.45 bar	Viton	Port Machined & Plugged	39" (990.6mm)	48.27" (1226.1mm)	P575920
2-1/2" SAE 4 Bolt Flange Code 61	50 psi / 3.45 bar	Viton	Port Machined & Plugged	16" (406.4mm)	26.45" (671.8mm)	P575921

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
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
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

Head/Bowl/Housing Seal Kits

Donaldson Part No.	Material
X011156	Buna
X011157	Viton



HFK08

Max Flow: 300 gpm (1135 lpm)

HFK08 In-Line/Tank Mount Filters

Working Pressures to: 350 psi
2415 kPa
24.1 bar

Rated Static Burst to: 500 psi
3450 kPa
34.5 bar

Flow Range To: 300 gpm
1135 lpm

Features

HFK08 is available in two styles: in-line and in-tank. Both styles feature a cast aluminum head and steel body for maximum strength and durability. Its single, center retention bolt simplifies servicing. Flow is from inside to outside of the filter cartridge.

Three in-stock HFK08 models offer our proprietary Synteq™ synthetic media designed especially for liquid filtration. A wider range of filter media is available to purchase separately, as are fluoroelastomer seals. A visual service indicator is built into the HFK08 head.



In-line model shown

Beta Rating

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

Porting Size Options

- 3" NPT
- SAE-20 O-ring

Replacement Filter Lengths

- 18.00" / 457mm

Standard Bypass Ratings

- 25 psi / 172.5 kPa / 1.7 bar

Assembly Weight

- 55.4 lbs / 25.12 kg

Operating Temperatures

- -20°F to 250°F
- -29°C to 121°C

Filter Burst Ratings

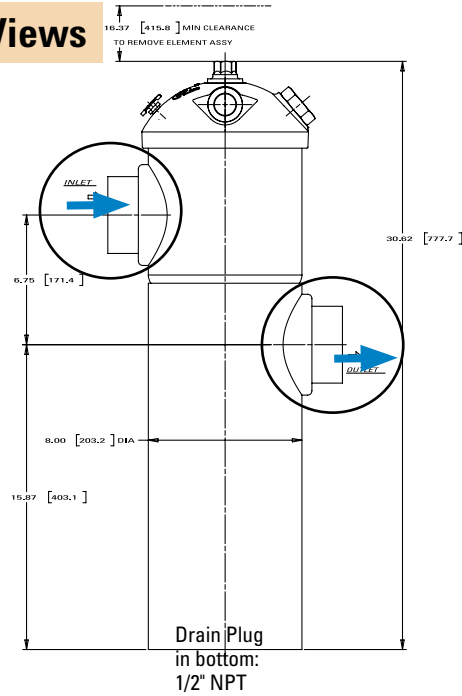
- 75 psi / 517 kPa / 5.2 bar (synthetic)
- 100 psi / 689 kPa / 6.9 bar (wire mesh)

HFK08 Specification Illustrations

All dimensions are shown in inches [millimeters].

Assembly - Side Views

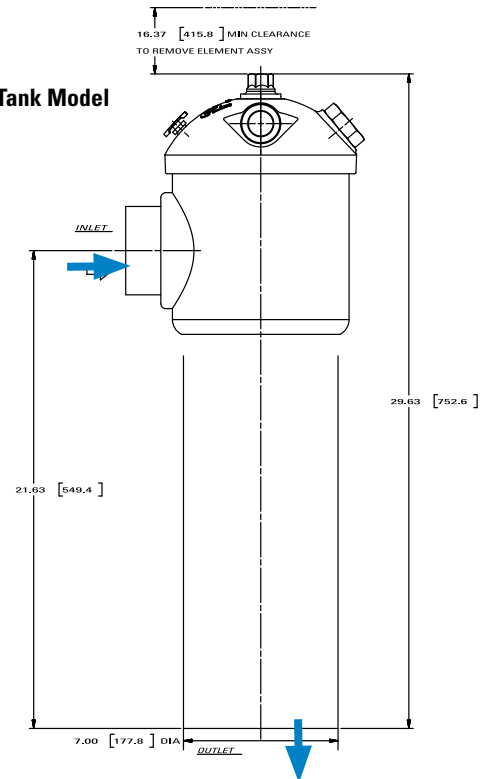
In-Line Model



Applications

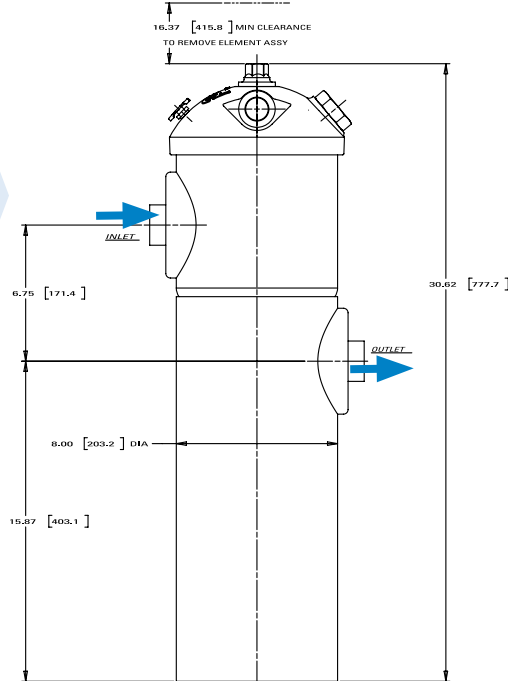
- Fluid Conditioning Systems
- Lube Oil Systems
- Return Lines
- Side Loop Systems
- Suction Lines

In-Tank Model

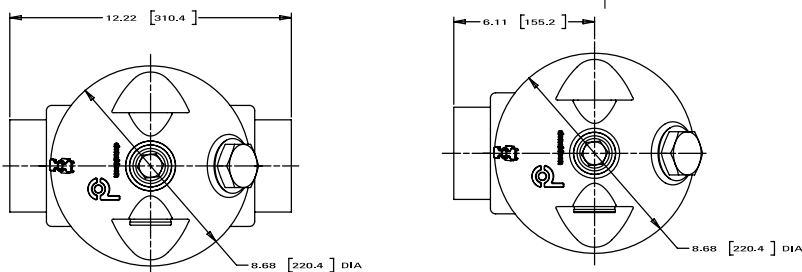


K080087 In-Line Model

Smaller port size (SAE-20) works well for kidney loop filtration.



Head - Top Views





HFK08

Max Flow: 300 gpm (1135 lpm)



HFK08 Components

Filter Assemblies

Port Size	Bypass Rating	Indicator Style1 & Location	Assembly Part No.	Length (in./mm)	Filter Part No.
3" NPT	25 psi / 172.5 kPa	Visual, Left side Visual, Right side	K080051, In-Tank	18"/457mm	P164703
			K080033, In-Line	18"/457mm	P164703
			K080085, In-Line	18"/457mm	P164407 Viton® Seal
SAE-20	25 psi / 172.5 kPa	Visual, Right side	K080087, In-Line	18"/457mm	P164405

Assembly Notes

'Donaldson uses the inlet port as the reference point. "Left side," for instance, means that the indicator mounts on the side of the filter head that is on your left when you face the inlet port. Viton® is a registered trademarks of E. I. DuPont de Nemours and Company.

Filter Choices

Media Type	$\beta_{x(c)} = 2$ Rating based on ISO 16889	$\beta_{x(c)} = 1000$	Length		Donaldson Part No.
			in	mm	
Synteq Synthetic		<4 μm	18.00	457	P164407 Viton® seal
		<4 μm	18.00	457	P164405
		6 μm	18.00	457	P166462
		11 μm	18.00	457	P176222
		23 μm	18.00	457	P164703
Wire Mesh		45 μm	18.00	457	P173573
		150 μm	18.00	457	P163945

Filter Notes

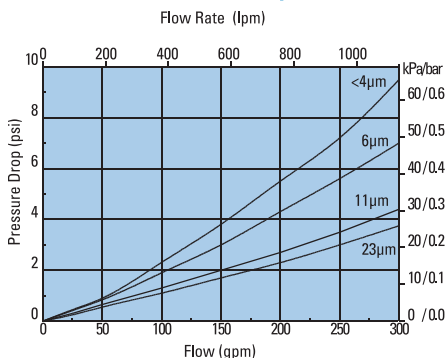
Standard HFK08 replacement filters have Buna-N® seals, which are appropriate for most applications involving petroleum oil. Filters with seals made of fluorocarbon elastomer (such as Viton® and Fluorel®) are required when using diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF (high water content fluids) over 150°F. HFK08 filters are inside to outside reverse flow 4.39" (112mm) OD. Refer to the table in the Technical Reference Guide for fluid compatibility with our filter media. Viton® is a registered trademarks of E. I. DuPont de Nemours and Company. Fluorel® is a registered trademark of 3M Company.



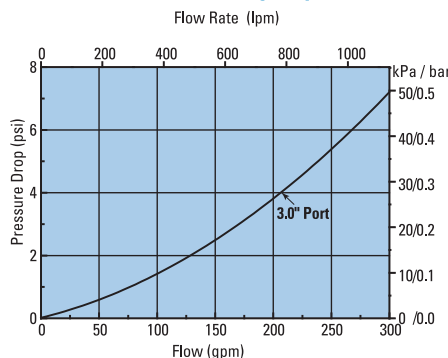
The K080087 model has features that are perfect for kidney loop filtration.

Performance Data

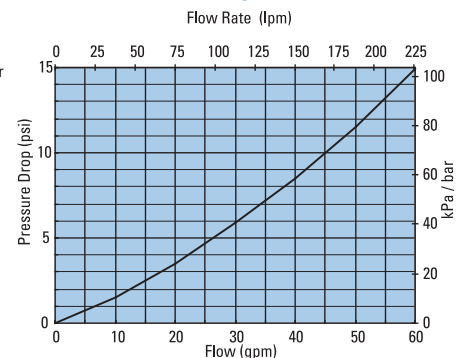
HFK08 Filter Only



HFK08 Housing Only



K080087 Assembly (with Filter)

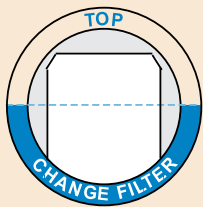
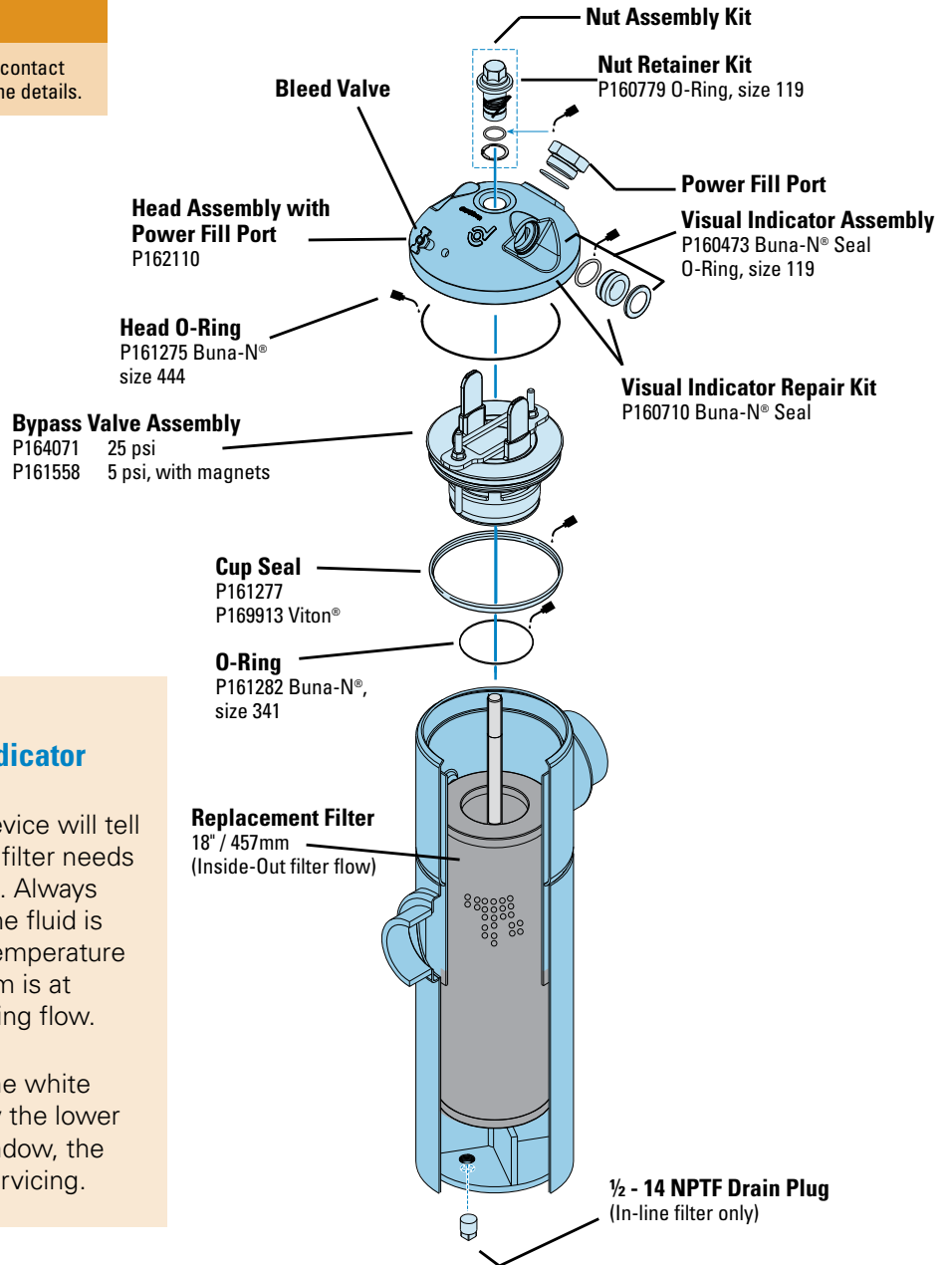




HFK08 Service Parts

SERVICE PARTS NOTE:

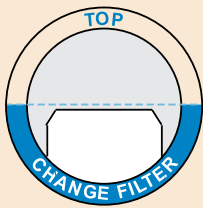
Some service parts may not be stocked. Please contact your Donaldson sales representative for lead time details.



Filter OK

How to Read the Visual Indicator

This simple device will tell you when the filter needs to be changed. Always check when the fluid is at operating temperature and the system is at normal operating flow.



Filter Needs Service

If the top of the white panel is below the lower half of the window, the filter needs servicing.



HFK08 replacement filters are available with synthetic or wire mesh media.



Donaldson Delivers Performance Under **Any** Pressure.



www.donaldsonfilters.com

PRODUCT INFORMATION



www.donaldsonfilters.com



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

HPK02.....	130
DPK2400	136
W440	140
FPK02	144
W350	150
HPK03.....	154
FPK04	160
HPK04.....	166
W451	174
W620	178
HPK05.....	183



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)

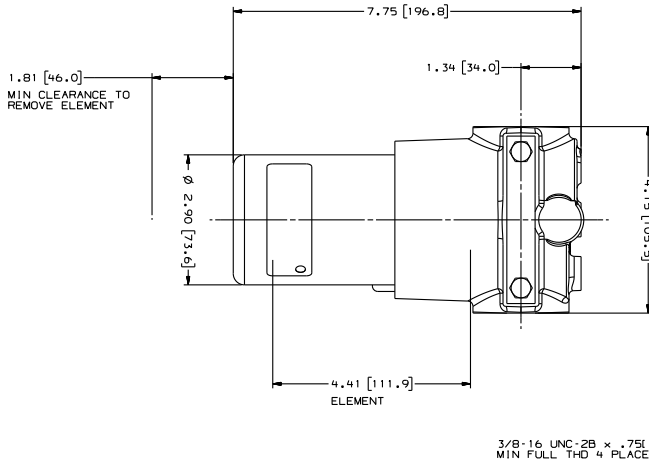
HPK02 Specification Illustrations

All dimensions are shown in inches [millimeters].

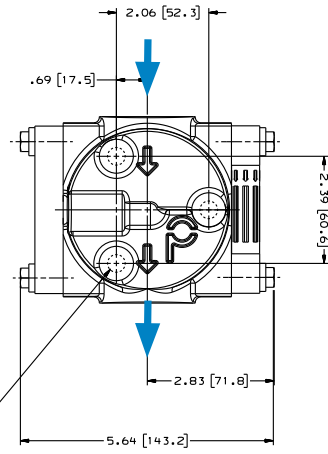
Applications

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

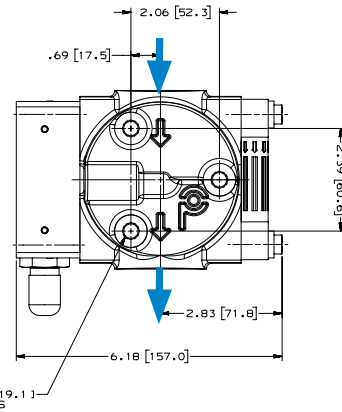
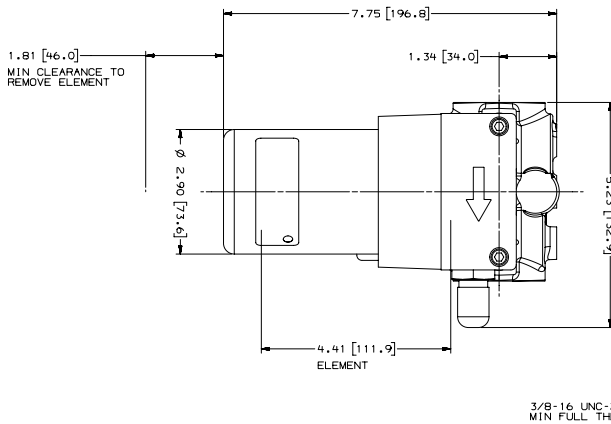
Assembly - Side View



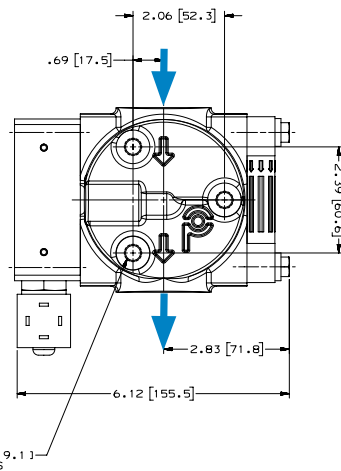
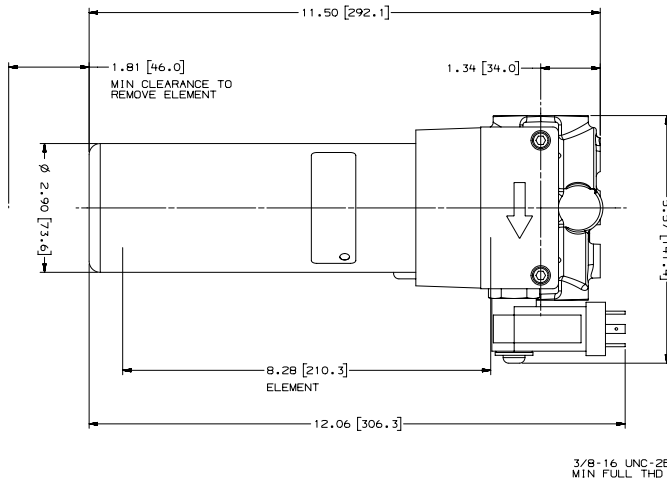
Head - Top View



HPK02 with Visual Service Indicator



HPK02 with AC/DC Electrical Service Indicator





HPK02 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

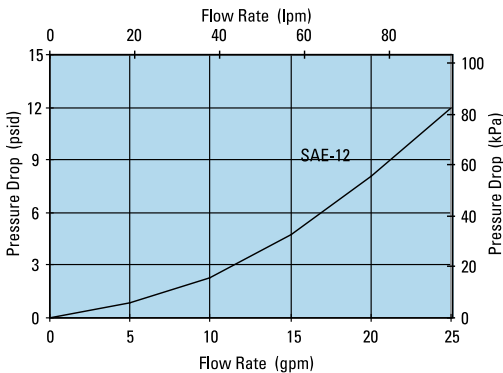


HPK02
Max Flow: 20 gpm (76 lpm)

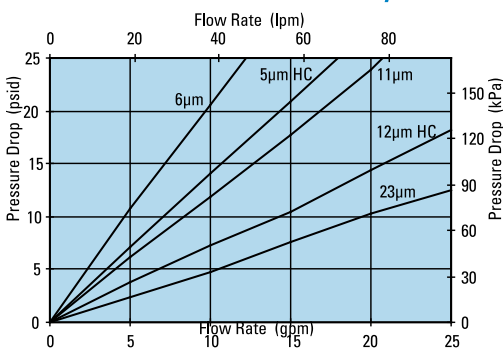


Performance Data

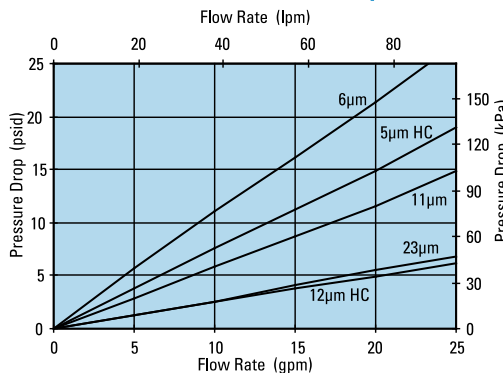
HPK02 Housing Only



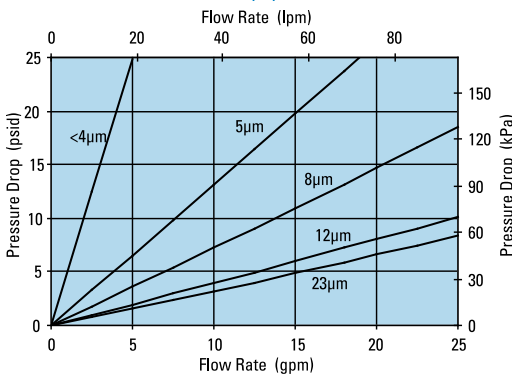
HPK02 Standard 4" Filter Only



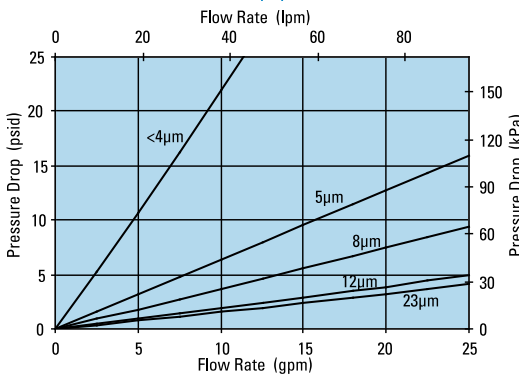
HPK02 Standard 8" Filter Only



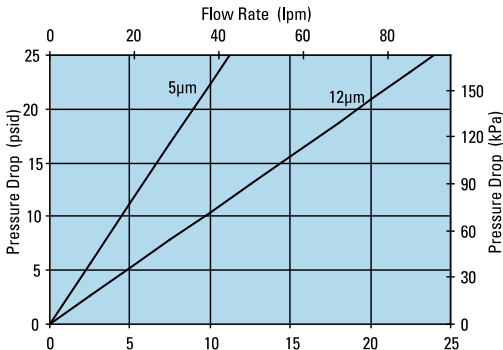
HPK02 4" DT Filter Only
DT-9020-4, 4"/102mm



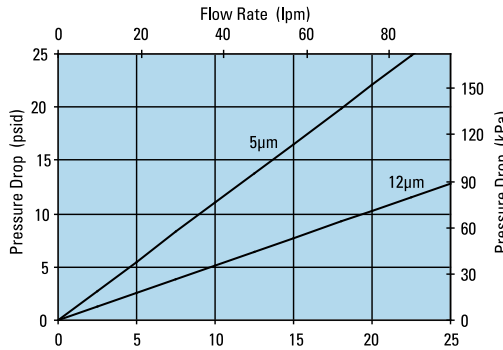
HPK02 8" DT Filter Only
DT-9020-8, 8"/203mm



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



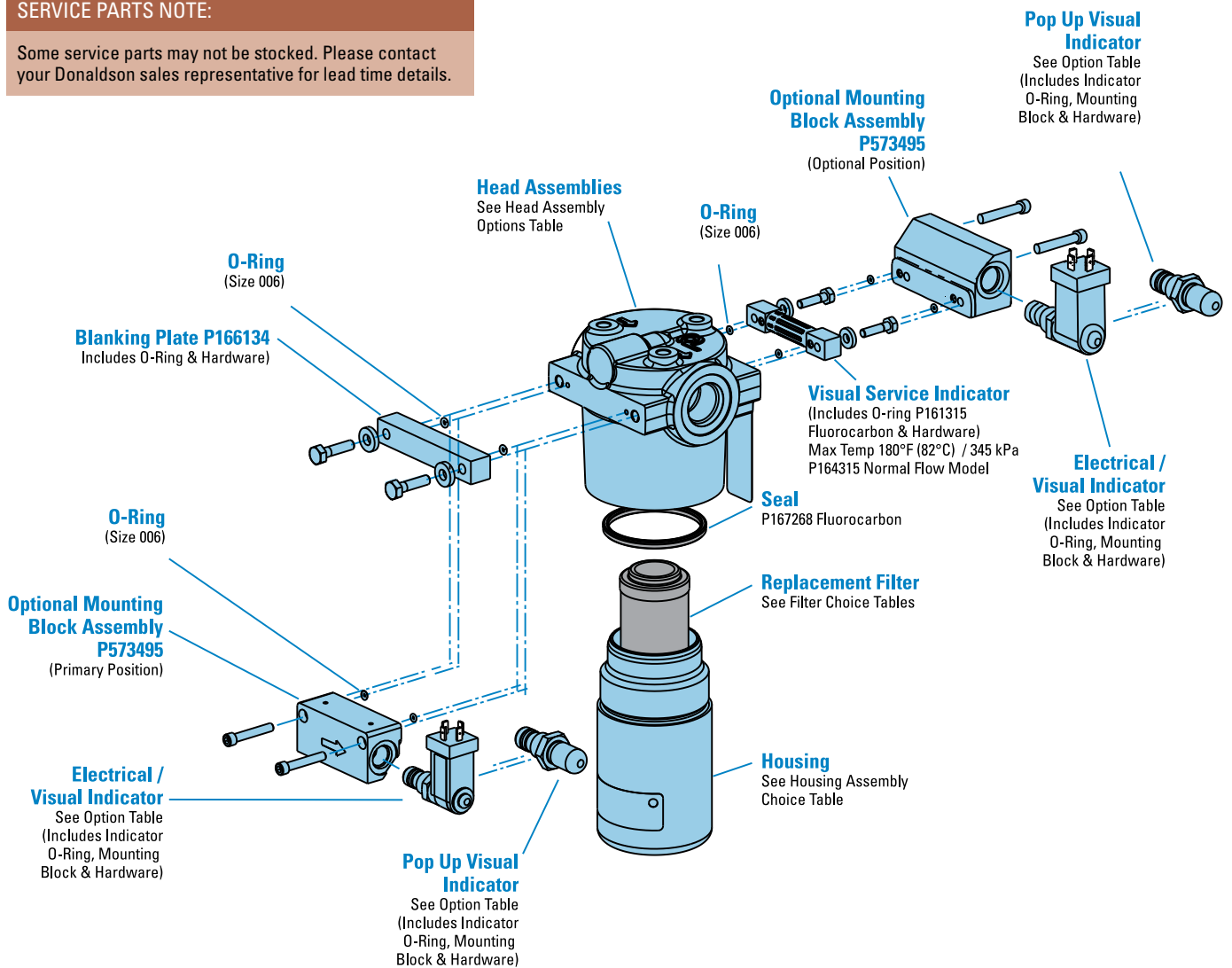
HPK02 8" DT Filter Only
DT-9021-8, 8"/203mm



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: 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 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 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 $\beta_{5(c)} = 1000$

Assembly Weight

- 98 lbs / 20 kg

Porting Size Options

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

Operating Temperatures

- -40° to 250°F (-40° to 121°C)

Replacement Filter Lengths

- 14.62" / 371 mm

Standard Bypass Ratings

- 100 psi / 690 kPa / 6.9 bar

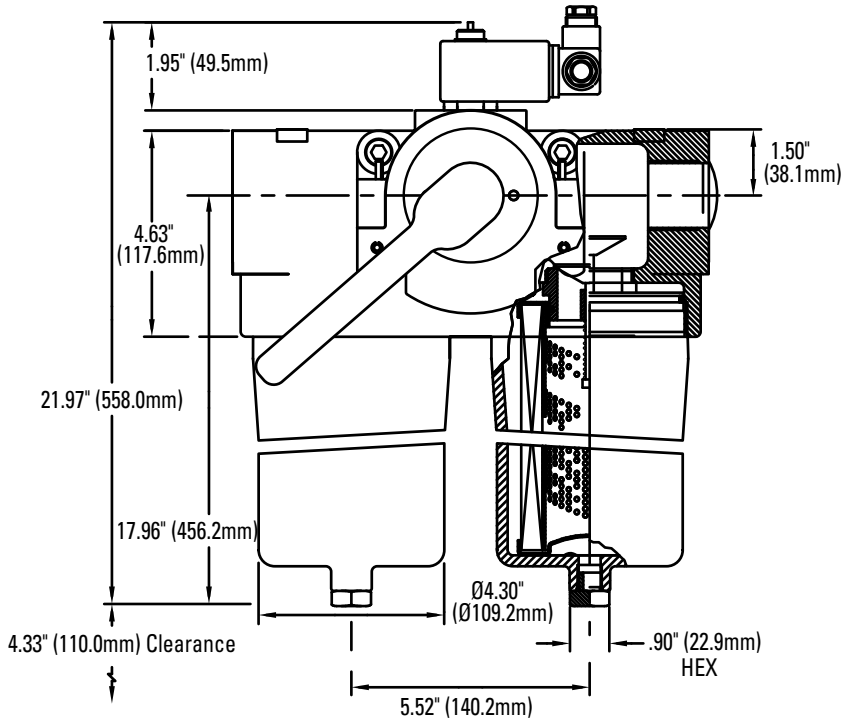
Filter Collapse Ratings

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

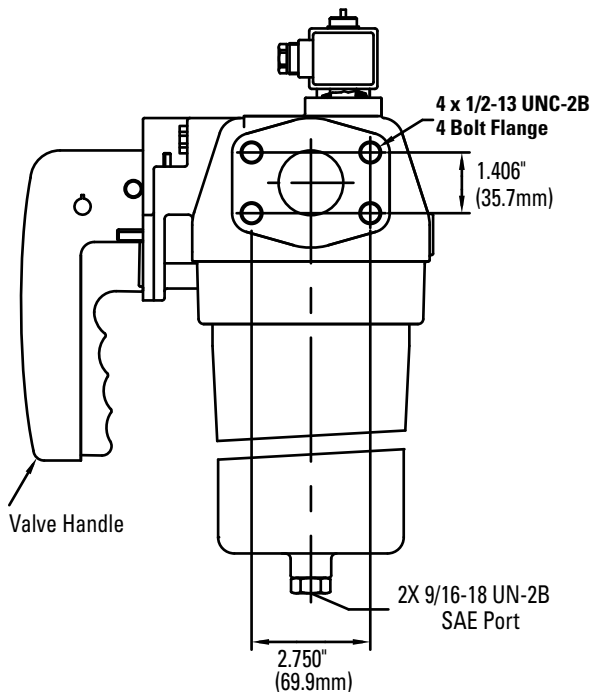
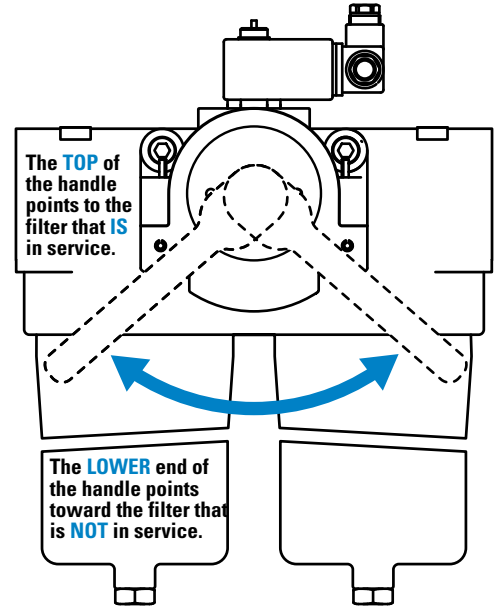
- No bypass

DPK2400 Specification Illustrations

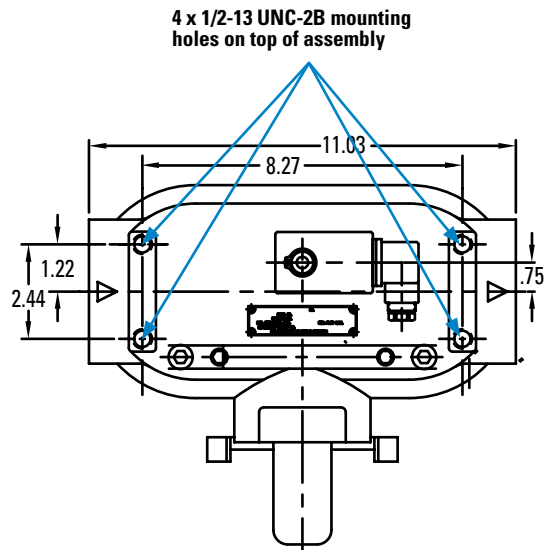
Assembly - Side Views



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



Head - Top View





DPK2400
Max Flow: 100 gpm (379 lpm)



DPK2400 Components

Assembly Choices

Part No.	Port Connections	Bypass Valve	Comments
P577026	1-½" SAE 4-bolt flange code 61	No bypass	Filter elements not included with assembly. Please select filter elements from list below
P577027	1-½" SAE 4-bolt flange code 61	100 psi (6.9 bar) bypass	Filter elements not included with assembly. Please select filter elements from list below

Filter Choices

Media Type	$\beta_{x(c)} = 1000$ 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

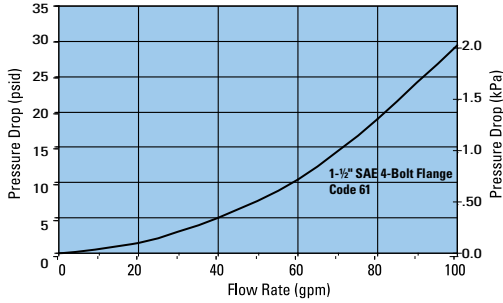
Service Indicator Choices

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

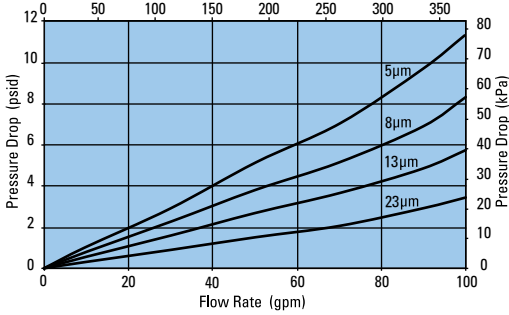
Flow Rate (lpm)



DPK2400 14" Filter Only

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

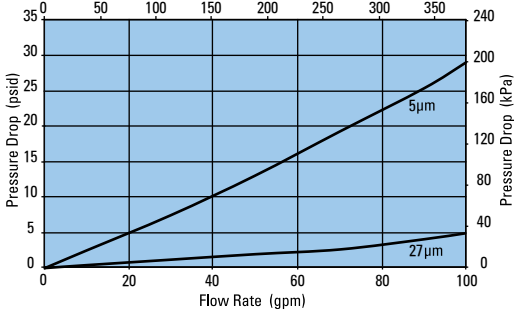
Flow Rate (lpm)



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
- 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)

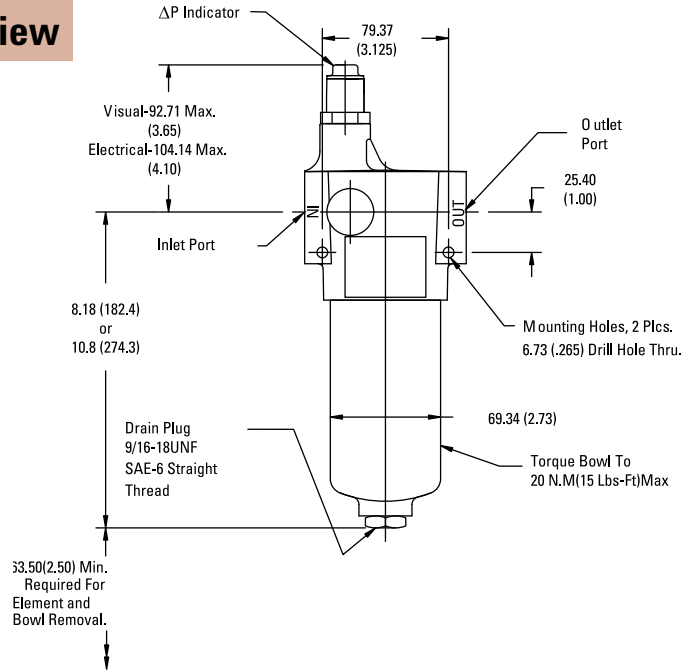
Filter Collapse Ratings

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

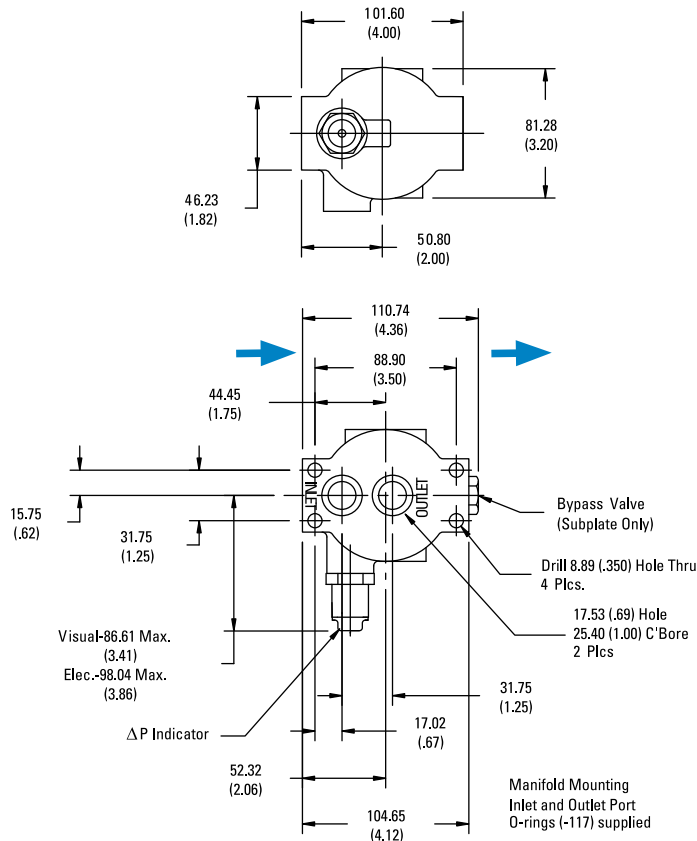
W440 Specification Illustrations

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

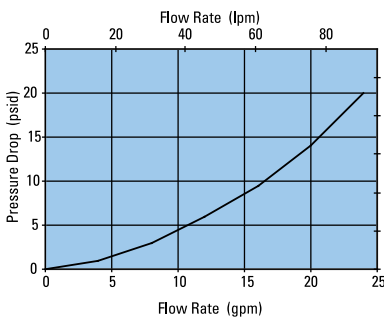
Media Type	$\beta_{x(c)} = 1000$ Rating based on ISO 16889	Length		Donaldson Part No.	Comments
		in	mm		
DT Synteq Synthetic	<4 μ m	4.41	112	P566194	DT-9020-4-2UM
	5 μ m	4.41	112	P566195	DT-9020-4-5UM
	8 μ m	4.41	112	P566196	DT-9020-4-8UM
	12 μ m	4.41	112	P566197	DT-9020-4-14UM
	23 μ m	4.41	112	P566198	DT-9020-4-25UM
	<4 μ m	8.28	210	P566199	DT-9020-8-2UM
	5 μ m	8.28	210	P566200	DT-9020-8-5UM
	8 μ m	8.28	210	P566201	DT-9020-8-8UM
	12 μ m	8.28	210	P566202	DT-9020-8-14UM
	23 μ m	8.28	210	P566203	DT-9020-8-25UM
	5 μ m	4.46	113	P566335	DT-9021-4-5UM, High collapse
	12 μ m	4.46	113	P566336	DT-9021-4-14UM, High collapse
	5 μ m	8.16	207	P566337	DT-9021-8-5UM, High collapse
	12 μ m	8.16	207	P566338	DT-9021-8-14UM, High collapse

Filter Notes

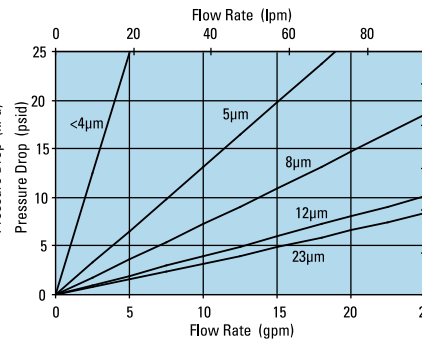
All Donaldson DT filters utilize glass fiber media with an epoxy-based resin system for the ultimate in chemical compatibility. All Donaldson DT filters are potted with epoxy-based adhesives. Standard collapse DT designs are double wire-backed using epoxy-coated steel mesh for maximum pleat support and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

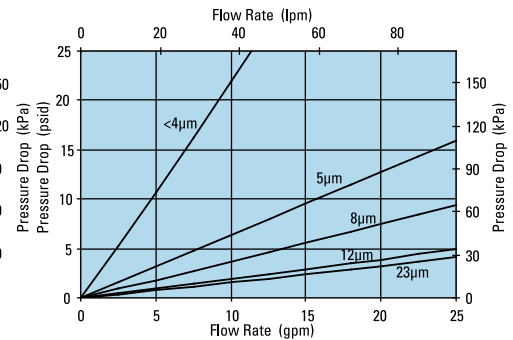
W440 Housing Only



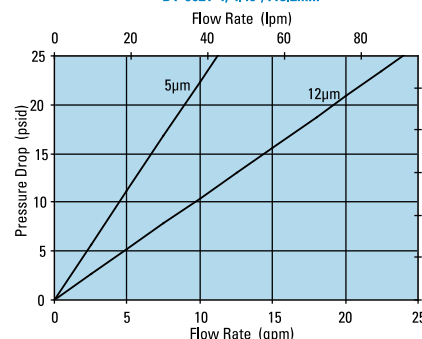
W440 4" DT Filter Only



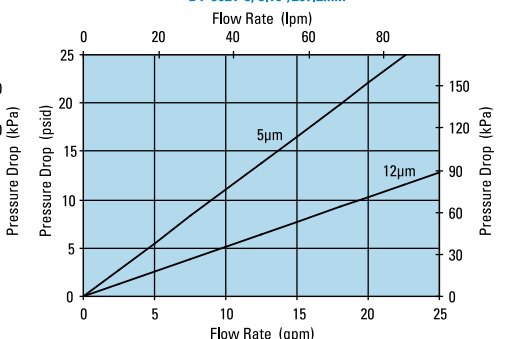
W440 8" DT Filter Only



W440 4" DT Filter Only



W440 8" DT Filter Only





Head Assembly Choices

Port Size	Bypass Rating	Seal Material 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

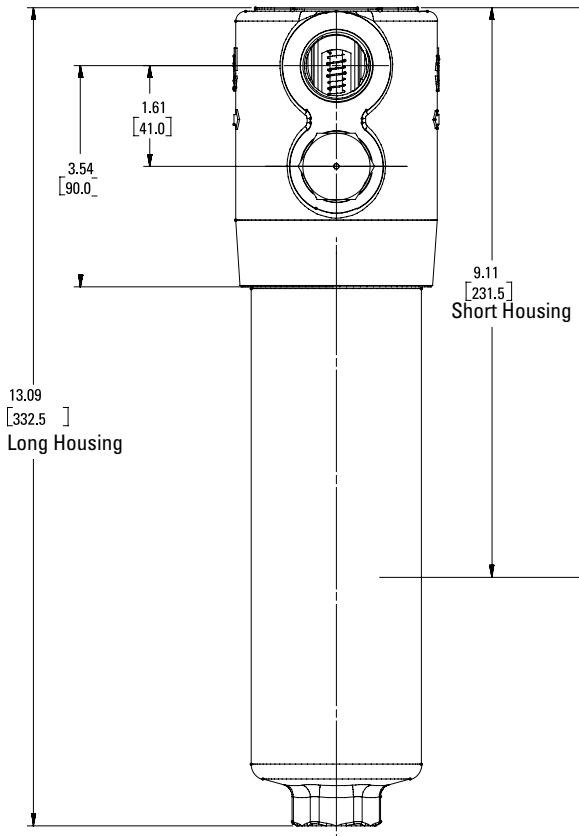
Filter Collapse Ratings

- 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].

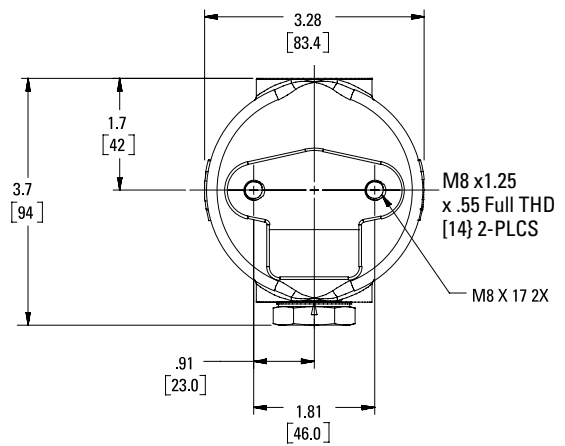
Assembly - Side View



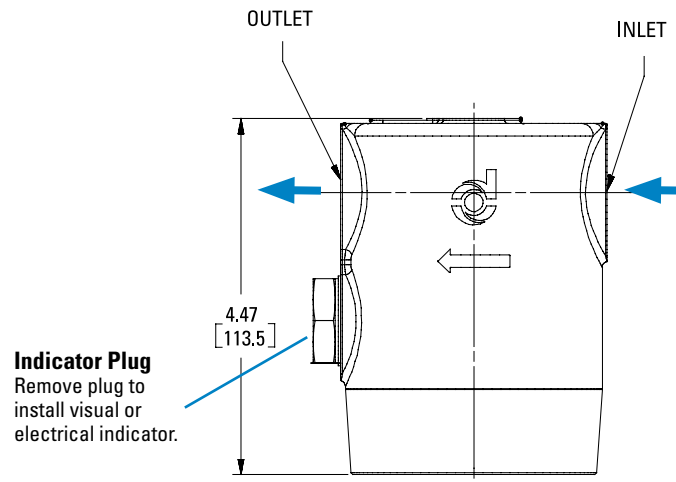
Applications

- 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.



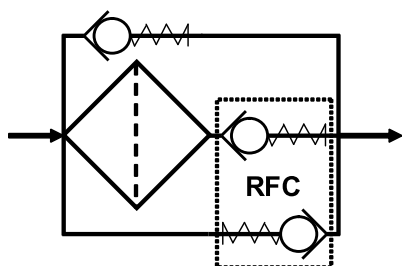
Housing Choices

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.

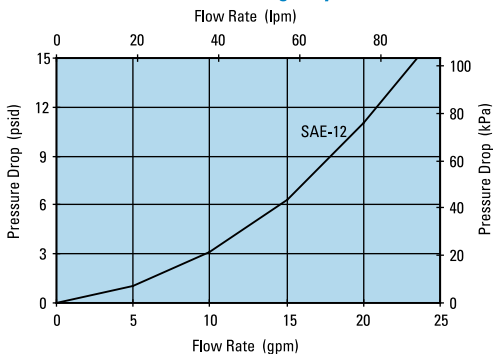
Viton® and Buna-N® registered trademarks of E. I. DuPont de Nemours and Company.





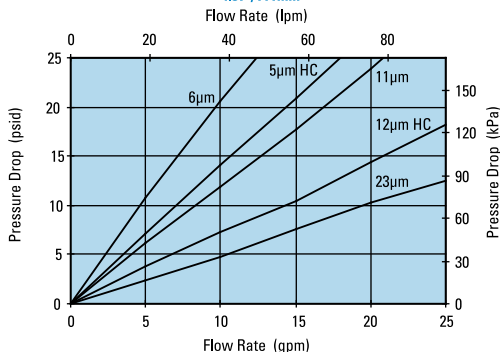
Performance Data

FPK02 Housing Only



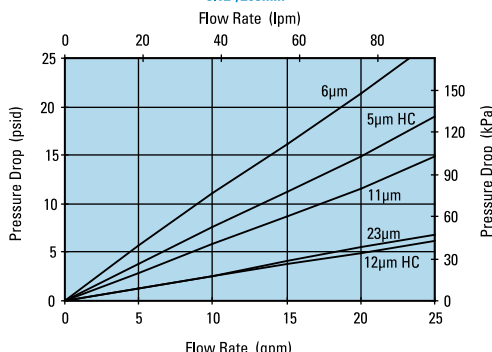
FPK02 Standard 4" Filter Only

4.37"/111mm



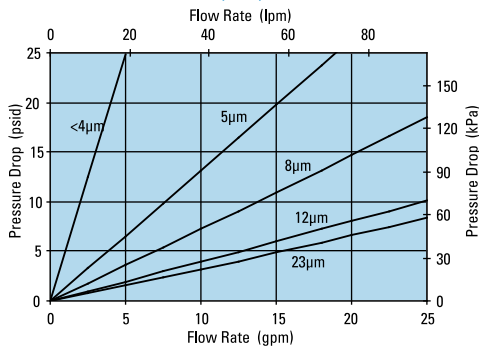
FPK02 Standard 8" Filter Only

8.12"/203mm



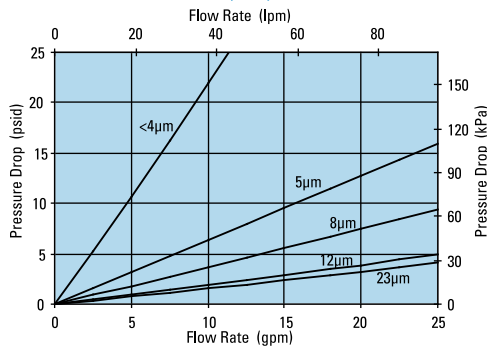
FPK02 4" DT Filter Only

DT-9020-4, 4.41"/111.9mm



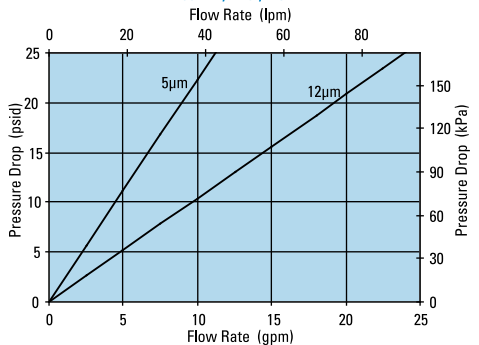
FPK02 8" DT Filter Only

DT-9020-8, 8.28"/210.3mm



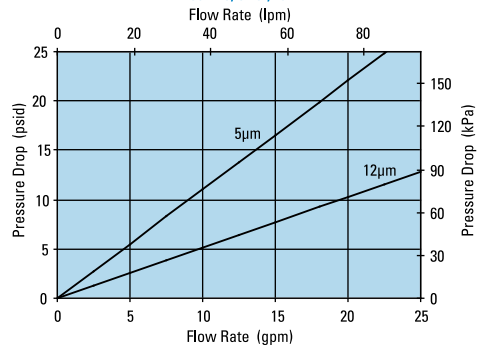
FPK02 4" DT Filter Only

DT-9021-4, 4.46"/113.2mm



FPK02 8" DT Filter Only

DT-9021-8, 8.16"/207.2mm

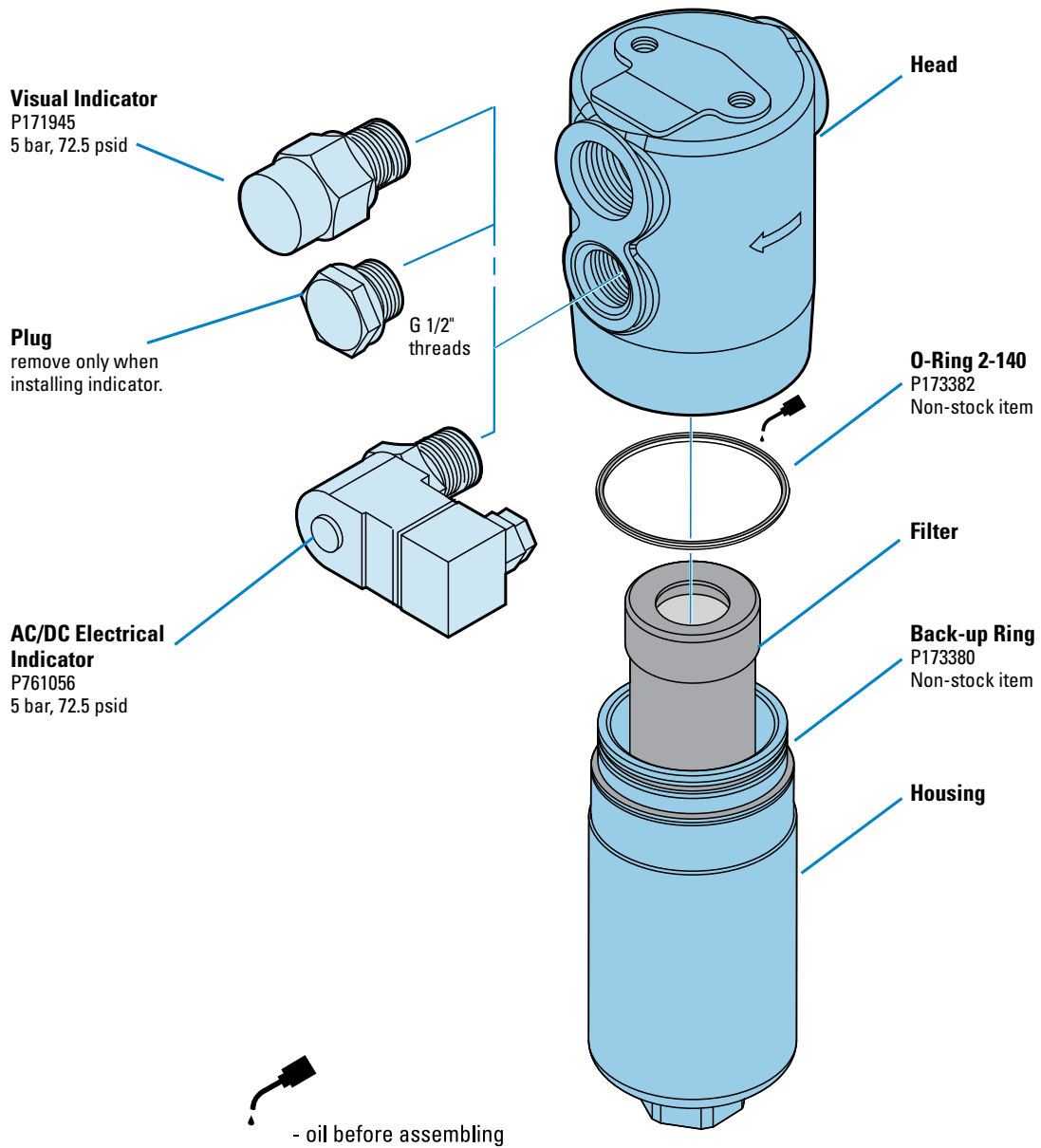


FPK02 Service Parts

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

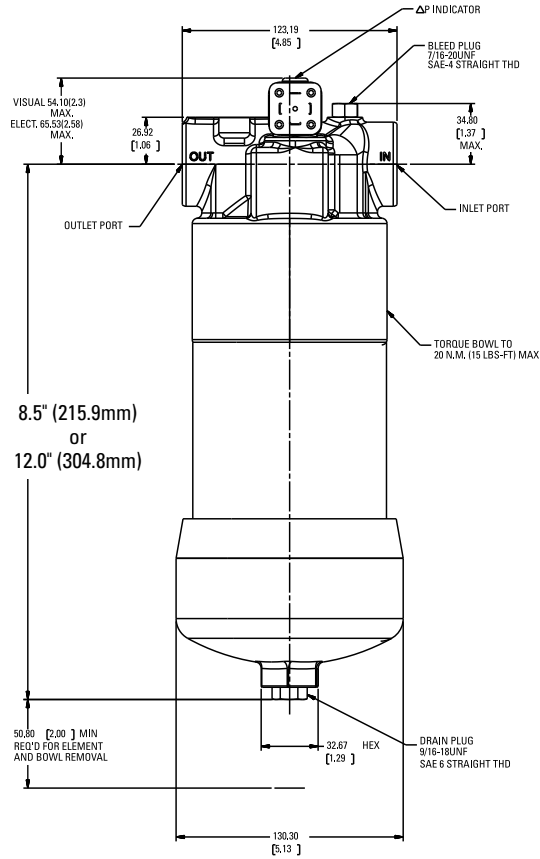
Operating Temperatures

- -20° to 250°F (-29° to 121°C)

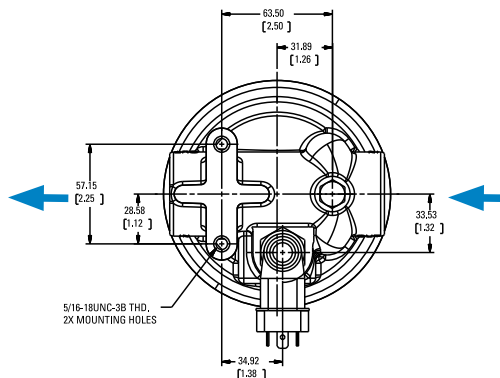
W350 Specification Illustrations

All dimensions are shown in millimeters [inches].

Assembly - Side View



Head - Top View





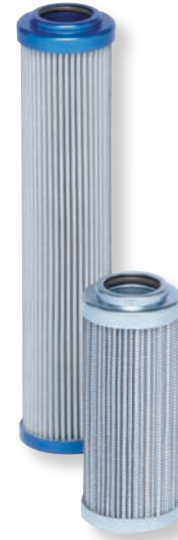
W350
Max Flow: 50 gpm (189 lpm)



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
Water Absorbing	5 μm	8.19	208	P566366	DT-9601-8-5UM, High collapse
	12 μm	8.19	208	P566367	DT-9601-8-14UM, High collapse
Water Absorbing	10 μm	8	209	P569528	Absorbs 130 ml water @ 25 psid

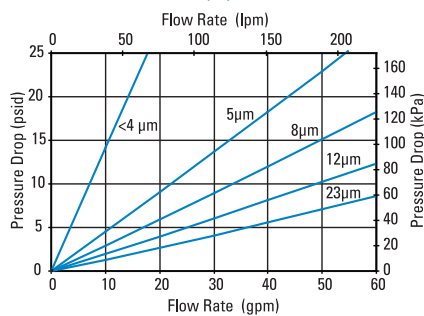


Filter Notes

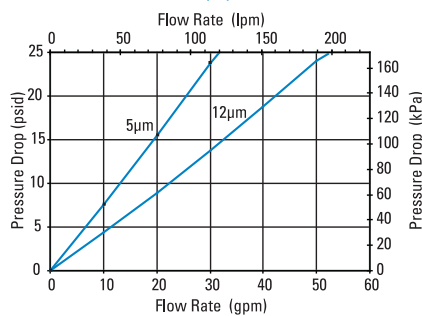
All Donaldson DT filters utilize glass fiber media with an epoxy-based resin system for the ultimate in chemical compatibility. All Donaldson DT filters are potted with epoxy-based adhesives. Standard collapse DT designs are double wire-backed using epoxy-coated steel mesh for maximum pleat support and 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. Viton® seals are standard on all Donaldson DT filters. Viton® is a registered trademark of E. I. DuPont de Nemours and Company.

Performance Data

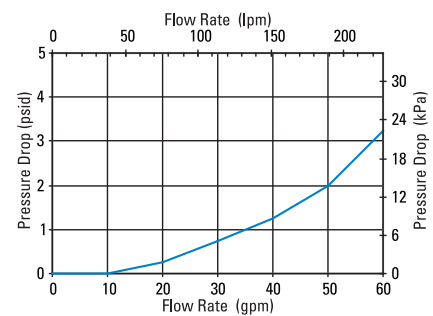
W350 4" DT Filter Only
DT-9600-4, 4"/102mm



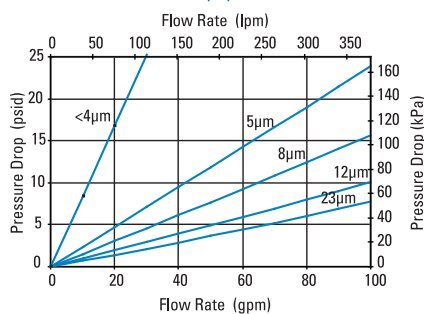
W350 4" DT Filter Only
DT-9601-4, 4"/102mm



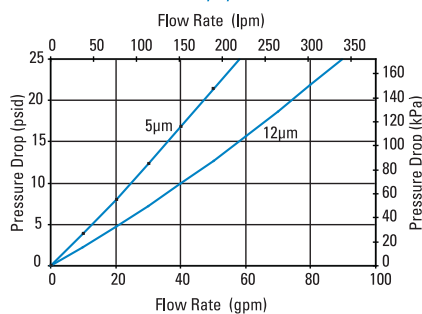
W350 Housing Only



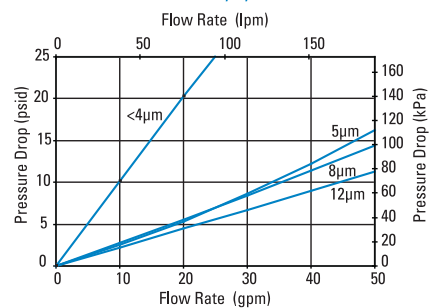
W350 8" DT Filter Only
DT-9600-8, 8"/203mm



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)

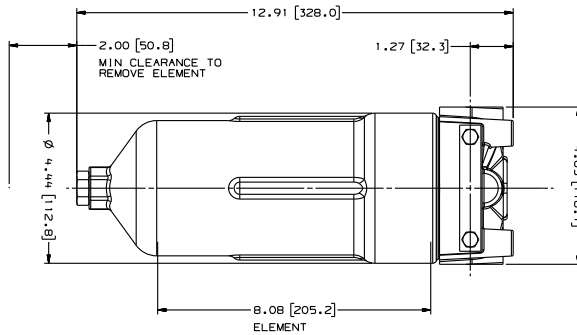
HPK03 Specification Illustrations

All dimensions are shown in inches [millimeters].

Applications

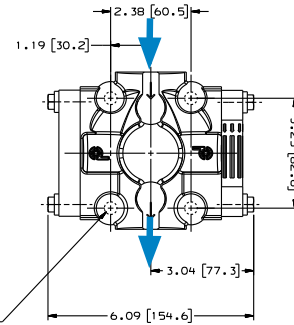
- High Pressure Circuits
- In-Plant Systems
- Meets HF3 Specification
- Mobile Equipment
- Servo Valve Circuits

Assembly - Side View

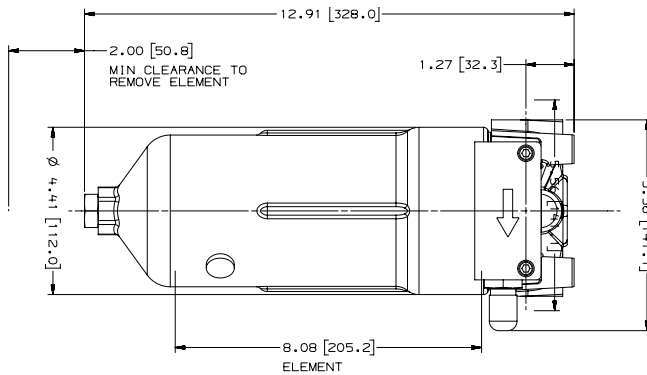


3/8-16 UNC-2B x .69 [17.5]
MIN FULL THD 4 PLACES

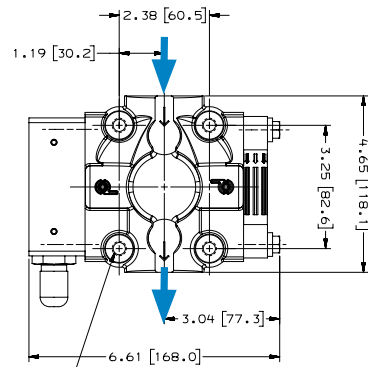
Head - Top View



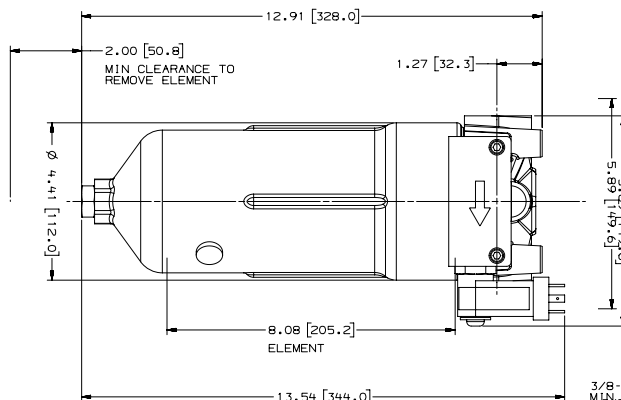
HPK03 with Visual Service Indicator



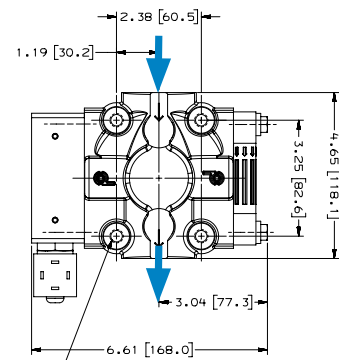
3/8-16 UNC-2B x .69 [17.5]
MIN FULL THD 4 PLACES



HPK03 with AC/DC Electrical Service Indicator



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





HPK03
Max Flow: 60 gpm (227 lpm)



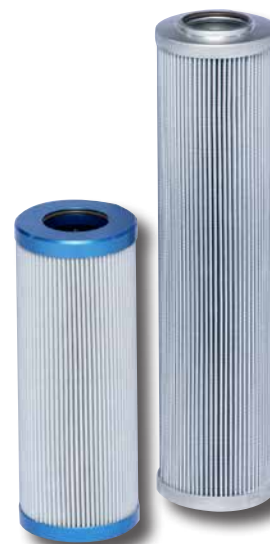
HPK03 Components

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

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	$\beta_{x(c)} = 2$ 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 fluor elastomer) are required when using diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF (high water content fluids) over 150°F/83°C. Refer to table in the Technical Reference Guide for fluid compatibility with our filter media. Donaldson high collapse filters are physically designed to withstand up to 3000 psi / 20,700 kPa before collapsing. The Viton® high collapse filter versions also use epoxy potting and media seam seals for added chemical compatibility. Viton® and Buna-N® registered trademarks of E. I. DuPont de Nemours and Company.





Housing Choices

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

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

Head Choices

Port Size	Bypass Rating	Indicators 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

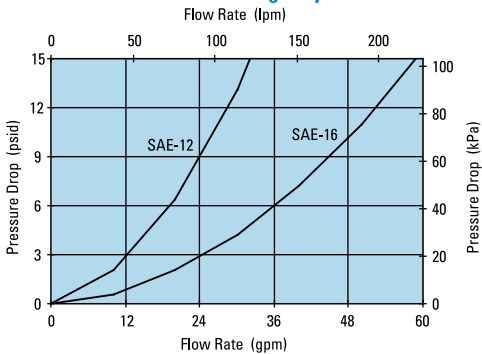
Indicator Choices

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

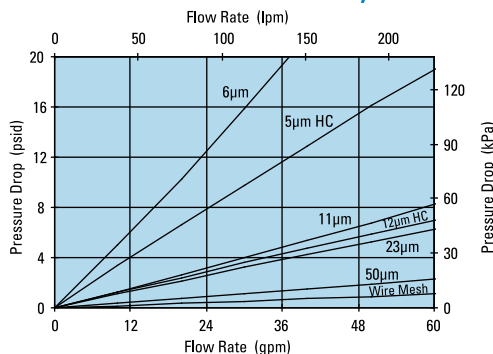


Performance Data

HPK03 Housing Only

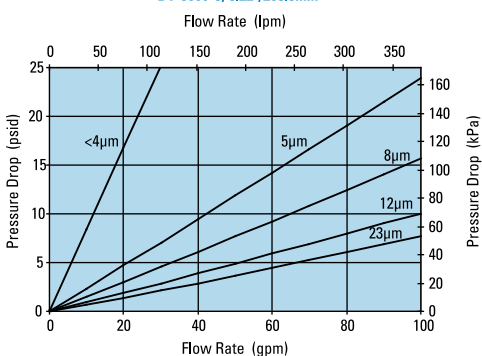


HPK03 8" Standard Filter Only



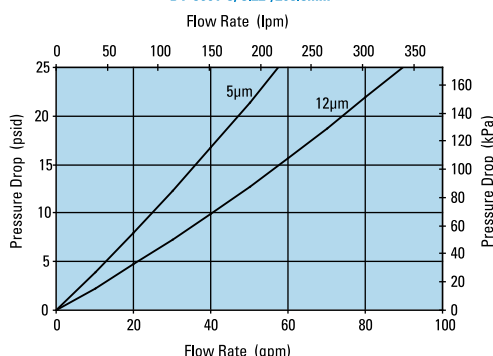
HPK03 8" DT Filter Only

DT-9600-8, 8.22"/208.8mm



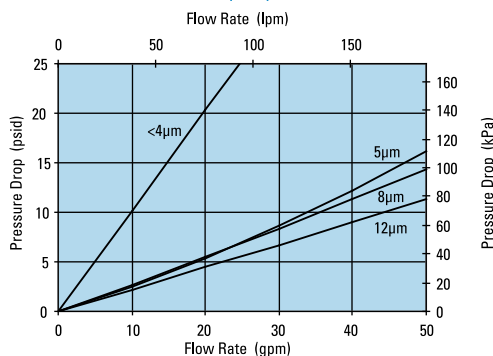
HPK03 8" DT Filter Only

DT-9601-8, 8.22"/208.8mm



W350 8" DX2 Filter Only

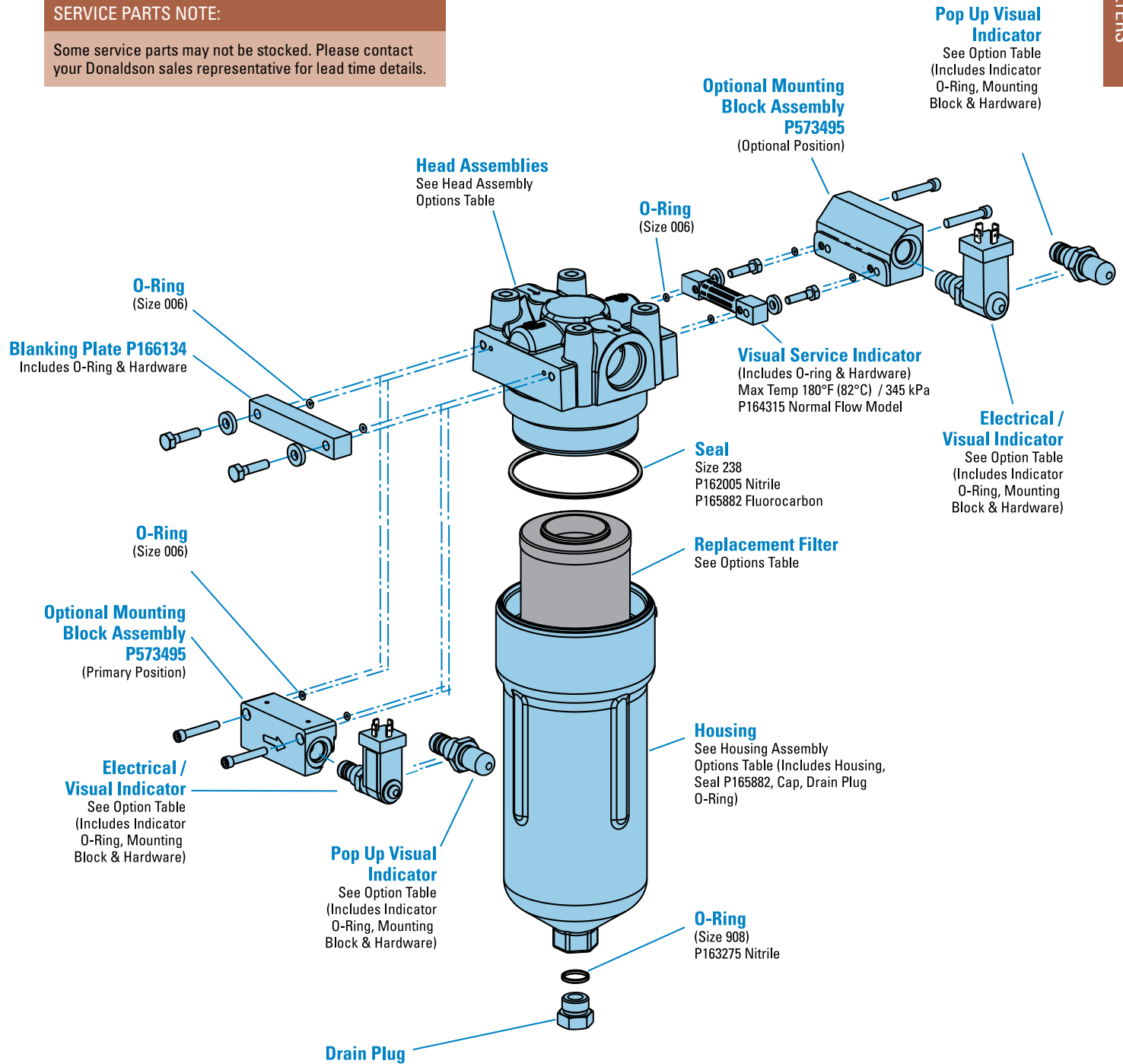
DX2-9600-8, 8.22"/208.8mm



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

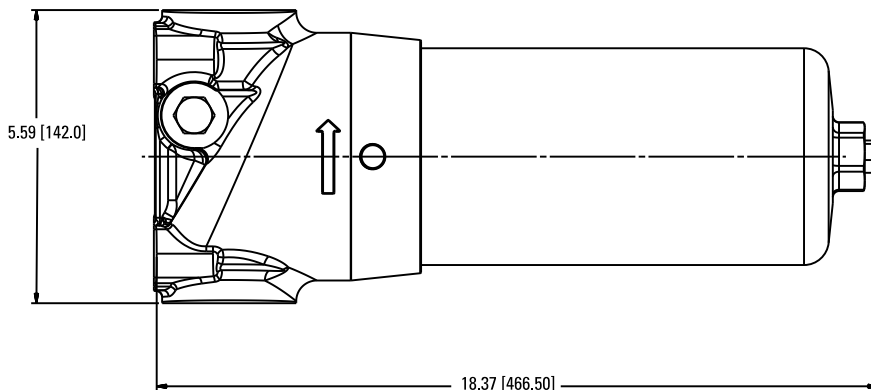
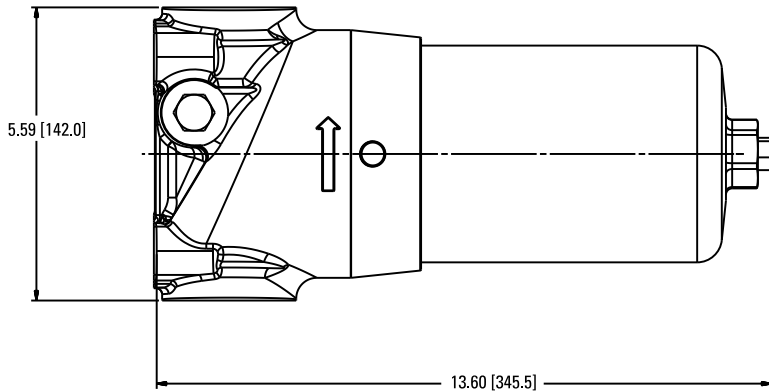
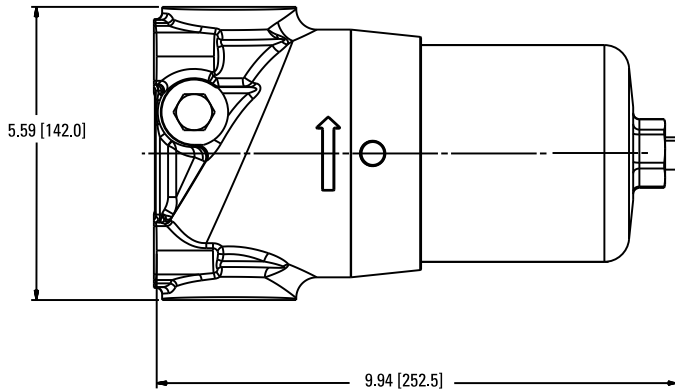
Operating Temperatures

- -4° to 248°F (-20° to 120°C)

FPK04 Specification Illustrations

All dimensions are shown in inches [millimeters].

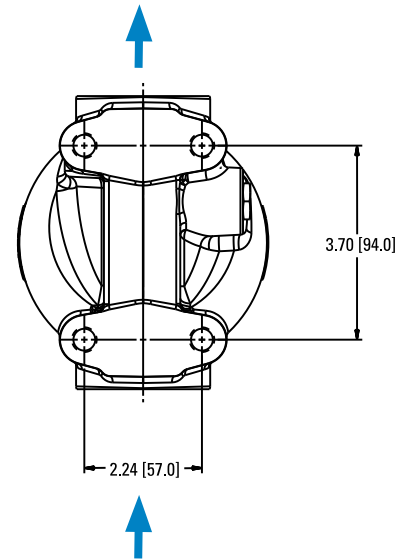
Assembly - Side View



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	$\beta_{x(e)} = 1000$ 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	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



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.

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 HWCFC 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.

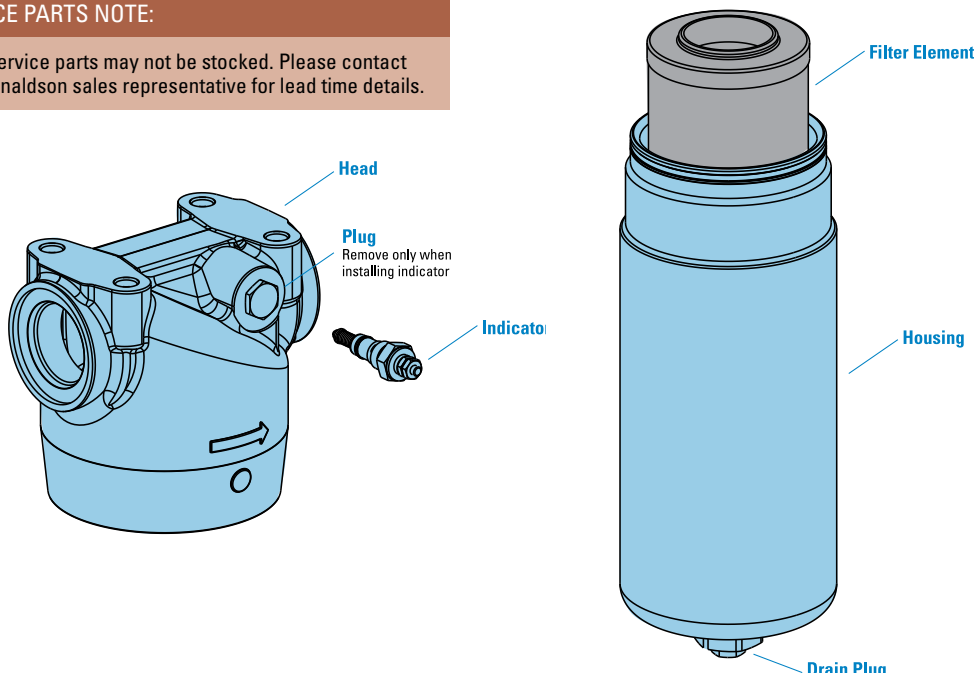
The fluorocarbon seal/high collapse filters also use epoxy potting and media seam seals for added chemical compatibility.

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:

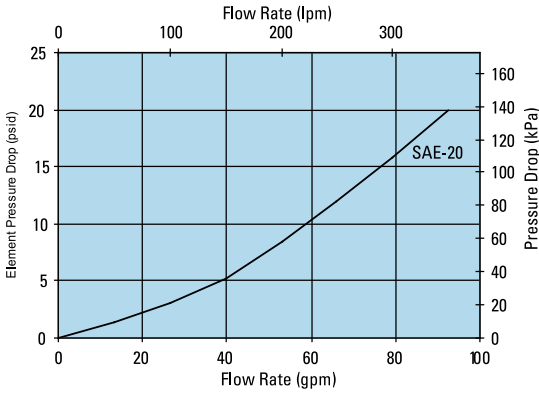
Some service parts may not be stocked. Please contact your Donaldson sales representative for lead time details.



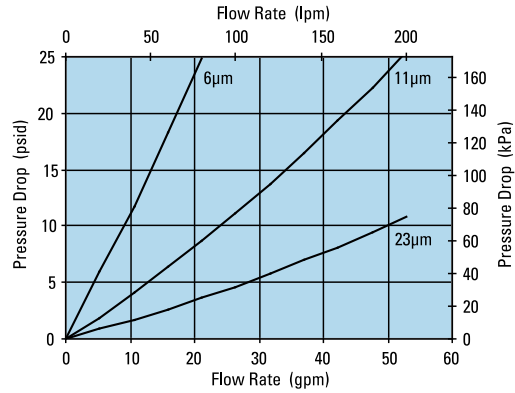


Performance Data

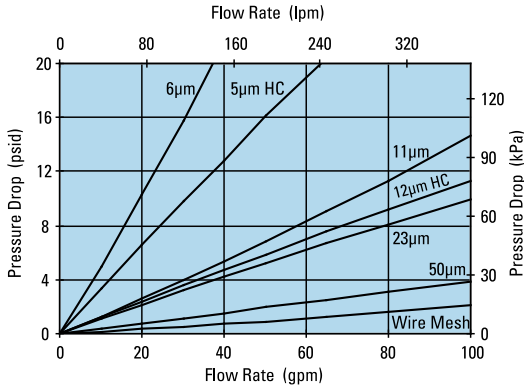
FPK04 Housing Only



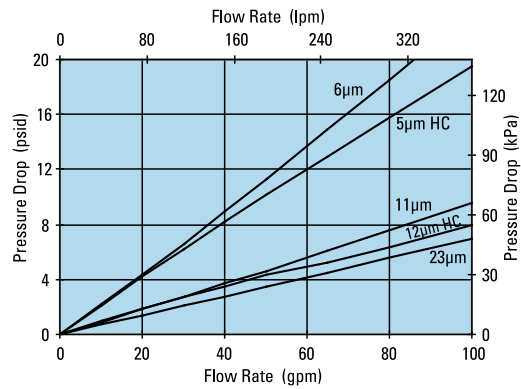
FPK04 4" Standard Filter Only
4.62"/117.3mm



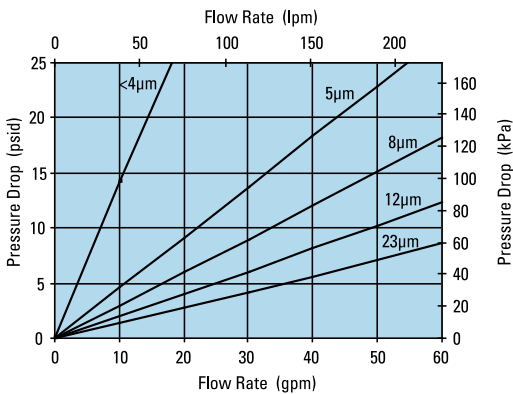
FPK04 8" Standard Filter Only
8.20"/208.3mm



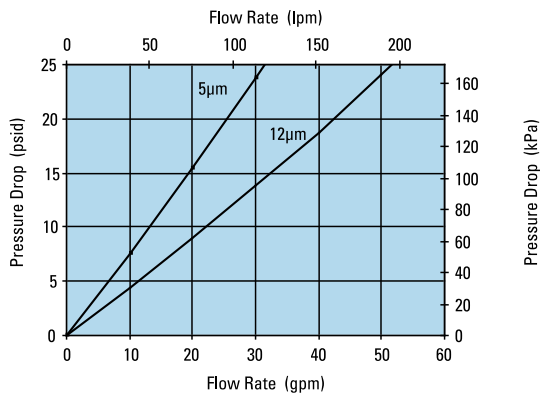
FPK04 13" Standard Filter Only
12.93"/328.4mm



FPK04 4" DT Filter Only
DT-9600-4, 4.59"/116.7mm



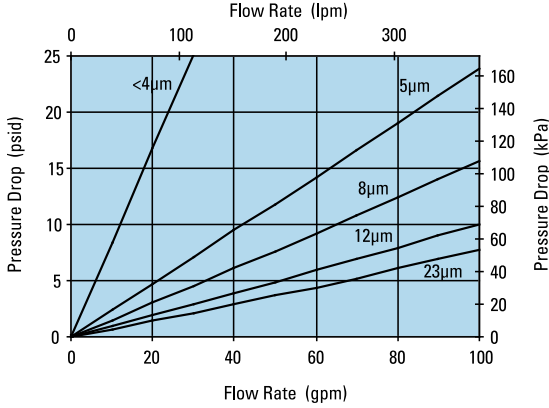
FPK04 4" DT Filter Only
DT-9601-4, 4.57"/116mm



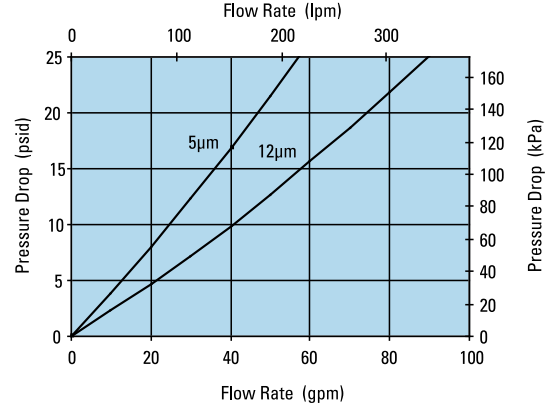


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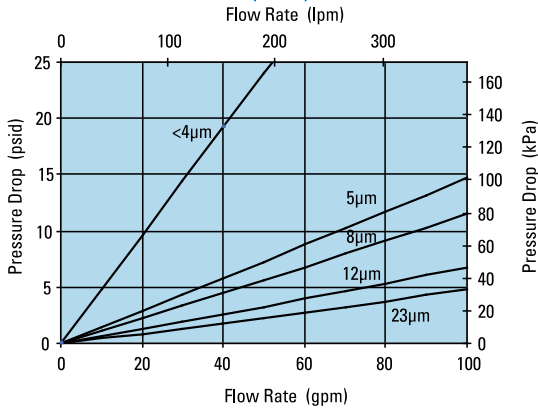
FPK04 8" DT Filter Only
DT-9600-8, 8.22"/208.8mm



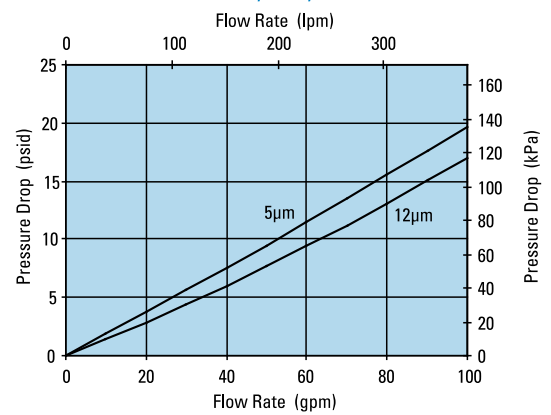
FPK04 8" DT Filter Only
DT-9601-8, 8.19"/208mm



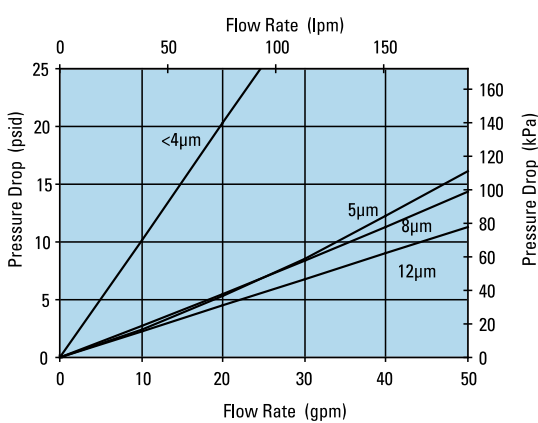
FPK04 13" DT Filter Only
DT-9600-13, 12.91"/327.8mm



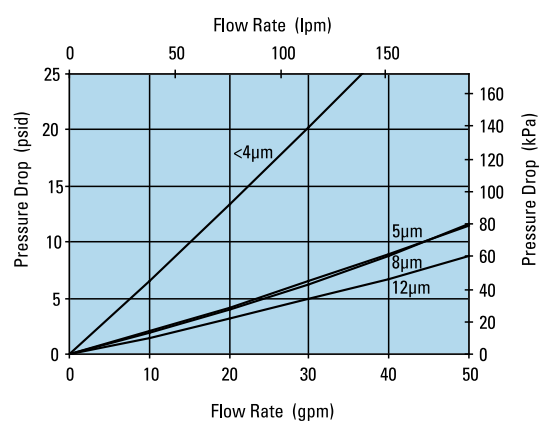
FPK04 13" DT Filter Only
DT-9601-13, 12.91"/327.8mm



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

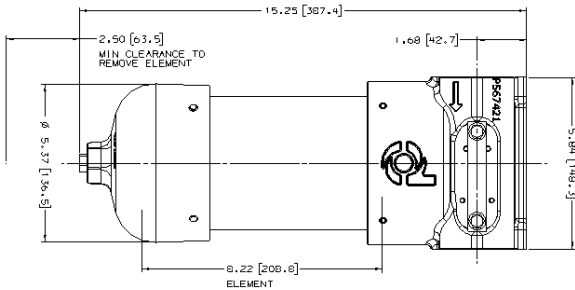
Filter Collapse Ratings

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

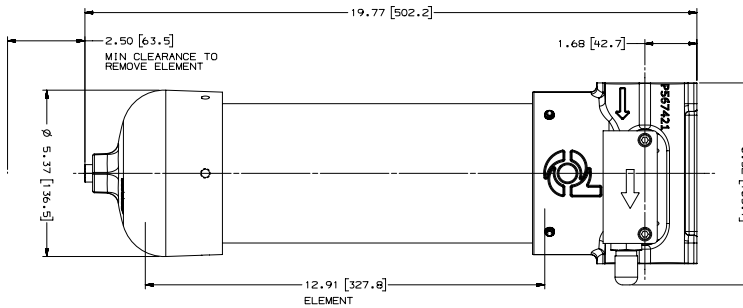
HPK04 Specification Illustrations

All dimensions are shown in inches [millimeters].

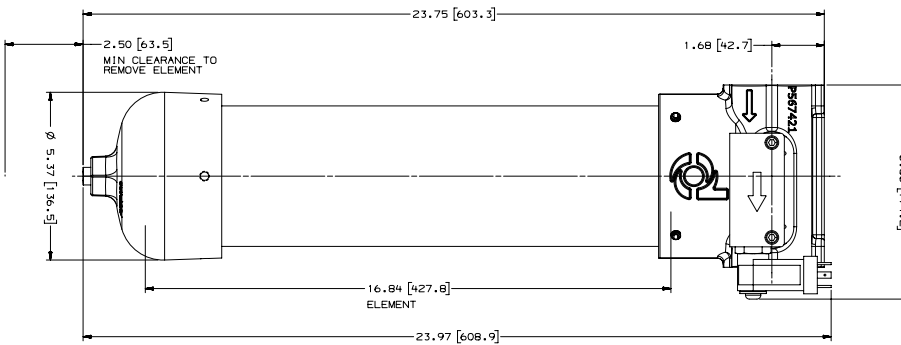
Assembly - Side Views



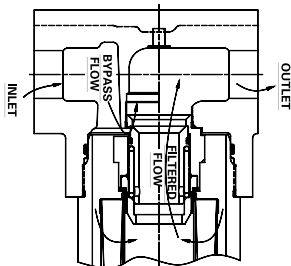
HPK04
with Visual Service Indicator



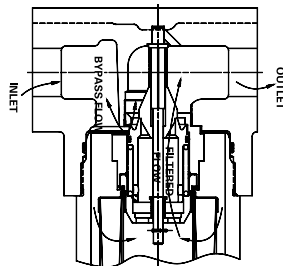
HPK04
with AC/DC Electrical Service Indicator



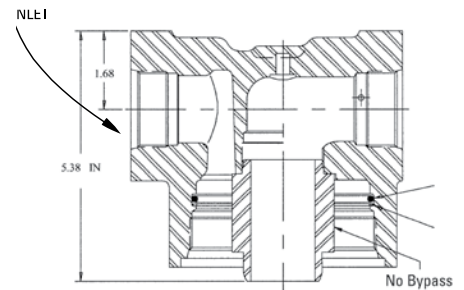
Bypass Valve Alternatives



60 psi / 414 kPa
Bypass Valve



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

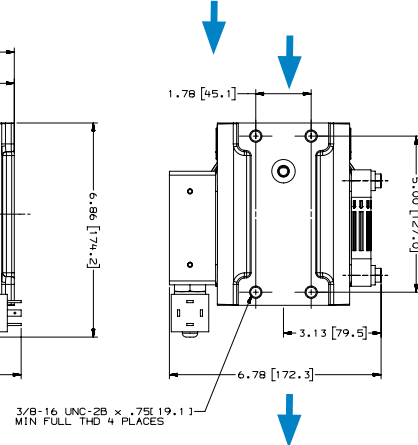
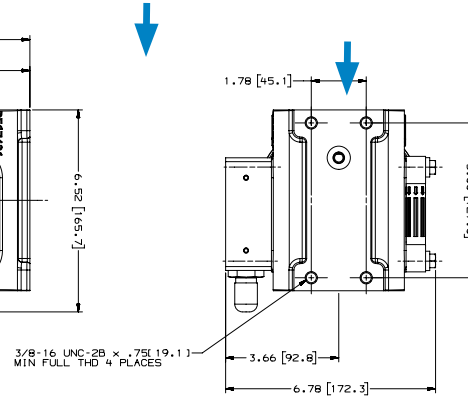
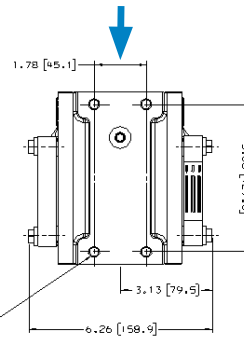


No Bypass

Applications

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

Head - Top Views





HPK04
Max Flow: 120 gpm (454 lpm)



HPK04 Components

High-Performance DT Filter Choices

Media Type	$\beta_{x(e)} = 1000$ 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	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	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



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	$\beta_{x(c)} = 2$ Rating based on ISO 16889	$\beta_{x(c)} = 1000$	Length		Donaldson Part No.	Comments
			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
		23 μ m	12.93	328	P164176	9600 Series, Buna-N
	23 μ m	16.84	428	P164178	9600 Series, Buna-N	
Water	10 μ m		8.20	208	P569528	9600 Series, Absorbs 180 ml water @ 25 psid
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

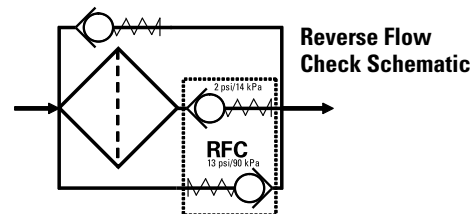
* Utilizes DT Synteq synthetic media
SEALS: Filters with seals made of Buna-N® are appropriate for most applications involving petroleum oil. Filters with seals made of Viton® (a fluoroelastomer) are required when using diester, phosphate ester fluids, water glycol, water/oil emulsions, and HWCF (high 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	Part No.
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

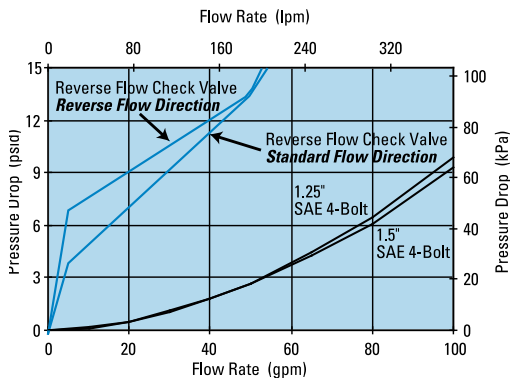
Notes on Indicators

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.

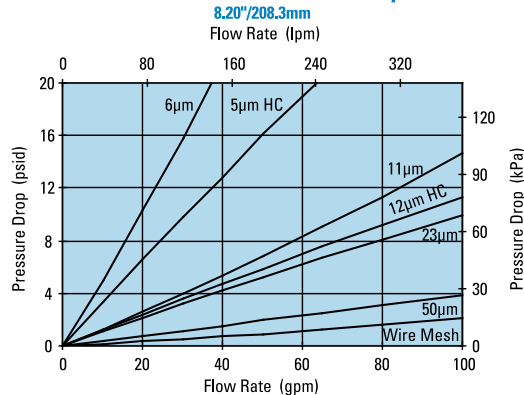


Performance Data

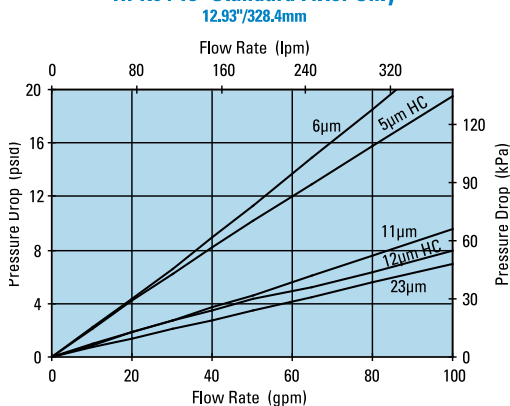
HPK04 Housing Only



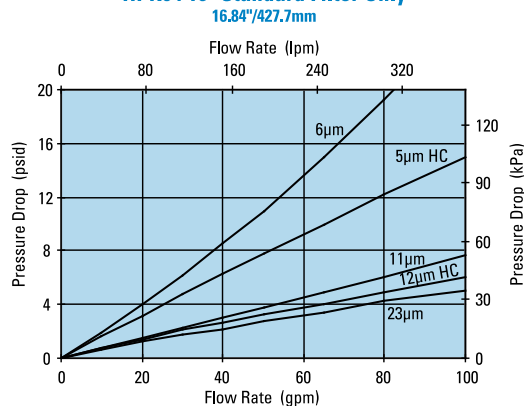
HPK04 8" Standard Filter Only



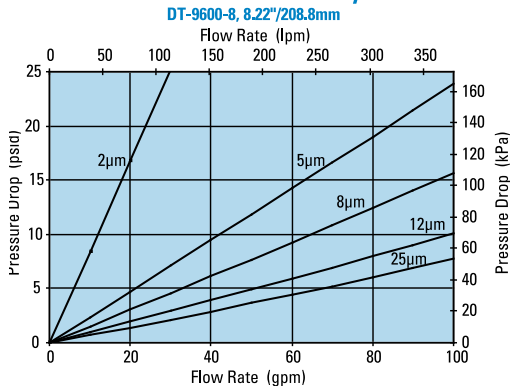
HPK04 13" Standard Filter Only



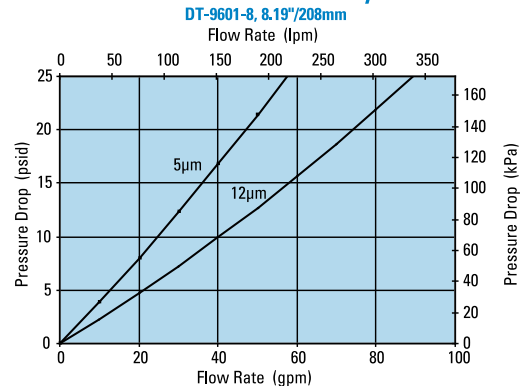
HPK04 16" Standard Filter Only



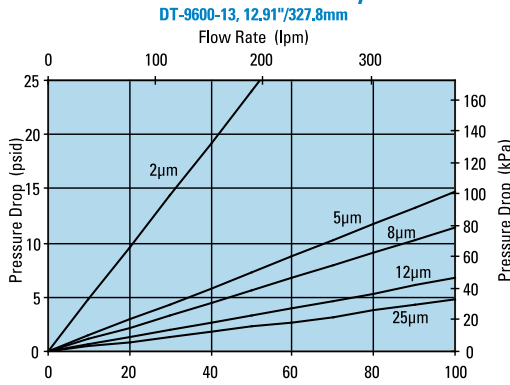
HPK04 8" DT Filter Only



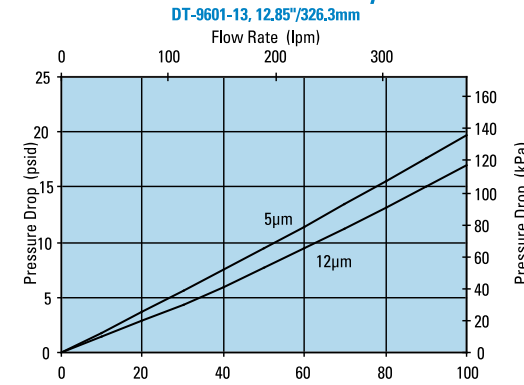
HPK04 8" DT Filter Only



HPK04 13" DT Filter Only



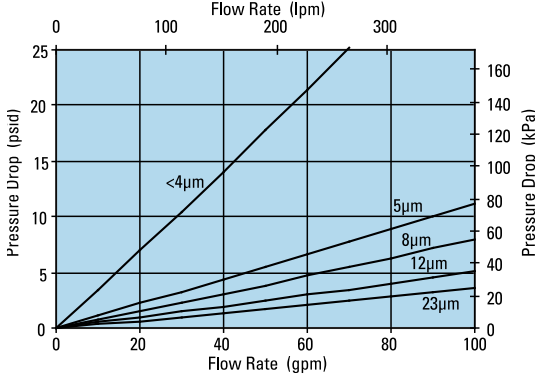
HPK04 13" DT Filter Only



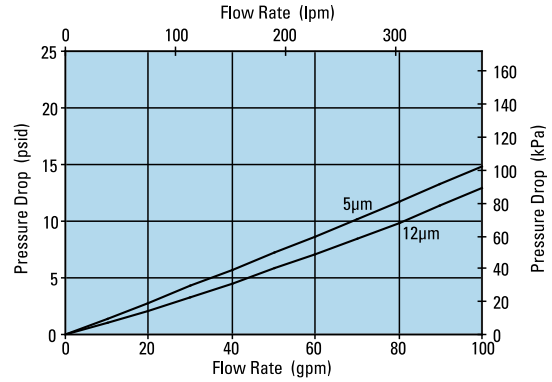


Performance Data

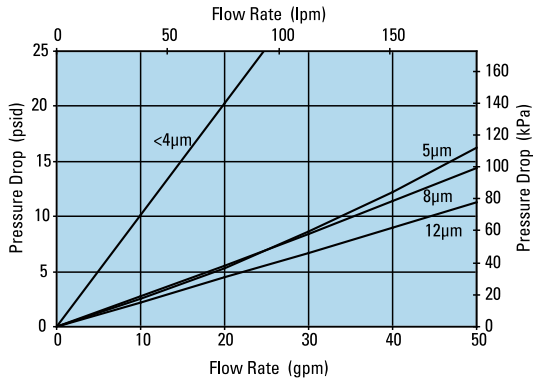
HPK04 16" DT Filter Only
DT-9600-16, 16.84"/427.8mm



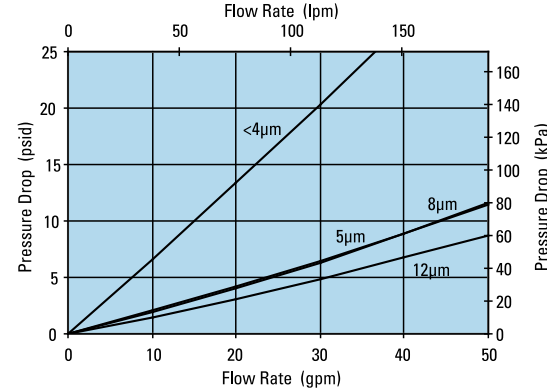
HPK04 16" DT Filter Only
DT-9601-16, 16.82"/427.1mm



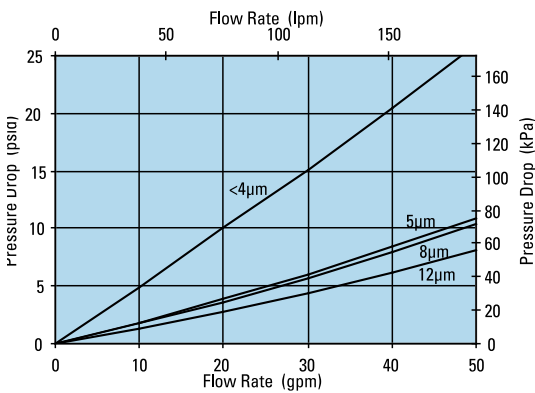
HPK04 8" DX2 Filter Only
DX2-9600-8, 8.19"/208mm



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

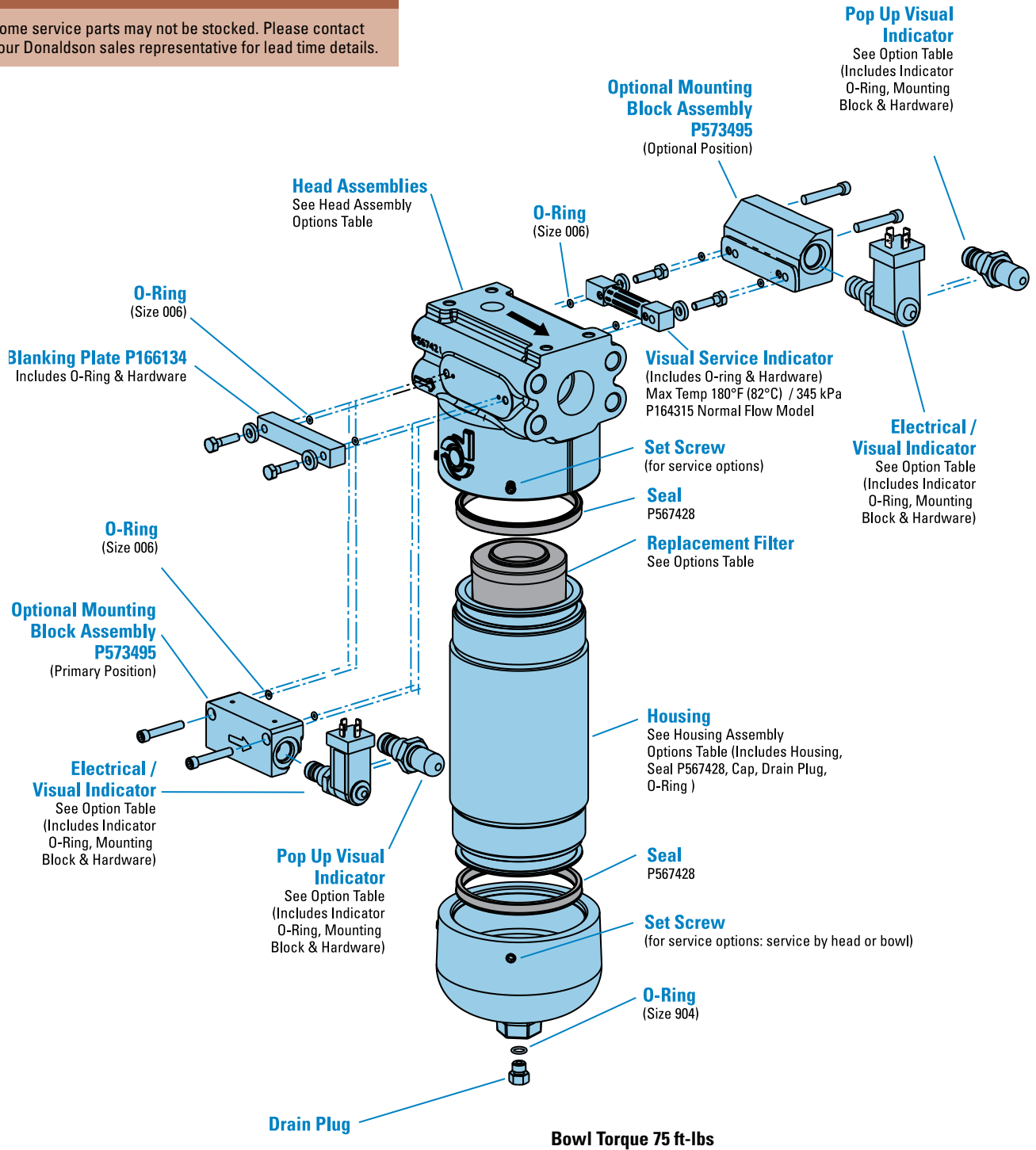
Replacement Indicator Only

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

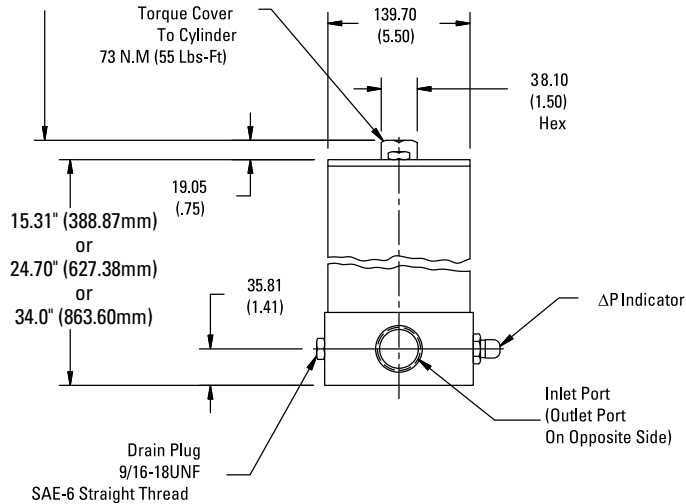
Filter Collapse Ratings

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

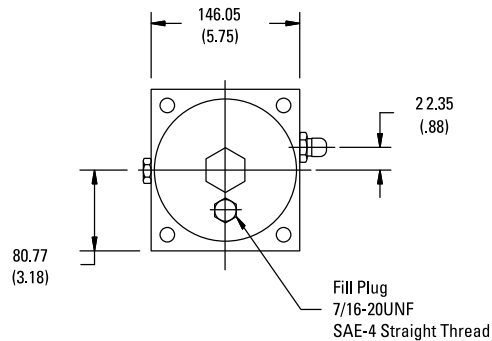
W451 Specification Illustrations

All dimensions are shown in millimeters [inches].

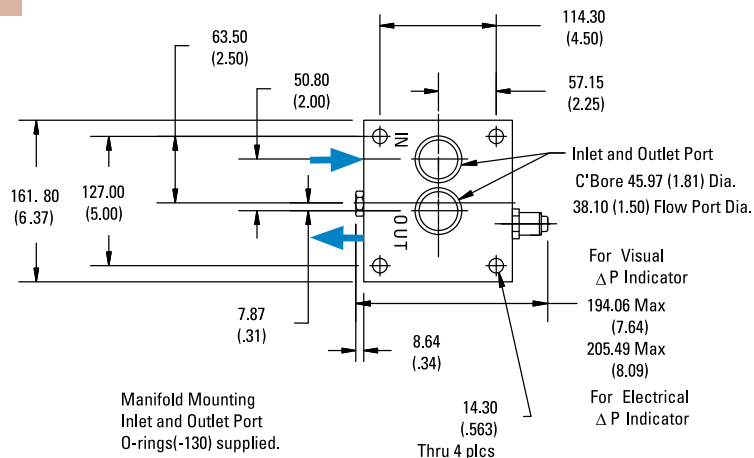
Assembly - Side View



Head - Side View



Head - Bottom View





W451
Max Flow: 150 gpm (568 lpm)



W451 Components

High-Performance DT Filter Choices

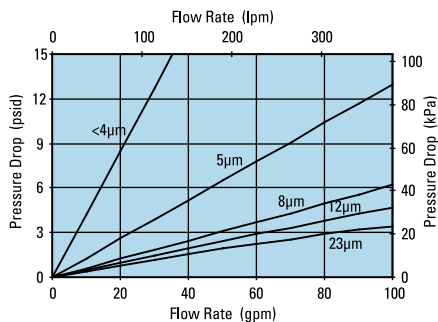
Media Type	$\beta_{x(c)} = 2$ Rating based on ISO 16889	$\beta_{x(c)} = 1000$	Length in mm	Donaldson Part No.	Comments
DT Synteq	<4 μm	9.04	230	P568816	DT-HF4-9-2UM
Synthetic	5 μm	9.28	236	P566270	DT-HF4-9-5UM
	8 μm	9.28	236	P566271	DT-HF4-9-8UM
	12 μm	9.28	236	P566272	DT-HF4-9-14UM
	23 μm	9.28	236	P566273	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

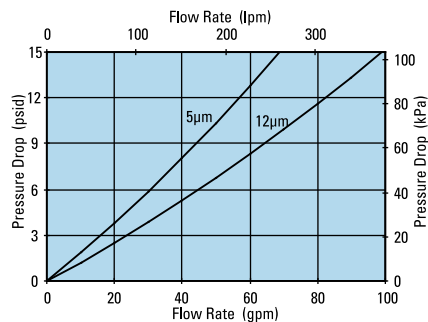
All Donaldson DT filters utilize glass fiber media with an epoxy-based resin system for the ultimate in chemical compatibility. All Donaldson DT filters are potted with epoxy-based adhesives. Standard collapse DT designs are double wire-backed using epoxy-coated steel mesh for maximum pleat support and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

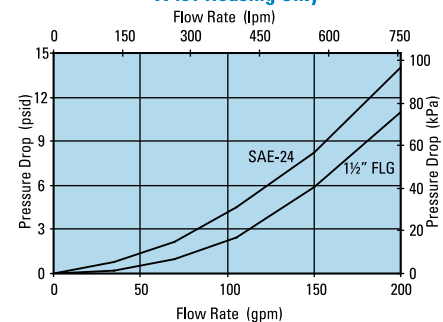
W451 9" DT Filter Only
DT-HF-9, 9.13"/231.8mm



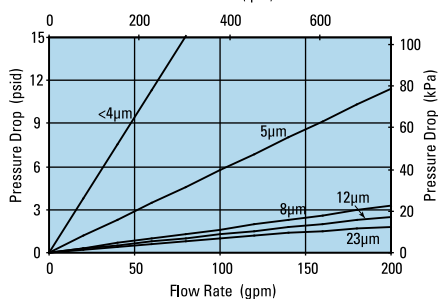
W451 9" DT High Collapse Filter Only
DT-HF4HC-9, 9.19"/233.5mm



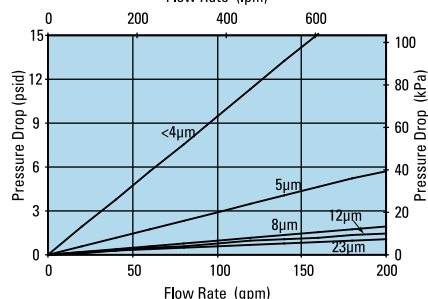
W451 Housing Only



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
- Head material: cast iron
- Housing material: steel
- 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

- 4.59" / 117mm
- 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

Assembly Weight

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

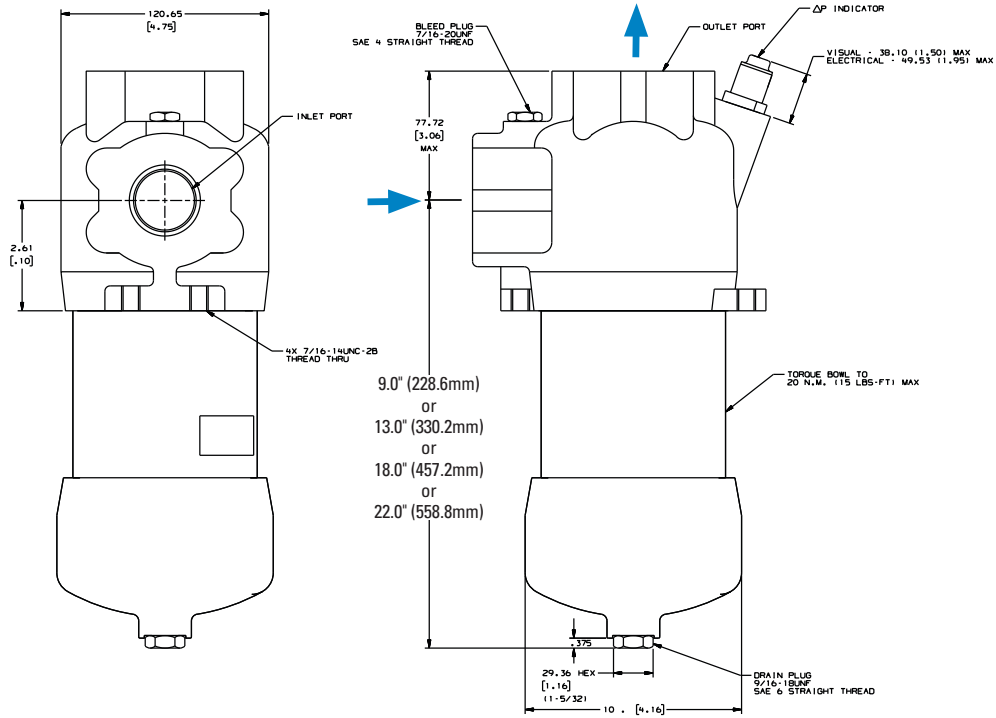
Filter Collapse Ratings

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

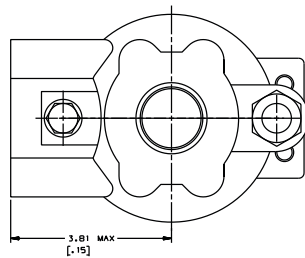
W620 Specification Illustrations

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	$\beta_{x(e)} = 1000$ 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	8.22	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.



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

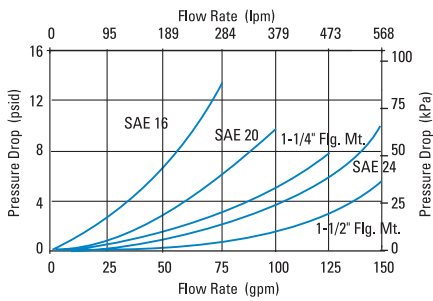


W620
Max Flow: 150 gpm (568 lpm)

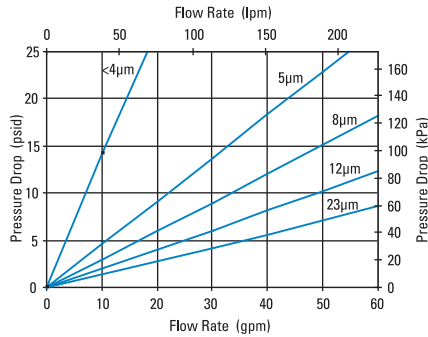


Performance Data

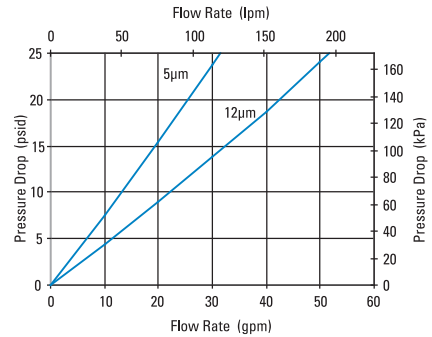
W620 Housing Only



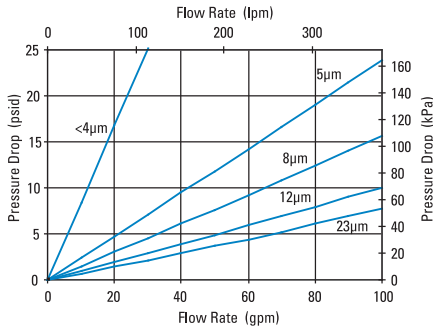
W620 4" DT Filter Only
DT-9600-4, 4.59"/116.7mm



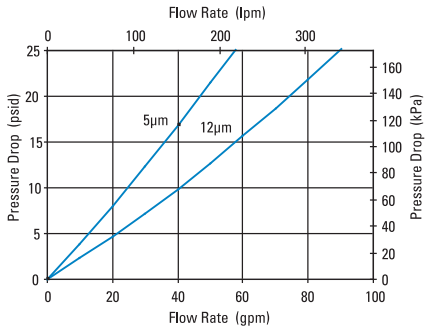
W620 4" DT Filter Only
DT-9601-4, 4.57"/116mm



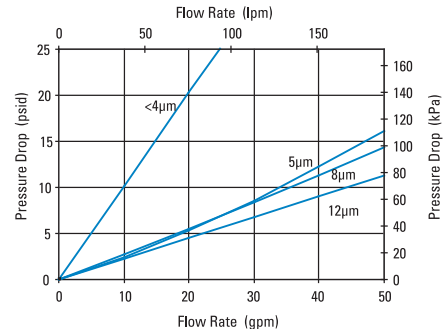
W620 8" DT Filter Only
DT-9600-8, 8.22"/208.8mm



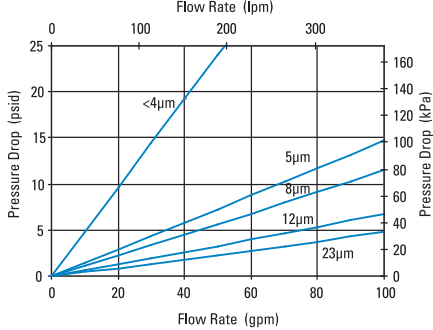
W620 8" DT Filter Only
DT-9601-8, 8.19"/208mm



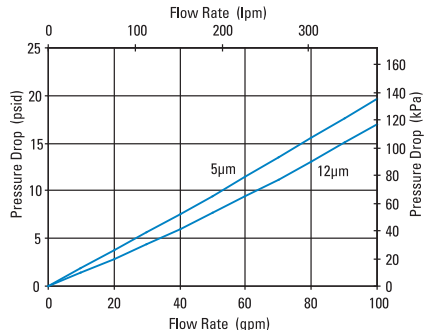
W620 8" DX2 Filter Only
DX2-9600-8, 8.19"/208mm



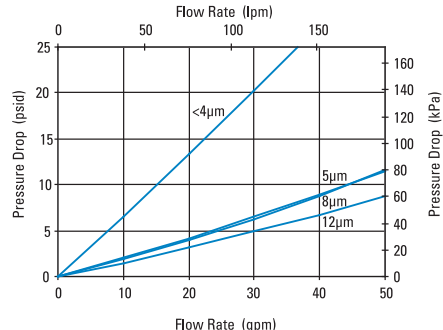
W620 13" DT Filter Only
DT-9600-13, 12.91"/327.8mm



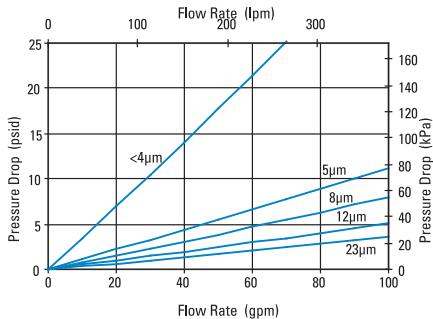
W620 13" DT Filter Only
DT-9601-13, 12.85"/326.3mm



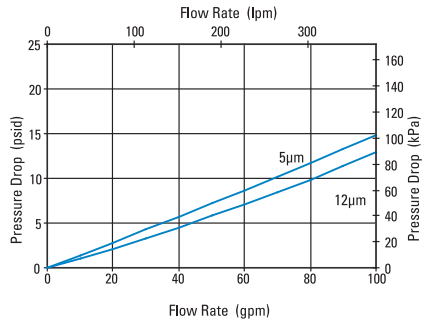
W620 13" DX2 Filter Only
DX2-9600-13, 12.87"/327mm



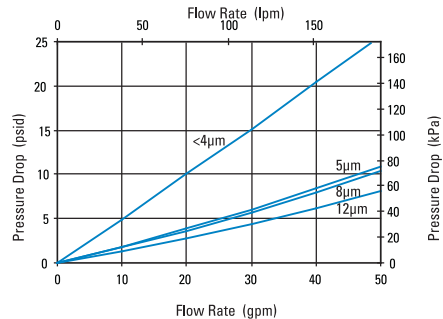
W620 16" DT Filter Only
DT-9600-16, 16.84"/427.8mm



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)