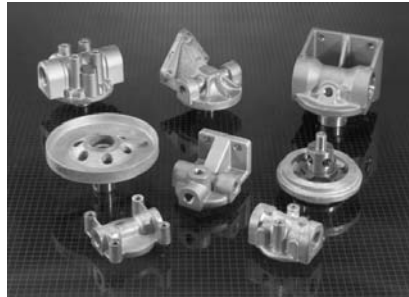


The following section features popular head assemblies and their matching filters for fuel, lube, coolant and hydraulic filtration.



Fuel Heads & Filters 36

- 15-30 gph / 57 -144 lph fuel flow range
- 40-160 gph / 151-606 lph fuel flow range
- 60-180 gph / 227-681 lph fuel flow range
- Up to 90 gph / 340 lph fuel flow range
- Selection for existing OE applications

Lube Heads & Filters..... 39

- Selection for existing OE applications includes extended service filter choices



Coolant Head, Mounting Bracket & SCA Filters 40

- This single head fits many coolant filters all with various amounts of coolant additive units. Extended service and time release filters are also available.
- Three- and four-ply coolant hoses in various diameter sizes are available.

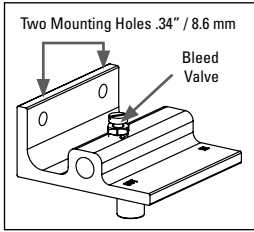


Hydraulic Heads & Filters..... 41

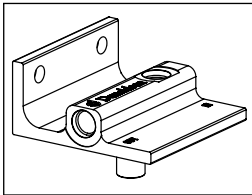
- Two low pressure series - LPS04 and HBK05
- Low pressure filters are the most commonly used type of filter in hydraulic circuits, used most often as return line filters in applications with working pressures up to 1000 psi, depending upon model selected.
- Three Duramax® medium-pressure series - HMK03, HMK04, HMK05
- Donaldson's famous Duramax filters are the highest rated medium pressure filters available in a spin-on configuration.
- Duramax filters are reliable, sturdy, long-lived and easy to install. Most often used as return-line filters, they are designed for working pressures up to 1000 psi and static pressures up to 2000 psi.

Fuel Flow Range: 15-30 gph / 57 -144 lph

Head Assemblies



1/4"-18 NPT Ports (2)
 Threaded Stud: M16 x 1.5
 Length: 3.25" / 83 mm
 Width: 3.25" / 83 mm
 Part No. P560382



1/2"-20 UNF Ports (2)
 Threaded Stud: M16 x 1.5
 Length: 3.25" / 83 mm
 Width: 3.25" / 83 mm
 Part No. P562263



1/4"-18 NPT Ports (2)
 Threaded Stud: M16 x 1.5
 Length: 4.02" / 102 mm
 Width: 3.10" / 79 mm
 Part No. P174775

Filter Choices: (flow ranges listed are maximums)
 Outer Dia.: 3.02" (77 mm)



FFWS-Twist&Drain
 20µ Efficiency @ 99%
 15 gph / 57 lph
 Length: 3.75" / 95 mm
 Part No. P551039



FFWS- Twist&Drain
 11µ Efficiency @ 99%
 30 gph / 144 lph
 Length: 5.55" / 141 mm
 Part No. P550588



FFWS-Twist&Drain
 25µ Efficiency @ 99%
 30 gph / 144 lph
 Length: 5.55" / 141 mm
 Part No. P550248



Oil Mist Coalescer
 2 CFM
 Length: 2.57" / 65 mm
 Part No. P566130

Fuel Flow Range: Up to 90 gph / 340 lph

Head Assemblies



1/2"-14 NPT Ports (4)
 Threaded Stud:
 m95 x 2.5 6H
 Length: 5.06" / 129 mm
 Width: 5.35" / 136 mm
 Part No. P566308

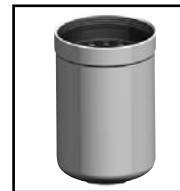


1/2"-14 NPT Ports (4)
 Air Relief Valve
 Manual Priming Pump
 Threaded Stud:
 m95 x 2.5 6H
 Length: 5.06" / 129 mm
 Width: 5.35" / 136 mm
 Part No. P566309

Filter Choices: (flow ranges listed are maximums)
 Outer Dia.: 3.82" (93 mm)



Filter
 5µ Cellulose
 90 gph / 340 lph
 Length: 6.10" / 155 mm
 Part No. P566310



Filter
 10µ Cellulose
 90 gph / 340 lph
 Length: 6.10" / 155 mm
 Part No. P566311



FFWS- Twist&Drain
 20µ Cellulose
 90 gph / 340 lph
 Length: 6.10" / 155 mm
 Part No. P566312

Twist&Drain - A Simple & Easy Drain Valve

Draining existing styles of fuel filter water separators can not only be messy, but can take more time to drain. If you're looking for a simple and quick way to eliminate the water from your fuel filter - consider installing a Donaldson filter system with a Twist&Drain valve.

- Large handle is easy to grasp and operate
- Free-flowing drain for fast water elimination
- Self-venting design allows water to evacuate in a quick, steady stream – not a slow drip (no need to open a secondary vent)
- Up to a single turn to begin draining



Fuel Flow Range: 40-160 gph / 151-606 lph

Head Assemblies



1/2" NPT
 Threaded Stud: 1"-14
 Length: 3.70" / 94 mm
 Height: 2.40" / 61 mm

Part No. P562261



5/8" SAE
 Threaded Stud: 1"-14
 Length: 3.70" / 94 mm
 Height: 2.40" / 61 mm

Part No. P562262

Filter Choices: (flow ranges listed are maximums)
 Outer Dia.: 3.66" (93 mm)



FFWS
 25µ Efficiency @ 99%
 75 gph / 284 lph
 Length: 5.86" / 149 mm

Part No. P550691



FFWS
 10µ Efficiency @ 99%
 Synthetic Media
 100 gph / 378 lph
 Length: 7.34" / 187 mm

Part No. P551001



FFWS-Twist&Drain
 20µ Efficiency @ 99%
 90 gph / 341 lph
 Length: 7.34" / 187 mm

Part No. P558000



FFWS-Twist&Drain
 25µ Efficiency @ 99%
 100 gph / 378 lph
 Length:
 8.36" / 212 mm

Part No. P552565



FFWS-Twist&Drain
 7µ Efficiency @ 99%
 120 gph / 454 lph
 Length: 9.67" / 246 mm

Part No. P550901



FFWS-Twist&Drain
 10µ Efficiency @ 99%
 Synteq® Media
 120 gph / 454 lph
 Length: 9.67" / 246 mm

Part No. P551000



Filter
 25µ Efficiency @ 99%
 40 gph / 151 lph
 Length: 4.21" / 107 mm

Part No. P550104



Filter
 25µ Efficiency @ 99%
 60 gph / 227 lph
 Length: 5.35" / 136 mm

Part No. P550105



Filter
 2µ Efficiency @ 99%
 100 gph / 378 lph
 Length: 6.87" / 174 mm

Part No. P551313

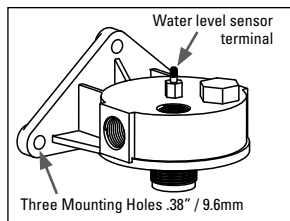


Filter
 3µ Efficiency @ 99%
 160 gph / 606 lph
 Length: 9.17" / 233 mm

Part No. P551311

Fuel Flow Range: 60-180 gph / 227-681 lph

Head Assembly



7/8"-14 Ports (2)
 Threaded Stud: 1 1/4"-12
 Length: 6.24" / 159 mm
 Width: 4.96" / 126 mm

Part No. P920682

Head has two inlet ports (on top) and two outlet ports (side) for design flexibility.

Filter Choices:
 Outer Dia.: 4.25" (108 mm)



Filter
 15µ Efficiency @ 99%
 60 gph / 227 lph
 Length: 7.05" / 179 mm

Part No. P920711



FFWS
 25µ Efficiency @ 99%
 180 gph / 681 lph
 Length: 11.33" / 288mm

Part No. P920683



FFWS
 10µ Cellulose
 180 gph / 681 lph
 Length: 11.33" / 288mm

Part No. P925683



Electronic (12V or 24V DC) water level sensor

Part No. P920681

Replacement Fuel Heads and Filters for Popular OE Applications



Head Assembly

7/8" -14 NPT Ports (2)
 Threaded Stud: 1 1/4-12 UNF
 Length: 5.56" / 141 mm
 Width: 4.73" / 120 mm

Part No. P174770

Filter Choices: (flow ranges listed are maximums) Outer Dia.: 4.66" (188 mm)



FFWS
 25µ Efficiency @ 99%
 250 gph / 946 lph
 Length: 12.36"/314 mm

Part No. P550687



FFWS
 10µ Efficiency @ 99%
 250 gph / 946 lph
 Length: 12.36"/314 mm

Part No. P551006



3/8" -18 NPTF Ports (2)
 Threaded Stud: 1 1/4-12 UNF
 Length: 4.84" / 123 mm
 Width: 4.73" / 120 mm

Part No. P174773



Filter
 9µ Efficiency @ 99%
 235 gph / 890 lph
 Length: 10.24"/260 mm

Part No. P550202



Filter
 30µ Efficiency @ 99%
 200 gph / 757 lph
 Length: 8.94"/118 mm

Part No. P550958



Head Assembly

3/8" -18 NPTF Ports (2)
 Threaded Stud: 1 1/16-16 UNF
 Length: 5.20" / 132 mm
 Width: 4.73" / 120 mm

Part No. P174774

Filter Choices: (flow ranges listed are maximums) Outer Dia.: 4.66" (118 mm)



Filter
 16µ Efficiency @ 99%
 250 gph / 946 lph
 Length: 8.94"/118 mm

Part No. P550959



Extended Service Filter
 5µ Efficiency @ 99%
 Synteq® Media
 150 gph / 568 lph
 Length: 8.94"/118 mm

Part No. EFF0047



Head Assembly

1/4" NPTF Ports (3)
 Threaded Stud: 13/16-12
 Length: 3.85" / 98 mm
 Width: 4.88" / 124 mm

Part No. P174785

Filter Choices: (flow ranges listed are maximums) Outer Dia.: 3.66" (93 mm)



Filter
 9µ Efficiency @ 99%
 90 gph / 340 lph
 Length: 6.85"/174 mm

Part No. P556916



Filter
 3µ Efficiency @ 99%
 Length:
 90 gph / 340 lph
 Length: 6.85"/174 mm

Part No. P556917



Filter
 16µ Efficiency @ 99%
 40 gph / 151 lph
 Length: 4.21"/107 mm

Part No. P550928



Extended Service Filter
 5µ Efficiency @ 99%
 Synteq® Media

60 gph / 227 lph
 Length: 6.85"/174 mm

Part No. EFF7917

Replacement Lube Heads and Filters for Popular OE Applications



Head Assembly

3/4"-14 NPTF Ports (2)
 By-pass Valve: 25 psi / 172 kPa
 Threaded Stud: 1"-12 UNF 2A
 Height: 2.40" / 61 mm
 Width: 3.74" / 95 mm

Part No. P561134

Filter Choices: (flow ranges listed are maximums) Outer Dia.: 3.66" (193 mm)



Filter
 20µ Efficiency @ 50%
 20 gpm, / 76 lpm
 Length: 6.85" / 174 mm

Part No. P553712



Filter
 20µ Efficiency @ 50%
 15 gpm, / 57 lpm
 Length: 5.35" / 136 mm
 Part No. P555680



Head Assembly

3/8"NPT Ports (2)
 By-pass valve: 25 psi / 172 kPa
 Threaded Stud: 1 3/8"-16 UN2A
 Length: 5.20" / 132 mm
 Width: 4.73" / 120 mm

Part No. P174777

Filter Choices: (flow ranges listed are maximums) Outer Dia.: 4.66" (118 mm)



By-pass Filter
 14µ Efficiency @ 50%
 7.5 gpm, / 28 lpm
 Length: 10.24" / 260 mm

Part No. P550777



Head Assembly

1-1/4 NPT Ports (2)
 Threaded Stud: 1-1/2"-12
 Width: 5.52" / 140 mm
 Bypass Valve: 40 psid

Part No. P174780

Filter Choices: (flow ranges listed are maximums) Outer Dia.: 4.66" (118 mm)



Filter
 14µ Efficiency @ 50%
 45 gpm, / 170 lpm
 Length: 10.24" / 260 mm

Part No. P551670



Extended Service Filter
 15µ Efficiency @ 99%
 Synteq Media
 45 gpm, / 170 lpm
 Length: 10.24" / 260 mm

Part No. ELF7670



Mounting Head Adapter

Threaded Stud: 1-1/2 - 12 UNF-2A
 Height: 1.73" / 44 mm
 Width: 5.20" / 132 mm

Part No. P174779



Extended Service Filter
 15µ Efficiency @ 99%
 Synteq Media
 25 gpm, / 95 lpm
 Length: 6.22" / 158 mm

Part No. ELF7947



Head Assembly

1-5/8"-12 Ports (2)
 Threaded Stud: 2-1/4"-12
 Width: 5.00" / 127 mm

Part No. P174783

Filter Choices: (flow ranges listed are maximums) Outer Dia.: 4.66" (118 mm)



Filter
 22µ Efficiency @ 99%
 50 gpm, / 184 lpm
 Length: 11.70" / 297 mm

Part No. P553000



Filter
 15µ Efficiency @ 99%
 35 gpm, / 132 lpm
 Length: 8.90" / 227 mm

Part No. P553548



Extended Service Filter
 15µ Efficiency @ 99%
 Synteq® Media
 50 gpm, / 184 lpm
 Length: 11.70" / 297 mm

Part No. EFF7300

Coolant Head & Filters

The Donaldson remote mount head is designed to fit all our spin-on filters with a 11/16"-16 threads. The bracket can be mounted to the head of the fire wall or some off-engine location.



Head Assembly

3/8" NPTF Ports (2)
 Threaded Stud: 11/16-16"
 Length: 3.60"/91 mm
 Width: 3.60"/91 mm

Part No. P174766

Filter Choices:

Outer Dia.: 3.66" (93 mm)



**Units
 Printed on
 Filter**

0	P554685
4	P554071
6	P554072
8	P554073
12	P554074
15	P554075

SCA Filter No.



Mounting Bracket
 Part No. P174767



Extended Service Filters 150,000 mile / 195,000 km service interval

Non-chemical filters will go the distance of your coolant; for Organic Additive Technology and Extended Service Coolant Users

Type	Filter Part No.
Non Chemical	ECF4085
Time Release	ECF4088

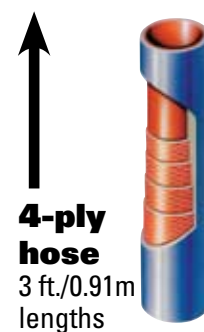
Coolant Hose

3-ply hose is reinforced with three layers of polyester fabric and coated with a unique silicone elastomer.

4-ply hose is reinforced with an added layer of polyester fabric and provides even greater resistance to abrasion and rubbing.

Size (inner dia.) in mm	Part No.	Nominal O.D. in mm	Recommended Clamp Lined Constant Torque
0.63 16	P171371	0.95 24	P532921 N/A
0.75 19	P171372	1.08 27	P532923 N/A
0.88 22	P171373	1.20 30	P532923 N/A
1.00 25	P171374	1.33 34	P532923 N/A
1.13 29	P171375	1.45 37	P532924 N/A
1.25 32	P171376	1.90 48	P532924 N/A
1.38 35	P171377	1.70 43	P115200 N/A
1.50 38	P171378	1.83 46	P115200 N/A
1.63 41	P171379	1.95 50	P115200 N/A
1.75 44	P171380	2.08 53	P115200 N/A
2.00 51	P171381	2.33 59	P115200 P532925
2.25 57	P171382	2.58 66	P115201 P532925
2.38 60	P171383	2.70 69	P115201 P532925
2.50 64	P171384	2.83 72	P115201 P532925
2.63 67	P171385	2.95 75	P143422 P532925
2.75 70	P171386	3.08 78	P143422 P532926
3.00 76	P171387	3.33 85	P143422 P532926
3.50 89	P171388	4.83 123	P115202 P532927
4.00 102	P171389	4.33 110	P115203 P532928

Size (inner dia.) in mm	Part No.	Nominal O.D. in mm	Recommended Clamp Lined Constant Torque
1.00 25	P171390	1.40 36	P532924 N/A
1.50 38	P171391	1.90 48	P115200 N/A
2.00 51	P171392	2.40 61	P115201 P532925
2.25 57	P171393	2.65 67	P115201 P532925
2.50 64	P171394	2.89 73	P115201 P532925
2.75 70	P171395	3.15 80	P143422 P532926



Designed to withstand extremes in operating temperatures ranging from -65°F to 350°F (-54°C to 177°C).

Hydraulic - Low Pressure Family LPS04



LPS04 Series Specifications

Product Family	Flow Range	Pressure (NFPA/3.10.17)		Porting Types
		Working	Static	
LPS04	0-30 gpm 0-114 l/min	150 psi 1034 kPa 10.3 bar	300 psi 2070 kPa 20.7 bar	1/2", 3/4" NPT, or SAE-8 (1/2"), SAE-12 (3/4") O-Ring

Where and Why Use

Low pressure filters are the most commonly used type of filter in hydraulic circuits, used most often as return line filters in applications with working pressures up to 1000 psi, depending upon model selected.

Mix 'n Match...

Select the head and filter combination to build a filter system to suit your specifications

Head Choices for LPS04

Port Size	Bypass Range	Gauge ports (drill, tap, plug)	Gauge Port Location	Donaldson Part No.
1/2" NPT	15 psi / 103.4 kPa / 1.34 bar	(2) 1/8" NPT	upstream side	P563288
3/4" NPT	25 psi / 172.5 kPa / 1.72 bar	(2) 1/8" NPT	upstream side	P561131
	5 psi / 34.5 kPa / .34 bar	(2) 1/8" NPT	downstream side	P561132
	25 psi / 172.5 kPa / 1.72 bar	none	na	P561134
	5 psi / 34.5 kPa / .34 bar	none	na	P561135
	none	none	na	P561136
	15 psi / 103.4 kPa / 1.34 bar	none	na	P563278
	SAE-12	none	none	na
none		(1) SAE-4	upstream side, LH	P561137
5 psi / 34.5 kPa / .34 bar		none	na	P561140
25 psi / 172.5 kPa / 1.72 bar		none	na	P561141
15 psi / 103.4 kPa / 1.34 bar		none	na	P563279
25 psi / 172.5 kPa / 1.72 bar		(2) 1/8" NPT	upstream side	P563280
15 psi / 103.4 kPa / 1.34 bar		none	M6 mtg. Thrds	P563287
SAE-8	25 psi / 172.5 kPa / 1.72 bar	none	na	P561138

Spin-on Filter Choices

Media Type	B _{x(c)} = 200	B _{x(c)} = 1000	Length (in./mm)	Donaldson Part No.
Cellulose		24	5.35/136	P565061
Cellulose		23	5.35/136	P562198
Cellulose		23	7.87/200	P565059
Cellulose	32		5.35/136	P562199
Cellulose	32		7.87/200	P565060
Synteq		9	7.87/200	P564357
Synteq		10	5.35/136	P560693
Synteq		10	7.87/200	P179089
Synteq		23	5.35/136	P560694
Synteq		6	5.35/136	P564967
Water absorbing*	32		5.35/136	P565062
Wire Mesh	150		5.35/136	P550274

* Absorbs Approx. 6 oz/170 ml of water @ 20 psid

Hydraulic - Low Pressure Family HBK05



HBK05 Series Specifications

Product Family	Flow Range	Pressure (NFPA/3.10.17)		Porting Types
		Working	Static	
HBK05	0-60 gpm 0-227 l/min	150 psi 1034 kPa 10.3 bar	250 psi 1724 kPa 17.2 bar	SAE-20 (1¼") O-Ring, or 1¼" NPT

Where and Why Use

Low pressure filters are the most commonly used type of filter in hydraulic circuits, used most often as return line filters in applications with working pressures up to 1000 psi, depending upon model selected.

Mix 'n Match...

Select the head and filter combination to build a filter system to suit your specifications

Head Assemblies

Port Size	Bypass Rating	Indicator Style & Location	Part No.
1¼" NPT	25 psi / 172 kPa	Visual, Both Sides	P166418
1¼" NPT	5 psi / 34 kPa	Visual, Both Sides	P166665
SAE-20 O-Ring	25 psi / 172 kPa	Visual, Both Sides	P166439

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**.

Spin-on Filter Choices

B _{x(c)} = 1000	Length		Part No.
	(in.)	(mm)	
<3µm	10.7	271	P167796 with Viton Seal
6µm	6.7	170	P169430
	10.7	271	P167832
9µm	6.7	170	P167162
	10.7	271	P165762
10µm	6.7	170	P165875
	10.7	271	P165876
13µm	6.7	170	P167944 with Viton Seal
	10.7	271	P167945 with Viton Seal
23µm	6.7	170	P165877
	10.7	271	P165878
>50µm	6.7	170	P165879
	10.7	271	P165880

Hydraulic - Original Duramax® HMK03

HMK03 Series Specifications

Product Family	Flow Range	Pressure (NFPA/3.10.17)		Porting Types
		Working	Static	
HMK03	0-25 gpm 0-95 l/min	1000 psi 6895 kPa 69 bar	2000 psi 13790 kPa 137.9 bar	SAE-12 O-Ring



Where and Why Use

Donaldson's famous Duramax® filters are the highest rated medium pressure filters available in a spin-on configuration. Duramax® are reliable, sturdy, long-lived and easy to install. Most often used as return-line filters, they are designed for working pressures up to 1000 psi and static pressures up to 2000 psi.

Mix 'n Match...

Select the head and filter combination to build a filter system to suit your specifications

Head Assemblies

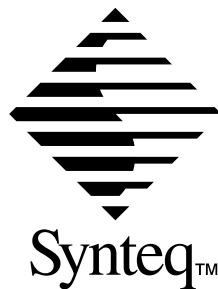
Port Size	Bypass Rating	Indicator	Head Part No.
SAE-12	No Bypass	None*	P170327
¾" O-Ring	50 psi	None*	P170773
	345 kPa	Visual*	P179460

*Head is machined to accept optional electrical indicators. See Indicator list at right for the available choices.

Spin-on Filter Choices

Media Type	B _{x(e)} = 1000	Length		Part No.	Seal Material
		(in.)	(mm)		
Synteq	6µm	5.5	140	P170306	BunaN
		9.5	242	P170307	BunaN
Synteq	9µm	5.5	140	P170308	BunaN
		9.5	242	P170309	BunaN
Synteq	10µm	9.5	242	P176107	BunaN
Synteq	14µm	9.5	242	P173702	BunaN
Synteq	20µm	5.5	140	P170310	BunaN
		9.5	242	P170311	BunaN
Synteq	23µm	5.5	140	P170312	BunaN
		9.5	242	P170313	BunaN
Cellulose	23µm	5.5	140	P170480 ¹	BunaN
		9.5	242	P170089 ¹	BunaN

¹ This filter not recommended for use with the "No Bypass" head assembly P170327



Synteq® is Donaldson's synthetic filter media that was specially developed for liquid filtration. Its low-friction, high-flow properties result in consistently low differential pressure over the life of the filter.

Donaldson designed this consistently-shaped fiber pattern to control fiber size, pore size, and flow patterns throughout the media mat. The result is a media with predictable filtration efficiencies, maximum dirt holding capacity, and low pressure drop.

Synteq filter media is compatible with petroleum based fluids, most phosphate esters, water oil emulsions, and HWCF (high water content fluids).

Hydraulic - Original Duramax® HMK04



HMK04 Series Specifications

Product Family	Flow Range	Pressure (NFPA/t3.10.17)		Porting Types
		Working	Static	
HMK04	0-35 gpm 0-132 l/min	500 psi 3448 kPa 34.5 bar	1000 psi 6895 kPa 69 bar	SAE-12, -16 O-Ring or 1" NPT, 3/4" NP

Where and Why Use

Donaldson's famous Duramax® filters are the highest rated medium pressure filters available in a spin-on configuration. Duramax® are reliable, sturdy, long-lived and easy to install. Most often used as return-line filters, they are designed for working pressures up to 1000 psi and static pressures up to 2000 psi.

Mix 'n Match...

Select the head and filter combination to build a filter system to suit your specifications

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. The filter head snout/post must be lubricated before spinning on a new filter to prevent thread damage.

Head Assemblies

Port Size	Bypass Rating	Standard Indicator Style & Location ^{1,2}	Indicator Options	Head Part No.	
3/4" NPT	25 psi / 172 kPa	None	None	P169317	
		D (Visual), Left Side	None	P169310	
SAE-12 O-Ring	25 psi / 172 kPa	None	None	P167473	
		D (Visual), Left Side	None	P166387	
	No Bypass	D (Visual), Left Side (25 psi)	None	P169320	
	None	None	None	P165434	
SAE-12 O-Ring (3 ports)	50 psi / 345 kPa	D (Visual), Left Side (50 psi)	None	P173750	
		A (Electrical)	B, C	P167529	
1" NPT	25 psi / 172 kPa	D (Visual), both sides	A, B, C	P166086	
		None	None	P169309	
		D (Visual), Left Side	None	P166416	
SAE-16 O-Ring	15 psi / 100 kPa	None	A	P176569	
SAE-16 O-Ring	25 psi / 172 kPa	None	None	P163681	
		D (Visual), Left Side	None	P166417	
		D (Visual), both sides	A, B, C	P166088	
		E (Electrical)	None	P176568	
	No Bypass	25 psi / 172 kPa	A (Electrical)	B, C	P165537
			D (Visual), Both Sides (25 psi)	A, B, C	P166664
	50 psi	25 psi / 172 kPa	A (Electrical)	B, C	P166902
			D (Visual, Right Side)	All	P179381
	No Bypass	50 psi	None	None	P164667
	50 psi / 345 kPa	50 psi / 345 kPa	None	None	P167201
A (Electrical)			B, C	P166862	
SAE-16 O-Ring	5 psi	D (Visual), Both Sides	All	P564850	
1" NPT	No Bypass	D (Visual), Left Side (25 psiD)	None	P564484	
1" NPT	25 psi	D (Visual), Left Side (25 psiD)	None	P564485	

Spin-on Filter Choices

B_{x(c)} = 1000	Media Technology	Length (in.) (mm)		Part Number
<3µm	Synteq	9.4	240	P165185 with Viton Seal
6µm	Synteq	9.4	240	P167590
9µm	Synteq	6.0	52	P165354
		9.4	240	P165332
10µm	Synteq	6.0	152	P176565
		9.4	240	P176566
24µm	Cellulose	6.0	152	P163405
		9.4	240	P163323
20µm	Synteq	6.0	152	P163542
300 psi collapse		9.4	240	P163555
20µm	Synteq	6.0	152	P164375
		9.4	240	P164378
13µm	Synteq	9.4	240	P164056 with Viton Seal
33µm	Synteq	6.0	152	P164381
		9.4	240	P164384
23µm	Cellulose	6.0	152	P163419
		9.4	240	P163324
29µm	Cellulose	6.0	152	P163496
		9.4	240	P163322
22µm	Synteq	9.4	240	P164059 with Viton Seal
>50µm	Synteq	6.0	152	P165335
		9.4	240	P165338
na	Water Removal	9.4	240	P560584

Synteq® is Donaldson's synthetic filter media that was specially developed for liquid filtration. Its low-friction, high-flow properties result in consistently low differential pressure over the life of the filter.



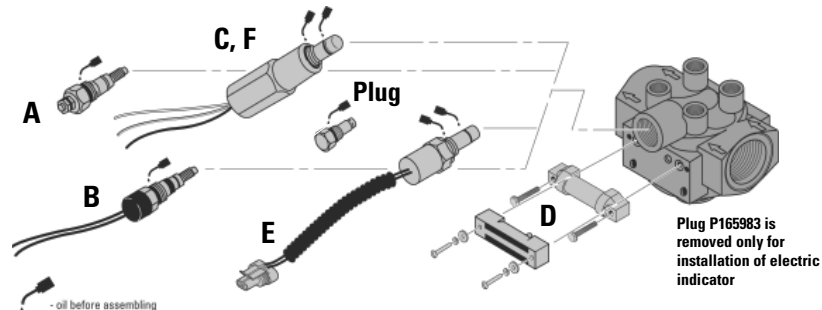
Donaldson designed this consistently-shaped fiber pattern to control fiber size, pore size, and flow patterns throughout the media mat. The result is a media with predictable filtration efficiencies, maximum dirt holding capacity, and low pressure drop.

Synteq filter media is compatible with petroleum based fluids, most phosphate esters, water oil emulsions, and HWCF (high water content fluids).

Filter Seals

Filters with seals made of BunaN 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. Donaldson offers both types.

Service Indicator Choices for HMK Series



Electric Models¹

Use with Bypass Valve Pressure of:	Indicator Part No.	Style ³	Description
5 psi / 34.5 kPa	P163642	A	Single post DC.
15 psi / 103 kPa	P163601	A	Single post DC.
25 psi / 172.5 kPa	P163839	A	Single post DC.
25 psi / 172.5 kPa	P162400	A	Single post DC.
25 psi / 172.5 kPa	P171143	B	DC 2-wire.
25 psi / 172.5 kPa	P173944	C	AC/DC 3-wire.
50 psi / 345 kPa	P165194	A	Single post DC.
50 psi / 345 kPa	P167455	A	Single post DC.
50 psi / 345 kPa	P171087	B	DC 2-wire.
50 psi / 345 kPa	P170926	E	DC 2-wire.
50 psi / 345 kPa	P173893	F	DC 3-wire.
50 psi / 345 kPa	P174396	C	AC/DC 3-wire.

Visual Models (non-electric)²

Use with Bypass Valve Pressure of:	Indicator Part No.	Style ³
15 psi / 103 kPa	P162642	D
25 psi / 172. kPa	P162696	D
50 psi / 345 kPa	P167580	D
n/a (blank plate)	P165984	n/a

NOTE: PSI is marked on the face of the visual indicators.

Indicator Notes

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

² All non-electric models have a maximum operating temperature of 180°F/ 82°C.

³ Indicator styles are illustrated above.

Hydraulic - Original Duramax® HMK05



HMK05 Series Specifications

Product Family	Flow Range	Pressure (NFPA/t3.10.17)		Porting Types
		Working	Static	
HMK05	0-50 gpm 189 l/min	350 psi 2413 kPa 24 bar	800 psi 5516 kPa 55 bar	SAE-20 O-Ring or 1¼" NPT

Where and Why Use

Donaldson's famous Duramax® filters are the highest rated medium pressure filters available in a spin-on configuration. Duramax are reliable, sturdy, long-lived and easy to install. Most often used as return-line filters, they are designed for working pressures up to 1000 psi and static pressures up to 2000 psi.

Mix 'n Match...

Select the head and filter combination to build a filter system to suit your specifications

Head Assemblies

Port Size	Bypass Rating	Standard Indicator Style & Location ¹	Indicator Options ²	Part No.	
1¼" NPT	25 psi / 182 kPa	D (Visual), Both Sides (25 psi)	A, B, C, E, F	P167294	
		A (Electrical) (25 psi)	A, B, C, E, F	P167621	
1¼" NPT	25 psi	D (Visual), Left Side (25 psi)	D	P167622	
SAE-20	25 psi	D (Visual), Both Sides (25 psi)	A, B, C, E, F	P165973	
O-Ring	50 psi	D (Visual), Left Side	A, B, C, E, F	P561885	
		Blank Plate Right Side, Elect Port Plugged			
		172 kPa	None	None	P167619
		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	

See previous page for indicator options.

Spin-On Filters for HMK05

Media Type	B _{x(c)} = 1000	Length (in./mm)	Part No.
Synteq	<3µm	14.2/361	P564468
Synteq	6µm	11.6/294	P170906
		11.6/294	P1712732 Viton
		11.6/294	P165675
Synteq	9µm	11.6/294	P1712742 Viton
		14.2/361	P179763
		11.6/294	P176567
Synteq	14µm	14.2/361	P170949
Synteq	20µm	11.6/294	P165659
		11.6/294	P1712752 Viton
		11.6/294	P165569
Synteq	23µm	11.6/294	P165569
		11.6/294	P1712762 Viton
		14.2/361	P173789
Cellulose	23µm	11.6/294	P165705
Synteq	>50µm	11.6/294	P165672
		14.2/361	P170546

Filter Seals

Filters with seals made of BunaN 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. Donaldson offers both types.

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. The filter head snout/post must be lubricated before spinning on a new filter to prevent thread damage.