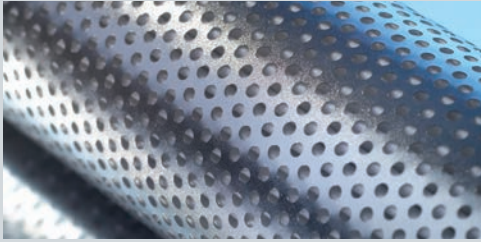


Low Pressure • Medium Pressure • High Pressure • Accessories • Off-line Filtration



## The best solution for clean, dry oil.

Clean dry oil is essential for your equipment. Donaldson Company, a leader in filtration for over 90 years, has proven performance in thousands of applications. Now offering a complete range of contamination control solutions.

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This catalogue contains our most popular hydraulic filter range and accessories. It lists the various housing assemblies in order of flow rates and pressure ranges, with the various filter options for each housing type shown in order of micron rating.

The flow rate shown for each assembly is the maximum rate through that head. **It is important to remember that flow rates can vary dramatically with the fluid viscosity of different types of fluids, and in particular, the temperature of the fluid.** We have included a viscosity table (shown below) for your reference to illustrate how this viscosity changes with temperature.

Please note this is not a technical catalogue. It does not contain all the information required to specify a hydraulic system. For technical information, including the pressure drop of heads and filters at different temperatures, for assistance in selecting the most appropriate option, or for our full product offering please contact Donaldson.

Donaldson offers a comprehensive range of hydraulic filter heads and housings for low, medium and high pressure applications. Spin-on filters and cartridges are available in a variety of media options across the range. We also carry a range of service indicators, breathers, gauges and replacement filters to support your hydraulic requirements.

When replacing another filter brand, use our cross referencing system [www.donaldsontoolbox.com.au](http://www.donaldsontoolbox.com.au)  
 Contact Donaldson for performance improvements for your hydraulic system.

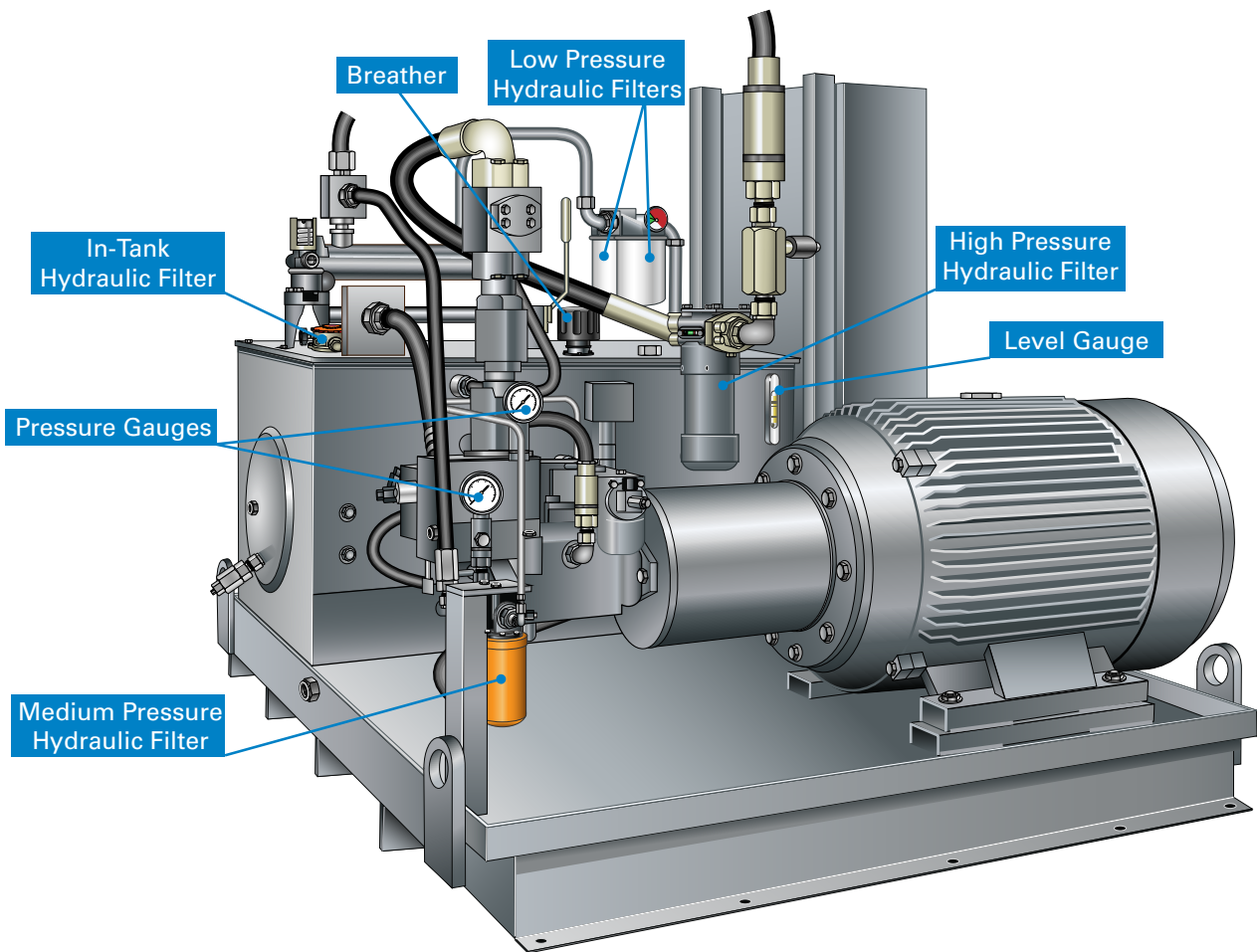
## Fuel/Oil Kinematic Viscosity Combined With Temperature in centiStokes (cSt)

SAE Gear Oil			75W			80W	85W	90			140		
SAE Engine Oil		5W	10W		20		30	40	50				
ISO Grade		15	22	32	46	68	100	150	220	320	460	680	
°F	°C	Diesel											
248	120				3.7	3.5	5.7	7.3	9.3	11.7	14.7	18.2	22.9
230	110				4.4	5.5	7.0	9.0	11.7	14.9	18.9	23.7	30.2
212	100		1	4.5	5.4	6.8	8.8	11.4	15.0	19.4	25.0	31.8	41.1
194	90		3	5.3	6.7	8.5	11.2	14.8	19.8	26.0	34.1	44.0	57.9
176	80		5	6.5	8.5	11.0	14.8	19.9	27.1	36.2	48.2	63.3	84.8
158	70		6.2	8.5	11.1	14.8	20.2	27.7	38.5	52.4	71.1	95.2	130
140	60		8	12	15.1	20.6	28.7	40.2	57.2	79.6	110	151	211
122	50		11	15	21.5	29.9	42.9	61.5	98.7	128	181	254	365
104	40	1	15	22	32	46	68	100	150	220	320	460	680
86	30	2	21	32	50.7	75.6	116	175	271	409	613	907	1380
68	20	3	33	51	86.7	135	214	334	536	838	1290	1980	3130
50	10	4	52	87	162	264	438	711	1190	1920	3070	4870	8020
32	0	5	85	180	340	585	1020	1720	2990	5060	8400	13900	23900
14	-10	9	185	375	820	1500	2770	4880	8890	15700	27200	47000	85000
-4	-20	15	400	800	2350	4650	9120	16800	32300	60000			



**any**  
**Performance Under Pressure**

- Low, medium and high pressure filtration
- Spin-on, cartridge and in-tank style filters
- Hydraulic line and reservoir accessories
- T.R.A.P.™ reservoir breather technology



**Off-Line Filtration**

The Donaldson "B.O.S.S." Bulk Oil Service System and Bu.F.S.S. Bulk Fuel Service System are the perfect solutions for your off-line filtration and transfer requirements. Refer to page 18 for details.

*Get a B.O.S.S. working for you!*

**Water Removal**

Water has been identified as one of the most significant and damaging of all contaminants for modern equipment. Donaldson offers a number of products and systems designed to prevent the ingress of moisture and remove entrained water.

Low Pressure Filter Assemblies

Low pressure filters are the most common type of filter in hydraulic circuits. They are often used as return line filters in applications with working pressures up to 150 psi, depending on model selected.

Hydraulic Series	Flow Range	Working Pressure	Porting Types	Media
SP15/25	0-114 l/min	150 psi 1034 kPa 10.3 bar	¾" NPT	Cellulose Synteq Wiremesh Water absorbing
SP50/60	0-227 l/min	150 psi 1034 kPa 10.3 bar	SAE-20 O-Ring 1 ¼" NPT	Cellulose Synteq Wiremesh Water absorbing
SP80/90 Dual Head Dual Elements	0-380 l/min	150 psi 1034 kPa 10.3 bar	1 ½" NPT, 2" SAE 4-Bolt Flange	Cellulose Synteq Wiremesh Water absorbing
FIK	0-639 l/min	147 psi 1000 kPa 10 bar	SAE-12 O-Ring SAE-16 O-Ring SAE- 20 O-Ring SAE- 24 O-Ring 2" SAE 4 Bolt Flange	Cellulose Synteq

0 - 114 l/min - SP15/25 Head

Port Size	Bypass Range	Gauge Ports	Gauge Port Location	Part No.
¾" NPT	25 psi / 172.5 kPa / 1.72 bar	1/8" NPT	Upstream side	P561131

SP15/25 Elements

Media Type	βx(c) = 200 Rating	βx(c) = 1000 Rating	Length		Part No.	Seal Material
			in	mm		
Synteq Media #1		6	5.35	136	P564967	BunaN
Synteq Media # 2½		10	5.35	136	P560693	BunaN
Cellulose # 10		23	5.35	136	P551551	BunaN
Cellulose # 10		23	7.87	200	P565059	BunaN
Cellulose # 25	32		5.35	136	P551553	BunaN
Wiremesh # 149	150		5.68	144	P550274	BunaN
Water Absorbing Media	32		5.35	136	P565062	BunaN



Filters Shown with P561131 Head

0-227 l/min - SP50/60 Heads (Single)

Port Size	Bypass Range	Gauge Ports	Gauge Port Location	Part No.
1 1/4" NPT	25 psi / 172.5 kPa / 1.72 bar	(2) 1/8" NPT	Upstream side	P563268
SAE-20 O-Ring	25 psi / 172.5 kPa / 1.72 bar	(2) 1/8" NPT	Upstream side	P563272
SAE-20 O-Ring	No Bypass	(2) 1/8" NPT	Upstream side	P564147

0-380 l/min - SP80/90 Head (Dual)

Port Size	Bypass Range	Gauge Ports	Gauge Port Location	Part No.
1 1/2" NPT & 2" SAE 4 Bolt	25 psi / 172.5 kPa / 1.72 bar	(4) 1/8" NPT	Upstream & Down stream sides	P563274



SP50/60 and SP80/90 Elements

Media Type	$\beta_{x(c)} = 200$ Rating	$\beta_{x(c)} = 1000$ Rating	Length		Part No.	Seal Material
			in	mm		
Synteq #1		6 $\mu$ m	6.7	170	P169430	BunaN
			10.7	271	P167832	BunaN
Synteq #2		9 $\mu$ m	6.7	170	P167162	BunaN
			10.7	271	P165762	BunaN
Synteq #2 1/2		10 $\mu$ m	6.7	170	P165875	BunaN
			10.7	271	P165876	BunaN
Synteq #9		23 $\mu$ m	6.7	170	P165877	BunaN
			10.7	271	P165878	BunaN
Synteq #20		>50 $\mu$ m	6.7	170	P165879	BunaN
			10.7	271	P165880	BunaN
Cellulose #3		24 $\mu$ m	6.7	170	P550386	BunaN
			6.7	170	P550388	BunaN
Cellulose #10		23 $\mu$ m	7.0	179	P550148	BunaN
			10.7	271	P550251	BunaN
			6.7	170	P550387	BunaN
Cellulose #25	32 $\mu$ m		6.7	170	P550387	BunaN
Water Absorbing	10 $\mu$ m		10.7	271	P561183	BunaN
Wiremesh	150 $\mu$ m nominal		6.7	170	P550275	BunaN
			10.7	271	P550276	BunaN



Filters Shown with P563268 Head

## FIK In-Tank Assemblies and Replacement Elements

The FIK in-tank return line filters are economical and space saving with simple screw-on covers, ideal for low pressure, in-tank applications. This is a heavy duty filter, with die-cast aluminium head and steel canister. The head (and inlet) sit above the tank, with the housing (and outlet) in the tank.

### 0-639 l/min - FIK Housings

Port Size	Bypass Rating*	FIK Assembly Number	$\beta_{x(c)} = 1000$ Rating	Filter Media	Provided with this Element	Flow Range
SAE-12 O-Ring	22 psi / 150 kPa / 1.5 bar	K040811	36	Cellulose	P171527	53 l/min
SAE-16 O-Ring	22 psi / 150 kPa / 1.5 bar	K040812*	36	Cellulose	P171533	86 l/min
SAE-20 O-Ring	22 psi / 150 kPa / 1.5 bar	K051204*	36	Cellulose	P171539	177 l/min
SAE-24 O-Ring	22 psi / 150 kPa / 1.5 bar	K070248*	36	Cellulose	P171557	248 l/min
2" SAE 4-Bolt Flange	22 psi / 150 kPa / 1.5 bar	K070250*	36	Cellulose	P171581	639 l/min

\*Models have service indicator port available

Note: Bypass valve is integral part of replacement filter

### FIK Elements

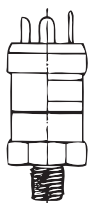
Media Type	$\beta_{x(c)} = 1000$ Rating	K040811	K040812	K051204	K070248	K070250
Synthetic	11	P171525	P171531	P171537	P171555	P171579
Cellulose	36	P171527	P171533		P171557	P171581
Cellulose	40		P171534	P171540		P171582



### Service Indicators

Part No.	Pressure Rating	Description	Where Used
P563978	30 psi / 200 kPa	Electrical indicator Adjustable 5-30 psi	SP15/25 SP50/60 SP80/90
P171966	22 psi / 150 kPa	AC/DC 0.5A resistive 0.2A inductive	FIK
P563298	Return function Range: 0 to 100 psi Colour coded (25 psi)	Pressure Gauge	SP15/25 SP50/60 SP80/90
P171958	17 psi / 116 kPa	Visual Indicator	FIK

P563978



P171966



P563298



P171958



## Medium Pressure Filter Assemblies

The HMK series of spin-on hydraulic filters feature high performance, high flow and medium pressure. They are designed for return line and side loop systems. Applications include fluid conditioning, process systems, lube oil systems, power transmission, case drains, hydrostatic charge pumps and cooling systems. The element has a heavy-duty steel body with die-cast top plate and the head is made from die-cast aluminium.

Hydraulic Series	Flow Range	Working Pressure	Porting Types	Media
HMK03	0-95 l/min	1000 psi 6895 kPa 69 bar	SAE-12 O-Ring	Synteq Cellulose
HMK04	0-130 l/min	500 psi 3450 kPa 34.05 bar	SAE-12 O-Ring SAE-16 O-Ring ¾" NPT, 1" NPT	Synteq Water Removal
HMK24 Dual Head Dual Elements	0-230 l/min	500 psi 3450 kPa 34.5 bar	SAE-20 O-Ring 1¼" SAE 4-Bolt Flange	Synteq Water Removal
HMK05	0-189 l/min	350 psi 2413 kPa 24 bar	SAE-20 O-Ring 1 ¼" NPT	Synteq Wiremesh Water Removal
HMK25 Dual Head Dual Elements	0-378 l/min	350 psi 2413 kPa 24 bar	1½" SAE4-Bolt Flange	Synteq Wiremesh Water Removal
Bulk hP	0-189 l/min	800 psi 5515 kPa 55 bar	SAE-16 O-Ring	Synteq XP

## 0-95 l/min - HMK03 Heads (Single)

Port Size	Bypass Rating	Indicator Visual	Indicator Options	Part No.
SAE-12 O-Ring	50 psi / 345 kPa	None	'C'	P170773
SAE-12 O-Ring	50 psi / 345 kPa	'D'	'C'	P179460
SAE-12 O-Ring	No Bypass	None	'C'	P170327

## HMK03 Elements

Media No.	Media Type	β <sub>x(c)</sub> = 1000 Rating	Length		Part No.	Seal Material
			in	mm		
No. 1	Synteq	6 μm	5.5	140	P170306	BunaN
			9.5	242	P170307	BunaN
No. 2	Synteq	9 μm	5.5	140	P170308	BunaN
			9.5	242	P170309	BunaN
No. 2½	Synteq	10 μm	9.5	242	P176107	BunaN
No. 3	Synteq	14 μm	5.5	140	P173702	BunaN
			9.5	242	P170310	BunaN
No. 4	Synteq	20 μm	5.5	140	P170310	BunaN
			9.5	242	P170311	BunaN
No. 9	Synteq	23 μm	5.5	140	P170312	BunaN
			9.5	242	P170313	BunaN
No. 10	Cellulose	29 μm	5.5	140	P170480	BunaN
			9.5	242	P170089	BunaN



Filter Shown with P179460 Head



**0-130 l/min - HMK04 Heads (Single)**

Port Size	Bypass Rating	Indicator Visual	Indicator Options	Part No.
3/4" NPT	25 psi / 172 kPa	'D' - Left	None	P169310
SAE-12 O-Ring	No Bypass	'D' - Left	None	P169320
1" NPT	25 psi / 172 kPa	'D' - Both	A, C	P166086
SAE-16 O-Ring	25 psi / 172 kPa	'D' - Left	None	P166417
		'D' - Both	A, C	P166088
	No Bypass	'D' - Both	A, C	P166664

**0-230 l/min - HMK24 Heads (Dual)**

Port Size	Bypass Rating	Indicator Visual	Indicator Options	Part No.
SAE-20 O-Ring	No Bypass	None	A, C	P179609
1 1/4" SAE 4-Bolt Flange	50 psi / 345 kPa	None	A, C	P179582

**HMK04 and HMK24 Elements**

Media No.	Media Type	βx(c) = 1000 Rating	Length		Part No.	Seal Material
			in	mm		
No. 1/2	Synteq	< 4 μm	9.4	240	P165185	Viton
No. 1	Synteq	6 μm	9.4	240	P167590	BunaN
No. 2	Synteq	9 μm	6.0	152	P165354	BunaN
			9.2	240	P165332	BunaN
10XP	Synteq 300 psi collapse	9 μm	9.4	240	P170950	BunaN
No. 2 1/2	Synteq	10 μm	6.0	152	P176565	BunaN
			9.4	240	P176566	BunaN
No. 4	Synteq	20 μm	6.0	152	P164375	BunaN
			9.4	240	P164378	BunaN
No. 7	Synteq	33 μm	6.0	152	P164381	BunaN
			9.4	240	P164384	BunaN
No. 20	Synteq	> 50 μm	6.0	152	P165335	BunaN
			9.4	240	P165338	BunaN
	Water Removal	NA	9.4	240	P560584	BunaN



Filter Shown with P166086 Head



Filters Shown with P179582 Head

## 0-189 l/min - HMK 05 Heads (Single)

Port Size	Bypass Rating	Indicator Visual	Indicator Options	Part No.
1 ¼" NPT	172 kPa / 25 psi	'D' - Both	A, C	P167294
SAE-20 O-Ring	345 kPa / 50 psi	'D' - Left	A, C	P561885

## 0-378 l/min - HMK 25 Head (Dual)

Port Size	Bypass Rating	Indicator Visual	Indicator Options	Part No.
1 ½" SAE 4-Bolt Flange	25 psi / 172 kPa	'D' - Both	A, C	P167296

## HMK05 and HMK25 Elements

Media No.	Media Type	βx(c) = 1000 Rating	Length		Part No.	Seal Material
			in	mm		
No. ½	Synteq	< 4 μm	14.2	361	P564468	BunaN
No. 1	Synteq	6 μm	11.6	294	P170906	BunaN
No. 2	Synteq	9 μm	11.6	294	P165675	BunaN
			14.2	361	P179763	BunaN
No. 2½	Synteq	10 μm	11.6	294	P176567	BunaN
No. 3	Synteq	14 μm	14.2	361	P170949	BunaN
No. 4	Synteq	20 μm	11.6	294	P165659	BunaN
					P171275	Viton
No. 9	Synteq	23 μm	11.6	294	P165569	BunaN
No. 20	Synteq	> 50 μm	11.6	294	P165672	BunaN
No. 149	Wiremesh	150 μm @ β200	11.6	294	P173943	BunaN
	Water Removal	na	11.6	294	P179075	BunaN

### Filter Notes

Filter 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 65°C. Donaldson offers both types, as shown in the tables above. (Viton® is a registered trademark of DuPont Dow Elastomers). Filters with seals made of BunaN are appropriate for most applications involving petroleum oil.



**0-189 l/min - Bulk hP Heads (Single)**

Port Size	Bypass Rating	Indicator Visual	Indicator Options	Part No.
SAE-16 O-Ring	No Bypass	Left	A, C	P566023
SAE-16 O-Ring	50 psi / 345 kPa	Left	A, C	P566024

**Bulk hP Elements**

Media Type	$\beta_{x(c)} = 2000$ Rating	Length		Part No.	Seal Material
		in	mm		
Synteq XP	4 $\mu$ m	9.88	250	P565184	Viton
Synteq XP	8 $\mu$ m	9.88	250	P565185	Viton
Synteq XP	14 $\mu$ m	9.88	250	P565183	Viton

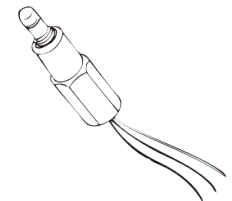


Filters Shown with P566023 Head

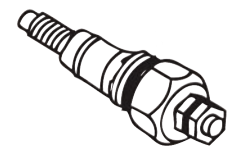
**Service Indicators**

Part No.	Pressure Rating	Description	Where Used	Style
P173944	25 psi / 172 kPa	AC/DC 3-wire Silver alloy contacts White: normally open Red: normally closed Black: common	HMK03, HMK04/24 HMK05/25 Bulk hP	C
P174396	50 psi / 345 kPa	AC/DC 3-wire Silver alloy contacts White: normally open Red: normally closed Black: common	HMK03 HMK04/24 HMK05/25 Bulk hP	C
P162400	25 psi / 172 kPa	DC/Single post Normally open	HMK04/24 HMK05/25 Bulk hP	A
P165965	50 psi / 345 kPa	Visual Indicator	HMK03 Bulk hP	D
P162696	25 psi / 172 kPa	Visual Indicator	HMK04/24 HMK05/25	D
P167580	50 psi / 345 kPa	Visual Indicator	HMK04/24 HMK05/25	D

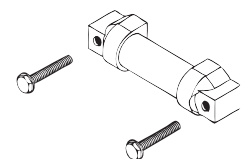
**P173944**  
**P174396**



**P162400**



**P165965**  
**P162696**  
**P167580**



## High Pressure Hydraulic Assemblies

The following are high pressure hydraulic assemblies used on in-plant and mobile hydraulic systems. Applications include hydrostatic transmissions and high pressure circuit systems. Made from ductile iron for strength and durability, they are available with a reverse flow check valve which allows bi-directional flow through the filter head.

Hydraulic Series	Flow Range Return	Working Pressure	Porting Types	Media
FPK02	0-95 l/min	6090 psi 42000 kPa 420 bar	SAE-12 O-Ring	Synteq
HPK03	0-227 l/min	3000 psi 20685 kPa 206.9 bar	SAE-16 O-Ring	Synteq DX2
HPK04	0-454 l/min	6000 psi 41370 kPa 413.8 bar	1 1/4" SAE 4 Bolt Flange 1 1/2" SAE 4 Bolt Flange	Synteq DX2
HPK05	0-757 l/min	3000 psi 20685 kPa 206.9 bar	2" SAE 4-Bolt Flange	Synteq

### 0-95 l/min - FPK02 - Head

Port Size	Bypass Rating	Indicator Options	Part No.
SAE 12 O-Ring	87 psi / 600 kPa	P171945 - Visual P171947 - Electrical	P762766

### FPK02 - Housings

Length		Part No
in	mm	
4	102	P762769
8	203	P762770

Note: Head assemblies include head-to-housing seal.

### FPK02 - Elements

Media No.	$\beta_{x(c)} = 1000$ Rating	Length		Part No.	Seal Material
		in	mm		
No. 1	6 $\mu$ m	4.37	111	P167180 High Collapse	Fluorocarbon
		8.12	203	P167838 P167182 High Collapse	BunaN Fluorocarbon
No. 2	9 $\mu$ m	4.37	111	P165041	BunaN
		8.12	203	P165043	BunaN
No. 2 1/2	10 $\mu$ m	4.37	111	P165006	BunaN
		8.12	203	P167181 High Collapse	Fluorocarbon
		8.12	203	P165015 P167183 High Collapse	BunaN Fluorocarbon
No. 9	23 $\mu$ m	4.37	111	P165136	BunaN
		8.12	203	P165138	BunaN



Filter Shown with P762766 Head with 8" housing

### 0-227 l/min - HPK03 Head

Port Size	Bypass Rating	Indicator Visual	Indicator Options	Part No.
SAE-16 O-Ring	50 psi / 345 kPa	Visual Left	P569634 - Electrical P567986 - Electrical	P166353

### HPK03 Housing

Length		Part No
in	mm	
8	209	P179579

Note: Head assemblies include head-to-housing seal.

### HPK03 Elements

Media No.	$\beta_{x(c)} = 1000$ Rating	Part No.	Seal Material
DX2	5 $\mu$ m	P565122	Viton
		P167842	BunaN
No. 1	6 $\mu$ m	P167185 High Collapse for No Bypass application	Viton
DX2	8 $\mu$ m	P565123	Viton
No. 2	9 $\mu$ m	P164594	BunaN
		P164166	BunaN
No. 2½	10 $\mu$ m	P167186 High Collapse for No Bypass application	Viton
DX2	14 $\mu$ m	P564936	Viton
No. 9	23 $\mu$ m	P164174	BunaN



Filter Shown with P166353 with 8" housing

## 0-454 l/min - HPK04 Heads

Port Size	Bypass Rating	Indicator Visual	Indicator Options	Part No.
1 1/2" SAE 4 Bolt Flange (code 62)	50 psi / 345 kPa	Visual Left	P569634 - Electrical P567986 - Electrical	P567642
1 1/4" SAE 4 Bolt Flange (code 62)	90 psi / 620 kPa Reverse flow check valve	Visual Left	P569634 - Electrical P567986 - Electrical	P567644

## HPK04 Housings

Length		Part No
in	mm	
8	203	P567650
13	330	P567649
16	406	P567648



Filter Shown with P567642  
with 16" housing

Note: Head assemblies include  
head-to-housing seal.

## HPK04 Elements

Media No.	$\beta_{x(c)} = 1000$ Rating	Length		Part No.	Seal Material
		in	mm		
DX2	5 $\mu$ m	8	208	P565122	Viton
		13	328	P565188	Viton
		16	427	P565196	Viton
No. 1	6 $\mu$ m	8	208	P167842	BunaN
				P167185 High Collapse	Viton
		13	328	P169432	BunaN
		16	427	P169433	BunaN
DX2	8 $\mu$ m	16	427	P167187 High Collapse	Viton
		8	208	P565123	Viton
		13	328	P565189	Viton
No. 2	9 $\mu$ m	16	427	P565197	Viton
		8	208	P164594	BunaN
		13	328	P164596	BunaN
No. 2 1/2	10 $\mu$ m	16	427	P164598	BunaN
				P164166	BunaN
		8	208	P167186 High Collapse	Viton
DX2	14 $\mu$ m	13	328	P164168	BunaN
		16	427	P164170	BunaN
		8	208	P564936	Viton
No. 9	23 $\mu$ m	13	328	P565187	Viton
		16	427	P565195	Viton
		8	208	P164174	BunaN
		13	328	P164176	BunaN
		16	427	P164178	BunaN



### 0-757 l/min - HPK05 Assembly

Port Size	Bypass Rating	Assembly Number	Bx(c) = 1000 Rating	Provided with this element
2" SAE 4 Bolt Flange (Code61)	60 psi / 414 kPa Reverse flow check valve	K052024	23	P164229

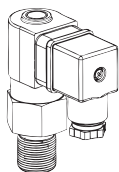
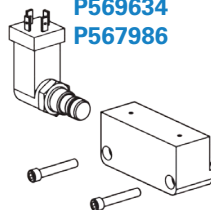
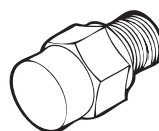
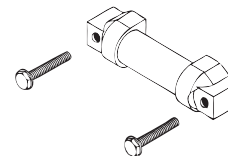
### HPK05 Elements

Media No.	βx(c) = 1000 Rating	Length		Part No.	Seal Material
		in	mm		
Synteq	5 μm	25.5	648	P566450	Viton
No. 2	9 μm	25.5	648	P164585	BunaN
No. 2 ½	10 μm	25.5	648	P164227	BunaN
No. 9	23 μm	25.5	648	P164229	BunaN



### Service Indicators

Part No.	Pressure Rating	Description	Where Used
P171947	72 psi / 493 kPa	AC/DC normally open or closed 250 VAC or 30 VDC max 5A resistive/inductive Electrical/Visual Combination	FPK02
P569634	50 psi / 345 kPa	Hirschmann receptacle 115 VAC/28 VDC, 2 amps	HPK03 HPK04 HPK05
P567986	50 psi / 345 kPa	Thermal lockout & serge control, Hirschmann receptacle 115 VAC/28 VDC, 2 amps 4 pin DIN 43650	HPK03 HPK04 HPK05
P171945	72 psi / 493 kPa	Visual Indicator	FPK02
P164315	50 psi / 345 kPa	Visual Indicator	HPK03 HPK04 HPK05

**P171947**

**P569634  
P567986**

**P171945**

**P164315**


T.R.A.P. Breather (Thermally Reactive Advanced Protection)

T.R.A.P. (Thermally Reactive Advanced Protection) Breathers eliminate air-borne moisture (humidity) and dirt from air entering hydraulic reservoirs. Suitable for both stationary and mobile applications, they provide faster acting protection for hydraulic reservoirs than silica gel breathers!

T.R.A.P. self regenerative media removes airborne moisture down to 15% relative humidity. The contaminant media pack is 97% efficient on particles down to 3µm.

Part No.	Construction	Connection	Airflow	Indicator
<b>Mini</b>				
P566174	Glass-filled nylon	9/16"-18UNF	85 L/min	No Indicator
P567390	Glass-filled nylon	3/8" NPT	85 L/min	No Indicator
P567392	Glass-filled nylon	1/4" NPT	85 L/min	No Indicator
<b>Anti rollover</b>				
P766645	Glass-filled nylon	3/4" BSP	200 L/min	No Indicator
P766646	Glass-filled nylon	1" BSP	200 L/min	No Indicator
<b>Metal</b>				
P565857	Epoxy-coated steel	3/4" NPT	708 L/min	Optional Visual
P565858	Epoxy-coated steel	Bayonet	708 L/min	No Indicator
P566037	Epoxy-coated steel	3/4" BSP	708 L/min	No Indicator
<b>Standard</b>				
P566151	Glass-filled ABS	1" NPT	1274 L/min	No Indicator
P564669	Glass-filled ABS	1" NPT	1274 L/min	Electronic <sup>1</sup>
P565616	Glass-filled ABS	Bayonet	1274 L/min	Electronic <sup>1</sup>
P505964	Adapter	1" NPT Female - 3/4" BSP Male		
<b>Bulk</b>				
P923075 (Filter only)	Urethane	1 1/4" BSP	1893 L/min	No Indicator
DFF0078 (Assembly)	Brass, Urethane	1 1/2" NPT	1893 L/min	Visual



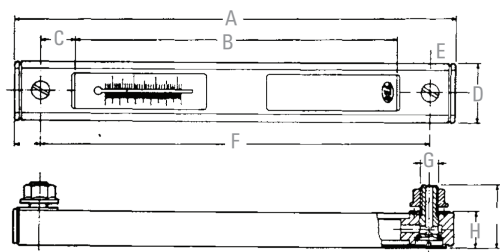
<sup>1</sup>The electronic indicator is triggered by pressure differential, and flashes red to indicate a change out is required (1 PSID).

Fluid Level Temperature Gauges

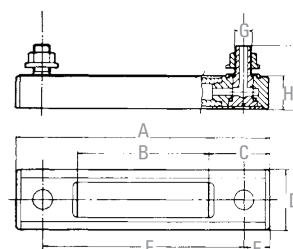
Part No.	Dim. A (in./mm)	Dim. B (in./mm)	Dim. C (in./mm)	Dim. D (in./mm)	Dim. E (in./mm)	Dim. F (in./mm)	Dim. G	Dim. H (in./mm)	Dim. I (in./mm)
① P171913	4.21/107	1.22/31	.89/22.5	1.57/40	.61/15.5	3/76	M10 x 1.5	.78/20	1.57/40
P171920	6.22/158	3.22/82	.89/22.5	1.57/40	.61/15.5	5/127	M12 x 1.5	.78/20	1.57/40
P562448	6.34/161	2.91/74	.90/23	1.22/31	0.47/12	5.0/127	M12 x 1.5	.90/23	1.61/41
P171921	11.2/285	8.23/209	.89/22.5	1.57/40	.61/15.5	10/254	M12 x 1.5	.78/20	1.57/40
P171922	11.22/25	8.23/209	.89/22.5	1.57/40	.61/15.5	10/254	M12 x 1.5	.78/20	1.57/40

① Level only    ② Maximum working pressure 14.5 psi / 100 kPa / 1 bar    ③ Max pressure 260PSI / 1790kPa / 1.079 bar

P171920  
P171921  
P171922



P171913  
P562448





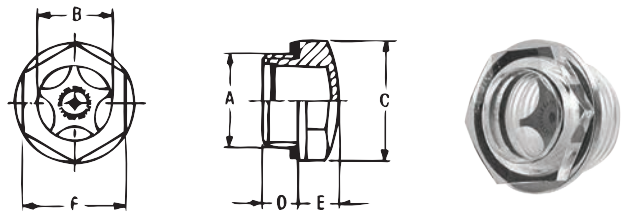
## Sight Glasses

Leak-free sight glasses come in plastic or metal with a variety of threads, seals and lenses. In low visibility areas, prism lens sight glasses are a good solution for quick and accurate readings. In applications involving high pressure or temperatures, steel sight glasses are preferred. Locking nuts provide mounting into sheet metal with minimum thickness and without welding.

### Sight Glasses

#### Description:

Transparent polyamid lens  
 Shock resistant  
 Anodized aluminum reflector  
 Operating temperature 210°F / 100°C  
 BunaN seal  
 For use with mineral, petroleum and water-based fluids  
 Any contact with alcohol or solvents must be avoided  
 Design HFTX  
 Working pressure 29 psi / 200 kPa / 2 bar

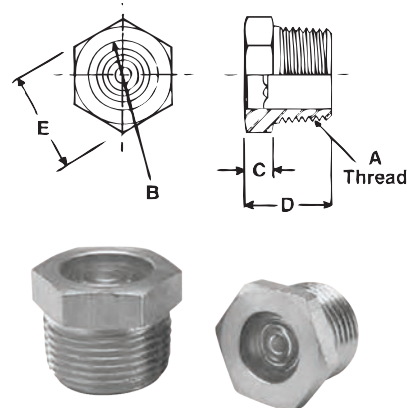


Part No.	Description	Thread Size Dim. A (in.)	Dim. B (in./mm)	Dim. C (in./mm)	Dim D (in./mm)	Dim. E (in./mm)	Dim. F (in./mm)
P562419	SG-04	1/4" BSP	.35/9	.71/18	.28/7	.24/6	.59/15
P562420	SG-06	3/8" BSP	.43/11	.87/22	.32/8	.28/7	.75/19
P562421	SG-08	1/2" BSP	.55/14	1.02/26	.32/8	.32/8	.87/22
P562426	SG-12	3/4" BSP	.79/20	1.22/31	.35/9	.39/10	1.06/27

### Prism Sight Glasses

#### Description:

All nickel-plated steel construction  
 Glass prism lenses hermetically sealed  
 Leak-proof service  
 Greater mechanical strength  
 Easy installation  
 Reflects light in the presence of any liquid  
 Maximum operating temp. 500°F / 260°C  
 Suitable for petroleum and water-based fluids  
 Working pressure 500 psi / 3450 kPa / 34.5 bar



Part No.	Description	Thread Size Dim. A (in.)	Dim. B (in./mm)	Dim. C (in./mm)	Dim D (in./mm)	Dim. E (in./mm)
P562412	SVM-16	1" NPT	0.94/24	0.31/8	0.94/24	1.38/35
P562414	SVM-24	1-1/2" NPT	1.44/37	0.41/10	0.81/251	2.00/51
P562415	SVM-32	2" NPT	1.88/48	0.41/10	0.88/22	2.50/64

**B.O.S.S. Bulk Oil Service System**

**Features**

The Donaldson B.O.S.S. Bulk Oil Service System is the perfect solution for your off-line filtration and transfer requirements.



Twin sample access ports for in-operation oil sampling



Two gauges supplied



Electric motor:  
1450 RPM 1.1 kw



Wall or trolley mounting option

The Donaldson B.O.S.S. Bulk Oil Service System provides off-line filtration and fluid transfer capability in a convenient portable package.

Use it in your workshop, with in-plant machinery, or mobile equipment to achieve and maintain the ISO cleanliness standards of your fluids.

The dual filter head comes fitted (as standard) with two 25µm@β2000 spin-on filters for cold or heavier fluids. For lighter fluids, you have the option of two 7µm@β2000 spin-on filters. Alternatively, a pair of water absorbing filters can be used to remove moisture. This head is ported to run in parallel for high flow capacity and should always be fitted with two filters of the same rating.

The Donaldson B.O.S.S. is designed for performance, convenience and safety. Its value adding features make it the best choice for protecting your machinery from wear and failure caused by contamination.



Get a B.O.S.S. working for you!



**Part No: P506037**

Filter Head	P568583 - Dual Spin-on head 1½" SAE 4-Bolt Ports
Pump	Gear pump
Flow Rate	40 L/min@ 1450 RPM
Power Source	240 Volt 50 Hz
Dimensions	H=1300mm, W=550mm, D=700mm
Weight	65kgs
Noise Level	72dB
Hose	1" ID x 2.5m (delivery) 1 ¼" ID x 2.5m (suction)
Starter	Overload protection on pump
Seals & O-Rings	BunaN (Pump) Viton (Filtration)
Frame	Heavy-duty 32mm industrial powdercoated with P-nose grip and gel-filled tyres

**Filters Supplied with Unit**

Part No.	ISO Filter Efficiency	Quantity Required
P568664	25 µm@Beta 2000 (Engine Oil and Gear Oil)	2

**Filters (Sold Separately)**

Part No.	ISO Filter Efficiency	Quantity Required
P568665	7 µm@Beta 2000 (transmission Oil and Hydraulic Oil)	2
P570248	Water Absorbing Media (for Ethanol-Free Fluids*)	2

\*Designed with expanding media that prevents water from entering storage or equipment tanks. Not intended for particle removal.

**NOT FOR USE WITH DIESEL**

Off-line Filtration

## Bu.F.S.S. Bulk Fuel Service System

### Features and Benefits



Triple sample access ports for in-operation fuel sampling



Three gauges supplied



Continuously rated electric motor



Wall or trolley mounting option



Optional Industrial grade timer

The Donaldson Bu.F.S.S. provides off-line filtration and fuel transfer capability in a convenient portable package.

Use it in your workshop, with in-plant machinery, or mobile equipment to achieve and maintain the ISO cleanliness standards of your fuel.

The unit is shipped pre-fitted with filtration and ready to use, all you need to add is your choice of hose fittings.

The extra large Donaldson spin-on filters installed on the Bu.F.S.S. will target a cleanliness level of ISO 14/13/11 as well as absorb free water in the fuel. The spin-on filter design makes this system both simple and cost-effective to service.

The powerful 550 W continuously rated motor is coupled to a 63 LPM pump to provide smooth and efficient fuel transfer and filtration. Differential pressure gauges display when the filters require replacing. The Bu.F.S.S. is mounted on gel filled wheels for easy manoeuvring. Using the optional brackets, it can even be wall mounted.

An optional industrial grade timer unit enables the Bu.F.S.S. to be used for regular timed kidney loop filtration.

The Donaldson Bu.F.S.S. is designed for performance, convenience and safety. Its value adding features make it the best choice for protecting your machinery from contaminated fuel.



Filter Head	P568583 - Dual Spin-on head 1½" SAE 4-Bolt Ports x 2
Pump	Vane pump
Flow Rate	63 L/min @ 2800 RPM
Power Source	240 Volt 50 Hz with 2m cable
Dimensions	H=1300mm, W=550mm, D=700mm
Weight	65kgs
Hose	1" ID x 2.9m (delivery and suction)
Motor	Continuous rating
Seals & O-Rings	Graphite & steatite (Pump) Viton (Filtration)
Frame	Heavy-duty 32mm industrial powdercoated with P-nose grip and gel-filled tyres

### Filters Supplied with Unit

Part No.	ISO Filter Efficiency	Quantity Required
P568666	< 4 µm @ Beta 2000 (Diesel Fuel)	2
P570248	Water Absorbing Media (for Ethanol-Free Fluids*)	2

\*Designed with expanding media that prevents water from entering storage or equipment tanks. Not intended for particle removal.

**ONLY FOR USE WITH DIESEL**

Photos for illustrative purposes only



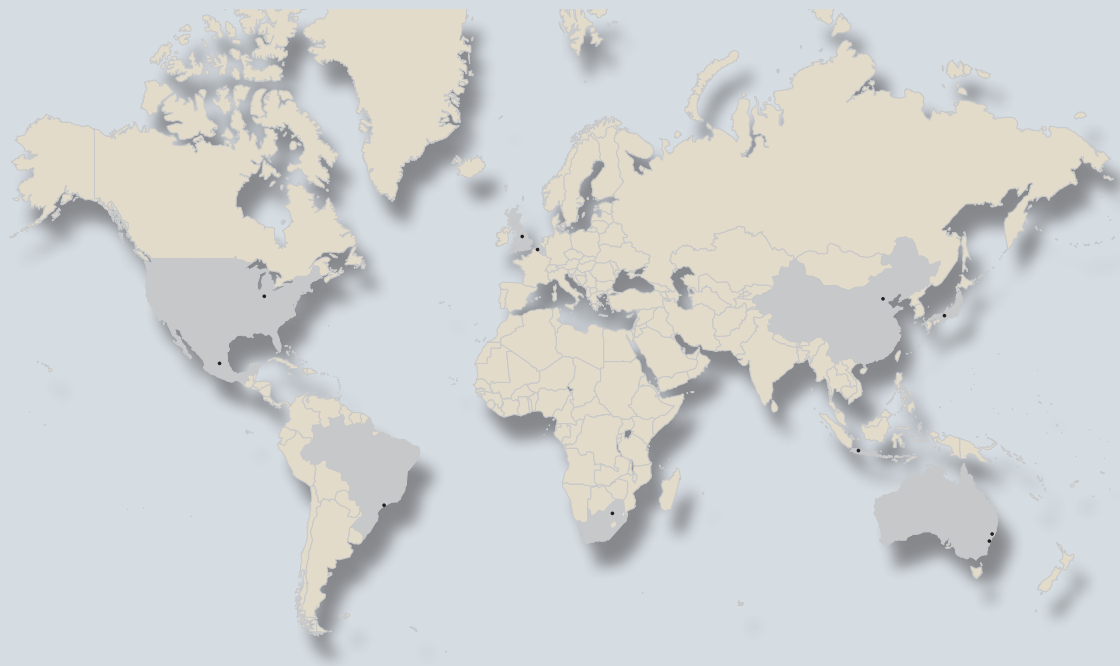
## Global Presence with Local Touch

Donaldson has established a global distribution network to serve our customers locally as well as worldwide. We operate as a global company with a network for primary distribution locations that support a mature hub of regional distribution centers and warehouses.

Donaldson distribution centers are strategically located to quickly and accurately deliver filtration and exhaust products wherever replacement products are needed. We work with a network of transportation, third party logistics companies,

consolidators and cross-docking facilities to meet or exceed our customers' requirements.

All regions of the world benefit from our global umbrella of distribution centers. We focus our efforts on local support and the capabilities of our staff. We continue to make significant investments in facilities, systems, supply chain relationships and staffing to offer the best order fulfillment options available.



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**Brochure No. 12IH006 (02/13)**

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