



HMK05/25

Max Flow: 50 gpm (189 lpm) / 100 gpm (378 lpm)



HMK05/25 DURAMAX® Spin-On Filters

Working Pressures to: 350 *psi*
2413 kPa
24.1 bar

Rated Static Burst to: 800 *psi*
5520 kPa
55.2 bar

Flow Range to:	HMK05	HMK25
	50 <i>gpm</i> 189 <i>lpm</i>	100 <i>gpm</i> 378 <i>lpm</i>



Features

HMK05 (single) and HMK25 (double) Duramax spin-on filters are perfect for high-flow applications, featuring a heavy-duty steel body and die-cast top plate for added strength. A special head-to-canister O-Ring seal prevents leakage. Buna-N® seals are standard. Viton® seals made of fluorocarbon are available. Since both HMK05 and HMK25 models use the same replacement filters, they make a great team within your application. Both filters feature identical pressure ratings, but the HMK25 double filter head means double flow capability, with two filters to hold more contaminant. So there's no need to inventory two different part numbers for replacement filters.

Take advantage of Donaldson's mix and match system of in-stock heads, housings and media choices – so you can get exactly what you need. Media options include wire mesh and Donaldson's exclusive Synteq™ synthetic media designed especially for liquid filtration.

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

- | | |
|-----------------|------------------------------------|
| HMK05 | HMK25 |
| • 1¼" NPT | • 1½" NPT |
| • SAE-20 O-ring | • SAE-24 O-ring |
| | • 1½" SAE 4-Bolt
Flange Code 61 |

Assembly Weight

- 7.5 lbs / 3.4 kg (single)
- 16 lbs / 7.3 kg (double)

Replacement Filter Lengths

- 7.6" / 193mm
- 11.63" / 295.4mm
- 14.2" / 361mm

Filter Collapse Ratings

- 200 *psi* / 13.8 bar

Standard Bypass Ratings

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

Operating Temperatures

- -20°F to 250°F / -29°C to 121°C (synthetic)
- -20°F to 225°F / -29°C to 107°C (cellulose)
- -20°F to 250°F / -29°C to 121°C (wire mesh)

Housing Fatigue Strength Ratings*

- 100,000 Cycles: 0-350 *psi* / 0-2413 kPa / 24.1 bar
- 300,000 Cycles: 0-300 *psi* / 0-2068 kPa / 20.7 bar
- 1,000,000 Cycles: 0-250 *psi* / 0-1734 kPa / 17.3 bar

*Per T3.10.17 NFPA

Filter Head Construction

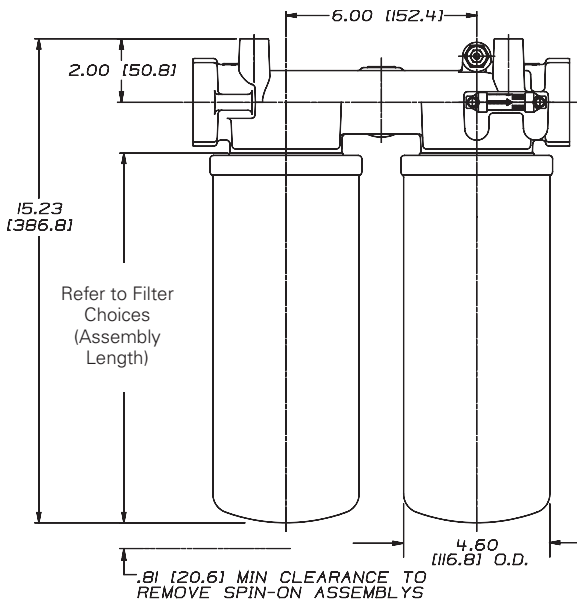
- Standard Head Cast Aluminum
- Ductile Iron Available in HMK25

HMK05/25 Specification Illustrations

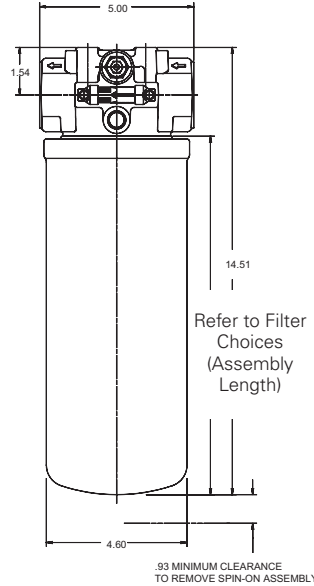
All dimensions are shown in inches [millimeters].

Assembly - Side Views

HMK25



HMK05

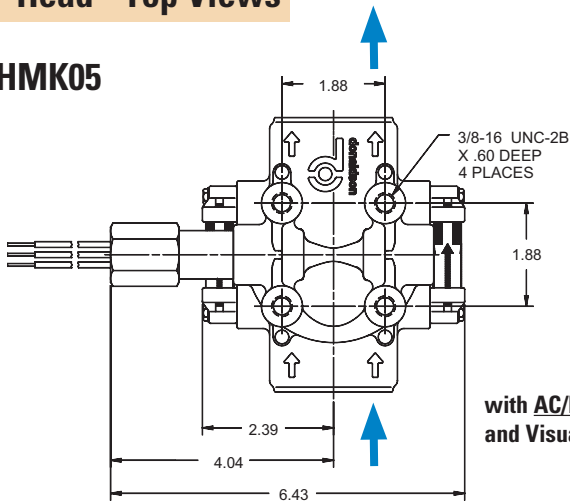


Applications

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

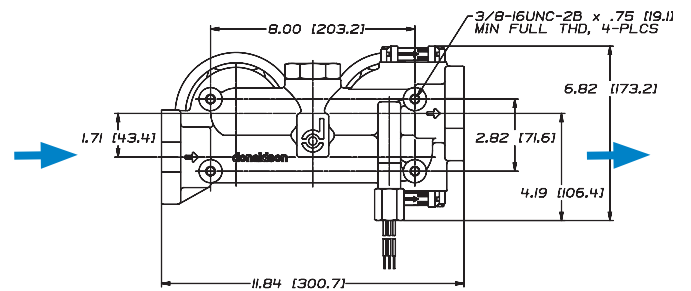
Head - Top Views

HMK05

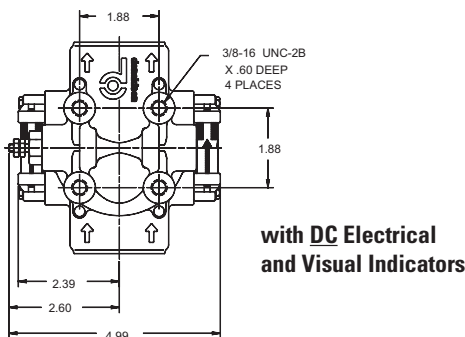


with **AC/DC** Electrical and Visual Indicators

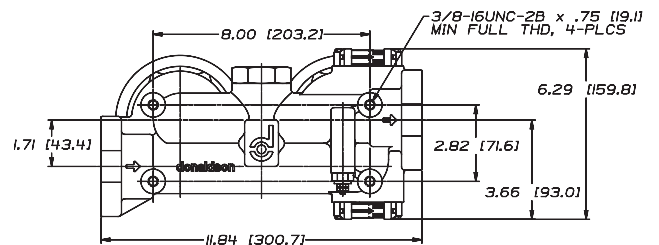
HMK25



with **AC/DC** Electrical and Visual Indicators



with **DC** Electrical and Visual Indicators



with **DC** Electrical and Visual Indicators



HMK05/25

Max Flow: 50 gpm (189 lpm) / 100 gpm (378 lpm)



HMK05/25 Components

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	<4 μm		14.2	361	P564468	
	7 μm		11.6	294	P170906	
	7 μm		11.6	294	P171273	¹ Viton®, Epoxy
	7 μm		11.6	294	P165675	
	7 μm		11.6	294	P171274	¹ Viton, Epoxy
	7 μm		14.2	361	P179763	
	9 μm		7.6	193	P176207	
	9 μm		11.6	294	P176567	
	9 μm		14.2	361	P170949	
	9 μm		11.6	294	P165659	
	9 μm		11.6	294	P171275	¹ Viton, Epoxy
	23 μm		7.6	193	P176208	
	23 μm		11.6	294	P165569	
	23 μm		11.6	294	P171276	¹ Viton Epoxy
	25 μm		14.2	361	P173789	
	50 μm		11.6	294	P165672	
	50 μm		14.2	361	P170546	
Water Absorbing	10 μm		11.6	294	P179075	
Wire Mesh	150 μm		11.6	294	P173943	

Filter Notes

- Refer to table in the Technical Reference Guide for fluid compatibility with our filter media.
- Thread size is 1 3/4"-12 UNF-2B
- Some part numbers are offered with the same beta ratings to maintain customer ordering patterns.

¹ 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 HWCFC (high water content fluids) over 150°F. Donaldson offers both types.

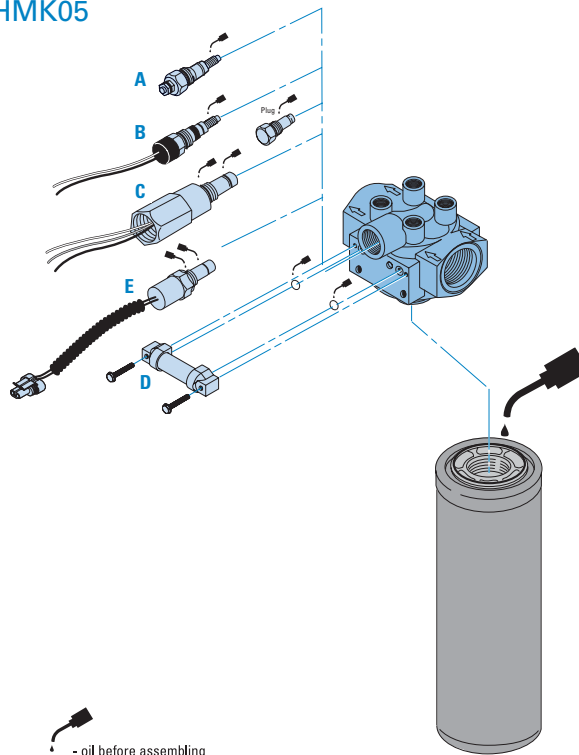
Oil Service Indicator Options

Electric Models ¹			
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. N.C.
25 psi / 172.5 kPa	P162400	A	Single post DC. N.O.
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. N.O.
50 psi / 345 kPa	P167455	A	Single post DC. N.C
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

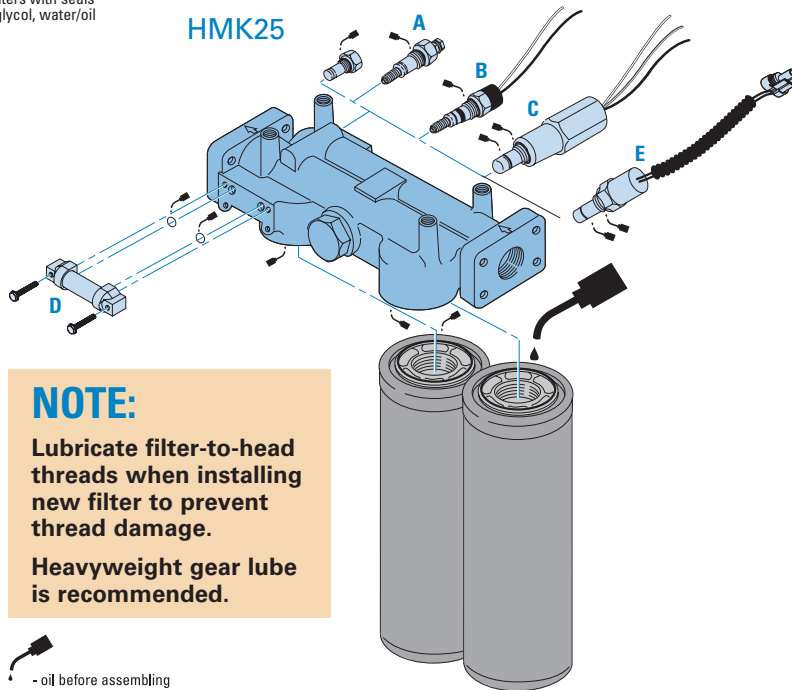
Visual Models (Non-Electric) ²			
Use with Bypass Valve Pressure of:	Indicator Part No.	Style ³	Description
15 psi / 103 kPa	P162642	D	
25 psi / 172.5 kPa	P162696	D	
50 psi / 345 kPa	P167580	D	
N/A	P165984		(blank plate)
25 psi / 172.5 kPa	P165965		D Heavy-duty
50 psi / 345 kPa	P574177		D Heavy-duty

Service Parts

HMK05



HMK25



NOTE:

Lubricate filter-to-head threads when installing new filter to prevent thread damage.

Heavyweight gear lube is recommended.

- oil before assembling

Indicator Notes

- All electric models have a maximum operating temperature of 250°F/ 114°C.
 - All non-electric models have a maximum operating temperature of 180°F/ 82°C.
 - Complete details on all service indicators can be found in the accessories section..
- Buna-N® Viton® are a registered trademarks of E. I. DuPont de Nemours and Company.

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
	25 psi / 172 KPa	A (Electrical) (25 psi)	A, B, C, E, F	P167621
1¼" NPT	25 psi / 172 KPa	D (Visual), Left Side (25 psi)	D	P167622
SAE-20	25 psi / 172 KPa	D (Visual), Both Sides (25 psi)	A, B, C, E, F	P165973
O-Ring	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

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	25 psi / 172 kPa	D (Visual), Both sides	A,B,C,E,F	P167296
Flange	No Bypass	D (Visual), Both Sides	A,B,C,E,F	P169984
1½" SAE 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*



Dual Head

NOTE:

Lubricate filter-to-head threads when installing new filter to prevent thread damage.

Heavyweight gear lube is recommended.

* Ductile Iron Construction

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



3-Port Head

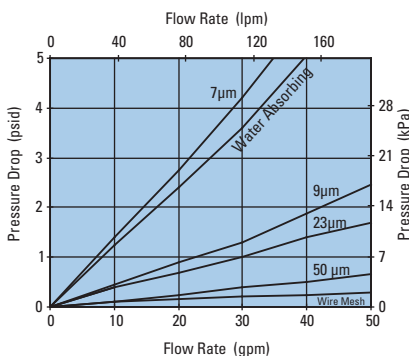
The **P561924** head is designed with a 50 psi / 3.45 bar third port bypass valve that diverts all bypass flow back to the reservoir, instead of going straight through the head and into the system as it does in 2-ported heads. Unfiltered fluid is NOT allowed into the system in the case of plugged filters.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

Head Notes

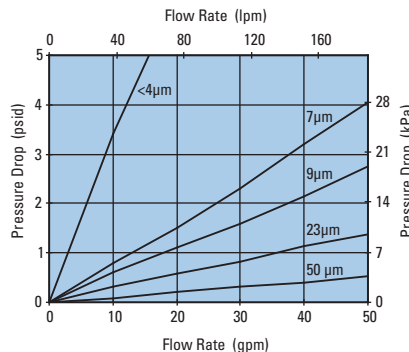
- Donaldson uses the inlet port as the reference point. "Left side," for instance, means the indicator mounts on the Left side when you face the inlet port.
- May be purchased separately.
- Complete details on all service indicators on pages 236-238.

Performance Data

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



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



HMK05/25 Head Only

