



HMK03

Max Flow: 25 gpm (95 lpm)



HMK03 DURAMAX® Spin-On Filters

Working Pressures to:

1000 psi / 6895 kPa / 69 bar

Rated Static Burst to:

2000 psi / 13,790 kPa / 138 bar

Flow Range To:

25 gpm / 95 lpm

Features

HMK03 Series Duramax® spin-on filters offer twice the capacity of competitive filters, yet they are physically smaller than traditional housing/cartridge filter assemblies. It features a die cast aluminum head and a unique radial seal O-Ring gasket design that eliminates leakage.

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. A full range of media options are available, using Donaldson's exclusive Synteq™ synthetic media designed especially for liquid filtration. You can also select the exact indicator types and bypass options to suit your application.

Beta Rating

- Performance to $\beta_{0.1} = 1000$

Porting Size Options

- SAE-12 O-Ring

Replacement Filter Lengths

- 5.5" / 140mm
- 9.5" / 242mm

Standard Bypass Ratings

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

Applications

- Hydrostatic Charge Pumps
- Hydrostatic Transmission
- Pilot Control Circuits
- Refrigeration Compressor Circuits



Assembly Weight

- Short: 3.3 lbs / 1.5 kg
- Long: 4.2 lbs / 1.9 kg

Operating Temperatures

- -20°F to 250°F / -29°C to 121°C

Filter Collapse Ratings

- 290 psid / 20 bar

Housing Fatigue Strength Ratings*

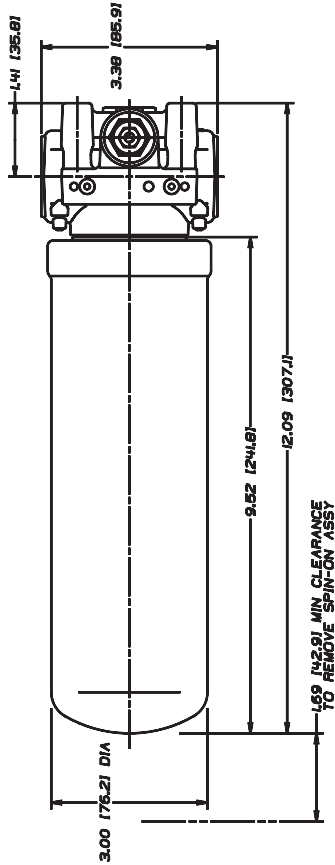
- 100,000 Cycles: 0-1000 psi / 0-6895 kPa / 68 bar
- 300,000 Cycles: 0-800 psi / 0-5516 kPa / 55 bar
- 1,000,000 Cycles: 0-700 psi / 0-4826 kPa / 48 bar

HMK03 Specification Illustrations

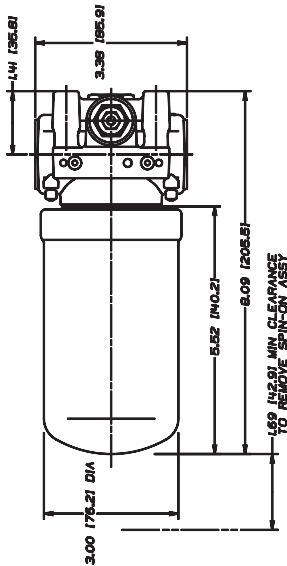
ASSEMBLY - SIDE VIEW

All dimensions are shown in inches [millimeters].

Long Assembly

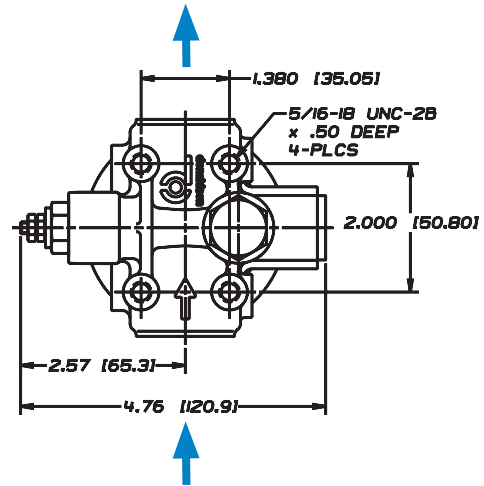


Short Assembly

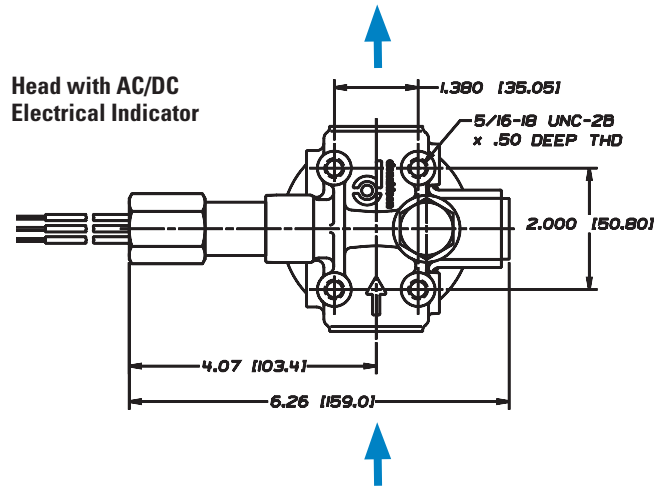


HEAD - TOP VIEW WITH INDICATORS

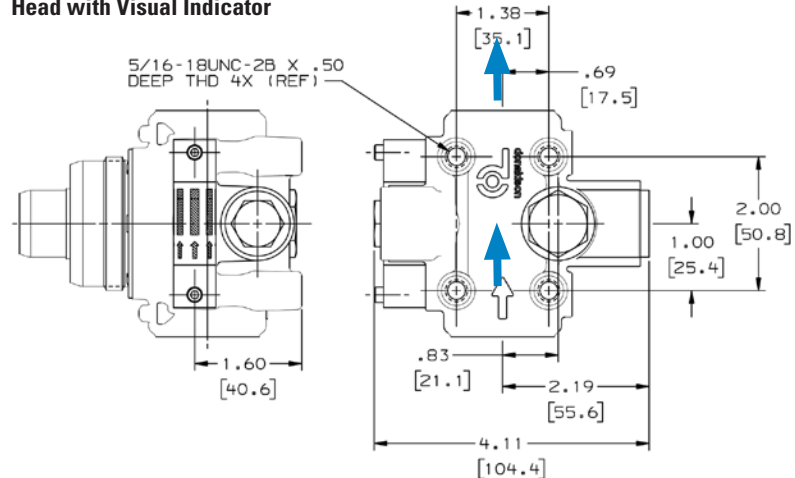
Head with DC Electrical Indicator



Head with AC/DC Electrical Indicator



Head with Visual Indicator





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HMK03 Components

Filter Choices

Media Type	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889	in	mm		
Synteq Synthetic	6 μm	5.5	140	P170308	Nitrile
	6 μm	9.5	242	P170309	Nitrile
	11 μm	5.5	140	P170310	Nitrile
	11 μm	9.5	242	P170311	Nitrile
	23 μm	5.5	140	P170312	Nitrile
	23 μm	9.5	242	P170313	Nitrile

Filter Notes

- Synteq™ filter media is compatible with petroleum based fluids, most phosphate esters, water oil emulsions, and HWCF (high water content fluids)
- All models have 2"-12 threads



HMK03 Head

Port Size	Bypass Rating	Indicator	Head Part No.
3/4" SAE-12 O-Ring	No Bypass	None*	P170327
	50 psi / 345 kPa	None*	P170773
	50 psi / 345 kPa	Visual*	P179460

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

Oil Service Indicator Choices

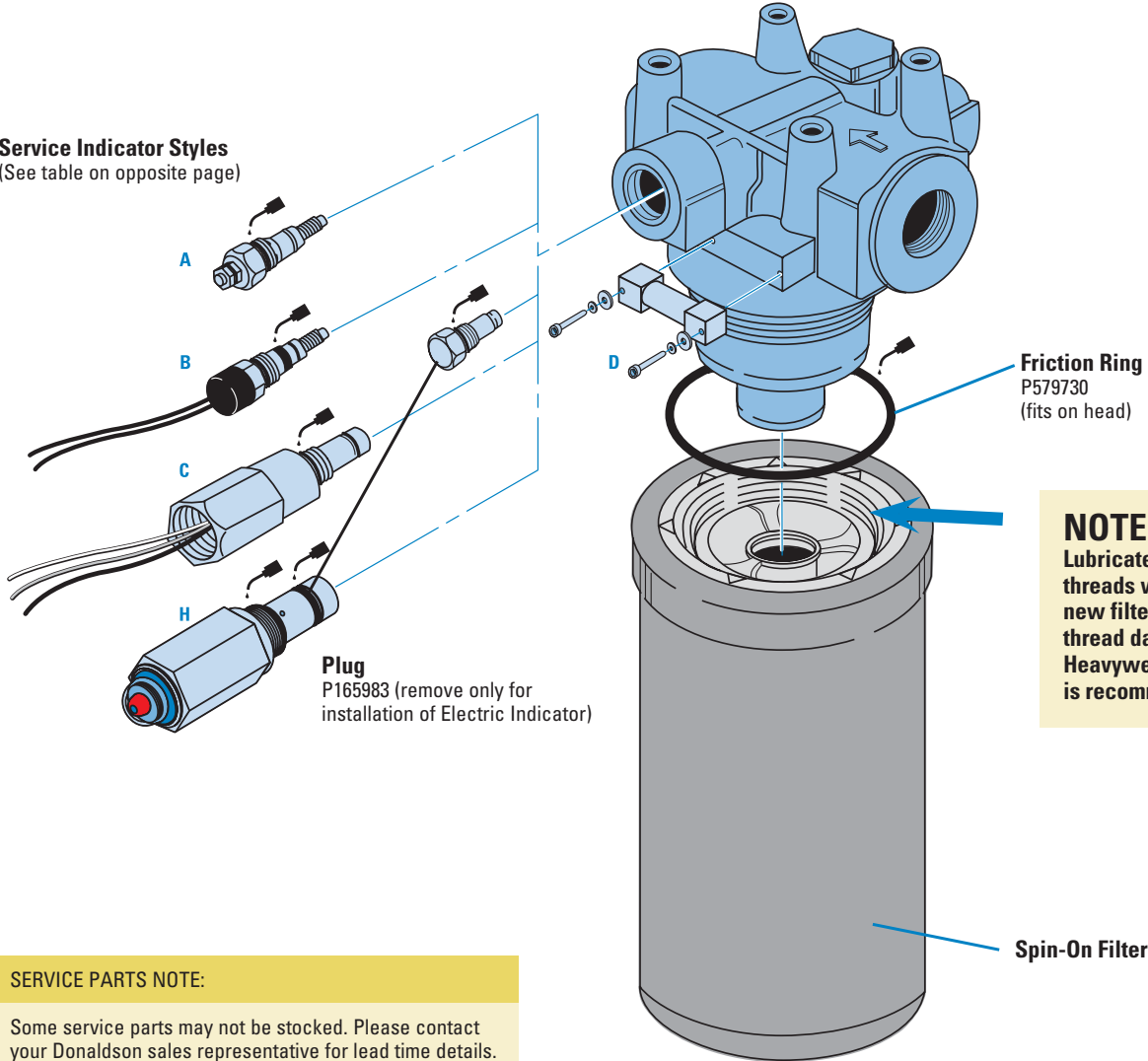
Use with Bypass Valve Pressure of:	Part No.	Style ²	Description ¹
25 psi / 172.5 kPa	P171143	B	Electric 2-wire DC
	P173944	C	Electric 3-wire AC/DC
	P165965	D	Visual
	P575334	H	Visual, pop up
50 psi / 345 kPa	P165194	A	Electric Single post DC
	P574968	B	Electric 2-wire DC
	P174396	C	Electric 3-wire AC/DC
	P575335	H	Visual, pop up
	P574967	E	DC 2-wire.

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

² See illustration of indicator styles on next page and complete details for all parts in the service indicators portion of the accessories section.

HMK03 Service Parts

Service Indicator Styles
(See table on opposite page)



Plug
P165983 (remove only for installation of Electric Indicator)

Friction Ring
P579730
(fits on head)

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

Spin-On Filter

SERVICE PARTS NOTE:

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

Performance Data

