

# HPK03 Highlights

**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 *l/min*



## Features

The sturdy HPK03 filter is constructed of ductile iron for durability in high pressure applications. Standard bowl drain plug means simplified servicing. Bowl includes a fluoroelastomer head-to-housing seal. Meets HF3 specification.

Take advantage of our Mix 'n 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* or no bypass. Seals made of fluorocarbon (such as Viton® and Fluorel®) or BunaN are available with HPK03.

All HPK03 filters contain Synteq®, our synthetic filter media designed especially for liquid filtration.

### Beta Rating

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

### T-Type Porting Sizes

- SAE-12 O-Ring
- SAE-16 O-Ring

### Assembly Weight

- 26 lbs / 11.8 kg

### Replacement Filter Lengths

- 8" / 203mm

### Standard Bypass Ratings

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

### Operating Temperatures

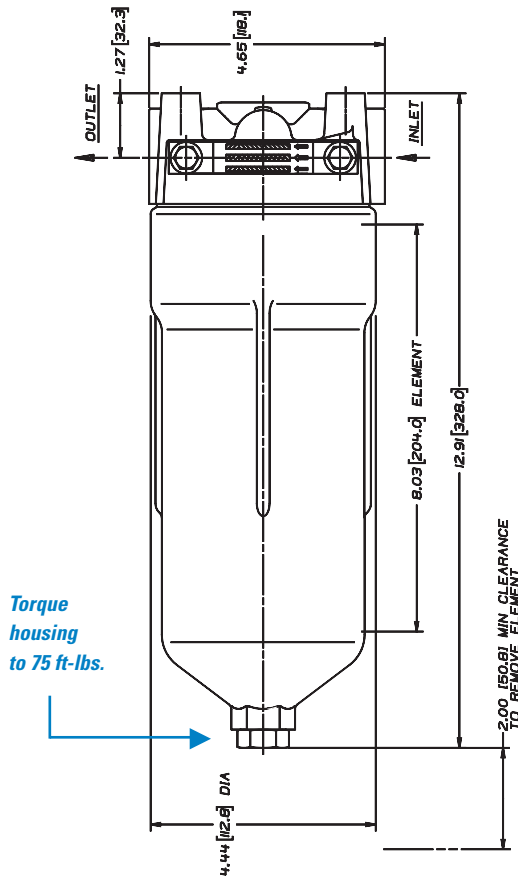
- -20°F to 250°F / -29°C to 121°C

### Element Collapse Ratings

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

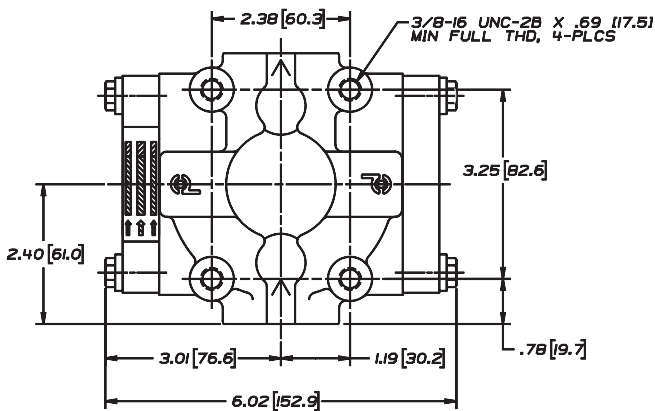
**Assembly - Side View**

*for:* High Pressure Circuits  
 In-Plant & Mobile Equipment  
 Servo Valve Circuits  
 Meets HF3 specifications

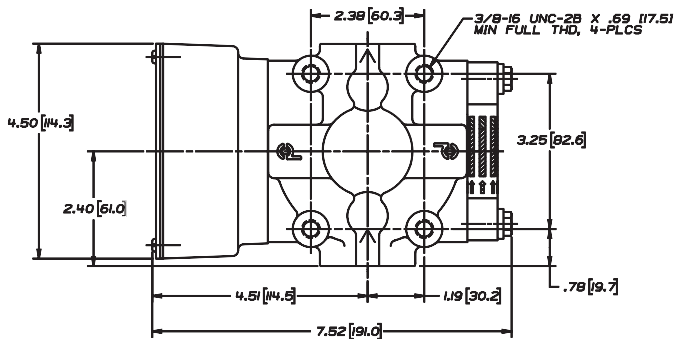


**Head - Top View**

**Standard Head - Top View**  
 with Visual Service Indicator left side,  
 blank plate right side



**Alternate Head - Top View**  
 with Electrical Service Indicator left side



All dimensions above are shown in inches [millimeters]

# HPK03 Components

## Element Choices

Media Number	B <sub>5(c)</sub> = 1000 Rating	Part No.	Seal	Comments
No. 1	6µm	P167842	BunaN	
No. 1	6µm	P167185	Viton	High Collapse for No Bypass applications.
No. 2	9µm	P164594	BunaN	
No. 2	9µm	P164601	Viton	
No. 2½	10µm	P164166	BunaN	
No. 2½	10µm	P167186	Viton	High Collapse for No Bypass applications.
No. 4	20µm	P164365	Viton	
No. 9	23µm	P164174	BunaN	
No. 20	>50µm	P165319	BunaN	
Media Number		Part No.	Seal	Comments
No. 74	75µm nominal	P162233	BunaN	Wire Mesh Media

### Filter Notes

- 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. (*Viton*® is a registered trademark of DuPont Dow Elastomers.)
- SYNTHETIC MEDIA: Synteq® filter media is compatible with petroleum based fluids, most phosphate esters, water oil emulsions, and HWCF (high water content fluids).
- Donaldson high collapse filters are physically designed to withstand up to 3000 psi / 20,700 kPa before collapsing.

## Housing

The **P179579** housing is 10.73 inches (273mm) long and accepts the filter element that is 8 inches (203mm) long. It includes a head-to-housing seal.

## Head Choices

Port Size <sup>4</sup>	Bypass Rating	Indicators <sup>1</sup>	Part No.
SAE-16 O-Ring	50 psi	Visual indicator, left side <sup>1,2</sup>	P166353
SAE-12 O-Ring	50 psi	Visual indicator, left side <sup>1,2</sup>	P170489
SAE-12 O-Ring	No bypass	Visual indicator, left side <sup>1,2</sup>	P170491

### Notes

<sup>1</sup> 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.

<sup>2</sup> Alternate indicator choice: electrical indicator (P166298) mounts in place of the visual indicator on the left side. Visual indicator can then be moved to the right side of the head, which is drilled and tapped with blank plate installed.



All HPK03 filters contain Synteq®, our synthetic media specially-developed for liquid filtration. Find out more on [page 8](#) !



# HPK03 Service Parts

**Visual Service Indicator**  
 P164315  
 (includes O-Ring & hardware)  
 Max Temp: 180°F/83°C  
 Set: 50 psi/345 kPa  
 or use blank plate P166134

**AC/DC Electrical Service Indicator**  
 P166298  
 (3-wire switch in conduit box, for left side of head only)  
 Max Temp: 250°F/121°C  
 Set: 40 psi/276 kPa  
 Voltage: 120 VAC / 28 VDC  
 Current: 250 mA  
 Circuit: Normally open (red) / normally closed (blue) / common (white)

**O-Ring**  
 P161315 Viton  
 Size 006

**Head Assembly**  
 (3 choices, listed in table on p.86)

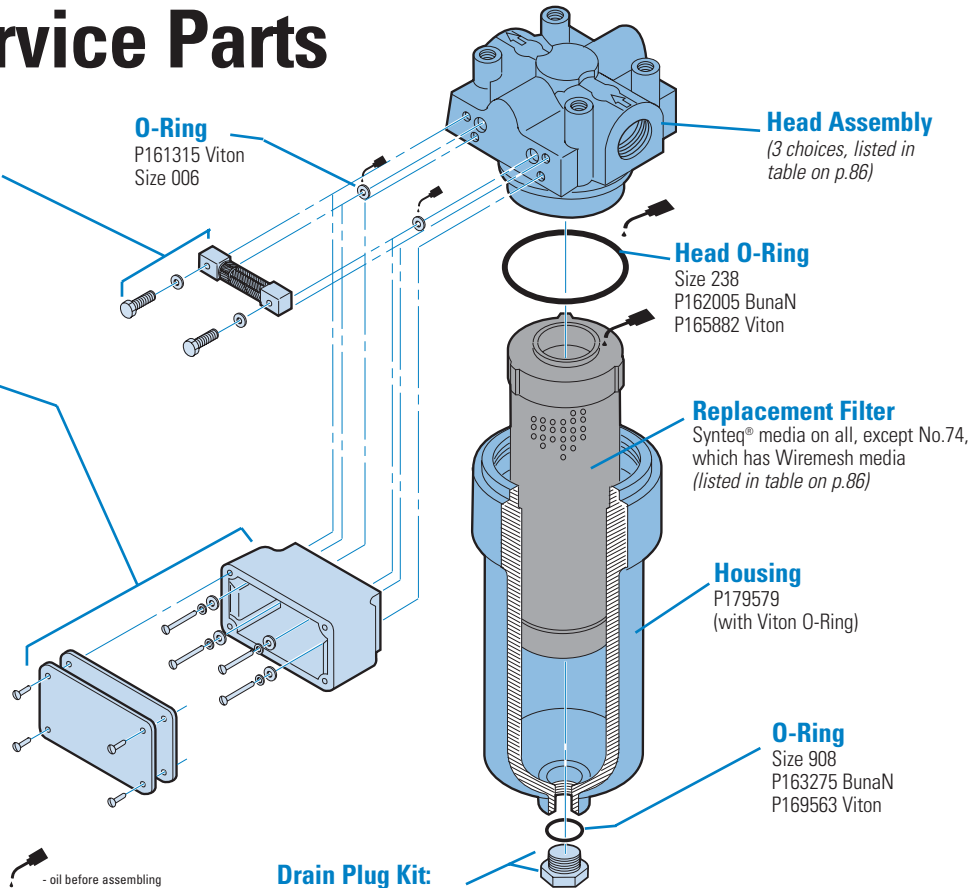
**Head O-Ring**  
 Size 238  
 P162005 BunaN  
 P165882 Viton

**Replacement Filter**  
 Synteq® media on all, except No.74, which has Wiremesh media (listed in table on p.86)

**Housing**  
 P179579  
 (with Viton O-Ring)

**O-Ring**  
 Size 908  
 P163275 BunaN  
 P169563 Viton

**Drain Plug Kit:**  
 P169564  
 (with Viton O-Ring)



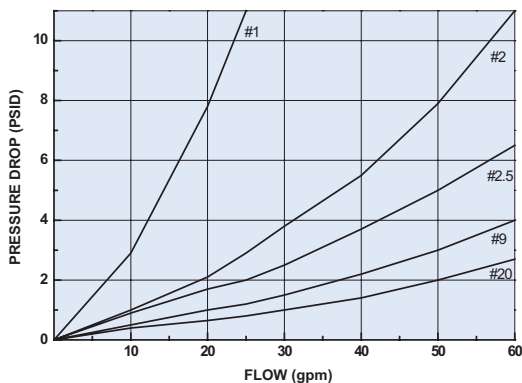
- oil before assembling

High Pressure Filters

## Performance Data

For a full explanation of how our performance curves were derived, see page 150.

HPK03 Element Only



HPK03 Housing Only

