

HPK05 Highlights

Working Pressures to: 3000 *psi*
20,700 kPa
20.6 bar

Rated Static Burst to: 6000 *psi*
41,400 kPa
413.8 bar

Flow Range to: 200 *gpm*
757 *l/min*



Features

The HPK05 high pressure filter series is made of ductile iron for strength and durability. Machined bypass valves are case-hardened at critical points to provide maximum strength and reliability!

Reverse flow bypass valve allows bi-directional flow through the filter head, with head up or head down mounting capabilities.

Available with your choice of visual or AC/DC electrical service indicator; choose Viton® or BunaN seals. The HPK05 filters contain Synteq®, Donaldson's exclusive synthetic fiber media formulated especially for liquid filtration!

Beta Rating

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

T-Type Porting Sizes

- 2" SAE 4-Bolt Flange (code 61)

Assembly Weight

- 63 lbs / 28.5

Replacement Filter Length

- 25.53"/648mm

Standard Bypass Ratings

- 60 *psi* / 414 kPa / 4.1 bar with reverse-flow check valve
- No Bypass

Operating Temperatures

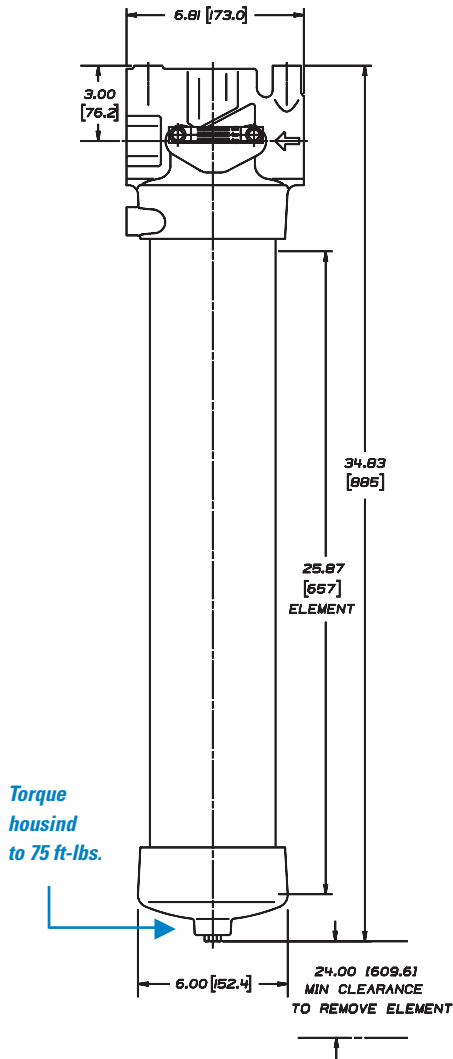
- -20°F to 250°F / -29°C to 121°C

Element Collapse Ratings

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

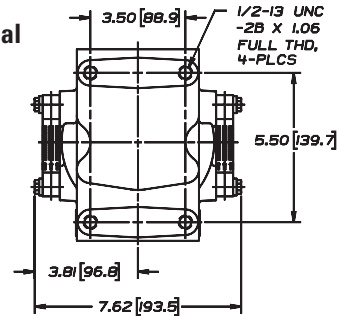
Assembly Side View

for: High Pressure Circuits
In-Plant & Mobile Equipment
Hydrostatic Transmissions
Centralized Lube Systems

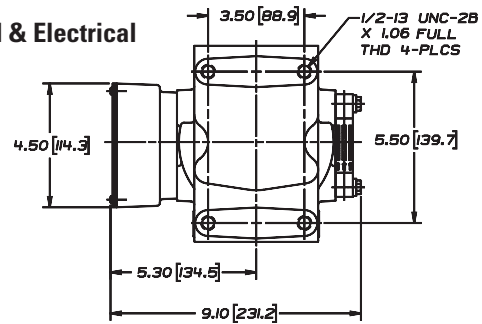


Head Top View

With 2 Visual Indicators

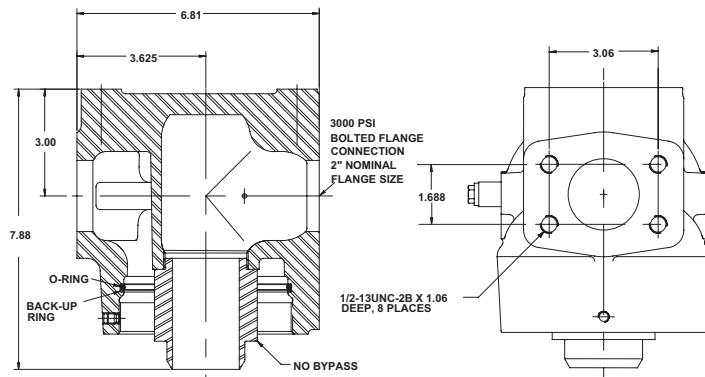
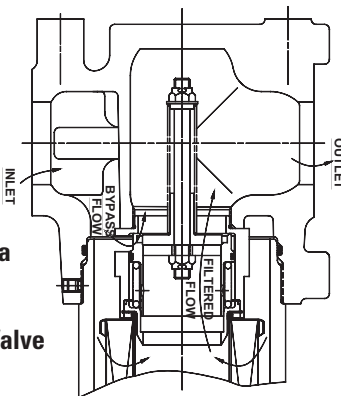


With Visual & Electrical Indicators



Bypass Valve Alternatives

60 psi /414 kPa
Bypass Valve
with Reverse
Flow Check Valve



No Bypass

All dimensions above are shown in inches [millimeters]

High Pressure Filters

HPK05 Components

Head Assemblies

Port Size ⁴	Bypass Rating	Indicator Style/Location ¹	Assembly Number	Media Number	Element Part No.
2" SAE 4-Bolt Flange (Code 61)	60 psi / 414 kPa Reverse flow check valve	Visual, Left side ²	K052024	No. 9	P164229
	No Bypass	Visual & Electrical ³	K052039	No. 9	P171037 ⁴

Assembly Notes

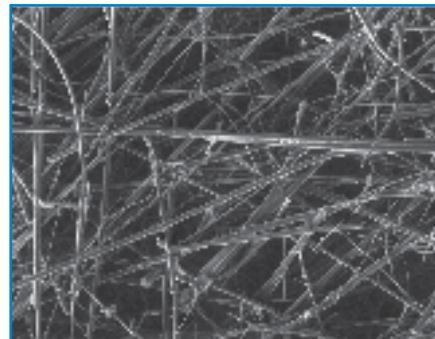
- ¹ Donaldson uses the inlet port as the reference point. "Left side," for instance, means that the indicator mounts on the side of the filter head that is on your left when you face the inlet port.
- ² Alternate choice: Electrical indicator (P166298) is available for mounting in place of the visual indicator on either side.
- ³ Visual indicator is mounted on left side of the head; electrical indicator (P170365) is mounted on the right side.
- ⁴ Rated as high collapse (3000 psi / 20700 kPa); has Viton® seals.

Synteq® Element Choices

Media Number	B _{w(c)} = 1000 Rating	Length (in./mm)	Part No.	Seal & Comments
No. 1	6µm	25.5 / 648	P167841	BunaN
No. 2	9µm	25.5 / 648	P164585	BunaN
No. 2½	10µm	25.5 / 648	P164227	BunaN
			P164435 Built to order	Viton
No. 9	23µm	25.5 / 648	P164229	BunaN
			P171037	Viton High Collapse

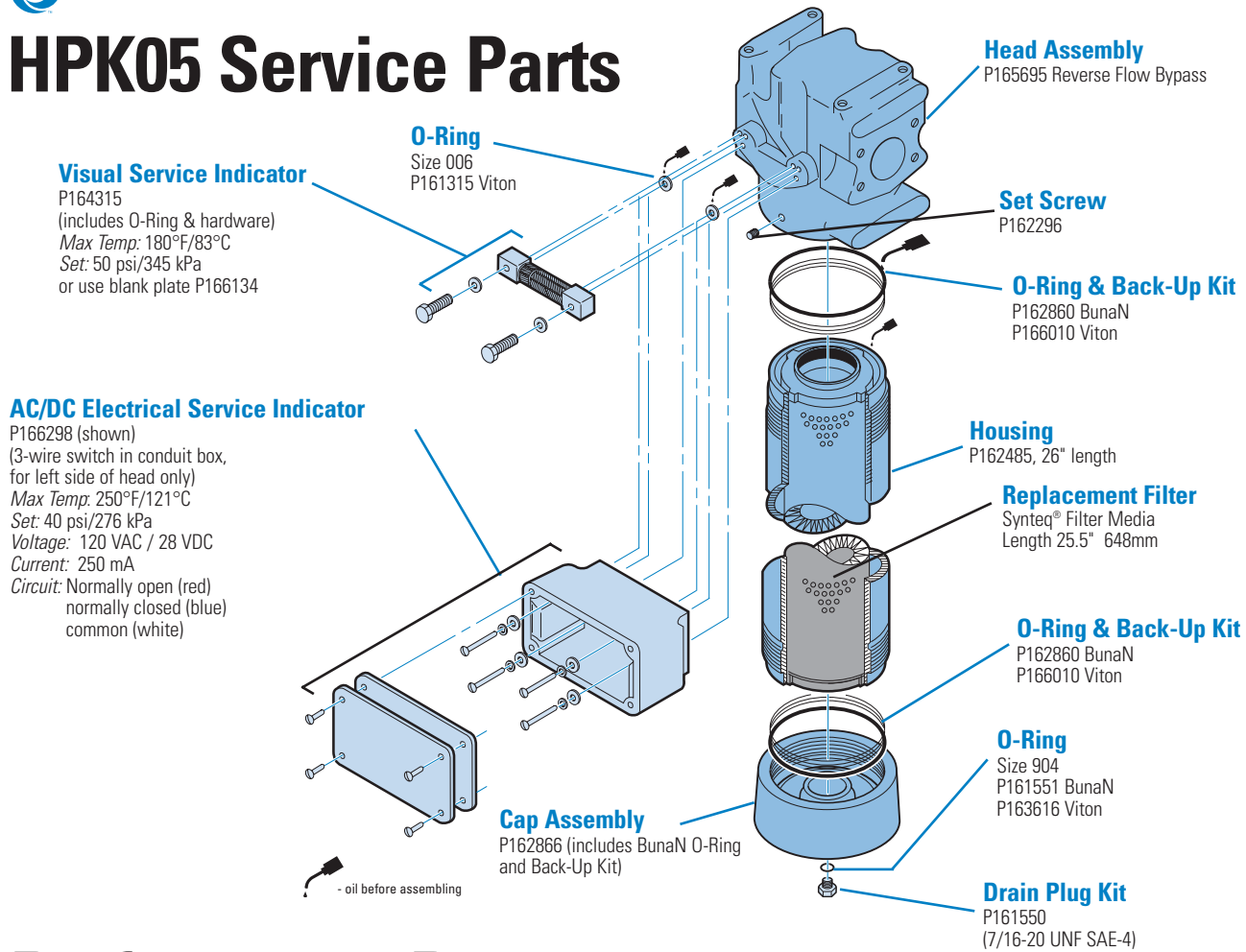
Element Notes

- Filters with seals made of **BunaN** are appropriate for most applications involving petroleum oil. Filters with seals made of fluor elastomer (such as Viton® or Fluorel®) 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 and Fluorel is a registered trademark of the 3M Company.*)
- Synteq® filter media is compatible with petroleum based fluids, and most phosphate esters, water oil emulsions, and HWCF (high water content fluids).
- Donaldson high collapse filters, with their steel endcaps and reinforcing wire-backed media, are rated to withstand up to 3000 *psi* / 20,700 kPa before collapsing.



In this photo from our scanning electron microscope that shows Donaldson Synteq® filter media magnified hundreds of times, you can see the rounded fibers that are specially designed for low resistance to flow. Filters made with Donaldson Synteq® maintain low pressure drop over the life of the filter.

HPK05 Service Parts



Performance Data

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

