

HFK08 Kidney Loop Filter

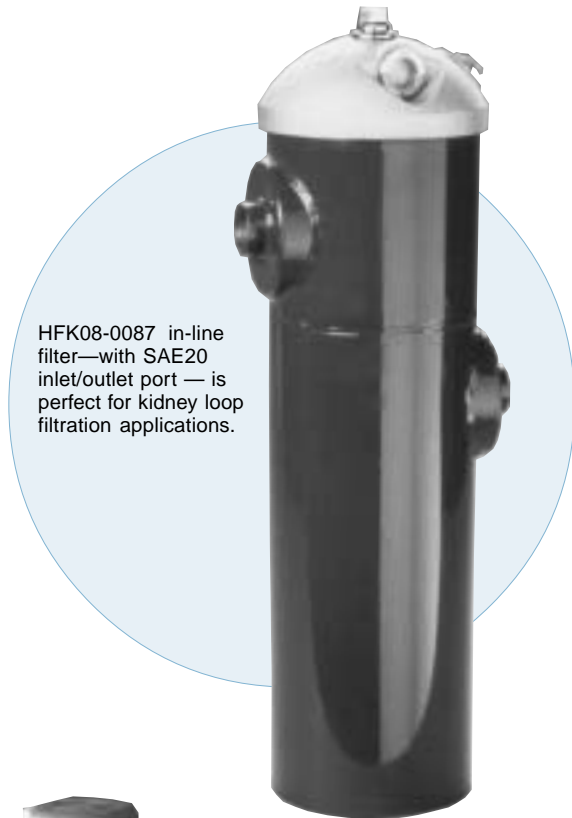
Working Pressures to:	350 <i>psi</i> 2400 kPa 24 bar
Rated Static Burst to:	500 <i>psi</i> 3450 kPa 34.5 bar
Flow Ranges to:	Return-line < 50 <i>gpm</i> 190 l/min

Dedicated Off-Line Circulation Loop, or Kidney Loop

One very effective way of ensuring thorough fluid conditioning is with a dedicated off-line circulation loop, or kidney loop, as illustrated on page 107.

Widely used in industrial applications, this system uses a separate circulation pump that runs continuously, circulating and conditioning the fluid. Multiple stages and types of filters can be included in the circuit, as well as heat exchangers and in-line immersion heaters.

We've designed the HFK08-0087 model with features that make it perfect for kidney looping -- the SAE-20 port, 50 *gpm* flow capacity, and synthetic media.



HFK08-0087 in-line filter—with SAE20 inlet/outlet port — is perfect for kidney loop filtration applications.



One of the most common ways our distributors set up a kidney loop system is on a filter cart that can be taken around to service various reservoirs.

Electric motor & hydraulic pump not supplied by Donaldson. Photo courtesy of DK Mann & Associates.

Beta Rating

- Performance to $\beta_{(2)}=75$

Porting Size

- SAE-20 O-Ring

Assembly Weight

- 34 lbs / 15.4 kg

Replacement Filter Length

- 18" / 457 mm

Standard Bypass Rating

- 25 *psi* / 172.5 kPa / 1.7 bar

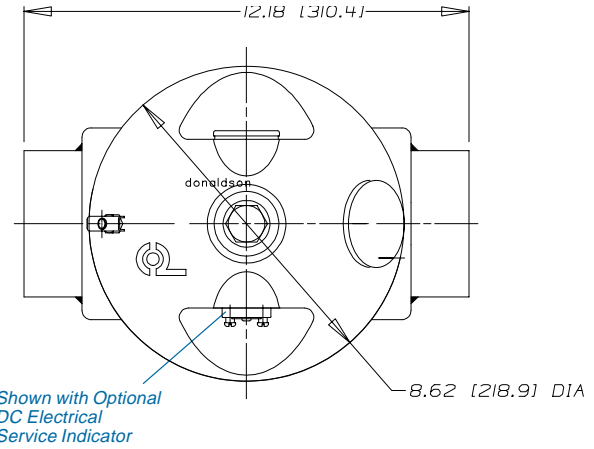
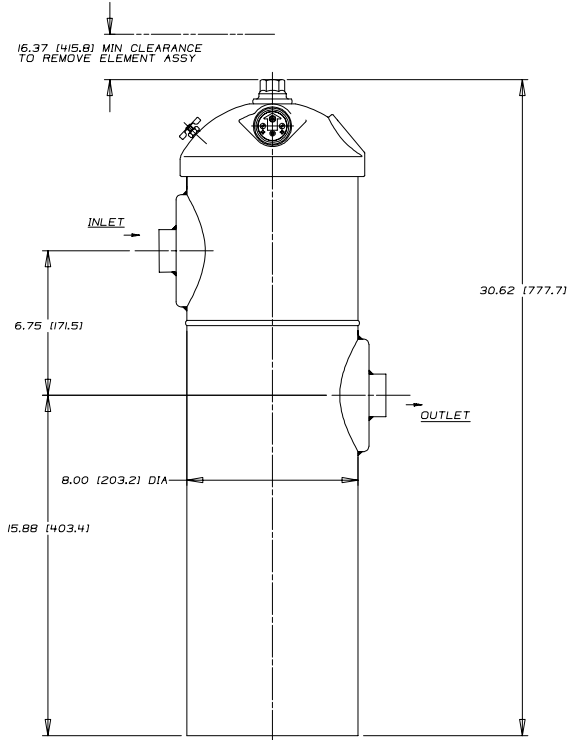
Operating Temperatures

- Synthetic media -20°F to 250°F
-29°C to 121°C

Collapse Rating

- 75 *psi* / 517 kPa / 5.2 bar

Assembly - Side View

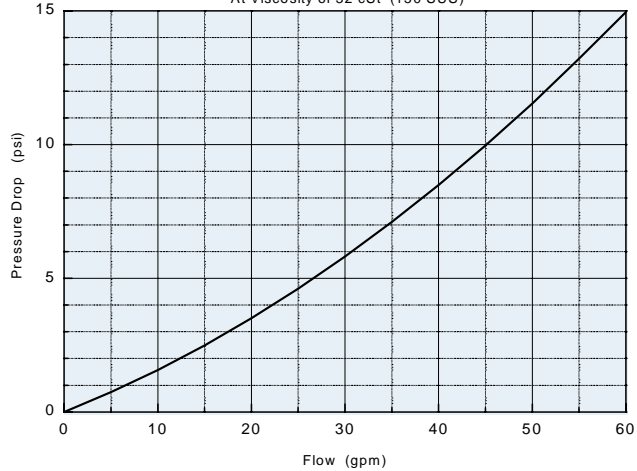


Head - Top View

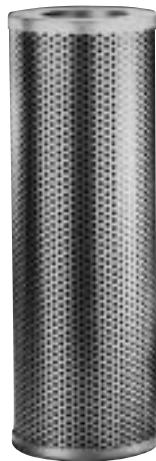
Performance Data

For a full explanation of how our performance curves were derived, see page 94.

Pressure Drop of HFK080087 Hydraulic Filter Assembly
At Viscosity of 32 cSt (150 SUS)



This data reflects the performance of the P164405 filter cartridge. Other cartridges are also available.



In-stock Assembly K080087 contains the P164405 Synteq® filter. Other media choices are listed below.

Service parts for the Kidney Loop Filter can be found on page 47.

Replacement Filter Choices

Media Number	Media Technology	B _(x) = 2/20/75 Rating	Part Number
No. ½	Synteq®	<2/<2/2	P164405
No. 2	Synteq®	2/3/5	P166462
No. 2½	Synteq®	2/7/10	P176222
No. 4	Synteq®	4/12/15	P164701
No. 6	Synteq®	5/10/13	P164407 with Viton seal (lead time applies)