HRK10 In-Line Cartridge Filters

**Working Pressures to:**
150 psi / 1035 kPa / 10.3 bar

**Rated Static Burst to:**
500 psi / 3450 kPa / 34.5 bar

**Flow Range To:**
300 gpm / 1135 lpm

**Features**

The HRK10 high flow filter combines the best features of its predecessor, the HEK11: ANSI inlet port options, top cover filter servicing for ease of maintenance, and a selection of service indicators. The HRK10 all-steel housing design provides a strong, durable, and dependable unit. It offers standard features like deep pleat filters for higher dirt holding capacity and standard Donaldson DT 4-layer media filter construction. This technology, combined with many other standard features, is ideal for today’s applications in pulp and paper, power generation and steel mill applications. A port for an electrical indicator is incorporated into the differential indicator block.

- Robust “Twist & Lift” cover for simplified servicing
- Multiple bypass valve design assures proper operation
- Wide variety of bypass valve ratings
- Reverse flow (inside to outside) filters for positive contamination containment
- Fluorocarbon seals standard
- Housing & cover material: steel
- Drain plug in bottom
- Bleed valve in cover
- Fill plug in cover

**Beta Rating (per ISO 16889)**
Performance to $\beta_{1000}=1000$

**Porting Size Options**
4” ANSI Flange, 8-bolt 150#

**Replacement Filter Lengths**
21.99” / 559mm

**Standard Bypass Ratings**
- 5 psi / 34.5 kPa / 0.34 bar
- 25 psi / 172 kPa / 1.7 bar
- 50 psi / 345 kPa / 3.4 bar
- No Bypass

**Assembly Weight**
140 lbs / 64 kg

**Operating Temperatures**
-20°F to 250°F (-29° to 121°C)

**Filter Collapse Ratings**
100 psid / 689 kPa / 6.9 bar

**Applications**
- Fluid Conditioning Systems
- In-Plant Systems
- Lube Oil Systems
- Side Loop Systems

**HRK10**
Max Flow: 300 gpm (1135 lpm)
HRK10 Specification Illustrations

ASSEMBLY - SIDE VIEW

All dimensions are shown in inches [millimeters].

HEAD - TOP VIEW

- INLET
- OUTLET
- POWER FILL PORT

Max Flow: 300 gpm (1135 lpm)
HRK10 Components

Filter Choices

<table>
<thead>
<tr>
<th>Media Type</th>
<th>β_{eq} = 2</th>
<th>β_{eq} = 1000</th>
<th>Length</th>
<th>Part No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synteq Synthetic</td>
<td>&lt;4 µm</td>
<td>21.99</td>
<td>559</td>
<td>P566187</td>
<td>Replaces old HEK11 filter P163472</td>
</tr>
<tr>
<td></td>
<td>5 µm</td>
<td>21.99</td>
<td>559</td>
<td>P566188*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8 µm</td>
<td>21.99</td>
<td>559</td>
<td>P566189</td>
<td>Replaces old HEK11 filter P176417** or P176223***</td>
</tr>
<tr>
<td></td>
<td>12 µm</td>
<td>21.99</td>
<td>559</td>
<td>P566190</td>
<td>Replaces old HEK11 filter P165449</td>
</tr>
<tr>
<td></td>
<td>23 µm</td>
<td>21.99</td>
<td>559</td>
<td>P566191</td>
<td>Replaces old HEK11 filter P164707</td>
</tr>
<tr>
<td>Water Absorbing</td>
<td>10 µm</td>
<td>21.99</td>
<td>559</td>
<td>P569531</td>
<td>Absorbs approximately 60 oz/1800 ml water @ 25 psid/1.72 bar</td>
</tr>
<tr>
<td>Wire Mesh</td>
<td>150 µm</td>
<td>21.99</td>
<td>559</td>
<td>P566192</td>
<td>Replaces old HEK11 filter P160078</td>
</tr>
</tbody>
</table>

Use HRK10 in place of previous HEK11 housings. For better performance use HRK10 filters in existing HEK11 housings.

* Utilizes DT Synthetic media

** 9 µm rating

*** 10 µm rating

Filter Notes: All β-1000 filters utilize glass fiber media with an epoxy-based resin system for the ultimate in chemical compatibility. All Donaldson HRK10 filters are potted with epoxy-based adhesives. All HRK10 filters are reserve flow (inside to outside), keeping contaminants contained during servicing. Fluorocarbon seals are standard on all HRK10 filters.

Housing Choices

Note: Filters Ordered Separately.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Port Connections</th>
<th>Bypass Valve</th>
<th>Indicator Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>K100001</td>
<td>4&quot; ANSI Flange</td>
<td>No bypass</td>
<td>Visual standard, electrical optional</td>
</tr>
<tr>
<td>K100002</td>
<td>4&quot; ANSI Flange</td>
<td>5 psi (0.34 bar) bypass</td>
<td>Visual standard, electrical optional</td>
</tr>
<tr>
<td>K100003</td>
<td>4&quot; ANSI Flange</td>
<td>25 psi (1.7 bar) bypass</td>
<td>Visual standard, electrical optional</td>
</tr>
<tr>
<td>K100004</td>
<td>4&quot; ANSI Flange</td>
<td>50 psi (3.4 bar) bypass</td>
<td>Visual standard, electrical optional</td>
</tr>
</tbody>
</table>

Electrical Indicator Options

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Set Point</th>
<th>Bypass Valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>P173944</td>
<td>20 psi (1.4 bar)</td>
<td>AC/DC, 3-wire</td>
</tr>
<tr>
<td>P174396</td>
<td>40 psi (2.8 bar)</td>
<td>AC/DC, 3-wire</td>
</tr>
</tbody>
</table>

Performance Data

HRK10 Filter Only
(127/95mm)

Flow Rate (lpm) | Pressure Drop (kPa)
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>&lt;4µm</td>
</tr>
<tr>
<td>1000</td>
<td>5µm</td>
</tr>
<tr>
<td>1500</td>
<td>8µm</td>
</tr>
<tr>
<td>2000</td>
<td>12µm</td>
</tr>
<tr>
<td>2500</td>
<td>23µm</td>
</tr>
<tr>
<td>3000</td>
<td>Wire Mesh</td>
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</tbody>
</table>

HRK10 Housing Only
(with 4" Port)

Flow Rate (gpm) | Pressure Drop (psid)
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>&lt;4µm</td>
</tr>
<tr>
<td>200</td>
<td>5µm</td>
</tr>
<tr>
<td>300</td>
<td>8µm</td>
</tr>
<tr>
<td>400</td>
<td>12µm</td>
</tr>
<tr>
<td>500</td>
<td>23µm</td>
</tr>
<tr>
<td>600</td>
<td>Wire Mesh</td>
</tr>
</tbody>
</table>

Donaldson.com
HRK10 Service Parts

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

Power Fill Port Plug Assembly
1 5/8” - 12 UNC THRD
P160276

“Twist & Lift” Cover

Purge Valve

Compressions Spring
P565897

Bypass Valve Assembly
P565901  No bypass
P565902  5 psi/34.5 kPa
P565903  25 psi/172.5 kPa
P565907  50 psi/345 kPa

O-Ring
P565386
Fluorocarbon Seal

Replacement Filter
Length 22”/559 mm
(Inside-Out element flow)

Optional Electrical Indicator
P173944  20 psi/140 kPa
P174396  40 psi/280 kPa

Visual Indicator
P167580  50 psi/345 kPa
P162696  25 psi/172 kPa
P162694  5 psi/34.5 kPa

Drain Port Plug
P173572
1” NPTF

Valve Body Seal
P565891
Fluorocarbon Seal

Purge Valve

O-Ring
P565920
Fluorocarbon Seal

Valve Body Seal
P565891
Fluorocarbon Seal