



Donaldson Delivers

Duramax[®] Generation 2 Hydraulic Filter Series



Duramax[®]

Reliable Hydraulic Filtration Solution

Donaldson Duramax® Generation 2 has been redesigned to provide a new standard of high performance filtration. The leak-resistant RadialSeal™ design makes servicing easier and provides foul-proof sealing. By moving the threads outward, the RadialSeal interface increases the surface area – creating a robust connection with superior vibration resistance, a common challenge in heavy-duty applications. A unique head-to-filter interface ensures that the correct replacement filter is always used. It features Synteq™ filter media technology, which delivers superior filter efficiency to meet ever-increasing system cleanliness requirements.

Our Duramax® Generation 2 filters take the hydraulic spin-on filter that has become the industry standard to a whole new level.

Working Pressures

- HNK04: 500 psi / 3448 kPa / 34.5 bar
- HNK05: 350 psi / 2415 kPa / 24.1 bar

Rated Static Burst

- HNK04: 4" dia. - 1000 psi / 6895 kPa / 69 bar
- HNK05: 5" dia. - 1000 psi / 6895 kPa / 69 bar

Flow Ranges

- 4" dia. - 0-35 gpm / 0-133 l/mi
- 5" dia. - 0-50 gpm / 0-189 l/mi

Vibration

- 1 million cycles, 10G input at resonance frequency, @ -20 °F to 250 °F / -29 °C to 121 °C

Beta Rating

- Media performance up to Beta $6\mu\text{m}_{(c)}$ = 1000

Porting Sizes

- 4" dia. - SAE-12 O-Ring, SAE-16 O-Ring
- 5" dia. - SAE-20 O-Ring

Standard Bypass Ratings

- 50 psi / 345 kPa / 3.4 bar
- No Bypass

Assembly Weight

- 4" dia. / 5.97" length - 3.95 lbs / 1.8 kg
- 4" dia. / 9.44" length - 4.7 lbs / 2.1 kg
- 5" dia. / 11.63" length - 7.35 lbs / 3.3 kg
- 5" dia. / 14.24" length - 8.0 lbs / 3.6 kg

Operating Temperatures

- -20°F to 250°F / -29°C to 121°C

Collapse Ratings

- 235 psid / 1621 kPa / 16.2 bar



Optional Electric Indicator
built-in indicator port standard

Unique Head-to-Filter Interface
ensures the correct replacement filter is used



RadialSeal™ Design
more robust seal provides the best leak protection and superior vibration resistance

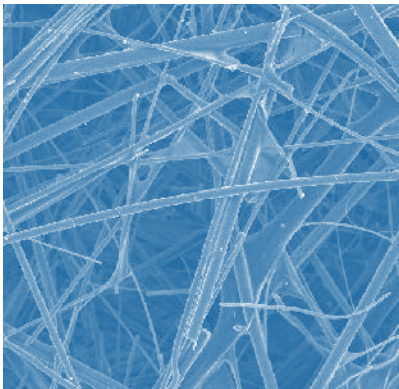
O-Ring Seal
designed for foul-proof servicing

Synteq™ Media Technology
low pressure drop and high dust-holding capacity



Synteq™ Media Technology

Donaldson-developed Synteq filter media provides superior filtration performance. Synteq's synthetic, uniform fiber structure allows for exceptionally low flow resistance – delivering high filtration efficiency with the ability to hold more contaminant and extend filter life.



Scanning electron microscope image of Synteq at 200x magnification shows the uniform synthetic fiber structure that allows high dust holding capacity and increased filtration.

Synteq Media Delivers:

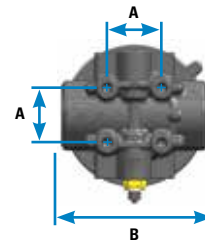
- Extended filter life
- High dust-holding capacity
- Low pressure drop
- Consistent performance throughout filter life



Typical Duramax Generation 2 applications:

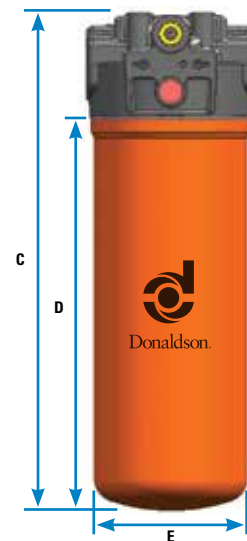
- Hydrostatic charge filtration
- Powershift transmissions
- Return line with cold start spikes
- Pilot circuits
- Mid-pressure kidney loops

Assembly Specifications



Minimum Service Clearance:
1.42" / 36mm

	HNK04 4" Diameter	HNK05 5" Diameter
A	1.4" (35mm)	1.9" (48mm)
B	4.0" (102mm)	5.0" (127mm)



	HNK04 4" Diameter	HNK05 5" Diameter
C	Short Assembly	
	8.5" (216mm)	15.5" (394mm)
D	Long Assembly	
	14.8" (376mm)	18.0" (457mm)
E	Short Assembly	
	6.0" (152mm)	11.6" (295mm)
D	Long Assembly	
	9.4" (239mm)	14.2" (362mm)
E	3.7" (94mm)	4.5" (115mm)

Duramax[®] Proven, Reliable & Easy to Install

Head Choices

MOUNTING THREADS 3/8-16 UNC

BUILT-IN INDICATOR PORT for optional electric indicator

Model	Port Size	Bypass Rating	Part No.
HNK04	SAE-12	50 psi / 3.5 bar	P568856
	SAE-12	No bypass	P568857
	SAE-16	50 psi / 3.5 bar	P568858
	SAE-16	No bypass	P568859
HNK05	SAE-20	50 psi / 3.5 bar	P568860
	SAE-20	No bypass	P568861

Optional Indicator

Set Point/Type	Part No.	Description
50 psi / 345 kPa	P165194	Electric Single Post DC
25 psi / 172 kPa	P575334	Visual Indicator, Pop up
50 psi / 345 kPa	P575335	Visual Indicator, Pop up

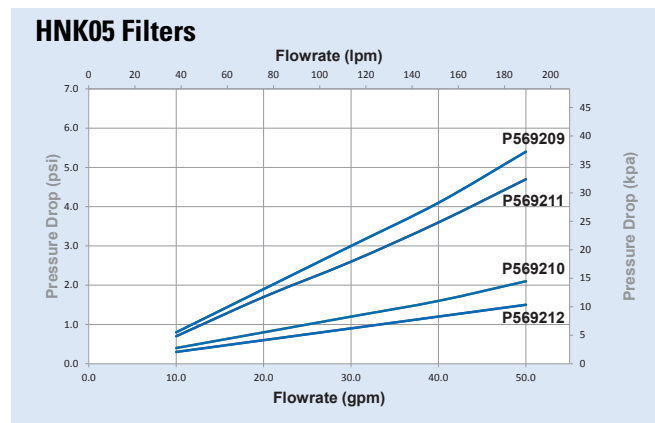
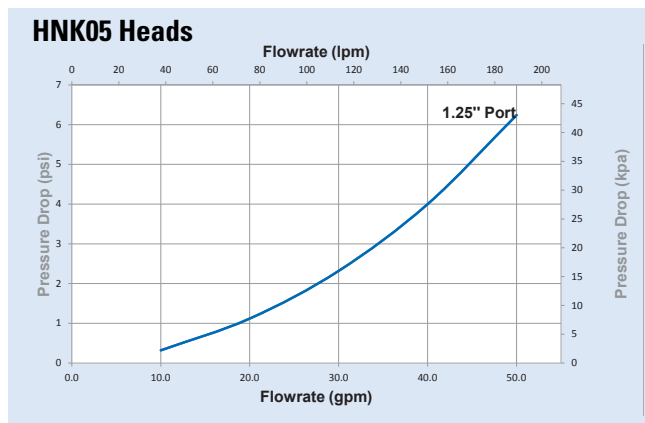
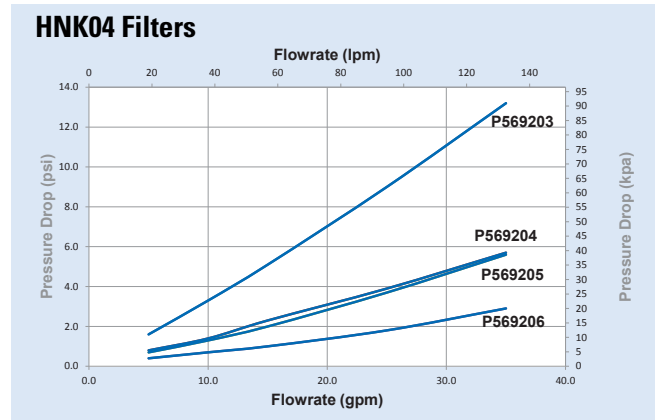
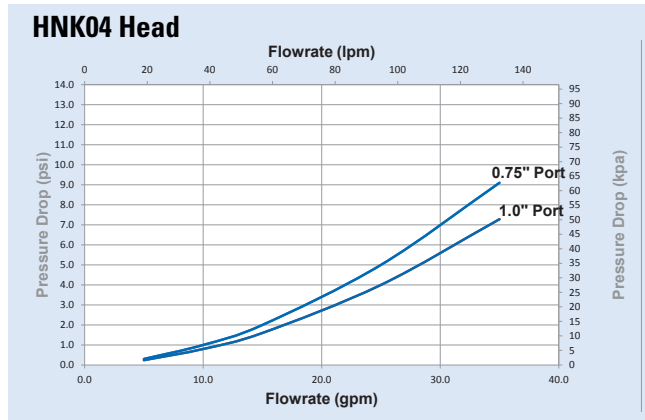
Filter Choices

FILTER MEDIA

Synthetic Synteq™ Media Technology

Model	Beta $\alpha_{(e)}$ = 1000 Rating	Length (in./mm)	Part No.
HNK04	6 μ m	5.97 / 151.7	P569203
	6 μ m	9.44 / 239.8	P569204
	11 μ m	5.97 / 151.7	P569205
	11 μ m	9.44 / 239.8	P569206
HNK05	6 μ m	11.63 / 295.4	P569209
	6 μ m	14.24 / 361.7	P569210
	11 μ m	11.63 / 295.4	P569211
	11 μ m	14.24 / 361.7	P569212

Performance Data



Donaldson Company, Inc.
PO Box 1299
Minneapolis, MN
55440-1299

www.donaldson.com
www.donaldsonfilters.com

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North America 800-374-1374
Mexico 52-449-910-6150
Latin Am. & Caribbean 52-449-910-6150
Brazil 55-11-2119-1604
Europe 32-16-38-3811

South Africa 27-11-997-6000
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