

W620 In-Line Cartridge Filters

Working Pressures to:

6000 psi / 41,380 kPa / 413.8 bar

Rated Static Burst to:

15,000 psi / 103,400 kPa / 1034 bar

Fatigue Pressure Rating:

3000 psi / 20,700 kPa / 207 bar

Flow Range To:

150 gpm / 568 lpm

Applications

- High Pressure Circuits
- In-Plant Systems
- Meets HF3 Specification
- Mobile Equipment

Features

The W620 filter assembly contains the popular HF3 filter. It offers a reverse flow bypass valve option available for hydrostatic transmissions. Donaldson DT high-performance 4-layer media is offered in a variety of designs. The differential pressure indicator line is designed to work with the wide assortment of bypass valves. Thermal lockout and surge control are two key features incorporated in many of the differential pressure indicators.

- Conforms to HF3 specifications
- Housing material: steel
- Head material: cast iron
- Reverse flow bypass valve option available

Beta Rating

- Performance to $\beta_{<4(c)}=1000$

Porting Size Options

- SAE-16, SAE-20, SAE-24 O-Ring
- 1¼" SAE 4-Bolt Flange Code 62
- 1½" SAE 4-Bolt Flange Code 61

Replacement Filter Lengths

- 4.59" / 116.6mm
- 8.22" / 203.2mm
- 12.91" / 330.2mm
- 16.84" / 406.4mm

Standard Bypass Ratings

- 50 psi / 345 kPa / 3.5 bar
- 90 psi / 621 kPa / 6.2 bar

Assembly Weight

- 9.00": 23 lbs / 10.43 kg
- 13.00": 33 lbs / 14.97 kg
- 18.00": 42 lbs / 19.05 kg
- 22.00": 48 lbs / 21.77 kg

Operating Temperatures

- -20° to 250°F (-29° to 121°C)

Filter Collapse Ratings

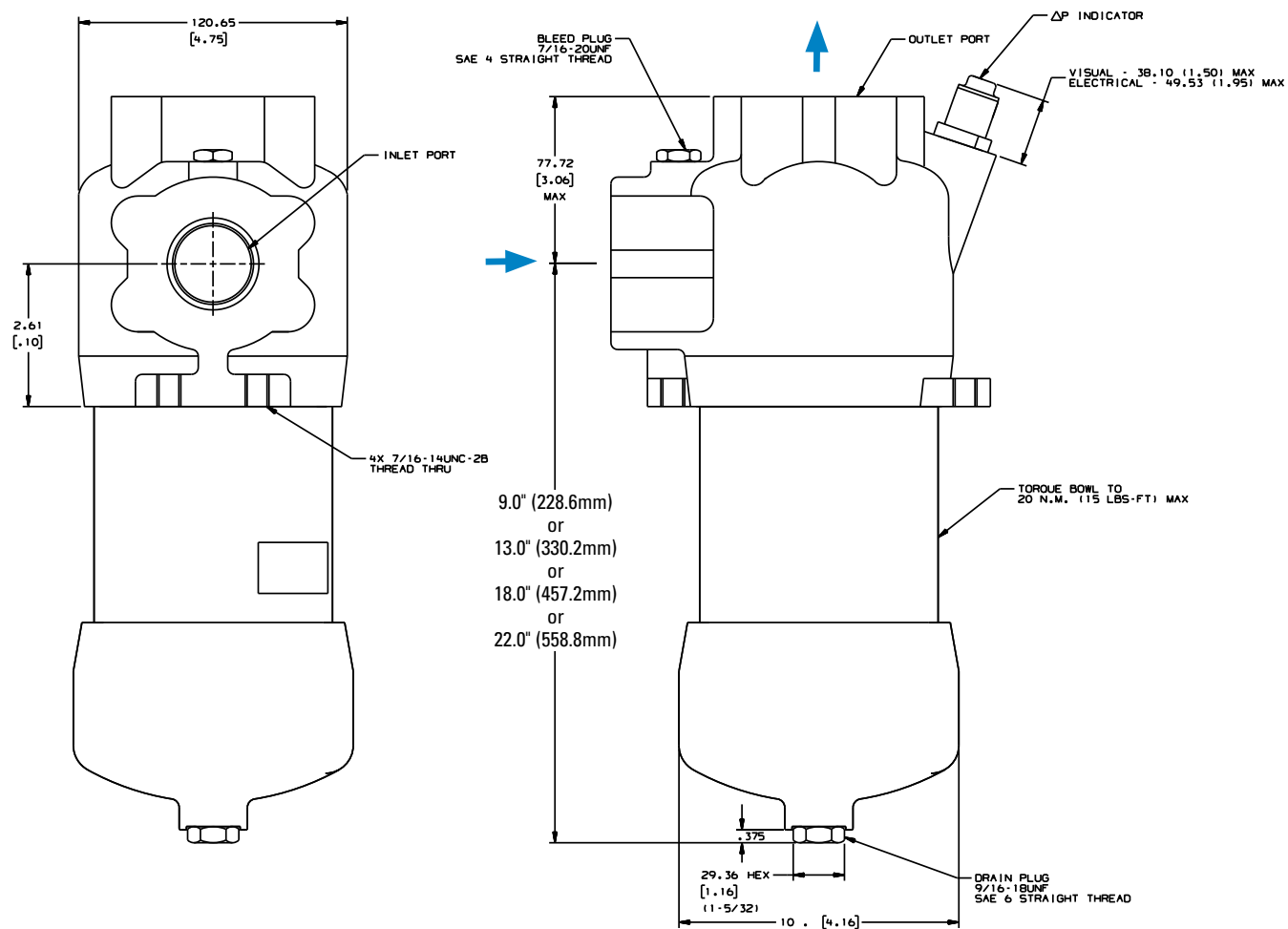
- 290 psi / 1999 kPa / 20.0 bar (standard)
- 3000 psi / 20,700 kPa / 206.8 bar (high collapse)



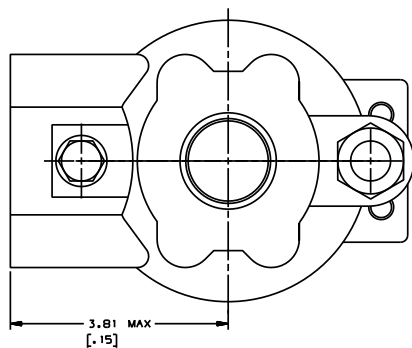
W620 Specification Illustrations

ASSEMBLY - SIDE VIEW

All dimensions are shown in millimeters [inches].



HEAD - TOP VIEW



W620 Components

Filter Choices

Media Type	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889	in	mm		
DT Synthetic	<4 μm	4.59	117	P566204	DT-9600-4-2UM
	5 μm	4.59	117	P566205	DT-9600-4-5UM
	5 μm	4.56	116	P167184	DT-9601-4-5UM, High Collapse
	8 μm	4.59	117	P566206	DT-9600-4-8UM
	12 μm	4.59	117	P566207	DT-9600-4-14UM
	12 μm	4.56	116	P167843	DT-9601-4-14UM, High Collapse
	23 μm	4.59	117	P566208	DT-9600-4-25UM
	<4 μm	8.22	209	P566209	DT-9600-8-2UM
	5 μm	8.22	209	P566210	DT-9600-8-5UM
	5 μm	8.19	208	P167185	DT-9601-8-5UM, High Collapse
	8 μm	8.22	209	P566211	DT-9600-8-8UM
	12 μm	8.22	209	P566212	DT-9600-8-14UM
	12 μm	8.19	208	P167186	DT-9601-8-14UM, High Collapse
	23 μm	8.22	209	P566213	DT-9600-8-25UM
	<4 μm	12.91	328	P566214	DT-9600-13-2UM
	5 μm	12.91	328	P566215	DT-9600-13-5UM
	5 μm	12.85	326	P167411	DT-9601-13-5UM, High Collapse
	8 μm	12.91	328	P566216	DT-9600-13-8UM
	12 μm	12.91	328	P566217	DT-9600-13-14UM
	12 μm	12.85	326	P167412	DT-9601-13-14UM, High Collapse
	23 μm	12.91	328	P566218	DT-9600-13-25UM
	<4 μm	16.84	428	P566219	DT-9600-16-2UM
	5 μm	16.84	428	P566220	DT-9600-16-5UM
	5 μm	16.84	428	P167187	DT-9601-16-5UM, High Collapse
	8 μm	16.84	428	P566221	DT-9600-16-8UM
	12 μm	16.84	428	P566222	DT-9600-16-14UM
	12 μm	16.84	428	P167188	DT-9601-16-14UM, High Collapse
	23 μm	16.84	428	P566223	DT-9600-16-25UM

Filter Notes: All Donaldson DT filters utilize glass fiber media with an acrylic-based resin system for the ultimate in chemical compatibility. All Donaldson DT filters are potted with acrylic-based adhesives. Standard collapse DT designs are double wire-backed using acrylic-coated steel mesh for maximum pleat support and dirt capacity. Fluorocarbon seals are standard on all Donaldson DT filters. Donaldson "high collapse" filters, with their steel end caps and wire-backed media, are rated to withstand up to 3000 psi/ 20,700 kPa before collapsing. High collapse designs are also potted into machined aluminum endcaps for greater filter integrity in critical applications. The fluorocarbon seal/high collapse filters also use acrylic potting and media seam seals for added chemical compatibility. High collapse designs are double wire-backed using stainless steel mesh. High collapse designs are double wire-backed using stainless steel mesh. High collapse designs are also potted into machined aluminum endcaps for greater filter integrity in critical applications.





W620

Max Flow: 150 gpm (568 lpm)



Head Assembly Choices

Port Size	Bypass Rating	Seal Material	Indicator Style & Location	Part No.	Comments
SAE-16 O-Ring	50 psi / 3.45 bar	Nitrile	Port Machined & Plugged	P574252	
SAE-24 O-Ring	50 psi / 3.45 bar	Nitrile	Port Machined & Plugged	P574253	
1-1/2" SAE 4 Bolt Flange, Code 61	50 psi / 3.45 bar	Nitrile	Port Machined & Plugged	P574254	3000 PSI Maximum Pressure
1-1/4" SAE 4 Bolt Flange, Code 62	50 psi / 3.45 bar	Fluorocarbon	Port Machined & Plugged	P575931	Reverse flow check valve
1-1/4" SAE 4 Bolt Flange, Code 62	50 psi / 3.45 bar	Fluorocarbon	Port Machined & Plugged	P575932	
SAE-16 O-Ring	90 psi / 6.21 bar	Fluorocarbon	Port Machined & Plugged	P575933	
SAE-20 O-Ring	50 psi / 3.45 bar	Fluorocarbon	Port Machined & Plugged	P575934	
SAE-20 O-Ring	50 psi / 3.45 bar	Fluorocarbon	Port Machined & Plugged	P575935	Reverse flow check valve

Housing Choices

Housing Length	Seal Material	Part No.
4" (101.1mm)	Nitrile	X011557
8" (203.2mm)	Nitrile	X011559
13" (330.2mm)	Nitrile	X011554
16" (406.4mm)	Nitrile	X011555

Service Part Choices

Part No.	Description
X011182	Head/Bowl/Housing Seal Kit - nitrile
X011183	Head/Bowl/Housing Seal Kit - fluorocarbon

Indicator Choices

Indicator Pressure Setting	Connector Style	Seal Material	Part No.	Thermal Lockout	Surge Control	Reset
Visual Pop-up Models						
35 psi / 241 kPa	NA	Nitrile	P572347	No	No	Auto
35 psi / 241 kPa	NA	Nitrile	P572348	Yes	Yes	Manual
35 psi / 241 kPa	NA	Fluorocarbon	P567456	Yes	Yes	Manual
70 psid / 482 kPa	NA	Nitrile	P572319	Yes	Yes	Manual
70 psid / 482 kPa	NA	Fluorocarbon	P567457	Yes	Yes	Manual
Electrical / Visual Models						
35 psi / 241 kPa	Hirschman	Nitrile	P572327	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Nitrile	P572329	No	No	Auto
35 psi / 241 kPa	Hirschman	Nitrile	P572384	Yes	Yes	Manual
35 psi / 241 kPa	Hirschman	Fluorocarbon	P567458	Yes	Yes	Manual
35 psi / 241 kPa	Brad Harrison	Nitrile	P572385	Yes	Yes	Manual
35 psi / 241 kPa	3 wire flying leads	Nitrile	P572349	No	No	Auto
70 psi / 482 kPa	Hirschman	Nitrile	P572320	Yes	Yes	Manual
70 psi / 482 kPa	Hirschman	Fluorocarbon	P567459	Yes	Yes	Manual
70 psi / 482 kPa	Hirschman	Nitrile	P572373	Yes	No	Manual
70 psi / 482 kPa	Hirschman	Fluorocarbon	P569639	Yes	No	Manual
Electrical Models						
35 psi / 241 kPa	Hirschman	Nitrile	P572359	No	No	Auto
35 psi / 241 kPa	Brad Harrison	Nitrile	P572361	No	No	Auto
70 psi / 482 kPa	Hirschman	Nitrile	P572369	No	No	Auto

Performance Data

