



W440

Max Flow: 20 gpm (76 lpm)



## W440 In-Line Cartridge Filters

### Working Pressures to:

4000 psi / 27,600 kPa / 276 bar

### Rated Static Burst to:

10,000 psi / 69,000 kPa / 690 bar

### Flow Range To:

20 gpm / 76 lpm

### Applications

- High Pressure Circuits
- In-Plant Systems
- Meets HF2 Specification
- Mobile Equipment



### Features

The W440 filter assembly can be manifold mounted to the hydraulic system. The size and material configuration are well-suited for today's demanding proportional and servo valve applications. Our standard housing drain plug helps relieve system pressure during filter change-outs. DT 4-layer media is offered in a variety of designs. Five different media grades are offered. Donaldson filters core collapse options range from 150 to 3,000 psi. The differential pressure indicator line is designed to work with a wide assortment of bypass valves. Thermal lockout and surge control are two key features incorporated in many of the differential pressure indicators.

- Conforms to HF2 specifications
- High collapse filter available for use with non-bypass applications
- Positive sealing poppet bypass for reliability and zero leakage
- Wide range of indicator options
- Compact design for use with servo or proportional valve
- Two housing length options for design flexibility
- Head material: cast iron
- Housing material: steel
- Drain plug in housing

### Beta Rating

- Performance to  $\beta_{<40} = 1000$

### Porting Size Options

- SAE-12 O-Ring
- Manifold mounting

### Replacement Filter Lengths

- 4.41" / 111.9mm
- 4.46" / 113.2mm
- 8.16" / 207.2mm
- 8.28" / 210.3mm

### Standard Bypass Ratings

- 50 psi / 345 kPa / 3.5 bar
- No Bypass

### Assembly Weight

- 4.41": 8.4 lbs / 3.8 kg
- 8.28": 10.6 lbs / 4.8 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)

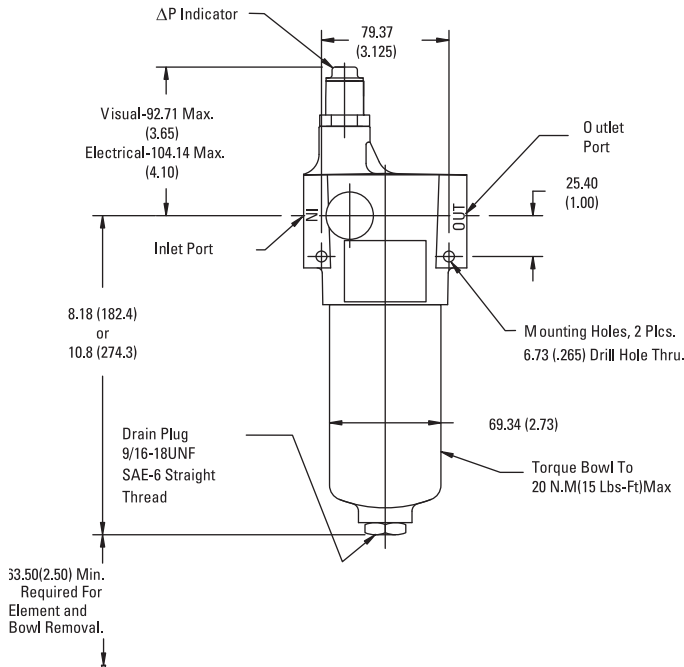
### Top-ported for subplate mounting

- 0.69" (17.5mm) holes
- 1.25" (31.8mm) centers

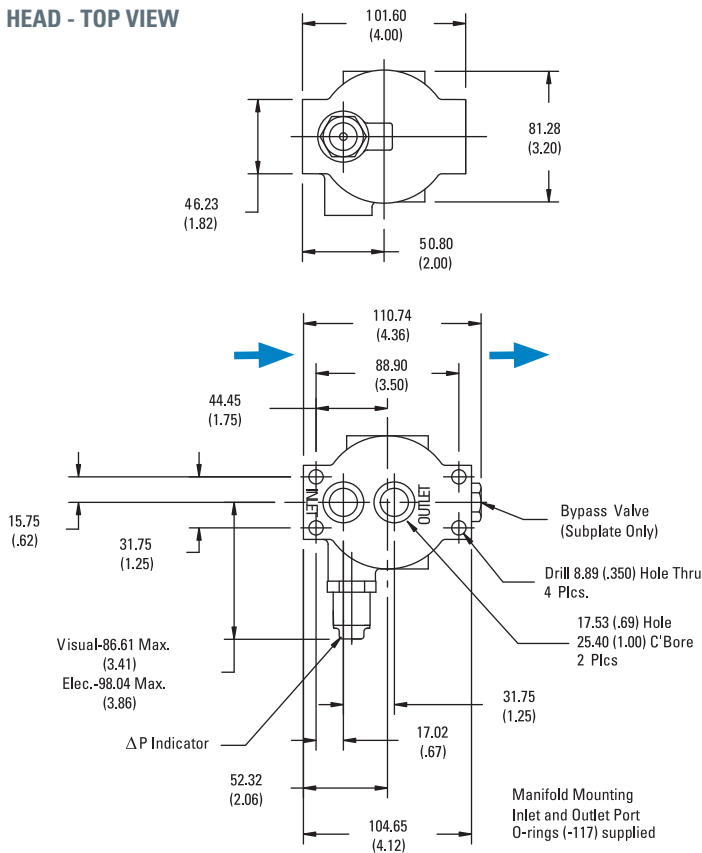
## W440 Specification Illustrations

### ASSEMBLY - SIDE VIEW

All dimensions are shown in millimeters [inches].



### HEAD - TOP VIEW





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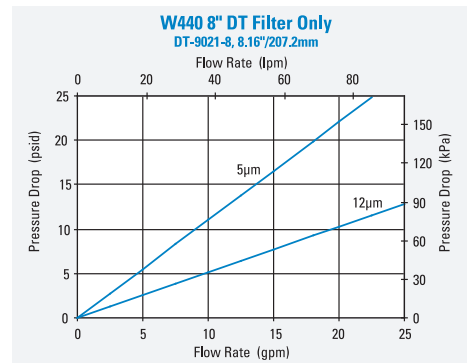
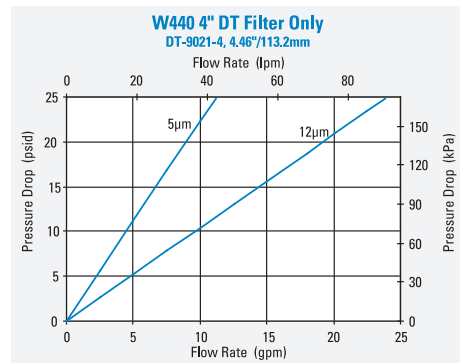
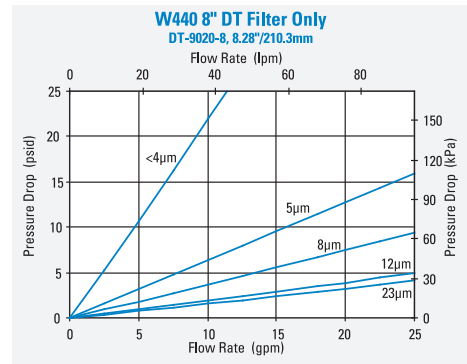
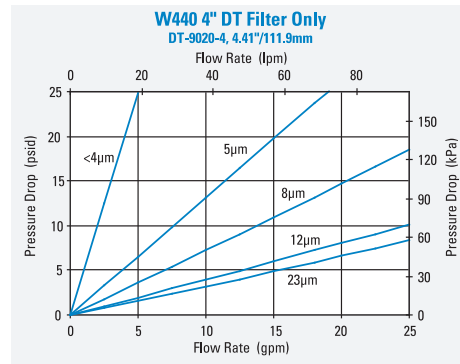
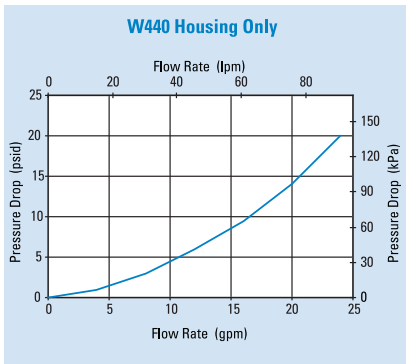
# W440 Components

## Filter Choices

Media Type	$\beta_{x(c)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 16889	in	mm		
DT Synthetic	<4 $\mu\text{m}$	4.39	112	P566194	DT-9020-4-2UM
	5 $\mu\text{m}$	4.39	112	P566195	DT-9020-4-5UM
	5 $\mu\text{m}$	4.46	113	P167180	DT-9021-4-5UM, High Collapse
	8 $\mu\text{m}$	4.39	112	P566196	DT-9020-4-8UM
	12 $\mu\text{m}$	4.39	112	P566197	DT-9020-4-14UM
	12 $\mu\text{m}$	4.46	113	P167181	DT-9021-4-14UM, High Collapse
	23 $\mu\text{m}$	4.39	112	P566198	DT-9020-4-25UM
	<4 $\mu\text{m}$	8.18	208	P566199	DT-9020-8-2UM
	5 $\mu\text{m}$	8.18	208	P566200	DT-9020-8-5UM
	5 $\mu\text{m}$	8.18	208	P167182	DT-9021-8-5UM, High Collapse
	8 $\mu\text{m}$	8.18	208	P566201	DT-9020-8-8UM
	12 $\mu\text{m}$	8.18	208	P566202	DT-9020-8-14UM
	12 $\mu\text{m}$	8.18	208	P167183	DT-9021-8-14UM, High Collapse
	23 $\mu\text{m}$	8.18	208	P566203	DT-9020-8-25UM

Filter Notes: All Donaldson DT filters utilize glass fiber media with an epoxy-based resin system for the ultimate in chemical compatibility. All Donaldson DT filters are potted with epoxy-based adhesives and are double wire-backed using epoxy-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 epoxy potting and media seam seals for added chemical compatibility. High collapse designs are double wire-backed using stainless steel mesh.

## Performance Data





## Head Assembly Choices

Port Size	Bypass Rating	Seal Material	Indicator Style & Location	Part No.
SAE-12 O-Ring	50 psi / 3.45 bar	Nitrile	Port Machined & Plugged	P574248
Manifold Mount	50 psi / 3.45 bar	Nitrile	Port Machined & Plugged	P574249
Manifold Mount	None	Fluorocarbon	Port Machined & Plugged	P574250

## Housing Choices

Housing Length	Seal Material	Part No.
4" (101.6mm)	Nitrile	X011125
8" (203.2mm)	Nitrile	X011126

## Service Part Choices

Part No.	Description
X011172	Head/Bowl/Housing Seal Kit - nitrile
X011173	Head/Bowl/Housing Seal Kit - fluorocarbon

## Indicator Choices

Indicator Pressure Setting	Connector Style	Seal Material	Part No.	Thermal Lockout	Surge Control	Reset
<b>Visual Pop-up Models</b>						
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 psi / 482 kPa	NA	Nitrile	P572319	Yes	Yes	Manual
70 psi / 482 kPa	NA	Fluorocarbon	P567457	Yes	Yes	Manual
100 psi / 690 kPa	NA	Nitrile	P572353	Yes	Yes	Manual
100 psi / 690 kPa	NA	Fluorocarbon	P572354	Yes	Yes	Manual
<b>Electrical / Visual Models</b>						
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
100 psi / 690 kPa	Hirschman	Nitrile	P572387	Yes	Yes	Manual
<b>Electrical Models</b>						
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