



SP50/60

Max Flow: 60 gpm (227 lpm)



SP50/60 Spin-On Filters

Working Pressures to:

150 psi / 1035 kPa / 10.3 bar

Rated Static Burst to:

250 psi / 1725 kPa / 17.2 bar

Flow Range To:

60 gpm / 227 lpm

Features

The SP50/60 spin-on filter is an economical, low-pressure model with a broad selection of media ratings. The die cast aluminum head and steel body ensure strength and durability—perfect for a wide variety of mobile and in-plant applications.

Take advantage of Donaldson's mix and match system of in-stock heads and filter choices—so you can get exactly what you need. Filter options include: synthetic media, natural-fiber cellulose, water-absorbing cellulose media and wire mesh media. SP50/60 spin-on filters are interchangeable with HBK05 filters.

Beta Rating

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

Porting Size Options

- 1¼" NPT
- SAE-20 O-Ring

Replacement Filter Lengths

- 6.7" / 170mm
- 7.0" / 178mm
- 10.7" / 271mm

Standard Bypass Ratings

- 25 psi / 172.5 kPa / 1.7 bar
- 15 psi / 103.4 kPa / 1.03 bar
- 5 psi / 34.5 kPa / .34 bar
- No Bypass

Applications

- Fluid Conditioning Systems
- In-Plant Systems
- Mobile Equipment
- Power Transmissions
- Process Systems



Assembly Weight

- 4.7 lbs / 2.1 kg (short)
- 5.6 lbs / 2.5 kg (long)

Operating Temperatures

- -22°F to 225°F / -30°C to 107°C

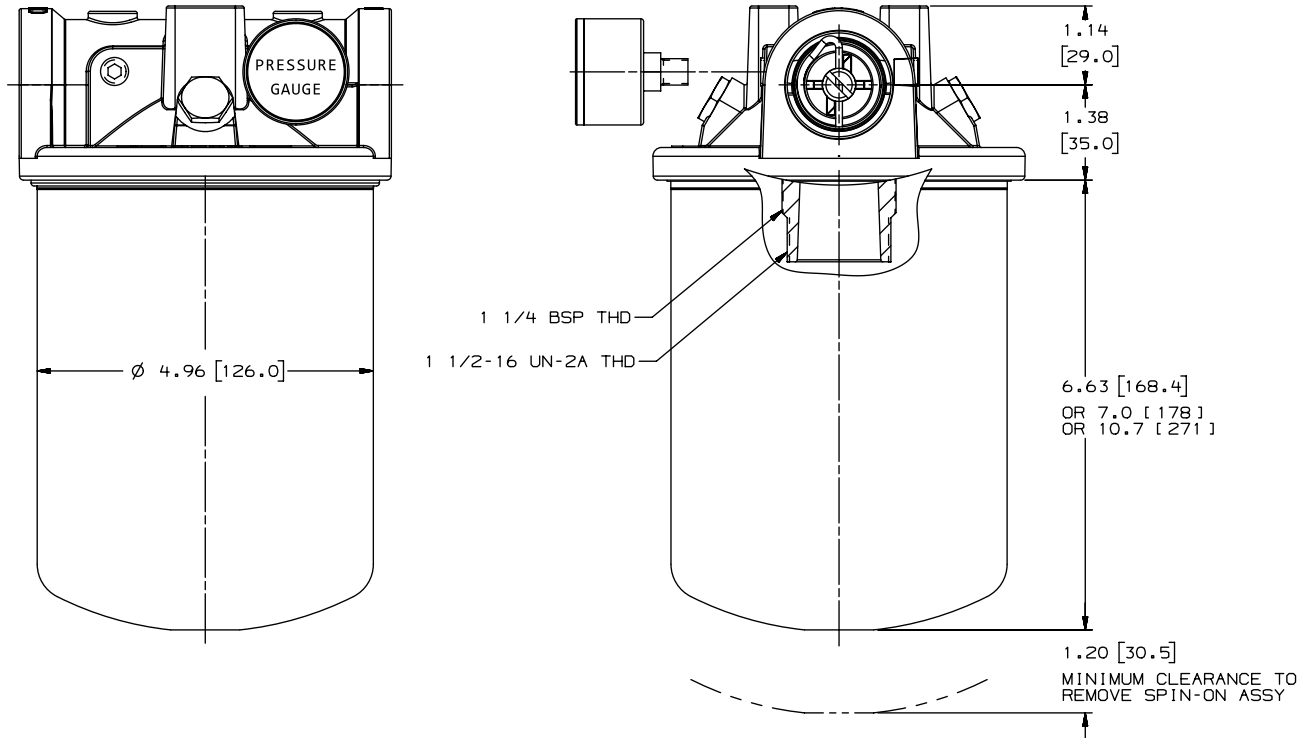
Filter Collapse Ratings

- 100 psid / 690 kPa / 6.9 bar

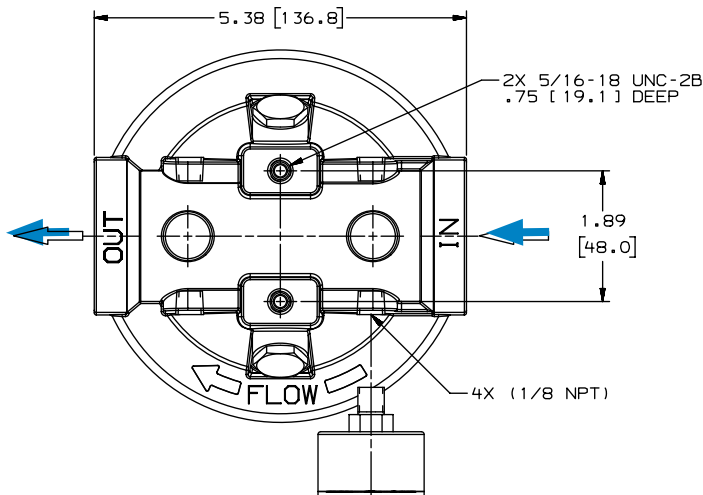
SP50/60 Specification Illustrations

ASSEMBLY - SIDE VIEW

All dimensions are shown in inches [millimeters].



HEAD - TOP VIEW





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SP50/60 Components

Filter Choices

Media Type	$\alpha_{x(e)} = 1000$	$\beta_{x(e)} = 2$	$\beta_{x(e)} = 1000$	Length		Part No.	Comments
	Rating based on ISO 23369	Rating based on ISO 16889		in	mm		
Synteq Synthetic			<4 μm	10.7	271	P167796	Fluorocarbon O-Ring & square seal kit. Compatible with water glycol.
			6 μm	6.7	170	P167162	3-seal kit
			6 μm	10.7	271	P165762	3-seal kit
Alpha-Web	10 μm			6.7	170	DBH5875	3-seal kit
Synteq Synthetic			11 μm	6.7	170	P165875	3-seal kit
			11 μm	10.7	271	P165876	3-seal kit
			13 μm	6.7	170	P167944	Fluorocarbon O-Ring & square seal kit. Compatible with water glycol.
			13 μm	10.7	271	P167945	Fluorocarbon O-Ring & square seal kit. Compatible with water glycol.
			23 μm	6.7	170	P165877	3-seal kit
			23 μm	10.7	271	P165878	3-seal kit
			50 μm	6.7	170	P165879	3-seal kit
			50 μm	10.7	271	P165880	3-seal kit
Cellulose		5 μm		6.7	170	P550386	3-seal kit
		5 μm		10.7	271	P550250	3-seal kit
		7 μm		7.2	183	P550388	3-seal kit
		7 μm		10.7	271	P550251	3-seal kit
		7 μm		7.00	178	P565245	Square seal kit, 1/4" BSP thread
		17 μm		6.7	170	P550387	3-seal kit
		17 μm		10.7	271	P550252	3-seal kit
		27 μm		7.00	178	P171616	Square seal kit, 1/4" BSP thread
Water Absorbing		10 μm		10.7	271	P561183	Cellulose media, 3-seal kit. Absorbs 350 ml water.
Wire Mesh		150 μm		6.7	170	P550275	Stainless steel wire mesh, 3-seal kit
		150 μm		10.7	271	P550276	Stainless steel wire mesh, 3-seal kit

All models have 1 1/2-16 UNF threads except where otherwise noted. All models measure 5.0/127mm outer diameter.

Head Choices

Port Size	Bypass Rating	Gauge Ports (drill, tap, plug)	Gauge Port Location	Part No.
1/4" NPT	No Bypass	(4) 1/8" NPT	upstream and downstream side	P576558
1/4" NPT	5 psi / 34.5 kPa / .34 bar	(4) 1/8" NPT	upstream and downstream side	P576555
1/4" NPT	15 psi / 103.4 kPa / 1.34 bar	(4) 1/8" NPT	upstream and downstream side	P576556
1/4" NPT	25 psi / 172.5 kPa / 1.72 bar	(4) 1/8" NPT	upstream and downstream side	P576557
SAE-20	No Bypass	(4) 1/8" NPT	upstream and downstream side	P576565
SAE-20	5 psi / 34.5 kPa / .34bar	(4) 1/8" NPT	upstream and downstream side	P576562
SAE-20	15 psi / 103.4 kPa / 1.34 bar	(4) 1/8" NPT	upstream and downstream side	P576563
SAE-20	25 psi / 172.5 kPa / 1.72 bar	(4) 1/8" NPT	upstream and downstream side	P576564

Gaskets

Each filter ships with a 3-seal kit, containing an "L" shaped, a square cut, and an O-Ring gasket seal, unless otherwise noted. Use only one of the following seals. Installation instructions can be found in the technical reference section.

- L Shaped
Use with filter heads with no groove or a wide groove.
- Square Cut
Use with filter heads with a narrow groove.
- O-Ring -246
Use with Donaldson HBK05 heads only.

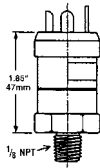
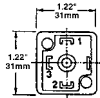
Note: On a return line system the gauge port should be on the upstream side. We suggest a 25 psi bypass. If head is used on a suction line, the gauge port should be on the downstream side very low bypass.

Pressure Gauges

Part No.	Pressure Range	Use With Bypass Valve Rating	Type
P563978	5 to 30 psi field adj.*	15 psi / 103.4 kPa / 1.34 bar or 25 psi / 172.5 kPa / 1.72 bar or No Bypass	Return indicator, electrical
P579714	0 to 100 psi	15 psi / 103.4 kPa / 1.34 bar or 25 psi / 172.5 kPa / 1.72 bar or No Bypass	Return indicator, numeric scale
P579715	0 to 100 psi	15 psi / 103.4 kPa / 1.34 bar Bypass	Return indicator, color coded
P579716	0 to 100 psi	25 psi / 172.5 kPa / 1.72 bar or No Bypass	Return indicator, color-coded
P579717	0 to -30 Hg	5 psi / 34.5 kPa / .34 bar or No Bypass	Suction indicator, numeric scale

* NOT PRESET: Setting adjustable for desired application

P563978



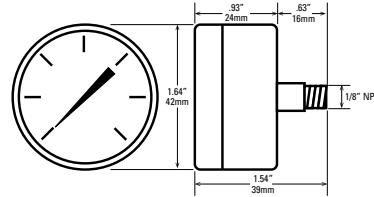
#1 Common; #2 Normally Closed;
#3 Normally Open

Instructions

1. Remove DIN adaptor
2. Remove small brass screw
3. Using 1/8" allen wrench adjust clockwise to increase set point/counter-clockwise to decrease set point
4. NO / NC

Adjustment screw located in center of electric prongs

P579714 - P579717



Pop-up Visual Indicators

Use With Bypass Valve Rating	Part Number	Style	Description
25 PSI / 172.5 kPa	P575334	H	Visual Pop-up, Auto Reset
15 PSI / 103 kPa	P579215	H	Visual Pop-up, Auto Reset

Electrical Indicators

Use With Bypass Valve Rating	Part Number	Style	Description
5 PSI / 34.5 kPa	P163642	A	Single Post DC, Normally Open
15 PSI / 103 kPa	P163601	A	Single Post DC, Normally Open
25 PSI / 172.5 kPa	P163839	A	Single Post DC, Normally Closed
25 PSI / 172.5 kPa	P162400	A	Single Post DC, Normally Open

Performance Data

