



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

Porting Size Options

- 1 1/4" NPT
- SAE-20 O-ring

Replacement Filter Lengths

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

Filter Collapse Ratings

- 100 psid / 690 kPa / 6.9 bar

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
- 2.5 psi / 17.2 kPa / .17 bar
- No Bypass

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



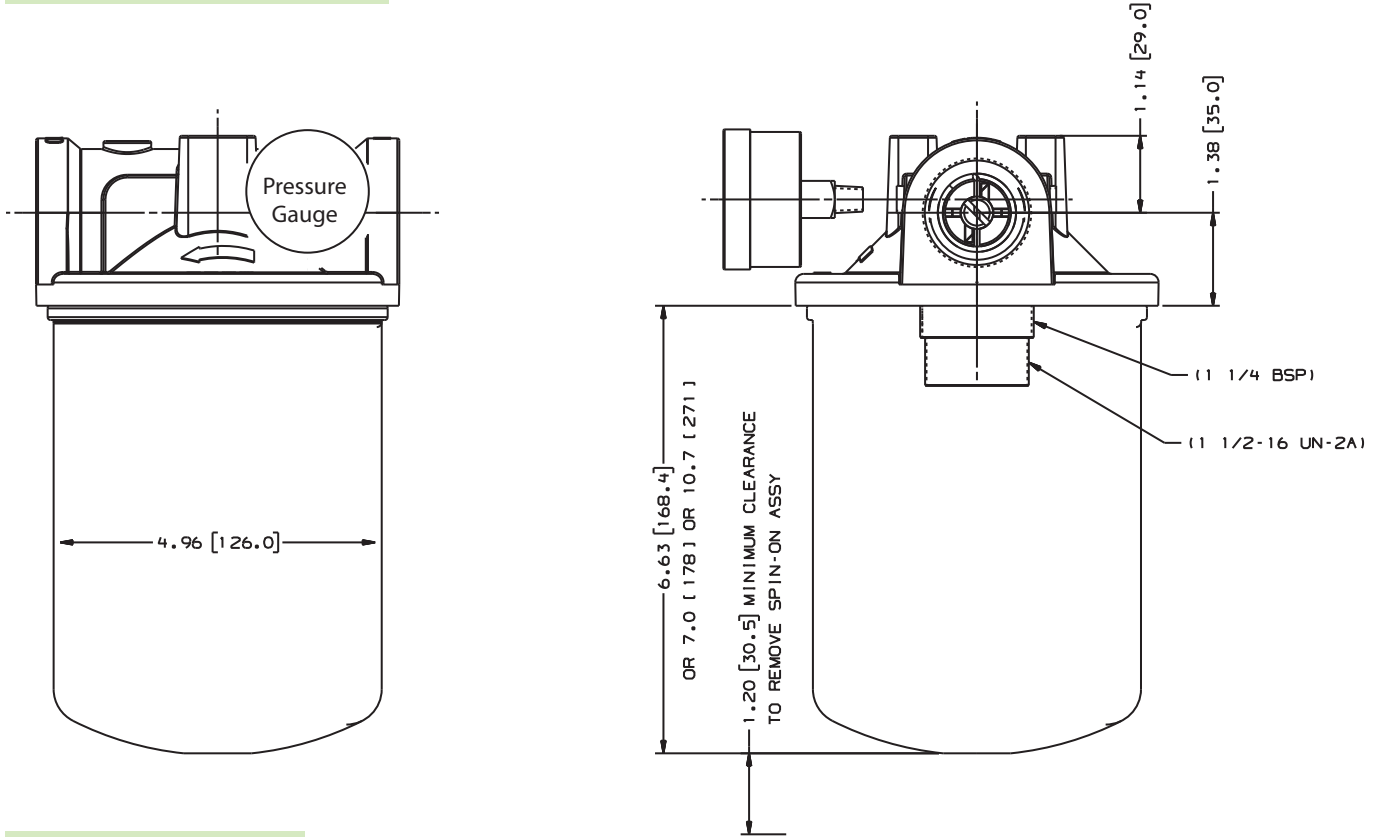
SP50/60 Specification Illustrations

All dimensions are shown in inches [millimeters].

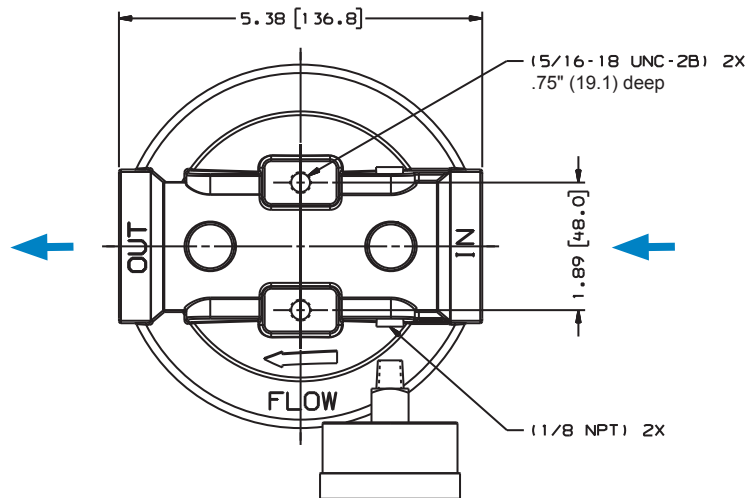
Applications

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

Assembly - Side View



Head - Top View





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Max Flow: 60 gpm (227 lpm)



SP50/60 Components

Filter Choices

Media Type	$\beta_{x(c)} = 2$ Rating based on ISO 16889	$\beta_{x(e)} = 1000$	Length		Donaldson Part No.	Comments
			in	mm		
Synteq Synthetic	<4 μm		10.7	271	P167796	Viton® O-ring & square seal kit
	6 μm		6.7	170	P167162	3-seal kit
	6 μm		10.7	271	P165762	3-seal kit
	11 μm		6.7	170	P165875	3-seal kit
	11 μm		10.7	271	P165876	3-seal kit
	13 μm		6.7	170	P167944	Viton O-ring & square seal kit
	13 μm		10.7	271	P167945	Viton O-ring & square seal kit
	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
Cellulose	5 μm		6.7	170	P550386	3-seal kit
	5 μm		10.7	271	P550250	3-seal kit
	7 μm		6.7	170	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
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 1/2-16 UNF threads except where otherwise noted. All models measure 5.0"/127 mm outer diameter. Viton® is a registered trademark of E. I. DuPont de Nemours and Company.

Head Choices

Port Size	Bypass Rating	Gauge Ports (drill, tap, plug)	Gauge Port Location	Donaldson Part No.
1/4" NPT	15 psi / 103.4 kPa / 1.34 bar	(2) 1/8" NPT	upstream side	P563267
1/4" NPT	25 psi / 172.5 kPa / 1.72 bar	(2) 1/8" NPT	upstream side	P563268
1/4" NPT	5 psi / 34.5 kPa / .34 bar	(2) 1/8" NPT	downstream side	P563269
1/4" NPT	15 psi / 103.4 kPa / 1.34 bar	none	na	P563270
1/4" NPT	Blocked	(2) 1/8" NPT	downstream side	P561952
1/4" NPT	2.5 psi / 17.3 kPa / .17 bar	none	na	P563490
1/4" NPT	2.5 psi / 17.3 kPa / .17 bar	(2) 1/8" NPT	downstream side	P563491
1/4" NPT	25 psi / 172.5 kPa / 1.72 bar	none	na	P563492
SAE-20	5 psi / 34.5 kPa / .34bar	(2) 1/8" NPT	downstream side	P573302
SAE-20	15 psi / 103.4 kPa / 1.34 bar	(2) 1/8" NPT	upstream side	P563271
SAE-20	25 psi / 172.5 kPa / 1.72 bar	(2) 1/8" NPT	upstream side	P563272
SAE-20	Blocked	(2) 1/8" NPT	upstream side	P564147

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.

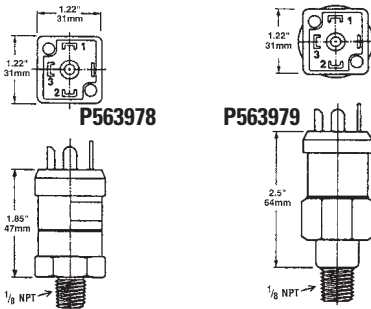
Optional Filter Service Indicators

This handy pressure gauge, mounted on the side of an SP50/60 filter head, will tell you when it's time to service the filter.

Donaldson 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
P563979	-5 to 15 in Hg field adj.*	5 psi / 34.5 kPa / .34 bar or No Bypass	Suction indicator, electrical
P563296	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
P563297	0 to 100 psi	15 psi / 103.4 kPa / 1.34 bar Bypass	Return indicator, color coded
P563298	0 to 100 psi	25 psi / 172.5 kPa / 1.72 bar or No Bypass	Return indicator, color-coded
P563299	0 to -20 Hg	5 psi / 34.5 kPa / .34 bar or No Bypass	Suction indicator, numeric scale



Notes
* NOT PRESET:
Setting adjustable for desired application



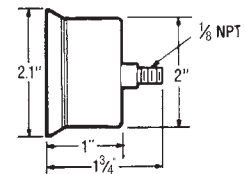
#1 Common; #2 Normally Closed;
#3 Normally Open

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

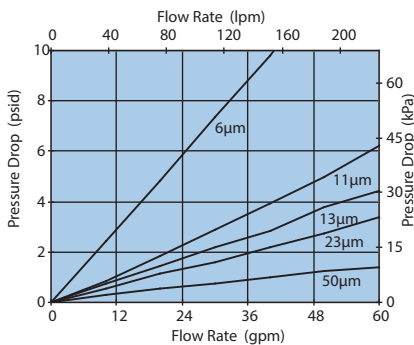
Adjustment screw located in center of electric prongs

P563296 - P563299

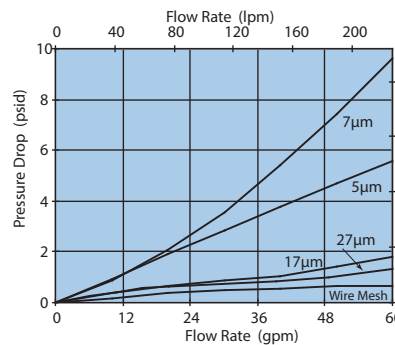


Performance Data

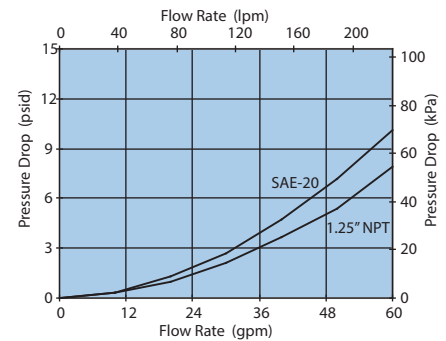
SP50 Filter Only
(Synthetic, 6.7"/170mm)



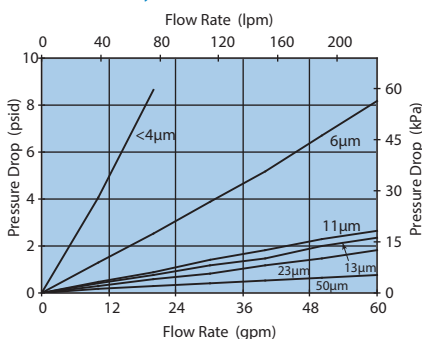
SP50 Filter Only
(Cellulose, 6.7"/170-178mm)



SP50/60 Head Only



SP60 Filter Only
(Synthetic, 10.7"/271mm)



SP60 Filter Only
(Cellulose, 10.7"/271mm)

