



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, as listed on page 46. Please note gasket options on page 52.

Beta Rating

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

Porting Size Options

- 1¼" NPT
- SAE-20 O-ring

Replacement Filter Lengths

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

Outer Diameter

- 5" / 127 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 250°F / -30°C to 121°C

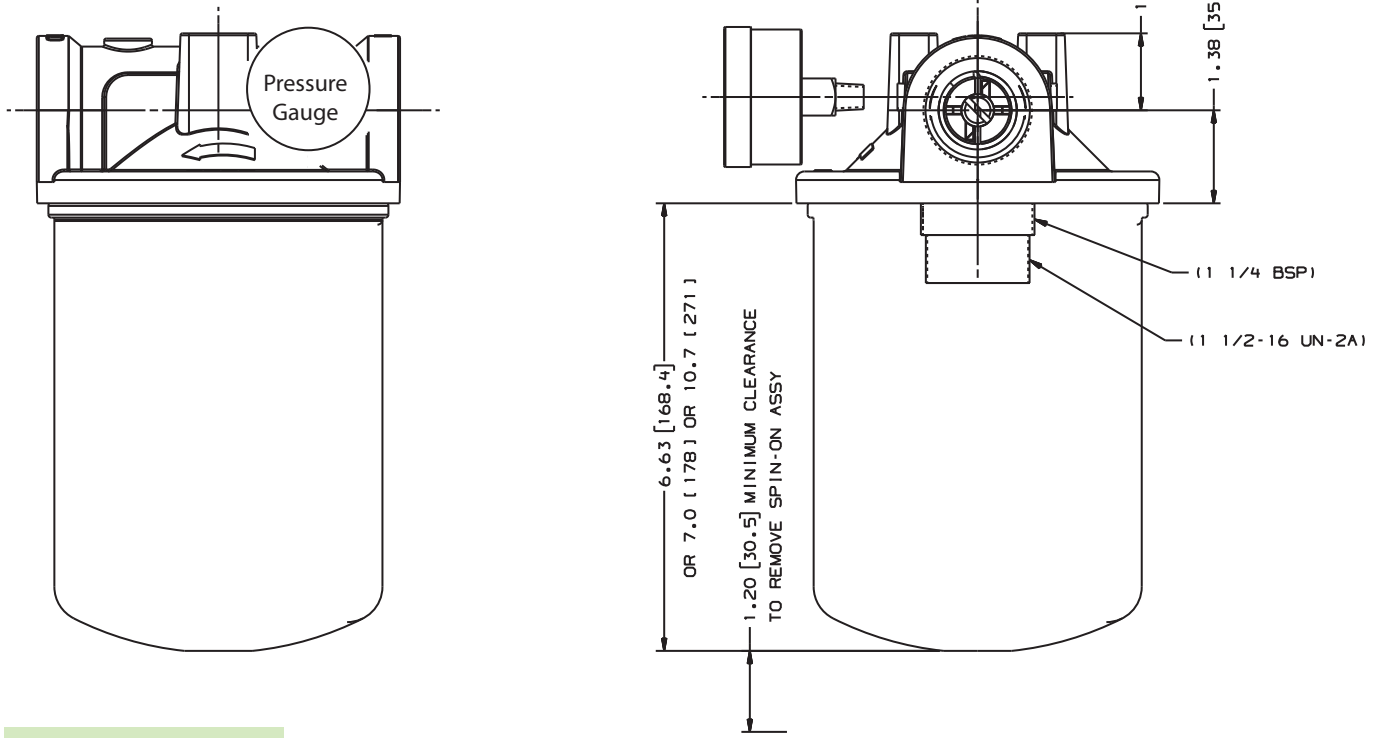
SP50/60 Specification Illustrations

All dimensions are shown in inches [millimeters].

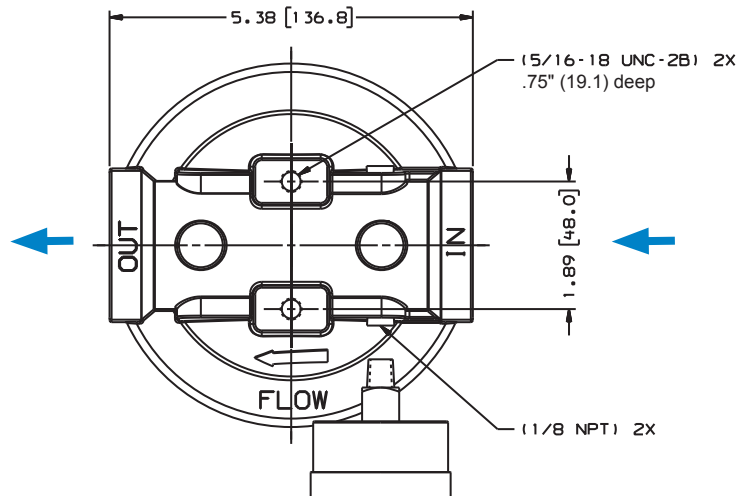
Applications:

- Process Systems
- Fluid Conditioning
- In-Plant & Mobile Equipment
- Power Transmissions
- Filter Cart

Assembly - Side View



Head - Top View





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Max Flow: 60 gpm (227 lpm)



SP50/60 Components

Filter Choices

Media Type	Beta _{rc} =200 Rating	Beta _{rc} =1000 Rating	Length (in./mm)	Donaldson Part No.	Comments
No. ½		<4 µm	10.7/271	P167796	Synthetic, Viton® O-ring & square seal kit
No. 1		5 µm	6.7/170	P169430	Synthetic, 3-seal kit
			10.7/271	P167832	Synthetic, 3-seal kit
No. 2		9 µm	6.7/170	P167162	Synthetic, 3-seal kit
			10.7/271	P165762	Synthetic, 3-seal kit
No. 2½		10 µm	6.7/170	P165875	Synthetic, 3-seal kit
			10.7/271	P165876	Synthetic, 3-seal kit
No. 6		13 µm	6.7/170	P167944	Synthetic, Viton O-ring & square seal kit
			10.7/271	P167945	Synthetic, Viton O-ring & square seal kit
No. 9		23 µm	6.7/170	P165877	Synthetic, 3-seal kit
			10.7/271	P165878	Synthetic, 3-seal kit
No. 20		>50 µm	6.7/170	P165879	Synthetic, 3-seal kit
			10.7/271	P165880	Synthetic, 3-seal kit
No. 3		24 µm	6.7/170	P550386	Cellulose, 3-seal kit
			10.7/271	P550250	Cellulose, 3-seal kit
No. 10		23 µm	6.7/170	P550388	Cellulose, 3-seal kit
			10.7/271	P550251	Cellulose, 3-seal kit
			7.00/178	P565245	Cellulose, square-seal, 1¼" BSP thread
No. 25	32 µm		6.7/170	P550387	Cellulose, 3-seal kit
			10.7/271	P550252	Cellulose, 3-seal kit
			7.00/178	P171616	Cellulose, square-seal, 1¼" BSP thread
Water Absorbing*	10 µm		10.7/271	P561183	Cellulose, "L" & square-seal kit
Wire Mesh	150 µm nom		6.7/170	P550275	SS Wire Mesh, 3-seal kit
			10.7/271	P550276	SS Wire Mesh, 3-seal kit

All models have 1½-16 UNF threads except where otherwise noted.

All models measure 5.07/127 mm outer diameter.

* Absorbs 350 ml water.

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Head Choices

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

SP spin-on filters can be used with three gasket styles. Donaldson filters ship with a 3-seal kit, containing an "L" shaped, a square cut, and an O-ring gasket seal, unless otherwise noted. Individual gaskets can be ordered separately using the part numbers below:

P569908

L Shaped



Use with Donaldson SP50/60 head and some non-Donaldson heads. Shipped with each Donaldson-branded spin-on filter.

P165641-Nitrile Square Cut
P169027-Fluorocarbon



Use with SP50/60, SP80/90, SP100/120 and some non-Donaldson heads. Shipped with each Donaldson-branded spin-on filter.

P166435-Nitrile O-Ring -246



Use with Donaldson HBK05 head.

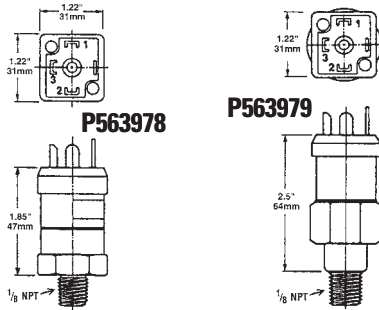
Optional Filter Service Indicators

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	15 psi / 103.4 kPa / 1.34 bar field adj.* or No Bypass	Return indicator, electrical or 25 psi / 172.5 kPa / 1.72 bar
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

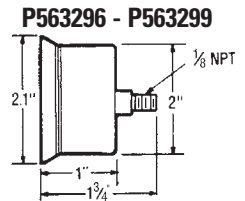


#1 Common; #2 Normally Closed;
#3 Normally Open

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



Performance Data

