



SP80/90

Max Flow: 100 gpm (380 lpm)



SP80/90 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: 100 *gpm*
380 *lpm*



Features

SP80/90 double filter head allows for double the flow capacity, with two filters to hold more contaminant. Aluminum casting and Buna-N® seals standard. SP80/90 filters are interchangeable with SP50/60 filters.

Buna-N® is a registered trademark of E. I. DuPont de Nemours and Company.

Beta Rating

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

Porting Size Options

- 1½" NPT
- SAE-24 O-ring
- 2" SAE 4-Bolt Flange Code 61

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 / 1.72 bar
- 15 psi / 103.4 kPa / 1.34 bar
- 5 psi / 34.5 kPa / .34 bar
- No Bypass

Operating Temperatures

- -22°F to 225°F / -30°C to 107°C

Assembly Weight

- 10.0 lbs / 4.5 kg (short) - approximate
- 11.8 lbs / 5.4 kg (long)

SP80/90 Specification Illustrations

All dimensions are shown in inches [millimeters].

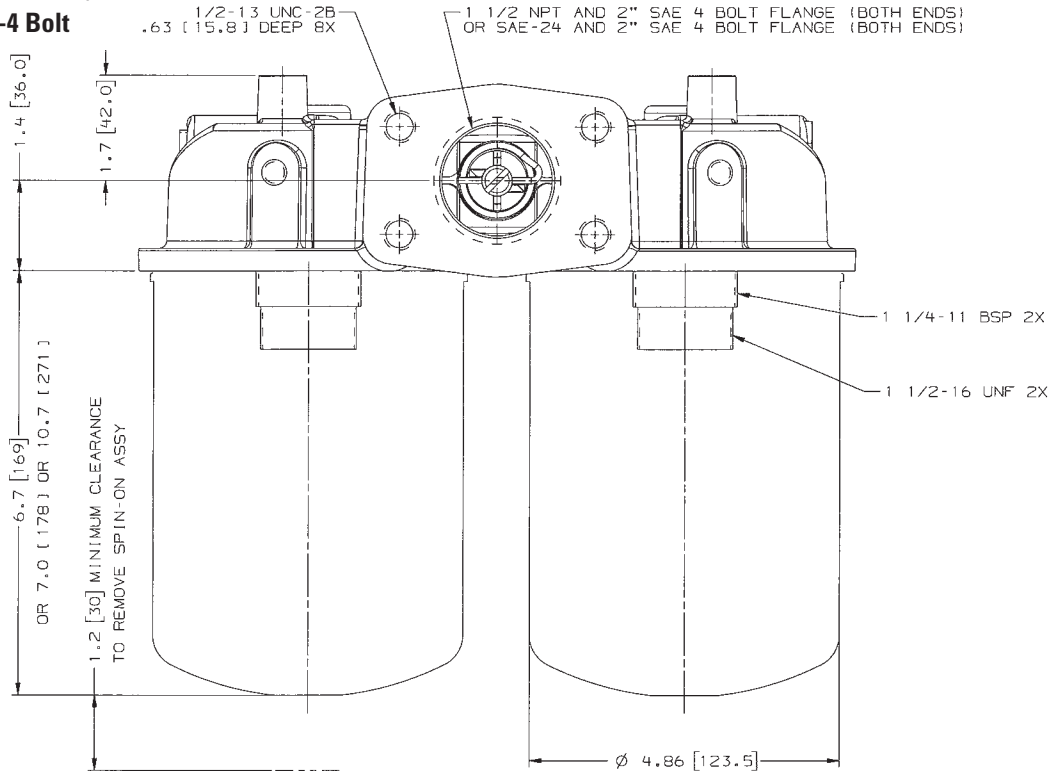
Assembly - Side View

Combination

1 1/2" NPT and 2" SAE

4-Bolt Flange (Both Ends) or

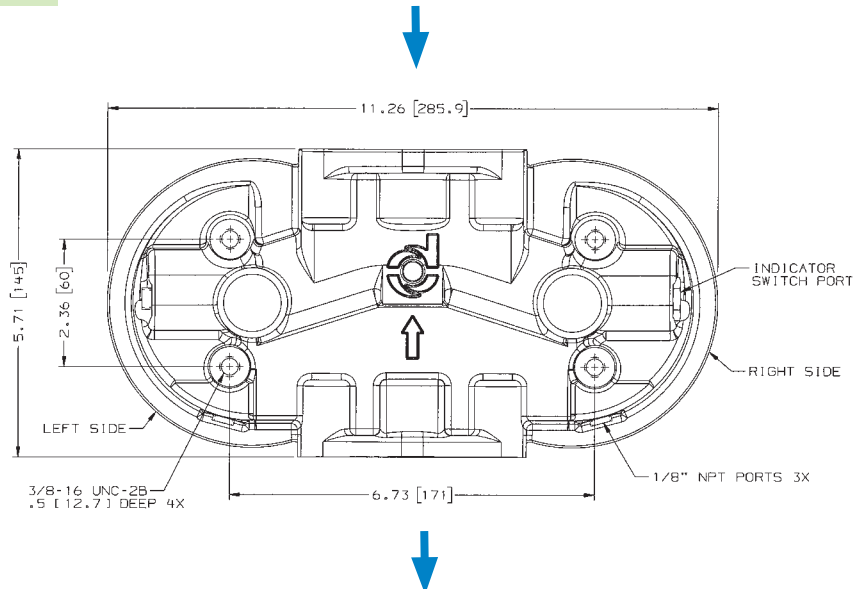
SAE-24 & 2" SAE-4 Bolt



Applications

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

Head - Top View





SP80/90

Max Flow: 100 gpm (380 lpm)

SP80/90 Components

Filter Choices

Media Type	$\beta_{x(c)} = 2$ Rating based on ISO 16889	$\beta_{x(c)} = 1000$	Length in	mm	Donaldson Part No.	Comments
Synteq Synthetic	<4 μm		10.7	271	P167796	Viton® O-ring & square seal kit
	7 μm		6.7	170	P169430	3-seal kit
	7 μm		6.7	170	P167162	3-seal kit
	7 μm		10.7	271	P167832	3-seal kit
	7 μm		10.7	271	P165762	3-seal kit
	9 μm		6.7	170	P165875	3-seal kit
	9 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
	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		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, 1¼" 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, 1¼" 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 1½-16 UNF threads except where otherwise noted. All models measure 5.0"/127mm outer diameter.

Some part numbers are offered with the same beta ratings to maintain customer ordering patterns.

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	DCI Part No.
1½" NPT & 2" SAE 4 BOLT	15 psi / 103.4 kPa / 1.34 bar	(4) 1/8" NPT	upstream & downstream sides	P563273
1½" NPT & 2" SAE 4 BOLT	25 psi / 172.5 kPa / 1.72 bar	(4) 1/8" NPT	upstream & downstream sides	P563274
1½" NPT & 2" SAE 4 BOLT	Blocked	(4) 1/8" NPT	upstream & downstream sides	P563275
1½" NPT & 2" SAE 4 BOLT	5 psi / 34.5 kPa / .34 bar	(4) 1/8" NPT	upstream & downstream sides	P563276
SAE-24 O-Ring	25 psi / 172.5 kPa / 1.72 bar	(4) 1/8" NPT	upstream & downstream sides	P564892
SAE-24	No Bypass	(4) 1/8" NPT	upstream & downstream sides	P573217

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.



Use with filter heads with no groove or a wide groove.



Use with filter heads with a narrow groove.



Use with Donaldson HBK05 heads only.

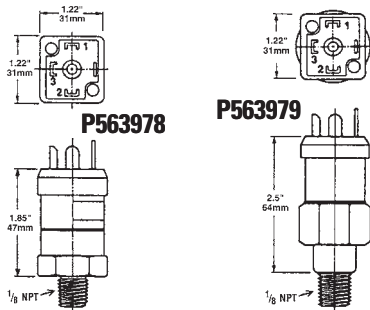
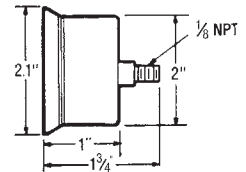
Optional Filter Service Indicators for Left Side

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

P563296 - P563299



#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 elec. prongs

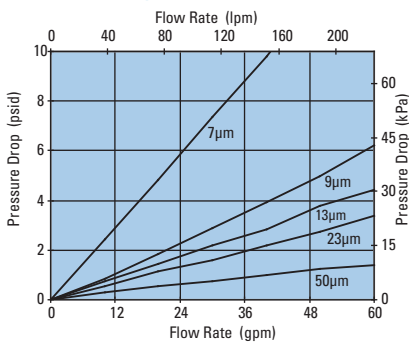


Optional Filter Service Indicators for Right Side

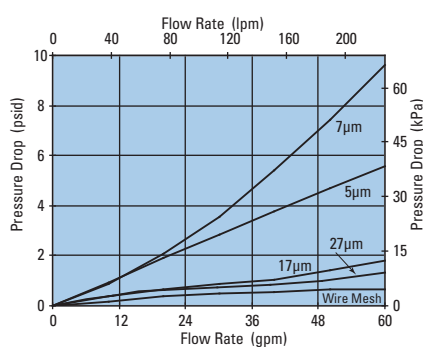
Refer to page 237 in the accessories section for right side electrical filter service indicator options.

Performance Data

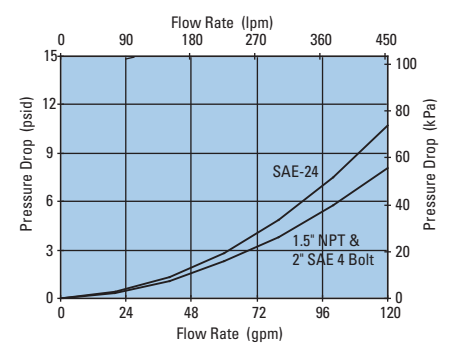
SP80 Filter Only
(Synthetic, 6.7"/170mm)



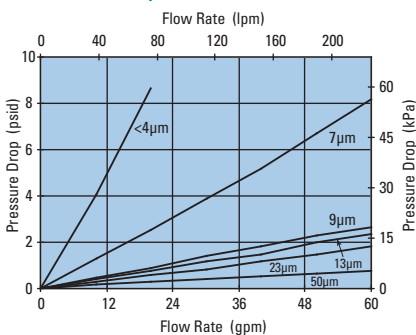
SP80 Filter Only
(Cellulose, 6.7"-7"/170-178mm)



SP80/90 Head Only



SP90 Filter Only
(Synthetic, 10.7"/271mm)



SP90 Filter Only
(Cellulose, 10.7"/271mm)

