

## 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:**

Return-line	<	120 <i>gpm</i> 454 <i>l/min</i>
Suction	<	35 <i>gpm</i> 132 <i>l/min</i>



## Features

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

### Beta Rating

- Performance to  $\beta_{6(c)}=1000$

### Porting Sizes

- 1½" NPT, 2" SAE Flange

### Replacement Filter Lengths

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

### 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

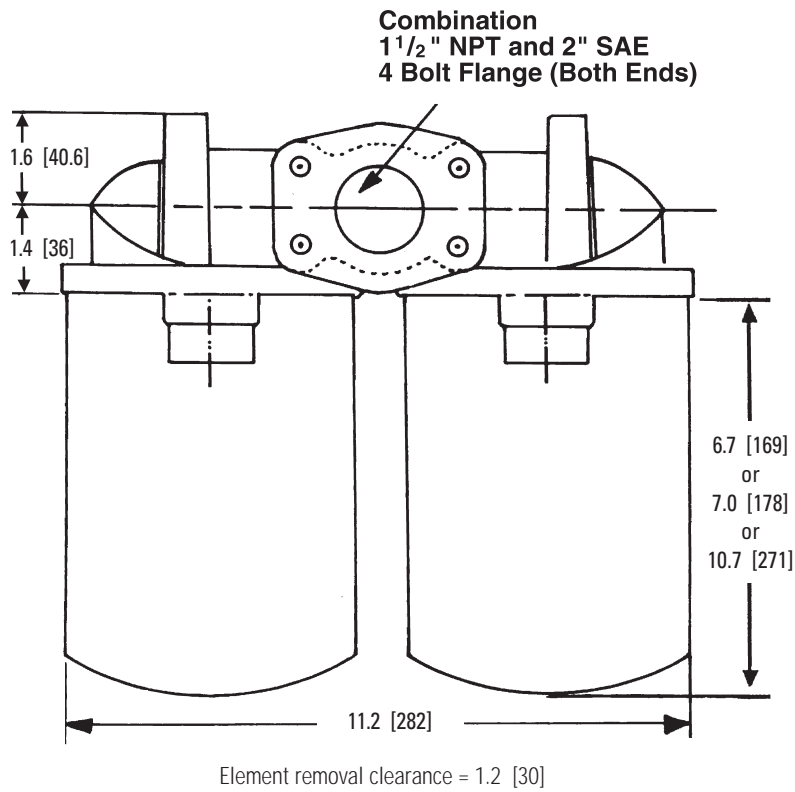
### Operating Temperatures

- -22°F to 250°F / -30°C to 121°C

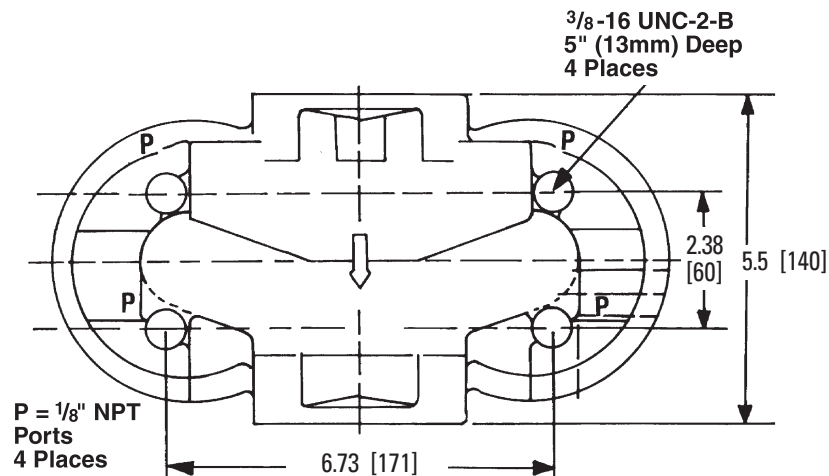
### Assembly Weight

- 10.0 lbs (short)
- 11.8 lbs (long)

Assembly - Side View



Head - Top View



All dimensions above are shown in inches [millimeters]

# SP80/90 Components

## Element Choices

Media Type	Beta <sub>(c)</sub> =200 Rating	Beta <sub>(c)</sub> =1000 Rating	Length (in./mm)	Donaldson Part No.	LHA Part No.	Comments	Brand
Cellulose Media #3		24µm	6.7/169	P550386	n/a		Donaldson
Cellulose Media #3		24µm	10.7/271	P550250	n/a		Donaldson
Cellulose Media #10		23µm	6.7/169	P550388	n/a		Donaldson
Cellulose Media #10		23µm	10.7/271	P550251	n/a		Donaldson
Cellulose Media #10		23µm	6.7/169	P562201	SPE-50-10		LHA
Cellulose Media #10		23µm	7.00/178	P564052	SPE-52-10	1¼" BSP thread	LHA
Cellulose Media #10		23µm	10.7/271	P562204	SPE-60-10		LHA
Cellulose Media # 3		24µm	6.7/169	P562200	SPE-50-3-N		LHA
Beta-10 Absolute Synthetic		10µm	6.7/169	P562207	SPE-50-BTA-10	Synthetic	LHA
Beta-10 Absolute Synthetic		10µm	10.7/271	P562208	SPE-60-BTA-10	Synthetic	LHA
Beta 3 Absolute Synthetic		6µm	6.7/169	P562209	SPE-50-BTA-3	Synthetic	LHA
Beta 3 Absolute Synthetic		6µm	10.7/271	P564055	SPE-60-BTA-3	Synthetic	LHA
Cellulose Media #25	32µm		6.7/169	P550387	n/a		Donaldson
Cellulose Media #25	32µm		10.7/271	P550252	n/a		Donaldson
Cellulose Media #25	32µm		6.7/169	P562202	SPE-50-25		LHA
Cellulose Media #25	32µm		7.0/178	P564053	SPE-52-25	1¼" BSP thread	LHA
Cellulose Media #25	32µm		10.7/271	P562205	SPE-60-25		LHA
Water Absorbing	10µm water absorption		10.7/271	P561183	n/a	Absorbs 24 oz./700 ml water	Donaldson
Water Absorbing	10µm water absorption		10.7/271	P562206	SPE-60-H-10	Absorbs 24 oz./700 ml water	LHA
Wiremesh	150µm nominal		6.7/169	P550275	n/a	Stainless Steel	Donaldson
Wiremesh	150µm nominal		10.7/271	P550276	n/a	Stainless Steel	Donaldson
Wiremesh	150µm nominal		6.7/169	P562203	SPE-50-140W		LHA

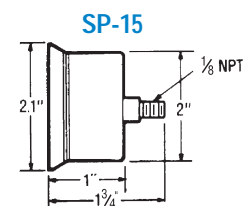
All models have 1½ -16 UNF threads except for SPE-52 models. SPE-52 models have 1¼" BSP threads.  
All models measure 5.0" / 127mm outer diameter.

## Head Choices for SP80/90

Port Size	Bypass Rating	Gauge Ports (drill, tap, plug)	Gauge Port Location	DCI Part No.	LHA Part No.
1½" NPT & 2" SAE 4 BOLT	15 psi / 103.4 kPa / 1.34 bar	(4) 1/8" NPT	upstream & downstream sides	P563273	SP80N*GN1
1½" NPT & 2" SAE 4 BOLT	25 psi / 172.5 kPa / 1.72 bar	(4) 1/8" NPT	upstream & downstream sides	P563274	SP80N*HN1
1½" NPT & 2" SAE 4 BOLT	Blocked	(4) 1/8" NPT	upstream & downstream sides	P563275	SP80N*DN1
1½" NPT & 2" SAE 4 BOLT	5 psi / 34.5 kPa / .34 bar	(4) 1/8" NPT	upstream & downstream sides	P563276	SP80N*FN2

## Optional Filter Service Indicators

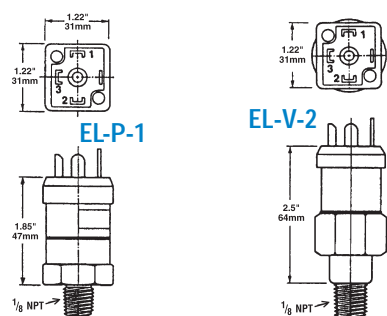
Donaldson Part No.	LHA Part No.	Pressure Range	Use With Bypass Valve Rating	Type	Brand
P563978	EL-P-1	5 to 35 psi field adj.*	15 psi / 103.4 kPa / 1.34 bar or 25 psi / 172.5 kPa / 1.72 bar or No Bypass	Return indicator, electrical	LHA
P563979	EL-V-2	-5 to -30 in Hg field adj.*	5 psi / 34.5 kPa / .34 bar or No Bypass	Suction indicator, electrical	LHA
P563296	SP-15P	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	LHA
P563297	SP-15P-1	0 to 100 psi	15 psi / 103.4 kPa / 1.34 bar Bypass	Return indicator, color coded	LHA
P563298	SP-15P-2	0 to 100 psi	25 psi / 172.5 kPa / 1.72 bar or No Bypass	Return indicator, color-coded	LHA
P563299	SP-15V	0 to -20 Hg	5 psi / 34.5 kPa / .34 bar or No Bypass	Suction indicator, numeric scale	LHA



### Notes

\* NOT PRESET: Setting adjustable for desired application

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



### EL-P and EL-V Instructions

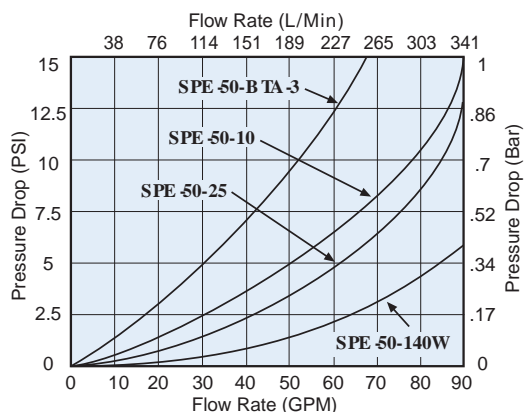
1. Remove DIN adaptor
2. Remove small brass screw
3. Using 1/8" allen wrench adjust clockwise to increase set point/counter-clockwise to decrease set point
4. NO / NC

Adjustment screw located in center of elec. prongs

## Performance Data

For a full explanation of how our performance curves were derived, see page 160.

### SP80



### SP90

