

## **Filter Solutions**

Pneumatech offers you a comprehensive line-up of innovative filter solutions to meet your specific needs. Our filtration solutions are engineered cost-effectively to provide the best quality air and meet today's increasing quality demands.

For general applications we provide oil coalescing, particulate and oil vapor filters in a wide range of flows and pressures. Pneumatech is also your partner for breathing air, silicone-free, sterile & process filtration.

**FS -**Sterile Filters

## FS - Sterile Filters

## **Features & Benefits**

- ► Enhanced high-grade stainless steel filter housing
  - Designed for applications with high risk of corrosion
  - High hygiene standards thanks to sanitary couplings
- ► Advanced filter cartridge design
  - High microbiological filtration efficiency
  - Designed to withstand a large number of sterilization cycles thanks to silicon bonded joint and additional NOMEX layer
- ▶ Stainless steel cylinders and end-caps
- ▶ Low pressure drop
- ▶ 100% integrity tested (DOP test)
- All components meet the FDA requirements for contact with food in accordance with the Code of Federal Regulations (CFR), title 21.

## **General Specifications**

- ▶ Operating Pressure: 10-16 Bar / 145-232 PSI
- ▶ Operating temperature range¹: -20°C to 150°C / -4°F to 302°F
- ▶ Side Connections : DN10 to DN200 sanitary flange (ISO)
- Surface Finish: Ra 0.8
- ▶ Body Connections: Sanitary tri clamp

<sup>1</sup>Operating temperature range can vary as per the filter element used.





Pneumatech's FS filters are designed for compressed air and gas applications that need to be free from microbiological contamination, and can thus be sterilized regularly.

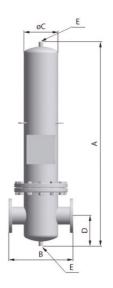
Pneumatech's FS filter housings are made out of stainless steel grade 1,4301, with a surface that has been smoothened to a level of Ra 0,8. The upper and bottom filter parts are connected by a sanitary tri clamp fitting; and the side connections are made out of sanitary ISO flanges. As a result, there is no void inside the entire filter housing; and thus no risk of micro-organism contamination.

The filter elements are manufactured with silicon as bonded joint to ensure robustness at high operating and sterilization temperatures. For the same reason, an additional NOMEX layer is used at the inside and outside of the filter element. The filter cylinders and end-caps are made out of stainless steel. This all results in a highly efficient and exceptionally strong filter, which keeps its performance after a large number of sterilization cycles.

Technical specifications for FS 1-16																	
Pneumatech Variant→	Units	FS HE 1	FS HE 2	FS HE 3	FS HE 4	FS HE 5	FS HE 6	FS HE 7	FS HE 8	FS HE 9	FS HE 10	FS HE 11	FS HE 12	FS HE 13	FS HE 14	FS HE 15	FS HE 16
Flow <sup>(1)</sup>	l/s	21	29	42	63	88	167	250	350	467	667	1400	1867	2667	3733	4778	5867
	m³/hr	75	105	150	225	315	600	900	1260	1680	2400	5040	6720	9600	13440	17200	21120
	cfm	44	62	88	132	185	353	530	742	989	1,413	2,966	3,955	5,650	7,910	10,124	12,431
OperatingPressure	bar/psi	16/232	16/232	16/232	16/232	16/232	16/232	16/232	16/232	16/232	16/232	10/145	10/145	10/145	10/145	10/145	10/145
Connections	Inch	DN10/ ø17,2	DN10/ ø17,2	DN15/ ø21,3	DN15/ ø21,3	DN25/ ø35,7	DN32/ ø42,4	DN40/ ø48,3	DN50/ ø60,3	DN65/ ø76,1	DN80/ ø88,9	DN100	DN100	DN150	DN150	DN200	DN200
Dimensions	A (mm)	218	246	251	275	303	363	446	587	763	1015	1012	1266	1305	1418	1568	1568
	A (inch)	8.6	9.7	9.9	10.8	11.9	14.3	17.6	23.1	30.0	40.0	39.8	49.8	51.4	55.8	61.7	61.7
	B (mm)	125	125	120	120	169	169	169	183	195	195	410	410	480	540	660	660
	B (inch)	4.9	4.9	4.7	4.7	6.7	6.7	6.7	7.2	7.7	7.7	16.1	16.1	18.9	21.3	26.0	26.0
	C (mm)	76.1	76.1	76.1	76.1	114.3	114.3	114.3	114.3	139.7	139.7	219.1	219.1	273	323.9	406.4	406.4
	C (inch)	3.0	3.0	3.0	3.0	4.5	4.5	4.5	4.5	5.5	5.5	8.6	8.6	10.7	12.8	16.0	16.0
	D (inch)	69	69	69	69	86	86	86	96	120	120	183	183	225	256	306	306
	E (inch)	1/8"	1/8"	1/8"	1/8"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/2"	1/2"	1/2"	1"	1"	1"
Mass	Kg	1.6	1.7	1.7	1.8	3.1	3.4	3.6	4.9	8.4	10.2	44	45	70	80	135	135
	Lbs	3.5	3.7	3.7	4.0	6.8	7.5	7.9	10.8	18.5	22.5	97.0	99.2	154.3	176.4	297.6	297.6

<sup>1.</sup> Flow is measured at Reference Conditions: 1 Bar(a) and 20°C

Correction factors																
Operating pressure	Bar(g)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	psi (g)	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	Кр	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13





Pneumatech reserves the right to change or revise specifications and product design in connection with any features of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

© 2017 Pneumatech. All rights reserved.

