porvair filtration group

Compfil™ SH

for Sterile Air and Gas Filtration

The Compfil™ SH stainless steel filter housings, which are available in 18 different sizes, are used for the purification of compressed air and other gases.

The optimised construction of the Compfil™ SH offers low differential pressure at high flow rates.

Typical Applications

- Chemical
- Aseptic packing
- Pharmaceutical
- Biotechnology
- Cosmetics
- Breweries
- Dairies
- Food and beverages
- Water treatment systems
- Fermentation processes

Features and Benefits

- **Various size options available**
  18 different sizes for operating volumes from 60 Nm^3/h (38 SCFM) to 23,040 Nm^3/h (14,554 SCFM) related to 7barg (1015 psig).
- **Compliant**
  Complies to the requirements of the European directive 2014/68/EU for pressure vessels.
- **Safe installation**
  Plug connection guarantees that the elements remain safely fixed at all times.
- **Filter flexibility**
  Different element sizes can be installed due to the modular design.

Ordering Information

For ordering information please contact a member of the sales team.

Specifications

Materials of Manufacture

Filter housing:	Stainless steel 1.4301 (304) or 1.4404 (316L)
Coupling nut:	Stainless steel 1.4301 (304)
Plug:	Stainless steel 1.4301 (304)
Housing gasket:	EPDM (other gasket upon request

Connection Types

BSP thread connection:	Standard for 0006 - 0288 single housing
DIN Flange:	Standard, starting at 0432 multiple housing

Welded ends, other connections and larger housings are available on request.

Maximum Operating Pressure

0006 - 0192: 16barg (232psig)
0288: 12barg (174psig)
0432 - 1920: 10barg (145psig)

Maximum Operating Temperature

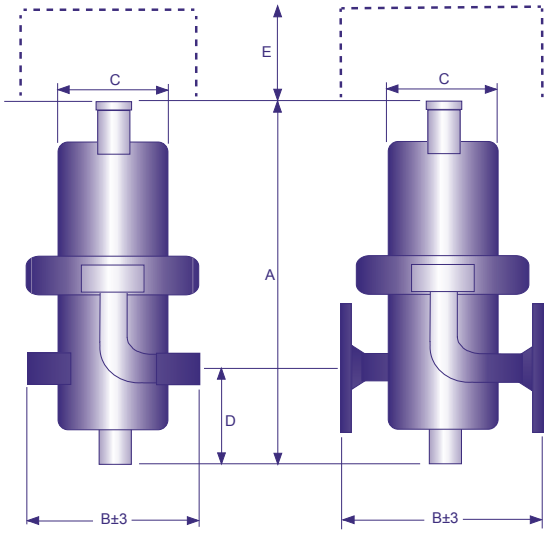
200°C (392°F)

Surface Finish

Inner: Etched and passivated
Ra 1,6: 0006 - 0288 / 0432 - 1920

Outer: Etched, passivated and polished
Ra 1,6: 0006 - 0288
Etched and passivated (not polished)
0432 - 1920

Threaded BSP Socket



Flanged DN2633

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Specifications

SH Part Code*	Size	Volume flow Nm3/hr at 7 barg operating pressure (SCFM at 101.5psig)		Connections						Filter element	
		Nom.	Max.	AS	DN	NP	BS	DT	AF	Size	Qty
SH-XX-0310	03/10	60 (38)	90 (57)	17.2 X 1.6	13 X 1.5	NPT 1/4"	G 1/4	DN 10	1/2	03/10	1
SH-XX-0410	04/10	90 (57)	120 (76)	17.2 X 1.6	13 X 1.5	NPT 3/8"	G 3/8	DN 10	1/2	04/10	1
SH-XX-0420	04/20	120 (76)	180 (114)	21.3 X 1.6	19 X 1.5	NPT 1/2"	G 1/2	DN 15	1/2	04/20	1
SH-XX-0520	05/20	180 (114)	270 (171)	26.9 X 1.6	23 X 1.5	NPT 3/4"	G 3/4	DN 20	3/4	05/20	1
SH-XX-0525	05/25	270 (171)	360 (227)	33.7 X 2	29 X 1.5	NPT 1"	G1	DN 25	1	05/25	1
SH-XX-0725	07/25	360 (227)	480 (303)	42.4 X 2	35 X 1.5	NPT 1 1/4"	G 1 1/4	DN 32	1 1/4	07/25	1
SH-XX-0730	07/30	480 (303)	720 (455)	48.3 X 2	41 X 1.5	NPT 1 1/2"	G 1 1/2	DN 40	1 1/2	07/30	1
SH-XX-1030	10/30	720 (455)	1,080 (682)	60.3 X 2	53 X 1.5	NPT 2"	G2	DN 50	2	10/30	1
SH-XX-1530	15/30	1,080 (682)	1,440 (910)	60.3 X 3	53 X 1.5	NPT 2"	G2	DN 50	2	15/30	1
SH-XX-2030	20/30	1,440 (910)	1,920 (1,213)	76.1 X 2	70 X 2.0	NPT 2 1/2"	G 2 1/2	DN 65	2 1/2	20/30	1
SH-XX-3030	30/30	1,920 (1,213)	2,880 (1,819)	88.9 X 2	85 X 2.0	NPT 3"	G3	DN 80	3	30/30	1
SH-XX-3050	30/50	2,880 (1,819)	4,320 (2,729)	88.9 X 3	85 X 2.0	NPT 3"	G3	DN 80	3	30/50	1
SH-XX-2030B	20/30	4,320 (2,729)	5,760 (3,639)					DN 100	4	20/30	3
SH-XX-3030B	30/30	5,760 (3,639)	7,680 (4,851)					DN 100	4	30/30	3
SH-XX-3030C	30/30	7,680 (4,851)	11,520 (7,277)					DN 150	6	30/30	4
SH-XX-3030D	30/30	11,520 (7,277)	15,360 (9,703)					DN 150	6	30/30	6
SH-XX-3030E	30/30	15,360 (9,703)	19,200 (12,029)					DN 200	8	30/30	8
SH-XX-3030F	30/30	19,200 (12,129)	23,040 (14,554)					DN 200	8	30/30	10

* To create part code, please add the two letters for the corresponding connection you desire.

Please note: that connections sizes correlate to the bowl size in order to accommodate specific volume flows.

Anything that isn't standard will come under a special/non-standard housing.

AS – ASA Threaded Connections

DN – DIN Threaded Connections

NP – NPT Threaded Connections

BP – BSP Threaded Connections

DT – DIN Flanged Connections

AF – ANSI Flanged Connections

Conversion table and note

Operating pressure (bar)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Conversion factor	0.25	0.36	0.50	0.60	0.75	0.90	1.00	1.10	1.20	1.40	1.50	1.60	1.75	1.90	2.00	2.10

Multiply volume shown by the conversion factor to obtain the volume flow (Nm^3/hr) at other operating pressures.

Weight and Dimensions

Element Size	Dimensions in mm (in)						Weight in kg (lb)
	A	B (Threaded)	B (DIN2633)	C	D	E	
03/10	215 (8.46)	105 (4.13)	180 (7.1)	70 (2.76)	55 (2.16)	90 (3.54)	1.7 (3.7)
04/10	243 (9.57)	105 (4.13)	180 (7.1)	70 (2.76)	55 (2.16)	120 (4.72)	1.9 (4.2)
04/20	243 (9.57)	108 (4.25)	180 (7.1)	70 (2.76)	55 (2.16)	120 (4.72)	1.9 (4.2)
05/20	266 (10.5)	125 (4.92)	202 (7.95)	70 (2.76)	55 (2.16)	150 (5.90)	2.0 (4.4)
05/25	293 (11.5)	125 (4.92)	212 (8.34)	85 (3.35)	74 (2.91)	150 (5.90)	2.6 (5.7)
07/25	344 (13.5)	140 (5.51)	220 (8.66)	85 (3.35)	74 (2.91)	200 (7.87)	3.0 (6.6)
07/30	386 (15.2)	170 (6.69)	254 (10)	104 (4.09)	94 (3.70)	200 (7.87)	4.3 (9.5)
10/30	460 (18.1)	170 (6.69)	260 (10.24)	104 (4.09)	94 (3.70)	280 (11.0)	4.8 (10.6)
15/30	587 (23.1)	170 (6.69)	260 (10.24)	104 (4.09)	94 (3.70)	450 (17.7)	5.3 (11.7)
20/30	732 (28.8)	216 (8.50)	290 (11.42)	129 (5.08)	106 (4.17)	580 (22.8)	9 (19.8)
30/30	987 (38.9)	216 (8.50)	300 (11.81)	129 (5.08)	106 (4.17)	850 (33.5)	10.8 (23.8)
30/50	1,026 (40.4)	240 (9.45)	340 (13.39)	154 (6.06)	119 (4.68)	850 (33.5)	16.2 (35.7)
20/30	1,090 (42.9)	410 (16.1)	410 (16.14)	219 (8.62)	200 (7.87)	580 (22.8)	43 (94.8)
30/30	1,350 (53.1)	410 (16.1)	410 (16.14)	219 (8.62)	200 (7.87)	850 (33.5)	44 (97)
30/30	1,410 (55.5)	480 (18.9)	480 (18.9)	273 (10.7)	240 (9.45)	850 (33.5)	70 (154.3)
30/30	1,460 (57.5)	540 (21.3)	540 (21.26)	324 (12.8)	250 (9.84)	850 (33.5)	80 (176.4)
30/30	1,600 (63.0)	660 (26.0)	660 (25.98)	406 (16.0)	300 (11.8)	850 (33.5)	135 (297.6)
30/30	1,600 (63.0)	660 (26.0)	660 (25.98)	406 (16.0)	300 (11.8)	850 (33.5)	135 (297.6)

PFG749d / September 2018 / Rev21: Aug 2021

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