

HBA Filter Housings

- air / gas filtration

- Flow efficient range of air / gas housings
- Demi (TRUESEAL) and K-40" (226) housing sizes
- Designed to maximize flow and minimize pressure drop
- Designed specifically for the food & beverage and sanitary process industries
- STANDARD product
 - Economy and short delivery lead times
- PLUS product
 - Available in 4 different vessel classes: Standard CE, Atex, High Pressure & Oxygen Service
 - Standard, sanitary and sanitary electropolished surface finishes available
 - A number of inlet / outlet port connections
 - Wide range of vent and drain options



Specification

STANDARD Range Materials of Construction

- Housing: 316L Stainless Steel
- Body Seals: Silicone FDA
- Vent / Drain Seals: PTFE FDA
- Clamps: 304 Stainless Steel

Standard Surface Finish

- Internal: As Welded
 - External: Polished 0.8 µm Ra (32 µln Ra)
- All finishes pickled & passivated.*

PLUS Range Materials of Construction

- Housing: 316L Stainless Steel
- Body Seals: Viton FDA, EPDM FDA, PFE FDA
- Clamps: 304 Stainless Steel

Surface Finish

Parker domnick hunter's PLUS range of filter housings are available in a wide range of surface finishes and options. Please see ordering information.

Welding

All assembly welds are full penetration. All welds are crevice and undercut free.
Weld finish & detail drawings available upon request.

Certification

Supplied as standard with vessel inspection certificate.

Material Test Certification

EN10204 3.1 supplied upon request.

Design Code

Housings designed in accordance with the European Council Pressure Equipment Directive (PED) 97/23/EC and the UK statutory Pressure Equipment Regulations (PER) 1999 N° 2001.

PED / PER conformity assessments based on Fluid Group 2 Gas (harmless) including steam. Only housings over PS.V 50 bar / litres bear the CE mark.

Design Basis

ASME VIII Division 1.

STANDARD Range

Working Condition PED 97/23/EC			Maximum Pressure				
Fluid Group	State	Temperature	01A	01B	01K	011	012
Non Dangerous	Gas / Vapour	150 °C (302 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
Dangerous	Gas / Vapour	150 °C (302 °F)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	CAT I
Volume (litres)			0.75	0.5	2.5	3.7	5.6

PLUS Range

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Dangerous	Gas / Vapour	150 °C (302 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	6.60 barg (95.72 psig)	5.30 barg (76.87 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	CAT I	CAT I	CAT I	CAT I
Volume (litres)			0.75	0.5	2.5	3.7	5.6	7.5	9.4

Working Condition PED 97/23/EC			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
Non Dangerous	Gas / Vapour	135 °C (275 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
Dangerous	Gas / Vapour	135 °C (275 °F)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	6.60 barg (95.72 psig)	5.30 barg (76.87 psig)
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Working Condition PED 97/23/EC			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
Non Dangerous	Gas / Vapour	205 °C (401 °F)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	CAT I	CAT I	CAT I	CAT I
Volume (litres)			0.75	0.5	2.5	3.7	5.6	7.5	9.4

Working Condition PED 97/23/EC			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
Dangerous	Gas / Vapour	150 °C (302 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	8.00 barg (116.03 psig)	6.60 barg (95.72 psig)	5.30 barg (76.87 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	CAT I	CAT I	CAT I	CAT I
Volume (litres)			0.75	0.5	2.5	3.7	5.6	7.5	9.4

Note: All housings are fully vacuum rated.

Membrane Filters HIGH FLOW TETPOR II

Food and Beverage sterile air / particulate free filtration

Sterile Air / ISO 8573.1:2001 - Class 1 Particulate Removal

Full retention of bacteria, viruses and particulate. Based on membrane technology. Retention correlated to a liquid bacterial challenge (ASTM 383-05) as well as bacterial and viral aerosol challenge. Used for the most critical of applications including medical, pharmaceutical / aseptic packaging and electronics.

HIGH FLOW TETPOR II Sterile Membrane Filters - ZHFT		Flow rate @ 7 barg (100 psig) 20°C (68 °F) Initial Dp 100 mbar (1.4 psi)	
Filter Type	Port Size	Nm ³ / hr	cfm
HBA01B	1/4"	34	20
HBA01B	3/8"	51	30
HBA01B	1/2"	71	42
HBA01A	3/4"	102	60
HBA01A	1"	153	90
HBA01K	1 1/2"	238	140
HBA011	2"	408	240
HBA012	2"	765	450



Depth Filters HIGH FLOW BIO-X

Proven depth filter technology and pleated construction to provide retention down to 0.01 micron in gas.

HIGH FLOW BIO-X Sterile Depth Filters - ZCHB		Flow rate @ 7 barg (100 psig) 20°C (68 °F) Initial Dp 100 mbar (1.4 psi)	
Filter Type	Port Size	Nm ³ / hr	cfm
HBA01B	1/4"	90	53
HBA01B	3/8"	110	64
HBA01B	1/2"	150	88
HBA01A	3/4"	200	117
HBA01A	1"	290	170
HBA01K	1 1/2"	500	292
HBA011	2"	780	456
HBA012	2"	1150	672



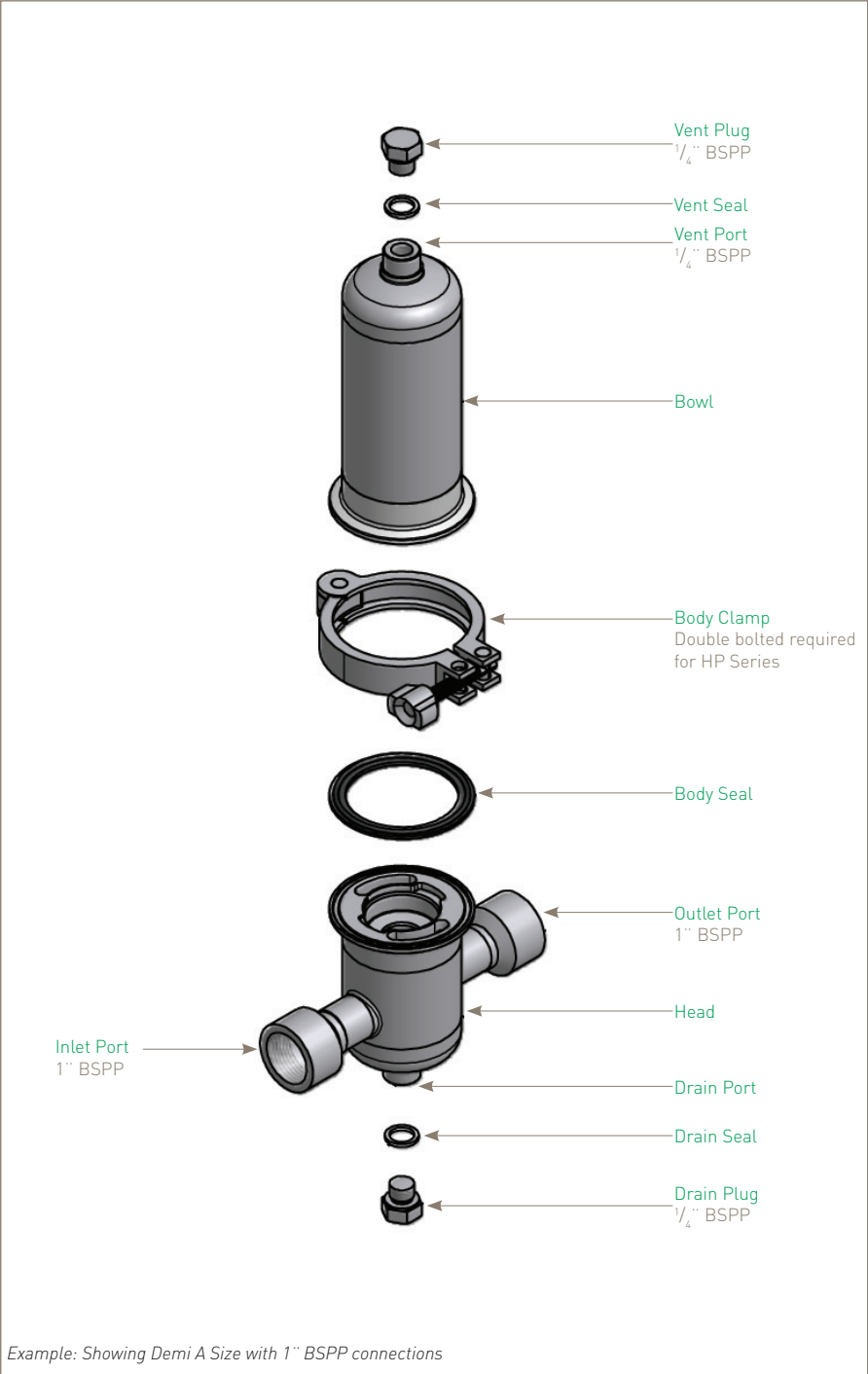
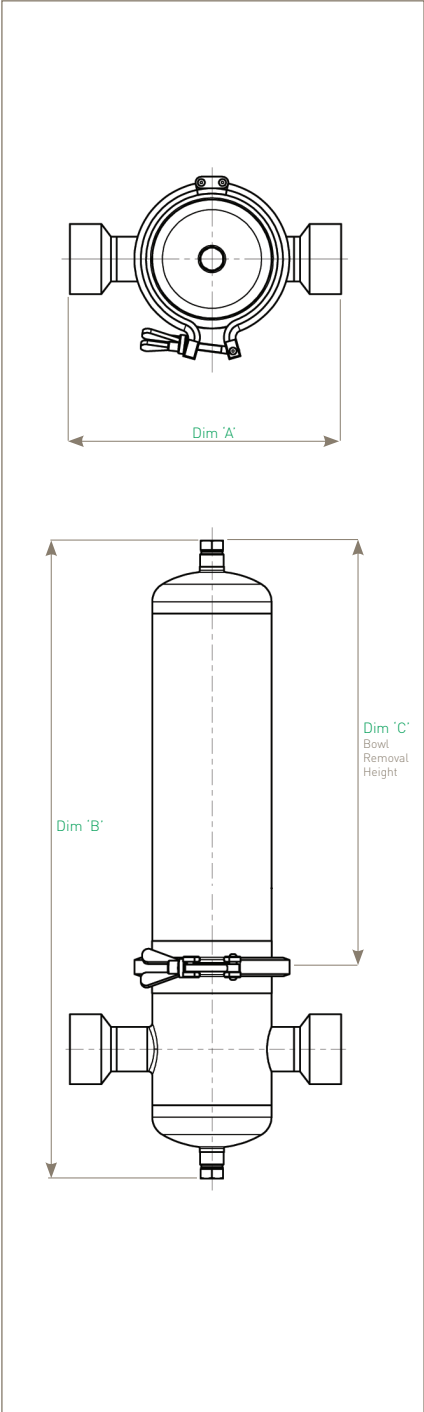
Flow Correction Factors

Line Pressure	barg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	psig	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor		0.4	0.5	0.65	0.75	0.85	0.95	1	1.15	1.25	1.40	1.50	1.60	1.75	1.90	2.00	2.15

Physical Characteristics

Bowl Height	Dimensions (mm)			Typical Weight
	'A'	'B'	'C'	
A Size 125 mm [5"]	220 mm [8.7"]	300 mm [11.8"]	130 mm [5.1"]	1.5 Kg [3.3lbs]
B Size 65 mm [2 1/2"]	220 mm [8.7"]	245 mm [9.6"]	70 mm [2.8"]	1.4 Kg [3.0lbs]
125 mm [5"]	259 mm [10.2"]	398 mm [15.7"]	223 mm [8.8"]	7.0 Kg [15.4 lbs]
250 mm [10"]	259 mm [10.2"]	548 mm [21.6"]	342 mm [13.5"]	7.6 Kg [16.7 lbs]
500 mm [20"]	259 mm [10.2"]	798 mm [31.4"]	590 mm [23.2"]	8.6 Kg [18.9 lbs]
750 mm [30"]	259 mm [10.2"]	1043 mm [41.1"]	838 mm [33.0"]	9.6 Kg [21.1 lbs]
1000 mm [40"]	259 mm [10.2"]	1293 mm [50.9"]	1068 mm [42.0"]	10.6 Kg [23.3 lbs]

Dimensions shown are based on the STANDARD range. For accurate dimensions, please contact Parker domnick hunter.



Example: Showing Demi A Size with 1" BSPP connections

The PLUS product range is available with many options of connections, vents, drains, surface finish, seals classification, etc. Please see product coding.

STANDARD Range - K to 20"

HBA 01 - -

Code Vessel Class	Code Length (Nominal)	Code Connection Size	Code Standard	Code Cartridge	Code Seal
CE Standard	K 5" (125 mm) 1 10" (250 mm) 2 20" (500 mm)	Y 1 1/2" (38.1 mm)	B BSPP N NPT	C 226	S Silicone

STANDARD Range - Demi A & B

HBA 01 - -

Code Vessel Class	Code Length (Nominal)	Code Connection Size	Code Standard	Code Cartridge	Code Seal
CE Standard	A 5" (125 mm) B 2 1/2" (65 mm)	B 1"	B BSPP N NPT	T 126	S Silicone

PLUS Range - K to 40"

HBA 01 - -

Code Vessel Class	Code Length (Nominal)	Code Connection Size	Code Standard	Code Cartridge	Code Seal	Code Vent	Code Drain																		
CE Standard AT ATEX 94/9/EC HP* High Pressure OX Oxygen Service	K 5" (125 mm) 1 10" (250 mm) 2 20" (500 mm) 3 30" (750 mm) 4 40" (1000 mm)	Y 1 1/2" (38.1 mm) C 2" (50.8 mm)	B BSPP (F) D DIN11851(M) F ANSI RF 150 ⁽¹⁾ H ANSI RF 300 L BS4504 DIN2633 N NPT (F) M* SMS Pipe (3008) T Tri-Clamp W ISO / BS Pipe	C 226	E EPDM P* PTFE S Silicone V Viton	B 1/4" BSPP (F) C Rectus 21 Vertical ⁽²⁾ H 1 1/2" TCF & Hosebarb ⁽²⁾ I 1 1/2" TCF & Staubli RBE03 ⁽²⁾ M 1 1/2" TCF & 1/2" TCF ⁽²⁾ N 1/4" NPT (F) R 1 1/2" TCF & Rectus 21 ⁽²⁾ S Staubli RBE03 Vertical T 1 1/2" TCF Only ⁽²⁾	B G 1/4" BSPP N G 1/4" NPT H Hosebarb R Rectus 21 S Staubli RBE03 T 1/2" TCF																		
* Supplied complete with a double bolted clamp.		⁽¹⁾ Not suited for High Pressure Vessels: HP Vessels to use ANSI RF 300 * SMS 1.12" = 38 OD x 1.2 THK SMS 2" = 51 OD x 1.2 THK		⁽²⁾ Not available in Industrial Finish. * Double bolted clamp required		<table border="1"> <thead> <tr> <th>Code Surface Finish</th> <th>Internal</th> <th>External</th> </tr> </thead> <tbody> <tr> <td>B Sanitary</td> <td>0.4 µm</td> <td>0.25 µm</td> </tr> <tr> <td>I Standard</td> <td>As Welded</td> <td>0.8 µm</td> </tr> <tr> <td>P Sanitary Electropolished</td> <td>0.4 µm EP</td> <td>0.25 µm</td> </tr> </tbody> </table>		Code Surface Finish	Internal	External	B Sanitary	0.4 µm	0.25 µm	I Standard	As Welded	0.8 µm	P Sanitary Electropolished	0.4 µm EP	0.25 µm						
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PLUS Range - Demi A & B

HBA 01 -

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