

# HSA Filter Housing

- sanitary air / gas

- Flow efficient sanitary range of air / gas housings to maximize the flow efficiency of the HIGH FLOW range of cartridges
- Designed specifically for the pharmaceutical industry
- Sanitary tri-clamp body closure
- STANDARD product
  - Sanitary connections and surface finish
- PLUS product
  - Available in 4 different vessel classes: Standard (CE), ATEX, High Pressure and Oxygen Service
  - Sanitary and sanitary electropolished surface finishes available
  - Choice of gasket and seal materials



## Specification

### STANDARD Range

#### Materials of Construction

- Housing: 316L Stainless Steel
- Seals: Silicone FDA
- Clamps: 304 Stainless Steel

#### Surface Finish

- Internal: Polished 0.4 µm Ra (16 µIn Ra)
- External: Polished 0.25 µm Ra (10 µIn Ra)

*All finishes pickled & passivated.*

### PLUS Range

#### Materials of Construction

- Housing: 316L Stainless Steel
- Seals: EPDM FDA  
PTFE FDA  
Silicone FDA  
Viton™ / FKM FDA
- Clamps: 304 Stainless Steel

#### Surface Finish

- Sanitary Finish
  - Internal: Polished 0.4 µm Ra (16 µIn Ra)
  - External: Polished 0.25 µm Ra (10 µIn Ra)

*All finishes pickled & passivated.*

- Sanitary Electropolished Finish

- Internal: Polished 0.4 µm Ra (16 µIn Ra) and Electropolished
- External: Polished 0.25 µm Ra (10 µIn Ra)

### 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.

### Directives

Housings designed in accordance with the European Council Pressure Equipment Directive (PED).  
ATEX (where applicable).

### Design Basis

ASME VIII Division 1.

### Approvals

EAC 010-2011, (No. TC N RU D-GB. AM01.B.00511)

Approval type: Import Certificate, TR CU  
Pressure Equipment (available on request)



## Standard Range

Working Condition PED			Maximum Pressure				
Fluid Group	State	Temperature	01A	01B	01K	011	012
Non Dangerous	Gas / Vapour	150 °C (302 °F)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)
Dangerous	Gas / Vapour	150 °C (302 °F)	10 barg (145 psig)	10 barg (145 psig)	8 barg (116 psig)	8 barg (116 psig)	8 barg (116 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	CAT I
Volume (litres)			0.75	0.5	1.9	3.1	5.0

## Plus Range

ATEX Working Condition PED			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
Non Dangerous	Gas / Vapour	135 °C (275 °F)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)
Dangerous	Gas / Vapour	135 °C (275 °F)	8 barg (116 psig)	8 barg (116 psig)	8 barg (116 psig)	8 barg (116 psig)	8 barg (116 psig)	7 barg (104 psig)	5 barg (81 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	CAT I	CAT I	CAT I
Volume (litres)			0.75	0.5	1.9	3.1	5.0	6.9	8.8

CE Working Condition PED			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
Non Dangerous	Gas / Vapour	150 °C (302 °F)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)	10 barg (145 psig)
Dangerous	Gas / Vapour	150 °C (302 °F)	10 barg (145 psig)	10 barg (145 psig)	8 barg (116 psig)	8 barg (116 psig)	8 barg (116 psig)	7 barg (104 psig)	5 barg (81 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	CAT I	CAT I	CAT I
Volume (litres)			0.75	0.5	1.9	3.1	5.0	6.9	8.8

High Pressure Working Condition PED			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
Non Dangerous	Gas / Vapour	205 °C (401 °F)	16 barg (232 psig)	16 barg (232 psig)	16 barg (232 psig)	16 barg (232 psig)	16 barg (232 psig)	16 barg (232 psig)	16 barg (232 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	CAT I	CAT I	CAT I
Volume (litres)			0.75	0.5	1.9	3.1	5.0	6.9	8.8

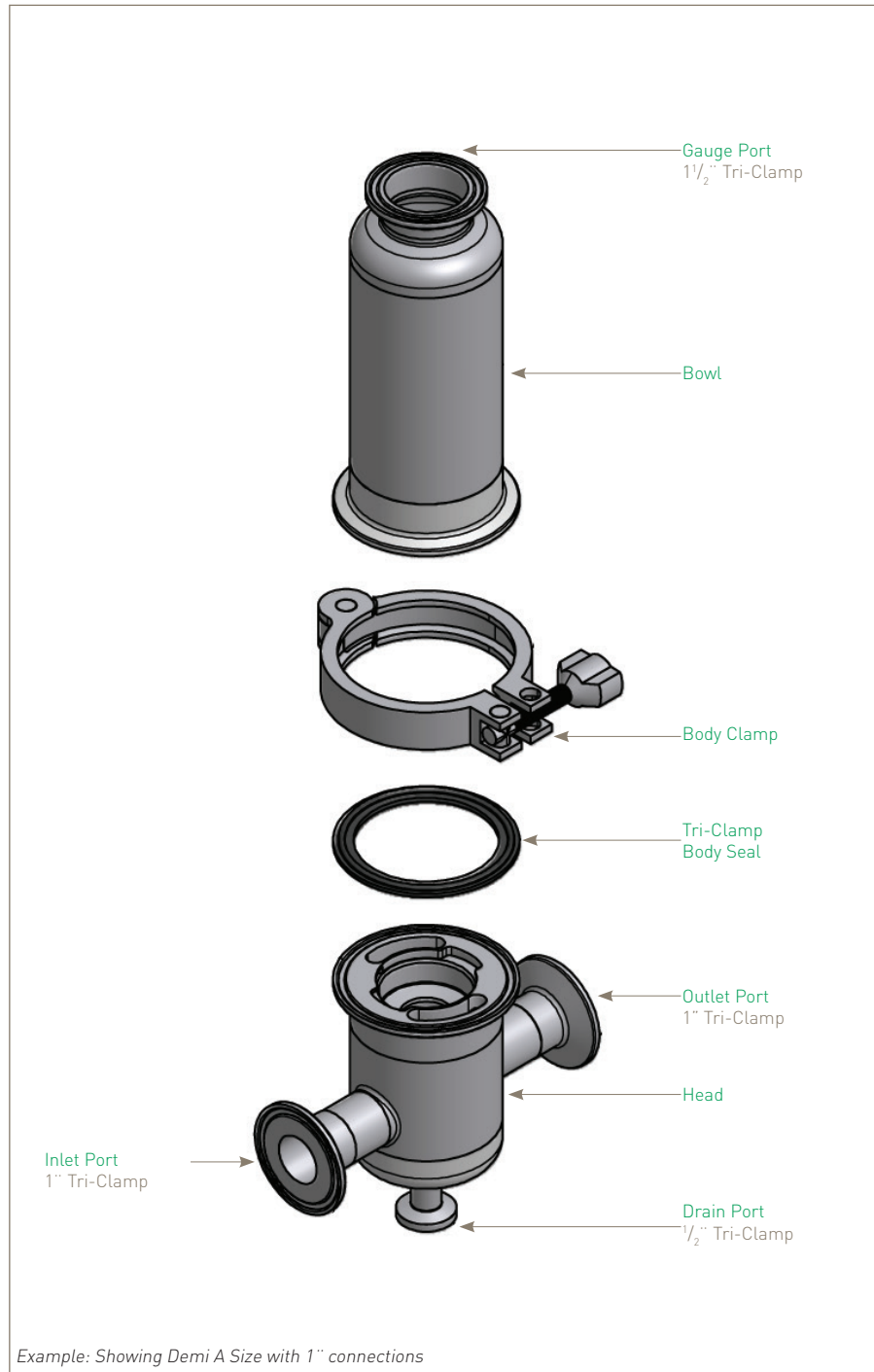
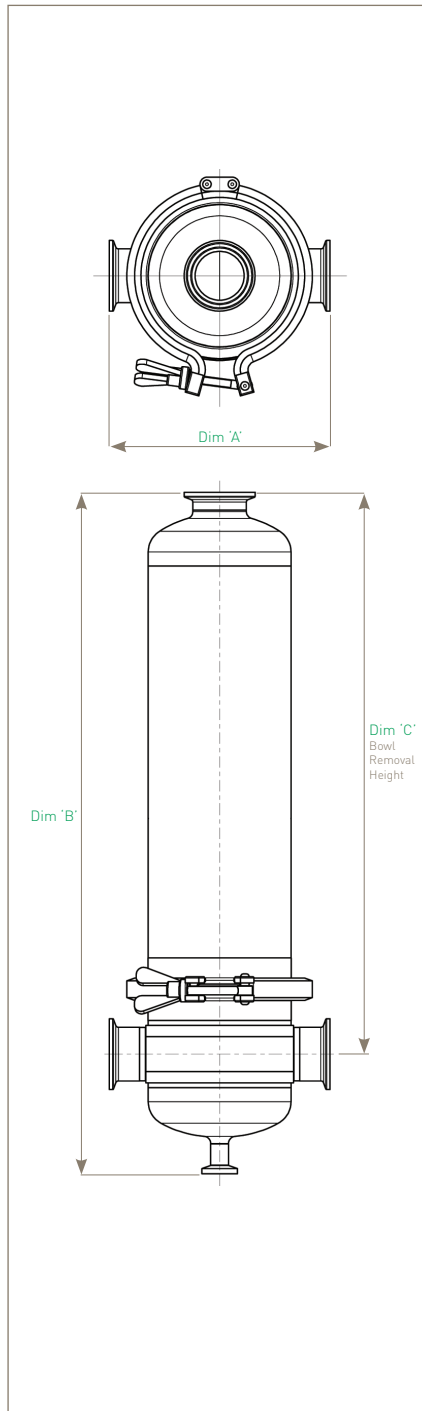
Oxygen Service Working Condition PED			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
Dangerous	Gas / Vapour	150 °C (302 °F)	10 barg (145 psig)	10 barg (145 psig)	8 barg (116 psig)	8 barg (116 psig)	8 barg (116 psig)	7 barg (104 psig)	5 barg (81 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	CAT I	CAT I	CAT I
Volume (litres)			0.75	0.5	1.9	3.1	5.0	6.9	8.8

Note: All housings are full vacuum rated.

## Physical Characteristics

Bowl Height	Dimensions			Typical Weight
	'A'	'B'	'C'	
A Size 125 mm [5"]	152 mm [6.0"]	227 mm [9.0"]	130 mm [5.1"]	1.3 Kg [2.86 lbs]
B Size 65 mm [2 1/2"]	152 mm [6.0"]	172 mm [6.8"]	70 mm [2.8"]	1.2 Kg [2.64 lbs]
125 mm [5"]	157 mm [6.2"]	337 mm [13.3"]	194 mm [7.6"]	5.1 Kg [11.22 lbs]
250 mm [10"]	157 mm [6.2"]	487 mm [19.2"]	313 mm [12.3"]	5.7 Kg [12.54 lbs]
500 mm [20"]	157 mm [6.2"]	737 mm [29.0"]	561 mm [22.1"]	6.7 Kg [14.74 lbs]

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



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"

HSA  01    -  -

Code   Vessel Class	Code   Length (Nominal)	Code   Connection Size	Code   Standard	Code   Cartridge	Code   Seal
CE Standard	K 5" (125 mm)	Y 1 1/2" (38.1 mm)	T Tri-Clamp®	C 226	S Silicone
	1 10" (250 mm)				
	2 20" (500 mm)				

## Delivery Key

<input type="text"/>	Standard delivery times
<input type="text"/>	<b>PLUS</b> delivery times

## STANDARD Range - Demi A & B

HSA  01    -  -

Code   Vessel Class	Code   Length (Nominal)	Code   Connection Size	Code   Standard	Code   Cartridge	Code   Seal
CE Standard	A 5" (125 mm)	B 1"	T Tri-Clamp®	T 126	S Silicone
	B 2 1/2" (65 mm)				

## PLUS Range - K to 40"

HSA  01     -   -  -

Code   Vessel Class	Code   Length (Nominal)	Code   Connection Size	Code   Standard	Code   Cartridge	Code   Seal	Code   Vent	Code   Drain
CE Standard	K 5" (125 mm)	Y 1 1/2" (38.1 mm)	T Tri-Clamp®	C 226	E EPDM	T 1 1/2" Tri-Clamp®	T 1/2" Tri-Clamp
HP* High Pressure	1 10" (250 mm)				P* PTFE	C Rectus 21 Vertical	H Hosebarb
	2 20" (500 mm)	C 2" (50.8 mm)			S Silicone	H 1 1/2" Tri-Clamp® & Hosebarb	R Rectus 21
AT ATEX	3 30" (750 mm)				V Viton™/FKM	I 1 1/2" Tri-Clamp® & Staubli RBE03	S Staubli RBE03
OX Oxygen Service	4 40" (1000 mm)					M 1 1/2" Tri-Clamp® & 1/2" Tri-Clamp®	
						R 1 1/2" Tri-Clamp® & Rectus 21	
						S Staubli RBE03 Vertical	

\* Supplied complete with a double bolted clamp

Code   Surface Finish	Internal	External
B Sanitary	0.4 µm	0.25 µm
P Sanitary Electropolished	0.4 µm EP	0.25 µm

Code   Tagged	
X	No
T	Yes

For Tagged Options customer identification numbers required at time of ordering

## PLUS Range - Demi A & B

HSA  01     -   -  -

Code   Vessel Class	Code   Length (Nominal)	Code   Connection Size	Code   Standard	Code   Cartridge	Code   Seal	Code   Vent	Code   Drain
CE Standard	A 5" (125 mm)	B 1"	T Tri-Clamp®	T 126	E EPDM	T 1 1/2" Tri-Clamp®	T 1/2" Tri-Clamp
HP* High Pressure	B 2 1/2" (65 mm)				P* PTFE	C Rectus 21 Vertical	H Hosebarb
		T 3/4"			S Silicone	H 1 1/2" Tri-Clamp® & Hosebarb	R Rectus 21
		A 1 1/2"			V Viton™/FKM	I 1 1/2" Tri-Clamp® & Staubli RBE03	S Staubli RBE03
AT ATEX						M 1 1/2" Tri-Clamp® & 1/2" Tri-Clamp®	
OX Oxygen Service						R 1 1/2" Tri-Clamp® & Rectus 21	
						S Staubli RBE03 Vertical	

\* Supplied complete with a double bolted clamp

Code   Surface Finish	Internal	External
B Sanitary	0.4 µm	0.25 µm
P Sanitary Electropolished	0.4 µm EP	0.25 µm

Code   Tagged	
X	No
T	Yes

For Tagged Options customer identification numbers required at time of ordering

Stäubli™ is a trademark of Stäubli AG.

Tri-Clamp® is a registered trademark of Alfa-Laval, Inc.

Viton™ is a registered trademark of DuPont Performance Elastomers L.L.C..

**Note:** All Tri-Clamp® connections conform to BS4825 Pt.3

Parker domnick hunter has a continuous policy of product development and although the Company reserves the right to change specifications, it attempts to keep customers informed of any alterations. This publication is for general information only and customers are requested to contact our Process Filtration Sales Department for detailed information and advice on a products suitability for specific applications. All products are sold subject to the company's Standard conditions of sale.



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