



aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Filtration Housings

A guide to products and services



ENGINEERING YOUR SUCCESS.

Contents

General

Precision Manufacturing	4-5	Other Products from Parker domnick hunter	75
Project Management	6-7	Parker Hannifin Group Product Range	76
A Dedicated Filter Range	8-9		

Single & Demi Cartridge Housings

HSA	sanitary air / gas	14-17	HSI	in-line sanitary	34-37
HSA⊕ Z Style	sanitary air / gas	18-19	HIL	industrial liquid	38-41
HBA	beverage air / gas	20-24	HIF	industrial liquid	42-45
HSV	vent applications	25-27	ZVP	industrial plastic	46
HSVLP	sanitary liquid L configuration	28-29			
HSL	sanitary liquid	30-33			

Enhanced Plus Single Cartridge Housings

HCA	Alloy 22 gas	50-51
HCL	Alloy 22 liquid	52-53
HPG	high pressure air / gas	54-55

Multi-Round Cartridge Housings

ZVA	air / gas	58-59	VIL	industrial multi liquid	64-65
VIS	high flow steam	60-61	VSH	beverage	66-67
VSL	sanitary liquid	62-63			

Accessories

Single Housing Heating Equipment	70-71	Spares	74
Gauges	72	Certificates	74
Valves	73		

Parker domnick hunter has a continuous policy of product development and although the Company reserves the right to change specification, 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 product's suitability for specific applications. All products are sold subject to the company's Standard conditions of sale.

Precision Manufacturing

Experience and qualifications provide a flexible approach



Parker domnick hunter, Process Division manufacture stainless and carbon steel pressure vessels and filtration systems that are designed to meet international industry standards and specific customer application requirements.

A combination of highly skilled employees, a dedicated manufacturing facility and 35 years experience of supplying process industries around the world, Parker domnick hunter provide solutions that match your requirements for performance, quality and value.

Our fabrication facility manufacture a standard range of stainless steel and Alloy 22 housings to support our range of filters, which can be modified and adapted to meet any process requirements. Our strength is in providing a range of products that meet industry standards with a flexibility to meet your own process requirements.

Manufacturing capability

- Pressure vessels from 0.1 to 10,000 litres
- Capacity: 5,000+ per year
- Automatic and hand welding techniques
- Assembly and hydro test facility
- Helium leak test, N.D.T., P.M.I. and stress relief
- Welding capability
 - manual / mechanical
 - MIG, MAG, TIG, MMA
 - micro plasma seam
 - keyhole plasma

Testing

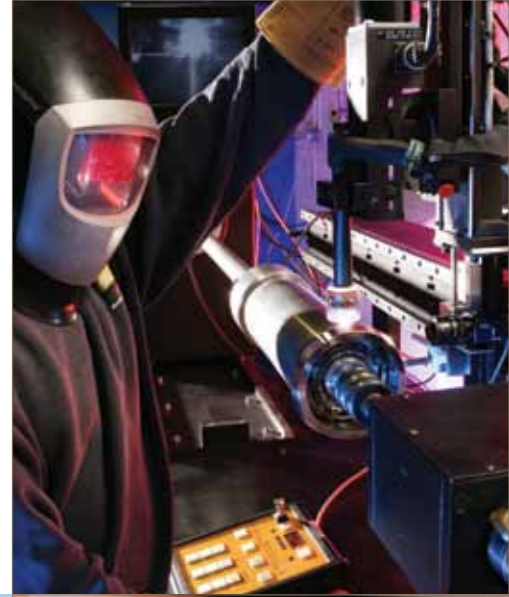
- Helium leak test
- Surface finish
- Hydrostatic testing
- Pneumatic testing
- Ultrasonic testing
- Radiographic (x-ray)
- Swab testing
- Magnetic particle flow detection
- Riboflow testing
- Earth continuity testing

Manufacturing best practice

- ISO9001
- ISO13485
- ISO14001

Vessels built to industry standards

- PED (CE)
- EN / B445
- EN / 286
- BN / 1210
- ATEX
- ASME U
- ASME BPE



Manufacturing Team Improvement Board



Project Management

Engineering your success



Parker domnick hunter, Process Division brings a wealth of experience in working on engineering projects around the world in partnership with some of the leading engineering, consultancy and project management groups. A highly trained workforce have the skills to match your exact requirements to the highest possible standards.

As part of the Parker Hannifin Corporation, Parker domnick hunter can provide:

- Project management
- Process system design
- System fabrication
- Global support
- Operator training
- Dedicated technical support team
- Quality management systems

Our experience and expertise has seen us design and fabricate major systems for industries including:

- Pharmaceutical
- Chemical
- Food and beverage
- Industrial fermentation

A combination of hands on experience, design and manufacturing excellence have gained Parker domnick hunter a reputation for supplying high quality competitive filtration systems.

Leading edge design

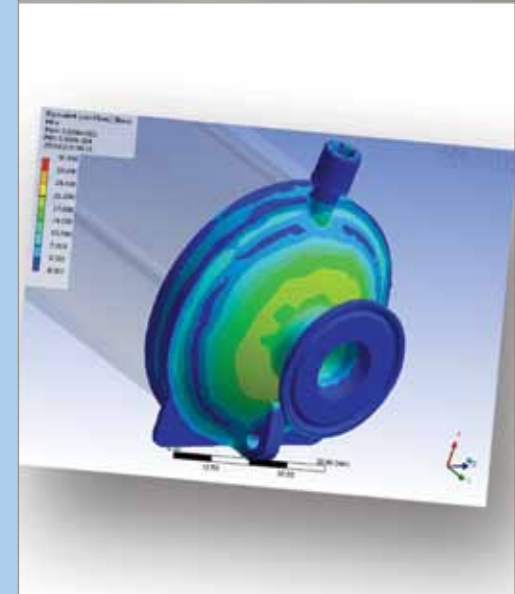
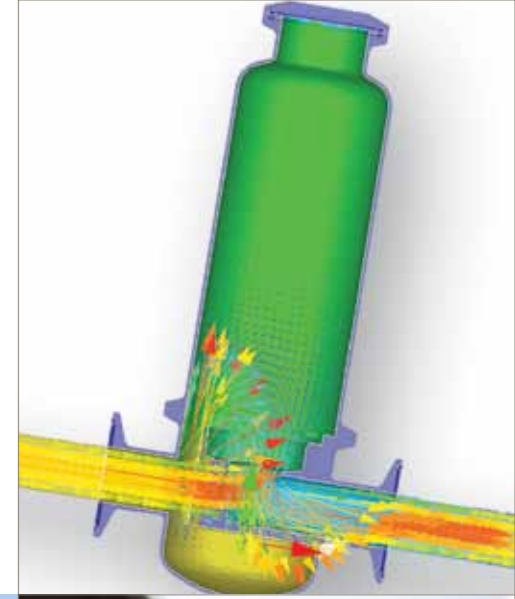
Parker domnick hunter's, Sustaining Engineering Group are dedicated to providing a complete design service for coded pressure vessels, high integrity piping and all associated controls and instrumentation for project or contract work.

Using the latest in 3D CAD technology, Parker domnick hunter have the ability to support each project with:

- Visualization - Photo Rendering
- Rapid Prototyping
- FEA - Finite Element Analysis
- CFD - Computational Flow Dynamics

Project partnership

During the whole qualification phase of a new project, Parker domnick hunter provides formal validation plans, continuous support and assistance with all stages of qualification from factory acceptance through to site installation.



Dedicated Filter Range

Choice and flexibility to suit your application



Parker domnick hunter, Process Division manufacture a range of microfiltration cartridges for liquid and gas applications that utilize the latest production techniques, combining the most suitable membranes and filtration media with the latest easy to use formats.

All of Parker domnick hunter's filters meet strict validation guidelines providing a high degree of assurance that they will consistently achieve a high level of performance in a given application and meet the needs of the industry that they have been specifically designed for.

- Wide choice of filtration media and filter formats
- Technical and validation support
- Industry and application specific filters
- Fully retrofitable range of products
- Manufactured in state-of-the-art facilities

Scaleability provides flexibility
The ability to scale up from small area discs to final manufacturing with minimal revalidation is paramount.

Parker domnick hunter provides a wide range of filter formats to ensure that the transition from pilot scale through to full production is as smooth as possible.

Single use systems
Disposable systems can eliminate cleaning validation, reduce capital costs, minimize health & safety risks and lower the chance of product contamination. Single use systems also provide a more convenient way of processing a product.

Close working relationships
Parker domnick hunter have partnered engineering companies on large scale projects around the world that require filtration expertise and dedicated technical support.

Committed to process improvement
Direct access to our teams from new product development, laboratory services, technical support, manufacturing and quality provide the right solution delivered to you on time, every time.

Our goal is to continually improve your productivity, reduce your process costs and ensure the safety of your final product. Our Technical Support Group (TSG) made up from a multidisciplinary team of Scientists and Engineers working directly with your team to define your process needs and produce optimized solutions.



Single Cartridge Housings

K size to 40" cartridges and Demi A & B size



HSA - Sanitary air / gas housing
High specification air housing

HBA - Beverage air / gas housing
Specifically designed for the food & beverage industry

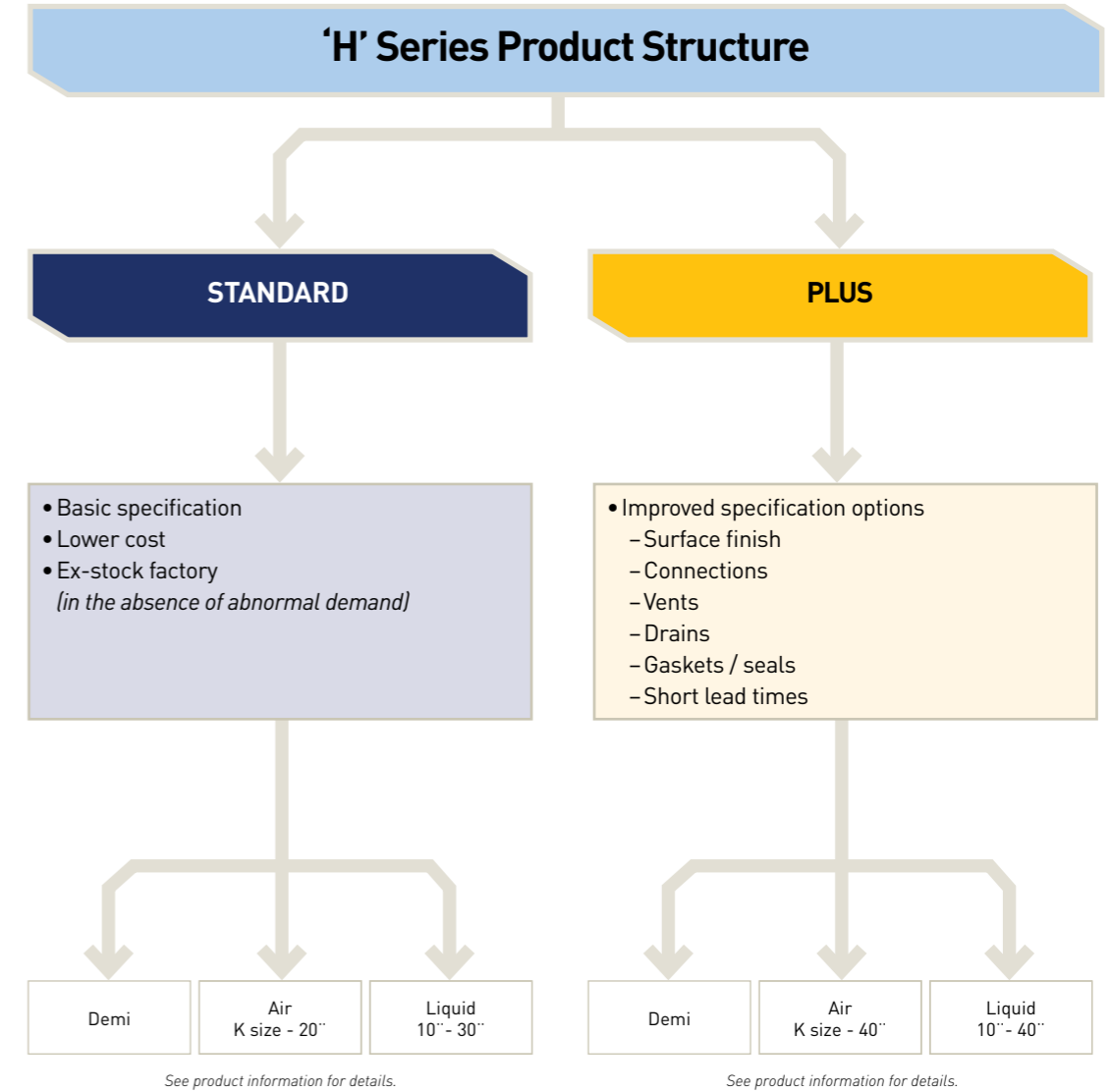
HSV - Vent housing
Flow efficient, self supportive sanitary housing

HSL - Sanitary liquid housing
Food, beverage & pharmaceutical finishes available

HSI - In-line sanitary liquid housing
Food, beverage & pharmaceutical finishes available

HIL - Industrial air / liquid housing
Ideal for water treatment & chemical applications

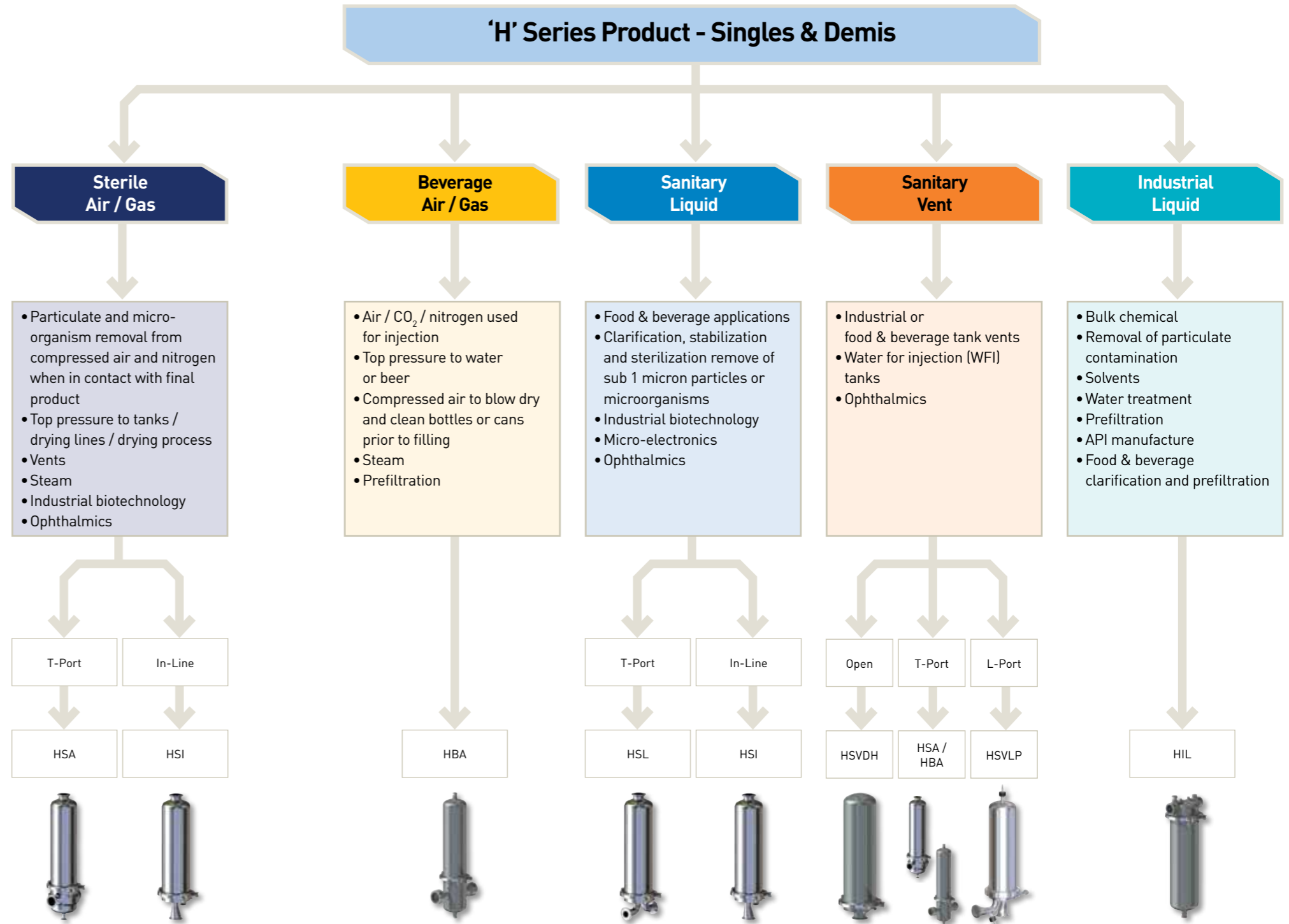
ZVP - Industrial plastic housing



PLUS Classifications	
CE	Standard Design - 10 barg
HP	Higher Pressure - 16 barg
OX	Oxygen Service
AT	ATEX (Atmospheres explosive)

Single Cartridge Housings

K size to 40" cartridges and Demi A & B size



HSA Filter Housing

- sanitary air / gas



- Flow efficient sanitary range of air / gas housings
- 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 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)

- 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.

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)	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)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	SEP
Volume (litres)			0.75	0.5	1.9	3.1	5.0

Plus Range

ATEX 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)	7.20 barg (104.42 psig)	5.60 barg (81.22 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	CAT I	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 97/23/EC			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
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)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
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)	7.20 barg (104.42 psig)	5.60 barg (81.22 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 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	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 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)	7.20 barg (104.42 psig)	5.60 barg (81.22 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 fully vacuum rated.

Demi HSA+ Z Style Filter Housing

- sanitary air / gas



- Flow efficient range of air / gas housings
- Available in 4 different housing classes: Standard (CE), Atex, High Pressure & Oxygen Service
- Sanitary and sanitary electropolished surface finishes available
- A choice of connections, vents, drains, gaskets & surface finishes
- Parker domnick hunter 'Z' location

(PLUS product only - no STANDARD range)

Specification

Materials of Construction

- Housing: 316L Stainless Steel
- Body Seal: EPDM FDA, PTFE FDA, Silicone FDA, Viton FDA
- Vent / Drain Seal: PTFE FDA

Surface Finish Options

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

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.

Design Basis

ASME VIII Division 1.
ATEX 94/9/EC (where applicable)

ATEX Working Condition PED 97/23/EC			Maximum Pressure	
Fluid Group	State	Temperature	01A	01B
Non Dangerous & Dangerous	Gas / Vapour	135 °C (275 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
PED Conformity Assessment Category			SEP	SEP
Volume (litres)			0.75	0.50

CE Working Condition PED 97/23/EC			Maximum Pressure	
Fluid Group	State	Temperature	01A	01B
Non Dangerous & Dangerous	Gas / Vapour	150 °C (302 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
PED Conformity Assessment Category			SEP	SEP
Volume (litres)			0.75	0.50

High Pressure Working Condition PED 97/23/EC			Maximum Pressure	
Fluid Group	State	Temperature	01A	01B
Non Dangerous	Gas / Vapour	205 °C (401 °F)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)
PED Conformity Assessment Category			SEP	SEP
Volume (litres)			0.75	0.50

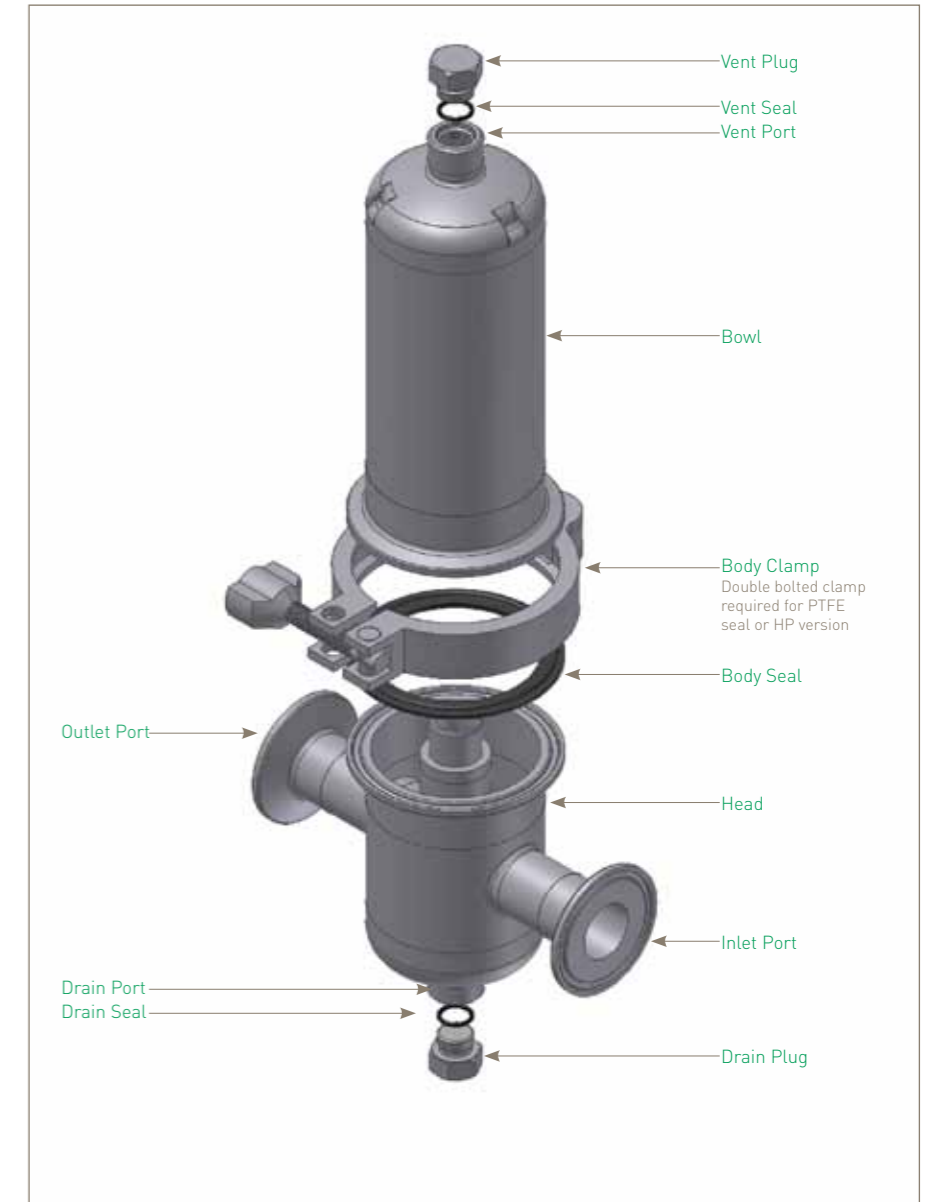
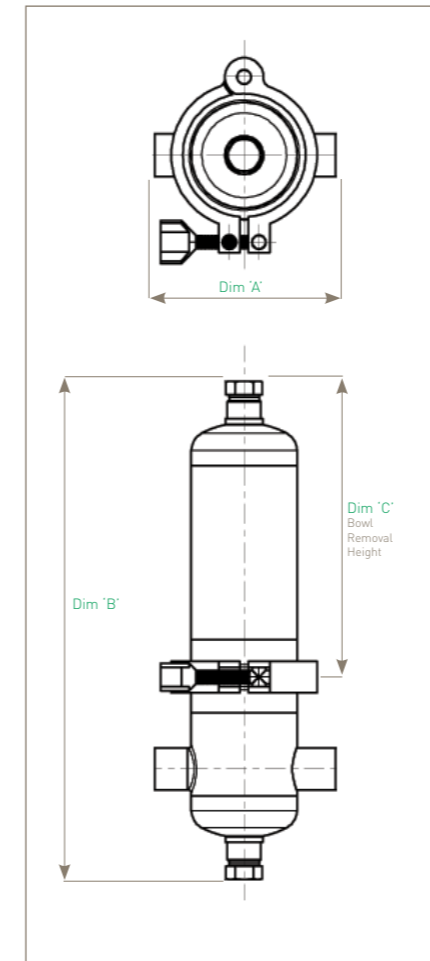
Oxygen Service Working Condition PED 97/23/EC			Maximum Pressure	
Fluid Group	State	Temperature	01A	01B
Dangerous	Gas / Vapour	150 °C (302 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
PED Conformity Assessment Category			SEP	SEP
Volume (litres)			0.75	0.50

Note: All housings are fully vacuum rated.

Physical Characteristics

Bowl Height	Dimensions (mm)						Typical Weight (kg)
	Weld	Tri-Clamp	BSP/NPT	'A'	'B'	'C'	
A Size 5" (125 mm)	106	149	172	295	177	1.5	
B Size 2 1/2" (65 mm)	106	149	172	240	122	1.4	

Dimensions are based on illustration shown. For accurate dimensions, please contact Parker domnick hunter.



Ordering Information

HSA **01** - - -

Code Vessel Class	Code Length (Nominal)	Code Connection Size	Code Standard	Code Cartridge	Code Seal	Code Vent	Code Drain
CE Standard AT ATEX HP High Pressure OX Oxygen Service	A 5" (125 mm) B 2 1/2" (65 mm)	B 1"	B BSPP (F) N NPT (F) T Tri-Clamp W ISO / BS Pipe	Z 116	E EPDM P* PTFE S Silicone V Viton	B 1/4" BSPP (F) N 1/4" NPT (F)	B 1/4" BSPP N 1/4" NPT

* Double bolted clamp required

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	Yes	No
T	Yes	No
X	No	Yes

For Tagged Options customer identification numbers required at time of ordering

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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.

HBA Filter Housings

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

Working Condition PED 97/23/EC			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
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)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
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)
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	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



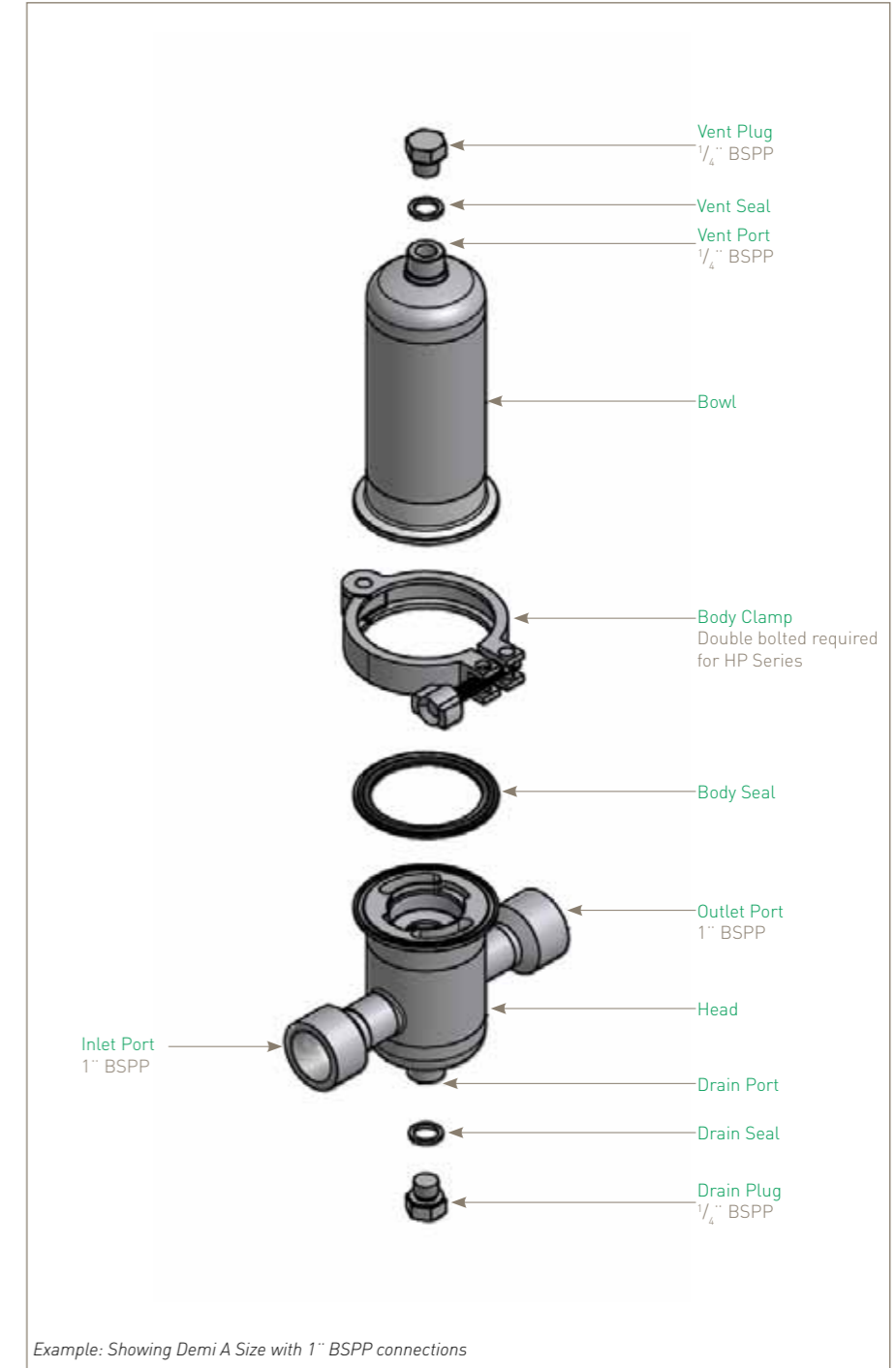
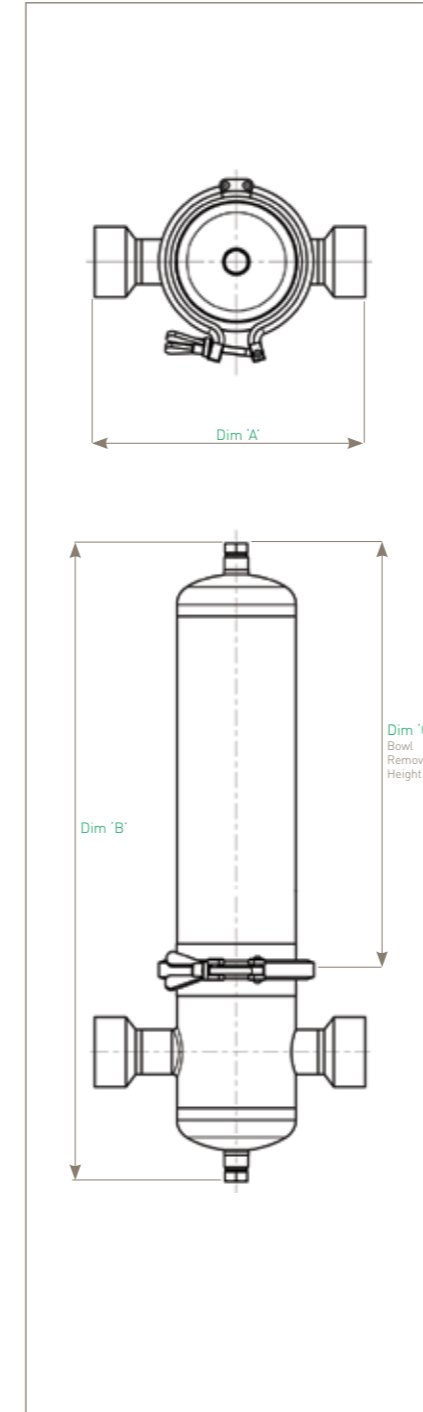
Flow Correction Factors

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.

HBA Filter Housings

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 1/2" (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 1/2" (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 1/2" NPT (F) R 1 1/2" TCF & Rectus 21 ⁽²⁾ S Staubli RBE03 Vertical T 1 1/2" TCF Only ⁽²⁾	B 6 1/4" BSPP N 6 1/2" NPT H Hosebarb R Rectus 21 S Staubli RBE03 T 1/2" TCF

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

Code Tagged	Yes	No
T	Yes	No
X	No	Yes

* Supplied complete with a double bolted clamp

⁽¹⁾ Not suited for High Pressure Vessels. HP Vessels to use ANSI RF 300.

⁽²⁾ SMS 1.12" - 38 OD x 1.2 THK
SMS 2" - 51 OD x 1.2 THK

⁽³⁾ Not available in Industrial Finish.

⁽⁴⁾ Only available in 1".

⁽⁵⁾ Not available in 1/2" or 3/4".

⁽⁶⁾ Not suited for High Pressure Vessels. HP Vessels to use ANSI RF 300.

* SMS 1" - 25 OD x 1.2 THK

For Tagged Options customer identification numbers required at time of ordering

PLUS Range - Demi A & B

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	A 5" (125 mm) B 2 1/2" (65 mm)	B 1" T 3/4" A 1/2" X 3/4" Q 1/4"	B BSPP (F) D ⁽²⁾ DIN11851 F ⁽³⁾⁽⁴⁾ ANSI RF 150 H ⁽³⁾ ANSI RF 300 L ⁽⁵⁾ BS4504 DIN2633 M* SMS Pipe (3008) N NPT (F) T ⁽³⁾ Tri-Clamp W ISO / BS Pipe	T 126	E EPDM P* PTFE S Silicone V Viton	B 1/4" BSPP (F) C Rectus 21 Vertical H ⁽⁶⁾ 1 1/2" TCF & Hosebarb I ⁽⁶⁾ 1 1/2" TCF & Staubli RBE03 M ⁽⁶⁾ 1 1/2" TCF & 1/2" TCF N 1/2" NPT (F) R ⁽⁶⁾ 1 1/2" TCF & Rectus 21 S Staubli RBE03 Vertical T 1 1/2" TCF Only	B 1/4" BSPP N 1/2" NPT H Hosebarb R Rectus 21 S Staubli RBE03 T 1/2" TCF

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

Code Tagged	Yes	No
T	Yes	No
X	No	Yes

* Supplied complete with a double bolted clamp

⁽¹⁾ Not available in Industrial Finish.

⁽²⁾ Only available in 1".

⁽³⁾ Not available in 1/2" or 3/4".

⁽⁴⁾ Not suited for High Pressure Vessels. HP Vessels to use ANSI RF 300.

* SMS 1" - 25 OD x 1.2 THK

For Tagged Options customer identification numbers required at time of ordering

HSV Filter Housings

- vent applications



- Direct connection to tank boss allows housing to be self-supportive
- Easy assembly and maintenance
- STANDARD product
 - Standard surface finish & tri-clamp connection
- PLUS product
 - Available as STANDARD or for Atex applications
 - Standard, sanitary and sanitary electropolished surface finishes available
 - Connection choices

(Also see HSVLP (L-Port) Datasheet)



Specification

STANDARD Range Materials of Construction

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

Surface Finish

- Internal: As welded
 - External: Polished 0.8 µm (32 µIn Ra)
- All finishes pickled & passivated.

PLUS Range Materials of Construction

- Housing: 316L Stainless Steel
 - Seals: EPDM FDA
PTFE FDA
Silicone FDA
Viton FDA
 - Clamps: 304 Stainless Steel
- Note: Seal used only to position bowl clamp arrangement.

Surface Finish

- Standard Finish
 - Internal: As Welded
 - External: Polished 0.8 µm Ra (32 µIn Ra)
- Sanitary Finish
 - Internal: Polished 0.4 µm Ra (16 µIn Ra)
 - External: Polished 0.25 µm Ra (10 µIn Ra)
- 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.

Recommended Operation Guidelines Sizing

Sizing vent vessels particularly for vacuum sensitive tanks can require specialist advice. It is important that VENT housings are sized on maximum gas flow capacity under actual operation conditions.

Vacuum Protection

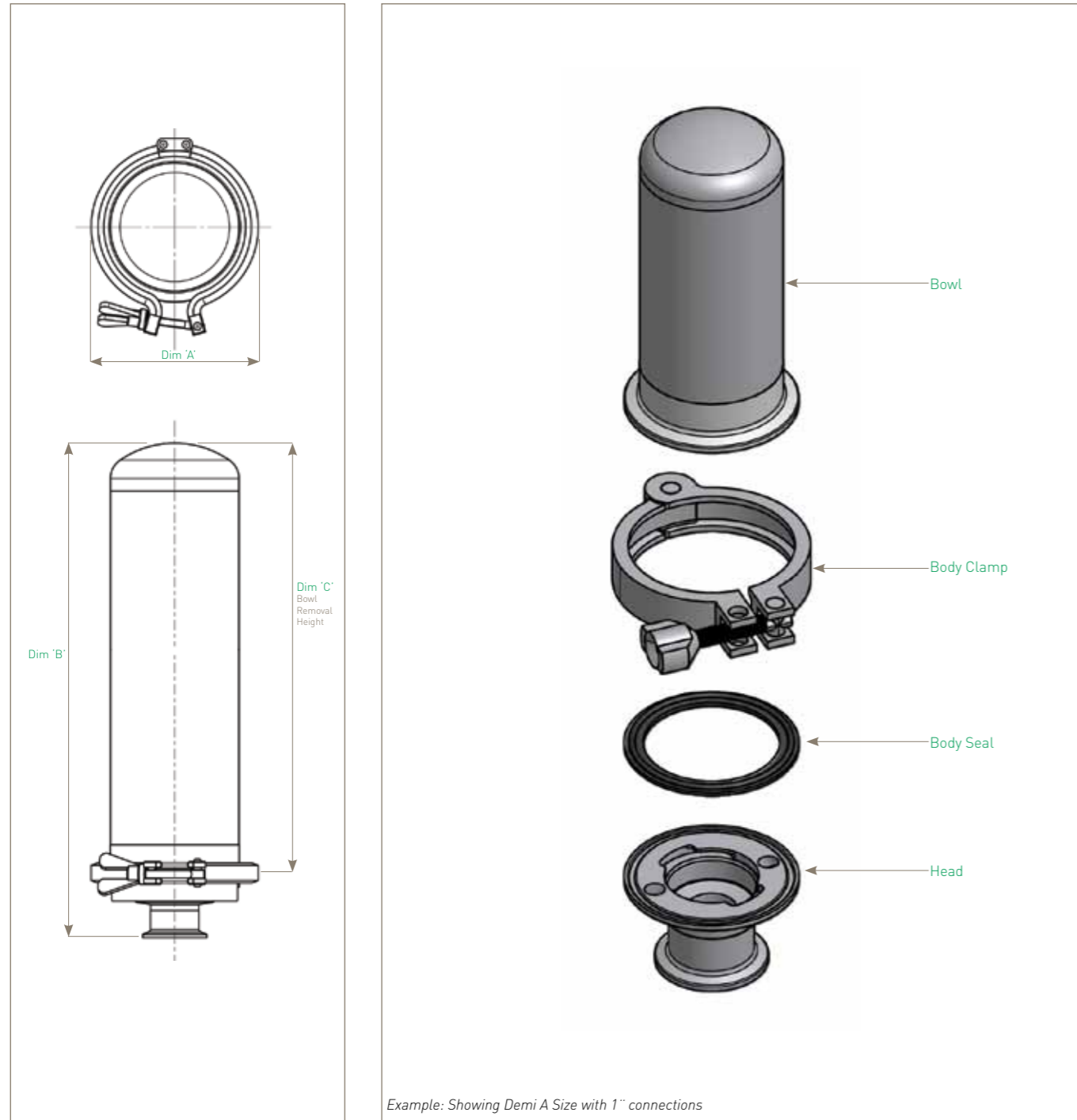
Where a tank is vacuum sensitive, there is a risk of tank collapse. In such cases the fitting of an appropriately rated bursting disc (or similar) and, if necessary a pressure relief valve, is highly recommended.

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Physical Characteristics

Bowl Height	Dimensions (mm)			Typical Weight
	'A'	'B'	'C'	
A Size 125 mm (5")	75 mm (2.9")	195 mm (7.7")	130 mm (5.1")	1.0 Kg (2.2lbs)
B Size 65 mm (2 1/2")	75 mm (2.9")	140 mm (5.5")	70 mm (2.8")	0.9 Kg (1.9lbs)
125 mm (5")	132 mm (5.2")	242 mm (9.5")	194 mm (7.6")	2.2 Kg (4.8 lbs)
250 mm (10")	132 mm (5.2")	392 mm (15.4")	313 mm (12.3")	2.8 Kg (6.1 lbs)
500 mm (20")	132 mm (5.2")	642 mm (25.3")	561 mm (22.1")	3.8 Kg (8.3 lbs)
750 mm (30")	132 mm (5.2")	890 mm (35.0")	809 mm (31.8")	4.8 Kg (10.6 lbs)
1000 mm (40")	132 mm (5.2")	1138 mm (44.8")	1057 mm (41.6")	5.8 Kg (12.8 lbs)

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



Example: Showing Demi A Size with 1" 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"

HSV 01 - -

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

STANDARD Range - Demi A & B

HSV 01 - -

Code Vessel Class	Code Length (Nominal)	Code Connection Size	Code Standard	Code Cartridge	Code Seal
DH Vent Housing	A 5" (125 mm) B 2 1/2" (65 mm)	B 1" (25.4 mm)	T Tri-Clamp	T 126	S Silicone

PLUS Range - K to 40"

HSV 01 - -

Code Vessel Class	Code Length (Nominal)	Code Connection Size	Code Standard	Code Cartridge	Code Seal	Code Surface Finish	Internal	External	Code Tagged
DH Standard AT ATEX	K 5" (125 mm) 1 10" (250 mm) 2 20" (500 mm) 3 30" (750 mm) 4 40" (1000 mm)	C 2" (50.8 mm) Y 1 1/2" (38.1 mm)	B BSPP (F) D DIN11851(M) F ANSI RF150 L BS4504 DIN2633 N NPT (F) T Tri-Clamp W BS/ISO Pipe	C 226	E EPDM P PTFE S Silicone V Viton	B Sanitary I Standard P Sanitary Electropolished	0.4 µm As Welded 0.4 µm EP	0.25 µm 0.8 µm 0.25 µm	T Yes X No

For Tagged Options customer identification numbers required at time of ordering

PLUS Range - Demi A & B

HSV 01 - -

Code Vessel Class	Code Length (Nominal)	Code Connection Size	Code Standard	Code Cartridge	Code Seal	Code Surface Finish	Internal	External	Code Tagged
DH Standard AT ATEX	A 5" (125 mm) B 2 1/2" (65 mm)	B 1" (25.4 mm)	B BSPP (F) D DIN11851 F ANSI RF150 L BS4504 DIN2633 N NPT (F) T Tri-Clamp	T 126	E EPDM P PTFE S Silicone V Viton	B Sanitary I Standard P Sanitary Electropolished	0.4 µm As Welded 0.4 µm EP	0.25 µm 0.8 µm 0.25 µm	T Yes X No

For Tagged Options customer identification numbers required at time of ordering

Note: All housings are fully vacuum rated.

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.

HSL Filter Housings

- sanitary liquid

- Single element sanitary liquid housing
- Designed specifically for the food & beverage and pharmaceutical industries
- Sanitary tri-clamp body closure as standard
- STANDARD product
 - Sanitary surface finish
 - Tri-clamp connections
- PLUS product
 - Available in 3 different vessel classes: Standard (CE), Atex and High Pressure
 - Sanitary or sanitary electropolished surface finish options
 - Wide range of vent and drain connections
 - 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 µln Ra)
 - External: Polished 0.25 µm Ra (10 µln Ra)
- All finishes pickled & passivated.*

PLUS Range

Materials of Construction

- Housing: 316L Stainless Steel
- Seals: EPDM FDA, PTFE FDA, Silicone FDA, Viton FDA
- Clamps: 304 Stainless Steel

Surface Finish

- Sanitary Finish
 - Internal: Polished 0.4 µm Ra (16 µln Ra)
 - External: Polished 0.25 µm Ra (10 µln Ra)
- Sanitary Electropolished Finish
 - Internal: Polished 0.4 µm Ra (16 µln Ra) and Electropolished
 - External: Polished 0.25 µm Ra (10 µln 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.

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	011	012	013
Non Dangerous	Liquid / Gas	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	Liquid / Gas	150 °C [302 °F]	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	CAT I
Volume (litres)			0.75	0.5	2.9	4.8	6.7

Plus Range

Working Condition PED 97/23/EC			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
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)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
Dangerous	Gas / Vapour	150 °C [302 °F]	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
Non Dangerous	Liquid	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)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
Dangerous	Liquid	150 °C [302 °F]	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	SEP	CAT I	CAT I
Volume (litres)			0.75	0.5	1.7	2.9	4.8	6.7	8.6

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]	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
Non Dangerous	Liquid	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	Liquid	135 °C [275 °F]	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	SEP	CAT I	CAT I
Volume (litres)			0.75	0.5	1.7	2.9	4.8	6.7	8.6

Working Condition PED 97/23/EC			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
Non Dangerous	Gas / Vapour / Liquid	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	SEP	CAT I	CAT I	CAT I
Volume (litres)			0.75	0.5	1.7	2.9	4.8	6.7	8.6

Note: All housings are fully vacuum rated.

HSI Filter Housings

- in-line sanitary liquid & gas



- In-line sanitary liquid & gas housing
- Designed specifically for the food and beverage and pharmaceutical industry
- Sanitary tri-clamp body closure as standard
- STANDARD product
 - Sanitary surface finish
 - Tri-clamp connections
- PLUS product
 - Available in 3 different vessel classes: Standard (CE), Atex & High Pressure
 - Sanitary or sanitary electropolished surface finish options
 - Wide range of vent and drain connections
 - Choice of gasket and seal materials

Specification

Materials of Construction

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

STANDARD Range Surface Finish

- Internal: Polished 0.4 µm Ra (16 µIn Ra)
 - External: Polished 0.25 µm Ra (10 µIn Ra)
- All finishes pickled & passivated.*

Materials of Construction

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

PLUS Range Surface Finish

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

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	011	012	013
Non Dangerous	Liquid / Gas	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	Liquid / Gas	150 °C [302 °F]	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	CAT I
Volume (litres)			0.75	0.5	2.9	4.8	6.7

Plus Range

Working Condition PED 97/23/EC			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
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)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
Dangerous	Gas / Vapour	150 °C [302 °F]	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
Non Dangerous	Liquid	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)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
Dangerous	Liquid	150 °C [302 °F]	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	SEP	CAT I	CAT I
Volume (litres)			0.75	0.5	1.7	2.9	4.8	6.7	8.6

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]	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
Non Dangerous	Liquid	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	Liquid	135 °C [275 °F]	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
PED Conformity Assessment Category			SEP	SEP	SEP	SEP	SEP	CAT I	CAT I
Volume (litres)			0.75	0.5	1.7	2.9	4.8	6.7	8.6

Working Condition PED 97/23/EC			Maximum Pressure						
Fluid Group	State	Temperature	01A	01B	01K	011	012	013	014
Non Dangerous	Gas / Vapour / Liquid	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	SEP	CAT I	CAT I	CAT I
Volume (litres)			0.75	0.5	1.7	2.9	4.8	6.7	8.6

Note: All housings are fully vacuum rated.

HIL Filter Housings

- industrial liquid



- Industrial liquid housing for prefiltration and clarification duties
- STANDARD product
 - BSP (G) or NPT connections and standard finish
- PLUS product
 - Available in 3 different vessel classes: Standard (CE), Atex & High Pressure
 - Standard and electropolished surface finishes available
 - A number of inlet / outlet port connections
 - Choice of BSP, NPT or no vent
 - Choice of BSP or NPT drain
 - Option of C (226) location and fabricated (not cast) head

Specification

STANDARD Range Materials of Construction

- Housing: Cast Head - Stainless Steel
Bowl - 316L Stainless Steel
- Seals: EPDM FDA
- Clamps: 304 Stainless Steel

Surface Finish

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

PLUS Range Materials of Construction

- Housing: Cast Head - Stainless Steel
Bowl - 316L Stainless Steel
- Seals: EPDM FDA
PTFE FDA
Silicone FDA
Viton FDA
- Clamps: 304 Stainless Steel

Surface Finish

Two Finished Available:

- Standard Finish
Head-Cast, Pickled & Passivated
Bowl Internal: As Welded
Pickled & Passivated
Bowl External: Polished 0.8 µm Ra (32 µIn Ra)
- Standard Electropolished Finish
Head-Cast, Pickled & Passivated
Bowl Internal: Electropolished
Bowl External: Polished 0.8 µm Ra (32 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.

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	011	012	013
Non Dangerous	Liquid / Gas	150 °C (302 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
Dangerous	Liquid / Gas	150 °C (302 °F)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
PED Conformity Assessment Category			SEP	CAT I	CAT I
Volume (litres)			3.2	5.1	7.0

PLUS Range

Working Condition PED 97/23/EC			Maximum Pressure			
Fluid Group	State	Temperature	011	012	013	014
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)
Dangerous	Gas / Vapour	150 °C (302 °F)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
Non Dangerous	Liquid	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)
Dangerous	Liquid	150 °C (302 °F)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
PED Conformity Assessment Category			SEP	CAT I	CAT I	CAT I
Volume (litres)			3.2	5.1	7.0	8.9

Working Condition PED 97/23/EC			Maximum Pressure			
Fluid Group	State	Temperature	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)
Dangerous	Gas / Vapour	135 °C (275 °F)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
Non Dangerous	Liquid	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)
Dangerous	Liquid	135 °C (275 °F)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)	5.00 barg (72.51 psig)
PED Conformity Assessment Category			SEP	CAT I	CAT I	CAT I
Volume (litres)			3.2	5.1	7.0	8.9

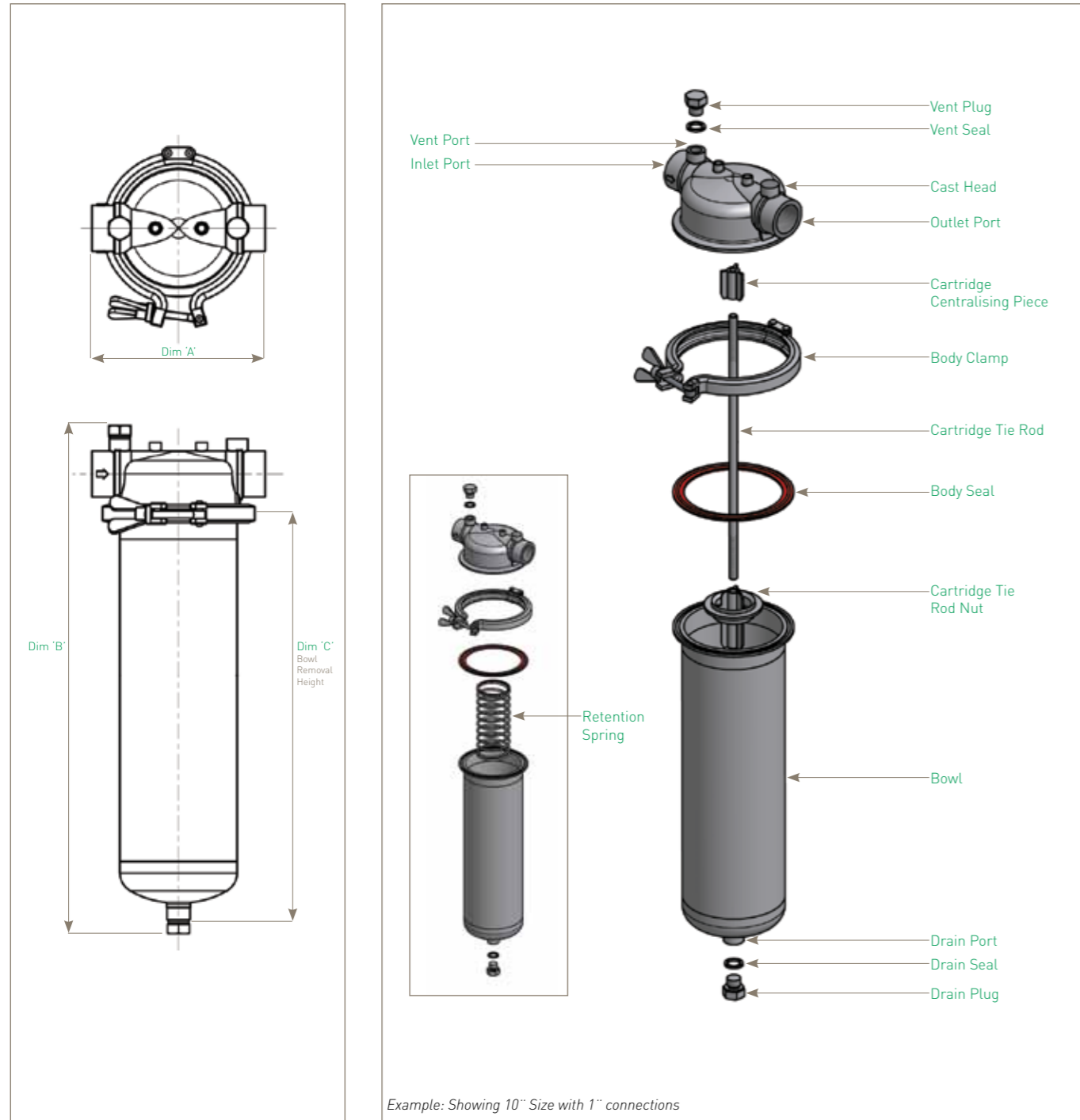
Working Condition PED 97/23/EC			Maximum Pressure			
Fluid Group	State	Temperature	011	012	013	014
Non Dangerous	Gas / Vapour / Liquid	205 °C (401 °F)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)
PED Conformity Assessment Category			CAT I	CAT I	CAT I	CAT I
Volume (litres)			3.2	5.1	7.0	8.9

Note: All housings are fully vacuum rated.

Physical Characteristics

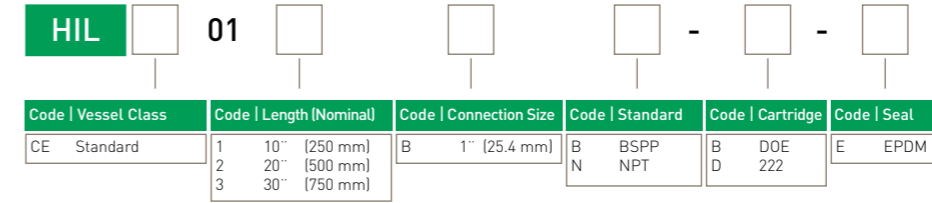
Bowl Height	Dimensions (mm)			Bowl	Typical Weight	
	'A'	'B'	'C'		Head	Total
250 mm (10")	150 mm (5.9")	441 mm (17.4")	297 mm (11.7")	1.5 Kg (3.3 lbs)	1.2 Kg (2.6 lbs)	3.8 Kg (8.4 lbs)
500 mm (20")	150 mm (5.9")	691 mm (27.2")	550 mm (21.7")	2.5 Kg (5.5 lbs)	1.2 Kg (2.6 lbs)	4.9 Kg (10.8 lbs)
750 mm (30")	150 mm (5.9")	936 mm (26.9")	814 mm (32.0")	3.5 Kg (7.7 lbs)	1.2 Kg (2.6 lbs)	6.0 Kg (13.2 lbs)

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

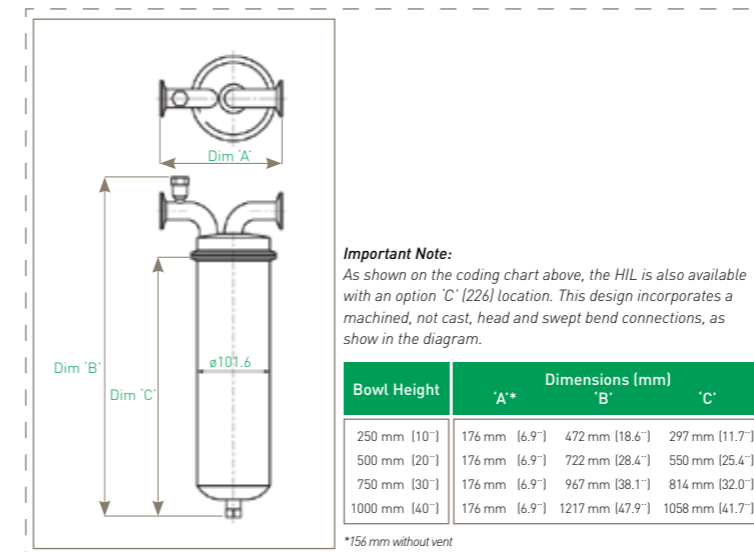
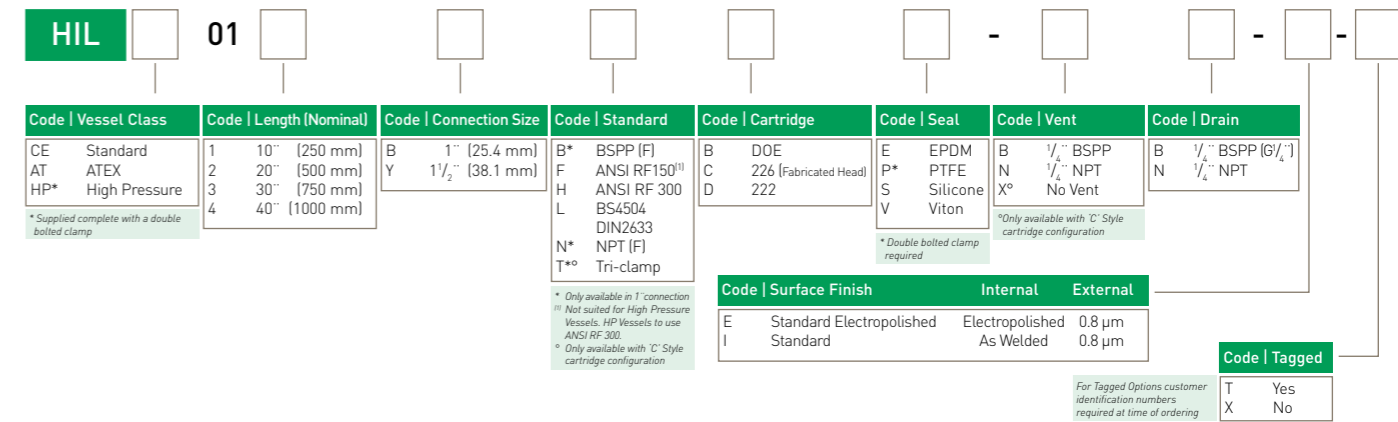


The PLUS product range is available with many options of connections, vents, drains, surface finish, seals classification, etc. Please see product coding.

STANDARD Range - 10" to 30"



PLUS Range - 10" to 40"



Parker donnick 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.

Demi HIF Filter Housing

- industrial gas / liquid



- Industrial gas and liquid housing with 2" location
- STANDARD product
 - Economy and short delivery lead times
- PLUS product
 - Available in 3 different vessel classes: Standard (CE), Atex, and High Pressure
 - Standard and electropolished surface finishes available
 - A number of inlet / outlet port connections
 - Choice BSP(G) or NPT vent and drains

Specification

STANDARD Range Materials of Construction

- Housing: Cast Head - Stainless Steel
Bowl - 316L Stainless Steel
- Body Seal: EPDM FDA
- Vent / Drain Seal: PTFE FDA
- Clamps: 304 Stainless Steel

Surface Finish

- Internal: Unpolished 1 µm Typical
 - External: Polished 0.8 µm Ra (32 µIn Ra)
- All finishes pickled & passivated.*

PLUS Range Materials of Construction

- Housing: Cast Head - Stainless Steel
Bowl - 316L Stainless Steel
- Body Seal: EPDM FDA
PTFE FDA
Silicone FDA
Viton FDA
- Vent / Drain Seal: PTFE FDA
- Clamps: 304 Stainless Steel

Surface Finish Options Two Finishes Available:

- Standard Finish
Head-Cast, Pickled & Passivated
Bowl Internal: As Welded
Pickled & Passivated
Bowl External: Polished 0.8 µm Ra (32 µIn Ra)
- Standard Electropolished Finish
Head-Cast, Pickled, Passivated & Electropolished
Bowl Internal: Electropolished
Bowl External: Polished 0.8 µm Ra (32 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.

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.

Design Basis

ASME VIII Division 1.

Demi HIF Filter Housings

STANDARD Range

Working Condition PED 97/23/EC			Maximum Pressure	
Fluid Group	State	Temperature	01A	01B
Non Dangerous & Dangerous	Liquid / Gas	150 °C (302 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
PED Conformity Assessment Category			SEP	SEP
Volume (litres)			0.75	0.50

PLUS Range

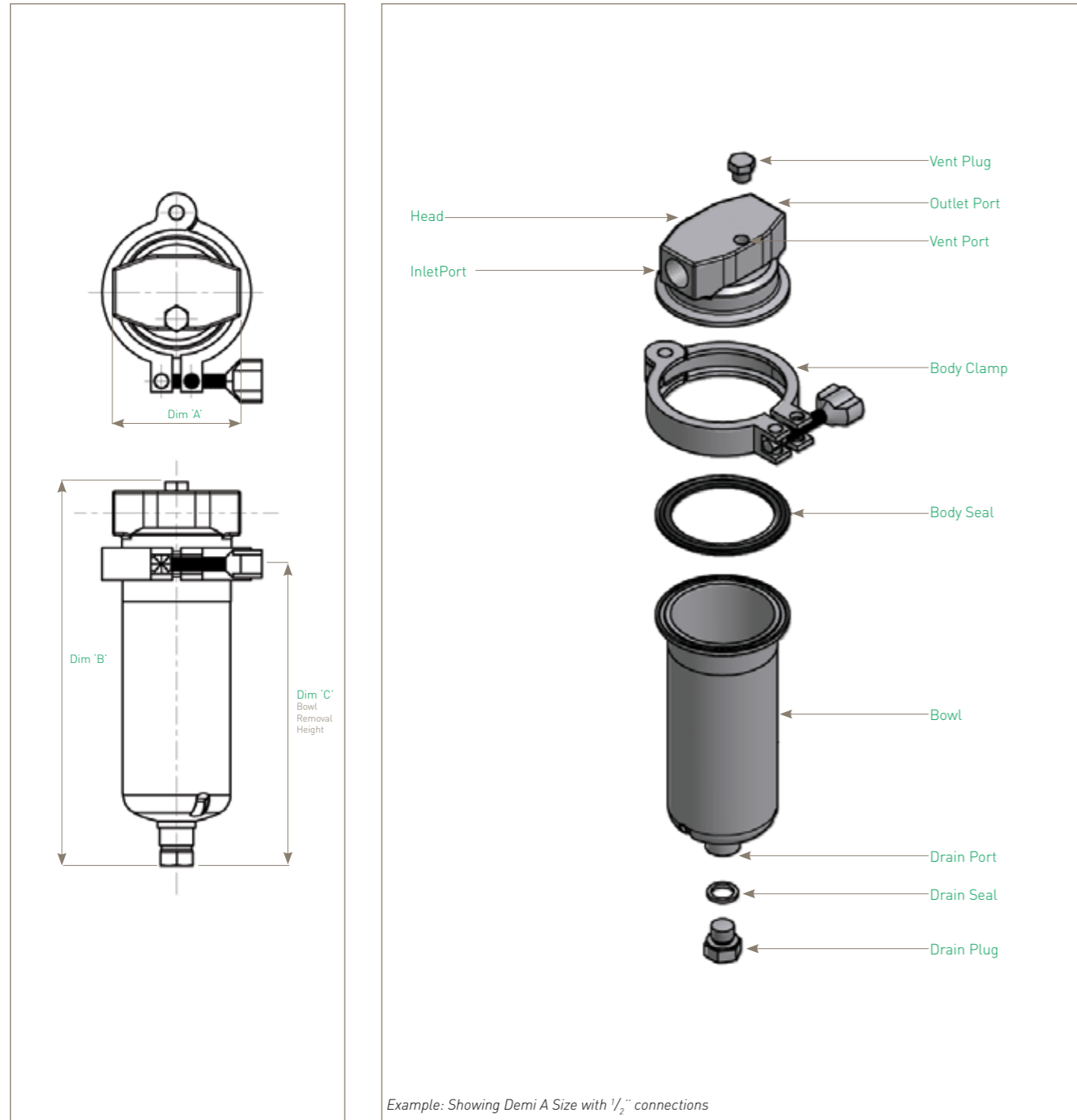
ATEX Working Condition PED 97/23/EC			Maximum Pressure	
Fluid Group	State	Temperature	01A	01B
Non Dangerous & Dangerous	Gas / Vapour & Liquid	135 °C (275 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
PED Conformity Assessment Category			SEP	SEP
Volume (litres)			0.75	0.50
CE Working Condition PED 97/23/EC			Maximum Pressure	
Fluid Group	State	Temperature	01A	01B
Non Dangerous & Dangerous	Gas / Vapour & Liquid	150 °C (302 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
PED Conformity Assessment Category			SEP	SEP
Volume (litres)			0.75	0.50
High Pressure Working Condition PED 97/23/EC			Maximum Pressure	
Fluid Group	State	Temperature	01A	01B
Non Dangerous	Gas / Vapour	205 °C (401 °F)	16.00 barg (232.06 psig)	16.00 barg (232.06 psig)
PED Conformity Assessment Category			SEP	SEP
Volume (litres)			0.75	0.50

Note: All housings are fully vacuum rated.

Physical Characteristics

Bowl Height	Dimensions (mm)			Typical Weight
	'A'	'B'	'C'	
A Size 125 mm [5"]	75 mm [2.9"]	226 mm [8.8"]	130 mm [5.1"]	1.5 Kg [3.3lbs]
B Size 65 mm [2 1/2"]	75 mm [2.9"]	171 mm [6.7"]	70 mm [2.7"]	1.4 Kg [3.0lbs]

Dimensions shown are based on the STANDARD range. For accurate dimensions, please contact Parker domnick 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 - Demi A & B

HIF [] 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]	A 1/2"	B BSPP N NPT	Z 116	E EPDM

PLUS Range - Demi A & B

HIF [] 01 [] [] [] [] [] - [] [] - [] [] []

Code Vessel Class	Code Length (Nominal)	Code Connection Size	Code Standard	Code Cartridge	Code Seal	Code Vent	Code Drain
CE Standard AT ATEX HP High Pressure	A 5" [125 mm] B 2 1/2" [65 mm]	A 1/2" X 3/8"	B BSPP (F) N NPT (F)	Z 116	E EPDM P* PTFE S Silicone V Viton	B N 1/4" BSPP 1/4" NPT	B N 1/4" BSPP 1/4" NPT

* Double bolted clamp required

Code Surface Finish	Internal	External
E Standard Electropolished	Electropolished	Linished 0.8 µm
I Standard	As Welded	Linished 0.8 µm

Code Tagged	Yes	No
T	Yes	No
X	No	Yes

For Tagged Options customer identification numbers required at time of ordering

ZVP Housings

- industrial plastic

- Single cartridge polypropylene / nylon housing
- Accepts DOE filters with knife edge sealing
- Accepts plug-in cartridges with positive o-ring seals
- Meets water conditioning foundation standards for hydraulic leak test and ultimate burst pressure
- Cost-effective filtration of liquids for pharmaceutical, chemical and beverage applications



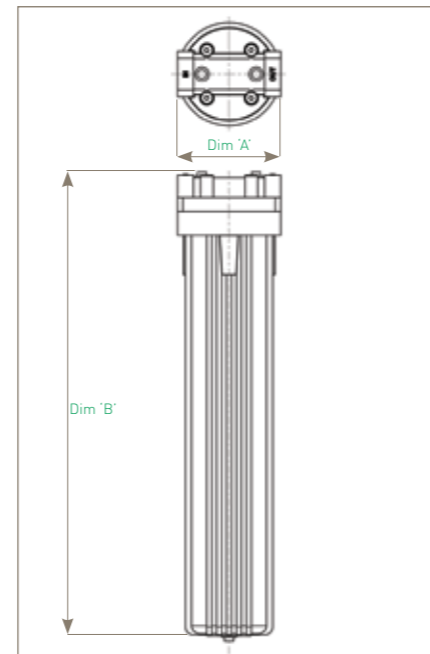
Available Options

Type	Material	Design Pressure (barg)	Cartridge ^o Location	Design Temperature	
ZVP-1	Reinforced Polypropylene	8.6	B	51.7 °C	(125.0 °F)
ZVP-2	Reinforced Polypropylene	8.6	B & N	51.7 °C	(125.0 °F)
ZVP-3	Polycarbonate / Reinforced Polypropylene	8.6	B & N	51.7 °C	(125.0 °F)
ZVP-4	Nylon	8.5	B & N	71.1 °C	(160.0 °F)
ZVP-5	Reinforced Polypropylene	8.6	N	51.7 °F	(125.0 °F)
ZVP-7	Reinforced Polypropylene	8.6	J	51.7 °C	(125.0 °F)
ZVP-10	Reinforced Polypropylene	8.6	J	51.7 °C	(125.0 °F)
ZVP-11	Pure Polypropylene	8.9	J	38.0 °C	(100.4 °F)

Type	Crossport (A) (mm)	Overall Height (B) (mm)	Approx. Weight (kg)	Approx. Volume (L)	Connection Size / Type	Vent Button
ZVP-1	112.7	180	0.6	0.7	3/8" BSPP	Yes
ZVP-2	130.0	311	1.5	1.6	3/4" BSPP	Yes
ZVP-3	130.0	321	1.2	1.6	3/4" BSPP	Yes
ZVP-4	130.0	305	1.8	1.6	3/4" BSPP	No
ZVP-5	130.0	569	1.9	2.6	3/4" BSPP	Yes
ZVP-7	130.0	311	1.5	1.6	3/4" BSPP	Yes
ZVP-10	130.0	569	1.9	2.6	3/4" BSPP	Yes
ZVP-11	130.0	316	1.4	1.6	3/4" BSPP	No*

* 3/4" BSPP vent and drain sockets with o-rings and plugs

Code	Cartridge Location
B	dh DOE
N	Internal 213
J	SOE (o-ring)



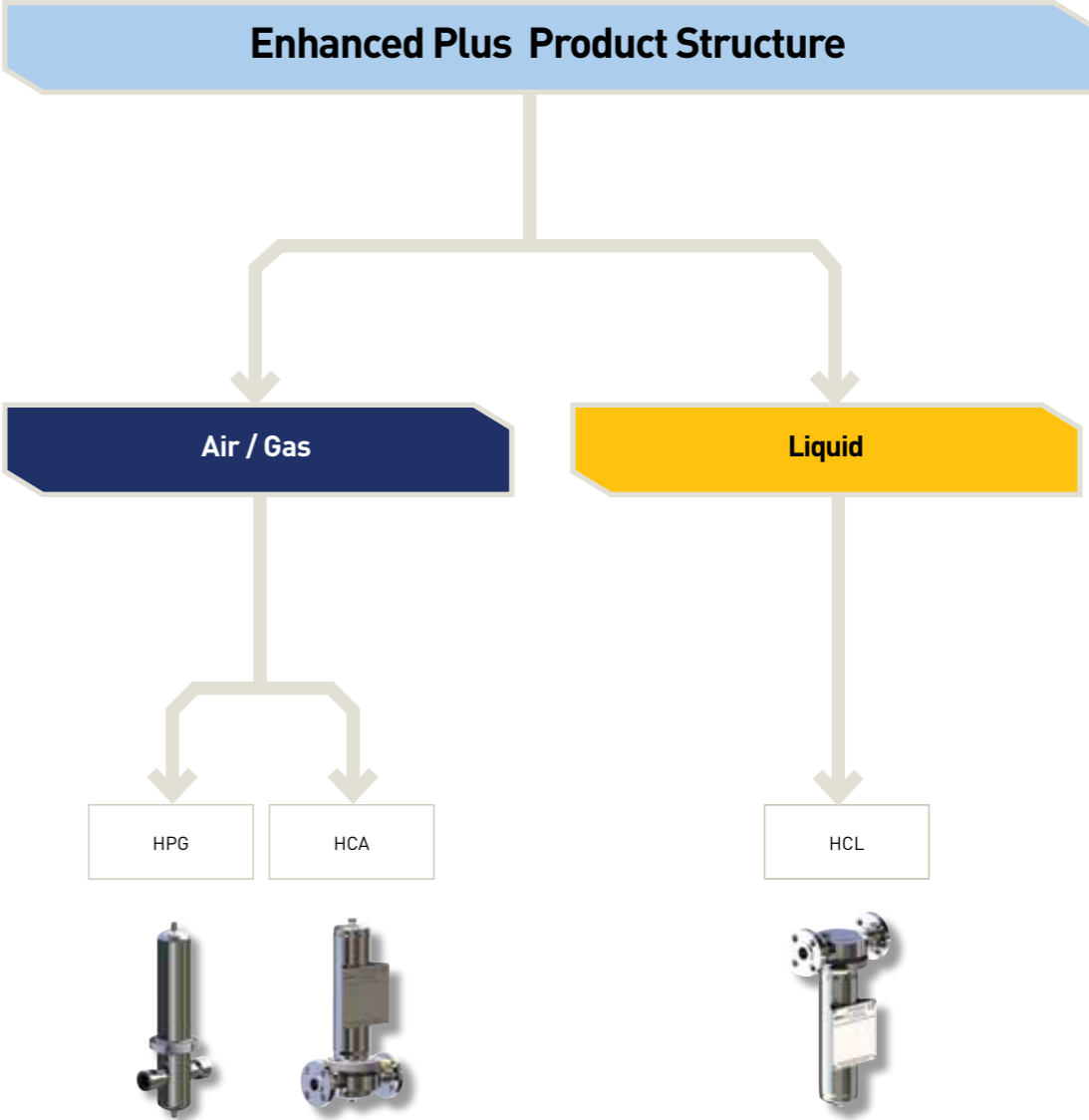
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Enhanced Plus Single Housing

K size to 30" cartridges



- HCA Enhanced PLUS - Alloy 22 gas housing**
For aggressive solvents & acids
- HCL Enhanced PLUS - Alloy 22 liquid housing**
For aggressive solvents & acids
- HPG Enhanced PLUS - high pressure air / gas housing**
For high pressure air / gas applications



Multi Housings

3 to 30 multi round cartridge housings



ZVA - Sanitary range air / gas housing

Specifically designed for the pharmaceutical industry

VSL - Multi-element sanitary liquid housing

Designed specifically for the pharmaceutical industry

VIL - Multi-element industrial liquid housing

General purpose industrial housing

VSH - Multi-element liquid housing

Designed for prefiltration & clarification applications

VIS - High flow steam

Specifically designed for steam filtration



ZVA Housings

- air / gas

- Sanitary range air / gas housing
- Specifically designed for the Pharmaceutical industry
- Laboratory and pilot scale to large industrial applications
- Flow efficient design with low pressure drop
- Steam jacketed and electrically heated options



Specification

Materials of Construction

- Housing: 316L Stainless Steel
- Seals: EPDM

Surface Finish

- Multis - Basic Specification
 - Internal: Inside of outlet assy and distribution box to be mechanically polished 0.8 µm Ra. Immerse entire vessel to achieve 100% pickle and passivation.
 - External: Grit blast 5 µm Ra mean

Multis - Full Specification

- Internal: Electropolish 0.6 µm Ra
- External: Bright Polished 0.4 µm Ra

Maximum Allowable Working Pressure (MAWP) PS
6 barg (87.0 psig)

Maximum Allowable Working Temperature (MAWT) TS
120 °C (248 °F)

Maximum Allowable Working Pressure Steam
3 barg (43.5 psig) @ 144 °C (291 °F)

Total Volume (litres)

031	032	033
31.0	40.0	49.0
051	052	053
45.0	58.0	72.0

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.

Custom Design

Parker domnick hunter offers a specialist and fabrication service allowing individual customer system specifications to be met.

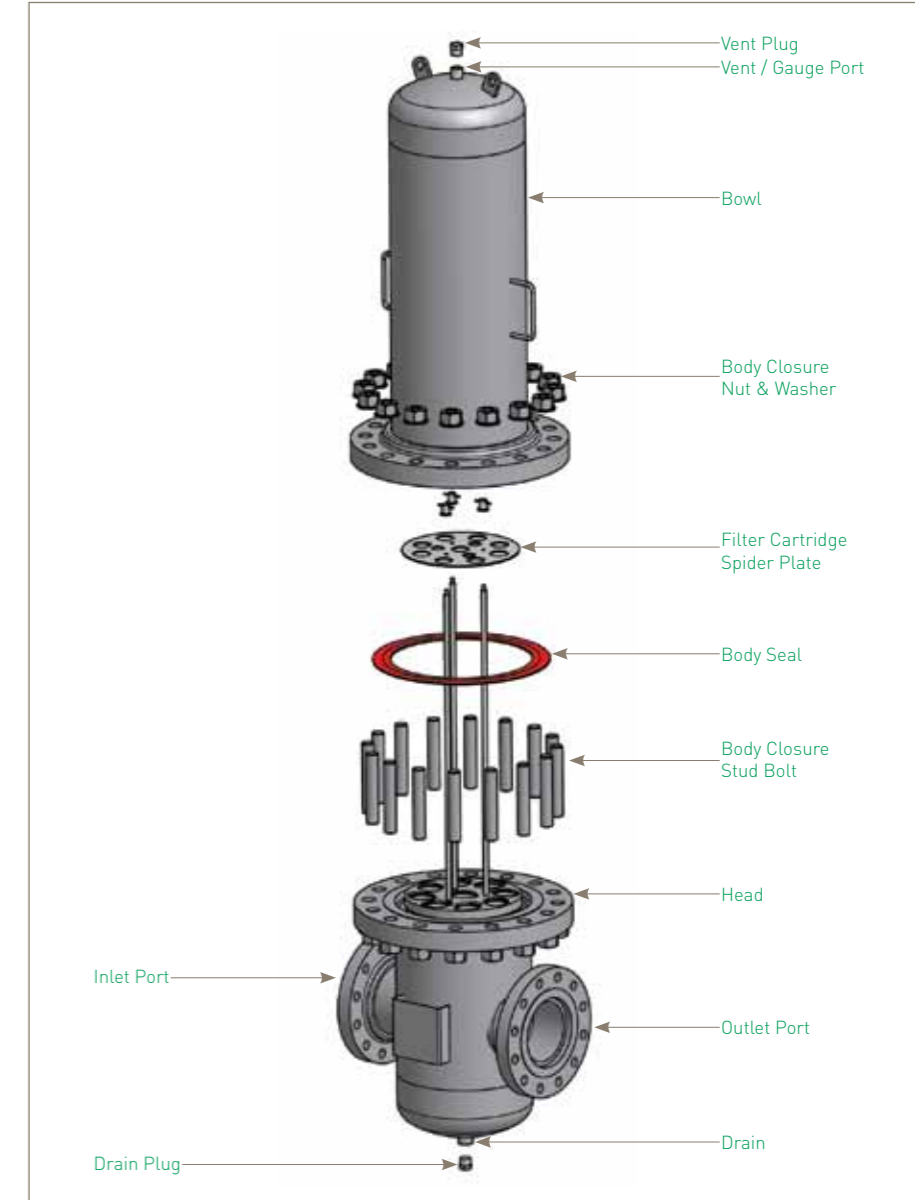
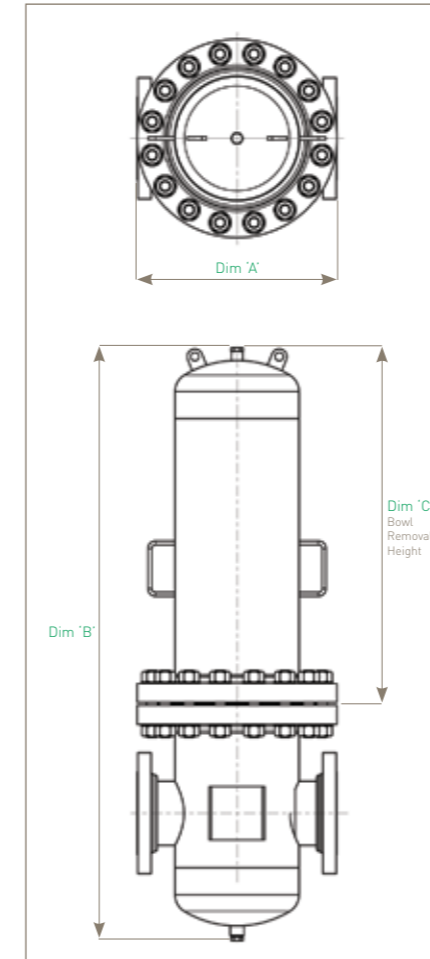
ZVA Housings

Physical Characteristics

Bowl Height	Dimensions (mm)	Typical Weight (Kg)		
	'A'	'B'	'C'	
10" (250 mm)	336	794	320	43.0
20" (500 mm)	336	1044	570	47.0
30" (750 mm)	336	1294	820	50.0

Dimensions shown are for a ZVACE 3 round, 3" ANSI inlet / outlet connections. For the full range of dimensions and weights, please contact Parker domnick hunter.

Note: All housings are fully vacuum rated.



Ordering Information

Code	Vessel Class	Code	N° of Cartridges	Code	Length (Nominal)	Code	Connection Size	Code	Connection Type	Code	Connection Standard	Code	Vent / Drain Conn. Type	Code	Surface Finish
CE	Standard	03	3	1	10" (250 mm)	D	3"	F	Flanged	A	NPT / ANSI	B	BSPP	C	Economy Spec
		05	5	2	20" (500 mm)	E	4"	W	Weld Prepared	N	Nominal Bore			F	Full Spec
		09	9	3	30" (750 mm)	G	6"			I	ISO				
		15	15			H	8"								

Note: For accessories, i.e. gauges, please contact Parker domnick hunter - Process Division for full availability.

VIS Housings

- high flow steam

- Specifically designed to maximize flow rates and minimize pressure drop
- Compatible with JUMBO element to maximize steam capacity



Specification

Materials of Construction

- Housing: 316L Stainless Steel
- Seals: EPDM

Surface Finish

- Internal: Inside of outlet and distribution box to be mechanically mirror polished 0.8 µm Ra. Immerse vessel to achieve 100% pickle and passivation.
- External: Grit blast 5 µm Ra mean

Maximum Allowable Working Pressure (MAWP) PS

7 barg [101.5 psig]

Maximum Allowable Working Temperature (MAWT) TS

170.5 °C [339 °F]

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) allowing for in-situ steam sterilisation. Only housings over PS.V 50 bar / litres bear the CE mark.

Design Basis

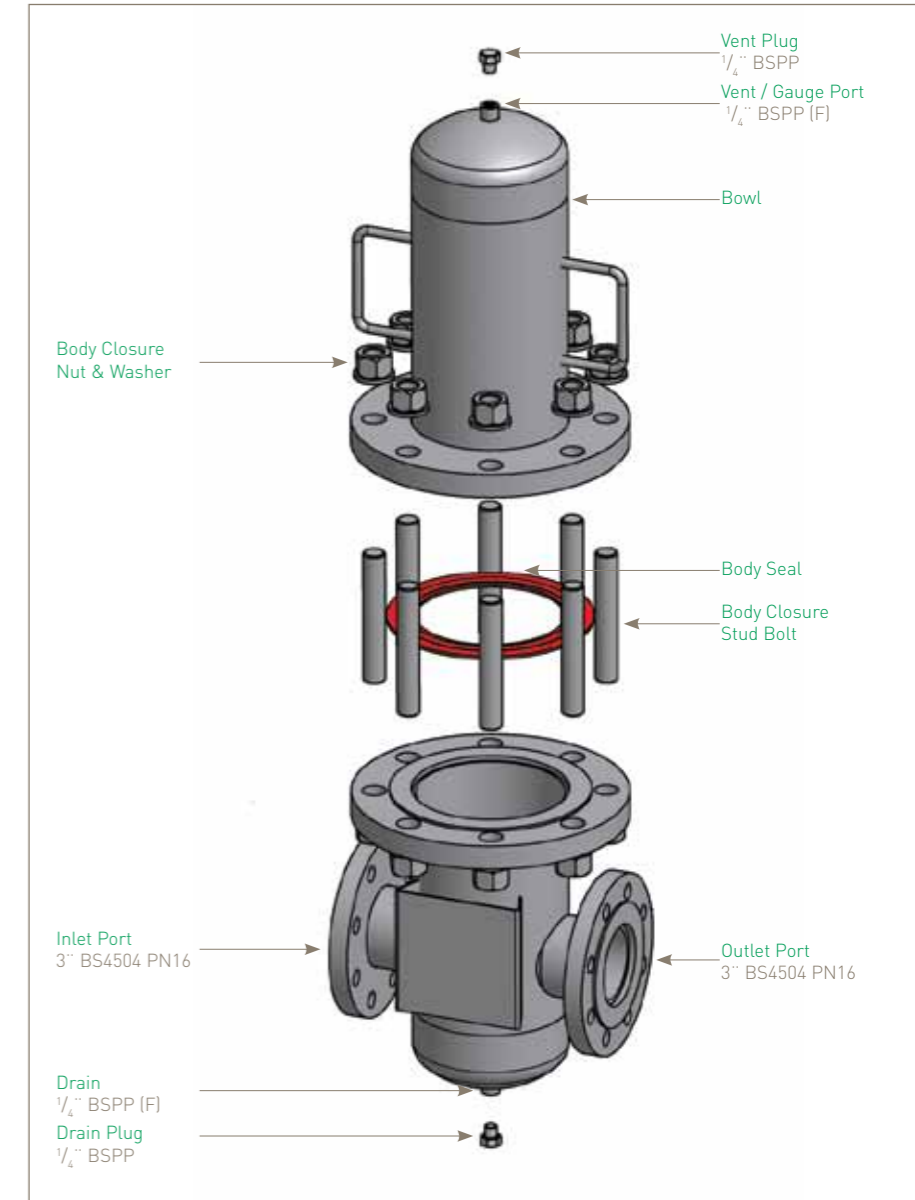
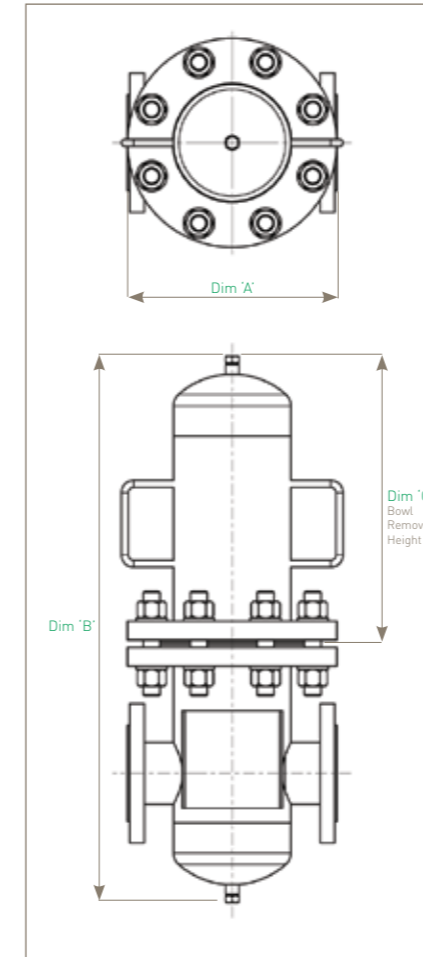
ASME VIII Division 1.

Physical Characteristics

Type	Dimensions (mm)			Typical Weight [Kg]
	'A'	'B'	'C'	
VISCE-01J-DD	300	763	310	30.0
VISCE-01J-ED	330	895	140	50.0
VISCE-3J-DD	515	1049	410	100.0
VISCE-3J-ED	700	1237	490	150.0

For the full range of dimensions and weights, please contact Parker domnick hunter.

Note: All housings are fully vacuum rated.



Ordering Information

VIS - -

Code Vessel Class	Code N° of Cartridges	Code Length (Nominal)	Code Connection Size	Code Connection Type
CE Standard	01 1 03 3	J Jumbo	D* 3" E** 4" G** 6" H** 8"	D BS4504 PN16 Flange A ANSI cl. 150 Flange

* Single housings only
** Round housings only

Note: For accessories, i.e. gauges, please contact Parker domnick hunter - Process Division for full availability.

VSL Housings

- sanitary liquid

- Multi-element sanitary liquid housing
- Designed specifically for the pharmaceutical industry
- Electropolished internal finish



Specification

Materials of Construction

- Housing: 316L Stainless Steel
- Seals: EPDM

Surface Finish

- Internal: Electropolished 0.4 µm Ra
- External: Polished 0.25 µm Ra

Economy Spec

An economy version is available with a lower specification, external finished to 0.8 µm Ra.

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) allowing for in-situ steam sterilisation. Only housings over PS.V 50 bar / litres bear the CE mark.

Design Basis

ASME VIII.

Custom Design

Parker domnick hunter offers a specialist and fabrication service allowing individual customer system specifications to be met.

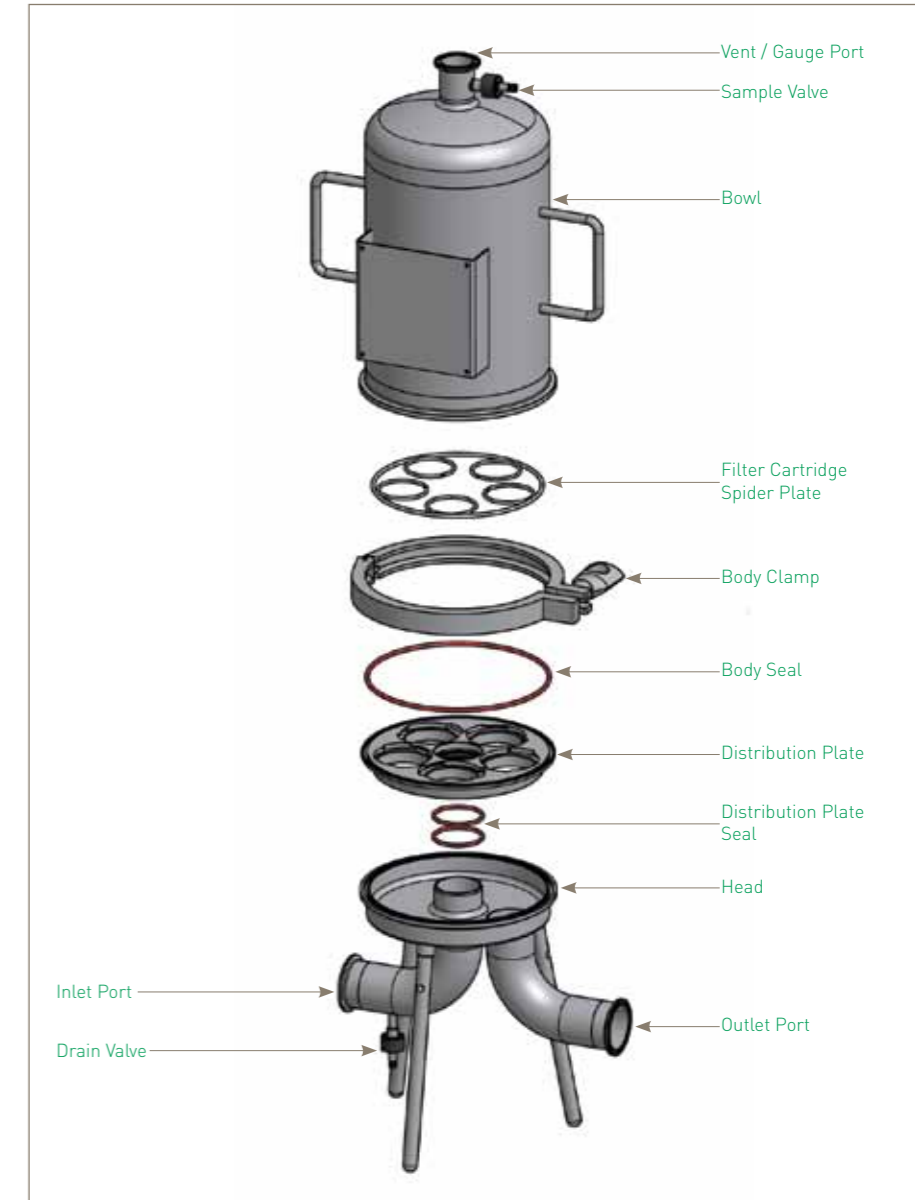
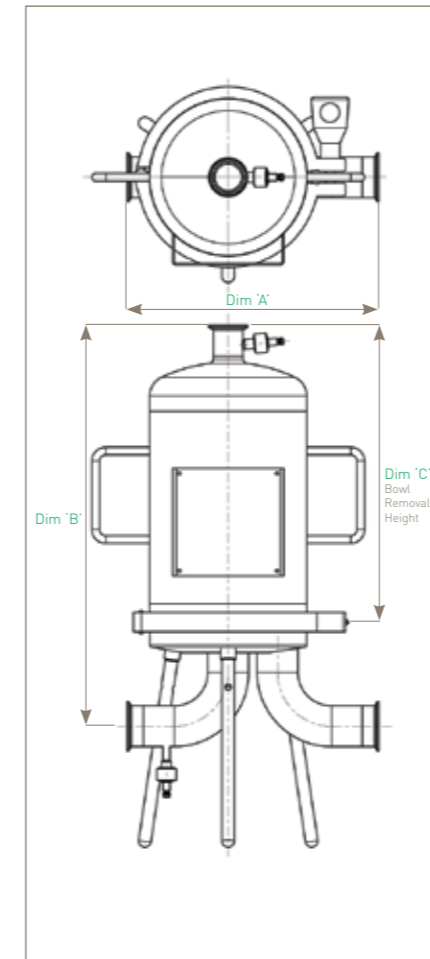
Working Condition PED 97/23/EC			Maximum Pressure		
Fluid Group	State	Temperature	3 / 5 Round	3 / 5 Round	3 / 5 Round
Non Dangerous	Liquids	80 °C [176 °F]	7.00 barg (101.50 psig)	7.00 barg (101.50 psig)	7.00 barg (101.50 psig)
Dangerous / Non Dangerous	Gas / Vapour	144 °C [297 °F]	3.00 barg (43.50 psig)	3.00 barg (43.50 psig)	3.00 barg (43.50 psig)
PED Conformity Assessment Category			CAT I	CAT II	CAT II
Volume [litres]			10.7	18.5	26.3

Physical Characteristics

Type	Dimensions (mm)			Typical Weight (Kg)
	'A'	'B'	'C'	
10" (250 mm)	271	493	320	18.0
20" (500 mm)	271	743	570	22.0
30" (750 mm)	271	993	820	26.0

Dimensions shown are for a 3 Round VSL, 2" TCF inlet / outlet connections. For the full range of dimensions and weights, please contact Parker domnick hunter.

Note: All housings are fully vacuum rated.



Ordering Information

Code Vessel Class	Code N° of Cartridges	Code Length [Nominal]	Code Connection Size	Code Connection Type	Code Connection Standard	Code Connection Type	Code Seal
CE Standard	03 3 05 5	1 10" (250 mm) 2 20" (500 mm) 3 30" (750 mm)	C 2"	T Tri-Clamp	B British Standard D DIN 07* Economy Series	B Sanitary Bleed T Tri-Clamp	E EPDM P PTFE S Silicone V Viton

Note: For accessories, i.e. gauges, please contact Parker domnick hunter - Process Division for full availability.

*Code finishes here, no mention of drain and seals

VSH Multi Housings

- beverage

- Multi-element sanitary liquid housing
- Designed specifically for the food & beverage industry
- High quality crevice free construction
- Available in 3 to 30 round versions
- Steam sterilizable



Specification

Materials of Construction

- Housing: 316L Stainless Steel
- Seals: Silicone

Surface Finish

- Internal: Mechanically Polished Ra <0.8 µm
- External: Mechanically Polished

Steam Sterilization

Refer to Parker domnick hunter for individual housing parameters.

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.

Design Basis

ASME VIII Division 1.

Custom Design

Parker domnick hunter offers a specialist and fabrication service allowing individual customer system specifications to be met.

Note: For 12, 18, 24 and 30 Round options, please contact Parker domnick hunter for detailed technical drawings.

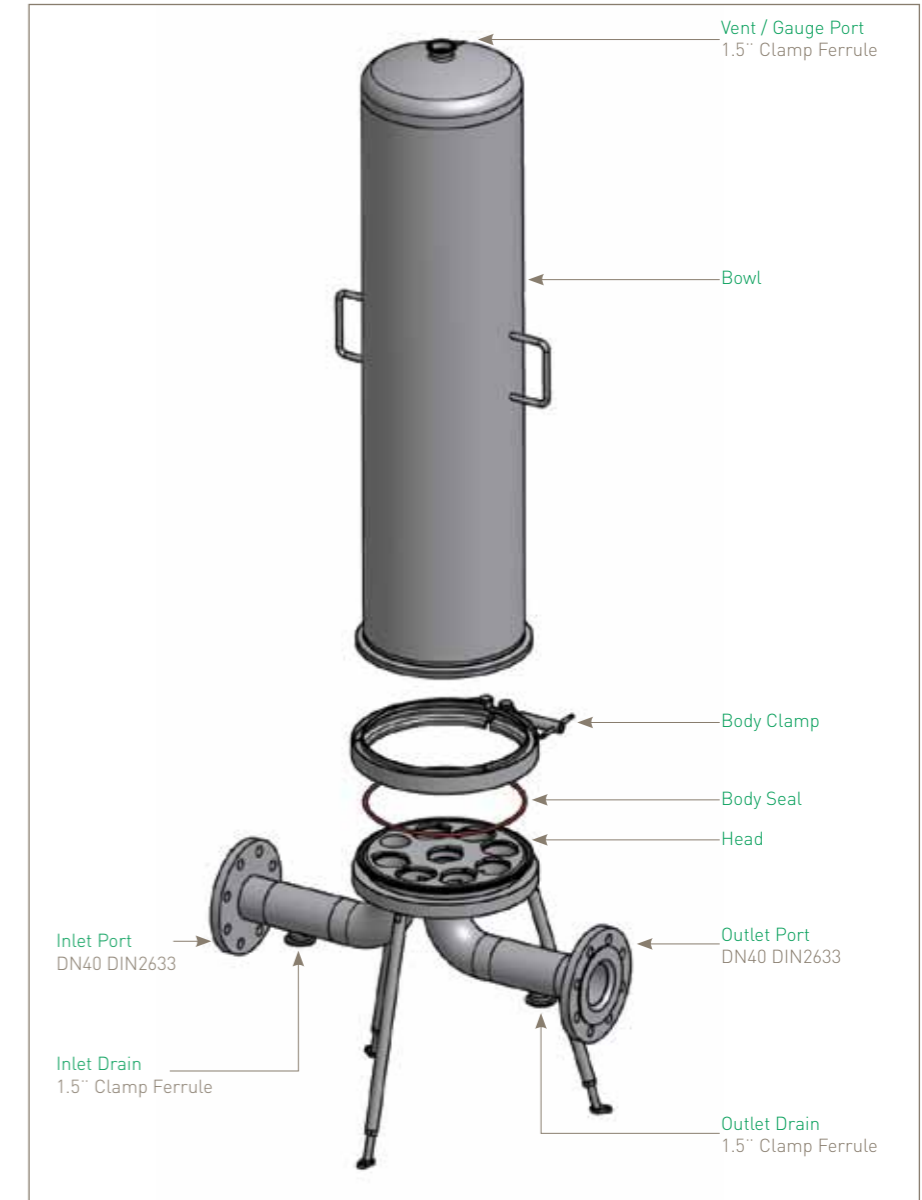
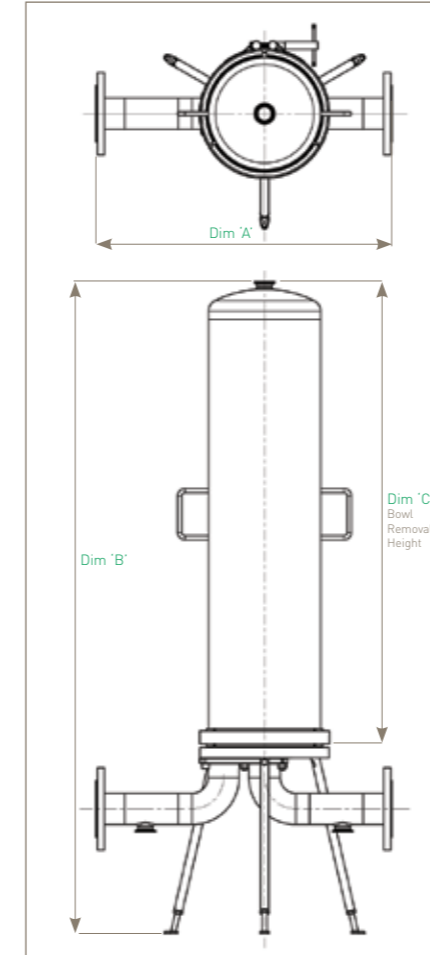
Working Condition PED 97/23/EC			Maximum Pressure			
Fluid Group	State	Temperature	031	032	033	034
Dangerous	Liquid	0 - 40 °C (0 - 104 °F)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)	10.00 barg (145.03 psig)
Dangerous	Liquid	150 °C (302 °F)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)
Dangerous	Gas / Vapour	0 - 150 °C (0 - 302 °F)	4.80 barg (98.62 psig)	3.90 barg (56.56 psig)	2.80 barg (40.61 psig)	2.10 barg (30.45 psig)
Non Dangerous	Liquid	0 - 40 °C (0 - 104 °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)
Non Dangerous	Liquid	150 °C (302 °F)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)
Non Dangerous	Gas / Vapour	0 - 40 °C (0 - 104 °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)
Non Dangerous	Gas / Vapour	150 °C (302 °F)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)
Volume (litres)			7.3	12.6	17.8	23.1
Fluid Group	State	Temperature	051	052	053	054
Dangerous	Liquid	0 - 40 °C (0 - 104 °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)
Dangerous	Liquid	150 °C (302 °F)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)
Dangerous	Gas / Vapour	0 - 150 °C (0 - 302 °F)	4.50 barg (65.26 psig)	2.40 barg (34.80 psig)	1.70 barg (24.65 psig)	1.30 barg (18.85 psig)
Non Dangerous	Liquid	0 - 40 °C (0 - 104 °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)
Non Dangerous	Liquid	150 °C (302 °F)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)
Non Dangerous	Gas / Vapour	0 - 40 °C (0 - 104 °F)	10.00 barg (145.03 psig)	9.90 barg (143.58 psig)	6.80 barg (98.62 psig)	5.20 barg (75.41 psig)
Non Dangerous	Gas / Vapour	150 °C (302 °F)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	6.80 barg (98.62 psig)	5.20 barg (75.41 psig)
Volume (litres)			11.0	20.0	29.1	38.2
Fluid Group	State	Temperature	081	082	083	084
Dangerous	Liquid	0 - 40 °C (0 - 104 °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)
Dangerous	Liquid	150 °C (302 °F)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)
Dangerous	Gas / Vapour	0 - 150 °C (0 - 302 °F)	2.30 barg (33.35 psig)	1.40 barg (20.30 psig)	1.00 barg (14.50 psig)	0.70 barg (10.15 psig)
Non Dangerous	Liquid	0 - 40 °C (0 - 104 °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)
Non Dangerous	Liquid	150 °C (302 °F)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)	7.50 barg (72.51 psig)
Non Dangerous	Gas / Vapour	0 - 40 °C (0 - 104 °F)	9.40 barg (136.33 psig)	5.60 barg (81.22 psig)	4.00 barg (58.01 psig)	3.10 barg (44.96 psig)
Non Dangerous	Gas / Vapour	150 °C (302 °F)	7.50 barg (72.51 psig)	5.60 barg (81.22 psig)	4.00 barg (58.01 psig)	3.10 barg (44.96 psig)
Volume (litres)			21.3	35.3	49.7	63.9
PED Conformity Assessment Category			CAT I	CAT I	CAT I	CAT I

Physical Characteristics

Type	Dimensions (mm)	Typical Weight (Kg)		
	'A'	'B'	'C'	
10" (250 mm)	606	840	290	27.0
20" (500 mm)	606	1060	540	30.0
30" (750 mm)	606	1310	790	33.0
40" (1000 mm)	606	1560	1040	36.0

Dimensions shown are for an 8 Round VSH, DN40 DIN2633 inlet / outlet connections. For the full range of dimensions and weights, please contact Parker domnick hunter.

Note: All housings are fully vacuum rated.



Ordering Information

Code	Vessel Class	Code	N° of Cartridges	Code	Length (Nominal)	Code	Connection Size	Code	Connection Type	Code	Connection Standard	Code	Vent / Drain Conn. Type	Code	Seal
CE	Standard	03	3	1	10" (250 mm)	B	1"	D*	DIN Male Flanged	A	NPT / ANSI	T	Tri-Clamp	E	EPDM
		05	5	2	20" (500 mm)	Y	1.5"	F*	Flanged	B	British			S	Silicone
		08	8	3	30" (750 mm)	C	2"	M	SMS Male	D	DIN			V	Viton
		12	12	4	40" (1000 mm)	X	2.5"	R	RJT Male	I	ISO				
		18	18			D	3"	T	Tri-Clamp						
		24	24			E	4"	W	Weld Prepared						
		30	30												

Note: 3, 5 and 8 Round housings available with 10", 20", 30" and 40" bowls
12, 18, 24 and 30 Round housings available with 20" and 30" bowls only

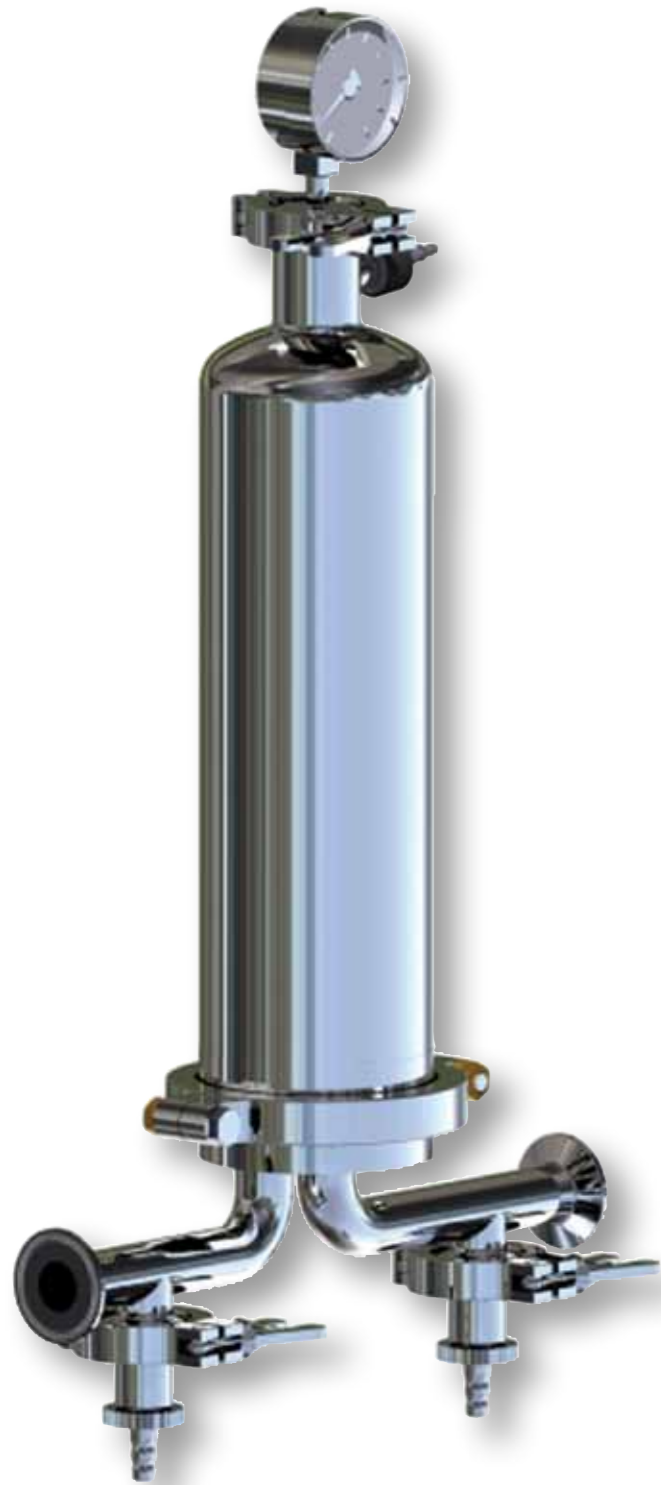
N° of Cartridges	1.5"	2"	2.5"	3"	4"
03	✓	✓	✓	✓	✓
05	✓	✓	✓	✓	✓
08	✓	✓	✓	✓	✓
12	✓	✓	✓	✓	✓
18	✓	✓	✓	✓	✓
24	✓	✓	✓	✓	✓
30	✓	✓	✓	✓	✓

*Check flange size code to ensure correct item is supplied.

Note: For accessories, i.e. gauges, please contact Parker domnick hunter - Process Division for full availability.

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.

Accessories



Gauges

Industry and product specific options

Valves

Comprehensive range of manual valves

Spares

Replacement parts and accessories

Certificates

Comprehensive range of supporting documentation



Parker domnick hunter provide a comprehensive range of pressure gauges to support their standard air / gas and liquid housings.

HIL Pressure Gauge			
Type	Connection	Pressure	Ordering Code
All stainless steel wetted parts with glycerine fill fluid. Design temperature 135 °C (275 °F). Cooling tower required for temperatures up to 205 °C (401 °F). See spares page 74.	1/4" BSP	0 - 10 barg	XPGSS03BS17
		0 - 16 barg	XPGSS03BS18
	1/4" NPT	0 - 10 barg	XPGSS03NP2
		0 - 16 barg	XPGSS03NP3



HBA & HIF Pressure Gauge			
Type	Connection	Pressure	Ordering Code
All stainless steel wetted parts with glycerine fill fluid (includes adapter for plain 1/2" BSPP connection). Design temperature 135 °C (275 °F). Cooling tower required for temperatures up to 205 °C (401 °F). See spares page 74.	1/2" BSP	0 - 10 barg	XPGSS03BS15
		0 - 16 barg	XPGSS03BS16
	1/2" NPT	0 - 10 barg	XPGSS03NP2
		0 - 16 barg	XPGSS03NP3



HSL Single & VSH Multi Pressure Gauge		
Type	Pressure / Temperature	Ordering Code
Sanitary gauge with double sanitary valves and sight glass for beverage applications. Glycerine gauge fill fluid.	0 - 10 barg / 150 °C (302 °F)	XGSS08TC1



HSL Single & VSH Multi Pressure Gauge Valve Manifold		
Type	Pressure / Temperature	Ordering Code
Sanitary gauge manifold with double sanitary valves without sight glass, for applications where glass not allowed. (Manifold and quick release only. Does not include gauge, clamp and seal)	0 - 10 barg / 150 °C (302 °F)	XMISS06TC1



HSL Single & VSH Multi Pressure Gauge		
Type	Pressure / Temperature	Ordering Code
Sanitary gauge with single sanitary valve. Glycerine gauge fill fluid.	0 - 10 barg / 150 °C (302 °F)	XPGSS08TC1



Single, VSH & VSL Multi Pressure Gauge		
Type	Pressure / Temperature	Ordering Code
Sanitary gauge with 1" and 1 1/2" tri-clamp connection and hygienic diaphragm. All stainless steel wetted parts with KN92 FDA approved fill fluid.	0 - 10 barg / 150 °C (302 °F)	XPGSS06TC4



Parker domnick hunter provide a comprehensive range of manual valves to support their standard air / gas and liquid housings.

Industrial 1 Piece Ball Valve		
Type	Connection	Ordering Code
316 stainless steel 1 piece ball valve with PTFE ball. Male / female.	1/4" BSP	XVASS03BS
	1/4" NPT	XVASS03NP



2 Piece Ball Valve		
Type	Connection	Ordering Code
316 stainless steel semi-sanitary ball valve. (for use on up-stream connection on sanitary liquid beverage or pharmaceutical housings)	1 / 1 1/2" Tri-Clamp - 20 mm Hosebarb	XVASS06TC



Butterfly Valves		
Type	Variant	Ordering Code
Stainless steel butterfly valve with silicone seals and polymer handle.	1" OD x 1.6 Weld End	XVASS050D1/VHPL
	1 1/2" OD x 1.6 Weld End	XVASS060D1/VHPL
	2" OD x 1.6 Weld End	XVASS070D1/VHPL
	2 1/2" OD x 1.6 Weld End	XVASS080D1/VHPL
	3" OD x 1.6 Weld End	XVASS090D1/VHPL
	DN25 DIN11851	XVASS050N1/VHPL
	DN40 DIN11851	XVASS060N1/VHPL
	DN50 DIN11851	XVASS070N1/VHPL
	DN65 DIN11851	XVASS080N1/VHPL
	DN80 DIN11851	XVASS090N1/VHPL
	1" Tri-clamp Ferrule	XVASS05TC4/VHPL
	1 1/2" Tri-clamp Ferrule	XVASS06TC4/VHPL
	2" Tri-clamp Ferrule	XVASS07TC4/VHPL
	2 1/2" Tri-clamp Ferrule	XVASS08TC4/VHPL
3" Tri-clamp Ferrule	XVASS09TC4/VHPL	



Sanitary Bleed Valve			
Type	Seals	Variant	Ordering Code
316 stainless steel sanitary bleed valve with Neoprene grip. Available with EPDM, Silicon, Viton or Perlast Seals. Available with Rectus 21, Staubli RBE03 or 8 mm hosebarb.	EPDM	Staubli RBE03 Male	XVASS30NA1
		Rectus 21 Male	XVASS30RT
		8 mm Hosebarb	XVASS30HB
	Silicone	Staubli RBE03 Male	XVASS30ST1
		Rectus 21 Male	XVASS30RT1
		8 mm Hosebarb	XVASS30HB1
	Viton	Staubli RBE03 Male	XVASS30NA4
		Rectus 21 Male	XVASS30RT2
		8 mm Hosebarb	XVASS30HB2
	Perlast	Staubli RBE03 Male	XVASS30NA2
		Rectus 21 Male	XVASS30RT3
		8 mm Hosebarb	XVASS28SL15



Sample Valve		
Type	Connection	Ordering Code
316 stainless steel sanitary valve with 1" / 1 1/2" tri-clamp connection and 12 mm hosebarb. For use on down-stream connection on sanitary liquid housings.	1 / 1 1/2" Tri-Clamp - Stepped 12 mm Hosebarb	XVASS05TC3



Gemu Diaphragm Valve			
Type	Connection	Variant	Ordering Code
316 stainless steel sanitary diaphragm valve with 1/2" (minicamp) tri-clamp connection and silicone or EPDM diaphragm.	1/2" (minicamp) tri-clamp	Silicone	XVASS04TC6
		EPDM	XVASS04TC1
		Viton	XVASS04TC7
		PTFE	XVASS04TC8



Parker's Motion & Control Technologies

At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion or control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further information call 00800 27 27 5374



AEROSPACE

Key Markets

- Aircraft engines
- Business & general aviation
- Commercial transports
- Land-based weapons systems
- Military aircraft
- Missiles & launch vehicles
- Regional transports
- Unmanned aerial vehicles

Key Products

- Flight control systems & components
- Fluid conveyance systems
- Fluid metering delivery & atomization devices
- Fuel systems & components
- Hydraulic systems & components
- Inert nitrogen generating systems
- Pneumatic systems & components
- Wheels & brakes



CLIMATE CONTROL

Key Markets

- Agriculture
- Air conditioning
- Food, beverage & dairy
- Life sciences & medical
- Precision cooling
- Processing
- Transportation

Key Products

- CO₂ controls
- Electronic controllers
- Filter driers
- Hand shut-off valves
- Hose & fittings
- Pressure regulating valves
- Refrigerant distributors
- Safety relief valves
- Solenoid valves
- Thermostatic expansion valves



ELECTROMECHANICAL

Key Markets

- Aerospace
- Factory automation
- Life science & medical
- Machine tools
- Packaging machinery
- Paper machinery
- Plastics machinery & converting
- Primary metals
- Semiconductor & electronics
- Textile
- Wire & cable

Key Products

- AC/DC drives & systems
- Electric actuators, gantry robots & slides
- Electrohydraulic actuation systems
- Electromechanical actuation systems
- Human machines interface
- Linear motors
- Stepper motors, servo motors, drives & controls
- Structural extrusions



FILTRATION

Key Markets

- Food & beverage
- Industrial machinery
- Life sciences
- Marine
- Mobile equipment
- Oil & gas
- Power generation
- Process
- Transportation

Key Products

- Analytical gas generators
- Compressed air & gas filters
- Condition monitoring
- Engine, air, fuel & oil filtration & systems
- Process, chemical, water & microfiltration filters
- Nitrogen, hydrogen & zero air generators



FLUID & GAS HANDLING

Key Markets

- Aerospace
- Agriculture
- Bulk chemical handling
- Construction machinery
- Food & beverage
- Fuel & gas delivery
- Industrial machinery
- Mobile
- Oil & gas
- Transportation
- Welding

Key Products

- Brass fittings & valves
- Diagnostic equipment
- Fluid conveyance systems
- Industrial hose
- PTFE & PFA hose, tubing & plastic fittings
- Rubber & thermoplastic hose & couplings
- Tube fittings & adapters
- Quick disconnects



HYDRAULICS

Key Markets

- Aerospace
- Aerial lift
- Agriculture
- Construction machinery
- Forestry
- Industrial machinery
- Mining
- Oil & gas
- Power generation & energy
- Truck hydraulics

Key Products

- Diagnostic equipment
- Hydraulic cylinders & accumulators
- Hydraulic motors & pumps
- Hydraulic systems
- Hydraulic valves & controls
- Power take-offs
- Rubber & thermoplastic hose & couplings
- Tube fittings & adapters
- Quick disconnects



PNEUMATICS

Key Markets

- Aerospace
- Conveyor & material handling
- Factory automation
- Life science & medical
- Machine tools
- Packaging machinery
- Transportation & automotive

Key Products

- Air preparation
- Brass fittings & valves
- Manifolds
- Pneumatic accessories
- Pneumatic actuators & grippers
- Pneumatic valves & controls
- Quick disconnects
- Rotary actuators
- Rubber & thermoplastic hose & couplings
- Structural extrusions
- Thermoplastic tubing & fittings
- Vacuum generators, cups & sensors



PROCESS CONTROL

Key Markets

- Chemical & refining
- Food, beverage & dairy
- Medical & dental
- Microelectronics
- Oil & gas
- Power generation

Key Products

- Analytical sample conditioning products & systems
- Fluoropolymer chemical delivery fittings, valves & pumps
- High purity gas delivery fittings, valves & regulators
- Instrumentation fittings, valves & regulators
- Medium pressure fittings & valves
- Process control manifolds



SEALING & SHIELDING

Key Markets

- Aerospace
- Chemical processing
- Consumer
- Energy, oil & gas
- Fluid power
- General industrial
- Information technology
- Life sciences
- Military
- Semiconductor
- Telecommunications
- Transportation

Key Products

- Analytical sample conditioning products & systems
- Dynamic seals
- Elastomeric o-rings
- EMI shielding
- Extruded & precision-cut, fabricated elastomeric seals
- Homogeneous & inserted elastomeric shapes
- High temperature metal seals
- Metal & plastic retained composite seals
- Thermal management



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01/11 Rev. 2A



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