# HPG Enhanced Plus Filter Housing

• high pressure air / gas



- Flow efficient range of housings for sterile filtration higher pressure air and gases
- Standard, sanitary & sanitary electropolished surface finishes available
- A number of inlet / outlet port connections available
- Range of vent and drain options
- Two pressure ratings:
  - 25 barg (363 psig) @ 140 °C (284 °F)
    - Typical application CO<sub>2</sub> & nitrogen sterile filtration
    - Higher pressure steam to 16 barg (232 psig)
  - 40 barg (580 psig) @ 140 °C (284 °F)
    - Typical application PET bottle blowing
    - Higher pressure steam to 32 barg (464 psig)
    - Group 1 gases, solvents and vapours to 16 barg (232 psig)



### **Specification**

#### **Materials of Construction**

■ Housing: 316L Stainless Steel

■ Seals: EPDM FDA

Silicone FDA

Viton FDA

■ Vent/Drain Seals: PTFE FDA

#### Surface Finish

Standard

Internal: As Welded

Pickled & Passivated

External: Polished 0.8 µm Ra

Sanitary

 $\begin{array}{ll} \text{Internal:} & \text{Polished 0.4 } \mu\text{m Ra} \\ \text{External:} & \text{Polished 0.25 } \mu\text{m Ra} \end{array}$ 

Sanitary Electropolished

Internal: Polished 0.4 µm Ra

and Electropolished

External: Polished 0.25 µm 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.

| HPG 25 barg (362 psig)             |                       |                                    |            | Maximum Pressure            |              |            |              |                |  |
|------------------------------------|-----------------------|------------------------------------|------------|-----------------------------|--------------|------------|--------------|----------------|--|
| Fluid Group                        | State                 | Temperature                        | 01B        | 01A                         | 01K          | 011        | 012          | 013            |  |
| Non Dangerous                      | Gas / Vapour<br>Steam | 140 °C (284 °F)<br>204 °C (400 °F) | 16.00 barg | (362.00 psig)<br>16.00 barg | (362.00 psig | 16.00 barg | (362.00 psig | ](362.00 psig) |  |
| PED Conformity Assessment Category |                       |                                    | SEP        | SEP                         | CAT I        | CAT I      | CAT I        | CAT I          |  |
| Volume (litres)                    |                       |                                    |            | 0.7                         | 2.5          | 3.5        | 5.5          | 7.5            |  |

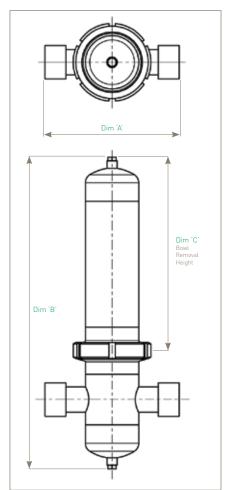
| HPG 40 barg (580 psig)             |                       |                                    |            | Maximum Pressure            |                             |  |            |                             |  |  |
|------------------------------------|-----------------------|------------------------------------|------------|-----------------------------|-----------------------------|--|------------|-----------------------------|--|--|
| Fluid Group State                  |                       | Temperature                        | 01B        | 01A                         | 01K                         | 011  | 012        | 013                         |  |  |
| Non Dangerous                      | Gas / Vapour<br>Steam | 140 °C [284 °F]<br>239 °C [462 °F] | 32.00 barg | (580.00 psig)<br>32.00 barg | (580.00 psig)<br>32.00 barg | 40.00 barg<br>(580.00 psig)<br>32.00 barg<br>(464.12 psig) | 32.00 barg | (580.00 psig)<br>32.00 barg |  |  |
| PED Conformity Assessment Category |                       |                                    |            | SEP                         | CAT I                       | CAT I  | CAT I      | CAT II                      |  |  |
| Volume (litres)                    |                       |                                    |            | 0.7                         | 2.5                         | 3.5  | 5.5        | 7.5                         |  |  |

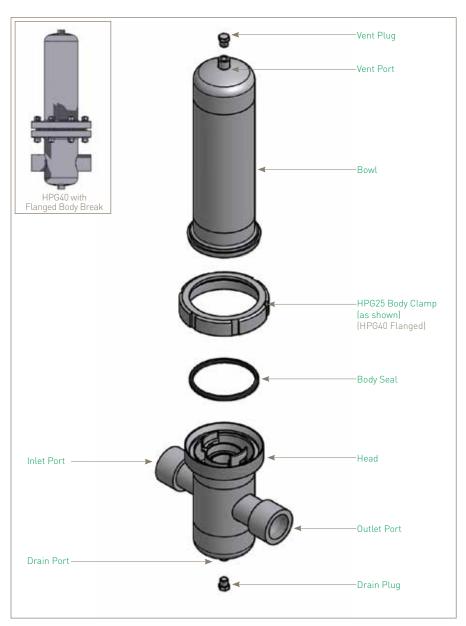
Note: All housings are fully vacuum rated.

## **Physical Characteristics**

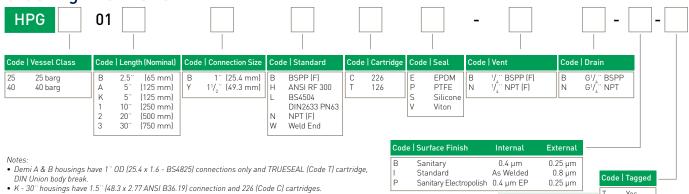
| Bowl<br>Height |          | Dim<br>'A' | Dimensions (mm)<br>'A' 'B' 'C' |     |      | Typical Weight (Kg)<br>Bowl Head Total |      |  |  |  |
|----------------|----------|------------|--------------------------------|-----|------|--|------|--|--|--|
| B Size         | (65 mm)  | 175        | 253                            | 130 | 0.75 | 1.50                                   | 2.25 |  |  |  |
| A Size         | (125 mm) | 175        | 308                            | 180 | 1.00 | 1.50                                   | 2.50 |  |  |  |
| K Size         | (125 mm) | 259        | 398                            | 223 | 1.00 | 5.40                                   | 7.00 |  |  |  |
| 10"            | (250 mm) | 259        | 548                            | 342 | 1.60 | 5.40                                   | 7.60 |  |  |  |
| 20             | (500 mm) | 259        | 798                            | 590 | 2.60 | 5.40                                   | 8.60 |  |  |  |
| 30             | (750 mm) | 259        | 1050                           | 840 | 3.60 | 5.40                                   | 9.60 |  |  |  |

Dimensions shown are for a vessel with  $11\frac{1}{2}$  "BSPP,  $1\frac{1}{4}$ " BSPP vent and drain. For other formats, please contact Parker domnick hunter.





# **Ordering Information**



- Sanitary screwed and tranditional flanges not considered sanitary.