



## STEAM Filter Cartridges

- steam filters
- 316L stainless steel

Steam is an often neglected part of a process, regarded as an add on to a customers liquid or gas filtration needs.

It has however, large specific applications in its own right and should be treated with the same level of importance as air, gas and liquid systems if long filter lifetimes and system cost effectiveness are to be achieved.

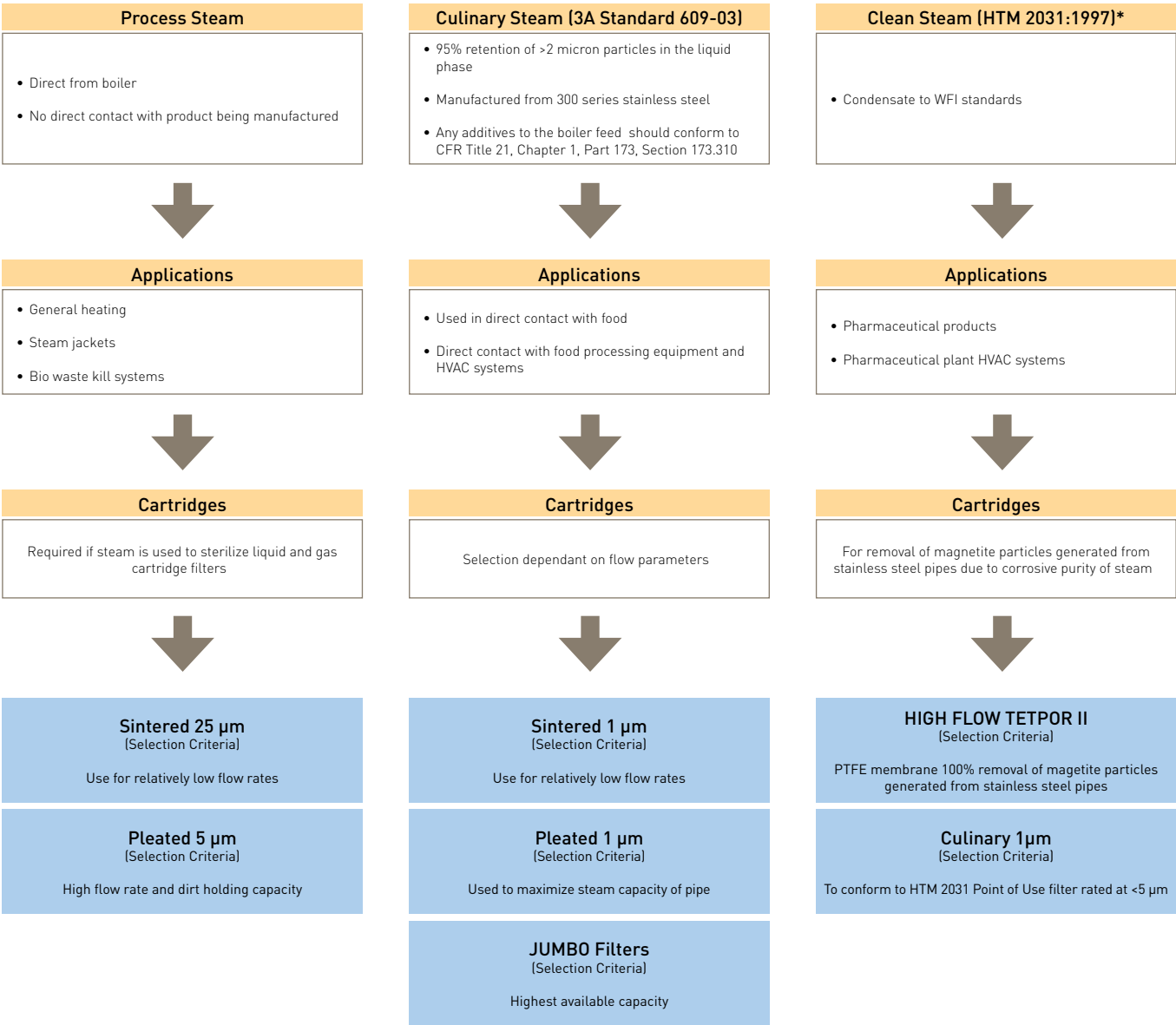
The quality of steam used within the food and dairy industries has been raised higher on the agenda in an ever increasing number of companies. Minimum acceptable standards are now being quoted on a more regular basis with particular reference to 'culinary grade' steam. Steam serves several purposes in the food & beverage industry. It is critical that this steam is of a high quality to ensure effective and continuous operation of the process.

### Features and Benefits

- 316L stainless steel filter cartridges
- Exceptionally high flow rates
- Available in culinary grade 1 micron
- High dirt holding capacity
- 'JUMBO' filter configuration ensures maximum utilization of pipework capacity



## Which Filter for Which Application ?



## Specifications - PLEATED

### Materials of Construction

- Filtration Media: 316L Stainless Steel
- Inner Support Core: 316L Stainless Steel
- Outer Support Cage: 316L Stainless Steel
- End Caps: 316L Stainless Steel
- Standard o-rings/gaskets: EPDM (*standard*)  
Silicone and Viton (*options available*)

### Recommended Operating Conditions

The maximum differential pressure in direction of flow (outside to in) is 10 barg (145.03 psig).

The maximum differential pressure in direction of flow (in to outside) is 2 barg (29.00 psig).

The maximum recommended continuous operating temperature range is -75 °C (-103 °F) to +200 °C (392 °F).

*Note: Temperature dependant on o-ring compound*

### Effective Filtration Area (EFA)

10" (250 mm)      0.15 m<sup>2</sup> (1.61 ft<sup>2</sup>)

### Housing Materials of Construction

- Material: 316L Stainless Steel
- Surface Finish:
  - Single Internal: Electropolished Ra 0.8
  - Single External: Mechanical Polish (Commercial Bright)
  - Jumbo Internal: Upstream - Beadblast
  - Outlet Assembly - Linished 180 grit
  - Jumbo External: Beadblast
- Vent / Drain:
  - Single / Jumbo: 1/4" BSPP
  - Female Thread
- Seal Material: EPDM Aseptic Seal

### Housing Design Pressure and Temperature

Single: 16 barg (232 psig)  
@ 200 °C (392 °F)

Jumbo: 7 barg (101 psig)  
@ 170 °C (338 °F)

| Figure | Housing Code | Connection Size | Capacity Kg / hr @ 1 barg | Overall Height  | Replacement Filter Code |
|--------|--------------|-----------------|---------------------------|-----------------|-------------------------|
| 1      | HBAHP01KY    | 1.5" (38.1 mm)  | 150                       | 14.8" (376 mm)  | ZCHS-K-...C             |
| 1      | HBAHP011C    | 2" (50.8 mm)    | 280                       | 20.7" (526 mm)  | ZCHS-1-...C             |
| 2      | VISCE-01J-D  | 3" (50.8 mm)    | 750                       | 30.0" (763 mm)  | ZCHS-J-...3             |
| 2      | VISCE-01J-E  | 4" (101.6 mm)   | 1300                      | 35.2" (895 mm)  | ZCHS-J-...4             |
| 2      | VISCE-03J-G  | 6" (152.4 mm)   | 2300                      | 41.2" (1049 mm) | 3 x ZCHS-J-...3         |
| 2      | VISCE-03J-H  | 8" (203.2 mm)   | 3750                      | 48.7" (1237 mm) | 3 x ZCHS-J-...4         |

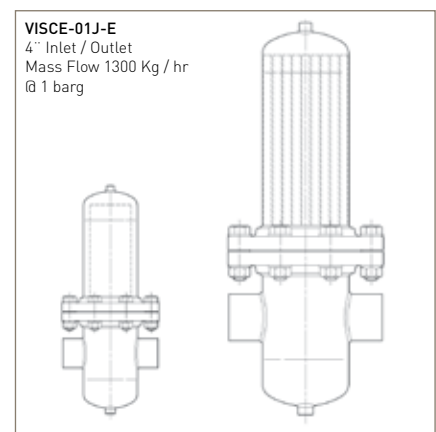
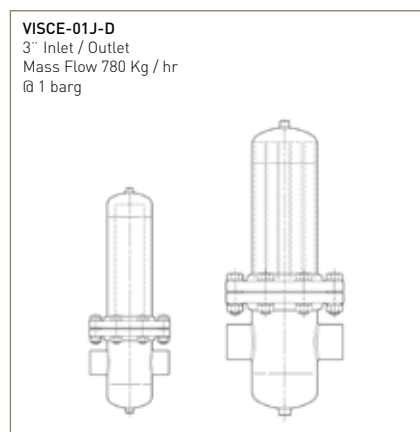
*Note: For efficient steam distribution it is recommended that steam velocities are restricted to 25 m / sec<sup>-1</sup>. For more information on the HBA range, please contact Parker domnick hunter.*

### Correction Factors

To use the table above, the steam flow rates must be at 1 barg (14.50 psig). For system flows at different line pressures, divide the system flow by the correction factor below to find the equivalent flow @ 1 barg (14.50 psig).

| Steam Pressure    | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Correction Factor | 0.5 | 1.0 | 1.5 | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 | 5.5 |

Table showing the relative system size difference between pleated cartridges left and sintered cartridges right.



## Specifications - SINTERED

### Materials of Construction

- Filtration Media: Sintered Stainless Steel (316L)
- End Caps: Stainless Steel (316L)
- Standard o-rings/gaskets: EPDM (standard)  
Silicone and Viton (options available)

### Recommended Operating Conditions

The maximum differential pressure in direction of flow (outside to in) is 10 barg (145.03 psig).

The maximum differential pressure in direction of flow (in to outside) is 5 barg (72.51 psig).

The maximum recommended continuous operating temperature range is -75 °C (-103 °F) to +200 °C (392 °F).


Note: Temperature dependent on o-ring compound

### Housing Materials of Construction

- Material: 316L Stainless Steel
- Surface Finish:
  - Internal: Electropolished Ra 0.8
  - External: Mechanical Polish (Commercial Bright)
- Vent / Drain: 1/4" BSPP Female Thread (Supplied with Plug)
- Seal Material: EPDM AseptiC Seal

### Housing Design Pressure and Temperature

16 barg (232 psig) @ 200 °C (392 °F)

| Figure   | Housing Code | Connection Size | Capacity Kg / hr @ 1 barg | Overall Height | Replacement Filter Code |
|--|--------------|-----------------|---------------------------|----------------|-------------------------|
|  | 1            | HBAHP01KY       | 1.5" (38.1 mm)            | 14.8" (376 mm) | ZCSSK-...C              |
|  | 1            | HBAHP011C       | 2" (50.8 mm)              | 20.7" (526 mm) | ZCSS1-...C              |
|  | 1            | HBAHP012C       | 2" (50.8 mm)              | 30.5" (776 mm) | ZCSS2-...C              |

Note: For efficient steam distribution it is recommended that steam velocities are restricted to 25 m/sec<sup>1</sup>. For more information on the HBA range, please contact Parker domnick hunter.

### Correction Factors

To use the table above, the steam flow rates must be at 1 barg (14.50 psig). For system flows at different line pressures, divide the system flow by the correction factor below to find the equivalent flow @ 1 barg (14.50 psig).

| Steam Pressure    | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Correction Factor | 0.5 | 1.0 | 1.5 | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 | 5.5 |

## Ordering Information

### SINTERED

**ZCSS** [ ] - [ ] [ ]

| Code   Length (Nominal) | Code   Nominal Micron Rating (Steam) | Code   Endcap (10") |
|-------------------------|--------------------------------------|---------------------|
| B 2.5" (65 mm)          | 001 1.0 µm (Culinary)                | B dh DOE            |
| A 5" (125 mm)           | 025 25.0 µm                          | C BF / 226 Bayonet  |
| K 5" (125 mm)           |                                      |                     |
| 1 10" (250 mm)          |                                      |                     |
| 2 20" (500 mm)          |                                      |                     |
| 3 30" (750 mm)          |                                      |                     |

**Code | Endcap (Demi)**

|                  |
|------------------|
| T TRUESEAL       |
| Z Demi A & B Std |

All cartridges supplied as single items.

### PLEATED

**ZCHS** [ ] - [ ] [ ] [ ]

| Code   Length (Nominal) | Code   Nominal Micron Rating (Steam) | Code   Endcap (10") |
|-------------------------|--------------------------------------|---------------------|
| B 2.5" (65 mm)          | 001 1.0 µm (Culinary)                | B dh DOE            |
| A 5" (125 mm)           | 005 5.0 µm                           | C BF / 226 Bayonet  |
| K 5" (125 mm)           |                                      | 3 3" JUMBO          |
| 1 10" (250 mm)          |                                      | 4 4" JUMBO          |
| 2 20" (500 mm)          |                                      |                     |
| 3 30" (750 mm)          |                                      |                     |

**Code | Endcap (Demi)**

|                  |
|------------------|
| T TRUESEAL       |
| Z Demi A & B Std |

All cartridges supplied as single items.

### SINTERED Stainless Steel Retrofit Cartridge Part Numbers - 1.0 µm & 25 µm

| Parker domnick hunter Cartridge | DS-R 3/1               | DS-R 3/1.4             | DS-R 4/1.5             | DS-R 4/2.5             | DS-R 5/2.5             | DS-R 5/3               | DS-R 10/3              | DS-R 15/3              | DS-R 20/3              | DS-R 30/3              | DS-R 30/5              |                        |                        |                        |                        |
|---------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Retrofit Cartridge              | GS3/1<br>SS3/1         | GS3/1.5<br>SS3/1.5     | GS4/1.5<br>SS4/1.5     | GS4/2.5<br>SS4/2.5     | GS5/2.5<br>SS5/2.5     | GS5/3<br>SS5/3         | GS10/3<br>SS10/3       | GS15/3<br>SS15/3       | GS20/3<br>SS20/3       | GS30/3<br>SS30/3       | GS30/5<br>SS30/5       |                        |                        |                        |                        |
| Parker domnick hunter Cartridge | PDS-R 02/05            | PDS-R 02/10            | PDS-R 03/05            | PDS-R 03/10            | PDS-R 04/10            | PDS-R 04/20            | PDS-R 05/20            | PDS-R 05/25            | PDS-R 07/25            | PDS-R 07/30            | PDS-R 10/30            | PDS-R 15/30            | PDS-R 20/30            | PDS-R 30/30            | PDS-R 30/50            |
| Retrofit Cartridge              | GS02/05<br>SS02/05     | GS02/10<br>SS02/10     | GS03/05<br>SS03/05     | GS03/10<br>SS03/10     | GS04/10<br>SS04/10     | GS04/20<br>SS04/20     | GS05/20<br>SS05/20     | GS05/25<br>SS05/25     | GS07/25<br>SS07/25     | GS07/30<br>SS07/30     | GS10/30<br>SS10/30     | GS15/30<br>SS15/30     | GS20/30<br>SS20/30     | GS30/30<br>SS30/30     | GS30/50<br>SS30/50     |
| Parker domnick hunter Cartridge | PDS-R 02/05            | PDS-R 02/10            | PDS-R 03/05            | PDS-R 03/10            | PDS-R 04/10            | PDS-R 04/20            | PDS-R 05/20            | PDS-R 05/25            | PDS-R 07/25            | PDS-R 07/30            | PDS-R 10/30            | PDS-R 15/30            | PDS-R 20/30            | PDS-R 30/30            | PDS-R 30/50            |
| Retrofit Cartridge              | P-GS02/05<br>P-SS02/05 | P-GS02/10<br>P-SS02/10 | P-GS03/05<br>P-SS03/05 | P-GS03/10<br>P-SS03/10 | P-GS04/10<br>P-SS04/10 | P-GS04/20<br>P-SS04/20 | P-GS05/20<br>P-SS05/20 | P-GS05/25<br>P-SS05/25 | P-GS07/25<br>P-SS07/25 | P-GS07/30<br>P-SS07/30 | P-GS10/30<br>P-SS10/30 | P-GS15/30<br>P-SS15/30 | P-GS20/30<br>P-SS20/30 | P-GS30/30<br>P-SS30/30 | P-GS30/50<br>P-SS30/50 |

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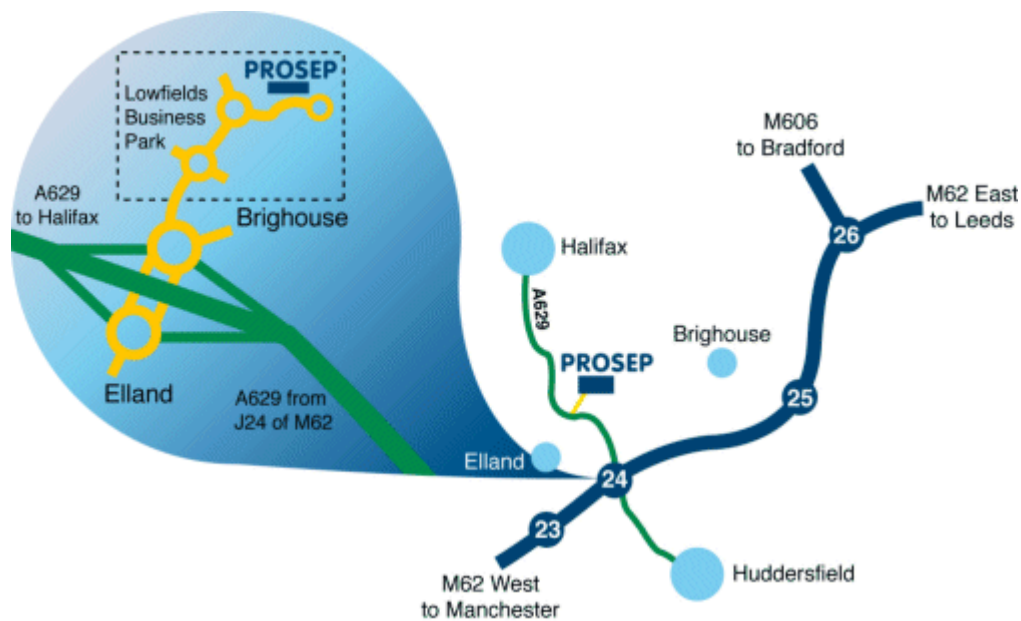
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**Map and Directions to Prosep Filters Limited**



Leave M62 at Junction 24.

At roundabout adjacent to Cedar Court Hotel take 2nd exit onto dual carriageway (A629), signposted Halifax.

Take 1st exit slip road.

At roundabout at end of sliproad, take 3rd exit off.

This is the entrance to Lowfields Business Park.

Proceed straight over 1st roundabout.

At next roundabout take 2nd exit onto River Bank Way - Prosep Filters can be found on the left after the S-bend.

[Link to Google Maps](#)