

Industrial Filter Housings for Cartridges and Bags

Envirogen offers a comprehensive range of filter housings for cartridge and bag applications, from single cartridge housings to multi-round bag or cartridge housings, as well as sanitary designs.

Our industrial multi-cartridge housings are supplied with a universal seat cup that allows either 222 (code 3 and code 8) or DOE filters to be fitted to the same housing.

For applications requiring pleated filter cartridges we recommend that SOE 222 filters are fitted. For applications using melt blown filter cartridges, cutend DOE filters are usually preferable.

The following tables provide guidance to aid in selection of the appropriate housing for your application. Contact Envirogen for more info.





Single Round Industrial Cartridge Housings

(See below for single round sanitary)

| Category | Comm/Light Indus | Comm/Light Indus | Comm/Light Indus | Industrial | Industrial | |
|---|---------------------|---------------------|---------------------|----------------------|-------------------|--|
| Product Name | HCS-PP | HCS-PC | HCS-VP | HCS-SSD | HCS-SS3 | |
| Bowl Material | Polypropylene | Polycarbonate | Virgin PP | 316SS | 316SS, 304SS | |
| Head Material | Polypropylene | Polypropylene | Virgin PP | 316 SS | 316SS, 304SS | |
| Closure | Threaded | Threaded | Threaded | Clamp | Clamp | |
| Electropolished | n/a | n/a | n/a | Yes | Yes | |
| Number of filters | 1 | 1 | 1 | 1 | 1 | |
| Filter lengths | 10" | 10" | 10, 20" | 4, 10, 20" | 4, 10, 20, 30" | |
| End Styles Accepted | DOE | DOE | Code 3 - 222/flat | DOE | Code 3 - 222/flat | |
| Inlet/Outlet | NPT | NPT | NPT | NPT | NPT | |
| I/O Sizes | 3/4" | 3/4" | 3/4", 1" | 3/4" | 3/4", 1" | |
| Vent | 1/4" | 1/4" | 1/4" | 1/8" | 1/8" | |
| Drain | n/a | n/a | 1/4" | 1/4" | 1/4" | |
| Gasket Options | Buna N, Epdm, Viton | Buna N, Epdm, Viton | Buna N, Epdm, Viton | Viton, EPDM, TEV | Viton, EPDM, TEV | |
| Max Oper Pressure at | | | | | | |
| Ambient Temp | 150 psi | 150 psi | 125psi | 175 psi | 175 psi | |
| FDA Materials | Yes | Yes | Yes | SS | SS | |
| Maximum Recom Flow Rate per 10" Equiv* | 10 GPM | 10 GPM | 10 GPM | 10 GPM | 10 GPM | |
| Optional Bracket | Yes | Yes | Yes | Yes | Yes | |
| Advantages | Economical | Clear Bowl | High Purity | Sealing confirmation | Code 3 seal | |



Multi-Round Cartridge Housings

| Category | Sanitary | Industrial | Industrial | Industrial | High Flow | |
|--|--------------------------------------|--|-------------------------------|---------------------------------------|--|--|
| Product Name | HCS-SAN or HCM-SAN | HCM-LG | HCM-M | HCM-NC | HC-HFH or HC-HFV | |
| Head and Shell Materials | 316 or 316L | 304, 316 or 316L SS | 304, 316 or 316L SS | 304, 316 or 316L SS | 304, 316 or 316L SS | |
| Closure | Tri Clamp or Swing Eye Bolts | Swing Eye Bolts | Swing Eye Bolts | Band Clamp | Swing Eye Bolts | |
| Electropolished | Yes, 0.2RA internal | No EP, Mech polish optional | Optional EP or mech polish | Optional EP or mech polish | No EP, Mech polish optional | |
| Number of Filters | 1, 3, 4, 6, 8, 11, 15, 20, 24, 29 | 12,18,22,28,36,42,52,61 ,69,81,94, 105,119,131,147 | 3, 5, 7, 12, 21 | 3, 5, 7, 9, 12 | 1, 2, 3, 4, 5, 7, 8, 9, 12,13, 15, 17, 19 | |
| Number of 10" Equivalents | 1 to 116 | 24 to 588 | 3 to 112 | 3 to 48 | n/a | |
| Flow Rate Capability (based on 5 GPM/10")* | 5 to 580 GPM | 120 to 2900 GPM | 15 to 560 GPM | 15 to 240 GPM | 175 to 9500 GPM | |
| Filter lengths | 10, 20, 30, 40 | 20, 30, 40 | 10, 20, 30, 40 | 10, 20, 30, 40 | 20, 40, 60 | |
| End Styles Accepted | 3, 7, 8 | DOE,3,7,8 | DOE, 3,7,8 | DOE, 3,7,8 | High Flow Style | |
| Accepts Filter Diameter | 2.8" | 2.67" | 2.67" | 2.67" | 6" | |
| Inlet/Outlet | TriClamp | ANSI Flange | ANSI Flange or NPT | ANSI Flange or NPT | ANSI Flange | |
| I/O Sizes | 1, 1.5, 2, 2.5, 3, 4, 6" | 3, 4, 6, 8, 10, 12" | 1.5, 2, 3, 4" | 1.5, 2, 2.5, 3" | 4 to 14" | |
| Vent | 1/2 to 1" TC | 1" NPT | 1/4", 3/4" | 1/4" | 1" NPT | |
| Drain | no | 1.5" NPT | 3/4, 1.5" | 3/4" | 1.5" NPT | |
| Gauge Port | no | 1/4" NPT | 1/4" NPT | 1/4" NPT | 1/4" NPT | |
| Gasket Options | Silicone, TEV, Viton | EPDM, Silicone, TEV, Viton | EPDM, Silicone, TEV, Viton | EPDM, Silicone, TEV, Viton | EPDM, Silicone, TEV, Viton | |
| Max Oper Pressure at Ambient Temp | 100 or 150 psi | 150 psi | 150 psi | 100 psi | 150 psi | |
| Legs | included | included | included | included | included | |
| Davit Arm | no | included | no | no | included | |
| ASME Code | U or UM Stamp Optional | U or UM Stamp Optional | U or UM Stamp Optional | No | U or UM Stamp Optiona | |
| Advantages | For sterile applications | For higher flow requirements | Medium flow industrial | Band closure for general applications | Fewer filters for high flow applications | |





Bag Filter Housings

| Category | Single | Single | Multi | |
|--------------------------------------|---|---|--|--|
| Product Name | HBFS | HBFC | HBFS | |
| Head and Shell Materials | 304L or 316L SS | Carbon Steel | 304L or 316L SS | |
| Closure | Clamp or Swing Bolts | Clamp or Swing Bolts | Swing Bolts, Clamp (2 rnd only) | |
| Standard Exterior Finish | Poly Coating | Painted | Poly Coating | |
| Finish Options | Electropolish, Mech (glass bead), passivate, epoxy coating | EP, Mech (glass bead), passivate, epoxy coating | Electropolish, Mech (glass bead), passivate, epoxy coating | |
| Number of Bags | 1 | 1 | 2, 3, 4, 5, 6, 8 | |
| Max Recommended Flow Rate* | 25 to 150 GPM | 25 to 150 GPM | 300 to 1200 GPM | |
| Accepts Bag Sizes | 1, 2, 3, 4 | 1, 2 | 2 | |
| Inlet/Outlet Configuration | Side in/Bottom out(std), Side in/Side out (option) | Side in/Bottom out (std), Side in/Side out (option) | Side In/Side Out | |
| Inlet/Outlet | FNPT(std), ANSI Flange (optional) | FNPT(std), ANSI Flange (optional) | ANSI Flange | |
| I/O sizes | .75, 1, 1.5, 2 | 2" | 3 to 8" | |
| Vent (FNPT) | 1/4" | 1/4" | 1/2" | |
| Drain (FNPT) | 1/2" | 1/2" | 1/2", 3/4" | |
| Gauge Port (FNPT) | 1/4" | 1/4" | 1/4" | |
| Gasket Options | Buna (std), EPR, Silicone, TES, Viton | Buna (std), EPR, Silicone, TES, Viton | Buna (std), EPR, Silicone, TES, Viton | |
| Max Oper Pressure at Ambient Temp | 150 psi (10.3 Bar) | 150 psi (10.3 Bar) | 150 psi (10.3 Bar) | |
| Legs | Size 1&2 - Standard Adjustable Size 3 & 4 Optional | Standard Adjustable | Standard Welded | |
| Davit Arm | No | No | Standard | |
| ASME Code | Optional | Optional | Optional | |
| Advantages | Heavy duty construction for max durability | Lowest cost option when SS not required. Not for aqueous use. | Multi bags for high flow applications | |







Ordering Guide

(See tables above for available options for each product line)

Bag Housing Ordering Information

| # of Bags | Product Name | Element Size | Closure | I/O size | I/O type | Flange Type (if applicable) | Materials of Construction | I/O Orientation | Gasket Material | ASME Code | Options | ASME Stamp |
|-----------|--------------|--------------|----------|----------|----------|-----------------------------|---------------------------|---------------------|-----------------|------------------|--------------------|------------|
| | | | C-Band | | | | | Blank - Side | | | | |
| Blank - 1 | HBFC | Bags | Clamp | 1 | N- FNPT | Blank - ANSI | 304L | in/Bottom Out | N-Buna N(std) | C- ASME Code | EP - Electropolish | U |
| | | | SB-Swing | | | | | | | | MP- Mechanical | |
| 2 | HBFS | 1 | Bolts | 1.5 | F-Flange | J-JIS | 316L | 2- side in/side out | S- Silicone | Blank - Non Code | Polish | UM |
| 3 | | 2 | | 2 | | D-DIN | CS | | V-Viton | | P-Passivate | |
| 4 | | 3 | | 3 | | | | | E- EPR | | EC- Epoxy Coat | |
| 5 | | 4 | | 4 | | | | | T-TES | | | |
| 6 | | | | 6 | | | | | | | | |
| 8 | | | | 8 | | | | | | | | |
| | | | | | | | | | | | | |

Example - HBFS2SB2N304N

Cartridge Housing Ordering Information

| | | | Materials of | | | | | Gasket | | | | |
|------------------------------------|--------------|--------------|--------------|-----------------|----------|--------------|-----------------------------|-------------|------------------|------------------|-----------------------|------------|
| # of Filter Cartridges (10" equiv) | Product Name | Element Size | Construction | Closure | I/O size | I/O type | Flange Type (if applicable) | Material | Filter Seal Type | ASME Code | Options | ASME Stamp |
| 1 to 588 (See tables) | See tables | 1- 10" | 304 | Blank -Threaded | 0.75 | N- NPT | Blank - ANSI | E- EPDM | DOE | C- ASME Code | EP - Electropolish | U |
| | | | | | | | | | | | MP- Mechanical | |
| for multi cartridge vessels only | | 2-20" | 316 | TC-Tri-Clamp | 1 | F-Flange | J-JIS | S- Silicone | 3- 222/flat | Blank - Non Code | Polish | UM |
| omit for single cart hsgs | | 3-30" | 316L | VB-Band Clamp | 1.5 | TC-Tri clamp | D-DIN | V-Viton | 6 - 226/flat | | D - Davit Arm | |
| | | 4-40" | PP | SB-Swing Bolts | 2 | | | N-Buna N | 7 - 226/fin | | SA - Spring Assist | |
| | | 04-4" | VPP | | 2.5 | | | T-TEV | 8 - 222/fin | | HY - Hydraulic Assist | |
| | | 6-60" | SAN | | 3 | | | | HF-High Flow | | B-Bracket | |
| | | | | | 4 | | | | | | | |
| | | | | | 6 | | | | | | | |
| | | | | | 8 | | | | | | | |
| | | | | | 10 | | | | | | | |
| | | | | | 12 | | | | | | | |
| | | | | | 14 | | | | | | | |
| | | | | | | | | | | | | |

Example - 588HCMLG4316SB12FE3CDUM

HOU-NA-0317



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