

# 47 mm Filter Holder

316L Stainless Steel Disc Filter Holder



## 47 mm Filter Holder

This innovative disc filter holder is designed for use in the clarification, sterilization and high purity filtration of liquids and gases. The vented, sanitary holder ensures the utmost reliability and reproducibility of filtration results in validation and scale-up studies, research and development and general laboratory applications.

### Features and Benefits

- True sanitary design and smooth, ultraclean surface finish enhance cleanability
- Tapered body design minimizes fluid hold-up volume
- Can be serially manifolded with similar filter holders
- Electropolished 316L stainless steel construction provides excellent durability and maximum corrosion resistance
- Clamp closure permits easy hand tightening of the filter holder
- Quick-release closure clamp speeds filter disc replacement and disassembly, and prevents filter distortion or breakage
- Non-threaded connections prevent entrapment of contaminants
- Bi-directional, PTFE-coated support screens securely support filter in forward or reverse flow conditions; prevent filter distortion or breakage; permit easy removal of filter after use; prevent filter from sticking to screens; provide security and reliability of results; allow filtration in either direction; protect against filter damage due to back (reverse) pressure surges
- Sanitary vent valve facilitates draining, venting, integrity testing and sampling
- Holder can be inline steam sterilized, autoclaved or hot water sanitized with filter in place

### Typical Applications

- Particulate and microbial filtration
- Filter validation studies
- Microbial challenge testing
- Contamination analysis
- Filterability testing
- Process scale-up studies
- Fluid sampling
- Aseptic sampling of fluids
- POU filtration on filling machines
- Carboy vents



# Product Specifications

## Materials of Construction

Filter Holder: 316L stainless steel

Cast Clamp: 304 stainless steel

Support Screens: PTFE coated 316L stainless steel

Closure O-rings: Silicone, Buna, EPR, Viton® or Teflon®

Vent Seal Tip: Teflon®

Vent O-ring: Silicone, Buna, EPR, Viton® or Teflon®

## Surface Finish

Wetted surfaces are polished to  $\leq 25$  micro-inch Ra finish; exterior surfaces are polished to a buffed-mirror finish. All surfaces are electropolished.

## Maximum Operating Pressure

150 psig @ 70 °F (10 bar @ 21 °C)

## Connections

Inlet/Outlet:  $\frac{3}{4}$ " sanitary flange

Vent:  $\frac{1}{4}$ " hose barb

## Filter Disc Size

47 mm diameter media

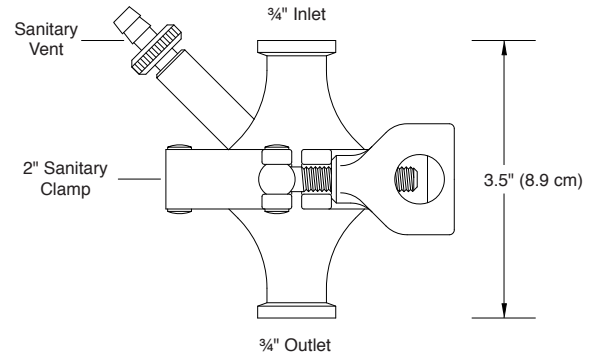
## Effective Filtration Area

12.4 cm<sup>2</sup> (1.92 in<sup>2</sup>)

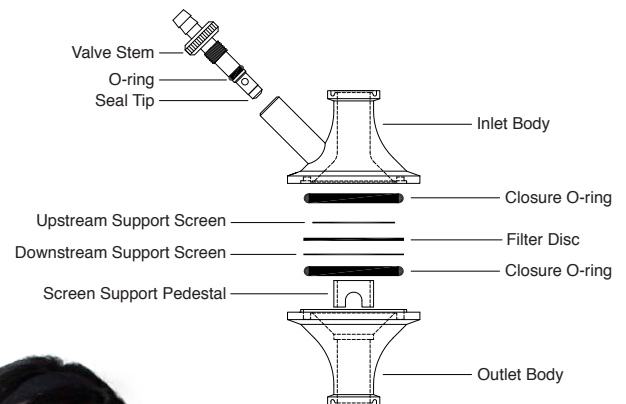
## Sterilization

Holder can be inline steam sterilized, autoclaved or hot water sanitized with filter disc in place.

## Side View



## Exploded View



# Ordering Information

## Filter Holder

### DH1-047

- DH1-047** = Standard vented sanitary 47 mm inline filter holder for single disc filters
- DH1S-047** = Modified vented sanitary 47 mm inline filter holder for thick or double-layered disc filters

## Closure O-ring

10

S

- B** = Buna  
**E** = EPR  
**S** = Silicone  
**T** = Teflon®  
**V** = Viton®

## Standard Replacement Parts

Inlet body with vent	<b>22200-50</b>
Outlet body	<b>22100-30</b>
Vent valve stem	<b>11300-20</b>
Clamp, 2"	<b>19020-10</b>
Upstream support screen, PTFE coated	<b>22250-20</b>
Upstream support screen, uncoated	<b>22250-00</b>
Downstream support screen, PTFE coated	<b>22275-20</b>
Downstream support screen, uncoated	<b>22275-00</b>
Downstream support pedestal	<b>22300-20</b>
Closure O-ring, Buna, 2/pkg.	<b>DH1-223B</b>
Closure O-ring, EPR, 2/pkg.	<b>DH1-223E</b>
Closure O-ring, Silicone, 2/pkg.	<b>DH1-223S</b>
Closure O-ring, PTFE encapsulated, 2/pkg.	<b>DH1-223T</b>
Closure O-ring, Viton®, 2/pkg.	<b>DH1-223V</b>

*Valve seal kits include 2 O-rings and 2 valve seal tips per kit:*

Valve seal kit, Buna	<b>1133B-00</b>
Valve seal kit, EPR	<b>1133E-00</b>
Valve seal kit, Silicone	<b>1133S-00</b>
Valve seal kit, PTFE	<b>1133T-00</b>
Valve seal kit, Viton®	<b>1133V-00</b>

## Accessories

¾" Sanitary clamp	<b>19007-10</b>
Adapter, ¾" sanitary flange to ¼" hose barb	<b>22410-20</b>
¾" Sanitary gasket, Buna	<b>4207-HSB</b>
¾" Sanitary gasket, EPR	<b>4207-HSE</b>
¾" Sanitary gasket, Silicone	<b>4207-HSS</b>
¾" Sanitary gasket, PTFE	<b>4207-HST</b>
¾" Sanitary gasket, Viton®	<b>4207-HSV</b>

## Part Number

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