# Clarity
clear solutions

Biopharmaceutical and
Pharmaceutical Filtration

The STRAINRITE Companies | World Class Filtration

# Brevi-Cap

SINGLE-USE, GAMMA STERILIZABLE
1-2 SQ FT FILTER CAPSULES

REV 5272025

CONTENT

03 Intro
04 Drawing
05 BRE-SG (Pur-MAXX E SG PES sterilizing grade)
06 BRE (Pur-MAXX E PES prefilter / single layer)
07 BRPA (Poly-MAXX pleated polypro)
08 BRGA (Fiber-MAXX pleated glass)
09 BRVM (Vent-MAXX PTFE)
10 BRVR (Vent-Rite PTFE)
11 BREDX (Endo-MAXX charged nylon)

## The Strainrite Companies

- Manufacturing and HQ in Auburn, ME USA
- Top-quality liquid filtration products
- Incorporated in 1978
- Clean room manufacturing
- 81,000 sq ft and growing
- 3rd Party GMP Accredited
- ISO9001

## Brevi-Cap filter capsules

### Uses

- Single use disposable systems
- Scale up/scale down benchtop studies
- OEM Equipment
- Avoidance of CIP and cross contamination
- Reducing operator exposure

### Typical fluids filtered

- APIs
- Buffers
- Cell culture media
- Cell suspensions
- Cosmeceuticals
- Final drug product
- Injectables, parenterals
- Lysate suspensions
- Nutraceuticals
- Ophthalmics
- Oral dosage forms
- Ultrapure chemicals/sterile chemicals

### Features

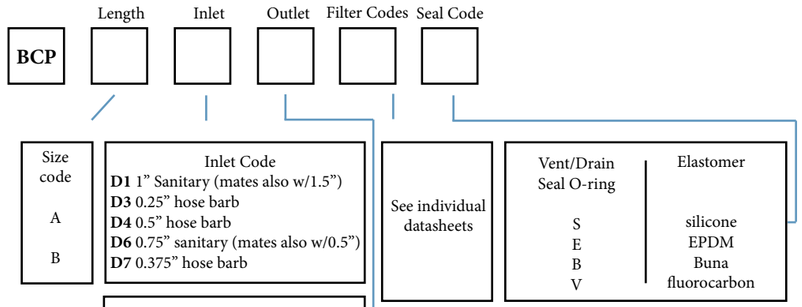
- Ultrapure polypropylene capsule
  ≈1 sq ft and ≈2 sq ft sizes
- Variety of Inlet and outlet connections
  include sanitary flanges in ¾” and 1”
  hose barbs for 1/8”, 3/8” and 1/4” i.d. tubing.
- Gamma irradiatable (with select filter media)
- Autoclavable
- Material compliance
- USP Class VI
- 21 CFR
- BSE/TSE
- ROHS
- REACH
- Easy to scale up
- Low extractables
- Vent and drain are 1/4” hose barb with valve.
- Low fill volumes
- Low hold-up volume

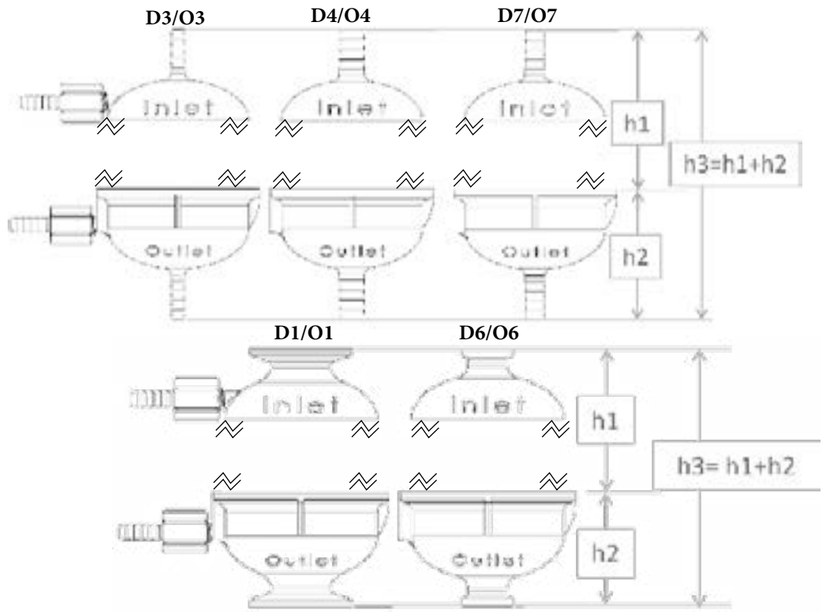
### Variety of filtration media available

- Sterilizing grade PES membrane
- Bioburden reduction and prefiltration
- PES membrane
- Charged nylon for endotoxin
- Polypropylene microfiber for prefiltration
- Glass microfiber for pre-filtration
- PTFE vent filter

The STRAINRITE Companies | World Class Filtration

SGS
AGS AMERICAN GLOBAL STANDARDS
9001:2025




h1 dimension, Size A & B

| | Size A | Size B |
|---|---|---|
| Inlet code | inches (mm) | inches (mm) |
| D1 | 2.8 (71) | 4.4 (112) |
| D3 | 3.3 (84) | 5.0 (127) |
| D4 | 3.3 (84) | 5.0 (127) |
| D6 | 2.8 (71) | 4.4 (112) |
| D7 | 3.3 (84) | 5.0 (127) |

h2 dimension, SizeA & B

| Outlet code | inches (mm) |
|---|---|
| O1 | 2.2 (56) |
| O3 | 2.7 (69) |
| O4 | 2.7 (69) |
| O6 | 2.2 (56) |
| O7 | 2.7 (69) |

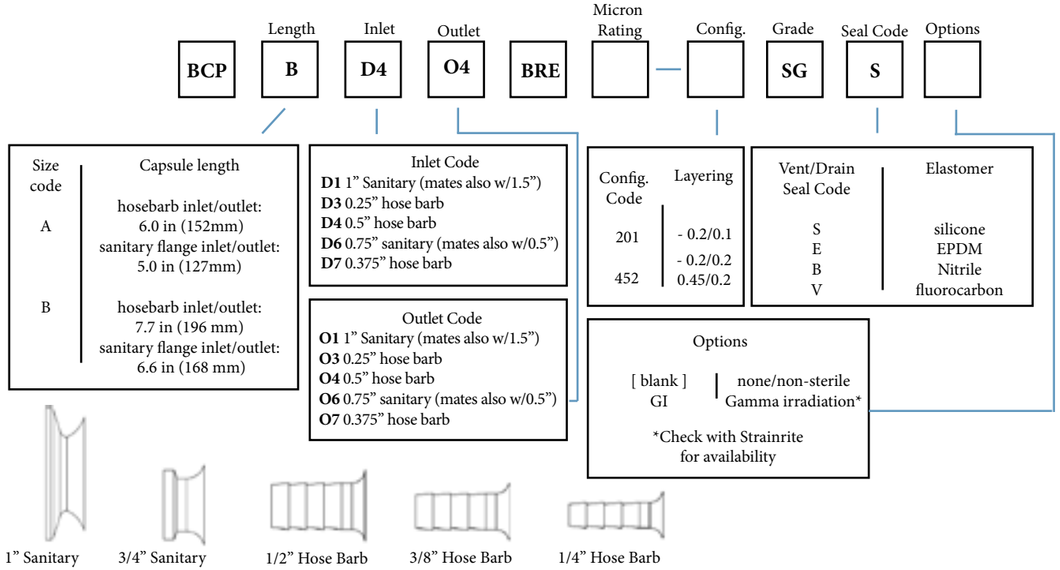
h3 dimension, Size A & B

| | Size A | Size B |
|---|---|---|
| Inlet/Outlet code | inches (mm) | inches (mm) |
| D1/O1 | 5.0 (127) | 6.6 (168) |
| D3/O3 | 6.0 (152) | 7.7(196) |
| D4/O4 | 6.0 (152) | 7.7(196) |
| D6/O6 | 5.0 (127) | 6.6 (168) |
| D7/O7 | 6.0 (152) | 7.7(196) |



| | |
|---|---|
| Designed for: | Sterilizing-filtration of SVPs, biopharmaceuticals, ophthlamics, APIs, biologicals, therapeutics. For ultra-pure chemicals, buffers, water, nutraceuticals, media. Upstream & downstream processing. |
| Membrane: | Two layers polyethersulfone membrane |
| Support Layers: | Polypropylene |
| Filter Hardware: | Polypropylene |
| Toxicity / Material Compliance: | USP Class VI |
| | 21 CFR |
| | REACH, ROHS, BSE/TSE |
| Validation: | Retains 1x10⁷/ cm² cfu of *Brevundimonas diminuta* |
| Quality: | 100% of filter units DI flushed |
| | 100% of filter units integrity tested |
| | Certificate of Quality |
| Sterilization: | Autoclavable, Gamma Irradiatable |
| Surface Area: | A = 1.02 ft²(948 cm²)<br>B = 1.86 ft² (1,728 cm²) |

## ORDER GUIDE: Brevi-Cap Capsule Filters with Sterilizing Grade Double-Layer PES 0.2 µm Membrane




## INTEGRITY TESTING

| Size | Wetting Fluid | Diffusive Flow Integrity Test | | | Bubble Point (psig) |
|---|---|---|---|---|---|
| | | Test Pressure (psig) | Air Flow Limit (ml/min) | | |
| A | Water | 40 | 0.2/0.2<br>0.45/0.2 | ≤2.8<br>≤4.0 | ≥ 49 |
| B | Water | 40 | 0.2/0.2<br>0.45/0.2 | ≤5.0<br>≤7.0 | ≥ 49 |

# Pur-MAXX E PES Membrane Pre - Filters and Bioburden Reduction Filters

| | |
|---|---|
| Designed for: | Prefiltration and bioburden reduction of LVPs, SVPs, biopharmaceuticals, ophthlamics, APIs, biologicals, therapeutics, ultra-pure chemicals, buffers, water, nutraceuticals. Upstream and downstream processing. Protection of final filters to improve economics. |
| Membrane: | Polyethersulfone membrane |
| Support Layers: | Polypropylene |
| Filter Hardware: | Polypropylene |
| Toxicity / Material Compliance: | USP Class VI |
| | 21 CFR |
| | REACH, ROHS, BSE/TSE |
| Quality: | 100% of filter units DI flushed and integrity tested |
| | Certificate of Quality |
| Sterilization: | Autoclavable, Gamma Irradiatable |
| Surface Area: | A = 1.02 ft² (1,189 cm²)<br>B = 1.86 ft² (2,155 cm²) |

## ORDER GUIDE: Brevi-Cap Capsule Filter with Pharmaceutical-Grade Bio-Reduction PES Membrane

| Length | Inlet | Outlet | | Micron | Grade | Seal Code | Options |
|---|---|---|---|---|---|---|---|
| BCP | B | D4 | O4 | BRE | 0.45 | 2 | S | |

**Size code / Capsule length**
- A: hosebarb inlet/outlet: 6.0 in (152mm); sanitary flange inlet/outlet: 5.0 in (127mm)
- B: hosebarb inlet/outlet: 7.7 in (196 mm); sanitary flange inlet/outlet: 6.6 in (168 mm)

**Inlet Code**
- **D1** 1" Sanitary (mates also w/1.5")
- **D3** 0.25" hose barb
- **D4** 0.5" hose barb
- **D6** 0.75" sanitary (mates also w/0.5")
- **D7** 0.375" hose barb

**Outlet Code**
- **O1** 1" Sanitary (mates also w/1.5")
- **O3** 0.25" hose barb
- **O4** 0.5" hose barb
- **O6** 0.75" sanitary (mates also w/0.5")
- **O7** 0.375" hose barb

**Absolute Micron Rating Code**: .04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2

**Vent/Drain Seal Code / Elastomer**
- S: silicone
- E: EPDM
- B: Nitrile
- V: fluorocarbon

**Options**
- [ blank ]: none/non-sterile
- GI: Gamma irradiation*

*Check with Strainrite for availability

## INTEGRITY TESTING

| | Micron Rating | 0.04 | 0.1 | 0.2 | 0.45 | 0.65 | 0.8 | 1.2 |
|---|---|---|---|---|---|---|---|---|
| | Wetting Fluid | IPA | IPA | Water | Water | Water | Water | Water |
| Size A | Diffusive Flow Test Pressure | 36 PSIG | 28 PSIG | 40 PSIG | 30 PSIG | 17 PSIG | 12 PSIG | 6 PSIG |
| | AIR Diffusive Flow Limit | ≤15 (ml/min) | ≤15 (ml/min) | ≤15 (ml/min) | ≤15 (ml/min) | ≤15 (ml/min) | ≤15 (ml/min) | ≤15 (ml/min) |
| | Bubble Point | ≥48 PSIG | ≥35 PSIG | ≥49 PSIG | ≥39.9 PSIG | ≥21.5 PSIG | ≥16 PSIG | ≥8 PSIG |
| Size B | Diffusive Flow Test Pressure | 36 PSIG | 28 PSIG | 40 PSIG | 30 PSIG | 17 PSIG | 12 PSIG | 6 PSIG |
| | AIR Diffusive Flow Limit (ml/min) | ≤28 (ml/min) | ≤28 (ml/min) | ≤28 (ml/min) | ≤28 (ml/min) | ≤28 (ml/min) | ≤28 (ml/min) | ≤28 (ml/min) |
| | Bubble Point | ≥48 PSIG | ≥35 PSIG | ≥49 PSIG | ≥39.9 PSIG | ≥21.5 PSIG | ≥16 PSIG | ≥8 PSIG |



# Poly-MAXX Polypropylene Microfiber

| | |
|---|---|
| Designed for: | Prefiltration and bioburden reduction of parenterals, biopharmaceuticals, ophthlamics, APIs, biologicals, therapeutics, ultra-pure chemicals, buffers, water, nutraceuticals. For upstream and downstream processing. Protection of downstream filters. Removal of gels. |
| Filter Medium: | Melt blown polypropylene microfiber – absolute rated |
| Support Layers: | Polypropylene |
| Filter Hardware: | Polypropylene |
| Toxicity / Material Compliance: | USP Class VI |
| | 21 CFR |
| | REACH, ROHS, BSE/TSE |
| Quality: | DI flush - optional |
| | Certificate of Quality |
| Sterilization: | Autoclavable, Gamma Irradiatable |
| Surface Area: | A = 1.05 ft² (975 cm²)<br>B = 1.91 ft² (1,774 cm²) |

## ORDER GUIDE: Brevi-Cap Capsule Filters with Pharmaceutical-Grade Polypropylene Microfiber Media

| Length | Inlet | Outlet | | Micron | Grade | Seal Code | Options |
|---|---|---|---|---|---|---|---|
| BCP | B | D4 | O4 | BRPA | 1 | 2 | S | |

**Size code / Capsule length**
- A: hosebarb inlet/outlet: 6.0 in (152mm); sanitary flange inlet/outlet: 5.0 in (127mm)
- B: hosebarb inlet/outlet: 7.7 in (196 mm); sanitary flange inlet/outlet: 6.6 in (168 mm)

**Inlet Code**
- **D1** 1" Sanitary (mates also w/1.5")
- **D3** 0.25" hose barb
- **D4** 0.5" hose barb
- **D6** 0.75" sanitary (mates also w/0.5")
- **D7** 0.375" hose barb

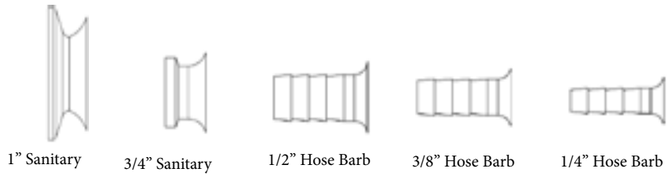
**Outlet Code**
- **O1** 1" Sanitary (mates also w/1.5")
- **O3** 0.25" hose barb
- **O4** 0.5" hose barb
- **O6** 0.75" sanitary (mates also w/0.5")
- **O7** 0.375" hose barb

**Absolute Micron Rating Code**: 1, 1.5, 2.5, 5, 10, 15, 20, 40, 70

**Vent/Drain Seal Code / Elastomer**
- S: silicone
- E: EPDM
- B: Nitrile
- V: fluorocarbon

**Options**
- [ blank ]: none/non-sterile
- GI: Gamma irradiation*
- DIF: DI Flush

*Check with Strainrite for availability



## Fiber-MAXX Glass Microfiber Pre-Filters

| | |
|---|---|
| Designed for: | Prefiltration and bioburden reduction, biopharmaceuticals, ophthlamics, APIs, biologicals, therapeutics, ultra-pure chemicals, buffers, water, nutraceuticals, upstream and downstream processing. Protection of downstream filters. Removal of gels. |
| Filter Medium: | Absolute rated microglass depth media |
| Support Layers: | Polypropylene and Polyester |
| Filter Hardware: | Polypropylene |
| Toxicity / Material Compliance: | USP Class VI |
| | 21 CFR |
| | REACH, ROHS, BSE/TSE |
| Quality: | DI flush - optional |
| | Certificate of Quality |
| Sterilization: | Autoclavable |
| Surface Area | A = 0.78 ft² (725 cm²)<br>B = 1.42 ft² (1,319 cm²) |

### ORDER GUIDE: Brevi-Cap Capsule Filters with Pharmaceutical-Grade Glass Microfiber Media

| | Length | Inlet | Outlet | | Micron | | Grade | Seal Code | Options |
|---|---|---|---|---|---|---|---|---|---|
| BCP | B | D4 | O4 | BRGA | 1 | — | 2 | S | |

**Size code / Capsule length**
- A: hosebarb inlet/outlet: 6.0 in (152mm); sanitary flange inlet/outlet: 5.0 in (127mm)
- B: hosebarb inlet/outlet: 7.7 in (196 mm); sanitary flange inlet/outlet: 6.6 in (168 mm)

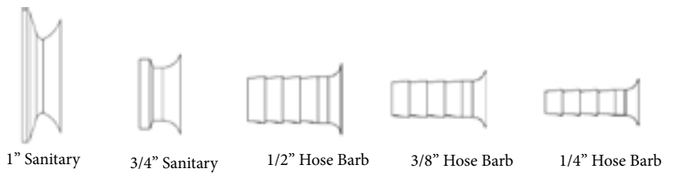
**Inlet Code**
- **D1** 1" Sanitary (mates also w/1.5")
- **D3** 0.25" hose barb
- **D4** 0.5" hose barb
- **D6** 0.75" sanitary (mates also w/0.5")
- **D7** 0.375" hose barb

**Outlet Code**
- **O1** 1" Sanitary (mates also w/1.5")
- **O3** 0.25" hose barb
- **O4** 0.5" hose barb
- **O6** 0.75" sanitary (mates also w/0.5")
- **O7** 0.375" hose barb

**Absolute Micron Rating Code**
- 1

**Vent/Drain Seal Code / Elastomer**
- S: silicone
- E: EPDM
- B: Nitrile
- V: fluorocarbon

**Options**
- [ blank ]: none/non-sterile
- DIF: DI Flush






## Vent-MAXX PTFE Membrane Sterile Air Filters

| | |
|---|---|
| Designed for: | Critical sterilizing air and gas filtration for: bioreactor sterile inlet air, bio-reactor exhaust gas, sterile holding tanks, sterile blanketing. Common gasses sterile-filtered are air, nitrogen, and $CO_2$. |
| Membrane: | Two layers 0.2 µm PTFE membrane |
| Support Layers: | Polypropylene |
| Filter Hardware: | Polypropylene |
| Toxicity / Material Compliance: | USP Class VI |
| | 21 CFR |
| | REACH, ROHS, BSE/TSE |
| Validation: | *Brevundimonas diminuta* retention: $10^7$ cfu /cm² in liquid and aerosol challenges |
| Quality: | 100% of filter units DI flushed |
| | 100% of filter units integrity tested |
| | Certificate of Quality |
| Sterilization: | Autoclavable |
| Surface Area: | A = .78 ft² (1,189 cm²)<br>B = 1.42 ft² (2,155 cm²) |

### ORDER GUIDE: Brevi-Cap Capsule Filters with Sterilizing Grade Vent-MAXX Double-Layer PTFE Membrane

| | Length | Inlet | Outlet | | Grade | Seal Code |
|---|---|---|---|---|---|---|
| BCP | B | D4 | O4 | BRVM | 2 | S |

**Size code / Capsule length**
- A: hosebarb inlet/outlet: 6.0 in (152mm); sanitary flange inlet/outlet: 5.0 in (127mm)
- B: hosebarb inlet/outlet: 7.7 in (196 mm); sanitary flange inlet/outlet: 6.6 in (168 mm)

**Inlet Code**
- **D1** 1" Sanitary (mates also w/1.5")
- **D3** 0.25" hose barb
- **D4** 0.5" hose barb
- **D6** 0.75" sanitary (mates also w/0.5")
- **D7** 0.375" hose barb

**Outlet Code**
- **O1** 1" Sanitary (mates also w/1.5")
- **O3** 0.25" hose barb
- **O4** 0.5" hose barb
- **O6** 0.75" sanitary (mates also w/0.5")
- **O7** 0.375" hose barb

**Vent/Drain Seal Code / Elastomer**
- S: silicone
- E: EPDM
- B: Nitrile
- V: fluorocarbon

### INTEGRITY TESTING

| Size | Wenting Fluid | Diffusive Flow Integrity Test | |
|---|---|---|---|
| | | Test Pressure (psig) | Air Flow Limit (ml/min) |
| A | IPA | 14 | 4.4 |
| B | IPA | 14 | 8.0 |

## Vent-RITE PTFE Membrane Sterile Air Filters

| | |
|---|---|
| Designed for: | Sterilizing air and gas filtration for: Sterile air where there is a very low probability of moisture or condensate, and absolute retention in liquids is not required. Common gasses sterile-filtered are air, nitrogen, and $CO_2$. |
| Membrane: | 0.2 µm PTFE membrane |
| Support Layers: | Polypropylene |
| Filter Hardware: | Polypropylene |
| Toxicity / Material Compliance: | USP Class VI |
| | 21 CFR |
| | REACH, ROHS, BSE/TSE |
| Validation: | *Brevundimonas diminuta* retention: $10^7$ cfu /$cm^2$ in aerosol challenges |
| Quality: | 100% of filter units DI flushed |
| | 100% of filter units integrity tested |
| | Certificate of Quality |
| Sterilization: | Autoclavable |
| Surface Area: | A = 1.28 $ft^2$ (1,189 $cm^2$)<br>B = 2.32 $ft^2$ (2,155 $cm^2$) |

### ORDER GUIDE: Brevi-Cap Capsule Filters with Sterilizing Grade Vent-Rite Single-Layer PTFE Membrane

| BCP | Length: B | Inlet: D4 | Outlet: O4 | BRVR | Grade: 2 | Seal Code: S |
|---|---|---|---|---|---|---|

**Size code / Capsule length**

| Size code | Capsule length |
|---|---|
| A | hosebarb inlet/outlet: 6.0 in (152mm) sanitary flange inlet/outlet: 5.0 in (127mm) |
| B | hosebarb inlet/outlet: 7.7 in (196 mm) sanitary flange inlet/outlet: 6.6 in (168 mm) |

**Inlet Code**

- **D1** 1" Sanitary (mates also w/1.5")
- **D3** 0.25" hose barb
- **D4** 0.5" hose barb
- **D6** 0.75" sanitary (mates also w/0.5")
- **D7** 0.375" hose barb

**Outlet Code**

- **O1** 1" Sanitary (mates also w/1.5")
- **O3** 0.25" hose barb
- **O4** 0.5" hose barb
- **O6** 0.75" sanitary (mates also w/0.5")
- **O7** 0.375" hose barb

**Vent/Drain Seal Code / Elastomer**

| Vent/Drain Seal Code | Elastomer |
|---|---|
| S | silicone |
| E | EPDM |
| B | Nitrile |
| V | fluorocarbon |

### INTEGRITY TESTING

| Size | Wetting Fluid | Diffusive Flow Integrity Test | |
|---|---|---|---|
| | | Test Pressure (psig) | Air Flow Limit (ml/min) |
| A | IPA | 14 | ≤20 |
| B | IPA | 14 | ≤36 |



## Endo-MAXX CN Filters

| | |
|---|---|
| Designed for: | Filtration of high purity water where a high degree of endotoxin control is required |
| Membrane: | Positive charge nylon 6,6 on polyester substrate |
| Support Layers: | Polypropylene |
| Filter Hardware: | Polypropylene |
| Toxicity / Material Compliance: | USP Class VI |
| | 21 CFR |
| | REACH, ROHS |
| | BSE/TSE |
| Validation: | Typical endotoxin reduction in water: 2 log |
| Quality: | 100% of filter units DI flushed |
| | 100% of filter units integrity tested |
| | Certificate of Quality |
| Sterilization: | Autoclavable, Gamma Irradiatable |
| Surface Area: | A = 1.02 $ft^2$ (1,189 $cm^2$)<br>B = 1.86 $ft^2$ (2,155 $cm^2$) |

### ORDER GUIDE: Brevi-Cap Capsule Filter with Endotoxin Reduction Charged Nylon Membrane

| BCP | Length: B | Inlet: D4 | Outlet: O4 | BREDX | Micron: 0.2 | Grade: 2 | Seal Code: S |
|---|---|---|---|---|---|---|---|

**Size code / Capsule length**

| Size code | Capsule length |
|---|---|
| A | hosebarb inlet/outlet: 6.0 in (152mm) sanitary flange inlet/outlet: 5.0 in (127mm) |
| B | hosebarb inlet/outlet: 7.7 in (196 mm) sanitary flange inlet/outlet: 6.6 in (168 mm) |

**Inlet Code**

- **D1** 1" Sanitary (mates also w/1.5")
- **D3** 0.25" hose barb
- **D4** 0.5" hose barb
- **D6** 0.75" sanitary (mates also w/0.5")
- **D7** 0.375" hose barb

**Outlet Code**

- **O1** 1" Sanitary (mates also w/1.5")
- **O3** 0.25" hose barb
- **O4** 0.5" hose barb
- **O6** 0.75" sanitary (mates also w/0.5")
- **O7** 0.375" hose barb

**Absolute Micron Rating Code**

- 0.1
- 0.2

**Vent/Drain Seal Code / Elastomer**

| Vent/Drain Seal Code | Elastomer |
|---|---|
| S | silicone |
| E | EPDM |
| B | Nitrile |
| V | fluorocarbon |

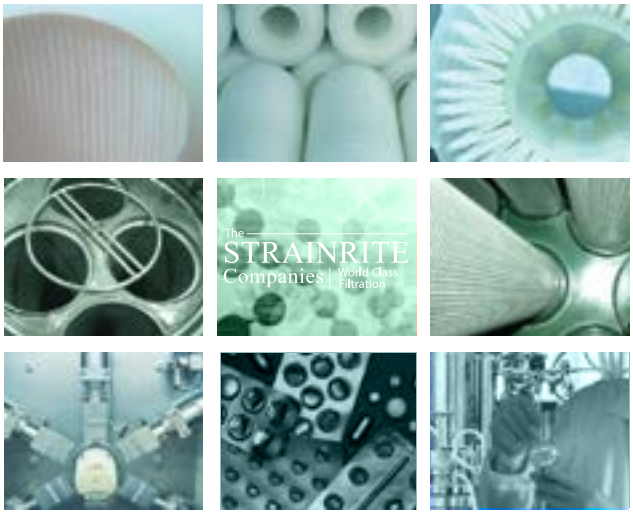
### INTEGRITY TESTING

| Micron Rating | | 0.1 | 0.2 |
|---|---|---|---|
| Wetting Fluid | | Water | Water |
| Size A | Diffusive Flow Test Pressure | 48 PSI | 36 PSIG |
| | Air Diffusive Flow Limit | 15 (ml/min) | ≤15 (ml/min) |
| | Bubble Point | ≥ 60 PSIG | ≥ 46 PSIG |
| Size B | Diffusive Flow Test Pressure | 48 PSI | 36 PSIG |
| | Air Diffusive Flow Limit (ml/min) | 28 (ml/min) | ≤28 (ml/min) |
| | Bubble Point | ≥ 60 PSIG | ≥ 46 PSIG |

The STRAINRITE Companies | World Class Filtration

Clarity
clear solutions

Designing and Manufacturing Leading-edge
Filtration Products Since 1978




**65 First Flight Drive**
**Auburn, ME 04210**
**Tel: (800) 487-3136**
**Fax: (207) 777-3177**
**www.strainrite.com**

**UF Strainrite publication, 2023**
**All rights reserved.**
**First edition, Printed in U.S.A.**
**BC12P-A**