

# All Natural Polypropylene CARTRIDGE HOUSINGS

All Natural Polypropylene Cartridge Housings help maintain high standards of purity and performance required in critical contamination control systems and processes.

## APPLICATIONS

- Deionized and Reagent Grade Water
- Electronic Grade Chemicals (See Compatibility Chart)
- Reagent Grade Chemicals
- Pharmaceutical
- Cosmetic
- Freons (TF, 113)
- Electronic Etching Solutions
- Magnetic Coatings (Tape, Disc or Card)
- Reverse Osmosis or Ultrafiltration Final Filters



## HOUSING OPTIONS

- Housings with plugged 0.25-inch NPT inlet, outlet and sump ports available
- Sump Extension Kit for 12-inch housing (157209) designed for use with 12-inch All Natural 222 and standard housings. This extension fills the 15/16-inch (24 mm) to 2, 1/16-inch (56 mm) gap left by single open end flat bottomed cartridges over 10-inch overall length 
- Cartridge Coupler (155003) for coupling 9.75-inch DOE cartridges in a 20-inch housing 
- Cap Plug Kit (144457) for vents or gauges, includes plug and Viton® o-ring 

## FEATURES

- All Natural polypropylene components – no fillers, colorants, plasticizers or lubricants
- Economical alternative to fluoropolymer, Stainless Steel or Teflon® housings
- Ultra-smooth contact surfaces prevent bacterial adhesion and build-up
- Resists deionized water and other inorganic solutions
- Resists stress cracking
- Viton® o-rings for dependable sealing
- 0.75-inch NPT inlet and outlet threads
- Compatible with most manufacturers

## SPECIFICATIONS

| Component           | Material/Value            |
|---------------------|---------------------------|
| Housing             | All Natural Polypropylene |
| Cap                 | All Natural Polypropylene |
| O-Ring              | Viton®                    |
| Maximum Temperature | 100° F (37.8° C)          |
| Maximum Pressure    | 100 PSI (6.9 bar)         |

**CAUTION:** Do not install where system will be exposed to direct sunlight.

**CAUTION:** Protect against freezing to prevent cracking of the filter and water leakage. For additional information about chemical compatibility, call our technical support department at 800.861.8758.

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## HOUSING SPECIFICATIONS AND PERFORMANCE

| Model | Cartridge Sealing                    | Maximum Dimensions                 | Initial ΔP (PSI) @ Flow Rate (gpm)* |
|-------|--------------------------------------|------------------------------------|-------------------------------------|
| #10   | DOE <sup>1</sup>                     | 12.5" x 5.125" (320 mm x 180 mm)   | 1 PSI @ 10 gpm (0.1 bar @ 38 Lpm)   |
| #12   | 222 <sup>2</sup>                     | 15.375" x 5.125" (390 mm x 180 mm) | 1 PSI @ 10 gpm (0.1 bar @ 38 Lpm)   |
| #20   | DOE <sup>1</sup><br>222 <sup>2</sup> | 29.125" x 5.125" (590 mm x 180 mm) | 1 PSI @ 10 gpm (0.1 bar @ 38 Lpm)   |

<sup>1</sup>DOE: Double open end    <sup>2</sup>222 o-ring sealing

\* Pressure drop measured on empty housing.

## CHEMICAL COMPATIBILITY

| Semiconductor Processing Materials            | 100% Poly     |               | PVDF          |                | Viton® |
|---|---------------|---------------|---------------|----------------|--------|
|   | 68° F (20° C) | 140° F (60° ) | 68° F (20° C) | 140° F (60° C) |        |
| Acetic Acid 99.7% (135°F/51.7° C Max)         | R             | C             | R             | R              | NR     |
| Acetic Acid 50%                               | R             | R             | R             | R              | R      |
| Acetone 99.5%                                 | R             | R             | NR            | NR             | NR     |
| Ammonium Fluoride 40%                         | R             | R             | R             | R              | R      |
| Ammonium Hydroxide 10%                        | R             | R             | R             | R              | R      |
| Hydrochloric Acid 37%                         | R             | R             | R             | R              | R      |
| Hydrofluoric Acid 49%, 52%                    | R             | R             | R             | R              | R      |
| Hydrogen Peroxide 50%                         | R             | C             | R             | R              | R      |
| Methanol 99.9% (140° F/60° C Max)             | R             | R             | R             | R              | NR     |
| Methylene Chloride 99.8% (105° F/40.6° C Max) | R             | NR            | R             | NR             | R      |
| Methyl Ethyl Ketone                           | R             | C             | NR            | NR             | NR     |
| N-Butyl Acetate 99.0%                         | NR            | NR            | C             | NR             | NR     |
| Nitric Acid 60%                               | R             | NR            | R             | C              | R      |
| Phosphoric Acid 86%                           | R             | R             | R             | R              | R      |
| Potassium Hydroxide 45%                       | R             | R             | R             | R              | NR     |
| 2-Propanol 99.5%                              | R             | R             | R             | C              | R      |
| Sodium Hydroxide 50%                          | R             | R             | R             | R              | R      |
| Sulfuric Acid 90%                             | R             | R             | R             | R              | R      |
| Tetrachloroethylene 99.0%                     | NR            | NR            | R             | R              | R      |
| Water-Deionized                               | R             | R             | R             | R              | R      |

R = Resistant    C = Conditionally resistant    NR = Non-resistant



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