

Pleated Microglass Cartridges

Meets Long Term 2 (LT2) Requirements for Ground Water Under Direct Influence of Surface Water (GWUDI)

Certified: NSF/ANSI Standard 61

Drinking Water System Components - Health Effects



Certified to
NSF/ANSI/CAN
Standard 61

- High flow capability
- Low initial pressure drop
- Lower overall operating cost
- Increased contaminant removal
- Longer filter runs for fewer change-outs



Features

- ▶ NSF-61 Listed filter media removes cyst-sized particles for safe, cyst-free drinking water
- ▶ Pleated microfiber media provides more surface area for longer filter life and increased particle removal
- ▶ Patented Dual Durometer end caps ensure positive end cap sealing
- ▶ End caps, center tubes and media are thermally bonded as one integral component for added strength and to provide superior end sealing
- ▶ 38 - 125 sq. ft. media (surface area) in a single cartridge design
- ▶ FDA Listed Materials: Manufactured from materials which are listed for food contact applications in Title 21 of the U.S. Code of Federal Regulations

Applications

- ▶ Surface Water Treatment Rule (SWTR) LT2
- ▶ Ground Water Under Direct Influence (GWUDI)
- ▶ Municipal Drinking Water
- ▶ Reverse Osmosis Pre-filtration
- ▶ Food & Beverage Filtration
- ▶ Desalination Pre-filtration
- ▶ Commercial/Residential Drinking Water
- ▶ Marine/Aquatic Filtration

Pleated Microglass Cartridges



Specifications

- ▶ Filter Media: FDA borosilicate microglass with acrylic binder
- ▶ Support Media: spun-bonded polyester laminated on both upstream and downstream sides
- ▶ Center Tubes: rigid PVC with perforations
- ▶ End Caps: Dual Durometer plastisol (pliable PVC) ensures a positive sealing surface
- ▶ Shrink Wrap: standard on all LT2 cartridges
- ▶ Flow Rate: 30 to 100 GPM (recommended per Harmsco® LT2 cartridge; > 3.6 Log removal)
- ▶ Temperature: 140°F (60°C) max*
* Temperature limits vary and depend on pressure and time under load.
- ▶ Change Out: 25-30 PSI (1.72-2.07 Bar) ΔP
- ▶ Surface Area: 38 to 125 sq. ft.
- ▶ pH: 3 to 11



Certified to NSF/ANSI/CAN Standard 61

INDEPENDENT LAB VALIDATED

To verify the performance of the Harmsco LT2 cartridge and NSF filter housing, IBR, a highly respected independent testing facility, was selected to conduct a challenge test outlined in the LT2 ESWTR Toolbox Guidance Manual 8.4.1. This defines the maximum challenge particulate based on detection limit and acceptable cryptosporidium surrogate...2 microns in this test. The “terminal” pressure drop was determined by Harmsco to be 30 psi. The Harmsco LT2 cartridge was tested in a single-pass challenge test at 3 points...after initial flushing, at 15 psi differential, and again at 30 psi differential.

Results of Challenge Test

Using 2-micron surrogate beads.

| Sample Point | Log Removal |
|-------------------------------------|-------------|
| Initial Efficiency | 3.6 |
| 50% Terminal Pressure Drop: 15 psi | 3.8 |
| 100% Terminal Pressure Drop: 30 psi | 3.7 |

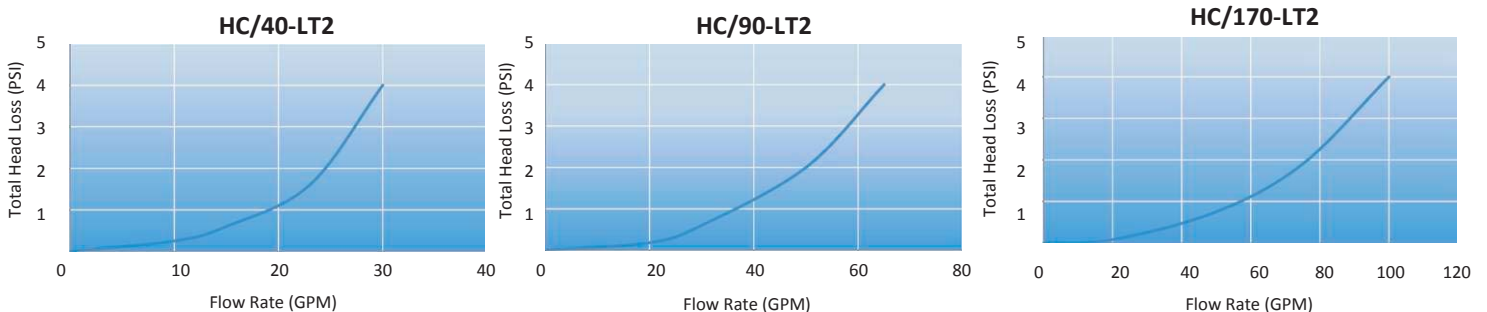
Cartridge Selection/Sizing Guide

| Product Code | Pleated Media Area (sq. ft.) | Length (in.) | O.D. (in.) | I.D. (in.) | Recommended Flow Rate (gpm) for > 3.6 log removal |
|---|------------------------------|--------------|------------|------------|---|
| LT2 Pleated Microglass Cartridges - Packed one cartridge per case. | | | | | |
| HC/40-LT2 | 38 | 9-5/8 | 7-3/4 | 4 | 30 |
| HC/90-LT2 | 81.25 | 19-1/2 | 7-3/4 | 4 | 65 |
| HC/170-LT2 | 125 | 30-3/4 | 7-3/4 | 4 | 100 |

Meets the Challenge Test Method defined in the LT2 ESWTR Tool Box Guidance Manual 8.4.1

Low Pressure Drop

Initial pressure drop using HC/170-LT2 cartridges is exceptionally low due to our pleated design and increased surface area. Pressure drop data is shown below, calculated for new cartridges in clear water.



Note: This publication is to be used as a guide. The data within has been obtained from many sources and is considered to be accurate. Harmsco does not assume liability for the accuracy and/or completeness of this data. Changes to the data can be made without notification. Temperature, Pressure, Flow Rates, Differential Pressures, Chemical Combinations and other unknown factors can affect performance in unknown ways. **Limited Warranty:** Harmsco warrants their products to be free of material and workmanship defects. Determination of suitability of Harmsco products for uses and applications contemplated by Buyer shall be the sole responsibility of Buyer. The end user/installer/buyer shall be liable for the product's performance and suitability regarding their specific intended applications. End users should perform their own tests to determine suitability for each application.

