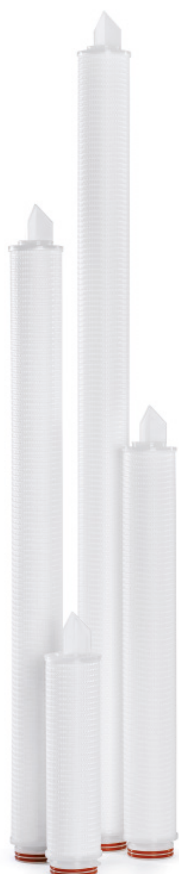




# CLAROX®

## MEMBRANE FILTER CARTRIDGES

Sterile filtration for water, mineral water, wine, beer and other beverages



- Absolute rated membrane filter cartridges for food and beverage applications. Obtained by pleating PES (hydrophilic polyethersulfone) layer membrane with upstream and downstream supports of polyester or polypropylene.
- Designed as sterilizing final filter for beverages with interesting cost benefit ratio and great performance in cold microbiological stabilization.
- Integrity testable.
- Repeatedly steamable.
- Sanitation.
- Regenerable.
- Thermo welded construction.
- EC-listed materials for food contact.
- FDA-listed materials per CFR21.

| Material of construction    | CLAROX® MP/B, GM*       | CLAROX® MP, MP/W        |
|-----------------------------|-------------------------|-------------------------|
| Filter media                | Asymmetric PES membrane | Asymmetric PES membrane |
| Upstream support            | Polypropylene           | Polyester               |
| Downstream support          | Polypropylene           | Polyester               |
| Internal core external core | Polypropylene           | Polypropylene           |
| Outer cage                  | Polypropylene           | Polypropylene           |
| Adapter and end caps        | Polypropylene           | Polypropylene           |

\* CLAROX® GM with pre-filter layers in borosilicate microfibers.

| Operating conditions                                |  |
|---|--|
| Maximum recommended operating differential pressure | 2.0 bar at 25 °C   |
| Maximum differential pressure                       | 5.0 bar at 25 °C   |
| Maximum continuous operating temperature            | 75 °C  |
| Regenerability                                      | Max. 2 % NaOH and active chlorine for food industry 200 ppm    |
| Thermal sterilization                               | Water 90 °C  |
| Chemical sterilization                              | By standard chemical agents                                    |
| Maximum cumulative time of steam sterilization      | 50 hours at 121 °C with cycles of 30 min. with max. ΔP 0.3 bar |

| Technical data                                |   |   |  |  |
|---|---|---|--|--|
| Description                                   | CLAROX® MP 02   | CLAROX® MP/W 04   | CLAROX® MP/W 06  | CLAROX® MP/W 08  |
| Absolute filtration rating                    | 0.2 micron  | 0.45 micron   | 0.65 micron  | 0.8 micron   |
| BP value                                      | 3.5 bar   | 1.3 bar   | 1.1 bar  | 0.7 bar  |
| Max. diffusion flow (10")                     | < 14 ml/min   | < 20 ml/min   | < 20 ml/min  | < 20 ml/min  |
| Test pressure for pressure hold test          | 2.3 bar   | 1.1 bar   | 0.9 bar  | 0.6 bar  |
| Test differential limits (per 30" cartridge)* | < 65 mbar   | < 115 mbar  | < 115 mbar   | < 115 mbar   |
| Bacteria retention                            | > 1.0 E7 per cm <sup>2</sup><br>( <i>Brevundimonas diminuta</i> )<br>(ASTM F838-05) | > 1.0 E10 per cm <sup>2</sup><br>( <i>Leuconostoc oenos</i> ) | > 1.0 E11 per cm <sup>2</sup><br>( <i>Saccharomyces cerevisiae</i> ) | > 1.0 E10 per cm <sup>2</sup><br>( <i>Saccharomyces cerevisiae</i> ) |
| Filter area per 10" cartridge                 | 0.55 m <sup>2</sup>   | 0.7 m <sup>2</sup>  | 0.7 m <sup>2</sup>   | 0.7 m <sup>2</sup>   |

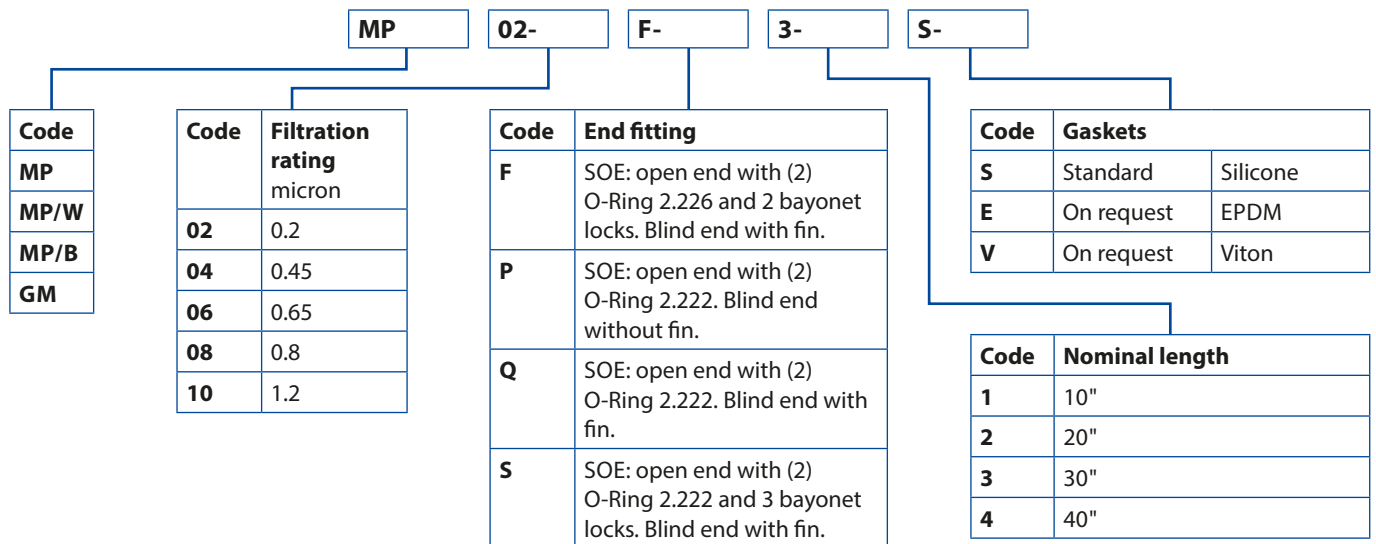
\* The values are related to 5 minutes and are indicative as they depend on the volume of the housing upstream of the filter cartridge.

| Technical data                                |   |   |  |
|---|---|---|--|
| Description                                   | CLAROX® MP/B 04   | CLAROX® MP/B 06   | CLAROX® GM   |
| Absolute filtration rating                    | 0.45 micron   | 0.65 micron   | 1.2 micron   |
| BP value                                      | 1.3 bar   | 1.1 bar   |  |
| Max. diffusion flow (10")                     | < 20 ml/min   | < 20 ml/min   |  |
| Test pressure for pressure hold test          | 1.1 bar   | 0.8 bar   | 0.5 bar  |
| Test differential limits (per 30" cartridge)* | < 115 mbar  | < 115 mbar  | < 120 mbar   |
| Bacteria retention                            | > 1.0 E7 per cm <sup>2</sup><br>( <i>Pediococcus damnosus</i> ) | > 1.0 E7 per cm <sup>2</sup><br>( <i>Saccharomyces cerevisiae</i> ) | > 1.0 E10 per cm <sup>2</sup><br>( <i>Saccharomyces cerevisiae</i> ) |
| Filter area per 10" cartridge                 | 0.75 m <sup>2</sup>   | 0.75 m <sup>2</sup>   | 0.7 m <sup>2</sup>   |

\* The values are related to 5 minutes and are indicative as they depend on the volume of the housing upstream of the filter cartridge.

| General data                              |  |
|---|--|
| Application area                          | Final filtration of water, mineral water, wine, beer juices and other beverages, ideal as police filter prior to bottling.                             |
| Chemical resistance, allowed products     | Withstands acids and alkalis, pH 1 to 14, alcohols, solvents, weak oxidizing cleaning solutions.   |
| Chemical resistance, not allowed products | Not compatible with strong oxidizing agents, e.g. 98 % sulfuric acid, fuming nitric and bromic acid, CHC and aromatic solvents, e.g. benzene, toluene. |
| Food safety                               | European regulation 10/2011 and its amendments, regulations 1935/2004 and 1895/2005.   |
| Quality standards                         | Produced under a certified quality system to guarantee traceability of manufacturing records and integrity testing results.                            |
| Packing unit                              | One cartridge per box.   |

## CLAROX® membrane filter cartridges ordering information



| Available micron ratings |                 |
|--------------------------|-----------------|
| MP                       | 0.2             |
| MP/W                     | 0.45, 0.65, 0.8 |
| MP/B                     | 0.45, 0.65      |
| GM                       | 1.2             |