**PRODUCT TECHNICAL SPECIFICATIONS**

**PLASTIC FILTERS**

**(Sifter-Disc)**

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**1. EXTENT**

 It eliminates the clogging problem by keeping dirt and particles into the line in Agricultural and Landscape Irrigation systems.

**2.IMPLEMENTATION**

• Agricultural watering

• Landscaping industry

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**3.** **MATERIAL PROPERTIES**

• Guaranteed Pressure Value: PN10 / 60 oC

• Made of high-quality polypropylene material.

• It has minimum pressure loss.

• It has the ability to operate in a wide flow range.

• It has a product design focused on easy cleanability and flexible maintenance.

• It has sensitive particle retention feature.

• It has 120 Mesh (130 Micron) Sieve and Disc Cartridge Option.

Sieve: Stainless Steel, Disc: Consists of Polypropylene (PP) raw material.

• High sensitivity to corrosion and chemicals

• Filter Manometer Output Measurement; ¼”, Flush Valve Outlet Dimension ¾”

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| --- | --- | --- |
| **Technical Criterion** | **Unit** | **Necessity** |
| Connection Standard (Male Thread) |   | BSP & NPT |
| Connection Dimensions | inch | 3/4" | 1" | 1 1/4" | 1 ½" | 2" |
| Flow Range | m3/h | 5 | 6 | 10 | 14 | 25 |
| Filter Surface Area (Sieve / Disc) | cm2 | 165 / 180 | 165 / 180 | 265 / 280 | 265 / 280 | 485 / 500 |
| Max. Operating pressure | Bar | 10 |
| Max. Operating temperature | oC | 60 |
| Filter Type |   | Sieve / Disc |
| Number of Sieve Mesh |   | 120 |
| Permissible Particle Size | Micron | 130 |
| Manometer Outlet |   | ¼ " (2 Pieces) |
| Flush Valve Outlet |   | ¾" |

**4. APPEARANCE**

When examined with the naked eye, Plastic Filters should have a homogeneous structure, should not contain foreign matter, and should not have surface defects such as bubbles, cracks, deformities, or regional color differences on the box.

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**5. PACKAGING**

 Plastic Filters are supplied to the market in bags and boxes so that they will not be damaged during transportation.

**6. MARKING**

 On the Plastic Filters put on the market and on their packaging;

• Name of the product,

• Quantity of the product,

• Company name, address, and other information (brand, etc.),

• Connection Size (3/4”-BSP)

• Filter Direction signs

• Manufacturing date,

• At least one of the batch, serial or code numbers,

**7.** **INSPECTION AND EXPERIMENTS**

|  |  |  |
| --- | --- | --- |
| **TEST DESCRIPTION** | **TEST METHOD** | **TEST CRITERIA** |
| **TEMPERATURE** | **PRESSURE** | **DURATION** |
| Body Sealing Test | ISO 9912 | 23 °C ± 3 °C | PN x 1,5 | 5 min. |
| 23 °C ± 3 °C | PN x 1,5 | 15 min. |
| Cyclic Pressure Test | ISO 9912 | 23 °C ± 3 °C | 1 Bar- 10 Bar | 20.000 cycle |
| 1 Bar- 15 Bar | 2000 cycle |
| Long-term Pressure Test | SPECIAL TEST | Outer Environment | 10 Bar | 30 Day |
| Explosion Test | SPECIAL TEST | 23 °C ± 3 °C | Min. 20 Bar | - |

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**8. USAGE INFORMATION**

• Attention should be paid to the connection direction of the sieve and disc filter.

• Before operating the system, it should be checked whether the filter is clean.

• The filter should be cleaned when the difference between the filter inlet and outlet pressures is more than 1 bar.

• Filters must be cleaned regularly for the health of the system.

• For the discharge valve, the blind plug on the filter cover is removed and a ¾” female valve is installed by drilling it with the help of a drill.

**9.** **DIMENSIONS**

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Plastic Filter Capacity Table

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| --- | --- | --- | --- |
| Size | Maximum flow | Filtering Surface (Disc) | Filtering Surface (Screen) |
| 3/4" | 5 m3/h | 165 cm2 | 180 cm2 |
| 1" | 6 m3/h | 165 cm2 | 180 cm2 |
| 1 1/4" | 10 m3/h | 265 cm2 | 280 cm2 |
| 1 1/2" | 14 m3/h | 265 cm2 | 280 cm2 |
| 2" | 25 m3/h | 485 cm2 | 500 cm2 |

Flow - Pressure Difference Graphs

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