Rain Bird HDF 1X2 Disc Filter

Automatic self-cleaning 2" filter for low flow ranges.
Maximum Flow: 106 gpm (24 m³/h).

Applications
❖ Turf irrigation systems with flow rates up to 106 GPM that require clean water.
❖ For Industry:
  - Discharge water
  - Recycled water
❖ Suited for areas with or without electricity.
❖ Ideal where manual cleaning is troublesome.
❖ Compact design fits in tight spaces.

Advantages
❖ Rain Bird HDF systems helical action provides efficient cleaning.
❖ Maximum filtering surface (231 in²/1492 cm²).
❖ Manufactured from engineered plastics to resist rust and corrosion from chemicals and water.
❖ Unit is pre-assembled for easy installation.
❖ Disc elements provide depth filtration - not just surface filtration.
❖ Control Unit functions on pressure differential or time.
❖ Manual backflush cycle can be initiated from the controller.
❖ Plastic backflush valves are lightweight and corrosion resistant.
❖ Low maintenance.
❖ Filtration disc versatility (filtration grade can be easily changed).
- Filtration options:
  - 100 micron (150 mesh)
  - 130 micron (120 mesh)
  - 200 micron (75 mesh)

How It Works
Rain Bird HDF Series 1X2 filters backwash successively.

Filtration Stage: As water goes through the discs, particles are projected away due to the cyclone effect, reducing the backwashing frequency.

Backflushing Stage: Water is projected through the discs, expelling the retained particles and evacuating them through the drainage manifold.
**Filtration** Maximum flow per 2" filter

<table>
<thead>
<tr>
<th>Quality of Water</th>
<th>Micron/ Mesh</th>
<th>200</th>
<th>130</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOOD</td>
<td>gpm</td>
<td>106</td>
<td>106</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>m³/h</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>gpm</td>
<td>106</td>
<td>88</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>m³/h</td>
<td>24</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>POOR</td>
<td>gpm</td>
<td>106</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>m³/h</td>
<td>24</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>VERY</td>
<td>gpm</td>
<td>106</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>m³/h</td>
<td>24</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>POOR</td>
<td>m³/h</td>
<td>18</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

**Material**
- Housing: Polyamide reinforced with fiberglass
- Filtering element: PP grooved discs
- Sealing element: Nitrile rubber (NBR)

**pH: 4 – Maximum pressure 145 psi / 10 bar – Maximum temperature 140°F / 60°C**

**Rain Bird HDF 1X2**

**Backwashing**

<table>
<thead>
<tr>
<th></th>
<th>200-130 Micron (75-120 mesh)</th>
<th>100 Micron (150 mesh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum backwashing pressure per 2&quot; filter</td>
<td>40 psi</td>
<td>50 psi</td>
</tr>
<tr>
<td>Minimum backwashing flow per 2&quot; filter</td>
<td>2.5 gpm</td>
<td>3.1 gpm</td>
</tr>
</tbody>
</table>

**HDF 1X2 Head Loss**

**130 Micron**

<table>
<thead>
<tr>
<th>Flow (gpm)</th>
<th>Head Loss (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>0.10</td>
</tr>
<tr>
<td>1.0</td>
<td>0.25</td>
</tr>
<tr>
<td>2.5</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>N. Filters</th>
<th>Manifold</th>
<th>Filtering Surface</th>
<th>F</th>
<th>E</th>
<th>L</th>
<th>W</th>
<th>R</th>
<th>T</th>
<th>S</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>1X2/2G</td>
<td>1X2</td>
<td>Inlet 2&quot; PVC</td>
<td>Outlet 2&quot; NPT</td>
<td>231</td>
<td>1492</td>
<td>22</td>
<td>571</td>
<td>11</td>
<td>270</td>
<td>33</td>
<td>842</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drainage 2&quot; NPT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Dimensions</th>
</tr>
</thead>
</table>

© Registered Trademark of Rain Bird Corporation
© 2013 Rain Bird Corporation 9/13

Rain Bird Corporation
6991 E. Southpoint Road
Tucson, AZ 85756
Phone: (520) 741-6100
Fax: (520) 741-6522

Rain Bird Technical Services
(800) RAINBIRD (1-800-724-6247)
(U.S. and Canada)

Rain Bird Corporation
970 West Sierra Madre Avenue
Azusa, CA 91702
Phone: (626) 812-3400
Fax: (626) 812-3411

Rain Bird International, Inc.
1000 West Sierra Madre Ave.
Azusa, CA 91702
Phone: (626) 963-9311
Fax: (626) 852-7343

Specification Hotline
800-458-3005 (U.S. and Canada)

The Intelligent Use of Water
www.rainbird.com