**Applications**
- Wastewater
- Reuse/recycled/reclaimed water
- Spray tanks
- Wherever very effective removal of debris is required
- Works well as standalone units or combined to form filter batteries

**Features/Benefits**
- Highly effective multiple disc ring design captures and holds more debris
- Low friction loss keeps system costs down
- Rings are easily removed for fast cleaning without the need for scrubbing
- Greater holding capacity of the rings vs. screen filters mean less frequent cleaning
- Color-coded disc rings make identification of mesh rating fast and easy
- Ring sets are easily replaced if mesh requirements change

**Specifications**
- Filter Body and Cover: Reinforced Polyamide
- Disc Rings: Polypropylene
- O-Rings and seals: Nitrile & EPDM
- Clamps, spring and bolts: Stainless Steel
- Temperature range: -40° to 160°F (-40° to 70°C)
- Maximum pressure: 140 psi

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**THE FILTERING PROCESS**

Grooved, compressed plastic disc rings produce a deep filtration process. As dirty water is pumped into the filter, and pressure increases on the outside of the filter, the water pressure compresses the rings together tightly.

Grooves in the disc rings criss cross, forming a three-dimensional network that traps particles. The number of criss-crossed intersection points on each groove varies, depending on filtration grade. The turbulence in the varying paths and the large number of intersections create an environment where particles are eventually trapped (see drawing below).

This design filters the dirty water thoroughly, not only on the outer surface of the cylindrical disc filter, but through the entire depth of every ring’s grooves. The result is a larger, more efficient filtering area (when compared to screen filters) with more debris being captured and cleaner water exiting from the filter.

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**DISC Mesh/Micron Chart**

<table>
<thead>
<tr>
<th>Color Code</th>
<th>Blue</th>
<th>Yellow</th>
<th>Red</th>
<th>Black</th>
<th>Brown</th>
<th>Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesh Size</td>
<td>40</td>
<td>80</td>
<td>120</td>
<td>140</td>
<td>200</td>
<td>280</td>
</tr>
<tr>
<td>Micron</td>
<td>400</td>
<td>200</td>
<td>130</td>
<td>100</td>
<td>70</td>
<td>55</td>
</tr>
</tbody>
</table>
MANUAL DISC FILTER SPECIFICATIONS

3/4" Filter

- Flow range: 1-17 GPM
- Maximum pressure: 140 psi
- Filtering surface area: 24.8 sq. in.
- Filtering volume: 5.8 cu. in.
- Length: 8 1/8"
- Width: 9 3/8"
- Weight: 8.8 lbs.
- Distance between end connections: 6"
- Inlet/outlet diameter: 3/4” male
- Model Number: 25A45-XXX
- With Shut-Off Valve
- Model Number: 25A46-XXX

1" Filter

- Flow range: 5-26 GPM
- Maximum pressure: 140 psi
- Filtering surface area: 48.91 sq. in.
- Filtering volume: 26.8 cu. in.
- Length: 8 7/8"
- Width: 5 1/8"
- Weight: 2.4 lbs.
- Distance between end connections: 6 7/8"
- Inlet/outlet diameter: 1” male
- Model Number: 25A47-XXX

1" Long Filter

- Flow range: 10-35 GPM
- Maximum pressure: 140 psi
- Filtering surface area: 77.78 sq. in.
- Filtering volume: 36.1 cu. in.
- Length: 13 1/16"
- Width: 5 1/8"
- Weight: 3.13 lbs.
- Distance between end connections: 6 7/8"
- Inlet/outlet diameter: 1” male
- Model Number: 25A48-XXX

2" Super Filter

- Flow range: 40-120 GPM
- Maximum pressure: 140 psi
- Filtering surface area: 148 sq. in.
- Filtering volume: 75 cu. in.
- Length: 19 13/32"
- Width: 5 1/8"
- Weight: 13.2 lbs.
- Distance between end connections: 7 7/8"
- Inlet/outlet diameter: 2” male
- Model Number: 25A49-XXXSDS

3" Twin Filter - Flanged

- Flow range: 80-175 GPM
- Maximum pressure: 140 psi
- Filtering surface area: 291 sq. in.
- Filtering volume: 150 cu. in.
- Length: 35.3"
- Width: 11 13/16"
- Weight: 26.8 lbs.
- Distance between end connections: 12 3/32"
- Inlet/outlet diameter: 3” flanged
- Model Number: 25A50-XXXF

3" Twin Filter - Grooved

- Flow range: 80-175 GPM
- Maximum pressure: 140 psi
- Filtering surface area: 291 sq. in.
- Filtering volume: 150 cu. in.
- Length: 35.3"
- Width: 11 13/16"
- Weight: 25.4 lbs.
- Distance between end connections: 12 3/32"
- Inlet/outlet diameter: 3” grooved
- Model Number: 25A50-XXXG
### 1 1/2" Filter
- **Flow range:** 10-35 GPM
- **Maximum pressure:** 140 psi
- **Filtering surface area:** 49 sq. in.
- **Filtering volume:** 26.8 cu. in.
- **Length:** 8 25/32" (217 mm)
- **Width:** 5 1/8" (130 mm)
- **Weight:** 2.9 lbs.
- **Distance between end connections:** 7 7/8" (200 mm)
- **Inlet/outlet diameter:** 1 1/2" male
- **Model Number:** 25A15-XXX

### 2" Dual Filter
- **Flow range:** 40-120 GPM
- **Maximum pressure:** 174 psi
- **Filtering surface area:** 148 sq. in.
- **Filtering volume:** 75 cu. in.
- **Length:** 18 1/4" (460 mm)
- **Width:** 7 1/4" (185 mm)
- **Weight:** 13 lbs.
- **Distance between end connections:** 13 1/4" (333 mm)
- **Inlet/outlet diameter:** 2" male
- **Model Number:** 25A30-XXX

### 3" Angle Filter - Flanged
- **Flow range:** 80-220 GPM
- **Maximum pressure:** 140 psi
- **Filtering surface area:** 287 sq. in.
- **Filtering volume:** 54 cu. in.
- **Length:** 25 7/16" (645 mm)
- **Width:** 11 13/16" (300 mm)
- **Weight:** 26 lbs.
- **Inlet/outlet diameter:** 3" flanged
- **Model Number:** 25A53-XXXF

### 3" Angle Filter - Grooved
- **Flow range:** 80-220 GPM
- **Maximum pressure:** 140 psi
- **Filtering surface area:** 287 sq. in.
- **Filtering volume:** 54 cu. in.
- **Length:** 25 7/16" (645 mm)
- **Width:** 11 13/16" (300 mm)
- **Weight:** 26 lbs.
- **Inlet/outlet diameter:** 3" grooved
- **Model Number:** 25A53-XXXG

### 4" Twin Filter - Flanged
- **Flow range:** 160-450 GPM
- **Maximum pressure:** 140 psi
- **Filtering surface area:** 574 sq. in.
- **Filtering volume:** 108 cu. in.
- **Weight:** 44.7 lbs.
- **Distance between end connections:** 16 9/16" (420 mm)
- **Inlet/outlet diameter:** 4" flanged
- **Model Number:** 25A78-XXXF

### 6" Twin Filter - Flanged
- **Flow range:** 200-600 GPM
- **Maximum pressure:** 140 psi
- **Filtering surface area:** 574 sq. in.
- **Filtering volume:** 108 cu. in.
- **Weight:** 48 lbs.
- **Distance between end connections:** 16 1/16" (410 mm)
- **Inlet/outlet diameter:** 6" flanged
- **Model Number:** 25A80-XXXF
## DISC FILTER Application Recommendations

<table>
<thead>
<tr>
<th>Filtering Volume (cu. in.)</th>
<th>Head Loss (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0.60 0.25</td>
</tr>
<tr>
<td>10</td>
<td>2.50 0.60</td>
</tr>
<tr>
<td>13</td>
<td>3.40 1.34</td>
</tr>
<tr>
<td>17</td>
<td>5.87 2.10</td>
</tr>
<tr>
<td>22</td>
<td>3.24 1.10 1.10</td>
</tr>
<tr>
<td>26</td>
<td>1.50 1.30 1.50</td>
</tr>
<tr>
<td>31</td>
<td>2.10 1.70 2.10</td>
</tr>
<tr>
<td>35</td>
<td>2.50 2.30 2.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Filtering Surface (sq. in.)</th>
<th>Head Loss (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>4.20 0.30 0.30</td>
</tr>
<tr>
<td>50</td>
<td>0.63 0.63</td>
</tr>
<tr>
<td>88</td>
<td>1.03 1.03 0.64</td>
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<tr>
<td>110</td>
<td>1.47 1.47 0.98</td>
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<tr>
<td>132</td>
<td>1.37 0.73</td>
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<tr>
<td>154</td>
<td>1.80 0.88</td>
</tr>
<tr>
<td>176</td>
<td>2.28 1.03</td>
</tr>
<tr>
<td>198</td>
<td>1.32</td>
</tr>
<tr>
<td>220</td>
<td>1.61</td>
</tr>
</tbody>
</table>

### MANUAL DISC FILTER Chart Legend

- **Effluent (incomplete biological treatment) - rivers & canals (high biological load) reservoirs (hot climate, insufficient sedimentation)**
- **Effluent (effective sedimentation, complete biological treatment) - rivers & canals (low biological load) reservoirs (cold climate, good sedimentation)**
- **Municipal supply or well water (well-maintained with no presence of iron or magnesium)**

The losses shown are for filters with 140 mesh.

### MANUAL DISC FILTER Ordering Information

<table>
<thead>
<tr>
<th>Model Number*</th>
<th>Description</th>
<th>Flow Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>25A45-XXX</td>
<td>½“ MPT x MPT</td>
<td>1 - 17 GPM</td>
</tr>
<tr>
<td>25A46-XXX</td>
<td>¾“ MPT x MPT w/ Shut-Off Valve</td>
<td>1 - 17 GPM</td>
</tr>
<tr>
<td>25A47-XXX</td>
<td>1” MPT x MPT</td>
<td>5 - 26 GPM</td>
</tr>
<tr>
<td>25A48-XXX</td>
<td>1” Long MPT x MPT</td>
<td>10 - 35 GPM</td>
</tr>
<tr>
<td>25A15-XXX</td>
<td>1½“ MPT x MPT</td>
<td>10 - 35 GPM</td>
</tr>
<tr>
<td>25A17-XXXSDS</td>
<td>1½“ Long MPT x MPT</td>
<td>10 - 52 GPM</td>
</tr>
<tr>
<td>25A49-XXXSDS</td>
<td>2” Super MPT x MPT</td>
<td>40 - 120 GPM</td>
</tr>
<tr>
<td>25A30-XXX</td>
<td>2” Dual MPT x MPT</td>
<td>40 - 120 GPM</td>
</tr>
<tr>
<td>25A50-XXG</td>
<td>3” Twin - Grooved</td>
<td>80 - 175 GPM</td>
</tr>
<tr>
<td>25A50-XXF</td>
<td>3” Twin - Flanged</td>
<td>80 - 175 GPM</td>
</tr>
<tr>
<td>25A53-XXF</td>
<td>3” Angle Filter - Flanged</td>
<td>80 - 220 GPM</td>
</tr>
<tr>
<td>25A53-XXG</td>
<td>3” Angle Filter - Grooved</td>
<td>80 - 220 GPM</td>
</tr>
<tr>
<td>25A78-XXF</td>
<td>4” Twin Filter - Flanged</td>
<td>160 - 450 GPM</td>
</tr>
<tr>
<td>25A80-XXF</td>
<td>6” Twin Filter - Flanged</td>
<td>200 - 600 GPM</td>
</tr>
</tbody>
</table>

*Substitute desired mesh for “XXX” (40 mesh = 040, 120 = 120)

**Filter comes with two opposing side inlets and one top outlet

***Filter comes with one side inlet and a top or side outlet

Note: Standard mesh includes 80, 120 or 140. 40 & 200 mesh are available by special order. ¾” filter is not available with 200 mesh.

Contact Netafim USA Customer Service for Item Numbers.