Manual Steel Filters

Durable, high quality manual steel filters for a wide range of filtration applications

- Interchangeable filter elements for a wide range of flow rates, filtration degrees and applications
- High quality polyester coating, as well as stainless steel housings, for chemical durability and corrosion resistance
- Large screen area
- Low pressure loss
- Easy to install and maintain, no tools required to clean screen
- Pressure sensing ports on inlet and outlet

<table>
<thead>
<tr>
<th>flow rates</th>
<th>filtration degrees</th>
<th>diameters</th>
<th>maximum operating pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 300 m³/h 1320 gpm</td>
<td>3500-80 micron</td>
<td>50-200 mm 2” - 8”</td>
<td>10 bar 145 psi</td>
</tr>
</tbody>
</table>
Amiad Manual Steel Filters

General
With their various filter elements, Amiad’s all purpose steel filters are made for a wide range of filtering applications and filtration degrees and are easy to install and maintain. They are made of carbon steel with a high quality polyester coating. Stainless steel or rubber - lined housings are also available. These filters need no special tools for dismantling or extracting the filter element from the filter housing for element cleaning. Visually monitoring the status of the filter element without disrupting the water flow is easily done with Amiad’s innovative clogging indicator connected to the filter’s upstream and downstream pressure check points upon request. Amiad’s manual steel filters can be upgraded to semi-automatic operation by adding one of Amiad’s exclusive Brushaway or Scanaway assemblies. Upgrading a manual filter to semi-automatic operation eliminates the need for turning the water off and extracting the filter screen for rinsing. With the semi-automatic assembly, the process flow is not interrupted during operation.

Filter elements
Amiad offers various filter elements for its steel filters in order to cover a wide range of flow rates, multiple filtration degrees, and applications. The direction of water flow in these screen elements is from the inside out along the screen element, therefore the suspended solids accumulate on the inside surface of the screen, while the seals* incorporated into the cylinder ends provide perfect sealing of the element inside the filter housing.

Weavewire stainless steel screen (1)
These screen elements are constructed of molded plastic ribs that support a stainless steel weavewire screen for filtration degrees of 80 to 500 micron.

Perforated stainless steel screen (2)
Suitable for coarse filtration (straining) between 500 and 3500 micron. * 2”-4” perforated screens do not have seals.
This arrangement allows for:
- Easy removal of the screen element from the filter housing for cleaning
- The accumulation of inorganic suspended solids at the end of the element to be easily removed by means of a flush valve
- Effective separation of inorganic particles
- Low pressure loss
- Manual drain ports
- Optional semi-automatic Brushaway or Scanaway cleaning kits

Filtration degrees available
The following table lists the filtration degrees available for the various Amiad steel filter elements. For ease of operation and maintenance, the various filtration degrees are color coded. Please consult your dealer for the most suitable filter element for your application’s requirements.

<table>
<thead>
<tr>
<th>Color</th>
<th>Black</th>
<th>Yellow</th>
<th>Red</th>
<th>White</th>
<th>Blue</th>
<th>Green</th>
<th>Gray</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micron</td>
<td>80</td>
<td>100</td>
<td>130</td>
<td>200</td>
<td>300</td>
<td>500</td>
<td>800</td>
</tr>
<tr>
<td>Mesh</td>
<td>200</td>
<td>155</td>
<td>120</td>
<td>75</td>
<td>50</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>2&quot;, 3&quot;, 4&quot;</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>4&quot; S - 8&quot;</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★★</td>
<td>★</td>
<td>★</td>
</tr>
</tbody>
</table>

▲ Weavewire Screen ★ Perforated Screen
2” In-Line

3” In-Line

Dim: mm (inch)

*Approx. length required for maintenance
4" Compact
In-Line

Typical Installation Drawing

Pressure Loss Graph
in clean water

4" Super In-Line/
6" Compact

Dim: mm (inch)
6” Super In-Line/ 8” In-Line

6” Super Modular/ 8” Modular

**Dim: mm (inch)**

*Approx. length required for maintenance*
6” Super In-Line/ 8” In-Line

**Typical Installation Drawing**

6” Super Modular/ 8” Modular

**Pressure Loss Graph**

in clean water

Dim: mm (inch)
## Technical Specifications

### Filter Type 2” In-Line
- **Inlet/outlet diameter**: 50 mm (2”)
- **Standard filtration degrees**: 3500, 2500, 1500, 800, 500, 300, 200, 130, 100, 80 micron
- **Max. operating pressure**: 10 bar (145 psi)
- **Max. operating temperature**: 60°C (140°F)
- **Drain port**: 40 mm (1 ½”) plugged
- **Weight [empty] threaded**: 7.3 kg (16 lbs)
- **Weight [empty] flanged**: 10.5 kg (23 lbs)

### Filter Type 3” In-Line
- **Inlet/outlet diameter**: 80 mm (3”)
- **Standard filtration degrees**: 3500, 2500, 1500, 800, 500, 300, 200, 130, 100, 80 micron
- **Max. operating pressure**: 10 bar (145 psi)
- **Max. operating temperature**: 60°C (140°F)
- **Drain port**: 40 mm (1 ½”) plugged
- **Weight [empty] threaded**: 13.6 kg (30 lbs)
- **Weight [empty] flanged**: 16.6 kg (36.6 lbs)

### Filter Type 4” Compact In-Line
- **Inlet/outlet diameter**: 100 mm (4”)
- **Standard filtration degrees**: 3500, 2500, 1500, 800, 500, 300, 200, 130, 100, 80 micron
- **Max. operating pressure**: 10 bar (145 psi)
- **Max. operating temperature**: 60°C (140°F)
- **Drain port**: 40 mm (1 ½”) plugged
- **Weight [empty] flanges**: 27.5 kg (60.6 lbs)

### Filter Type 4” Super In-Line
- **Inlet/outlet diameter**: 150 mm (6”)
- **Standard filtration degrees**: 3500, 2500, 1500, 800, 500, 300, 200, 130, 100, 80 micron
- **Max. operating pressure**: 10 bar (145 psi)
- **Max. operating temperature**: 60°C (140°F)
- **Drain port**: 50 mm (2”) unplugged
- **Weight [empty]**: 38 kg (83.7 lbs)

### Filter Type 6” Compact In-Line
- **Inlet/outlet diameter**: 150 mm (6”)
- **Standard filtration degrees**: 3500, 2500, 1500, 800, 500, 300, 200, 130, 100, 80 micron
- **Max. operating pressure**: 10 bar (145 psi)
- **Max. operating temperature**: 60°C (140°F)
- **Drain port**: 50 mm (2”) unplugged
- **Weight [empty]**: 43 kg (94.7 lbs)

### Filter Type 6” Super In-Line/Modular
- **Inlet/outlet diameter**: 200 mm (8”)
- **Standard filtration degrees**: 3500, 2500, 1500, 800, 500, 300, 200, 130, 100, 80 micron
- **Max. operating pressure**: 10 bar (145 psi)
- **Max. operating temperature**: 60°C (140°F)
- **Drain port**: 50 mm (2”) unplugged
- **Weight [empty]**: 56 kg (123.4 lbs)

### Filter Type 8” In-Line/Modular
- **Inlet/outlet diameter**: 200 mm (8”)
- **Standard filtration degrees**: 3500, 2500, 1500, 800, 500, 300, 200, 130, 100, 80 micron
- **Max. operating pressure**: 10 bar (145 psi)
- **Max. operating temperature**: 60°C (140°F)
- **Drain port**: 50 mm (2”) unplugged
- **Weight [empty]**: 65 kg (143.2 lbs)

*Consult Amiad for optimum flow depending on filtration degree and water quality.*
## Engineering Data

### Filter Type Data

<table>
<thead>
<tr>
<th>Filter Type</th>
<th>2&quot; In-Line</th>
<th>3&quot; In-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Filter Element Data</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filtration area</td>
<td>800 cm² (124 in²)</td>
<td>1,600 cm² (248 in²)</td>
</tr>
<tr>
<td>Filter element types</td>
<td>Weavewire screen, perforated screen</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Construction Materials</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter housing</td>
<td>Carbon steel 37-2 with polyester coating</td>
<td></td>
</tr>
<tr>
<td>Filter lid</td>
<td>Carbon steel 37-2 with polyester coating</td>
<td></td>
</tr>
<tr>
<td>Seals</td>
<td>NBR</td>
<td></td>
</tr>
<tr>
<td>Weavewire screen</td>
<td>Polypropylene + glass fibers, stainless steel</td>
<td></td>
</tr>
<tr>
<td>Perforated screen</td>
<td>Stainless steel 316</td>
<td></td>
</tr>
</tbody>
</table>

### Filter Type Data

<table>
<thead>
<tr>
<th>Filter Type</th>
<th>4&quot; Compact In-Line</th>
<th>4&quot; Super In-Line</th>
<th>6&quot; Compact In-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Filter Element Data</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filtration area</td>
<td>2,400 cm² (372 in²)</td>
<td>2,800 cm² (434 in²)</td>
<td>2,800 cm² (434 in²)</td>
</tr>
<tr>
<td>Filter element types</td>
<td>Weavewire screen, perforated screen</td>
<td>Weavewire screen, perforated screen</td>
<td>Weavewire screen, perforated screen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Construction Materials</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter housing</td>
<td>Carbon steel 37-2 with polyester coating</td>
<td>SMC polyester</td>
<td></td>
</tr>
<tr>
<td>Filter lid</td>
<td>NBR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seals</td>
<td>Carbon steel 37-2 with polyester coating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weavewire screen</td>
<td>Stainless steel 316 with polypropylene + fiber glass and NBR seals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perforated screen</td>
<td>Stainless steel 316 and NBR seals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Filter Type Data

<table>
<thead>
<tr>
<th>Filter Type</th>
<th>6&quot; Super In-Line/Modular</th>
<th>8&quot; In-Line/Modular</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Screen Data</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filtration area</td>
<td></td>
<td>5,800 cm² (899 in²)</td>
</tr>
<tr>
<td>Filter element types</td>
<td></td>
<td>Weavewire screen, perforated screen</td>
</tr>
</tbody>
</table>

| **Construction Materials** | | |
|---------------------------|---|---|---|
| Filter housing | Carbon steel 37-2 with polyester coating | | |
| Filter lid | SMC polyester | | |
| Seals | NBR | | |
| Weavewire screen | Stainless steel 316 with polypropylene + fiber glass and NBR seals | | |
| Perforated screen | Stainless steel 316 and NBR seals | | |

*Amiad offers a variety of construction materials. Consult us for specifications.*
The Americas

USA
Amiad USA Inc.
Web: www.amiadusa.com | E-mail: infousa@amiad.com

Brazil
Amiad Sistemas de Água Ltda.
E-mail: infobrasil@amiad.com

Mexico
Amiad México SA DE CV,
Web: www.amiad.es | E-mail: infomexico@amiad.com
Irrigation office: E-mail: infomexico-irr@amiad.com

Asia

India
Amiad Filtration India Pvt Limited
Web: www.amiadindia.com | E-mail: info-india@amiad.com

China
Amiad China (Yixing Taixing Environetc Co., Ltd.)
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Filtration & Control Systems Pte. Ltd.
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