The Series FR Filter-Regulators are combination units that provide maximum options in minimal space. Constructed of aluminum and polycarbonate, these rugged units offer the same air pressure regulation features as our standard R Series units side-by-side with the convenience of an F Series filter. Unscrewing the adjustment knob and retaining flange easily adapts panel or bracket mounting.

The Series FRL takes the FR Series to the next level by including an L Series lubricator. The package is completely installed and ready to go right out of the box.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Process Connection</th>
<th>Pressure Range</th>
<th>Filtration</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR1-112050M</td>
<td>1/8&quot; NPT</td>
<td>120 psi</td>
<td>50 microns</td>
</tr>
<tr>
<td>FR2-212050M</td>
<td>1/4&quot; NPT</td>
<td>120 psi</td>
<td>50 microns</td>
</tr>
<tr>
<td>FRL1-112050M</td>
<td>1/8&quot; NPT</td>
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<td>1/4&quot; NPT</td>
<td>120 psi</td>
<td>50 microns</td>
</tr>
</tbody>
</table>

**Series FR Filter-Regulator**

- **Size 1**
  - NPT Connection
  - 1-37/64 [40.08]
  - 1-5/32 [32.54]
  - MOUNTING BRACKET FOR SERIES FR1

- **Size 2**
  - NPT Connection
  - 1-17/64 [32.15]
  - 1-3/32 [45.25]
  - MOUNTING BRACKET FOR SERIES FR2

**Series FRL Filter-Regulator-Lubricator**

- **Size 1**
  - NPT Connection
  - 1-13/64 [30.60]
  - 1-17/64 [32.15]
  - MOUNTING BRACKET FOR SERIES FRL2

- **Size 2**
  - NPT Connection
  - 1-5/32 [1.62]
  - 1-23/32 [43.66]
  - MOUNTING BRACKET FOR SERIES FRL1

**Filters, Regulators and Lubricators**

Combination Packages For Pneumatic Air Applications
FEATURES
FR Filter Regulator Combo
• Aluminum and polycarbonate construction
• Manual, semi-auto or autodrain available
• 1 Size has polycarbonate bowl, 2 Size has polycarbonate bowl with metal guard
• Non-rising adjustment knob with push-pull lock ring feature
• Panel or bracket mounting

FRL Package
• All-in-one package ready for installation
• Automatic drain
• 50µ filter standard (others available)
• 120 psi regulator & 1/8” NPT on 1 Size
• 120 psi regulator & 1/4” NPT on 2 Size

Filters - Regulators & Filters-Regulators-Lubricators

<table>
<thead>
<tr>
<th>Function</th>
<th>FR</th>
<th>FRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Style</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Process Connection</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Pressure Range</td>
<td>010</td>
<td>030</td>
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<tr>
<td>Filtration</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Drain</td>
<td>M</td>
<td>S</td>
</tr>
</tbody>
</table>

Model F195
Disposable In-Line Filter
Flowmeter Accessories and Options

Remove 99.99% of unwanted particles from within your gas flow with the Model F195 Disposable In-Line Filter. Encapsulated microfiber filter elements are able to filter particles as small as 0.1 micron. Filters are completely disposable — simply remove the filter from your line and throw it away when it becomes dirty. The transparent nylon housing makes it simple to determine if the filter needs to be changed.

Line Pressure vs. Flow

Line Pressure (psig): 1.5 10 20 30 40 60 80 100 125
Gas Flow (scfm): 0.6 0.9 1.3 1.6 2.0 2.7 3.5 4.2 5.7

* 1.5 psi pressure drop.

Model F195, Disposable In-Line Filter

SPECIFICATIONS
Filtration Efficiency: 99.99% (removal of 0.1 micron particles).
Housing Construction: Nylon.
Filter Tube Dimensions: 0.59 ID x 1.39 length.
Maximum Temperature: 230°F @ 0 psig (110°C @ 0 bar), 120°F @ 125 psig (49°C @ 9 bar).
Maximum Pressure: 125 psi (8.6 bar).
Maximum Differential Pressure: 60 psi (4 bar) (in-to-out flow direction), 20 psi (1.4 bar) (out-to-in flow direction).
Internal Volume: 11.5 cc (11.5 ml).
Connections: Barbed for 1/4” I.D. tubing.