Advanced Filter System II (AFS II)

Description: The Advance Filter System II (AFS II) is a high capacity gas purifier that removes H₂O, and Hydrocarbons with (5 or more carbons) from inert gases, hydrogen, and dry air to low ppb levels. Common applications include gas chromatography (GC) and inductively-coupled plasma spectroscopy (ICP).

Because of its features of high capacity and robust construction, the AFS is suitable for installations requiring multiple instruments. AFS features a double sealing system that serves as a safeguard against gas leaks, keeping hazardous gases from escaping into the laboratory.

The AFS system requires installation of a stainless steel manifold to the gas line (options are ½" or ¼" standard compression fittings). Brackets and hardware are included to mount the manifold to the bench or wall. Once the manifold is installed the easily replaceable cartridge is attached to the manifold with a clamping knob.

The AFS II is strongly recommended for GC/FID testing platforms, for the dry air and hydrogen detector gas used for the FID detectors.

Design Features/Components
- Dual Sealing System (Safety)
- Assembled with Heavy Duty Components (Safety)
- Sensitive Visual Indicators (O₂ & H₂O)
- Simple Cartridge Replacement
- Stainless Steel Manifold Fittings
- 10 micron frits on cartridge
- 100% Helium leak tested
- Shipped filled with Helium

Applications
- Point of use purification Hydrogen FID gas used with the operation of GC/FID platforms
- Point of use purification of dry air FID gas used with the operation of GC/FID platforms
- Removal of H₂O and Hydrocarbons (5 or more carbons)

*Footnote: The high capacity AFS is suitable for multi-GC installations.
**Specialty Gas Equipment**

**PURIFIERS**

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Compression Fittings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y40-AFS28</td>
<td>Advanced Filter System II, Complete Kit</td>
<td>¼&quot; Fittings</td>
</tr>
<tr>
<td>Y40-AFS24</td>
<td>Advanced Filter System II, Complete Kit</td>
<td>¼&quot; Fittings</td>
</tr>
<tr>
<td>Y40-AFSRC2</td>
<td>Replacement Cartridge, Advanced Filter System II</td>
<td></td>
</tr>
<tr>
<td>Y40-AFSFSM8</td>
<td>¼&quot; Advanced Filter System Manifold</td>
<td></td>
</tr>
<tr>
<td>Y40-AFSFSM4</td>
<td>¼&quot; Advanced Filter System Manifold</td>
<td></td>
</tr>
</tbody>
</table>

**Specifications**

- **Maximum Operating Pressure:** 200 psi
- **Recommended Maximum Flow:** 2 slpm
- **Source Gas:** H₂, Ar, N₂, He, O₂, dry air
- **Maximum Operating Temperature:** 35°C
- **Efficiency:**
  - H₂O: 20 ppb
  - HC: 5 ppb (>C4)
- **H₂O Capacity:** 12 g
- **HC Capacity:** 8 g
- **Dimensions:** 12 in. x 2 in. x 2 in.
- **Approximate Weight:** 5.9 lbs.

**Materials of Construction**

- **Manifold**
  - Body: Stainless Steel
  - Fittings: ¼" & ⅛" Stainless Steel Fittings
  - O-Ring Seal: Fluoroelastomer

- **Purifier Cartridge**
  - Internal Structure: Stainless Steel inner tube, Borosilicate Glass, and Polycarbonate plastic
  - External Structure: Aluminum (Anodized)

**Equipment**