1. Introduction

NFG series, forward flow, vapor phase, filter separator cartridge elements are designed to filter fine dirt particles and to coalesce liquids from natural gas without excessive pressure differential buildup in “outside-in” flow applications. These NFG series filter cartridges are especially suited for use in the Nowata GW series gas filter housings. (These filter cartridges are not designed for compatibility with amine.)

The nominally rated NFG series cartridge filter elements have the following characteristics:

- Beta ratios in excess of 1000
- Absolute rated at 0.3 micron and better than 99.9% efficient rating
- Robust construction.
- Can withstand over 75 psi differential pressure in either direction
- Large dirt holding capacity
- Highest quality components
## 2. Construction Specifications for the NFF Series Cartridges

### Cartridge Lengths Available
- 12, 24, 36, 72 inches

### Outside Diameter
- 3-1/2 or 4-1/2 inches

### Inside Diameter
- 2 or 3 inches

### Micron Ratings Available
- 0.3 or 0.1 Micron

### Recommended Change-Out Differential Pressure
- 15 psi

### Maximum Operating Temperature -
- 240 °F (115 °C)

### Minimum Operating Temperature -
- -60 °F (-51 °C)

### Center Core
- Carbon Steel

### Outer Core
- Carbon Steel

### End Caps
- Carbon Steel

### Gaskets
- Buna N

### Inner Sock
- Orlon or Cotton

### Gasket Adhesive
- Polyurethane

### Pre-Filter Media
- Fiberglass

### Final High Efficiency Media
- Polypropylene

### NFF-R Series 0.3 Micron

**Cartridges for reverse flow fine coalescing applications**

<table>
<thead>
<tr>
<th>Cartridge Model Number</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFF12R</td>
<td>12 inches long, 3.5 inch O.D. x 2 inch I.D.</td>
</tr>
<tr>
<td>NFF24R</td>
<td>24 inches long, 3.5 inch O.D. x 2 inch I.D.</td>
</tr>
<tr>
<td>NFF36R</td>
<td>36 inches long, 3.5 inch O.D. x 2 inch I.D.</td>
</tr>
<tr>
<td>NFF324R</td>
<td>24 inches long, 4.5 inch O.D. x 3 inch I.D.</td>
</tr>
<tr>
<td>NFF336R</td>
<td>36 inches long, 4.5 inch O.D. x 3 inch I.D.</td>
</tr>
<tr>
<td>NFF372R</td>
<td>72 inches long, 4.5 inch O.D. x 3 inch I.D.</td>
</tr>
</tbody>
</table>

### NFF-R1 Series 0.1 Micron

**Cartridges specifically used for reverse flow ultra-fine coalescing applications**

<table>
<thead>
<tr>
<th>Cartridge Model Number</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFF12R1</td>
<td>12 inches long, 3.5 inch O.D. x 2 inch I.D.</td>
</tr>
<tr>
<td>NFF24R1</td>
<td>24 inches long, 3.5 inch O.D. x 2 inch I.D.</td>
</tr>
<tr>
<td>NFF36R1</td>
<td>36 inches long, 3.5 inch O.D. x 2 inch I.D.</td>
</tr>
<tr>
<td>NFF324R1</td>
<td>24 inches long, 4.5 inch O.D. x 3 inch I.D.</td>
</tr>
<tr>
<td>NFF336R1</td>
<td>36 inches long, 4.5 inch O.D. x 3 inch I.D.</td>
</tr>
<tr>
<td>NFF372R1</td>
<td>72 inches long, 4.5 inch O.D. x 3 inch I.D.</td>
</tr>
</tbody>
</table>