Air Preparation Units
Filters, Regulators, and Lubricators
We are dedicated to fulfilling your compressed air filtration requirements. We know that every application requires specific needs and we have the products ready to address them.

If you can't find a specific compressed air/gas filter, dryer, or accessory in this catalog, call 1-800-521-4357. Our knowledgeable technical assistance department will be happy to assist you!

Inquiries via e-mail are also encouraged. E-mail inquiries to finitefilter@parker.com. We can provide solutions that will remove contaminants such as oil, water and particulate from your compressed air and gas lines, saving you time and money!

⚠️ CAUTION:
Polycarbonate bowls and sight domes, being transparent and tough, are ideal for use with Filters and Lubricators. They are suitable for use in normal industrial environments, but should not be located in areas where they could be subjected to direct sunlight, an impact blow, nor temperatures outside of the rated range. As with most plastics, some chemicals can cause damage. Polycarbonate bowls and sight domes should not be exposed to chlorinated hydro-carbons, ketones, esters and certain alcohols. They should not be used in air systems where compressors are lubricated with fire-resistant fluids such as phosphate ester and di-ester types.
Metal bowls are recommended where ambient and/or media conditions are not compatible with polycarbonate bowls. Metal bowls resist the action of most such solvents, but should not be used where strong acids or bases are present or in salt laden atmospheres. Consult the factory for specific recommendations where these conditions exist.
TO CLEAN POLYCARBONATE COMPONENTS USE MILD SOAP AND WATER ONLY! DO NOT use cleansing agents such as acetone, benzene, carbon tetrachloride, gasoline, toluene, etc., which are damaging to this plastic.
Metal bowl guards are recommended for all applications.

⚠️ CAUTION:
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.
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# Product Selection Chart

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<th>Series</th>
<th>Port Size</th>
<th>Bowls</th>
<th>Capacity (Micron)</th>
<th>Elements</th>
<th>Page</th>
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</thead>
<tbody>
<tr>
<td>Filters</td>
<td>14F</td>
<td>1/8</td>
<td>X X</td>
<td>X</td>
<td>N/A</td>
<td>1 oz. Standard</td>
</tr>
<tr>
<td></td>
<td>FF504</td>
<td>1/4</td>
<td>X</td>
<td>X</td>
<td>N/A</td>
<td>1 oz. Standard</td>
</tr>
<tr>
<td></td>
<td>05F</td>
<td>3/8</td>
<td>X X</td>
<td>X</td>
<td>N/A</td>
<td>2 oz. Standard</td>
</tr>
<tr>
<td></td>
<td>06F</td>
<td>1/2</td>
<td>X X</td>
<td>X</td>
<td>N/A</td>
<td>4.4 oz. Standard</td>
</tr>
<tr>
<td></td>
<td>FF10</td>
<td>3/4</td>
<td>X</td>
<td></td>
<td>X</td>
<td>4 oz. Standard</td>
</tr>
<tr>
<td></td>
<td>07F</td>
<td>1</td>
<td>X X X</td>
<td>X</td>
<td>N/A</td>
<td>7.2 oz. Standard</td>
</tr>
<tr>
<td></td>
<td>P3NF</td>
<td>1-1/2</td>
<td>X X</td>
<td>X</td>
<td>N/A</td>
<td>18 oz. Standard</td>
</tr>
<tr>
<td>Coalescers</td>
<td>QF*S</td>
<td>1/8</td>
<td>X X</td>
<td>N/A</td>
<td>X</td>
<td>1 oz. Grade 6 Std., Grade 10 Opt.</td>
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<tr>
<td></td>
<td>FF501</td>
<td>1/4</td>
<td>X</td>
<td>X</td>
<td>N/A</td>
<td>1 oz. 0.3 Micron</td>
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<tr>
<td></td>
<td>15F</td>
<td>3/8</td>
<td>X X</td>
<td>X</td>
<td>X</td>
<td>2 oz. Grade 6 Std., Grade 10 Opt.</td>
</tr>
<tr>
<td></td>
<td>11F</td>
<td>1/2</td>
<td>X X</td>
<td>X</td>
<td>X</td>
<td>4.4 oz. Grade 6 Std., Grade 10 Opt.</td>
</tr>
<tr>
<td></td>
<td>FF11</td>
<td>3/4</td>
<td>X</td>
<td></td>
<td>X</td>
<td>4 oz. 0.3 Micron</td>
</tr>
<tr>
<td></td>
<td>12F</td>
<td>1-1/2</td>
<td>X X</td>
<td>X</td>
<td>X</td>
<td>7.2 oz. Grade 6 Std., Grade 10 Opt.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basic Unit</th>
<th>Series</th>
<th>Port Size</th>
<th>Spring</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulators</td>
<td>14R</td>
<td>X X</td>
<td>Std.</td>
<td>40</td>
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<td></td>
<td>FR364</td>
<td>X</td>
<td>Std.</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>05R</td>
<td>X X</td>
<td>Std.</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>06R</td>
<td>X X X</td>
<td>Std.</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>FR10</td>
<td>X</td>
<td>Std.</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>07R</td>
<td>X X X</td>
<td>Std.</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>P3NR</td>
<td>X X X</td>
<td>Std.</td>
<td>52</td>
</tr>
<tr>
<td>Pilot</td>
<td>11R</td>
<td>X X X</td>
<td>-</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>12R</td>
<td>X X X</td>
<td>-</td>
<td>56</td>
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</table>

*sight gauge
### Product Selection Chart

<table>
<thead>
<tr>
<th>Basic Unit</th>
<th>Port Size</th>
<th>Bowls</th>
<th>Capacity</th>
<th>Elements (Micron)</th>
<th>Spring Range</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>F10E</td>
<td>3/8 1/2 3/4 1 1-1/2</td>
<td>X X N/A</td>
<td>1 oz.</td>
<td>Grade 6 Standard; Grade 10 Optional</td>
<td>Std.</td>
<td>62</td>
</tr>
<tr>
<td>FB548</td>
<td>X</td>
<td>316 Stainless Steel</td>
<td>1 oz.</td>
<td>Grade 6 Standard; Grade 10 Optional</td>
<td>Std.</td>
<td>64</td>
</tr>
<tr>
<td>05E</td>
<td>X X</td>
<td>X N/A</td>
<td>2 oz.</td>
<td>Std.</td>
<td>Std.</td>
<td>66</td>
</tr>
<tr>
<td>06E</td>
<td>X X X</td>
<td>X N/A</td>
<td>4 oz.</td>
<td>Std.</td>
<td>Std.</td>
<td>68</td>
</tr>
<tr>
<td>FB11</td>
<td>X</td>
<td>316 Stainless Steel</td>
<td>4 oz.</td>
<td>Std.</td>
<td>Std.</td>
<td>70</td>
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<tr>
<td>07E</td>
<td>X X X</td>
<td>X N/A</td>
<td>7.2 oz.</td>
<td>Grade 6 Standard; Grade 10 Optional</td>
<td>Std.</td>
<td>72</td>
</tr>
<tr>
<td>F12E</td>
<td>X X X</td>
<td>N/A</td>
<td>7.2 oz.</td>
<td>Grade 6 Standard; Grade 10 Optional</td>
<td>Std.</td>
<td>74</td>
</tr>
<tr>
<td>15L</td>
<td>X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Cannot be filled under pressure</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>16L</td>
<td>X X X</td>
<td>X N/A X</td>
<td>2.6 oz.</td>
<td>Cannot be filled under pressure</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>17L</td>
<td>X X X</td>
<td>X N/A X</td>
<td>4.9 oz.</td>
<td>Cannot be filled under pressure</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>04L</td>
<td>X</td>
<td>X N/A</td>
<td>1 oz.</td>
<td>Cannot be filled under pressure</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>FL10</td>
<td>X</td>
<td>316 Stainless Steel</td>
<td>4 oz.</td>
<td></td>
<td>88</td>
<td></td>
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<tr>
<td>P3NL</td>
<td>X X X</td>
<td>N/A N/A X</td>
<td>18 oz.</td>
<td>Can be filled under pressure</td>
<td>90</td>
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<tr>
<td>14G</td>
<td>X</td>
<td>X N/A</td>
<td>1 oz.</td>
<td>Two-Unit</td>
<td>Std.</td>
<td>92</td>
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<tr>
<td>14A</td>
<td>X</td>
<td>X N/A</td>
<td>1 oz.</td>
<td>Three-Unit</td>
<td>Std.</td>
<td>94</td>
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<tr>
<td>15G</td>
<td>X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Two-Unit</td>
<td>Std.</td>
<td>96</td>
</tr>
<tr>
<td>15A</td>
<td>X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Three-Unit</td>
<td>Std.</td>
<td>98</td>
</tr>
<tr>
<td>16G</td>
<td>X X X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Two-Unit</td>
<td>Std.</td>
<td>100</td>
</tr>
<tr>
<td>16A</td>
<td>X X X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Three-Unit</td>
<td>Std.</td>
<td>102</td>
</tr>
<tr>
<td>17G</td>
<td>X X X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Two-Unit</td>
<td>Std.</td>
<td>104</td>
</tr>
<tr>
<td>17A</td>
<td>X X X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Three-Unit</td>
<td>Std.</td>
<td>106</td>
</tr>
<tr>
<td>P3N3B</td>
<td>X X X</td>
<td>N/A N/A X</td>
<td>18 oz.</td>
<td>Three-Unit</td>
<td>Std.</td>
<td>108</td>
</tr>
<tr>
<td>15H</td>
<td>X X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Two-Unit</td>
<td>Std.</td>
<td>110</td>
</tr>
<tr>
<td>15B</td>
<td>X X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Three-Unit</td>
<td>Std.</td>
<td>112</td>
</tr>
<tr>
<td>16H</td>
<td>X X X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Two-Unit</td>
<td>Std.</td>
<td>114</td>
</tr>
<tr>
<td>16B</td>
<td>X X X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Three-Unit</td>
<td>Std.</td>
<td>116</td>
</tr>
<tr>
<td>17H</td>
<td>X X X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Two-Unit</td>
<td>Std.</td>
<td>118</td>
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<tr>
<td>17B</td>
<td>X X X</td>
<td>X N/A X</td>
<td>2 oz.</td>
<td>Three-Unit</td>
<td>Std.</td>
<td>120</td>
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<tr>
<td>P3NCB</td>
<td>X X X</td>
<td>N/A N/A X</td>
<td>18 oz.</td>
<td>Three-Unit</td>
<td>Std.</td>
<td>122</td>
</tr>
</tbody>
</table>

*sight gauge
Drains

Automatic Pulse Drain

The diaphragm in this drain pulses when there is a pressure differential such as a valve cycling or cylinder stroking downstream. This action flexes the diaphragm and allows the filter to drain the entrapped water.

Automatic Float Drain

The float internal to this drain rises with increased liquid level. When the float rises, it opens a seat area allowing the trapped liquids to drain through the bottom. A manual override can be pushed in the bottom of the drain to unseat the float if particulates create a block.

(Spitter Drain)
The diaphragm in this drain pulses when there is a pressure differential such as a valve cycling or cylinder stroking downstream. This action flexes the diaphragm and allows the filter to drain the entrapped water.
# Air Preparation Units Symbol Chart

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Symbol 1" /></td>
<td>FILTER/separator with manual drain</td>
</tr>
<tr>
<td><img src="image2" alt="Symbol 2" /></td>
<td>FILTER/separator with automatic drain</td>
</tr>
<tr>
<td><img src="image3" alt="Symbol 3" /></td>
<td>OIL REMOVAL FILTER (coalescing filter)</td>
</tr>
<tr>
<td><img src="image4" alt="Symbol 4" /></td>
<td>AUTOMATIC DRAIN</td>
</tr>
<tr>
<td><img src="image5" alt="Symbol 5" /></td>
<td>LUBRICATOR with manual drain</td>
</tr>
<tr>
<td><img src="image6" alt="Symbol 6" /></td>
<td>AIR LINE PRESSURE REGULATOR adjustable, relieving</td>
</tr>
<tr>
<td><img src="image7" alt="Symbol 7" /></td>
<td>AIR LINE PRESSURE REGULATOR pilot controlled, relieving</td>
</tr>
<tr>
<td><img src="image8" alt="Symbol 8" /></td>
<td>FILTER/REGULATOR (piggyback) Manual Drain Relieving (With Gauge)</td>
</tr>
<tr>
<td><img src="image9" alt="Symbol 9" /></td>
<td>FILTER/REGULATOR (piggyback) Auto Drain Relieving</td>
</tr>
<tr>
<td><img src="image10" alt="Symbol 10" /></td>
<td>AIR LINE COMBO F-R-L simplified</td>
</tr>
</tbody>
</table>
Filters

- Pipe Sizes 1/8 thru 1½ Inch
- Flows to 310 SCFM
- Pressures to 250 PSIG

Air filters are designed to remove airborne solid contaminants, pipe scale, rust, pipe dope, etc., which may plug small orifices or cause excessive wear and premature failure of pneumatic components.

- Miniature 14F Series, 1/8 and 1/4 Inch
- Miniature FF504 Stainless Series, 1/4 Inch
- Economy 05F Series, 1/4 and 3/8 Inch
- Compact 06F Series, 1/4, 3/8 and 1/2 Inch
- Standard 07F Series, 3/8, 1/2 and 3/4 Inch
- Standard FF10 Stainless Series, 1/2 Inch
- Hi-Flow P3NF Series, 3/4, 1 and 1-1/2 Inch

Filter Selection

1. Determine maximum system flow requirements.
2. Determine maximum allowable pressure drop at rated flow in SCFM.
3. Refer to flow chart and select filter pipe size by choosing curve that offers minimum pressure drop at desired flow in SCFM. For optimum performance, a 2 to 5 PSIG pressure drop should be selected.

Once the required flow is determined for a pneumatic application, the filter can be selected by using the flow chart. To read the filter flow chart, first determine the inlet pressure that will be used. Find the appropriate pressure curve on the graph. Each graph will contain three pressure curves. If the required inlet pressure is not on the graph, interpolate a similar curve for the required pressure. Next, determine the acceptable pressure drop across the filter and locate it on the vertical axis. Find the intersection point of the acceptable pressure drop and the inlet pressure curve. At this point follow a vertical path downward to view the flow in SCFM. If the flow is too low, select a larger port size or body size to give the required flow. If the flow is higher than necessary, select a smaller port size or body size to give the required flow.
First Stage Filtration:
Air enters at inlet port and flows through deflector plate (A) which causes a swirling action. Liquids and coarse particles are forced to the bowl interior wall (B) by the centrifugal action of the swirling air. They then carry down the bowl wall by the force of gravity. Shroud (C) assures that the proper swirling action occurs and that the air does not pass directly through the filter element (D) until the large particles and liquids are removed. The baffle (E) separates the lower portion of the bowl into a “quiet zone” where the removed liquids and particles collect, unaffected by the swirling air, and are therefore not reentrained into the flowing air.

Second Stage Filtration:
After liquids and large particles are removed in the first stage of filtration, the air flows through element (D) where smaller particles are filtered out and retained. The filtered air then passes downstream. Collected liquids and particles in the “quiet zone” should be drained before their level reaches a height where they would be reentrained in the flowing air. This can be accomplished by the twist drain (F) which is actuated by twisting knob (G) counterclockwise.
14F Filters – Miniature

Features
- Excellent water removal efficiency.
- Unique deflector plate that creates swirling of the air stream ensuring maximum water and dirt separation.
- Easily disassembled for servicing without the use of tools.
- 5 micron element standard.
- Interchangeable Twist and Automatic Pulse Drains.
- High Flow: 1/8" – 22 SCFM, 1/4" – 24 SCFM

Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Element</th>
<th>Bowl Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1/8&quot; Inch</td>
<td>Poly Bowl ‡</td>
<td>14F01B*</td>
<td>1/8&quot; Twist Drain</td>
</tr>
<tr>
<td>1 1/4&quot; Inch</td>
<td></td>
<td>14F11B*</td>
<td>1/4&quot; Twist Drain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14F03B*</td>
<td>1/8&quot; Automatic Pulse Drain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14F13B*</td>
<td>1/4&quot; Automatic Pulse Drain</td>
</tr>
<tr>
<td></td>
<td>Metal Bowl without Sight Gauge</td>
<td>14F07B*</td>
<td>1/8&quot; Twist Drain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14F17B*</td>
<td>1/4&quot; Automatic Pulse Drain</td>
</tr>
</tbody>
</table>

† With Automatic Pulse Drain.
‡ For polycarbonate bowl see Caution on page 2.
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.
14F Filter Kits & Accessories

Bowl Kits –
Poly Bowl –
Automatic Pulse Drain ................................................. PS408BP
Twist Drain ...................................................................... PS404P
Metal Bowl –
Automatic Pulse Drain .................................................... PS451BP
Twist Drain ...................................................................... PS447BP
Filter Element Kits –
5 Micron Element ............................................................ PS403P
5 Micron Element Kit (element and retainer) .................... PS407P
Mounting Bracket ............................................................... PS417BP

Specifications
Automatic Pulse Drain Tube Barb .................................... 1/8 Inch
Bowl Capacity .................................................................... 1 Ounce
Port Threads ...................................................................... 1/8, 1/4 Inch
Pressure & Temperature Ratings –
Polycarbonate Bowl ......................................................... 0 to 150 PSIG (0 to 10.3 bar)
32°F to 125°F (0°C to 52°C)
Metal Bowl ........................................................................... 0 to 250 PSIG (0 to 17.2 bar)
32°F to 175°F (0°C to 80°C)
Automatic Pulse Drain ....................................................... 10 to 250 PSIG (0.7 to 17.2 bar)
at 125°F (52°C) or less
Weight ................................................................................ 0.41 lb. (0.18 kg)

Materials of Construction
Body .................................................................................. Zinc
Bowls ................................................................................. Transparent Polycarbonate
Metal (Zinc) Bowl w/o Sight Gauge
Deflector, Element Holder & Baffle ..................................... Plastic
Drains –
Twist Drain –
Body & Stem .................................................................... Plastic
Seals .................................................................................. Nitrile
Automatic Pulse Drain –
Piston & Seals ..................................................................... Nitrile
Stem, Seat, Adaptor & Washers ......................................... Aluminum
Filter Elements –
5 Micron (Standard) .......................................................... Plastic
Seals .................................................................................... Nitrile
**FF504 Filter – Miniature**

**Features**
- Stainless steel construction handles most corrosive environments.
- Fluorocarbon seals standard.
- 1/8" female threaded drain.
- High Flow: 1/4" - 23 SCFM

**Ordering Information**

**Port Size**

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Manual Twist Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>FF504-02DGSS</td>
<td></td>
</tr>
</tbody>
</table>

SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.
Technical Information

FF504 Filter Kits & Accessories
Filter Element Kit –
Particulate (5 Micron) Element ........................................ EK504VY

Manual Twist Drain –
Small (Old) .............................................................. SA600Y7-1SS
Large (New) .............................................................. SAP05481

Pipe Nipple –
1/4" 316 Stainless Steel ........................................... 616Y28-SS

Specifications
Bowl Capacity .......................................................... 1.0 Ounces
Filter Rating ............................................................... 5 Micron
Sump Capacity .......................................................... 0.4 Ounce
Port Threads .............................................................. 1/4 Inch

Pressure & Temperature Ratings –
Manual Twist Drain ................................................. 0 to 300 PSIG (0 to 20.7 bar)
0°F to 180°F (18°C to 82°C)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (2°C).

Weight ................................................................. 0.6 lb. (0.27 kg)

Materials of Construction
Body ................................................................. 316 Stainless Steel
Bowls ................................................................. 316 Stainless Steel
Deflector ................................................................. Acetal
Drain ................................................................. 316 Stainless Steel
Element Holder ..................................................... Acetal
Filter Element ....................................................... Polyethylene
Seals ................................................................. Fluorocarbon
05F Filters – Economy

Features
- Excellent water removal efficiency.
- Unique deflector plate and shroud creates a swirling of the air stream ensuring maximum water and dirt separation.
- Large filter element surface guarantees low pressure drop and increased element life.
- 5 micron filter element standard.
- Shown with metal bowl guard.
- High Flow: 1/4" – 54 SCFM§
  3/8" – 70 SCFM§

Options
- Blank No Options

Features
- *Will be entered at factory

Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Twist Drain</th>
<th>Automatic Pulse Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly Bowl / Metal Guard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>05F12B*</td>
<td>05F1PB*</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>05F22B*</td>
<td>05F2PB*</td>
<td></td>
</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>05F14B*</td>
<td>05F1TB*</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>05F24B*</td>
<td>05F2TB*</td>
<td></td>
</tr>
</tbody>
</table>

§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.
† For polycarbonate bowl see Caution on page 2.

05F Filter Dimensions

<table>
<thead>
<tr>
<th>Inches (mm)</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00</td>
<td>2.06</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>52</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>E</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>5.35</td>
<td>5.91</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>136</td>
<td>150</td>
<td>57</td>
<td></td>
</tr>
</tbody>
</table>

Port Type
- Blank NPT
- Blank No Options

05F Series
Air Line Filters

Technical Specifications – 05F

Technical Information

05F Filter Kits & Accessories

Bowl Guard Kit ...................................................... PS905P
Bowl Kits –
  Poly Bowl –
    Automatic Pulse Drain ........................................... PS995P
    Twist Drain ........................................................ PS932P
  Metal Bowl –
    Sight Gauge / Automatic Pulse Drain .................... PS996P
    Sight Gauge / Twist Drain ................................ PS935P
DPI Replacement Kit ................................................ PS781P
Drain Kit –
  Automatic Pulse Drain ........................................... PS998P
  Twist Drain ........................................................ PS512

Filter Element Kits –
  5 Micron Element .................................................. PS902P
Mounting Bracket Kit ............................................. PS943P
Sight Gauge Kit .................................................... PS914P

Specifications

Bowl Capacity ...................................................... 2.0 Ounces
Sump Capacity ..................................................... 0.9 Ounce
Port Threads ....................................................... 1/4, 3/8 Inch

Pressure & Temperature Ratings –

Without Differential Pressure Indicator:
  Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.3 bar)
  32°F to 125°F (0°C to 52°C)
  Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)
  32°F to 175°F (0°C to 80°C)

With Differential Pressure Indicator: 0 to 150 PSIG (0 to 10.3 bar)
  32°F to 125°F (0°C to 52°C)
  Automatic Pulse Drain – 10 to 150 PSIG (0.7 to 10.3 bar)

Weight ................................................................. 1.2 lb. (0.54 kg)

Materials of Construction

Body .............................................................................. Zinc
Bowls .......................................................... Transparent Polycarbonate or Metal (Zinc) With or Without Sight Gauge
Bowl Guards ......................................................... Steel
Collar ................................................................. Plastic
Deflector, Shroud & Baffle ........................................ Plastic
Drain ................................................................. Plastic
Filter Elements –
  5 Micron .......................................................... Plastic
Seals ......................................................................... Nitrile
Sight Gauge, DPI .................................................. Polyamide (Nylon)
06F Filters – Compact

**Features**
- Excellent water removal efficiency.
- Unique deflector plate and shroud creates a swirling of the air stream ensuring maximum water and dirt separation.
- Large filter element surface guarantees low pressure drop and increased element life.
- Optional automatic float drain available.
- Shown with metal bowl guard.
- High Flow: 1/4" – 53 SCFM\(^\text{c}\)
  3/8" – 80 SCFM\(^\text{c}\)
  1/2" – 85 SCFM\(^\text{c}\)

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Twist Drain</td>
</tr>
<tr>
<td>Poly Bowl(^\text{c}) / Metal Guard</td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>06F12B*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>06F22B*</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>06F32B*</td>
</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>06F14B*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>06F24B*</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>06F34B*</td>
</tr>
</tbody>
</table>

\(^\text{c}\) For polycarbonate bowl see Caution on page 2.

\(^\text{c}\) SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

**Ordering Information**

![Ordering Information Diagram]
06F Filter Kits & Accessories

Bowl Guard Kit ......................................................... PS705P
Bowl Kits –
  Poly Bowl –
    Automatic Float Drain ........................................ PS722P
    Twist Drain ......................................................... PS732P
  Metal Bowl –
    Sight Gauge / Automatic Float Drain .................... PS723P
    Sight Gauge / Twist Drain .................................... PS735P
DPI Replacement Kit .............................................. PS781P
Drain Kits –
  Automatic Float Drain ........................................... PS506P
  Twist Drain ......................................................... PS512

Filter Element Kits –
  5 Micron Element ................................................ PS702P
Mounting Bracket Kit ............................................. PS743P
Sight Gauge Kit ...................................................... PS914P

Specifications

Bowl Capacity ....................................................... 4.4 Ounces
Sump Capacity ...................................................... 1.75 Ounces
Port Threads ......................................................... 1/4, 3/8, 1/2 Inch

Pressure & Temperature Ratings –
Without Differential Pressure Indicator:
  Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.3 bar)
    32°F to 125°F (0°C to 52°C)
  Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)
    32°F to 175°F (0°C to 80°C)
With Differential Pressure Indicator: 0 to 150 PSIG (0 to 10.3 bar)
  32°F to 125°F (0°C to 52°C)
  Automatic Float Drain – 15 to 250 PSIG (1.0 to 17.2 bar)
    32°F to 175°F (0°C to 80°C)

Weight ................................................................. 1.4 lb. (0.6 kg)

Materials of Construction

Body ................................................................. Zinc
Bowls ............................................................... Transparent Polycarbonate or Metal (Zinc) With or Without Sight Gauge
Bowls ............................................................... Steel
Collar ............................................................... Plastic
Deflector, Shroud & Baffle .................................... Plastic
Drains –
  Twist Drain – Body & Nut ................................... Plastic
  Automatic Float Drain – Housing, Float ............... Plastic
  Seals ................................................................... Nitrile
  Springs, Push Rod ............................................. Stainless Steel
Filter Elements –
  5 Micron ......................................................... Plastic

Seals ................................................................. Nitrile
Sight Gauge ....................................................... Polyamide
FF10 Filter – Standard

Features
• Stainless steel construction handles most corrosive environments.
• Meets NACE specifications MR-01-75/ISO 15156.
• 1/8” female threaded drain.
• High Flow: 1/2” - 70 SCFM §

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT without sight gauge</th>
<th>NPT with sight gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Manual Twist Drain</td>
<td>Automatic Float Drain</td>
</tr>
<tr>
<td>1/2”</td>
<td>FF10-04DGSS</td>
<td>FF10-04DGRSS</td>
</tr>
<tr>
<td></td>
<td>FF10-04WGSS</td>
<td>FF10-04WGRSS</td>
</tr>
</tbody>
</table>

§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

Ordering Information

<table>
<thead>
<tr>
<th>FF10</th>
<th>-</th>
<th>04</th>
<th>W</th>
<th>G</th>
<th>SS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Port Type</th>
<th>Port Size</th>
<th>Bowl</th>
<th>Element</th>
<th>Options</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPT</td>
<td>04 1/2 Inch</td>
<td>D Metal Bowl without Sight Gauge</td>
<td>G 5 Micron</td>
<td>Blank Manual Twist Drain</td>
<td>SS Stainless Steel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W Metal Bowl with Sight Gauge</td>
<td></td>
<td>R Automatic Float Drain</td>
<td></td>
</tr>
</tbody>
</table>
Technical Information

![Graph showing flow characteristics for FF10 Series Air Line Filters.](image)

**FF10 Filter Kits & Accessories**
- **Drain Kit** –
  - Automatic Float Drain: SA602MDSS
  - Manual Twist Drain –
    - Small (Old): SA600Y7-1SS
    - Large (New): SAP05481
- **Filter Element Kits** –
  - Particulate (5 Micron) Element: EK55G
- **Pipe Nipple** – 1/2" 316 Stainless Steel: 616A28-SS

**Specifications**
- **Bowl Capacity**: 4.0 Ounces
- **Filter Rating**: 5 Micron
- **Sump Capacity**: 1.7 Ounce
- **Port Threads**: 1/2 Inch
- **Pressure & Temperature Ratings** –
  - Manual Twist Drain (D-Bowl): 0 to 300 PSIG (0 to 20.7 bar), 0°F to 180°F (-18°C to 82°C)

**Materials of Construction**
- **Body**: 316 Stainless Steel
- **Bows**: 316 Stainless Steel
- **Deflector**: Acetal
- **Drain**: 316 Stainless Steel
- **Element Holder**: Acetal
- **Filter Element**: Polyethylene
- **Seals**: Fluorocarbon
- **Sight Gauge**: Isoplast

**Note:** Air must be dry enough to avoid ice formation at temperatures below 32°F (2°C).
07F Filters – Standard

Features
- Excellent water removal efficiency.
- Unique deflector plate and shroud creates a swirling of the air stream ensuring maximum water and dirt separation.
- Large filter element surface guarantees low pressure drop and increased element life.
- Optional automatic float drain available.
- Shown with metal bowl guard.
- High Flow: 3/8” – 100 SCFM
  1/2” – 130 SCFM
  3/4” – 145 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Twist Drain</th>
<th>Automatic Float Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly Bowl† / Metal Guard</td>
<td></td>
<td>07F22B*</td>
<td>07F26B*</td>
</tr>
<tr>
<td>3/8”</td>
<td></td>
<td>07F32B*</td>
<td>07F36B*</td>
</tr>
<tr>
<td>1/2”</td>
<td></td>
<td>07F42B*</td>
<td>07F46B*</td>
</tr>
<tr>
<td>3/4”</td>
<td></td>
<td>07F24B*</td>
<td>07F28B*</td>
</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
<td></td>
<td>07F34B*</td>
<td>07F38B*</td>
</tr>
<tr>
<td>3/8”</td>
<td></td>
<td>07F44B*</td>
<td>07F48B*</td>
</tr>
<tr>
<td>1/2”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/4”</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‡ For polycarbonate bowl see Caution on page 2.
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Bowl Options</th>
<th>Elements</th>
<th>Engineering Level</th>
<th>Options</th>
<th>Port Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 3/8 Inch</td>
<td>Polycarbonate Bowl</td>
<td>B 5 Micron</td>
<td></td>
<td>Blank</td>
<td>Blank</td>
</tr>
<tr>
<td>3 1/2 Inch</td>
<td>2 Metal Bowl Guard / Twist Drain</td>
<td></td>
<td></td>
<td>None</td>
<td>NPT</td>
</tr>
<tr>
<td>4 3/4 Inch</td>
<td>6 Metal Bowl Guard / Auto Float Drain</td>
<td></td>
<td></td>
<td>Blank</td>
<td>NPT</td>
</tr>
</tbody>
</table>

* Will be entered at factory

* 3/8 & 1/2 inch meet ISO 1179-1 Standard.
Technical Information

07F Filter Kits & Accessories

Bowl Guard Kit .............................................................. PS805P

Bowl Kits –
  Poly Bowl –
  Automatic Float Drain ................................................ PS822P
  Twist Drain ................................................................. PS832P
  Metal Bowl –
  Sight Gauge / Automatic Drain .................................. PS823P
  Sight Gauge / Twist Drain ........................................... PS835P

DPI Replacement Kit .................................................. PS781P

Drain Kits –
  Automatic Float Drain ............................................... PS506P
  Twist Drain ................................................................. PS512

Filter Element Kits –
  5 Micron Element ....................................................... PS802P
  Mounting Bracket Kit ................................................ PS843P
  Sight Gauge Kit .......................................................... PS914P

Specifications

Bowl Capacity ............................................................. 7.2 Ounces
Sump Capacity ............................................................. 2.8 Ounces
Port Threads ................................................................. 3/8, 1/2, 3/4 Inch

Pressure & Temperature Ratings –
  Without Differential Pressure Indicator:
    Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.3 bar)
      32°F to 125°F (0°C to 52°C)
    Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)
      32°F to 175°F (0°C to 80°C)
  With Differential Pressure Indicator:
    0 to 150 PSIG (0 to 10.3 bar)
      32°F to 125°F (0°C to 52°C)
    Automatic Float Drain – 15 to 250 PSIG (1.0 to 17.2 bar)

Weight ............................................................... 2.2 lb. (1.0 kg)

Materials of Construction

Body ................................................................. Zinc
Bowls ................................................................. Transparent Polycarbonate
Metal (Zinc) With or Without Sight Gauge

Bowl Guards ......................................................... Steel
Collar ................................................................. Steel
Deflector, Shroud & Baffle ......................................... Plastic or Metal

Drains –
  Twist Drain – Body & Nut ......................................... Plastic
  Push ‘N’ Drain –
    Body ................................................................ Nitrile
    Stem ................................................................ Brass

Automatic Float Drain –
  Housing, Float ....................................................... Plastic
  Seals ........................................................................ Nitrile
  Springs, Push Rod ................................................... Stainless Steel

Filter Elements –
  5 Micron (Standard) ................................................ Plastic

Seals ................................................................. Nitrile

Sight Gauge .......................................................... Polyamide
P3NF Filters – Hi-Flow

Features

- Port blocks (PB) available to provide 1-1/2" port extension to 1" ported bodies.
- Excellent water removal efficiency.
- Metal bowl with sight gauge.
- Large filter element surface guarantees low pressure drop and increased element life.
- Twist Drain as standard, optional automatic float drain.

High Flow:

- 3/4" – 270 SCFM
- 1" – 300 SCFM
- 1-1/2" – 310 SCFM

## Features

- Port blocks (PB) available to provide 1-1/2" port extension to 1" ported bodies.
- Excellent water removal efficiency.
- Metal bowl with sight gauge.
- Large filter element surface guarantees low pressure drop and increased element life.
- Twist Drain as standard, optional automatic float drain.

### High Flow:

- 3/4" – 270 SCFM
- 1" – 300 SCFM
- 1-1/2" – 310 SCFM

### Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Twist Drain</th>
<th>NPT</th>
<th>Automatic Float Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>P3NFA96ESM</td>
<td>P3NFA96ESA</td>
<td></td>
</tr>
<tr>
<td>1&quot;</td>
<td>P3NFA98ESM</td>
<td>P3NFA98ESA</td>
<td></td>
</tr>
<tr>
<td>1-1/2&quot; #</td>
<td>P3NFA9PESM</td>
<td>P3NFA9PESA</td>
<td></td>
</tr>
</tbody>
</table>

# 1" Port Body with 1-1/2" Port Block.
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop, with 40 micron element.

### P3NF Filter Dimensions

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>A (PB)</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.62 (92)</td>
<td>5.91 (150)</td>
<td>3.62 (92)</td>
</tr>
<tr>
<td>C</td>
<td>4.38 (35)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DT</td>
<td>9.57 (243)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ET</td>
<td>10.95 (278)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4.92 (125)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*With Twist Drain or Automatic Float Drain

### Grayed Out Items

**ARE OBSOLETE AS OF JULY 1, 2014**

* 3/4 & 1 inch meet ISO 1179-1 Standard.
Technical Information

P3NF Filter Kits & Accessories

Bowl Kits –
- Metal Bowl – Sight Gauge / Automatic Float Drain .............. P3NKA00BSA
- Sight Gauge / Twist Drain ............................................. P3NKA00BSM

Bowl Latch Kit .......................................................... C11A33
DPI Replacement Kit ................................................... PS781P
Drain Kit –
- Automatic Float Drain .............................................. PS506P
- Twist Drain ............................................................... PS512

Filter Elements –
- 5 Micron Element ...................................................... P3NKA00ESE

Mounting Bracket Kit ................................................. P3NKA00MW
Sight Gauge Kit ........................................................ P3NKA00PE

Specifications

Pressure & Temperature Rating –
0 to 250 PSIG (0 to 17 bar) 32°F to 175°F (0°C to 80°C)
Automatic Float Drain – 15 to 250 PSIG (1.0 to 17 bar)

Bowl Capacity .......................................................... 18.0 Ounces
Sump Capacity .......................................................... 6.8 Ounces

Weight –
- 3/4" ........................................................................... 3.5 lb. (1.6 kg)
- 1" ............................................................................ 3.5 lb. (1.6 kg)
- 1-1/2" # ................................................................. 4.6 lb. (2.1 kg)

Materials of Construction

Body ................................................................. Aluminum
Deflector .............................................................. Plastic
Drain ................................................................. Plastic

Filter Elements –
- 5 Micron (Standard) .................................................. Plastic

Seals ................................................................. Nitrile
Sight Gauge ........................................................ Polyamide (Nylon)

# 1" Port Body with 1-1/2" Port Block.
Coalescing Filters
- Pipe Sizes 1/8 thru 3/4 Inch
- Flows to 44 SCFM
- Pressures to 250 PSIG

Coalescing filters are designed to remove 99.9% + of the liquid aerosols, both water and oil, and submicron particulate matter from your pneumatic system. These filters will provide oil free air for applications such as spray painting, air gauging, pneumatic instrumentation, printing and packaging.

Filter Selection
1. Determine flow and pressure requirements.
2. Refer to Flow Chart and select the proper filter to match your flow and pressure needs.

Filter Media Specifications

<table>
<thead>
<tr>
<th>Grade Designation</th>
<th>Coalescing Efficiency 0.3 to 0.6 Micron Particles</th>
<th>Maximum Oil Carryover¹ PPM w/w</th>
<th>Micron Rating</th>
<th>Pressure Drop (PSID) @ Rated Flow²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Media Dry</td>
<td>Media Wet With 10-20 wt. oil</td>
</tr>
<tr>
<td>6</td>
<td>99.97%</td>
<td>0.008</td>
<td>0.01</td>
<td>1.0</td>
</tr>
<tr>
<td>10</td>
<td>95%</td>
<td>0.85</td>
<td>1.0</td>
<td>0.5</td>
</tr>
</tbody>
</table>

¹Tested per ADF-400 at 40 ppm inlet.
²Add dry + wet for total pressure drop.

Filter Element Selection

<table>
<thead>
<tr>
<th>Element Grade</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>General air coalescing applications when total removal of liquid aerosols and suspended fines is required in all pressure ranges. Protection of air dryers, air gauging, air logic, modulating systems, critical air conveying, most breathing air systems, etc.</td>
</tr>
<tr>
<td>10</td>
<td>Precoalescer or prefilter for Grade 6 to remove gross amounts of water and oil, or tenacious aerosols which are difficult to remove. Upgrading existing particulate equipment to coalescing without increase in pressure drop.</td>
</tr>
</tbody>
</table>
The contaminated air enters the element interior and is forced through a thick membrane of borosilicate glass fibers coated with epoxy (A). Flow then passes through an outer structural support and, at this stage, has removed up to 99.97% + of the sub-micron particles evident in the contaminated air. These tiny droplets coalesce together and are blotted from the filter surface by the drain and release layers of non-woven glass felt and rayon cloth. The drops now begin a gravitational passage to the filter sump (B) where they can be manually or automatically drained.

The clean, filtered air now passes through the outer screen plastic net and out into the pneumatic system. The Air Line Coalescing Filter removes liquid aerosols and sub-micron particulate matter. Collected liquids and particles in the “quiet zone” should be drained before their level reaches a height where they would be reentrained in the flowing air. This can be accomplished by the manual drain (C) which is actuated by twisting knob (D) counterclockwise. On the 30 Series, unscrew the drain valve (E) slightly until the liquid begins to drain.
Q5S/Q1S and H5S/H1S Coalescing Filters – Miniature

Features
- Removes liquid aerosols and sub-micron particles.
- Liquids gravitate to the bottom of the element and will not re-enter the airstream.
- Oil free air for critical applications, such as air gauging and pneumatic instrumentation and controls.
- Interchangeable twist and automatic pulse drains.
- Grade 6 element, 99.97% DOP efficiency.
- High Flow: Grade 6 Element
  - 1/8" – 7.7 SCFM§
  - 1/4" – 7.7 SCFM§
- Grade 10 Element
  - 1/8" – 7.7 SCFM§
  - 1/4" – 7.7 SCFM§

Dimensions

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Poly Bowl ‡</th>
<th>Metal Bowl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8&quot;</td>
<td>Q5S-6HM06-013</td>
<td>H5S-6HM06-013</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>Q1S-6HM06-013</td>
<td>H1S-6HM06-013</td>
</tr>
</tbody>
</table>

Standard part numbers shown bold, with Grade 6 Elements (for Grade 10 Elements, replace “6” with “10”).

‡ For polycarbonate bowl see Caution on page 2.
§ SCFM = Standard cubic feet per minute at 100 PSIG inlet and 2-3 PSIG pressure drop.

Ordering Information

Port Size NPT
<table>
<thead>
<tr>
<th>Port Size</th>
<th>Poly Bowl ‡</th>
<th>Metal Bowl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8&quot;</td>
<td>Q5S-6HM06-013</td>
<td>H5S-6HM06-013</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>Q1S-6HM06-013</td>
<td>H1S-6HM06-013</td>
</tr>
</tbody>
</table>

Standard part numbers shown bold, with Grade 6 Elements (for Grade 10 Elements, replace “6” with “10”).

‡ For polycarbonate bowl see Caution on page 2.
§ SCFM = Standard cubic feet per minute at 100 PSIG inlet and 2-3 PSIG pressure drop.
Technical Information

Q*S, H*S
Grade 6

Q*S, H*S
Grade 10

Materials of Construction

Body ............................................................... Aluminum
Bowls ............................................................ Transparent Polycarbonate
Drains – Twist Drain –
Body & Stem .................................................. Plastic
Seals .................................................................. Nitrile
Automatic Pulse Drain –
Piston & Seals .................................................. Nitrile
Stem, Seat, Adaptor & Washers ....................... Aluminum
Element Holder ................................................. Plastic
Filter Element .................................................. Borosilicate & Microglass fibers
Seals ................................................................. Nitrile

Filter Media Specifications

<table>
<thead>
<tr>
<th>Grade Designation</th>
<th>Coalescing Efficiency</th>
<th>Maximum Oil Carryover</th>
<th>Micron Rating</th>
<th>Pressure Drop (PSID) @ Rated Flow²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.3 to 0.6 Micron Particles</td>
<td>0.008</td>
<td>0.01</td>
<td>1.0</td>
</tr>
<tr>
<td>6</td>
<td>99.9%</td>
<td>0.85</td>
<td>1.0</td>
<td>0.5</td>
</tr>
</tbody>
</table>

¹Tested per ADF-400 at 40 ppm inlet.
²Add dry + wet for total pressure drop.
FF501 Coalescing Filter – Miniature

Features

- Stainless steel construction handles most corrosive environments.
- 1/8" female threaded drain*.
- High Flow: 1/4" - 16 SCFM §

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>FF501-02DHSS</td>
</tr>
</tbody>
</table>

Standard part numbers shown bold. For other models refer to ordering information below.

SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

Ordering Information

<table>
<thead>
<tr>
<th>Port Type</th>
<th>Port Size</th>
<th>Bowl</th>
<th>Element</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>- NPT</td>
<td>02 1/4 Inch</td>
<td>D Metal Bowl without Sight Gauge</td>
<td>H Grade 6</td>
<td>SS Stainless Steel</td>
</tr>
</tbody>
</table>
Technical Information

**FF501 Filter Kits & Accessories**
- Filter Element .................................................. 6HM06-013 x 10
- Manual Twist Drain ........................................ SAP05481

**Specifications**
- Bowl Capacity .................................................. 1.0 Ounces
- Filter Rating .................................................. 99.97% efficient at 0.01 Micron
- Port Threads .................................................. 1/4 Inch

**Pressure & Temperature Ratings – Manual Twist Drain:**
- 0 to 300 PSIG (0 to 20.7 bar)
- 0°F to 180°F (-18°C to 82°C)

*Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (2°C)*

**Sump Capacity** .................................................. 0.4 Ounce
**Weight** .............................................................. 0.6 lb. (0.27 kg)

<table>
<thead>
<tr>
<th>Grade Designation</th>
<th>Coalescing Efficiency</th>
<th>Maximum Oil Carryover¹</th>
<th>Micron Rating</th>
<th>Pressure Drop (PSI) @ Rated Flow²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 6</td>
<td>99.97%</td>
<td>0.008</td>
<td>0.01</td>
<td>1.0</td>
</tr>
</tbody>
</table>

¹Tested per ADF-400 at 40 ppm inlet.
²Add dry + wet for total pressure drop.

**Materials of Construction**
- Body .............................................................. 316 Stainless Steel
- Bowls ............................................................ 316 Stainless Steel
- Drain ............................................................ 316 Stainless Steel
- Element Holder ................................................. Acetal
- Filter Element ................................................. Borosilicate Microglass Fiber
- Seals ............................................................... Fluorocarbon
15F Coalescing Filters – Economy

Features
- Removes liquid aerosols and sub-micron particles.
- Liquids gravitate to the bottom of the element and will not re-enter the airstream.
- Oil free air for critical applications, such as air gauging and pneumatic instrumentation and controls.
- Interchangeable twist and automatic pulse drains.
- Pressure differential indicator standard.
- High Flow: Grade 6 Element  Grade 10 Element
  1/4” – 30 SCFM§  1/4” – 51 SCFM§
  3/8” – 30 SCFM§  3/8” – 66 SCFM§

Options
- Blank With Differential Pressure Indicator

Port Size
- NPT Twist Drain Automatic Pulse Drain
- Poly Bowl† / Metal Guard
  1/4” 15F12E* 15F1PE*
  3/8” 15F22E* 15F2PE*
- Metal Bowl / Sight Gauge
  1/4” 15F14E* 15F1TE*
  3/8” 15F24E* 15F2TE*

Standard part numbers shown bold, with Grade 6 Elements (for Grade 10 Elements, replace “E” with “H” in the 6th position). For other models refer to ordering information below.
† For polycarbonate bowl see Caution on page 2.
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

Ordering Information

Port Size
1 1/4 Inch
2 3/8 Inch

Bowl Options
- Polycarbonate Bowl
  2 Metal Bowl Guard / Twist Drain
  P Metal Bowl Guard / Auto Pulse Drain
- Metal Bowl
  4 Sight Gauge / Twist Drain
  T Sight Gauge / Auto Pulse Drain

Elements
- E Grade 6
- H Grade 10

Engineering Level
- * Will be entered at factory

Port Type
- Blank NPT

Options
- Blank With Differential Pressure Indicator

15F Coalescing Filter Dimensions

<table>
<thead>
<tr>
<th>Port Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly Bowl</td>
<td>2.00</td>
<td>2.06</td>
<td>1.50</td>
</tr>
<tr>
<td>Metal Bowl</td>
<td>(51)</td>
<td>(52)</td>
<td>(38)</td>
</tr>
<tr>
<td>1/4”</td>
<td>1.86</td>
<td>5.35</td>
<td>6.85</td>
</tr>
<tr>
<td>3/8”</td>
<td>(47)</td>
<td>(136)</td>
<td>(174)</td>
</tr>
</tbody>
</table>

† With Twist Drain or Automatic Float Drain

Inches (mm)

GRAYED OUT ITEMS ARE OBSOLETE AS OF JULY 1, 2014
Technical Information

15F Coalescing Filter Kits & Accessories

Bowl Guard Kit .................................................. PS905P
Bowl Kits –
Poly Bowl –  Automatic Pulse Drain.......................... PS995P
Twist Drain.................................................. PS932P
Metal Bowl – Sight Gauge / Automatic Pulse Drain........ PS996P
Sight Gauge / Twist Drain........................................ PS935P
DPI Replacement Kit ....................................... PS781P
Drain Kit – Automatic Pulse Drain............................. PS998P
Twist Drain.................................................. PS512

Filter Element Kits –
Grade 6 (Standard) ........................................... PS924P
Grade 10 (Optional) ........................................... PS943P
Mounting Bracket Kit ........................................ PS943P
Sight Gauge Kit................................................ PS914P

Specifications

Bowl Capacity .................................................. 2.0 Ounces
Sump Capacity .................................................. 0.9 Ounce
Port Threads .................................................. 1/4, 3/8 Inch

Pressure & Temperature Ratings –
With Differential Pressure Indicator: 0 to 150 PSIG (0 to 10.3 bar)
32°F to 125°F (0°C to 52°C)
Weight .................................................. 1.2 lb. (0.54 kg)

Materials of Construction

Body .............................................................. Zinc
Bowls .......................................................... Transparent Polycarbonate
Metal (Zinc) Without Sight Gauge
Steel
Collar .......................................................... Plastic
Drain .......................................................... Plastic

Filter Element –
Borosilicate & felt glass fibers 99.97% DOP efficiency
Largest Aerosol Particle Passed (Grade 6) ............... 0.01 Micron
Largest Solid Particle Passed (Grade 6) ............... 0.30 Micron
Seals .......................................................... Nitrile
Sight Gauge, DPI ........................................... Polyamide (Nylon)

15F Media Specifications

<table>
<thead>
<tr>
<th>Grade Designation</th>
<th>Coalescing Efficiency</th>
<th>Maximum Oil Carryover</th>
<th>Micron Rating</th>
<th>Pressure Drop (PSID) @ Rated Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Micron Particles</td>
<td>PPM w/w</td>
<td></td>
<td>Media Dry</td>
</tr>
<tr>
<td>6</td>
<td>0.3 to 0.6</td>
<td>0.008</td>
<td>0.01</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>0.3 to 0.6</td>
<td>0.008</td>
<td>0.01</td>
<td>10</td>
</tr>
</tbody>
</table>

1Tested per ISO 12500-1 at 40 ppm inlet.
2Add dry + wet for total pressure drop.
11F Coalescing Filters – Compact

Features

• Removes liquid aerosols and sub-micron particles.
• Liquids gravitate to the bottom of the element and will not re-enter the airstream.
• Oil free air for critical applications, such as air gauging and pneumatic instrumentation and controls.
• Interchangeable twist and automatic float drains.
• Pressure differential indicator standard.
• Shown with recommended metal bowl guard.
• High Flow: Grade 6 Element  Grade 10 Element
  1/4" – 45 SCFM⁵  1/4" – 60 SCFM⁵
  3/8" – 48 SCFM⁵  3/8" – 72 SCFM⁵
  1/2" – 65 SCFM⁵  1/2" – 95 SCFM⁵

Standard part numbers shown bold, with Grade 6 Elements (for Grade 10 Elements, replace “E” with “H” in the 6th position). For other models refer to ordering information below.

‡ For polycarbonate bowl see Caution on page 2.

§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

Port Size | NPT | Twist Drain | Automatic Float Drain
---|---|---|---
Poly Bowl‡ / Metal Guard
  1/4"  | 11F12E* | 11F16E*
  3/8"  | 11F22E* | 11F26E*
  1/2"  | 11F32E* | 11F36E*
Metal Bowl / Sight Gauge
  1/4"  | 11F14E* | 11F18E*
  3/8"  | 11F24E* | 11F28E*
  1/2"  | 11F34E* | 11F38E*

11F Coalescing Filter Dimensions

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.81</td>
<td>2.74</td>
<td>1.46</td>
</tr>
<tr>
<td>(71)</td>
<td>(70)</td>
<td>(37)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ci</th>
<th>D</th>
<th>D†</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.81</td>
<td>5.69</td>
<td>5.74</td>
</tr>
<tr>
<td>(46)</td>
<td>(145)</td>
<td>(146)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E</th>
<th>E†</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.15</td>
<td>7.20</td>
</tr>
<tr>
<td>(182)</td>
<td>(183)</td>
</tr>
</tbody>
</table>

† With Automatic Float Drain

Inches (mm)

Ordering Information

11F 1 2 E * — —

Port Size
1 1/4 Inch
2 3/8 Inch
3 1/2 Inch

Bowl Options
Polycarbonate Bowl
2 Metal Bowl Guard / Twist Drain
6 Metal Bowl Guard / Auto Float Drain
Metal Bowl
4 Sight Gauge / Twist Drain
8 Sight Gauge / Auto Float Drain

Elements
E Grade 6
H Grade 10

Engineering Level
* Will be entered at factory

Options
Blank
With Differential Pressure Indicator

Port Type
Blank NPT
11F Coalescing Filter Kits & Accessories

Bowl Guard Kit .......................................................... PS705P
Bowl Kits –
  Poly Bowl –
    Automatic Float Drain ........................................ PS723P
    Twist Drain ......................................................... PS732P
  Metal Bowl –
    Sight Gauge / Automatic Float Drain............... PS723P
    Sight Gauge / Twist Drain ........................ PS735P
DPI Replacement Kit ................................................ PS781P
Drain Kits –
  Automatic Float Drain ........................................ PS506P
  Twist Drain ........................................................ PS512
Filter Element Kits – Grade 6 (Standard) ................. PS724
  Grade 10 (Optional) ........................................ PS730
Mounting Bracket Kit ............................................. PS743P
Sight Gauge Kit ....................................................... PS914P

Specifications

Bowl Capacity .......................................................... 4.4 Ounces
Sump Capacity ........................................................ 1.75 Ounces
Operation –
  Normal Operating Pressure Drop .................. 2 PSIG
  Maximum Recommended Pressure Drop .... 10 PSIG
(Particle should be replaced)
Minimum Recommended Flow –
  20% Nominal Rating of Element
Port Threads ............................................................... 1/4, 3/8, 1/2 inch
Weight ................................................................. 1.5 lb (0.7 kg)

11F Coalescing Filter Operation

Finite Filter Operation
Oxford, MI
www.parker.com/finitefilter

Materials of Construction

Body ............................................................... Zinc
Bowls .................................................. Transparent Polycarbonate
  Metal (Zinc) With or Without Sight Gauge
Collar ................................................... Steel
Drains –
  Twist Drain – Body & Nut ......................... Plastic
  Push ‘N’ Drain – Body ......................... Nitrile
  Stem .................................................... Brass
Automatic Float Drain – ....................... Housing, Float Plastic
  Seals .................................................... Nitrile
  Springs, Push Rod ............. Stainless Steel

Filter Element –
  Borosilicate & felt glass fibers 99.97% DOP efficiency
Seals ................................................. Nitrile
Sight Gauge ....................................... Polyamide

11F Media Specifications

<table>
<thead>
<tr>
<th>Grade Designation</th>
<th>Coalescing Efficiency</th>
<th>Maximum Oil Carryover1</th>
<th>Micron Rating</th>
<th>Pressure Drop (PSID) @ Rated Flow2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.3 to 0.6 Micron Particles</td>
<td>PPM w/w</td>
<td></td>
<td>Media Dry</td>
</tr>
<tr>
<td>6</td>
<td>99.97%</td>
<td>0.008</td>
<td>0.01</td>
<td>1.0</td>
</tr>
<tr>
<td>10</td>
<td>95%</td>
<td>0.85</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

1Tested per ISO 12500-1 at 40 ppm inlet.
2Add dry + wet for total pressure drop.
FF11 Coalescing Filter – Standard

Features

• Stainless steel construction handles most corrosive environments.
• Meets NACE specifications MR-01-75/ISO 15156.
• 1/8" female threaded drain*.
• High Flow: 1/2" - 45 SCFM §

![Diagram of FF11 Coalescing Filter]

### Dimensions

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT without sight gauge</th>
<th>NPT with sight gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>Manual Twist Drain</td>
<td>Automatic Float Drain</td>
</tr>
<tr>
<td></td>
<td>F11-04DJSS</td>
<td>F11G04WJSS</td>
</tr>
<tr>
<td></td>
<td>Metal Bowl With Sight Gauge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F11-04DJRSS</td>
<td>F11G04WJRSS</td>
</tr>
</tbody>
</table>

Standard part numbers shown bold. For other models refer to ordering information below.

### Ordering Information

<table>
<thead>
<tr>
<th>F11</th>
<th>04</th>
<th>W</th>
<th>J</th>
<th>SS</th>
</tr>
</thead>
</table>

Port Type
- NPT
- G BSPP

Port Size
04 1/2 Inch

Bowl
- D Metal Bowl without Sight Gauge
- W Metal Bowl with Sight Gauge

Element
- J Grade 6

Options
- Blank Manual Twist Drain
- R Automatic Float Drain

Material
- SS Stainless Steel

---

§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.
Technical Information

F11 Filter Kits & Accessories
Drain Kit –
  Automatic Float Drain ................................................ SA602MDSS
  Manual Twist Drain –
    Small (Old) ............................................................ SA600Y7-1SS
    Large (New) ............................................................ SAP05481
Filter Element Kits –
  Grade 6 ................................................................. 6HM07-019 x 10

Specifications
  Bowl Capacity ............................................................. 4.0 Ounces
  Filter Rating .............................................................. 0.01 Micron
  Sump Capacity ............................................................ 1.7 Ounce
  Port Threads .............................................................. 1/2 Inch

Pressure & Temperature Ratings –
  Manual Twist Drain .................................................. 0 to 300 PSIG (0 to 20.7 bar)
    0°F to 180°F (-18°C to 82°C)
  Manual Twist Drain (W) .............................................. 0 to 250 PSIG (0 to 17.2 bar)
    0°F to 150°F (-18°C to 66°C)
  Automatic Float Drain .............................................. 0 to 175 PSIG (0 to 12 bar)
    40°F to 125°F (4°C to 52°C)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (2°C).

Weight ............................................................. 1.9 lb. (0.85 kg)

Materials of Construction
  Body ................................................................. 316 Stainless Steel
  Bowls ................................................................. 316 Stainless Steel
  Drain ................................................................. 316 Stainless Steel
  Element Holder ........................................................ Acetal
  Filter Element ........................................................ Borosilicate Fiber
  Seals ................................................................. Fluorocarbon
  Sight Gauge ............................................................. Isoplast

FF11 Media Specifications

<table>
<thead>
<tr>
<th>Grade Designation</th>
<th>Coalescing Efficiency</th>
<th>Maximum Oil Carryover1</th>
<th>Micron Rating</th>
<th>Pressure Drop (PSID) @ Rated Flow2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Media Dry</td>
<td>Media Wet With 10-20 wt. oil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>99.97%</td>
<td>0.008</td>
<td>0.01</td>
<td>1.0</td>
</tr>
</tbody>
</table>

1 Tested per ISO 12500-1 at 40 ppm inlet.
2 Add dry + wet for total pressure drop.
12F Coalescing Filters – Standard

Features
- Removes liquid aerosols and sub-micron particles.
- Liquids gravitate to the bottom of the element and will not re-enter the airstream.
- Oil free air for critical applications, such as air gauging and pneumatic instrumentation and controls.
- Interchangeable twist and automatic float drains.
- Pressure differential indicator standard.
- Shown with recommended metal bowl guard.
- High Flow: Grade 6 Element Grade 10 Element
  - 3/8" – 73 SCFM\(^{\text{§}}\)
  - 3/8" – 98 SCFM\(^{\text{§}}\)
  - 1/2" – 75 SCFM\(^{\text{§}}\)
  - 1/2" – 125 SCFM\(^{\text{§}}\)
  - 3/4" – 80 SCFM\(^{\text{§}}\)
  - 3/4" – 160 SCFM\(^{\text{§}}\)

### Bowl Options

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Poly Bowl (^{\dagger}) / Metal Guard</th>
<th>Metal Bowl / Sight Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;</td>
<td>12F22E*</td>
<td>12F24E*</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>12F32E*</td>
<td>12F34E*</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>12F42E*</td>
<td>12F44E*</td>
</tr>
</tbody>
</table>

### Ordering Information

```
12F 3 2 E * — —
```

**Port Size**
- 2 3/8 Inch
- 3 1/2 Inch
- 4 3/4 Inch

**Bowl Options**
- Polycarbonate Bowl
- Metal Bowl / Twist Drain
- Metal Bowl / Auto Float Drain

**Elements**
- E Grade 6
- H Grade 10

**Engineering Level**
- * Will be entered at factory

**Options**
- Blank
- With Differential Pressure Indicator

**Port Type**
- Blank NPT

\(\text{SCFM} =\) Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

\(\dagger\) With Automatic Float Drain

Standard part numbers shown bold, with Grade 6 Elements (for Grade 10 Elements, replace “E” with “H” in the 6th position). For other models refer to ordering information below.

Granular and Fibrous Particles

- Removes onyx and metallic particles effectively.

Dimensions

```
Port Size  NPT
----------  -------
            Twist Drain  Automatic Float Drain
Poly Bowl \(^{\dagger}\) / Metal Guard
3/8"       12F22E*     12F24E*
1/2"       12F32E*     12F34E*
3/4"       12F42E*     12F44E*
Metal Bowl / Sight Gauge
3/8"       12F24E*     12F28E*
1/2"       12F34E*     12F38E*
3/4"       12F44E*     12F48E*
```

Inches (mm)

GRAYED OUT ITEMS ARE OBSOLETE AS OF JULY 1, 2014

Parker Hannifin Corporation
Finite Filter Operation
Oxford, MI
www.parker.com/finitefilter

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## Technical Information

### Grade 6

![Graph](image)

### Grade 10

![Graph](image)

### 12F Coalescing Filter Kits & Accessories

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowl Guard Kit</td>
<td>PS805P</td>
</tr>
<tr>
<td>Bowl Kits</td>
<td></td>
</tr>
<tr>
<td>Poly Bowl – Automatic Float Drain</td>
<td>PS822P</td>
</tr>
<tr>
<td>Twist Drain</td>
<td>PS832P</td>
</tr>
<tr>
<td>Metal Bowl – Sight Gauge / Automatic Float Drain</td>
<td>PS823P</td>
</tr>
<tr>
<td>Sight Gauge / Twist Drain</td>
<td>PS835P</td>
</tr>
<tr>
<td>DPI Replacement Kit</td>
<td>PS781P</td>
</tr>
<tr>
<td>Drain Kits</td>
<td></td>
</tr>
<tr>
<td>Automatic Float Drain</td>
<td>PS506P</td>
</tr>
<tr>
<td>Semi-Auto Drain</td>
<td>PS511P</td>
</tr>
<tr>
<td>Twist Drain</td>
<td>PS512</td>
</tr>
<tr>
<td>Filter Element Kits – Grade 6 (Standard)</td>
<td>PS824</td>
</tr>
<tr>
<td>Grade 10 (Optional)</td>
<td>PS830</td>
</tr>
<tr>
<td>Mounting Bracket Kit</td>
<td>PS843P</td>
</tr>
<tr>
<td>Sight Gauge Kit</td>
<td>PS914P</td>
</tr>
</tbody>
</table>

### Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowl Capacity</td>
<td></td>
<td>7.2 Ounces</td>
</tr>
<tr>
<td>Sump Capacity</td>
<td></td>
<td>2.8 Ounces</td>
</tr>
<tr>
<td>Operation – Normal Operating Pressure Drop</td>
<td></td>
<td>2 PSIG</td>
</tr>
<tr>
<td>Maximum Recommended Pressure Drop</td>
<td></td>
<td>10 PSIG</td>
</tr>
<tr>
<td>Minimum Recommended Flow</td>
<td></td>
<td>20% Nominal Rating of Element</td>
</tr>
<tr>
<td>Port Threads</td>
<td></td>
<td>3/8, 1/2 &amp; 3/4 Inch</td>
</tr>
<tr>
<td>Pressure &amp; Temperature Ratings</td>
<td></td>
<td>With Differential Pressure Indicator: 0 to 150 PSIG (0 to 10.3 bar) 32°F to 125°F (0°C to 52°C)</td>
</tr>
<tr>
<td>Automatic Float Drain</td>
<td></td>
<td>15 to 250 PSIG (1.0 to 17.2 bar)</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>2.4 lb. (1.1 kg)</td>
</tr>
</tbody>
</table>

### Materials of Construction

- **Body**: Transparent Polycarbonate Metal (Zinc) With or Without Sight Gauge
- **Collar**: Steel
- **Drains – Twist Drain – Body & Nut**: Plastic or Metal
- **Filter Element**: Borosilicate & felt glass fibers 99.97% DOP efficiency
- **Seals**: Nitrile
- **Sight Gauge**: Polymide

### 12F Media Specifications

<table>
<thead>
<tr>
<th>Grade</th>
<th>Coalescing Efficiency</th>
<th>Maximum Oil Carryover</th>
<th>Micron Rating</th>
<th>Pressure Drop (PSID)</th>
<th>Media</th>
<th>Media Wet</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>99.97%</td>
<td>0.008</td>
<td>0.01</td>
<td>1.0</td>
<td>2-3</td>
<td>10-20 w/o</td>
</tr>
<tr>
<td>10</td>
<td>95%</td>
<td>0.85</td>
<td>1.0</td>
<td>0.5</td>
<td>0.5</td>
<td></td>
</tr>
</tbody>
</table>

1. Tested per ISO 12500-1 at 40 ppm inlet.
2. Add dry + wet for total pressure drop.

Parker Hannifin Corporation
Finite Filter Operation
Oxford, MI
www.parker.com/finitefilter
Regulators

- Pipe Sizes 1/8 thru 1½ Inch
- Flows to 300 SCFM
- Pressures to 250 PSIG

Air regulators are designed to provide quick response and accurate pressure regulation for the most demanding industrial applications.

- Miniature 14R Series, 1/8 and 1/4 Inch
- Miniature FR364 Stainless Series, 1/4 Inch
- Economy 05R Series, 1/4 and 3/8 Inch
- Compact 06R Series, 1/4, 3/8 and 1/2 Inch
- Standard FR11 Stainless Series, 1/2 Inch
- Standard 07R Series, 3/8, 1/2 and 3/4 Inch
- Hi-Flow P3NR Series, 3/4, 1 and 1½ Inch
- Pilot Controlled 11R, 12R Series, 1/4 thru 3/4 Inch

Regulator Selection

1. Determine maximum system flow requirements.
2. Determine maximum allowable pressure drop at rated flow in SCFM.
3. Refer to flow chart and select regulator by choosing the curve that offers minimum pressure drop at desired flow in SCFM.

Reading Flow Charts to Size Regulators

Once the required flow is determined for a pneumatic application the regulator or filter/regulator can be selected by using the flow chart. The chart serves two different purposes. To read the flow, use the right side of the chart. To read the relief characteristics use the left side of the chart. When reading the flow chart, first determine the secondary pressure that will be used. Find the appropriate pressure curve on the graph. Given an acceptable pressure drop for an application, follow the flow curve until it intersects the pressure drop point. This will give the flow at that particular pressure drop.

WARNING

Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.
With the adjusting knob (A) turned fully counterclockwise (no spring load), and pressure supplied to the regulator inlet port, the valve poppet assembly (B) is closed. Turning the adjusting knob clockwise applies a load to control spring (C). This load causes the piston / diaphragm (D) and the valve poppet assembly (B) to move downward allowing flow across the seat area (E) created between the poppet assembly and the seat. Pressure in the downstream line is sensed below the piston / diaphragm (D) and offsets the load of spring (C). As downstream pressure rises, poppet assembly (B) and control piston (C) move upward until the area (E) is closed and the load of the spring (C) and pressure under piston / diaphragm (D) are in balance. A reduced outlet pressure has now been obtained, depending on spring load. Creating a demand downstream, such as opening a valve, results in a reduced pressure under the piston / diaphragm (D). The load of control spring (C) now causes the poppet assembly to move downward opening seat area (E) allowing air to flow to meet the downstream demand. The flow of downstream air is metered by the amount of opening (E).

During low flow requirements, the amount of opening at the seat (E) is small, while at high flows it is large. The downstream pressure signal, which regulates the amount of opening, requires an adjustment over this range, in order to attempt a constant output.

This adjustment is the orifice (G), which is sized and located in such a manner as to provide a compensation to the downstream pressure signal transmitted to the piston. This effect is called aspiration and its effect is to maintain downstream pressure nearly constant over a wide range of flow demands.

Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the piston / diaphragm (D) to move upward against control spring (C), open vent hole (F), and vent the excess pressure to atmosphere through the hole in the bonnet (H). (This occurs in the relieving type regulator only.)
14R Regulators – Miniature

Features
- Unbalanced poppet standard.
- Solid control piston with lip seal for extended life.
- Non-rising adjusting knob.
- Compact, 2.88 inch (73.2mm) high by 1.65 inch (42mm) wide.
- Easily serviced.
- High Flow: 1/8" – 13 SCFM
  1/4" – 15 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
</tr>
<tr>
<td>1/8&quot;</td>
<td>14R013F*</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>14R113F*</td>
</tr>
</tbody>
</table>

NOTE: 1.218 Dia. (31mm) hole required for panel mounting.

§ SCFM = Standard cubic feet per minute at 100 PSIG inlet, 90 PSIG no flow secondary setting and 10 PSIG pressure drop.

Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Pressure Range</th>
<th>Relief</th>
<th>Port Type</th>
<th>Pressure Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1/8 Inch Pipe, 1/8 Inch Gauge Port</td>
<td>13 125 PSIG</td>
<td>F Relieving</td>
<td>Blank NPT</td>
<td>14R 1 13 F * --- --- ---</td>
</tr>
<tr>
<td>1 1/4 Inch Pipe, 1/8 Inch Gauge Port</td>
<td></td>
<td></td>
<td>F Relieving</td>
<td>13 125 PSIG</td>
</tr>
</tbody>
</table>

Inlet Pressure is 100 PSIG. For other pressures, contact factory.

"Will be entered at factory"
Technical Information

Relief And Flow Characteristics

CAUTION:
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

14R Regulator Kits & Accessories

Body Service Kit – Unbalanced ........................................ PS424BP
Bonnet Assembly Kit ........................................................ L01369
Gauges – 30 PSIG, 1/8" NPT (0 to 2.1 bar)..............K4515N18030
          60 PSIG, 1/8" NPT (0 to 4.1 bar)..............K4515N18060
          160 PSIG, 1/8" NPT (0 to 11.0 bar).............K4515N18160
          60 PSIG, 1/4" NPT (0 to 4.1 bar)..............K4520N14060
          160 PSIG, 1/4" NPT (0 to 11.0 bar).............K4520N14160
Mounting Bracket Kit (Includes Panel Mount Nut) ....PS417BP
Panel Mount Nuts – Plastic.......................................... P78652
                   Metal................................................. P01531
Service Kits – Relieving.............................................. PS426P
Springs – 2-125 PSIG Range (Gold)......................... P01173

Specifications

Gauge Ports (2) ...................................................... 1/8 or 1/4 Inch
(Can be used for Full Flow)
Port Threads .......................................................... 1/8, 1/4 Inch
Pressure & Temperature Ratings –
          0 to 300 PSIG (0 to 20.7 bar)
          32°F to 125°F (0°C to 52°C)
Low Temperature ............................................. -4°F to 125°F (-20°C to 52°C)
Secondary Pressure Range–
          Standard Pressure........................................ 2 to 125 PSIG (0 to 8.6 bar)

Weight – 14R................................................. 0.3 lb. (0.14 kg)

Materials of Construction

Adjusting Nut ......................................................... Brass
Adjusting Stem & Spring ............................................. Steel
Body ........................................................................... Zinc
Bonnet, Seat, Piston & Valve Poppet............................... Plastic
Seals ........................................................................ Nitrile
FR364 Regulator – Miniature

Features

• Stainless steel construction handles most corrosive environments.
• Large diaphragm to valve area ratio for precise regulation and high flow capacity.
• Meets NACE specifications MR-01-75/ISO 15156.
• High Flow: 1/4" – 12 SCFM

<table>
<thead>
<tr>
<th>Series</th>
<th>Adjustment Type</th>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR364</td>
<td>Knob</td>
<td>1/4&quot;</td>
<td>R364-02CSS</td>
</tr>
</tbody>
</table>

5 SCFM = Standard cubic feet per minute at 100 PSIG inlet, 75 PSIG no flow secondary setting and 15 PSIG pressure drop.

⚠️ WARNING

Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

FR364 - 02 C SS

- Series: R364
- Port Type: NPT
- Port Size: 1/4 Inch
- Pressure Range: C 0-125 PSIG (0-8.5 bar)
- Material: SS Stainless Steel
FR364 Series
Air Line Regulators

Operation

With the adjusting knob (A) turned fully counter-clockwise (no spring load), and pressure supplied to the regulator inlet port, the valve poppet assembly (B) is closed. Turning the adjusting knob clockwise applies a load to control spring (C). This load causes the diaphragm (D) and the valve poppet assembly (B) to move downward allowing flow across the seat area (E) created between the poppet assembly and the seat. Pressure in the downstream line is sensed below the diaphragm (D) and offsets the load of spring (C). As downstream pressure rises, poppet assembly (B) and diaphragm (D) move upward until the area (E) is closed and the load of the spring (C) and pressure under diaphragm (D) are in balance. A reduced outlet pressure has now been obtained, depending on spring load. Creating a demand downstream, such as opening a valve, results in a reduced pressure under the diaphragm (D). The load of control spring (C) now causes the poppet assembly to move downward opening seat area (E) allowing air to flow to meet the downstream demand. The flow of downstream air is metered by the amount of opening (E).

Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the diaphragm (D) to move upward against control spring (C), open vent hole (F), and vent the excess pressure to atmosphere through the hole in the bonnet (H). (This occurs in the relieving type regulator only.)

Technical Information

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

FR364 Regulator Kits & Accessories

R364 Bonnet Kit (Knob Included) ...................... CKR364YSS

Gauge –
160 PSIG (0 to 1100 kPa) ...................... K4515N14160SS

Panel Mount Bracket (Stainless) ...................... 161X57-SS

Panel Mount Nut –
Stainless ........................................... R05X51-SS
Plastic ............................................... R05X51-P

Service Kit –
Relieving ........................................... RKR364YSS

Springs –
0-125 PSIG Range ............................ SPR-377-1-SS

Specifications

Gauge Port ................................................. 1/4 Inch

Operation .................................... Fluorocarbon Diaphragm

Port Threads .................................................... 1/4 Inch

Pressure & Temperature Ratings – ........... 300 PSIG Max (20.7 bar)
40°F to 150°F (4°C to 66°C)

Weight ........................................... 0.5 lb. (0.23 kg)

Materials of Construction

Adjustment Mechanism / Springs .............. 316 Stainless Steel

Adjusting Knob (R364) .................................. Polypropylene

Body ............................................................. 316 Stainless Steel

Bonnet (R364) .............................................. Acetal

Bottom Plug ............................................. 316 Stainless Steel

Poppet ......................................................... 316 Stainless Steel

Seals ............................................................ Fluorocarbon
05R Regulators – Economy

Features
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Rolling diaphragm for extended life.
- Removable non-rising knob for panel mounting and tamper resistance.
- Easily serviced.
- Reverse Flow.
- High Flow: 1/4" – 30 SCFM§
  3/8" – 40 SCFM§

NOTE: 1.53 Dia. (39mm) hole required for panel mounting.
§ SCFM = Standard cubic feet per minute at 100 PSIG inlet,
  90 PSIG no flow secondary setting and 10 PSIG pressure drop.

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>05R113A*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>05R213A*</td>
</tr>
<tr>
<td>With 160 PSI Gauge</td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>05R118A*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>05R218A*</td>
</tr>
</tbody>
</table>

Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Pressure Range</th>
<th>Relief</th>
<th>Engineering Level</th>
<th>Port Type</th>
<th>Options</th>
<th>Preset / Pressure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; Inch</td>
<td>Without Gauge 13 125 PSIG</td>
<td>A Relieving</td>
<td>Blank NPT</td>
<td>Blank No Options</td>
<td>Blank None</td>
<td></td>
</tr>
<tr>
<td>3/8&quot; Inch</td>
<td>With Gauge* 18 125 PSIG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Will be entered at factory
† Inlet Pressure is 100 PSIG. For other pressures, contact factory.

** Includes 1-1/2" Dial Face Gauge
Technical Information

05R Series
Air Line Regulators

Technical Specifications – 05R

Relief and Flow Characteristics

05R113A*

05R213A*

CAUTION:
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

05R Regulator Kits & Accessories

Bonnet Assembly Kit ................................................. PS915P
Control Knob ............................................................. P04420
Gauges – 1-1/2" Dial Face ???
30 PSIG (0 to 2.1 bar) ....................... K4515N14030
60 PSIG (0 to 4.1 bar) ..................... K4515N14060
160 PSIG (0 to 11.0 bar) ............... K4515N14160
300 PSIG (0 to 20.0 bar) .............. K4515N14300
2" Dial Face
60 PSIG (0 to 4.1 bar) ....................... K4520N14060
160 PSIG (0 to 11.0 bar) .............. K4520N14160

Mounting Bracket Kit ................................. PS963P
Panel Mount Nut – Metal ......................... PS964P
Springs – 1-30 PSIG Range .................. P04427
1-60 PSIG Range ................................. P04426
2-125 PSIG Range ......................... P04425
2-200 PSIG ........................................ P02934
Service Kit – Relieving ...................... PS908P

Specifications

Gauge Ports (2) .............................................. 1/4 Inch
Port Threads ............................................. 1/4, 3/8 Inch
Primary Pressure Rating –
Maximum Primary Pressure .................. 250 PSIG (17.2 bar) Max.
For Secondary Pressure Ranges see above charts.
Temperature Rating
Low Temperature .................. -4°F to 125°F (-20°C to 52°C)
Weight ........................................... 1.1 lb. (0.49 kg)

Materials of Construction

Adjusting Stem .............................................. Brass
Bonnet ............................................................ Plastic
Body .............................................................. Zinc
Collar, Knob ................................................. Plastic
Diaphragm ..................................................... Nitrile
Poppet & Cap .............................................. Plastic
Seals ............................................................. Nitrile
Springs – Poppet & Control .................. Steel

WARNING
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

05R Series
Air Line Regulators

Bulletin 1300-703-08/USA-0914
Parker Hannifin Corporation
Finite Filter Operation
Oxford, MI
www.parker.com/finitefilter
06R Regulators – Compact

Features
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Rolling diaphragm for extended life.
- Two high flow 1/4" gauge ports can be used as additional outlets.
- Easily serviced.
- Removable non-rising knob for panel mounting and tamper resistance.
- High Flow: 1/4" – 53 SCFM
  3/8" – 60 SCFM
  1/2" – 75 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>06R113A*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>06R213A*</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>06R313A*</td>
</tr>
</tbody>
</table>

NOTE: 2.00 Dia. (51mm) hole required for panel mounting.

§ SCFM = Standard cubic feet per minute at 100 PSIG inlet, 90 PSIG no flow secondary setting and 10 PSIG pressure drop.

⚠️ WARNING
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Pressure Range Without Gauge</th>
<th>Relief</th>
<th>Engineering Level</th>
<th>Port Type</th>
<th>Options</th>
<th>Preset / Pressure Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; 1 1/4 Inch</td>
<td>13 125 PSIG</td>
<td>A</td>
<td>Blank NPT</td>
<td>*Will be entered at factory</td>
<td>Blank None</td>
<td>Blank Limited</td>
</tr>
<tr>
<td>3/8&quot; 2 3/8 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2&quot; 3 1/2 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Inlet Pressure is 100 PSIG. For other pressures, contact factory.
Technical Information

CAUTION:
REGULATOR PRESSURE ADJUSTMENT –
The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

06R Regulator Kits & Accessories
Bonnet Assembly Kit ........................................................... PS715P
Control Knob ................................................................. P04069B
Gauges – 60 PSIG (0 to 4.1 bar) .................................. K4520N14060
160 PSIG (0 to 11.0 bar) ........................................ K4520N14160
Mounting Bracket Kit (Includes Panel Mount Nut) ........ PS707P
Panel Mount Nut – Plastic .................................................. P04082
Metal ................................................................. P04079B
Service Kit – Relieving (Includes Poppet) ................. PS708P
Springs – 2-125 PSIG Range ........................................ P04063
Tamperproof Kit .............................................................. PS737P

Specifications
Gauge Ports (2) .................................................................. 1/4 Inch
(Can be used as additional High Flow 1/4 Inch Outlet Ports)
Port Threads ................................................................. 1/4, 3/8, 1/2 Inch
Primary Pressure Rating –
Maximum Primary Pressure ........................................ 250 PSIG (17.2 bar)
Secondary Pressure Range –
Standard Pressure ......................................................... 2 to 125 PSIG (0 to 8.6 bar)
Temperature Rating .......................................................... 32°F to 175°F (0°C to 80°C)
Weight 1.6 lb. (0.7 kg)

Materials of Construction
Adjusting Stem ............................................................... Steel
Body ........................................................................ Zinc
Bonnet, Piston Stem, Valve Poppet & Cap ......................... Plastic
Collar, Knob ................................................................. Plastic
Diaphragm ...................................................................... Nitrile
Seals ........................................................................... Nitrile
Springs – Poppet ............................................................. Stainless
Control ................................................................. Steel
FR10 Regulator – Standard

Features
• Stainless steel construction handles most corrosive environments.
• Large diaphragm to valve area ratio for precise regulation and high flow capacity.
• Meets NACE specifications MR-01-75/ISO 15156.
• Low temperature version available.
• High Flow: 1/2” – 80 SCFM

FR10-04CSS

Material
SS Stainless Steel

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2”</td>
<td>FR10-04CSS</td>
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</tbody>
</table>

SCFM = Standard cubic feet per minute at 100 PSIG inlet, 75 PSIG no flow secondary setting and 15 PSIG pressure drop.

<table>
<thead>
<tr>
<th>R10, R11 Regulator Dimensions</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.34</td>
<td>2.43</td>
<td>3.59</td>
<td>1.38</td>
<td>4.97</td>
</tr>
<tr>
<td>inches (mm)</td>
<td>(60)</td>
<td>(62)</td>
<td>(91)</td>
<td>(35)</td>
<td>(126)</td>
</tr>
</tbody>
</table>

WARNING
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

FR10 - 04 C SS

Series
R10 Standard Knob

Port Type
- NPT

Port Size
04 1/2 Inch

Pressure Range
C 0-125 PSIG (0-8.5 bar)
Operation

With the adjusting knob (A) turned fully counter-clockwise (no spring load), and pressure supplied to the regulator inlet port, the valve poppet assembly (B) is closed. Turning the adjusting knob clockwise applies a load to control spring (C). This load causes the diaphragm (D) and the valve poppet assembly (B) to move downward allowing flow across the seat area (E) created between the poppet assembly and the seat. Pressure in the downstream line is sensed below the diaphragm (D) and offsets the load of spring (C). As downstream pressure rises, poppet assembly (B) and diaphragm (D) move upward until the area (E) is closed and the load of the spring (C) and pressure under diaphragm (D) are in balance. A reduced outlet pressure has now been obtained, depending on spring load. Creating a demand downstream, such as opening a valve, results in a reduced pressure under the diaphragm (D). The load of control spring (C) now causes the poppet assembly to move downward opening seat area (E) allowing air to flow to meet the downstream demand. The flow of downstream air is metered by the amount of opening (E).

Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the diaphragm (D) to move upward against control spring (C), open vent hole (F), and vent the excess pressure to atmosphere through the hole in the bonnet (H). (This occurs in the relieving type regulator only.)

Technical Information

CAUTION:

REGULATOR PRESSURE ADJUSTMENT –
The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

FR10 Regulator Kits & Accessories

R10 Bonnet Kit (Knob Included) .............................................. CKR10YSS
Gauge –
160 PSIG (0 to 1100 kPa), 2” Face............................ K4520N14160SS
Panel Mount Bracket (Stainless).................................161X57-SS
Panel Mount Nut –
Stainless ................................................................. R10X51-SS
Plastic ........................................................................ R10X51-P
Service Kit –
Relieving................................................................. RKR10YSS

Springs –
0-125 PSIG Range .................................................. SPR-389-1-SS

Specifications

Gauge Port ................................................................. 1/4 Inch
Operation .......................................................... Fluorocarbon Diaphragm
Port Threads ......................................................... 1/2 Inch
Pressure & Temperature Ratings – ...........300 PSIG Max (20.7 bar)
0°F to 150°F (-18°C to 66°C)
Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (2°C).
Weight ................................................................. 1.79 lb. (0.81 kg)

Materials of Construction

Adjustment Mechanism / Springs ............... 316 Stainless Steel
Body ................................................................. 316 Stainless Steel
Bonnet / Knob (R10) ........................................ Acetal
Bottom Plug ...................................................... 316 Stainless Steel
Poppet ................................................................. 316 Stainless Steel
Seals ................................................................. Fluorocarbon
07R Regulators – Standard

Features

• Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
• Rolling diaphragm for extended life.
• Two high flow 1/4" gauge ports can be used as additional outlets.
• Easily serviced.
• Removable non-rising knob for panel mounting and tamper resistance.
• High Flow: 3/8" – 70 SCFM§
  1/2" – 90 SCFM§
  3/4" – 90 SCFM§

NOTE: 2.00 Dia. (51mm) hole required for panel mounting.
§ SCFM = Standard cubic feet per minute at 100 PSIG inlet, 90 PSIG no flow secondary setting and 10 PSIG pressure drop.

Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>07R213A*</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>07R313A*</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>07R413A*</td>
</tr>
</tbody>
</table>

NOTE: 2.00 Dia. (51mm) hole required for panel mounting.

Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

WARNING

ORDERING INFORMATION

07R  3  13  A  *  —  —  ---
Technical Information

CAUTION:
REGULATOR PRESSURE ADJUSTMENT –
The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

07R Regulator Kits & Accessories
Bonnet Assembly Kit .......................................................... PS715P
Control Knob ................................................................. P04069B
Gauges – 60 PSIG (0 to 4.1 bar).......................... K4520N14060
160 PSIG (0 to 11.0 bar)............................. K4520N14160

Mounting Bracket Kit (Includes Panel Mount Nut) ........ PS807P
Panel Mount Nut – Plastic .............................................. P04082
Metal ............................................................... P04079B

Service Kit – Relieving (Includes Poppet) .................. PS808P
Springs – 2-125 PSIG Range ................................. P04063
Tamperproof Kit .......................................................... PS737P

Specifications
Gauge Ports (2) .......................................................... 1/4 Inch (Can be used as additional High Flow 1/4 Inch Outlet Ports)
Port Threads .......................................................... 3/8, 1/2, 3/4 Inch
Primary Pressure Rating –
Maximum Primary Pressure .................................. 250 PSIG (17.2 bar)
Secondary Pressure Range –
Standard Pressure ........................................... 2 to 125 PSIG (0 to 8.6 bar)
Temperature Rating ............................................... 32°F to 175°F (0°C to 80°C)
Weight .......................................................... 2.5 lb. (1.1 kg)

Materials of Construction
Adjusting Stem .............................................................. Steel
Body ........................................................................ Zinc
Bonnet, Piston Stem, Valve Poppet & Cap ................. Plastic
Collar, Knob ............................................................... Plastic
Diaphragm ............................................................... Nitrile
Seals ........................................................................ Nitrile
Springs – Poppet ......................................................... Stainless
Control ................................................................. Steel
P3NR Regulators – Hi-Flow

Features
- Port blocks (PB) available to provide 1-1/2” port extension to 1” ported bodies.
- Self relieving feature plus balanced poppet provides quick response and accurate pressure regulation.
- Solid control piston for extended life.
- High Flow: 3/4” – 200 SCFM§
  1” – 300 SCFM§
  1½” – 300 SCFM§

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
</tr>
<tr>
<td>3/4”</td>
<td>P3NRA96BNN</td>
</tr>
<tr>
<td>1”</td>
<td>P3NRA98BNN</td>
</tr>
<tr>
<td>1½</td>
<td>P3NRA9PBNN</td>
</tr>
</tbody>
</table>

NOTE: 2.00 Dia. (51mm) hole required for panel mounting.

§ SCFM – Standard cubic feet per minute at 100 PSIG inlet,
90 PSIG no flow secondary setting and 10 PSIG pressure drop.

<table>
<thead>
<tr>
<th>P3NR Regulator Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>3.62 (92)</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>6.38 (162)</td>
</tr>
</tbody>
</table>

Inches (mm)

⚠️ WARNING
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

Design Level
- Port Type: 9 NPT Female
- Port Size: 6 3/4” (w/o Port Blocks)
- 8 1” (w/o Port Blocks)
- P 1-1/2” Port Blocks (w/ 1” Ported Body)
- Relief: B Relieving
- Adjustment: N Non-Rising Knob
- Pressure Gauge: Without Gauge
  N 125 PSI (0 to 8 bar)
Technical Information

CAUTION:
REGULATOR PRESSURE ADJUSTMENT –
The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

P3NR Regulator Kits & Accessories
Control Knob ......................................................... P3NKA00PN
Gauges – 60 PSIG (0 to 4.1 bar) ...................... K4520N14060
160 PSIG (0 to 11.0 bar) .............................. K4520N14160
Mounting Bracket Kit* ........................................ P3NKA00MW
Service Kit – Relieving ................................. P3NKA00RR
Springs – 2-125 PSIG Range ...................... C10A1308

Specifications
Gauge Ports (2) ................................................. 1/4 Inch
(Can be used as additional High Flow 1/4 Inch Outlet Ports)
Port Threads .................................................. 3/4, 1, 1-1/2 Inch

Primary Pressure Rating –
Maximum Primary Pressure ......................... 250 PSIG (17.2 bar)
Secondary Pressure Range –
Standard Pressure ...................................... 2 to 125 PSIG (0 to 8.6 bar)
Temperature Rating ................................. 32°F to 175°F (0°C to 80°C)

Materials of Construction
Adjusting Stem ................................................. Steel
Body ................................................................. Aluminum
Bonnet .............................................................. Aluminum
Knob ................................................................. Plastic
Piston ................................................................. Plastic
Poppet Assembly .............................................. Brass
Seals ................................................................. Nitrile
Springs – Poppet & Control .......................... Steel

Weight – 3/4* .............................................. 4.2 lb. (1.9 kg)
1* ................................................................. 4.2 lb. (1.9 kg)
1½* ......................................................... 5.3 lb. (2.4 kg)

† 1* Port Body with 1½* Port Block.
11R Pilot Controlled Regulator – Compact

Features

- Balanced poppet provides quick response and accurate pressure regulation.
- Pilot controlled regulators can be mounted “out of reach” with pilot regulator installed in a convenient location.
- Solid control piston for extended life.
- Two full flow 1/4” gauge ports can be used as additional outlets.
- Pilot port 1/4 Inch.
- High Flow: 1/4" – 85 SCFM§
  3/8" – 95 SCFM§
  1/2" – 95 SCFM§

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>11R115P*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>11R215P*</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>11R315P*</td>
</tr>
</tbody>
</table>

NOTE: 2.00 Dia. (50.8mm) hole required for panel mounting.

§ SCFM = Standard cubic feet per minute at 100 PSIG inlet, 90 PSIG no flow secondary setting and 10 PSIG pressure drop.

11R Pilot Regulator Dimensions

| Port Type | Blank NPT |

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4&quot; NPT</td>
<td>2.81 (71)</td>
<td>2.74 (70)</td>
<td>3.05 (77)</td>
<td>1.39 (35)</td>
<td>4.44 (113)</td>
</tr>
</tbody>
</table>

Inches (mm)

⚠️ WARNING

Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

11R 2 15 P * –

Port Size
1 1/4 Inch
2 3/8 Inch
3 1/2 Inch

Relief / Gauge Options
Without Gauge
15 Relieving Piston

Adjustment
P Pilot Operated

Engineering Level
*Will be entered at factory

Port Type
Blank NPT
**Technical Information**

**11R Pilot Regulator Kits & Accessories**
- Body Service Kits – Seat Insert Kit .................................. PS713P
- Gauges – 60 PSIG (0 to 4.1 bar) ........................................... K4520N14060
  160 PSIG (0 to 11.0 bar) ............................................... K4520N14160
- Mounting Bracket Kit (Includes Panel Mount Nut) ............ PS707P
- Panel Mount Nut – Plastic .................................................. P04082
  Metal ................................................................. P04079B
- Pilot Conversion Kit – Relieving ........................................ PS745P
- Service Kits – Relieving ..................................................... PS749P

**Specifications**
- Gauge Ports (2) ................................................................. 1/4 Inch
  (Can be used as additional Full Flow 1/4 Inch Outlet Ports)
- Port Threads .............................................................. 1/4, 3/8, 1/2 Inch
- Pressure & Temperature Rating .......................... 0 to 250 PSIG (0 to 17.2 bar)
  32°F to 175°F (0°C to 80°C)
- Weight ................................................................. 1.3 lb. (0.58 kg.)

**Materials of Construction**
- Body & Pilot Cap ......................................................... Zinc
- Piston, Valve Poppet, & Collar ................................. Plastic
- Seals ............................................................................ Nitrile
- Springs ................................................................. Steel
12R Pilot Controlled Regulator – Standard

Features

- Balanced poppet provides quick response and accurate pressure regulation.
- Pilot controlled regulators can be mounted “out of reach” with pilot regulator installed in a convenient location.
- Solid control piston for extended life.
- Two full flow 1/4" gauge ports can be used as additional outlets.
- Pilot port 1/4 Inch.
- High Flow: 3/8" – 120 SCFM§
  1/2" – 140 SCFM§
  3/4" – 140 SCFM§

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>12R215P*</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>12R315P*</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>12R415P*</td>
</tr>
</tbody>
</table>

NOTE: 2.00 Dia. (50.8mm) hole required for panel mounting.

§ SCFM = Standard cubic feet per minute at 100 PSIG inlet,
90 PSIG no flow secondary setting and 10 PSIG pressure drop.

⚠️ WARNING

Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

12R 2 15 P * —

- **Port Size**
  - 2: 3/8 Inch
  - 3: 1/2 Inch
  - 4: 3/4 Inch

- **Relief / Gauge Options**
  - Without Gauge
  - 15 Relieving Piston

- **Adjustment**
  - P Pilot Operated

- **Engineering Level**
  - *Will be entered at factory*

- **Port Type**
  - Blank NPT
Technical Information

12R Pilot Regulator Kits & Accessories

- Body Service Kits – Seat Insert Kit: PS813P
- Gauges – 60 PSIG (0 to 4.1 bar): K4520N14060
  160 PSIG (0 to 11.0 bar): K4520N14160
- Mounting Bracket Kit (Includes Panel Mount Nut): PS807P
- Panel Mount Nut – Plastic: P04082
  Metal: P04079B
- Pilot Conversion Kit – Relieving: PS745P
- Service Kits – Relieving: PS849P

Specifications

- Gauge Ports (2)
  (Can be used as additional Full Flow 1/4 Inch Outlet Ports)
- Port Threads: 3/8, 1/2, 3/4 Inch
- Pressure & Temperature Rating: 0 to 250 PSIG (0 to 17.2 bar)
  32°F to 175°F (0°C to 80°C)
- Weight: 2.0 lb. (0.91 kg)

Materials of Construction

- Body & Pilot Cap: Zinc
- Piston, Valve Poppet, & Collar: Plastic
- Seals: Nitrile
- Springs: Steel
Filter / Regulators

- Pipe Sizes 1/8 thru 3/4 Inch
- Flows to 90 SCFM
- Pressures to 250 PSIG

Integral Filter / Regulators are an excellent choice where accurate pressure regulation and high moisture removal efficiency are required in a space saving package.

- Miniature 14E Series, 1/8 and 1/4 Inch
- Miniature FB548 Stainless Series, 1/4 Inch
- Economy 05E Series, 1/4 and 3/8 Inch
- Compact 06E Series, 1/4, 3/8 and 1/2 Inch
- Standard FB11 Stainless Series, 1/2 Inch
- Standard 07E Series, 3/8, 1/2 and 3/4 Inch
- Standard / Coalescing F12E Series, 3/8, 1/2 and 3/4 Inch

Filter / Regulator Selection

1. Determine maximum system flow requirements.
2. Determine maximum allowable pressure drop at rated flow in SCFM.
3. Refer to flow chart and select filter/regulator by choosing the curve that offers minimum pressure drop at desired flow in SCFM.

Reading Flow Charts to Size Filter / Regulators

Once the required flow is determined for a pneumatic application the regulator or filter/regulator can be selected by using the flow chart. The chart serves two different purposes. To read the flow, use the right side of the chart. To read the relief characteristics use the left side of the chart. When reading the flow chart, first determine the secondary pressure that will be used. Find the appropriate pressure curve on the graph. Given an acceptable pressure drop for an application, follow the flow curve until it intersects the pressure drop point. This will give the flow at that particular pressure drop.

WARNING

Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.
Turning the knob (A) clockwise applies a load to control spring (B) which forces the piston/diaphragm (C) and valve poppet assembly (D) to move downward allowing filtered air to flow through the seat area (E) created between the poppet assembly and the seat. “First stage filtration” begins when air pressure supplied to the inlet port is directed through deflector plate (F) causing a swirling centrifugal action forcing liquids and coarse particles to the inner bowl wall (G) and down below the lower baffle (H) to the quiet zone. After liquids and large particles are removed in the first stage of filtration “second stage filtration” occurs as air flows through element (J) where smaller particles are filtered out and retained. The air flow now passes through seat area (E) to the outlet port of the unit. Pressure in the downstream line is sensed below the piston/diaphragm (C) and offsets the load of control spring (B). When downstream pressure reaches the set-point, poppet valve assembly (D) and piston/diaphragm (C) move upward closing seat area (E). Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the piston/diaphragm (C) to move upward opening vent hole (K) venting the excess pressure to atmosphere through the hole in the bonnet (L). (This occurs in the standard relieving type regulator only.)
14E Filter / Regulator – Miniature

Features
- Excellent water removal efficiency.
- Unbalanced poppet standard.
- Solid control piston for extended life.
- Space saving package offers both filter and regulator features in one integral unit.
- Non-rising adjustment knob.
- Two full flow 1/8" gauge ports.
- High Flow: 1/8" – 16 SCFM^6
  1/4" – 18 SCFM^6

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Poly Bowl‡</th>
<th>Metal Bowl</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Twist Drain</td>
<td>Automatic Pulse Drain</td>
<td></td>
</tr>
<tr>
<td>1/8&quot;</td>
<td>14E01B13F*</td>
<td>14E05B13F*</td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>14E11B13F*</td>
<td>14E15B13F*</td>
<td></td>
</tr>
<tr>
<td>1/8&quot;</td>
<td>14E03B13F*</td>
<td>14E07B13F*</td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>14E13B13F*</td>
<td>14E17B13F*</td>
<td></td>
</tr>
</tbody>
</table>

‡ For polycarbonate bowl see Caution on page A2.
^ SCFM = Standard cubic feet per minute at 100 PSIG inlet,
90 PSIG no flow secondary setting and 10 PSIG pressure drop.
NOTE: 1.218 Dia. (31mm) hole required for panel mounting.

Ordering Information

14E 1 1 B 13 F * — — ---

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Elements</th>
<th>Relief</th>
<th>Port Type</th>
<th>Pressure Range</th>
<th>Bowl Options</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8&quot;</td>
<td>B 5 Micron</td>
<td>F Relieving</td>
<td>Blank NPT</td>
<td>13 125 PSIG</td>
<td>Polycarbonate Bowl</td>
<td>Blank No Options</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Twist Drain</td>
<td>Blank None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 Automatic Drain</td>
<td>Blank None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 Twist Drain</td>
<td>Blank None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7 Automatic Drain</td>
<td>Blank None</td>
</tr>
</tbody>
</table>

1/8" NPT Gauge Ports (2)

Distance Required To Remove All Bowls Regardless Of Drain Option

Inches (mm)
† With Auto Drain

Preset / Pressure Limited
Blank None
Technical Information

CAUTION:
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

14E Filter / Regulator Kits & Accessories

Bowl Kits –
Poly Bowl – Automatic Drain ........................................... PS408BP
Twist Drain ..................................................... PS404P
Metal Bowl – Automatic Drain ........................................... PS451BP
Twist Drain ................................................... PS447BP
Filter Element Kits –
5 Micron ................................................. PS403
40 Micron ............................................... PS401

Gauges – 160 PSIG (0 to 11.0 bar) .......... K4515N18160
Mounting Bracket Kit (Includes Panel Mount Nut) .......... PS417BP
Panel Mount Nut ............................................. P78652
Poppet Kit –
Unbalanced ................................................. PS424BP
Relieving ........................................................ PS426P
Springs – 2- 125 PSIG Range (Gold).............................. P01173

Specifications

Automatic Pulse Drain Tube Barb .................................. 1/8 Inch
Bowl Capacity ................................................. 1 Ounce
Gauge Ports (2) (Can be used for Full Flow) .................... 1/8 Inch
Port Threads .................................................... 1/8, 1/4 Inch
Pressure & Temperature Ratings –
Polycarbonate Bowl
0 to 150 PSIG (0 to 10.3 bar), 32°F to 125°F (0°C to 52°C)
Metal Bowl
0 to 250 PSIG (0 to 17.2 bar), 32°F to 175°F (0°C to 80°C)

Materials of Construction

Adjusting Nut .................................................. Brass
Adjusting Stem & Spring ..................................... Steel
Body................................................................. Zinc
Bonnet, Knob, Seat, Piston, Holder & Deflector .............. Plastic
Bowls Available –
Transparent ................................................. Polycarbonate
Metal (Without Sight Gauge) .................... Zinc
Drains – Manual – Twist Type
Body & Stem .................................................. Plastic
Seals................................................................. Nitrile
Automatic – Pulse Type
Piston & Seals................................................. Nitrile
Stem, Seat, Adaptor & Washers .................. Aluminum
Filter Elements –
5 Micron (Standard) ........................................... Plastic
Seals................................................................. Nitrile

Secondary Pressure Ranges –
Standard Pressure .......................... 2 to 125 PSIG (0 to 8.6 bar)
Weight .......................................................... 0.4 lb. (0.18 kg)
F10E Filter / Regulator - Miniature

Features
- Excellent water removal efficiency.
- Unbalanced poppet standard.
- Solid control piston for extended life.
- Space saving package offers both filter and regulator features in one integral unit.
- Non-rising adjustment knob.
- Two full flow 1/8" gauge ports.
- High Flow: 1/8" – 16 SCFM\(^{\S}\)
  1/4" – 18 SCFM\(^{\S}\)

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Poly Bowl (^{\S})</th>
<th>Metal Bowl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8&quot;</td>
<td>F10E0113E*</td>
<td>F10E1313E*</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>F10E1113E*</td>
<td>F10E1513E*</td>
</tr>
</tbody>
</table>

\(^{\S}\) For polycarbonate bowl see Caution on page 2.
\(^{\S}\) SCFM = Standard cubic feet per minute at 100 PSIG inlet,
90 PSIG no flow secondary setting and 10 PSIG pressure drop.

NOTE: 1.218 Dia. (31mm) hole required for panel mounting.

Ordering Information

F10E 1 1 13 E *

Port Size
- 0 1/8 Inch
- 1 1/4 Inch

Bowl Options
- Polycarbonate Bowl
  - 1 Twist Drain
  - 5 Automatic Drain
- Metal Bowl
  - 3 Twist Drain
  - 7 Automatic Drain

Pressure Range
- 13 125 PSIG

Element
- E Grade 6 Coalescing Element
- H Grade 10 Coalescing Element

Engineering Level
- Will be entered at factory

Dimensions

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>B*</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td>4.18</td>
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<td></td>
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<td>(93)</td>
<td>(106)</td>
</tr>
</tbody>
</table>

Inches (mm)

* Metal Bowl
Technical Information

CAUTION:
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

F10E Filter / Regulator Kits & Accessories
For spare parts, please call our technical assistance department at 1-800-521-4357.

Specifications
Automatic Pulse Drain Tube Barb ......................... 1/8 Inch
Bowl Capacity .................................................... 1 Ounce
Gauge Ports (2) (Can be used for Full Flow) .......... 1/8 Inch
Port Threads ...................................................... 1/8, 1/4 Inch
Pressure & Temperature Ratings –
  Polycarbonate Bowl
    0 to 150 PSIG (0 to 10.3 bar), 32°F to 125°F (0°C to 52°C)
  Metal Bowl
    0 to 250 PSIG (0 to 17.2 bar), 32°F to 175°F (0°C to 80°C)
Secondary Pressure Ranges –
  Standard Pressure...................... 2 to 125 PSIG (0 to 8.6 bar)

Weight ................................................................. 0.4 lb. (0.18 kg)
Filter Element Kits –
  Grade 6 (Box of 10) ......................... 6HR06-013x10
  Grade 10 (Box of 10) ....................... 10HR06-013x10

Materials of Construction
Adjusting Nut ......................................................... Brass
Adjusting Stem & Spring ......................................... Steel
Body ................................................................. Zinc
Bonnet, Knob, Seat, Piston, Holder & Deflector ........... Plastic
Bowls Available – Transparent .................................. Polycarbonate
  Metal (Without Sight Gauge) ......................... Zinc
Drains – Manual – Twist Type
  Body & Stem .................................................. Plastic
  Seals ............................................................ Nitrile
Automatic – Pulse Type
  Piston & Seats .............................................. Nitrile
  Stem, Seat, Adaptor & Washers ....................... Aluminum
Filter Elements – 5 Micron (Standard) .................... Plastic
  Seals ............................................................ Nitrile
FB548 Filter / Regulator – Miniature

Features
- Stainless Steel Construction
  Handles Most Corrosive Environments
- Large Diaphragm To Valve Area Ratio For Precise Regulation And High Flow Capacity
- 1/8" Female Threaded Drain*
- High Flow: 1/4" – 12 SCFM§

* Beginning January 2008

SCFM = Standard cubic feet per minute at 100 PSIG inlet, 75 PSIG no flow secondary setting and 15 PSIG pressure drop.

**WARNING**
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

FB548 Piggyback Dimensions

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<th>A</th>
<th>C1</th>
<th>D</th>
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<td>(55)</td>
<td>(92)</td>
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<table>
<thead>
<tr>
<th></th>
<th>E1</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3.06</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
<td>(78)</td>
<td>(40)</td>
</tr>
</tbody>
</table>

inches (mm)
NOTE: 1.25 Dia. (32mm) hole required for panel mounting.
Operation

Turning the adjusting knob clockwise applies a load to control spring (B) which forces diaphragm (C) and valve poppet assembly (D) to move downward allowing filtered air to flow through the seat area (E) created between the poppet assembly and the seat. “First stage filtration”. Air pressure supplied to the inlet port is directed through deflector plate (F) causing a swirling centrifugal action forcing liquids and coarse particles to the inner bowl wall (G) and down below the lower baffle (H) to the quiet zone. After liquids and large particles are removed in the first stage of filtration “second stage filtration” occurs as air flows through element (J) where smaller particles are filtered out and retained. The air flow now passes through seat area (E) to the outlet port of the unit. Pressure in the downstream line is sensed below the diaphragm (C) and offsets the load of spring (B). When downstream pressure reaches the set-point, poppet valve assembly (D) and diaphragm (C) move upward closing seat area (E). Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the diaphragm (C) to move upward opening vent hole (K) venting the excess pressure to atmosphere through the hole in the bonnet (L). (This occurs in the standard relieving type filter/regulators only.)

Technical Information

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

FB548, Regulator Kits & Accessories

FB548 Bonnet Kit (Knob Included) ........................................... CKR364YSS
Filter Element Kits –  
Particulate (5 Micron). .................................................... EK504VV
Gauge –  
160 PSIG (0 to 1100 kPa), 2” Face ............ K4515N14160SS
Manual Twist Drain ............................................................. SA600Y7-1SS
Panel Mount Bracket (Stainless) ................................. 161X57-SS
Panel Mount Nut –  
Stainless .................................................................. R05X51-SS
Plastic ................................................................. R05X51-P
Service Kit –  
Relieving .............................................................. RK549YSS
Springs –  
0-125 PSIG Range .................................................. SPR-377-1-SS

Specifications

Bowl Capacity .................................................... 1.0 Ounces
Filter Rating ................................................................. 5 Micron
Gauge Port ................................................................. 1/4 Inch
Operation ................................................................. Fluorocarbon Diaphragm
Port Threads ................................................................. 1/4 Inch
Pressure & Temperature Ratings –  
300 PSIG Max (20.7 bar)  
0°F to 150°F (-18°C to 66°C)
Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (2°C).
Sump Capacity ...................................................... 0.4 Ounce
Weight ................................................................. 0.6 lb. (0.27 kg)

Materials of Construction

Adjustment Mechanism / Springs .................. 316 Stainless Steel
Body ................................................................. 316 Stainless Steel
Bonnet (B548) ......................................................... Acetal
Bottom Plug ............................................................. 316 Stainless Steel
Knob (B548) ............................................................. Polypropylene
Poppet ................................................................. 316 Stainless Steel
Seals ................................................................. Fluorocarbon
# Economy 05E Series

## 05E Filter / Regulator – Economy

### Features
- Space saving package offers both filter and regulator features for optimal performance.
- Excellent water removal efficiency.
- Rolling diaphragm for extended life.
- Removable non-rising knob for tamper resistance.
- Quick response, and accurate pressure regulation regardless of changing flow or inlet pressure.
- 5 micron filter element standard,
- High Flow: 1/4" – 30 SCFM
  3/8" – 40 SCFM

### Bulletin 1300-703-08/USA-0914

#### Economy 05E Series

- **05E Filter / Regulator – Economy**

#### Key Features
- **Features**
  - Space saving package offers both filter and regulator features for optimal performance.
  - Excellent water removal efficiency.
  - Rolling diaphragm for extended life.
  - Removable non-rising knob for tamper resistance.
  - Quick response, and accurate pressure regulation regardless of changing flow or inlet pressure.
  - 5 micron filter element standard,
  - High Flow: 1/4" – 30 SCFM
  3/8" – 40 SCFM

#### Port Size

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Twist Drain</th>
<th>Automatic Pulse Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly Bowl / Metal Guard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>05E12B13A*</td>
<td>05E1PB13A*</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>05E22B13A*</td>
<td>05E2PB13A*</td>
<td></td>
</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>05E14B13A*</td>
<td>05E1TB13A*</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>05E24B13A*</td>
<td>05E2TB13A*</td>
<td></td>
</tr>
</tbody>
</table>

#### Ordering Information

| 05E | 1 | 2 | B | 13 | A | * | — | — | --- |

#### Bowl Options
- Poly Bowl
- Metal Bowl Guard / Twist Drain
- Metal Bowl Guard / Auto Pulse Drain
- Sight Gauge / Twist Drain
- Sight Gauge / Auto Pulse Drain

#### Pressure Range
- 13 – 125 PSIG

#### Engineering Level
- *Will be entered at factory*

#### Options
- Blank / No Options

---

**WARNING**

- Product rupture can cause serious injury.
- Do not connect regulator to bottled gas.
- Do not exceed maximum primary pressure rating.

**NOTE:**

- SCFM = Standard cubic feet per minute at 100 PSIG inlet,
- 90 PSIG no flow secondary setting and 10 PSIG pressure drop.
- 1.53 Dia. (39mm) hole required for panel mounting.

---

**Presets / Pressure Limited**

- Blank / None

---

**Ports Type**

- Blank / NPT

---

**Relief**

- A Relieving

---

**Elements**

- B 5 Micron

---

**Dimensions**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
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</thead>
<tbody>
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<td>3.16</td>
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</table>

**Inches (mm)**

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<thead>
<tr>
<th>D</th>
<th>E</th>
<th>F</th>
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</thead>
<tbody>
<tr>
<td>3.55</td>
<td>8.51</td>
<td>1.77</td>
</tr>
</tbody>
</table>

---

**Ports**

- Blank / NPT

---

**Preset / Pressure Limited**

- Blank / None

---

**Economy 05E Series**

- 1/4", 3/8" NPT – Basic 1/4" Body

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**Parker Hannifin Corporation**

**Finite Filter Operation**

**Oxford, MI**

**www.parker.com/finitefilter**

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**Oxford, MI**

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CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

05E Filter / Regulator Kits & Accessories

Bowl Guard Kit ................................................................. PS905P
Bowl Kits –
Poly Bowl – Automatic Pulse Drain .................................... PS995P
Twist Drain ....................................................................... PS922P
Metal Bowl – Sight Gauge / Automatic Pulse Drain ......... PS996P
Sight Gauge / Twist Drain .................................................. PS935P
Drain Kit –
Automatic Pulse Drain ................................................... PS998P
Twist Drain ....................................................................... PS512
Filter Element Kits – 5 Micron ............................................. PS902P
40 Micron ....................................................................... PS901P
Sight Gauge Kit ................................................................. PS914P
Gauges – 1-1/2" Dial Face ??
30 PSIG (0 to 2.1 bar) .................................................. K4515N14030
60 PSIG (0 to 4.1 bar) .................................................. K4515N14060
160 PSIG (0 to 11.0 bar) ................................................ K4515N14160
300 PSIG (0 to 20.0 bar) ................................................ K4515N14300
2" Dial Face
60 PSIG (0 to 4.1 bar) .................................................. K4520N14060
160 PSIG (0 to 11.0 bar) ................................................ K4520N14160
Mounting Bracket Kit (Includes Panel Mount Nut) .......... PS963P
Panel Mount Nut – Metal .................................................. PS964P
Spring – 2-125 PSIG Range ................................................ P04425
Relieving Service Kit .......................................................... PS908P
Bonnet Assembly Kit ........................................................ PS915P

Specifications

Bowl Capacity ................................................................. 2.0 Ounces
Gauge Port (2) .................................................................... 1/4 Inch
Sump Capacity ................................................................. 0.9 Ounce
Port Threads ....................................................................... 1/4, 3/8 Inch
Pressure & Temperature Rating –
Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.3 bar)
32°F to 125°F (0°C to 52°C)
Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)
32°F to 175°F (0°C to 80°C)
Automatic Pulse Drain – 10 to 150 PSIG (0.7 to 10.3 bar)
Weight ................................................................. 1.35 lb. (0.6 kg)

Materials of Construction

Adjusting Stem ................................................................. Steel
Body ................................................................................ Zinc
Bonnet, Internal Parts ...................................................... Plastic
Bowl Guard ................................................................. Steel
Collar .............................................................................. Plastic
Diaphragm ......................................................................... Nitrile
Drain ................................................................................ Plastic
Filter Element – 5 Micron (Standard) .................................. Plastic

Knob ................................................................................ Plastic
Seals ................................................................................ Nitrile
Sight Gauge ................................................................. Polyamide (Nylon)
Springs – Poppet & Control ................................................ Steel
06E Filter / Regulator – Compact

Features
• Space saving package offers both filter and regulator features for optimal performance.
• Excellent water removal efficiency.
• Rolling diaphragm for extended life.
• Quick response, and accurate pressure regulation regardless of changing flow or inlet pressure.
• Two high flow 1/4" gauge ports can be used as additional outlets.
• Shown with recommended metal bowl guard.
• High Flow: 1/4" – 46 SCFM
  3/8" – 55 SCFM
  1/2" – 61 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Twist Drain</th>
<th>Automatic Float Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly Bowl / Metal Guard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>06E12B13A*</td>
<td>06E16B13A*</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>06E22B13A*</td>
<td>06E26B13A*</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>06E32B13A*</td>
<td>06E36B13A*</td>
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</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>06E14B13A*</td>
<td>06E18B13A*</td>
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<td>3/8&quot;</td>
<td>06E24B13A*</td>
<td>06E28B13A*</td>
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<tr>
<td>1/2&quot;</td>
<td>06E34B13A*</td>
<td>06E38B13A*</td>
<td></td>
</tr>
</tbody>
</table>

† For polycarbonate bowl see Caution on page 2.
‡ SCFM = Standard cubic feet per minute at 100 PSI inlet, 90 PSI no flow secondary setting and 10 PSI pressure drop.
NOTE: 2.00 Dia. (50.8 mm) hole required for panel mounting. Max. panel thickness 1/4".

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Elements</th>
<th>Relief</th>
<th>Port Type</th>
<th>Engineering Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 Inch</td>
<td>B 5 Micron</td>
<td>A Relieving</td>
<td>Blank None</td>
<td>Blank No Options</td>
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<tr>
<td>3/8 Inch</td>
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<tr>
<td>1/2 Inch</td>
<td></td>
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**WARNING**
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

<table>
<thead>
<tr>
<th>06E</th>
<th>1</th>
<th>2</th>
<th>B</th>
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<th>A</th>
<th>Options</th>
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Preset
Blank None

<table>
<thead>
<tr>
<th>Bowls Options</th>
<th>Pressure Range</th>
<th>Engineering Level</th>
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<tbody>
<tr>
<td>Polycarbonate Bowl</td>
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<td></td>
</tr>
<tr>
<td>2 Metal Bowl Guard / Twist Drain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Metal Bowl Guard / Auto Float Drain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal Bowl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Sight Gauge / Twist Drain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Sight Gauge / Auto Float Drain</td>
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<td></td>
</tr>
<tr>
<td>13</td>
<td>125 PSI</td>
<td></td>
</tr>
</tbody>
</table>

*Will be entered at factory

† Inlet Pressure is 100 PSI
‡ With Twist Drain or Auto Pulse Drain

For other pressures, contact factory.
CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

06E Filter / Regulator Kits & Accessories

- Bonnet Assembly Kit .................................................. PS715P
- Bowl Guard Kit ......................................................... PS705P
- Bowl Kits –
  - Poly Bowl – Automatic Float Drain .......................... PS722P
  - Twist Drain ............................................................... PS732P
  - Metal Bowl – Sight Gauge / Automatic Drain .......... PS723P
  - Sight Gauge / Twist Drain ....................................... PS735P
- Control Knob ............................................................ PS704P
- Drain Kit –
  - Automatic Float Drain ........................................... PS506P
  - Twist Drain ............................................................... PS512
- Filter Element Kits – 4 Micron ................................. PS702
  - 40 Micron .................................................................. PS701
- Gauges –
  - 60 PSIG (0 to 4.1 bar) ............................................ K4520N14060
  - 160 PSIG (0 to 11.0 bar) ............................................ K4520N14160
- Mounting Bracket Kit (Includes Panel Mount Nut) ...... PS707P
- Panel Mount Nut ......................................................... P04082
- Service Kits – Non-Relieving (Includes Poppet) ......... PS711P
  - Relieving (Includes Poppet) ................................. PS710P
- Seat Insert Kit ............................................................ PS713P
- Spring – 2-125 PSIG Range ...................................... PS04063
- Tamperproof Kit (Key Lock) ...................................... PS737P

Specifications

- Bowl Capacity .......................................................... 4.4 Ounces
- Gauge Ports (2) .......................................................... 1/4 Inch
  (Can be used as Additional Full Flow 1/4" Outlet Ports)
- Port Threads ............................................................. 1/4, 3/8, 1/2 Inch

Pressure & Temperature Ratings –

- Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.4 bar)
  - 32°F to 125°F (0°C to 52°C)
- Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)
  - 32°F to 175°F (0°C to 80°C)
- Automatic Float Drain – 15 to 250 PSIG (1.0 to 17.2 bar)

Secondary Pressure Range –

- Standard Pressure .................................................. 2 to 125 PSIG (0 to 8.6 bar)

Sump Capacity .......................................................... 1.75 Ounces

Weight ................................................................. 1.6 lb. (0.7 kg)

Materials of Construction

- Adjusting Stem ........................................................ Steel
- Body ........................................................................... Zinc
- Bonnet, Internal Parts .............................................. Plastic
- Bowls Available – Transparent Polycarbonate
  - Metal (With or Without Sight Gauge) .................... Zinc
- Bowl Guard ............................................................. Steel
- Collar ........................................................................ Plastic
- Diaphragm ............................................................... Nitrile
- Drains – Manual Twist Drain Standard
  - Body & Nut ............................................................. Plastic
  - Automatic Float Drain Optional
    - (Interchangeable for Field Conversions)
    - Operating Range .................................................. 10 to 250 PSIG (0.7 to 17.2 bar)
  - Housing, Float ..................................................... Plastic
  - Seals ........................................................................ Nitrile
  - Springs, Push Rod .................................................. Stainless Steel
- Knob ......................................................................... Plastic
- Filter Elements – 5 Micron (Optional) ......................... Plastic
- Seals ......................................................................... Nitrile
- Sight Gauge ............................................................. Polyamide
- Springs – Poppet ....................................................... Stainless Steel
- Control ................................................................. Steel
FB11 Filter / Regulator – Standard

Features

- Stainless steel construction handles most corrosive environments.
- Large diaphragm to valve area ratio for precise regulation and high flow capacity.
- 1/8" female threaded drain.
- Low temperature version available.
- High Flow: 1/2" – 72 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Adjustment Type</th>
<th>NPT</th>
<th>Metal Bowl with Sight Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>Knob</td>
<td>1/8” Female Thread</td>
<td>FB11-04WGCSS FB11-04WGRSS</td>
</tr>
</tbody>
</table>

Standard part numbers shown bold. For other models refer to ordering information below.

SCFM = Standard cubic feet per minute at 100 PSIG inlet, 90 PSIG no flow secondary setting and 15 PSIG pressure drop.

**WARNING**

Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

**Ordering Information**

<table>
<thead>
<tr>
<th>FB11</th>
<th>04</th>
<th>W</th>
<th>G</th>
<th>C</th>
<th>SS</th>
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<table>
<thead>
<tr>
<th>Series</th>
<th>Port Type</th>
<th>Bowl</th>
<th>Element</th>
<th>Reduced Pressure Range</th>
<th>Options</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>FB11 Standard Knob</td>
<td>- NPT</td>
<td>D Metal Bowl without Sight Gauge</td>
<td>G 5 Micron</td>
<td>C 0-125 PSIG (0-8.5 bar)</td>
<td>Blank Relieving</td>
<td>SS Stainless Steel</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Port Size</th>
<th>04 1/2 Inch</th>
</tr>
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</table>
Technical Information

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

FB11 Regulator Kits & Accessories

FB11 Bonnet Kit (Knob Included) .................................................. CKR10YSS

Drain Kit –
  Automatic Float Drain .................................................. SA602MDSS
  Manual Twist Drain .................................................. SA600Y7-1SS

Filter Element Kit –
  Particulate (5 Micron) ....................................................... EKF10VY

Gauge –
  160 PSIG (0 to 1100 kPa), 2” Face .................................. K4520N14160SS

Panel Mount Bracket (Stainless) .............................................. R10Y57-SS

Panel Mount Nut –
  Stainless ........................................................................ R10X51-SS
  Plastic ............................................................................... R10X51-P

Service Kit –
  Releasing ........................................................................ RKR10YSS

Spring –
  0-125 PSIG Range ....................................................... SPR-389-1-SS

Specifications

Bowl Capacity ................................................................. 4.0 Ounces

Filter Rating ................................................................. 5 Micron

Gauge Port ................................................................. 1/4 Inch

Operation ................................................................. Fluorocarbon Diaphragm

Port Threads ................................................................. 1/2 Inch

Pressure & Temperature Ratings –

Metal Bowl (D) ................................................................. 300 PSIG Max (20.7 bar)
  0°F to 150°F (-18°C to 66°C)

Metal Bowl (W) ................................................................. 0 to 250 PSIG (0 to 17.2 bar)
  0°F to 150°F (-18°C to 66°C)

Automatic Float Drain ............................................. 15 to 175 PSIG (1 to 12 bar)
  40°F to 125°F (4°C to 52°C)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (2°C).

Sump Capacity ................................................................. 1.7 Ounce

Weight ................................................................. 2.42 lb. (1.09 kg)

Materials of Construction

Adjustment Mechanism / Springs ........................................... 316 Stainless Steel

Body ................................................................. 316 Stainless Steel

Bonnet / Knob (B11) .......................................................... Acetal

Bottom Plug ................................................................. 316 Stainless Steel

Poppet ................................................................. 316 Stainless Steel

Seals ................................................................. Fluorocarbon

Gauge Port ................................................................. Isoplast

Flow Characteristics
07E Filter / Regulator – Standard

Features
- Space saving package offers both filter and regulator features for optimal performance.
- Excellent water removal efficiency.
- Rolling diaphragm for extended life.
- Quick response, and accurate pressure regulation regardless of changing flow or inlet pressure.
- Two high flow 1/4" gauge ports can be used as additional outlets.
- Shown with recommended metal bowl guard.
- High Flow: 3/8" = 70 SCFM
- 1/2" = 90 SCFM
- 3/4" = 90 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT Twist Drain</th>
<th>Automatic Float Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly Bowl‡ / Metal Guard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>07E22B13A*</td>
<td>07E26B13A*</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>07E32B13A*</td>
<td>07E36B13A*</td>
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<tr>
<td>3/4&quot;</td>
<td>07E42B13A*</td>
<td>07E46B13A*</td>
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<tr>
<td>Metal Bowl / Sight Gauge</td>
<td></td>
<td></td>
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<tr>
<td>3/8&quot;</td>
<td>07E24B13A*</td>
<td>07E28B13A*</td>
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<tr>
<td>1/2&quot;</td>
<td>07E34B13A*</td>
<td>07E38B13A*</td>
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<tr>
<td>3/4&quot;</td>
<td>07E44B13A*</td>
<td>07E48B13A*</td>
</tr>
</tbody>
</table>

‡ For polycarbonate bowl see Caution on page 2.
§ SCFM = Standard cubic feet per minute at 100 PSIG inlet, 90 PSIG no flow secondary setting and 10 PSIG pressure drop.
NOTE: 2.00 Dia. (50.8 mm) hole required for panel mounting. Max. panel thickness 1/4".

---

WARNING
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>07E 3 2 B 13 A * — — ---</th>
</tr>
</thead>
</table>

Port Size
- 2 3/8 Inch
- 3 1/2 Inch
- 4 3/4 Inch

Elements
- B 5 Micron

Relief
- A Relieving

Port Type
- Blank NPT

Preset
- Blank None

Bowl Options
- Polycarbonate Bowl
- Metal Bowl Guard / Twist Drain
- Metal Bowl Guard / Auto Float Drain

Pressure Range
- Without Gauge
- 13 125 PSIG

§ If 250 PSIG spring range is used, use metal bowl.

Engineering Level
- Blank No Options

Options
- *Will be entered at factory

† Inlet Pressure is 100 PSIG.
For other pressures, contact factory.
CAUTION:
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

**07E Filter / Regulator Kits & Accessories**

- **Bonnet Assembly Kit** .................................................. PS715P
- **Bowl Guard Kit** .......................................................... PS805P
- **Bowl Kits** –
  - Poly Bowl – Automatic Float Drain ............................. PS822P
  - Twist Drain ................................................................. PS832P
  - Metal Bowl – Sight Gauge / Automatic Drain ................ PS823P
  - Sight Gauge / Twist Drain ............................................ PS835P
- **Control Knob** ............................................................. P0409B
- **Drain Kits** – Automatic Float Drain ............................ PS069P
  - Twist Drain ................................................................. PS512
- **Filter Element Kits** – 5 Micron ................................. PS802
  - 40 Micron ................................................................. PS801
- **Gauges** –
  - 60 PSIG (0 to 4.1 bar) ............................................ K4520N14060
  - 160 PSIG (0 to 11.0 bar) ........................................ K4520N14160
- **Mounting Bracket Kit** (Includes Panel Mount Nut) .... PS087P
- **Panel Mount Nut** ....................................................... PS082P
- **Service Kits** – Non-Relieving (Includes Poppet) .......... PS811P
  - Relieving (Includes Poppet) ........................................ PS810P
- **Seat Insert Kit** .......................................................... PS813P
- **Springs** – 2- 125 PSIG Range ................................. P04082
- **Tamperproof Kit** (Key Lock) ...................................... PS737P

**Specifications**

- **Bowl Capacity** .......................................................... 7.2 Ounces
- **Gauge Ports** (2) ......................................................... 1/4 Inch
  (Can be used as Additional Full Flow 1/4" Outlet Ports)
- **Port Threads** ............................................................. 3/8, 1/2, 3/4 Inch

**Pressure & Temperature Ratings** –

- **Polycarbonate Bowl** – 0 to 150 PSIG (0 to 10.4 bar)
  - 32°F to 125°F (0°C to 52°C)
- **Metal Bowl** – 0 to 250 PSIG (0 to 17.2 bar)
  - 32°F to 175°F (0°C to 80°C)
- **Automatic Float Drain** – 15 to 250 PSIG (1.0 to 17.2 bar)

**Secondary Pressure Ranges** –

- **Standard Pressure** .................................................... 2 to 125 PSIG (0 to 8.6 bar)

- **Sump Capacity** ............................................................ 2.8 Ounces
- **Weight** ................................................................. 2.5 lb. (1.1 kg)

**Materials of Construction**

- **Adjusting Stem** .......................................................... Steel
- **Body** ................................................................. Zinc
- **Bonnet, Internal Parts** ................................................. Plastic
- **Bowl Kits** – Non-Relieving (Includes Poppet) ........ PS811P
  - Relieving (Includes Poppet) ........................................ PS810P
- **Seal Insert Kit** .......................................................... PS813P
- **Springs** – 2- 125 PSIG Range ................................. P04082
- **Tamperproof Kit** (Key Lock) ...................................... PS737P

- **Control Knob** ............................................................. Steel
- **Filter Element – 5 Micron (Standard)** ......................... Plastic

- **Automatic Float Drain Optional**
  (Interchangeable for Field Conversions)
  - **Operating Range** .................................................. 10 to 250 PSIG (0.7 to 17.2 bar)
  - **Housing, Float** .................................................... Plastic
  - **Seals** ................................................................. Nitrile
  - **Springs, Push Rod** .............................................. Stainless Steel

- **Knob** ................................................................. Plastic
- **Seals** ................................................................. Nitrile
- **Sight Gauge** ............................................................ Polyamide
- **Springs – Poppet** .................................................... Stainless Steel
- **Control** ................................................................. Steel
F12E Filter / Regulator – Coalescing

Features
- Space saving package offers both coalescer and regulator features for optimal performance.
- Removes liquid, aerosol and sub-micron particles.
- Rolling diaphragm for extended life.
- Removable non-rising knob for panel mounting and tamper resistance.
- Quick response, and accurate pressure regulation regardless of changing flow or inlet pressure.
- Two high flow 1/4” gauge ports can be used as additional outlets.
- High Flow: Grade 6 Element
  - 3/8” – 35 SCFM
  - 1/2” – 40 SCFM
  - 3/4” – 45 SCFM

Port Size | Standard with Coalescer | Standard w/ Coalescer and Built-in Prefilter
---|---|---
Twist Drain
3/8” | F12E23E13A* | F12E23Q13A* |
1/2” | F12E33E13A* | F12E33Q13A* |
3/4” | F12E43E13A* | F12E43Q13A* |
Automatic Float Drain
3/8” | F12E27E13A* | F12E27Q13A* |
1/2” | F12E37E13A* | F12E37Q13A* |
3/4” | F12E47E13A* | F12E47Q13A* |

Port Size | High Flow with Coalescer | High Flow w/ Coalescer and Built-in Prefilter
---|---|---
Twist Drain
3/8” | F12E28C13A* | F12E28Q13A* |
1/2” | F12E38C13A* | F12E38Q13A* |
3/4” | F12E48C13A* | F12E48Q13A* |
Automatic Float Drain
3/8” | F12E29C13A* | F12E29Q13A* |
1/2” | F12E39C13A* | F12E39Q13A* |
3/4” | F12E49C13A* | F12E49Q13A* |

12E Filter / Regulator Dimensions

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<table>
<thead>
<tr>
<th>D†</th>
<th>E</th>
<th>E†</th>
<th>F</th>
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<tbody>
<tr>
<td>8.17</td>
<td>12.99</td>
<td>12.96</td>
<td>3.29</td>
</tr>
</tbody>
</table>

Port Type
- Blank NPT
- Blank None

Elements
- C Grade 6

Relief
- A Relieving

Preset
- Blank None

Bowl Options
- Metal Bowl
- 3 Twist Drain
- 7 Automatic Float Drain
- 8 High Flow Twist Drain
- 9 High Flow Float Drain

Note: Q media is a coalescing element with the same configuration as Type C, but with a pleated cellulose prefilter built in.

Port Size
- 2 3/8 Inch
- 3 1/2 Inch
- 4 1/4 Inch

Element
- Without Gauge
- 13 125 PSIG

WARNING
Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

Standard part numbers shown bold. For other models refer to ordering information below.

Maple Fluid Power

SCFM = Standard cubic feet per minute at 150 PSIG inlet, 90 PSIG no flow secondary setting and 10 PSIG pressure drop.

NOTE: 2.00 Dia. (50.8 mm) hole required for panel mounting.

† With Twist Drain or Auto Float Drain

* SCFM = Standard cubic feet per minute at 150 PSIG inlet, 90 PSIG no flow secondary setting and 10 PSIG pressure drop.

† Inlet Pressure is 100 PSIG.
For other pressures, contact factory.
Technical Information

CAUTION:
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

F12E Filter / Regulator Kits & Accessories

Bonnet Assembly Kit .................................................... PS715P
Bowl Kits –
  Metal Bowl – Automatic Float Drain .................................. PS826P
  Twist Drain .......................................................... PS834P
Control Knob \ P04069B
Drain Kits –
  Automatic Float Drain ........................................... PS506P
  Twist Drain .......................................................... PS512
Filter Element –
Gauges – 60 PSIG (0 to 4.1 bar)................................. K4520N14060
  160 PSIG (0 to 11.0 bar)............................... K4520N14160
Mounting Bracket Kit (Includes Panel Mount Nut) ........ PS807P
Service Kit – Relieving (Includes Poppet).................... PS886P
Springs – 2- 125 PSIG Range ........................................... P04063
Tamperproof Kit (Key Lock) ........................................ PS737P

Specifications

Bowl Capacity .................................................. 7.2 Ounces
Gauge Ports (2) .................................................. 1/4 Inch
  (Can be used as Additional Full Flow 1/4” Outlet Ports)
Port Threads ...................................................... 3/8, 1/2, 3/4 Inch
Pressure & Temperature Ratings –
  Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)
  32°F to 175°F (0°C to 80°C)

Secondary Pressure Ranges –
Standard Pressure .................. 2 to 125 PSIG (0 to 8.6 bar)
Sump Capacity ......................... 2.8 Ounces
Weight .................................................. 2.5 lb. (1.1 kg)

Materials of Construction

Adjusting Stem .................................................. Steel
Body .......................................................... Zinc
Bonnet, Internal Parts ................. Plastic
Bowls Available – Metal (Without Sight Gauge) ............ Zinc
Collar For Bonnet ......................... Metal
Control Spring ........................................... Steel
Diaphragm .................................................. Nitrile
Drains – Manual Twist Drain Standard
  Body & Nut .................................................. Plastic
Automatic Float Drain Optional
  (Interchangeable for Field Conversions)
  Operating Range.................. 10 to 250 PSIG (0.7 to 17.2 bar)
  Housing, Float ................................. Plastic
  Seals .................................................. Nitrile
  Springs, Push Rod ......................... Stainless Steel
Knob .................................................. Plastic
Filter Element –
  Borosilicate & felt glass fibers 99.97% DOP efficiency
  Largest Aerosol Particle Passed (Grade 6) ............ 0.75 Microns
  Largest Solid Particle Passed (Grade 6) .............. 0.30 Microns
  Seals .................................................. Nitrile
  Sight Gauge ........................................... Polyamide
  Springs – Poppet ................................ Stainless
Micro-Mist Lubricators

- Pipe Sizes 1/4 thru 3/4 Inch
- Flows to 90 SCFM
- Pressures to 250 PSIG

Micro-Mist Air Lubricators are designed to provide optimum and uniform lubrication with fine micro-mist particles of 2 micron or smaller, to pneumatic components even through complex piping arrangements.

- Economy 15L Series, 1/4 and 3/8 Inch
- Compact 16L Series, 1/4, 3/8 and 1/2 Inch
- Standard 17L Series, 3/8, 1/2 and 3/4 Inch

Lubricator Selection

1. Determine maximum system flow requirements.
2. Determine maximum allowable pressure drop at rated flow in SCFM.
3. Refer to flow chart and select lubricator by choosing the curve that offers minimum pressure drop at desired flow in SCFM.

Reading Flow Charts to Size Micro-Mist Lubricators

Once the required flow is determined for a pneumatic application the lubricator can be selected by using the flow chart. To read the lubricator flow chart, first determine the inlet pressure that will be used. Find the appropriate inlet pressure curve on the graph. Each graph will contain three pressure curves. If the required inlet pressure is not on the graph, interpolate a similar curve for the required pressure. Next, determine the acceptable pressure drop across the lubricator and locate it on the vertical axis. Find the intersection point of the acceptable pressure drop and the inlet pressure curve. At this point follow a vertical path downward to view the flow in SCFM. If the flow is too low, select a larger port size or body size to give the required flow. If the flow is higher than necessary, select a smaller port size or body size to give the required flow.

F442 Oil

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Quart</td>
<td>F442001P</td>
</tr>
<tr>
<td>1 Gallon</td>
<td>F442002P</td>
</tr>
<tr>
<td>12 Quart Case</td>
<td>F442003P</td>
</tr>
<tr>
<td>4 Gallon Case</td>
<td>F442005P</td>
</tr>
</tbody>
</table>
Air flowing through the unit goes through two paths. At low air flow rates, the majority of the air flows through venturi section (A). The rest of the air slightly deflects and flows by the flapper (B). The velocity of the air flowing through venturi section (A) creates a pressure drop at throat section (C). This lower pressure allows oil to be forced from the reservoir through the pickup tube (D) past the check ball (E), to the dome assembly where the rate of oil flow is controlled by metering screw (F). Rotation of the metering screw (F) in the counterclockwise direction increases the oil flow rate; in the clockwise direction decreases the oil flow rate.

Oil then flows through the clearance between the inner and outer sight domes (G) where drops are formed and drip into the nozzle tube (H). Here it is then broken into fine particles as it expands into the low pressure venturi. From there, the atomized oil flows through the precision orifice (J). This action causes the larger particles of oil to fall back into the reservoir where it can recirculate through the system. The remaining mist of fine particles (5 micron or smaller – about 3% of which passed through the sight dome) is then carried through opening (K) where it joins and mixes with air that bypassed the flapper (B). As air flow rate increases, the flapper (B) deflects, allowing most of the inlet air to bypass the venturi section (A). However, a proportion of the inlet air passes through the venturi, assuring that oil delivery increases linearly with increased air flow rate. This proportioning method is advantageous at low inlet flows because the venturi design remains efficient.

The check ball (E) prevents reverse oil flow down the pickup tube when air flow stops. Thus, oil delivery can resume immediately when air flow restarts. Micro-Mist Lubricators can only be filled when the air supply is shut off.
15L Micro-Mist Lubricators – Economy

Features

- Proportional oil delivery over a wide range of air flows.
- Generates oil particles of 5 micron or smaller downstream to lubricate systems having complex piping arrangements.
- Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate.
- Ideal for low and high flow applications with changing air flow.
- Transparent sight dome for 360° visibility.
- Removable drip control knob for tamper resistance.
- High Flow: 1/4" – 40 SCFM§
  3/8" – 40 SCFM§

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Bowl Options</th>
<th>Fill Options</th>
<th>Engineering Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Size</td>
<td>1/4&quot;</td>
<td>15L12N*</td>
<td>Blank NPT</td>
<td>* Will be entered at factory</td>
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<tr>
<td>Poly Bowl</td>
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<td>Metal Bowl</td>
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</tr>
<tr>
<td>Poly Bowl</td>
<td>1</td>
<td>Sight Gauge /</td>
<td>Blank No Fill Plug</td>
<td></td>
</tr>
<tr>
<td>Poly Bowl</td>
<td>1</td>
<td>Twist Drain</td>
<td>Blank No Fill Plug</td>
<td></td>
</tr>
<tr>
<td>Poly Bowl</td>
<td>1</td>
<td>No Drain</td>
<td>Blank No Fill Plug</td>
<td></td>
</tr>
</tbody>
</table>

Ordering Information

Standard part numbers shown bold. For other models refer to ordering information below.

‡ For polycarbonate bowl and sight dome, see Caution on page 2.
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

Inches (mm)

† With Twist Drain.
15L Micro-Mist Lubricator
Kits & Accessories

Adjustment Knob .................................................. P04121
Bowl Guard Kit PS905P

Bowl Kits –
Poly Bowl – No Drain ........................................ PS946P
Metal Bowl – Sight Gauge / Twist Drain ............... PS929P

Drain Kit – Twist Drain ......................................... PS512

Liquid Level Sensor Kit ........................................ PS797P
Mounting Bracket Kit .......................................... PS943P

Oil –
1 Quart .................................................................. F442001P
1 Gal. ................................................................... F442002P
12 Quart Case .................................................... F442003P
4 Gallon Case .................................................... F442005P

Pressure Fill Adapter Kit .................................. PS916P
Service Kit ........................................................ PS948P
Sight Dome Kit ................................................... PS740P
Sight Gauge Kit ................................................... PS914P

Specifications

Bowl Capacity .................................................. 2.0 Ounces
Minimum Flow for Lubrication ................. 2 SCFM at 100 PSIG
Port Threads ................................................... 1/4, 3/8 Inch
Pressure & Temperature Ratings
  Polycarbonate Bowl –
  0 to 150 PSIG (0 to 10.3 bar)
  32°F to 125°F (0°C to 52°C)
  Metal Bowl –
  0 to 250 PSIG (0 to 17.2 bar)
  32°F to 175°F (0°C to 80°C)

Suggested Lubricant................................................. F442 Oil
Petroleum based oil of 100 to 200 SSU viscosity at
100°F and an aniline point greater than 200°F
(DO NOT USE OILS WITH ADDITIVES,
COMPOUNDED OILS CONTAINING SOLVENTS,
GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)

Weight ................................................................. 1 lb. (0.45 kg)

Materials of Construction

Body ................................................................. Zinc
Bowls – Transparent ........................................ Polycarbonate
  Metal (With Sight Gauge) .................. Zinc

Collar ................................................................. Steel

Drains – Twist – Body & Nut ......................... Plastic

Injector Meter Block & Base Assembly .......... Plastic

Seals ................................................................. Nitrile

Sight Dome ....................................................... Polycarbonate

Sight Gauge .................................................... Polymide (Nylon)
16L Micro-Mist Lubricators – Compact

Features

• Proportional oil delivery over a wide range of air flows.
• Generates oil particles of 5 micron or smaller downstream to lubricate systems having complex piping arrangements.
• Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate.
• Ideal for low and high flow applications with changing air flow.
• Transparent sight dome for 360° visibility.
• Yellow fill cap identifies Micro-Mist Lubricator.
• High Flow: 1/4" – 40 SCFM §
  3/8" – 60 SCFM §
  1/2" – 90 SCFM §

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly Bowl ‡ / Metal Guard</td>
<td></td>
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<tr>
<td>1/4&quot;</td>
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<tr>
<td>1/2&quot;</td>
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</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
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<tr>
<td>1/4&quot;</td>
<td>16L14B*</td>
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<tr>
<td>3/8&quot;</td>
<td>16L24B*</td>
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<td>1/2&quot;</td>
<td>16L34B*</td>
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</table>

Standard part numbers shown bold. For other models refer to ordering information below.

‡ For polycarbonate bowl and sight dome, see Caution on page 2.
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

Ordering Information

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<table>
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<th>Bowl Options</th>
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<tr>
<td>Metal Bowl Guard / No Drain</td>
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<td>Sight Gauge / Twist Drain</td>
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<table>
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<tr>
<th>Port Type</th>
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Technical Information

16L Micro-Mist Lubricator Kits & Accessories
Adjustment Knob .................................................. P04121
Bowl Guard Kit .................................................. PS705P
Bowl Kits –
 Poly Bowl – No Drain ........................................ PS746P
 Twist Drain .................................................. PS717P
 Pressure Fill .................................................. PS719P
 Remote Fill .................................................. PS728P
 Metal Bowl – Sight Gauge / Twist Drain ................. PS729P
 Sight Gauge / Pressure Fill ................................ PS720P
 Drain Kit – Twist Drain ....................................... PS512
 Fill Cap Kit .................................................. PS742P
 Liquid Level Sensor Kit ...................................... PS797P
 Lubricator Service Kit ....................................... PS748P
 Mounting Bracket Kit ....................................... PS743P
 Oil –
 1 Quart .................................................. F442001P
 1 Gal .................................................. F442002P
 12 Quart Case ............................................ F442003P
 4 Gallon Case ............................................ F442005P
 Pressure Fill Adapter Kit ................................ PS716P
 Sight Dome / Fill Cap Kit .................................. PS739P
 Sight Dome Kit ................................................ PS740P
 Nylon Sight Dome Kit ..................................... PS740N

Specifications
Bowl Capacity .................................................. 2.60 Ounces
Minimum Flow for Lubrication .......................... 1 SCFM At 100 PSIG
Port Threads .................................................. 1/4, 3/8, 1/2 Inch
Pressure & Temperature Rating –
 Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.3 bar)
 32°F to 125°F (0°C to 52°C)
 Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)
 32°F to 175°F (0°C to 80°C)
Suggested Lubricant ........................................ F442 Oil
Petroleum based oil of 100 to 200 SSU viscosity at
100°F and an aniline point greater than 200°F
(DO NOT USE OILS WITH ADDITIVES,
COMPOUNDED OILS CONTAINING SOLVENTS,
GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)
Weight .................................................. 1.2 lb. (.5 kg)

Materials of Construction
Body .............................................................. Zinc
Bowls – Transparent ........................................ Polycarbonate
 Metal (With Sight Gauge) ................................ Zinc
Bowl Guard .................................................. Steel
Collar .......................................................... Plastic
Drain – Twist – Body & Nut ............................... Plastic
Injector Meter Block & Base Assembly ............... Plastic
Seals .......................................................... Nitrile
Sight Dome .................................................. Polycarbonate
Sight Gauge .................................................. Polyamide (Nylon)
17L Micro-Mist Lubricators – Standard

**Features**
- Proportional oil delivery over a wide range of air flows.
- Generates oil particles of 5 micron or smaller downstream to lubricate systems having complex piping arrangements.
- Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate.
- Ideal for low and high flow applications with changing air flow.
- Transparent sight dome for 360° visibility.
- Yellow fill cap identifies Micro-Mist Lubricator.
- High Flow: 3/8" – 60 SCFM\(^5\)  
  1/2" – 90 SCFM\(^5\)  
  3/4" – 90 SCFM\(^5\)

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Twist Drain</th>
<th>No Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly Bowl / Metal Guard</td>
<td>3/8&quot;</td>
<td>17L22B*</td>
<td>–</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>17L32B*</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>17L42B*</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
<td>3/8&quot;</td>
<td>17L24B*</td>
<td>–</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>17L34B*</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>17L44B*</td>
<td>–</td>
<td></td>
</tr>
</tbody>
</table>

Standard part numbers shown bold. For other models refer to ordering information below.

\(^1\) For polycarbonate bowl and sight dome, see Caution on page 2.

\(^5\) SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

### Ordering Information

```
17L 2 2 B * –
```

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Bowl Options</th>
<th>Options</th>
<th>Engineering Level</th>
<th>Port Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8 Inch</td>
<td>Polycarbonate Bowl</td>
<td>B With Fill Plug</td>
<td>Blank NPT</td>
<td>* Will be entered at factory</td>
</tr>
<tr>
<td>1/2 Inch</td>
<td>2 Metal Bowl Guard / No Drain</td>
<td></td>
<td></td>
<td>* 3/8 &amp; 1/2 inch meet ISO 1179-1 Standard.</td>
</tr>
<tr>
<td>3/4 Inch</td>
<td>Metal Bowl</td>
<td>4 Sight Gauge / Twist Drain</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Technical Information

17L Micro-Mist Lubricator
Kits & Accessories

Adjustment Knob .................................................. P04121
Bowl Guard Kit PS805P

Bowl Kits –
Poly Bowl – No Drain ........................................ PS846P
  Twist Drain .................................................. PS817P
  Pressure Fill ............................................... PS819P
  Remote Fill ................................................. PS828P
Metal Bowl – Sight Gauge / Twist Drain ............. PS829P
  Sight Gauge / Pressure Fill .......................... PS820P

Drain Kit – Twist Drain .................................... PS512
Fill Cap Kit ..................................................... PS742P
Liquid Level Sensor Kit ................................. PS797P
Lubricator Service Kit ............................... PS748P
Mounting Bracket Kit ................................. PS843P
Oil –
  1 Quart ............................................. F442001P
  1 Gal ................................................ F442002P
  12 Quart Case .................................. F442003P
  4 Gallon Case ................................. F442005P
Pressure Fill Adapter Kit ........................ PS716P
Sight Dome / Fill Cap Kit ...................... PS739P
Sight Dome Kit ........................................ PS740P
Nylon Sight Dome Kit ...................... PS740N

Specifications

Bowl Capacity .................................................. 4.9 Ounces
Minimum Flow for Lubrication ............... 1 SCFM At 100 PSIG
Port Threads .................................................. 3/8, 1/2, 3/4 Inch

Pressure & Temperature Rating –
  Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.3 bar)
    32°F to 125°F (0°C to 52°C)
  Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)
    32°F to 175°F (0°C to 80°C)

Suggested Lubricant ........................................ F442 Oil

Petroleum based oil of 100 to 200 SSU viscosity
at 100°F and an aniline point greater than 200°F
(Do not use oils with additives, compounded oils containing solvents,
graphite, detergents, or synthetic oils.)

Weight .................................................. 1.9 lb. (.9 kg)

Materials of Construction

Body .............................................................. Zinc
Bowls –
  Transparent ............................................. Polycarbonate
  Metal (with Sight Gauge) ..................... Zinc

Bowl Guard .................................................. Steel
Collar ................................................................. Plastic or Metal

Drain – Twist – Body & Nut ............................ Plastic
Injector Meter Block & Base Assembly ............ Plastic

Seals ................................................................. Nitrile
Sight Dome ..................................................... Polycarbonate
Sight Gauge ..................................................... Polyamide (Nylon)
Mist Lubricators
- Pipe Sizes 1/4 thru 1½ Inch
- Flows to 260 SCFM
- Pressures to 250 PSIG

Mist Air Lubricators are designed to provide lubrication for most general applications in a pneumatic system. Units should be installed close to the application ensuring effective distribution of oil to pneumatic components.

- Miniature 04L Series, 1/4 Inch
- Standard FL10 Stainless Series, 1/2 Inch
- Hi-Flow P3NL Series, 3/4, 1 and 1-1/2 Inch

Lubricator Selection
1. Determine maximum system flow requirements.
2. Determine maximum allowable pressure drop at rated flow in SCFM.
3. Refer to flow chart and select lubricator by choosing the curve that offers minimum pressure drop at desired flow in SCFM.

Reading Flow Charts to Size Mist Lubricators

Once the required flow is determined for a pneumatic application the lubricator can be selected by using the flow chart. To read the lubricator flow chart, first determine the inlet pressure that will be used. Find the appropriate pressure curve on the graph. Each graph will contain three pressure curves. If the required inlet pressure is not on the graph, interpolate a similar curve for the required pressure. Next, determine the acceptable pressure drop across the lubricator and locate it on the vertical axis. Find the intersection point of the acceptable pressure drop and the inlet pressure curve. At this point follow a vertical path downward to view the flow in SCFM.

If the flow is too low, select a larger port size or body size to give the required flow. If the flow is higher than necessary, select a smaller port size or body size to give the required flow.

F442 Oil

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Quart</td>
<td>F442001P</td>
</tr>
<tr>
<td>1 Gallon</td>
<td>F442002P</td>
</tr>
<tr>
<td>12 Quart Case</td>
<td>F442003P</td>
</tr>
<tr>
<td>4 Gallon Case</td>
<td>F442005P</td>
</tr>
</tbody>
</table>
Air flowing through the unit goes through two paths. At low air flow rates, the majority of the air flows through venturi section (A). The rest of the air slightly deflects and flows by the flapper (B), restrictor disc (M) on the 09L. The velocity of the air flowing through venturi section (A) creates a pressure drop at throat section (C). This lower pressure allows oil to be forced from the reservoir through the pickup tube (D) past the check ball (E), to the dome assembly where the rate of oil flow is controlled by metering screw (F). Rotation of the metering screw (F) in the counterclockwise direction increases the oil flow rate; in the clockwise direction decreases the oil flow rate. Oil then flows through the clearance between inner and outer sight domes (G) where drops are formed and drip into the nozzle tube (H). On the 09L, oil flows through the drip tube (F) where drops are formed and drip into the throat section (C). Here it is then broken into fine particles and mixed with the swirling air to be carried to the venturi outlet where it joins the air by passing the flapper (B), (M). As air flow rate increases, the flapper (B), (M) deflects, allowing a greater part of the additional air to bypass the venturi section (A). This assures the oil delivery rate increases linearly with increased air flow rate. The check ball (E) assures that when there is no oil flow the oil in the pickup tube does not return to the reservoir.

The bowl can be filled under pressure due to the action of the check ball (J). When the fill cap is removed, air in the bowl escapes and pressure forces the check ball (J) to nearly seal at (K). When the fill cap is replaced, the small amount of air flow past check ball (J) builds up pressure and together with the spring forces the check ball (J) off seat (K), letting full line pressure into the bowl.
04L Mist Lubricators – Miniature

Features

• Proportional oil delivery over a wide range of air flows.
• Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate.
• Ideal for low and high flow applications with changing air flow.
• Transparent sight dome for 360° visibility.
• High Flow: 1/8” – 20 SCFM
  1/4” – 20 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Poly Bowl ‡</th>
<th>Metal Bowl without Sight Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8”</td>
<td>Twist Drain</td>
<td>—</td>
<td>04L03G*</td>
</tr>
<tr>
<td>1/4”</td>
<td>—</td>
<td>04L01G*</td>
<td>04L13G*</td>
</tr>
</tbody>
</table>

Standard part numbers shown bold. For other models refer to ordering information below.

‡ For polycarbonate bowl and sight dome, see Caution on page 2.
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

Ordering Information

04L Lubricator Dimensions

Port Size | NPT | Poly Bowl ‡ | Metal Bowl without Sight Gauge |
----------|-----|-------------|--------------------------------|
1/8”      | Twist Drain  | —           | 04L03G*                         |
1/4”      | —            | 04L01G*     | 04L13G*                         |

Inches (mm)
† With Twist Drain.
Technical Information

04L Mist Lubricator Kits & Accessories

Bowl Kits –
- Poly Bowl – No Drain ....................................................... PS421P
- Metal Bowl – Twist Drain (No Sight Gauge) ..................... PS447BP
- Mounting Bracket Kit ............................................................. PS419

Oil –
- 1 Quart ...................................................................... F442001P
- 1 Gal. ......................................................................... F442002P
- 12 Quart Case ........................................................... F442003P
- 4 Gallon Case ........................................................... F442005P

Specifications

Bowl Capacity ................................................................. 1 Ounce
Minimum Flow for Lubrication .............................. 0.5 SCFM at 100 PSIG
Port Threads .............................................................. 1/4 Inch

Pressure & Temperature Ratings –
- Polycarbonate Bowl –
  0 to 150 PSIG (0 to 10.3 bar)
  32°F to 125°F (0°C to 52°C)
- Metal Bowl –
  0 to 250 PSIG (0 to 17.2 bar)
  32°F to 175°F (0°C to 80°C)

Suggested Lubricant = ................................................................. F442 Oil
Petroleum based oil of 100 to 200 SSU viscosity at
100°F and an aniline point greater than 200°F
(Do not use oils with additives,
compounded oils containing solvents,
graphite, detergents, or synthetic oils.)

Weight ................................................................. 0.4 lb. (0.18 kg)

Materials of Construction

Body .............................................................................. Zinc
Bowl(s) –
- Transparent ........................................................ Polycarbonate
- Metal (Without Sight Gauge) .................................... Zinc
Drains –
- Twist – Body & Nut................................................ Plastic
Seals ................................................................. Nitrile
Sight Dome ............................................................... Polycarbonate
FL10 Series
1/2 Inch Ports

FL10 Lubricator – Standard

<table>
<thead>
<tr>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Stainless Steel Construction Handles</td>
</tr>
<tr>
<td>Most Corrosive Environments</td>
</tr>
<tr>
<td>• 1/8&quot; Female Threaded Drain</td>
</tr>
<tr>
<td>• Fillable Under Pressure</td>
</tr>
<tr>
<td>• Meets NACE Specifications MR-01-75/ISO 15156</td>
</tr>
<tr>
<td>• High Flow: 1/2&quot; - 100 SCFM §</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Metal Bowl Without Sight Gauge</th>
<th>Metal Bowl With Sight Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>FL10-04DSS</td>
<td>FL10G04WSS</td>
<td></td>
</tr>
</tbody>
</table>

Standard part numbers shown bold. For other models refer to ordering information below.

§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

### Ordering Information

```
FL10 - 04 W SS
```

Port Type: NPT
Port Size: 1/2 Inch
Bowl: D Metal Bowl without Sight Gauge, W Metal Bowl with Sight Gauge
Material: SS Stainless Steel

FL10 Lubricator Dimensions

<table>
<thead>
<tr>
<th>A (inches)</th>
<th>A1 (mm)</th>
<th>B (inches)</th>
<th>B1 (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.38 (60)</td>
<td>2.50 (64)</td>
<td>1.75 (44)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C (inches)</th>
<th>D (inches)</th>
<th>E (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.81 (46)</td>
<td>5.00 (127)</td>
<td>6.81 (173)</td>
</tr>
</tbody>
</table>

Distance Required To Remove All Bowls Regardless of Drain Option

1/8" Female Thread

Optional Sight Gauge
Air flowing through the unit goes through two paths. At low flow rates the majority of the air flows through the Venturi section (A). The rest of the air opens the check valve (C). The velocity of the air flowing through the Venturi section (A) creates a pressure drop. This lower pressure allows the oil to be forced from the reservoir through the pickup tube (B) and travels up to the metering screw (D). The rate of oil delivery is then controlled by adjusting the metering screw (D). Oil flows past the metering screw (D) and forms a drop in the nozzle tube (E). As the oil drops through the dome (F) and back into the Venturi section (A), it is broken up into fine particles. It is then mixed with the air flowing past the check valve (C) and is carried downstream. As the air flow increases the check valve (C) will open more fully. This additional flow will assure that the oil delivery rate will increase linearly with the increase of air flow.

Technical Information

FL10 Filter Kits & Accessories

Drain Kit – Manual Twist Drain ................................................... SA600Y7-1SS
Pipe Nipple – 1/2" 316 Stainless Steel ............................................. 616A28-SS
Sight Dome Kit ................................................................. RKL10SS

Specifications

Bowl Capacity ................................................................. 4.0 Ounces
Port Threads ................................................................. 1/2 Inch
Pressure & Temperature Ratings –
Metal Bowl (D) .......................................................... 300 PSIG Max (20.7 bar)
0°F to 150°F (-18°C to 66°C) Auto Drain Ratings
Metal Bowl (W) .......................................................... 0 to 250 PSIG (0 to 17.2 bar)
0°F to 150°F (-18°C to 66°C)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (2°C).

Materials of Construction

Body ................................................................. 316 Stainless Steel
Bowl ................................................................. 316 Stainless Steel
Dip Tube ................................................................. 316 Stainless Steel
Drain ................................................................. 316 Stainless Steel
Fill Plug ................................................................. 316 Stainless Steel
Seals ................................................................. Fluorocarbon
Sight Dome ............................................................. Nylon
Sight Gauge ............................................................. Isoplast

Weight ................................................................. 1.9 lb. (0.85 kg)
P3NL Mist Lubricators – Hi-Flow

Features

- Port blocks (PB) available to provide 1½” port extension to 1” ported bodies.
- Proportional oil delivery over a wide range of air flows.
- Bowl can be filled while air line is under pressure.
- Transparent sight dome for 360° visibility.
- High Flow: 3/4” – 240 SCFM§
  1” – 250 SCFM§
  1½” – 260 SCFM§

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Drain</td>
</tr>
</tbody>
</table>

Metal Bowl / Sight Gauge

- 3/4” : P3NLA96LSN
- 1” : P3NLA98LSN
- 1½”# : P3NLA9PLSN

Standard part numbers shown bold. For other models refer to ordering information below

# 1” Port Body with 1-1/2” Port Block.
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

P3NL Lubricator Dimensions

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>A PB</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4”</td>
<td>3.62(92)</td>
<td>5.91(150)</td>
<td>3.62(92)</td>
<td>2.81(71)</td>
<td>9.00(229)</td>
<td>11.81(300)</td>
<td>4.92(125)</td>
</tr>
</tbody>
</table>

Inches (mm)

Ordering Information

<table>
<thead>
<tr>
<th>Design Level</th>
<th>Port Type</th>
<th>Port Size</th>
<th>Type</th>
<th>Bowl</th>
<th>Drain / Fill Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 NPT Female</td>
<td>3/4” (w/o Port Blocks)</td>
<td>6</td>
<td>Oil Mist</td>
<td>S Metal Bowl w/ Sight Dome</td>
<td>N No Drain, Solid Bowl / Fill Plug</td>
</tr>
<tr>
<td>8 1” (w/o Port Blocks)</td>
<td>8</td>
<td>L w/ Polycarbonate Sight Dome</td>
<td>1-1/2” Port Blocks (w/ 1” Ported Body)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 3/4 & 1 inch meet ISO 1179-1 Standard.
Technical Information

P3NL Series
Air Line Mist Lubricators

Technical Specifications – P3NL

P3NL Lubricator Kits & Accessories

Adjustment Knob .................................................. P04121
Bowl Kits –
Metal Bowl – Sight Gauge / Twist Drain .......... P3NKA00BSM
Metal Bowl – Sight Gauge / No Drain .............. P3NKA00BSN
Bowl Latch Kit ........................................................ C11A33
Drain Kit – Twist Drain ........................................ PS512
Fill Cap Kit .......................................................... P3NKA00PL
Sight Dome Kit – Polycarbonate ....................... PS740P
Nylon ............................................................. PS740N
Sight Gauge .......................................................... P3NKA00PE
Pressure Fill Adapter Kit ................................. P3NKA00PK
Service Kit .......................................................... P3NKA00RL
Mounting Bracket Kit* ........................................ P3NKA00MW
Oil – 1 Quart ....................................................... F442001P
1 Gal. ................................................................. F442002P
12 Quart Case ............................................. F442003P
4 Gallon Case ................................................ F442005P

Specifications

Bowl Capacity .................................................. 18.0 Ounces
Minimum Flow for Lubrication ................. 6.6 SCFM at 100 PSIG
Pressure & Temperature Rating .......... 0 to 250 PSIG (0 to 17.2 bar)
32°F to 175°F (0°C to 80°C)

Suggested Lubricant ........................................ F442 Oil
Petroleum based oil of 100 to 200 SSU viscosity
at 100°F and an aniline point greater than 200°F
(Do not use oils with additives, compounded oils containing solvents,
graphite, detergents, or synthetic oils.)

Weight – 3/4 Inch ........................................... 3.5 lb. (1.6 kg)
1 Inch ......................................................... 3.5 lb. (1.6 kg)
1-1/2 Inch† ............................................... 4.6 lb. (2.1 kg)

Materials of Construction

Body, Bowl ........................................................ Aluminum
Drains: Twist Drain (Optional) ....................... Plastic
Injector Meter Block & Base Assembly .......... Plastic
Seals ............................................................. Nitrile
Sight Dome ...................................................... Polycarbonate
Sight Gauge ..................................................... Polyamide (Nylon)

† 1" Port Body with 1-1/2" Port Block.
Close Nippled Combinations – 14 Miniature Series

- See individual component pages for details.

### Two-Unit Combo

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>14G</td>
<td>1/4&quot;</td>
<td>14G11B13F0G*</td>
</tr>
</tbody>
</table>

For other models, refer to ordering information on next page.

### Three-Unit Combo

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>14A</td>
<td>1/4&quot;</td>
<td>14A11B13F0G*</td>
</tr>
</tbody>
</table>

For other models, refer to ordering information on next page.

- Regulator can be mounted with knob in up or down position.
Close Nippled Combinations – 14 Miniature Series

Ordering Information

<table>
<thead>
<tr>
<th>Series</th>
<th>14A</th>
<th>1</th>
<th>B</th>
<th>13</th>
<th>F</th>
<th>0</th>
<th>G</th>
<th>*</th>
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</thead>
<tbody>
<tr>
<td>Filter Bowl Options</td>
<td>Poly Bowl</td>
<td>1 Twist Drain</td>
<td>Metal Bowl</td>
<td>3 Twist Drain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulator Pressure</td>
<td>Without Gauge</td>
<td>125 PSIG</td>
<td></td>
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<tr>
<td>Lubricator Bowl Options</td>
<td>Poly Bowl</td>
<td>0 No Drain</td>
<td>Metal Bowl</td>
<td>3 Twist Drain</td>
<td></td>
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<tr>
<td>Engineering Level</td>
<td>*Will be entered at factory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port Size</td>
<td>1 1/4 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filter Element</td>
<td>B 5 Micron</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Relief</td>
<td>F Relieving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubricator Body Options</td>
<td>G No Fill Plug</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

WARNING

Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

For polycarbonate bowl and sight dome, see Caution on page 2.

Dimensions (Includes Panel Mount Nut)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.80 (46)</td>
<td>2.37 (60)</td>
<td>0.90 (23)</td>
<td>1.35 (34)</td>
<td>1.00 (25)</td>
<td>0.50 (13)</td>
<td>0.20 (5)</td>
<td>1.24 (31)</td>
<td>0.56 (14)</td>
<td>0.22 (6)</td>
<td>0.45 (11)</td>
<td>0.62 (16)</td>
<td>PS417BP (10F, 14F, P3A, 14R, 14E)</td>
</tr>
<tr>
<td>1.80 (46)</td>
<td>2.17 (55)</td>
<td>0.90 (23)</td>
<td>1.35 (34)</td>
<td>1.00 (25)</td>
<td>0.50 (13)</td>
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<td>1.24 (31)</td>
<td>0.56 (14)</td>
<td>0.22 (6)</td>
<td>0.45 (11)</td>
<td>0.62 (16)</td>
<td>PS419 (04L)</td>
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</tbody>
</table>

Inches (mm)
Close Nippled Combinations – 15 Economy Series

- Regulator can be mounted with knob in up or down position.
- See individual component pages for details.

**Two-Unit Combo**

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>15G</td>
<td>1/4&quot;</td>
<td>15G12B13A2N*</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>15G22B13A2N*</td>
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</tbody>
</table>

For other models, refer to ordering information on next page.

**Three-Unit Combo**

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>15A</td>
<td>1/4&quot;</td>
<td>15A12B13A2N*</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>15A22B13A2N*</td>
</tr>
</tbody>
</table>

For other models, refer to ordering information on next page.

---

**Note:** All dimensions nominal.
Close Nippled Combinations – 05 Economy Series

Ordering Information

<table>
<thead>
<tr>
<th>Series</th>
<th>Port Size</th>
<th>Regulator Pressure</th>
<th>Relief</th>
<th>Lubricator Bowl Options</th>
<th>Engineering Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>15A  3-Unit</td>
<td>1/4 Inch</td>
<td>Without Gauge</td>
<td></td>
<td>Poly Bowl</td>
<td>&quot;Will be entered at factory</td>
</tr>
<tr>
<td>15G  2-Unit</td>
<td>3/8 Inch</td>
<td>125 PSIG</td>
<td></td>
<td>2 Metal Bowl Guard / No Drain</td>
<td></td>
</tr>
</tbody>
</table>

Filter Bowl Options
- Poly Bowl
- 2 Metal Bowl Guard / No Drain
- Metal Bowl
- 4 Sight Gauge / Twist Drain

Filter Element
- B: 5 Micron

Note: *Includes 1-1/2” Dial Face Gauge
§ Metal Bowls Only

WARNING
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

CAUTION:
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Kits & Accessories (See individual component sections for other kits and accessories.)

Mounting Bracket Kit ..............................................PS963P
(Includes Panel Mount Nut)
Modular Combinations – 15 Economy Series

- Regulator can be mounted with knob in up or down position.
- See individual component pages for details.
- Gauges, Port Blocks, Manifold Blocks and Ball Valve must be ordered separately.

Two-Unit Combo

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>15H</td>
<td>1/4&quot;</td>
<td>15H12B13A2N*</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>15H22B13A2N*</td>
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</tbody>
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For other models, refer to ordering information on next page.

Three-Unit Combo

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1/4&quot;</td>
<td>15B12B13A2N*</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>15B22B13A2N*</td>
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For other models, refer to ordering information on next page.
Modular Combinations – 15 Economy Series

Ordering Information

<table>
<thead>
<tr>
<th>Series</th>
<th>Port Size</th>
<th>Filter Element</th>
<th>Relief</th>
<th>Engineering Level</th>
<th>Modular Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>15B</td>
<td>1 1/4 Inch</td>
<td>B 5 Micron</td>
<td>A Relieving</td>
<td>&quot;Will be entered at factory&quot;</td>
<td>Blank No Port Blocks</td>
</tr>
<tr>
<td>15H</td>
<td>2 3/8 Inch</td>
<td></td>
<td></td>
<td></td>
<td>G With Port Blocks</td>
</tr>
</tbody>
</table>

- **Filter Bowl Options**
  - Poly Bowl
  - Metal Bowl Guard / Twist Drain
  - Metal Bowl
  - Sight Gauge / Twist Drain

- **Regulator Pressure**
  - Without Gauge
  - 13 125 PSIG

- **Lubricator Body Options**
  - Poly Bowl
  - Metal Bowl Guard / Twist Drain

- **Lubricator Bowl Options**
  - Poly Bowl
  - Metal Bowl Guard / No Drain
  - Metal Bowl / Sight Gauge
  - Twist Drain

**CAUTION:**
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

**WARNING**
Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

For polycarbonate bowl and sight dome, see Caution on page 2.

**Kits & Accessories** (See individual component sections for other kits and accessories.)

- Body Connector Kit .............................................. PS954P
- Lockout Valve ...................................................... PS95601P
- Manifold Block .................................................... PS95701P
- Pressure Switches –
  - DIN Connectors ......................................................... P01909
  - Flying Leads ......................................................... P01908
- Wall Mounting Kit .................................................. PS955P

<table>
<thead>
<tr>
<th>Port Block Kits:</th>
<th>1/8&quot;</th>
<th>1/4&quot;</th>
<th>3/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPT ...............</td>
<td>PS95000P</td>
<td>PS95001P</td>
<td>PS95002P</td>
</tr>
</tbody>
</table>

Modular Accessories – 15 Economy Series

Body Connectors allow you to easily assemble and disassemble Modular Combinations. Body Connectors are required whenever you assemble two or more pieces together. Each Kit includes one set.

Port Block Connectors allow you to make threaded port connections to Modular units and are available in various port sizes to match your system requirements. Each Kit includes all the necessary pieces to make two port connections.

**Body Connectors**

PS954P

**Port Block Connector Kits**

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Part Numbers</th>
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</thead>
<tbody>
<tr>
<td>1/8&quot;</td>
<td>PS95000P</td>
</tr>
<tr>
<td>NPT</td>
<td>PS95001P</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>PS95002P</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td></td>
</tr>
</tbody>
</table>


GRAYED OUT ITEMS ARE OBSOLETE AS OF JULY 1, 2014
Modular Accessories – 15 Economy Series

Wall Mounting Kits
PS955P

Wall Mounting Kits are available for mounting your Modular Assemblies and can be assembled and used with any standard body connector set.

Since Modular Combinations are always identical in size, you can predrill for wall mounting on your equipment.

Kit includes 1 assembly.

Lockout Valve
PS95601P
1/4" Port

Lockout Valves provide positive shut-off and exhaust capability to isolate Modular units so they can be easily removed from the line and can be locked in a closed position. Center position can be used as a slow start for 06 and 07 series. Accepts #3 padlock.

NOTE: Body Connectors are not supplied with Lockout Valves.

Modular Manifold Block
PS95701P
1/4" Port

A Modular Manifold Block can be used between any two Modular units to give additional outlet ports. The 1/4" Manifold Block provides three additional outlets. Any standard pipe plug can be used to close off unused ports.

NOTE: Body Connectors are not supplied with Manifold Blocks.
Close Nippled Combinations – 16 Compact & 17 Standard Series

- See individual component pages for details.

### Two-Unit Combo

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>16G</td>
<td>1/4&quot;</td>
<td>16G12A13A2B*</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>16G22A13A2B*</td>
</tr>
<tr>
<td></td>
<td>1/2&quot;</td>
<td>16G32A13A2B*</td>
</tr>
<tr>
<td>17G</td>
<td>3/8&quot;</td>
<td>17G22A13A2B*</td>
</tr>
<tr>
<td></td>
<td>1/2&quot;</td>
<td>17G32A13A2B*</td>
</tr>
<tr>
<td></td>
<td>3/4&quot;</td>
<td>17G42A13A2B*</td>
</tr>
</tbody>
</table>

For other models, refer to ordering information on next page.

### Three-Unit Combo

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>16A</td>
<td>1/4&quot;</td>
<td>16A12A13A2B*</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>16A22A13A2B*</td>
</tr>
<tr>
<td></td>
<td>1/2&quot;</td>
<td>16A32A13A2B*</td>
</tr>
<tr>
<td>17A</td>
<td>3/8&quot;</td>
<td>17A22A13A2B*</td>
</tr>
<tr>
<td></td>
<td>1/2&quot;</td>
<td>17A32A13A2B*</td>
</tr>
<tr>
<td></td>
<td>3/4&quot;</td>
<td>17A42A13A2B*</td>
</tr>
</tbody>
</table>

For other models, refer to ordering information on next page.

### Model Numbers & Dimensions

#### 06G, 16G Series

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.13 (156)</td>
<td>5.69 (145)</td>
<td>4.69 (119)</td>
<td>3.18 (81)</td>
<td>10.38 (264)</td>
<td>1.37 (35)</td>
</tr>
</tbody>
</table>

#### 07G, 17G Series

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.99 (178)</td>
<td>6.97 (177)</td>
<td>4.79 (122)</td>
<td>3.44 (87)</td>
<td>11.76 (299)</td>
<td>1.63 (41)</td>
</tr>
</tbody>
</table>

Inches (mm)

- All dimensions nominal.

#### 06A, 16A Series

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.45 (240)</td>
<td>5.69 (145)</td>
<td>2.24 (57)</td>
<td>3.18 (81)</td>
<td>7.93 (201)</td>
<td>1.37 (35)</td>
</tr>
</tbody>
</table>

#### 07A, 17A Series

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.74 (2738)</td>
<td>6.97 (177)</td>
<td>2.41 (61)</td>
<td>3.44 (87)</td>
<td>9.38 (238)</td>
<td>1.63 (41)</td>
</tr>
</tbody>
</table>

Inches (mm)

- All dimensions nominal.
Close Nippled Combinations – 16 Compact & 17 Standard Series

Ordering Information

<table>
<thead>
<tr>
<th>Series</th>
<th>Port Size</th>
<th>Filter Element</th>
<th>Relief</th>
<th>Lubricator Body Options</th>
<th>Engineering Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro-Mist</td>
<td></td>
<td>B 5 Micron</td>
<td>A Relieving</td>
<td>B With Fill Plug</td>
<td>*Will be entered at factory</td>
</tr>
<tr>
<td>16A Compact 3-Unit</td>
<td>1 1/4 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17A Standard 3-Unit</td>
<td>2 3/8 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16G Compact 2-Unit</td>
<td>3 1/2 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17G Standard 2-Unit</td>
<td>4 3/4 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Available on 06/16 Series only.
** Available on 07/17 Series only.

Filter Bowl Options

- Poly Bowl
- 2 Metal Bowl Guard / Twist Drain
- Metal Bowl
- 4 Sight Gauge / Twist Drain

Regulator Pressure

- Without Gauge
- 13 125 PSIG

* If 250 PSIG spring range is used, use Metal Bowl.

Lubricator Bowl Options

- Poly Bowl
- 2 Metal Bowl Guard / No Drain
- Metal Bowl / Sight Gauge
- 4 Twist Drain

Kits & Accessories (See individual component sections for other kits and accessories.)

Mounting Bracket Kit (Includes Panel Mount Nut)
06A, 16A, 06G, 16G ........................................... PS707P
07A, 17A, 07G, 17G ........................................... PS807P

CAUTION:
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

WARNING
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

For polycarbonate bowl and sight dome, see Caution on page 2.
Modular Combinations – 16 Compact & 17 Standard Series

- See individual component pages for details.

### Two-Unit Combo

<table>
<thead>
<tr>
<th>Series</th>
<th>Model Numbers Port</th>
<th>Model Numbers Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>06H</td>
<td>06H12A13A2B* 1/4&quot;</td>
<td>16H12A13A2B*</td>
</tr>
<tr>
<td></td>
<td>06H22A13A2B* 3/8&quot;</td>
<td>16H22A13A2B*</td>
</tr>
<tr>
<td></td>
<td>06H32A13A2B*G 1/2&quot;</td>
<td>16H32A13A2B*G</td>
</tr>
<tr>
<td>07H</td>
<td>07H22A13A2B* 3/8&quot;</td>
<td>17H22A13A2B*</td>
</tr>
<tr>
<td></td>
<td>07H32A13A2B* 1/2&quot;</td>
<td>17H32A13A2B*</td>
</tr>
<tr>
<td></td>
<td>07H42A13A2B* 3/4&quot;</td>
<td>17H42A13A2B*</td>
</tr>
</tbody>
</table>

For other models, refer to ordering information on next page.
† 06 / 16 Available with Port Blocks Only.

### Three-Unit Combo

<table>
<thead>
<tr>
<th>Series</th>
<th>Model Numbers Port</th>
<th>Model Numbers Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>06B</td>
<td>06B12A13A2B* 1/4&quot;</td>
<td>16B12A13A2B*</td>
</tr>
<tr>
<td></td>
<td>06B22A13A2B* 3/8&quot;</td>
<td>16B22A13A2B*</td>
</tr>
<tr>
<td></td>
<td>06B32A13A2B*G 1/2&quot;</td>
<td>16B32A13A2B*G</td>
</tr>
<tr>
<td>07B</td>
<td>07B22A13A2B* 3/8&quot;</td>
<td>17B22A13A2B*</td>
</tr>
<tr>
<td></td>
<td>07B32A13A2B* 1/2&quot;</td>
<td>17B32A13A2B*</td>
</tr>
<tr>
<td></td>
<td>07B42A13A2B* 3/4&quot;</td>
<td>17B42A13A2B*</td>
</tr>
</tbody>
</table>

For other models, refer to ordering information on next page.
† 06 / 16 Available with Port Blocks Only.
Modular Combinations – 16 Compact & 17 Standard Series

Ordering Information

16B 1 2 B 13 A 2 B *

Series
- Micro-Mist
  - 16B Compact 3-Unit
  - 17B Standard 3-Unit
  - 16H Compact 2-Unit
  - 17H Standard 2-Unit

Port Size
- 1 1/4 Inch*
- 2 3/8 Inch
- 3 1/2 Inch***
- 4 3/4 Inch**

Filter Element
- B 5 Micron

Relief
- A Relieving

Engineering Level
- "Will be entered at factory"

Lubricator Body Options
- B With Fill Plug

Modular Options
- Blank No Port Blocks
- G With Port Blocks

Filter Bowl Options
- Poly Bowl
- 2 Metal Bowl Guard / Twist Drain
- Metal Bowl
- 4 Sight Gauge / Twist Drain

Regulator Pressure
- Without Gauge
  - 13 125 PSIG

Lubricator Bowl Options
- Poly Bowl
  - 2 Metal Bowl Guard / No Drain
  - Metal Bowl / Sight Gauge
  - 4 Twist Drain

* If 250 PSIG spring range is used, use Metal Bowl.

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Kits & Accessories (See individual component sections for other kits and accessories.)

<table>
<thead>
<tr>
<th>Kits &amp; Accessories</th>
<th>Port Block Kits:</th>
<th>Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Connector Kit</td>
<td>PS754P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lockout Valve</td>
<td>PS756P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manifold Block</td>
<td>PS757P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure Switches –</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>DIN Connectors</td>
<td>P01909</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flying Leads</td>
<td>P01908</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall Mounting Kit</td>
<td>PS755P</td>
<td></td>
<td></td>
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<tr>
<td>Port Block Kits:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Series</td>
<td></td>
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<td>PS750P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3/8&quot;*</td>
<td>PS751P</td>
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<td></td>
<td></td>
<td>1/2&quot;</td>
<td>PS752P</td>
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<td>17 Series</td>
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<td>PS850P</td>
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<tr>
<td></td>
<td></td>
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<td>PS852P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3/4&quot;</td>
<td>PS853P</td>
</tr>
</tbody>
</table>

* Use 1/4 or 3/8 ported bodies.
† 1/4, 3/8 & 1/2 inch meet ISO 1179-1 Standard.
‡ 1/2 inch meets ISO 1179-1 Standard.
Modular Accessories – 16 Compact & 17 Standard Series

Body Connectors
16 Series........ PS754P
17 Series........ PS854P

Body Connectors allow you to easily assemble and disassemble Modular Combinations.
Each Kit includes one set.
Body Connectors are required whenever you assemble two or more pieces together.

Port Block Connector Kits

<table>
<thead>
<tr>
<th>Series</th>
<th>Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>1/4&quot;</td>
<td>PS750</td>
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<tr>
<td></td>
<td>3/8&quot;</td>
<td>PS751P</td>
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<td>1/2&quot;</td>
<td>PS752P*</td>
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<tr>
<td>17</td>
<td>1/4&quot;</td>
<td>PS850P</td>
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<tr>
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<td>3/8&quot;</td>
<td>PS851P</td>
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<td>PS852P</td>
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<td>3/4&quot;</td>
<td>PS853P</td>
</tr>
</tbody>
</table>

* Use 1/4 or 3/8 ported bodies.

Port Block Connectors allow you to make threaded port connections to Modular units and are available in various port sizes to match your system requirements.
Each Kit includes all the necessary pieces to make two port connections.
Modular Accessories – 16 Compact & 17 Standard Series

Wall Mounting Kits
06 Series & 07 Series........... PS755P

Wall Mounting Kits are available for mounting your Modular Assemblies and can be assembled and used with any standard body connector set.

Since Modular Combinations are always identical in size, you can predrill for wall mounting on your equipment. Kit includes 1 assembly.

Lockout Valves
16 Series........ PS756P...... 3/8" Port
17 Series........ PS856P ...... 1/2" Port

Lockout Valves provide positive shut-off and exhaust capability to isolate Modular units so they can be easily removed from the line and can be locked in a closed position. Center position can be used as a slow start. Accepts #3 padlock.

NOTE: Body Connectors are not supplied with Lockout Valves.

Modular Manifold Block
06 Series ........ PS757P .......... 3/8" Port
07 Series......... PS857P .......... 1/2" Port

A Modular Manifold Block can be used between any two Modular units to give additional outlet ports. The Manifold Block provides 2 additional outlets in 3/8" and 1/2" sizes. Any standard pipe plug can be used to close off unused ports.

NOTE: Body Connectors are not supplied with Manifold Blocks.
Close Nippled Combinations – P3N Hi-Flow Series

- Regulator can be mounted with knob in up or down position.
- See individual component pages for details.

Three-Unit Combo

- 40 Micron Filter Element
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3N3B</td>
<td>3/4&quot;</td>
<td>P3N3B96SGMNNLNA</td>
<td>11.89 (302)</td>
<td>9.57 (243)</td>
<td>6.38 (162)</td>
<td>3.56 (90)</td>
<td>15.95 (405)</td>
<td>1.81 (50)</td>
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<tr>
<td></td>
<td>1&quot;</td>
<td>P3N3B98SGMNNLNA</td>
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<td>1-1/2&quot;†</td>
<td>P3N3B9PSGMNNLNA</td>
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</table>

Notes: All Combo part numbers are with regulator knob in up position.
† Port Body with 1-1/2" Port Block.
For other models, refer to Ordering Information on next page.
Close Nippled Combinations – P3N Hi-Flow Series

Ordering Information

<table>
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<tr>
<th>P3N</th>
<th>3</th>
<th>A</th>
<th>9</th>
<th>6</th>
<th>S</th>
<th>G</th>
<th>M</th>
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</table>

- **Type**: 3 Combinations w/ Pipe Nipples
- **Combination**: Metal Bowl
- **Bowl**: Hi-Flow 3-Unit
- **Port Type**: 9 NPT Female
- **Port Size**: 6 3/4" (w/o Port Blocks)
- **Port Size**: 8 1" (w/o Port Blocks)
- **Port Size**: P 1-1/2" Port Blocks (w/ 1" Ported Body)
- **Filter Elements**: E 5 Micron
- **Relief**: N Relieving
- **Mounting Options**: A No Brackets or Kits
- **Combination**: Metal Bowl
- **Bowl**: Hi-Flow 3-Unit
- **Regulator Pressure Range & Gauges**: Without Gauge
- **Regulator Pressure Range & Gauges**: N 125 PSI (0 to 8 bar)
- **Lubricator Type**: Oil Mist
- **Lubricator Type**: L w/ Polycarbonate Sight Dome
- **Filter Drains**: M Twist Drain

**CAUTION:**

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

**WARNING**

Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

**Kits & Accessories** (See individual component sections for other kits and accessories.)

Wall Mounting Kit* .......................................................... P3NKA00MW

Grayed out items are obsolete as of July 1, 2014.
Modular Combinations – P3N Hi-Flow Series

- Regulator can be mounted with knob in up or down position.
- See individual component pages for details.

Three-Unit Combo

- 40 Micron Filter Element
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
<th>Dimensions (mm)</th>
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<tbody>
<tr>
<td></td>
<td>3/4&quot;</td>
<td>P3NCB96SEMNNLNA</td>
<td>A: 10.87 (276), A1: 13.15 (334), A2: 13.46 (342), A3: 15.75 (400), B: 3.62 (92), B1: 5.20 (132), B2: 5.74 (146)</td>
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<tr>
<td></td>
<td>1&quot;</td>
<td>P3NCB98SEMNNLNA</td>
<td>C: 6.38 (162), D: 9.57 (243), E: 15.95 (405), A: 10.87 (276), A1: 13.15 (334), A2: 13.46 (342), A3: 15.75 (400)</td>
</tr>
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<td></td>
<td>1-1/2&quot;†</td>
<td>P3NCB9PSEMNNLNA</td>
<td>A0: 10.87 (276), A1: 13.15 (334), A2: 13.46 (342), A3: 15.75 (400), B1: 5.20 (132), B2: 5.74 (146)</td>
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</tbody>
</table>

Notes: All Combo part numbers are with regulator knob in up position.† 1" Port Body with 1-1/2" Port Block.
For other models, refer to Ordering Information on next page.

Inches (mm)
- All dimensions nominal.
- Mounting brackets not included (change last character in model number to “B” if required).
- Gauges not included (change 12th character to “G” if required).
# Modular Combinations – P3N Hi-Flow Series

## Ordering Information

<table>
<thead>
<tr>
<th>Series</th>
<th>Type</th>
<th>Filter Elements</th>
<th>Relief</th>
<th>Mounting Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3N C A 9 6 S G M N N L N A</td>
<td>C Combination - Modular</td>
<td>E 5 Micron</td>
<td>N Relieving</td>
<td>A No Brackets or Kits</td>
</tr>
<tr>
<td>Combination</td>
<td>Bowl</td>
<td>Port Type</td>
<td>Port Size</td>
<td>Lubricator Type</td>
</tr>
<tr>
<td>Metal Bowl</td>
<td>S Metal Bowl w/ Sight Gauge</td>
<td>9 NPT Female</td>
<td>6 3/4&quot; (w/o Port Blocks)</td>
<td>Oil Mist</td>
</tr>
<tr>
<td>B Hi-Flow 3-Unit</td>
<td>Regulator Pressure Range &amp; Gauges</td>
<td>8 1&quot; (w/o Port Blocks)</td>
<td>Without Gauge</td>
<td>L w/ Polycarbonate Sight Dome</td>
</tr>
<tr>
<td></td>
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<td>H 3/4&quot; Port Blocks (w/ 3/4&quot; Ported Body)</td>
<td>M 1&quot; Port Blocks (w/ 1&quot; Ported Body)</td>
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<td>P 1-1/2&quot; Port Blocks (w/ 1&quot; Ported Body)</td>
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Modular Accessories – P3N Hi-Flow Series

Mounting Brackets
P3NKA00MW
For 1-1/2” BSPP Port Block with E02 fitting application, use Mounting Bracket Kit P3NKA0BMW

Replacement Body Covers
P3NKA00PM
Each Kit contains two covers. All units are shipped with body covers.

For modular combinations, one side has groove and the mating side is flat. Use the o-ring seal provided in the groove. For some modular combinations, both surfaces may have grooves. In those applications, use o-ring in one groove and square seal provided in the other.

Port Block Kits

3/4" 1" 1-1/2"
Individual Filters, Individual Regulators and 2-Piece Filter and Regulator Assemblies:
NPT P3NKB96CP ......P3NKB98CP .......P3NKB9BCP

2 and 3 Piece Combinations including a Lubricator (FR/L & FRL), Individual Lubricators, Individual Coalescing Filters and 2-Piece Filter and Coalescer Assemblies:
NPT P3NKB96CL ......P3NKB98CL........P3NKB9BCL

Port Block Kits allow units to be installed or removed as modular components. Each Kit includes all the necessary pieces to make two port connections.

* 3/4, 1 & 1-1/2 inch meet ISO 1179-1 Standard.
Mounting Bracket Kits

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Dimensions in inches (mm)
Other Products from Parker Hannifin

International H-Series
Compressed Air and Gas Filters
[Bulletin 1300-993C/USA]

Finite’s H-Series compressed air filters are the most widely used filter. Our standard grade 6 element captures 99.97% of particulate, oil, and water contamination.

- Coalescing, particulate, and adsorption elements
- Pressures to 500 PSIG
- Connections from 1/4” to 3” NPT, BSPF & BSPT
- Flows from 10 to 1600 SCFM

Par-Fit™ Conversion Elements
[Bulletin 1300-500-1/USA]

- Coalescing, particulate and adsorption elements
- Offer UNI-CAST Finite advantage
- Over 2500 interchanges available

ASME Coded Vessels
[Bulletin 1300-400/USA]

- Coalescing, particulate and adsorption elements
- Pressures to 185 PSIG
- Connections from 3” NPT to 16” flange
- Flows up to 37,000 SCFM
- Custom designs available

Stainless Steel Filters
[Bulletin 1300-625/USA]

- Used in the most demanding environments
- Pressures to 250 PSIG
- Connections from 3/4” to 1” NPT
- Flows up to 170 SCFM

Water Separators
[Bulletin 1300-925/USA]

- Remove bulk water from your application
- Connections from 1/4” to 3” NPT
- Pressures to 230 PSIG

Vacuum Exhaust Filters
[Bulletin 1300-310/USA]

- Eliminate 99.9% of oil mist and smoke from vacuum pump exhaust
- Easily adapts to most vacuum pumps
- Flows up to 200 SCFM

Instrumentation & Gas Sampling Filters
[Bulletin 1300-694/USA]

- Stainless steel, aluminum & plastic housings
- Clear bowls available
- Connections from 1/8” to 2” NPT
- Pressures to 5000 PSIG
Other Products from Parker Hannifin

**Dual-Stage BA-Series**
(Bulletin 1300-905/USA)
- Coalescer/adsorber combination unit
- Pressures to 500 PSIG
- Connections from 1/4” to 1” NPT
- Flows up to 75 SCFM

**FDD Desiccant Dryers**
(Bulletin 1300-850/USA)
- For point-of-use and OEM applications
- Pressure dewpoints down to -60° F
- Connections from 1/4” to 1” NPT
- Ideal for intermittent flows

**Membrane Dryers**
(Bulletin 1300-800/USA)
- Compressed air hollow fiber membrane dryers
- Pressure dewpoints down to -40° F
- Connections from 1/4” to 1/2” NPT
- Flows up to 40 SCFM

**Accessories**
(Bulletin 1300-150/USA)
- Differential pressure gauges
- Float, solenoid, and zero-air-loss drains
- Mounting brackets and adapter kits

**High Pressure Stainless Steel Filters, SJ-Series**
(Bulletin 1300-997/USA)
- Compatible with high pressure specialty gases
- Pressures to 6000 PSIG
- Stainless steel
- Variety of filter elements available

**High Pressure Filters, J-Series**
(Bulletin 1300-220/USA)
- CNG, alternative fuel and breathing air filters
- Pressures to 5000 PSIG
- Spheroidal Cast Iron
- Coalescing, particulate and adsorption filter elements available

**Medium Pressure Filters, M-Series**
(Bulletin 1300-997/USA)
- Pressures to 800 PSIG
- Connections from 1/2” to 2” NPT, BSPT & BSPF
- Use with specialty gases
- Variety of filter elements available

**High Pressure Drains**
(Bulletin 1300-997/USA)
- Safely drain condensate under pressure
- Pressures to 6000 PSIG
- Directly connect to J-Series and SJ-Series
- Horizontal or vertical mounting
Notes
Offer of Sale

The items described in this document are hereby offered for sale at prices to be established by Parker Hannifin Corporation, its subsidiaries and its authorized distributors. This offer and its acceptance by any customer ("Buyer") shall be governed by all of the following Terms and Conditions. Buyer's order for any item described in this document, when communicated to Parker Hannifin Corporation, its subsidiary or an authorized distributor ("Seller") verbally or in writing, shall constitute acceptance of this offer.

1. Terms and Conditions of Sale: All descriptions, quotations, proposals, offers, acknowledgments, acceptances and sales of Seller's products are subject to and shall be governed exclusively by the terms and conditions stated herein. Buyer's acceptance of any offer to sell is limited to these terms and conditions. Any terms or conditions in addition to, or inconsistent with those stated herein, proposed by Buyer in any acceptance or an offer by Seller, are hereby objected to. No such additional, different or inconsistent terms and conditions shall become part of the contract between Buyer and Seller unless expressly accepted in writing by Seller. Seller's acceptance of any offer to purchase by Buyer is expressly conditional upon Buyer's assent to all the terms and conditions stated herein, including any terms in addition to, or inconsistent with those contained in Buyer's offer. Acceptance of Seller's products shall in all events constitute such assent.

2. Payment: Payment shall be made by Buyer within 30 days from the date of shipment. Amounts not timely paid shall bear interest at the Maximum rate permitted by law for each month or portion thereof that the Buyer is late making payment. Any claims by Buyer for omissions or shortages in a shipment shall be waived unless Seller receives notice thereof within 30 days after Buyer's receipt of the shipment.

3. Delivery: Unless otherwise provided on the face hereof, delivery shall be made F.O.B. Seller's plant. Regardless of the method of delivery, however, risk of loss shall pass to Buyer upon Seller's delivery to a carrier. Any delivery dates shown are approximate only and Seller shall have no liability for any delays in delivery.

4. Warranty: Seller warrants that the items sold hereunder shall be free from defects in material or workmanship for a period of 18 months from date of shipment to Buyer. THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO ITEMS PROVIDED HEREUNDER. SELLER MAKES NO OTHER WARRANTY, GUARANTEE, OR REPRESENTATION OF ANY KIND WHATSOEVER. ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO, MERCHANTABILITY AND FITNESS FOR PURPOSE, WHETHER EXPRESS, IMPLIED, OR ARISING BY OPERATION OF LAW, TRADE USAGE, OR COURSE OF DEALING ARE HEREBY DISCLAIMED.

NOTWITHSTANDING THE FOREGOING, THERE ARE NO WARRANTIES WHATSOEVER ON ITEMS BUILT OR ACQUIRED WHOLLY OR PARTIALLY, TO BUYER'S DESIGNS OR SPECIFICATIONS.

5. Limitation of Remedy: SELLER'S LIABILITY ARISING FROM OR IN CONNECTION WITH THE ITEMS SOLD OR THIS CONTRACT SHALL BE LIMITED EXCLUSIVELY TO REPAIR OR REPLACEMENT OF ITEMS SOLD OR REFUND OF THE PURCHASE PRICE PAID BY BUYER, AT SELLER'S SOLE OPTION. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS ARISING FROM OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR ITEMS SOLD HEREUNDER, WHETHER ALLEGED TO ARISE FROM BREACH OF CONTRACT, EXPRESS OR IMPLIED WARRANTY, OR IN TORT, INCLUDING WITHOUT LIMITATION, NEGLIGENCE, FAILURE TO WARN OR STRICT LIABILITY.

6. Changes, Reschedules and Cancellations: Buyer may request to modify the designs or specifications for the items sold hereunder as well as the quantities of delivery dates thereof, or may request to cancel all or part of this order, however, no such requested modification or cancellation shall become part of the contract between Buyer and Seller unless accepted by Seller in a written amendment to this agreement. Acceptance of any such requested modification or cancellation shall be at Seller's discretion, and shall be upon such terms and conditions as Seller may require.

7. Special Tooling: A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

8. Buyer's Property: Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

9. Taxes: Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.

10. Indemnity For Infringement of Intellectual Property Rights: Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Part 10. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, U.S. trademarks, copyrights, trade dress and trade secrets (hereinafter 'Intellectual Property Rights'). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that an item sold pursuant to this contract infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If an item sold hereunder is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using said item, replace or modify said item so as to make it noninfringing, or offer to accept return of said item and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to items delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any item sold hereunder. The foregoing provisions of this Part 10 shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgments resulting from any claim that such item infringes any patent, trademark, copyright, trade dress, trade secret or any similar right.

11. Force Majeure: Seller does not assume the risk of and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter 'Events of Force Majeure'). Events of Force Majeure shall include without limitation, accidents, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's Control.

12. Entire Agreement/Governing Law: The terms and conditions set forth herein, together with any amendments, modifications and any different terms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain thereto. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of the sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.
## Worldwide Filtration Manufacturing Locations

### North America

**Compressed Air Treatment**
- **Filtration & Separation/Balston**
  - Haverhill, MA
  - 978 838 0505
  - www.parker.com/balston

**Finite Airtek Filtration**
- **Airetek/domnick hunter/Zander**
  - Lancaster, NY
  - 716 686 6400
  - www.parker.com/faf

**Extensive Airtek Filtration/Finite**
- **Oxford, MI**
  - 248 628 6400
  - www.parker.com/finitefilter

**Engine Filtration & Water Purification**

- **Racor**
  - Modesto, CA
  - 209 521 7860
  - www.parker.com/racor
  - Holly Springs, MS
  - 662 252 2656
  - www.parker.com/racor
  - Beaufort, SC
  - 843 846 3200
  - www.parker.com/racor

**Racor – Village Marine Tec.**
- **Gardena, CA**
  - 310 516 9911
desalination.parker.com

**Racor Sea Recovery**
- **Carson, CA**
  - 310 637 3400
  - www.parker.com/rfde

**Hydraulic Filtration**

- **Hydraulic Filter**
  - Arnhem, Holland
  - +31 26 3760376
  - www.parker.com/hfde

- **Urjala Operation**
  - Urjala, Finland
  - +358 20 733 2500
  - www.parker.com/hfde

**Condition Monitoring Centre**
- **Norfolk, England**
  - +44 (0) 1842 763 299
  - www.parker.com/hfde

**Parker Kittiwake**
- **West Sussex, England**
  - +44 (0) 1903 731 470
  - www.kittiwake.com

**Parker Procal**
- **Peterborough, England**
  - +44 (0) 1733 232 495
  - www.kittiwake.com

**Process Filtration**

- **domnick hunter Process Filtration**
  - Oxford, MI
  - 248 628 1850
  - www.parker.com/finitefilter

- **Aerospace Filtration**
  - **Velcon Filtration**
    - Colorado Springs, CO
    - 719 531 5855
    - www.velcon.com

### Europe

**Compressed Air Treatment**

- **domnick hunter Filtration & Separation**
  - Gateshead, England
  - +44 (0) 191 402 9000
  - www.parker.com/dhfns

**Parker Gas Separations**
- **Etten-Leur, Netherlands**
  - +31 76 508 5300
  - www.parker.com/dhfns

**Hiross Zander**
- **Padova Business Unit**
  - Padova, Italy
  - +39 049 971 111
  - www.parker.com/hzd

**Hiross Zander**
- **Essen Business Unit**
  - Essen, Germany
  - +49 2054 9340
  - www.parker.com/hzd

**Engine Filtration & Water Purification**

- **Racor**
  - Dewsbury, England
  - +44 (0) 1924 487 000
  - www.parker.com/rfde

**Racor Research & Development**
- **Stuttgart, Germany**
  - +49 (0)711 7071 290-10
  - www.parker.com/rfde

**Hydraulic Filtration**

- **Hydraulic Filter**
  - Arnhem, Holland
  - +31 26 3760376
  - www.parker.com/hfde

**Urjala Operation**
- **Urjala, Finland**
  - +358 20 733 2500
  - www.parker.com/hfde

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- **Norfolk, England**
  - +44 (0) 1842 763 299
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  - www.kittiwake.com

**Parker Procal**
- **Peterborough, England**
  - +44 (0) 1733 232 495
  - www.kittiwake.com

**Process Filtration**

- **domnick hunter Process Filtration**
  - Birtley, England
  - +44 (0) 191 410 5121
  - www.parker.com/processfiltration

- **Parker Twin Filter BV**
  - Zaandam, Netherlands
  - +31(0)75 655 50 00
  - www.twincfilter.com

### Asia Pacific

**Australia**
- **Castle Hill, Australia**
  - +61 2 9634 7777
  - www.parker.com/australia

**China**
- **Shanghai, China**
  - +86 21 5031 2525
  - www.parker.com/china

**India**
- **Navi Mumbai, India**
  - +91 22 651 370 8185
  - www.parker.com/india

**Parker Fowler**
- **Bangalore, India**
  - +91 80 2783 6794
  - www.johnfowlerindia.com

**Japan**
- **Tokyo, Japan**
  - +81 45 870 1522
  - www.parker.com/japan

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- **Osaka, Japan**
  - +81 66 340 1600
  - www.techno.taiyo-tld.co.jp

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- **Jurong Town, Singapore**
  - +65 6887 6300
  - www.parker.com/singapore

**Thailand**
- **Bangkok, Thailand**
  - +66 2186 7000
  - www.parker.com/thailand

### Latin America

**Parker Comercio Ltda.**
- **Filtration Division**
  - Sao Paulo, Brazil
  - +55 12 4009 3500
  - www.parker.com/br

**Pan American Division**
- **Miami, FL**
  - 305 470 8800
  - www.parker.com/panam

### Africa

**Parker Comercio Ltda.**
- **Filtration Division**
  - Sao Paulo, Brazil
  - +55 12 4009 3500
  - www.parker.com/br

**Parker Fowler**
- **Bangalore, India**
  - +91 80 2783 6794
  - www.johnfowlerindia.com

**Japan**
- **Tokyo, Japan**
  - +81 45 870 1522
  - www.parker.com/japan

**Parker Techno**
- **Ogata, Japan**
  - +81 66 340 1600
  - www.techno.taiyo-tld.co.jp

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- **Jurong Town, Singapore**
  - +65 6887 6300
  - www.parker.com/singapore

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  - www.parker.com/panam

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  - +27 11 9610700
  - www.parker.com/africa