Air Preparation Products
Filters, Regulators, Lubricators, & Airline Accessories
Catalog 0700P-E

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding
DISTRIBUTION NETWORK

At Parker, we have the largest global distribution network in motion and control, with over 7,500 distributors serving more than 422,000 customers. 

To find the distributor nearest you, please visit our DISTRIBUTOR LOCATOR at http://www.parker.com/pneu/distributor

ENGINEERING YOUR SUCCESS.

⚠️ WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application including consequences of any failure, and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated on the separate page of this document entitled “Offer of Sale”.

© Copyright 2010-2005 Parker Hannifin Corporation. All Rights Reserved
Index

Introduction

Global Air Preparation System  www.parker.com/globalfrl

Filters, Regulators, Lubricators  www.parker.com/pneu/trl

Stainless Steel FRLs  www.parker.com/pneu/ssfrls

Precision Regulators  www.parker.com/pneu/precreg

Proportional Regulators
(P31P, P32P & PAR™-15)

LV / EZ Lockout Valves
(Lockout Valves)  www.parker.com/pneu/lockout

Integrated Fittings

Accessories  www.parker.com/pneu/accessories

Ball Valves / Plug Valves  www.parker.com/pneu/ball

Quick Couplings

Hose & Fittings

Tubing & Fittings

Safety Guide, Offer of Sale
Filters, Regulators, Lubricators
Mini, Prep-Air® II, General Line

Section C
www.parker.com/pneu/frl

Product Selection ................................................C3-C5
Bulk Liquid Separators ........................................C6-C9
Air Line Filters ...................................................C11-C31
Air Line Coalescing Filters ............................C32-C50
Air Line Regulators ...........................................C52-C95
Filter / Regulator “Piggybacks” ..................C96-C111
Air Line Lubricators, Micro-Mist .........C112-C120
Air Line Lubricators, Mist .........................C121-C138
Combinations & Accessories 14A / 14G .......C140-C141
15A / 15G / 15B / 15H ..................C142-C147
06G / 16G / 06A / 16A ..................C148-C149
07G / 17G / 07A / 17A ..................C148-C149
06H / 16H / 06B / 16B ..................C150-C151
07H / 17H / 07B / 17B ..................C150-C151
06 / 07 Modular Accessories ..............C152-C153
P3N ........................................C154-C156
C628 ........................................C157
Air Line Accessories ..............................C158-C166

BOLD ITEMS ARE MOST POPULAR.
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.
## Product Selection Chart

### Air Preparation Systems & Prep-Air® II

#### Air Preparation Units

<table>
<thead>
<tr>
<th>Basic Unit</th>
<th>Series</th>
<th>Port Size</th>
<th>Bowls</th>
<th>Capacity</th>
<th>Elements (Micron)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1/8 1/4 3/8 1/2 3/4 1 1-1/4 1-1/2 2 2-1/2 3 4 6 Poly Metal Metal SG</td>
<td></td>
<td>5 20 40 Adsorber</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SEPARATORS</strong></td>
<td></td>
<td>X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C6</td>
<td></td>
</tr>
<tr>
<td>P3TF</td>
<td></td>
<td>X X X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C9</td>
<td></td>
</tr>
<tr>
<td><strong>FILTERS</strong></td>
<td></td>
<td>X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02F</td>
<td></td>
<td>X X X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C13</td>
<td></td>
</tr>
<tr>
<td>14F</td>
<td></td>
<td>X X X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C14</td>
<td></td>
</tr>
<tr>
<td>05F</td>
<td></td>
<td>X X X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C16</td>
<td></td>
</tr>
<tr>
<td>06F</td>
<td></td>
<td>X X X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C18</td>
<td></td>
</tr>
<tr>
<td>07F</td>
<td></td>
<td>X X X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C20</td>
<td></td>
</tr>
<tr>
<td>P3NF</td>
<td></td>
<td>X X X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C22</td>
<td></td>
</tr>
<tr>
<td>F602</td>
<td></td>
<td>X X X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C24</td>
<td></td>
</tr>
<tr>
<td>35F</td>
<td></td>
<td>X X X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C30</td>
<td></td>
</tr>
<tr>
<td>43F</td>
<td></td>
<td>X X X X X X X X X X X</td>
<td>Aluminum Body</td>
<td>Water Separator</td>
<td>C30</td>
<td></td>
</tr>
</tbody>
</table>

| **COALESCING** |        | X X X X X X X X X X X | Aluminum Body | Water Separator | |
| P3TF       |        | X X X X X X X X X X X | Aluminum Body | Water Separator | C35 |
| 10F        |        | X X X X X X X X X X X | Aluminum Body | Water Separator | C36 |
| 15F        |        | X X X X X X X X X X X | Aluminum Body | Water Separator | C38 |
| 11F        |        | X X X X X X X X X X X | Aluminum Body | Water Separator | C40 |
| 12F        |        | X X X X X X X X X X X | Aluminum Body | Water Separator | C42 |
| P3NF       |        | X X X X X X X X X X X | Aluminum Body | Water Separator | C44 |
| F701       |        | X X X X X X X X X X X | Aluminum Body | Water Separator | C46 |
| 35F        |        | X X X X X X X X X X X | Aluminum Body | Water Separator | C48 |
| 43F        |        | X X X X X X X X X X X | Aluminum Body | Water Separator | C48 |
| P3TF       |        | X X X X X X X X X X X | Aluminum Body | Water Separator | C50 |
## Product Selection Chart

<table>
<thead>
<tr>
<th>Basic Unit</th>
<th>Series</th>
<th>Port Size</th>
<th>Spring Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/8</td>
<td>1/4</td>
<td>3/8</td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Will follow Pilot Regulator setting.
# Product Selection Chart

## Prep-Air® II

### Air Preparation Units

<table>
<thead>
<tr>
<th>Basic Unit</th>
<th>Series</th>
<th>Port Size</th>
<th>Bowls</th>
<th>Capacity (Micron)</th>
<th>Elements (Micron)</th>
<th>Adsorber</th>
<th>Spring Range</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep-Air® II Air Preparation Units</td>
<td>Catalog 0700P-E</td>
<td>Selection Chart</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Basic Unit Series**

<table>
<thead>
<tr>
<th>1/8</th>
<th>1/4</th>
<th>3/8</th>
<th>1/2</th>
<th>3/4</th>
<th>1</th>
<th>1-1/4</th>
<th>2</th>
<th>Poly</th>
<th>Metal</th>
<th>SG</th>
</tr>
</thead>
</table>

**Micro Mist Lubricators**

<table>
<thead>
<tr>
<th>15L</th>
<th>X X</th>
<th>X X</th>
<th>X X</th>
<th>—</th>
<th>2 oz.</th>
<th>Cannot be filled under pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>16L</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>2.6 oz.</td>
<td>Cannot be filled under pressure</td>
</tr>
<tr>
<td>17L</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>4.9 oz.</td>
<td>Cannot be filled under pressure</td>
</tr>
<tr>
<td>02L</td>
<td>X X</td>
<td>Aluminum Body</td>
<td>25 oz.</td>
<td>Cannot be filled under pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>04L</td>
<td>X X</td>
<td>X X</td>
<td>—</td>
<td>1 oz.</td>
<td>Cannot be filled under pressure</td>
<td></td>
</tr>
<tr>
<td>06L</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>2.9 oz.</td>
<td>Can be filled under pressure</td>
</tr>
<tr>
<td>07L</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>6 oz.</td>
<td>Can be filled under pressure</td>
</tr>
<tr>
<td>P3NL</td>
<td>X X</td>
<td>X X</td>
<td>—</td>
<td>—</td>
<td>18 oz.</td>
<td>Can be filled under pressure</td>
</tr>
<tr>
<td>L066</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>—</td>
<td>16 oz.</td>
<td>Cannot be filled under pressure</td>
</tr>
</tbody>
</table>

**Nippled Combos**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>06G/16G</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>2 oz.</td>
<td>Two-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
<tr>
<td>06A/16A</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>2 oz.</td>
<td>Three-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
<tr>
<td>07G/17G</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>2 oz.</td>
<td>Two-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
<tr>
<td>07A/17A</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>2 oz.</td>
<td>Three-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
<tr>
<td>P3N3A</td>
<td>X X</td>
<td>X X</td>
<td>—</td>
<td>—</td>
<td>18 oz.</td>
<td>Two-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
<tr>
<td>C62B</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>—</td>
<td>32 &amp; 16</td>
<td>Three-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
</tbody>
</table>

**Modular Compressors**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>06B/16B</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>2 oz.</td>
<td>Three-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
<tr>
<td>07H/17H</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>2 oz.</td>
<td>Two-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
<tr>
<td>07B/17B</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>X X</td>
<td>2 oz.</td>
<td>Three-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
<tr>
<td>P3NCA</td>
<td>X X</td>
<td>X X</td>
<td>—</td>
<td>—</td>
<td>18 oz.</td>
<td>Two-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
<tr>
<td>P3NCB</td>
<td>X X</td>
<td>X X</td>
<td>—</td>
<td>—</td>
<td>18 oz.</td>
<td>Three-Unit</td>
<td>—</td>
<td>—</td>
<td>Std.</td>
<td>Std.</td>
<td>—</td>
</tr>
</tbody>
</table>

**Additional Information**

- Poly: Polypropylene
- Metal: Aluminum
- SG: Gas Flow
Bulk Liquid Separators – P3TF

Features
- Tested in Accordance with ISO 8573.9.
- High Liquid Removal Efficiencies at All Flow Conditions.
- Low Pressure Losses for Low Operational Costs.
- Multiple Port Sizes for a Given Flow Rate Provides Increased Flexibility During Installation.
- Suitable for Variable Flow Compressors.
- Works with All Types of Compressor and Compressor Condensate.
- Low Maintenance.
- Lightweight Cast Aluminum Housing with 1/4" to 3" Ports.
- External Surface Epoxy Painted for Maximum Corrosion Resistance.

Applications
- Bulk Liquid Removal at Any Point in a Compressed Air System
- Protection of Refrigeration and Heatless Regenerative Desiccant Dryers
- Liquid Removal from Compressor Inter-coolers / After-coolers
- Liquid Separation Within Refrigeration Dryers
- Pre-Filtration

Ordering Information

<table>
<thead>
<tr>
<th>Engineering Level</th>
<th>Thread Type</th>
<th>Port Size / Flow</th>
<th>Drain Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Current Engineering Level</td>
<td>2 BSPT</td>
<td>1/4 Inch / 21 SCFM</td>
<td>A Auto Internal Float*</td>
</tr>
<tr>
<td></td>
<td>9 NPT</td>
<td>3/8 Inch / 85 SCFM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/2 Inch / 85 SCFM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3/4 Inch / 233 SCFM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Inch / 233 SCFM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-1/2 Inch / 742 SCFM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 Inch / 742 SCFM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 Inch / 1695 SCFM</td>
<td></td>
</tr>
</tbody>
</table>

*Models are supplied with Auto Drain as Standard.
Operation

- Air Enters the Bulk Liquid Separator Inlet and Turns Into the Separator Module.
- The Inlet of the Separator Module Contains a Set of Fixed Vanes Which the Air Must Pass Through.
- The Vanes Force the Air to Spin Inside the Vessel.
- The Spinning Air is Then Forced to Change Direction as it Passes the Impinger.
- A Vortex is Created Which, Due to the Design of the Separator Module, Narrows and Intensifies as it Reaches the Lower Part of the Separator Module.
- Bulk Liquid is Removed From the Airstream Due to:
  - Directional Changes of the Airstream
  - Velocity Changes
  - Centrifugal Action of the Vortex
- As the Vortex Reaches the Bottom of the Module, Air is Forced Through The Center of the Vortex.
- Aerospace Turning Vanes, Located in the Outlet of the Separator Module, Turn an Inefficient Corner Into a Number of More Efficient Corners.
- Turning Vanes Reduce Turbulence, Minimizing Pressure Loss and Cost of Ownership.
- The Number of Vanes Required is Dependent Upon the Conduit Diameter.

Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Pipe Size</th>
<th>SCFM (L/s)</th>
<th>Maximum Operating Pressure psig (bar)</th>
<th>Operating Temperature</th>
<th>Weight Lb. (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3TFA92WAAN</td>
<td>1/4&quot;</td>
<td>21 (10)</td>
<td>23 (10)</td>
<td>0.9 (0.4)</td>
<td></td>
</tr>
<tr>
<td>P3TFA93WBAN</td>
<td>3/8&quot;</td>
<td>85 (40)</td>
<td>232 (16)</td>
<td>2.2 (1.0)</td>
<td></td>
</tr>
<tr>
<td>P3TFA94WCAN</td>
<td>1/2&quot;</td>
<td>85 (40)</td>
<td>2.2 (1.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P3TFA96WDAN</td>
<td>3/4&quot;</td>
<td>233 (110)</td>
<td>4.8 (2.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P3TFA98WEAN</td>
<td>1&quot;</td>
<td>233 (110)</td>
<td>2.6 (5.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P3TFA9BWGAN</td>
<td>1-1/2&quot;</td>
<td>742 (350)</td>
<td>5.3 (11.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P3TFA9CWHAN</td>
<td>2&quot;</td>
<td>742 (350)</td>
<td>5.3 (11.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P3TFA9EWKAN</td>
<td>3&quot;</td>
<td>1695 (800)</td>
<td>12.0 (26.4)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stated flows are for operation at 102 psig (7 bar) with reference to 20°C, 1 bar (a), 0% relative water vapor pressure.
### Technical Specifications – P3TF Series

#### Bulk Liquid Separators

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Wall Mounting Bracket Kit</th>
<th>Pipe Size</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
<th>BSPP F (mm)</th>
<th>G (mm)</th>
<th>H (mm)</th>
<th>J (mm)</th>
<th>K (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3TFA92WAAN</td>
<td>P3TKA00MWA</td>
<td>1/4&quot;</td>
<td>3.00</td>
<td>1.12</td>
<td>6.02</td>
<td>1.58</td>
<td>7.15</td>
<td>1/2</td>
<td>2.05</td>
<td>1.18</td>
<td>0.71</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(76)</td>
<td>(28.5)</td>
<td>(153)</td>
<td>(40)</td>
<td>(181.5)</td>
<td></td>
<td>(30)</td>
<td>(18)</td>
<td>(18)</td>
<td>(24.5)</td>
</tr>
<tr>
<td>P3TFA93WBAN</td>
<td>P3TKA00MWB</td>
<td>3/8&quot;</td>
<td>3.83</td>
<td>1.34</td>
<td>7.91</td>
<td>1.97</td>
<td>9.25</td>
<td>1/2</td>
<td>2.36</td>
<td>1.57</td>
<td>0.81</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(97.5)</td>
<td>(34)</td>
<td>(201)</td>
<td>(50)</td>
<td>(235)</td>
<td></td>
<td>(60)</td>
<td>(40)</td>
<td>(20.5)</td>
<td>(25.5)</td>
</tr>
<tr>
<td>P3TFA94WCAN</td>
<td>P3TKA00MWB</td>
<td>1/2&quot;</td>
<td>3.83</td>
<td>1.34</td>
<td>7.91</td>
<td>1.97</td>
<td>9.25</td>
<td>1/2</td>
<td>2.36</td>
<td>1.57</td>
<td>0.81</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(97.5)</td>
<td>(34)</td>
<td>(201)</td>
<td>(50)</td>
<td>(235)</td>
<td></td>
<td>(60)</td>
<td>(40)</td>
<td>(20.5)</td>
<td>(25.5)</td>
</tr>
<tr>
<td>P3TFA96WDAN</td>
<td>P3TKA00MWD</td>
<td>3/4&quot;</td>
<td>5.07</td>
<td>1.67</td>
<td>13.09</td>
<td>2.76</td>
<td>10.80</td>
<td>1/2</td>
<td>2.68</td>
<td>2.36</td>
<td>0.91</td>
<td>1.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(129)</td>
<td>(42.5)</td>
<td>(232.5)</td>
<td>(70)</td>
<td>(275)</td>
<td></td>
<td>(68)</td>
<td>(60)</td>
<td>(23)</td>
<td>(28)</td>
</tr>
<tr>
<td>P3TFA98WEAN</td>
<td>P3TKA00MWD</td>
<td>1</td>
<td>5.07</td>
<td>1.67</td>
<td>12.68</td>
<td>2.76</td>
<td>14.35</td>
<td>1/2</td>
<td>2.68</td>
<td>2.36</td>
<td>0.91</td>
<td>1.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(129)</td>
<td>(42.5)</td>
<td>(322)</td>
<td>(70)</td>
<td>(364.5)</td>
<td></td>
<td>(68)</td>
<td>(60)</td>
<td>(23)</td>
<td>(28)</td>
</tr>
<tr>
<td>P3TFA99BWGAN</td>
<td>P3TKA00MWF</td>
<td>1-1/2&quot;</td>
<td>6.70</td>
<td>1.97</td>
<td>18.68</td>
<td>3.94</td>
<td>20.64</td>
<td>1/2</td>
<td>3.62</td>
<td>3.31</td>
<td>1.26</td>
<td>1.54</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(170)</td>
<td>(50)</td>
<td>(474.5)</td>
<td>(100)</td>
<td>(524.5)</td>
<td></td>
<td>(92)</td>
<td>(84)</td>
<td>(32)</td>
<td>(39)</td>
</tr>
<tr>
<td>P3TFA9CWHAN</td>
<td>P3TKA00MWF</td>
<td>2&quot;</td>
<td>6.70</td>
<td>1.97</td>
<td>18.68</td>
<td>3.94</td>
<td>20.64</td>
<td>1/2</td>
<td>3.62</td>
<td>3.31</td>
<td>1.26</td>
<td>1.54</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(170)</td>
<td>(50)</td>
<td>(474.5)</td>
<td>(100)</td>
<td>(524.5)</td>
<td></td>
<td>(92)</td>
<td>(84)</td>
<td>(32)</td>
<td>(39)</td>
</tr>
<tr>
<td>P3TFA9EWKAN</td>
<td>P3TKA00MWJ</td>
<td>3&quot;</td>
<td>8.07</td>
<td>2.36</td>
<td>30.39</td>
<td>4.72</td>
<td>32.76</td>
<td>1/2</td>
<td>5.31</td>
<td>3.94</td>
<td>1.40</td>
<td>1.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(205)</td>
<td>(60)</td>
<td>(772)</td>
<td>(120)</td>
<td>(832)</td>
<td></td>
<td>(135)</td>
<td>(100)</td>
<td>(35.5)</td>
<td>(42.5)</td>
</tr>
</tbody>
</table>

#### Dimensions

- **Model Number**
- **Wall Mounting Bracket Kit**
- **Pipe Size**
- **A**
- **B**
- **C**
- **D**
- **E**
- **BSPP F**
- **G**
- **H**
- **J**
- **K**

#### Bulk Liquid Separator Kits & Accessories

**Drain Kit**

- **Materials of Construction**
  - **Automatic Float Drain**
    - Plastic
  - **Housing / Bowl**
    - Aluminum
  - **Seals**
    - Fluorocarbon

**For External Drains**, please reference WDV3-G

**Automatic Electrical Drain or ED Zero Loss Drain**

**Wall Mounting Bracket Kit**

Mounting brackets provide additional support to filters installed in flexible piping systems or OEM equipment.
Bulk Liquid Separators – P3TF

Features
- Designed in accordance with ASME and CRN
- Connection sizes: 4 inch & 6 inch
- High liquid removal efficiencies at all flow conditions
- Suitable for variable flow compressors
- Works with all types of compressor and compressor condensate
- External surface epoxy painted for maximum corrosion resistance

Bulk Liquid Separators

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Flow SCFM</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot; Flange</td>
<td>2119</td>
<td>P3TFAFFW2AN</td>
</tr>
<tr>
<td>6&quot; Flange</td>
<td>3814</td>
<td>P3TFAFGW3AN</td>
</tr>
</tbody>
</table>

Materials of Construction
- Body: Steel
- Baffle: Plated Steel
- Deflector: Plated Steel
- Seals: Fluorocarbon
- Stud: Plated Steel

Operating Information
- Operating Pressure: 232 PSIG (16 bar)
- Operating Temperature: 35°F to 150°F (1.5°C to 66°C)

Service Kits

<table>
<thead>
<tr>
<th>Description</th>
<th>P3TF Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dp Gauge Replacement Kit</td>
<td>DPG-Kit</td>
</tr>
<tr>
<td>Drain Kit - 1/2&quot; NPT</td>
<td>HDF-120-NPT-A</td>
</tr>
</tbody>
</table>

Inlet Air Pressure Correction

<table>
<thead>
<tr>
<th>PSI</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>2.65</td>
</tr>
<tr>
<td>29</td>
<td>1.87</td>
</tr>
<tr>
<td>44</td>
<td>1.53</td>
</tr>
<tr>
<td>58</td>
<td>1.32</td>
</tr>
<tr>
<td>73</td>
<td>1.18</td>
</tr>
<tr>
<td>87</td>
<td>1.08</td>
</tr>
<tr>
<td>100</td>
<td>1.00</td>
</tr>
<tr>
<td>116</td>
<td>0.94</td>
</tr>
<tr>
<td>131</td>
<td>0.88</td>
</tr>
<tr>
<td>145</td>
<td>0.84</td>
</tr>
<tr>
<td>160</td>
<td>0.80</td>
</tr>
<tr>
<td>174</td>
<td>0.76</td>
</tr>
<tr>
<td>189</td>
<td>0.73</td>
</tr>
<tr>
<td>203</td>
<td>0.71</td>
</tr>
<tr>
<td>218</td>
<td>0.68</td>
</tr>
<tr>
<td>232</td>
<td>0.66</td>
</tr>
<tr>
<td>247</td>
<td>0.64</td>
</tr>
<tr>
<td>261</td>
<td>0.62</td>
</tr>
<tr>
<td>275</td>
<td>0.61</td>
</tr>
<tr>
<td>290</td>
<td>0.59</td>
</tr>
</tbody>
</table>

For pressures above 232 PSIG (16 bar), use manual drain.
Prep-Air® II
Air Preparation Units

Notes
Filters

- Pipe Sizes 1/8 thru 2 Inch
- Flows to 1000 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 02F Series, 1/4 Inch
- Miniature 14F Series, 1/8 and 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
- Hi-Flow P3NF Series, 3/4, 1 and 1-1/2 Inch
- Hi-Flow F602 Series, 3/4, thru 2 Inch
- Hi-Flow 35F Series, 1-1/2 and 2 Inch
- Hi-Flow 43F Series, 3 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.
Particulate Filters:
For the removal of solid particle contaminants down to 5 microns and the separation of bulk liquids.
This type of filter is generally used in industrial applications where liquid water and oil, and harmful dirt particles must be removed from the compressed air system. This type of filter should also be used as a prefilter for the Coalescing (oil removal) filter.

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. On the 09 Series, unscrew the drain valve (F) slightly until the liquid begins to drain.

Semi Automatic Drain
(A) Accepts 3/16 I.D. Tubing
(Overnight Drain)
This drain offers a semi-automatic function when there is a differential pressure in the filter which occurs when system pressure is shut off. The drain can also be used manually by gripping it with your fingertips and pushing upward.

Automatic Pulse Drain
(B) Accepts 1/8 I.D. Tubing
(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.

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.
Application
This small, aluminum in-line filter is designed to provide protection for portable pneumatic hand tools. It weighs only 2 ounces with a throw-away filter element rated at 5 micron. Either port may be used as the inlet port. Flow is 17 SCFM (10.3 dm$^3$/s) at 90 psig (6.2 bar) inlet pressure with 5 psig (0.3 bar) pressure drop.

Specifications
Flow Capacity*.............................. 17 SCFM (8 dm$^3$/s)
Operating Temperature .................. 32° to 150°F (0° to 65.5°C)
Maximum Supply Pressure .................. 200 psig (13.8 bar)
Standard Filtration .......................... 5 Micron
Port Size NPT / BSPT ......................... 1/4
Weight lb. (kg) ................................ 0.13 lb. (0.06 kg)

* Inlet pressure 90 psig (6.2 bar). Pressure drop 5 PSID (0.3 bar).

“F” Series Filters, Type “A” 5 micron elements: All Parker 5 micron elements meet or exceed ISO Class 3 for maximum particle size and concentration of solid contaminants.

Materials of Construction
Body ................................................. Aluminum
Baffle ................................................. Aluminum
Filter Element ................................. Sintered Polyethylene
Seals ................................................. Nitrile

Replacement Element Kits
5 Micron ............................................. PS436

Ordering Information
<table>
<thead>
<tr>
<th>Port Size</th>
<th>5 Micron</th>
<th>02F1BA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>02F1BA</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part Number</th>
<th>02F Filter Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>02F1BA</td>
<td>A 2.50 (63.5)</td>
</tr>
</tbody>
</table>

Inches (mm)

![Graph](image)

02F1BA
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\(^\text{§}\)
  1/4” – 24 SCFM\(^\text{§}\)

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT Twist Drain</th>
<th>NPT Automatic Pulse Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly Bowl ‡</td>
<td>14F01BB</td>
<td>14F05BB</td>
</tr>
<tr>
<td>1/8”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4”</td>
<td>14F11BB</td>
<td>14F15BB</td>
</tr>
<tr>
<td>Metal Bowl without Sight Gauge</td>
<td>14F03BB</td>
<td>14F07BB</td>
</tr>
<tr>
<td>1/8”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4”</td>
<td>14F13BB</td>
<td>14F17BB</td>
</tr>
</tbody>
</table>

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

For polycarbonate bowl see Caution on page C2.

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

Ordering Information

<table>
<thead>
<tr>
<th>14F</th>
<th>1</th>
<th>1</th>
<th>B</th>
<th>B</th>
<th>—</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Bowl Options</th>
<th>Elements</th>
<th>Engineering Level</th>
<th>Port Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1/8 Inch</td>
<td>Polycarbonate Bowl</td>
<td>A 40 Micron</td>
<td>B Current</td>
<td>Blank</td>
</tr>
<tr>
<td>1 1/4 Inch</td>
<td>Twist Drain</td>
<td>B 5 Micron</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Z Adsorber</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

BOLD ITEMS ARE MOST POPULAR.
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 –
- 40 Micron .............................................................. PS401P
- 5 Micron ................................................................. PS403P
- 5 Micron Cartridge Kit ............................................. PS407P
- Adsorber ............................................................... PS452P

Mounting Bracket Kit.............................................. 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
- 40 Micron (Optional) ............................................... Plastic
- Adsorber (Optional) ............................................... Activated Charcoal
Seals ........................................................................ Nitrile
### 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.
- 40 micron filter element standard, 5 micron and adsorber available.
- Shown with recommended metal bowl guard.
- High Flow: 1/4" – 54 SCFM
  3/8" – 70 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>1/4&quot;</td>
<td>Poly Bowl / Metal Guard</td>
<td>05F12A*</td>
<td>05F1PA*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>Metal Bowl / Sight Gauge</td>
<td>05F22A*</td>
<td>05F2PA*</td>
</tr>
</tbody>
</table>

#### Standard part numbers shown bold.

For other models refer to ordering information below.

For polycarbonate bowl see Caution on page C2.

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

#### Ordering Information

**05F 1 2 A A — —**

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Bowl Options</th>
<th>Elements</th>
<th>Engineering Level</th>
<th>Port Type</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>1/8&quot; Tubing</td>
<td>A 40 Micron</td>
<td>A  Current</td>
<td>Blank NPT</td>
<td>Blank P</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>1/8&quot; Tubing</td>
<td>B 5 Micron</td>
<td>Blank BSPP</td>
<td>BSPT</td>
<td>No Options</td>
</tr>
</tbody>
</table>

**BOLD ITEMS ARE MOST POPULAR.**

---

**Notes:**
- Grayed out items are obsolete.
- † With Twist or Automatic Pulse Drain
Technical Information

05F Filter Kits & Accessories

Bowl Guard Kit ................................................................. PS956P

Bowl Kits –
Poly Bowl –
  Automatic Pulse Drain ............................................. PS995P
  Twist Drain ....................................................... PS932P
  Metal Bowl –
  Automatic Pulse Drain ........................................... PS997P
  Twist Drain ..................................................... PS934P
  Sight Gauge / Automatic Pulse Drain ................. PS996P
  Sight Gauge / Twist Drain ................................ PS935P

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

Drain Kit –
  Automatic Pulse Drain ........................................ PS998P
  Semi-Auto Drain ........................................ PS511P
  Twist Drain ................................................ PS512P
  Push ‘N’ Drain ............................................... PS513P

Filter Element Kits –
  40 Micron ................................................ PS901P
  5 Micron .................................................. PS902P
  Adsorber ................................................ PS931P

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 –
  40 Micron (Standard) ........................................... Plastic
  5 Micron (Optional) .................................................. Plastic
  Adsorber (Optional) ........................................... Activated Charcoal

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

Sight Gauge, DPI ........................................................... Polyamide (Nylon)
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 recommended metal bowl guard.
- High Flow: 1/4" – 53 SCFM
  3/8" – 80 SCFM
  1/2" – 85 SCFM

### Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>06F</th>
<th>1</th>
<th>2</th>
<th>A</th>
<th>C</th>
<th>—</th>
<th>—</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/8 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BOLD ITEMS ARE MOST POPULAR.**
Technical Information

06F Filter Kits & Accessories

Bowl Guard Kit .................................................. PS705P
Bowl Kits –
Poly Bowl –
  Automatic Float Drain ....................................... PS722P
  Twist Drain .......................................................... PS732P
Metal Bowl –
  Automatic Float Drain ....................................... PS726P
  Twist Drain .......................................................... PS734P
  Sight Gauge / Automatic Float Drain .................. PS723P
  Sight Gauge / Twist Drain ................................. PS735P
DPI Replacement Kit ............................................ PS781P
Drain Kits –
Automatic Float Drain ....................................... PS506P
Semi-Auto Drain .................................................. PS511P
Twist Drain .......................................................... PS512P
Push 'N' Drain .................................................... PS513P
Filter Element Kits –
40 Micron .......................................................... PS701P
  5 Micron ............................................................. PS702P
Adsorber ............................................................ PS731P
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 (17.2 bar)
    32°F to 175°F (0°C to 80°C)
With Differential Pressure Indicator:
  0 to 150 psig (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................................................................. 1.4 lb. (0.6 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
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 –
  40 Micron (Standard) ........................................ Plastic
  5 Micron (Optional) ........................................... Plastic
  Adsorber (Optional) .......................................... Activated Charcoal
  Seals ............................................................ Nitrile
  Sight Gauge ................................................... Polyamide
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 recommended metal bowl guard.
- High Flow: 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></td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>07F32AC</td>
<td>07F36AC</td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>07F42AC</td>
<td>07F46AC</td>
<td></td>
</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>07F34AC</td>
<td>07F38AC</td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>07F44AC</td>
<td>07F48AC</td>
<td></td>
</tr>
</tbody>
</table>

Standard part numbers shown bold. For other models refer to ordering information below.
‡ For polycarbonate bowl see Caution on page C2.
§ 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>07F Filters – Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 1/2 Inch</td>
<td>07F32AC</td>
</tr>
<tr>
<td>4 3/4 Inch</td>
<td>07F42AC</td>
</tr>
</tbody>
</table>

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

Elements
- A 40 Micron
- B 5 Micron

Options
- Blank
- NPT

Port Type
- Blank
- BSPP

* 1/2 inch meets 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
    - Automatic Float Drain: PS826P
    - Twist Drain: PS834P
    - Sight Gauge / Automatic Drain: PS823P
    - Sight Gauge / Twist Drain: PS835P
- **DPI Replacement Kit**: PS781P
- **Drain Kits**
  - Automatic Float Drain: PS506P
  - Semi-Auto Drain: PS511P
  - Twist Drain: PS512P
  - Push ‘N’ Drain: PS513P
- **Filter Element Kits**
  - 40 Micron: PS801P
  - 5 Micron: PS802P
  - Adsorber: PS831P
- **Mounting Bracket Kit**: PS843P
- **Sight Gauge Kit**: PS914P

### Specifications

- **Bowl Capacity**: 7.2 Ounces
- **Sump Capacity**: 2.8 Ounces
- **Port Threads**: 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**: Transparent Polycarbonate (Zinc) With or Without Sight Gauge
- **Bowl Guards**: Steel
- **Collar**: Plastic or Metal
- **Deflector, Shroud & Baffle**: Plastic
- **Drains**
  - Twist Drain – Body & Nut: Nitrile
  - Push ‘N’ Drain – Body: Nitrile
  - Stem: Brass
  - **Automatic Float Drain**
    - Housing, Float: Plastic
    - Seals: Nitrile
    - Springs, Push Rod: Stainless Steel
- **Filter Elements**
  - 40 Micron (Standard): Plastic
  - 5 Micron (Optional): Plastic
  - Adsorber (Optional): Activated Charcoal
  - 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§

**Port Size**

<table>
<thead>
<tr>
<th>Port Size</th>
<th>3/4&quot;</th>
<th>1&quot;</th>
<th>1-1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPT</td>
<td>3/4&quot;</td>
<td>1&quot;</td>
<td>1-1/2&quot;</td>
</tr>
<tr>
<td>Twist Drain</td>
<td>P3NF96GSM</td>
<td>P3NF96GSA</td>
<td>P3NF99GSA</td>
</tr>
<tr>
<td>Automatic Float Drain</td>
<td>P3NF96GSM</td>
<td>P3NF96GSA</td>
<td>P3NF99GSA</td>
</tr>
</tbody>
</table>

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

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

**Ordering Information**

**Note:** BSPP ported units supplied using NPT ported bodies and BSPP port block kits.

BOLD ITEMS ARE MOST POPULAR.
## Technical Information

### 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** –
  - 40 Micron (Standard) ............................................ Plastic
  - 5 Micron (Optional) .................................................. Plastic
  - Adsorber (Optional) ............................................ Activated Charcoal
- **Seals** .................................................. Nitrile
- **Sight Gauge** ......................................... Polyamide (Nylon)

* If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.

---

### P3NF Filter Kits & Accessories

**Bowl Kits** –
- **Metal Bowl** –
  - Sight Gauge / Automatic Float Drain ......................... P3NKA00BSA
  - Sight Gauge / Twist Drain .................................... P3NKA00BSM
  - Sight Gauge / Push 'N' Drain ............................... P3NKA00BSP
- **Bowl Latch Kit** ........................................... C11A33
- **DPI Replacement Kit** ...................................... PS781P
- **Drain Kit** –
  - Automatic Float Drain .................................... PS506P
  - Twist Drain .............................................. PS512P

**Filter Elements** –
- 40 Micron ................................................. P3NKA00ESG
- 5 Micron .................................................. P3NKA00ESE
- Adsorber .................................................. P3NKA00ESA
- **Mounting Bracket Kit** .................................. P3NKA00MW
- **Sight Gauge Kit** ....................................... P3NKA00PE

---

**Technical Information**
F602 Filters – Hi-Flow

Features
- Excellent water removal efficiency
- For heavy duty applications with minimum pressure drop requirement.
- Unique deflector plate that creates swirling of the air stream ensuring maximum water and dirt separation.
- Large filter element surface guarantees low pressure drop and increased element life.
- 40 micron filter element standard, 5 micron available.
- Metal bowl with sight gauge standard.
- Twist drain as standard, optional auto drain.
- Large bowl capacity.
- Optional high capacity bowl(s) available.
- High Flow: 3/4” – 270 SCFM\(^\S\)
  1” – 300 SCFM\(^\S\)

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Twist Drain</th>
<th>Internal Auto Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4”</td>
<td></td>
<td>F602-06WJ</td>
<td>F602-06WJR</td>
</tr>
<tr>
<td>1”</td>
<td></td>
<td>F602-08WJ</td>
<td>F602-08WJR</td>
</tr>
<tr>
<td>3/4”</td>
<td></td>
<td>F602-06EJ</td>
<td>F602-06EJR</td>
</tr>
<tr>
<td>1”</td>
<td></td>
<td>F602-08EJ</td>
<td>F602-08EJR</td>
</tr>
</tbody>
</table>

Standard part numbers shown bold.
For other models refer to ordering information below.
\(^\S\) SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Ordering Information

- **F** 602 — 06 W J — /**
- **Port Threads**
  - NPT
  - BSPP
- **Port Size**
  - 06 3/4 Inch
  - 08 1 Inch
- **Bowl**
  - E 32 oz. Large Capacity Metal without Sight Gauge
  - W 16 oz. Metal with Sight Gauge
- **Element**
  - G 5 Micron
  - J 40 Micron
- **Drains and Options**
  - Blank
  - Manual Twist Drain
  - Q External Heavy Duty Auto Drain
  - R Internal Auto Drain
  - U Semi-Auto Drain

BOLD ITEMS ARE MOST POPULAR.
Technical Information

F602 Filter Kits & Accessories

Bowl Kits –
- Aluminum (E) 32 oz. .................................................. BK603B
- Zinc with Sight Gauge (W) 16 oz. ................................. BK605WB

Drain Kits –
- External Auto (E) 32 oz. .................................................. SA602D
- External Auto (W) 16 oz. .................................................. SA602D
- Internal Auto (All) ............................................................ SA602MD
- Manual (All) ................................................................. SA600Y7-1
- Semi-Automatic “Overnight” Drain ................................ SA602A7
  (Drains automatically under zero pressure)

Filter Element Kits –
- 40 Micron (All) ............................................................. EK602B
- 5 Micron (All) ............................................................... EK602VB

Mounting Bracket Kit
(Pair or 2 Kits Pipe Mounted Brackets needed) –
- 3/4" Unit ........................................................... SA200AW57
- 1" Unit .............................................................. SA200CW57

Repair Kits –
- Deflector, Baffle Assembly, and Retaining Rod (E,W) .... RK602B
- External Auto Drain (All) ............................................... RK602D
- Internal Auto Drain (All) ............................................... RK602MD
- Metal Bowl with Sight Gauge (W) 16 oz. .................... RKB605WB

Specifications

Bowl Capacity –
- Aluminum Bowl (E) 32 oz. ........................................... 32 Ounces
- Zinc Bowl (W) 16 oz. .................................................. 16 Ounces

Port Threads ......................................................... 3/4, 1 Inch

( ) = Bowl Type

Pressures & Temperatures

Primary Pressure - bar
- 1.7
- 3.4
- 5.2
- 6.9
- 10.3

Primary Pressure - PSIG
- 25
- 50
- 75
- 100
- 150

Flow Characteristics
F602-06WJ
3/4-inch Port

Pressure Drop - bar
- 0
- 1
- 2
- 3

Pressure Drop - PSIG
- 0
- 40
- 80
- 120
- 160

Flow - dm^3/s
- 0
- 25
- 100
- 140

Technical Specifications – F602
Catalog 0700P-E

Air Line Filters

“Q” Option External Heavy Duty Auto Drain
SA602D / SA603D
For heavy duty applications where the filter is being used to remove large volumes of liquid and/or particulate matter from the airstream, the external automatic drain (“Q” option) should be used.

Hydraulics

Body ................................................................. Zinc
Bowl –
- (E) 32 oz. .......................................................... Aluminum without Sight Gauge
- (W) 16 oz. .......................................................... Zinc with Sight Gauge

Drain –
- Manual Twist & Overnight ........................................ Brass
- Housing “R” ......................................................... Acetal
- Housing “Q” ....................................................... Bronze

Filter Elements –
- 40 Micron (Standard) ........................................... Polypropylene
- 5 Micron (Optional) .............................................. Polypropylene

Seals ................................................................. Nitrile
Sight Gauge ....................................................... Nylon

Materials of Construction

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics
F602 Filters – Hi-Flow

Features
• Excellent water removal efficiency
• For heavy duty applications with minimum pressure drop requirement.
• Unique deflector plate that creates swirling of the air stream ensuring maximum water and dirt separation.
• Large filter element surface guarantees low pressure drop and increased element life.
• 40 micron filter element standard, 5 micron available.
• Metal bowl with sight gauge standard.
• Twist drain as standard, optional auto drain.
• Large bowl capacity.
• Optional high capacity bowl(s) available.
• High Flow: 1-1/4" – 390 SCFM§
  1-1/2" – 450 SCFM§

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Twist Drain</th>
<th>NPT</th>
<th>Internal Auto Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/4&quot;</td>
<td>F602-10WJ</td>
<td>F602-10WJR</td>
<td></td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>F602-12WJ</td>
<td>F602-12WJR</td>
<td></td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>F602-10EJ</td>
<td>F602-10EJR</td>
<td></td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>F602-12EJ</td>
<td>F602-12EJR</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

F 602 — 10 W J — /**
### Technical Information

#### Pressure Drop vs Flow Characteristics

<table>
<thead>
<tr>
<th>Flow - SCFM</th>
<th>Pressure Drop - PSIG</th>
<th>Primary Pressure - PSIG</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>0</td>
<td>1.7</td>
</tr>
<tr>
<td>50</td>
<td>1</td>
<td>3.4</td>
</tr>
<tr>
<td>75</td>
<td>2</td>
<td>5.2</td>
</tr>
<tr>
<td>100</td>
<td>3</td>
<td>6.9</td>
</tr>
<tr>
<td>150</td>
<td>5</td>
<td>10.3</td>
</tr>
</tbody>
</table>

### F602 Filter Kits & Accessories

#### Bowl Kits

- Aluminum (E) 32 oz. .................. BK603B
- Zinc with Sight Gauge (W) 16 oz.  .............. BK605WB

#### Drain Kits

- External Auto (E) 32 oz. .................. SA603D
- External Auto (W) 16 oz. .................. SA602D
- Internal Auto (All) ...................... SA602MD
- Manual (All) .......................... SA600Y7-1
- Semi-Automatic "Overnight" Drain ........... SA602A7

#### Filter Element Kits

- 40 Micron (All) .......................... EK602B
- 5 Micron (All) .......................... EK602VB

#### Repair Kits

- Deflector, Baffle Assembly, and Retaining Rod (All) ............ RK602C
- External Auto Drain (All) .......................... RK602D
- Internal Auto Drain (All) .......................... RK602MD
- Metal Bowl with Sight Gauge (W) 16 oz. ............. RKB605WB

### Specifications

#### Bowl Capacity

- Aluminum (E) 32 oz. .................. 32 Ounces
- Zinc (W) 16 oz. .................. 16 Ounces

#### Port Threads

- 1-1/4, 1-1/2 Inch

### Pressure & Temperature Ratings

- Aluminum Bowl (E) 32 oz. – 0 to 300 psig (0 to 20.4 bar)
  40°F to 150°F (4.4°C to 65.6°C)
- Zinc (W) 16 oz. – 0 to 250 psig (0 to 17.2 bar)
  40°F to 150°F (4.4°C to 65.6°C)

### Weight

- Aluminum Bowl (E) 32 oz. .................. 7.7 lb. (3.49 kg) / Unit
  31 lb. (14.06 kg) / 4-Unit Master Pack
- Zinc Bowl (W) 16 oz. .................. 7 lb. (3.18 kg) / Unit
  28 lb. (12.70 kg) / 4-Unit Master Pack

### Materials of Construction

#### Body

- Zinc

#### Bowls

- (E) 32 oz. .................. Aluminum without Sight Gauge
- (W) 16 oz. .................. Zinc with Sight Gauge

#### Drain

- Manual Twist & Overnight .................. Brass
- Housing "R" .......................... Acetal
- Housing "Q" .......................... Bronze

#### Filter Elements

- 40 Micron (Standard) .................. Polypropylene
- 5 Micron (Optional) .................. Polypropylene

#### Seals

- Nitrile

#### Sight Gauge

- Nylon

---

"Q" Option External Heavy Duty Auto Drain
SA602D / SA603D

For heavy duty applications where the filter is being used to remove large volumes of liquid and/or particulate matter from the airstream, the external automatic drain ("Q" option) should be used.
F602 Filters – Hi-Flow

Features
- Excellent water removal efficiency
- For heavy duty applications with minimum pressure drop requirement.
- Unique deflector plate that creates swirling of the air stream ensuring maximum water and dirt separation.
- Large filter element surface guarantees low pressure drop and increased element life.
- 40 micron filter element standard.
- Metal bowl with sight gauge standard.
- Twist drain as standard, optional auto drain.
- Large bowl capacity.
- Optional high capacity bowl(s) available.
- High Flow: 2 & 2-1/2” – 1200 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Twist Drain</th>
<th>Internal Auto Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Bowl / Sight Gauge - 16 oz.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2&quot;</td>
<td>F602-16WJ</td>
<td>F602-16WJR</td>
<td></td>
</tr>
<tr>
<td>2-1/2&quot;</td>
<td>F602-20WJ</td>
<td>F602-20WJR</td>
<td></td>
</tr>
<tr>
<td>Metal Bowl without Sight Gauge - 32 oz.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2&quot;</td>
<td>F602-16EJ</td>
<td>F602-16EJR</td>
<td></td>
</tr>
<tr>
<td>2-1/2&quot;</td>
<td>F602-20EJ</td>
<td>F602-20EJR</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

F 602 — 16 W J — /**

Port Threads
- NPT
  G BSPP

Port Size
- 16 2 Inch
  20 2-1/2 Inch

Bowl
E 32 oz. Large Capacity Metal without Sight Gauge
W 16 oz. Metal with Sight Gauge

Element
J 40 Micron

Drains and Options
Blank
Q Manual Twist Drain
E External Heavy Duty Auto Drain
R Internal Auto Drain
U Semi-Auto Drain

Engineering Level
* Will be Entered at Factory.

BOLD ITEMS ARE MOST POPULAR.
Technical Information

### F602 Filter Kits & Accessories

**Bowl Kits** –
- Aluminum (E) 32 oz. ........................................... BK603B
- Zinc with Sight Gauge (W) 16 oz. ......................... BK605WB

**Drain Kits** –
- External Auto (E) 32 oz. ..................................... SA602D
- Internal Auto (All) ................................................ SA602MD
- Manual (All) ...................................................... SA600Y7-1
- Semi-Automatic “Overnight” Drain ...................... SA602A7

**Filter Element Kits** –
- 40 Micron (All) .................................................. EK602G

**Repair Kits** –
- Deflector, Baffle Assembly, and Retaining Rod (All) ... RK602C
- External Auto Drain (All) ...................................... RK602D
- Internal Auto Drain (All) ....................................... RK602MD
- Metal Bowl with Sight Gauge (W) 16 oz. .............. RKB605WB

### Specifications

**Bowl Capacity** –
- Aluminum (E) 32 oz. ........................................... 32 Ounces
- Zinc (W) 16 oz. .................................................. 16 Ounces

**Port Threads** ...................................................... 2, 2-1/2 Inch

( ) = Bowl Type

### Pressure & Temperature Ratings –

- Aluminum Bowl (E) 32 oz. – 0 to 300 psig (0 to 20.4 bar)
  - 40°F to 150°F (4.4°C to 65.6°C)
- Zinc (W) 16 oz. – 0 to 250 psig (0 to 17.2 bar)
  - 40°F to 150°F (4.4°C to 65.6°C)
- With Internal Auto Drain (R) – 20 to 175 psig (1.4 to 11.9 bar)
  - 40°F to 125°F (4.4°C to 52°C)
- With External Auto Drain (Q) – 0 to 250 psig (0 to 17.2 bar)
  - 40°F to 150°F (4.4°C to 65.6°C)

### Weight –

- Aluminum Bowl (E) 32 oz. .......................... 10.3 lb. (4.67 kg) / Unit
  - Aluminum Bowl (E) 32 oz. .......................... 11 lb. (4.99 kg) / 1-Unit Master Pac
- Zinc Bow (W) 16 oz. ..................................... 9.8 lb. (4.45 kg) / Unit
  - Zinc Bow (W) 16 oz. ..................................... 39 lb. (17.69 kg) / 4-Unit Master Pac

### Materials of Construction

**Body** ................................................................. Aluminum

**Bows** –
- (E) 32 oz. ......................................................... Aluminum without Sight Gauge
- (W) 16 oz. ......................................................... Zinc with Sight Gauge

**Drain** –
- Manual Twist & Overnight ................................. Brass
- Housing “R” .......................................................... Acetal
- Housing “Q” ......................................................... Bronze

**Filter Elements** –
- 40 Micron (Standard) ......................................... Polypropylene

**Seals** ................................................................. Buna N

**Sight Gauge** ...................................................... Nylon
35F, 43F Filters – Hi-Flow

**Features**

- Heavy-duty cast aluminum housings to withstand operating pressures up to 250 PSIG*.
- Differential pressure indicator to eliminate the guesswork of element replacement.
- Differential pressure gauge available, order separately, Kit DP3-01-000.
- Unique drain mounting plate design offers a trouble-free method for interchanging and installing external drains.
- High Flow: 1-1/2" – 1280 SCFM§
  2" – 1400 SCFM§
  3" – 2900 SCFM§.

* Without Differential Pressure Indicator – Max. supply pressure is 250 PSIG (20.7 bar).

**Features**

- Heavy-duty cast aluminum housings to withstand operating pressures up to 250 PSIG*.
- Differential pressure indicator to eliminate the guesswork of element replacement.
- Differential pressure gauge available, order separately, Kit DP3-01-000.
- Unique drain mounting plate design offers a trouble-free method for interchanging and installing external drains.
- High Flow: 1-1/2" – 1280 SCFM§
  2" – 1400 SCFM§
  3" – 2900 SCFM§.

* Without Differential Pressure Indicator – Max. supply pressure is 250 PSIG (20.7 bar).

**Features**

<table>
<thead>
<tr>
<th>Port size</th>
<th>Element type</th>
<th>Part number (NPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35F</td>
<td>1-1/2</td>
<td>5 micron</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>5 micron</td>
</tr>
<tr>
<td>43F</td>
<td>3</td>
<td>5 micron</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

#### 35F Filter Dimensions

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.80 (198)</td>
<td>7.75 (197)</td>
<td>2.81 (71)</td>
<td>16.24 (412.5)</td>
<td>19.07 (484)</td>
<td>3.88 (98.6)</td>
<td>.55 (14)</td>
</tr>
</tbody>
</table>

#### 43F Filter Dimensions

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.94 (227)</td>
<td>8.88 (225.5)</td>
<td>3.48 (88)</td>
<td>25.96 (659.4)</td>
<td>29.44 (748)</td>
<td>4.44 (112.8)</td>
<td>.55 (14)</td>
</tr>
</tbody>
</table>

* Max. pressure rating 150 PSIG.

** Gauge ships loose.
Technical Information

35F & 43F Filter Kits & Accessories

Differential Pressure Indicator Cap –
  For pressures over 150 PSIG ..................... GRP-95-022
Differential Pressure Gauge ..................... DP3-01-000
Differential Pressure Indicator ................. DP2-02-001

Drain, Automatic, Internal, Fluorocarbon,
  1/8 NPT ................................................. GRP-95-981

Drain Plate Kit –
  1/2 NPT Tapped Drain Port .......................... GRP-95-393

Element
  35F, 5 Micron ................................. FRP-95-505
  43F, 5 Micron ................................. FRP-95-508

Manual Drain Kit
  with 1/2" Drain Plate .............................. GRP-95-392

Specifications

| Maximum Supply | without DPI and with Pressure Gauge.................. 250 PSIG (17.2 bar)* | without DPI........................................ 150 PSIG (10.3 bar) |
| Operating Temperature | 32° to 150°F (0° to 65.5°C) |  |

Port Size –
  35F ..................................................................... 1-1/2, 2 Inch
  43F ..................................................................... 3 Inch

Standard Filtration ........................................ 5 Micron

Weight –
  35F ..................................................... 19.3 lb. (8.7 kg)
  43F ..................................................... 32.8 lb. (14.9 kg)

* Without pressure indicator

Materials of Construction

| Baffle | Plated Steel |
| Body | Aluminum |
| Bowls | Aluminum |
| Deflector | Plated Steel |
| Element Retainer | Plated Steel |
| Filter Element | Polyethylene |
| Seals | Fluorocarbon |
| Stud | Plated Steel |
Coalescing Filters

- Pipe Sizes 1/8 thru 3 inch
- Flows to 1660 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.

- Miniature 02F Series, 1/4 Inch I.D.
- Miniature 10F Series, 1/8 and 1/4 Inch
- Economy 15F Series, 1/4 and 3/8 Inch
- Compact 11F Series, 1/4, 3/8 and 1/2 Inch
- Standard 12F Series, 3/8, 1/2 and 3/4 Inch
- High Flow P3NF Series, 3/4, 1 and 1-1/2 Inch
- High Flow F701 Series, 3/4 & 1 Inch
- Hi-Flow 35F Series, 1-1/2 and 2 Inch
- Hi-Flow 43F Series, 3 Inch
- P3TF Series Flanged Filters, 4 & 6 Inch

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.

Media Specifications

<table>
<thead>
<tr>
<th>Grade</th>
<th>Coalescing Efficiency</th>
<th>Maximum Oil Carveryover</th>
<th>Micron Rating</th>
<th>Pressure Drop (PSID)2 @ Rated Flow</th>
</tr>
</thead>
<tbody>
<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>

1 Tested per BCAS 860900 at 40 ppm inlet.
2 Add dry + wet for total pressure drop.

D.O.P. = Diocylphthalate

Element Selection

<table>
<thead>
<tr>
<th>Element Grade</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 (.01 Micron)</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 (.7 Micron)</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>

Reading Nomograms for Coalescing Filters

To size a coalescer, refer to the nomograms below. First determine the system pressure and find that pressure on the vertical axis on the left. Next, find the required flow rate on the middle vertical axis. Draw a connecting line between the two points extending to the middle vertical axis giving the recommended coalescer series. If the intersection on the model number axis is between models then choose the model above the intersection point insuring the proper flow in the unit.
Coalescing Filters
(Oil Removal)

Specifically designed for the removal of solid particles, water and oil aerosols down to 0.01 micron. Maximum remaining oil content of air leaving the filter down to 0.01ppm at 70°F (21°C) at a pressure of 100 psig (6.9 bar) using a typical compressor lubricant. Two filter element grades are offered to better meet your air quality requirements.

Grade 10 filter elements are used for most air coalescing applications where the removal of liquid aerosols and submicron particles for general air quality is required. Protection of components such as air valves, cylinders, as well as air conveyors, air gaging, air bearings, air control circuits and paint spraying equipment are examples of specific end-use applications. This grade of filter element should be used as a prefilter for the Grade C coalescing filter.

Grade 6 high-efficiency filter elements are used where the removal of extremely fine particulate and virtually “oil-free” or high quality air is necessary. Specific end-use applications are protection of critical air control circuits, air logic systems, flow and temperature controllers, food processing, electronics, health care and film processing.

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.

Semi Automatic Drain

(Overnight Drain)
This drain offers a semi-automatic function when there is a differential pressure in the filter which occurs when system pressure is shut off. The drain can also be used manually by gripping it with your fingertips and pushing upward.

Automatic Pulse Drain

(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.

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.
When all mechanisms are combined and utilized by a deep bed of the correct type of filter material, removal of virtually all particles whether liquid or solid, is achieved.

Coalescing Filters
Essentially, coalescing filters Grade 10 (.7 micron) & 6 (.01 micron), rely on what is known as mechanical filtration for their effectiveness. The main mechanisms of mechanical filtration are direct interception, inertial impaction and diffusion. Electrostatic attraction can have some bearing although the efficiency of coalescing filters is not dependent on this mechanism.

Direct Interception occurs when a particle collides with and adheres to a fiber of the filter material without deviating out of the streamline flow. This mechanism tends to take place on the surface of the filter material and affects mainly larger particles over 1 micron in size.

Inertial Impaction occurs when a particle is unable to follow the tortuous path around the filter fibers and eventually collides with and adheres to one of the fibers. Typically affecting particles in the 0.3 micron -1 micron size range.

Diffusion or Brownian Movement, as it is sometimes called, occurs with extremely small particles which tend to wander within the gas stream, increasing their chances of colliding with and adhering to a fiber. This usually affects particles below 0.3 micron in size. A degree of overlap takes place with the mechanisms, the extent varying on the conditions.

Pollution Size Chart

To assist in understanding the parameters of filtration, refer to this pollution size comparison chart. Look at the size of a major contaminant, oil aerosol! It is in the region of 0.01 - 0.8 micron. Tobacco smoke is also a liquid aerosol in a similar size band 0.01 -1.2 micron. Observe the smoke test yourself, appreciate the size of the problem! The smallest particle the human eye can see is in the order of 40 microns.
02F Coalescing Filters – Miniature

Features
- Clear nylon housing.
- Full length support tube.
- Positive tube seals.
- Optional filter grades available.
- Disposable.
- High Flow: Grade 6 – 3.5 SCFM
  Grade 10 – 5.3 SCFM

Application
The 02F Miniature Inline Filter is designed to remove 99.9%+ of the aerosols and sub-micron particles from your air system.

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Model</th>
<th>Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; I.D.</td>
<td>02FA06A</td>
<td>Grade 6</td>
</tr>
<tr>
<td></td>
<td>02FA10A</td>
<td>Grade 10</td>
</tr>
<tr>
<td></td>
<td>02FA22A</td>
<td>Grade 6 (oil activated dye)</td>
</tr>
</tbody>
</table>

Operation
The contaminated air enters the filters interior and is forced through the elements membrane of Borosilicate glass fibers. Contaminants and aerosols are collected and distributed evenly along the entire tube's length. This is accomplished by the use of the “center post” which not only provides this “drop out pocket”, but also provides a stable support.

Ordering Information

Specifications
Port Size ........................................ 1/4 I.D. Hose Slip On Tang Standard
Pressure & Temperature Ratings –
100 psig at 125°F (0.69 bar at 52°C) or less

Materials of Construction
Element ........................................... Borosilicate & Felt Glass Fibers
Housing .......................................... Nylon

02F Coalescing Filter Dimensions

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>3.28</td>
<td>1.69</td>
</tr>
<tr>
<td>(25)</td>
<td>(83)</td>
<td>(43)</td>
</tr>
</tbody>
</table>

Inches (mm)
10F 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" – 17 SCFM§
  1/4" – 20 SCFM§
  Grade 10 Element
  1/8" – 19 SCFM§
  1/4" – 24 SCFM§

Port Size  | NPT       | Twist Drain | Automatic Pulse Drain
---        | ---       | ---         | ---
Poly Bowl ‡ |           | ---         | ---
1/8"       | 10F01ED   | 10F05ED     | ---
1/4"       | 10F11ED   | 10F15ED     | ---
Metal Bowl without Sight Gauge | 10F03ED | 10F07ED | ---
1/8"       | 10F13ED   | 10F17ED     | ---
1/4"       |           | ---         | ---

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 C2.
§ SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Ordering Information

10F 1 1 E D —

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

Bowl Options
1 Twist Drain
5 Automatic Pulse Drain
3 Twist Drain
7 Automatic Pulse Drain

Elements
E Grade 6
H Grade 10

Engineering Level
D Current

Port Type
Blank NPT
1 BSPP
2 BSPT

BOLD ITEMS ARE MOST POPULAR.
10F Coalescing 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 – Grade 6 (Standard) PS446P
Grade 10 (Optional) PS456P

Mounting Bracket Kit PS417BP

Materials of Construction

Body Zinc
Bowls Transparent Polycarbonate
Metal (Zinc) Without Sight Gauge

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 & 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

Specifications

Automatic Pulse Drain Tube Barb 1/8 Inch
Bowl Capacity 1 Ounce

Operation –
Normal Operating Pressure Drop 2 psig
Maximum Recommended Pressure Drop 10 psig
(Element should be replaced)

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)
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.
- Differential pressure 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
- N Without Differential Pressure Indicator
- R With Electronic DPI

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.

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Element Grade</th>
<th>Ordering Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>Twist Drain</td>
<td>15F12E*</td>
<td>15F12E*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>Twist Drain</td>
<td>15F22E*</td>
<td>15F22E*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bowl Options</th>
<th>Elements</th>
<th>Engineering Level</th>
<th>Port Type</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polycarbonate Bowl / Metal Guard</td>
<td>E Grade 6</td>
<td>Blank NPT</td>
<td>Blank</td>
<td>N Without Differential Pressure Indicator</td>
</tr>
<tr>
<td>1 Twist Drain</td>
<td>3 Twist Drain</td>
<td>1&quot; BSPP</td>
<td>With Differential Pressure Indicator</td>
<td></td>
</tr>
<tr>
<td>2 Metal Bowl Guard / Twist Drain</td>
<td>4 Sight Gauge / Twist Drain</td>
<td>2 BSPT</td>
<td>R With Electronic DPI</td>
<td></td>
</tr>
<tr>
<td>P Metal Bowl Guard / Auto Pulse Drain</td>
<td>T Sight Gauge / Auto Pulse Drain</td>
<td>1/4 &amp; 3/8 inch meet ISO 1179-1 Standard.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Accepts 1/8" Tubing

Distance Required To Remove All Bowls Regardless Of Drain Option

Inches (mm)

‡ For polycarbonate bowl see Caution on page C2.

† With Twist Drain or Automatic Float Drain

Grayed out items are obsolete.

BOLD ITEMS ARE MOST POPULAR.
Prep-Air®, 15F Series
Coalescing Filters (Oil Removal)

Technical Specifications – 15F

15F Coalescing Filter Kits & Accessories

Bowl Guard Kit ........................................... PS905P
Bowl Kits –
Poly Bowl – Automatic Pulse Drain ............... PS995P
Twist Drain .................................................. PS932P
Metal Bowl – Automatic Pulse Drain ............... PS979P
Twist Drain .................................................. PS934P
Sight Gauge / Automatic Pulse Drain ............. PS996P
Sight Gauge / Twist Drain ............................. PS935P
DPI Replacement Kit .................................... PS781P
Electronic DPI Replacement Kit .................... PS764
Drain Kit –
Semi-Auto Drain ......................................... PS998P
Twist Drain .................................................. PS912P
Push ‘N’ Drain ............................................. PS939P
Electrical Connector – 15mm, 3-Pin DIN, 6 Ft. Cord ... PS2932JB
Filter Element Kits – Grade 6 (Standard) ........ PS924P
Grade 10 (Optional) ..................................... PS930P
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:
Poly carbonate 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)

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

Materials of Construction

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

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

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)
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.
- Differential pressure indicator standard.
- Shown with recommended metal bowl guard.
- High Flow: Grade 6 Element 1/4" – 45 SCFM\(^6\) 1/4" – 60 SCFM\(^6\) 3/8" – 48 SCFM\(^6\) 3/8" – 72 SCFM\(^6\) 1/2" – 65 SCFM\(^6\) 1/2" – 95 SCFM\(^6\)

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Twist Drain</th>
<th>Automatic Float Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>11F12EC</td>
<td>11F16EC</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>11F22EC</td>
<td>11F26EC</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>11F32EC</td>
<td>11F36EC</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>11F14EC</td>
<td>11F18EC</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>11F24EC</td>
<td>11F28EC</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>11F34EC</td>
<td>11F38EC</td>
<td></td>
</tr>
</tbody>
</table>

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 C2.
\(^6\) SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Ordering Information

11F 1 2 E C — —

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

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

Elements
- E Grade 6
- H Grade 10

Engineering Level
- C Current

Options
- Blank
- With Differential Pressure Indicator
- N Without Differential Pressure Indicator

Port Type
- Blank NPT
- 1* BSPP

Inches (mm)

BOLD ITEMS ARE MOST POPULAR.
11F Coalescing Filter Kits & Accessories

Bowl Guard Kit ................................................. PS705P
Bowl Kits –
- Poly Bowl – Automatic Float Drain .................. PS723P
- Twist Drain .................................................. PS732P
- Metal Bowl – Automatic Float Drain ................ PS726P
- Twist Drain .................................................. PS734P
- Sight Gauge / Automatic Float Drain .............. PS723P
- Sight Gauge / Twist Drain ............................. PS735P
DPI Replacement Kit ........................................ PS781P
Electronic DPI Replacement Kit ...................... PS764
Drain Kits –
- Automatic Float Drain ................................. PS506P
- Semi-Auto Drain ........................................ PS511P
- Twist Drain ................................................ PS512P
- Push ‘N’ Drain ............................................ PS513P
Electrical Connector - 15mm, 3-Pin DIN, 6 Ft. Cord ... PS2932JB
Filter Element Kits – Grade 6 (Standard) .... PS724P
Grade 10 (Optional) ......................................... PS730P
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
  (Element should be replaced)
  Minimum Recommended Flow –
  20% Nominal Rating of Element
- 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)
- Weight ....................................................... 1.5 lb (0.7 kg)

Materials of Construction
- Body ......................................................... Stainless Steel
- Bowls ....................................................... Transparent Polycarbonate
- Collar ....................................................... Steel
- Drains – Twist Drain – Body & Nut ............ Plastic
- Push ‘N’ Drain – Body ................................. Plastic
- 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
- Largest Aerosol Particle Passed (Grade 6) .... 0.01 Micron
- Largest Solid Particle Passed (Grade 6) ......... 0.30 Micron
- Seals ......................................................... Nitrile
- Sight Gauge ............................................... Polyamide
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.
- Differential pressure indicator standard.
- Shown with recommended metal bowl guard.
- High Flow: Grade 6 Element Grade 10 Element
  - 1/2" – 75 SCFM§ 1/2" – 125 SCFM§
  - 3/4" – 80 SCFM§ 3/4" – 160 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>1/2&quot;</td>
<td>Poly Bowl / Metal Guard</td>
<td>12F32EC</td>
<td>12F36EC</td>
</tr>
<tr>
<td></td>
<td>Metal Bowl / Sight Gauge</td>
<td>12F42EC</td>
<td>12F46EC</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td></td>
<td>12F34EC</td>
<td>12F38EC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12F44EC</td>
<td>12F48EC</td>
</tr>
</tbody>
</table>

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 C2.
§ SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Ordering Information

12F 3 2 E C — —

<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>3 1/2 Inch</td>
<td>Polycarbonate Bowl</td>
<td>E Grade 6</td>
<td>C Current</td>
<td>Blank</td>
<td>Blank NPT</td>
</tr>
<tr>
<td>4 3/4 Inch</td>
<td>Metal Bowl Guard / Twist Drain</td>
<td>H Grade 10</td>
<td></td>
<td>With</td>
<td>BSPP</td>
</tr>
<tr>
<td>2</td>
<td>2 Metal Bowl Guard / Twist Drain</td>
<td></td>
<td></td>
<td>Differential Pressure Indicator N Without</td>
<td>1&quot; BSPP</td>
</tr>
<tr>
<td>6</td>
<td>6 Metal Bowl Guard / Auto Float Drain</td>
<td></td>
<td></td>
<td>Pressure Indicator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Metal Bowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3 Twist Drain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4 Sight Gauge / Twist Drain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7 Auto Float Drain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8 Sight Gauge / Auto Float Drain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BOLD ITEMS ARE MOST POPULAR.
Prep-Air® II, 12F Series
Coalescing Filters (Oil Removal)

Technical Information

Grade 6

Grade 10

12F Coalescing Filter Kits & Accessories

Bowl Guard Kit .................................................. PS805P
Bowl Kits –
Poly Bowl – Automatic Float Drain .................... PS822P
Twist Drain .................................................. PS832P
Metal Bowl – Automatic Float Drain ................ PS826P
Twist Drain .................................................. PS834P
Sight Gauge / Automatic Float Drain ................ PS823P
Sight Gauge / Twist Drain ................................ PS835P
DPI Replacement Kit .......................................... PS781P
Electronic DPI Replacement Kit ......................... PS764
Drain Kits –
Automatic Float Drain ................................... PS506P
Semi-Auto Drain ........................................... PS511P
Twist Drain .................................................. PS512P
Push ‘N’ Drain............................................. PS513P
Electrical Connector - 15mm, 3-Pin DIN, 6 Ft. Cord ... PS2932JB
Filter Element Kits –
Grade 6 (Standard) ...................................... PS824P
Grade 10 (Optional) ..................................... PS830P
Mounting Bracket Kit ...................................... PS843P
Sight Gauge Kit ............................................ PS914P

Specifications

Bowl Capacity ................................................. 7.2 Ounces
Sump Capacity .................................................. 2.8 Ounces
Operation – Normal Operating Pressure Drop .......... 2 psig
maximum Recommended Pressure Drop .............. 10 psig
Element should be replaced
Minimum Recommended Flow – 20% Nominal Rating of Element
Port Threads .................................................. 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 (17.2 bar)
32°F to 175°F (0°C to 80°C)
With Differential Pressure Indicator:
0 to 150 psig (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 ..................................................... 2.4 lb (1.1 kg)

Materials of Construction

Body ................................................................. Zinc
Bowls ............................................................ Transparent Polycarbonate
Metal (Zinc) With or Without Sight Gauge
Collar ......................................................... Stainless 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
Largest Aerosol Particle Passed (Grade 6) ............ 0.01 Micron
Largest Solid Particle Passed (Grade 6) ............... 0.30 Micron
Seals .............................................................. Nitrile
Sight Gauge ................................................... Polyamide
P3NF Coalescing Filters – Hi-Flow

**Features**

- Port blocks (PB) available to provide 1-1/2" port extension to 1" ported bodies.
- 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: Grade 6 Element
  - 3/4" – 130 SCFM\(^6\)
  - 1" – 140 SCFM\(^6\)
  - 1-1/2\(^{†}\) – 150 SCFM\(^6\)

**Grade 10 Element**

- 3/4" – 195 SCFM\(^6\)
- 1" – 215 SCFM\(^6\)
- 1-1/2\(^{†}\) – 225 SCFM\(^6\)

Standard part numbers shown bold for Grade 6 Elements (for Grade 10 Elements, replace “D” with “Q” in the 8th position). 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.

### Ordering Information

<table>
<thead>
<tr>
<th>P3N</th>
<th>F</th>
<th>A</th>
<th>9</th>
<th>8</th>
<th>D</th>
<th>S</th>
<th>M</th>
</tr>
</thead>
</table>

**Port Type**

- 1" G Thread (BSPP) Female
- 2 Rc Thread (BSPT) Female
- 9 NPT Female

**Port Size**

- 3/4" (w/o Port Blocks)
- 1" (w/o Port Blocks)
- 1-1/2" Port Blocks (w/ 1" Ported Body)

**Element**

- w/ DPI Indicator
- D Grade 6
- Q Grade 10

**Bowl**

- S Metal Bowl w/ Sight Gauge

**Drain**

- M Twist Drain

Note: BSPP ported units supplied using NPT ported bodies and BSPP port block kits.

**BOLD ITEMS ARE MOST POPULAR.**
Technical Information

### Grade 6

**P3NF Coalescing Filter Kits & Accessories**

- **Bowl Kits**
  - Metal Bowl
  - Sight Gauge / Automatic Float Drain: P3NKA00BSA
  - Sight Gauge / Twist Drain: P3NKA00BSM
  - Sight Gauge / Push ‘N’ Drain: P3NKA00BSP

- **Bowl Latch Kit**: C11A33

- **DPI Replacement Kit**: PS781P

- **Drain Kit**
  - Automatic Float Drain: PS506P
  - Semi-Auto Drain: PS511P
  - Twist Drain: PS512P
  - Push ‘N’ Drain: PS513P

- **Filter Elements**
  - Grade 6 (Standard): P3NKA00ESC
  - Grade 10 (Optional): P3NKA00ES9

- **Sight Gauge Kit**: P3NKA00PE

- **Mounting Bracket Kit**: P3NKA00MW

*If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.*

### Specifications

- **Bowl Capacity**: 18.0 Ounces
- **Sump Capacity**: 6.8 Ounces
- **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

- **Pressure & Temperature Rating**: 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)

### Materials of Construction

- **Body & Bowl**: Aluminum
- **Deflector**: Plastic
- **Drain**: Plastic
- **Seals**: Nitrile
- **Sight Gauge**: Polyamide (Nylon)

- **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)

† 1" Port Body with 1-1/2" Port Block.
F701 Coalescing Filters

Features
- Removes liquid aerosols and sub-micron particles.
- Protects pneumatic systems from contamination that standard particulate filters will not catch.
- Two different grade elements available.
- Differential pressure indicator (pop-up) standard.
- Differential pressure gauge optional.
- High flow design.

Note: All coalescing filters should be protected by a particulate filter (i.e., F602, or other) installed upstream.

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Flow (SCFM)*</th>
<th>Part Number</th>
<th>Flow (SCFM)*</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Bowl 32 oz.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>95</td>
<td>F701-06E3P</td>
<td>158</td>
<td>F701-06E7P</td>
</tr>
<tr>
<td>1&quot;</td>
<td>95</td>
<td>F701-08E3P</td>
<td>158</td>
<td>F701-08E7P</td>
</tr>
<tr>
<td>Metal Bowl 100 oz.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>170</td>
<td>F701-06L3P</td>
<td>285</td>
<td>F701-06L7P</td>
</tr>
<tr>
<td>1&quot;</td>
<td>170</td>
<td>F701-08L3P</td>
<td>285</td>
<td>F701-08L7P</td>
</tr>
</tbody>
</table>

* Dry media flow. For wet media info see table on next page.

Ordering Information

F 701 — 06 E 3 P — /**

Port Threads
--- NPT
G BSPP

Port Size
06 3/4 Inch
08 1 Inch

Bowl
E Metal without Sight Gauge 32 oz.
L Metal without Sight Gauge 100 oz.

Element
3 Grade 6
7 Grade 10

Element Service Indicator
Blank None
P Pop-up Style
G Differential Pressure Gauge

Bowl Drains
Blank Manual Twist Drain
T High Pressure Internal Auto Drain
Q* External Auto Drain
R Low Pressure Internal Auto Drain

Engineering Level
* Will be Entered at Factory

*G* Differential Pressure Gauge add 2.00 (50.8) to C & E.
*Q* External Auto Drain add 1.70 (43.1) to B & C.

inches (mm)

F701 Coalescing Filter Dimensions

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Bowl Capacity</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4 &amp; 1 Inch (E)</td>
<td>32 oz.</td>
<td>4.95 (126)</td>
<td>11.77 (299)</td>
<td>13 (330)</td>
<td>4.00 (101)</td>
<td>1.23 (31)</td>
</tr>
<tr>
<td>3/4 &amp; 1 Inch (L)</td>
<td>100 oz.</td>
<td>4.95 (126)</td>
<td>21.39 (543)</td>
<td>22.63 (575)</td>
<td>4.00 (101)</td>
<td>1.23 (31)</td>
</tr>
</tbody>
</table>

*G* Differential Pressure Gauge add 2.00 (50.8) to C & E.
*Q* External Auto Drain add 1.70 (43.1) to B & C.

BOLD ITEMS ARE MOST POPULAR.
F701 Filter Kits & Accessories

Mounting Bracket –
Port Size
3/4 (Pair of Pipe Mounted Brackets)................................. SA200AW57
1 (Pair of Pipe Mounted Brackets)................................. SA200CW57

Bowl Kit –
Port Size
3/4, 1 Inch (E) 32 oz.................................................. BK603B
3/4, 1 Inch (L) 100 oz.................................................. BK603C

Differential Pressure Pop Up Indicator Repair Kit ........ RK701P
(only works with originally equipped units)

Differential Pressure Gauge ........................................ DP276-P
(only works on units without pop-up indicator)

Drain Kits –
Internal Automatic Drain - High Pressure (T)................. SA702MD
Manual Twist Drain .................................................. SA600Y7-1

Filter Element Kits –
Port Size / Grade 6
3/4, 1 Inch (E) 32 oz.................................................. F701-C3-0773
3/4, 1 Inch (L) 100 oz.................................................. F701-C3-0774

Port Size / Grade 10
3/4, 1 Inch (E) 32 oz.................................................. F701-C7-0773
3/4, 1 Inch (L) 100 oz.................................................. F701-C7-0774

Specifications

Operation –
Maximum Recommended Pressure Drop .................. 10 psig
(element should be replaced)
Normal Operating Pressure Drop (Dry)...................... 2 psig
Normal Operating Pressure Drop (Wet).................... 5 psig

Minimum Recommended Flow – .......................... 20% of Rated Flow

Maximum Pressure (Manual Drains) – ............... 0 to 300 psig (0-20 bar)

Maximum Pressure (Auto Drains) –
“R” Drain (Low Pressure Internal) ......................... 175 psig (12 bar)
“T” Drain (High Pressure Internal) ......................... 250 psig (17 bar)
“Q” Drain (External) ........................................ 250 psig (17 bar)

Maximum Temperature ..................................... 32°F to 150°F (0°C to 65°C)

Maximum temperature with “T”, “R”, or “Q” Drains .... 125°F (52°C)

Weight –
3/4 & 1 Inch (E) 32 oz............................................. 5 lb. (2.3 kg)
3/4 & 1 Inch (L) 100 oz......................................... 8 lb. (3.6 kg)

Materials of Construction

Body & Flange Ring .............................................. Zinc

Bowl –
Metal Bowl (E) .................................................. Aluminum

Drains –
Auto Float Drain –
Housing “R”, “T” (Internal) .................................. Acetal
Housing “Q” (External) ........................................ Brass

Manual Twist Drain ........................................... Brass

Seals & Float ..................................................... Buna N

Springs ......................................................... Stainless Steel

Elements (Media) ................................................. Borosilicate Fibers & Felt

Element End Caps ................................................ Urethane

Seals ............................................................. Buna N

Technical Information

Media Specifications

<table>
<thead>
<tr>
<th>Grade</th>
<th>D.O.P. Coalescing Efficiency</th>
<th>Maximum Oil Carryover</th>
<th>Pressure Drop (PSID) @ Rated Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>99.97%</td>
<td>0.008</td>
<td>1.0, 2.3</td>
</tr>
<tr>
<td>10</td>
<td>95%</td>
<td>0.85</td>
<td>0.5, 0.5</td>
</tr>
</tbody>
</table>

1 Tested per BCAS 860900 at 40 ppm inlet.
2 Add dry + wet for total pressure drop.
D.O.P. = Dioctylphthalate

Minimum Recommended Flow – ............... 20% of Rated Flow

Pressure Drop (PSID) =

<table>
<thead>
<tr>
<th>Flow - SCFM</th>
<th>Flow - dm³/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>80</td>
<td>80</td>
</tr>
</tbody>
</table>

Pressure Drop (PSID) =

<table>
<thead>
<tr>
<th>Primary Pressure - PSIG</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow - SCFM</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
</tr>
</tbody>
</table>

Flow - SCFM

Minimum Recommended Flow – .......................... 20% of Rated Flow

Maximum Pressure (Manual Drains) – ............... 0 to 300 psig (0-20 bar)

Maximum Pressure (Auto Drains) –
“R” Drain (Low Pressure Internal) ......................... 175 psig (12 bar)
“T” Drain (High Pressure Internal) ......................... 250 psig (17 bar)
“Q” Drain (External) ........................................ 250 psig (17 bar)

Maximum Temperature ..................................... 32°F to 150°F (0°C to 65°C)

Maximum temperature with “T”, “R”, or “Q” Drains .... 125°F (52°C)

Weight –
3/4 & 1 Inch (E) 32 oz............................................. 5 lb. (2.3 kg)
3/4 & 1 Inch (L) 100 oz......................................... 8 lb. (3.6 kg)

Materials of Construction

Body & Flange Ring .............................................. Zinc

Bowl –
Metal Bowl (E) .................................................. Aluminum

Drains –
Auto Float Drain –
Housing “R”, “T” (Internal) .................................. Acetal
Housing “Q” (External) ........................................ Brass

Manual Twist Drain ........................................... Brass

Seals & Float ..................................................... Buna N

Springs ......................................................... Stainless Steel

Elements (Media) ................................................. Borosilicate Fibers & Felt

Element End Caps ................................................ Urethane

Seals ............................................................. Buna N
35F, 43F Coalescing Filters – Hi-Flow

**Features**

- Heavy-duty cast aluminum housings to withstand operating pressures up to 250 PSIG*
- Differential pressure indicator to eliminate the guesswork of element replacement
- Differential pressure gauge available, order separately, Kit DP3-01-000
- Unique drain mounting plate design offers a trouble-free method for interchanging and installing external drains
- High-flow Filter Elements: Coalescing, 1 Micron and 0.01 Micron
- High Flow: 1-1/2” – 710 SCFM§
  2” – 710 SCFM§
  3” – 1770 SCFM§

* Without Differential Pressure Indicator – Max. supply pressure is 250 PSIG (20.7 bar).

---

<table>
<thead>
<tr>
<th>Port size</th>
<th>Element type</th>
<th>Part number (NPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35F</td>
<td>1-1/2 0.01 micron</td>
<td>35F77EAP</td>
</tr>
<tr>
<td></td>
<td>1-1/2 1.0 micron</td>
<td>35F77HAP</td>
</tr>
<tr>
<td></td>
<td>2 0.01 micron</td>
<td>35F87EAP</td>
</tr>
<tr>
<td></td>
<td>2 1.0 micron</td>
<td>35F87HAP</td>
</tr>
<tr>
<td>43F</td>
<td>3 0.01 micron</td>
<td>43FN7EAP</td>
</tr>
<tr>
<td></td>
<td>3 1.0 micron</td>
<td>43FN7HAP</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>35F Coalescing Filter Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>7.80 (198)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>43F Coalescing Filter Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>8.94 (227)</td>
</tr>
</tbody>
</table>

---

**Ordering Information**

**Port Size**
- 35F
- 7 1-1/2 Inch
- 8 2 Inch
- 43F N 3 Inch

**Bowl**
- Metal without Sight Gauge, Auto Float Drain

**Element**
- E .01 Micron
- H 1 Micron

**Engineering Level**
- A

**Options**
- N Without Differential Pressure Indicator
- P* With Differential Pressure Indicator
- G** With Differential Pressure Gauge

**Port Threads**
- Blank NPT
  - 1 BSPP
  - 2 BSPT

---

* Max. pressure rating 150 PSIG.
** Gauge ships loose.

---

BOLD ITEMS ARE MOST POPULAR.
Technical Information

35F & 43F Coalescing Filter Kits & Accessories
Differential Pressure Indicator Cap –
For pressures over 150 PSIG ............... GRP-95-022
Differential Pressure Gauge .................. DP3-01-000
Differential Pressure Indicator ............. DP2-02-001
Drain, Automatic, Internal, Fluorocarbon,
1/8 NPT ............................................ GRP-95-981
Drain Plate Kit –
1/2 NPT Tapped Drain Port .................. GRP-95-393
Element
35F: 0.01 Micron ................................. MTP-95-502
35F: 1.0 Micron ................................. MSP-95-502
35F: Adsorber .................................. MXP-95-502
43F: 0.01 Micron ................................. MTP-95-562
43F: 1.0 Micron .................................. MSP-95-876
43F: Adsorber .................................. MXP-95-565
Manual Drain Kit
with 1/2" Drain Plate .......................... GRP-95-392

Specifications
Maximum Supply without DPI and with
Pressure Gauge ............. 250 PSIG (17.2 bar)*
with DPI .......................... 150 PSIG (10.3 bar)
Operating Temperature ......................... 32° to 150°F (0° to 65.5°C)
Port Size –
35F ........................................ 1-1/2, 2 Inch
43F ........................................ 3 Inch
Standard Filtration* – Micron ................. 1.0, 0.01
Adsorber ................................ Activated carbon
Weight –
35F ........................................ 19.3 lb. (8.7 kg)
43F ........................................ 32.8 lb. (14.9 kg)
* Filtration temperature of 70°F (21°C) @ 100 PSIG (6.9 bar) with typical
compressor lubricating oil and protected by 0.01 micron filter.

Materials of Construction
Body ................................................... Aluminum
Bowls ................................................ Aluminum
Filter Element –
0.01 & 1.0 Micron ................................ Borosilicate Cloth
Adsorber ................................ Activated Carbon
Seals .................................................. Fluorocarbon
Stud .................................................. Plated Steel
### P3TF Series Flanged Filters

**Features**
- No tie rod element design
- Pleated element technology
- New high efficiency drainage layer
- Designed in accordance with ASME and CRN
- Connection sizes: 4 inch & 6 inch flange
- Acrylic polyurethane coating for corrosion protection

#### Flanged Filters

<table>
<thead>
<tr>
<th>Port size</th>
<th>Flow SCFM</th>
<th>Element type</th>
<th>Number of elements</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot; Flange</td>
<td>2755</td>
<td>0.01 micron</td>
<td>4</td>
<td>P3TFAFFD2AN</td>
</tr>
<tr>
<td>4&quot; Flange</td>
<td>2755</td>
<td>1.0 micron</td>
<td>4</td>
<td>P3TFAFFQ2AN</td>
</tr>
<tr>
<td>6&quot; Flange</td>
<td>4132</td>
<td>0.01 micron</td>
<td>6</td>
<td>P3TFAFGD3AN</td>
</tr>
<tr>
<td>6&quot; Flange</td>
<td>4132</td>
<td>1.0 micron</td>
<td>6</td>
<td>P3TFAFGQ3AN</td>
</tr>
</tbody>
</table>

**Materials of Construction**
- Body: Steel
- Baffle: Plated Steel
- Deflector: Plated Steel
- Filter Element: 0.01 & 1.0 Micron, Borosilicate Cloth
- Seals: Fluorocarbon
- Stud: Plated Steel

**Inlet Air Pressure Correction**

| PSI  | 15 | 29 | 44 | 58 | 73 | 87 | 100 | 116 | 131 | 145 | 160 | 174 | 189 | 203 | 218 | 232 | 247 | 261 | 275 | 290 |
|------|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| bar  | 1  | 2  | 3  | 4  | 5  | 6  | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  |
| Factor | 0.38 | 0.53 | 0.65 | 0.76 | 0.85 | 0.93 | 1.00 | 1.07 | 1.13 | 1.19 | 1.25 | 1.31 | 1.36 | 1.41 | 1.46 | 1.51 | 1.56 | 1.60 | 1.65 | 1.70 |

**Operating Information**
- Operating Pressure: 232 PSIG (16 bar)
- Operating Temperature: 35°F to 212°F (1.5°C to 100°C)

**Service Kits**

<table>
<thead>
<tr>
<th>Description</th>
<th>Number Required</th>
<th>P3TF Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dp Gauge Replacement Kit</td>
<td>DPG-Kit</td>
<td></td>
</tr>
<tr>
<td>Drain Kit - 1/2&quot; NPT</td>
<td>HDF-120-NPT-A</td>
<td></td>
</tr>
<tr>
<td>Filter Element Kit 0.01 Micron</td>
<td>4 or 6</td>
<td>PSY1035002</td>
</tr>
<tr>
<td>Filter Element Kit 1.0 Micron</td>
<td>4 or 6</td>
<td>PSY1035001</td>
</tr>
</tbody>
</table>

For pressures above 232 PSIG (16 bar), use manual drain.
Regulators

- Pipe Sizes 1/8 thru 2 Inch
- Flows to 1000 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 P3A-R Series, 1/8 and 1/4 Inch
- Miniature R34 Series, 1/8 and 1/4 Inch
- Miniature R25 Series, 1/4 and 3/8 Inch
- Miniature R45 Series, 1/4 and 3/8 Inch
- Economy 15R Series, 1/4 and 3/8 Inch
- Economy 05R Series, 1/4 and 3/8 Inch
- Compact 06R Series, 1/4, 3/8 and 1/2 Inch
- Standard 07R Series, 3/8, 1/2 and 3/4 Inch
- Hi-Flow P3NR Series, 3/4, 1 and 1-1/2 Inch
- Standard R119 Series, 1/4, 3/8 and 1/2 Inch
- Hi-Flow R119 Series, 3/4 thru 2 Inch
- Hi-Flow 09R Series, 2 Inch
- Pilot Operated 10R, 11R, 12R, P3NR Series, 1/4 thru 1-1/2 Inch; R119 Series 1/4 thru 2-1/2 Inch

Miniature Regulators for Water Service
- Miniature R24 Series, 1/4 and 3/8 Inch
- Miniature R46 Series, 1/4 and 3/8 Inch
- Miniature 20R Series, 1/8 and 1/4 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.

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.
General Purpose Regulators

Used to provide a convenient and low cost method to reduce a supplied air pressure to a desired outlet pressure and transform a fluctuating air supply to a relatively constant reduced air pressure within the operating range of the regulator.

This type of regulator is generally used in a wide variety of applications where reduced pressure is highly desirable for energy conservation, safety requirements, air circuit control and air instrumentation.

Operation

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

**14R Regulator Dimensions**

<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>14R013FC</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>14R113FC</td>
</tr>
<tr>
<td>With Gauge</td>
<td></td>
</tr>
<tr>
<td>1/8&quot;</td>
<td>14R018FC</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>14R118FC</td>
</tr>
</tbody>
</table>

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

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>Options</th>
<th>Preset / Pressure Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellow Knob</td>
<td>Black Knob</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 30 psig</td>
<td>B0 30 psig</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 30 psig</td>
<td>B5 30 psig</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 60 psig</td>
<td>B6 60 psig</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 15 psig</td>
<td>B7 15 psig</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 125 psig</td>
<td>B8 125 psig</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With Gauge

- F Relieving
- G Non-Relieving
- H Low Temp. Relieving
- J Low Temp. Non-Relieving

- Blank NPT
- L’ Preset Non-Adjustable
- P’ Preset Adjustable
- S’ Pressure Limiter Max. Adjustable
- T’ Pressure Limiter Max. Non-Adjustable

- Blank None
- XXX’ Preset Pressure
- XXX’ Pressure Limited

Inches (mm)

Spring Type by Preset / Limited Pressure:

- For Preset / Limited Pressure 10 to 25 use 30 PSI Spring
- For Preset / Limited Pressure 26 to 50 use 60 PSI Spring
- For Preset / Limited Pressure 51 to 90 use 125 PSI Spring

*BOLD ITEMS ARE MOST POPULAR.*
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
Bonnet Assembly Kit ................................................. L01369
Bonnet Tamperproof Kit .......................................... P01265
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
Poppet / Piston Kits – Unbalanced, Non-Relieving...... PS428P
Unbalanced, Relieving........................ PS426P
Springs – 1-15 psig Range (Yellow)............. P01176
1-30 psig Range (Black).................. P01175
1-60 psig Range (White)............... P01174
2-125 psig Range (Gold)................ P01173

* Tighten panel mount nut 2.8 to 3.4 Nm (25 to 30 in-lbs) of torque.

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 –
Standard Pressure .......................... 2 to 125 psig (0 to 8.6 bar)
Medium Pressure ......................... 1 to 60 psig (0 to 4.1 bar)
Medium Pressure ......................... 1 to 30 psig (0 to 2.1 bar)
Low Pressure ................................. 1 to 15 psig (0 to 1 bar)
Weight – 14R, 14RM, 14**L*............... 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
Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

P3A-R Regulators – Miniature

Features
- Lightweight plastic body.
- Non-rising adjusting knob.
- Solid control piston with lip seal for extended life.
- Unbalanced poppet standard.
- Two full flow 1/8" gauge ports.
- Reverse flow capability.
- 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>P3A-RN91YNN</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>P3A-RN92YNN</td>
</tr>
<tr>
<td>With Gauge</td>
<td></td>
</tr>
<tr>
<td>1/8&quot;</td>
<td>P3A-RN91YGN</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>P3A-RN92YGN</td>
</tr>
</tbody>
</table>

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

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

| P3A-RN | 9 | 1 | Y | N | N | N | — |

Options

- Without Gauge
  - L Preset Non-Adjustable
  - N No Options
  - P Preset Adjustable
  - S Pressure Limiter Adjustable
  - T Pressure Limiter Non-Adjustable

- With Gauge
  - B 15 psig (0 to 1 bar)
  - G 120 psig (0 to 8 bar)
  - M 60 psig (0 to 4 bar)
  - Z 30 psig (0 to 2 bar)

Options

- Preset / Pressure Limited
  - Blank None
  - XXX Preset Pressure Limited

* Inlet Pressure is 100 psig. For other pressures, contact factory.

*BOLD ITEMS ARE MOST POPULAR.*
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 a non-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.

P3AR Regulator Kits & Accessories

Specifications

Gauge Ports (2) ................................................................. 1/8 Inch

<table>
<thead>
<tr>
<th>Operating Pressure Range –</th>
<th>psig</th>
<th>bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary –</td>
<td>Maximum</td>
<td>120</td>
</tr>
<tr>
<td>Secondary –</td>
<td>Minimum</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>15</td>
</tr>
<tr>
<td>15 psig Spring</td>
<td>Minimum</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>30</td>
</tr>
<tr>
<td>30 psig Spring</td>
<td>Minimum</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>60</td>
</tr>
<tr>
<td>60 psig Spring</td>
<td>Minimum</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>110</td>
</tr>
<tr>
<td>110 psig Spring</td>
<td>Minimum</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>110</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>32°F to 125°F (0°C to 52°C)</td>
<td></td>
</tr>
</tbody>
</table>

Port Threads .............................................................. 1/8, 1/4 Inch

Weight ........................................................................... 0.23 lb. (0.10 kg)

Materials of Construction

Adjusting Nut .................................................................. Brass
Adjusting Stem & Spring .................................................. Steel
Poppet Return Spring ..................................................... Stainless Steel
Body .............................................................................. Plastic
Bonnet, Seat & Piston ..................................................... Plastic
Seals .............................................................................. Nitrile
Valve Poppet ................................................................. Plastic & Nitrile

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

*Crispin panel mount nut 2.8 to 3.4 Nm (25 to 30 in-lbs) of torque.
R34 Regulators – Miniature

**Features**
- Diaphragm operated for fast operation.
- Large Diaphragm to valve area ratio for precise regulation and high flow capacity.
- Balanced valve design for precise regulation.
- Available in 2 or 4 port design.
- Available with a manifold mount to minimize plumbing.
- Suitable for low temperature applications.
- Non-rising adjusting knob.
- 1/8" - 17 SCFM*
- 1/4" - 19 SCFM*

---

**R34 Miniature Regulator**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>A</th>
<th>A1</th>
<th>B</th>
<th>B1</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1.50 (38.1)</td>
<td>1.54 (39.2)</td>
<td>1.188 (30.18)</td>
<td>1.56 (39.6)</td>
<td>2.75 (69.9)</td>
</tr>
<tr>
<td>C1</td>
<td>2.70 (68.6)</td>
<td>0.50 (12.7)</td>
<td>3.25 (82.6)</td>
<td>3.25 (82.6)</td>
<td>1.20 (30.5)</td>
</tr>
<tr>
<td>G1</td>
<td>0.60 (15.2)</td>
<td>0.32 (8.1)</td>
<td>0.73 (18.5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Ordering Information**

**R34**

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Port Size</th>
<th>Without Gauge</th>
<th>Without Gauge</th>
<th>Without Gauge</th>
<th>With Gauge</th>
<th>With Gauge</th>
<th>With Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relieving</td>
<td>1/8&quot;</td>
<td>R344-01A</td>
<td>R344-01B</td>
<td>R344-01C</td>
<td>R344-01AG</td>
<td>R344-01BG</td>
<td>R344-01CG</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>R344-02A</td>
<td>R344-02B</td>
<td>R344-02C</td>
<td>R344-02AG</td>
<td>R344-02BG</td>
<td>R344-02CG</td>
<td></td>
</tr>
</tbody>
</table>

---

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

---

**R344-02C**

---

BOLD ITEMS ARE MOST POPULAR.
Technical Information

**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.

**Materials of Construction**

- **Body** ......................................................... Aluminum
- **Bonnet** ...................................................... Acetal
- **Diaphragm & Seals** ...................................... Nitrile
- **Valve Assembly** ......................................... Brass
- **Springs** ...................................................... Steel
- **Panel Nut** .................................................... Acetal

**Specifications**

- **Operating Temperature** .................. -40°F to 150°F (-40°C to 65.5°C)
- **Supply Pressure** ................................. 300 psig Maximum (20.4 bar)
- **Port Threads** ............................................. 1/8, 1/4 Inch
- **Gauge Ports** ............................................. 1/8 Inch
  - (No Gauge Port Version Available)
- **Weight** .................................................. 25 lbs. (0.11 kg)
R24, R25 Regulators – Miniature (Air / Water Service)

**Features**
- Lightweight Plastic Body
- Constructed with a Combination of N.S.F. and F.D.A. Approved Materials
- Unbalanced Poppet Standard
- Non-rising, Push-to-lock Adjusting Knob
- Compact, 3.10 inch (79mm) high by 1.60 inch (41mm) wide
- Lightweight
- Diaphragm Operated

**R24, R25 Regulator Dimensions**

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8&quot;</td>
<td>R25-01C</td>
<td>1.60 (41)</td>
<td>1.60 (41)</td>
<td>2.61 (66)</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>R25-02C</td>
<td>0.49 (13)</td>
<td>3.10 (79)</td>
<td></td>
</tr>
</tbody>
</table>

**Ordering Information**

<table>
<thead>
<tr>
<th>Series</th>
<th>Port Size</th>
<th>Pressure Range</th>
<th>Relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>R24 EPDM Elastomers (Water)</td>
<td>1/8 Inch</td>
<td>A 0 to 25 psig (0 to 2 bar)</td>
<td>Blank</td>
</tr>
<tr>
<td>R25 Buna Elastomers (Air)</td>
<td>1/4 Inch</td>
<td>B 0 to 60 psig (0 to 4 bar)</td>
<td>K Non-Relieving</td>
</tr>
</tbody>
</table>

NOTE: 1.250 Dia. (31.8mm) hole required for panel mounting.
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.

R24, R25 Regulator Kits and Accessories

Panel Mount Nut – Plastic ............................................ R05X51-P
Aluminum .................................................. R05X51-A

Mounting Bracket and Nut .................................................. SA161X57

Service Kits – Relieving (Buna) ........................................... RKR25Y
Non-Relieving (Buna) ............................................. RKR26KY
Relieving (EPDM) ............................................... RKR24Y
Non-Relieving (EPDM) ............................................. RKR24KY

Springs – 0-25 psig Spring .................................................. SPR-375-1
0-60 psig Spring .................................................. SPR-376
0-125 psig Spring .................................................. SPR-377

Specifications

Gauge Ports (2) .................................................. 1/8 Inch
(Use for full flow)

Pressure Rating – Maximum Inlet Pressure 150 psig ... (10.0 bar)
Port Threads .................................................. 1/8, 1/4 Inch

Temperature Rating ............................................ 40°F to 125°F (4°C to 52°C)
Weight .................................................. 0.25 lb. (0.11 kg)

Materials of Construction

Adjusting Screw .................................................. Steel

Body .................................................. Acetal
Bonnet and Seat .................................................. Acetal
Diaphragm (R25) ............................................... Buna N
Diaphragm (R24) ............................................... EPDM
Seals (R25) .................................................. Buna N
Seals (R24) .................................................. EPDM

Springs .................................................. Stainless Steel

Valve Poppet (R25) ............................................... Buna N
Valve Poppet (R24) ............................................... EPDM

WARNING

Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.
R45, R46 Regulators – Miniature (Air / Water Service)

Features

- Lightweight Plastic Body
- Constructed with a Combination of N.S.F. and F.D.A. Approved Materials
- Unbalanced Poppet Standard
- Non-rising, Push-to-lock Adjusting Knob
- Compact, 3.43 inch (87.1mm) high by 2.06 inch (52.3mm) wide
- Lightweight
- Diaphragm Operated

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Air Service</th>
<th>Water Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Relieving</td>
<td>Non-Relieving</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>R45-02C</td>
<td>R46-02CK</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>R45-03C</td>
<td>R46-03CK</td>
<td></td>
</tr>
</tbody>
</table>

Bold Items are Most Popular.
For other models refer to ordering information below.

NOTE: 1.250 Dia. (31.8mm) hole required for panel mounting.

Ordering Information

R45, R46 Regulator Dimensions

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.06 (52)</td>
<td>2.06 (52)</td>
<td>2.90 (74)</td>
</tr>
<tr>
<td>D</td>
<td>0.53 (14)</td>
<td>3.43 (87)</td>
<td></td>
</tr>
</tbody>
</table>

Inches (mm)
R45, R46 Series
Air Line Regulators

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.

---

**Materials of Construction**

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusting Screw</td>
<td>Steel</td>
</tr>
<tr>
<td>Body</td>
<td>Acetal</td>
</tr>
<tr>
<td>Bonnet and Seat</td>
<td>Acetal</td>
</tr>
<tr>
<td>Diaphragm (R45)</td>
<td>Buna N</td>
</tr>
<tr>
<td>Diaphragm (R46)</td>
<td>EPDM</td>
</tr>
<tr>
<td>Seals (R45)</td>
<td>Buna N</td>
</tr>
<tr>
<td>Seals (R46)</td>
<td>EPDM</td>
</tr>
<tr>
<td>Springs</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Valve Poppet (R45)</td>
<td>Buna N</td>
</tr>
<tr>
<td>Valve Poppet (R46)</td>
<td>EPDM</td>
</tr>
</tbody>
</table>

---

**R45, R46 Regulator Kits and Accessories**

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel Mount Nut</td>
<td>Plastic R05X51, Aluminum R05X51A</td>
</tr>
<tr>
<td>Mounting Bracket and Nut</td>
<td>SA161X57</td>
</tr>
<tr>
<td>Service Kits – Relieving</td>
<td>RKR45Y</td>
</tr>
<tr>
<td></td>
<td>RKR45KY</td>
</tr>
<tr>
<td>Springs</td>
<td>SPR-46</td>
</tr>
<tr>
<td></td>
<td>SPR-47</td>
</tr>
<tr>
<td></td>
<td>SPR-48</td>
</tr>
</tbody>
</table>

---

**Specifications**

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauge Ports (2)</td>
<td>1/4 Inch (Can be used for full flow)</td>
</tr>
<tr>
<td>Pressure Rating</td>
<td>Maximum Inlet Pressure 150 psig (10.0 bar)</td>
</tr>
<tr>
<td>Port Threads</td>
<td>1/4, 3/8 Inch</td>
</tr>
<tr>
<td>Temperature Rating</td>
<td>40°F to 125°F (4°C to 52°C)</td>
</tr>
<tr>
<td>Weight</td>
<td>0.38 lb. (0.17 kg)</td>
</tr>
</tbody>
</table>
20R Regulators – Miniature (Water Service)

Features
- Rugged brass body for water service.
- Unbalanced poppet standard.
- Diaphragm operated for fast response.
- Non-rising adjusting knob.
- Compact, 3.06 inch (77.79mm) high by 1.56 inch (36.69mm) wide.
- High Flow: 1.25 GPM

<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>20R013GC</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>20R113GC</td>
</tr>
</tbody>
</table>

Bold Items are Most Popular.
For other models refer to ordering information below.
NOTE: 1.25 Dia. (32mm) hole required for panel mounting.

20R Regulator Dimensions

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8&quot;</td>
<td>1.56 (40)</td>
<td>1.56 (40)</td>
<td>2.56 (65)</td>
<td>0.50 (13)</td>
<td>3.06 (78)</td>
</tr>
</tbody>
</table>

Inches (mm)

Ordering Information

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

Pressure Range
- 11 25 psig
- 13 125 psig
- 61 60 psig

Relief
- F Relieving
- G Non-Relieving

Engineering Level
- C Current

Port Type
- Blank
- NPT BSPP

BOLD ITEMS ARE MOST POPULAR.
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.

20R Regulator Kits & Accessories

- Bonnet Kit ......................................................... PCKR364Y
- Bonnet Tamperproof Kit ................................... PCKR364T
- Panel Mount Nut – Aluminum ....................... R05X51-A
  – Plastic ..................................................... R05X51-P
- Mounting Bracket Kit ................................... SA161X57
- Repair Kits – Relieving .............................. PRKR164Y
  – Non-Relieving ................................. PRKR163Y

Specifications

- Gauge Ports (2) .............................................. 1/8 Inch
- Port Threads ................................................ 1/8, 1/4 Inch
- Pressure Rating – Maximum .................... 0 to 300 psig (0 to 20.7 bar)
- Secondary Pressure Ranges –
  - Standard Pressure .................. 2 to 125 psig (0 to 8.6 bar)
  - Medium Pressure .................. 1 to 60 psig (0 to 4.1 bar)
  - Medium Pressure .................. 1 to 25 psig (0 to 2.1 bar)
- Temperature Ratings .................. 32°F to 125°F (0°C to 52°C)
- Weight .................................................. 0.5 lb (0.23 kg)

Materials of Construction

- Adjusting Nut & Stem .................. Steel
- Body, Valve Poppet, Bottom Plug, Diaphragm Button .... Brass
- Bonnet, Knob ............................................. Plastic
- Seals, Diaphragm ................................. Buna N
- Springs .............................................. Steel
15R Regulators – Economy

Features

• Solid control piston with resilient seat for service-free operation.
• Non-rising “locking” adjusting knob.
• Compact, 3.30 inch (84mm) high by 2.12 inch (54mm) wide.
• Easily serviced.
• High Flow: 1/4” – 21 SCFM§
  3/8” – 28 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”</td>
<td>15R113FB</td>
</tr>
<tr>
<td>3/8”</td>
<td>15R213FB</td>
</tr>
<tr>
<td>With Gauge</td>
<td></td>
</tr>
<tr>
<td>1/4”</td>
<td>15R118FB</td>
</tr>
<tr>
<td>3/8”</td>
<td>15R218FB</td>
</tr>
</tbody>
</table>

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

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

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

Pressure Range
<table>
<thead>
<tr>
<th>Without Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>10  30 psig</td>
</tr>
<tr>
<td>11  60 psig</td>
</tr>
<tr>
<td>12  15 psig</td>
</tr>
<tr>
<td>13  125 psig</td>
</tr>
<tr>
<td>With Gauge</td>
</tr>
<tr>
<td>15  30 psig</td>
</tr>
<tr>
<td>16  60 psig</td>
</tr>
<tr>
<td>17  15 psig</td>
</tr>
<tr>
<td>18  125 psig</td>
</tr>
</tbody>
</table>

Relief

F Relieving
G Non-Relieving
H Low Temp. Relieving
J Low Temp. Non-Relieving

Engineering Level
B Current

15R Regulator Dimensions

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.12 (54)</td>
<td>2.00 (51)</td>
<td>2.60 (66)</td>
</tr>
<tr>
<td>D</td>
<td>0.70 (18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>3.30 (84)</td>
<td></td>
</tr>
</tbody>
</table>

Inches (mm)

BOLD ITEMS ARE MOST POPULAR.
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.

15R 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 .................................. P76652
Metal ................................................................. P01531
Poppet / Piston Kits – Unbalanced, Non-Relieving .......................... PS428P
Unbalanced, Relieving ........................................ PS426P
Seal Kit – Unbalanced ............................................ PS454B
Springs – 1-15 psig Range (Yellow) .......................... P01176
1-30 psig Range (Black) .............................. P01175
1-60 psig Range (White) ......................... P01174
2-125 psig Range (Gold) ......................... P01173

* Tighten panel mount nut 2.8 to 3.4 Nm (25 to 30 in-lbs) of torque.

Specifications
Gauge Ports (2) ................................................... 1/4 Inch
(Can be used for Full Flow)
Port Threads ......................................................... 1/4, 3/8 Inch
Pressure & Temperature Ratings –
Standard Pressure ...................................... 0 to 250 psig (0 to 17.2 bar)
32°F to 125°F (0°C to 52°C)
Medium Pressure .......................................... 1 to 60 psig (0 to 4.1 bar)
32°F to 125°F (0°C to 52°C)
Low Pressure ...................................................... 1 to 15 psig (0 to 1 bar)

Secondary Pressure Ranges –
Standard Pressure ...................................... 2 to 125 psig (0 to 8.6 bar)
Medium Pressure .......................................... 1 to 60 psig (0 to 4.1 bar)
Low Pressure ...................................................... 1 to 15 psig (0 to 1 bar)

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

Materials of Construction
Adjusting Nut .................................................. Brass
Adjusting Stem & Spring ...................................... Steel
Bonnet, Seat, Piston & Valve Poppet ............... Plastic
Seals ................................................................. Nitrile

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

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

**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§

### Ordering Information

**05R Regulator Dimensions**

<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>

### Engineering Level

- **Blank**
- **NPT**
- **BSPP**
- **1**
- **2**
- **BSP**
- **BSP**

### Relief

- **A**
- **Non-Relieving**
- **H**
- **Low Temp. Relieving**
- **J**
- **Low Temp. Non-Relieving**

### Options

- **Blank**
- **No Options**

### Pressure / Pressure Limited

<table>
<thead>
<tr>
<th>Port Type</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>None</td>
</tr>
<tr>
<td>XXX*</td>
<td>Preset</td>
</tr>
<tr>
<td>Pressure</td>
<td>Limited</td>
</tr>
</tbody>
</table>

### Spring Type by Preset / Limited Pressure:

- For Preset / Limited Pressure 10 to 25 use 30 PSI Spring
- For Preset / Limited Pressure 26 to 50 use 60 PSI Spring
- For Preset / Limited Pressure 51 to 90 use 125 PSI Spring

**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.

---

**BOLD ITEMS ARE MOST POPULAR.**
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
300 psig (0 to 20.0 bar) .................................... K4520N14300
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
Non-Relieving ....................................................................... PS909P

Specifications

Gauge Ports (2) .................................................................. 1/4 Inch
Port Threads ........................................................................ 1/4, 3/8 Inch
Primary Pressure Rating – 
Maximum Primary Pressure ........................................ 300 psig (17.2 bar) Max.
For Secondary Pressure Ranges see above charts.

Temperature Rating .......................................................... 32°F to 175°F (0°C to 80°C)
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.
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\(\text{§}\) 3/8” – 60 SCFM\(\text{§}\) 1/2” – 75 SCFM\(\text{§}\)

<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”</td>
<td>06R113AC</td>
</tr>
<tr>
<td>3/8”</td>
<td>06R213AC</td>
</tr>
<tr>
<td>1/2”</td>
<td>06R313AC</td>
</tr>
<tr>
<td>With 160 PSI Gauge</td>
<td></td>
</tr>
<tr>
<td>1/4”</td>
<td>06R118AC</td>
</tr>
<tr>
<td>3/8”</td>
<td>06R218AC</td>
</tr>
<tr>
<td>1/2”</td>
<td>06R318AC</td>
</tr>
</tbody>
</table>

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

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

\(\text{§}\) 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

<table>
<thead>
<tr>
<th>06R</th>
<th>1</th>
<th>13</th>
<th>A</th>
<th>C</th>
<th>---</th>
<th>---</th>
</tr>
</thead>
</table>

<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 1/4 Inch</td>
<td>11 60 psig 13 125 psig 15 250 psig With Gauge(\text{**})</td>
<td>A Relieving</td>
<td>C Current</td>
<td>Blank</td>
<td>Blank None</td>
<td>Blank None</td>
</tr>
<tr>
<td>2 3/8 Inch</td>
<td>16 60 psig 18 125 psig 21 250 psig</td>
<td>L Non-Relieving</td>
<td></td>
<td>NPT 1/4 &amp; 3/8 inch meet ISO 1179-1 Standard.</td>
<td>No Options</td>
<td>XXX^* Preset Pressure</td>
</tr>
<tr>
<td>3 1/2 Inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Inlet Pressure is 100 psig. For other pressures, contact factory.</td>
<td></td>
</tr>
</tbody>
</table>

\(\text{**}\) Includes 1-1/2” Dial Face Gauge

Spring Type by Preset / Limited Pressure:
For Preset / Limited Pressure 28 to 50 use 60 PSI Spring
For Preset / Limited Pressure 51 to 90 use 125 PSI Spring

BOLD ITEMS ARE MOST POPULAR.
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

<table>
<thead>
<tr>
<th>Kit Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonnet Assembly Kit</td>
<td>PS715P</td>
</tr>
<tr>
<td>Control Knob</td>
<td>P0409B</td>
</tr>
<tr>
<td>Gauges – 2&quot; Dial Face</td>
<td>K4520N14060</td>
</tr>
<tr>
<td></td>
<td>K4520N14160</td>
</tr>
<tr>
<td></td>
<td>K4520N14300</td>
</tr>
<tr>
<td>1-3/4&quot; Digital Round Face</td>
<td>K4517N14160D</td>
</tr>
<tr>
<td>Mounting Bracket Kit (Includes Panel Mount Nut)</td>
<td>PS707P</td>
</tr>
<tr>
<td>Panel Mount Nut – Plastic</td>
<td>P04082</td>
</tr>
<tr>
<td></td>
<td>P04079B</td>
</tr>
<tr>
<td>Reverse Flow Service Conversion Kit –</td>
<td>PS708RP</td>
</tr>
<tr>
<td>Relieving</td>
<td></td>
</tr>
<tr>
<td>Service Kit – Relieving (Includes Poppet)</td>
<td>PS708P</td>
</tr>
<tr>
<td></td>
<td>PS709P</td>
</tr>
<tr>
<td>Springs – 1-30 psig Range</td>
<td>P01698</td>
</tr>
<tr>
<td>1-60 psig Range</td>
<td>P04062</td>
</tr>
<tr>
<td>2-125 psig Range</td>
<td>P04063</td>
</tr>
<tr>
<td>5-250 psig Range</td>
<td>P04064</td>
</tr>
<tr>
<td>Tamperproof Kit</td>
<td>PS737P</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>Port</th>
<th>1/4 Inch</th>
<th>3/8 Inch</th>
<th>1/2 Inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauge Ports (2)</td>
<td>1/4 Inch</td>
<td>3/8 Inch</td>
<td>1/2 Inch</td>
</tr>
<tr>
<td>100 psig (6.9 bar) Primary Pressure</td>
<td>100 psig (6.9 bar) Primary Pressure</td>
<td>100 psig (6.9 bar) Primary Pressure</td>
<td></td>
</tr>
<tr>
<td>(Can be used as additional High Flow 1/4 Inch Outlet Ports)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port Threads</td>
<td>1/4, 3/8, 1/2 Inch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Pressure Rating</td>
<td>Maximum Primary Pressure</td>
<td>250 psig (17.2 bar)</td>
<td></td>
</tr>
<tr>
<td>Secondary Pressure Ranges</td>
<td>Standard Pressure</td>
<td>2 to 125 psig (0 to 8.6 bar)</td>
<td></td>
</tr>
<tr>
<td>Low Pressure</td>
<td>1 to 60 psig (0 to 4.1 bar)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Pressure</td>
<td>5 to 250 psig (0.4 to 17.2 bar)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature Rating</td>
<td>32°F to 175°F (0°C to 80°C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Temperature</td>
<td>-4°F to 125°F (-20°C to 52°C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>1.6 lb. (0.7 kg)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Materials of Construction

<table>
<thead>
<tr>
<th>Component</th>
<th>Steel</th>
<th>Zinc</th>
<th>Plastic</th>
<th>Nitrile</th>
<th>Stainless Steel</th>
<th>Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusting Stem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonnet, Piston Stem, Valve Poppet &amp; Cap</td>
<td>Plastic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collar, Knob</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diaphragm</td>
<td>Nitrile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seals</td>
<td>Nitrile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Springs – Poppet</td>
<td>Stainless Steel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Control | Steel |
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: 1/2” – 90 SCFM§
  3/4” – 90 SCFM§

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>07R313AC</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>07R413AC</td>
</tr>
<tr>
<td>With 160 PSI Gauge</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>07R318AC</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>07R418AC</td>
</tr>
</tbody>
</table>

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

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>Port Size</th>
<th>Pressure Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>11 60 psig</td>
</tr>
<tr>
<td>13 125 psig</td>
<td></td>
</tr>
<tr>
<td>15 250 psig</td>
<td></td>
</tr>
<tr>
<td>16 60 psig</td>
<td></td>
</tr>
<tr>
<td>18 125 psig</td>
<td></td>
</tr>
<tr>
<td>21 250 psig</td>
<td></td>
</tr>
<tr>
<td>With Gauge**</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>13 125 psig</td>
</tr>
<tr>
<td>15 250 psig</td>
<td></td>
</tr>
<tr>
<td>16 60 psig</td>
<td></td>
</tr>
<tr>
<td>18 125 psig</td>
<td></td>
</tr>
<tr>
<td>21 250 psig</td>
<td></td>
</tr>
</tbody>
</table>

** Includes 1-1/2” Dial Face Gauge

### Ordering Information

| 07R 3 13 A C — — --- |

### Pressure Range

**Available Preset / Pressure Limited Range. 10 to 90 psig in 5 psig increments. For higher pressures, contact factory.**

(Example: 065 = 65 psig)

---

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

**WARNING**

---

### Spring Type by Preset / Limited Pressure:
For Preset / Limited Pressure 26 to 50 use 60 PSI Spring
For Preset / Limited Pressure 51 to 90 use 125 PSI Spring

**BOLD ITEMS ARE MOST POPULAR.**
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 – 2" Dial Face
  60 psig (0 to 4.1 bar) ............................................. K4520N14060
  160 psig (0 to 11.0 bar) ........................................ K4520N14160
  300 psig (0 to 20.0 bar) ........................................... K4520N14300
1-3/4" Digital Round Face
  160 psig (0 to 11.0 bar) ......................................... K4517N14160D
Mounting Bracket Kit (Includes Panel Mount Nut) .... PS807P
Panel Mount Nut – Plastic ..................................... P04082
  Metal ................................................................. P04079B
Reverse Flow Service Conversion Kit –
  Relieving ............................................................ PS808RP
Service Kit – Relieving (Includes Poppet) ................. PS808P
  Non-Relieving (Includes Poppet) ............................ PS808P
Springs – 1-30 psig Range .................................... P01698
  1-60 psig Range .................................................. P04062
  2-125 psig Range ................................................ P04063
  5-250 psig Range ................................................ P04064
Tamperproof Kit .................................................. PS737P

Specifications

Gauge Ports (2) .......................................................... 1/4 Inch
(Can be used as additional High Flow 1/4 Inch Outlet Ports)
Port Threads ......................................................... 1/2, 3/4 Inch
Primary Pressure Rating –
  Maximum Primary Pressure ................................ 250 psig (17.2 bar)
Secondary Pressure Ranges –
  Standard Pressure ............................................. 2 to 125 psig (0 to 8.6 bar)
  Low Pressure ...................................................... 1 to 60 psig (0 to 4.1 bar)
  High Pressure .................................................... 5 to 250 psig (0.4 to 17.2 bar)
Temperature Rating ............................................ 32°F to 175°F (0°C to 80°C)
  Low Temperature ............................................. -4°F to 125°F (-20°C to 52°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§
  1-1/2" – 300 SCFM§

Port Size | NPT
---|---
Without Gauge
3/4" | P3NRA96BNN
1" | P3NRA98BNN
1-1/2" | P3NRA9PBNN
With 160 PSI Gauge
3/4" | P3NRA96BNG
1" | P3NRA98BNG
1-1/2" | P3NRA9PBNG

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

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

Ordering Information

**Port Size**
- 3/4" (w/o Port Blocks)
- 1" (w/o Port Blocks)
- 1-1/2" Port Blocks (w/ 1" Ported Body)

**Relief**
- B Relieving
- N Non-Relieving

**Adjustment**
- N Non-Rising Knob

**Pressure Gauge**
- Without Gauge
  - L 60 PSI (0 to 4 bar)
  - N 125 PSI (0 to 8 bar)
- With Gauge
  - H 250 PSI (0 to 17 bar)
  - M 60 PSI (0 to 4 bar)
  - G 125 PSI (0 to 8 bar)
  - J 250 PSI (0 to 17 bar)

**Note:** BSPP ported units supplied using NPT ported bodies and BSPP port block kits.

**Bold Items are Most Popular.**
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 – 2˝ Dial Face
60 psig (0 to 4.1 bar) ...................... K4520N14060
160 psig (0 to 11.0 bar) .................. K4520N14160
300 psig (0 to 20.0 bar) ................ K4520N14300
1-3/4˝ Digital Round Face
160 psig (0 to 11.0 bar) .................. K4517N14160D
Mounting Bracket Kit* .................... P3NKA00MW
Service Kit – Relieving .................. P3NKA00RR
Non-Relieving ............................ P3NKA00RN
Springs – 1-60 psig Range .............. C10A1304
2-125 psig Range ........................ C10A1308
5-250 psig Range ........................ C10A1317

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)
Temperature Rating ...................... 32°F to 175°F (0°C to 80°C)
Weight – 3/4˝ .......................... 4.2 lb. (1.9 kg)
1˝ ........................................ 4.2 lb. (1.9 kg)
1-1/2˝† .................................. 5.3 lb. (2.4 kg)

Materials of Construction

Adjusting Stem ............................ Steel
Body ........................................... Aluminum
Bonnet ......................................... Aluminum
Knob ........................................... Plastic
Piston ......................................... Plastic
Poppet Assembly ........................... Brass
Seals ........................................... Nitrile
Springs – Poppet & Control ............. Steel
† 1˝ Port Body with 1-1/2˝ Port Block.

* If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.
R119 Regulators – Standard

Features

- High Flow Performance Featuring Rugged Design for the Most Demanding Applications
- Ideal for Those Installations Calling for Constant Pressure with Wide Variation in Flow
- Diaphragm Operated Design with Balanced Poppet Design for Quick and Accurate Regulation
- Secondary Aspiration Plus Balanced Poppet Provides Quick Response and Accurate Pressure Regulation
- Heavy Duty Tee Handle Adjustment
- Reverse Flow Version Available
- Panel Mount Version Available
- High Flow: 1/4” – 100 SCFM§
  3/8” – 110 SCFM§
  1/2” – 150 SCFM§

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT Relieving</th>
<th>BSPP Relieving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge 0-125 PSIG Reduced Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4”</td>
<td>R119-02C</td>
<td>R119G02C</td>
</tr>
<tr>
<td>3/8”</td>
<td>R119-03C</td>
<td>R119G03C</td>
</tr>
<tr>
<td>1/2”</td>
<td>R119-04C</td>
<td>R119G04C</td>
</tr>
<tr>
<td>With Gauge 0-125 PSIG Reduced Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4”</td>
<td>R119-02CG/M2</td>
<td>–</td>
</tr>
<tr>
<td>3/8”</td>
<td>R119-03CG/M2</td>
<td>–</td>
</tr>
<tr>
<td>1/2”</td>
<td>R119-04CG/M2</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 100 PSIG inlet, 75 PSIG no flow secondary setting, and 20 PSIG pressure drop.

Ordering Information

R 119 – 02 C /M2

Port Threads
- NPT
  02  1/4 Inch
  03  3/8 Inch
  04  1/2 Inch
- BSPP

Reduced Pressure Range
- A  0-25 PSIG
- B  0-60 PSIG
- C  0-125 PSIG
- D  0-250 PSIG

Options
- None
  G Gauge
  K† Non-Relieving
  P Panel Mount
  X64** Fluorocarbon O-Rings and Diaphragm
  X80* Reverse Flow
  X7 Brass Bottom Plug

* Reverse flow for use downstream of control valves.
** Brass Bottom Plug Standard with X64 Option.
† Not available with 250 PSIG spring.

Standard Regulators
1/4, 3/8 & 1/2 Inch Ports

R119 Regulator Dimensions

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>R119-02C, R119-03C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.00 (76)</td>
<td>1.38 (35)</td>
<td>5.29 (134)</td>
<td>2.74 (70.5)</td>
<td>6.67 (169)</td>
<td>.90 (24)</td>
</tr>
<tr>
<td>R119-04C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.56 (90)</td>
<td>1.56 (40)</td>
<td>5.34 (136)</td>
<td>3.25 (83)</td>
<td>6.90 (175)</td>
<td>1.45 (37)</td>
</tr>
</tbody>
</table>

inches (mm)

BOLD ITEMS ARE MOST POPULAR.
Technical Specifications – R119

R119 Regulator Kits & Accessories

Gauges – 2" Dial Face
- 60 psig (0 to 4.1 bar) ....... K4520N14060
- 160 psig (0 to 11.0 bar) ..... K4520N14160
- 300 psig (0 to 20.0 bar) ..... K4520N14300
1/2" Inch Ports
- 100 PSIG (6.9 bar) ......... RK119Y

Mounting Bracket Kit –
- 1/4", 3/8" .......................... SA15Y57
- 1/2" .................................. 18A57

Panel Mount Conversion Kit –
- 1/4", 3/8" .................... 4202
- 1/2" .......................... 4204

Repair Kits –
- Non-Relieving Diaphragm,
  Valve Assembly (1/4", 3/8"; All PSIG) .............. RK118Y
- Relieving Diaphragm,
  Valve Assembly (1/4", 3/8"; All PSIG) ............. RK119Y
- Non-Relieving Diaphragm,
  Valve Assembly (1/2"; 25, 60, 125 PSIG) .......... RK118A
- Non-Relieving Diaphragm,
  Valve Assembly (1/2"; 250 PSIG) ................. RK118A250
- Relieving Diaphragm,
  Valve Assembly (1/2"; 25, 60, 125 PSIG) ........ RK119A

Flow Characteristics

R119-02C
- 1/4 Inch Ports
- 100 PSIG (6.9 bar) Primary Pressure

R119-03C
- 3/8 Inch Ports
- 100 PSIG (6.9 bar) Primary Pressure

Specifications

Gauge Ports (2) ............................................. 1/4 Inch
Port Threads ............................................. 1/4, 3/8, 1/2 Inch
Reduced Pressure Range ............ 2 to 125 PSIG (0.15 to 8.5 bar)
Supply Pressure ......................... 300 PSIG Maximum (20.4 bar)
Temperature Rating ............. 40°F to 125°F (4.4°C to 52°C)

Weight –
- R119-02, R119-03 ......................... 1.8 lb. (0.82 kg) / Unit
- 26 lb. (11.79 kg) / 12-Unit Master Pack
- R119-04 ............................................. 3.2 lb. (1.45 kg) / Unit
- 27 lb. (12.25 kg) / 8-Unit Master Pack

Materials of Construction

Adjusting Screw, Springs ...................... Steel
Body, Spring Cage ............................ Zinc
Bottom Plug ........................................... Nylon
Inner Valve ........................................ Brass
Seals ................................................. Buna N

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.
R119 Regulators – Hi-Flow

Features

- High flow performance featuring rugged design for the most demanding applications.
- Ideal for those installations calling for constant pressure with wide variation in flow.
- Diaphragm operated design with balanced poppet design for quick and accurate regulation.
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Heavy duty tee handle adjustment.
- Reverse flow version available.
- High Flow: 3/4" – 300 SCFM$  
  1" – 400 SCFM$  
  1-1/4" & 1-1/2" – 500 SCFM$  

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Relieving</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>R119-06C/M2</td>
<td>Without Gauge 0-125 psig Reduced Pressure</td>
</tr>
<tr>
<td>1&quot;</td>
<td>R119-08C/M2</td>
<td></td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>R119-10C/M2</td>
<td></td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>R119-12C/M2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Relieving</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>R119-06CG/M2</td>
<td>With Gauge 0-125 psig Reduced Pressure</td>
</tr>
<tr>
<td>1&quot;</td>
<td>R119-08CG/M2</td>
<td></td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>R119-10CG/M2</td>
<td></td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>R119-12CG/M2</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 100 psig Inlet, 75 psig No Flow Secondary Setting, and 20 psig Pressure Drop.

ORDERING INFORMATION

R 119 — 06 C G /M2

Port Threads
- NPT
  G BSPP

Port Size
- 06 3/4 Inch
- 08 1 Inch
- 10 1-1/4 Inch
- 12 1-1/2 Inch

Reduced Pressure Range
- C 0-125 psig
- D 0-250 psig

Options
- Blank None
- G Gauge
- K Non-Relieving
- X64† Fluorocarbon O-Rings and Diaphragm
- X80† Reverse Flow

Engineering Level
- /M2 Current
- † Reverse flow for use downstream of control valves.
- ‡ Brass Bottom Plug Standard with X64 Option.

WARNING

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

Flow Characteristics R119-06C

3/4 Inch Ports
100 PSIG (6.9 bar)
Primary Pressure

Flow - SCFM

Flow - dm³/s

Secondary Pressure - PSIG

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.

R119 Regulator Kits & Accessories

Gauges – 2" Dial Face
60 psig (0 to 4.1 bar) ................. K4520N14060
160 psig (0 to 11.0 bar) ................. K4520N14160
300 psig (0 to 20.0 bar) ................. K4520N14300
1-3/4" Digital Round Face
160 psig (0 to 11.0 bar) ................. K4517N14160D

Mounting Bracket Kit ...................................................... 18B57

Repair Kits –
Non-Relieving Diaphragm,
Valve Assembly (3/4", 1") ........................................... RK118B
Non-Relieving Diaphragm,
Valve Assembly (1-1/4", 1-1/2") .................................... RK118D
Relieving Diaphragm,
Valve Assembly (3/4", 1") ........................................... RK119B
Relieving Diaphragm,
Valve Assembly (1-1/4", 1-1/2") .................................... RK119D

For Fluorocarbon Repair Kits, add X64 to Kit Number suffix.

Specifications

Gauge Ports (2) ........................................... 1/4 Inch
Port Threads ........................................... 3/4, 1, 1-1/4, 1-1/2 Inch
Reduced Pressure Range ............... 2 to 125 psig (0.15 to 8.5 bar)
Supply Pressure ......................... 300 psig Maximum (20.4 bar)
Temperature Rating ...................... 40°F to 125°F (4.4°C to 52°C)

Weight –
R119-06, R119-08 .................. 6.2 lb. (2.81 kg) / Unit
25 lb. (11.34 kg) / 4-Unit Master Pack
R119-10, R119-12 .................. 7.2 lb. (3.27 kg) / Unit
29 lb. (13.15 kg) / 4-Unit Master Pack

Materials of Construction

Adjusting Screw, Springs ..................... Steel
Body, Spring Cage ......................... Zinc
Bottom Plug, Innervalue .................. Brass
Seals .............................................. Buna N
09R Regulators – Hi-Flow

Features
• Piston design for reduced downtime.
• High flow.
• Balanced poppet for quick and accurate regulation.
• Two full flow 1/4" gauge ports which can be used as additional outlets.
• Self relieving piston standard.
• High Flow: 2" – 1000 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td>09R813BA</td>
</tr>
<tr>
<td>2&quot;</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 100 psig inlet, 90 psig no flow secondary setting and 10 psig pressure drop.

Ordering Information

Port Size 8 13 B A

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Pressure Range</th>
<th>Relief</th>
<th>Engineering Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 2 Inch</td>
<td>13 125 psig</td>
<td>B Relieving</td>
<td>A Current</td>
</tr>
<tr>
<td></td>
<td>15 180 psig</td>
<td>M Non-Relieving</td>
<td></td>
</tr>
</tbody>
</table>

09 Regulator Dimensions

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.30 (135)</td>
<td>3.60 (91)</td>
<td>9.10 (231)</td>
</tr>
<tr>
<td>D</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>2.80 (71)</td>
<td>11.90 (302)</td>
<td></td>
</tr>
</tbody>
</table>

Inches (mm)

BOLD ITEMS ARE MOST POPULAR.
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.

Specifications

Gauge Ports (2) ................................................................. 1/4 Inch
(Can be used as additional Full Flow 1/4 Inch Outlet Ports)

Port Threads ................................................................. 2 Inch

Primary Pressure Rating –
Maximum Primary Pressure ...................................... 300 psig (17.2 bar)

Secondary Pressure Range – ........10 to 125 psig (0.7 to 8.6 bar)
 ...................................................... 10 to 180 psig (0.7 to 12.4 bar)

Temperature Rating ........................................... 32°F to 150°F (0°C to 66°C)

Weight ................................................................. 10.82 lb. (53 kg)

Materials of Construction

Adjusting Stem & Springs ............................................ Steel

Body ................................................................. Zinc Alloy, Die Cast

Bonnet, Piston Stem, Valve Poppet & Cap ........... Aluminum

Piston, Cap ................................................................. Plastic

Seals ................................................................. Nitrile
10R Pilot Controlled Regulator – Economy

**Features**
- Unique balanced poppet valve minimizes secondary pressure fluctuations.
- Solid control piston with resilient seat for long, service-free operation.
- Easily serviced.
- High Flow: 1/4" – 50 SCFM
  3/8" – 50 SCFM

**Port Size**

<table>
<thead>
<tr>
<th>Without Gauge</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>10R115PB</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>10R215PB</td>
</tr>
<tr>
<td>With 160 PSI Gauge</td>
<td>10R121PB</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>10R221PB</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td></td>
</tr>
</tbody>
</table>

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

**NOTE:** 1.53 Dia. (39mm) hole required for panel mounting.

**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>10R</th>
<th>1</th>
<th>15</th>
<th>P</th>
<th>B</th>
<th>—</th>
<th>—</th>
</tr>
</thead>
</table>

**Port Size**

1. 1/4 Inch
2. 3/8 Inch

**Relief / Gauge Options**

- **Without Gauge**
  - 14 Non-Relieving Piston
  - 15 Relieving Piston

- **With Gauge**
  - 19 Non-Relieving Piston
  - 21 Relieving Piston

* Includes 1-1/2" Dial Face Gauge 0 to 160 psig

**Adjustment**

- P Pilot Operated

**Engineering Level**

- B Current

**Port Type**

- Blank NPT
- 1 BSPP

**Options**

- Blank No Options

BOLD ITEMS ARE MOST POPULAR.
Technical Information

10R Pilot Regulator Kits & Accessories

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
- 300 psig (0 to 20.0 bar) ........... K4520N14300

Mounting Bracket Kit .................. PS963P
Panel Mount Nut – Metal ............... PS964P
Pilot Conversion Kit .................. PS945P
Service Kits – Relieving ............... PS94900P
Non-Relieving ....................... PS94700P

Specifications

Gauge Ports (2) .................................. 1/4 Inch
Port Threads .................................. 1/4, 3/8 Inch
Pressure & Temperature Rating – ...... 0 to 250 psig (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
Weight ........................................ 0.90 lb. (0.41 kg)

Materials of Construction

Body ............................................. Zinc
Piston & Poppet ........................... Plastic
Seals .......................................... Nitrile
Spring – Poppet ........................... Steel
Prep-Air® II, 11R Series
1/4", 3/8", 1/2" - Basic 3/8" Body

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

### Port Size

<table>
<thead>
<tr>
<th>NPT</th>
<th>1/4&quot;</th>
<th>3/8&quot;</th>
<th>1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; NPT</td>
<td>11R115PB</td>
<td>11R215PB</td>
<td>11R315PB</td>
</tr>
<tr>
<td>3/8&quot; NPT</td>
<td>11R121PB</td>
<td>11R221PB</td>
<td>11R321PB</td>
</tr>
<tr>
<td>1/2&quot; NPT</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

11R 2 15 P C —

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Relief / Gauge Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/4 Inch</td>
<td>Without Gauge</td>
</tr>
<tr>
<td>2 3/8 Inch</td>
<td>Non-Relieving Piston</td>
</tr>
<tr>
<td>3 1/2 Inch</td>
<td>Relieving Piston</td>
</tr>
</tbody>
</table>

* Includes 2" Dial Face Gauge 0 to 300 psig

<table>
<thead>
<tr>
<th>Adjustment</th>
<th>Engineering Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>P Pilot Operated</td>
<td>C Current</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port Type</th>
<th>Blank NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 BSPP</td>
<td></td>
</tr>
</tbody>
</table>

BOLD ITEMS ARE MOST POPULAR.
Technical Information

11R Pilot Regulator Kits & Accessories

- Body Service Kits – Seat Insert Kit .................................. PS713P
- Gauges – 2" Dial Face
  - 60 psig (0 to 4.1 bar) ........................................... K4520N14060
  - 160 psig (0 to 11.0 bar) ....................................... K4520N14160
  - 300 psig (0 to 20.0 bar) ....................................... K4520N14300
- 1-3/4" Digital Round Face
  - 160 psig (0 to 11.0 bar) ....................................... K4517N14160D
- Mounting Bracket Kit (Includes Panel Mount Nut) ............. PS707P
- Panel Mount Nut – Plastic ........................................ P04082
  - Metal ................................................................... P04079B
- Pilot Conversion Kit – Relieving .................................. PS745P
- Service Kits – Non-Relieving ...................................... PS747P
  - 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: 1/2" – 140 SCFM\(^\text{§}\)
  3/4" – 140 SCFM\(^\text{§}\)

**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: 1/2" – 140 SCFM\(^\text{§}\)
  3/4" – 140 SCFM\(^\text{§}\)

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>12R315PB</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>12R415PB</td>
</tr>
<tr>
<td>With 160 PSI Gauge</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>12R321PB</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>12R421PB</td>
</tr>
</tbody>
</table>

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

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

\[ \text{SCFM} = \text{Standard cubic feet per minute at 100 psig inlet, } 90 \text{ psig no flow secondary setting and 10 psig pressure drop.} \]

**WARNING**

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

**Ordering Information**

<table>
<thead>
<tr>
<th>12R</th>
<th>2</th>
<th>15</th>
<th>P</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Size</td>
<td>Relief / Gauge Options</td>
<td>Adjustment</td>
<td>Engineering Level</td>
<td>Port Type</td>
</tr>
<tr>
<td>3 1/2 Inch</td>
<td>Without Gauge</td>
<td>P Pilot Operated</td>
<td>B Current</td>
<td>Blank</td>
</tr>
<tr>
<td>4 3/4 Inch</td>
<td>Non-Relieving Piston</td>
<td>1</td>
<td>BSPP</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Relieving Piston</td>
<td>15</td>
<td>BSPT</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>&quot;With Gauge&quot;</td>
<td>19</td>
<td>&quot;With Gauge&quot;</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Non-Relieving Piston</td>
<td>21</td>
<td>Non-Relieving Piston</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Relieving Piston</td>
<td>15</td>
<td>Relieving Piston</td>
<td></td>
</tr>
</tbody>
</table>

* Includes 2" Dial Face Gauge 0 to 300 psig

**BOLD ITEMS ARE MOST POPULAR.**
12R Pilot Regulator Kits & Accessories

Body Service Kits – Seat Insert Kit.......................... PS813P
Gauges – 2" Dial Face
  60 psig (0 to 4.1 bar).................................K4520N14060
  160 psig (0 to 11.0 bar)..............................K4520N14160
  300 psig (0 to 20.0 bar).............................K4520N14300
1-3/4" Digital Round Face
  160 psig (0 to 11.0 bar)...........................K4517N14160D
Mounting Bracket Kit (Includes Panel Mount Nut)............PS807P
Panel Mount Nut – Plastic ........................................P04082
  Metal ..................................................P04079B
Pilot Conversion Kit – Relieving.......................... PS745P
Service Kits – Non-Relieving.......................... PS847P
  Relieving ........................................PS849P

Specifications

Gauge Ports (2).........................................................1/4 Inch
(Can be used as additional Full Flow 1/4 Inch Outlet Ports)
Port Threads.........................................................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
P3NR Pilot Controlled Regulator - 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" – 300 SCFM§
  1" – 300 SCFM§
  1-1/2" – 350 SCFM§

Port Size | NPT
---|---
Without Gauge
3/4" | P3NRA96BPP
1" | P3NRA98BPP
1-1/2" | P3NRA9PBPP

With 160 PSI Gauge
3/4" | P3NRA96BPG
1" | P3NRA98BPG
1-1/2" | P3NRA9PBPG

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 100 psig inlet, 90 psig 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

P3N R A 9 8 B P P

Port Type
1 G Thread (BSPP) Female
2 Rc Thread (BSPT) Female
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
N Non-Relieving

Adjustment
P Pilot Operated

Pressure Gauge
Without Gauge
P Pilot Operator
With Gauge
M 60 PSI (0 to 4 bar)
G 125 PSI (0 to 8 bar)
J 250 PSI (0 to 17 bar)

Note: BSPP ported units supplied using NPT ported bodies and BSPP port block kits.

BOLD ITEMS ARE MOST POPULAR.
Technical Information

**P3NR Pilot Regulator Kits & Accessories**

Gauges – 2” Dial Face
- 60 psig (0 to 4.1 bar) ........................................ K4520N14060
- 160 psig (0 to 11.0 bar) .................................. K4520N14160
- 300 psig (0 to 20.0 bar) .................................. K4520N14300

1-3/4” Digital Round Face
- 160 psig (0 to 11.0 bar) .................................. K4517N14160D

Mounting Bracket Kit* ........................................... P3NKAK00MW

Service Kit – Relieving ........................................... P3NKAK00PD

**Specifications**

Gauge Ports (2) .................................................. 1/4 Inch

Port Threads .................................................. 3/4, 1, 1-1/2 Inch

Primary Pressure Rating –
- Maximum Primary Pressure ................................... 250 psig (17.2 bar) Max.

Temperature Rating ........................................... 32°F to 175°F (0°C to 80°C)

Weight –
- 3/4” .............................................................. 3.3 lb. (1.5 kg)
- 1” ................................................................. 3.3 lb. (1.5 kg)
- 1-1/2” † ......................................................... 4.4 lb. (2.0 kg)

**Materials of Construction**

- Adjusting Stem ................................................... Steel
- Body .................................................................. Aluminum
- Bonnet .............................................................. Aluminum
- Piston .............................................................. Plastic
- Poppet Assembly .................................................. Brass
- Seals ................................................................ Nitrile
- Springs – Poppet ................................................... Steel

† 1” Port Body with 1-1/2” Port Block.

* If 1-1/2 BSPP E02 fittings are required, use P3NKAK00MW.
R119 – Pilot Operated Regulators

Features
- Adapted for control by a remote or distant small pilot regulator. Ideal for maximum capacity requirements in applications where units are not readily accessible.
- High flow performance featuring rugged design for the most demanding applications.
- Ideal for those installations calling for constant pressure with wide variation in flow.
- Diaphragm operated design with balanced poppet and constant bleed pilot for quick and accurate regulation.
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Reverse flow available.
- High flow: 1/4" - 100 SCFM, 3/8" - 110 SCFM, 1/2" - 150 SCFM.

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT Relieving</th>
<th>BSPP Relieving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge 0-125 PSIG Reduced Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>R119-02J/M2</td>
<td>R119G02J</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>R119-03J/M2</td>
<td>R119G03J</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>R119-04J/M2</td>
<td>R119G04J</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, 75 PSIG No Flow Secondary Setting, and 20 PSIG Pressure Drop.

Ordering Information

**R** R119 — **02** J /M2

- **Port Threads**
  - NPT
  - G BSPP
- **Port Size**
  - 02 1/4 Inch
  - 03 3/8 Inch
  - 04 1/2 Inch
- **Reduced Pressure Range**
  - J Air Pilot Operated
- **Options**
  - K Non-Relieving
  - X64* Fluorocarbon O-Rings and Diaphragm
  - X71 Non-Bleed Pilot (For use with Electronic Controllers)
  - X7 Brass Bottom Plug
- **Engineering Level**
  - /M2 Current

BOLD ITEMS ARE MOST POPULAR.

---

WARNING
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.
Product rupture can cause serious injury.
R119 Regulator Kits & Accessories

Gauges – 2" Dial Face
- 60 psig (0 to 4.1 bar) .................................. K4520N14060
- 160 psig (0 to 11.0 bar) .......................... K4520N14160
- 300 psig (0 to 20.0 bar) ............................ K4520N14300
- 1-3/4" Digital Round Face
  - 160 psig (0 to 11.0 bar) ............................ K4517N14160D

Repair Kits –
- Non-Relieving Diaphragm, Valve Assembly (1/2") .................. RK118X20A
- Non-Relieving Diaphragm, Valve Assembly (1/4", 3/8") ............ RK118X20Y
- Relieving Diaphragm, Valve Assembly (1/2") .................. RK119X20A
- Relieving Diaphragm, Valve Assembly (1/4", 3/8") .................. RK119X20Y

For Fluorocarbon Repair Kits, add X64 to Kit Number suffix.
For Non-Bleed Pilot Repair Kits, add X71 to Kit Number suffix.

Specifications

- Gauge Ports (2) ......................................... 1/4 Inch
- Port Threads ......................................... 1/4, 3/8, 1/2 Inch
- Pilot Port –
  - 1/4 & 3/8" Threads .................................. 1/8"
  - 1/2" Threads ............................................ 1/4"

- Reduced Pressure Range –
  Adjustable to within 5 to 7 PSIG of Supply Pressure

- Supply Pressure .................................... 300 PSIG Maximum (20.4 bar)
- Air Consumption –
  Constant bleed from air pilot chamber: approx. 0.17 SCFM (10 SCFH)
- Temperature Rating ............................... 40°F to 125°F (4.4°C to 52°C)
- Weight –
  - R119-02J, R119-03J ............................. 1.6 lb (0.73 kg) / Unit
  - 19 lb (8.62 kg) / 12-Unit Master Pack
  - R119-04J ............................................. 2.6 lb (1.18 kg) / Unit
  - 21 lb (9.53 kg) / 8-Unit Master Pack

Materials of Construction

- Body, Ring, Top Plate .............................. Zinc
- Bottom Plug ......................................... Nylon
- Inner Valve .......................................... Brass
- Seals .................................................. Buna N
R119 Pilot Operated Regulators - Hi-Flow

**Features**

- Adapted for control by a remote or distant small pilot regulator. Ideal for maximum capacity requirements in applications where units are not readily accessible.
- High flow performance featuring rugged design for the most demanding applications.
- Ideal for those installations calling for constant pressure with wide variation in flow.
- Diaphragm operated design with balanced poppet and constant bleed pilot for quick and accurate regulation.
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Reverse flow version available.
- High Flow: 3/4" & 1" – 300 SCFM§
  1-1/4" & 1-1/2" – 500 SCFM§

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Relieving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge 0-125 psig Reduced Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>R119-06J/M2</td>
<td></td>
</tr>
<tr>
<td>1&quot;</td>
<td>R119-08J/M2</td>
<td></td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>R119-10J/M2</td>
<td></td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>R119-12J/M2</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 100 psig Inlet, 75 psig No Flow Secondary Setting, and 20 psig Pressure Drop.

**Ordering Information**

```
R 119 — 06 J — /M2
```

**Options**

- Blank None (K) Non-Relieving
- X64† Fluorocarbon O-Rings and Diaphragm
- X71 Non-Bleed Pilot (For use with Electronic Controllers)
- X80 Reverse Flow

---

**WARNING**

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

---

† Brass Bottom Plug Standard with X64 Option.
R119 Series
Pilot Controlled Regulators

Technical Information

Flow Characteristics

R119-06J

3/4 Inch Ports
100 PSIG (6.9 bar)
Primary Pressure

Secondary Pressure - bar

Secondary Pressure - PSIG

Flow - SCFM

Flow - dm³/s

R119-10J

1-1/4 Inch Ports
100 PSIG (6.9 bar)
Primary Pressure

Secondary Pressure - bar

Secondary Pressure - PSIG

Flow - SCFM

Flow - dm³/s

R119-12J

1-1/2 Inch Ports
100 PSIG (6.9 bar)
Primary Pressure

Secondary Pressure - bar

Secondary Pressure - PSIG

Flow - SCFM

Flow - dm³/s

R119 Regulator Kits & Accessories

Gauges – 2” Dial Face

- 60 psig (0 to 4.1 bar) ............................................. K4520N14060
- 160 psig (0 to 11.0 bar) ......................................... K4520N14160
- 300 psig (0 to 20.0 bar) ......................................... K4520N14300

1-3/4” Digital Round Face

- 160 psig (0 to 11.0 bar) ......................................... K4517N14160D

Repair Kits –

- Non-Relieving Diaphragm,
  Valve Assembly (3/4”, 1”) ................................. RK118X20B
- Non-Relieving Diaphragm,
  Valve Assembly (1-1/4”, 1-1/2”) .................... RK118X20D
- Relieving Diaphragm,
  Valve Assembly (3/4”, 1”) ................................. RK119X20B
- Relieving Diaphragm,
  Valve Assembly (1-1/4”, 1-1/2”) .................... RK119X20D

For Fluorocarbon Repair Kits, add X64 to Kit Number suffix.

Specifications

Gauge Ports (2) ........................................................... 1/4 Inch

Port Threads ............................................. 3/4, 1, 1-1/4, 1-1/2 Inch

Reduced Pressure Range –

Adjustable to Within 5 to 7 psig of Supply Pressure

Supply Pressure .................. 300 psig Maximum (20.4 bar)

Air Consumption –

Constant Bleed from Air Pilot Chamber:
Approximately 0.17 SCFM (10 SCFH)

Temperature Rating .................. 40°F to 125°F (4.4°C to 52°C)

Weight –

- R119-06J, R119-08J ................................. 5.2 lb. (2.36 kg) / Unit
  42 lb. (19.05 kg) / 8-Unit Master Pack
- R119-10J, R119-12J ................................. 5.6 lb. (2.54 kg) / Unit
  46 lb. (20.87 kg) / 8-Unit Master Pack

Materials of Construction

- Body, Ring, Top Plate .............................................. Zinc
- Bottom Plug, Inner Valve ...................................... Brass
- Seals ................................................................. Buna N

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics
R119 Pilot Operated Regulators - Hi-Flow

Features

- Adapted for control by a remote or distant small pilot regulator. Ideal for maximum capacity requirements in applications where units are not readily accessible.
- High flow performance featuring rugged design for the most demanding applications.
- Ideal for those installations calling for constant pressure with wide variation in flow.
- Piston operated design with balanced poppet and dual constant bleed for quick and accurate regulation.
- High Flow: 2" & 2-1/2" – 1800 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Relieving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Gauge 0-125 psig Reduced Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2&quot;</td>
<td>R119-16J</td>
<td></td>
</tr>
<tr>
<td>2-1/2&quot;</td>
<td>R119-20J</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 100 psig Inlet, 75 psig No Flow Secondary Setting, and 20 psig Pressure Drop.

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>R</th>
<th>119</th>
<th>—</th>
<th>16</th>
<th>J</th>
</tr>
</thead>
</table>

Port Threads
- NPT
- G BSPP

Port Size
- 16 2 Inch
- 20 2-1/2 Inch

Reduced Pressure Range
- J Air Pilot Operated

NOTE: Non-Relieving Not Available.
R119 Regulator Kits & Accessories

Gauges – 2" Dial Face
60 psig (0 to 4.1 bar).............................. K4520N14060
160 psig (0 to 11.0 bar).......................... K4520N14160
300 psig (0 to 20.0 bar).......................... K4520N14300
1-3/4" Digital Round Face
160 psig (0 to 11.0 bar).......................... K4517N14160D

Repair Kits –
Piston Type Regulation (2", 2-1/2") ...................... RK119G

Specifications

<table>
<thead>
<tr>
<th>Gauge Ports (2)</th>
<th>1/4 Inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Can be used for Full Flow)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port Threads</th>
<th>2, 2-1/2 Inch</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Reduced Pressure Range –</th>
<th>Adjustable to Within 5 to 7 psig of Supply Pressure</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Supply Pressure</th>
<th>300 psig Maximum (20.4 bar)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Air Consumption –</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant Bleed from Air Pilot Chamber:</td>
</tr>
<tr>
<td>Approximately 0.17 SCFM (10 SCFH)</td>
</tr>
<tr>
<td>Constant Bleed from Reduced Pressure:</td>
</tr>
<tr>
<td>Approximately 0.17 SCFM (10 SCFH)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Temperature Rating</th>
<th>40°F to 120°F (4.4°C to 48.9°C)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Weight –</th>
</tr>
</thead>
<tbody>
<tr>
<td>R119-16J, R119-20J</td>
</tr>
<tr>
<td>15 lb. (6.80 kg) / 1-Unit Master Pack</td>
</tr>
</tbody>
</table>

Materials of Construction

<table>
<thead>
<tr>
<th>Body, Piston</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seals</td>
<td>Buna N</td>
</tr>
<tr>
<td>Innervalve</td>
<td>Brass &amp; Stainless</td>
</tr>
</tbody>
</table>
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 B34 Series, 1/8 and 1/4 Inch
- Economy 05E Series, 1/4 and 3/8 Inch
- Compact 06E Series, 1/4, 3/8 and 1/2 Inch
- Standard 07E Series, 3/8, 1/2 and 3/4 Inch
- Hi-Flow P3NE Series, 3/4, 1 and 1-1/2 Inch
- Standard / Coalescing 12E 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.

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.
Filter / Regulator

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.)

Semi Automatic Drain

(Overnight Drain)
This drain offers a semi-automatic function when there is a differential pressure in the filter which occurs when system pressure is shut off. The drain can also be used manually by gripping it with your fingertips and pushing upward.

Automatic Pulse Drain

(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.

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.
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
  1/4" – 18 SCFM

<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†</td>
<td>1/8&quot;</td>
<td>14E01B13FC</td>
<td>14E05B13FC</td>
</tr>
<tr>
<td></td>
<td>1/4&quot;</td>
<td>14E11B13FC</td>
<td>14E15B13FC</td>
</tr>
<tr>
<td>Metal Bowl</td>
<td>1/8&quot;</td>
<td>14E03B13FC</td>
<td>14E07B13FC</td>
</tr>
<tr>
<td></td>
<td>1/4&quot;</td>
<td>14E13B13FC</td>
<td>14E17B13FC</td>
</tr>
</tbody>
</table>

Standard part numbers shown bold. For other models refer to ordering information below.
† For polycarbonate bowl see Caution on page C2.
§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 | C | — | — | --- |

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

**Pressure Range**

<table>
<thead>
<tr>
<th>Without</th>
<th>With Gauge*</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 30 psig</td>
<td>15 30 psig</td>
</tr>
<tr>
<td>11 60 psig</td>
<td>16 60 psig</td>
</tr>
<tr>
<td>12 15 psig</td>
<td>17 15 psig</td>
</tr>
<tr>
<td>13 125 psig</td>
<td>18 125 psig</td>
</tr>
</tbody>
</table>

* Not available with BSPP or BSPT port types.

**Spring Type by Preset / Limited Pressure:**
- For Preset / Limited Pressure 10 to 25 use 30 PSI Spring
- For Preset / Limited Pressure 26 to 50 use 60 PSI Spring
- For Preset / Limited Pressure 51 to 90 use 125 PSI Spring

**Options**
- Blank: No Options
- L†: Preset
  - Non-Adjustable
  - Pressure Limiter Max.
- P†: Preset Adjustable
  - Pressure
  - Limiter Max.
- S†: Pressure
  - Limiter Max.

† 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.

14E Filter / Regulator Kits & Accessories

Bonnet Tamperproof Kit.................................P01265

Bowl Kits –
Poly Bowl – Automatic Drain .........................PS408BP
Twist Drain.................................................PS404P

Metal Bowl – Automatic Drain .........................PS451BP
Twist Drain.................................................PS447BP

Filter Element Kits – 40 Micron .........................PS401P
5 Micron....................................................PS403P
Adsorber.................................................PS452P

Gauges – 30 psig (0 to 2.1 bar) .........................K4515N18030
60 psig (0 to 4.1 bar) ..................................K4515N18060
160 psig (0 to 11.0 bar) .................................K4515N18160

Mounting Bracket Kit* (Includes Panel Mount Nut)............PS417BP

Panel Mount Nut*...........................................P78652

Poppet / Piston Kits – Unbalanced, Non-Relieving ..................PS428P
Unbalanced, Relieving..................................PS426P

Springs – 1- 15 psig Range (Yellow).......................P01176
1- 30 psig Range (Black) ...............................P01175
1- 60 psig Range (White) ...............................P01174
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

* Tighten panel mount nut 2.8 to 3.4 Nm (25 to 30 in-lbs) of torque.

\[ \text{Pressure & Temperature Ratings – } \]

- 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)

\[ \text{Secondary Pressure Ranges – } \]

- Standard Pressure .................... 2 to 125 psig (0 to 8.6 bar)
- Medium Pressure ..................... 1 to 30 psig (0 to 2.1 bar)
- Medium Pressure ..................... 1 to 60 psig (0 to 4.1 bar)
- Low Pressure ......................... 1 to 15 psig (0 to 1 bar)

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

Materials of Construction

- Adjusting Nut .............................................Brass
- Adjusting Stem & Spring .............................Steel
- Body.........................................................Zinc
- Bonnet, Knob, Seat, Piston, Holder & Deflector .................Plastic
- Bowls Available – Transparent ..........................Polycarbonate
- Body & Stem..............................................Plastic
- Drains – Manual – Twist Type
  - Body & Stem ............................................Plastic
  - Nitrile
  - Stem, Seat, Adaptor & Washers .........................Aluminum
- Filter Elements – 5 Micron (Standard) .......................Plastic
  - 40 Micron (Optional) ..................................Plastic
  - Adsorber (Optional) ..................................Activated Charcoal
  - Nitrile
- Seals.........................................................Nitrile
B34 Miniature Filter / Regulator

Features
- Excellent Water Removal Efficiency
- Diaphragm Operated for Fast Operation
- Large Diaphragm to Valve Area for Precise Regulation and High Flow capacity
- Balanced Valve Design for Precise Regulation
- Space Saving Package Offers Both Filter and Regulator Features in One Integral Unit
- Non-rising Adjustment Knob
- High Flow: 1/8” – 17 SCFM§
  1/4” – 19 SCFM§

Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Manual Twist Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly Bowl†</td>
<td>B344-01AGC</td>
<td></td>
</tr>
<tr>
<td>1/8”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4”</td>
<td>B344-02AGC</td>
<td></td>
</tr>
<tr>
<td>Metal Bowl without Sight Gauge</td>
<td>B344-01DGC</td>
<td></td>
</tr>
<tr>
<td>1/8”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4”</td>
<td>B344-02DGC</td>
<td></td>
</tr>
</tbody>
</table>

Bold Items are Most Popular.
For other models refer to ordering information below.

NOTE: 1.218 Dia. (31mm) hole required for panel mounting.
† For polycarbonate bowl see Caution on page 2.
§ SCFM = Standard cubic feet per minute at 100 PSIG inlet.
  75 PSIG no flow secondary setting and 25% pressure drop.

B34 Filter / Regulator Dimensions

<table>
<thead>
<tr>
<th>Port Size</th>
<th>A</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8” NPT</td>
<td>1.54 (39.2)</td>
<td>2.68 (68.1)</td>
<td>3.63 (92.1)</td>
</tr>
<tr>
<td>1/4” NPT</td>
<td>6.31 (160.2)</td>
<td>1.65 (41.9)</td>
<td></td>
</tr>
</tbody>
</table>

Options
- Blank - None
- G - Gauge
- K - Non-Relieving
- P - Panel Mount (Plastic)
- S - Automatic Pulse Drain

BOLD ITEMS ARE MOST POPULAR.
**Technical Information**

![Flow Characteristics Graph](image-url)

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

---

### B34 Filter / Regulator Kits & Accessories

**Adjusting Knob** .......................................................... RRP-16-005-000

**Bowl Kits** –
- Zinc (D) ................................................................. BK50SY
- Zinc with Automatic Pulse Drain (D) ....................... BK505SY
- Polycarbonate (A) ...................................................... BK504Y
- Polycarbonate with Automatic Pulse Drain (A) ........ BK504SY

**Drain Kits** –
- Automatic Pulse Drain (Maximum Pressure = 175 PSIG) RKK50SY

**Filter Element Kits** –
- 5 Micron (All) ......................................................... FRP-96-729

**Gauges** –
- 1/2" Dial Size, 1/8" Back Connection
  - 0 to 60 PSIG (0 to 400 kPa) .......................... K451518060
  - 1/2" Dial Size, 1/8" Back Connection
  - 0 to 160 PSIG (0 to 1100 kPa) ....................... K451518160

**Mounting Bracket Kit (Includes Plastic Panel Nut)** ...... SA161X57

**Panel Mount Nut** –
- Plastic ................................................................. R05X51-P
- Aluminum ......................................................... R05X51-A

**Repair Kits** –
- Non-Relieving Diaphragm, Valve Assembly (All) ....... GRP-96-726
- Relieving Diaphragm, Valve Assembly (All) ............ GRP-96-725

**Springs** –
- 0-25 ............................................................... GRP-95-111
- 0-60 ............................................................... GRP-96-718
- 0-125 ............................................................ GRP-96-717

---

### Specifications

**Bowl Capacity** .......................................................... 1 Ounce

**Gauge Ports (2)** .................................................... 1/8 Inch

**Maximum Pressure** –
- Zinc Bowl (D) ..................................................... 0 to 300 PSIG
- Polycarbonate Bowl (A) ..................................... 0 to 150 PSIG

**Port Threads** ......................................................... 1/8 &1/4 Inch

**Reduced Pressure Range** –
- 0 to 25 PSIG ....................................................... (0 to 1.7 bar) (A)
- 0 to 60 PSIG ....................................................... (0 to 4.1 bar) (B)
- 2 to 125 PSIG ..................................................... (0.15 to 8.5 bar) (C)

**Temperature Rating** .................................................. 40°F to 125°F (4.4°C to 52°C)

**Weight** –
- Zinc Bowl (D) ..................................................... 0.6 lb. (0.27 kg) / Unit
- 12 lb. (5.44 kg) / 24-Unit Master Pack
- Polycarbonate Bowl (A) ..................................... 0.3 lb. (0.14 kg) / Unit
- 6 lb. (2.72 kg) / 24-Unit Master Pack

---

### Materials of Construction

- **Adjusting Knob** ................................................ Acetal
- **Body** ............................................................... Aluminum
- **Bows** –
  - Polycarbonate (A) ........................................... Polycarbonate
  - Metal (D) ....................................................... Zinc
  - Zinc with Automatic Pulse Drain
- **Elastomers** ...................................................... Buna N
- **Filter Element** ............................................... Sintered Polyethylene
- **Filter Retainer, Valve Plate** ............................ Acetal
- **Innervave, Diaphragm, Button, Drain** .............. Brass
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.
- 40 micron filter element standard, 5 micron and adsorber available.
- High Flow: 1/4" – 30 SCFM§
  3/8" – 40 SCFM§

<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>1/4&quot;</td>
<td>05E12A13A*</td>
<td>05E1PA13A*</td>
</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
<td>1/4&quot;</td>
<td>05E14A13A*</td>
<td>05E1TA13A*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>05E24A13A*</td>
<td>05E2TA13A*</td>
<td></td>
</tr>
</tbody>
</table>

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

† For polycarbonate bowl see Caution on page C2.
§ SCFM = Standard cubic feet per minute at 100 psig inlet,
90 psig no flow secondary setting and 10 psig pressure drop.

NOTE: 1.53 Dia. (39mm) hole required for panel mounting.

05E Filter / Regulator – Economy

<table>
<thead>
<tr>
<th>Port Type</th>
<th>Pressure Range</th>
<th>Engineering Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>Without Gauge</td>
<td>Without Gauge</td>
</tr>
<tr>
<td>NPT</td>
<td>0-30 psig</td>
<td>10-30 psig</td>
</tr>
<tr>
<td>1*</td>
<td>0-60 psig</td>
<td>11-60 psig</td>
</tr>
<tr>
<td>2</td>
<td>0-125 psig</td>
<td>13-125 psig</td>
</tr>
<tr>
<td>3</td>
<td>0-200 psig</td>
<td>14—200 psig</td>
</tr>
</tbody>
</table>

BOLD ITEMS ARE MOST POPULAR.

GRAYED OUT ITEMS ARE OBSOLETE.

WARNING

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

Preset / Pressure Limited

Blank None XXX* Preset Pressure Pressure Limited

* Available Preset / Pressure Limited Range, 10 to 90 psig in 5 psig increments. For higher pressures, contact factory.
(Example: 065 = 65 psig)

© 1992 Parker Hannifin Corporation
Richland, Michigan
www.parker.com/pneumatics
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 ....................................................... PS992P
- Metal Bowl – Automatic Pulse Drain .............. PS997P
- Twist Drain ....................................................... PS994P
- Sight Gauge / Automatic Pulse Drain ............ PS996P
- Sight Gauge / Twist Drain ............................... PS935P

**Drain Kit**
- Automatic Pulse Drain ................................. PS998P
- Semi-Auto Drain ........................................ PS511P
- Twist Drain ....................................................... PS512P
- Push ‘N Drain ..................................................... PS513P

**Filter Element Kits**
- 5 Micron ......................................................... PS902P
- 40 Micron ......................................................... PS901P
- 5 Micron (Standard) ......................................... PS902P
- Adsorber (Optional) ........................................ PS931P

**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) ................................ K4515N14400

- 2" Dial Face
  - 60 psig (0 to 4.1 bar) .................................. K4520N14060
  - 160 psig (0 to 11.0 bar) ................................ K4520N14160
  - 300 psig (0 to 20.0 bar) ................................ K4520N14400

**Mounting Bracket Kit** (Includes Panel Mount Nut) PS963P

**Panel Mount Nut** – Metal ................................ PS964P

**Springs**
- 1-30 psig Range ............................................. PO4427
- 1-60 psig Range ............................................. PO4426
- 2-125 psig Range ........................................... PO4425
- 2-200 psig Range ........................................ PO2934

**Relieving Service Kit** ..................................... PS908P

**Non-Relieving Service Kit** .............................. PS909P

**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** –
- Poly carbonate 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)
  - 32°F to 125°F (0°C to 52°C)

**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 Elements**
- 40 Micron (Standard) .................................. Plastic
- 5 Micron (Optional) ....................................... Plastic
- Adsorber (Optional) .................................. Activated Charcoal

**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\(^\text{§}\)
  3/8” – 55 SCFM\(^\text{§}\)
  1/2” – 61 SCFM\(^\text{§}\)

**Ordering Information**

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Poly Bowl(^\dagger) / Metal Guard</th>
<th>Metal Bowl / Sight Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4”</td>
<td>NPT</td>
<td>06E12A13AC</td>
<td>06E14A13AC</td>
</tr>
<tr>
<td>3/8”</td>
<td>NPT</td>
<td>06E22A13AC</td>
<td>06E24A13AC</td>
</tr>
<tr>
<td>1/2”</td>
<td>NPT</td>
<td>06E32A13AC</td>
<td>06E34A13AC</td>
</tr>
</tbody>
</table>

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

\(^\dagger\) For polycarbonate bowl see Caution on page C2.

\(^\text{§}\) 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.

Spring Type by Preset / Limited Pressure:
- For Preset / Limited Pressure 26 to 50 use 60 PSI Spring
- For Preset / Limited Pressure 51 to 90 use 125 PSI Spring

---

**Parker Hannifin Corporation**
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

C104
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.

06E Filter / Regulator Kits & Accessories

Bonnet Assembly Kit ................................................................. PS715P
Bowl Guard Kit ................................................................. PS705P
Bowl Kits –
  Poly Bowl – Automatic Float Drain ........................................ PS722P
  Twit Drain ................................................................. PS732P
  Metal Bowl – Automatic Float Drain ........................................ PS726P
  Semi-Auto Drain ............................................................ PS794P
  Twist Drain ................................................................. PS734P
  Sigt Gauge / Automatic Drain .............................................. PS723P
  Sigt Gauge / Twist Drain .................................................. PS735P
Control Knob .............................................................. PS04089B
Drain Kits –
  Automatic Float Drain ...................................................... PS06P
  Twit Drain ................................................................. PS711P
  Push 'N' Drain ............................................................. PS713P
Filter Element Kits –
  40 Micron ................................................................ PS701P
  5 Micron ................................................................ PS702P
  Adsorber ................................................................ PS731P
Gauges – 2" Dial Face
  60 psig (0 to 4.1 bar) ..................................................... K45201N14060
  160 psig (0 to 11.0 bar) .................................................. K45201N14160
  300 psig (0 to 20.0 bar) .................................................. K45201N14300
1-3/4" Digital Round Face
  160 psig (0 to 11.0 bar) .................................................. K4517N14160D
Mounting Bracket Kit (Includes Panel Mount Nut) ................................................................ PS707P
Panel Mount Nut ............................................................... P04082
Service Kits – Non-Releasing (Includes Poppet) ................................ PS711P
Relieving (Includes Poppet) ................................................ PS710P
Seat Insert Kit ................................................................ PS713P
Springs –
  1 - 30 psig Range .......................................................... PS01698
  1 - 60 psig Range .......................................................... PS04062
  2 - 125 psig Range ......................................................... PS04063
  5 - 250 psig Range ........................................................ PS04064
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 Ranges –
Standard Pressure .................................................. 2 to 125 psig (0 to 8.6 bar)
Low Pressure ............................................................. 1 to 60 psig (0 to 4.1 bar)
High Pressure .......................................................... 5 to 250 psig (0.4 to 17.2 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
Manual Push 'N' Drain Optional
Body ................................................................. Nitrile
Stem ................................................................. Brass

Automatic Float Drain Optional
(Intechangeable 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 – 40 Micron (Standard) .............. Polyamid
5 Micron (Optional) .................................................. Plastic
Adsorber (Optional) ........................................... Activated Carbon

Seals ................................................................. Nitrile
Sight Gauge ............................................................. Polyamide
Springs – Poppet ......................................................... Stainless
Control ............................................................... Steel

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics
**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: 1/2" – 90 SCFM
  
  3/4" – 90 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>1/2&quot;</td>
<td>07E32A13AC</td>
<td>07E36A13AC</td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>07E42A13AC</td>
<td>07E46A13AC</td>
<td></td>
</tr>
</tbody>
</table>

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

† For polycarbonate bowl see Caution on page C2.

‡ 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".

**Ordering Information**

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Elements</th>
<th>Relief</th>
<th>Type</th>
<th>Pressure Range</th>
<th>Engineering Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>A 40 Micron</td>
<td>A Relieving</td>
<td>Blank</td>
<td>Without</td>
<td>Current</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>B 5 Micron</td>
<td>L Non-Relieving</td>
<td>NPT</td>
<td>With</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bowl Options</th>
<th>Pressure Range</th>
<th>Engineering Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polycarbonate Bowl</td>
<td>Without</td>
<td>Current</td>
</tr>
<tr>
<td>2 Metal Bowl Guard / Twist Drain</td>
<td>11 60 psig</td>
<td>3</td>
</tr>
<tr>
<td>6 Metal Bowl Guard / Auto Float Drain</td>
<td>13 125 psig</td>
<td>A</td>
</tr>
<tr>
<td>Metal Bowl</td>
<td>15f 250 psig</td>
<td>C</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.

**Preset**

<table>
<thead>
<tr>
<th>Blank</th>
<th>XXX*</th>
<th>None</th>
<th>Preset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>None</td>
<td>XXX*</td>
<td>Preset</td>
</tr>
</tbody>
</table>

† With Auto Float Drain

* Available Preset Range, 10 to 90 psig in 5 psig increments. For higher pressures, contact factory.

(Example: 065 = 65 psig)

**Spring Type by Preset / Limited Pressure:**

For Preset / Limited Pressure 26 to 50 use 60 PSI Spring
For Preset / Limited Pressure 51 to 90 use 125 PSI Spring

BOLD ITEMS ARE MOST POPULAR.
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.

07E Filter / Regulator Kits & Accessories

<table>
<thead>
<tr>
<th>Kit Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonnet Assembly Kit</td>
<td>PS71SP</td>
</tr>
<tr>
<td>Bowl Guard Kit</td>
<td>PS80SP</td>
</tr>
<tr>
<td>Bowl Kits –</td>
<td></td>
</tr>
<tr>
<td>Poly Bowl –</td>
<td></td>
</tr>
<tr>
<td>Automatic Float Drain</td>
<td>PS822P</td>
</tr>
<tr>
<td>Twist Drain</td>
<td>PS832P</td>
</tr>
<tr>
<td>Metal Bowl –</td>
<td></td>
</tr>
<tr>
<td>Automatic Float Drain</td>
<td>PS826P</td>
</tr>
<tr>
<td>Semi-Auto Drain</td>
<td>PS894P</td>
</tr>
<tr>
<td>Twist Drain</td>
<td>PS834P</td>
</tr>
<tr>
<td>Sight Gauge / Auto Drain</td>
<td>PS823P</td>
</tr>
<tr>
<td>Sight Gauge / Twist Drain</td>
<td>PS835P</td>
</tr>
<tr>
<td>Control Knob</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P04089B</td>
</tr>
<tr>
<td>Drain Kits –</td>
<td></td>
</tr>
<tr>
<td>Automatic Float Drain</td>
<td>PS060P</td>
</tr>
<tr>
<td>Semi-Auto Drain</td>
<td>PS511P</td>
</tr>
<tr>
<td>Twist Drain</td>
<td>PS012P</td>
</tr>
<tr>
<td>Push 'N' Drain</td>
<td>PS013P</td>
</tr>
<tr>
<td>Filter Element Kit –</td>
<td></td>
</tr>
<tr>
<td>40 Micron</td>
<td>PS801P</td>
</tr>
<tr>
<td>5 Micron</td>
<td>PS802P</td>
</tr>
<tr>
<td>Adsorber</td>
<td>PS831P</td>
</tr>
<tr>
<td>Gauges –</td>
<td></td>
</tr>
<tr>
<td>2&quot; Dial Face –</td>
<td></td>
</tr>
<tr>
<td>60 psig (0 to 4.1 bar)</td>
<td>K4520N14060</td>
</tr>
<tr>
<td>160 psig (0 to 11.0 bar)</td>
<td>K4520N14160</td>
</tr>
<tr>
<td>300 psig (0 to 20.0 bar)</td>
<td>K4520N14300</td>
</tr>
<tr>
<td>1-3/4&quot; Digital Round Face</td>
<td></td>
</tr>
<tr>
<td>160 psig (0 to 11.0 bar)</td>
<td>K4517N14160D</td>
</tr>
<tr>
<td>Mounting Bracket Kit –</td>
<td>PS807P</td>
</tr>
<tr>
<td>Panel Mount Nut –</td>
<td>P04082</td>
</tr>
<tr>
<td>Service Kits –</td>
<td></td>
</tr>
<tr>
<td>Non-Relieving (Includes Poppet)</td>
<td>PS811P</td>
</tr>
<tr>
<td>Relieving (Includes Poppet)</td>
<td>PS810P</td>
</tr>
<tr>
<td>Seat Insert Kit –</td>
<td>PS813P</td>
</tr>
<tr>
<td>Springs –</td>
<td></td>
</tr>
<tr>
<td>1-30 psig Range</td>
<td>P01898</td>
</tr>
<tr>
<td>1-60 psig Range</td>
<td>P04062</td>
</tr>
<tr>
<td>2-125 psig Range</td>
<td>P04063</td>
</tr>
<tr>
<td>5-250 psig Range</td>
<td>P04064</td>
</tr>
<tr>
<td>Tamperproof Kit (Key Lock)</td>
<td>PS737P</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowl Capacity</td>
<td>7.2 Ounces</td>
</tr>
<tr>
<td>Gauge Ports (2)</td>
<td>1/4 Inch</td>
</tr>
<tr>
<td>(Can be used as Additional Full Flow 1/4&quot; Outlet Ports)</td>
<td></td>
</tr>
<tr>
<td>Port Threads</td>
<td>1/2, 3/4 Inch</td>
</tr>
</tbody>
</table>

Pressure & Temperature Ratings –
Polypropylene Bowl – 0 to 150 psig (0 to 10.4 bar)
32°F to 175°F (0°C to 80°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)
Low Pressure 1 to 60 psig (0 to 4.1 bar)
High Pressure 5 to 250 psig (0.4 to 17.2 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
Bows Available – Polycarbonate
Filter Guard – Metal (With or Without Sight Gauge) – Zinc
Ball Guard – Polycarbonate
Collar – Plastic or Metal
Diaphragm – Nitrile

Drains – Manual Twist Drain Standard
Body & Nut – Plastic
Manual Push 'N' Drain Optional
Body – Nitrile
Stem – Brass
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

Knobs – Plastic

Filter Elements – 40 Micron (Standard)
5 Micron (Optional) – Plastic
Adsorber (Optional) – Activated Charcoal
Seals – Nitrile

Sight Gauge – Polyamide
Springs – Popet – Stainless Steel
Control – Steel

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics
P3NE Filter / Regulator – 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 auto drain.
- Self relieving feature plus balanced poppet provides quick response and accurate pressure regulation.
- Solid control piston for extended life.
- High Flow: 3/4" – 250 SCFM§
  1" – 250 SCFM§
  1-1/2 – 250 SCFM§

Ordering Information

<table>
<thead>
<tr>
<th>Port Type</th>
<th>Port Size</th>
<th>Element</th>
<th>Bowl</th>
<th>Drains</th>
<th>Relief</th>
<th>Adjustment</th>
<th>Pressure Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot; G Thread (BSPP) Female</td>
<td>6 3/4&quot; (w/o Port Blocks)</td>
<td>A Adsorber E 5 Micron G 40 Micron</td>
<td>S Metal Bowl w/ Sight Gauge</td>
<td>M Twist Drain A Automatic Float Drain</td>
<td>B Relieving N Non-Relieving</td>
<td>N Non-Rising Knob</td>
<td>L 60 PSI (0 to 4 bar)</td>
</tr>
<tr>
<td>2 Rc Thread (BSPT) Female</td>
<td>8 1&quot; (w/o Port Blocks)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N 125 PSI (0 to 8 bar)</td>
</tr>
<tr>
<td>9 NPT Female</td>
<td>P 1-1/2&quot; Port Blocks (w/ 1&quot; Ported Body)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H 250 PSI (0 to 17 bar)</td>
</tr>
</tbody>
</table>

Note: BSPP ported units supplied using NPT ported bodies and BSPP port block kits.

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

BOLD ITEMS ARE MOST POPULAR.
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.

P3NE Filter / Regulator Kits & Accessories

<table>
<thead>
<tr>
<th>Bowl Kits –</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Bowl – Sight Gauge / Automatic Float Drain</td>
<td>P3NKA00BSA</td>
<td></td>
</tr>
<tr>
<td>Sight Gauge / Twist Drain</td>
<td>P3NKA00BSM</td>
<td></td>
</tr>
<tr>
<td>Sight Gauge / Push ‘N’ Drain</td>
<td>P3NKA00BSP</td>
<td></td>
</tr>
<tr>
<td>Bowl Latch Kit</td>
<td>C11A33</td>
<td></td>
</tr>
<tr>
<td>Control Knob</td>
<td>P3NKA00PN</td>
<td></td>
</tr>
<tr>
<td>Drain Kit – Automatic Float Drain</td>
<td>PS506P</td>
<td></td>
</tr>
<tr>
<td>Semi-Auto Drain</td>
<td>PS511P</td>
<td></td>
</tr>
<tr>
<td>Twist Drain</td>
<td>PS512P</td>
<td></td>
</tr>
<tr>
<td>Push ‘N’ Drain</td>
<td>PS513P</td>
<td></td>
</tr>
<tr>
<td>Filter Element Kits – 40 Micron</td>
<td>P3NKA00E5G</td>
<td></td>
</tr>
<tr>
<td>PSA Micron</td>
<td>P3NKA00E5O</td>
<td></td>
</tr>
<tr>
<td>5 Micron</td>
<td>P3NKA00ESE</td>
<td></td>
</tr>
<tr>
<td>Adsorber</td>
<td>P3NKA00ESA</td>
<td></td>
</tr>
<tr>
<td>Gauges – 2” Dial Face</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 psig (0 to 4.1 bar)</td>
<td>K4520N14060</td>
<td></td>
</tr>
<tr>
<td>160 psig (0 to 11.0 bar)</td>
<td>K4520N14160</td>
<td></td>
</tr>
<tr>
<td>300 psig (0 to 20.0 bar)</td>
<td>K4520N14300</td>
<td></td>
</tr>
<tr>
<td>1-3/4” Digital Round Face</td>
<td>K4517N14160D</td>
<td></td>
</tr>
<tr>
<td>160 psig (0 70 11.0 bar)</td>
<td>K4517N14160D</td>
<td></td>
</tr>
<tr>
<td>Mounting Bracket Kit*</td>
<td>P3NKA00MW</td>
<td></td>
</tr>
<tr>
<td>Service Kit – Relieving</td>
<td>P3NKA00RR</td>
<td></td>
</tr>
<tr>
<td>Non-Relieving</td>
<td>P3NKA00RRN</td>
<td></td>
</tr>
<tr>
<td>Sight Gauge</td>
<td>P3NKA00PE</td>
<td></td>
</tr>
<tr>
<td>Springs – 1-60 psig Range</td>
<td>C10A1304</td>
<td></td>
</tr>
<tr>
<td>2-125 psig Range</td>
<td>C10A1308</td>
<td></td>
</tr>
<tr>
<td>5-250 psig Range</td>
<td>C10A1317</td>
<td></td>
</tr>
</tbody>
</table>

* If 1-1/2 BSPP E02 fittings are required, use P3NKA0BSM.

Specifications

| Bowl Capacity | 18.0 Ounces |
| Gauge Ports (2) | 1/4 Inch |
| Port Threads | 3/4, 1, 1-1/2* Inch |
| Pressure & Temperature Rating | 0 to 250 psig (0 to 17.2 bar) |
| | 32°F to 175°F (0°C to 80°C) |
| For Secondary Pressure Ranges see above charts. |
| Sump Capacity | 6.8 Ounces |
| Weight – 3/4” | 5.3 lb. (2.4 kg) |
| | 1” | 5.3 lb. (2.4 kg) |
| | 1-1/2” | 6.43 lb. (2.9 kg) |

Materials of Construction

Adjusting Stem | Steel |
Body, Bonnet, Bowl | Aluminum |
Drain | Plastic |
Filter Elements – 40 Micron (Standard) | Plastic |
5 Micron (Optional) | Plastic |
Adsorber (Optional) | Activated Charcoal |
Knob | Plastic |
Piston | Plastic |
Seals | Nitrile |
Sight Gauge | Polyamide (Nylon) |
Springs – Poppet & Control | Steel |

* 1” Port Body with 1-1/2” Port Block.
**12E 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\(^\text{§}\)
  - 1/2" – 40 SCFM\(^\text{§}\)
  - 3/4" – 45 SCFM\(^\text{§}\)

**Port Size**

<table>
<thead>
<tr>
<th>Port Type</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twist Drain</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>12E23E13AA</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>12E33E13AA</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>12E43E13AA</td>
</tr>
<tr>
<td>Automatic Float Drain</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>12E27E13AA</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>12E37E13AA</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>12E47E13AA</td>
</tr>
</tbody>
</table>

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

\(^\text{§}\) 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.

**Ordering Information**

| 12E | 3 | 3 | E | 13 | A | A | — | — | --- |

**Bowl Options**
- Metal Bowl
- 3 Twist Drain
- 7 Automatic Float Drain

**Spring Type by Preset / Limited Pressure:**
- For Preset / Limited Pressure 10 to 25 use 30 PSI Spring
- For Preset / Limited Pressure 26 to 50 use 60 PSI Spring
- For Preset / Limited Pressure 51 to 90 use 125 PSI Spring

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

---

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics
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.

12E Filter / Regulator Kits & Accessories
Bonnet Assembly Kit ... PS715P
Bowl Kits –
   Metal Bowl – Automatic Float Drain …… PS826P
   Twist Drain …… PS834P
   Push ‘N’ Drain …… PS825P
Control Knob …… P04069B
Drain Kits –
   Automatic Float Drain …… PS506P
   Twist Drain …… PS512P
   Push ‘N’ Drain …… PS513P
Filter Element Kits –
   Grade 6 …… PS884P
   Grade 10 …… PS885P

Gauges – 2” Dial Face
   60 psig (0 to 4.1 bar) …… K4520N14060
   160 psig (0 to 11.0 bar) …… K4520N14160
   300 psig (0 to 20.0 bar) …… K4520N14300
1-3/4” Digital Round Face
   160 psig (0 to 11.0 bar) …… K4517N14160D
Mounting Bracket Kit (Includes Panel Mount Nut) …… PS807P
Service Kit – Relieving (Includes Poppet) …… PS886P
Springs – 1- 30 psig Range …… P01698
   1- 60 psig Range …… P04062
   2- 125 psig Range …… P04063
   5- 250 psig Range …… P04064
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)
   1/2 Inch Ports 100 PSIG (6.9 bar)
   Primary Pressure

Secondary Pressure Ranges –
   Standard Pressure …… 2 to 125 psig (0 to 8.6 bar)
   Low Pressure …… 1 to 60 psig (0 to 4.1 bar)
   High Pressure …… 5 to 250 psig (0.4 to 17.2 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
   Manual Push ‘N’ Drain Optional
   Body …… Nitrile
   Stem …… Brass
Automatic Float Drain Optional
   Operating Range …… 10 to 250 psig (.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 Steel
Micro-Mist Lubricators

- Pipe Sizes 1/4 thru 3/4 Inch
- Flows to 500 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.

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

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.)

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Quart</td>
<td>F442001</td>
</tr>
<tr>
<td>1 Gallon</td>
<td>F442002</td>
</tr>
<tr>
<td>12 Quart Case</td>
<td>F442003</td>
</tr>
<tr>
<td>4 Gallon Case</td>
<td>F442005</td>
</tr>
</tbody>
</table>
Lubricators

Micro-Mist

The Micro-Mist lubricators inject a micro-mist of oil into the flowing air stream to automatically provide the correct amount of internal lubrication for air tools and other pneumatic devices. This type of lubricator can be precisely adjusted to a very low oil flow rate because only a portion of the oil drops seen in the sight dome goes downstream. The lubricator should be used where only a very minute amount of lubricant is desirable or where it is necessary for the oil to remain in suspension in the air stream for long distances.

Operation

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\(^\text{§}\)
  3/8" – 40 SCFM\(^\text{§}\)

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Twist Drain</th>
<th>No Drain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>15L12N*</td>
<td>15L12N</td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>15L22N*</td>
<td>15L22N</td>
<td></td>
</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
<td>15L14N*</td>
<td>15L24N</td>
<td></td>
</tr>
</tbody>
</table>

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

\(\text{‡}\) For polycarbonate bowl and sight dome, see Caution on page C2.

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

Ordering Information

<table>
<thead>
<tr>
<th>15L</th>
<th>1</th>
<th>2</th>
<th>N</th>
<th>A</th>
<th>—</th>
<th>—</th>
</tr>
</thead>
</table>

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

Bowl Options
- Polycarbonate Bowl
  1. No Drain
  2. Metal Bowl Guard / No Drain
  5. Pressure Fill
- Metal Bowl
  4. Sight Gauge / Twist Drain
  8. Sight Gauge / Pressure Fill
- Metal Bowl Guard / Pressure Fill

Fill Options
- B With Fill Plug
- F With Body Pressure Fill
- N No Fill Plug

Engineering Level
- A Current

Port Type
- Blank NPT
  1. BSPP
  2. BSPT

Options
- Blank No Options

|
|---|---|---|
| F | 1.77 | 45 |
| F† | — | (10) |

Dimensions

- A: 2.00 (51)
- B: 2.06 (52)
- C: 2.26 (57)
- C†: 3.35 (85)
- D: 5.12 (130)
- D†: 5.35 (136)
- E: 7.38 (187)
- E†: 7.61 (193)
- F: 1.77 (45)
- F†: 0.39 (10)

Inches (mm)

\(\text{†}\) With Twist Drain.

Polycarbonate Bowl
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 ..................................................... PS512P
Mounting Bracket Kit ....................................................... PS943P
Oil – 1 Gal................................................................. F442002
  12 Quart Case .......................................................... F442003
  4 Gallon Case .......................................................... F442005
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 (38°C)
and an aniline point greater than 200°F (93)
(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
Bows – Transparent .................................................. Polycarbonate
Metal (With Sight Gauge) ........................................ Zinc
Bowl Guard .......................................................... Steel
Collar ................................................................. Plastic
Drains – Twist – Body & Nut .................................... Plastic
Injector Meter Block & Base Assembly ................. Plastic
Seals ................................................................. Nitrile
Sight Dome .......................................................... Polycarbonate
Sight Gauge ......................................................... Polyamide (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\(^\text{§}\)
  3/8” – 60 SCFM\(^\text{§}\)
  1/2” – 90 SCFM\(^\text{§}\)

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Poly Bowl (^\dagger) / Metal Guard</th>
<th>Metal Bowl / Sight Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4”</td>
<td>Twist Drain</td>
<td>16L12BE</td>
<td>16L14BE</td>
</tr>
<tr>
<td>3/8”</td>
<td>Twist Drain</td>
<td>16L22BE</td>
<td>16L24BE</td>
</tr>
<tr>
<td>1/2”</td>
<td>Twist Drain</td>
<td>16L32BE</td>
<td>16L34BE</td>
</tr>
</tbody>
</table>

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

\(^\dagger\) For polycarbonate bowl and sight dome, see Caution on page C2.

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

Ordering Information

16L 1 2 B E —
**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** .................................. PS512P
- **Fill Cap Kit** ....................................................... PS742P
- **Lubricator Service Kit** .................................... PS748P
- **Mounting Bracket Kit** ..................................... PS743P
- **Oil – 1 Gal.** ..................................................... F442002
  - 12 Quart Case .................................................. F442003
  - 4 Gallon Case .................................................. F442005
- **Pressure Fill Adapter Kit** ............................... PS716P
- **Pressure Fill Button** ........................................ P11912
- **Remote Auto-Fill Device** ................................. PS505CP
- **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**
  - Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C)
  - and an aniline point greater than 200°F (93)
  - (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: 1/2” – 90 SCFM, 3/4” – 90 SCFM

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Poly Bowl ‡ / Metal Guard</th>
<th>Metal Bowl / Sight Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>17L32BE</td>
<td>17L34BE</td>
<td>17L42BE</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>17L44BE</td>
<td></td>
<td></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 C2.
§ SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Ordering Information

17L 2 2 B E —

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

Bowl Options
- Polycarbonate Bowl
- Metal Bowl Guard / No Drain
- 2 Metal Bowl Guard / Pressure Fill
- 6 Metal Bowl Guard / Auto Fill Device
- K Metal Bowl Guard /
- N Metal Bowl Guard / Twist Drain
- 4 Sight Gauge / Twist Drain
- 8 Sight Gauge / Pressure Fill
- M Sight Gauge / Auto Fill Device
- 4 With Fill Plug
- C With Fill Plug/Nylon Sight Dome
- F With Body Pressure Fill
- G With Body Pressure Fill / Nylon Sight Dome

Options
- B With Fill Plug
- C With Fill Plug/Nylon Sight Dome
- F With Body Pressure Fill
- G With Body Pressure Fill / Nylon Sight Dome

17L Lubricator Dimensions

<table>
<thead>
<tr>
<th>Port Type</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPT 1/2&quot;</td>
<td>3.24 (82)</td>
<td>3.25 (83)</td>
<td>2.41 (61)</td>
</tr>
<tr>
<td>BSPP 3/4&quot;</td>
<td>6.86 (174)</td>
<td>6.95 (177)</td>
<td>9.09 (231)</td>
</tr>
<tr>
<td>NPT 1/2&quot;</td>
<td>9.35 (237)</td>
<td>2.75 (70)</td>
<td></td>
</tr>
</tbody>
</table>

*1/2 inch meets ISO 1179-1 Standard.
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 ................................................... PS512P
Fill Cap Kit ........................................................................ PS742P
Lubricator Service Kit ..................................................... PS748P
Mounting Bracket Kit ...................................................... PS843P
Oil – 1 Gal. ........................................................................... F442002
12 Quart Case ................................................................. F442003
4 Gallon Case ................................................................. F442005
Pressure Fill Adapter Kit ................................................ P716P
Pressure Fill Button ....................................................... P11912
Remote Auto-Fill Device ................................................ PS505CP
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 ................................................................. 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 (38°C)
and an aniline point greater than 200°F (93°C)
(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
Bows – 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)
Prep-Air® II
Air Preparation Units

Notes
Mist Lubricators

- Pipe Sizes 1/8 thru 2 Inch
- Flows to 1000 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 02L Series, 1/4 and 3/8 Inch
- Miniature 04L Series, 1/8 and 1/4 Inch
- Compact 06L Series, 1/4, 3/8 and 1/2 Inch
- Standard 07L Series, 3/8, 1/2 and 3/4 Inch
- Hi-Flow P3NL Series, 3/4, 1 and 1-1/2 Inch
- Hi-Flow L606 Series, 3/4, 1, 1-1/4 and 1-1/2 Inch
- Hi-Flow 09L Series, 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>F442001</td>
</tr>
<tr>
<td>1 Gallon</td>
<td>F442002</td>
</tr>
<tr>
<td>12 Quart Case</td>
<td>F442003</td>
</tr>
<tr>
<td>4 Gallon Case</td>
<td>F442005</td>
</tr>
</tbody>
</table>

Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C) and an aniline point greater than 200°F (93°C)

(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)
Lubricators

Mist

These lubricators inject an oil aerosol into the flowing air stream to automatically provide the proper amount of internal lubrication to air operated tools or other pneumatic devices.

Operation

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.
02L Lubricator – Miniature

Features
- Extends the service life of air operated hand tools.
- Reduces downtime of air operated equipment, saves money.
- Small / lightweight.
- Automatic lubrication with air tool operation.
- Adjustable oil flow.
- Corrosion resistant.
- Full swivel outlet port.

Application
In-Line Lubricators assure proper lubrication for small pneumatic hand tools. These in-line lubricators put the oil source right at the tool. Oil capacity is 1/4 oz. (1 ml), enough to last through an average 8-hour shift. This lubricator requires cyclical or intermittent airflow for proper operation, and consequently works best when installed at the tool inlet or on a short hose near the tool. The 02L cannot be filled under pressure.

Dimensions

<table>
<thead>
<tr>
<th>Part Number</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>02LFB</td>
<td>2.65 (67)</td>
<td>1.305 (33)</td>
<td>1.125 (28.5)</td>
<td>.65 (16.5)</td>
</tr>
<tr>
<td>02L1B</td>
<td>2.93 (74)</td>
<td>1.305 (33)</td>
<td>1.125 (28.5)</td>
<td>.65 (16.5)</td>
</tr>
<tr>
<td>02L2B</td>
<td>3.19 (81)</td>
<td>1.305 (33)</td>
<td>1.125 (28.5)</td>
<td>.65 (16.5)</td>
</tr>
</tbody>
</table>

Inches (mm)

Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Female Threads Inlet / Female Threads Outlet</th>
<th>Female Threads Inlet / Male Threads Outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>02LFB</td>
<td>02L1B</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>N/A</td>
<td>02L2B</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>1/4&quot;</th>
<th>3/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Capacity*</td>
<td>29 SCFM (13.6 dm³/s)</td>
<td>30 SCFM (14.2 dm³/s)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>32° to 150°F (0° to 65.5°C)</td>
<td></td>
</tr>
<tr>
<td>Maximum Supply Pressure</td>
<td>200 psig (13.8 bar)</td>
<td></td>
</tr>
<tr>
<td>Oil Capacity</td>
<td>.25 oz. (7.4 cm³)</td>
<td></td>
</tr>
<tr>
<td>Port Size</td>
<td>1/4, 3/8 NPT / BSPT</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>.2 lb (0.1 kg)</td>
<td></td>
</tr>
</tbody>
</table>

* Inlet pressure 90 psig (6.2 bar). Pressure drop 5 PSID (0.3 bar).

Materials of Construction

Body .................................................. Aluminum
Seals ............................................. Nitrile

Suggested Lubricant  F442 Oil
Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C)
and an aniline point greater than 200°F (93°C)
(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS
CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR
SYNTHETIC OILS.)

Replacement Kits
Fill Plug Kit – Brass Fill Plug and O-ring .................. PS434
O-ring Repair Kit ......................................... PS435
## 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

### Ordering Information

<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&quot;</td>
<td>–</td>
<td>04L00GB</td>
<td>04L03GB</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>–</td>
<td>04L10GB</td>
<td>04L13GB</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Port Type</th>
<th>Blank</th>
<th>NPT</th>
<th>BSPP</th>
<th>BSPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Level</td>
<td>B</td>
<td>Current</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bowl Options</td>
<td>Polycarbonate Bowl</td>
<td>Metal Bowl</td>
<td>0 Without Drain</td>
<td>3 Twist Drain</td>
</tr>
</tbody>
</table>

‡ For polycarbonate bowl and sight dome, see Caution on page C2.
§ SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

### Diagram

![04L Lubricator Dimensions](chart)

- **A**: 1.73 (44)
- **B**: 1.56 (40)
- **C**: 2.16 (55)
- **D**: 3.64 (92)
- **D†**: 3.78 (96)
- **E**: 5.80 (147)
- **E†**: 5.94 (151)
- **F**: 1.60 (41)

*Inches (mm)*

† With Twist Drain.
Technical Information

04L Mist Lubricator Kits & Accessories

Bowl Kits –
Poly Bowl – No Drain ........................................ PS421P
Twist Drain .................................................. PS420P
Metal Bowl – Twist Drain (No Sight Gauge) ........ PS447BP

Mounting Bracket Kit ........................................ PS419

Oil – 1 Gal....................................................... F442002
12 Quart Case ............................................. F442003
4 Gallon Case ............................................ F442005

Specifications

Bowl Capacity ................................................. 1 Ounce
Minimum Flow for Lubrication ...................... 0.5 SCFM at 100 psig
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)

Suggested Lubricant – ...................................... F442 Oil
Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C)
and an aniline point greater than 200°F (93°C).
(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
Bowls – Transparent .................................. Polycarbonate
Metal (Without Sight Gauge) ...................... Zinc
Drains – Twist – Body & Nut ....................... Plastic
Seals ......................................................... Nitrile
Sight Dome .................................................. Polycarbonate
06L Mist Lubricators – Compact

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.
- Bowl can be filled while air line is under pressure.
- Transparent sight dome for 360° visibility.
- High Flow: 1/4" – 40 SCFM
  3/8" – 60 SCFM
  1/2" – 90 SCFM

---

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Poly Bowl ‡ / Metal Guard</th>
<th>Metal Bowl / Sight Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>Twist Drain</td>
<td>06L12BE</td>
<td>06L14BE</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>Twist Drain</td>
<td>06L22BE</td>
<td>06L24BE</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>Twist Drain</td>
<td>06L32BE</td>
<td>06L34BE</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 C2.

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

---

06L Lubricator 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>2.24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D</th>
<th>D†</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.58</td>
<td>5.69</td>
<td>7.82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E†</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.93</td>
<td>2.25</td>
</tr>
</tbody>
</table>

Inches (mm)

†With Twist Drain.

---

Ordering Information

<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>2 Metal Bowl Guard / No Drain</td>
<td>C With Fill Plug / Nylon Sight Dome</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2 Inch</td>
<td>6 Metal Bowl Guard / Pressure Fill</td>
<td>4 Sight Gauge / Twist Drain</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>K Metal Bowl Guard / Auto Fill Device</td>
<td>8 Sight Gauge / Pressure Fill</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N Metal Bowl Guard / Twist Drain</td>
<td>M Sight Gauge / Auto Fill Device</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>F With Body Pressure Fill</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>G With Body Pressure Fill / Nylon Sight Dome</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BOLDS ITEMS ARE MOST POPULAR.
06L Mist Lubricator Kits & Accessories

- Adjustment Knob: P04121
- Bowl Guard Kit: PS705P
- Bowl Kits –
  - Poly Bowl –
    - No Drain: PS746P
    - Twist Drain: PS717P
    - Remote Fill: PS728P
  - Metal Bowl –
    - Sight Gauge / Twist Drain: PS729P
    - Sight Gauge / Pressure Fill: PS720P
- Drain Kit – Twist Drain: PS512P
- Fill Cap Kit: PS741P
- Lubricator Service Kit: PS718P
- Mounting Bracket Kit: PS743P
- Oil –
  - 1 Gal.: F442002
  - 12 Quart Case: F442003
  - 4 Gallon Case: F442005
- Pressure Fill Adapter Kit: PS716P
- Pressure Fill Button: P11912
- Remote Auto-Fill Device: PS505CP
- Sight Dome / Fill Cap Kit: PS738P
- Sight Dome Kit: PS740P
- Nylon Sight Dome Kit: PS740N

Specifications

- Bowl Capacity: 2.9 Ounces
- Minimum Flow for Lubrication: 5 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)
  - Metal Bowl: 0 to 250 psig (0 to 17.2 bar)
- Suggested Lubricant: F442 Oil
- Weight: 1.2 lb. (0.5 kg)

Materials of Construction

- Body: Zinc
- Bowls: 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)
**07L Mist Lubricators – Standard**

**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.
- Bowl can be filled while air line is under pressure.
- Transparent sight dome for 360° visibility.
- High Flow: 1/2" – 90 SCFM\(^\circ\) 3/4" – 90 SCFM\(^\circ\)

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

<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 (^\ddagger) / Metal Guard</td>
<td>07L32BE</td>
<td>07L42BE</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Metal Bowl / Sight Gauge</td>
<td>07L34BE</td>
<td>07L44BE</td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

\(^\ddagger\) For polycarbonate bowl and sight dome, see Caution on page C2.

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

### Ordering Information

**07L Lubricator Dimensions**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.24 (82)</td>
<td>3.25 (83)</td>
<td>2.41 (61)</td>
</tr>
<tr>
<td>D</td>
<td>6.86 (174)</td>
<td>6.95 (177)</td>
<td>9.09 (231)</td>
</tr>
<tr>
<td>D†</td>
<td>9.35 (237)</td>
<td>2.75 (70)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F</th>
<th>E†</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.75 (70)</td>
<td></td>
</tr>
</tbody>
</table>

Inches (mm)

\(^\ddagger\) With Twist Drain.

BOLD ITEMS ARE MOST POPULAR.
Prep-Air®, 07L Series
Air Line Mist Lubricators

Technical Information

07L Mist Lubricator Kits & Accessories

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustment Knob</td>
<td>P04121</td>
</tr>
<tr>
<td>Bowl Guard Kit</td>
<td>PS805P</td>
</tr>
<tr>
<td>Bowl Kits – Poly Bowl – No Drain</td>
<td>PS846P</td>
</tr>
<tr>
<td>Twist Drain</td>
<td>PS817P</td>
</tr>
<tr>
<td>Pressure Fill</td>
<td>PS819P</td>
</tr>
<tr>
<td>Remote Fill</td>
<td>PS828P</td>
</tr>
<tr>
<td>Metal Bowl – Sight Gauge / Twist Drain</td>
<td>PS829P</td>
</tr>
<tr>
<td>Sight Gauge / Pressure Fill</td>
<td>PS820P</td>
</tr>
<tr>
<td>Drain Kit – Twist Drain</td>
<td>PS512P</td>
</tr>
<tr>
<td>Fill Cap Kit</td>
<td>PS741P</td>
</tr>
<tr>
<td>Lubricator Service Kit</td>
<td>PS718P</td>
</tr>
<tr>
<td>Mounting Bracket Kit</td>
<td>PS843P</td>
</tr>
<tr>
<td>Oil – 1 Gal.</td>
<td>F442002</td>
</tr>
<tr>
<td>12 Quart Case</td>
<td>F442003</td>
</tr>
<tr>
<td>4 Gallon Case</td>
<td>F442005</td>
</tr>
<tr>
<td>Pressure Fill Adapter Kit</td>
<td>PS716P</td>
</tr>
<tr>
<td>Pressure Fill Button</td>
<td>P11912</td>
</tr>
<tr>
<td>Remote Auto-Fill Device</td>
<td>PS505CP</td>
</tr>
<tr>
<td>Sight Dome / Fill Cap Kit</td>
<td>PS738P</td>
</tr>
<tr>
<td>Sight Dome Kit</td>
<td>PS740P</td>
</tr>
<tr>
<td>Nylon Sight Dome Kit</td>
<td>PS740N</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowl Capacity</td>
<td>6.0 Ounces</td>
</tr>
<tr>
<td>Minimum Flow for Lubrication</td>
<td>.5 SCFM At 100 psig</td>
</tr>
<tr>
<td>Port Threads</td>
<td>1/2, 3/4 Inch</td>
</tr>
<tr>
<td>Pressure &amp; Temperature Rating – Polycarbonate Bowl</td>
<td>0 to 150 psig (0 to 10.3 bar)</td>
</tr>
<tr>
<td></td>
<td>32°F to 125°F (0°C to 52°C)</td>
</tr>
<tr>
<td>Metal Bowl – Sight Gauge / Twist Drain</td>
<td>0 to 250 psig (0 to 17.2 bar)</td>
</tr>
<tr>
<td></td>
<td>32°F to 175°F (0°C to 80°C)</td>
</tr>
<tr>
<td>Suggested Lubricant</td>
<td>F442 Oil</td>
</tr>
<tr>
<td></td>
<td>Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C)</td>
</tr>
<tr>
<td></td>
<td>and an aniline point greater than 200°F (93°C).</td>
</tr>
<tr>
<td></td>
<td>(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)</td>
</tr>
<tr>
<td>Weight</td>
<td>1.9 lb. (0.9 kg)</td>
</tr>
</tbody>
</table>

Materials of Construction

<table>
<thead>
<tr>
<th>Item</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>Zinc</td>
</tr>
<tr>
<td>Bowls – Transparent</td>
<td>Polycarbonate</td>
</tr>
<tr>
<td>Bowls – Metal (With Sight Gauge)</td>
<td>Zinc</td>
</tr>
<tr>
<td>Bowl Guard</td>
<td>Steel</td>
</tr>
<tr>
<td>Collar</td>
<td>Plastic or Metal</td>
</tr>
<tr>
<td>Drain – Twist – Body &amp; Nut</td>
<td>Plastic</td>
</tr>
<tr>
<td>Injector Meter Block &amp; Base Assembly</td>
<td>Plastic</td>
</tr>
<tr>
<td>Seals</td>
<td>Nitrile</td>
</tr>
<tr>
<td>Sight Dome</td>
<td>Polycarbonate</td>
</tr>
<tr>
<td>Sight Dome Kit</td>
<td>Polyamide (Nylon)</td>
</tr>
</tbody>
</table>
**P3NL Mist Lubricators – Hi-Flow**

**Features**
- Port blocks (PB) available to provide 1-1/2\(^\prime\) port extension to 1\(^\prime\) 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\(^\circ\) visibility.
- High Flow: 3/4\(^\prime\) – 240 SCFM\(^\text{§}\)
  - 1\(^\prime\) – 250 SCFM\(^\text{§}\)
  - 1-1/2\(^\prime\) – 260 SCFM\(^\text{§}\)

---

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>Standard Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Bowl / Sight Gauge</td>
<td>N/A</td>
<td>P3NLA96LSN</td>
</tr>
<tr>
<td>3/4(^\prime)</td>
<td>P3NLA96LSN</td>
<td></td>
</tr>
<tr>
<td>1(^\prime)</td>
<td>P3NLA98LSN</td>
<td></td>
</tr>
<tr>
<td>1-1/2(^\prime)</td>
<td>P3NLA9PLSN</td>
<td></td>
</tr>
</tbody>
</table>

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

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

---

**Ordering Information**

**P3NL Lubricator Dimensions**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>A(^\prime)</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.62</td>
<td>5.91</td>
<td>3.62</td>
</tr>
<tr>
<td></td>
<td>(92)</td>
<td>(150)</td>
<td>(92)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.81</td>
<td>9.00</td>
<td>11.81</td>
<td>4.92</td>
</tr>
<tr>
<td></td>
<td>(71)</td>
<td>(229)</td>
<td>(300)</td>
<td>(125)</td>
</tr>
</tbody>
</table>

Inches (mm)

---

**Engineering Level**

- A Current

**Port Type**

- 1\(^\prime\) G Thread (BSPP) Female
- 2\(^\prime\) Rc Thread (BSPT) Female
- 9\(^\prime\) NPT Female

**Port Size**

- 6 \(3/4\)\(^\prime\) (w/o Port Blocks)
- 8 \(1\)\(^\prime\) (w/o Port Blocks)
- P \(1-1/2\)\(^\prime\) Port Blocks (w/ 1\(^\prime\) Ported Body)

**Type**

- Oil Mist
- L w/ Polycarbonate Sight Dome
- A w/ Nylon Sight Dome

**Bowl**

- S Metal Bowl w/ Sight Gauge

**Drain / Fill Device**

- A Auto Fill / Fill Plug
- N No Drain, Solid Bowl / Fill Plug
- M Twist Drain / Fill Plug
- H No Drain / Body Pressure Fill
- J Twist Drain / Body Pressure Fill

---

**Note:** BSPP ported units supplied using NPT ported bodies and BSPP port block kits.

**BOLD ITEMS ARE MOST POPULAR.**
### Technical Information

#### Flow Characteristics

**P3NL 3/4 Inch Ports**

<table>
<thead>
<tr>
<th>Pressure Drop - PSIG</th>
<th>35</th>
<th>90</th>
<th>150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Pressure - PSIG</td>
<td>2.4 bar</td>
<td>6.2 bar</td>
<td>10.3 bar</td>
</tr>
</tbody>
</table>

**Flow - SCFM**

<table>
<thead>
<tr>
<th>Flow Characteristics</th>
<th>P3NL 3/4 Inch Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>600</td>
</tr>
</tbody>
</table>

**P3NL 1 Inch Ports**

<table>
<thead>
<tr>
<th>Pressure Drop - PSIG</th>
<th>35</th>
<th>90</th>
<th>150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Pressure - PSIG</td>
<td>2.4 bar</td>
<td>6.2 bar</td>
<td>10.3 bar</td>
</tr>
</tbody>
</table>

**Flow - SCFM**

<table>
<thead>
<tr>
<th>Flow Characteristics</th>
<th>P3NL 1 Inch Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>700</td>
</tr>
</tbody>
</table>

**P3NL 1-1/2 Inch Ports**

<table>
<thead>
<tr>
<th>Pressure Drop - PSIG</th>
<th>35</th>
<th>90</th>
<th>150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Pressure - PSIG</td>
<td>2.4 bar</td>
<td>6.2 bar</td>
<td>10.3 bar</td>
</tr>
</tbody>
</table>

**Flow - SCFM**

<table>
<thead>
<tr>
<th>Flow Characteristics</th>
<th>P3NL 1-1/2 Inch Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1000</td>
</tr>
</tbody>
</table>

---

### 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) and 32°F to 175°F (0°C to 80°C)
- **Suggested Lubricant**: F442 Oil
- **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**: Plastic (Twist Drain Optional)
- **Injector Meter Block & Base Assembly**: Plastic
- **Seals**: Nitrile
- **Sight Dome**: Polycarbonate
- **Sight Gauge**: Polyamide (Nylon)

*If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.*

---

### 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**: PS4133
- **Drain Kit – Twist Drain**: PS512P
- **Fill Cap Kit**: P3NKA00PL
- **Sight Dome Kit – Polycarbonate**: PS740P
- **Sight Dome Kit – Nylon**: PS740N
- **Sight Gauge Kit**: P3NKA00PE
- **Pressure Fill Adapter Kit**: P3NKA00PK
- **Service Kit**: P3NKA00RL
- **Mounting Bracket Kit**: P3NKA00MW
- **Oil**
  - 1 Gal: F442002
  - 12 Quart Case: F442003
  - 4 Gallon Case: F442005

---

* 1" Port Body with 1-1/2" Port Block.
## L606 Standard Lubricators

### Features
- Metal Bowl with Sight Gauge - Standard
- Polycarbonate Sight Dome
- Bowl can be filled while Air Line is Under Pressure
- Proportional Oil Delivery Over a Wide Range of Air Flows
- Large Capacity Bowl
- Optional High Capacity Bowl(s) Available
- Precision Needle Valve Assures Repeatable Oil Delivery and Provides Simple Adjustment of Delivery Rate
- High Flow: 3/4" - 325 SCFM
  1" - 350 SCFM

### Ordering Information

**Port Threads**
- NPT
- G BSPP

**Port Size**
- 3/4" Inch
- 1" Inch

**Bowl**
- Capacity Description Size
  - E 32 oz. Large Capacity without Sight Gauge with Drain 3/4" & 1"
  - G 64 oz. Large Capacity with Sight Gauge 3/4" & 1"
  - W 16 oz. Metal with Sight Gauge & Drain 3/4" & 1"

**Options**
- Blank None
- H Button Head Fill Fitting
- X9 Manual Twist Drain (Increases Product Length by 9/16 Inch)

**Engineering Level**
- M8 Current

**Bold Items are Most Popular. For other models refer to ordering information below.**

§ SCFM = Standard cubic feet per minute at 100 psig inlet, and 5 psig pressure drop.
L606 Lubricator Kits & Accessories

Adjusting Knob ......................................................... 606Y72
Bowl Kits –
  Aluminum (E) .................................................BK603B
  Aluminum with Sight Gauge (G) .................. BK606X30B
  Zinc with Sight Gauge (W) ................... BK609WB
Button Head Fill Fitting (M14 male thread) .............. L606C14
Dip Tube Kit ............................................................ DTK606
Drip Spout Kit .......................................................... RK606SY
Mounting Bracket –
  3/4 Inch units (2 required per unit) ................. SA200AW57
  1 Inch units (2 required per unit) ............... SA200CW57
Oil – 1 Gal.............................................................. F442002
  12 Quart Case .................................................... F442003
  4 Gallon Case ................................................. F442005
Repair Kits –
  Needle Valve Assembly (All) ......................... RK606Y
  Sight Gauge Bowl Repair Kit (W) .................. RKB605WB
  Sight Gauge Bowl Repair Kit (G) .................. RKB606X30B

Specifications

Bowl Capacity –
  Aluminum (E) .................................................. 32 Ounces
  Aluminum with Polycarbonate Sight Gauge (G) .... 64 Ounces
  Zinc with Nylon Sight Gauge (W) ................... 16 Ounces

Port Threads ......................................................... 3/4, 1 Inch

Pressure & Temperature Ratings –
  Aluminum Bowl (E) .................................. 0 to 300 psig (0 to 20.4 bar)
  40°F to 150°F (4.4°C to 65.6°C)
  Aluminum Bowl with Polycarbonate Sight Gauge (G) .... 0 to 150 psig (0 to 10.2 bar)
  40°F to 125°F (4.4°C to 52°C)

Zinc Bowl with Nylon Sight Gauge (W).................. 0 to 250 psig (0 to 17.2 bar)
  40°F to 150°F (4.4°C to 65.6°C)

Weight –
  Aluminum Bowl (E) .............................................. 5.5 lb. (2.49 kg) / Unit
  22.3 lb. (10.12 kg) / 4-Unit Master Pack
  Aluminum Bowl with Polycarbonate Sight Gauge (G) .... 7.2 lb. (3.27 kg) / Unit
  28.8 lb. (13.06 kg) / 4-Unit Master Pack
  Zinc Bowl with Nylon Sight Gauge (W).................. 4.2 lb. (1.91 kg) / Unit
  16.6 lb. (7.53 kg) / 4-Unit Master Pack

Suggested Lubricant .................................................. F442 Oil
  Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C)
  and an aniline point greater than 200°F (93°C).
  (DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS
  CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)

Materials of Construction

Body ................................................................. Zinc

Bowls –
  (E) ............................................................... Aluminum
  (G) ............................................................... Aluminum with Polycarbonate Sight Gauge
  (W) .............................................................. Zinc with Nylon Sight Gauge

Seals ................................................................. Buna N
L606 Standard Lubricators

**Features**
- Metal Bowl with Sight Gauge - Standard
- Polycarbonate Sight Dome
- Bowl can be filled while Air Line is Under Pressure
- Proportional Oil Delivery Over a Wide Range of Air Flows
- Large Capacity Bowl
- Optional High Capacity Bowl(s) Available
- Precision Needle Valve Assures Repeatable Oil Delivery and Provides Simple Adjustment of Delivery Rate
- High Flow: 1-1/4" - 325 SCFM
  1-1/2" - 400 SCFM

### Ordering Information

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
<th>BSPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/4&quot;</td>
<td>L606-10W/M8</td>
<td>L606G10W/M8</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>L606-12W/M8</td>
<td>L606G12W/M8</td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>L606-10E/M8</td>
<td>L606G10E/M8</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>L606-12E/M8</td>
<td>L606G12E/M8</td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>L606-10G/M8</td>
<td>L606G10G/M8</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>L606-12G/M8</td>
<td>L606G12G/M8</td>
</tr>
</tbody>
</table>

**Bold Items are Most Popular.**
For other models refer to ordering information below.

§ SCFM = Standard cubic feet per minute at 100 psig inlet, and 5 psig pressure drop.

### L606 Lubricator Dimensions

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>L606-10W, L606-12W</td>
<td>4.97 (126)</td>
<td>7.63 (194)</td>
<td>2.84 (72.2)</td>
<td>4.81 (122)</td>
<td>10.47 (266)</td>
<td>2.48 (63.1)</td>
</tr>
<tr>
<td>L606-10E, L606-12E</td>
<td>4.97 (126)</td>
<td>11.13 (283)</td>
<td>2.84 (72.2)</td>
<td>4.81 (122)</td>
<td>13.97 (355)</td>
<td>2.48 (63.1)</td>
</tr>
<tr>
<td>L606-10G, L606-12G</td>
<td>5.00 (127)</td>
<td>7.99 (203)</td>
<td>2.84 (72.2)</td>
<td>4.81 (122)</td>
<td>12.80 (325)</td>
<td>2.50 (64)</td>
</tr>
</tbody>
</table>

inches (mm)
Technical Information

L606-12G

L606 Lubricator Kits & Accessories

Adjusting Knob ............................................................606Y72
Bowl Kits –
  Aluminum (E) .....................................................BK603B
  Aluminum with Sight Gauge (G) ..........................BK606X30B
  Zinc with Sight Gauge (W) .................................BK609WB
Button Head Fill Fitting (M14 male thread) ..........L606C14
Dip Tube Kit .............................................................DTK606
Drip Spout Kit .............................................................RK606SY
Oil – 1 Gal.........................F442001
  12 Quart Case.....................................................F442003
  4 Gallon Case .....................................................F442005
Repair Kits –
  Needle Valve Assembly (All) .....................RK606Y
  Sight Gauge Bowl Repair Kit (W) ..................RKB605WB
  Sight Gauge Bowl Repair Kit (G) ..................RKB606X30B

Specifications

Bowl Capacity –
  Aluminum (E) .....................................................32 Ounces
  Aluminum with Polycarbonate Sight Gauge (G) 64 Ounces
  Zinc with Nylon Sight Gauge (W) .............................16 Ounces
Port Threads ..........................................................1-1/4, 1-1/2 Inch
Pressure & Temperature Ratings –
  Aluminum Bowl (E) ..................................0 to 300 psig (0 to 20.4 bar)
    40°F to 150°F (4.4°C to 65.6°C)
  Aluminum Bowl with
    Polycarbonate Sight Gauge (G) ...........0 to 150 psig (0 to 10.2 bar)
    40°F to 125°F (4.4°C to 52°C)
  Zinc Bowl with
    Nylon Sight Gauge (W) ..........................0 to 250 psig (0 to 17.2 bar)
    40°F to 150°F (4.4°C to 65.6°C)

Weight –
  Aluminum Bowl (E) ...........................................8.3 lb. (3.76 kg) / Unit
  33.2 lb. (15.06 kg) / 4-Unit Master Pack
  Aluminum Bowl with
    Polycarbonate Sight Gauge (G) ................10 lb. (4.54 kg) / Unit
    40 lb. (18.14 kg) / 4-Unit Master Pack Zinc Bowl with
    Nylon Sight Gauge (W) ..............................7.5 lb. (3.40 kg) / Unit
    28.2 lb. (12.79 kg) / 4-Unit Master Pack

Suggested Lubricant .................................................F442 Oil
  Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C)
  and an aniline point greater than 200°F (93°C).
  (DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS
  CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR
  SYNTHETIC OILS.)

Materials of Construction

Body ..............................Zinc

Bowls –
  (E)....................................................Aluminum
  (G)....................................................Aluminum with Polycarbonate Sight Gauge
  (W)....................................................Zinc with Nylon Sight Gauge

Seals ....................................................Buna N
09L Mist Lubricators – Hi-Flow

Features
- Metal bowl with sight gauge and manual drain – standard.
- Transparent sight dome for 360° visibility.
- Bowl can be filled while air line is under pressure.
- Proportional oil delivery over a wide range of air flows.
- High Flow: 1000 – SCFM

Features
- Metal bowl with sight gauge and manual drain – standard.
- Transparent sight dome for 360° visibility.
- Bowl can be filled while air line is under pressure.
- Proportional oil delivery over a wide range of air flows.
- High Flow: 1000 – SCFM

Port Size NPT

<table>
<thead>
<tr>
<th>Port Size</th>
<th>NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Bowl / Sight Gauge – 1 Quart</td>
<td>09L84BA</td>
</tr>
<tr>
<td>2”</td>
<td></td>
</tr>
<tr>
<td>Metal Bowl / Sight Gauge – 3 Quart</td>
<td>09L8PBA</td>
</tr>
<tr>
<td>2”</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 900 psig Inlet, and 5 psig Pressure Drop.

Ordering Information

09L 8 4 B A —

Port Size
- 8 2 Inch

Bowl Options
- Metal Bowl
- Sight Gauge / Manual Drain

Options
- B Without Tamperproof Cap
- P 3 Quart Sight Gauge / Manual Drain

Engineering Level
- A Current

Port Type
- Blank NPT

BOLD ITEMS ARE MOST POPULAR.
Technical Specifications – 09L

09L Series
Air Line Mist Lubricators

Technical Information

**Pressure Drop - bar**
2.1 4.1 6.2 7.0 8.2

**Primary Pressure - bar**
2.1 4.1 6.2 7.0 8.2

**Primary Pressure - PSIG**
30 60 90 100 120

**Flow Characteristics**
09L8PB* 2 Inch Ports

**Specifications**

- **Bowl Capacity**: 1 Qt. (Standard)
  3 Qt. (Optional)

- **Bowl**: Metal with Sight Gauge
  Manual Twist Drain

- **Port Threads**: 2 Inch

- **Pressure & Temperature Rating**: 0 to 150 psig (0 to 10.3 bar)
  32°F to 150°F (0°C to 66°C)

- **Suggested Lubricant**: F442 Oil
  Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C)
  and an aniline point greater than 200°F (93°C).
  (DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS
  CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR
  SYNTHETIC OILS.)

- **Weight**:
  1 Qt. (Standard) 10.2 lb. (4.6 kg)
  3 Qt. (Optional) 13.7 lb. (6.2 kg)

**Materials of Construction**

- **Body**: Zinc Alloy, Die Cast

---

9L Lubricator Kits & Accessories

- **Fill Cap Kit**: PS610P
- **Lubricator Service Kit**: PS607P
- **Metal Bowl – Sight Gauge / Twist Drain**: PS612P*
- **Oil – 1 Gal.**: F442002
  12 Quart Case: F442003
  4 Gallon Case: F442005
- **Sight Dome Kit**: PS613P

* 1 Quart Bowl
Remote Auto-Fill Device

Features
- Wide operating range (oil supply to inlet may be 30 to 270 psig; air operating pressure depends on bowl used).
- Rugged polyurethane float design.
- Complete field conversion kit.
- Adaptable on polycarbonate and metal bowls already in service.
- Oil supply strainer standard.
- Fits 06L / 16L and 07L / 17L Series.

Oil enters the unit at the pipe thread fitting (A) with a supply pressure that is a minimum of 20 psig above the lubricator air pressure. With the float lowered, oil flows through metering orifice (B) and lifts the check ball (C). Oil continues to flow past the shuttle chamber annulus (D) and out the cross drilled hole (E). As the oil level rises, it causes the float to rise to its maximum level in the bowl. During this period the shut-off ball (F) remains in chamber (G), out of the flow stream. Near the end of the filling period, shut-off ball (F) will enter the flow stream and snap shut against the seat in chamber (G).

The stem assembly will thus block any additional oil passage as long as the oil supply pressure is maintained at (A). When the supply pressure at (A) is released, ball (C) is held up against the shuttle (D) by a spring causing a slight delay in reverse flow shut-off. This permits the higher still present supply pressure in chamber (G) to dissipate and bowl pressure to take over. The shuttle then moves down forcing ball (C) to close orifice (B). The orifice will remain closed as long as there is air pressure in the bowl.

This delay of reverse flow in chamber (G) is necessary to allow shut-off ball (F) to fall when the oil level decreases and permit oil to enter the bowl for the next refill. Thus, for the unit to operate properly, it is necessary that the oil supply pressure go to zero after each fill.

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 / Sight Gauge: 0 to 250 psig (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
- Oil inlet pressure must be at least 20 psig above system air pressure and may be up to 300 psig.

Suggested Lubricant: F442 Oil
- Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C) and an aniline point greater than 200°F (93°C).
- (DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)

Materials of Construction
- Body, Cap & Stem: Aluminum
- Float: Polyurethane
- Mounting Nut: Delrin
- Seals: Nitrile
- Spring: Stainless

Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Kit Number</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>06L-16L</td>
<td>PS505CP</td>
<td>5.36 (136)</td>
</tr>
<tr>
<td>07L-17L</td>
<td>PS505CP</td>
<td>6.71 (170)</td>
</tr>
</tbody>
</table>

Inches (mm)

Flexible tubing is recommended for oil supply line connection to remote fill inlet. Rigid piping should be avoided to prevent possible damage due to stresses on the lubricator bowl assembly.

Oil supply line should be pressurized for 2 to 15 minutes one or more times per day. Pressurization frequency should be based on maintaining oil in lubricator at its highest level.

Weight: 1.9 lb. (0.9 kg)
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>1/8&quot;</td>
<td>14G01B13F0GD</td>
</tr>
<tr>
<td></td>
<td>1/4&quot;</td>
<td>14G11B13F0GD</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.

Three-Unit Combo

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>14A</td>
<td>1/8&quot;</td>
<td>14A01B13F0GF</td>
</tr>
<tr>
<td></td>
<td>1/4&quot;</td>
<td>14A11B13F0GF</td>
</tr>
</tbody>
</table>

For other models, refer to ordering information on next page.
Close Nippled Combinations – 14 Miniature Series

Ordering Information

| 14A | 1 | 1 | B | 13 | F | 0 | G | * |

Series

| 14A | 3-Unit |
| 14G | 2-Unit |

Filter Bowl Options

- Poly Bowl
- 1 Twist Drain
- 5 Automatic Pulse Drain
- Metal Bowl
- 3 Twist Drain
- 7 Automatic Pulse Drain

Regulator Pressure

- Poly Bowl
- Without Gauge
- 10 30 psig
- 11 60 psig
- 12 15 psig
- 13 125 psig

- With Gauge
- 15 30 psig
- 16 60 psig
- 17 15 psig
- 18 125 psig

Lubricator Bowl Options

- Poly Bowl
- 0 No Drain
- 1 Twist Drain
- 3 Twist Drain

Filter Element

- A 40 Micron
- B 5 Micron

Relief

- F Relieving
- G Non-Relieving

Lubricator Body Options

- G No Fill Plug

Engineering Level

- D Current - 14G
- F Current - 14A

NOTE: BOLD OPTIONS ARE STANDARD.

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 C2.

Dimensions

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.80</td>
<td>2.37</td>
<td>0.90</td>
<td>1.35</td>
<td>1.00</td>
<td>0.50</td>
<td>0.20</td>
<td>1.24</td>
<td>0.56</td>
<td>0.22</td>
<td>0.45</td>
<td>0.62</td>
<td>PS417BP (10F, 14F, P3A, 14R, 14E)</td>
</tr>
<tr>
<td>1.80</td>
<td>2.17</td>
<td>0.90</td>
<td>1.35</td>
<td>1.00</td>
<td>0.50</td>
<td>0.20</td>
<td>1.24</td>
<td>0.56</td>
<td>0.22</td>
<td>0.45</td>
<td>0.62</td>
<td>PS419 (04L)</td>
</tr>
</tbody>
</table>

Inches (mm)

C141
Close Nippled Combinations – 05 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>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15G</td>
<td>1/4&quot;</td>
<td>15G12A13A2N*</td>
<td>4.49 (114)</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>15G22A13A2N*</td>
<td>5.35 (136)</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>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15A</td>
<td>1/4&quot;</td>
<td>15A12A13A2N*</td>
<td>7.00 (178)</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>15A22A13A2N*</td>
<td>5.35 (136)</td>
</tr>
</tbody>
</table>

Inches (mm)

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

#### Ordering Information

<table>
<thead>
<tr>
<th>15A</th>
<th>1</th>
<th>2</th>
<th>A</th>
<th>13</th>
<th>A</th>
<th>2</th>
<th>N</th>
<th>E</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Series</th>
<th>Port Size</th>
<th>Regulator Pressure</th>
<th>Relief</th>
<th>Lubricator Body Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>15A 3-Unit</td>
<td>1 1/4 Inch</td>
<td>Without Gauge: 10 30 psig, 11 60 psig, 13 125 psig, 14 200 psig</td>
<td>A Relieving</td>
<td>Poly Bowl</td>
</tr>
<tr>
<td>15G 2-Unit</td>
<td>2 3/8 Inch</td>
<td>With Gauge: 17 30 psig, 16 60 psig, 18 125 psig, 19 200 psig</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Filter Bowl Options

- Poly Bowl
  - 1 Twist Drain
  - 2 Metal Bowl Guard / Twist Drain
  - N Automatic Pulse Drain
  - P Metal Bowl Guard / Automatic Pulse Drain
  - Metal Bowl
  - 3 Twist Drain
  - 4 Sight Gauge / Twist Drain
  - R Automatic Pulse Drain
  - T Sight Gauge / Automatic Pulse Drain
  - Automatic Pulse Drain

#### Filter Element

- A 40 Micron
- B 5 Micron

#### Relief Options

- A Relieving
- H Low Temp. Relieving
- J Low Temp Non-Relieving
- L Non-Relieving

#### Lubricator Body Options

- B With Fill Plug
- F With Body Pressure Fill
- N No Fill Plug

### Kits & Accessories

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

Mounting Bracket Kit .................................................. PS963P
(Includes Panel Mount Nut)

---

**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.

For polycarbonate bowl and sight dome, see Caution on page C2.

---

**WARNING**

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

---

**GRAYED OUT ITEMS ARE OBSOLETE**

**BOLD ITEMS ARE MOST POPULAR.**
## Modular Combinations – 05 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>15H12A13A2N*</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>15H22A13A2N*</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>15B</td>
<td>1/4&quot;</td>
<td>15B12A13A2N*</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>15B22A13A2N*</td>
</tr>
</tbody>
</table>

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

Inches (mm)
- All dimensions nominal.
- Mounting brackets not included.
### Modular Combinations – 05 Economy Series

#### Ordering Information

<table>
<thead>
<tr>
<th>15B</th>
<th>1</th>
<th>2</th>
<th>A</th>
<th>13</th>
<th>A</th>
<th>2</th>
<th>N</th>
<th>E</th>
<th>—</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series</td>
<td>Port Size</td>
<td>Filter Element</td>
<td>Relief</td>
<td>Engineering Level</td>
<td>Modular Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15B 3-Unit</td>
<td>1 1/4 Inch</td>
<td>A 40 Micron</td>
<td>A Relieving</td>
<td>Blank</td>
<td>No Port Blocks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15B 2-Unit</td>
<td>3/8 Inch</td>
<td>B 5 Micron</td>
<td>H Low Temp. Relieving</td>
<td>A</td>
<td>With Mounting Bracket &amp; Port Block</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>J Low Temp Non-Relieving</td>
<td>B</td>
<td>With Mounting Bracket, Lockout &amp; Port Block</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>L Non-Relieving</td>
<td>C</td>
<td>With Mounting Bracket &amp; Lockout</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>G</td>
<td>With Port Blocks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>With Lockout and Port Blocks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>With Mounting Bracket</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Filter Bowl Options

<table>
<thead>
<tr>
<th>Poly Bowl</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twist Drain</td>
<td>N</td>
<td>P</td>
<td>B</td>
<td>T</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal Bowl Guard / Twist Drain</td>
<td>N</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Regulator Pressure

<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>PS9500P</td>
<td>PS95001P</td>
<td>PS95002P</td>
</tr>
<tr>
<td>BSPP</td>
<td>PS95010P</td>
<td>PS95011P</td>
<td>PS95012P</td>
</tr>
<tr>
<td>BSPT</td>
<td>PS95020P</td>
<td>PS95021P</td>
<td>PS95022P</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.

For polycarbonate bowl and sight dome, see Caution on page C2.

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

- **Body Connector Kit**
- **Lockout Valve**
- **Manifold Block**
- **Pressure Switches**
  - DIN Connectors
  - Flying Leads
- **Wall Mounting Kit**

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 Connector Kits

<table>
<thead>
<tr>
<th>Size</th>
<th>NPT</th>
<th>1/4&quot;</th>
<th>3/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8&quot;</td>
<td>PS95000P</td>
<td>PS95001P</td>
<td>PS95002P</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>PS95010P</td>
<td>PS95011P*</td>
<td>PS95012P*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>PS95020P</td>
<td>PS95021P</td>
<td>PS95022P</td>
</tr>
</tbody>
</table>


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 – 05 Economy Series

Wall Mounting Kits
PS955P

Wall Mounting Kits are available for mounting your Modular Accessories 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.
Close Nippled Combinations – 06 Compact & 07 Standard Series

- See individual component pages for details.

## Two-Unit Combo

### Series | Model Numbers | Port | Model Numbers | Series
--- | --- | --- | --- | ---
06G | 06G12A13A2BC | 1/4" | 16G12A13A2BC | 16G
 | 06G22A13A2BC | 3/8" | 16G22A13A2BC | 16G
 | 06G32A13A2BC | 1/2" | 16G32A13A2BC | 16G
07G | 07G32A13A2BD | 1/2" | 17G32A13A2BD | 17G
 | 07G42A13A2BD | 3/4" | 17G42A13A2BD | 17G

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

### Dimensions

- All dimensions nominal.

## Three-Unit Combo

### Series | Model Numbers | Port | Model Numbers | Series
--- | --- | --- | --- | ---
06A | 06A12A13A2BC | 1/4" | 16A12A13A2BC | 16A
 | 06A22A13A2BC | 3/8" | 16A22A13A2BC | 16A
 | 06A32A13A2BC | 1/2" | 16A32A13A2BC | 16A
07A | 07A32A13A2BD | 1/2" | 17A32A13A2BD | 17A
 | 07A42A13A2BD | 3/4" | 17A42A13A2BD | 17A

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

### Dimensions

- All dimensions nominal.
Close Nipped Combinations – 06 Compact & 07 Standard Series

Ordering Information

<table>
<thead>
<tr>
<th>Series</th>
<th>Port Size</th>
<th>Filter Element</th>
<th>Relief</th>
<th>Lubricator Options</th>
<th>Engineering Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro-Mist</td>
<td></td>
<td>A 40 Micron</td>
<td>A Relieving</td>
<td>B With Fill Plug</td>
<td>C Current - 06A, 16A, 06G, 16G</td>
</tr>
<tr>
<td>16A Compact 3-Unit</td>
<td>1 1/4 Inch</td>
<td>B 5 Micron</td>
<td>L Non-Relieving</td>
<td>F With Body Pressure Fill</td>
<td>D Current - 07A, 17A, 07G, 17G</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>
<tr>
<td>06A Compact 3-Unit</td>
<td>* Available on 06/16 Series only.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07A Standard 3-Unit</td>
<td>** Available on 07/17 Series only.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>06G Compact 2-Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07G Standard 2-Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Filter Bowl Options
- Poly Bowl
  - 2 Metal Bowl Guard / Twist Drain
  - 6 Metal Bowl Guard / Automatic Float Drain
    - Metal Bowl
  - 3 Twist Drain
  - 4 Sight Gauge / Twist Drain
  - 7 Automatic Float Drain
  - 8 Sight Gauge / Automatic Float Drain

Regulator Pressure
- Without Gauge
  - 11 60 psig
  - 13 125 psig
  - 15* 250 psig
- With Gauge
  - 16 60 psig
  - 18 125 psig
  - 21* 250 psig

Lubricator Bowl Options
- Poly Bowl
  - 2 Metal Bowl Guard / No Drain
  - 6 Metal Bowl Guard / Pressure Fill
  - K Metal Bowl Guard / Auto Fill
  - N Metal Bowl Guard / Twist Drain
  - M Auto Fill

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

BOLD ITEMS ARE MOST POPULAR.

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.

For polycarbonate bowl and sight dome, see Caution on page C2.

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.)

Mounting Bracket Kit (Includes Panel Mount Nut)
- 06A, 16A, 06G, 16G ........................................ PS707P
- 07A, 17A, 07G, 17G ........................................ PS807P
Modular Combinations – 06 Compact & 07 Standard Series

- See individual component pages for details.

Two-Unit Combo

<table>
<thead>
<tr>
<th>Series</th>
<th>Model Numbers</th>
<th>Port</th>
<th>Model Numbers</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>06H</td>
<td>06H12A13A2BC</td>
<td>1/4&quot;</td>
<td>16H12A13A2BC</td>
<td>16H</td>
</tr>
<tr>
<td></td>
<td>06H22A13A2BC</td>
<td>3/8&quot;</td>
<td>16H22A13A2BC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>06H32A13A2BCG</td>
<td>1/2&quot;</td>
<td>16H32A13A2BCG</td>
<td></td>
</tr>
<tr>
<td>07H</td>
<td>07H32A13A2BD</td>
<td>1/2&quot;</td>
<td>17H32A13A2BD</td>
<td>17H</td>
</tr>
<tr>
<td></td>
<td>07H42A13A2BD</td>
<td>3/4&quot;</td>
<td>17H42A13A2BD</td>
<td></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</th>
<th>Port</th>
<th>Model Numbers</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>06B</td>
<td>06B12A13A2BC</td>
<td>1/4&quot;</td>
<td>16B12A13A2BC</td>
<td>16B</td>
</tr>
<tr>
<td></td>
<td>06B22A13A2BC</td>
<td>3/8&quot;</td>
<td>16B22A13A2BC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>06B32A13A2BCG</td>
<td>1/2&quot;</td>
<td>16B32A13A2BCG</td>
<td></td>
</tr>
<tr>
<td>07B</td>
<td>07B32A13A2BD</td>
<td>1/2&quot;</td>
<td>17B32A13A2BD</td>
<td>17B</td>
</tr>
<tr>
<td></td>
<td>07B42A13A2BD</td>
<td>3/4&quot;</td>
<td>17B42A13A2BD</td>
<td></td>
</tr>
</tbody>
</table>

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

Inches (mm)
• All dimensions nominal.
Modular Combinations – 06 Compact & 07 Standard 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>Micro-Mist</td>
<td>1 1/4 Inch*</td>
<td>A 40 Micron</td>
<td>A Relieving</td>
<td>C Current - 06H, 16H, 06B, 16B</td>
<td>Blank No Port Blocks</td>
</tr>
<tr>
<td>16B Compact 3-Unit</td>
<td>2 3/8 Inch</td>
<td>B 5 Micron</td>
<td>L Non-Relieving</td>
<td>D Current - 07H, 17H, 07B, 17B</td>
<td>A With Wall Mounting Bracket &amp; Port Block</td>
</tr>
<tr>
<td>17B Standard 3-Unit</td>
<td>3 1/2 Inch*</td>
<td></td>
<td></td>
<td></td>
<td>B With Mounting Bracket, Lockout &amp; Port Block</td>
</tr>
<tr>
<td>16H Compact 2-Unit</td>
<td>4 3/4 Inch**</td>
<td></td>
<td></td>
<td></td>
<td>C With Mounting Bracket &amp; Lockout</td>
</tr>
<tr>
<td>17H Standard 2-Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>G With Port Blocks</td>
</tr>
<tr>
<td>Mist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>J With Lockout (No Port Blocks)</td>
</tr>
<tr>
<td>06B Compact 3-Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K With Lockout and Port Blocks</td>
</tr>
<tr>
<td>07B Standard 3-Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W With Mounting Bracket</td>
</tr>
<tr>
<td>06H Compact 2-Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07H Standard 2-Unit</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 C2.

BOLD ITEMS ARE MOST POPULAR.

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

Body Connector Kit ........................................ PS754P
Lockout Valve ........................................ PS756P
Manifold Block ........................................ PS757P
Wall Mounting Kit .................................. PS755P

<table>
<thead>
<tr>
<th>Port Block Kits:</th>
<th>Size</th>
<th>NPT</th>
<th>BSPP</th>
<th>BSPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>06 Series</td>
<td>1/4&quot;</td>
<td>PS750P</td>
<td>PS765P</td>
<td>PS761P</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>PS751P</td>
<td>PS766P</td>
<td>PS762P</td>
</tr>
<tr>
<td></td>
<td>1/2&quot;</td>
<td>PS752P</td>
<td>PS767P</td>
<td>PS799P</td>
</tr>
<tr>
<td>07 Series</td>
<td>1/4&quot;</td>
<td>PS850P</td>
<td>PS865P</td>
<td>PS861P</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>PS851P</td>
<td>PS866P</td>
<td>PS862P</td>
</tr>
<tr>
<td></td>
<td>1/2&quot;</td>
<td>PS852P</td>
<td>PS867P</td>
<td>PS863P</td>
</tr>
<tr>
<td></td>
<td>3/4&quot;</td>
<td>PS853P</td>
<td>PS860P</td>
<td>PS864P</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 – 06 Compact & 07 Standard Series

Body Connectors
06 Series........PS754P
07 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>
<th>BSPP</th>
<th>BSPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>06 Series</td>
<td>1/4&quot;</td>
<td>PS750P</td>
<td>PS765P</td>
<td>PS761P</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>PS751P</td>
<td>PS766P</td>
<td>PS762P</td>
</tr>
<tr>
<td></td>
<td>1/2&quot;</td>
<td>PS752P</td>
<td>PS767P</td>
<td>PS799P†</td>
</tr>
<tr>
<td>07 Series</td>
<td>1/4&quot;</td>
<td>PS850P</td>
<td>PS865P</td>
<td>PS861P</td>
</tr>
<tr>
<td></td>
<td>3/8&quot;</td>
<td>PS851P</td>
<td>PS866P</td>
<td>PS862P</td>
</tr>
<tr>
<td></td>
<td>1/2&quot;</td>
<td>PS852P</td>
<td>PS867P</td>
<td>PS863P</td>
</tr>
<tr>
<td></td>
<td>3/4&quot;</td>
<td>PS853P</td>
<td>PS860P</td>
<td>PS864P</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 – 06 Compact & 07 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

06 Series .......... PS756P ..... 3/8" Port
07 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.

**Two-Unit Combo**

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

<table>
<thead>
<tr>
<th>Series Port Model Numbers</th>
<th>P3N3A96SGMNNLNA</th>
<th>P3N3A98SGMNNLNA</th>
<th>P3N3A9PSGMNNLNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>7.76 (197)</td>
<td>9.57 (243)</td>
<td>6.38 (162)</td>
</tr>
<tr>
<td>1&quot;</td>
<td>3.56 (90)</td>
<td>15.95 (405)</td>
<td>1.81 (50)</td>
</tr>
</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.

**Three-Unit Combo**

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

<table>
<thead>
<tr>
<th>Series Port Model Numbers</th>
<th>P3N3B96SGMNNLNA</th>
<th>P3N3B98SGMNNLNA</th>
<th>P3N3B9PSGMNNLNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>11.89 (302)</td>
<td>9.57 (243)</td>
<td>6.38 (162)</td>
</tr>
<tr>
<td>1&quot;</td>
<td>3.56 (90)</td>
<td>15.95 (405)</td>
<td>1.81 (50)</td>
</tr>
</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.

• 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).
### Close Nippled Combinations – P3N Hi-Flow Series

#### Ordering Information

<table>
<thead>
<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>
<th>N</th>
<th>N</th>
<th>L</th>
<th>N</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Series</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Combinations w/ Pipe Nipples</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Combination</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal Bowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Hi-Flow 2-Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B Hi-Flow 3-Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Port Type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 NPT Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Port Size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 3/4” (w/o Port Blocks)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 1” (w/o Port Blocks)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P 1-1/2” Port Blocks (w/ 1” Ported Body)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bowl</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S Metal Bowl w/ Sight Gauge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Filter Drains</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M Twist Drain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Automatic Float Drain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Regulator Pressure Range &amp; Gauges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Without Gauge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E 60 PSI (0 to 4 bar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G 125 PSI (0 to 8 bar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 250 PSI (0 to 17 bar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Gauge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M 60 PSI (0 to 4 bar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G 125 PSI (0 to 8 bar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J 250 PSI (0 to 17 bar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relief</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N Relieving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M Non-Relieving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mounting Options</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A No Brackets or Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B Wall Bracket</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lubricator Type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil Mist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L w/ Polycarbonate Sight Dome</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A w/ Nylon Sight Dome</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BOLD ITEMS ARE MOST POPULAR.**

**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** .................................................. P3NKAO0MW

* If 1-1/2 BSPP E02 fittings are required, use P3NKAO0BMW.

---

**OLD ITEMS ARE MOST POPULAR.**

* If 1-1/2 BSPP E02 fittings are required, use P3NKAO0BMW.
Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Catalog 0700P-E
(Revised 05-27-14)

P3N Hi-Flow Series
Model Numbers & Dimensions
2 & 3-Unit Modular Combinations

Modular Combinations – P3N Hi-Flow Series

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

Two-Unit Combo

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

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3NCA</td>
<td>3/4&quot;</td>
<td>P3NCA96SGMNNLNA</td>
</tr>
<tr>
<td></td>
<td>1&quot;</td>
<td>P3NCA98SGMNNLNA</td>
</tr>
<tr>
<td></td>
<td>1-1/2&quot;</td>
<td>P3NCA9PSGMNNLNA</td>
</tr>
</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).

Three-Unit Combo

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

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3NCB</td>
<td>3/4&quot;</td>
<td>P3NCB96SGMNLNA</td>
</tr>
<tr>
<td></td>
<td>1&quot;</td>
<td>P3NCB98SGMNLNA</td>
</tr>
<tr>
<td></td>
<td>1-1/2&quot;</td>
<td>P3NCB9PSGMNLNA</td>
</tr>
</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>P3N</th>
<th>C</th>
<th>A</th>
<th>9</th>
<th>6</th>
<th>S</th>
<th>G</th>
<th>M</th>
<th>N</th>
<th>N</th>
<th>L</th>
<th>N</th>
<th>A</th>
</tr>
</thead>
</table>

**Series**
- **C** Combination - Modular

**Combination**
- **A** Hi-Flow 2-Unit
- **B** Hi-Flow 3-Unit

**Port Type**
- **1** G Thread (BSPP) Female
- **2** Rc Thread (BSPT) Female
- **9** NPT Female

**Port Size**
- **6** 3/4" (w/o Port Blocks)
- **8** 1" (w/o Port Blocks)
- **H** 3/4" Port Blocks (w/3/4" Ported Body)
- **M** 1" Port Blocks (w/1" Ported Body)
- **P** 1-1/2" Port Blocks (w/1" Ported Body)

**Filter Drains**
- **M** Twist Drain

**Bowl**
- **S** Metal Bowl w/ Sight Gauge

**Filter Elements**
- **E** 5 Micron
- **G** 40 Micron

**Relief**
- **N** Relieving
- **M** Non-Relieving

**Regulator Pressure Range & Gauges**
- **Without Gauge**
  - **L** 60 PSI (0 to 4 bar)
  - **N** 125 PSI (0 to 8 bar)
  - **H** 250 PSI (0 to 17 bar)
- **With Gauge**
  - **M** 60 PSI (0 to 4 bar)
  - **G** 125 PSI (0 to 8 bar)
  - **J** 250 PSI (0 to 17 bar)

**Mounting Options**
- **A** No Brackets or Kits
- **B** Wall Bracket

**Lubricator Type**
- **Oil Mist**
- **L** w/ Polycarbonate Sight Dome

**Lubricator Drain / Fill Devices**
- **N** No Drain, Solid Bowl / Fill Plug
- **M** Manual Twist Drain / Fill Plug
- **A** Automatic Fill / Fill Plug
- **S** Bowl Pressure Fill / Fill Plug
- **H** No Drain / Body Pressure Fill
- **J** Manual Twist Drain / Body Pressure Fill

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

**Port Block Kits: For Modular Combinations**
- **3/4"**
  - **1**
- **1-1/2"**
  - **NPT**
  - **BSP**

**Wall Mounting Kit**

---

**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.

---

* If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.

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

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>P3NKB96CP</td>
</tr>
<tr>
<td></td>
<td>P3NKB98CP</td>
</tr>
<tr>
<td>P3NKB9BCP</td>
<td></td>
</tr>
<tr>
<td>BSPP</td>
<td>P3NKB16CP</td>
</tr>
<tr>
<td></td>
<td>P3NKB18CP</td>
</tr>
<tr>
<td></td>
<td>P3NKB1BCP*</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPT</td>
<td>P3NKB96CL</td>
</tr>
<tr>
<td></td>
<td>P3NKB98CL</td>
</tr>
<tr>
<td></td>
<td>P3NKB9BCL*</td>
</tr>
<tr>
<td>BSPP</td>
<td>P3NKB16CL*</td>
</tr>
<tr>
<td></td>
<td>P3NKB18CL*</td>
</tr>
<tr>
<td></td>
<td>P3NKB1BCL*</td>
</tr>
</tbody>
</table>

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.
C628 Series
Standard Combinations

Three-Unit Combo

- See individual components for details.
- Gauges included on combinations.

<table>
<thead>
<tr>
<th>Series</th>
<th>Port</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>C628</td>
<td>3/4&quot;</td>
<td>C628-06FRLWJCW</td>
</tr>
<tr>
<td></td>
<td>1&quot;</td>
<td>C628-08FRLWJCW</td>
</tr>
<tr>
<td></td>
<td>1-1/4&quot;</td>
<td>C628-10FRLWJCW</td>
</tr>
<tr>
<td></td>
<td>1-1/2&quot;</td>
<td>C628-12FRLWJCW</td>
</tr>
</tbody>
</table>

For other models, refer to ordering information below.

Ordering Information

```
C    628    —    06    FRL    W    J    C    W    /**
```

<table>
<thead>
<tr>
<th>Port Size</th>
<th>Filter Bowl Options</th>
<th>Elements</th>
<th>Engineering Change Designator</th>
</tr>
</thead>
<tbody>
<tr>
<td>06 3/4 Inch</td>
<td>E 32 oz. Large Capacity w/o/Sight Gauge</td>
<td>G 5 Micron</td>
<td>Will be entered at factory.</td>
</tr>
<tr>
<td>08 1 Inch</td>
<td>W 16 oz. Metal w/Sight Gauge</td>
<td>J 40 Micron</td>
<td></td>
</tr>
<tr>
<td>10 1-1/4 Inch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 1-1/2 Inch</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BOLD ITEMS ARE MOST POPULAR.

⚠️ 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.

Drains and Options
- H Button Head Fill Fitting (Lubricator)
- K Non-Relieving Regulator
- Q External Heavy Duty Auto Drain (Filter)
- R Internal Auto Drain (Filter)
- X9 Manual Twist Drain on Lubricator (Increases Product Length by 9/16 Inch)

Lubricator Bowl Options
- E 32 oz. Large Capacity w/o/Sight Gauge
- W 16 oz. Metal w/Sight Gauge
**06S & 07S Soft Start / Quick Dump Valve**

**Features**
- Combines Soft Start and Quick Dump Valve in the same body
- Large flow capacities up to 5.7 Cv
- Inline or Modular mounting
- Soft Start flow easily adjusted

**Operation**
When the valve is installed into the pneumatic system and pilot operator receives no signal, the air is blocked at Port 1. When a pilot signal is received at pilot operator, the valve shifts closing the connection between Ports 2 and 3. At the same time air flow begins between Ports 1 and 2 at a slow rate controlled by the needle valve located on the top of the valve. When the down stream pressure reaches approximately 60% of the supply pressure, the main valve spool opens allowing full flow through the valve into the system. If pilot signal or system pressure is lost, the valve returns to it’s initial state venting the down stream pressure through Port 3.

**Dimensions:**

<table>
<thead>
<tr>
<th>Model</th>
<th>Port Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>06S</td>
<td>3/8&quot;</td>
<td>3.36 (85)</td>
<td>5.40 (137)</td>
<td>2.07 (53)</td>
<td>2.08 (53)</td>
<td>1.68 (43)</td>
<td>2.17 (55)</td>
</tr>
<tr>
<td>07S</td>
<td>1/2&quot;</td>
<td>3.81 (96)</td>
<td>5.96 (151)</td>
<td>2.07 (53)</td>
<td>2.74 (70)</td>
<td>1.91 (48)</td>
<td>2.54 (65)</td>
</tr>
</tbody>
</table>

Inches (mm)

Pressure supply piping must be the same size as the inlet port or larger to insure that the pilot valve receives sufficient pressure supply during high flow conditions. The valves pilot signal is through a solenoid pilot mounted on the head. The valve should be mounted downstream of the FRL and with the soft start adjustment needle easily accessible.

**CAUTION:** Do not use synthetic, reconstituted, or oils with an alcohol content or detergent additive.

**CAUTION:** Do not restrict the inlet of valves.

**Ordering Information**

<table>
<thead>
<tr>
<th>Series</th>
<th>Port Size</th>
<th>Operator / Voltage</th>
<th>Engineering Level</th>
<th>Thread Type / Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>06S</td>
<td>3/8 Inch (06S)</td>
<td>30-145 PSI</td>
<td>Blank</td>
<td>NPT</td>
</tr>
<tr>
<td>07S</td>
<td>1/2 Inch (07S)</td>
<td>49 24VDC*</td>
<td>B Current</td>
<td>1&quot; BSPPP (G)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>53 120/60 Hz*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>69 24VDC**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>73 120/60 Hz**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MD M12 Male Connector, 4 Pole; 24VDC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**BOLD ITEMS ARE MOST POPULAR.**
Preface

Performance Characteristics

Soft Start Adjustment
Flow vs. Pressure Drop

Table 1: Shows the relationship between the inlet pressure and downstream pressure at which the main valve opens.

<table>
<thead>
<tr>
<th>Inlet Pressure psig</th>
<th>Downstream Pressure psig</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>55</td>
</tr>
<tr>
<td>100</td>
<td>67</td>
</tr>
<tr>
<td>125</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 2: Product forward Flow Cv and Exhaust Flow Cv.

<table>
<thead>
<tr>
<th>Series</th>
<th>Flow Cv</th>
<th>Exhaust Flow Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>06S</td>
<td>4.1</td>
<td>3.4</td>
</tr>
<tr>
<td>07S</td>
<td>5.7</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Kits & Accessories

06S Repair Kit .......................................................... PHRKC75
07S Repair Kit .......................................................... PHRKC105
06 Modular Body Connectors ........................................ PS754P
07 Modular Body Connectors ........................................ PS854P
1/2" Exhaust Silencer ................................................ ES50MB
3/4" Exhaust Silencer ................................................ ES75MB

Specifications

Exhaust Ports
06S ................................................................. 1/2 Inch
07S ................................................................. 3/4 Inch

Inlet and Outlet Ports
06S ................................................................. 3/8 Inch
07S ................................................................. 1/2 Inch

Maximum Pressure
Standard Coil .................................................. 145 psig (10.0 bar)
High Pressure Coil ............................................... 200 psig (13.8 bar)

Minimum Operating Pressure .................................. 30 psig (2.1 bar)

Temperature Ratings .............................................. 40°F to 120°F (4°C to 49°C)

Weight
06S ................................................................. 2.25 lbs. (1.02 kg)
07S ................................................................. 3.75 lbs. (1.70 kg)

Materials of Construction

Body ................................................................. Aluminum
Bottom Plug ........................................................ Brass

Connections

Central M12 Male Connector, 4 Pole

<table>
<thead>
<tr>
<th>Pin Number</th>
<th>Function</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24V Supply</td>
<td>Brown</td>
</tr>
<tr>
<td>2</td>
<td>0 to 10V or 4 to 20mA Control Signal RI = 100k Ω</td>
<td>White</td>
</tr>
<tr>
<td>3</td>
<td>0V (GND) Supply</td>
<td>Blue</td>
</tr>
<tr>
<td>4</td>
<td>24V Alarm Output Signal</td>
<td>Black</td>
</tr>
</tbody>
</table>
**06T & 07T Solenoid Quick Dump Valve**

**Features**
- Shuts off incoming pressure while rapidly exhausting downstream pressure
- Large exhaust flow capacities up to 5.0 Cv
- Solenoid operation
- Non-locking manual override
- Inline or Modular Mounting

**Operation**
The solenoid quick dump valves are high flow, normally closed, 3-Port, 2-Position directional control valves. Upon energizing the solenoid, inlet air is applied to the top of the piston. The piston pushes against the spring and opens the main valve providing full flow air to the downstream. When the solenoid is de-energized, the main valve closes allowing downstream air to exhaust rapidly through the bottom plug. The bottom plug is tapped so that exhaust may be piped away or fitted with a muffler.

**Dimensions:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>06T</td>
<td>3/8&quot;</td>
<td>3.36 (85)</td>
<td>5.40 (137)</td>
<td>2.08 (53)</td>
<td>2.17 (26)</td>
<td>1.04 (43)</td>
<td>1.68 (43)</td>
<td>2.07 (53)</td>
<td>1.90 (48)</td>
</tr>
<tr>
<td>07T</td>
<td>1/2&quot;</td>
<td>3.81 (96)</td>
<td>5.96 (151)</td>
<td>2.74 (70)</td>
<td>2.55 (65)</td>
<td>1.37 (35)</td>
<td>1.91 (48)</td>
<td>2.07 (53)</td>
<td>1.90 (48)</td>
</tr>
</tbody>
</table>

Inches (mm)

**Ordering Information**

<table>
<thead>
<tr>
<th>06T</th>
<th>2</th>
<th>53</th>
<th>A</th>
</tr>
</thead>
</table>

**Series**
- 06T Solenoid Quick Dump Valve
- 07T Solenoid Quick Dump Valve

**Port Size**
- 06T: 2 3/8 Inch (06T), 3 1/2 Inch (07T)

**Operator / Voltage**
- 30-145 PSI
- 49 24VDC*
- 53 120/60 Hz*
- 145-200 PSI
- 69 24VDC**
- 73 120/60 Hz**
- MD M12 Male Connector, 4 Pole; 24VDC

**Engineering Level**
- A Current

**Thread Type / Label**
- Blank NPT
- 1* BSPP (G)

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

BOLD ITEMS ARE MOST POPULAR.
### Performance Characteristics

**Soft Start Flow 100 PSI Inlet Flow vs. Pressure Drop**

![Graph showing pressure drop vs. flow](image)

**Filters / Coalescers**
- Prep-Air® II, 06T & 07T

---

**Prep-Air® II, 06T & 07T**

**Air Line Accessories**

<table>
<thead>
<tr>
<th>Series</th>
<th>Flow Cv</th>
<th>Exhaust Flow Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>06T</td>
<td>3.7</td>
<td>4.1</td>
</tr>
<tr>
<td>07T</td>
<td>5.5</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Tables**

**Table 2: Product forward Flow Cv (1 to 2).**

<table>
<thead>
<tr>
<th>Connector</th>
<th>Connector with 6’ (2m) Cord</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS2429BP</td>
<td>PS2429JBP</td>
<td>Unlighted</td>
</tr>
<tr>
<td>PS243079BP</td>
<td>PS2430J79BP*</td>
<td>Light – 24VDC</td>
</tr>
<tr>
<td>PS243083BP</td>
<td>PS2430J83BP*</td>
<td>Light – 120V/60Hz</td>
</tr>
</tbody>
</table>

* LED with surge suppression.

**Note:** Max ø6.5mm cable size required for connector w/o 6’ (2m) cord.
IP65 rated when properly installed.

**Engineering Data:**
- Conductors: 2 Poles Plus Ground; Cable Range (Connector Only):
  - 6 to 8mm (0.24 to 0.31 Inch); Contact Spacing: 11mm

---

**30mm Square 3-Pin**

**Connectors**

<table>
<thead>
<tr>
<th>Connector</th>
<th>Connector with 6’ (2m) Cord</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS2028BP</td>
<td>PS2028JBP</td>
<td>Unlighted</td>
</tr>
<tr>
<td>PS203279BP</td>
<td>PS2032J79BP*</td>
<td>Light – 6-24VDC</td>
</tr>
<tr>
<td>PS203283BP</td>
<td>PS2032J83BP*</td>
<td>Light – 120V/60Hz</td>
</tr>
</tbody>
</table>

* LED with surge suppression.

**Note:** Max ø6.5mm cable size required for connector w/o 6’ (2m) cord.
IP65 rated when properly installed.

**Engineering Data:**
- Conductors: 2 Poles Plus Ground; Cable Range (Connector Only):
  - 8 to 10mm (0.31 to 0.39 Inch); Contact Spacing: 18mm

---

**Specifications**

**Exhaust Ports**
- 06T .................................................. 1/2 Inch
- 07T .................................................. 3/4 Inch

**Inlet and Outlet Ports**
- 06T .................................................. 3/8 Inch
- 07T .................................................. 1/2 Inch

**Maximum Pressure**
- Standard Coil ........................................... 145 psig (10.0 bar)
- High Pressure Coil ..................................... 200 psig (13.8 bar)

**Minimum Operating Pressure** ........................................... 30 psig (2.1 bar)

**Temperature Ratings** ........................................... 40°F to 120°F (4°C to 49°C)

**Weight**
- 06T .................................................. 2.25 lbs. (1.02 kg)
- 07T .................................................. 3.75 lbs. (1.70 kg)

---

**Materials of Construction**

**Body** .................................................. Aluminum

**Bottom Plug** ........................................... Brass

---

**Connections**

Central M12 Male Connector, 4 Pole

**ISO 20401**

[Diagram showing connector with pin numbers and colors]

**Pin Number** | **Function** | **Color**
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24V Supply</td>
<td>Brown</td>
</tr>
<tr>
<td>2</td>
<td>0 to 10V or 4 to 20mA Control Signal RI = 100kΩ</td>
<td>White</td>
</tr>
<tr>
<td>3</td>
<td>0V (GND) Supply</td>
<td>Blue</td>
</tr>
<tr>
<td>4</td>
<td>24V Alarm Output Signal</td>
<td>Black</td>
</tr>
</tbody>
</table>
06P & 07P Auto Pilot Soft Start Valve

Features
- Smooth start-up of pneumatic system
- Air pilot operation
- Large flow capacities up to 5.5 Cv
- Inline or Modular Mounting

Operation
When pressure is supplied to the inlet port, gradual filling of the downstream system occurs through the adjustable needle valve. The piston opens the main valve when the downstream side of the valve reaches approximately 60% of the supply pressure. The ramp up time to reach the switch over pressure is adjustable via the needle valve in the cover.

The Auto pilot soft start valve is not intended to be used as a shut off valve and should always be placed after a shut off valve.

Ordering Information

<table>
<thead>
<tr>
<th>Series</th>
<th>Port Size</th>
<th>Engineering Level</th>
<th>Thread Type / Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>06P</td>
<td>2 3/8 Inch (06P)</td>
<td>A Current</td>
<td>Blank NPT</td>
</tr>
<tr>
<td>07P</td>
<td>3 1/2 Inch (07P)</td>
<td></td>
<td>1&quot; BSPP (G)</td>
</tr>
</tbody>
</table>

* 3/8 & 1/2 inch meet ISO 1179-1 Standard.
Performance Characteristics

Soft Start Adjustment Flow vs. Pressure Drop

Table 1: Shows the relationship between the inlet pressure and downstream pressure at which the main valve opens.

<table>
<thead>
<tr>
<th>Inlet Pressure psig</th>
<th>Downstream Pressure psig</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>45</td>
</tr>
<tr>
<td>100</td>
<td>60</td>
</tr>
<tr>
<td>125</td>
<td>75</td>
</tr>
<tr>
<td>150</td>
<td>85</td>
</tr>
</tbody>
</table>

Table 2: Product forward Flow Cv (1 to 2).

<table>
<thead>
<tr>
<th>Series</th>
<th>Flow Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>06P</td>
<td>3.8</td>
</tr>
<tr>
<td>07P</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Dimensions:

<table>
<thead>
<tr>
<th>Model</th>
<th>Port Size</th>
<th>A (in) (mm)</th>
<th>B (in) (mm)</th>
<th>C (in) (mm)</th>
<th>D (in) (mm)</th>
<th>E (in) (mm)</th>
<th>F (in) (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>06P</td>
<td>3/8&quot;</td>
<td>3.36 (85)</td>
<td>4.70 (119)</td>
<td>2.08 (53)</td>
<td>1.48 (38)</td>
<td>1.04 (26)</td>
<td>1.68 (43)</td>
</tr>
<tr>
<td>07P</td>
<td>1/2&quot;</td>
<td>3.81 (96)</td>
<td>5.21 (132)</td>
<td>2.07 (53)</td>
<td>1.80 (46)</td>
<td>1.37 (35)</td>
<td>1.91 (48)</td>
</tr>
</tbody>
</table>

Inches (mm)

Repair Kits

- 06P Repair Kit .................................................. PHRKSS75
- 07P Repair Kit .................................................. PHRKSS105
- 06 Modular Body Connectors ................................. PS754P
- 07 Modular Body Connectors ................................. PS854P

Materials of Construction

- Body ............................................................... Aluminum
- Bottom Plug –
  - 06P .............................................................. Brass
  - 07P .............................................................. Zinc

Specifications

- Maximum Pressure ............................................. 300 psig (20.7 bar)
- Minimum Operating Pressure ............................... 30 psig (2.1 bar)
- Temperature Ratings ........................................ 40°F to 120°F (4°C to 49°C)
- Opens to Full Flow ........................................... 60% Supply Pressure
- Weight –
  - 06P .............................................................. 2.75 lb. (1.25 kg)
  - 07P .............................................................. 4.50 lb. (2.04 kg)
**Mounting Bracket Kits**

<table>
<thead>
<tr>
<th>Kit</th>
<th>Dimensions (inches (mm))</th>
<th>PS417BP (Includes Panel Mount Nut)</th>
<th>PS419 (Includes Panel Mount Nut)</th>
<th>PS743P, PS843P</th>
<th>PS707P &amp; PS807P (Includes Panel Mount Nut)</th>
<th>PS963P (Includes Aluminum Panel Mount Nut)</th>
<th>P3NKA00MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS417BP</td>
<td>(10F, 14F, P3A, 14R, 14E)</td>
<td>1.80 (46) 2.37 (60) 0.90 (23) 1.35 (34) 1.00 (25) 0.50 (13) 0.20 (5) 1.24 (31) 0.56 (14) 0.22 (6) 0.45 (11) 0.62 (16)</td>
<td>1.80 (46) 2.17 (55) 0.90 (23) 1.35 (34) 1.00 (25) 0.50 (13) 0.20 (5) 1.24 (31) 0.56 (14) 0.22 (6) 0.45 (11) 0.62 (16)</td>
<td>1.80 (46) 2.17 (55) 0.90 (23) 1.35 (34) 1.00 (25) 0.50 (13) 0.20 (5) 1.24 (31) 0.56 (14) 0.22 (6) 0.45 (11) 0.62 (16)</td>
<td>0.84 (21) 3.25 (83) 1.50 (38) 0.42 (11) 2.00 (51) 0.94 (24) 0.28 (7) 1.44 (37)</td>
<td>0.84 (21) 3.25 (83) 1.50 (38) 0.42 (11) 2.00 (51) 0.94 (24) 0.28 (7) 1.44 (37)</td>
<td>PS707P</td>
</tr>
<tr>
<td>PS419</td>
<td>(04L)</td>
<td>1.00 (25) 3.94 (100) 1.57 (40) 0.50 (13) 2.19 (56) 1.25 (32) 0.28 (7) 1.68 (43)</td>
<td>PS419 (04L)</td>
<td>1.00 (25) 3.94 (100) 1.57 (40) 0.50 (13) 2.19 (56) 1.25 (32) 0.28 (7) 1.68 (43)</td>
<td>0.28 (7) 2.12 (54) 2.00 (51) 0.14 (4) 1.85 (47) 0.63 (16) 0.28 (7) 1.41 (36)</td>
<td>0.28 (7) 2.12 (54) 2.00 (51) 0.14 (4) 1.85 (47) 0.63 (16) 0.28 (7) 1.41 (36)</td>
<td>PS963P</td>
</tr>
<tr>
<td>PS743P, PS843P</td>
<td>(06F, 11F, 06L, 16L)</td>
<td>0.84 (21) 3.25 (83) 1.50 (38) 0.42 (11) 2.00 (51) 0.94 (24) 0.28 (7) 1.44 (37)</td>
<td>PS743P (06F, 11F, 06L, 16L)</td>
<td>0.84 (21) 3.25 (83) 1.50 (38) 0.42 (11) 2.00 (51) 0.94 (24) 0.28 (7) 1.44 (37)</td>
<td>0.28 (7) 2.12 (54) 2.00 (51) 0.14 (4) 1.85 (47) 0.63 (16) 0.28 (7) 1.41 (36)</td>
<td>0.28 (7) 2.12 (54) 2.00 (51) 0.14 (4) 1.85 (47) 0.63 (16) 0.28 (7) 1.41 (36)</td>
<td>PS963P</td>
</tr>
<tr>
<td>PS707P</td>
<td>(06R, 06E, 11R)</td>
<td>0.84 (21) 3.26 (83) 0.77 (20) 1.46 (37) 2.00 (51) 0.94 (24) 0.28 (7)</td>
<td>PS707P (06R, 06E, 11R)</td>
<td>0.84 (21) 3.26 (83) 0.77 (20) 1.46 (37) 2.00 (51) 0.94 (24) 0.28 (7)</td>
<td>0.28 (7) 2.12 (54) 2.00 (51) 0.14 (4) 1.85 (47) 0.63 (16) 0.28 (7) 1.41 (36)</td>
<td>0.28 (7) 2.12 (54) 2.00 (51) 0.14 (4) 1.85 (47) 0.63 (16) 0.28 (7) 1.41 (36)</td>
<td>PS707P</td>
</tr>
<tr>
<td>PS963P</td>
<td>(05R, 10R, 05E, 27E)</td>
<td>1.00 (25) 3.94 (100) 1.57 (40) 0.50 (13) 2.19 (56) 1.25 (32) 0.28 (7) 1.68 (43)</td>
<td>PS963P (05R, 10R, 05E, 27E)</td>
<td>1.00 (25) 3.94 (100) 1.57 (40) 0.50 (13) 2.19 (56) 1.25 (32) 0.28 (7) 1.68 (43)</td>
<td>0.28 (7) 2.12 (54) 2.00 (51) 0.14 (4) 1.85 (47) 0.63 (16) 0.28 (7) 1.41 (36)</td>
<td>0.28 (7) 2.12 (54) 2.00 (51) 0.14 (4) 1.85 (47) 0.63 (16) 0.28 (7) 1.41 (36)</td>
<td>PS963P</td>
</tr>
<tr>
<td>P3NKA00MW</td>
<td>(P3NF, P3NR, P3NE, P3NL)</td>
<td>6.22 (158) 8.19 (208) 2.75 (70) 1.97 (50) 2.36 (60) 1.77 (45) 1.30 (33)</td>
<td>P3NKA00MW (P3NF, P3NR, P3NE, P3NL)</td>
<td>6.22 (158) 8.19 (208) 2.75 (70) 1.97 (50) 2.36 (60) 1.77 (45) 1.30 (33)</td>
<td>0.28 (7) 2.12 (54) 2.00 (51) 0.14 (4) 1.85 (47) 0.63 (16) 0.28 (7) 1.41 (36)</td>
<td>0.28 (7) 2.12 (54) 2.00 (51) 0.14 (4) 1.85 (47) 0.63 (16) 0.28 (7) 1.41 (36)</td>
<td>P3NKA00MW</td>
</tr>
</tbody>
</table>

**Notes:**
- Dimensions are for reference only.
- Kits include panel mount nut.
- Panel mount nut for specific kits is included in the description.
1. GENERAL INSTRUCTIONS

1.1. Scope: This safety guide is designed to cover general guidelines on the installation, use, and maintenance of Pneumatic Division Valves, FRLs (Filters, Pressure Regulators, and Lubricators), Vacuum products and related accessory components.

1.2. Fail-Safe: Valves, FRLs, Vacuum products and their related components can and do fail without warning for many reasons. Design all systems and equipment in a fail-safe mode, so that failure of associated valves, FRLs or Vacuum products will not endanger persons or property.


1.4. Distribution: Provide a copy of this safety guide to each person that is responsible for selection, installation, or use of Valves, FRLs or Vacuum products. Do not select, or use Parker valves, FRLs or vacuum products without thoroughly reading and understanding this safety guide as well as the specific Parker publications for the products considered or selected.

1.5. User Responsibility: Due to the wide variety of operating conditions and applications for valves, FRLs, and vacuum products Parker and its distributors do not represent or warrant that any particular valve, FRL or vacuum product is suitable for any specific end use system. This safety guide does not analyze all technical parameters that must be considered in selecting a product. The user, through its own analysis and testing, is solely responsible for:

- Making the final selection of the appropriate valve, FRL, Vacuum component, or accessory.
- Assuring that all user’s performance, endurance, maintenance, safety, and warning requirements are met and that the application presents no health or safety hazards.
- Complying with all existing warning labels and / or providing all appropriate health and safety warnings on the equipment on which the valves, FRLs or Vacuum products are used; and,
- Assuring compliance with all applicable government and industry standards.

1.6. Safety Devices: Safety devices should not be removed, or defeated.

1.7. Warning Labels: Warning labels should not be removed, painted over or otherwise obscured.

1.8. Additional Questions: Call the appropriate Parker technical service department if you have any questions or require any additional information. See the Parker publication for the product being considered or used, or call 1-800-CPARKER, or go to www.parker.com, for telephone numbers of the appropriate technical service department.

2. PRODUCT SELECTION INSTRUCTIONS

2.1. Flow Rate: The flow rate requirements of a system are frequently the primary consideration when designing any pneumatic system. System components need to be able to provide adequate flow and pressure for the desired application.

2.2. Pressure Rating: Never exceed the rated pressure of a product. Consult product labeling, Pneumatic Division catalogs or the instruction sheets supplied for maximum pressure ratings.

2.3. Temperature Rating: Never exceed the temperature rating of a product. Excessive heat can shorten the life expectancy of a product and result in complete product failure.

2.4. Environment: Many environmental conditions can affect the integrity and suitability of a product for a given application. Pneumatic Division products are designed for use in general purpose industrial applications. If these products are to be used in unusual circumstances such as direct sunlight and/or corrosive or caustic environments, such use can shorten the useful life and lead to premature failure of a product.

2.5. Lubrication and Compressor Carryover: Some modern synthetic oils can and will attack nitrile seals. If there is any possibility of synthetic oils or greases migrating into the pneumatic components check for compatibility with the seal materials used. Consult the factory or product literature for materials of construction.

2.6. Polycarbonate Bowls and Sight Glasses: To avoid potential polycarbonate bowl failures:

- Do not locate polycarbonate bowls or sight glasses in areas where they could be subject to direct sunlight, impact blow, or temperatures outside of the rated range.
- Do not expose or clean polycarbonate bowls with detergents, chlorinated hydro-carbons, ketones, esters or certain alcohols.
- Do not use polycarbonate bowls or sight glasses in air systems where compressors are lubricated with fire resistant fluids such as phosphate ester and di-ester lubricants.
2.7. Chemical Compatibility: For more information on plastic component chemical compatibility see Pneumatic Division technical bulletins Tec-3, Tec-4, and Tec-5

2.8. Product Rupture: Product rupture can cause death, serious personal injury, and property damage.
- Do not connect pressure regulators or other Pneumatic Division products to bottled gas cylinders.
- Do not exceed the maximum primary pressure rating of any pressure regulator or any system component.
- Consult product labeling or product literature for pressure rating limitations.

3. PRODUCT ASSEMBLY AND INSTALLATION INSTRUCTIONS

3.1. Component Inspection: Prior to assembly or installation a careful examination of the valves, FRLs or vacuum products must be performed. All components must be checked for correct style, size, and catalog number. DO NOT use any component that displays any signs of nonconformance.

3.2. Installation Instructions: Parker published Installation Instructions must be followed for installation of Parker valves, FRLs and vacuum components. These instructions are provided with every Parker valve or FRL sold, or by calling 1-800-CPARKER, or at www.parker.com.

3.3. Air Supply: The air supply or control medium supplied to Valves, FRLs and Vacuum components must be moisture-free if ambient temperature can drop below freezing.

4. VALVE AND FRL MAINTENANCE AND REPLACEMENT INSTRUCTIONS

4.1. Maintenance: Even with proper selection and installation, valve, FRL and vacuum products service life may be significantly reduced without a continuing maintenance program. The severity of the application, risk potential from a component failure, and experience with any known failures in the application or similar applications should determine the frequency of inspections and the servicing or replacement of Pneumatic Division products so that products are replaced before any failure occurs. A maintenance program must be established and followed by the user and, at minimum, must include instructions 4.2 through 4.10.

4.2. Installation and Service Instructions: Before attempting to service or replace any worn or damaged parts consult the appropriate Service Bulletin for the valve or FRL in question for the appropriate practices to service the unit in question. These Service and Installation Instructions are provided with every Parker valve and FRL sold, or are available by calling 1-800-CPARKER, or by accessing the Parker web site at www.parker.com.


4.4. Visual Inspection: Any of the following conditions require immediate system shut down and replacement of worn or damaged components:
- Air leakage: Look and listen to see if there are any signs of visual damage to any of the components in the system. Leakage is an indication of worn or damaged components.
- Damaged or degraded components: Look to see if there are any visible signs of wear or component degradation.
- Kinked, crushed, or damaged hoses. Kinked hoses can result in restricted air flow and lead to unpredictable system behavior.
- Any observed improper system or component function: Immediately shut down the system and correct malfunction.
- Excessive dirt build-up: Dirt and clutter can mask potentially hazardous situations.

Caution: Leak detection solutions should be rinsed off after use.

4.5. Routine Maintenance Issues:
- Remove excessive dirt, grime and clutter from work areas.
- Make sure all required guards and shields are in place.

4.6. Functional Test: Before initiating automatic operation, operate the system manually to make sure all required functions operate properly and safely.

4.7. Service or Replacement Intervals: It is the user’s responsibility to establish appropriate service intervals. Valves, FRLs and vacuum products contain components that age, harden, wear, and otherwise deteriorate over time. Environmental conditions can significantly accelerate this process. Valves, FRLs and vacuum components need to be serviced or replaced on routine intervals. Service intervals need to be established based on:
- Previous performance experiences.
- Government and / or industrial standards.
- When failures could result in unacceptable down time, equipment damage or personal injury risk.

4.8. Servicing or Replacing of any Worn or Damaged Parts: To avoid unpredictable system behavior that can cause death, personal injury and property damage:
- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to system and Pneumatic Division products before installation, service, or conversion.
- Installation, servicing, and / or conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversions air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or if the product does not operate properly, do not put product or system into use.
- Warnings and specifications on the product should not be covered or painted over. If masking is not possible, contact your local representative for replacement labels.

4.9. Putting Serviced System Back into Operation: Follow the guidelines above and all relevant Installation and Maintenance Instructions supplied with the valve FRL or vacuum component to insure proper function of the system.
The items described in this document and other documents and descriptions provided by Parker Hannifin Corporation, its subsidiaries and its authorized distributors ("Seller") are hereby offered for sale at prices to be established by Seller. This offer and its acceptance by any customer ("Buyer") shall be governed by all of the following Terms and Conditions ("Terms"). Buyer's order for any goods described in its document, when communicated to Seller verbally, or in writing, shall constitute acceptance of this offer.

All goods or work described will be referred to as "Products".

1. Terms and Conditions. Seller’s willingness to offer Products, or accept an order for Products, to or from Buyer is subject to these Terms and Conditions or any newer version of the terms and conditions found on-line at www.parker.com/saleterms/. Seller objects to all changes, additional terms or conditions of Buyer’s order or any other document issued by Buyer.

2. Price Adjustments; Payments. Prices stated on Seller’s quote or other documentation offered by Seller are valid for 30 days, and do not include any sales, use, or other tax. Unless otherwise specified by Seller and reflected on F.C.A., Seller’s facility (INCOTERMS 2010). Payment is subject to credit approval and is due 30 days from the date of invoice or such other term as required by Seller’s Credit Department. Buyer shall pay six percent (6%) interest on any unpaid invoices at the rate of 1.5% per month or the maximum allowable rate under applicable law.

3. Delivery Dates; Title and Risk; Shipment. All delivery dates are approximate and Seller shall not be responsible for any damages resulting from any delay. Regardless of the manner of shipment, title to any products and risk of loss or damage shall pass to Buyer upon placement of the products with the shipment carrier at Seller’s facility. Unless otherwise stated, Seller may exercise its judgment in choosing the carrier and means of delivery. No deferment of shipment at Buyers’ request beyond the respective dates indicated shall be considered except on terms that will indemnify, defend and hold Seller harmless against all loss and additional expense. Buyer shall be responsible for any additional shipping charges incurred by Seller due to Buyer’s acts or omissions.

4. Warranty. Seller warrants that the Products sold hereunder shall be free from defects in material or workmanship for a period of twelve months from the date of delivery to Buyer or 2,000 hours of normal use, whichever occurs first. The prices charged for Seller’s Products are based upon the applicable warranty. It is acknowledged by Buyer that Buyer has been advised of all such warranty terms, and Buyer represents and agrees that Buyer shall have no claim against Seller for any such defects or failures. Buyer shall pay for all costs of service or repair in the event of a defect in material or workmanship.

5. Claims; Commencement of Actions. Buyer will promptly inspect all Products upon delivery. No claims for shortages will be allowed unless reported to the Seller within 10 days of delivery. No other claims against Seller will be allowed unless asserted in writing within 30 days after delivery. Buyer shall notify Seller of any alleged breach of warranty within 30 days after the date the defect is or should have been discovered by Buyer. Any action based upon breach of this agreement or upon any other claim arising out of or in connection with (or in any manner related to) an action by Seller for an amount due on any invoice) must be commenced within 12 months from the date of the breach without regard to the date breach is discovered.

6. LIMITATION OF LIABILITY. UPON NOTIFICATION, SELLER WILL, AT ITS OPTION, REPAIR OR REPLACE A DEFECTIVE PRODUCT, OR REFUND THE PURCHASE PRICE. IN NO EVENT SHALL SELLER BE LIABLE TO BUYER FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR AS THE RESULT OF, THE SALE, DELIVERY, NON-DELIVERY, SERVICING, USE OR DISPOSAL THEREOF, OR FOR ANY CHARGES OR EXPENSES OF ANY NATURE INCURRED WITHOUT SELLER’S WRITTEN CONSENT, EVEN IF SELLER HAS BEEN NEGLIGENT, WHETHER IN CONTRACT, TORT, OR OTHERWISE. IN NO EVENT SHALL SELLER BE LIABLE UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE OF THE PRODUCTS.

7. User Responsibility. The user, through its own analysis and testing, is solely responsible for the final selection of the Product. If a Product is selected and remain Seller’s property notwithstanding any sale or transfer of title to Buyer, Seller shall not be responsible for any loss or damage to such property while it is in Seller’s possession or control.

8. SPECIAL TOOLING. A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture Products. Such costs and remain Seller’s property notwithstanding any sale or transfer of title to Buyer. In no event will Buyer acquire any interest in apparatus which is utilized in the manufacture of the Products, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any changes or modifications thereafter, Buyer shall have no rights in or to any other apparatus or discard otherwise dispose of any special tooling or other property in its sole discretion at any time.

9. Buyer’s Obligation; Rights of Seller. To secure payment of all sums due hereunder, Seller retains a security interest in the goods delivered, and this agreement shall be deemed a Security Agreement under the Uniform Commercial Code. Buyer authorizes Seller as its attorney to execute and file on Buyer’s behalf all documents Seller deem necessary to protect Seller’s security interest.

10. Improper use and Indemnity. Buyer shall indemnify, defend, and hold Seller harmless from any claim, liability, damages, lawsuits, and costs (including attorney fees), whether for personal injury, property damage, patent, trademark or copyright infringement or any other claim, brought by or incurred by Buyer, Buyer’s employees, or any other person, arising out of: (a) improper selection, improper application or other misuse of Products purchased by Buyer from Seller; (b) any act or omission, negligent or otherwise, of Buyer; (c) Buyer’s use of patterns, plans, designs, or specifications furnished by Buyer to manufacture Product; or (d) Buyer’s failure to comply with these terms and conditions. Seller shall not indemnify Buyer under any circumstance except as specifically provided.

11. Cancellations and Changes. Orders shall not be subject to cancellation or change by Buyer for any reason, except with Seller’s written consent and upon terms that will indemnify, defend and hold Seller harmless against all direct, incidental and consequential loss or damage, and changes in product features, specifications, designs and availability with notice to Buyer.

12. Limitation on Assignment. Buyer may not assign its rights or obligations under this agreement without the prior written consent of Seller.

13. Force Majeure. Seller does not assume the risk and shall not be liable for delay or failure to perform due to any cause beyond the reasonable control of Seller (hereinafter “Events of Force Majeure”). Events of Force Majeure shall include without limitation: accidents; strikes or labor disputes; acts of any government or government agency; acts of nature; delays or failures in delivery from carriers or suppliers; shortages of materials, or any other cause beyond Seller’s reasonable control.

15. Waiver and Severability. Failure to enforce any provision of this agreement will not be construed as a waiver of any such failure. Buyer’s right to enforce that provision in the future. Invalidity of any provision of this agreement by legislation or other rule of law shall not invalidate any other provision herein. The remaining provisions shall remain in full force and effect.

16. Termination. Seller may terminate this agreement for any reason and at any time by giving Buyer thirty (30) days written notice of termination. Seller may immediately terminate this agreement, in writing, if Buyer: (a) commits a breach of any provision of this agreement (b) appoints a trustee, receiver or custodian for all or any part of Buyer’s property (c) files a petition for relief in bankruptcy on its own behalf, or by a third party (d) makes an assignment for the benefit of creditors, or (e) the dissolves or liquidates all or a majority of its assets.

17. Governing Law. This agreement and the sale and delivery of All Products hereunder shall be deemed to have taken place in and shall be governed and construed in accordance with the laws of the State of Ohio, as applicable to contracts executed and wholly performed therein and without regard to conflicts of laws principles. Buyer irrevocably agrees and consents to the exclusive jurisdiction and venue of the courts of Cuyahoga County, Ohio with respect to any dispute, controversy or claim arising out of or relating to this agreement.

18. Indemnity. Seller shall have no liability for infringement of any patent, copyright, trademark, trade dress, trade secret or similar rights except as provided in this Section. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, trademarks, copyrights, trade dress and trade secrets (“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 a Product sold pursuant to this Agreement infringes the Intellectual Property Rights of a third party. Seller’s obligation to defend and indemnify Buyer is conditioned on Buyer (a) promptly notify Seller in writing of such claim within thirty (30) 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 a Product 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 the Product, replace or modify the Product so as to make it noninfringing, or offer to accept return of the Product 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 Products 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 Product sold hereunder. The foregoing provisions of this Section shall constitute Seller’s sole and exclusive liability and Buyer’s sole and exclusive remedy for infringement of Intellectual Property Rights.

19. Entire Agreement. This agreement contains the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of sale. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter are herein merged.

20. Compliance with Law. U.S. Export. Buyer agrees to comply with all applicable laws and regulations, including those of the United Kingdom and the United States of America, and of the country or countries of the Territory in which the Buyer may operate, including without limitation: Anti-Bribery Act, the U.S. Foreign Corrupt Practices Act, the U.S. Anti-Kickback Act, and any other foreign Anti-Bribery or Anti-Kickback Act (the “Anti-Kickback Act”), and agrees to indemnify and hold harmless Seller from the consequences of any violation of such provisions by Buyer, its employees or agents. Buyer acknowledges that they are familiar with the provisions of the U. K. Bribery Act of 2010, the FCPA and the Anti-Kickback Act, and conform to the requirements thereof. In particular, Buyer represents and agrees that Buyer shall not make any payment or give anything of value, directly or indirectly to any governmental or foreign political official, any foreign political party or official thereof, any candidate for foreign political office, or any commercial entity or person, for the purpose of influencing such person to purchase products or otherwise benefit the business of Seller.