



## Air Preparation Products Miniature / Inline

### Filters

02F	<a href="#">J2-J3</a>
P31FB	<a href="#">J4-J5</a>
14F	<a href="#">J6-J7</a>

### Coalescing Filters

02F	<a href="#">J8-J9</a>
P31F	<a href="#">J10-J11</a>
10F	<a href="#">J12-J13</a>
15F	<a href="#">J14-J15</a>

### Regulators

P31R	<a href="#">J16-J17</a>
14R	<a href="#">J18-J19</a>
P3A-R	<a href="#">J20-J21</a>
R34	<a href="#">J22-J23</a>
R25	<a href="#">J24-J25</a>
R45	<a href="#">J26-J27</a>
15R	<a href="#">J28-J29</a>

### Filter / Regulators

P31EB	<a href="#">J30-J31</a>
B34	<a href="#">J32-J33</a>
14E	<a href="#">J34-J35</a>
05E	<a href="#">J36-J37</a>

### Lubricators

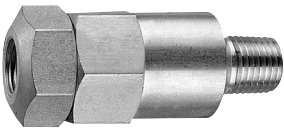
02L	<a href="#">J38-J39</a>
P31LB	<a href="#">J40-J41</a>
04L	<a href="#">J42-J43</a>



02F Particulate Filters - Miniature

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 at 90 psig inlet pressure with 5 psig pressure drop.



Port Size	Description	Part Number
1/4"	Inline Filter	02F1BA

**Operating information**

Supply pressure (max):	200 psig ( 13.8 bar)
Operating temperature:	32°F to 150°F (0°C to 65.6°C)
Flow capacity†:	17 scfm (8 dm³/s, ANR)
Standard Filtration*:	5 micron
Weight:	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.

☒ Most popular.



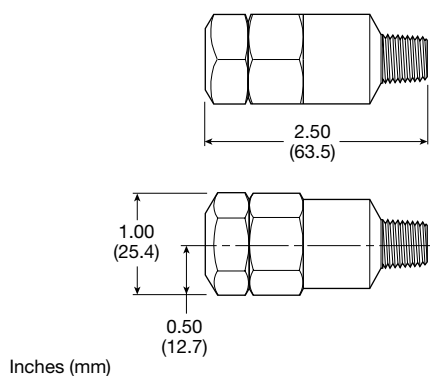
## Miniature Particulate Filters

### Material Specifications

Body	Aluminum
Baffle	Aluminum
Filter element	Sintered polyethylene
Seals	Nitrile

### Repair and Service Kits

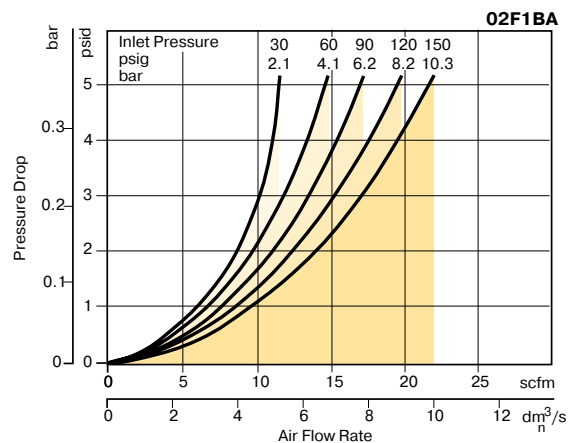
5 Micron	<b>PS436</b>
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## Air Preparation Products Miniature / Inline

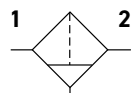
### Flow Charts

#### 1/4" Filter

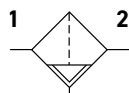


## P31 Particulate Filter - Mini

- Integral 1/4" ports (NPT, BSPP & BSPT)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminum construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting



Manual drain



Pulse drain

Port Size	Description	Part Number
1/4"	Poly Bowl, Manual Drain	<b>P31FB92EGMN</b>
1/4"	Poly Bowl, Pulse Drain	<b>P31FB92EGBN</b>
1/4"	Metal Bowl, Manual Drain	<b>P31FB92EMMN</b>
1/4"	Metal Bowl, Pulse Drain	<b>P31FB92EMBN</b>

## Operating information

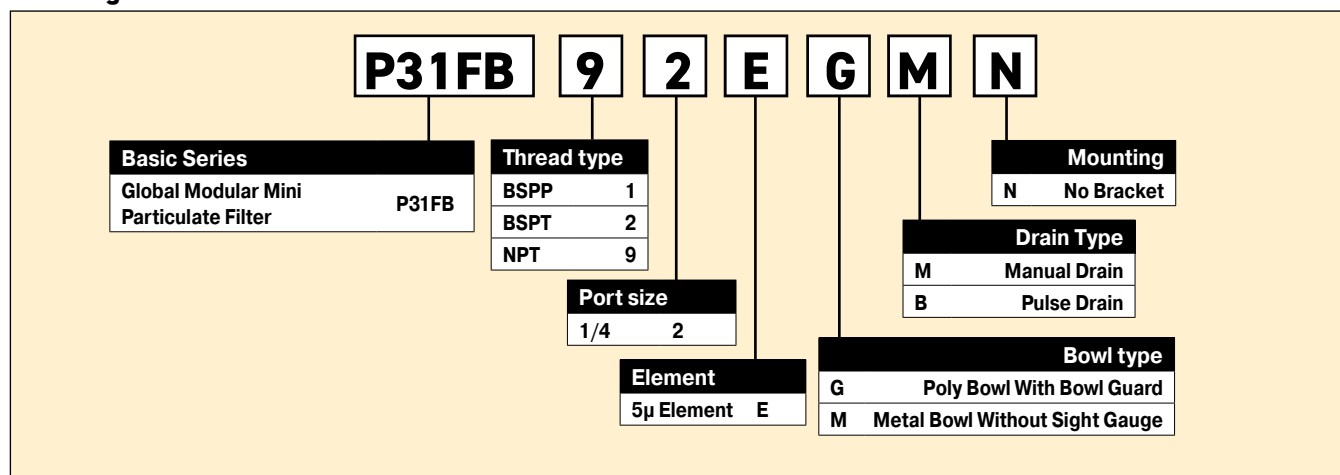
Supply pressure (max):	
Plastic bowl	150 psig (10 bar)
Metal bowl	250 psig (17 bar)
Operating temperature:	
Plastic bowl	14°F to 125°F (-10°C to 52°C)
Metal bowl	14°F to 150°F (-10°C to 65.5°C)
Standard filtration:	5 micron
Flow capacity*:	25 scfm (12 dm³/s, ANR)
Useful retention†:	0.4 US oz. (12 cm³)
Weight:	0.24 lb (0.11 kg)

\* Inlet pressure 91.3 psig (6.3 bar). Pressure drop 4.9 psig (0.34 bar).

† Useful retention refers to volume below the quiet zone baffle.

Air quality:  
Within ISO 8573-1: 1991 Class 3 (Particulates)  
Within ISO 8573-1: 2001 Class 6 (Particulates)

## Ordering Information:



Most popular.



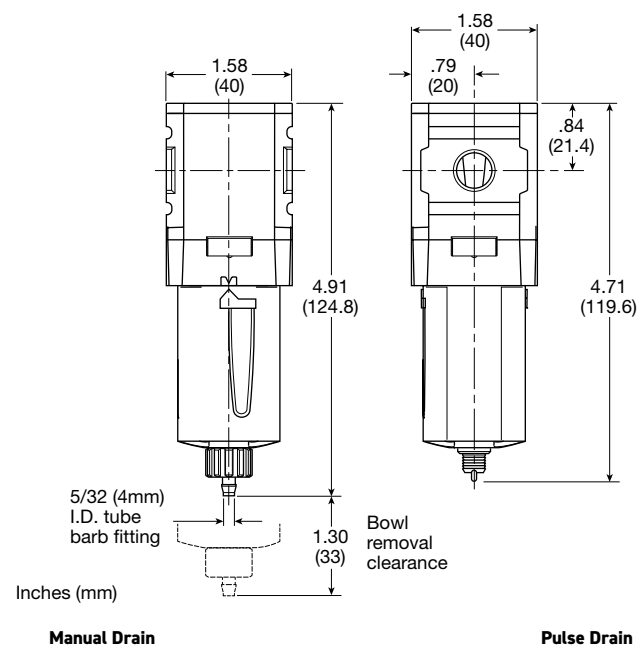
## Mini Particulate Filters

### Material Specifications

Body	Aluminum
Body cap	ABS
Plastic bowl	Polycarbonate
Metal bowl	Aluminum
Bowl guard	Nylon
Element retainer	Acetal
Baffle	Acetal
Filter element polyethylene	Sintered
Seals	Nitrile

### Repair and Service Kits

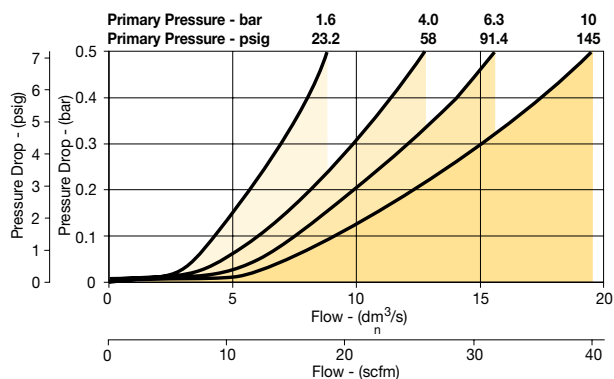
Plastic bowl / bowl guard, manual drain	<b>P31KB00BGM</b>
Metal bowl / w/o sight gauge, manual drain	<b>P31KB00BMM</b>
Plastic bowl / bowl guard, pulse drain	<b>P31KB00BGB</b>
Metal bowl / w/o sight gauge, pulse drain	<b>P31KB00BMB</b>
5 $\mu$ particle filter element	<b>P31KA00ESE</b>
C-bracket (fits to body)	<b>P31KA00MW</b>
T-bracket with body connector	<b>P31KA00MT</b>
Body connector	<b>P31KA00CB</b>



## Air Preparation Products Miniature / Inline

### Flow Charts

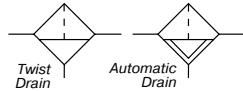
#### P31 1/4 Particulate Filter



**Miniature Particulate Filters**

**14F Particulate Filters - Miniature**

- 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
- 1/8" & 1/4" ports (NPT, BSPP & BSPT)



**Operating information**

Supply pressure (max):  
 Plastic bowl 0 to 150 psig (0 to 10.3 bar)  
 Metal bowl 0 to 250 psig (0 to 17.2 bar)  
 Auto pulse drain 10 to 250 psig (0.7 to 17.2 bar)

Operating temperature:  
 Plastic bowl 32°F to 125°F (0°C to 52°C)  
 Metal bowl 32°F to 175°F (0°C to 80°C)  
 Auto pulse drain 125°F (52°C) or less

Flow capacity†:  
 High flow 1/8" 22 scfm (10.4 dm³/s, ANR)  
 1/4" 24 scfm (11.3 dm³/s, ANR)

Bowl capacity: 1 oz.

Auto pulse drain tube barb 1/8 inch

Weight: 0.41 lb (0.18 kg)

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

Port Size	Description *	Part Number
1/8"	Poly Bowl, Twist Drain	<b>14F01BB</b>
1/8"	Metal Bowl, Twist Drain	<b>14F03BB</b>
1/8"	Poly Bowl, Auto Pulse Drain	<b>14F05BB</b>
1/8"	Metal Bowl, Auto Pulse Drain	<b>14F07BB</b>
1/4"	Poly Bowl, Twist Drain	<b>14F11BB</b>
1/4"	Metal Bowl, Twist Drain	<b>14F13BB</b>
1/4"	Poly Bowl, Auto Pulse Drain	<b>14F15BB</b>
1/4"	Metal Bowl, Auto Pulse Drain	<b>14F17BB</b>

\* For polycarbonate bowl, see caution in Engineering Section A.

**Ordering Information:**

**14F**

Port Size	
1/8 inch	0
1/4 inch	1

**1**

Bowl Options	
Poly Bowl, Twist Drain	1
Poly Bowl, Automatic Pulse Drain	5
Metal Bowl, Twist Drain	3
Metal Bowl, Automatic Pulse Drain	7

**1**

**B**

Element	
A	40 Micron
B	5 Micron
Z	Adsorber

**B**

Engineering Level	
B	Current

**Blank**

Port Type	
Blank	NPT
1	BSPP
2	BSPT

Most popular.



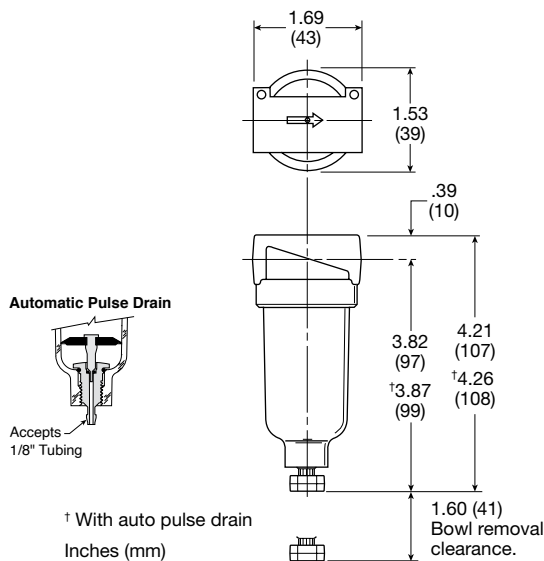
## Miniature Particulate Filters

### Material Specifications

Body	Zinc
Transparent bowl	Polycarbonate
Metal bowl without sight gauge	Zinc
Deflector, element holder & baffle	Plastic
Twist drain, body & stem	Plastic
Twist drain, seals	Nitrile
Auto pulse drain, piston & seals	Nitrile
Auto pulse drain, stem, seat, adaptor & washers	Aluminum
Element	Plastic
Adsorber (optional)	Activated charcoal
Seals	Nitrile

### Repair and Service Kits

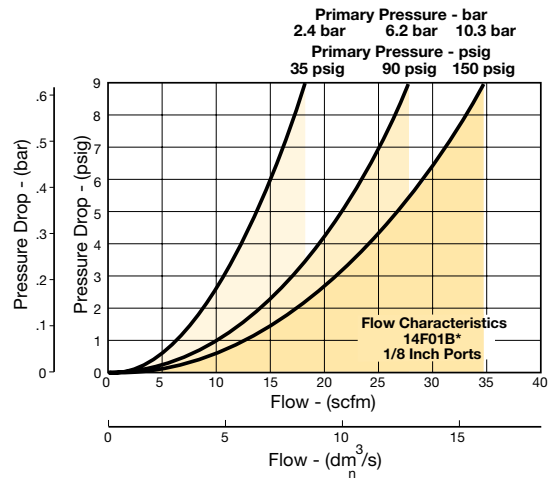
Poly bowl / auto pulse drain	<b>PS408BP</b>
Poly bowl / twist drain	<b>PS404P</b>
Metal bowl / auto pulse drain	<b>PS451BP</b>
Metal bowl / twist drain	<b>PS447BP</b>
40 Micron element	<b>PS401P</b>
5 Micron element	<b>PS403P</b>
5 Micron cartridge kit	<b>PS407P</b>
Adsorber element	<b>PS452P</b>
Mounting bracket kit	<b>PS417BP</b>



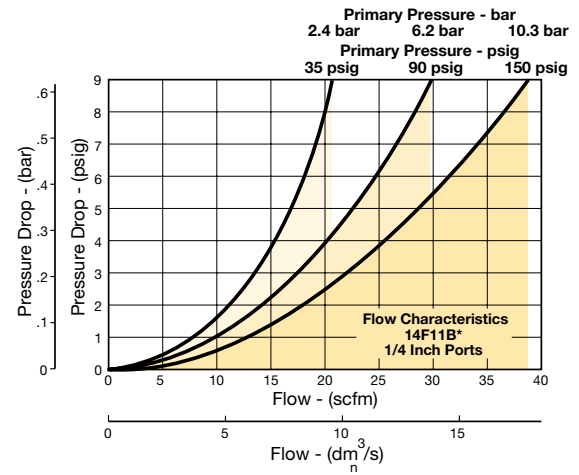
## Air Preparation Products Miniature / Inline

### Flow Charts

#### 14F 1/8" Particulate Filter



#### 14F 1/4" Particulate Filter



## Miniature Coalescing Filters

### 02F Coalescing Filters – Miniature

- Clear nylon housing.
- Full length support tube.
- Positive tube seals.
- Optional filter grades available.
- Disposable.

#### Application

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



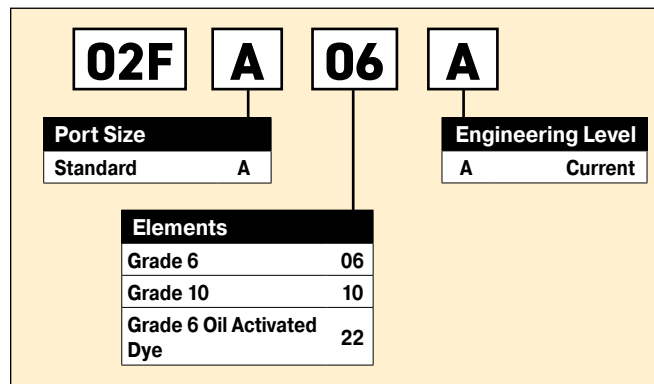
#### Operating information

Pressure & temperature:	100 psig at 125°F (0.69 bar at 52°C) or less
High flow†:	Grade 6 3.5 scfm (1.65 dm³/s, ANR) Grade 10 5.3 scfm (2.50 dm³/s, ANR)
Port size:	1/4 I.D. hose slip on tang standard

† scfm @ 1 psid operating pressure 100 psig.

Port Size	Element	Part Number
1/4" I.D.	Grade 6 (0.01 micron)	<b>02FA06A</b>
	Grade 10 (1.0 micron)	<b>02FA10A</b>
	Grade 6 (oil activated dye)	<b>02FA22A</b>

#### Ordering Information:



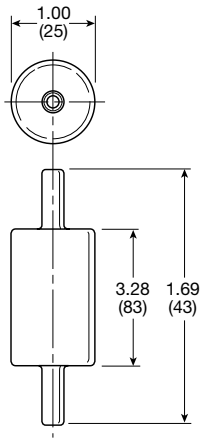


Miniature Coalescing Filters

Air Preparation Products  
Miniature / Inline

Material Specifications

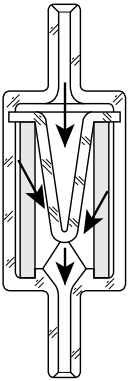
Element	Borosilicate & Felt Glass Fibers
Housing	Nylon



Inches (mm)

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 tubes 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.



Filters
Coalescers
Regulators
Filter / Regulators
Lubricators
Miniature / Inline Products



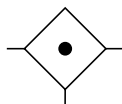
## P31 Coalescing and Adsorber Filters – Mini

- Integral 1/4" ports (NPT, BSPP & BSPT)
- Removes liquid aerosols and sub micron particles
- Oil free air for critical applications, such as air gauging, pneumatic instrumentation and control
- Positive bayonet latch to ensure correct and safe fitting
- Adsorbing activated carbon element removes oil vapors and most hydrocarbons



**Note:** To optimize the life of coalescing element, it is advisable to install a P31F pre-filter with a 5 micron element upstream of the coalescing filter.

To optimize the life of an Adsorber it is advisable to install a P31 Coalescing Filter upstream of the Adsorber. Adsorber element should be replaced approximately every 1000 hours of service.



Port Size	Description	Element	Part Number
1/4"	Poly Bowl, Manual Drain	0.01 micron	<b>P31FB92GMN</b>
1/4"	Poly Bowl, Pulse Drain	0.01 micron	<b>P31FB92CGBN</b>
1/4"	Metal Bowl, Manual Drain	0.01 micron	<b>P31FB92CMMN</b>
1/4"	Metal Bowl, Pulse Drain	0.01 micron	<b>P31FB92CMBN</b>

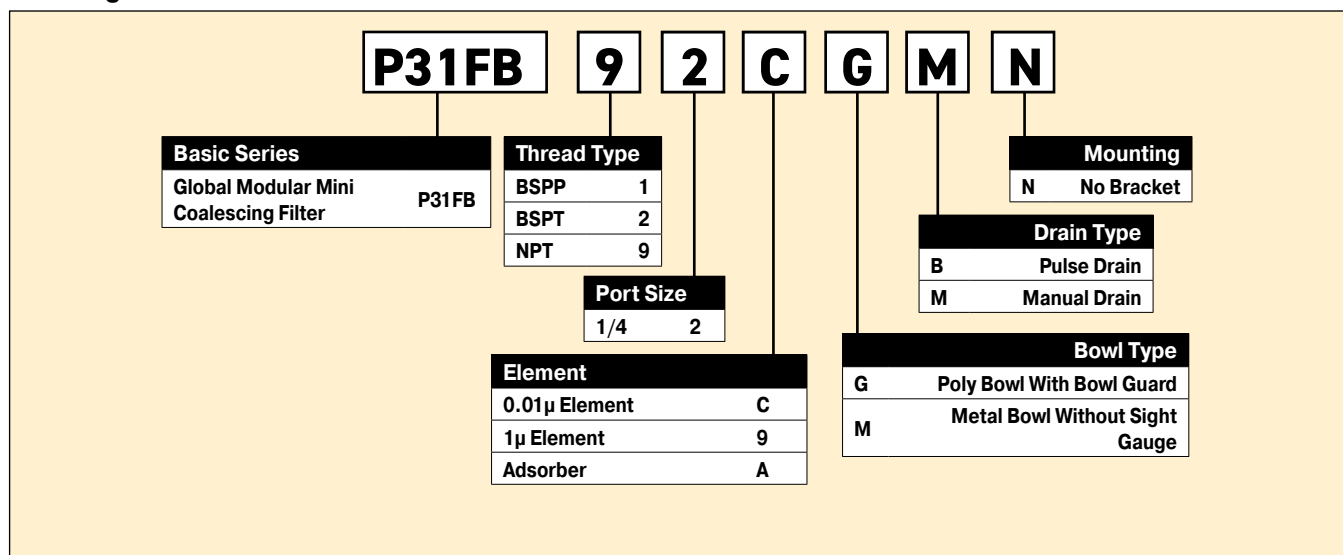
## Operating information

Supply pressure (max):	
Poly bowl	150 psig (10 bar)
Metal bowl	250 psig (17 bar)
Operating temperature:	
Plastic bowl	14°F to 125°F (-10°C to 52°C)
Metal bowl	14°F to 150°F (-10°C to 65.5°C)
Standard filtration:	1.0 and 0.01 micron
Adsorber	Max. oil carryover (ppm w/w) 0.003 @ 70°F (21°C)
Flow capacity*:	
1.0 micron coalescing	12 scfm (5.5 dm³/s, ANR)
0.01 micron coalescing	7.5 scfm (3.6 dm³/s, ANR)
Activated carbon adsorber	12.7 scfm (6 dm³/s, ANR)
Useful retention†:	0.4 US oz. (12 cm³)
Weight:	0.24 lb (0.11 kg)

\* Inlet pressure 91.3 psig (6.3 bar). Pressure drop 3 psig (0.2 bar), saturated element.

† Useful retention refers to volume below the quiet zone baffle.

## Ordering Information:



☐ Most popular.



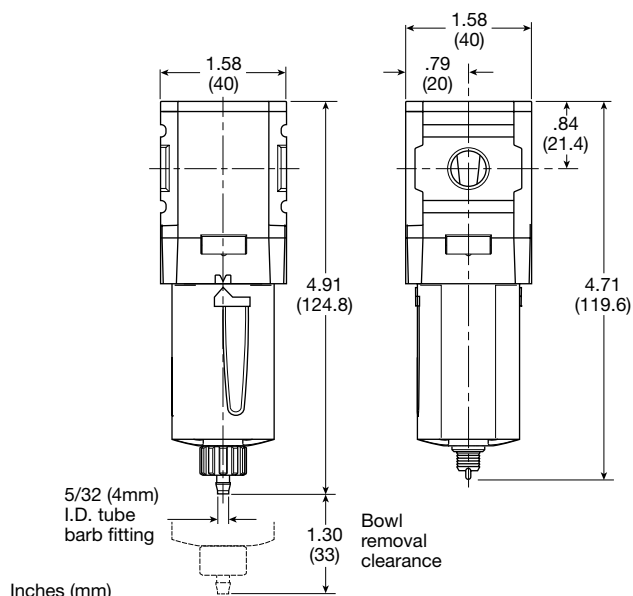
## Mini Coalescing and Adsorber Filters

### Material Specifications

Body	Aluminum
Body cap	ABS
Plastic bowl	Polycarbonate
Metal bowl	Aluminum
Filter element	Borosilicate cloth
Adsorber element	Activated carbon
Seals	Nitrile

### Repair and Service Kits

Plastic bowl / bowl guard, manual drain	<b>P31KB00BGM</b>
Metal bowl / w/o sight gauge, manual drain	<b>P31KB00BMM</b>
Plastic bowl / bowl guard, pulse drain	<b>P31KB00BGB</b>
Metal bowl / w/o sight gauge, pulse drain	<b>P31KB00BMB</b>
1 $\mu$ coalescing filter element	<b>P31KA00ES9</b>
0.01 $\mu$ coalescing filter element	<b>P31KA00ESC</b>
Activated carbon adsorber filter element	<b>P31KA00ESA</b>
C-bracket (fits to body)	<b>P31KA00MW</b>
T-bracket with body connector	<b>P31KA00MT</b>
Body connector	<b>P31KA00CB</b>



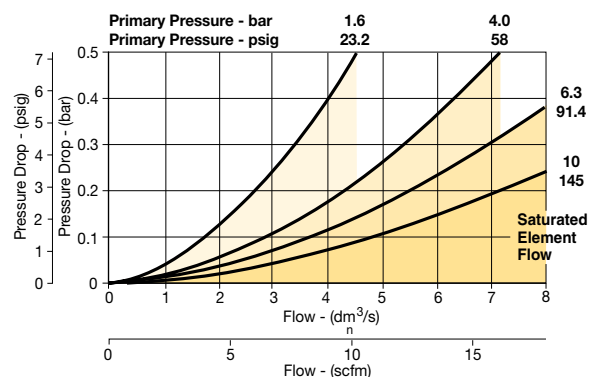
Manual Drain

Pulse Drain

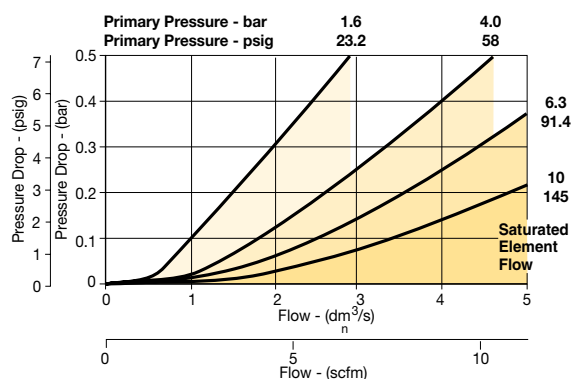
## Air Preparation Products Miniature / Inline

### Flow Charts

#### P31 - 1.0 micron flow Coalescing Filter



#### P31 - 0.01 micron flow Coalescing Filter



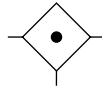
## Miniature Coalescing Filters

### 10F Coalescing Filters - Miniature

- 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
- 1/8", 1/4" ports (NPT, BSPP, BSPT)

**Note:** To optimize the life of coalescing element, it is advisable to install a pre-filter with a 5 micron element upstream of the coalescing filter.

To optimize the life of an adsorber it is advisable to install a coalescing filter upstream of the adsorber. Adsorber element should be replaced approximately every 1000 hours of service.



#### Operating information

Supply pressure (max):  
 Plastic bowl 0 to 150 psig (0 to 10.3 bar)  
 Metal bowl 0 to 250 psig (0 to 17.2 bar)  
 Auto pulse drain 10 to 250 psig (0.7 to 17.2 bar)

Operating pressure drop:  
 Normal 2 psig (0.14 bar)  
 Max recommended 10 psig (0.7 bar)  
 (Element should be replaced)

Operating temperature:  
 Plastic bowl 32°F to 125°F (0°C to 52°C)  
 Metal bowl 32°F to 175°F (0°C to 80°C)  
 Auto pulse drain 125°F (52°C) or less

Flow capacity†: Grade 6 1/8" 17 scfm (8 dm³/s, ANR)  
 1/4" 20 scfm (9.4 dm³/s, ANR)  
 Grade 10 1/8" 19 scfm (9 dm³/s, ANR)  
 1/4" 24 scfm (11.3 dm³/s, ANR)

Bowl capacity: 1 oz.

Auto pulse drain tube barb 1/8 inch

Weight: 0.41 lb (0.18 kg)

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

Port Size	Description *	Part Number
1/8"	Poly Bowl, Twist Drain	<b>10F01ED</b>
1/8"	Metal Bowl, Twist Drain	<b>10F03ED</b>
1/8"	Poly Bowl, Auto Pulse Drain	<b>10F05ED</b>
1/8"	Metal Bowl, Auto Pulse Drain	<b>10F07ED</b>
1/4"	Poly Bowl, Twist Drain	<b>10F11ED</b>
1/4"	Metal Bowl, Twist Drain	<b>10F15ED</b>
1/4"	Poly Bowl, Auto Pulse Drain	<b>10F13ED</b>
1/4"	Metal Bowl, Auto Pulse Drain	<b>10F17ED</b>

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 in Engineering Section A.

#### Ordering information:

<b>10F</b>	<b>1</b>	<b>1</b>	<b>E</b>	<b>D</b>	
<b>Port Size</b>					<b>Port Type</b>
1/8 inch	0				Blank NPT
1/4 inch	1				1 BSPP
					2 BSPT
<b>Bowl Options</b>				<b>Engineering Level</b>	
Poly Bowl, Twist Drain	1			D	Current
Poly Bowl, Auto Pulse Drain	5				
Metal Bowl, Twist Drain	3				
Metal Bowl, Auto Pulse Drain	7				
			<b>Element</b>		
			E	Grade 6	
			H	Grade 10	

Most popular.



## Air Preparation Products

### Miniature / Inline

## Flow Charts

### Grade 6 Element

### 10F 1/8" Coalescing Filter

**Flow Characteristics**  
10F01E\*  
1/8 Inch Ports

Primary Pressure - bar  
2.4 bar  
6.2 bar  
10.3 bar

Primary Pressure - psig  
35 psig  
90 psig  
150 psig

Pressure Drop - (bar)  
0  
0.1  
0.2  
0.3  
0.4  
0.5  
0.6

Pressure Drop - (psig)  
0  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10

Flow - (scfm)  
0  
5  
10  
15  
20  
25  
30  
35  
40  
45

Flow - (dm<sup>3</sup>/s)  
0  
5  
10  
15  
20

### 10F 1/4" Coalescing Filter

**10F11E\* 1/4 inch Ports**

Primary Pressure - bar: 2.4 bar, 6.2 bar, 10.3 bar  
 Primary Pressure - psig: 35 psig, 90 psig, 150 psig

Pressure Drop - (bar)  
 Pressure Drop - (psig)

Flow - (scfm)  
 Flow -  $\text{dm}^3/\text{s}$

Flow Characteristics  
 10F11E\*  
 1/4 inch Ports

### Grade 10 Element

### 10F 1/8" Coalescing Filter

**Flow Characteristics**  
10F01H\*  
1/8 Inch Ports

Primary Pressure - bar: 2.4 bar, 6.2 bar, 10.3 bar  
Primary Pressure - psig: 35 psig, 90 psig, 150 psig

Pressure Drop - (bar)  
Pressure Drop - (psig)

Flow - (scfm)  
Flow - (dm³/s)

### 10F 1/4" Coalescing Filter

**Flow Characteristics**  
10F11H\*  
1/4 Inch Ports

Primary Pressure - bar  
2.4 bar  
6.2 bar  
10.3 bar

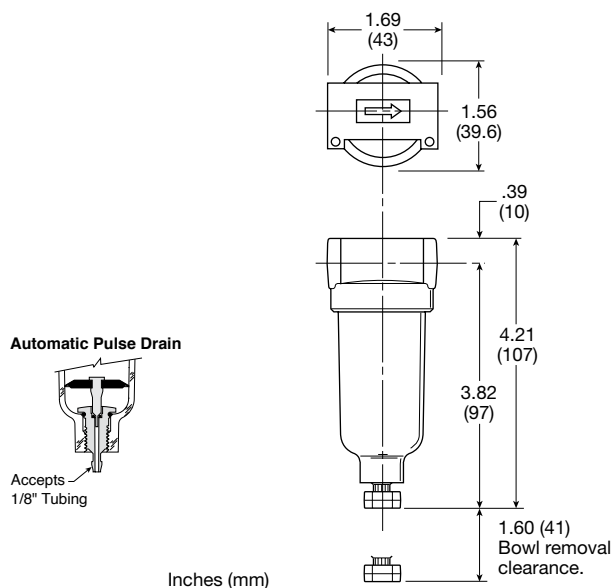
Primary Pressure - psig  
35 psig  
90 psig  
150 psig

Pressure Drop - (bar)

Pressure Drop - (psig)

Flow - (scfm)

Flow - (dm<sup>3</sup>/s)



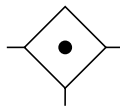
## Economy Coalescing Filters

### 15F Coalescing Filters - Economy

- 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.
- 1/4" & 3/8" ports – NPT

**Note:** To optimize the life of coalescing element, it is advisable to install a pre-filter with a 5 micron element upstream of the coalescing filter.

To optimize the life of an adsorber it is advisable to install a coalescing filter upstream of the adsorber. Adsorber element should be replaced approximately every 1000 hours of service.



#### Operating information

Supply pressure (max):

Without DPI

Plastic bowl

0 to 150 psig (0 to 10.3 bar)

Metal bowl

0 to 250 psig (0 to 17.2 bar)

With DPI

Auto pulse drain

0 to 150 psig (0 to 10.3 bar)

10 to 150 psig (0.7 to 10.3 bar)

Operating temperature:

Plastic bowl

32°F to 125°F (0°C to 52°C)

Metal bowl

32°F to 175°F (0°C to 80°C)

With DPI

32°F to 125°F (0°C to 52°C)

Flow capacity<sup>†</sup>: Grade 6

1/8" 30 scfm (14.2 dm<sup>3</sup>/s, ANR)

1/4" 30 scfm (14.2 dm<sup>3</sup>/s, ANR)

Bowl capacity:

2.0 oz.

Sump capacity:

0.9 oz.

Weight:

1.2 lb (0.54 kg)

<sup>†</sup> scfm = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.  
DPI = Differential pressure indicator

Port Size	Description *	Part Number
1/4"	Poly Bowl, Metal Guard, Twist Drain	<b>15F12EA</b>
1/4"	Poly Bowl, Metal Guard, Auto Pulse Drain	<b>15F1PEA</b>
3/8"	Poly Bowl, Metal Guard, Twist Drain	<b>15F22EA</b>
3/8"	Poly Bowl, Metal Guard, Auto Pulse Drain	<b>15F2PEA</b>

\* For polycarbonate bowl, see caution in Engineering Section A.

#### Ordering Information:

<b>15F</b>	<b>1</b>	<b>2</b>	<b>E</b>	<b>A</b>		
<b>Port Size</b> 1/4 inch 1 3/8 inch 2		<b>Bowl Options</b> Poly Bowl, Metal Bowl Guard, Twist Drain 2 Poly Bowl, Metal Bowl Guard, Auto Pulse Drain P		<b>Element</b> Grade 6 (0.01) E	<b>Port Type</b> Blank NPT	<b>Options</b> Blank With Differential Pressure Indicator (DPI) N Without Differential Pressure Indicator (DPI)
				<b>Engineering Level</b> A Current		

Most popular.



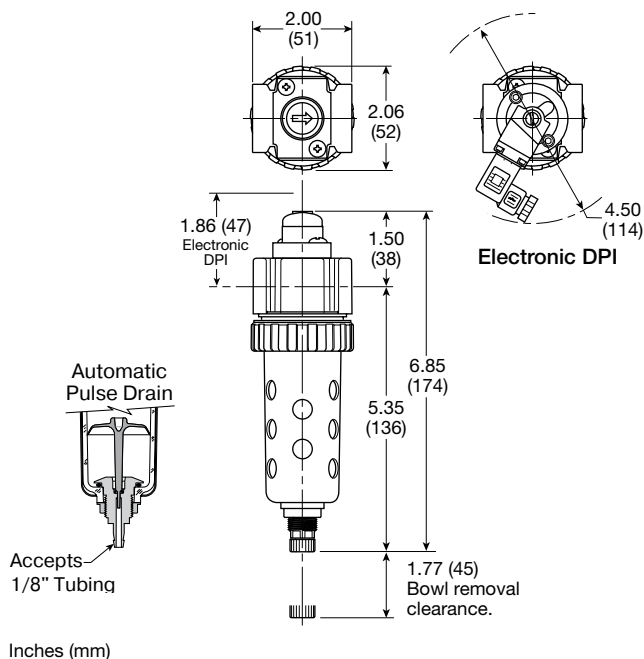
## Economy Coalescing Filters

### Material Specifications

Body	Zinc
Transparent bowl	Polycarbonate
Metal bowl without sight gauge	Zinc
Bowl guards	Steel
Collar	Plastic
Drain	Plastic
Element	Borosilicate & felt glass fibers
Seals	Nitrile
Sight gauge, DPI	Polyamide (nylon)

### Repair and Service Kits

Bowl Guard Kit	<b>PS905P</b>
Poly bowl / automatic pulse drain kit	<b>PS995P</b>
Poly bowl / twist drain kit	<b>PS932P</b>
DPI replacement kit	<b>PS781P</b>
Electronic DPI replacement kit	<b>PS764</b>
Automatic pulse drain kit	<b>PS998P</b>
Twist drain kit	<b>PS512P</b>
Electrical connector: 15mm, 3-pin DIN, 6 ft. cord	<b>PS2932JBP</b>
Filter element kits – Grade 6 (standard)	<b>PS924P</b>
Mounting bracket kit	<b>PS943P</b>
Sight gauge kit	<b>PS914P</b>

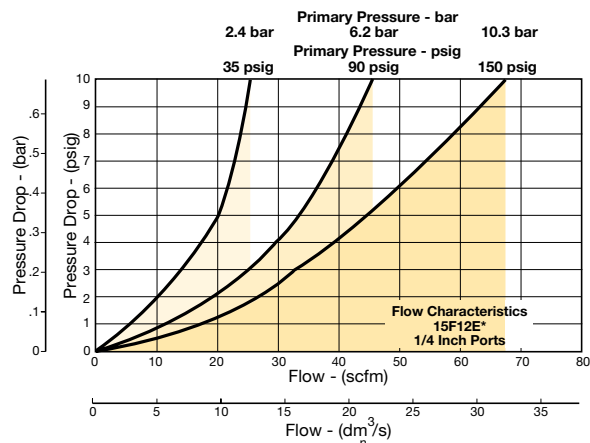


## Air Preparation Products Miniature / Inline

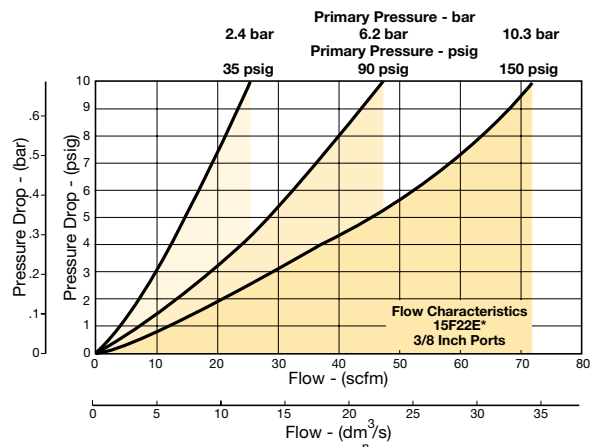
### Flow Charts

#### Grade 6 Element

##### 15F 1/4" Coalescing Filter



##### 15F 3/8" Coalescing Filter



Filters

Coalescers

Regulators

Filter /  
Regulators

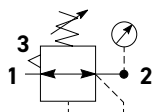
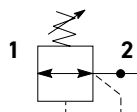
Lubricators

Miniature / Inline  
Products



## P31 Regulators - Mini

- Integral 1/4" ports (NPT, BSPP & BSPT)
- Robust but lightweight aluminum construction
- Secondary pressure ranges
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Relieving & non-relieving types
- Non-rising knob

Self relieving regulator  
with gauge

Non-relieving regulator

## Operating information

Flow capacity*:	1/4	73 scfm (34 dm³/s, ANR)
Operating temperature†:		-4°F to 150°F (-20°C to 65.5°C)
Supply pressure (max):		300 psig (20 bar)
Adjusting range pressure:		30 psig (0-2 bar) 60 psig (0-4 bar) 125 psig (0-8 bar) 232 psig (0-16 bar)
Weight:		0.37 lb (0.17 kg)

\* Inlet pressure 145 psig (10 bar). Secondary pressure 100 psig (6.9 bar) and 14.5 psig (1 bar) pressure drop.

† Units with square gauges: 5°F to 150°F (-15°C to 65.5°C)

Gauge supplied with every part. Gauge can be installed on the front or back of the regulator. If no gauge is installed, both seal screws must be installed.

Port Size	Description (Relieving)	Gauge	Part Number
1/4"	125 psig (8 bar)	Square	<b>P31RB92BN5P</b>

## Ordering Information:

**P31RB 9 2 B N 5 P**

<b>Basic Series</b> Global Modular Mini Regulator <b>P31RB</b>	<b>Thread Type</b> BSPP 1 BSPT 2 NPT 9	<b>Port Size</b> 1/4 2	<b>Relief</b> Relieving B Non-Relieving N Reverse Flow - Relieving R	<b>Adjustment</b> N Non-Rising Knob	<b>Mounting</b> P Plastic Panel Mount Nut
--	---	---------------------------	---	--	--

Adjustment Range		
With Square Gauge		
psig	Bar	MPa
1 = 30*	V = 2*	2 = 0.2*
3 = 60	S = 4	4 = 0.4
5 = 125	T = 8	6 = 0.8
7 = 232	W = 16	8 = 1.6

\* Regulator comes with gauge respective to the adjustment range available.

Most popular.





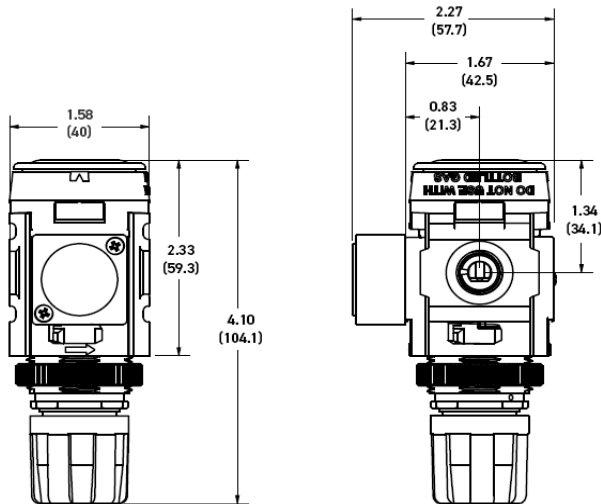
## Mini Regulators

### Material Specifications

Body	Aluminum
Adjustment knob	Acetal
Bonnet	Glass-filled nylon
Diaphragm assembly	Stainless steel / Nitrile
Valve assembly	Acetal/ Nitrile
Springs	Steel
Seals	Nitrile
Panel nut	Acetal
Bottom Cap	Glass-filled nylon

### Repair and Service Kits

Panel mount nut - aluminum	<b>P31KA00MM</b>
Panel mount nut - plastic	<b>P31KA00MP</b>
Angle bracket (attaches via panel nut)	<b>P31KB00MR</b>
C-bracket (fits to body)	<b>P31KA00MW</b>
T-bracket with body connector	<b>P31KA00MT</b>
Body connector	<b>P31KA00CB</b>



**NOTE:** 1.20 in. (30mm) hole required for panel nut mounting.



### WARNING

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

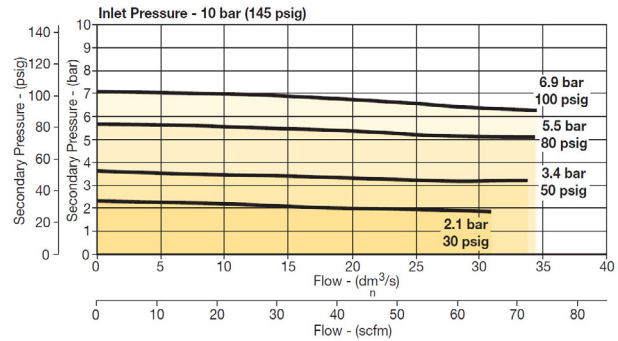
### CAUTION:

**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.

## Air Preparation Products Miniature / Inline

### Flow Charts

#### P31RB 1/4" Regulator



### Gauges (\*see note below)

Square flush mount gauge	0-060 psig	<b>P31KA060XB</b>
	0-160 psig	<b>P31KA160XB</b>
	0-290 psig	<b>P31KA290XB</b>
	0-4 bar	<b>P31KA04BXB</b>
	0-11 bar	<b>P31KA11BXB</b>
	0-20 bar	<b>P31KA20BXB</b>
	0-0.4 MPa	<b>P31KA04MXB</b>
Square flush mount gauge	0-1.1 MPa	<b>P31KA11MXB</b>
	0-2.0 MPa	<b>P31KA20MXB</b>
Square with adapter kit	0-4 bar	<b>K4511SCR04B</b>
	0-11 bar	<b>K4511SCR11B</b>
	0-60 psig	<b>K4511SCR060</b>
	0-160 psig	<b>K4511SCR160</b>
1.00" Round 1/8" center back mount	0-60 psig / 1-4 bar	<b>K4510N18060</b>
	0-160 psig / 0-11 bar	<b>K4510N18160</b>
40mm Round 1/8" center back mount (not for use with common port regulators)	0-30 psig / 0-2 bar	<b>K4515N18030</b>
	0-60 psig / 0-4 bar	<b>K4515N18060</b>
	0-160 psig / 0-11 bar	<b>K4515N18160</b>

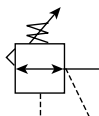
For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

**\*For P31 Regulators with date code after November 2023 (4423 Date Code), please use these part numbers when ordering a replacement gauge.**



## 14R Regulators - Miniature

- Unbalanced poppet standard
- Solid control piston with lip seal for extended life
- Non-rising adjusting knob
- Compact design
- Very easy to service
- 1/8", 1/4" ports (NPT, BSPP, BSPT)



Port Size	Description	Part Number
1/8"	Without Gauge	<b>14R013FC</b>
1/8"	With Gauge	<b>14R018FC</b>
1/4"	Without Gauge	<b>14R113FC</b>
1/4"	With Gauge	<b>14R118FC</b>

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

### Operating information

Supply pressure (max):	0 to 300 psig (0 to 20.7 bar)
Secondary pressure ranges	
Standard	2 to 125 psig (0 to 8.6 bar)
Medium	1 to 60 psig (0 to 4.1 bar)
Medium	1 to 30 psig (0 to 2.1 bar)
Low	1 to 15 psig (0 to 1 bar)
Operating temperature:	32°F to 125°F (0°C to 52°C)
Low temperature	-4°F to 125°F (-20°C to 52°C)
Flow capacity†:	
High flow	1/8" 13 scfm (6.1 dm³/s, ANR)
	1/4" 15 scfm (7.1 dm³/s, ANR)
Gauge ports (2):	1/8 or 1/4 inch
Weight:	0.3 lb (0.14 kg)

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

### Ordering Information:

<b>14R</b>	<b>1</b>	<b>13</b>	<b>F</b>	<b>C</b>			
<b>Port Size</b>			<b>Port Type</b>			<b>Preset / Pressure Limited</b>	
1/8 Inch Pipe, 1/8 Inch Gauge Port    0			Blank    NPT			Blank    None	
1/4 Inch Pipe, 1/8 Inch Gauge Port    1			1    BSPP			XXX*    Preset Pressure	
1/4 Inch Pipe, 1/4 Inch Gauge Port    B			2    BSPT			XXX*    Pressure Limited	
1/8 Inch Pipe, No Gauge Port    C							
Manifold Mounting    M							
			<b>Engineering Level</b>				
			C    Current				

Most popular.



## Miniature Regulators

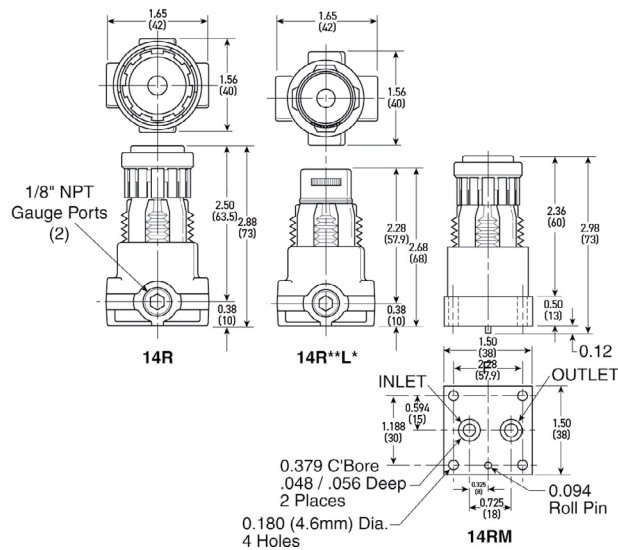
### Material Specifications

Adjusting nut	Brass
Adjusting stem & spring	Steel
Body	Zinc
Bonnet, seat, piston & valve poppet	Plastic
Seals	Nitrile

### Repair and Service Kits

Bonnet assembly kit	<b>L01369</b>
Bonnet tamperproof kit	<b>P01265</b>
30 psig gauge, 1/8" NPT (0 to 2.1 bar)	<b>K4515N18030</b>
60 psig gauge, 1/8" NPT (0 to 4.1 bar)	<b>K4515N18060</b>
160 psig gauge, 1/8" NPT (0 to 11.0 bar)	<b>K4515N18160</b>
60 psig gauge, 1/4" NPT (0 to 4.1 bar)	<b>K4520N14060</b>
160 psig gauge, 1/4" NPT (0 to 11.0 bar)	<b>K4520N14160</b>
Mounting bracket kit* (includes panel mount nut)	<b>PS417BP</b>
Plastic panel mount nuts*	<b>P78652</b>
Metal panel mount nuts*	<b>P01531</b>
Unbalanced non-relieving, poppet / piston kit	<b>PS428P</b>
Unbalanced relieving, poppet / piston kit	<b>PS426P</b>
1- 15 psig spring (yellow)	<b>P01176</b>
1-30 psig spring (black)	<b>P01175</b>
1-60 psig spring (white)	<b>P01174</b>
2- 125 psig spring (gold)	<b>P01173</b>

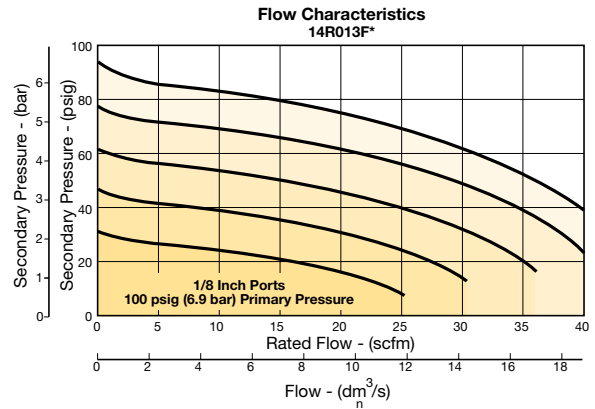
\* Tighten panel mount nut 2.8 to 3.4 Nm (25 to 30 in-lbs) of torque.



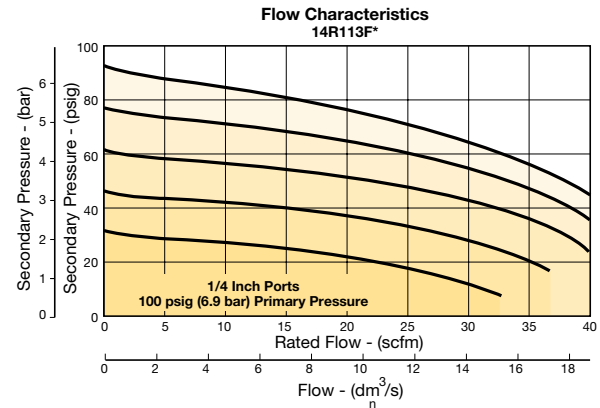
## Air Preparation Products Miniature / Inline

### Flow Charts

#### 14R 1/8" Regulators



#### 14R 1/4" Regulators



### WARNING

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

### CAUTION:

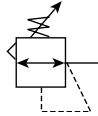
**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and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



## Miniature Regulators

### P3A-R Regulators - Miniature

- 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
- 1/8", 1/4" ports (NPT)



Port Size	Description	Part Number
1/4"	Without Gauge	<b>P3A-RN92YNNN</b>

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

#### Operating information

Supply pressure (max):	120 psig (8.3 bar)
Secondary pressure:	
15 psig spring	1 to 15 psig (0.07 to 1.0 bar)
30 psig spring	6 to 30 psig (0.4 to 2.1 bar)
60 psig spring	6 to 60 psig (0.4 to 4.1 bar)
110 psig spring	6 to 110 psig (0.4 to 7.6 bar)
Operating temperature:	32°F to 125°F (0°C to 52°C)
Flow capacity†:	
High flow 1/8"	13 scfm (6.1 dm³/s, ANR)
1/4"	15 scfm (7.1 dm³/s, ANR)
Gauge ports (2):	1/8 inch
Weight:	0.3 lb (0.14 kg)

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

#### Ordering Information:

<b>P3A-RN</b>	<b>9</b>	<b>1</b>	<b>Y</b>	<b>N</b>	<b>N</b>	<b>N</b>	
<b>Port Type</b>	<b>Port Size</b>	<b>Relief</b>	<b>Pressure / Gauge</b>	<b>Option</b>	<b>Preset / Pressure Limited</b>		
NPT Female	1/8 inch	Non-Relieving, Black Knob	Without Gauge	N	Blank		
	1/4 inch	Relieving, Black Knob	15 psig (0 to 1 bar)		XXX*		
		Non-Relieving, Yellow Knob	30 psig (0 to 2 bar)		XXX*		
		Relieving, Yellow Knob	60 psig (0 to 4 bar)				
			120 psig (0 to 8 bar)				
			With Gauge				
			15 psig (0 to 1 bar)				
			30 psig (0 to 2 bar)				
			60 psig (0 to 4 bar)				
			120 psig (0 to 8 bar)				

Most popular.



## Miniature Regulators

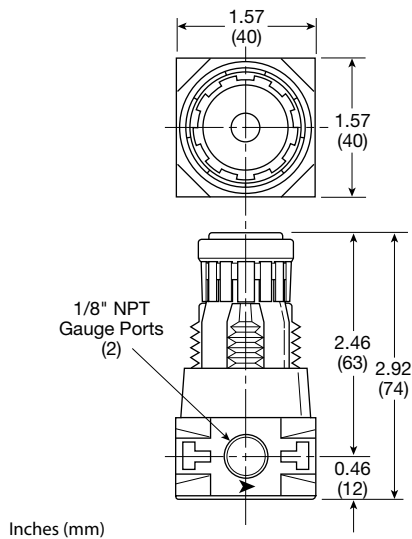
### Material Specifications

Adjusting nut	Brass
Adjusting stem & spring	Steel
Poppet return spring	Stainless Steel
Body	Plastic
Bonnet, seat & piston	Plastic
Seals	Nitrile
Valve poppet	Plastic & nitrile

### Repair and Service Kits

30 psig gauge, 1/8" NPT (0 to 2.1 bar)	<b>K4515N18030</b>
60 psig gauge, 1/8" NPT (0 to 4.1 bar)	<b>K4515N18060</b>
160 psig gauge, 1/8" NPT (0 to 11.0 bar)	<b>K4515N18160</b>
Mounting bracket kit* (includes panel mount nut)	<b>PS417BP</b>
Panel mount nut* <b>P78652</b>	
Unbalanced non-relieving, poppet / piston kit	<b>PS428P</b>
Unbalanced relieving, poppet / piston kit	<b>PS426P</b>
1-15 psig Spring (yellow)	<b>P01176</b>
1-30 psig spring (black)	<b>P01175</b>
1-60 psig spring (white)	<b>P01174</b>
5-110 psig spring (gold)	<b>P01173</b>

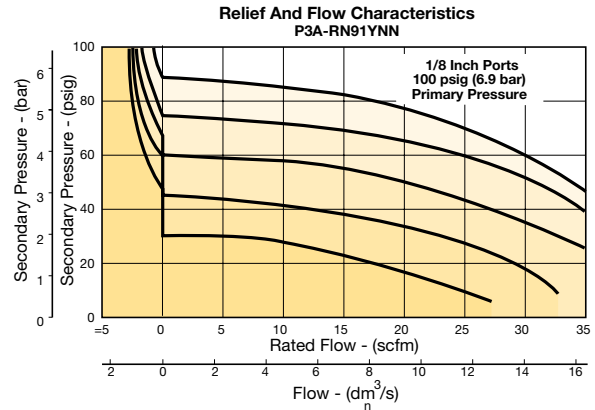
\* Tighten panel mount nut 2.8 to 3.4 Nm (25 to 30 in-lbs) of torque.



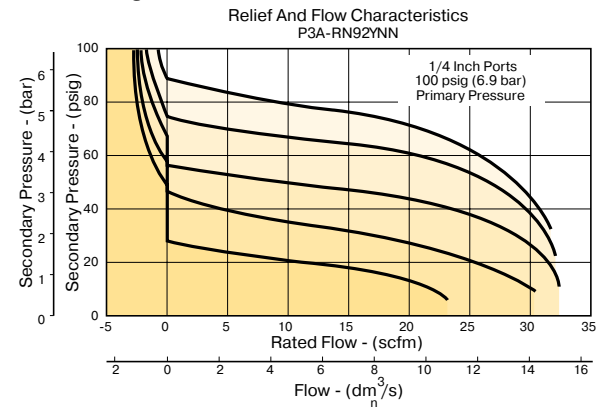
## Air Preparation Products Miniature / Inline

### Flow Charts

#### P3A-R 1/8" Regulator



#### P3A-R 1/4" Regulator



### WARNING

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

### CAUTION:

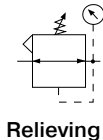
**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and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



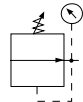
## Miniature Regulators

### R34 Regulators - Miniature

- Diaphragm operated for fast response
- 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", 1/4" ports (NPT, BSPP)



Relieving



Non-Relieving

Port Size	Description	Part Number	
		Without Gauge	With Gauge
1/8"	Relieving, 0 to 30 psig	<b>R344-01A</b>	<b>R344-01AG</b>
1/8"	Relieving, 0 to 60 psig	<b>R344-01B</b>	<b>R344-01BG</b>
1/8"	Relieving, 0 to 125 psig	<b>R344-01C</b>	<b>R344-01CG</b>
1/4"	Relieving, 0 to 30 psig	<b>R344-02A</b>	<b>R344-02AG</b>
1/4"	Relieving, 0 to 60 psig	<b>R344-02B</b>	<b>R344-02BG</b>
1/4"	Relieving, 0 to 125 psig	<b>R344-02C</b>	<b>R344-02CG</b>
Manifold	Relieving, 0 to 30 psig	<b>R342-0MA</b>	-
Manifold	Relieving, 0 to 60 psig	<b>R342-0MB</b>	-
Manifold	Relieving, 0 to 125 psig	<b>R342-0MC</b>	-



R344-02C



R342-0MC

#### Operating information

Supply pressure (max):	300 psig (0 to 20.7 bar)
Operating temperature:	-40°F to 150°F (-40°C to 65.5°C)
Flow capacity†:	
High flow	1/8" 17 scfm (8.0 dm³/s, ANR)
	1/4" 19 scfm (8.9 dm³/s, ANR)
Gauge ports (2):	1/8 inch (no gauge port version available)
Weight:	0.25 lb (0.11 kg)

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

#### Ordering Information:

**R34**

Number of Ports	
2 Ports	2
4 Ports	4*

\* Not available with manifold mount.

**4**

Thread	
NPT	-
BSPP	G

**-**

Port	
1/8 inch	01
1/4 inch	02
Manifold Mount	0M

**02**

Pressure Range	
0 to 30 psi	A
0 to 60 psi	B
0 to 125 psi	C

**C**

**G**

Options	
Blank	No Option
G	Gauge
K	Non-Relieving Diaphragm
N	Unbalanced
P	Panel Mount Nut
X64	Fluorocarbon Elastomers

**Blank**

Preset	
Blank	None
XXX*	Preset Pressure

\* Available preset / pressure limited range, 10 to 90 psig in 5 psig increments. For higher pressures, contact factory.  
(Example: 065 = 65 psig)

Most popular.



## Miniature Regulators

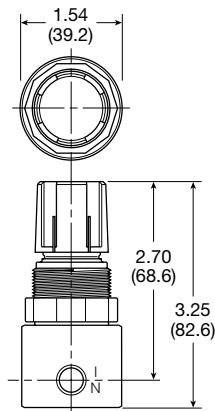
### Material Specifications

Body	Aluminum
Bonnet	Acetal
Diaphragm & seals	Nitrile
Valve assembly	Brass
Springs	Steel
Panel Nut	Acetal

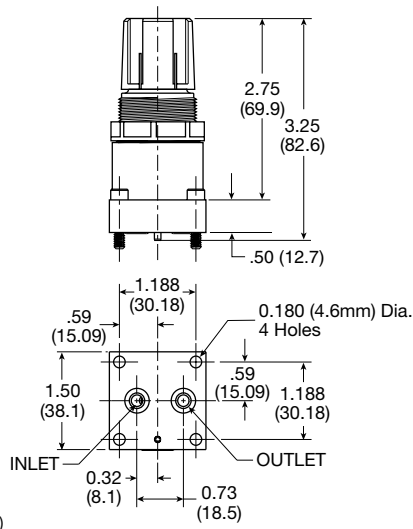
### Repair and Service Kits

Diaphragm assembly, non-relieving	<b>GRP-96-726</b>
Diaphragm assembly, relieving	<b>GRP-96-725</b>
0 to 30 psig (0 to 2.1 bar), spring, regulating	<b>GRP-95-111</b>
0 to 60 psig (0 to 4.1 bar) spring, regulating	<b>GRP-96-718</b>
0 to 125 psig (0 to 8.6 bar) spring, regulating	<b>GRP-96-717</b>
Panel mount nut, aluminum	<b>R05X51-A</b>
Panel mount nut, plastic	<b>R05X51-P</b>
Mounting bracket kit (includes panel mount nut)	<b>SA161X57</b>
1-1/2" Dial Face, 1/8 NPT, CBM, 0 to 60 psig (0 to 4.1 bar), gauge	<b>K4515N18060</b>
1-1/2" Dial Face, 1/8 NPT, CBM, 0 to 160 psig (0 to 11.0 bar), gauge	<b>K4515N18160</b>
Tamperproof knob kit	<b>P31KB00AT</b>

#### R342 / R344



#### R342-OMC

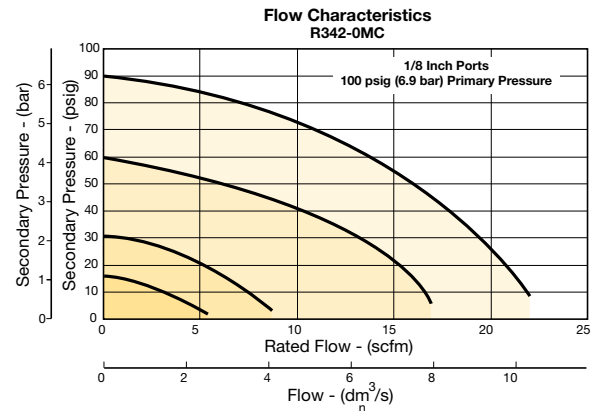


Inches (mm)

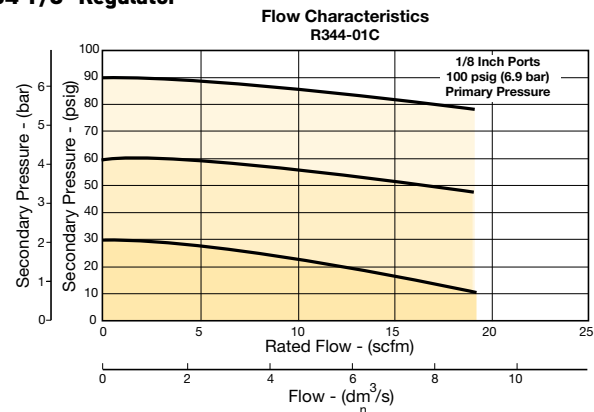
## Air Preparation Products Miniature / Inline

### Flow Charts

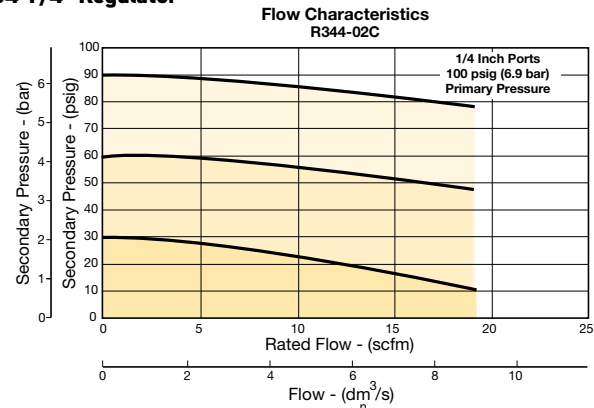
#### R34 1/8" Manifold Mount



#### R34 1/8" Regulator



#### R34 1/4" Regulator



### 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.

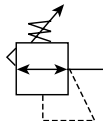




## Miniature Regulators

### R25 Regulators - Miniature

- Lightweight plastic body
- Unbalanced poppet standard
- Non-rising, push-to-lock adjusting knob
- Compact, 3.10 Inch (79 mm) high by 1.60 Inch (41 mm) wide
- Lightweight
- Diaphragm operated
- 1/8", 1/4" ports (NPT)



#### Operating information

Supply pressure (max):	Inlet 150 psig (10.0 bar)
Operating temperature:	40°F to 125°F (4°C to 52°C)
Gauge ports (2):	1/8 inch (can be used for full flow)
Weight:	0.25 lb (0.11 kg)

Port Size	Description	Part Number
1/8"	Relieving, 0-125 Reduced Pressure, without Gauge	<b>R25-01C</b>
1/4"	Relieving, 0-125 Reduced Pressure, without Gauge	<b>R25-02C</b>

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

#### Ordering Information:

<b>R25</b>		<b>-</b>	<b>02</b>	<b>C</b>	
<b>Type</b>		<b>Port Size</b>		<b>Relief</b>	
Buna Elastomers		1/8 inch 01		Blank Relieving	
R25		1/4 inch 02		P Panel Mount Nut	
				<b>Pressure Range</b>	
				A 0 to 25 psig (0 to 2 bar)	
				B 0 to 60 psig (0 to 4 bar)	
				C 0 to 125 psig (0 to 125 (0 to 8 bar)	



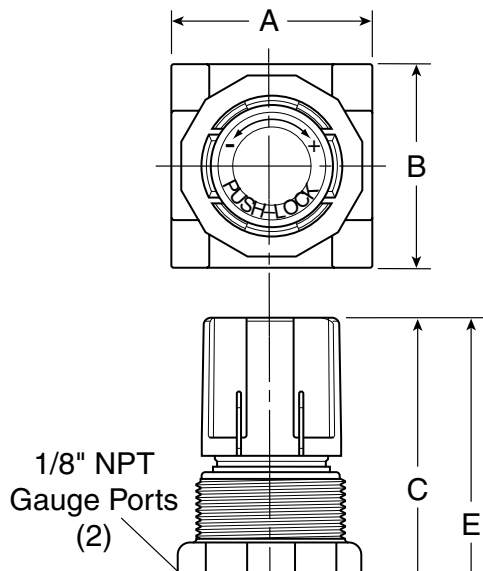
## Miniature Regulators

### Material Specifications

Adjusting screw	Steel
Body	Acetal
Bonnet and seat	Acetal
Diaphragm	Buna N
Seals	Buna N
Springs	Stainless steel
Valve poppet	Buna N

### Repair and Service Kits

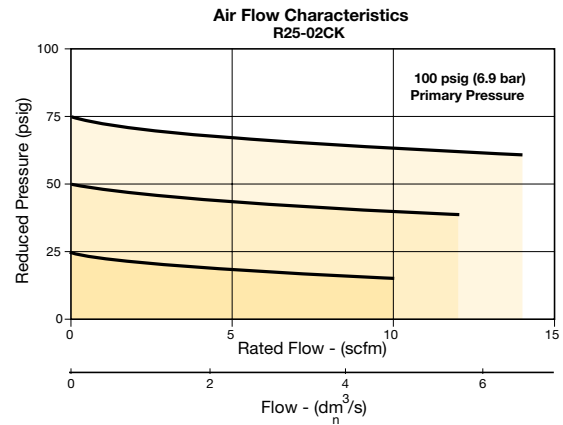
Panel mount nut, plastic	<b>R05X51-P</b>
Panel mount nut, aluminum	<b>R05X51-A</b>
Mounting bracket and nut	<b>SA161X57</b>
Relieving (Buna)	<b>RKR25Y</b>
Non-Relieving (Buna)	<b>RKR25KY</b>
0-25 psig spring	<b>SPR-375-1</b>
0-60 psig spring	<b>SPR-376</b>
0-125 psig spring	<b>SPR-377</b>



## Air Preparation Products Miniature / Inline

### Flow Charts

#### R25 1/4" Regulator



### WARNING

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

### CAUTION:

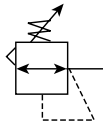
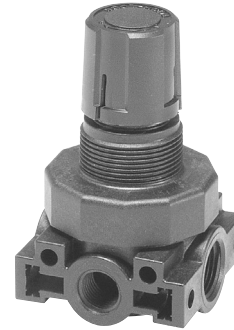
**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and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



## Miniature Regulators

### R45 Regulators - Miniature

- Lightweight plastic body
- Unbalanced poppet standard
- Non-rising, push-to-lock adjusting knob
- Compact, 3.43 inch (87.1 mm) high by 2.06 inch (52.3 mm) wide
- Lightweight
- Diaphragm operated
- 1/4", 3/8" ports (NPT)



Port Size	Description	Part Number
1/4"	Relieving, 0-125 Reduced Pressure, without Gauge	<b>R45-02C</b>
3/8"	Relieving, 0-125 Reduced Pressure, without Gauge	<b>R45-03C</b>

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

#### Operating information

Supply pressure (max):	Inlet 150 psig (10.0 bar)
Operating temperature:	40°F to 125°F (4°C to 52°C)
Gauge ports (2):	1/4 inch (can be used for full flow)
Weight:	0.38 lb (0.17 kg)

#### Ordering Information:

<b>R45</b>	<b>-</b>	<b>02</b>	<b>C</b>	
<b>Type</b> Buna Elastomers    R45		<b>Port Size</b> 1/4 inch    02 3/8 inch    03	<b>Pressure Range</b> A    0 to 25 psig (0 to 2 bar) B    0 to 60 psig (0 to 4 bar) C    0 to 125 psig (0 to 8 bar)	<b>Relief</b> Blank    Relieving P    Panel Mount Nut

 Most popular.



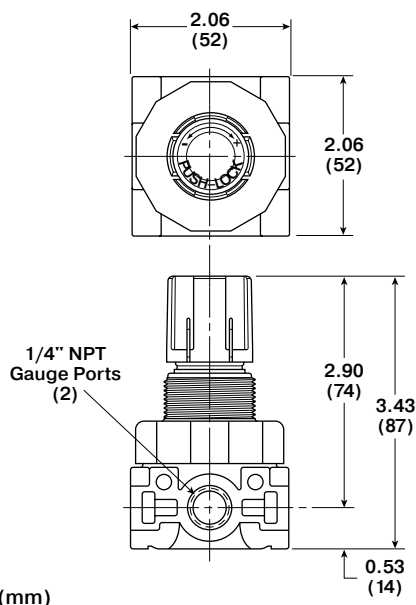
## Miniature Regulators

### Material Specifications

Adjusting screw	Steel
Body	Acetal
Bonnet and seat	Acetal
Diaphragm	Buna N
Seals	Buna N
Springs	Stainless steel
Valve Poppet	Buna N

### Repair and Service Kits

Panel mount nut, plastic	<b>R05X51</b>
Panel mount nut, aluminum	<b>R05X51-A</b>
Mounting bracket and nut	<b>SA161X57</b>
Relieving	<b>RKR45Y</b>
Non-Relieving	<b>RKR45KY</b>
0-25 psig spring	<b>SPR-46</b>
0-60 psig spring	<b>SPR-47</b>
0-125 psig spring	<b>SPR-48</b>

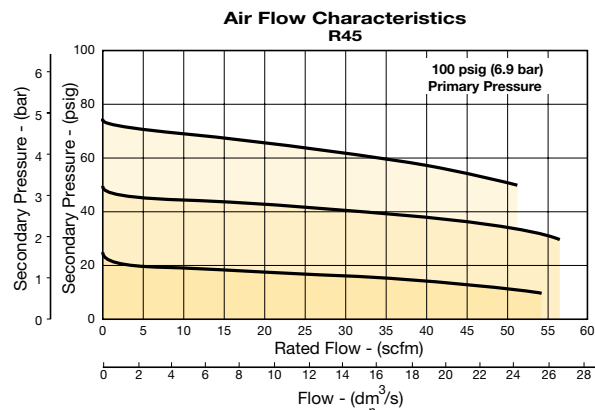


Inches (mm)

## Air Preparation Products Miniature / Inline

### Flow Charts

#### R45 1/4" Regulator



### WARNING

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Do not exceed Maximum primary pressure rating.**

### CAUTION:

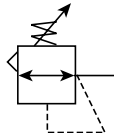
**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and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



**Economy Regulators**

**15R Regulators - Economy**

- Solid control piston with resilient seat for service-free operation
- Non-rising "locking" adjusting knob
- Compact, 3.30 inch (84 mm) high by 2.12 inch (54 mm) wide
- Easily serviced
- 1/4", 3/8" ports (NPT)



Port Size	Description	Part Number
1/4"	Without Gauge	<b>15R113FB</b>
1/4"	With Gauge	<b>15R118FB</b>
3/8"	Without Gauge	<b>15R213FB</b>
3/8"	With Gauge	<b>15R218FB</b>

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

**Operating information**

Supply pressure (max): 0 to 250 psig (0 to 17.2 bar)

Secondary pressure ranges  
 Standard 2 to 125 psig (0 to 8.6 bar)  
 Medium 1 to 60 psig (0 to 4.1 bar)  
 Medium 1 to 30 psig (0 to 1.7 bar)  
 Low 1 to 15 psig (0 to 1 bar)

Operating temperature: 32°F to 125°F (0°C to 52°C)  
 Low temperature -4°F to 125°F (-20°C to 52°C)

Flow capacity†:  
 High flow 1/4" 21 scfm (9.9 dm³/s, ANR)  
 3/8" 28 scfm (13.2 dm³/s, ANR)

Gauge ports (2): 1/4 inch  
 (can be used at full flow)

Weight: 0.5 lb (0.23 kg)

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

**Ordering Information:**

**15R**

**1**

**13**

**F**

**B**

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

Engineering Level	
B	Current

Pressure Range	
<b>Without Gauge</b>	
15 psig	12
30 psig	10
60 psig	11
125 psig	13
<b>With Gauge</b>	
15 psig	17
30 psig	15
60 psig	16
125 psig	18

Relief	
F	Relieving
G	Non-Relieving

  Most popular.



## Economy Regulators

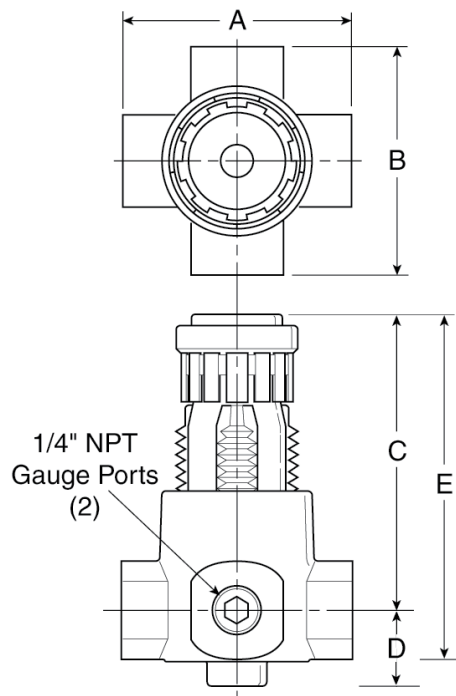
### Material Specifications

Adjusting nut	Brass
Adjusting stem & spring	Steel
Body	Zinc
Bonnet, seat, piston & valve poppet	Plastic
Seals	Nitrile

### Repair and Service Kits

Body Service Kit – Unbalanced	<b>PS424BP</b>
Bonnet Assembly Kit	<b>L01369</b>
30 psig, 1/8" NPT (0 to 2.1 bar) gauge	<b>K4515N18030</b>
60 psig, 1/8" NPT (0 to 4.1 bar) gauge	<b>K4515N18060</b>
160 psig, 1/8" NPT (0 to 11.0 bar) gauge	<b>K4515N18160</b>
60 psig, 1/4" NPT (0 to 4.1 bar) gauge	<b>K4520N14060</b>
160 psig, 1/4" NPT (0 to 11.0 bar) gauge	<b>K4520N14160</b>
Mounting bracket kit* (Includes panel mount nut)	<b>PS417BP</b>
Panel mount nuts*, plastic	<b>P78652</b>
Panel mount nuts*, metal	<b>P01531</b>
Poppet / piston kit, unbalanced, non-relieving	<b>PS428P</b>
Poppet / piston kit, unbalanced, relieving	<b>PS426P</b>
Seal, unbalanced	<b>PS454B</b>
1- 15 psig spring (yellow)	<b>P01176</b>
1-30 psig spring (black)	<b>P01175</b>
1-60 psig spring (white)	<b>P01174</b>
2- 125 psig spring (gold)	<b>P01173</b>

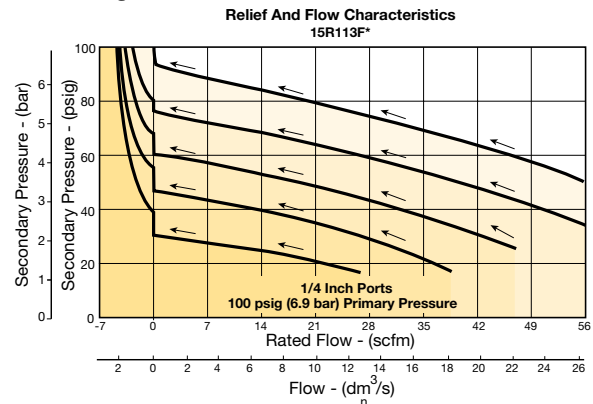
\* Tighten panel mount nut 2.8 to 3.4 Nm (25 to 30 in-lbs) of torque.



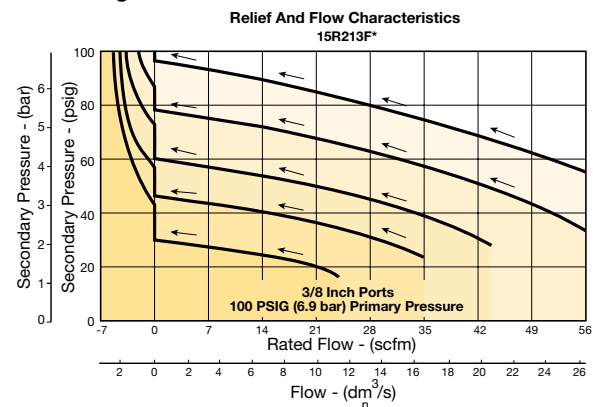
## Air Preparation Products Miniature / Inline

### Flow Charts

#### 15R 1/4" Regulator



#### 15R 3/8" Regulator



### WARNING

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

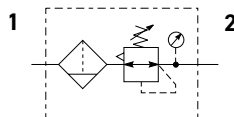
### CAUTION:

**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.



## P31 Filter / Regulators - Mini

- Integral 1/4" ports (NPT, BSPP & BSPT)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminum construction
- Positive bayonet latch to ensure correct & safe fitting
- Secondary pressure ranges
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation



## Operating information

Flow capacity*:	1/4	73 scfm (35 dm <sup>3</sup> /s, ANR)
Operating temperature†:		
Plastic bowl	14°F to 125°F (-10°C to 52°C)	
Metal bowl	14°F to 150°F (-10°C to 65.5°C)	
Supply pressure (max):		
Plastic bowl	150 psig (10 bar)	
Metal bowl	250 psig (17 bar)	
Standard filtration	5 micron	
Useful retention†:	0.4 US oz. (12 cm <sup>3</sup> )	
Adjusting range pressure:		
	0 to 30 psig (0 to 2 bar)	
	0 to 60 psig (0 to 4 bar)	
	0 to 125 psig (0 to 8 bar)	
	0 to 250 psig (0 to 17 bar)	
Weight:	0.42 lb (0.19 kg)	

\* Inlet pressure 145 psig (10 bar). Secondary pressure 100 psig (6.9 bar) and 14.5 psig (1 bar) pressure drop.

† Units with square gauges: 5°F to 150°F (-15°C to 65.5°C)

† Useful retention refers to volume below the quiet zone baffle.

Gauge supplied with every part. Gauge can be installed on the front or back of the regulator. If no gauge is installed, both seal screws must be installed.

Port Size	Description (Relieving)	Bowl / Drain Type †	Part Number
1/4"	125 psig (8 bar)	Poly / Manual	<b>P31EB92EGMBN5P</b>
1/4"	125 psig (8 bar)	Poly / Pulse	<b>P31EB92EGBBN5P</b>
1/4"	125 psig (8 bar)	Metal / Manual	<b>P31EB92EMMBN5P</b>
1/4"	125 psig (8 bar)	Metal / Pulse	<b>P31EB92EMBBN5P</b>

† For polycarbonate bowl, see caution in Engineering Section A.

Air quality: Within ISO 8573-1: 1991 Class 3 (Particulates)  
Within ISO 8573-1: 2001 Class 6 (Particulates)

## Ordering Information:

<b>P31EB</b>		<b>9</b>	<b>2</b>	<b>E</b>	<b>G</b>	<b>M</b>	<b>B</b>	<b>N</b>	<b>5</b>	<b>P</b>															
<b>Basic Series</b> Global Modular Mini Filter / Regulator <b>P31EB</b>		<b>Thread Type</b> BSPP 1 BSPT 2 NPT 9	<b>Element</b> 5µ Element E	<b>Port Size</b> 1/4 2	<b>Bowl Type</b> Poly Bowl with Bowl Guard G Metal Bowl without Sight Gauge M	<b>Drain Type</b> Pulse Drain B Manual Drain M	<b>Relief</b> B Relieving N Non-Relieving	<b>Adjustment</b> N Non-Rising Knob	<b>Mounting</b> P Plastic Panel Mount Nut	<b>Adjustment Range</b> <b>With Square Gauge</b> <table border="1"> <thead> <tr> <th>psig</th> <th>Bar</th> <th>MPa</th> </tr> </thead> <tbody> <tr> <td>1 = 30*</td> <td>V = 2*</td> <td>2 = 0.2*</td> </tr> <tr> <td>3 = 60</td> <td>S = 4</td> <td>4 = 0.4</td> </tr> <tr> <td>5 = 125</td> <td>T = 8</td> <td>6 = 0.8</td> </tr> <tr> <td>7<sup>‡</sup> = 232</td> <td>W<sup>‡</sup> = 16</td> <td>8<sup>‡</sup> = 1.6</td> </tr> </tbody> </table>	psig	Bar	MPa	1 = 30*	V = 2*	2 = 0.2*	3 = 60	S = 4	4 = 0.4	5 = 125	T = 8	6 = 0.8	7 <sup>‡</sup> = 232	W <sup>‡</sup> = 16	8 <sup>‡</sup> = 1.6
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7 <sup>‡</sup> = 232	W <sup>‡</sup> = 16	8 <sup>‡</sup> = 1.6																							

\* Regulator comes with gauge respective to the adjustment range available.  
<sup>‡</sup> Not available with poly bowl with bowl guard.

Most popular.



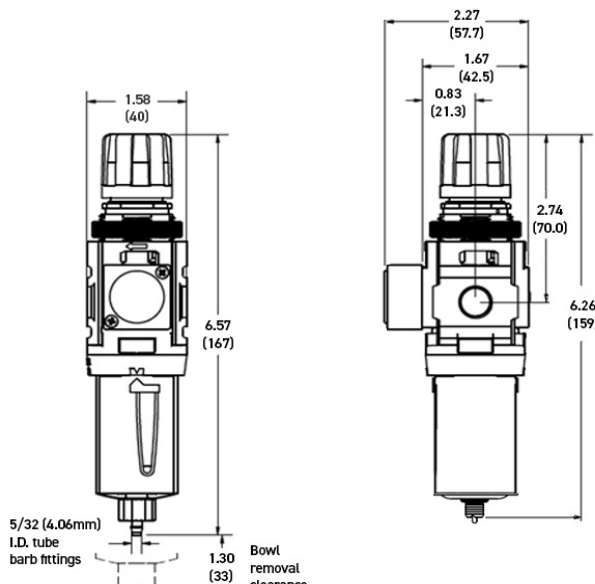
## Mini Filter / Regulators

### Material Specifications

Body	Aluminum
Adjustment knob	Acetal
Bonnet	Glass-filled nylon
Plastic bowl	Polycarbonate
Metal bowl	Aluminum
Bowl guard	Nylon
Filter element	Polyethylene
Seals	Nitrile
Springs	Steel
Valve assembly	Acetal / Nitrile
Diaphragm assembly	Stainless Steel / Nitrile
Panel nut	Acetal

### Repair and Service Kits

Plastic bowl / bowl guard manual drain	<b>P31KB00BGM</b>
Plastic bowl / bowl guard pulse drain	<b>P31KB00BGB</b>
Metal bowl / w/o sight gauge pulse drain	<b>P31KB00BMB</b>
5μ particle filter element	<b>P31KA00ESE</b>
Panel mount nut - aluminum	<b>P31KA00MM</b>
Panel mount nut - plastic	<b>P31KA00MP</b>
Angle bracket (attaches via panel nut)	<b>P31KB00MR</b>
C-bracket (fits to body)	<b>P31KA00MW</b>
T-bracket with body connector	<b>P31KA00MT</b>
Body connector	<b>P31KA00CB</b>



Manual Drain

Pulse Drain



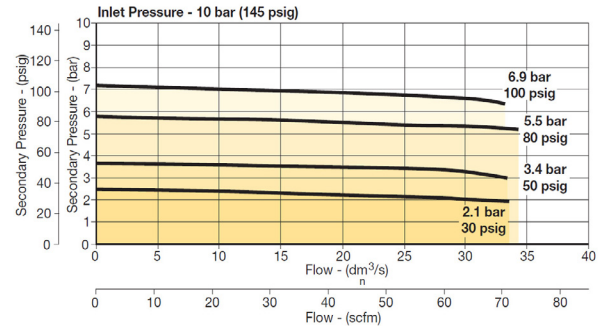
### WARNING

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

## Air Preparation Products Miniature / Inline

### Flow Charts

#### P31EB 1/4" Filter / Regulator



### Gauges (\*see note below)

Square flush mount gauge	0-60 psig	P31KA060XB
	0-160 psig	P31KA160XB
	0-290 psig	P31KA290XB
	0-4 bar	P31KA04BXB
	0-11 bar	P31KA11BXB
	0-20 bar	P31KA20BXB
	0-0.4 MPa	P31KA04MXB
	0-1.1 MPa	P31KA11MXB
	0-2.0 MPa	P31KA20MXB

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

**\*For P31 Regulators with date code after November 2023 (4423 Date Code), please use these part numbers when ordering a replacement gauge.**

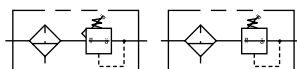
### CAUTION:

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## B34 Filter / Regulator - Miniature

- 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
- 1/8", 1/4" ports (NPT, BSPP)



Port Size	Description †	Part Number
1/8"	Poly Bowl, Twist Drain	<b>B344-01AGC</b>
1/8"	Metal Bowl, Twist Drain	<b>B344-01DGC</b>
1/4"	Poly Bowl, Twist Drain	<b>B344-02AGC</b>
1/4"	Metal Bowl, Twist Drain	<b>B344-02DGC</b>

† For polycarbonate bowl, see caution in Engineering Section A.  
NOTE: 1.218 Dia. (31 mm) hole required for panel mounting.

### Operating information

Supply pressure (max):		
Zinc bowl (D)		0 to 300 psig (0 to 20.7 bar)
Poly bowl (A)		0 to 150 psig (0 to 10.3 bar)
Operating temperature:		
40°F to 150°F (4.4°C to 52°C)		
Reduced pressure range:		
		0 to 25 psig (0 to 1.7 bar)
		0 to 60 psig (0 to 4.1 bar)
		2 to 125 psig (0.15 to 8.5 bar)

Flow capacity†:		
High flow	1/8"	17 scfm (8 dm³/s, ANR)
	1/4"	19 scfm (9 dm³/s, ANR)

Bowl capacity: 1 oz.

Weight:	Zinc bowl	0.6 lb (0.27 kg)
	Poly bowl	0.3 lb (0.14 kg)

† scfm = Standard cubic feet per minute at 100 psig inlet and 75 psig no psig no flow secondary setting and 25% pressure drop.

( ) Bowl type

### Ordering Information:

<b>B34</b>	<b>4</b>	<b>-</b>	<b>02</b>	<b>A</b>	<b>G</b>	<b>C</b>	
<b>Number of Ports</b>						<b>Options</b>	
2 Ports 2						Blank None	
4 Ports 4						G Gauge	
		<b>Port Type</b>				K Non-Relieving	
		NPT -				P Panel Mount (plastic)	
		BSPP G				S Auto Pulse Drain	
		<b>Port Size</b>				<b>Reduced Pressure Range</b>	
		1/8 inch 01				A 0-25 psig	
		1/4 inch 02				B 0-60 psig	
						C 0-125 psig	
		<b>Element</b>		<b>Element</b>			
		Polycarbonate Bowl A		5 Micron			
		Metal Without Sight Gauge D					

Most popular.





## Miniature Filter / Regulators

### Material Specifications

Adjusting Knob	Acetal
Body	Aluminum
Polycarbonate bowl (A)	Polycarbonate
Metal bowl (D)	Zinc
Elastomers	Buna N
Filter Element polyethylene	Sintered
Filter retainer, vane plate	Acetal
Innervale, diaphragm, button, drain	Brass

### Repair and Service Kits

Adjusting knob	<b>RRP-16-005-000</b>
Zinc bowl (D)	<b>BK505Y</b>
Zinc bowl with auto pulse drain (D)	<b>BK505SY</b>
Polycarbonate bowl (A)	<b>BK504Y</b>
Polycarbonate bowl with auto pulse drain (A)	<b>BK504SY</b>
Automatic pulse drain (Maximum pressure = 175 psig)	<b>RK504SY</b>
5 micron element (All)	<b>FRP-96-729</b>
1-1/2" dial size, 1/8" back connection 0 to 60 psig (0 to 400 kPa), gauge	<b>K4515N18060</b>
1-1/2" dial size, 1/8" back connection 0 to 160 psig (0 to 1100 kPa), gauge	<b>K4515N18160</b>
Mounting bracket kit (includes plastic panel nut)	<b>SA161X57</b>
Panel mount nut, plastic	<b>R05X51-P</b>
Panel mount nut, aluminum	<b>R05X51-A</b>
Non-relieving diaphragm, valve assembly (All)	<b>GRP-96-726</b>
Relieving diaphragm, valve assembly (All)	<b>GRP-96-725</b>
0-25 psig gauge	<b>GRP-95-111</b>
0-60 psig gauge	<b>GRP-96-718</b>
0-125 psig gauge	<b>GRP-96-717</b>

### WARNING

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Do not exceed Maximum primary pressure rating.**

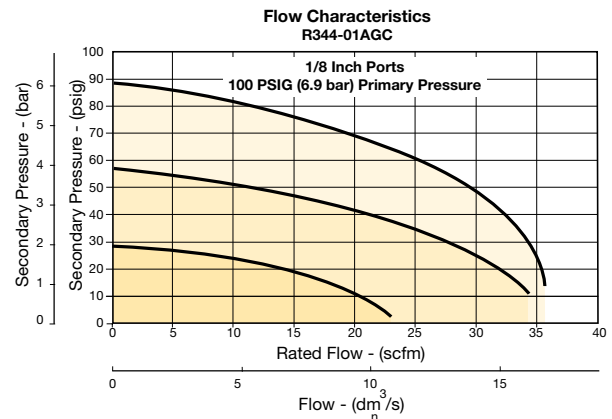
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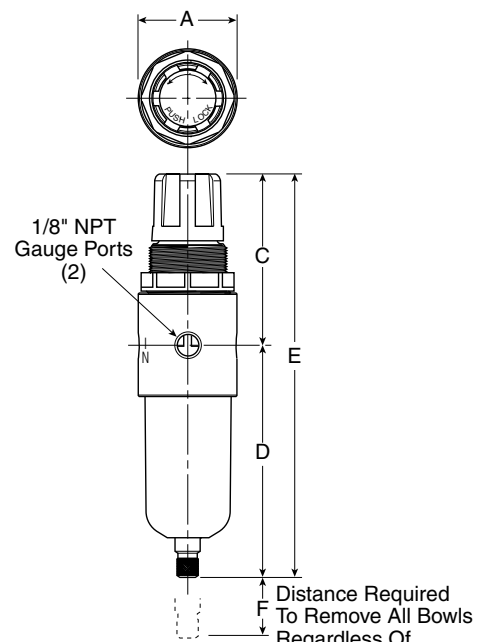
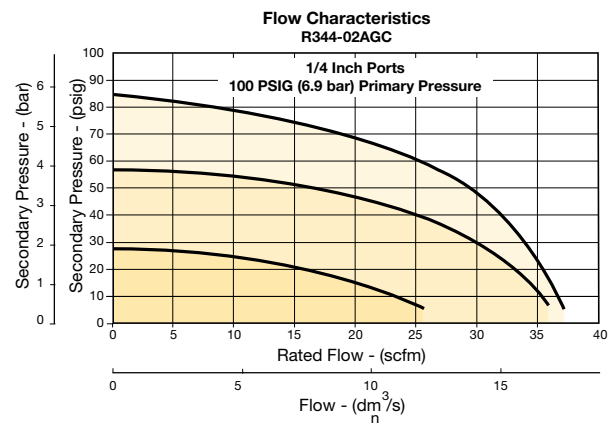
## Air Preparation Products Miniature / Inline

### Flow Charts

#### B34 1/8" Filter / Regulator



#### B34 1/4" Filter / Regulator



## 14E Filter / Regulator - Miniature

- 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
- 1/8", 1/4" ports (NPT, BSPP, BSPT)



### Operating information

Supply pressure (max):		
Plastic bowl		0 to 150 psig (0 to 10.3 bar)
Metal bowl		0 to 250 psig (0 to 17.2 bar)
Secondary pressure ranges		
Standard		2 to 125 psig (0 to 8.6 bar)
Medium		1 to 30 psig (0 to 2.1 bar)
Medium		1 to 60 psig (0 to 4.1 bar)
Low		1 to 15 psig (0 to 1 bar)
Operating temperature:		
Plastic bowl		32°F to 125°F (0°C to 52°C)
Metal bowl		32°F to 175°F (0°C to 80°C)
Flow capacity†:		
High flow	1/8"	16 scfm (7.6 dm³/s, ANR)
	1/4"	18 scfm (8.5 dm³/s, ANR)
Bowl capacity:		1 oz.
Auto pulse drain tube barb		1/8 inch
Gauge ports (2):		1/8 inch (can be used as additional full flow)
Weight:		0.4 lb (0.18 kg)
† scfm = Standard cubic feet per minute at 100 psig inlet and 10 psig pressure drop.		

Port Size	Description *	Part Number
1/8"	Poly Bowl, Twist Drain	<b>14E01B13FC</b>
1/8"	Metal Bowl, Twist Drain	<b>14E03B13FC</b>
1/8"	Poly Bowl, Auto Pulse Drain	<b>14E05B13FC</b>
1/8"	Metal Bowl, Auto Pulse Drain	<b>14E07B13FC</b>
1/4"	Poly Bowl, Twist Drain	<b>14E11B13FC</b>
1/4"	Metal Bowl, Twist Drain	<b>14E13B13FC</b>
1/4"	Poly Bowl, Auto Pulse Drain	<b>14E15B13FC</b>
1/4"	Metal Bowl, Auto Pulse Drain	<b>14E17B13FC</b>

\* For polycarbonate bowl, see caution in Engineering Section A.  
NOTE: 1.218 Dia. (31 mm) hole required for panel mounting.

### Ordering Information:

<b>14E</b>	<b>1</b>	<b>1</b>	<b>B</b>	<b>13</b>	<b>F</b>	<b>C</b>			
<b>Port Size</b>		<b>Element</b>		<b>Engineering Level</b>		<b>Preset / Pressure Limited</b>			
1/8 inch	0	40 Micron	A	C	Current	Blank	None		
1/4 inch	1	5 Micron	B			XXX*	Preset Pressure		
		Adsorber	Z			XXX*	Pressure Limited		
<b>Bowl Options</b>				<b>Relief</b>		<b>Port Type</b>			
Poly Bowl, Twist Drain	1			F	Relieving	Blank	NPT		
Poly Bowl, Auto Pulse Drain	5			G	Non-Relieving	1	BSPP		
Metal Bowl, Twist Drain	3			H*	Low Temp. Relieving	2	BSPT		
Metal Bowl, Auto Pulse Drain	7								

Most popular.



## Miniature Filter / Regulators

### Material Specifications

Adjusting nut	Brass
Adjusting stem & spring	Steel
Body	Zinc
Bonnet, knob, seat, piston, holder & deflector	Plastic
Transparent bowl	Polycarbonate
Metal bowl (without sight gauge)	Zinc
Twist drain, body & stem	Plastic
Twist drain, seals	Nitrile
Auto pulse drain, piston & seals	Nitrile
Auto pulse drain, stem, seat, adaptor & washers	Aluminum
5 Micron elements (standard)	Plastic
40 Micron elements (optional)	Plastic
Adsorber elements (optional)	Activated charcoal
Seals	Nitrile

### Repair and Service Kits

Bonnet tamperproof kit	<b>P01265</b>
Poly bowl / auto drain	<b>PS408BP</b>
Poly bowl / twist drain	<b>PS404P</b>
Metal bowl / auto drain	<b>PS451BP</b>
Metal bowl / twist drain	<b>PS447BP</b>
40 micron element	<b>PS401P</b>
5 micron element	<b>PS403P</b>
Adsorber element	<b>PS452P</b>
30 psig (0 to 2.1 bar), gauge	<b>K4515N18030</b>
60 psig (0 to 4.1 bar)	<b>K4515N18060</b>
160 psig (0 to 11.0 bar) element	<b>K4515N18160</b>
Mounting bracket kit* (includes panel mount nut)	<b>PS417BP</b>
Panel mount nut*	<b>P78652</b>
Unbalanced, non-relieving	<b>PS428P</b>
Unbalanced, relieving	<b>PS426P</b>
1- 15 psig spring (yellow)	<b>P01176</b>
1- 30 psig spring (black)	<b>P01175</b>
1- 60 psig spring (white)	<b>P01174</b>
2- 125 psig spring (gold)	<b>P01173</b>

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



### WARNING

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

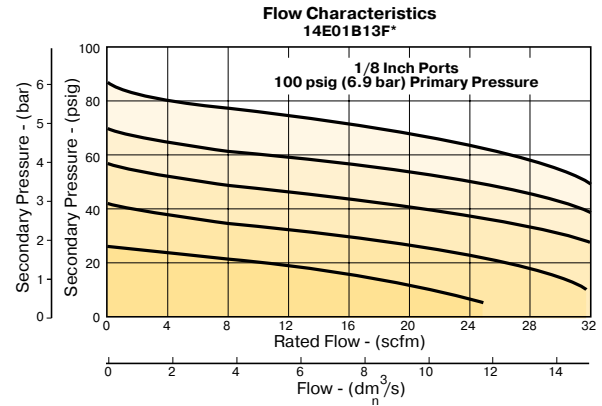
### CAUTION:

**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.

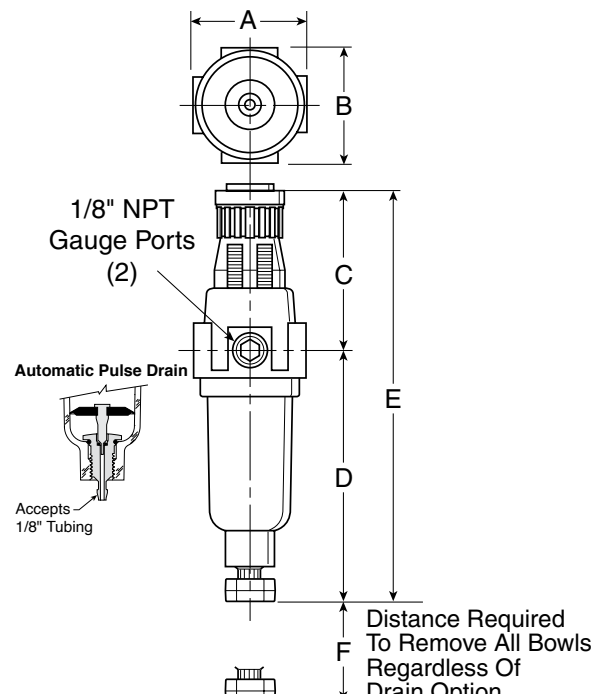
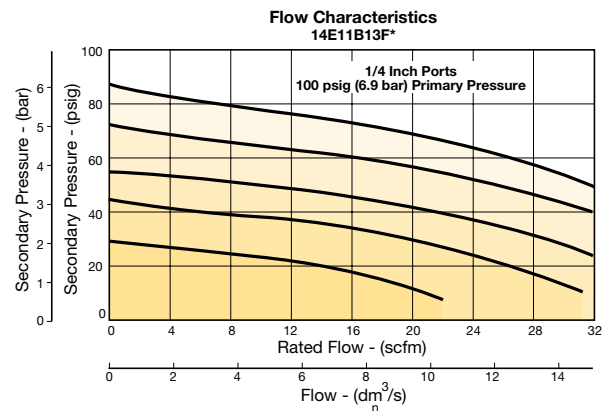
## Air Preparation Products Miniature / Inline

### Flow Charts

#### 14E 1/8" Filter / Regulator

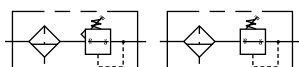


#### 14E 1/4" Filter / Regulator



**05E Filter / Regulator - Economy**

- 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
- 1/4", 3/8" ports (NPT)

**Operating information**

Supply pressure (max):		
Plastic bowl		0 to 150 psig (0 to 10.3 bar)
Operating temperature:		
Plastic bowl		32°F to 125°F (0°C to 52°C)
Flow capacity†:		
High flow	1/4"	30 scfm (14.2 dm³/s, ANR)
	3/8"	40 scfm (18.9 dm³/s, ANR)
Bowl capacity:		
		2 oz.
Auto pulse drain tube barb		
		1/8 inch
Gauge ports (2):		
		1/4 inch
Sump capacity:		
		0.9 oz.
Weight:		
		1.35 lb (0.6 kg)
† 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	Description †	Part Number
1/4"	Poly Bowl, Metal Guard, Twist Drain, 40 Micron, 2-125 psi w/ out Gauge, Relieving	<b>05E12A13AB</b>
3/8"	Poly Bowl, Metal Guard, Twist Drain, 40 Micron, 2-125 psi w/ out Gauge, Relieving	<b>05E22A13AB</b>

† For polycarbonate bowl, see caution in Engineering Section A.

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

☐ Most popular.



## Economy Filter / Regulators

### Material Specifications

Adjusting stem	Steel
Body	Zinc
Bonnet, internal parts	Plastic
Transparent bowl	Polycarbonate
Bowl guard	Steel
Collar	Plastic
Diaphragm	Nitrile
Drain	Plastic
40 micron element (standard)	Plastic
5 micron element (optional)	Plastic
Adsorber element (optional)	Activated charcoal
Knob	Plastic
Seals	Nitrile
Sight gauge	Polyamide (nylon)
Springs, poppet & control	Steel

### Repair and Service Kits

Bowl guard kit	<b>PS905P</b>
Poly bowl, automatic pulse drain	<b>PS995P</b>
Poly bowl, twist drain	<b>PS932P</b>
Auto pulse drain	<b>PS998P</b>
Twist drain	<b>PS512P</b>
40 micron element	<b>PS901P</b>
5 micron element	<b>PS902P</b>
Adsorber element	<b>PS931P</b>
Sight gauge kit	<b>PS914P</b>
1-1/2" dial face 30 psig (0 to 2.1 bar), gauge	<b>K4515N14030</b>
1-1/2" dial face 60 psig (0 to 4.1 bar), gauge	<b>K4515N14060</b>
1-1/2" dial face 160 psig (0 to 11.0 bar), gauge	<b>K4515N14160</b>
1-1/2" dial face 300 psig (0 to 20.7 bar), gauge	<b>K4515N14300</b>
2" dial face 60 psig (0 to 4.1 bar), gauge	<b>K4520N14060</b>
2" dial face 160 psig (0 to 11.0 bar), gauge	<b>K4520N14160</b>
2" dial face 300 psig (0 to 20.7 bar), gauge	<b>K4520N14300</b>
Mounting bracket kit (includes panel mount nut)	<b>PS963P</b>
Panel mount nut – metal	<b>PS964P</b>
1-30 psig spring	<b>P04427</b>
1-60 psig spring	<b>P04426</b>
2-125 psig spring	<b>P04425</b>
2-200 psig spring	<b>P02934</b>
Relieving service kit	<b>PS908P</b>
Bonnet assembly kit	<b>PS915P</b>



### WARNING

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

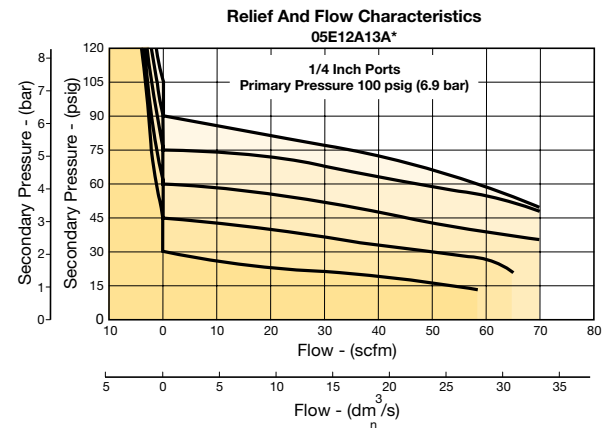
### CAUTION:

**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.

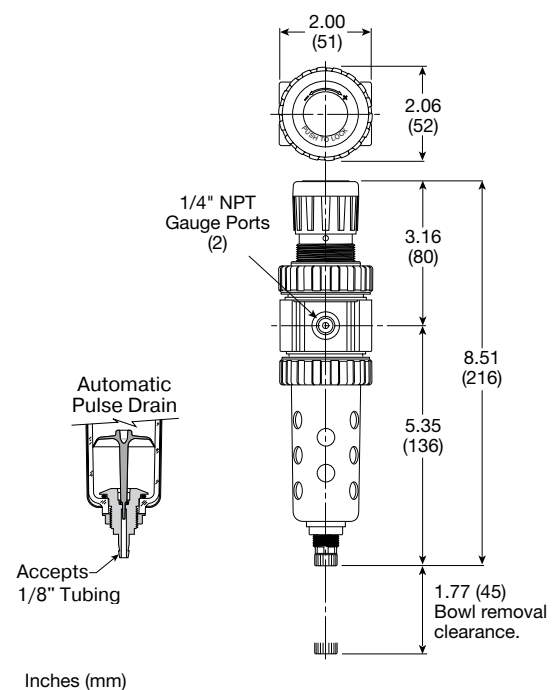
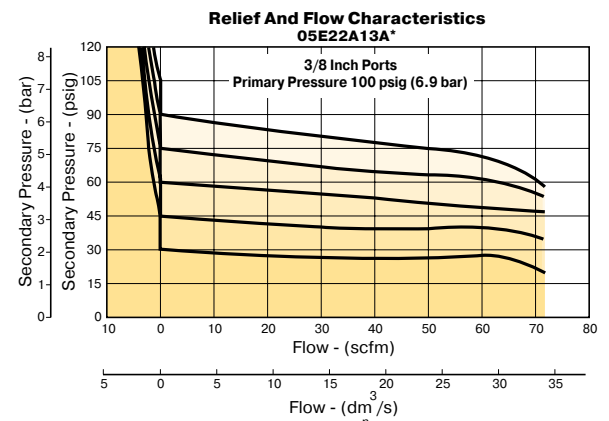
## Air Preparation Products Miniature / Inline

### Flow Charts

#### 05E 1/4" Filter / Regulator

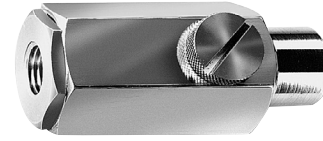


#### 05E 3/8" Filter / Regulator



## 02L Lubricator - Miniature

- 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
- Integral 1/4", 3/8" ports (NPT, BSPT)



### 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.

### Operating information

Supply pressure (max):	200 psig ( 13.8 bar)	
Operating temperature:	32°F to 150°F (0°C to 65.6°C)	
Flow capacity†:		
High flow	1/4"	29 scfm ( 13.6 dm³/s, ANR)
	3/8"	30 scfm ( 14.2 dm³/s, ANR)
Oil capacity:	0.25 oz. ( 7.4 cm³)	
Weight:	0.2 lb (0.1 kg)	
† scfm = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.		

Port Size	Description	Part Number
1/4"	Female Threads Inlet / Female Threads Outlet	<b>02LFB</b>
1/4"	Female Threads Inlet / Male Threads Outlet	<b>02L1B</b>
3/8"	Female Threads Inlet / Male Threads Outlet	<b>02L2B</b>

☐ Most popular.



## Miniature Mist Lubricators

### Material Specifications

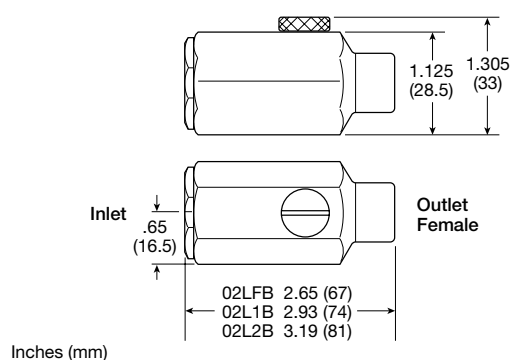
Body	Aluminum
Seals	Nitrile

#### Suggested Lubricant **F442 Oil**

Petroleum based oil of 100 to 200 SUS 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

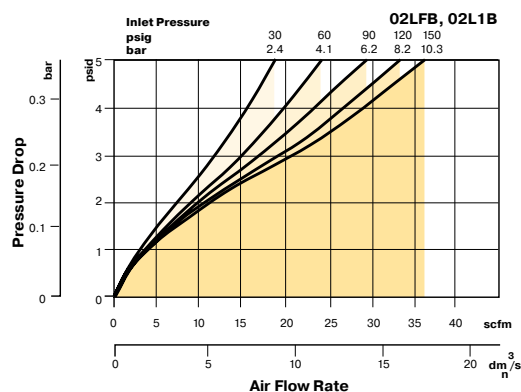
Fill plug kit, brass fill plug and o-ring	<b>PS434</b>
O-ring repair kit	<b>PS435</b>



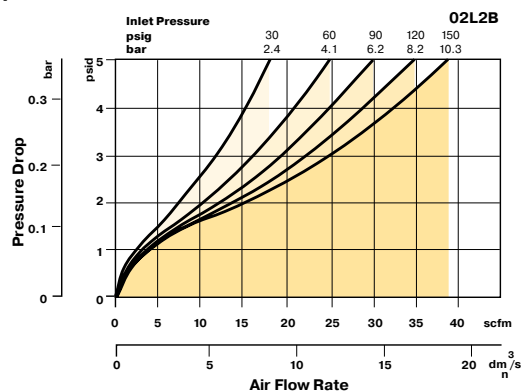
## Air Preparation Products Miniature / Inline

### Flow Charts

#### 02L 1/4" In-Line Lubricator



#### 02L 3/8" In-Line Lubricator



Filters

Coalescers

Regulators

Filter /  
Regulators

Lubricators

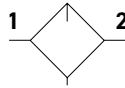
Miniature / Inline  
Products



**Mini Lubricators**

**P31 Lubricators - Mini**

- Integral 1/4" ports (NPT, BSPP & BSPT)
- Robust but lightweight aluminum construction
- Proportional oil delivery over a wide range of air flows
- Finger tip ratchet control for precise oil drip rate adjustment



Lubricator with drain

Port Size	Description	Part Number
1/4"	Poly Bowl - No Drain	<b>P31LB92LGNN</b>
1/4"	Metal Bowl - No Drain	<b>P31LB92LMNN</b>

**Operating information**

Flow capacity\*: 1/4 40 scfm (19 dm³/s, ANR)

Operating temperature:  
Plastic bowl 14°F to 125°F (-10°C to 52°C)  
Metal bowl 14°F to 150°F (-10°C to 65.5°C)

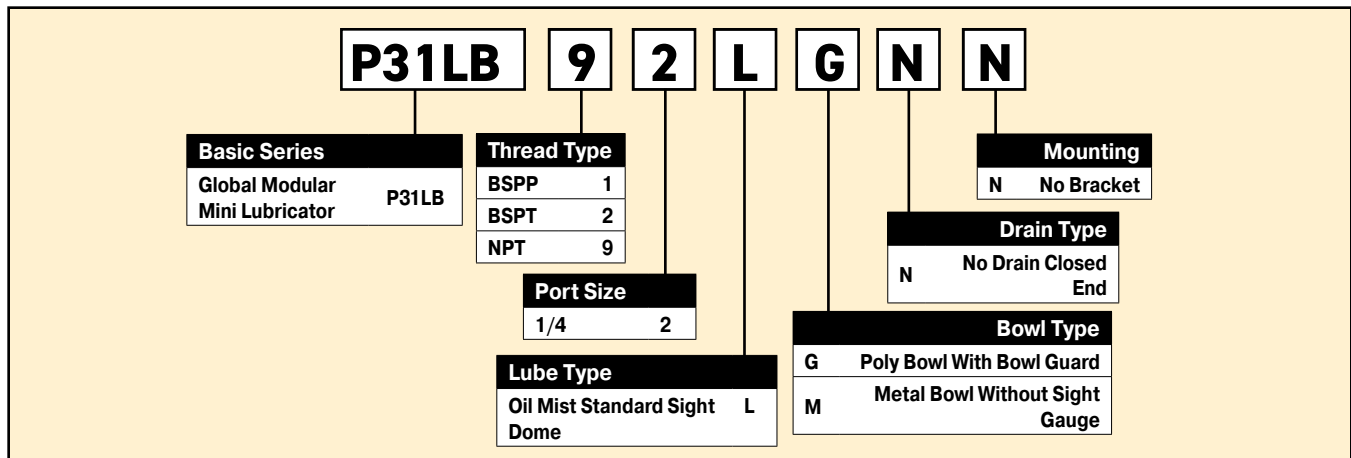
Supply pressure (max):  
Plastic bowl 150 psig (10 bar)  
Metal bowl 250 psig (17 bar)

Bowl capacity: 0.6 US oz. (18 cm³)

Weight: 0.29 lb (0.13 kg)

\* Inlet pressure 91.3 psig (6.3 bar). Pressure drop 4.9 psig (0.34 bar).

**Ordering Information:**



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

Petroleum based oil of 100 to 200 SUS 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.)

☐ Most popular.





## Mini Lubricators

### Material Specifications

Body	Aluminum
Body cap	ABS
Plastic bowl	Polycarbonate
Metal bowl	Aluminum
Seals	Nitrile
Sight dome	Polycarbonate
Suggested lubricant ISO / ASTM VG32	
Pick-up filter	Sintered bronze

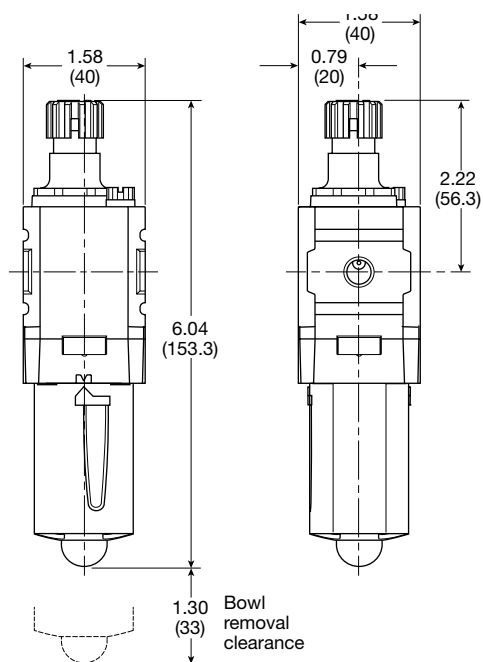
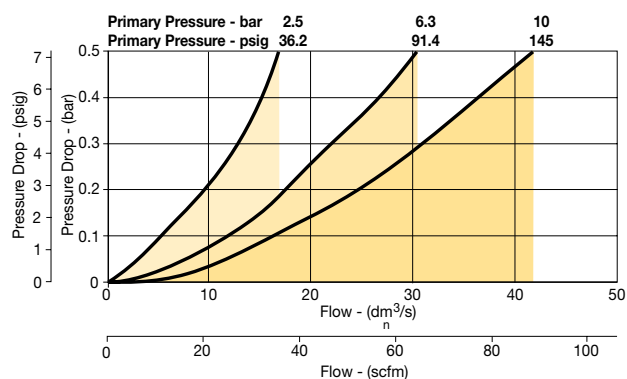
### Repair and Service Kits

Plastic bowl / bowl guard no drain	<b>P31KB00BGN</b>
Metal bowl / w/o sight gauge no drain	<b>P31KB00BMN</b>
Drip control assembly	<b>P32KA00PG</b>
Fill plug	<b>P31KA00PL</b>
C-bracket (fits to body)	<b>P31KA00MW</b>
T-bracket with body connector	<b>P31KA00MT</b>
Body connector	<b>P31KA00CB</b>
Oil (1 quart)	<b>F442001</b>
Oil (1 gallon)	<b>F442002</b>
Oil (12 quart case)	<b>F442003</b>
Oil (4 gallon case)	<b>F442005</b>

## Air Preparation Products Miniature / Inline

### Flow Charts

#### P31LB 1/4" Lubricator



Inches (mm)



- 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
- Integral 1/8", 1/4" ports (NPT, BSPP, BSPT)



‡ For polycarbonate bowl and sight dome, see caution in Engineering Section A.

Supply pressure (max):		
Plastic bowl		150 psig (10.3 bar)
Metal bowl		250 psig (17.2 bar)
Operating temperature:		
Plastic bowl		32°F to 125°F (0°C to 52°C)
Metal bowl		32°F to 175°F (0°C to 80°C)
Flow capacity <sup>1</sup> :		
High flow	1/8"	20 scfm (9.4 dm <sup>3</sup> /s, ANR)
	1/4"	20 scfm (9.4 dm <sup>3</sup> /s, ANR)
Minimum flow		0.5 scfm (0.24 dm <sup>3</sup> /s, ANR) at 100 psig (6.9 bar)
Bowl capacity:		1 oz.
Weight:		0.4 lb (0.18 kg)

The diagram shows a 10-digit product code with callouts for each digit:

- 04L**: Port Size
 

Port Size	
/8 inch	0
/4 inch	1
- 1**: Bowl Options
 

Bowl Options	
Poly Bowl, No Drain	0
Poly Bowl, Twist Drain	1
Metal Bowl, Twist Drain	3
- 0**: Engineering Level
 

Engineering Level	
B	Current
- G**: Body
 

Body	
G	No Fill Plug
- B**: Port Type
 

Port Type	
Blank	NPT
1	BSPP
2	BSPT
- [Blank]**: (No callout provided)

Petroleum based oil of 100 to 200 SUS 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.)



J42

Catalog 0700P  
Air Preparation Products

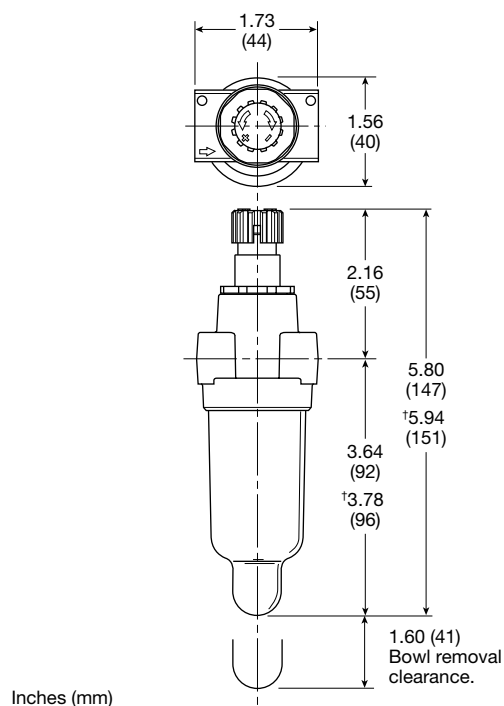
## Miniature Mist Lubricators

### Material Specifications

Body	Zinc
Transparent bowls	Polycarbonate
Metal bowl (without sight gauge)	Zinc
Drains, twist – body & nut	Plastic
Seals	Nitrile
Sight dome	Polycarbonate

### Repair and Service Kits

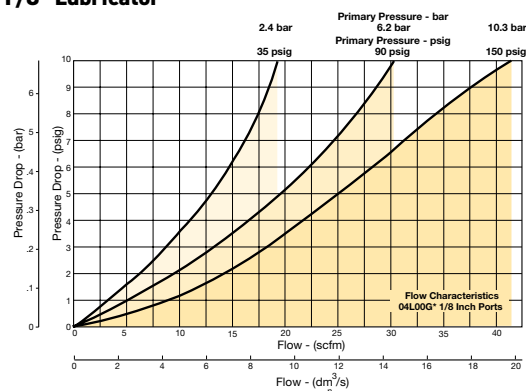
Poly bowl / no drain kit	<b>PS421P</b>
Poly bowl / twist drain kit	<b>PS420P</b>
Metal bowl / twist drain (no sight gauge) kit	<b>PS447BP</b>
Mounting bracket kit	<b>PS419</b>
Oil (1 quart)	<b>F442001</b>
Oil (1 gallon)	<b>F442002</b>
Oil (12 quart case)	<b>F442003</b>
Oil (4 gallon case)	<b>F442005</b>



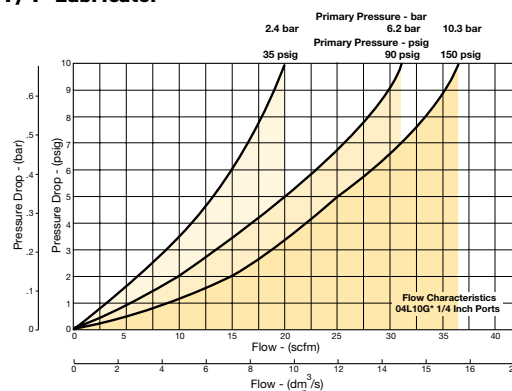
## Air Preparation Products Miniature / Inline

### Flow Charts

#### 04L 1/8" Lubricator



#### 04L 1/4" Lubricator





Miniature / Inline  
Products

