

Producción CNC, SA de CV
Av. Pie de la Cuesta No. 1440
Local 2 Col. Amalia Solorzano
Querétaro, Qro. CP 76130
Tel. (442) 253 7834
Fax. (442) 253 7997
www.parkercnc.com.mx

Section A



Product Selection	3
Air Line Filters	4-21
Air Line Coalescing Filters	22-39
Air Line Regulators	40-79
Pressure Sensors	80-86
Filter / Regulator "Piggybacks"	88-105
Air Line Lubricators, Micro-Mist	106-115

Bold text part numbers are standard.
Standard text part numbers may have longer lead times.

Air Line Lubricators, Mist	116-132
Combinations & Accessories	
14A / 14G	134-135
P3A	136-137
15A / 15G / 15B / 15H	138-143
06A / 16G / 06B / 16H	144-149
07A / 17G / 07B / 17H	144-149
P3N	150-154
Air Line Accessories	156-166

**CAUTION:**

Polycarbonate bowls, 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 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 BOWLS 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.

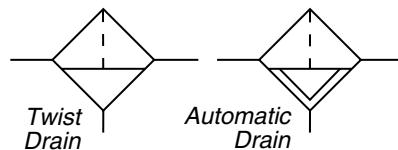
**CAUTION:**

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**A**

Series	14	P3A	05	06	07	P3N	PF 602	PL 606	27	12	09	3550
Port Size	1/8, 1/4	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/8, 1/2, 3/4	3/4 1, 1-1/2	1, 1-1/4	1-1/2	1/4, 3/8	3/8, 1/2, 3/4	2	1/4
Filter												
Coalescing Style Filter												
Regulator												
Pilot Controlled Regulator												
Mist Lubricator												
Micro-Mist Lubricator												
Filter / Regulator												
Filter / Regulator / Lubricator Combination												
Precision Regulator												

Filters



- Pipe Sizes 1/8 thru 2 Inch
- Flows to 1000 SCFM
- Pressures to 250 PSIG

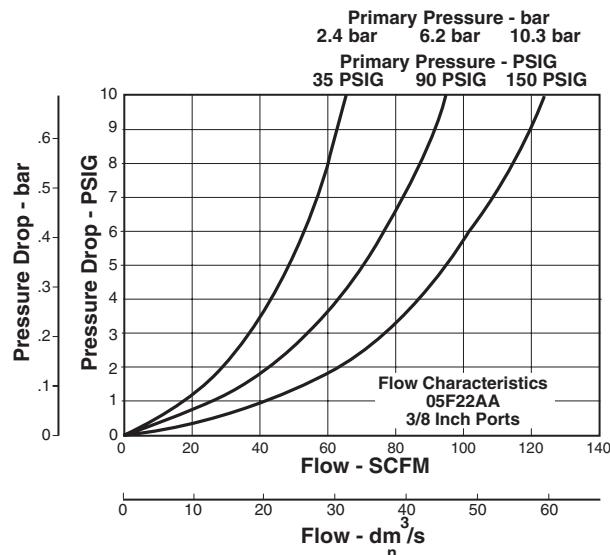
Air filters are designed to remove airborne solid contaminants, pipe scale, rust, pipe dope, etc., which may plug small orifices or cause excessive wear and premature failure of pneumatic components.

- Miniature 14F Series, 1/8 and 1/4 Inch
- Miniature P3A-FA 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 PF602 Series, 1, 1-1/4 and 1-1/2 Inch
- Hi-Flow 09F Series, 2 Inch

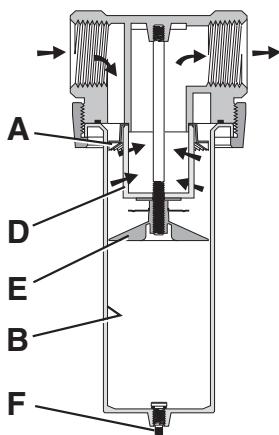
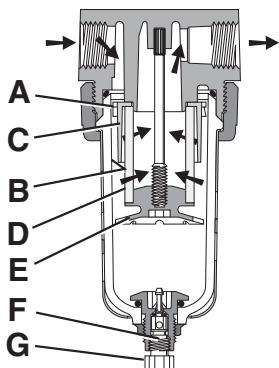
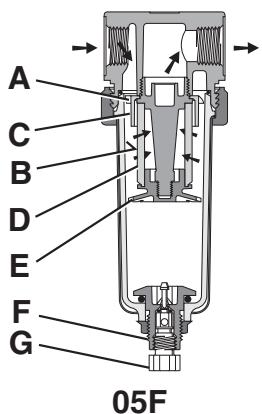
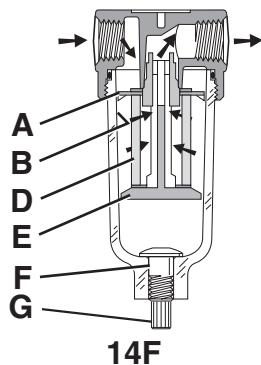
Filter Selection

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

Reading Flow Charts to Size Filters

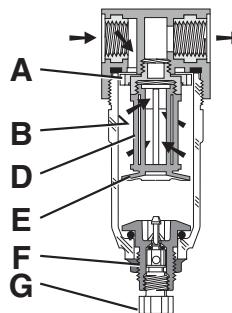


Once the required flow is determined for a pneumatic application, the filter can be selected by using the flow chart. To read the filter flow chart, first determine the inlet pressure that will be used. Find the appropriate pressure curve on the graph. Each graph will contain three pressure curves. If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



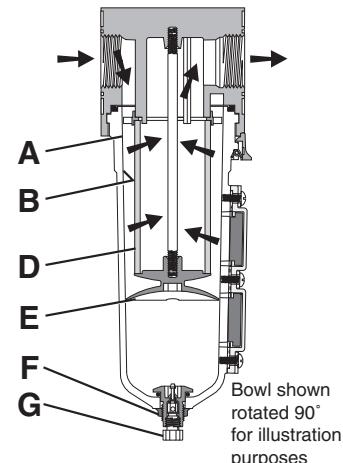
First Stage Filtration:

Air enters at inlet port and flows through deflector plate (**A**) which causes a swirling action. Liquids and coarse particles are forced to the bowl interior wall (**B**) by the centrifugal action of the swirling air. They then carry down the bowl wall by the force of gravity. Shroud (**C**) assures that the proper swirling action occurs and that the air does not pass directly through the filter element (**D**) until the large particles and liquids are removed. The baffle (**E**) separates the lower portion of the bowl into a "quiet zone" where the removed liquids and particles collect, unaffected by the swirling air, and are therefore not reentrained into the flowing air.

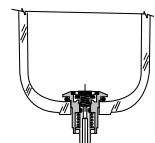


Second Stage Filtration:

After liquids and large particles are removed in the first stage of filtration, the air flows through element (**D**) where smaller particles are filtered out and retained. The filtered air then passes downstream. Collected liquids and particles in the "quiet zone" should be drained before their level reaches a height where they would be reentrained in the flowing air. This can be accomplished by the twist drain (**F**) which is actuated by twisting knob (**G**) counterclockwise. On the 09 Series, unscrew the drain valve (**F**) slightly until the liquid begins to drain.



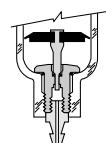
Semi Automatic Drain



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.

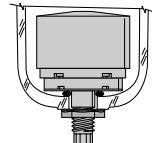
Automatic Pulse Drain



Accepts 3/16 I.D.
Tubing

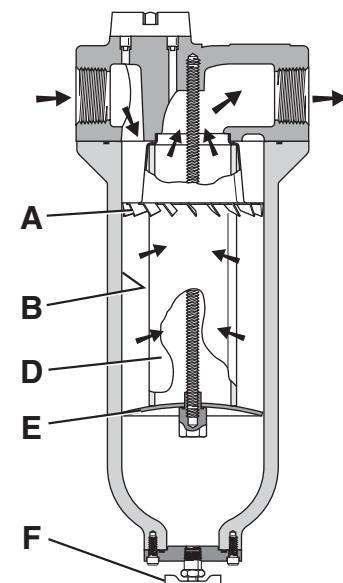
(Spitter Drain)
The diaphragm in this drain pulses when there is a pressure differential such as a valve cycling or cylinder stroking downstream. This action flexes the diaphragm and allows the filter to drain the entrapped water.

Automatic Float Drain

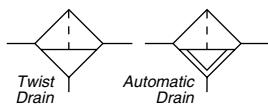


1/8" NPT

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.

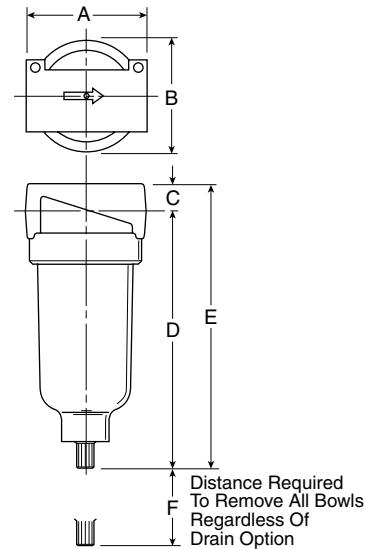


14F Filters – Miniature



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.
- High Flow: 1/8" – 22 SCFM §
1/4" – 24 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Pulse Drain	Twist Drain	Automatic Pulse Drain
Poly Bowl ‡				
1/8"	14F01BB	14F05BB	14F01BB1	14F05BB1
1/4"	14F11BB	14F15BB	14F11BB1	14F15BB1
Metal Bowl without Sight Gauge				
1/8"	14F03BB	14F07BB	14F03BB1	14F07BB1
1/4"	14F13BB	14F17BB	14F13BB1	14F17BB1

Standard part numbers shown, for other models refer to ordering information below.

‡ For polycarbonate bowl see Caution on page 2.

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

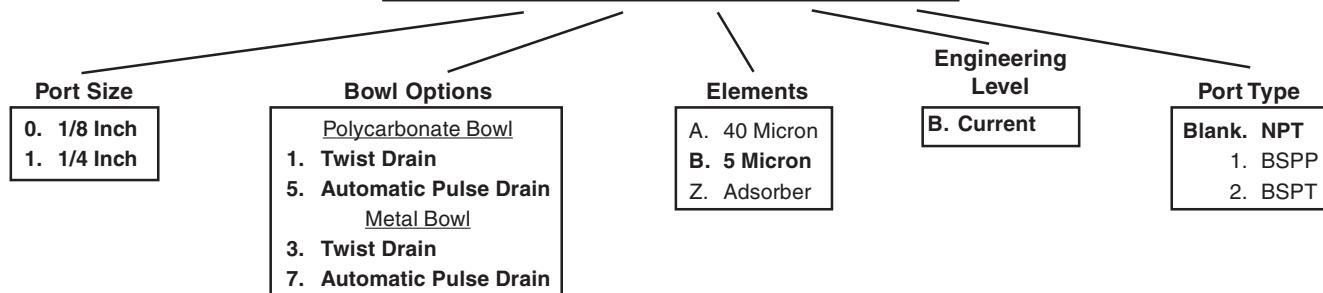
14F Filter Dimensions		
A	B	C
1.69 (43)	1.53 (39)	.39 (10)
D	D†	E
3.82 (97)	3.87 (99)	4.21 (107)
E†	F	
4.26 (108)	1.60 (41)	

Inches (mm)

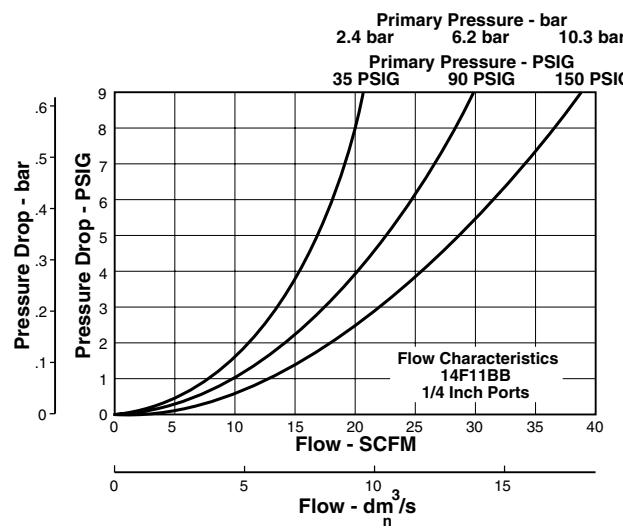
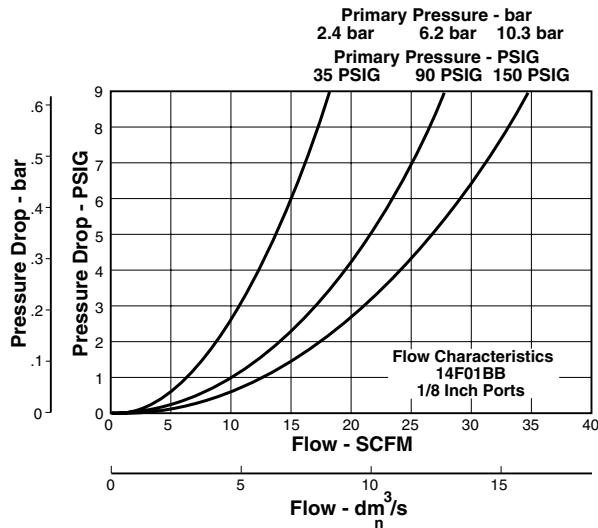
† With Automatic Pulse Drain

Ordering Information

14F 1 1 B B —



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****14F Filter Kits & Accessories****Bowl Kits –**

- Poly Bowl – Automatic Pulse Drain PS408P
- Twist Drain PS404P
- Metal Bowl –Automatic Pulse Drain PS451P
- Twist Drain PS447BP

Filter Element Kits –

- 40 Micron PS401P
- 5 Micron PS403P
- 5 Micron Cartridge Kit PS407P
- Adsorber PS452P

- Mounting Bracket Kit PS417BP

Specifications

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

Weight41 lb. (.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

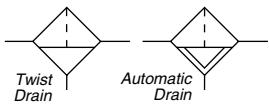
Filter Elements –5 Micron (Standard) Plastic

40 Micron (Optional) Plastic

Adsorber (Optional) Activated Charcoal

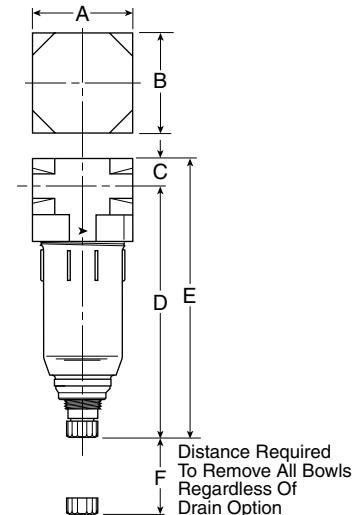
Seals Nitrile

P3A-F Filters – Miniature



Features

- Lightweight Plastic Body
- Excellent water removal efficiency.
- Unique deflector plate that creates swirling of the air stream ensuring maximum water and dirt separation.
- 5 micron element standard.
- Fingertip operated drain.
- Easily disassembled for servicing without the use of tools.
- High Flow: 1/4" – 34 SCFM[§]



Port Size	NPT	
	Twist Drain	Auto Pulse Drain
1/8"	P3A-FA91BENP	P3A-FA91CENP
1/4"	P3A-FA92BENP	P3A-FA92CENP

Standard part numbers shown.

‡ For polycarbonate bowl see Caution on page 2.

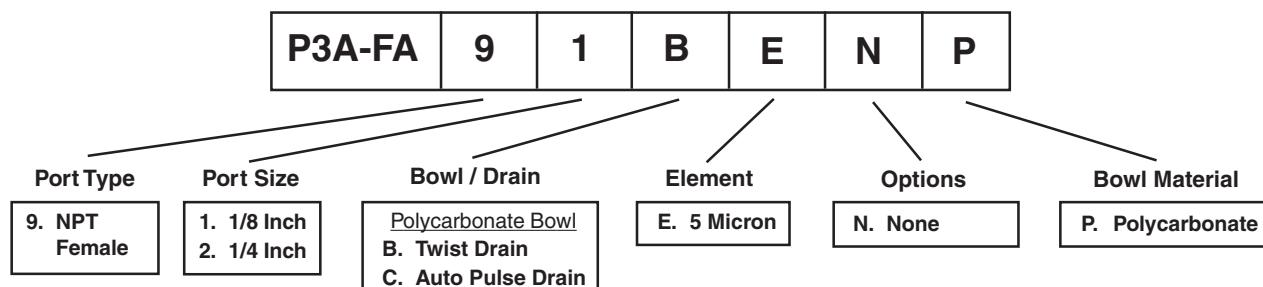
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

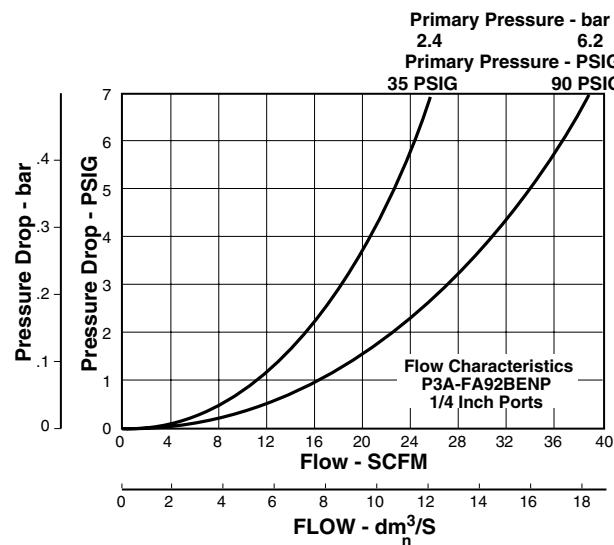
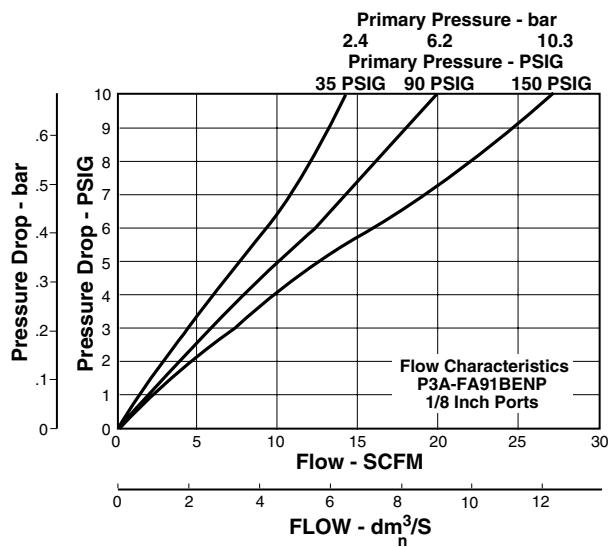
Filter Dimensions			
A	B	C	D
1.57 (40)	1.57 (40)	.43 (11)	3.98 (101)
D† 3.70 (94)	E† 4.41 (112)	E† 4.13 (105)	F 2.00 (51)

Inches (mm)

† With Automatic Pulse Drain

Ordering Information



Technical Information**A****Filter Kits and Accessories****Elements –**

5 Micron Element P3A-KA00EEN

Plastic Bowls –Bowl with Manual Drain P3A-KA00BBP
Bowl with Auto Pulse Drain P3A-KA00BCP**Service Kit** P3A-KA00RFN**Wall Mount Kit** P3A-KA00CFN**Specifications**

Bowl Capacity 0.9 Ounces

Sump Capacity 0.24 ounces

Port Threads 1/8 & 1/4 Inch

Operating Pressure Range PSIG bar kPa
Maximum 120 8.3 828

Operating Temperature Range 32°F to 125°F (0°C to 52°C)

Weight 0.18 lb. (0.08 kg.)

Materials of Construction

Body Plastic

Bowl Transparent Polycarbonate

Deflector Plastic

Drains – Twist Drain –

Body & Stem Plastic

Seals Nitrile

Auto (Pulse) –

Piston & Seals Nitrile

Stem, Seat, Adaptor & Washers Aluminum

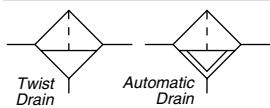
Filter Element & Baffle –

Standard 5 Micron Nylon & Plastic

Port Inserts Brass**Seals** Nitrile

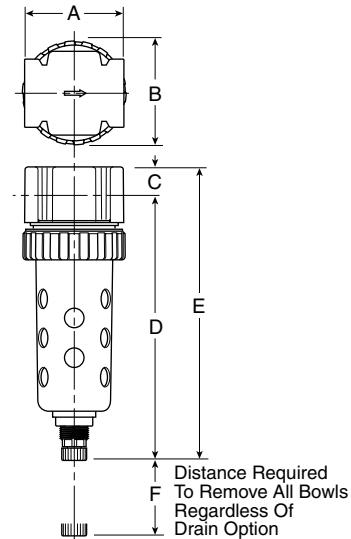


05F Filters – Economy



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.
- High Flow: 1/4" – 54 SCFM §
3/8" – 70 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Pulse Drain	Twist Drain	Automatic Pulse Drain
Poly Bowl [†] / Metal Guard				
1/4"	05F12AA	05F1PAA	05F12AA1	05F1PAA1
3/8"	05F22AA	05F2PAA	05F22AA1	05F2PAA1
Metal Bowl / Sight Gauge				
1/4"	05F14AA	05F1TAA	05F14AA1	05F1TAA1
3/8"	05F24AA	05F2TAA	05F24AA1	05F2TAA1

05F Filter Dimensions		
A	B	C
2.00 (51)	2.06 (52)	.56 (14)
D [†]	E [†]	F
5.35 (136)	5.91 (150)	2.25 (57)

Inches (mm)

[†] With Twist or Automatic Pulse Drain

Standard part numbers shown, for other models refer to ordering information below.

‡ For polycarbonate bowl see Caution on page 2.

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

Ordering Information

05F 1 2 A A — —

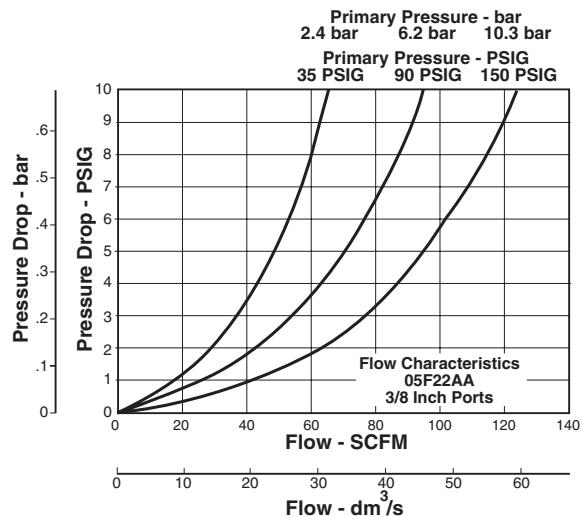
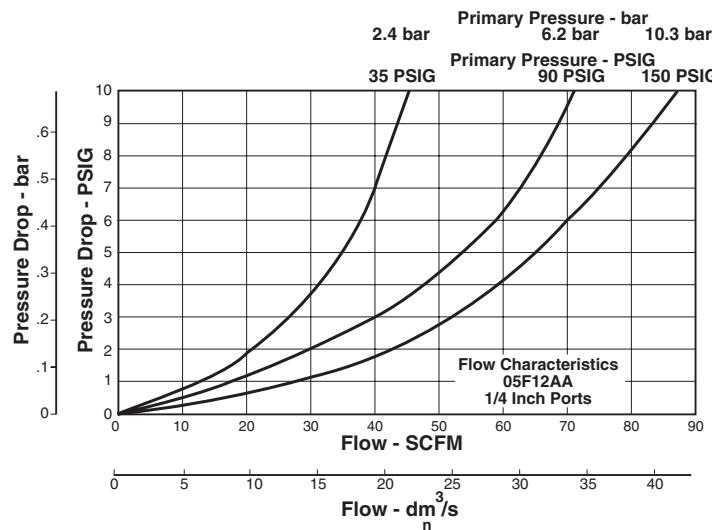
Port Size	Bowl Options	Elements	Engineering Level	Port Type	Options
1. 1/4 Inch 2. 3/8 Inch	<u>Polycarbonate Bowl</u> 1. Twist Drain 2. Metal Bowl Guard / Twist Drain N. Auto Pulse Drain P. Metal Bowl Guard / Auto Pulse Drain E. Push 'N' Drain F. Metal Bowl Guard / Push 'N' Drain J. Semi-Auto Drain K. Metal Bowl Guard / Semi-Auto Drain	<u>Metal Bowl</u> 3. Twist Drain 4. Sight Gauge / Twist Drain R. Auto Pulse Drain T. Sight Gauge / Auto Pulse Drain G. Push 'N' Drain H. Sight Gauge / Push 'N' Drain L. Semi-Auto Drain M. Sight Gauge / Semi-Auto Drain	A. 40 Micron B. 5 Micron Z. Adsorber	A. Current Blank. NPT 1. BSPP 2. BSPT	Blank. No Options P. With Differential Pressure Indicator V.* Fluorocarbon
					* Fluorocarbon available with metal bowl, twist drain only.

NOTE: BOLD OPTIONS ARE STANDARD.



Technical Information

A



05F Filter Kits & Accessories

Bowl Guard Kit	PS905P
Bowl Kits –	
Poly Bowl –Automatic Pulse Drain	PS995P
Semi-Auto Drain	PS992P
Twist Drain	PS932P
Push 'N' Drain	PS904P
Metal Bowl –Automatic Pulse Drain	PS997P
Semi-Auto Drain	PS994P
Twist Drain	PS934P
Twist Drain (Fluorocarbon)	PS934VP
Push 'N' Drain	PS925P
Sight Gauge / Automatic Pulse Drain	PS996P
Sight Gauge / Semi-Auto Drain	PS993P
Sight Gauge / Twist Drain	PS935P
Sight Gauge / Twist Drain (Fluorocarbon)	PS935VP
Sight Gauge / Push 'N' Drain	PS906P
DPI Replacement Kit	PS781P
Drain Kit –	
Automatic Pulse Drain	PS998P
Semi-Auto Drain	PS511P
Twist Drain	PS512P
Twist Drain (Fluorocarbon)	PS512VP
Push 'N' Drain	PS513P
Filter Element Kits –40 Micron	PS901P
5 Micron	PS902P
Adsorber	PS931P
Mounting Bracket Kit	PS943P
Sight Gauge Kit	PS914P

Specifications

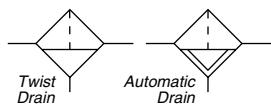
Bowl Capacity	2.0 Ounces
Sump Capacity	.9 Ounce
Port Threads	1/4, 3/8 Inch
Pressure & Temperature Ratings –	
Without Differential Pressure Indicator:	
Polycarbonate Bowl	0 to 150 PSIG (0 to 10.3 bar) 32°F to 125°F (0°C to 52°C)
Metal Bowl	0 to 250 PSIG (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
With 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) at 125°F (52°C) or less

Weight 1.2 lb. (.54 kg)

Materials of Construction

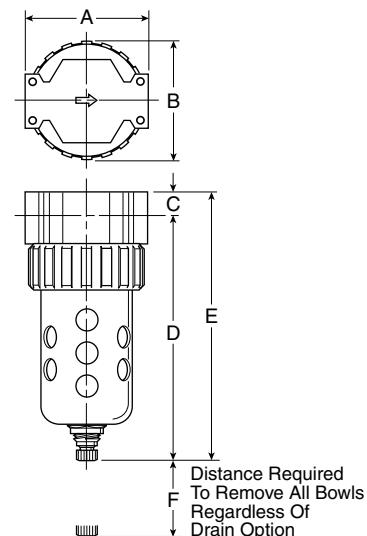
Body	Zinc
Bowls	Transparent Polycarbonate or Metal (Zinc) With or Without Sight Gauge
Bowl Guards	Steel
Collar	Plastic
Deflector, Shroud & Baffle	Plastic
Drain	Plastic
Filter Elements – 40 Micron (Standard)	Plastic
5 Micron (Optional)	Plastic
Adsorber (Optional)	Activated Charcoal
Seals	Nitrile
Sight Gauge, DPI	Polyamide (Nylon)

06F Filters – Compact



Features

- Excellent water removal efficiency.
 - Unique deflector plate and shroud creates a swirling of the air stream ensuring maximum water and dirt separation.
 - Large filter element surface guarantees low pressure drop and increased element life.
 - Optional Push 'N' Drain requires only fingertip touch to drain. 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 §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Float Drain	Twist Drain	Automatic Float Drain
Poly Bowl [‡] / Metal Guard				
1/4"	06F12AC	06F16AC	06F12AC1	06F16AC1
3/8"	06F22AC	06F26AC	06F22AC1	06F26AC1
1/2"	06F32AC	06F36AC	06F32AC1	06F36AC1
Metal Bowl / Sight Gauge				
1/4"	06F14AC	06F18AC	06F14AC1	06F18AC1
3/8"	06F24AC	06F28AC	06F24AC1	06F28AC1
1/2"	06F34AC	06F38AC	06F34AC1	06F38AC1

06F Filter Dimensions		
A	B	C
2.81 (71)	2.74 (70)	.53 (13)
D	D [†]	E
5.69 (145)	5.74 (146)	6.22 (158)
E [†]	F	
6.27 (159)	2.25 (57)	

Inches (mm)

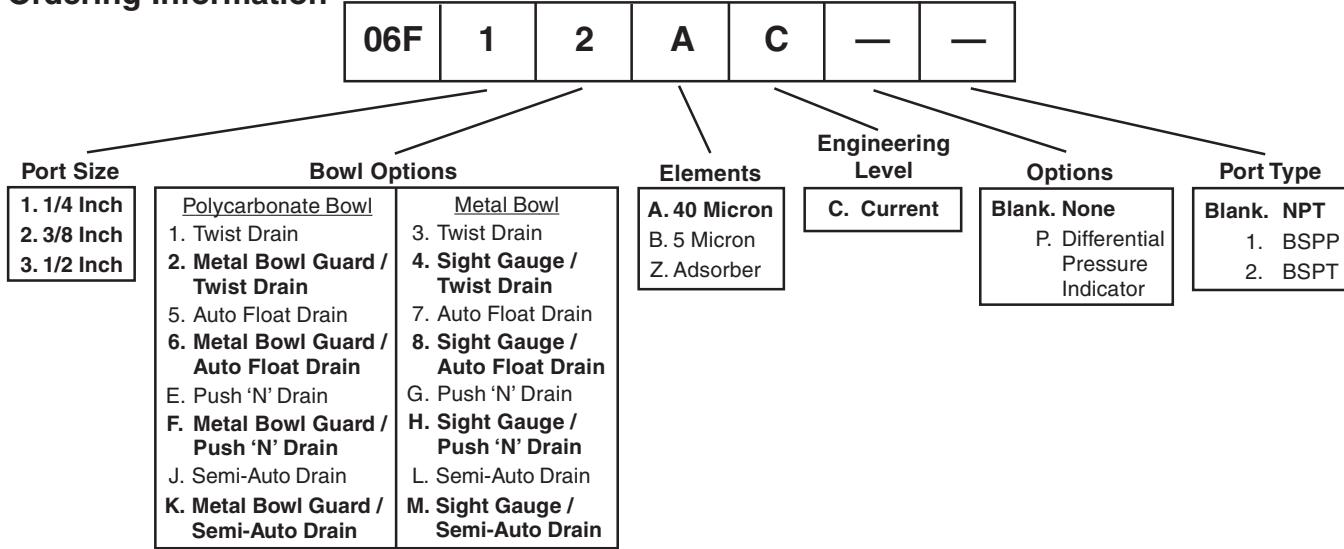
[†] With Automatic Float Drain.

Standard part numbers shown; for other models refer to ordering information below.

[‡] For polycarbonate bowl see Caution on page 2.

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

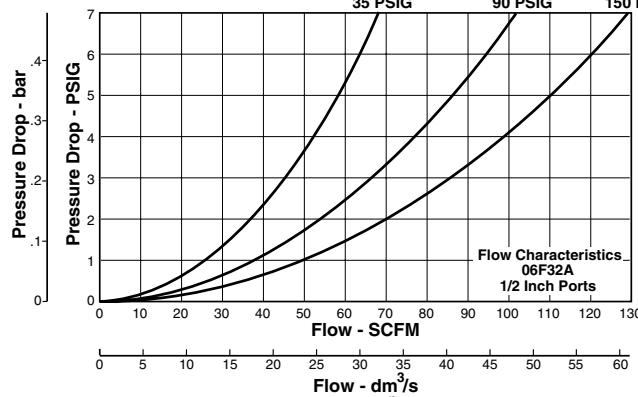
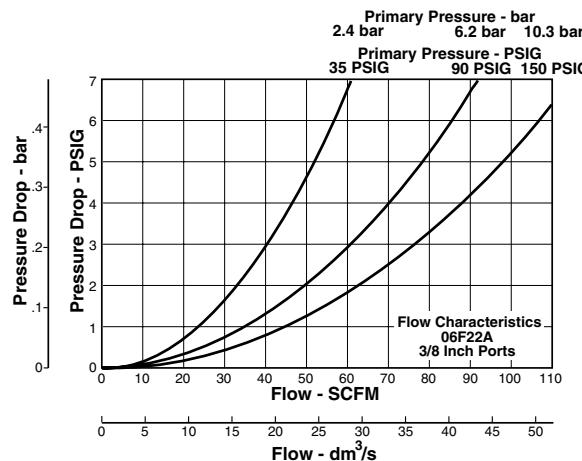
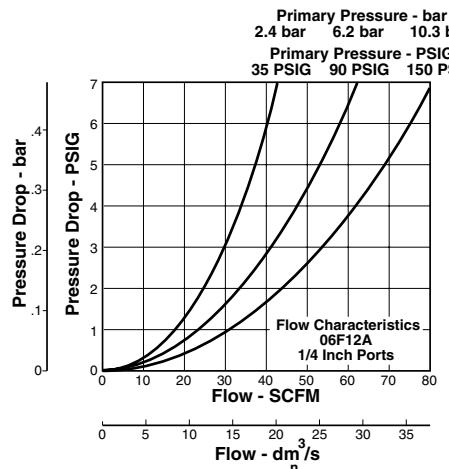
Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.



Technical Information



06F Filter Kits & Accessories

Bowl Guard Kit	PS705P
Bowl Kits –	
Poly Bowl – Automatic Float Drain	PS722P
Semi-Auto Drain	PS792P
Twist Drain	PS732P
Push 'N' Drain	PS704P
Metal Bowl – Automatic Float Drain	PS726P
Semi-Auto Drain	PS794P
Twist Drain	PS734P
Push 'N' Drain	PS725P
Sight Gauge / Automatic Float Drain	PS723P
Sight Gauge / Semi-Auto Drain	PS793P
Sight Gauge / Twist Drain	PS735P
Sight Gauge / Push 'N' Drain	PS706P
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	PS714P

Specifications

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

Pressure & Temperature Ratings –

Without Differential Pressure Indicator:

Polycarbonate Bowl	0 to 150 PSIG (0 to 10.3 bar)
	32°F to 125°F (0°C to 52°C)
Metal Bowl	0 to 250 PSIG (0 to 17.2 bar)
	32°F to 175°F (0°C to 80°C)
With Differential Pressure Indicator	0 to 150 PSIG (0 to 10.3 bar)
	32°F to 125°F (0°C to 52°C)
Automatic Float Drain	10 to 250 PSIG (0.7 to 17.2 bar)
	at 125°F (52°C) or less

Weight 1.4 lb. (.6 kg)

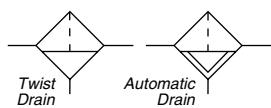
Materials of Construction

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
Push 'N' Drain – 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

A

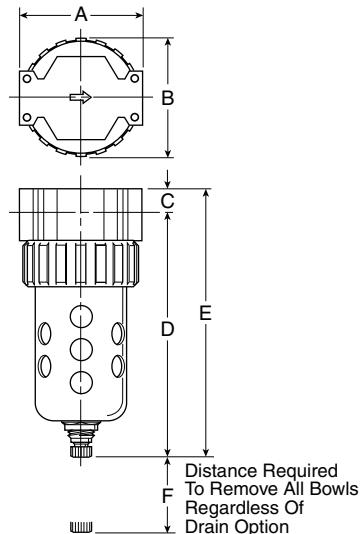


07F Filters – Standard



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 Push 'N' Drain requires only fingertip touch to drain. Optional automatic float drain available.
- Shown with recommended metal bowl guard.
- High Flow: 3/8" – 100 SCFM §
1/2" – 130 SCFM §
3/4" – 145 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Float Drain	Twist Drain	Automatic Float Drain
Poly Bowl[‡] / Metal Guard				
3/8"	07F22AC	07F26AC	07F22AC1	07F26AC1
1/2"	07F32AC	07F36AC	07F32AC1	07F36AC1
3/4"	07F42AC	07F46AC	07F42AC1	07F46AC1
Metal Bowl / Sight Gauge				
3/8"	07F24AC	07F28AC	07F24AC1	07F28AC1
1/2"	07F34AC	07F38AC	07F34AC1	07F38AC1
3/4"	07F44AC	07F48AC	07F44AC1	07F48AC1

07F Filter Dimensions		
A	B	C
3.24 (82)	3.25 (83)	.70 (18)
D	D [†]	E
6.97 (177)	7.00 (178)	7.67 (195)
E [†]	F	
7.70 (196)	2.75 (70)	

Inches (mm)

[†] With Automatic Float Drain

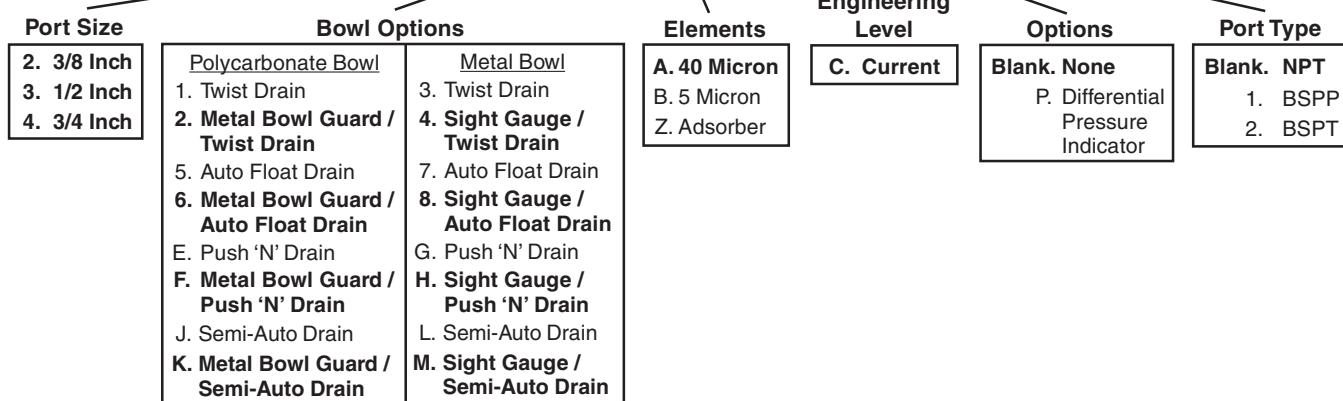
Standard part numbers shown, for other models refer to ordering information below.

[‡] For polycarbonate bowl see Caution on page 2.

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

Ordering Information

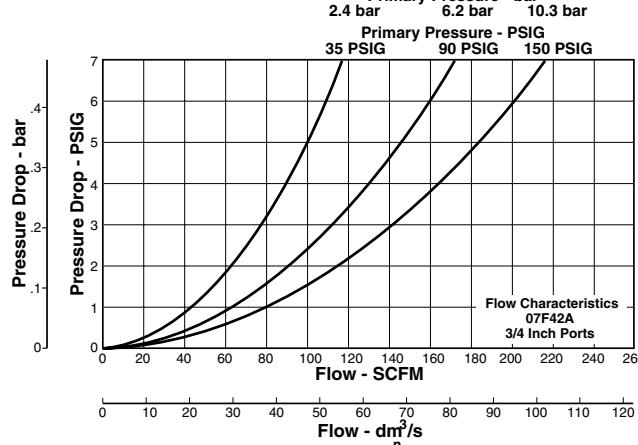
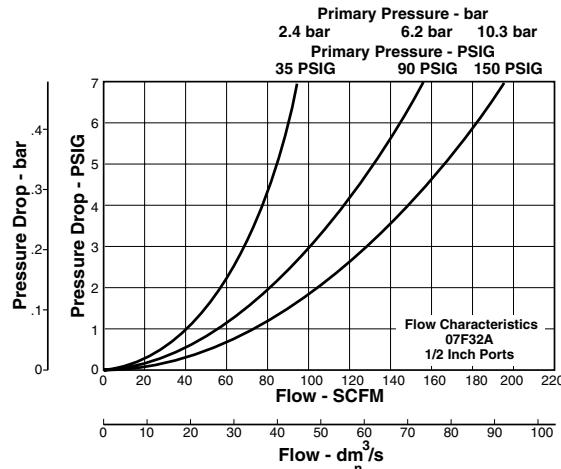
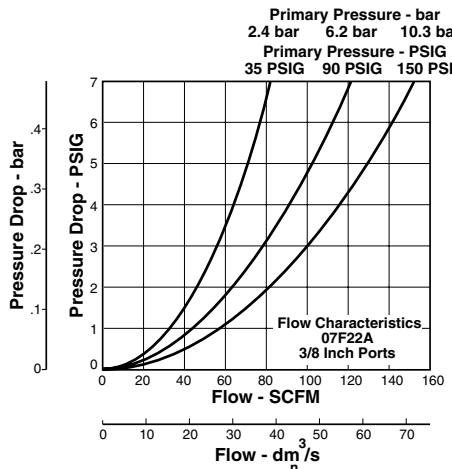
07F	3	2	A	C	—	—
------------	----------	----------	----------	----------	----------	----------



NOTE: **BOLD OPTIONS ARE STANDARD.**

**A**

Technical Information



07F Filter Kits & Accessories

Bowl Guard Kit	.....	PS805P
Bowl Kits –		
Poly Bowl – Automatic Float Drain	.....	PS822P
Semi-Auto Drain	.....	PS892P
Twist Drain	.....	PS832P
Push 'N' Drain	.....	PS804P
Metal Bowl – Automatic Float Drain	.....	PS826P
Semi-Auto Drain	.....	PS894P
Twist Drain	.....	PS834P
Push 'N' Drain	.....	PS825P
Sight Gauge / Automatic Drain	.....	PS823P
Sight Gauge / Semi-Auto Drain	.....	PS893P
Sight Gauge / Twist Drain	.....	PS835P
Sight Gauge / Push 'N' Drain	.....	PS806P
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	.....	PS814P

Specifications

Bowl Capacity	.....	7.2 Ounces
Sump Capacity	.....	2.8 Ounces

Port Threads 3/8, 1/2, 3/4 Inch

Pressure & Temperature Ratings –

Without Differential Pressure Indicator:

Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.3 bar)

32°F to 125°F (0°C to 52°C)

Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)

32°F to 175°F (0°C to 80°C)

With Differential Pressure Indicator – 0 to 150 PSIG (0 to 10.3 bar)

32°F to 125°F (0°C to 52°C)

Automatic Float Drain – 10 to 250 PSIG (0.7 to 17.2 bar)

at 125°F (52°C) or less

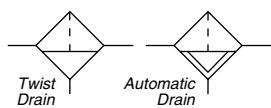
Weight 2.2 lb. (1.0 kg)

Materials of Construction

Body	.....	Zinc
Bowls	.....	Transparent Polycarbonate
Bowl Guards		
Collar	.....	Metal (Zinc) With or Without Sight Gauge
Deflector, Shroud & Baffle	.....	Steel
Drains – Twist Drain – Body & Nut	.....	Plastic or Metal
Push 'N' Drain – Body	.....	Plastic
Push 'N' Drain – Stem	.....	Brass
Automatic Float Drain – Housing, Float	.....	Nitrile
Seals	.....	Stainless Steel
Filter Elements – 40 Micron (Standard)	.....	Plastic
5 Micron (Optional)	.....	Plastic
Adsorber (Optional)	.....	Activated Charcoal
Seals	.....	Nitrile
Sight Gauge	.....	Polyamide

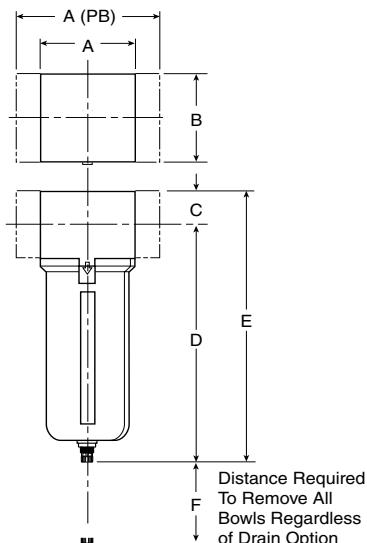


P3NF Filters – Hi-Flow



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	NPT		BSPP	
	Twist Drain	Automatic Float Drain	Twist Drain	Automatic Float Drain
Metal Bowl / Sight Gauge				
3/4"	P3NFA96GSM	P3NFA96GSA	P3NFA16GSM	P3NFA16GSA
1"	P3NFA98GSM	P3NFA98GSA	P3NFA18GSM	P3NFA18GSA
1-1/2" *	P3NFA9PGSM	P3NFA9PGSA	P3NFA1PGSM	P3NFA1PGSA

P3NF Filter Dimensions		
A	A (PB)	B
3.62 (92)	5.91 (150)	3.62 (92)
C	D †	E †
1.38 (35)	9.57 (243)	10.95 (278)
F		
4.92 (125)		

Standard part numbers shown, 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, with 40 micron element.

Inches (mm)

† With Twist Drain or Automatic Float Drain

Ordering Information



Design Level

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)

Element

- | |
|---------------------|
| w/o DPI Indicator |
| A. Adsorber |
| E. 5 Micron |
| G. 40 Micron |
| w/ DPI Indicator |
| B. Adsorber |
| F. 5 Micron |
| H. 40 Micron |

Bowl

- S. Metal Bowl w/ Sight Gauge**

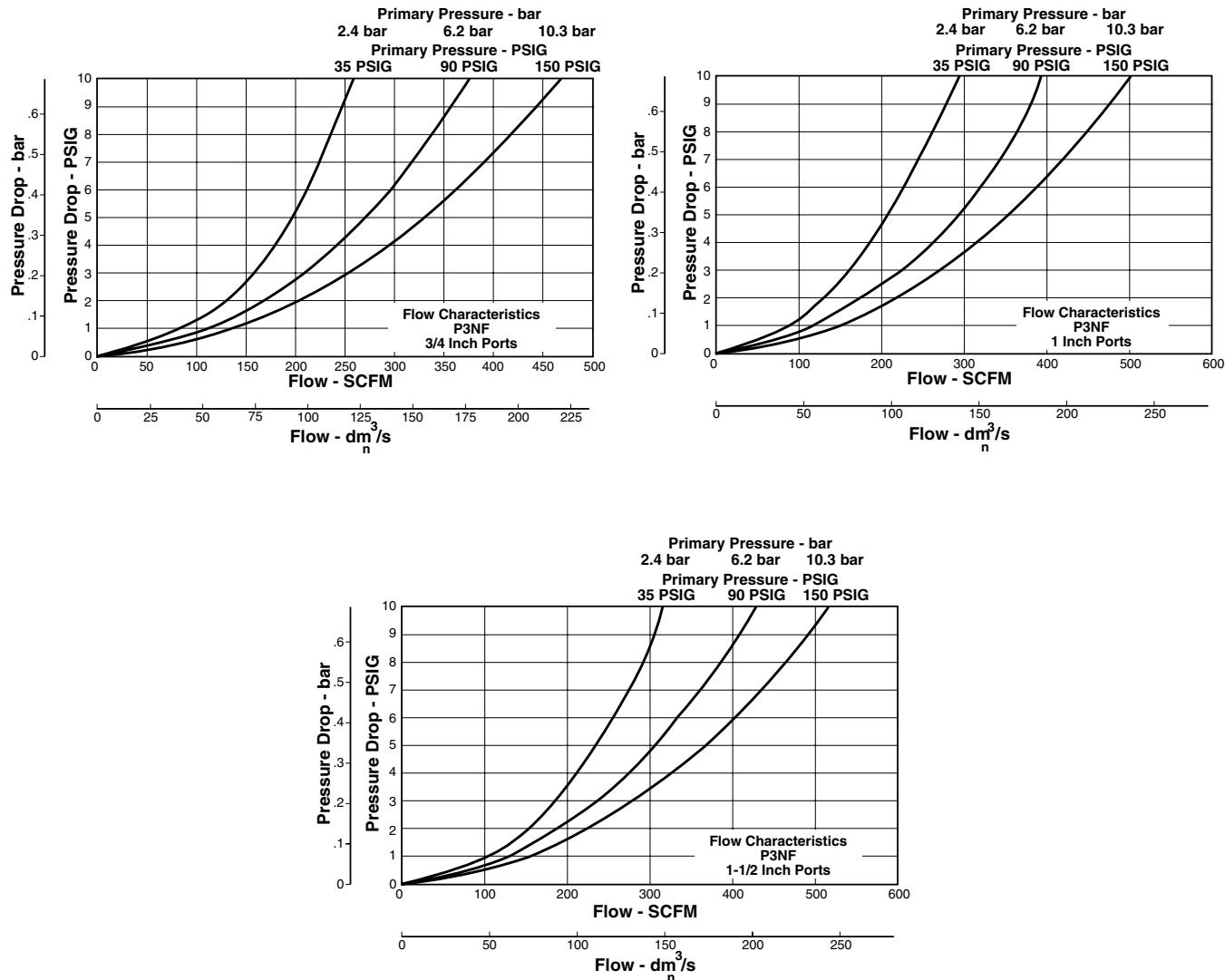
Drain

- | |
|--------------------------|
| M. Twist Drain |
| A. Automatic Float Drain |
| P. Push 'N' Drain |
| S. Semi-Auto Drain |

NOTE: **BOLD OPTIONS ARE STANDARD.**



Technical Information

A


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
 Semi-Auto Drain PS511P
 Twist Drain PS512P
 Push 'N' Drain PS513P

Filter Elements – 40 Micron P3NKA00ESG
 5 Micron P3NKA00ESE
 Adsorber P3NKA00ESA

Mounting Bracket Kit* P3NKA00MW

Sight Gauge Kit P3NKA00PE

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

Specifications

Body Aluminum

Bowl Capacity 18.0 Ounces

Sump Capacity 6.8 Ounces

Deflector Plastic

Drain Plastic

Filter Elements –

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

Pressure & Temperature Rating – 0 to 250 PSIG (0 to 17 bar)
 32°F to 175°F (0°C to 80°C)

Automatic Float Drain – 10 to 250 PSIG (0.7 to 17 bar)
 at 125°F (52°C) or less

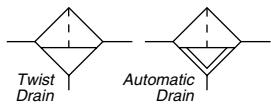
Seals Nitrile

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)

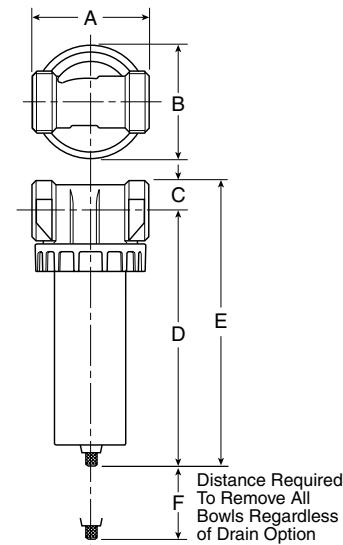
1" Port Body with 1-1/2" Port Block.

PF602 Filters – Hi-Flow



Features

- Excellent water removal efficiency.
- 32 oz. Metal bowl.
- Large filter element surface guarantees low pressure drop and increased element life.
- Twist Drain as standard, optional auto drain.
- High Flow: 1" – 350 SCFM §
1-1/4" – 380 SCFM §
1-1/2" – 380 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Float Drain	Twist Drain	Automatic Float Drain
Metal Bowl				
1"	PF602-08EJ	PF602-08EJR	PF602G08EJ	PF602G08EJR
1-1/4"	PF602-10EJ	PF602-10EJR	PF602G10EJ	PF602G10EJR
1-1/2"	PF602-12EJ	PF602-12EJR	PF602G12EJ	PF602G12EJR

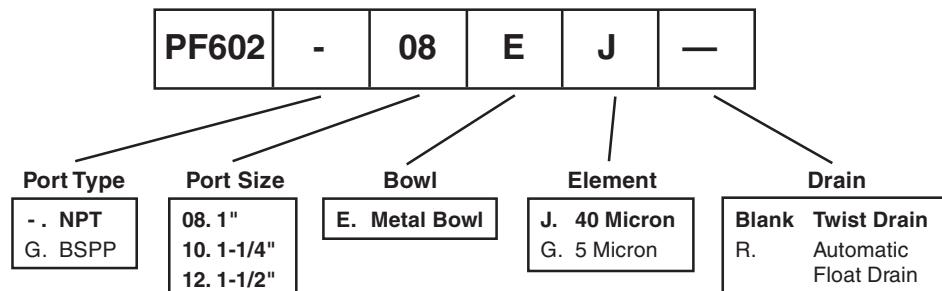
Standard part numbers shown, for other models refer to ordering information below.

§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop, with 40 micron element.

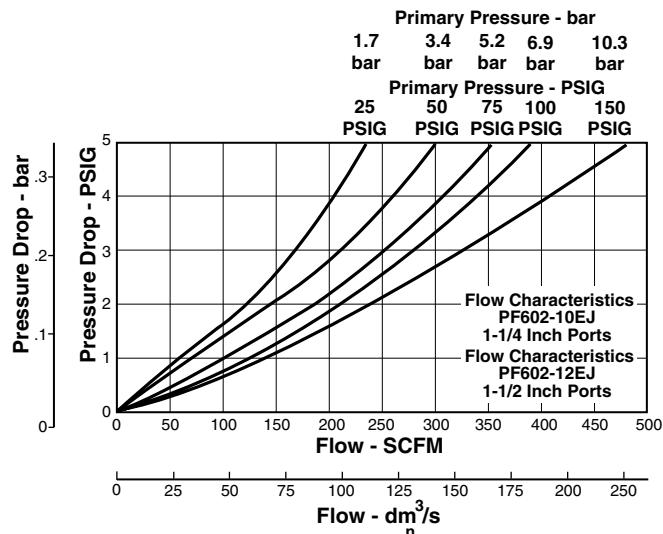
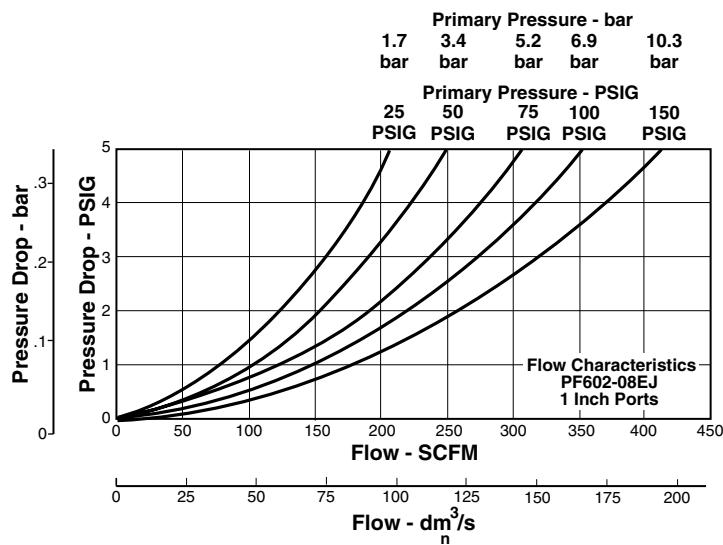
PF602-08 Filter Dimensions		
A	B	C
4.56 (116)	4.97 (126)	.94 (24)
D	E	F
10.69 (271)	11.63 (295)	3.25 (83)
PF602-10 & PF602-12 Filter Dimensions		
A	B	C
5.19 (132)	4.97 (126)	1.28 (33)
D	E	F
11.13 (283)	12.41 (315)	3.25 (83)

Inches (mm)

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

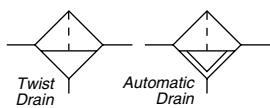
Technical Information**A****PF602 Filter Kits & Accessories**

Bowl	..... PBK603B
Drain Kit – Automatic Drain	..... PSA602MD
Twist Drain	..... PSA600Y7-1
Filter Elements – 40 Micron	..... PEK602B
5 Micron	..... PEK602VB
Mounting Bracket Kit (For 1" ported body only)	..... SA200CW57
Repair Kit (Deflector, Baffle & Post)	
1" Ported Body	..... PRK602B
1-1/4" & 1-1/2" Ported Body	..... PRK602C

Specifications

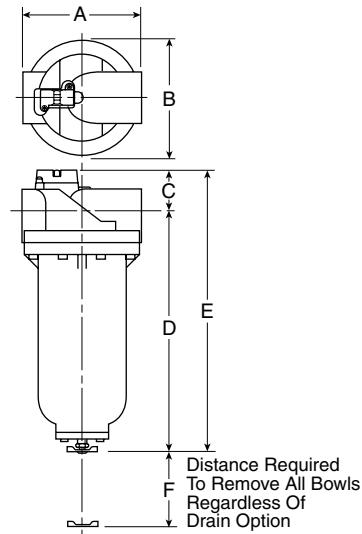
Body	..... Zinc
Bowl	..... Aluminum
Bowl Capacity	..... 32 Ounces
Sump Capacity	..... 19 Ounces
Deflector	..... Aluminum
Drain	..... Brass
Filter Elements –	
40 Micron (Standard)	..... Polypropylene
5 Micron (Optional)	..... Polypropylene
Pressure & Temperature Ratings –	
Manual Drain – 0 to 300 PSIG (0 to 20.7 bar)	
32°F to 180°F (0°C to 82°C)	
Automatic Float Drain – 15 to 175 PSIG (1 to 12 bar)	
32°F to 120°F (0°C to 49°C)	
Seals	..... Nitrile
Weight – 1"	..... 7 lb. (3.2 kg)
1-1/2"	..... 7.7 lb. (3.5 kg)

09F Filters – Hi-Flow



Features

- Metal bowl standard.
- 5 micron element.
- Large capacity bowl.
- Standard differential pressure indicator.
- High Flow: 2" – 1000 SCFM[§]



Port Size	NPT	
	Twist Drain	Automatic Float Drain
2"	09F83BB	09F87BB

Standard part numbers shown, for other models refer to ordering information below.

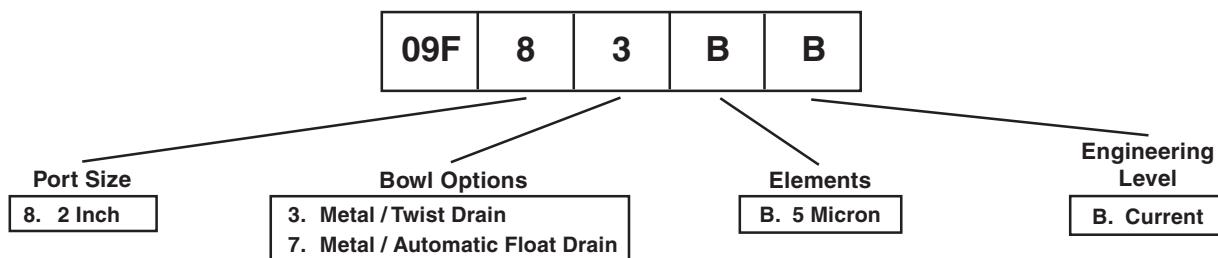
[§] SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

09F Filter Dimensions		
A 7.80 (92)	B 7.75 (142)	C 2.83 (92)
D[†] 16.24 (412)	E[†] 19.07 (484)	F 4.92 (125)

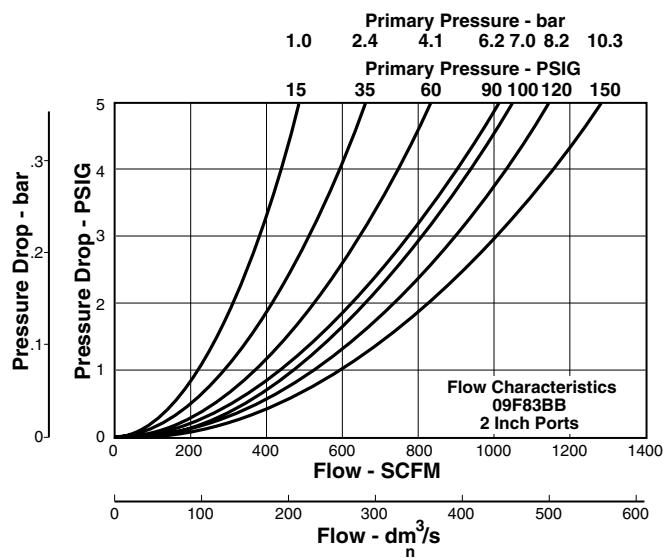
Inches (mm)

[†] With Twist Drain or Automatic Float Drain

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****09F Filter Kits & Accessories**

Differential Pressure Indicator	PS619P
Drain Kits – Automatic Float Drain	PS620P
Twist Drain	PS625P

Filter Element Kit – 5 Micron Element PS618P

Specifications

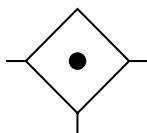
Bowl Capacity	117 Ounces
Sump Capacity	12.5 Ounces
Port Threads	2 Inch
Pressure & Temperature Ratings	150 PSIG at 150°F (10.3 bar at 66°C)
Weight	19.3 lb. (8.7 kg)

Materials of Construction

Body	Aluminum
Bowls	Metal
Deflector	Steel
Drains – Twist Drain	Brass Petcock
Automatic Float Drain –	
Housing, Float	Plastic
Seals	Buna N
Springs, Push Rod	Stainless Steel
Filter Element	Plastic
Seals	Fluorocarbon

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 10F Series, 1/8 and 1/4 Inch
- Miniature P3A-FA 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
- Main Line 30F Series, 1-1/2, 2, 2-1/2 and 3 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

Grade	D.O.P. Coalescing Efficiency .3 to .6 Micron Particles	Maximum Oil Carryover ¹ PPM w/w	Pressure Drop (PSID) ² @ Rated Flow		Particulate Micron Rating
			Media Dry	Media Wet With 10-20 wt. oil	
6	99.97%	.008	1.0	2-3	.01
10	95%	.85	.5	.5	.7

¹ Tested per BCAS 860900 at 40 ppm inlet.

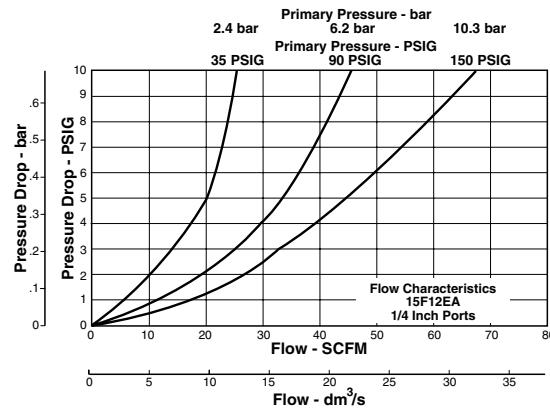
² Add dry + wet for total pressure drop.

D.O.P. = Diethylphthalate

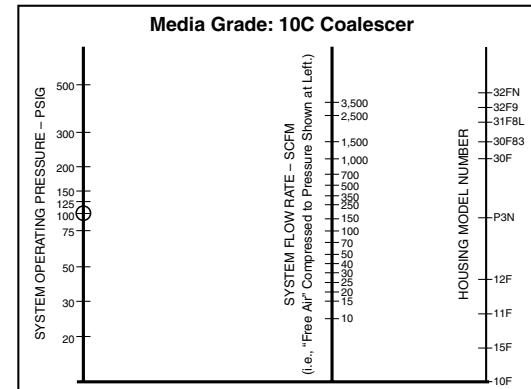
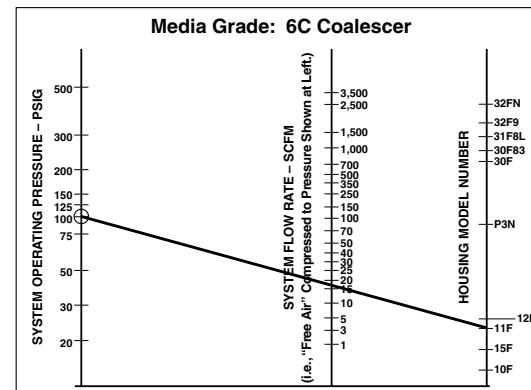
Reading Flow Charts For Coalescing Filters

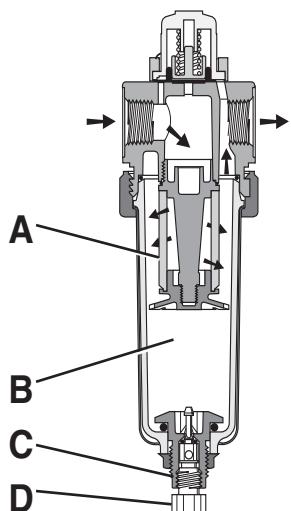
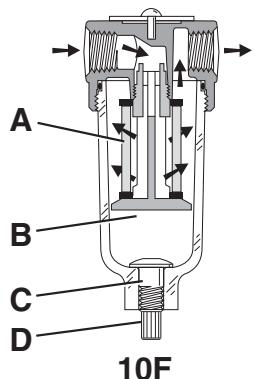
To read the coalescer flow chart, first determine the inlet pressure that will be used. Find the appropriate pressure curve on the graph. Each graph will contain three pressure curves. If the required inlet pressure is not on the graph, interpolate a similar curve for the required pressure. Next, determine the acceptable pressure drop across the coalescer 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.

**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.

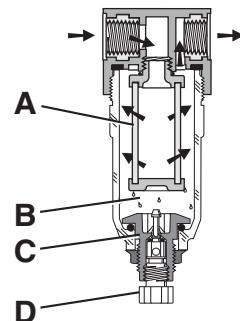
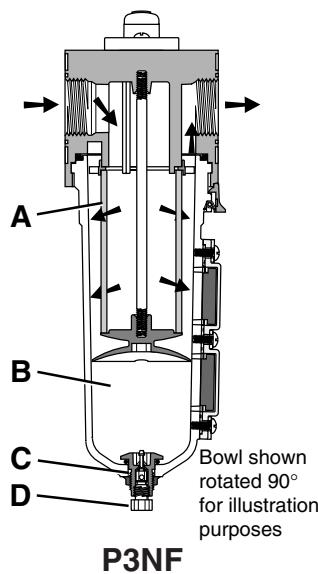
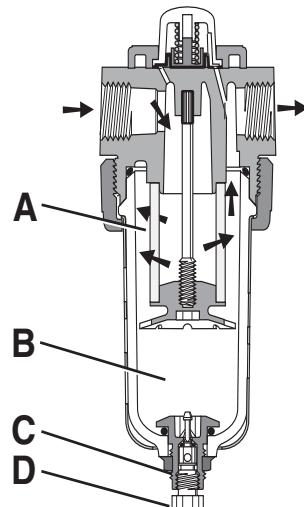
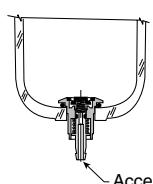




The contaminated air enters the element interior and is forced through a thick membrane of borosilicate glass fibers coated with epoxy (**A**). Flow then passes through an outer structural support and, at this stage, has removed up to 99.97% + of the sub-micron particles evident in the contaminated air. 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.

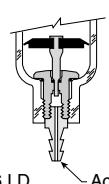
The clean, filtered air now passes through the outer screen plastic net and out into the pneumatic system. The Air Line Coalescing Filter removes liquid aerosols and sub-micron particulate matter.

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.

**P3A-FA****Semi Automatic Drain**

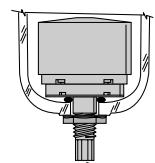
(Overnight Drain)

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.

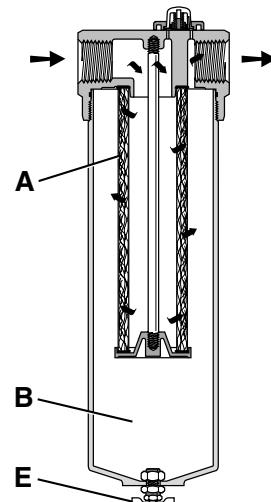
Automatic Pulse Drain

(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 through the bottom.

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.



Coalescing Filters – Model Number Cross-Reference

ARROW		PARKER	NORGREN	PARKER	PALL	PARKER
Model Number	interchanges with	Model Number	Model Number	interchanges with	Model Number	Model Number
EKF-401		P9001P	665-75	P9046P	OL-5C, MDC-, MCC-, MCS-, PSC, or PCC-4463SU	
EKF-402		P9002P	665-92	P9047P	OL-9C, PPY, POC, MDC-, MCC-, MCS-, PCS, or PCC-1001SU	P9056P
EKF-405		P9003P	665-88	P9048P	MDC-, MCC-, PPC, PCC-1201SU	P9057P
EKF-407		P9004P			PPC, PCC-350SU	P9058P
EKF-410		P9005P			PPC, or PCC-700SU	P9059P
EKF-418		P9006P			DT-5C	P9060P
EKF-428		P9007P			MDC-, MCC-, MCS-, PCS, or PCC-4463AF	P9061P
EKF-501		P9009P			DT-9C, MDC-, MCC-, MCS-, PCS, or PCC-1001AF	P9062P
EKF-502		P9010P			MDC-, MCC-, PCC-1201AF	P9063P
EKF-505		P9011P			PCC-350AF	P9064P
EKF-507		P9012P			PCC-700AF	P9065P
EKF-510		P9013P			MDC-, MCC-, PCC-1001HT	P9066P
EKF-518		P9014P			MDC-, MCC-, PCC-1201HT	P9067P
EKF-528		P9015P			PCC-350HT	P9068P
EKF-501A		P9016P			PCC-700HT	P9069P
EKF-502A		P9017P				
EKF-505A		P9018P				
EKF-507A		P9019P				
EKF-510A		P9020P				
EKF-518A		P9021P				
EKF-528A		P9022P				
EKF-601		P9023P				
EKF-602		P9024P				
EKF-605		P9025P				
EKF-607		P9026P				
EKF-610		P9027P				
EKF-618		P9028P				
EKF-628		P9029P				

02F Coalescing Filters – Miniature

A

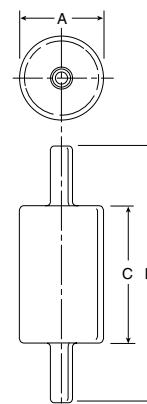


Features

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

Application

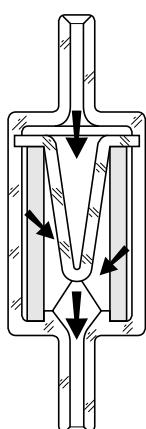
The 02F Miniature Inline Filter is designed to remove 99.9%+ of the aerosols and sub-micron particles from your air system.



Port Size	Model	Element
1/4" I.D.	02FA06A	Grade 6
	02FA10A	Grade 10
	02FA22A	Grade 6 (oil activated dye)

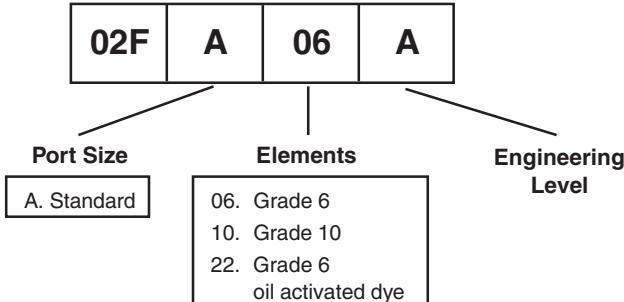
02F Coalescing Filter Dimensions		
A 1.00 25mm	B 3.28 83mm	C 1.69 43mm

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.

Ordering Information



Performance Specifications

G r a d e	D.O.P. Coalescing Efficiency .3 to .6 Micron Particles	Maximum Oil Carryover ¹ PPM w/w	Pressure Drop (PSID) ² @ Rated Flow		Flow: SCFM @ 1 PSID Operating Pressure 100 PSIG
			Media Dry	Media Wet With 10-20 wt. oil	
6	99.97%	.008	1.0	2-3	3.5 SCFM
10	95%	.85	.5	.5	5.3 SCFM

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

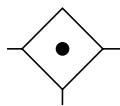
Specifications

Port Size 1/4 I.D. Hose Slip On Tang Standard
Pressure & Temperature Ratings –
100 PSIG at 125°F (69 kPa at 52°C) or less

Materials of Construction

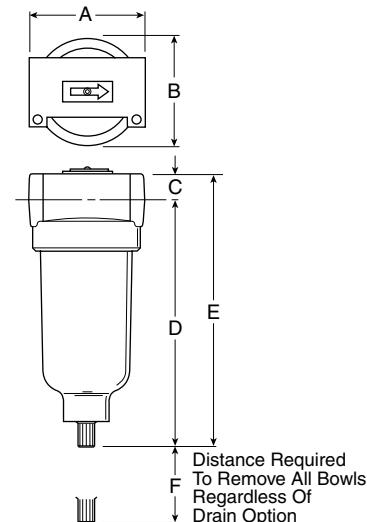
Element Borosilicate & Felt Glass Fibers
Housing Nylon
Optional Tube Barbs Brass

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.
- High Flow: Grade 6 Element
1/8" – 17 SCFM §
1/4" – 20 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Pulse Drain	Twist Drain	Automatic Pulse Drain
Poly Bowl[‡]				
1/8"	10F01ED	10F05ED	10F01ED1	10F05ED1
1/4"	10F11ED	10F15ED	10F11ED1	10F15ED1
Metal Bowl without Sight Gauge				
1/8"	10F03ED	10F07ED	10F03ED1	10F07ED1
1/4"	10F13ED	10F17ED	10F13ED1	10F17ED1

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

‡ For polycarbonate bowl see Caution on page 2.

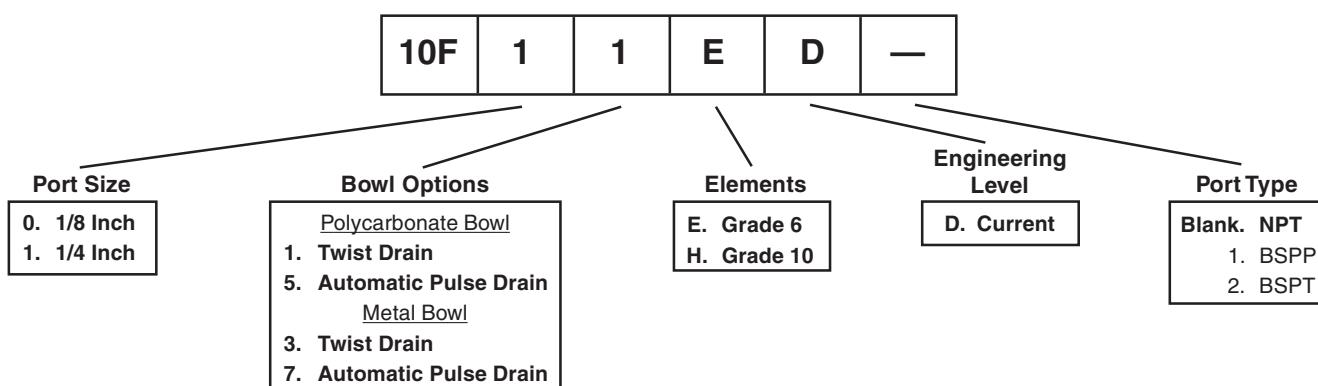
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

10F Coalescing Filter Dimensions		
A	B	C
1.69 (43)	1.53 (39)	.39 (10)
D	D [†]	E
3.82 (97)	3.87 (99)	4.21 (107)
E [†]	F	
4.26 (108)	1.60 (41)	

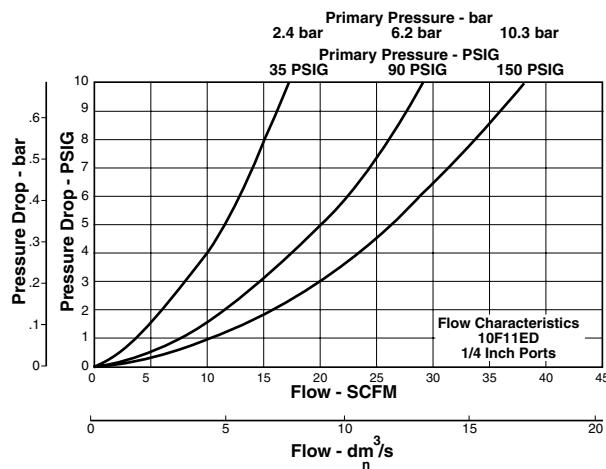
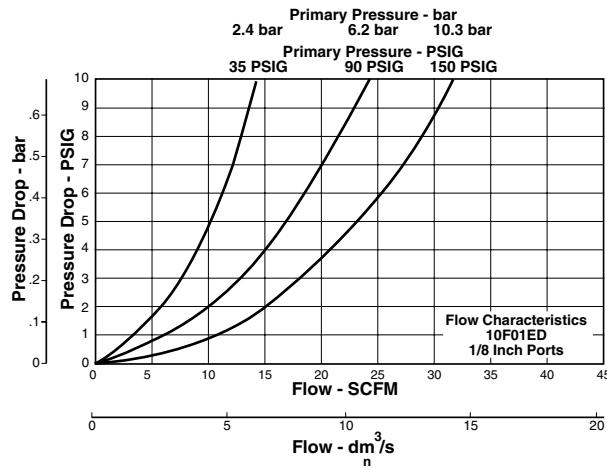
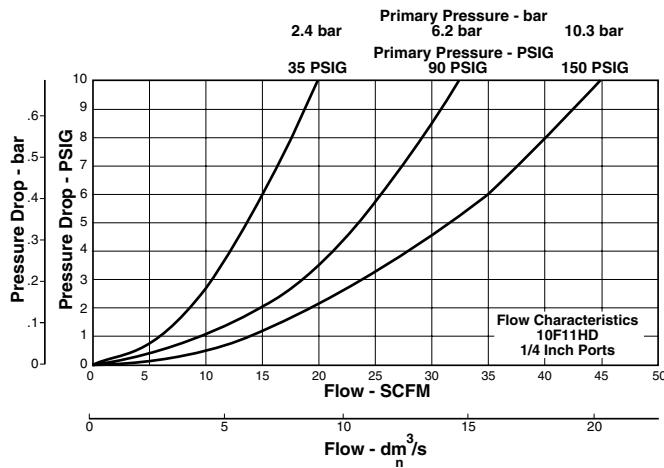
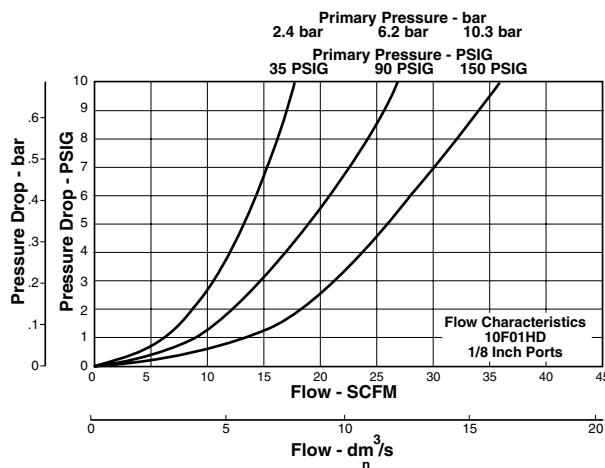
Inches (mm)

† With Automatic Pulse Drain

Ordering Information



NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information**A****Grade 6****Grade 10****10F Coalescing Filter Kits & Accessories****Bowl Kits –**

Poly Bowl – Automatic Pulse Drain	PS408P
Twist Drain	PS404P
Metal Bowl – Automatic Pulse Drain	PS451P
Twist Drain	PS447BP
Filter Element Kits – Grade 6 (Standard)	PS446P
Grade 10 (Optional)	PS456P
Mounting Bracket Kit	PS417BP

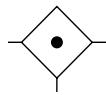
Specifications

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)
Weight .....	.41 lb. (.18 kg)

Materials of Construction

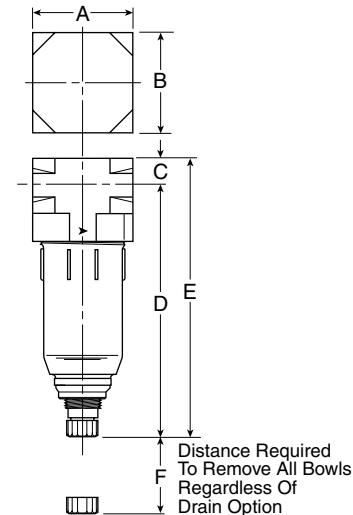
Body	Zinc
Bowls	Transparent Polycarbonate Metal (Zinc) Without Sight Gauge
Drains – Twist Drain –	
Body & Stem	Plastic
Seals	Nitrile
Automatic Pulse Drain –	
Piston & Seals	Nitrile
Stem, Seat, Adaptor & Washers	Aluminum
Element Holder	Plastic
Filter Elements	Borosilicate & Felt Glass Fibers
Seals	Nitrile

P3AF Coalescing Filters



Features

- Lightweight Plastic Body
- Removes liquid aerosols and sub-micron particles.
- Liquids gravitate to the bottom of the element and will not re-enter the air stream.
- Oil free air for critical applications, such as air gauging and pneumatic instrumentation and controls.
- Grade 6 element, 99.97% DOP efficiency.
- Fingertip operated drain, automatic drain optional.
- Easily disassembled for servicing without the use of tools.
- High Flow: 1/8" – 20 SCFM §
1/4" – 32 SCFM §



Port Size	NPT	
	Twist Drain	Auto Pulse Drain
1/8"	P3A-FA91BCNP	P3A-FA91CCNP
1/4"	P3A-FA92BCNP	P3A-FA92CCNP

Standard part numbers shown with Grade 6 Elements.

† For polycarbonate bowl see Caution on page 2.

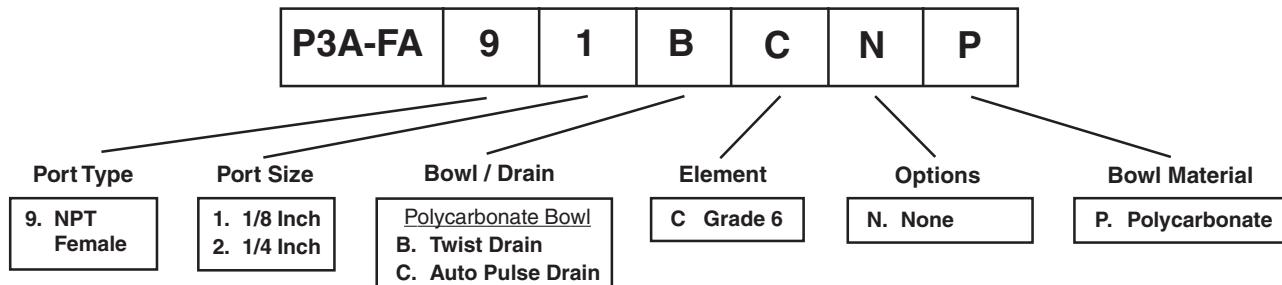
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

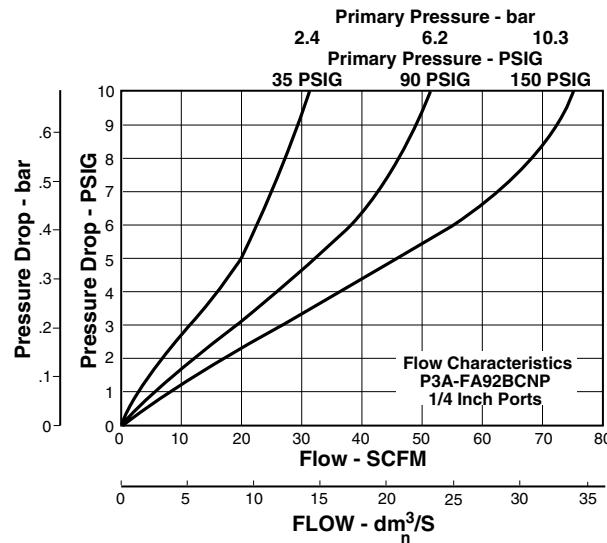
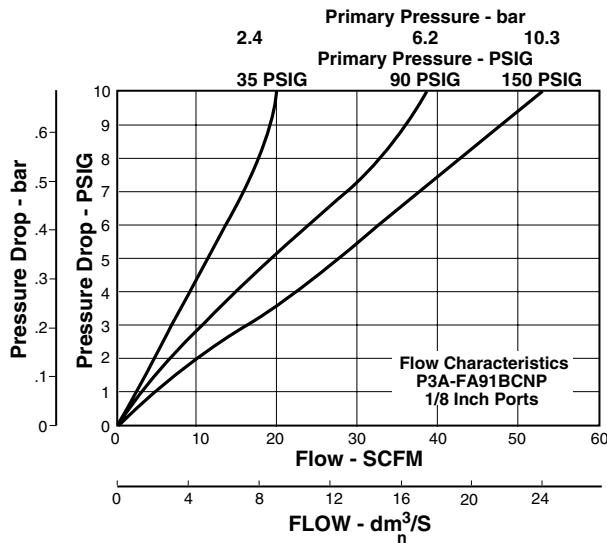
Filter Dimensions			
A	B	C	D
1.57 (40)	1.57 (40)	.43 (11)	3.98 (101)
D†	E	E†	F
3.70 (94)	4.41 (112)	4.13 (105)	2.00 (51)

Inches (mm)

† With Pulse Drain

Ordering Information



Technical Information**A****Coalescing Filter Kits and Accessories****Elements –**

Grade 6 Coalescer Element PS467P

Plastic Bowls –Bowl with Manual Drain P3A-KA00BBP
Bowl with Auto Pulse Drain P3A-KA00BCP**Service Kit** P3A-KA00RFN**Wall Mount Kit** P3A-KA00CFN**Specifications****Bowl Capacity** 0.9 Ounces**Sump Capacity** 0.24 ounces**Operation –**Normal Operating Pressure Drop 2 PSIG
Maximum Recommended Pressure Drop 10 PSIG
(Element should be replaced).**Operating Pressure Range** **PSIG** **bar** **kPa**
Maximum 120 8.3 828**Operating Temperature Range** 32°F to 125°F (0°C to 52°C)**Port Threads** 1/8 & 1/4 Inch**Weight** 0.18 lb. (0.08 kg.)**Materials of Construction****Body** Plastic**Bowl** Transparent Polycarbonate**Drains – Twist Drain –**
Body & Stem Plastic

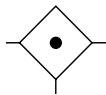
Seals Nitrile

Auto (Pulse) –
Piston & Seals Nitrile

Stem, Seat, Adaptor & Washers Aluminum

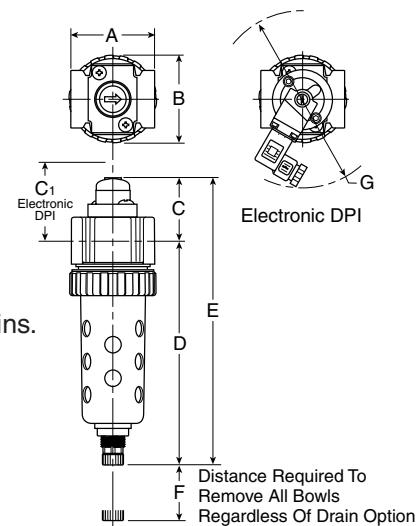
Filter Element –Borosilicate & felt glass fibers 99.97% DOP efficiency
Largest Aerosol Particle Passed 0.75 Microns
Largest Solid Particle Passed 0.30 Microns**Port Inserts** Brass**Seals** Nitrile

15F Coalescing Filters – Economy



Features

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



Port Size	NPT		BSPP	
	Twist Drain	Automatic Pulse Drain	Twist Drain	Automatic Pulse Drain
Poly Bowl[‡] / Metal Guard				
1/4"	15F12EA	15F1PEA	15F12EA1	15F1PEA1
3/8"	15F22EA	15F2PEA	15F22EA1	15F2PEA1
Metal Bowl / Sight Gauge				
1/4"	15F14EA	15F1TEA	15F14EA1	15F1TEA1
3/8"	15F24EA	15F2TEA	15F24EA1	15F2TEA1

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

‡ For polycarbonate bowl see Caution on page 2.

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

15F Coalescing Filter Dimensions		
A	B	C
2.00 (51)	2.06 (52)	1.50 (38)
C ₁	D [†]	E [†]
1.86 (47)	5.35 (136)	6.85 (174)
F	G Dia.	
1.77 (45)	4.50 (114)	

Inches (mm)

[†] With Twist Drain or Automatic Float Drain

Ordering Information

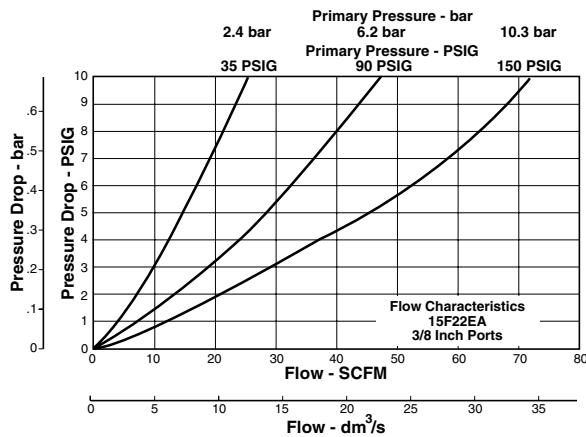
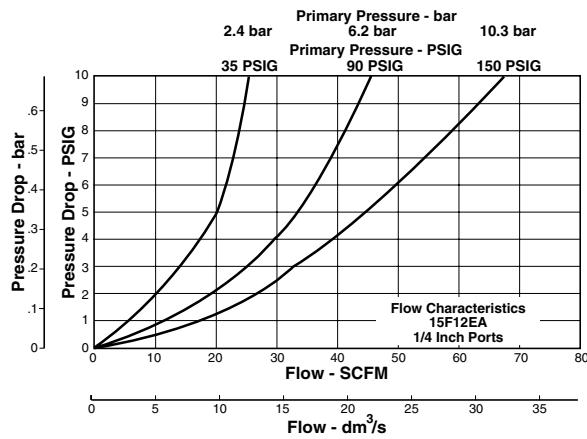
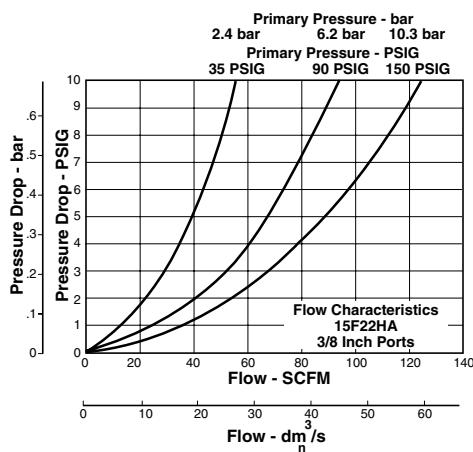
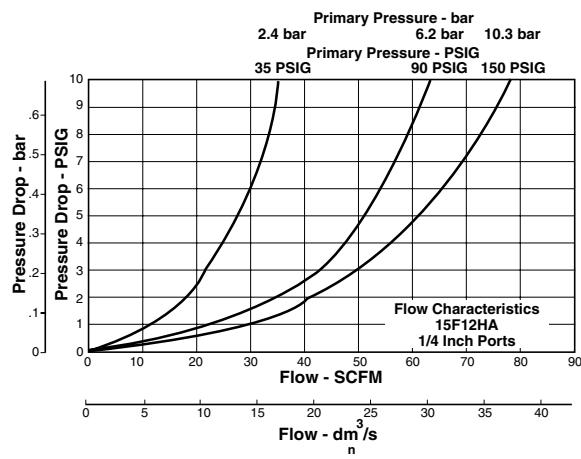
15F 1 2 E A — —

Port Size	Bowl Options	Elements	Engineering Level	Port Type	Options
1. 1/4 Inch 2. 3/8 Inch	Polycarbonate Bowl 1. Twist Drain 2. Metal Bowl Guard / Twist Drain N. Auto Pulse Drain P. Metal Bowl Guard / Auto Pulse Drain E. Push 'N' Drain F. Metal Bowl Guard / Push 'N' Drain J. Semi-Auto Drain K. Metal Bowl Guard / Semi-Auto Drain	Metal Bowl 3. Twist Drain 4. Sight Gauge / Twist Drain R. Auto Pulse Drain T. Sight Gauge / Auto Pulse Drain G. Push 'N' Drain H. Sight Gauge / Push 'N' Drain L. Semi-Auto Drain M. Sight Gauge / Semi-Auto Drain	E. Grade 6 H. Grade 10	A. Current	Blank. NPT 1. BSPP 2. BSPT
					Blank. With Differential Pressure Indicator N. Without Differential Pressure Indicator Q. Fluorocarbon with DPI R. With Electronic DPI V. Fluorocarbon without DPI

* Fluorocarbon available with Metal Bowl, Twist Drain only.

NOTE: BOLD OPTIONS ARE STANDARD.

A

Technical Information**Grade 6****Grade 10****15F Coalescing Filter Kits & Accessories**

Bowl Guard Kit	PS905P
Bowl Kits –	
Poly Bowl – Automatic Pulse Drain	PS995P
Semi-Auto Drain	PS992P
Twist Drain	PS932P
Push 'N' Drain	PS904P
Metal Bowl – Automatic Pulse Drain	PS997P
Semi-Auto Drain	PS994P
Twist Drain	PS934P
Twist Drain (Fluorocarbon)	PS934VP
Push 'N' Drain	PS925P
Sight Gauge / Automatic Pulse Drain	PS996P
Sight Gauge / Semi-Auto Drain	PS993P
Sight Gauge / Twist Drain	PS935P
Sight Gauge / Twist Drain (Fluorocarbon)	PS935VP
Sight Gauge / Push 'N' Drain	PS906P
DPI Replacement Kit	PS781P
Electronic DPI Replacement Kit	PS764
Drain Kit –	
Automatic Pulse Drain	PS998P
Semi-Auto Drain	PS511P
Twist Drain	PS512P
Twist Drain (Fluorocarbon)	PS512VP
Push 'N' Drain	PS513P
Electrical Connector - 15mm, 3-Pin DIN, 6 Ft. Cord	PS2923JP
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	.9 Ounce
Port Threads	1/4, 3/8 Inch
Pressure & Temperature Rating –	
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)
Weight	1.2 lb. (.54 kg)

Materials of Construction

Body	Zinc
Bowls	Transparent Polycarbonate Metal (Zinc) Without Sight Gauge
Bowl Guards	Steel
Collar	Plastic
Drain	Plastic
Filter Elements	Borosilicate & Felt Glass Fibers
Seals	Nitrile
Sight Gauge, DPI	Polyamide (Nylon)

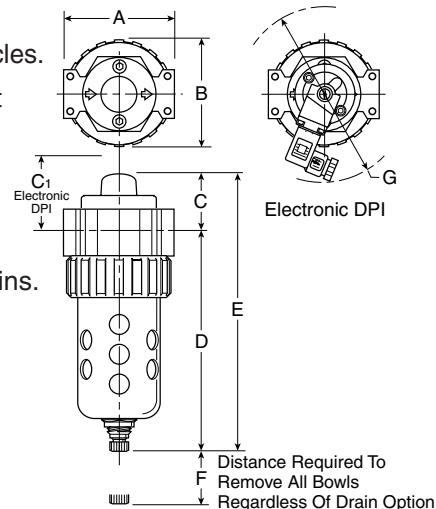
11F Coalescing Filters – Compact



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.
- Pressure differential indicator standard.
- Shown with recommended metal bowl guard.
- High Flow: Grade 6 Element

1/4"	–	45 SCFM §
3/8"	–	48 SCFM §
1/2"	–	65 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Float Drain	Twist Drain	Automatic Float Drain
Poly Bowl[‡] / Metal Guard				
1/4"	11F12EC	11F16EC	11F12EC1	11F16EC1
3/8"	11F22EC	11F26EC	11F22EC1	11F26EC1
1/2"	11F32EC	11F36EC	11F32EC1	11F36EC1
Metal Bowl / Sight Gauge				
1/4"	11F14EC	11F18EC	11F14EC1	11F18EC1
3/8"	11F24EC	11F28EC	11F24EC1	11F28EC1
1/2"	11F34EC	11F38EC	11F34EC1	11F38EC1

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

[‡] For polycarbonate bowl see Caution on page 2.

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

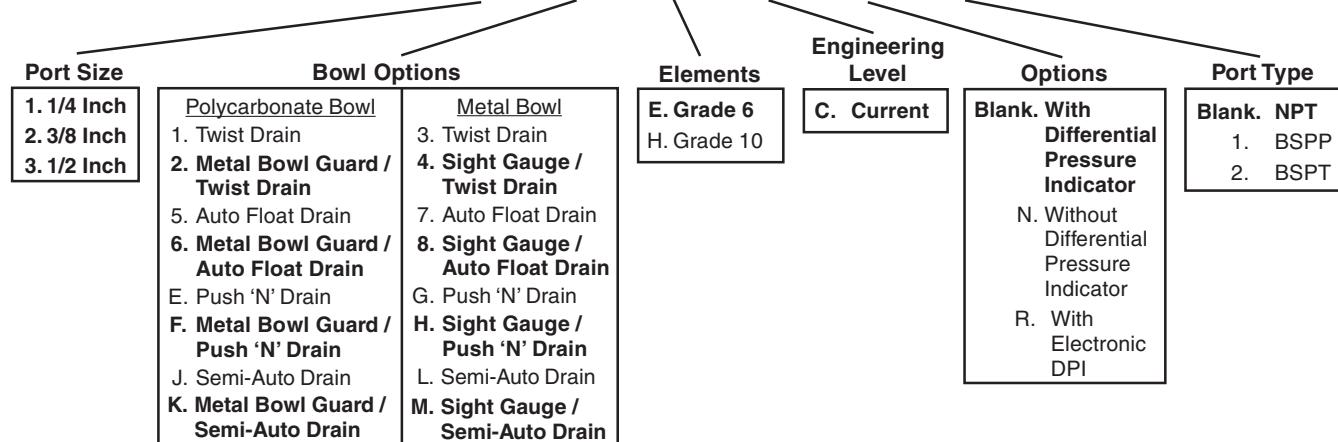
11F Coalescing Filter Dimensions		
A	B	C
2.81 (71)	2.74 (70)	1.46 (37)
C ₁	D	D [†]
1.81 (46)	5.69 (145)	5.74 (146)
E	E [†]	F
7.15 (182)	7.20 (183)	2.25 (57)
G Dia.		
4.50 (114)		

Inches (mm)

[†] With Automatic Float Drain

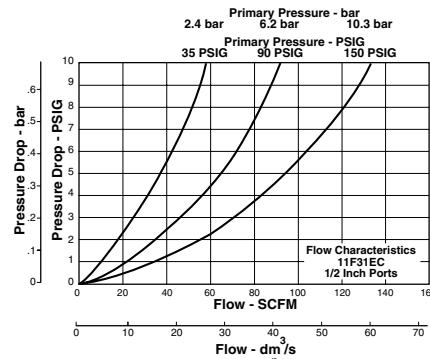
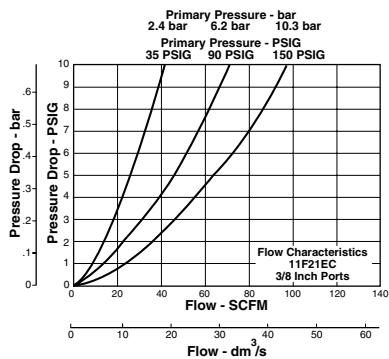
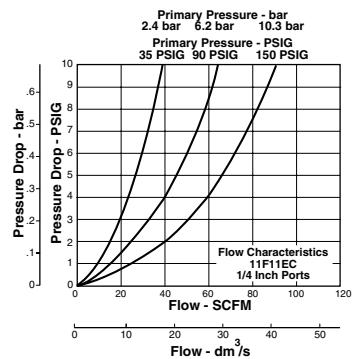
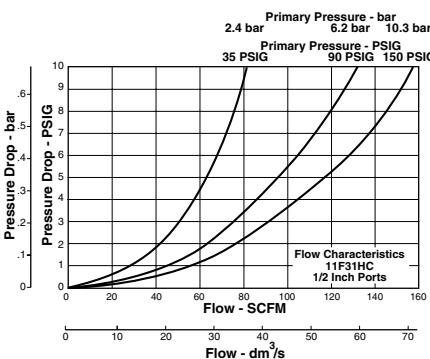
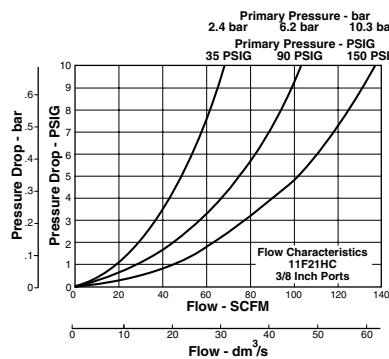
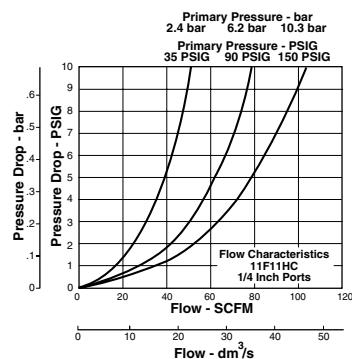
Ordering Information

11F	1	2	E	C	—	—
------------	----------	----------	----------	----------	----------	----------



NOTE: **BOLD OPTIONS ARE STANDARD.**

A

Technical Information**Grade 6****Grade 10****11F Coalescing Filter Kits & Accessories**

Bowl Guard Kit PS705P

Bowl Kits –

Poly Bowl – Automatic Float Drain PS722P

Semi-Auto Drain PS792P

Twist Drain PS732P

Push 'N' Drain PS704P

Metal Bowl – Automatic Float Drain PS726P

Semi-Auto Drain PS794P

Twist Drain PS734P

Push 'N' Drain PS725P

Sight Gauge / Automatic Float Drain PS723P

Sight Gauge / Semi-Auto Drain PS793P

Sight Gauge / Twist Drain PS735P

Sight Gauge / Push 'N' Drain PS706P

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 PS2923P

Filter Element Kits – Grade 6 (Standard) PS724P

Grade 10 (Optional) PS730P

Mounting Bracket Kit PS743P

Sight Gauge Kit PS714P

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 – 10 to 250 PSIG (.69 to 17.2 bar)

Weight 1.5 lb (.7 kg)

Materials of Construction

Body Zinc

Bowls Transparent Polycarbonate

Metal (Zinc) With or Without Sight Gauge

Bowl Guard Steel

Collar 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 Borosilicate & Felt Glass Fibers

Seals Nitrile

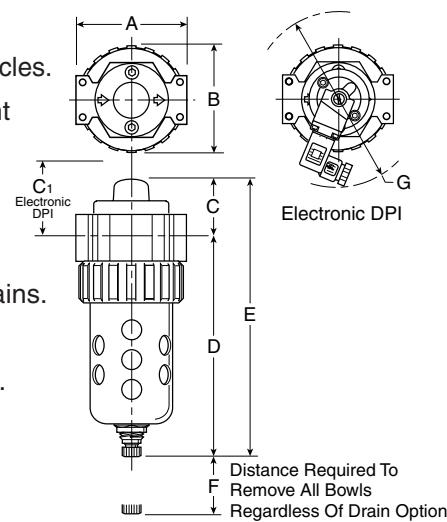
Sight Gauge Polyamide

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.
- Pressure differential indicator standard.
- Shown with recommended metal bowl guard.
- High Flow: Grade 6 Element
 - 3/8" – 73 SCFM §
 - 1/2" – 75 SCFM §
 - 3/4" – 80 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Float Drain	Twist Drain	Automatic Float Drain
Poly Bowl [‡] / Metal Guard				
3/8"	12F22EC	12F26EC	12F22EC1	12F26EC1
1/2"	12F32EC	12F36EC	12F32EC1	12F36EC1
3/4"	12F42EC	12F46EC	12F42EC1	12F46EC1
Metal Bowl / Sight Gauge				
3/8"	12F24EC	12F28EC	12F24EC1	12F28EC1
1/2"	12F34EC	12F38EC	12F34EC1	12F38EC1
3/4"	12F44EC	12F48EC	12F44EC1	12F48EC1

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

[‡] For polycarbonate bowl see Caution on page 2.

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

12F Coalescing Filter Dimensions		
A	B	C
3.24 (82)	3.25 (83)	1.63 (41)
C ₁	D	D [†]
2.00 (51)	6.97 (177)	7.00 (178)
E	E [†]	F
8.60 (218)	8.63 (219)	2.75 (70)
G Dia.		
4.50 (114)		

Inches (mm)

[†] With Automatic Float Drain

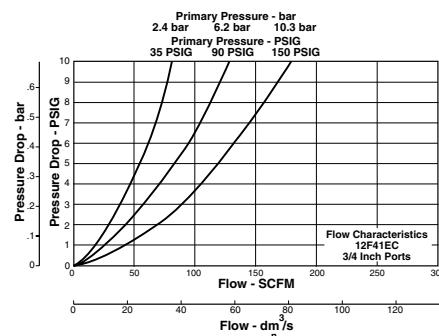
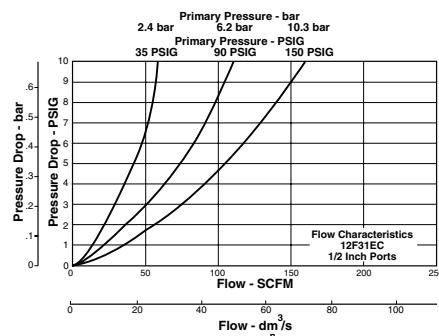
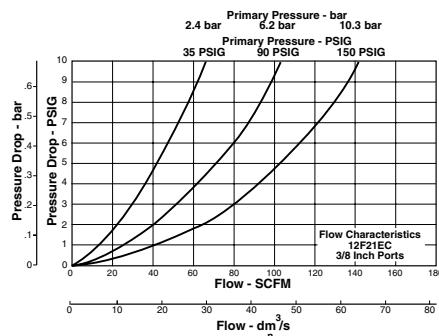
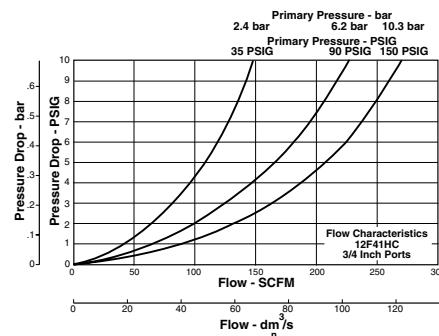
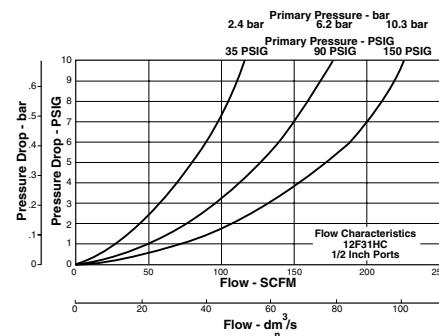
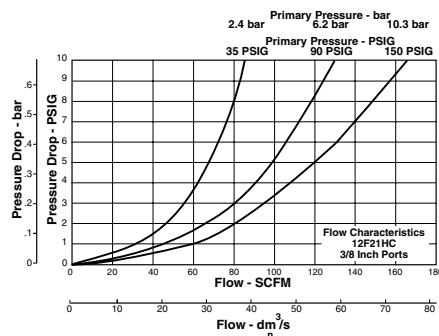
Ordering Information

12F	3	2	E	C	—	—
------------	----------	----------	----------	----------	----------	----------

Port Size	Bowl Options	Elements	Engineering Level	Options	Port Type
2. 3/8 Inch	Polycarbonate Bowl	Metal Bowl	E. Grade 6	Blank. With Differential Pressure Indicator	Blank. NPT
3. 1/2 Inch	1. Twist Drain	3. Twist Drain	H. Grade 10	N. Without Differential Pressure Indicator	1. BSPP
4. 3/4 Inch	2. Metal Bowl Guard / Twist Drain	4. Sight Gauge / Twist Drain	C. Current	R. With Electronic DPI	2. BSPT
	5. Auto Float Drain	7. Auto Float Drain			
	6. Metal Bowl Guard / Auto Float Drain	8. Sight Gauge / Auto Float Drain			
	E. Push 'N' Drain	G. Push 'N' Drain			
	F. Metal Bowl Guard / Push 'N' Drain	H. Sight Gauge / Push 'N' Drain			
	J. Semi-Auto Drain	I. Semi-Auto Drain			
	K. Metal Bowl Guard / Semi-Auto Drain	M. Sight Gauge / Semi-Auto Drain			

NOTE: **BOLD OPTIONS ARE STANDARD.**

A

Technical Information**Grade 6****Grade 10****12F Coalescing Filter Kits & Accessories**

Bowl Guard Kit PS805P

Bowl Kits –

Poly Bowl – Automatic Float Drain PS822P

Semi-Auto Drain PS892P

Twist Drain PS832P

Push 'N' Drain PS804P

Metal Bowl – Automatic Float Drain PS826P

Semi-Auto Drain PS894P

Twist Drain PS834P

Push 'N' Drain PS825P

Sight Gauge / Automatic Float Drain PS823P

Sight Gauge / Semi-Auto Drain PS893P

Sight Gauge / Twist Drain PS835P

Sight Gauge / Push 'N' Drain PS806P

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 PS2923JP

Filter Element Kits – Grade 6 (Standard) PS824P

Grade 10 (Optional) PS830P

Mounting Bracket Kit PS843P

Sight Gauge Kit PS814P

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 3/8, 1/2 & 3/4 Inch**Pressure & Temperature Ratings –**

Without Differential Pressure Indicator:

Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.3 bar)

32°F to 125°F (0°C to 52°C)

Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)

32°F to 175°F (0°C to 80°C)

With Differential Pressure Indicator – 0 to 150 PSIG (0 to 10.3 bar)

32°F to 125°F (0°C to 52°C)

Automatic Float Drain – 10 to 250 PSIG (.69 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

Bowl Guard Steel**Collar** Plastic or Metal**Drains –** Twist Drain – Body & Nut Plastic

Push 'N' Drain – Body Nitrile

Stem Brass

Automatic Float Drain – Housing, Float Plastic

Seals Nitrile

Springs, Push Rod Stainless Steel

Filter Elements Borosilicate & Felt Glass Fibers**Seals** Nitrile**Sight Gauge** Polyamide

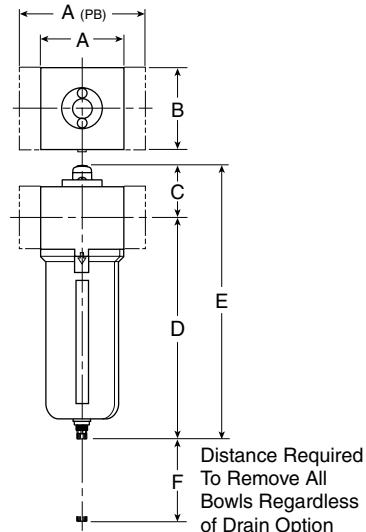
P3NF Coalescing Filters – Hi-Flow

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 §
1"	– 140 SCFM §
1-1/2" #	– 150 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Float Drain	Twist Drain	Automatic Float Drain
Metal Bowl / Sight Gauge				
3/4"	P3NFA96DSM	P3NFA96DSA	P3NFA16DSM	P3NFA16DSA
1"	P3NFA98DSM	P3NFA98DSA	P3NFA18DSM	P3NFA18DSA
1-1/2" #	P3NFA9PDSM	P3NFA9PDSA	P3NFA1PDSM	P3NFA1PDSA

P3NF Coalescing Filter Dimensions		
A	A (PB)	B
3.62 (92)	5.91 (150)	3.62 (92)
C	D †	E †
2.30 (58.5)	9.57 (243)	11.90 (302)
F		
4.92 (125)		

Inches (mm)

† With Twist Drain or Automatic Float Drain

Standard part numbers shown with 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

P	3	N	F	A	9	8	D	S	M
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

Design Level

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)

Element

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

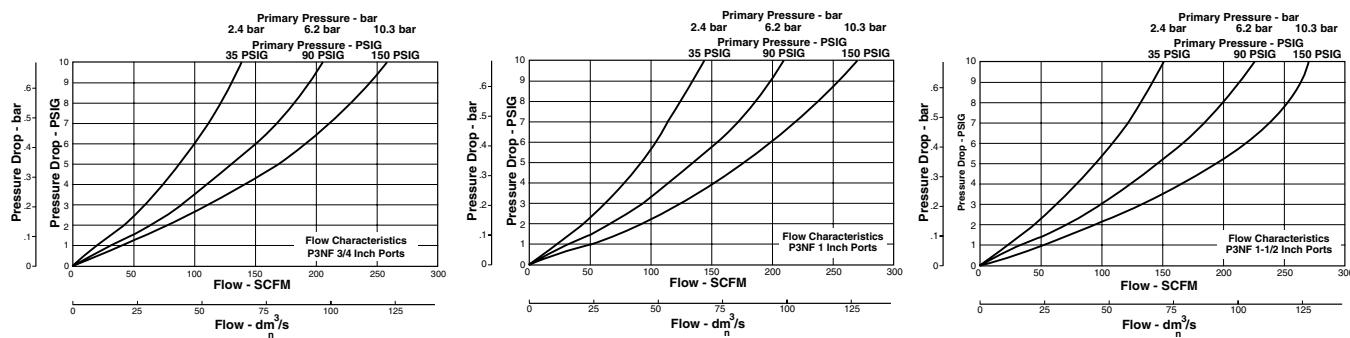
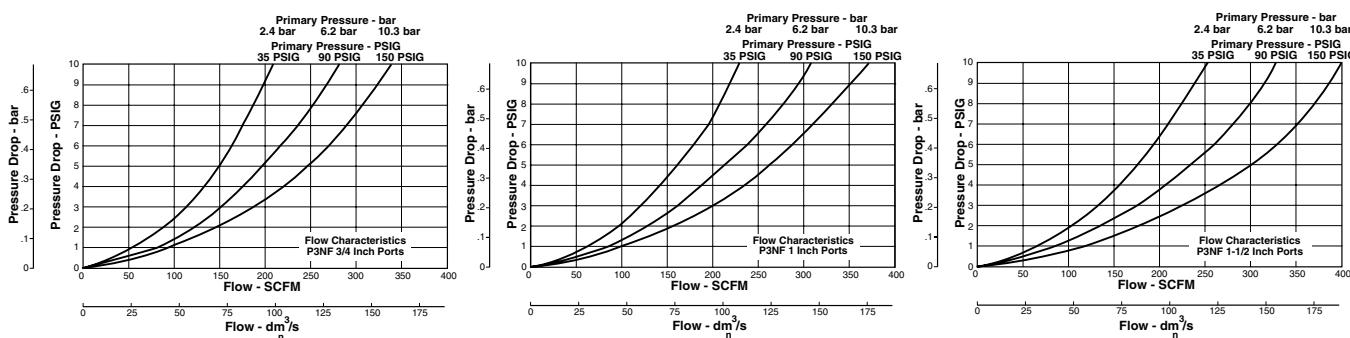
Bowl

S. Metal Bowl w/ Sight Gauge

Drain

M. Twist Drain
A. Automatic Float Drain
P. Push 'N' Drain
S. Semi-Auto Drain

NOTE: **BOLD** OPTIONS ARE STANDARD.

Technical Information**Grade 6****A****Grade 10****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

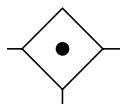
* If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.

Specifications

Body & Bowl	Aluminum
Bowl Capacity	18.0 Ounces
Sump Capacity	6.8 Ounces
Deflector	Plastic
Drain	Plastic
Filter Elements	Borosilicate & Felt Glass Fibers
Pressure & Temperature Rating –	0 to 250 PSIG (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
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.

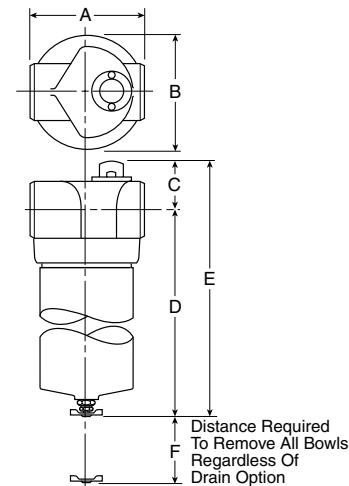
30F, 31F, 32F Coalescing Filters – Main Line



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.
- Differential pressure indicator standard.
- High Flow:

Port Size	Model	Bowl Capacity	SCFM [§]
1-1/2"	30F	14.8 Oz.	350
2"	31F83	17.9 Oz.	450
2"	31F8L	20.9 Oz.	625
2-1/2"	32F9	29.7 Oz.	800
3"	32FN	29.7 Oz.	1000



Port Size	Twist Drain
Metal Bowl without Sight Gauge	
1-1/2"	30F73ECP
2"	31F83ECP
2"	31F8LECP
2-1/2"	32F9LECP
3"	32FNLECP

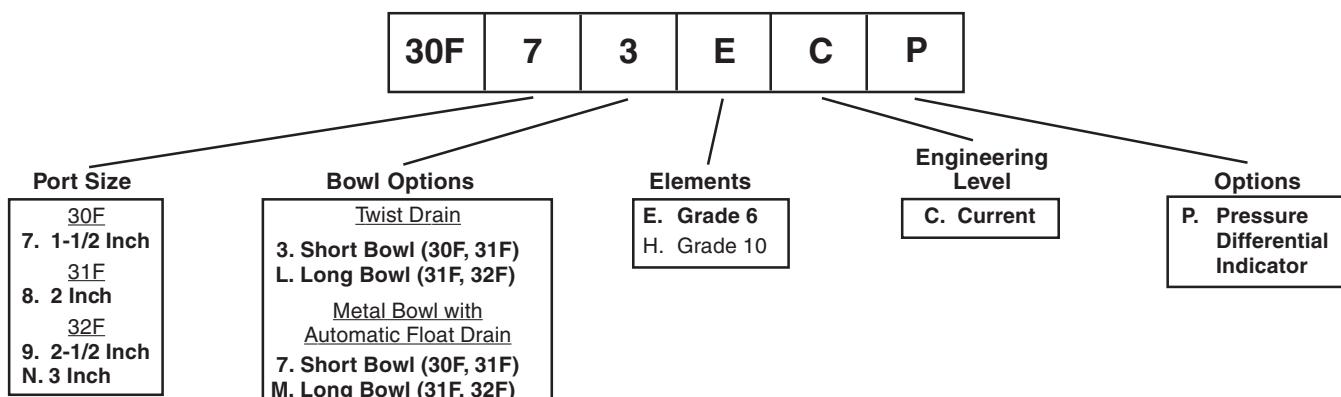
Standard part numbers shown with Grade 6 Elements (for Grade 10 Elements, replace "E" with "H" in the 6th position), for other models refer to ordering information below.

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

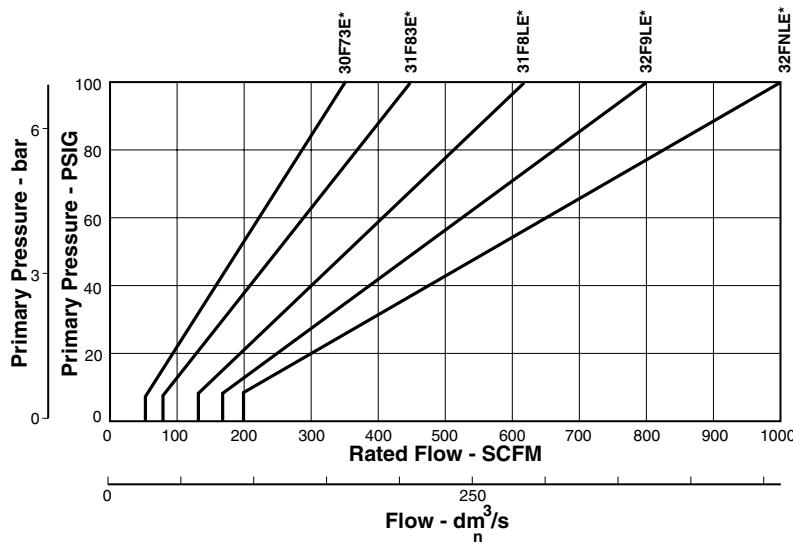
Main Line – Coalescing Filter Dimensions						
	A	B	C	D	E	F
30F	6.00 (152)	5.67 (144)	2.55 (65)	17.41 (442)	19.96 (507)	13.50 (343)
31F83	6.00 (152)	5.67 (144)	2.55 (65)	23.47 (596)	26.02 (661)	19.25 (489)
31F8L	6.00 (152)	5.67 (144)	2.55 (65)	28.51 (724)	30.25 (768)	24.02 (610)
32F9	8.00 (203)	7.24 (184)	3.30 (84)	34.41 (874)	37.71 (958)	28.50 (724)
32FN	8.00 (203)	7.24 (184)	3.30 (84)	34.41 (874)	37.71 (958)	28.50 (724)

Inches (mm)

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****30F, 31F, 32F Coalescing Filter****Kits & Accessories****Bowl Kit – Metal / Twist Drain –**

30F	41618P
31F83	41619P
31F8L	41620P
32F	41621P

DPI Replacement Kit –

30F, 31F83, 31F8L, 32F	2003P
------------------------------	-------

Differential Pressure Indicating Gauge –

30F, 31F83, 31F8L, 32F	2111P
------------------------------	-------

Drain Kits – Automatic Float Drain –

30F, 31F83, 31F8L, 32F	PS506P
------------------------------	--------

Filter Element Kits – Grade 6 (Standard) –

30F	9920-011x1P
31F83	9920-012x1P
31F8L	9920-013x1P
32F	9920-014x1P

Grade 10 (Optional) –

30F	9920-015x1P
31F83	9920-016x1P
31F8L	9920-017x1P
32F	9920-018x1P

Specifications

Model	Bowl Capacity	Port Threads	Weight
30F	14.8 Oz.	1-1/2"	11.9 lb. (5.4 kg)
31F83	17.9 Oz.	2"	14.0 lb. (6.4 kg)
31F8L	20.9 Oz.	2"	15.9 lb. (7.2 kg)
32F9	29.7 Oz.	2-1/2"	35.0 lb. (15.9 kg)
32FN	29.7 Oz.	3"	34.2 lb. (15.5 kg)

Operation –

- Normal Operating Pressure Drop 2 PSIG
- Maximum Recommended Pressure Drop 10 PSIG
(Element should be replaced)
- Minimum Recommended Flow 20%

Pressure & Temperature Ratings – 0 to 250 PSIG (0 to 17.2 bar)
32°F to 175°F (0°C to 80°C)

Materials of Construction

Body Aluminum

Bowl Aluminum without Sight Gauge

Drains – Twist Drain Brass Petcock

Automatic Float Drain –

Housing, Float Plastic

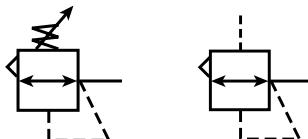
Seals Buna N

Springs, Push Rod Stainless Steel

Filter Elements Borosilicate & Felt Glass Fibers

Seals Nitrile

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
- 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
- Hi-Flow 09R Series, 2 Inch
- Dial Regulators Series, 1/4 thru 2 Inch
- Precision 27R Series, 1/4 and 3/8 Inch
- Compact 3550 Series, 1/4 Inch
- Pilot Controlled 10R, 11R, 12R, P3NR Series, 1/4 thru 1-1/2 Inch

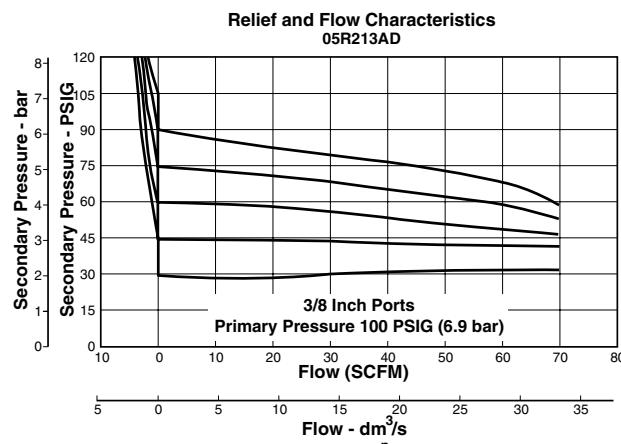
Miniature Regulators for Water Service.

- Miniature P3A-W Series, 1/8 and 1/4 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.

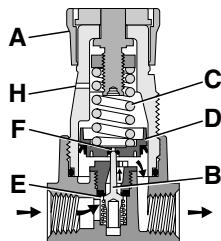
Reading Flow Charts to Size Regulators



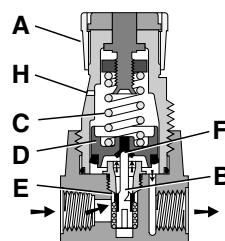
Once the required flow is determined for a pneumatic application the regulator or filter/regulator can be selected by using the flow chart. The chart serves two different purposes. To read the flow, use the right side of the chart. To read the relief characteristics use the left side of the chart. When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

CAUTION:

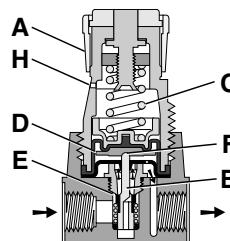
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting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



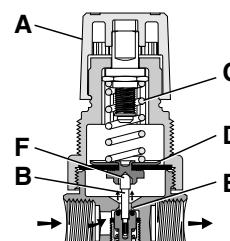
14R



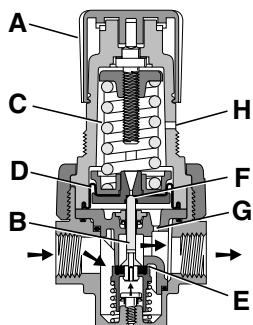
P3AR



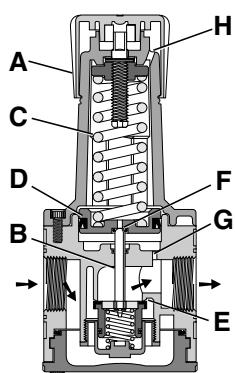
P3AW



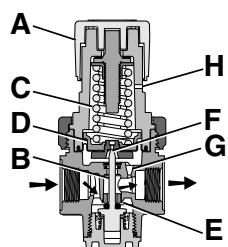
20R



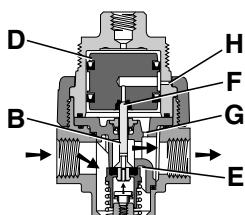
05R, 06R, 07R



P3NR



27R

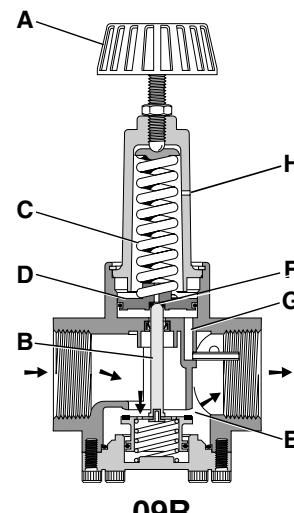


10R, 11R, 12R

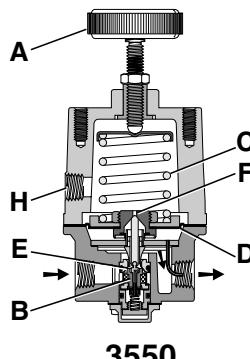
With the adjusting knob (**A**) turned fully counterclockwise (no spring load), and pressure supplied to the regulator inlet port, the valve poppet assembly (**B**) is closed. Turning the adjusting knob clockwise applies a load to control spring (**C**). This load causes the piston / diaphragm (**D**) 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.

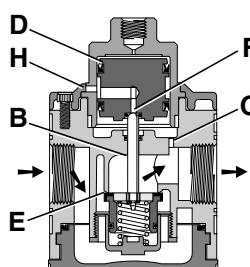
Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the piston / diaphragm (**D**) to move upward against control spring (**C**), open vent hole (**F**), and vent the excess pressure to atmosphere through the hole in the bonnet (**H**). (This occurs in the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



09R



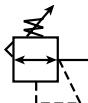
3550



P3NR Air Pilot

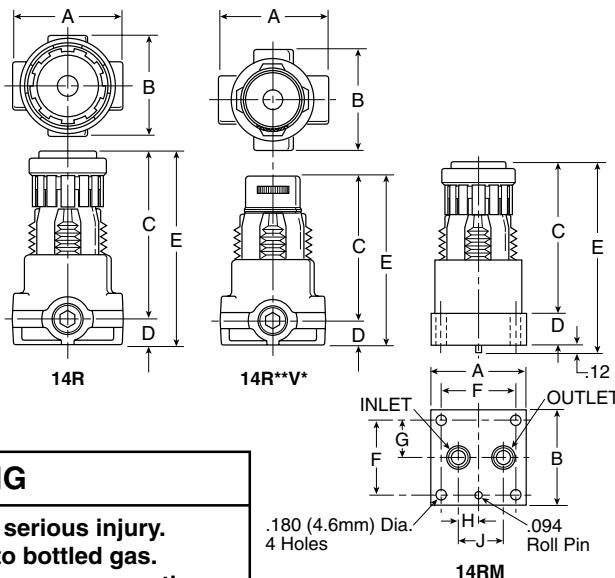
A

14R Regulators – Miniature



Features

- Unbalanced poppet standard.
- Solid control piston with lip seal for extended life.
- Non-rising adjusting knob.
- Compact, 2.9 inch (74mm) high by 1.65 inch (42mm) wide.
- Easily serviced.
- High Flow: 1/8" – 13 SCFM §
1/4" – 15 SCFM §



WARNING

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

Port Size	NPT	BSPP
Without Gauge		
1/8"	14R013FC	14R013FC1
1/4"	14R113FC	14R113FC1
With 160 PSI Gauge		
1/8"	14R018FC	14R018FC1
1/4"	14R118FC	14R118FC1

Standard part numbers shown, 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.

14R Regulator Dimensions					
14R	A 1.65 (42)	B 1.56 (40)	C 2.50 (63.5)	D .38 (10)	E 2.88 (73)
14R**V*	A 1.65 (42)	B 1.56 (40)	C 2.30 (58.4)	D .38 (10)	E 2.68 (68)
14RM	A 1.50 (38)	B 1.50 (38)	C 2.36 (60)	D .50 (13)	E 2.98 (73)
	F 1.188 (30)	G .594 (15)	H .325 (8)	J .725 (18)	

Inches (mm)

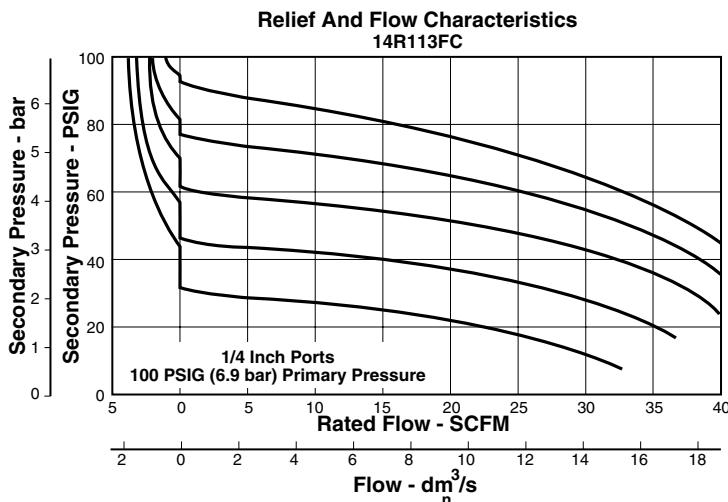
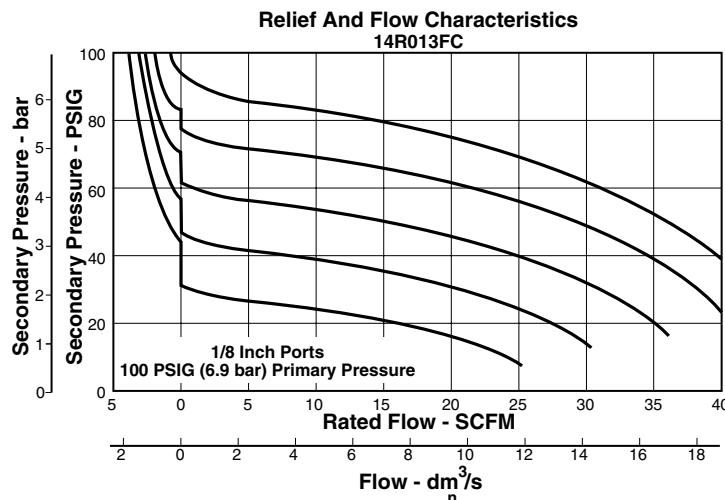
Ordering Information

14R 1 13 F C — — ---

Port Size	Pressure Range	Relief	Engineering Level	Port Type	Options	Preset / Pressure Limited
0. 1/8 Inch Pipe, 1/8 Inch Gauge Port	Without Gauge	F. Relieving	C. Current	Blank. NPT	Blank. No Options	* Available Preset / Pressure Limited Range, 10 to 90 PSIG in 5 PSIG increments. For higher pressures, contact factory. (Example: 065 = 65 PSIG)
1. 1/4 Inch Pipe, 1/4 Inch Gauge Port	Yellow Knob	Black Knob	G. Non-Relieving	1. BSPP	L.† Preset Non-Adjustable	XXX* Preset Pressure
B. 1/4 Inch Pipe, 1/4 Inch Gauge Port	10. 30 PSIG	B0. 30 PSIG		2. BSPT	P.† Preset Adjustable	XXX* Pressure Limited
C. 1/8 Inch Pipe, No Gauge Port	11. 60 PSIG	B1. 60 PSIG			S.† Pressure Limiter Max.	
D. 1/4 Inch Pipe, No Gauge Port	12. 15 PSIG	B2. 15 PSIG			T.† Pressure Limiter Max. Non-Adjustable	
M. Manifold Mounting	13. 125 PSIG	B3. 125 PSIG				
	With Gauge					
	15. 30 PSIG	B5. 30 PSIG				
	16. 60 PSIG	B6. 60 PSIG				
	17. 15 PSIG	B7. 15 PSIG				
	18. 125 PSIG	B8. 125 PSIG				

NOTE: **BOLD OPTIONS ARE STANDARD.**

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

Technical Information**A****14R Regulator Kits & Accessories**

Body Service Kit – Unbalanced	PS424BP
Bonnet Assembly Kit	L01369
Bonnet Tamperproof Kit	P01265
Gauges –	
30 PSIG, 1/8" NPT (0 to 200 kPa)	P530156
60 PSIG, 1/8" NPT (0 to 400 kPa)	P530154
160 PSIG, 1/8" NPT (0 to 1100 kPa)	P77413
60 PSIG, 1/4" NPT (0 to 400 kPa)	P781641
160 PSIG, 1/4" NPT (0 to 1100 kPa)	P781642
Mounting Bracket Kit (Includes Panel Mount Nut)	PS417BP
Panel Mount Nuts – Plastic	P78652
Metal	P01531
Service Kits – Non-Relieving	PS422P
Relieving	PS423P
Springs –	
1-30 PSIG Range	P01175
1-60 PSIG Range	P01174
2-125 PSIG Range	P01173
1-15 PSIG Range	P01176

Specifications

Gauge Ports (2)	1/8 or 1/4 Inch (Can be used for Full Flow)
Port Threads	1/8, 1/4 Inch
Pressure & Temperature Ratings –	0 to 300 PSIG (0 to 2068 kPa) 32°F to 125°F (0°C to 52°C)
Secondary Pressure Ranges –	
Standard Pressure	2 to 125 PSIG (14 to 863 kPa)
Medium Pressure	1 to 60 PSIG (6.9 to 414 kPa)
Medium Pressure	1 to 30 PSIG (6.9 to 207 kPa)
Low Pressure	1 to 15 PSIG (6.9 to 104 kPa)
Weight – 14R, 14RM, 14**V* .....	.3 lb. (.14 kg)

Materials of Construction

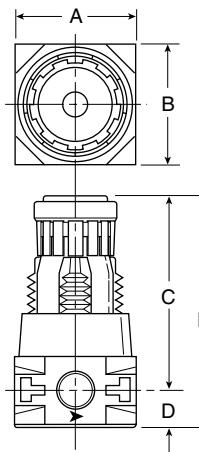
Adjusting Nut	Brass
Adjusting Stem & Spring	Steel
Body	Zinc
Bonnet, Seat, Piston & Valve Poppet	Plastic
Seals	Nitrile

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" – 18 SCFM[§]



Port Size	NPT
Without Gauge	
1/8"	P3A-RN91YNN
1/4"	P3A-RN92YNN
With Gauge	
1/8"	P3A-RN91YGN
1/4"	P3A-RN92YGN

Regulator Dimensions			
A	B	C	D
1.57 (40)	1.57 (40)	2.46 (63)	0.46 (12)
E			
2.92 (74)			

Inches (mm)

Standard part numbers shown, 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.

WARNING

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

Ordering Information

P3A-RN	9	1	Y	N	N
--------	---	---	---	---	---

Port Type

9. NPT
Female

Port Size

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

Relief / Knob

B. Relieving, Black Knob
Q. Non-Relieving,
Yellow Knob
V. Relieving, No Knob
Y. Relieving, Yellow Knob

Pressure / Gauge

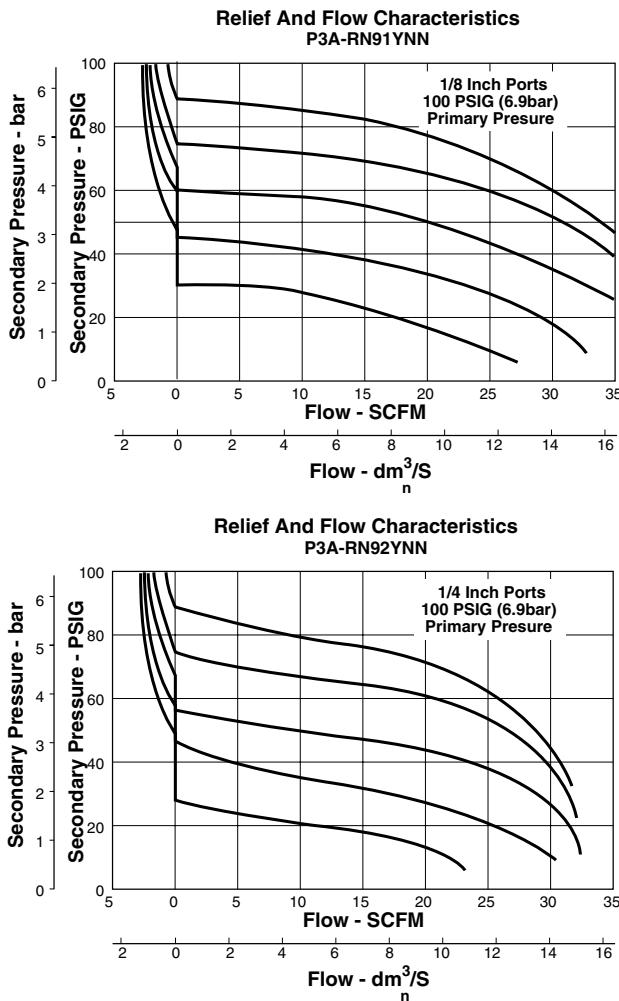
Without Gauge
A. 15 PSIG (0 to 1 bar)
L. 60 PSIG (0 to 4 bar)
N. 120 PSIG (0 to 8 bar)
Y. 30 PSIG (0 to 2 bar)
With Gauge
B. 15 PSIG (0 to 1 bar)
G. 120 PSIG (0 to 8 bar)
M. 60 PSIG (0 to 4 bar)
Z. 30 PSIG (0 to 2 bar)

Options

N. None

NOTE: BOLD OPTIONS ARE STANDARD.

A

Technical Information**Regulator Kits and Accessories**

Gauges – 30 PSIG, 1/8" NPT (0 to 200 kPa)	P530156
60 PSIG, 1/8" NPT (0 to 400 kPa)	P530154
160 PSIG, 1/8" NPT (0 to 1100 kPa)	P77413
Panel Mount Nut	P78652
Mounting Bracket Kit	PS417BP
Service Kits –	
Piston Non-Relieving	PS422
Piston Relieving	PS423
Poppet Service Kits – Balanced	PS425B
Unbalanced	PS424B
Springs –	
1-15 PSIG Spring	P01176
1-30 PSIG Spring	P01175
1-60 PSIG Spring	P01174
5-110 PSIG Spring	P01173
Tamperproof Kit	P01265

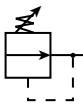
Specifications

Gauge Ports (2)	.....	1/8 Inch		
Operating Pressure Range –	PSIG	bar	kPa	
Primary –	Maximum	120	8.3	828
Secondary –				
15 PSIG Spring	Minimum	1	0.07	7
	Maximum	15	1.0	103
30 PSIG Spring	Minimum	6	0.4	41
	Maximum	30	2.1	207
60 PSIG Spring	Minimum	6	0.4	41
	Maximum	60	4.1	414
110 PSIG Spring	Minimum	6	0.4	41
	Maximum	110	7.6	758

Operating Temperature Range 32°F to 125°F (0°C to 52°C)**Port Threads** 1/8, 1/4 Inch**Weight** 0.23 lb. (0.10 kg.)**Materials of Construction**

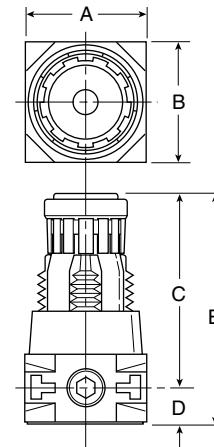
Adjusting Nut	.....	Brass
Adjusting Stem & Spring	.....	Steel
Poppet Return Spring	.....	Stainless Steel
Body	.....	Plastic
Bonnet, Seat & Piston	.....	Plastic
Seals	.....	Nitrile
Valve Poppet	.....	Plastic & Nitrile

P3A-W Regulators – Miniature (Water Service)



Features

- Lightweight plastic body.
- Constructed of F.D.A. listed materials.
- Unbalanced poppet standard.
- Non-rising adjusting knob.
- Compact, 2.96 inch (75 mm) high by 1.57 inch (40 mm) wide.
- Lightweight.
- Rolling diaphragm for superior performance and life.



Port Size	NPT
Without Gauge	
1/8"	P3A-WN91QNN
1/4"	P3A-WN92QNN

Standard part numbers shown, for other models refer to ordering information below.

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

Regulator Dimensions			
A	B	C	D
1.57 (40)	1.57 (40)	2.50 (64)	0.46 (12)

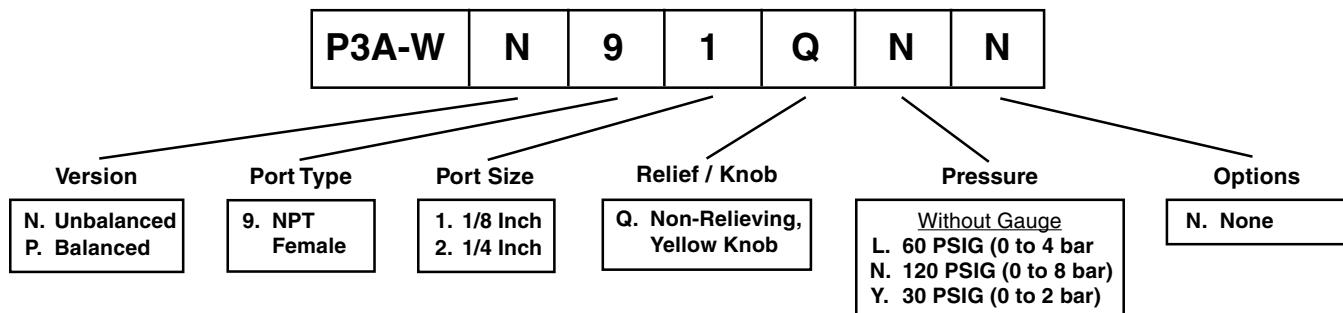
E
2.96 (75)

Inches (mm)

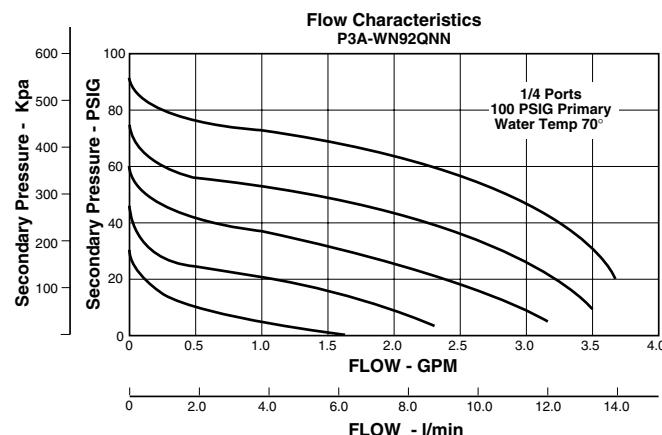
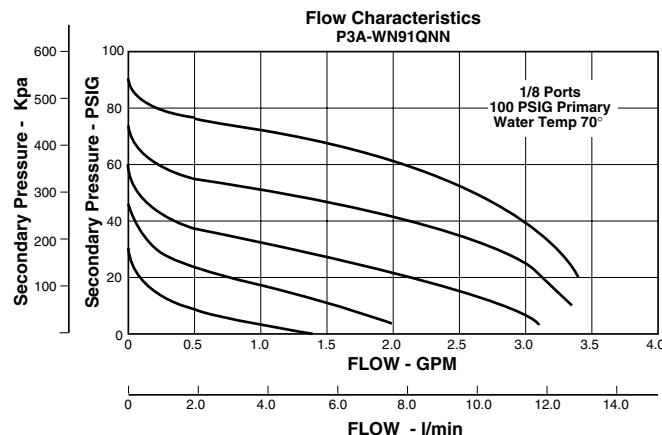
WARNING

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

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****Regulator Kits and Accessories**

Panel Mount Nut	P78652
Mounting Bracket Kit	PS417BP
Service Kits – Piston Non-Relieving	PS422
Poppet Service Kits – Balanced	PS425B
Unbalanced	PS424B
Springs – 1-30 PSIG Spring	P78659B
1-60 PSIG Spring	P00411
5-125 PSIG Spring	P78660B

Specifications

Gauge Ports (2) 1/8 Inch
(Can be used for full flow)

Pressure Rating –
Maximum Inlet Pressure 150 PSIG (1000 kPa)

Port Threads 1/8, 1/4 Inch

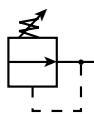
Temperature Rating Water 40°F to 125°F (4°C to 52°C)

Weight 0.23 lb. (0.10 kg.)

Materials of Construction

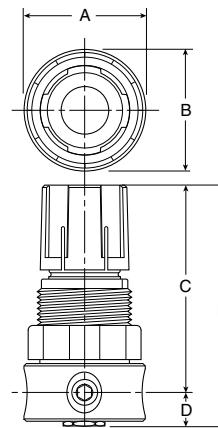
Adjusting Nut	Brass
Adjusting Stem	Brass
Body	Plastic
Bonnet, Seat & Piston	Plastic
Diaphragm	Santoprene
Seals	Buna N or Thermo Plastic Elastomer
Springs	Stainless Steel
Valve Poppet	Plastic / Nitrile

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



Port Size	NPT	BSPP
Without Gauge		
1/8"	20R013GC	20R013GC1
1/4"	20R113GC	20R113GC1

Standard part numbers shown, for other models refer to ordering information below.

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

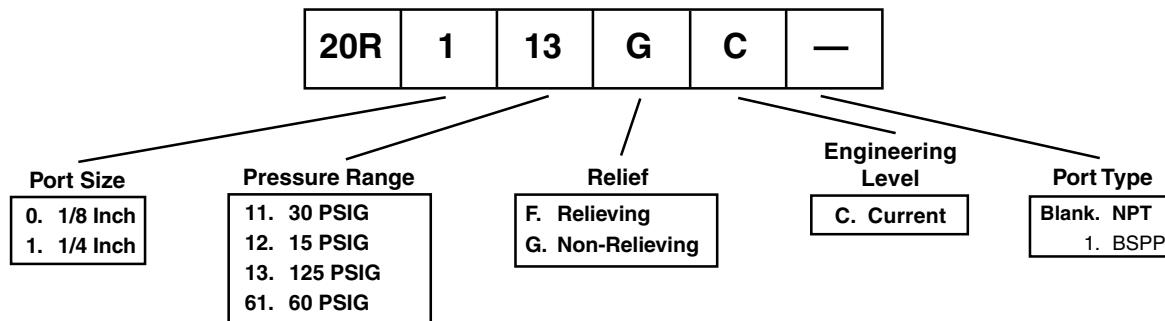
20R Regulator Dimensions		
A 1.56 (39.8)	B 1.56 (39.8)	C 2.56 (65)
D .50 (12.7)	E 3.06 (77.7)	

Inches (mm)

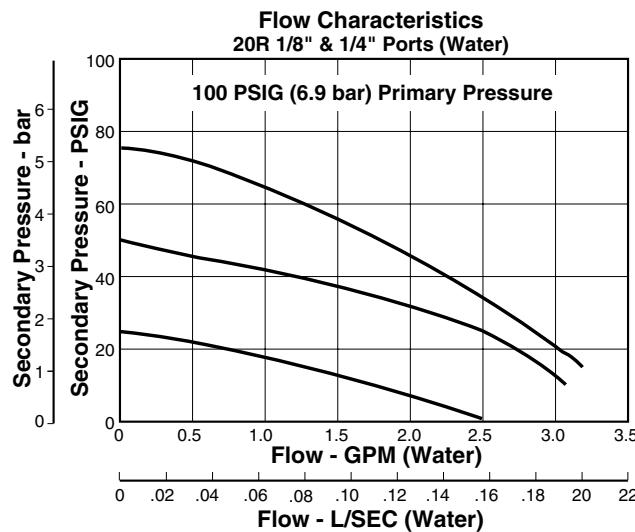
WARNING

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

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****20R Regulator Kits & Accessories**

Bonnet Kit	PCKR364Y
Bonnet Tamperproof Kit	PCKR364T
Panel Mount Nut	PR05X51
Mounting Bracket Kit	SA161X57
Repair Kits –	
Relieving	PRKR164Y
Non-Relieving	PRKR163Y

Specifications

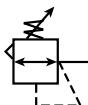
Gauge Ports (2)	1/8 Inch
Port Threads	1/8, 1/4 Inch
Pressure Rating – Maximum	0 to 300 PSIG (0 to 2068 kPa)
Secondary Pressure Ranges –	
Standard Pressure	2 to 125 PSIG (14 to 863 kPa)
Medium Pressure	1 to 60 PSIG (6.9 to 414 kPa)
Medium Pressure	1 to 30 PSIG (6.9 to 207 kPa)
Low Pressure	1 to 15 PSIG (6.9 to 104 kPa)
Temperature Ratings	32°F to 125°F (0°C to 52°C)
Weight .....	.5 lb. (.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

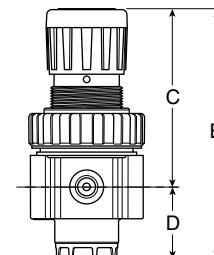
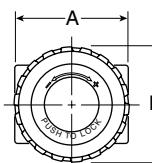


05R Regulators – Economy



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 §



Port Size	NPT	BSPP
Without Gauge		
1/4"	05R113AD	05R113AD1
3/8"	05R213AD	05R213AD1
With 160 PSI Gauge		
1/4"	05R118AD	05R118AD1
3/8"	05R218AD	05R218AD1

05R Regulator Dimensions		
A	B	C
2.00 (51)	2.06 (52)	3.16 (80)
D	E	
1.28 (32)	4.44 (17)	

Inches (mm)

Standard part numbers shown, for other models refer to ordering information below.

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.

WARNING

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

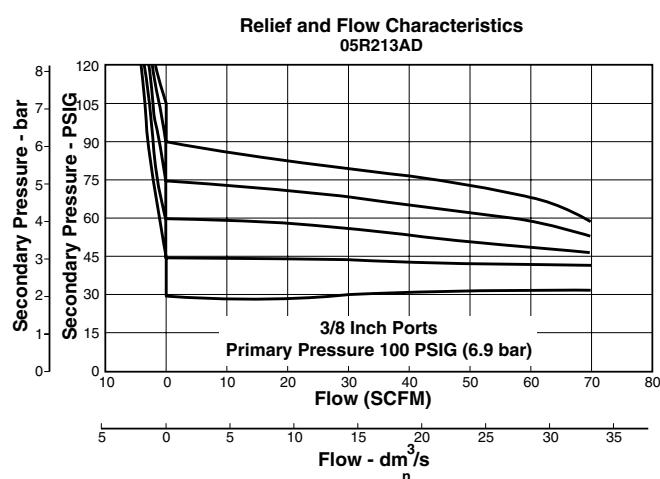
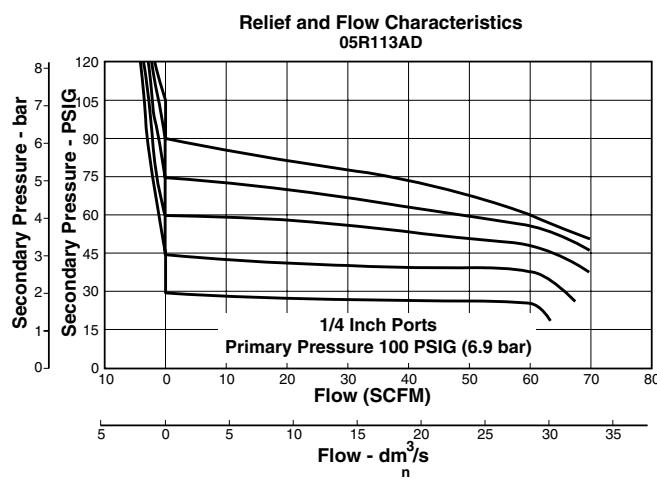
Ordering Information

05R	1	13	A	D	—	—	---	Preset / Pressure Limited
Port Size	Pressure Range	Relief	Engineering Level	Port Type	Options			
1. 1/4 Inch 2. 3/8 Inch	Without Gauge 10. 30 PSIG 11. 60 PSIG 12. 15 PSIG 13. 125 PSIG With Gauge** 17. 30 PSIG 16. 60 PSIG 18. 125 PSIG 19. 200 PSIG	A. Relieving L. Non-Relieving	D. Current	Blank. NPT 1. BSPP 2. BSPT	Blank. No Options L.† Preset Non-Adjustable P.† Preset Adjustable S.† Pressure Limiter Max. Adjustable T.† Pressure Limiter Max. Non- Adjustable V. Fluorocarbon	Blank. None XXX* Preset Pressure XXX* Pressure Limited	* Available Preset / Pressure Limited Range, 10 to 90 PSIG in 5 PSIG increments. For higher pressures, contact factory. (Example: 065 = 65 PSIG)	† Inlet Pressure is 100 PSIG. For other pressures, contact factory.
	** Includes 1-1/2" Dial Face Gauge							

NOTE: **BOLD OPTIONS ARE STANDARD.**



Technical Information

A


05R Regulator Kits & Accessories

Bonnet Assembly Kit	PS915P
Control Knob	P04420
Gauges – 1-1/2" Dial Face	
30 PSIG (0 to 200 kPa)	RRP-96-663
60 PSIG (0 to 400 kPa)	RRP-96-664
160 PSIG (0 to 1100 kPa)	RRP-96-665
300 PSIG (0 to 2000 kPa)	RRP-96-666
2" Dial Face	
60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
Mounting Bracket Kit	PS963P
Panel Mount Nut – Metal	PS964P
Springs – 1-30 PSIG Range	
1-60 PSIG Range	P04426
2-125 PSIG Range	P04425
2-200 PSIG	P02934
Service Kit – Relieving	
Relieving (Fluorocarbon)	PS908VP
Non-Relieving	PS909P
Non-Relieving (Fluorocarbon)	PS909VP

Specifications

Gauge Ports (2)	1/4 Inch
Port Threads	1/4, 3/8 Inch
Primary Pressure Rating –	
Maximum Primary Pressure	250 PSIG (17.2 bar) Max.
For Secondary Pressure Ranges see above charts.	
Temperature Rating	32°F to 175°F (0°C to 80°C)
Weight	1.1 lb. (.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

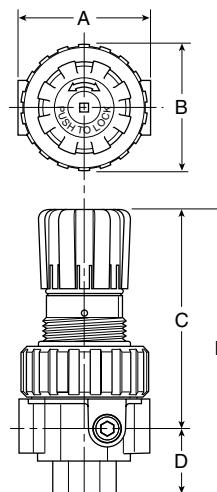


06R Regulators – Compact



Features

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



Port Size	NPT	BSPP
Without Gauge		
1/4"	06R113AC	06R113AC1
3/8"	06R213AC	06R213AC1
1/2"	06R313AC	06R313AC1
With 160 PSI Gauge		
1/4"	06R118AC	06R118AC1
3/8"	06R218AC	06R218AC1
1/2"	06R318AC	06R318AC1

Standard part numbers shown, 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.

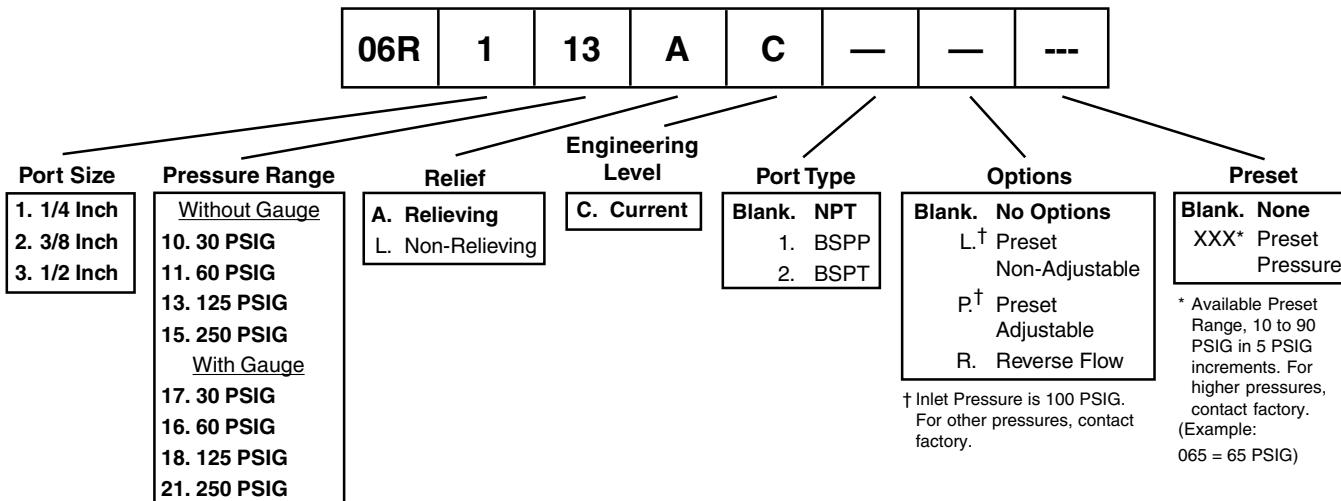
06R Regulator Dimensions		
A 2.81 (71)	B 2.74 (70mm)	C 4.69 (119)
D 1.39 (35)	E 6.08 (154)	

Inches (mm)

WARNING

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

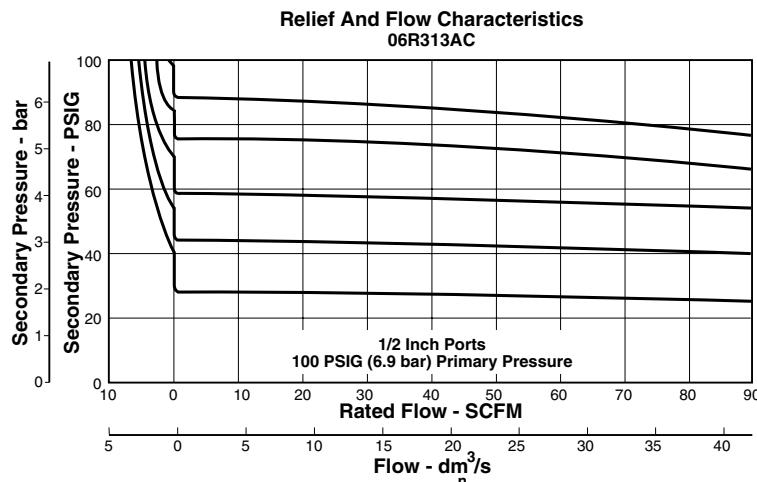
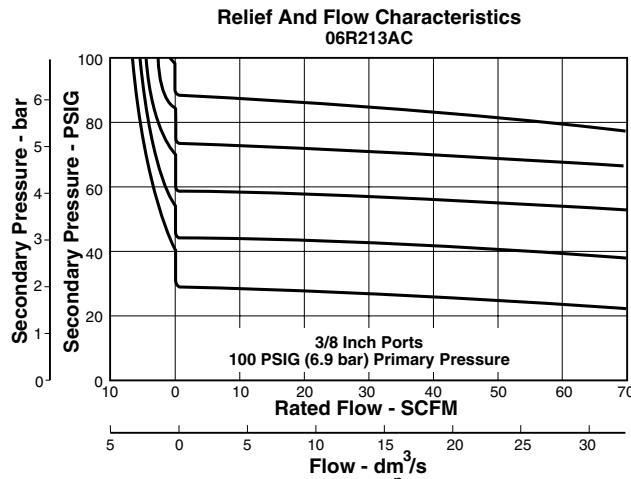
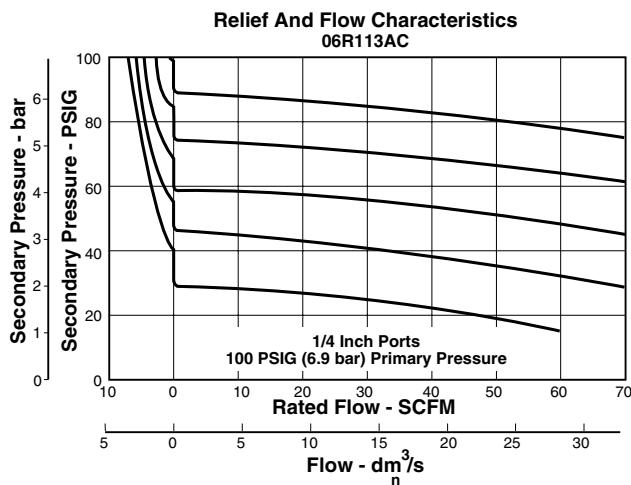
Ordering Information



NOTE: **BOLD** OPTIONS ARE STANDARD.



Technical Information

A


06R Regulator Kits & Accessories

Bonnet Assembly Kit	PS715P
Control Knob	P04069B
Gauges – 60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
Mounting Bracket Kit (Includes Panel Mount Nut)	PS707P
Panel Mount Nut – Plastic	P04082
Metal	P04079B
Reverse Flow Service Conversion Kit –	
Relieving	PS708RP
Non-Relieving	PS709RP
Service Kit – Relieving (Includes Poppet)	PS708P
Non-Relieving (Includes Poppet)	PS709P
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	1/4, 3/8, 1/2 Inch
Primary Pressure Rating –	Maximum Primary Pressure
	250 PSIG (1725 kPa)
Secondary Pressure Ranges –	
	Standard Pressure
	2 to 125 PSIG (14 to 863 kPa)
	Low Pressure
	1 to 60 PSIG (6.9 to 414 kPa)
	High Pressure
	5 to 250 PSIG (35 to 1725 kPa)
Temperature Rating	32°F to 175°F (0°C to 80°C)
Weight	1.6 lb. (.7 kg)
Materials of Construction	
Adjusting Stem	Steel
Body	Zinc
Bonnet, Piston Stem, Valve Poppet & Cap	Plastic
Collar, Knob	Plastic
Diaphragm	Nitrile
Seals	Nitrile
Springs – Poppet	Stainless
Control	Steel

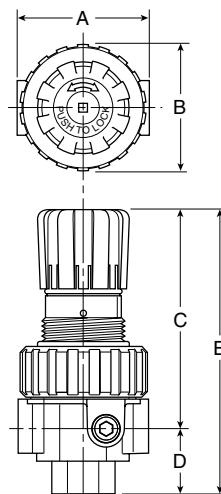


07R Regulators – Standard



Features

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



Port Size	NPT	BSPP
Without Gauge		
3/8"	07R213AC	07R213AC1
1/2"	07R313AC	07R313AC1
3/4"	07R413AC	07R413AC1
With 160 PSI Gauge		
3/8"	07R218AC	07R218AC1
1/2"	07R318AC	07R318AC1
3/4"	07R418AC	07R418AC1

Standard part numbers shown, 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.

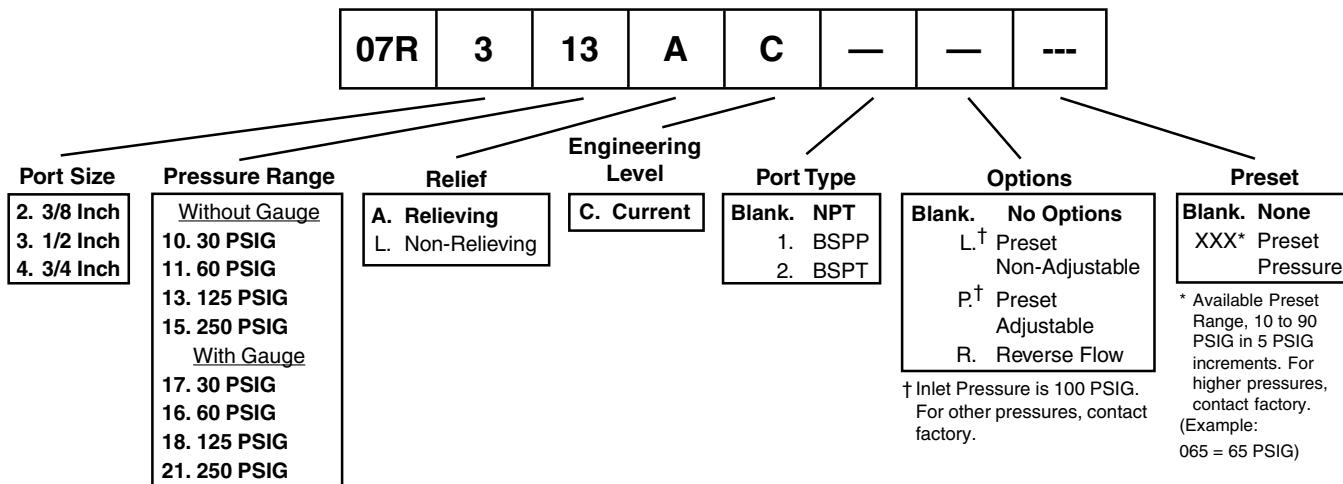
07R Regulator Dimensions		
A	B	C
3.24 (82)	2.74 (70)	4.79 (122)
D	E	
1.61 (41)	6.40 (163)	

Inches (mm)

WARNING

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

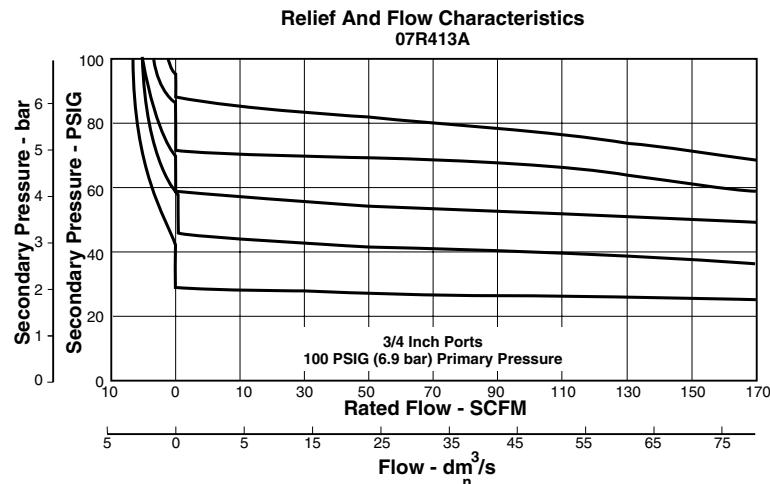
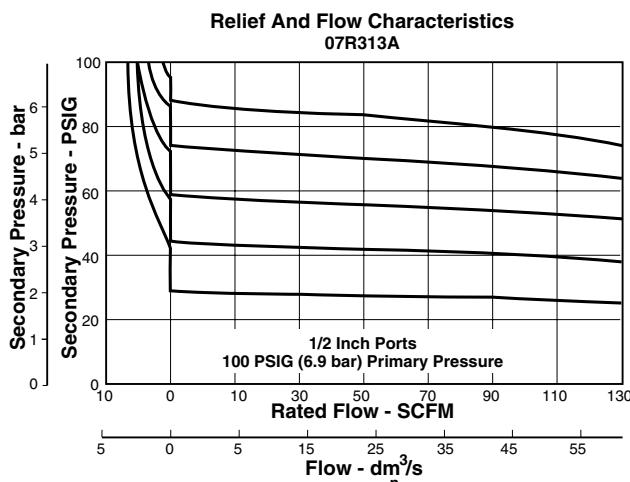
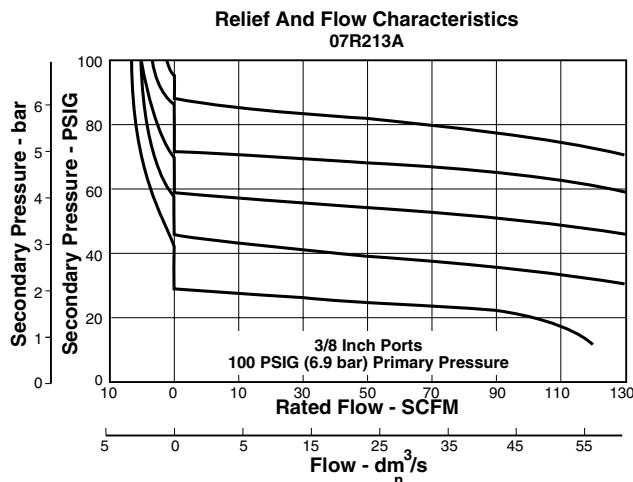
Ordering Information



NOTE: **BOLD** OPTIONS ARE STANDARD.



Technical Information

A


07R Regulator Kits & Accessories

Bonnet Assembly Kit	PS715P
Control Knob	P04069B
Gauges – 60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
Mounting Bracket Kit (Includes Panel Mount Nut)	PS807P
Panel Mount Nut – Plastic	P04082
Metal	P04079B
Reverse Flow Service Conversion Kit –	
Relieving	PS808RP
Non-Relieving	PS809RP
Service Kit – Relieving (Includes Poppet)	PS808P
Non-Relieving (Includes Poppet)	PS809P
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 3/8, 1/2, 3/4 Inch

Primary Pressure Rating –
Maximum Primary Pressure 250 PSIG (1725 kPa)

Secondary Pressure Ranges –

Standard Pressure 2 to 125 PSIG (14 to 863 kPa)
Low Pressure 1 to 60 PSIG (6.9 to 414 kPa)

High Pressure 5 to 250 PSIG (35 to 1725 kPa)

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

Weight 2.5 lb. (1.1 kg)

Materials of Construction

Adjusting Stem	Steel
Body	Zinc
Bonnet, Piston Stem, Valve Poppet & Cap	Plastic
Collar, Knob	Plastic
Diaphragm	Nitrile
Seals	Nitrile
Springs – Poppet	Stainless Steel
Control	Steel

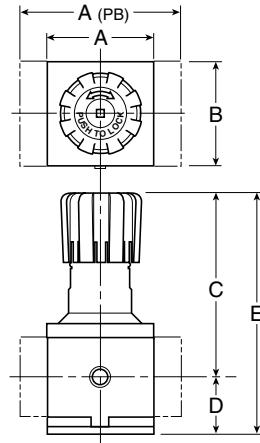


P3NR Regulators – Hi-Flow



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	BSPP
Without Gauge		
3/4"	P3NRA96BNN	P3NRA16BNN
1"	P3NRA98BNN	P3NRA18BNN
1-1/2" #	P3NRA9PBNN	P3NRA1PBNN
With 160 PSI Gauge		
3/4"	P3NRA96BNG	P3NRA16BNG
1"	P3NRA98BNG	P3NRA18BNG
1-1/2" #	P3NRA9PBNG	P3NRA1PBNG

P3NR Regulator Dimensions		
A 3.62 (92)	A (PB) 5.91 (150)	B 3.62 (92)
C 6.38 (162)	D 2.08 (53)	E 8.46 (215)

Inches (mm)

Standard part numbers shown, for other models refer to ordering information below.

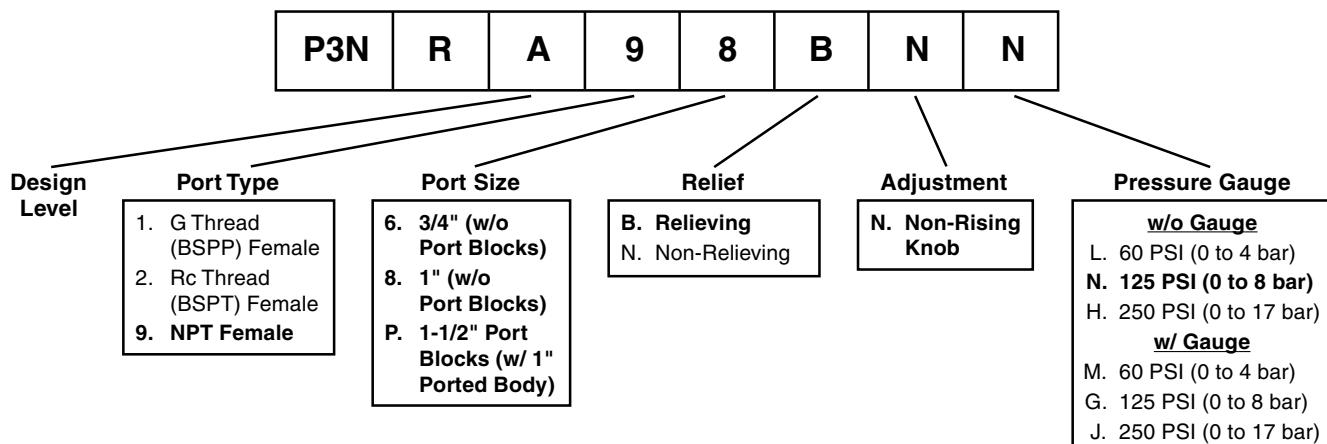
1" Port Body with 1-1/2" Port Block.

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

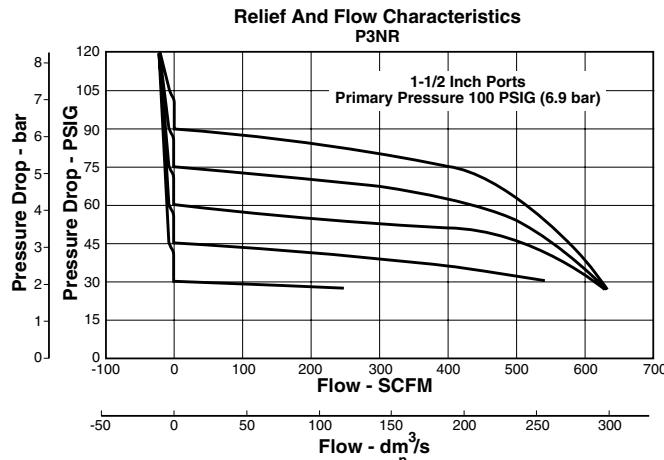
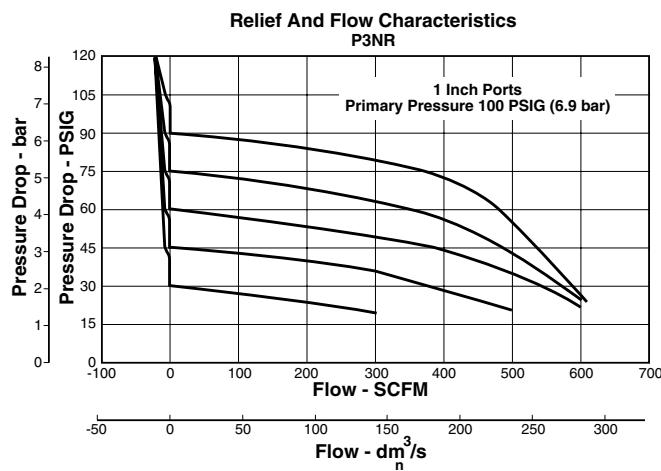
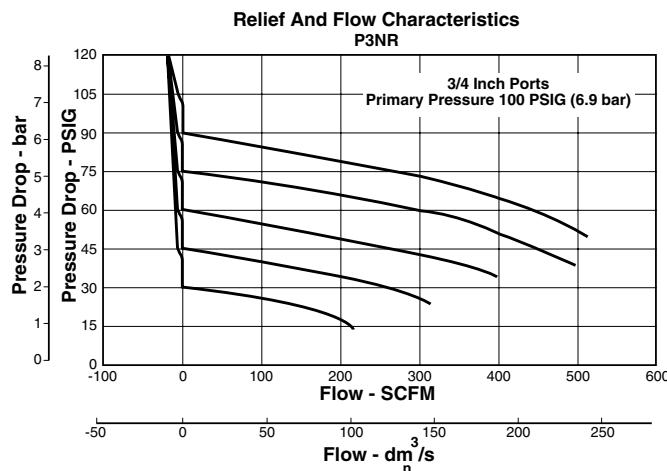
WARNING

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

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

**Technical Information****A****P3NR Regulator Kits & Accessories**

Control Knob	P3NKA00PN
Gauges – 60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
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

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

Specifications

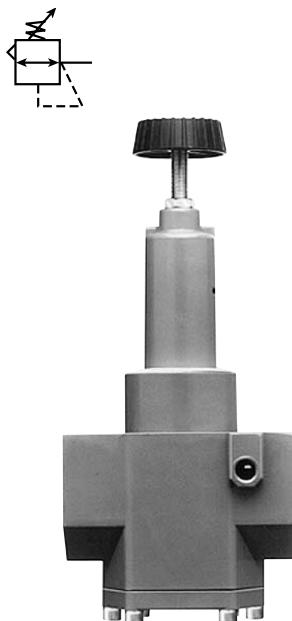
Gauge Ports (2)	1/4 Inch
(Can be used as additional High Flow 1/4 Inch Outlet Ports)	
Port Threads	3/4, 1, 1-1/2" Inch
Primary Pressure Rating –	
Maximum Primary Pressure	250 PSIG (1725 kPa)
Temperature Rating	32°F to 175°F (0°C to 80°C)
Weight – 3/4"	4.2 lb. (1.9 kg)
1"	4.2 lb. (1.9 kg)
1-1/2" #	5.3 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

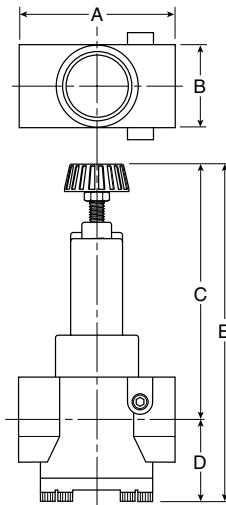
1" Port Body with 1-1/2" Port Block.

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[§]



Port Size	NPT
Without Gauge	
2"	09R813BA

Standard part numbers shown, 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.

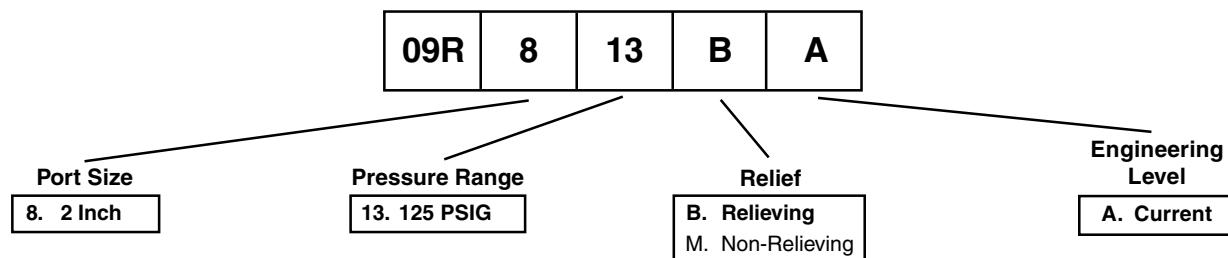
09R Regulator Dimensions		
A	B	C
5.30 (135)	3.60 (91)	9.10 (231)
D 2.80 (71)	E 11.90 (302)	

Inches (mm)

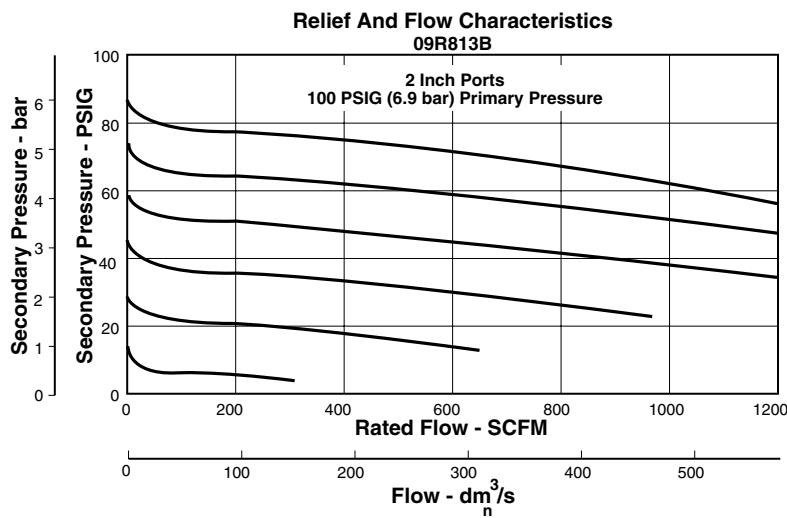
WARNING

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

Ordering Information



NOTE: **BOLD** OPTIONS ARE STANDARD.

Technical Information**A****09R Regulator Kits & Accessories**

Body Service Kit	PS603P
Gauges – 160 PSIG (0 to 1100 kPa)	P781642
Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
Mounting Bracket Kit	PS605P
Service Kit – Non-Relieving	PS604P
Service Kit – Relieving	PS626P
Springs – 2-125 PSIG Range	PS602P

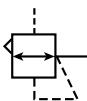
Specifications

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	250 PSIG (1725 kPa)
Secondary Pressure Range –	10 to 125 PSIG (69 to 863 kPa)
Temperature Rating	32°F to 150°F (0°C to 66°C)
Weight	10.82 lb. (53 kg)

Materials of Construction

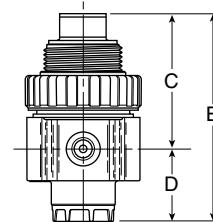
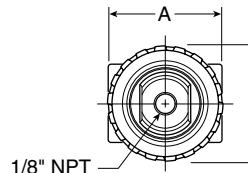
Adjusting Stem & Springs	Steel
Body	Zinc Alloy, Die Cast
Bonnet, Piston Stem, Valve Poppet & Cap	Aluminum
Piston, Cap	Plastic
Seals	Nitrile

10R Pilot Controlled Regulator – Economy



Features

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



Port Size	NPT	BSPP
Without Gauge		
1/4"	10R115PB	10R115PB1
3/8"	10R215PB	10R215PB1
With 160 PSI Gauge		
1/4"	10R121PB	10R121PB1
3/8"	10R221PB	10R221PB1

10R Regulator Dimensions		
A	B	C
2.00 (51)	2.06 (52)	2.43 (61)
D	E	
1.28 (32)	3.71 (93)	

Inches (mm)

Standard part numbers shown, for other models refer to ordering information below.

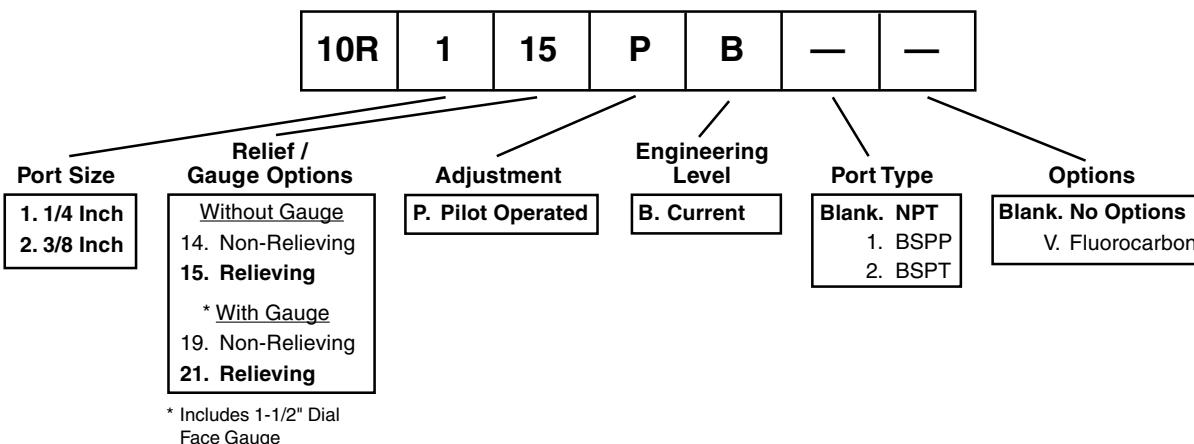
NOTE: 1.53 Dia. (39mm) hole required for panel mounting.

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

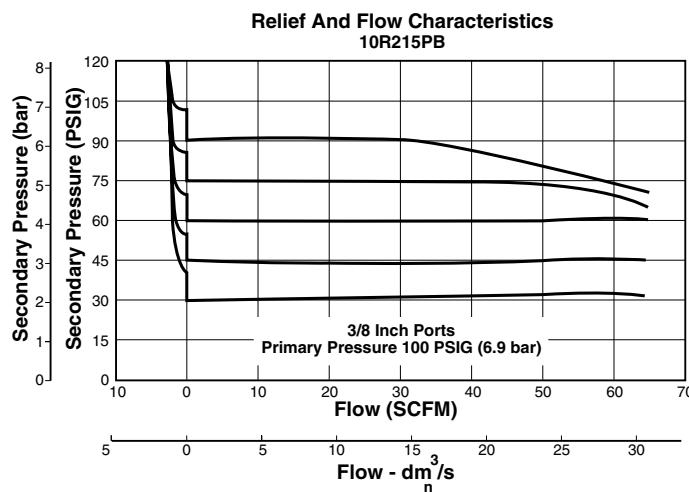
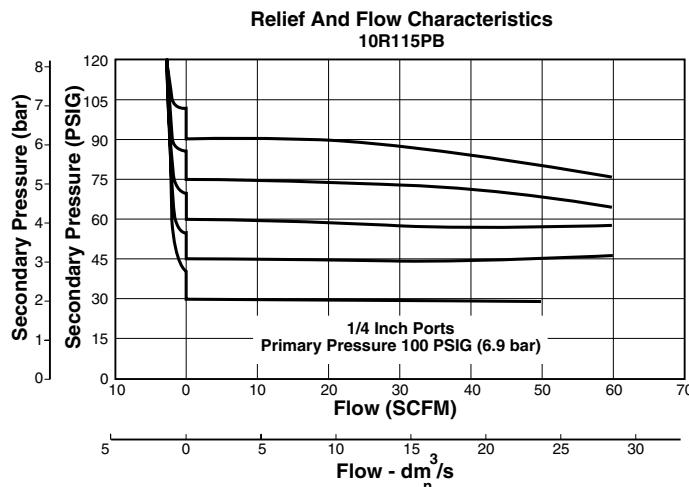
WARNING

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

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****10R Pilot Regulator Kits & Accessories****Gauges – 1-1/2" Dial Face**

30 PSIG (0 to 200 kPa)	RRP-96-663
60 PSIG (0 to 400 kPa)	RRP-96-664
160 PSIG (0 to 1100 kPa)	RRP-96-665
300 PSIG (0 to 2000 kPa)	RRP-96-666

2" Dial Face

60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643

Mounting Bracket Kit	PS963P
----------------------------	--------

Non-Relieving Service Kit	PS947P
---------------------------------	--------

Panel Mount Nut – Metal	PS964P
-------------------------------	--------

Pilot Conversion Kit	PS945P
----------------------------	--------

Relieving Service Kit	PS949P
-----------------------------	--------

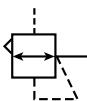
Specifications

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 .....	.90 lb. (.41 kg)

Materials of Construction

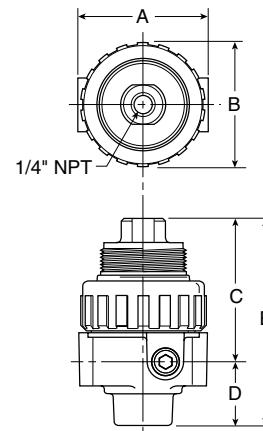
Body	Zinc
Piston & Poppet	Plastic
Seals	Nitrile
Spring – Poppet	Steel

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	NPT	BSPP
Without Gauge		
1/4"	11R115PC	11R115PC1
3/8"	11R215PC	11R215PC1
1/2"	11R315PC	11R315PC1
With 160 PSI Gauge		
1/4"	11R121PC	11R121PC1
3/8"	11R221PC	11R221PC1
1/2"	11R321PC	11R321PC1

11R Regulator Dimensions		
A 2.81 (71)	B 2.74 (70)	C 3.05 (77)
D 1.39 (35)	E 4.44 (113)	

Inches (mm)

Standard part numbers shown, for other models refer to ordering information below.

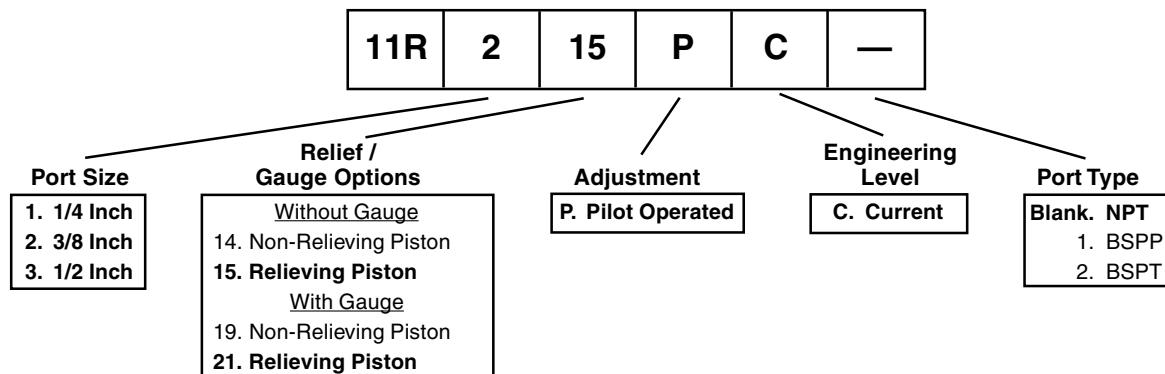
NOTE: 2.00 Dia. (50.8mm) hole required for panel mounting.

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

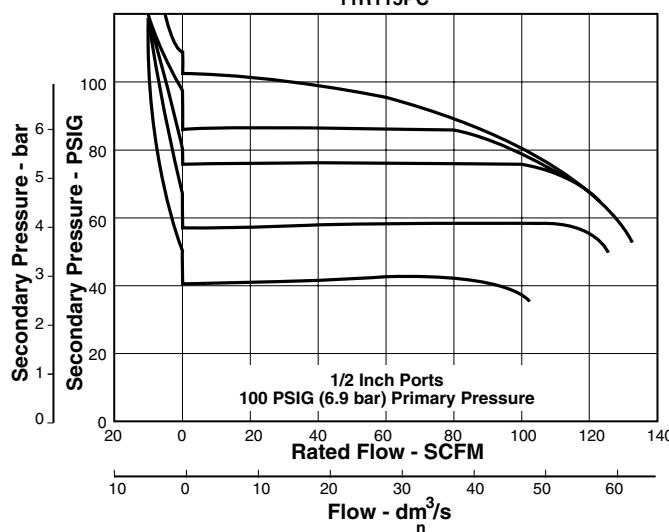
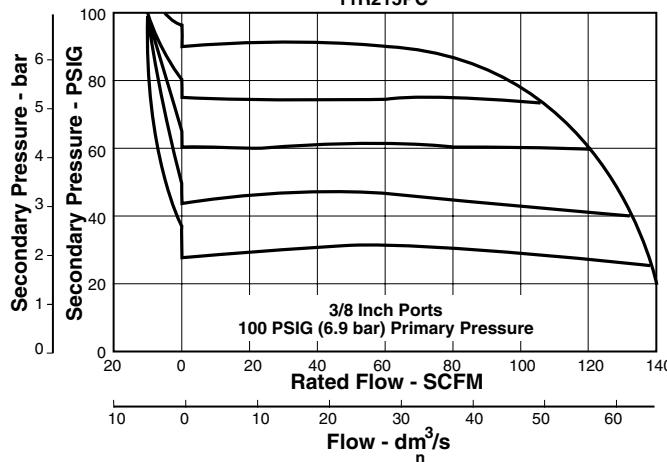
WARNING

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

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****Relief And Flow Characteristics
11R115PC****Relief And Flow Characteristics
11R215PC****11R Pilot Regulator Kits & Accessories**

Body Service Kits – Seat Insert Kit	PS713P
Gauges – 60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Mounting Bracket Kit (Includes Panel Mount Nut)	PS707P
Panel Mount Nut – Plastic	P04082
Metal	P04079
Pilot Conversion Kit – Relieving	PS745P
Service Kits – Non-Relieving	PS747P
Relieving	PS749P

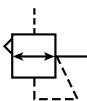
Specifications

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 1725 kPa) 32°F to 175°F (0°C to 80°C)
Weight	1.3 lb. (.58 kg.)

Materials of Construction

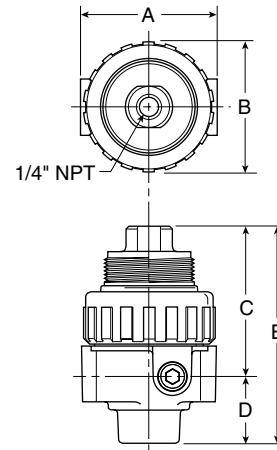
Body & Pilot Cap	Zinc
Piston, Valve Poppet, & Collar	Plastic
Seals	Nitrile
Springs	Steel

12R Pilot Controlled Regulator – Standard



Features

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



Port Size	NPT	BSPP
Without Gauge		
3/8"	12R215PB	12R215PB1
1/2"	12R315PB	12R315PB1
3/4"	12R415PB	12R415PB1
With 160 PSI Gauge		
3/8"	12R221PB	12R221PB1
1/2"	12R321PB	12R321PB1
3/4"	12R421PB	12R421PB1

12R Regulator Dimensions		
A	B	C
3.24 (82)	2.74 (70)	3.15 (80)
D	E	
1.61 (41)	4.76 (121)	

Inches (mm)

Standard part numbers shown, for other models refer to ordering information below.

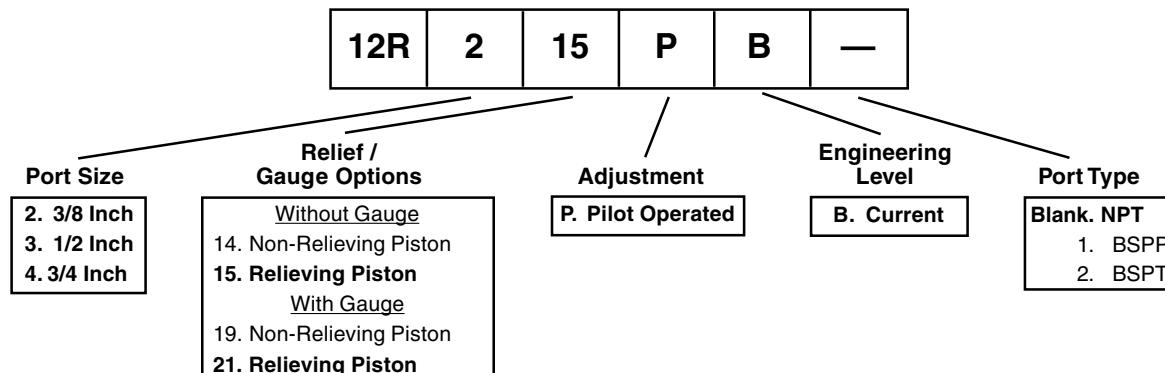
NOTE: 2.00 Dia. (50.8mm) hole required for panel mounting.

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

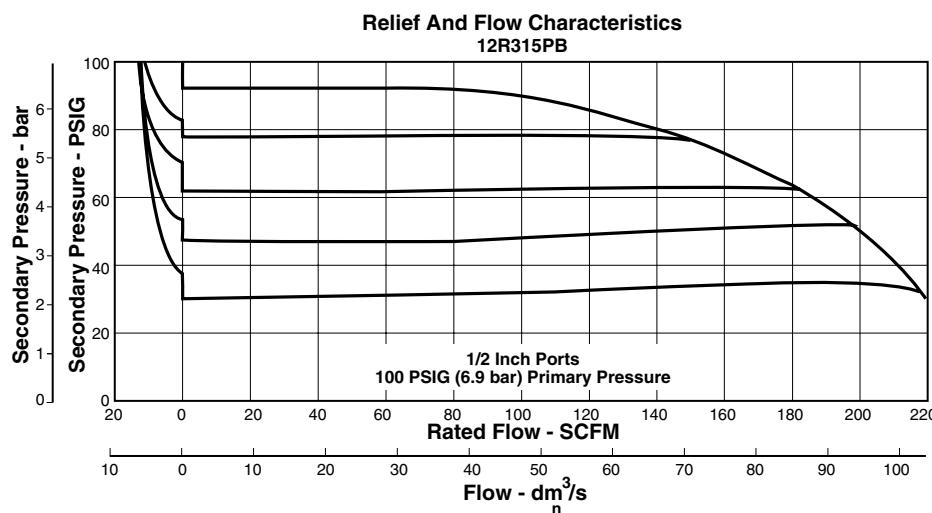
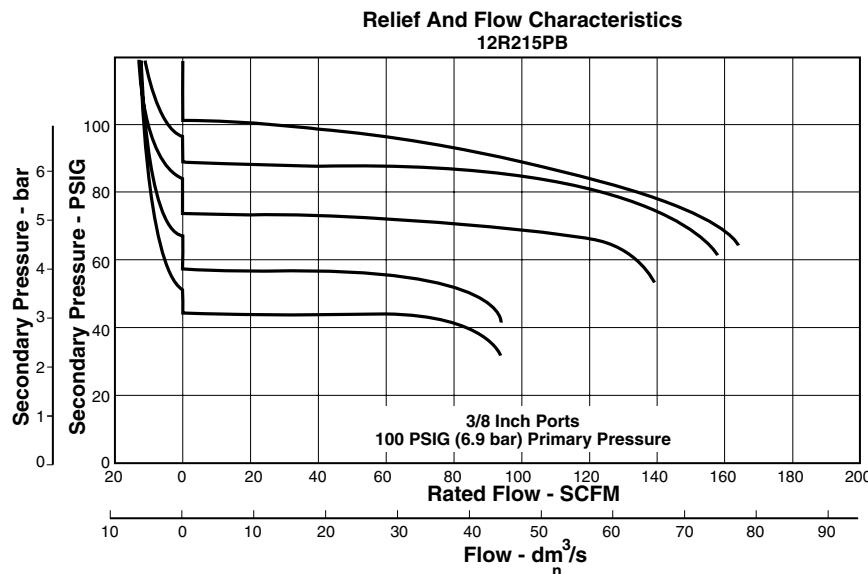
WARNING

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

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****12R Pilot Regulator Kits & Accessories**

Body Service Kits – Seat Insert Kit	PS813P
Gauges – 60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Mounting Bracket Kit (Includes Panel Mount Nut)	PS807P
Panel Mount Nut – Plastic	P04082
Metal	P04079
Pilot Conversion Kit – Relieving	PS745P
Service Kits – Non-Relieving	PS847P
Relieving	PS849P

Specifications

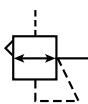
Gauge Ports (2)	.....	1/4 Inch (Can be used as additional Full Flow 1/4 Inch Outlet Ports)
Port Threads	.....	3/8, 1/2, 3/4 Inch
Pressure & Temperature Rating –	0 to 250 PSIG (0 to 1725 kPa) 32°F to 175°F (0°C to 80°C)	
Weight	.....	2.0 lb. (.91 kg)

Materials of Construction

Body & Pilot Cap	.....	Zinc
Piston, Valve Poppet, & Collar	.....	Plastic
Seals	.....	Nitrile
Springs	.....	Steel

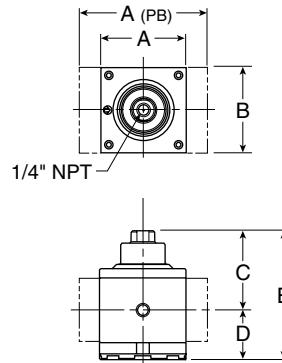


P3NR Pilot Controlled Regulator - Hi-Flow



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	BSPP
Without Gauge		
3/4"	P3NRA96BPP	P3NRA16BPP
1"	P3NRA98BPP	P3NRA18BPP
1-1/2"	P3NRA9PBPP	P3NRA1PBPP
With 160 PSI Gauge		
3/4"	P3NRA96BPG	P3NRA16BPG
1"	P3NRA98BPG	P3NRA18BPG
1-1/2"	P3NRA9PBPG	P3NRA1PBPG

P3NR Regulator Dimensions		
A	A (PB)	B
3.62 (92)	5.91 (150)	3.62 (92)
C	D	E
3.38 (86)	2.08 (53)	5.46 (139)

Inches (mm)

Standard part numbers shown, 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

P	3	N	R	A	9	8	B	P	P
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

Design Level

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

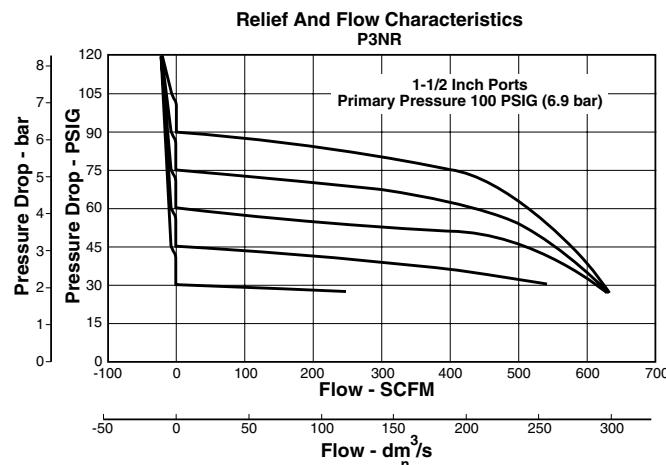
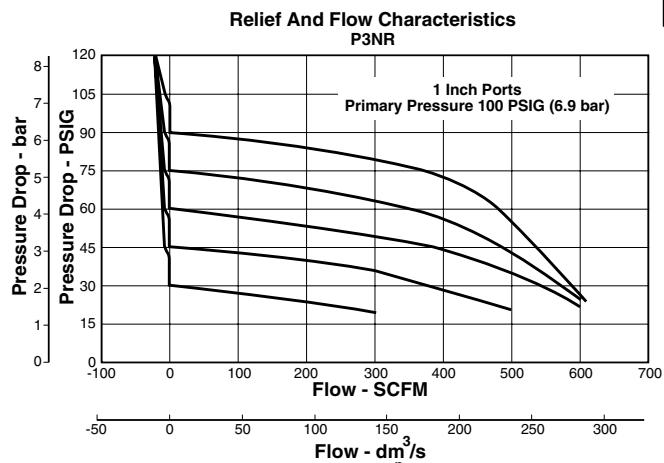
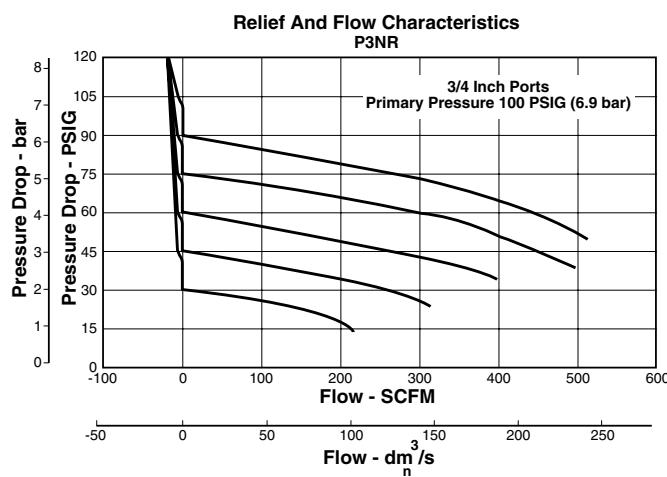
Adjustment

- 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 17.2 bar) |

NOTE: **BOLD** OPTIONS ARE STANDARD.

**Technical Information****A****P3NR Pilot Regulator Kits & Accessories**

Gauges – 60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Mounting Bracket Kit*	P3NKA00MW
Service Kit – Relieving	P3NKA00PD
Non-Relieving	P3NKA00PT

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.

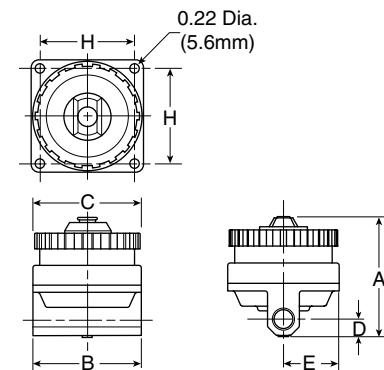
* If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.

51R Regulator – Relieving



Features

- Pressure reference indicating dial face.
- Non-rising, pressure-adjustment dial.
- Self-relieving.
- Full pressure adjustment in less than one full turn.
- Recommended for pilot-air applications.
- Flow capacity: 1/4" – 0.7 SCFM*



Port Size	Standard Pressure 5 to 160 PSIG (0.34 to 11 bar)	Low Pressure 2 to 40 PSIG (0.14 to 3 bar)
1/4"	51R126RA	51R125RA

Standard part numbers shown; for other models refer to ordering information below.

* Inlet pressure 100 psig (6.9 bar). Secondary pressure 90 psig (6.2 bar).

SCFM = Standard cubic feet per minute at 100 PSIG inlet, 90 PSIG no-flow secondary setting and 25 PSIG pressure drop.

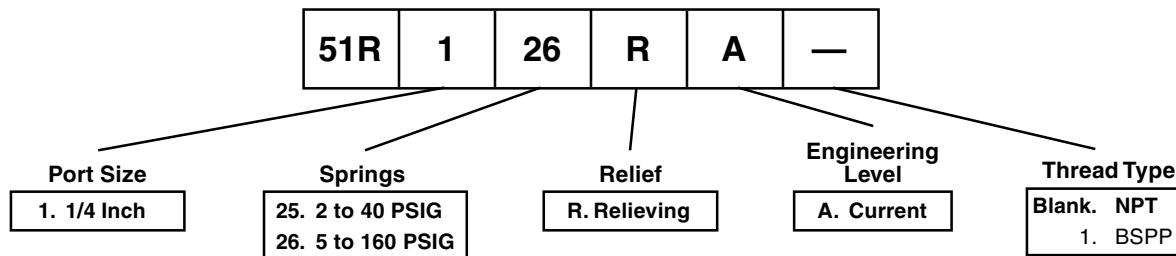
51R Regulator Dimensions		
A	B	C
2.80 (71)	2.60 (66)	2.60 (66)
D 0.40 (10)	E 1.30 (33)	H 2.20 (55.9)

Inches (mm)

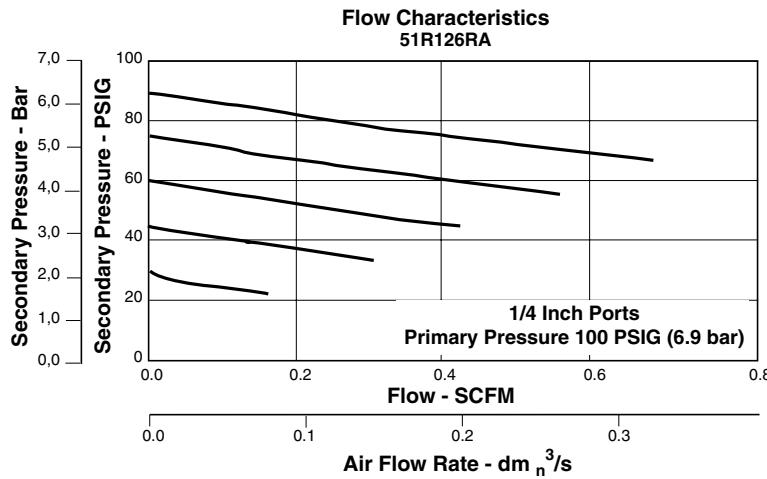
WARNING

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

Ordering Information



NOTE: Bold items are standard.

Technical Information**A****51R Regulator Kits & Accessories**

Adjustment Dial Knob	RRP-16-024-80
O-ring, Repair Kit	GRP-95-260-80
Piston and Bonnet Repair Kit	RRP-95-765-80
Spring, Regulation, Belleville Washer	
2 to 40 PSIG (276 kPa)	RRP-95-906-80
5 to 160 PSIG (1103 kPa)	RRP-95-905-80
Tamper Resistant Kit	RRP-95-585-80
Valve, Pilot with O-ring and Valve Spring	RRP-96-934-80

Specifications

Adjusting Range Pressure	2 to 40 PSIG (14 to 276 kPa) 5 to 160 PSIG (34 to 1103 kPa)
Bleed Rate	0.05 SCFM
Maximum Operating Temperature	150°F (65.5°C)
Maximum Supply Pressure	300 PSIG (2068 kPa)
Port Threads	1/4"
Weight	1.3 lb. (0.5 kg)

Materials of Construction

Body	Zinc
Bonnet	Zinc / Brass
Piston	Acetal
Seals	Nitrile
Springs	Steel
Valve Assembly	Brass / Nitrile / Acetal

52R Regulator – Relieving



Features

- Balanced poppet design.
- Non-rising, pressure-adjusting dial.
- High-relief flow (3/16" relief orifice).
- Two 1/4" gauge ports.
- Piston operated.
- Flow capacity: 1/4" – 117 SCFM*
 3/8" – 180 SCFM*
 1/2" – 195 SCFM*
 3/4" – 220 SCFM*

Port Size	High Flow 5 to 160 PSIG (0.34 to 11 bar)	Low Pressure 2 to 40 PSIG (0.14 to 3 bar)
1/4"	52R126RA	52R125RA
3/8"	52R226RA	52R225RA
1/2"	52R326RA	52R325RA
3/4"	52R426RA	52R425RA

Standard part numbers shown; for other models refer to ordering information below.

* Inlet pressure 100 PSIG (6.9 bar). Secondary pressure (1/4, 1/2 & 3/4) 90 PSIG (6.2 bar);
 (3/8) 80 PSIG (5.5 bar).

SCFM = Standard cubic feet per minute at 100 PSIG inlet,
 90 PSIG no-flow secondary setting and 25 PSIG pressure drop.

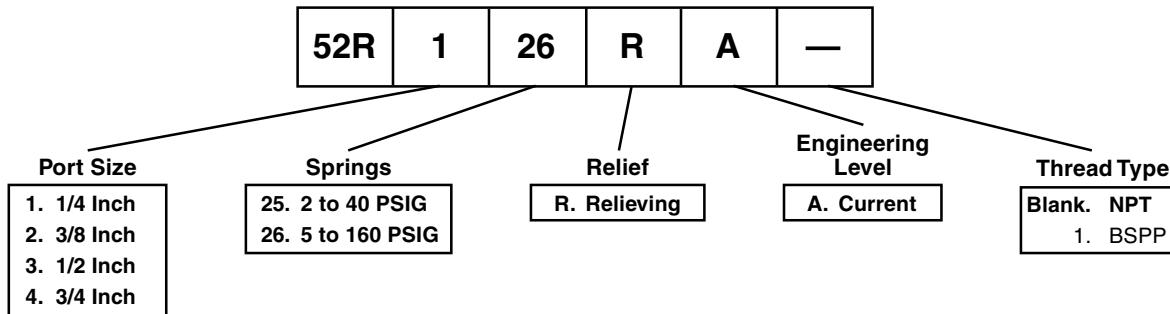
52R Regulator Dimensions		
A 4.10 (104)	B 3.20 (81)	C 2.60 (66)
D 0.95 (24)	E 1.60 (41)	F 4.30 (109)
G 2.70 (68.5)	H 2.20 (55.9)	

Inches (mm)

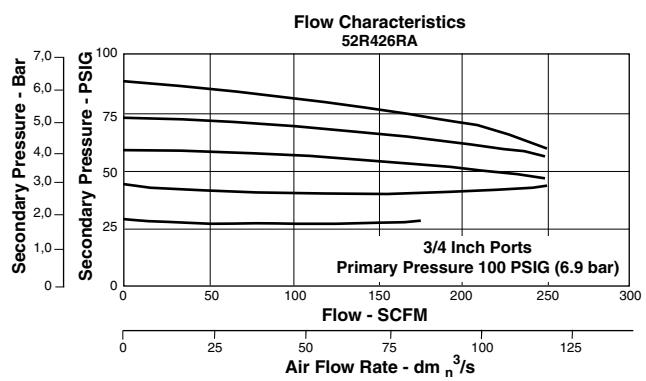
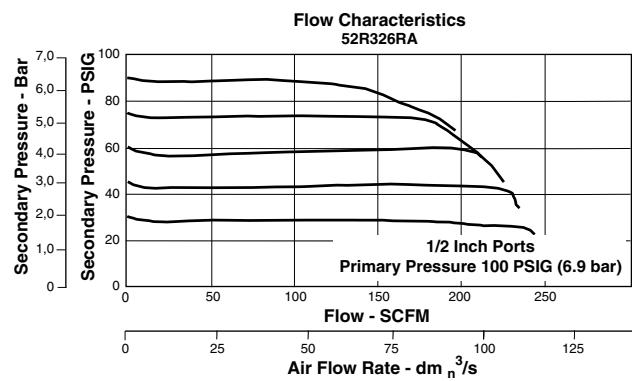
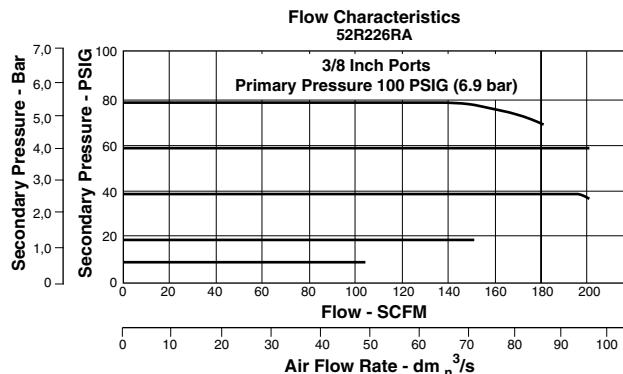
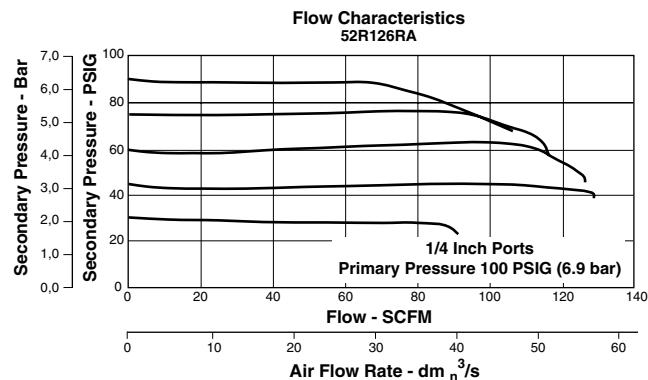
WARNING

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

Ordering Information



NOTE: Bold items are standard.

Technical Information**A****52R Regulator Kits & Accessories**

Adjustment Dial Knob	RRP-16-024-80
O-ring, Repair Kit	GRP-95-260-80
Piston Bottom and O-ring Seal	RRP-95-192-80
Pistons and Bonnet Repair Kit	RRP-95-766-80
Spring, Regulation, Belleville Washer 2 to 40 PSIG Range	RRP-95-906-80
5 to 160 PSIG Range	RRP-95-905-80
Tamper Resistant Kit	RRP-95-585-80
Valve, Main with U-Cup Seal & Bottom Plug	RRP-95-914-80
Valve, Main with U-Cup Seal	RRP-95-151-80
Valve, Pilot with O-ring and Valve Spring	RRP-96-934-80

Specifications

Adjusting Range Pressure	2 to 40 PSIG (14 to 276 kPa) 5 to 160 PSIG (34 to 1103 kPa)
Bleed Rate	0.05 SCFM
Gauge Ports	Two Ports 1/4" (Can be used as additional High Flow 1/4 Inch Outlet Ports)
Maximum Operating Temperature	150°F (65.5°C)
Maximum Supply Pressure	300 PSIG (2068 kPa)
Port Threads	1/4", 3/8", 1/2", 3/4"
Weight	2.3 lb. (1.04 kg)

Materials of Construction

Body	Zinc
Bonnet	Zinc / Brass
Piston	Acetal
Seals	Nitrile
Springs	Steel
Valve Assembly	Brass / Nitrile / Acetal

53R Regulator – Relieving



Features

- Balanced poppet design.
- Non-rising, pressure-adjusting dial.
- High-relief flow (3/16" relief orifice).
- Two 1/4" gauge ports.
- Piston operated.
- Flow capacity: 3/4" – 400 SCFM*
1" – 650 SCFM*
1-1/4" – 700 SCFM*

Port Size	High Flow 5 to 160 PSIG (0.34 to 11 bar)	Low Pressure 2 to 40 PSIG (0.14 to 3 bar)
3/4"	53R426RA	53R425RA
1"	53R526RA	53R525RA
1-1/4"	53R626RA	53R625RA

53R Regulator Dimensions		
A 5.20 (132)	B 4.30 (109)	C 2.60 (66)
D 1.70 (43)	E 1.23 (31.2)	F 4.30 (109)
G 3.00 (76)	H 2.20 (55.9)	J 1.31 (33.3)

Inches (mm)

Standard part numbers shown; for other models refer to ordering information below.

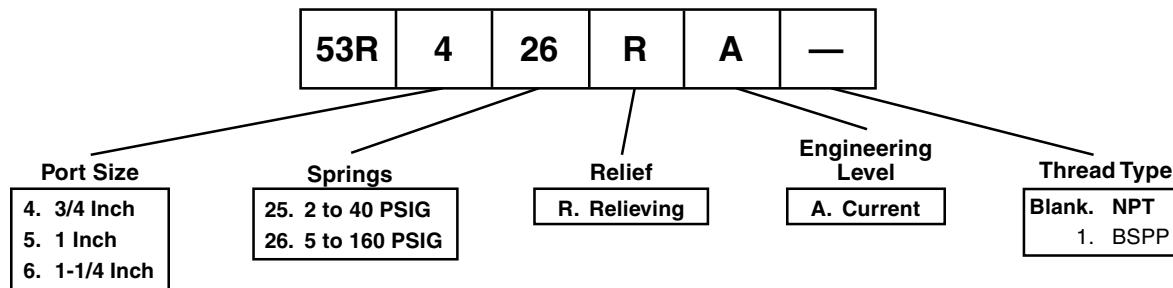
* Inlet pressure 100 PSIG (6.9 bar). Secondary pressure 80 PSIG (5.5 bar).

SCFM = Standard cubic feet per minute at 100 PSIG inlet,
90 PSIG no-flow secondary setting and 25 PSIG pressure drop.

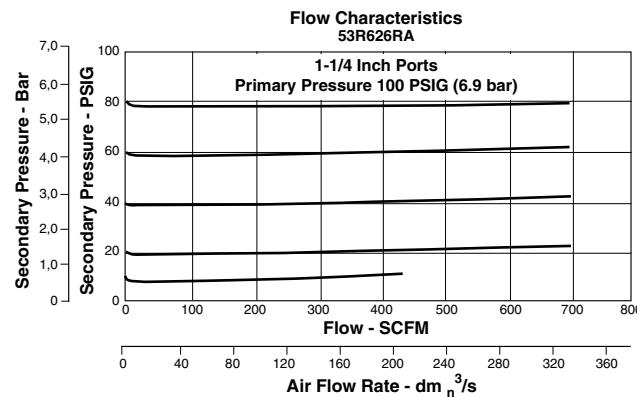
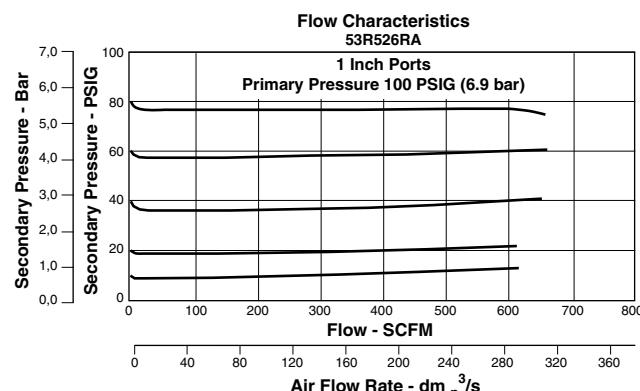
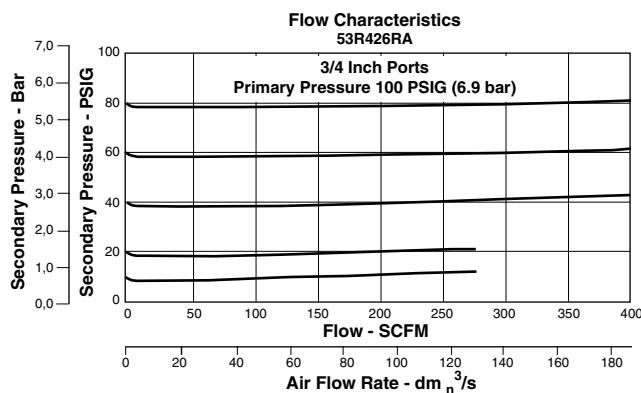
WARNING

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

Ordering Information



NOTE: Bold items are standard.

Technical Information**A****53R Regulator Kits & Accessories**

Adjustment Dial Knob	RRP-16-024-80
O-ring, Repair Kit	GRP-95-261-80
Piston, Bottom and O-ring Seal	RRP-95-192-80
Pistons and Bonnet Repair Kit	RRP-95-766-80
Spring, Regulation, Belleville Washer 2 to 40 PSIG Range	RRP-95-906-80
5 to 160 PSIG Range	RRP-95-905-80
Tamper Resistant Kit	RRP-95-585-80
Valve, Main with O-ring Seal	RRP-95-152-80
Valve, Pilot with O-ring and Valve Spring	RRP-96-935-80

Specifications

Adjusting Range Pressure	2 to 40 PSIG (14 to 276 kPa) 5 to 160 PSIG (34 to 1103 kPa)
Bleed Rate	0.05 SCFM
Gauge Ports	Two Ports 1/4" (Can be used as additional High Flow 1/4 Inch Outlet Ports)
Maximum Operating Temperature	150°F (65.5°C)
Maximum Supply Pressure	300 PSIG (2068 kPa)
Port Threads	3/4", 1", 1-1/4"
Weight	4.0 lb. (1.8 kg)

Materials of Construction

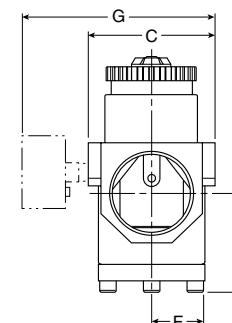
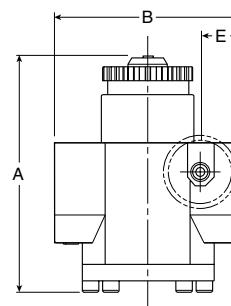
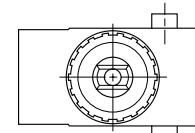
Body	Zinc
Bonnet	Zinc / Brass
Piston	Acetal
Seals	Nitrile
Springs	Steel
Valve Assembly	Brass / Nitrile / Acetal

54R Regulator – Relieving



Features

- Balanced poppet design.
- Non-rising, pressure-adjusting dial.
- High-relief flow (3/16" relief orifice).
- Two 1/4" gauge ports.
- Piston operated.
- Flow capacity: 1-1/2" – 1,600 SCFM*
2" – 1,600 SCFM*



Port Size	High Flow 5 to 160 PSIG (0.34 to 11 bar)	Low Pressure 2 to 40 PSIG (0.14 to 2.8 bar)
1-1/2"	54R726RA	54R725RA
2"	54R826RA	54R825RA

Standard part numbers shown; for other models refer to ordering information below.

* Inlet pressure 100 PSIG (6.9 bar). Secondary pressure 80 PSIG (5.5 bar).

SCFM = Standard cubic feet per minute at 100 PSIG inlet,
90 PSIG no-flow secondary setting and 25 PSIG pressure drop.

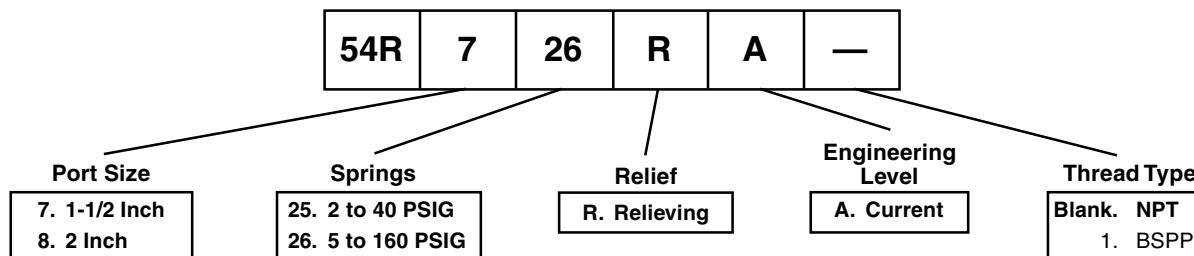
54R Regulator Dimensions		
A	B	C
6.80 (173)	5.30 (135)	3.60 (90)
D	E	F
2.80 (71)	1.15 (29.2)	1.80 (45.7)
G		
5.30 (134.6)		

Inches (mm)

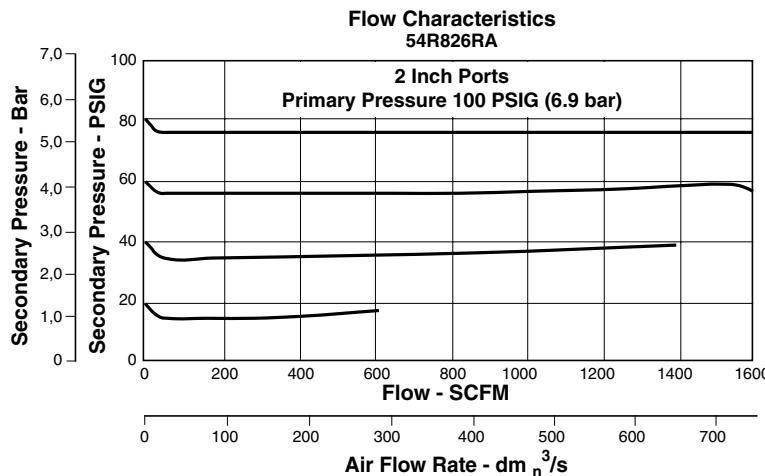
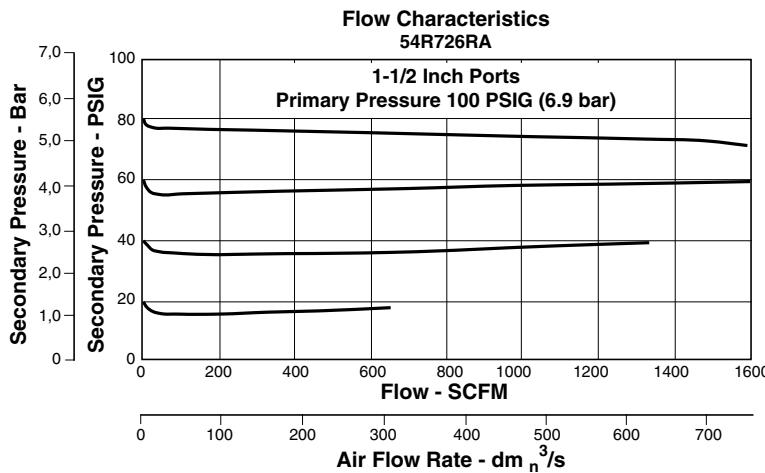
WARNING

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

Ordering Information



NOTE: Bold items are standard.

Technical Information**A****54R Regulator Kits & Accessories**

Adjustment Dial Knob	RRP-16-024-80
O-ring, Repair Kit	GRP-95-262-80
Piston, Bottom and O-ring Seal	RRP-95-192-80
Pistons and Bonnet Repair Kit	RRP-95-766-80
Spring, Regulation, Belleville Washer 2 to 40 PSIG Range	RRP-95-906-80
5 to 160 PSIG Range	RRP-95-905-80
Spring, Main Valve	RRP-95-024-80
Tamper Resistant Kit	RRP-95-585-80
Valve, Main with O-ring Seal	RRP-95-153-80
Valve, Pilot with O-ring and Valve Spring	RRP-96-935-80

Specifications

Adjusting Range Pressure	2 to 40 PSIG (14 to 276 kPa) 5 to 160 PSIG (34 to 1103 kPa)
Bleed Rate	0.05 SCFM
Gauge Ports	Two Ports 1/4" (Can be used as additional High Flow 1/4 Inch Outlet Ports)
Maximum Operating Temperature	150°F (65.5°C)
Maximum Supply Pressure	300 PSIG (2068 kPa)
Port Threads	1-1/2", 2"
Weight	9 lb. (4.1 kg)

Materials of Construction

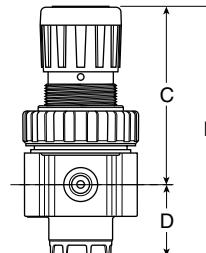
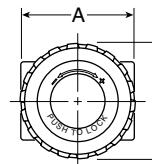
Body	Zinc
Bonnet	Zinc / Brass
Piston	Zinc
Seals	Nitrile
Springs	Steel
Valve Assembly	Brass / Nitrile / Acetal

27R Regulator – Precision



Features

- Fine adjustment sensitivity.
- Good repeatability and minimal pressure drop.
- High flow capacity.
- Two 1/4" gauge ports.
- Brass Poppet for long life.
- High Flow: 25 SCFM[§]
- Modular with 05 Series FRL.
- Non-rising, removable knob.
- Multiple porting options.



Pressure	1/4" NPT	1/4" BSPP
15 PSIG	27R112AD	27R112AD1
30 PSIG	27R110AD	27R110AD1
60 PSIG	27R114AD	27R114AD1
125 PSIG	27R113AD	27R113AD1

27R Regulator Dimensions		
A	B	C
2.00 (51)	2.06 (52)	3.16 (80)
D	E	
1.28 (32)	4.44 (113)	

Inches (mm)

Standard part numbers shown, for other models refer to ordering information below.

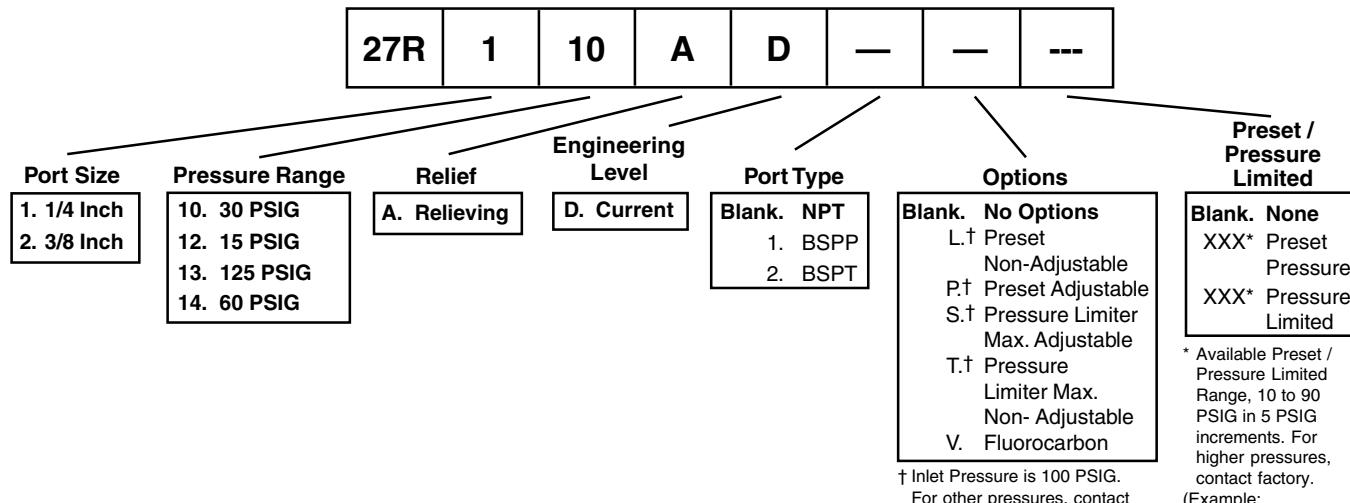
NOTE: 1.53 Dia. (39mm) hole required for panel mounting. Maximum panel thickness 1/4".

[§] SCFM = Standard cubic feet per minute at 150 PSIG inlet,
 90 PSIG no flow secondary setting and 5 PSIG pressure drop.

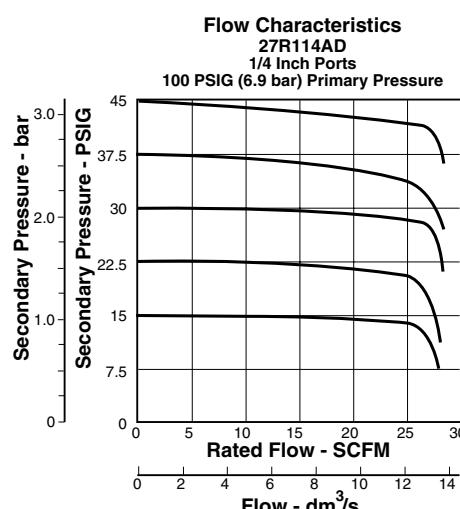
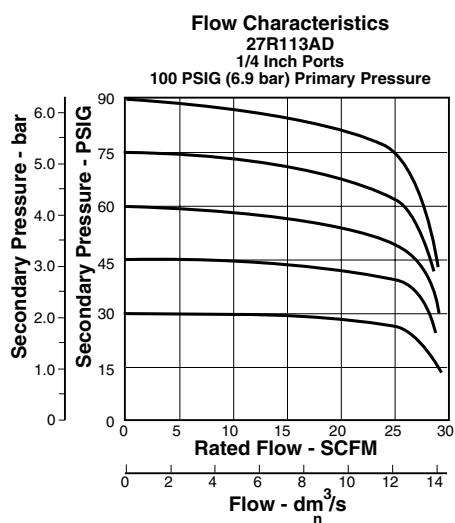
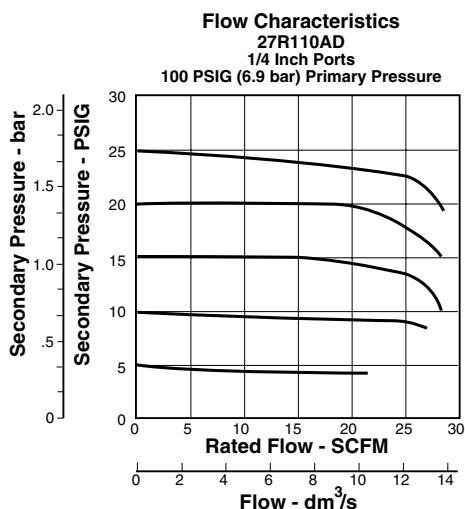
WARNING

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

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****27R Regulator Kits & Accessories**

Bonnet Assembly Kit	PS910P
Control Knob	P0442001
Gauges – 1-1/2" Dial Face	
30 PSIG (0 to 200 kPa)	RRP-96-663
60 PSIG (0 to 400 kPa)	RRP-96-664
160 PSIG (0 to 1100 kPa)	RRP-96-665
300 PSIG (0 to 2000 kPa)	RRP-96-666
2" Dial Face	
60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
Mounting Bracket Kit	PS963P
Panel Mount Nut – Metal	PS964P
Service Kit	PS907P
Springs – 1-30 PSIG Range	P04427
1-15 PSIG Range	P04428
0-60 PSIG Range	P04426
2-125 PSIG Range	P04425

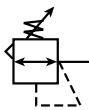
Specifications

Bleed Rate	2.0 SCFH
Gauge Ports (2)	1/4 Inch
Effect of Supply Pressure Variation –	
0.5 PSIG (3.5 kPa) for 25 PSIG (173 kPa) change in P_1	

Relief Capacity –0.5 SCFM (0.24 dm³/s) @ 5 PSIG (35 kPa) increase in P_2 **Flow Capacity –**28 SCFM (13.2 dm³/s) @ 100 PSIG (690 kPa) P_1 and 20 PSIG (138 kPa) P_2 **Port Threads** 1/4, 3/8 Inch**Maximum Inlet Pressure** 250 PSIG (1725 kPa)**Relief Flow** 5.0 SCFM**Repeatability** ±.14 PSIG (±0.97 kPa)**Response –** 510 ms
The valve will open to full flow and fill a volume of 100 in³**Temperature Rating** 32°F to 175°F (0°C to 80°C)**Weight** 1.0 lb. (.45 kg)**Materials of Construction**

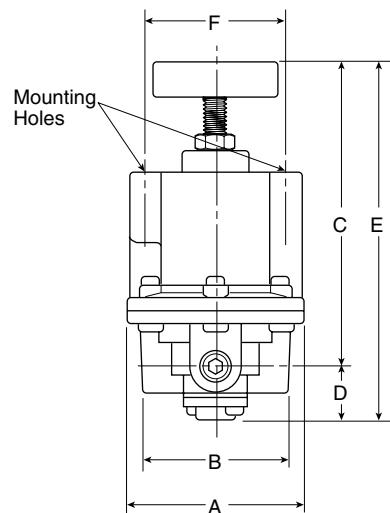
Poppet	Brass
Bonnet	Plastic
Body	Zinc
Collar, Knob	Plastic
Diaphragm	Nitrile
Bottom Cap	Plastic
Seals	Nitrile
Springs – Poppet & Control	Steel

3550 Regulator – Compact Precision



Features

- Adjusting knob.
- Diaphragm design for good repeatability, response and sensitivity.
- Balanced poppet.
- Two full flow gauge ports.
- Precise regulation; will sense a decrease in downstream pressure as small as 1/8" of water.
- High flow capacity; flows of 40 SCFM attainable with minimal drop.
- Sensitive relief. Downstream pressure buildup, down to 0.01 PSIG above the set pressure, is automatically vented through an integral relief valve.
- Superior flow response, quick reaction to high flow demands. Desired downstream pressure levels maintained through the use of a venturi type aspirator tube.



3550 Regulator Dimensions

A	B	C
3.00 (761)	2.55 (65)	5.56 (141)
D	E	F
.94 (29)	6.50 (165)	2.25 (57)

Inches (mm)

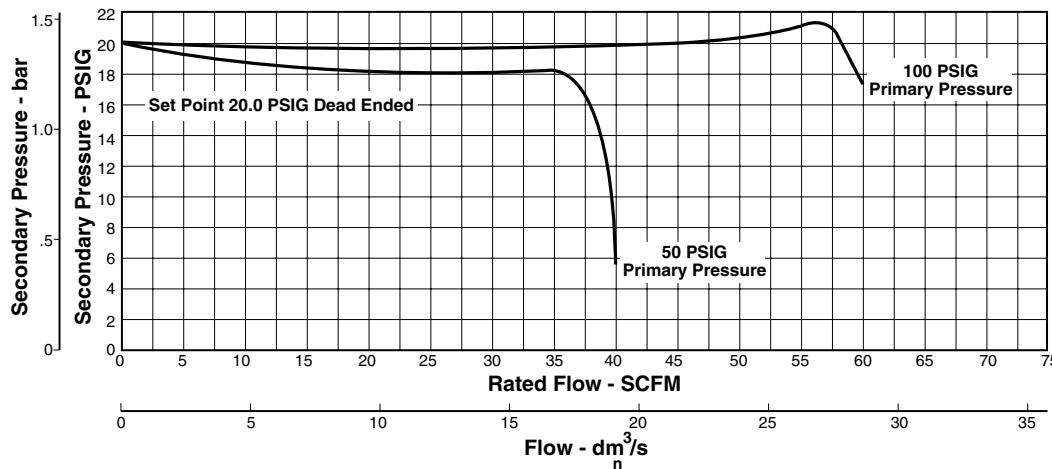
⚠ WARNING

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

Ordering Information

Port Size	1/2 to 30 PSIG Relieving	1/2 to 30 PSIG Non-Relieving	1 to 60 PSIG Relieving	1 to 60 PSIG Non-Relieving	2 to 150 PSIG Relieving	2 to 150 PSIG Non-Relieving
1/4 Inch	03550 1020	03550 3020	03550 1030	03550 3030	03550 1040	03550 3040

NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information**A****3550 Regulator Kits & Accessories**

Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
Mounting Bracket Kit	035500400
Service Kit – Non-Relieving	035508009
Relieving	035508000

Specifications

Bleed Rate 0.02 SCFM
Gauge Ports (2) 1/4 Inch
 (Can be used as additional Full Flow 1/4 Inch Outlet Ports)

Effect of Supply Pressure Variation –

Less than 0.1 PSIG for 100 PSIG change

Exhaust Capacity –

5.5 SCFM with downstream pressure 5 PSIG above set pressure.
 Exhaust commences at 0.01 PSIG above set pressure.

Flow Capacity –

27 SCFM (12.7 dm³/s) @ 100 PSIG (690 kPa) P₁
 and 20 PSIG (138 kPa) P₂

Operating Temperature Range – ... -40°F to 200°F (-4°C to 93°C)

Operating Pressure Range –		PSIG	kPa
Primary –	Maximum	500	3450
Secondary –			
30 PSIG Spring	Minimum	0.5	3.4
	Maximum	30	207
60 PSIG Spring	Minimum	1	6.9
	Maximum	60	414
150 PSIG Spring	Minimum	2	14
	Maximum	150	1035

Port Threads 1/4 Inch

Pressure Rating 0 to 250 PSIG (0 to 1725 kPa)

Relief Flow 1.0 SCFM

Repeatability ±.02 PSIG (±0.014 bar)

Response 250 ms

The valve will open to full flow and fill a volume of 1250 cm³

Sensitivity 0.125" Water Column

Weight 1.6 lb. (.73 kg)

Materials of Construction

Adjusting Stem & Spring Steel

Biased Spring Stainless Steel

Body, Bonnet Aluminum

Control Knob Plastic

Diaphragm Nitrile and Dacron, Convoluted

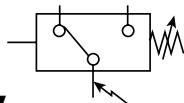
Seals Nitrile

Valve Popet Brass

Valve Popet Seat Fluorocarbon

MPS-31

Red \longleftrightarrow Green Display



Model Number	Output	Pressure Range
MPS-P31N-NG	NPN	0 to 145 PSI
MPS-P31N-PG	PNP	0 to 145 PSI
MPS-V31N-NG	NPN	0 to -30 inHg
MPS-V31N-PG	PNP	0 to -30 inHg
MPS-P31N-NC	NPN	0 to 145 PSI
MPS-P31N-PC	PNP	0 to 145 PSI
MPS-V31N-NC	NPN	0 to -30 inHg
MPS-V31N-PC	PNP	0 to -30 inHg

Pressure Sensors MPS-31 2-Color Panel Mount

Features

- **Pressure Ranges:**
 - Positive Pressure 0 to 145 PSI
 - Vacuum Pressure 0 to -30 inHg
 - Compound -14.7 to 72.5 PSI
- **Sensor Output:**
 - 1 NPN or PNP Open Collector Transistor Output , 30VDC, 125mA
- **Switch Point and High-low Programming**
- **4 Selectable Units of Measure**
 - (mmHg, -bar, -kPa, inHg)
 - (kgf/cm², PSI, bar, kPa)
- **Output Response Time Less Than 2.0 Milliseconds**
- **IP65 Rated and CE Marked**
- **Air and Non-Corrosive Gases**
- **Error Message**

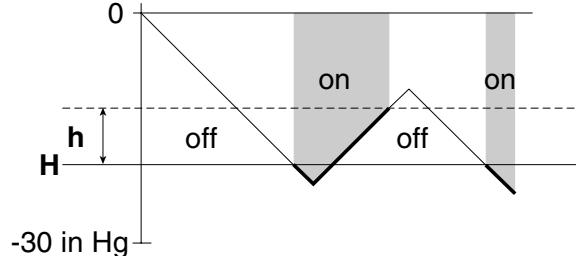
For additional sensor options,
see Catalog 0801/USA.

Output Modes

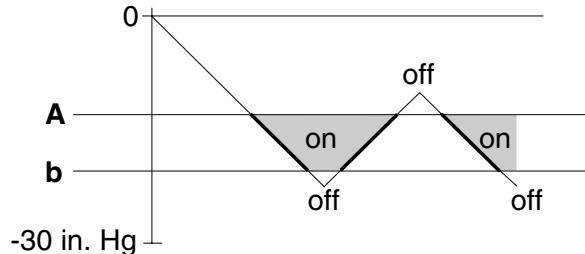
The MPS-31 Series Sensor has one independent NPN or PNP open collector output signal. The Switch Output Mode has a switch point programmed by the user at a specific pressure. The Hysteresis Range (**h**) adjustment controls the output signal 0 to 100% below the Switch Point (**H**).

The Window Comparator Mode provides two Switchpoint Settings (**A**) and (**b**) that control the output signals (NPN / PNP) between two pressures. This is referred to as the "High / Low" setting.

Switch Output

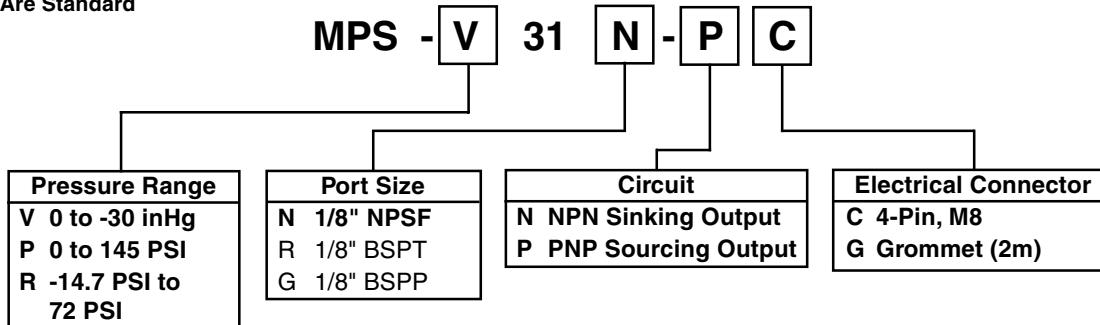


Window Comparator Output



Model Number Index

Bold Items Are Standard



MPS-V31N-PG



MPS-V31N-PC

Mounting Bracket MPS-ACCK1 Included with Sensors.

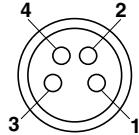
Specifications

Pressure Range	Vacuum (V)	Positive (P)	Compound (R)
Units of Measure	bar: 0.001	bar: 0.01	bar: 0.01
Display Resolution	kPa: 0.1	MPa: 0.001	kPa: 1
	mmHg: 1	kgf/cm ² : 0.01	kgf/cm ² : 0.01
	inHg: 0.1	PSI: 1	PSI: 0.1
Media	Air and Non-Corrosive Gases		
Pressure Port	N: 1/8" NPSF, R: 1/8" BSPT, G: 1/8" BSPP		
Proof Pressure	V: 145 PSI, P: 217.5 PSI, R: 145 PSI		
Operating Temperature	32 to 122°F (0 to 50°C)		
Storage Temperature	14 to 140°F (-10 to 60°C)		
Humidity	35 to 85% RH		
Electrical Connection	C: 4-Pin, M8 Connector, G: Grommet Open Lead		
Power Supply	10.8 to 26.4VDC, Ripple Vp-p 10% Max., Reverse Voltage Protection		
Display	3-Digit, 7-Segment LED		
Display Refresh	.1 to 3.0 sec. (Factory set at 0.1)		
Output Circuit	NPN (Sinking), PNP (Sourcing) Open Collector Transistor, 30VDC, 125mA		
Switch Output	Output Signal, NPN or PNP, Normally Open or Closed, LED Indicator		
Output Modes	Hysteresis or Window Comparator		
Output Response Time	< 2ms, 32, 256, 512ms Programmable (Factory set 2ms)		
Repeatability	± 0.2% F.S.		
Thermal Error	1% over ±25°C (77°C) Temperature Change (Range 32 to 122°F (0 to 50°C)		
General Protection	IP40, CE Rating, EMC-EN55011 Class B, EN 50082-2		
Current Consumption	< 70mA		
Vibration Resistance	10 to 55Hz, 1.5mm, XYZ, 2 hrs.		
Shock Resistance	10 G, XYZ		
Material	Housing: Polycarbonate, Pressure Port: Zinc Die-cast		
Mass	1.7 oz. (45g)		

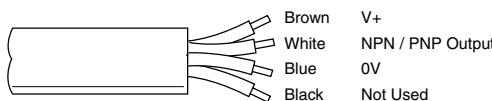
Sensor Pin Out

Pin

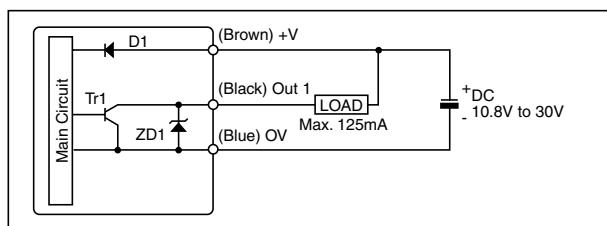
- 1 Brown: 24VDC
- 2 Black: NPN/PNP Open Collector Output
- 3 Blue: 0VDC
- 4 Not Used



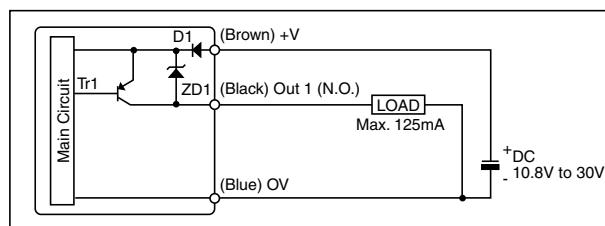
Lead Wiring



Internal Circuit



NPN



PNP

⚠️ Cautions

The MPS-31 Pressure Sensor is designed to monitor pressure and is not a safety measure to prevent accidents. The compatibility of the sensor is the responsibility of the designer of the system and specifications.

Operating Environment

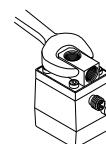
- Parker / Convum Sensors have not been investigated for explosion-proof construction in hazardous environments.
- Do not use with flammable gases, liquids, or in hazardous environments.
- Avoid installing the sensor in locations where excessive voltage surges could damage or affect the performance of the sensor.

Operations

- Dedicate a power supply of 10.8 to 30VDC to the sensor and set the ripple to V_{p-p}10% or less. Avoid excessive voltage. Avoid voltage surges.
- A small amount of internal voltage drop is possible. Ensure the power supply minus any internal voltage drop exceeds the operating load.
- Verify the operating media is compatible with the specified sensor. Check the chemical make-up, operating temperatures, and maximum pressure ranges of the system before installing.
- Installation of air dryer system is recommended to remove moisture.

Installation

- Never insert an object into the pressure port other than an appropriate fluid connector.
- Avoid short-circuiting the sensor. Connect the brown lead to V+ and blue lead to 0V.
- Do not connect the output lead wires (black / white) to the power supply.
- Outputs not being used should be trimmed and insulated.
- Install as shown using the metal mounting bracket.



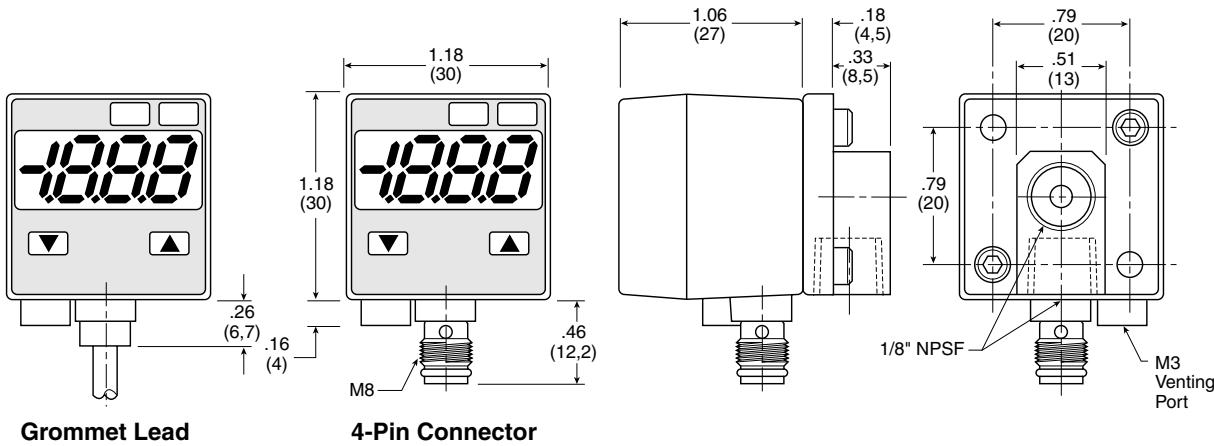
Error Messages

Display	Description	Solutions
Err	Zero Reset Error	Reset Zero Below 3% of F.S.
Er1	System Error (Internal)	Contact Factory
CE1	Over current of Output 1	Load current exceeds
FFF -FF	Applied pressure exceeds pressure range	Apply pressures with the rating of the sensor

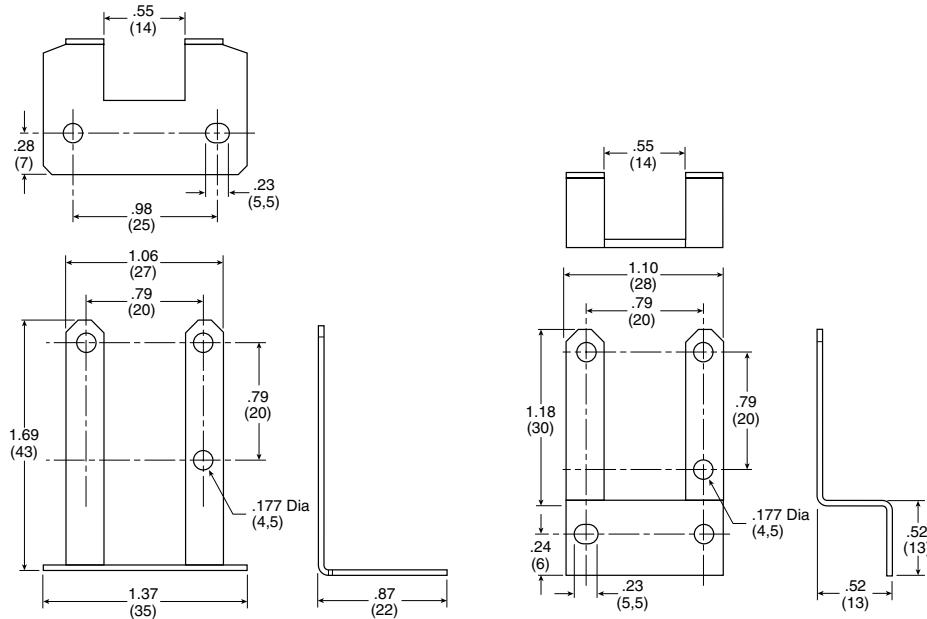
Dimensions

N, R, G
1/8" Female

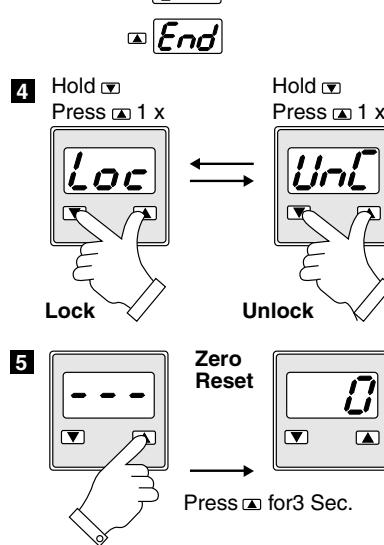
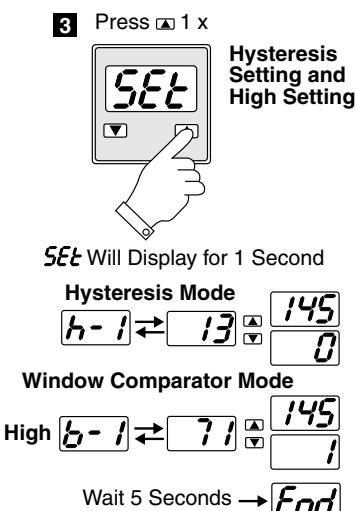
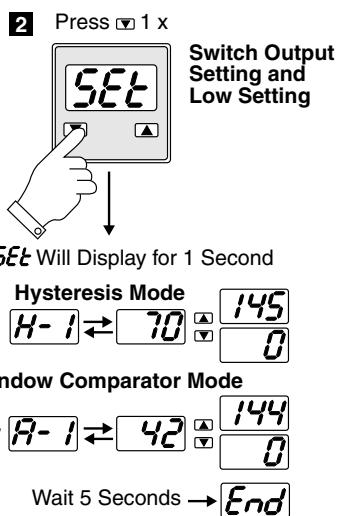
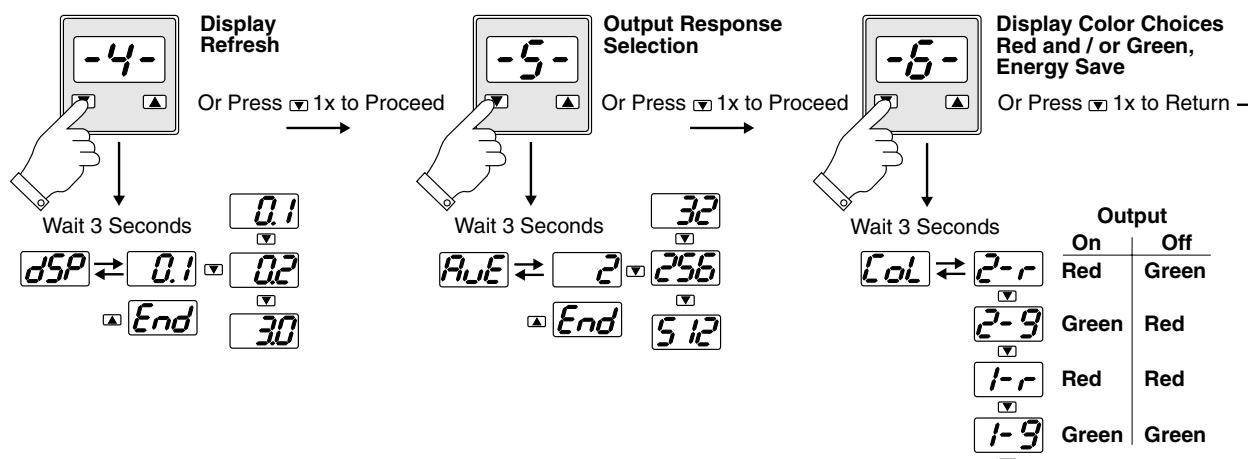
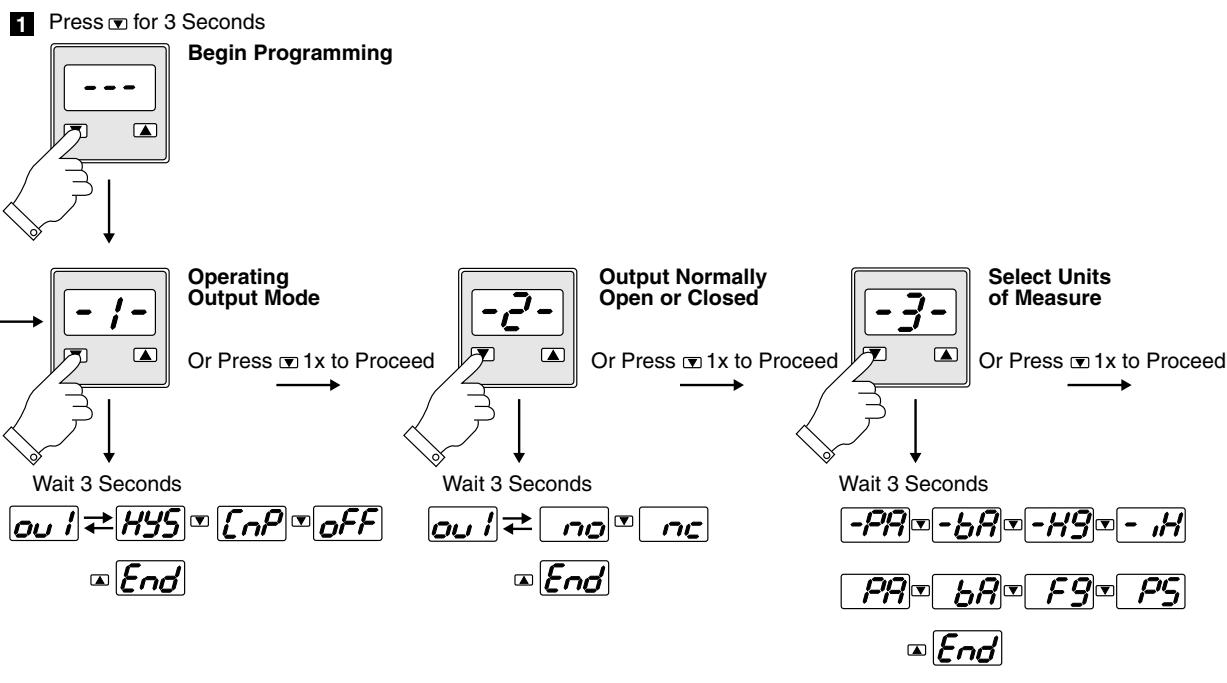
A



MPS-ACCK1 Mounting Brackets (Included)



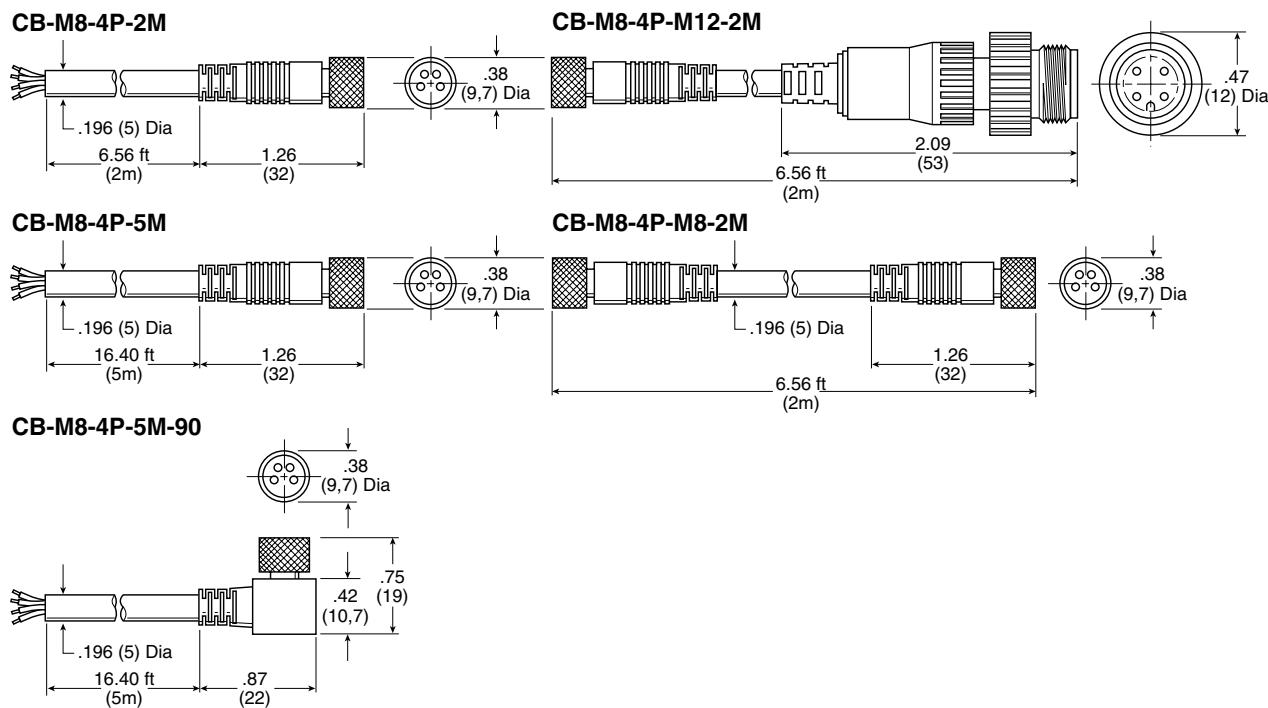
See page 86 for Symbol Explanation.



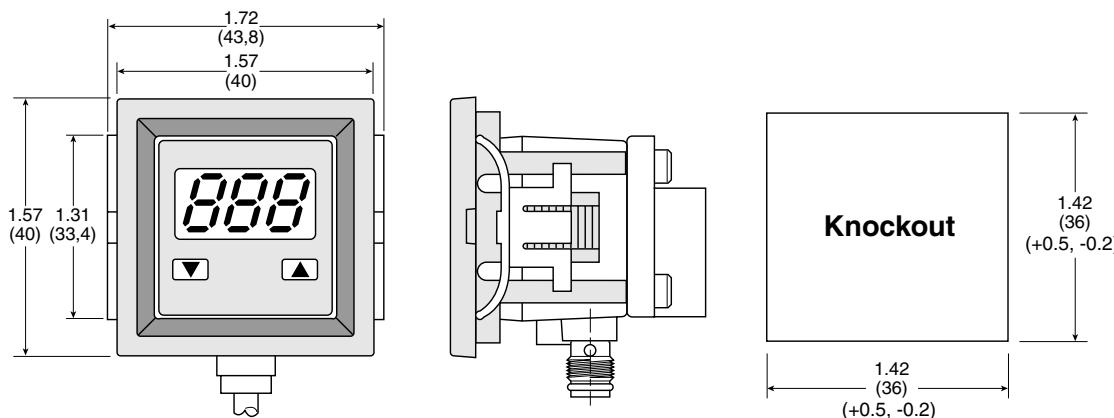
Accessories

A

Cables



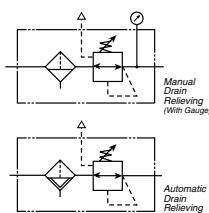
MPS-ACCH7 Panel Mounting Bracket



ou 1	Output 1
ou 2	Output 2
ou 3	Output 3
ou 4	Output 4
nc	Output Normally Closed (Passing)
no	Output Normally Open (Non-Passing)
-PR PR	Pressure Units (Pascal). Negative Units for Vacuum Sensors
-bR bR	Pressure Units (Bar). Negative Units for Vacuum Sensors
-Hg Hg	Pressure Units (mm.Hg). Negative Units for Vacuum Sensors
-inHg	Pressure Units (in.Hg). Negative Units for Vacuum Sensors
-Fg Fg	Pressure Units (kgf/cm ²). Negative Units for Vacuum Sensors
PS	Pressure Units (PSI)
ESy	Easy Mode. Sensor will only allow changes to set points
oFF	Off, or Energy Saving Display; reduces current consumption of Sensor
on	On
HYS	Hysteresis Mode. Select Hysteresis Set Point and Hysteresis Range
CnP	Windows Comparative Mode Select High and Low Set Point
H-1	Hysteresis Mode Set Point. Output 1
H-2	Hysteresis Mode Set Point. Output 2
h-1	Hysteresis Mode. Hysteresis Range Output 1
h-2	Hysteresis Mode. Hysteresis Range Output 2
A-1	Windows Comparative Mode Low Set Point Output 1
b-1	Windows Comparative Mode High Set Point Output 1
A-2	Windows Comparative Mode Low Set Point Output 2
b-2	Windows Comparative Mode High Set Point Output 2
RUT	Automatic Teach Mode. Automatically sets Outputs 1 and 2 while cycling system. Output 1 set to Hysteresis Mode, Output 2 set to Window Comparative Mode
AL	Auto Surveillance Mode On/Off. Set after Automatic Teach
ALn	Auto Surveillance based on cycles times. Provides output if Peak Value is not obtained in a specified number of cycles. (1-100)
dSP	Display Refresh Setting. Display updates from .1 to 1 sec. .3 sec factory set. Does not affect Sensor Response Time
RuE	Output Response Time. Multiples the sensor response time. Increases sensor response time. (Anti-chatter Mode)

Pressure Sensors
MPS-31 2-Color Panel Mount

Pb	Pressure Value Display Mode. Displays Pressure for a specific time period and then updates for next time period
Pbt	Time Range for Pressure Value Display Mode
Pbd	Value Setting for Pressure Value Display Mode
PE	Display Peak Value over selected time range
bo	Display Bottom Value over selected time range
du	Display Difference over selected time range
dSF	Display Function Mode. On/Off
Fnc	Display Function. Selects display types.
ib	Display blinks pressure when Output 1 is Passing Normal when Output 1 is Non-Passing
2b	Display blinks pressure when Output 2 is Passing Normal when Output 2 is Non-Passing
id	Display shows pressure when Output 1 is Passing Display shows special screen when Non-Passing
2d	Display shows pressure when Output 2 is Passing Display shows special screen when Non-Passing
SET	Select Switch Output setting for MPS-31
Col	Color Setting for MPS-31
Pot	MPS-4, Port Reference Selection
A	MPS-4, Display change of B port to A port static
b	MPS-4, Display change of A port to B port static
Ab	MPS-4, Display change of A port to change of B port
P1	MPS-7, Pressure Range Selection Vacuum
P2	MPS-7, Pressure Range Selection Low Pressure
P3	MPS-7, Pressure Range Selection Positive Pressure
P4	MPS-7, Pressure Range Selection Compound Pressure
SAvE	MPS-7, Energy Savings Mode, reduces current consumption
P-1	MPS-7, Peak Surveillance
oPL	Digital Input Sensors Only. Digital Input Mode for remote Zero reset of sensors
d in	Digital Input
dch	Digital Channel
Scn	MPS-7 Scan Mode. Sensor scans and displays each channel for 3 sec.
Loc	Locked. Sensor programs cannot be changed
Unl	Unlocked. Sensor programs can be changed
Zero Reset	Sets Sensors reference point to current atmospheric conditions

Filter / Regulator

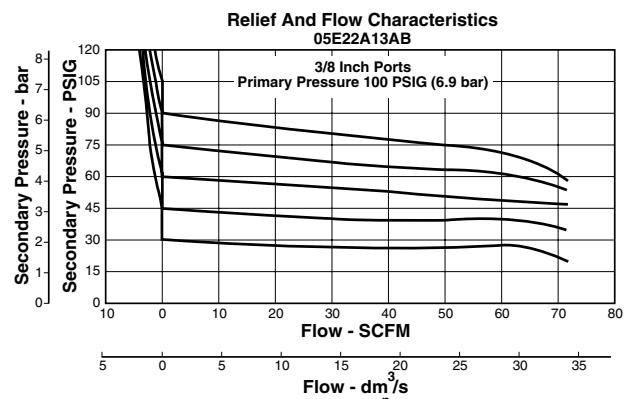
- Pipe Sizes 1/8 thru 1-1/2 Inch
- Flows to 200 SCFM
- Pressures to 250 PSIG

Integral Filter / Regulator "Piggybacks" 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 P3A-EA 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
- Economy / Precision 27E Series, 1/4 and 3/8 Inch
- Standard / Coalescing 12E Series, 3/8, 1/2 and 3/4 Inch

Filter / Regulator Selection

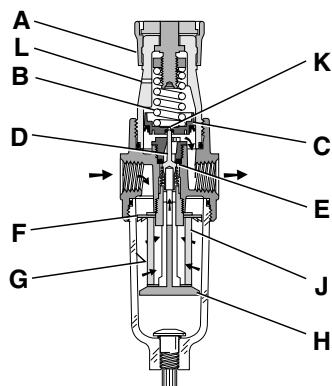
1. Determine maximum system flow requirements.
2. Determine maximum allowable pressure drop at rated flow in SCFM.
3. Refer to flow chart and select filter/regulator by choosing the curve that offers minimum pressure drop at desired flow in SCFM.

Reading Flow Charts to Size Filter / Regulators

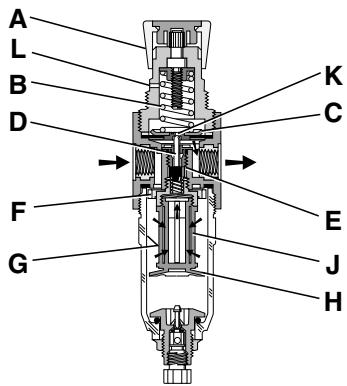
Once the required flow is determined for a pneumatic application the regulator or filter/regulator can be selected by using the flow chart. The chart serves two different purposes. To read the flow, use the right side of the chart. To read the relief characteristics use the left side of the chart. When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

CAUTION:

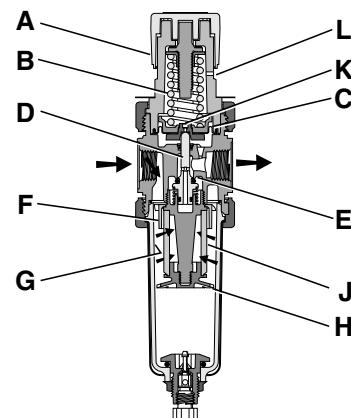
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting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



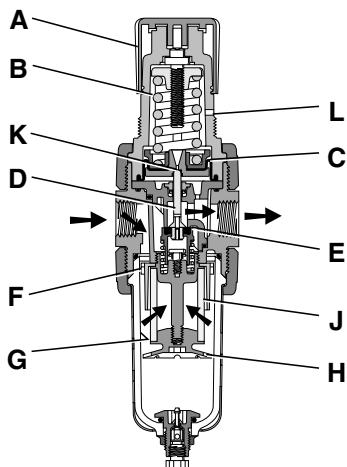
14E



P3AEA

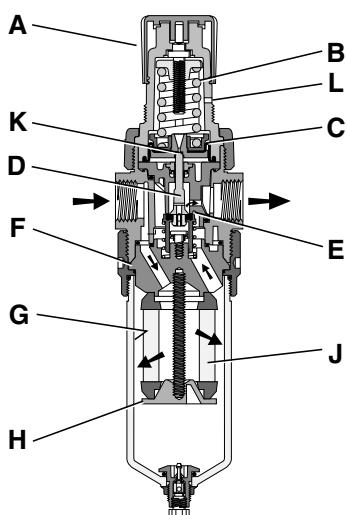


05E



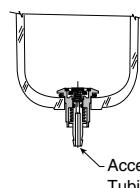
06E / 07E

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.)



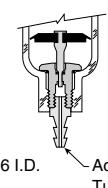
12E

Semi Automatic Drain



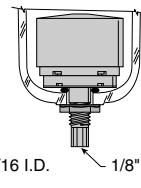
Accepts 3/16 I.D. Tubing

Automatic Pulse Drain



Accepts 3/16 I.D. Tubing

Automatic Float Drain



1/8" NPT

(Overnight Drain)

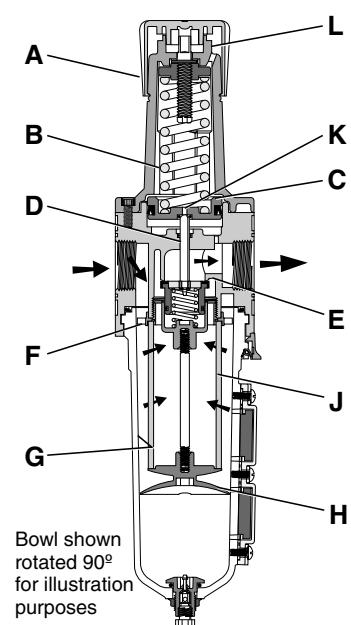
This drain offers a semi-automatic function when system pressure is shut off. The drain can also be used manually by gripping it with your fingertips and pushing upward.

(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.

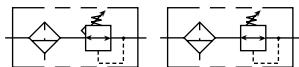
The float internal to this drain rises with increased liquid level. When the float rises, it opens a seat area allowing the trapped liquids to drain through the bottom. A manual override can be pushed in the bottom of the drain to unseat the float if particulates create a block.

Bowl shown rotated 90° for illustration purposes



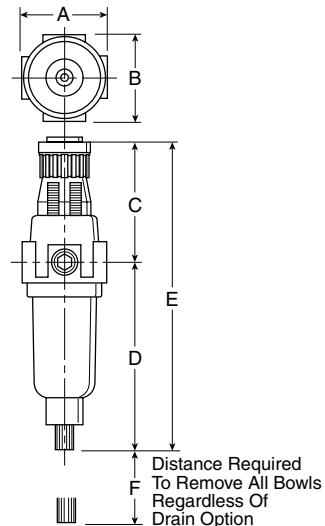
P3NE

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[§]



Port Size	NPT		BSPP	
	Twist Drain	Automatic Pulse Drain	Twist Drain	Automatic Pulse Drain
Poly Bowl[‡]				
1/8"	14E01B13FC	14E05B13FC	14E01B13FC1	14E05B13FC1
1/4"	14E11B13FC	14E15B13FC	14E11B13FC1	14E15B13FC1
Metal Bowl				
1/8"	14E03B13FC	14E07B13FC	14E03B13FC1	14E07B13FC1
1/4"	14E13B13FC	14E17B13FC	14E13B13FC1	14E17B13FC1

14E Piggyback Dimensions		
A	B	C
1.62 (41)	1.58 (40)	2.42 (61)
D	D [†]	E
3.79 (96)	3.84 (98)	6.21 (158)
E [†]	F	
8.63 (219)	1.60 (41)	

Inches (mm)
[†] With Auto Drain

Standard part numbers shown, for other models refer to ordering information below.

[‡] For polycarbonate bowl see caution in Product Selection Chart page 2.

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

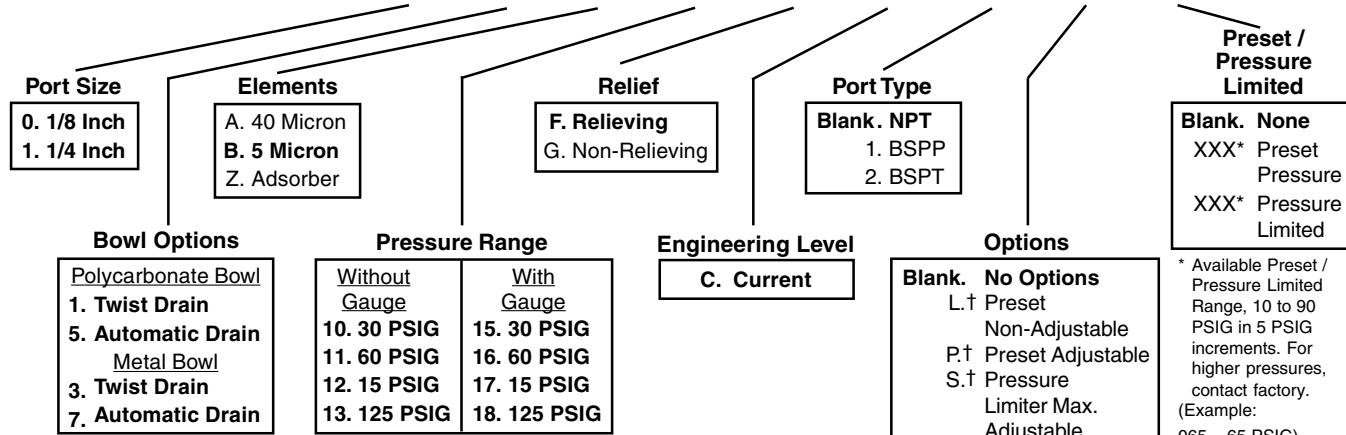
NOTE: 1.53 Dia. (39mm) hole required for panel mounting.

WARNING

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

Ordering Information

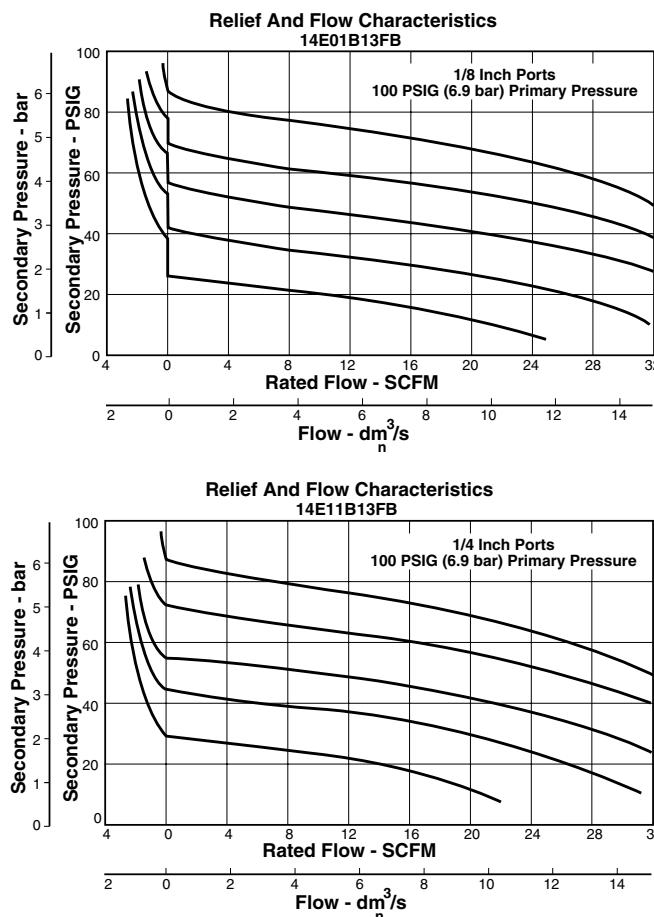
14E	1	1	B	13	F	C	—	—	---
-----	---	---	---	----	---	---	---	---	-----



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

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

NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****14E Filter / Regulator Kits & Accessories**

Bonnet Tamperproof Clip	P01265
Bowl Kits –	
Poly Bowl – Automatic Drain	PS408P
Twist Drain	PS404P
Metal Bowl – Automatic Drain	PS451P
Twist Drain	PS447BP
Filter Element Kits – 40 Micron	
5 Micron	PS403P
Adsorber	PS452P
Gauges – 30 PSIG (0 to 200 kPa)	
60 PSIG (0 to 400 kPa)	P530154
160 PSIG (0 to 1100 kPa)	P77413
Mounting Bracket Kit (Includes Panel Mount Nut)	
Panel Mount Nut	PS417BP
Poppet Kits – Unbalanced	
Balanced	PS424BP
Service Kits – Non-Relieving	
Relieving	PS423P
Springs – 1- 15 PSIG Range	
1- 30 PSIG Range	P01175
1- 60 PSIG Range	P01174
2- 125 PSIG Range	P01173

Specifications

Bowl Capacity	1 Ounce
Gauge Ports (2) (Can be used for Full Flow)	1/8 Inch
Port Threads	1/8, 1/4 Inch

Pressure & Temperature Ratings –

Polycarbonate Bowl

0 to 150 PSIG (0 to 1035 kPa), 32°F to 125°F (0°C to 52°C)

Metal Bowl

0 to 250 PSIG (0 to 1725 kPa), 32°F to 175°F (0°C to 80°C)

Secondary Pressure Ranges –

Standard Pressure 2 to 125 PSIG (14 to 863 kPa)

Medium Pressure 1 to 30 PSIG (6.9 to 207 kPa)

Medium Pressure 1 to 60 PSIG (6.9 to 414 kPa)

Low Pressure 1 to 15 PSIG (6.9 to 104 kPa)

Weight4 lb. (.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
Metal (Without Sight Gauge) Zinc

Drains – Manual – Twist Type

Body & Stem Plastic

Seals Nitrile

Automatic – Pulse Type

Piston & Seals Nitrile

Stem, Seat, Adaptor & Washers Aluminum

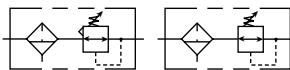
Filter Elements – 5 Micron (Standard) Plastic

40 Micron (Optional) Plastic

Adsorber (Optional) Activated Charcoal

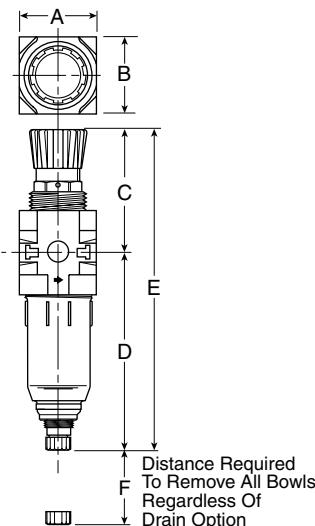
Seals Nitrile

P3A-EA Filter / Regulator – Miniature



Features

- Lightweight plastic body
- Excellent water removal efficiency.
- Space saving package offers both filter and regulator features in one integral unit.
- Unique deflector plate that creates swirling of the air stream ensuring maximum water and dirt separation.
- 5 micron element standard.
- Fingertip operated drain.
- Non-rising adjustment knob.
- Diaphragm design for good repeatability, response
- Balanced poppet standard.



Port Size	NPT	
	Twist Drain	Auto Pulse Drain
1/8"	P3A-EA91BEBNNP	P3A-EA91CEBNNP
1/4"	P3A-EA92BEBNNP	P3A-EA92CEBNNP

Standard part numbers shown, for other models refer to ordering information below.

‡ For polycarbonate bowl see caution in Product Selection Chart page 2.

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

NOTE: 1.20 Dia. (31mm) hole required for panel mounting.

Filter Dimensions			
A	B	C	D
1.57 (40)	1.57 (40)	2.52 (64)	3.98 (101)
D†	E	E†	F
3.70 (94)	6.50 (165)	6.22 (158)	2.00 (51)

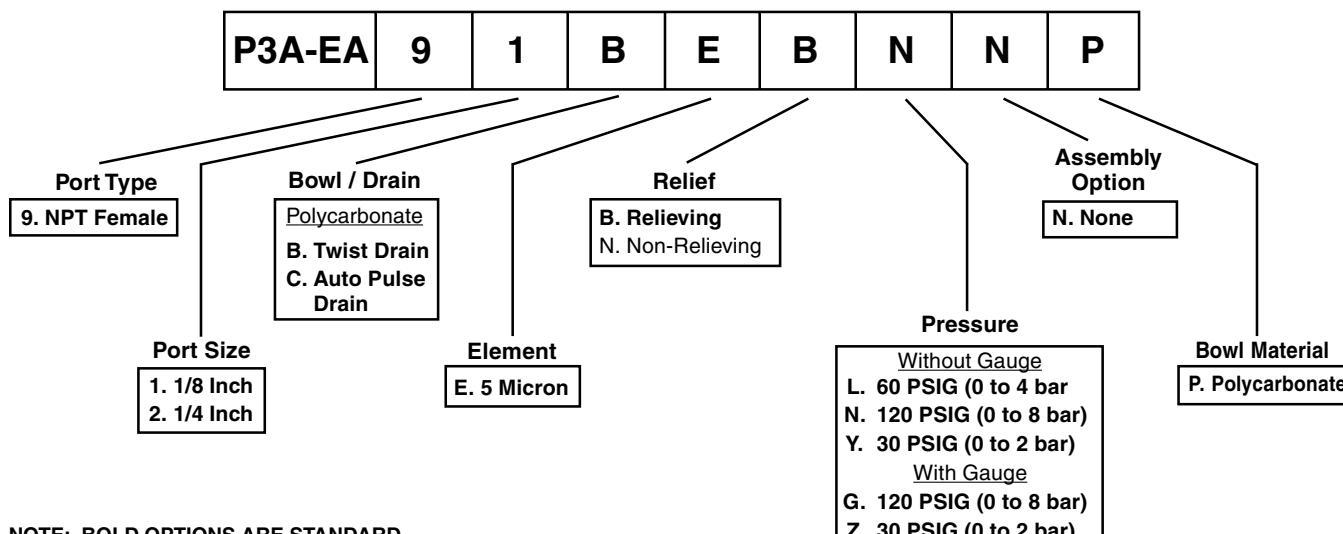
Inches (mm)

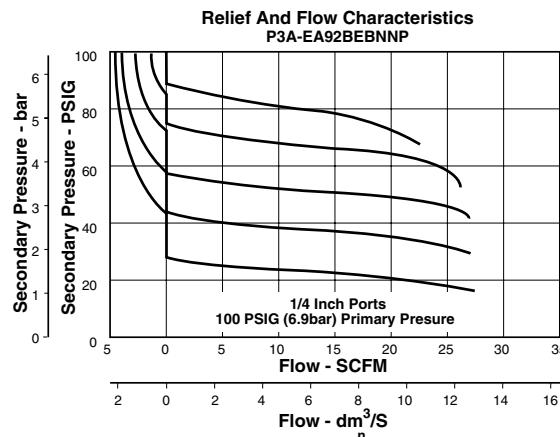
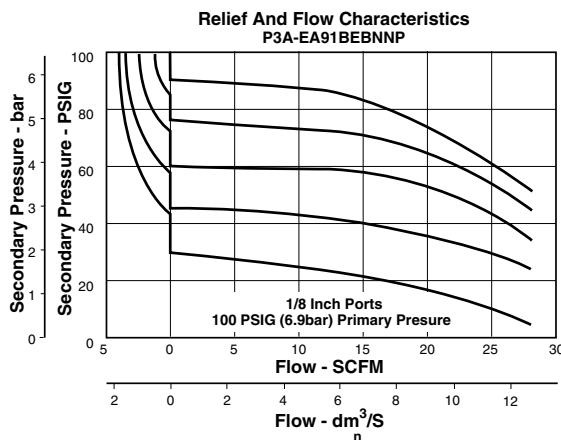
† With Pulse Drain

WARNING

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

Ordering Information



Technical Information**A****Filter / Regulator Kits and Accessories**

Elements – 5 Micron Element	P3A-KA00EEN
Gauges – 30 PSIG, 1/8" NPT (0 to 200 kPa)	P530156
60 PSIG, 1/8" NPT (0 to 400 kPa)	P530154
160 PSIG, 1/8" NPT (0 to 1100 kPa)	P77413
Panel Mount Nut	256918
Mounting Bracket Kit	P3A-KA00MRN
Plastic Bowls – Bowl with Twist Drain	P3A-KA00BBP
Bowl with Auto Pulse Drain	P3A-KA00BCP
Service Kits – Filter Section	P3A-KA00RFN
Regulator Section –	
Relieving Diaphragm & Poppet	P3A-KA00RRN
Springs – 1-30 PSIG Spring	156912
1-60 PSIG Spring	156918
5-110 PSIG Spring	156919
Tamperproof Kit	B732965

Specifications

Operating Pressure Range –		PSIG	bar	kPa
Primary –	Maximum	120	8.3	828
Secondary –				
30 PSIG Spring	Minimum	6	0.4	41
	Maximum	30	2.1	207
60 PSIG Spring	Minimum	6	0.4	41
	Maximum	60	4.1	414
110 PSIG Spring	Minimum	6	0.4	41
	Maximum	110	7.6	758

Operating Temperature Range 32°F to 125°F (0°C to 52°C)

Port Threads 1/8, 1/4 Inch

Weight 0.26 lb. (0.12 kg.)

Materials of Construction

Adjusting Nut	Brass
Adjusting Stem & Spring	Steel
Poppet Return Spring	Stainless Steel
Body	Plastic
Bonnet	Plastic
Bowl	Transparent Polycarbonate
Deflector	Plastic
Diaphragm	Nitrile
Drains – Twist Drain –	
Body & Stem	Plastic
Seals	Nitrile
Auto (Pulse) –	
Piston & Seals	Nitrile
Stem, Seat, Adaptor & Washers	Aluminum

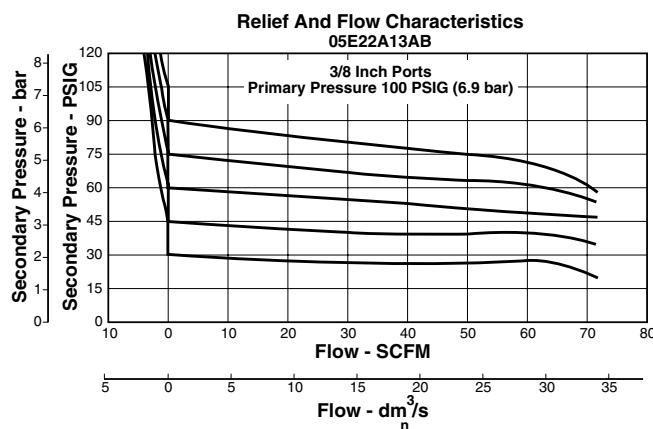
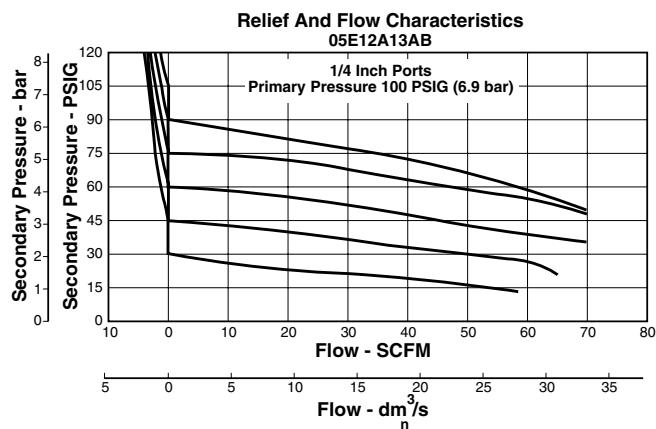
Filter Element & Baffle –

Standard 5 Micron Nylon and Plastic

Port Inserts Brass**Seals** Nitrile**Poppet** Plastic & Nitrile



Technical Information

A


05E Filter / Regulator Kits & Accessories

Bowl Guard Kit	PS905P
Bowl Kits –	
Poly Bowl – Automatic Pulse Drain	PS995P
Semi-Auto Drain	PS992P
Twist Drain	PS932P
Push 'N' Drain	PS904P
Metal Bowl – Automatic Pulse Drain	PS997P
Semi-Auto Drain	PS994P
Twist Drain	PS934P
Twist Drain (Fluorocarbon)	PS934VP
Push 'N' Drain	PS925P
Sight Gauge / Automatic Pulse Drain	PS996P
Sight Gauge / Semi-Auto Drain	PS993P
Sight Gauge / Twist Drain	PS935P
Sight Gauge / Twist Drain (Fluorocarbon)	PS935VP
Sight Gauge / Push 'N' Drain	PS906P
Drain Kit – Automatic Pulse Drain	PS998P
Semi-Auto Drain	PS511P
Twist Drain	PS512P
Twist Drain (Fluorocarbon)	PS512VP
Push 'N' Drain	PS513P
Filter Element Kits – 40 Micron	PS901P
5 Micron	PS902P
Adsorber	PS931P
Sight Gauge Kit	PS914P
Gauges – 1-1/2" Dial Face	
30 PSIG (0 to 200 kPa)	RRP-96-663
60 PSIG (0 to 400 kPa)	RRP-96-664
160 PSIG (0 to 1100 kPa)	RRP-96-665
300 PSIG (0 to 2000 kPa)	RRP-96-666
2" Dial Face	
60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
Mounting Bracket Kit (Includes Panel Mount Nut)	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
Relieving Service Kit	PS908P
Non-Relieving Service Kit	PS909P
Bonnet Assembly Kit	PS915P

Specifications

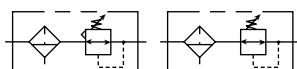
Bowl Capacity	2.0 Ounces
Gauge Port (2)	1/4 Inch
Sump Capacity	.9 Ounce
Port Threads	1/4, 3/8 Inch
Pressure & Temperature Rating –	
Polycarbonate Bowl –	0 to 150 PSIG (0 to 10.3 bar) 32°F to 125°F (0°C to 52°C)
Metal Bowl –	0 to 250 PSIG (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
Automatic Pulse Drain –	10 to 150 PSIG (.7 to 10.3 bar)
Weight	1.35 lb. (.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

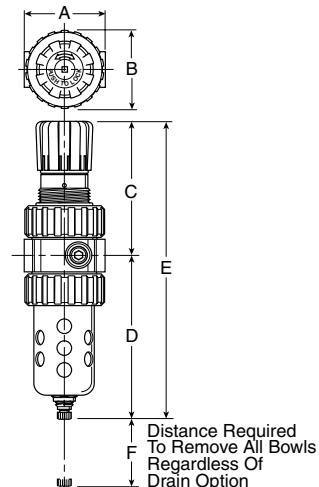


06E Filter / Regulator – Compact



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 §
3/8" – 55 SCFM §
1/2" – 61 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Float Drain	Twist Drain	Automatic Float Drain
Poly Bowl[‡] / Metal Guard				
1/4"	06E12A13AC	06E16A13AC	06E12A13AC1	06E16A13AC1
3/8"	06E22A13AC	06E26A13AC	06E22A13AC1	06E26A13AC1
1/2"	06E32A13AC	06E36A13AC	06E32A13AC1	06E36A13AC1
Metal Bowl / Sight Gauge				
1/4"	06E14A13AC	06E18A13AC	06E14A13AC1	06E18A13AC1
3/8"	06E24A13AC	06E28A13AC	06E24A13AC1	06E28A13AC1
1/2"	06E34A13AC	06E38A13AC	06E34A13AC1	06E38A13AC1

06E Piggyback Dimensions		
A	B	C
2.81 (71)	2.74 (70)	4.69 (119)
D [†]	D [†]	E
5.69 (145)	5.74 (146)	10.38 (264)
E [†]	F	
10.43 (265)	2.25 (57)	

Inches (mm)

[†] With Auto Float Drain

Standard part numbers shown, for other models refer to ordering information below.

[‡] For polycarbonate bowl see caution in Product Selection Chart page 2.

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

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

Maximum panel thickness 1/4".

WARNING

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

Ordering Information

06E 1 2 A 13 A C — — ---

Port Size

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

Bowl Options

Polycarbonate Bowl	Metal Bowl
1. Twist Drain	3. Twist Drain
2. Metal Bowl Guard / Twist Drain	4. Sight Gauge / Twist Drain
5. Auto Float Drain	7. Auto Float Drain
6. Metal Bowl Guard / Auto Float Drain	8. Sight Gauge / Auto Float Drain
E. Push 'N' Drain	G. Push 'N' Drain
F. Metal Bowl Guard / Push 'N' Drain	H. Sight Gauge / Push 'N' Drain
J. Semi-Auto Drain	L. Semi-Auto Drain
K. Metal Bowl Guard / Semi-Auto Drain	M. Sight Gauge / Semi-Auto Drain

Elements

- A. 40 Micron
- B. 5 Micron
- Z. Adsorber

Relief

- A. Relieving
- L. Non-Relieving

Port Type

- Blank. NPT
1. BSPP
2. BSPT

Preset

- Blank. None
- XXX* Preset Pressure

Pressure Range

<u>Without Gauge</u>	<u>With Gauge</u>
10. 30 PSIG	17. 30 PSIG
11. 60 PSIG	16. 60 PSIG
13. 125 PSIG	18. 125 PSIG
15. § 250 PSIG	21. § 250 PSIG

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

Engineering Level

- C. Current**

Options

- Blank. No Options
- L.† Preset Non-Adjustable
- P.† Preset Adjustable

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

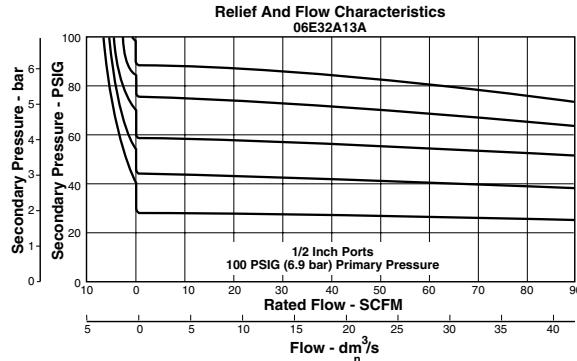
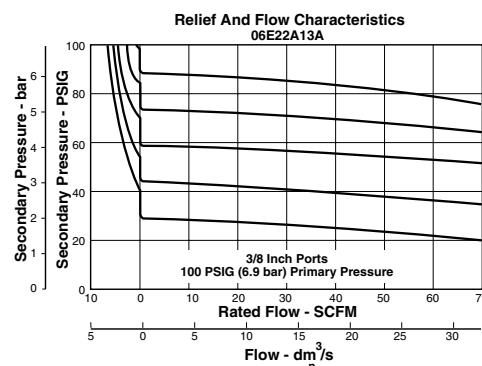
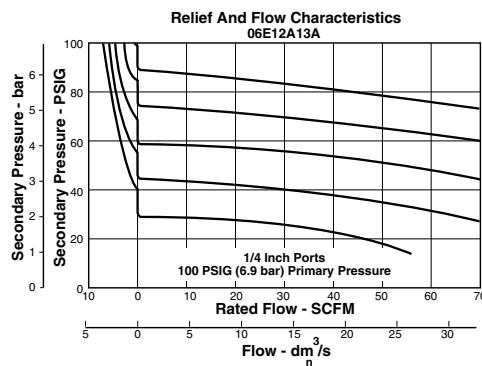
* Available Preset Range, 10 to 90 PSIG in 5 PSIG increments. For higher pressures, contact factory.
(Example:
065 = 65 PSIG)

NOTE: BOLD OPTIONS ARE STANDARD.



Technical Information

A

**06E Filter / Regulator Kits & Accessories**

Bonnet Assembly Kit	PS715P
Bowl Guard Kit	PS705P
Bowl Kits –	
Poly Bowl – Automatic Float Drain	PS722P
Semi-Auto Drain	PS792P
Twist Drain	PS732P
Push 'N' Drain	PS704P
Metal Bowl – Automatic Float Drain	PS726P
Semi-Auto Drain	PS794P
Twist Drain	PS734P
Push 'N' Drain	PS725P
Sight Gauge / Automatic Drain	PS723P
Sight Gauge / Semi-Auto Drain	PS793P
Sight Gauge / Twist Drain	PS735P
Sight Gauge / Push 'N' Drain	PS706P
Control Knob	
Drain Kits –	P04069B
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
Gauges – 60 PSIG (0 to 414 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
Mounting Bracket Kit (Includes Panel Mount Nut)	PS707P
Panel Mount Nut	P04082
Service Kits – Non-Relieving (Includes Poppet)	PS711P
Relieving (Includes Poppet)	PS710P
Seat Insert Kit	PS713P
Sight Gauge Kit	PS714P
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	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 1035 kPa)

32°F to 125°F (0°C to 52°C)

Metal Bowl – 0 to 250 PSIG (0 to 1725 kPa)

32°F to 175°F (0°C to 80°C)

Secondary Pressure Ranges –

Standard Pressure	..... 2 to 125 PSIG (14 to 863 kPa)
Low Pressure	..... 1 to 60 PSIG (6.9 to 414 kPa)
High Pressure	..... 5 to 250 PSIG (35 to 1725 kPa)

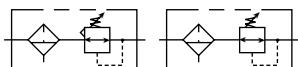
Sump Capacity	..... 1.75 Ounces
Weight	..... 1.6 lb. (.7 kg)

Materials of Construction

Adjusting Stem	..... Steel
Body	..... Zinc
Bonnet, Internal Parts	
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	
(Interchangeable for Field Conversions)	
Operating Range	..... 10 to 250 PSIG (0.7 to 17 kPa)
Housing, Float	..... Plastic
Seals	..... Nitrile
Springs, Push Rod	..... Stainless Steel
Knob	..... Plastic
Filter Elements – 40 Micron (Standard)	..... Plastic
5 Micron (Optional)	..... Plastic
Adsorber (Optional)	..... Activated Charcoal
Seals	..... Nitrile
Sight Gauge	..... Polyamide
Springs – Poppet	..... Stainless Steel
Control	..... Steel

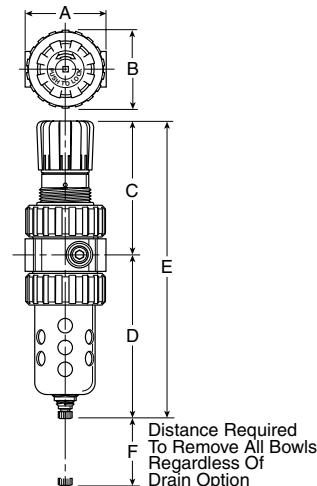


07E Filter / Regulator – Standard



Features

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



Port Size	NPT		BSPP	
	Twist Drain	Automatic Float Drain	Twist Drain	Automatic Float Drain
Poly Bowl [†] / Metal Guard				
3/8"	07E22A13AC	07E26A13AC	07E22A13AC1	07E26A13AC1
1/2"	07E32A13AC	07E36A13AC	07E32A13AC1	07E36A13AC1
3/4"	07E42A13AC	07E46A13AC	07E42A13AC1	07E46A13AC1
Metal Bowl / Sight Gauge				
3/8"	07E24A13AC	07E28A13AC	07E24A13AC1	07E28A13AC1
1/2"	07E34A13AC	07E38A13AC	07E34A13AC1	07E38A13AC1
3/4"	07E44A13AC	07E48A13AC	07E44A13AC1	07E48A13AC1

07E Piggyback Dimensions		
A	B	C
3.24 (82)	3.25 (83)	4.79 (122)
D	D [†]	E
6.97 (177)	7.00 (178)	11.76 (299)
E [†]	F	
11.79 (299)	2.75 (70)	

Inches (mm)

[†] With Auto Float Drain

Standard part numbers shown, for other models refer to ordering information below.

[‡] For polycarbonate bowl see caution in Product Selection Chart page 2.

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

NOTE: 2.00 Dia. (50.8 mm) hole required for panel mounting.
Maximum panel thickness 1/4".

WARNING

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

Ordering Information

07E 3 2 A 13 A C — — ---

Port Size

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

Bowl Options

Polycarbonate Bowl	Metal Bowl
1. Twist Drain	3. Twist Drain
2. Metal Bowl Guard / Twist Drain	4. Sight Gauge / Twist Drain
5. Auto Float Drain	7. Auto Float Drain
6. Metal Bowl Guard / Auto Float Drain	8. Sight Gauge / Auto Float Drain
E. Push 'N' Drain	G. Push 'N' Drain
F. Metal Bowl Guard / Push 'N' Drain	H. Sight Gauge / Push 'N' Drain
J. Semi-Auto Drain	L. Semi-Auto Drain
K. Metal Bowl Guard / Semi-Auto Drain	M. Sight Gauge / Semi-Auto Drain

Elements

A. 40 Micron
B. 5 Micron
Z. Adsorber

Relief

A. Relieving
L. Non-Relieving

Port Type

Blank. NPT
1. BSPP
2. BSPT

Preset

Blank. None
XXX* Preset Pressure

Pressure Range

Without Gauge	With Gauge
10. 30 PSIG	17. 30 PSIG
11. 60 PSIG	16. 60 PSIG
13. 125 PSIG	18. 125 PSIG
15. § 250 PSIG	21. § 250 PSIG

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

Engineering Level

C. Current

Options

Blank. No Options
L.† Preset
Non-Adjustable
P.† Preset Adjustable

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

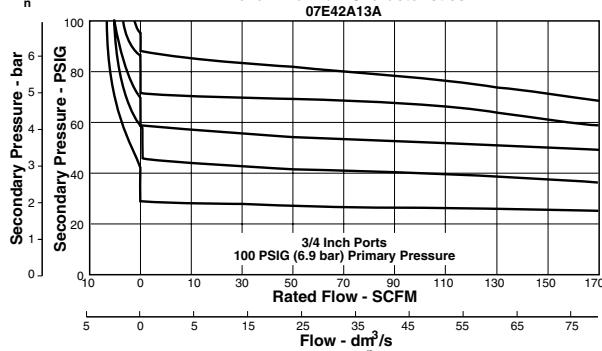
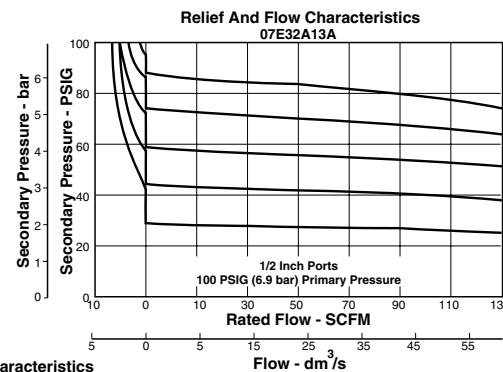
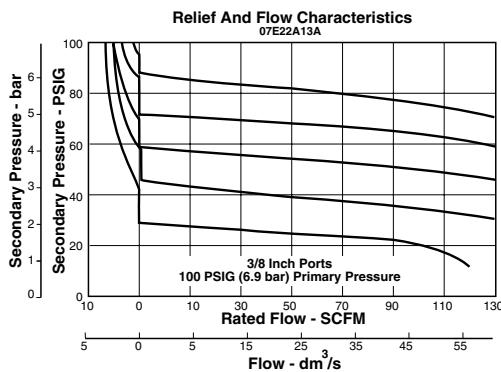
† Inlet Pressure is 100 PSIG.
For other pressures, contact factory.

NOTE: BOLD OPTIONS ARE STANDARD.



Technical Information

A

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

Bonnet Assembly Kit	PS715P
Bowl Guard Kit	PS805P
Bowl Kits –	
Poly Bowl – Automatic Float Drain	PS822P
Semi-Auto Drain	PS892P
Twist Drain	PS832P
Push 'N' Drain	PS804P
Metal Bowl – Automatic Float Drain	PS826P
Semi-Auto Drain	PS894P
Twist Drain	PS834P
Push 'N' Drain	PS825P
Sight Gauge / Automatic Float Drain	PS823P
Sight Gauge / Semi-Auto Drain	PS893P
Sight Gauge / Twist Drain	PS835P
Sight Gauge / Push 'N' Drain	PS806P
Control Knob	P04069B
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
Gauges – 60 PSIG (0 to 414 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
Mounting Bracket Kit (Includes Panel Mount Nut)	PS807P
Panel Mount Nut	P04082
Service Kits – Non-Relieving (Includes Poppet)	PS811P
Relieving (Includes Poppet)	PS810P
Seat Insert Kit	PS813P
Sight Gauge Kit	PS814P
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

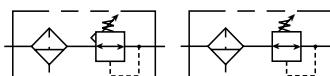
(Can be used as Additional Full Flow 1/4" Outlet Ports)

Port Threads 3/8, 1/2, 3/4 Inch**Pressure & Temperature Ratings –**Polycarbonate Bowl – 0 to 150 PSIG (0 to 1035 kPa)
32°F to 125°F (0°C to 52°C)Metal Bowl – 0 to 250 PSIG (0 to 1725 kPa)
32°F to 175°F (0°C to 80°C)**Secondary Pressure Ranges –**Standard Pressure 2 to 125 PSIG (14 to 863 kPa)
Low Pressure 1 to 60 PSIG (6.9 to 414 kPa)
High Pressure 5 to 250 PSIG (35 to 1725 kPa)**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 –Transparent	Polycarbonate
Metal (With or Without Sight Gauge)	Zinc
Bowl Guard	Steel
Collar	Plastic or Metal
Diaphragm	Nitrile
Drains – Twist Drain Standard	
Body & Nut	Plastic
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 1725 kPa)
Housing, Float	Plastic
Seals	Nitrile
Springs, Push Rod	Stainless Steel
Knob	Plastic
Filter Elements – 40 Micron (Standard)	Plastic
5 Micron (Optional)	Plastic
Adsorber (Optional)	Activated Charcoal
Seals	Nitrile
Sight Gauge	Polyamide
Springs – Poppet	Stainless Steel
Control	Steel

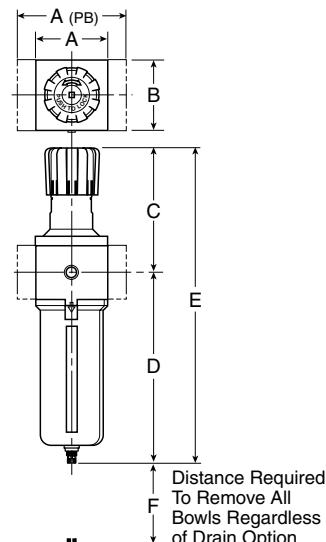


P3NE Filter / Regulator – Hi-Flow



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 §



Port Size	NPT		BSPP	
	Twist Drain	Automatic Float Drain	Twist Drain	Automatic Float Drain
Metal Bowl / Sight Gauge				
3/4"	P3NEA96GSMBNN	P3NEA96GSABNN	P3NEA16GSMBNN	P3NEA16GSABNN
1"	P3NEA98GSMBNN	P3NEA98GSABNN	P3NEA18GSMBNN	P3NEA18GSABNN
1-1/2" #	P3NEA9PGSMBNN	P3NEA9PGSABNN	P3NEA1PGSMBNN	P3NEA1PGSABNN

P3NE Piggyback Dimensions		
A	A (PB)	B
3.62 (92)	5.91 (150)	3.62 (92)
C	D †	E †
6.38 (162)	9.57 (243)	15.95 (405)
F		
4.92 (125)		

Inches (mm)

† With Twist Drain or Auto Float Drain

Standard part numbers shown, 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, with 40 micron element.

WARNING

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

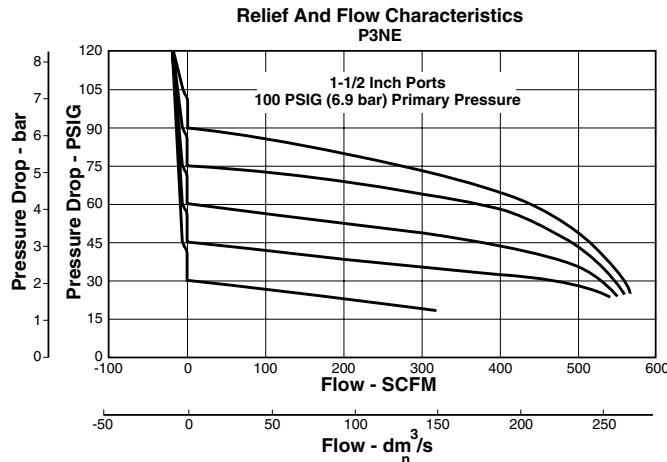
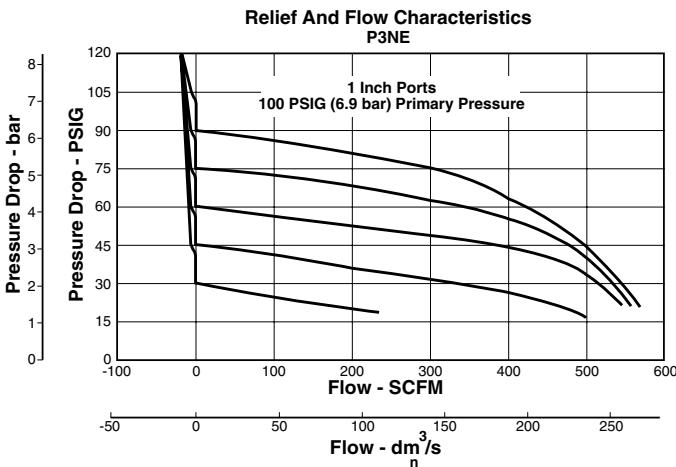
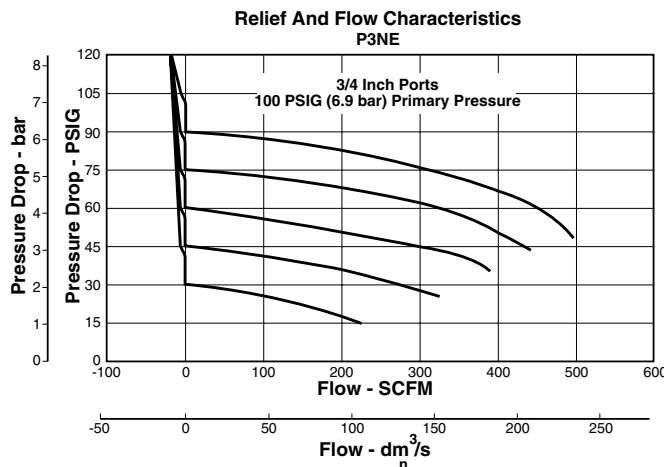
Ordering Information

P3N	E	A	9	8	G	S	M	B	N	N
-----	---	---	---	---	---	---	---	---	---	---

Design Level

Port Type	Port Size	Element	Bowl	Drains	Relief	Adjustment	Pressure Range
1. G Thread (BSPP) Female	6. 3/4" (w/o Port Blocks)	A. Adsorber E. 5 Micron G. 40 Micron	S. Metal Bowl w/ Sight Gauge	M. Twist Drain A. Automatic Float Drain P. Push 'N' Drain S. Semi-Auto Drain	B. Relieving N. Non-Relieving	N. Non-Rising Knob	w/o Gauge L. 60 PSI (0 to 4 bar)
2. Rc Thread (BSPT) Female	8. 1" (w/o Port Blocks)						N. 125 PSI (0 to 8 bar)
9. NPT Female	P. 1-1/2" Port Blocks (w/ 1" Ported Body)						H. 250 PSI (0 to 17 bar)

NOTE: BOLD OPTIONS ARE STANDARD.

**Technical Information****A****P3NE Filter / Regulator 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**Control Knob** P3NKA00PN

Drain Kit – Automatic Float Drain PS506P
Semi-Auto Drain PS511P
Twist Drain PS512P
Push 'N' Drain PS513P

Filter Element Kits – 40 Micron P3NKA00ESG
5 Micron P3NKA00ESE
Adsorber P3NKA00ESA

Gauges – 60 PSIG (0 to 414 kPa) P781641
160 PSIG (0 to 1100 kPa) P781642
300 PSIG (0 to 2000 kPa) P781643

Pressure Sensor – 0 to 145 PSI MPS-P31N-PC**Mounting Bracket Kit*** P3NKA00MW

Service Kit – Relieving P3NKA00RR
Non-Relieving P3NKA00RN

Sight Gauge Kit P3NKA00PE

Springs – 1-60 PSIG Range C10A1304
2-125 PSIG Range C10A1308
5-250 PSIG Range C10A1317

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

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)

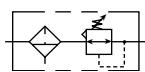
Materials of Construction**Adjusting Stem** Steel**Body, Bonnet, Bowl** Aluminum**Drain** Plastic

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

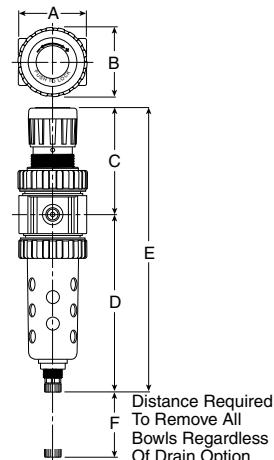
1" Port Body with 1-1/2" Port Block.

27E Filter / Regulator – Precision



Features

- Excellent water removal efficiency.
- High flow.
- Fine adjustment sensitivity.
- Good repeatability and minimal pressure drop.
- Modular with 05 Series FRL
- Non-Rising removable adjustment knob.



Port Size	NPT		BSPP	
	Twist Drain	Automatic Pulse Drain	Twist Drain	Automatic Pulse Drain
Poly Bowl / Metal Guard				
1/4"	27E12A13AB	27E1PA13AB	27E12A13AB1	27E1PA13AB1
3/8"	27E22A13AB	27E2PA13AB	27E22A13AB1	27E2PA13AB1
Metal Bowl / Sight Gauge				
1/4"	27E14A13AB	27E1TA13AB	27E14A13AB1	27E1TA13AB1
3/8"	27E24A13AB	27E2TA13AB	27E24A13AB1	27E2TA13AB1

27E Piggyback Dimensions		
A	B	C
2.00 (51)	2.06 (52)	3.16 (80)
D [†]	E [†]	F
5.35 (136)	8.51 (216)	1.77 (45)

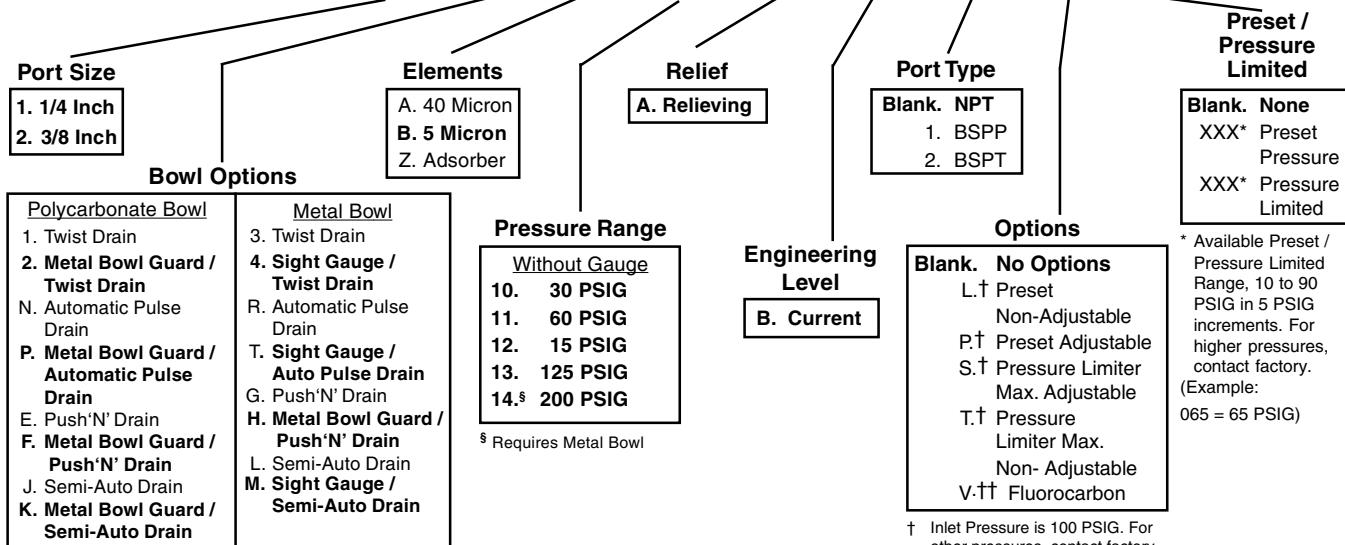
Inches (mm)
[†] With Twist Drain or Auto Float Drain

Standard part numbers shown, for other models refer to ordering information below.

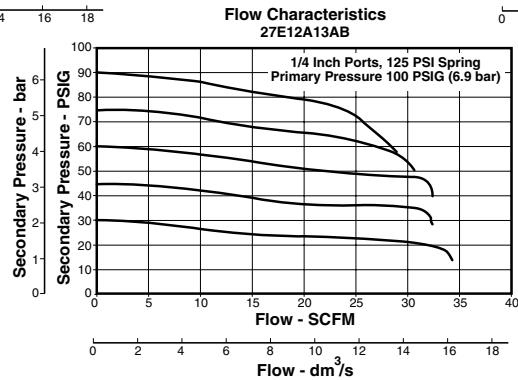
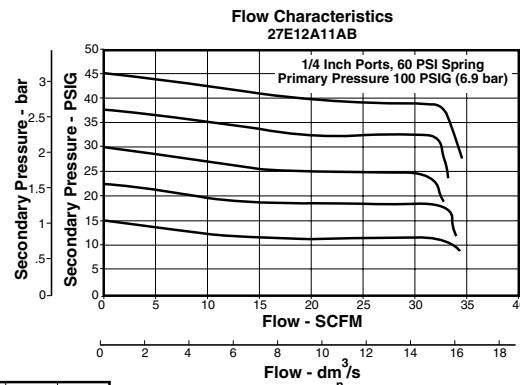
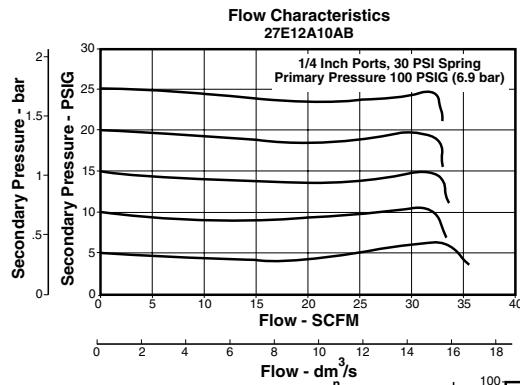
WARNING	
Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.	

Ordering Information

27E 1 2 A 13 A B — — ---



NOTE: **BOLD OPTIONS ARE STANDARD.**

A**Technical Information****27E Filter / Regulator Kits & Accessories**

Bowl Guard Kit	PS905P
Bowl Kits –	
Poly Bowl – Automatic Pulse Drain	PS995P
Semi-Auto Drain	PS992P
Twist Drain	PS932P
Push 'N' Drain	PS904P
Metal Bowl – Automatic Pulse Drain	PS997P
Semi-Auto Drain	PS994P
Twist Drain	PS934P
Twist Drain (Fluorocarbon)	PS934VP
Push 'N' Drain	PS925P
Sight Gauge / Automatic Pulse Drain	PS996P
Sight Gauge / Semi-Auto Drain	PS993P
Sight Gauge / Twist Drain	PS935P
Sight Gauge / Twist Drain (Fluorocarbon)	PS935VP
Sight Gauge / Push 'N' Drain	PS906P
Control Knob	P0442001
Drain Kit – Automatic Pulse Drain	PS998P
Semi-Auto Drain	PS511P
Twist Drain	PS512P
Twist Drain (Fluorocarbon)	PS512VP
Push 'N' Drain	PS513P
Filter Element Kits –	
40 Micron	PS901P
5 Micron	PS902P
Adsorber	PS931P
Sight Gauge Kit	PS914P
Gauges – 1-1/2" Dial Face	
30 PSIG (0 to 200 kPa)	RRP-96-663
60 PSIG (0 to 400 kPa)	RRP-96-664
160 PSIG (0 to 1100 kPa)	RRP-96-665
300 PSIG (0 to 2000 kPa)	RRP-96-666
2" Dial Face	
60 PSIG (0 to 400 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Pressure Sensor – 0 to 145 PSI	MPS-P31-PC
Mounting Bracket Kit (Includes Panel Mount Nut)	PS963P
Panel Mount Nut – Metal	PS964P
Springs –	
1-15 PSIG Range	P04428
1-30 PSIG Range	P04427
1-60 PSIG Range	P04426
2-125 PSIG Range	P04425
2-200 PSIG	P02934
Regulator Service Kit	PS907P
Bonnet Assembly Kit	PS910P

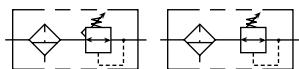
Specifications

Bowl Capacity	2.0 Ounces
Bleed Rate	2.0 SCFH
Gauge Ports (2)	1/4 Inch
Effect of Supply Pressure Variation –	0.5 PSIG (3.5 kPa) for 25 PSIG (173 kPa) change in P ₁
Flow Capacity –	33 SCFM (15.6 dm ³ /s) @ 100 PSIG (690 kPa) P ₁ and 20 PSIG (138 kPa) P ₂
Sump Capacity	.9 Ounce
Port Threads	1/4, 3/8 Inch
Pressure & Temperature Rating –	
Polycarbonate Bowl –	0 to 150 PSIG (0 to 10.3 bar) 32°F to 125°F (0°C to 52°C)
Metal Bowl –	0 to 250 PSIG (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
Automatic Pulse Drain –	10 to 150 PSIG (.7 to 10.3 bar)
Relief Capacity –	0.5 SCFM (0.24 dm ³ /s) @ 5 PSIG (35 kPa) increase in P ₂
Repeatability	±.14 PSIG (±0.97 kPa)
Response –	510 ms The valve will open to full flow and fill a volume of 100 in ³
Weight	1.35 lb. (.6 kg)

Materials of Construction

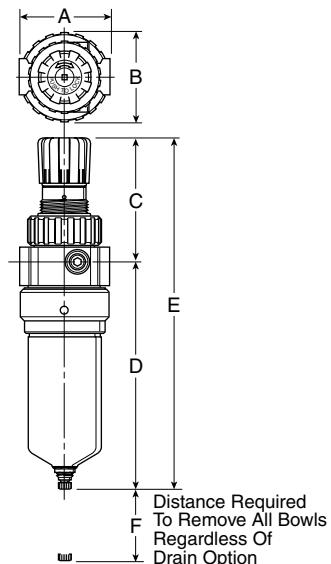
Adjusting Stem	Steel
Body	Zinc
Bonnet, Internal Parts	Plastic
Bowl Guard	Steel
Collar	Plastic
Diaphragm	Nitrile
Drain	Plastic
Filter Elements –	Plastic
40 Micron (Standard)	Plastic
5 Micron (Optional)	Plastic
Adsorber (Optional)	Activated Charcoal
Knob	Plastic
Poppet	Brass
Seals	Nitrile
Sight Gauge	Polyamide (Nylon)
Springs – Poppet & Control	Steel

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: 3/8" – 35 SCFM §
1/2" – 40 SCFM §
3/4" – 45 SCFM §



Port Size	NPT	BSPP
Twist Drain		
3/8"	12E23E13AA	12E23E13AA1
1/2"	12E33E13AA	12E33E13AA1
3/4"	12E43E13AA	12E43E13AA1
Automatic Float Drain		
3/8"	12E27E13AA	12E27E13AA1
1/2"	12E37E13AA	12E37E13AA1
3/4"	12E47E13AA	12E47E13AA1

Standard part numbers shown, 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 150 PSIG inlet,
90 PSIG no flow secondary setting and 10 PSIG pressure drop.

12E Piggyback Dimensions

A	B	C
3.24 (82)	3.25 (83)	4.79 (122)
D	D†	E
8.20 (208)	8.17 (208)	12.99 (330)

Inches (mm)

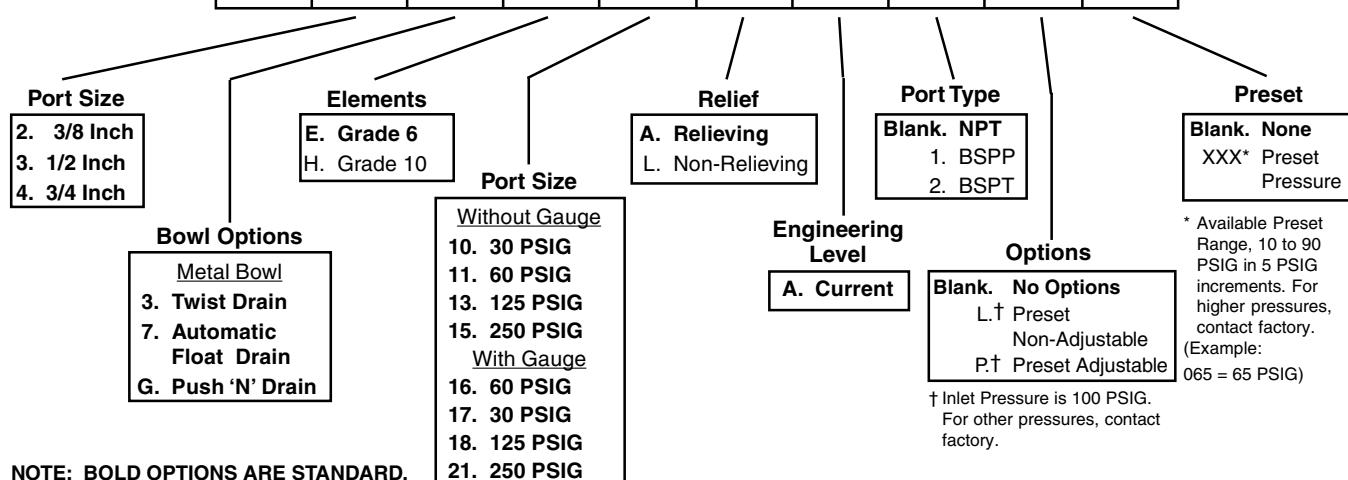
† With Twist Drain or Auto Float Drain

WARNING

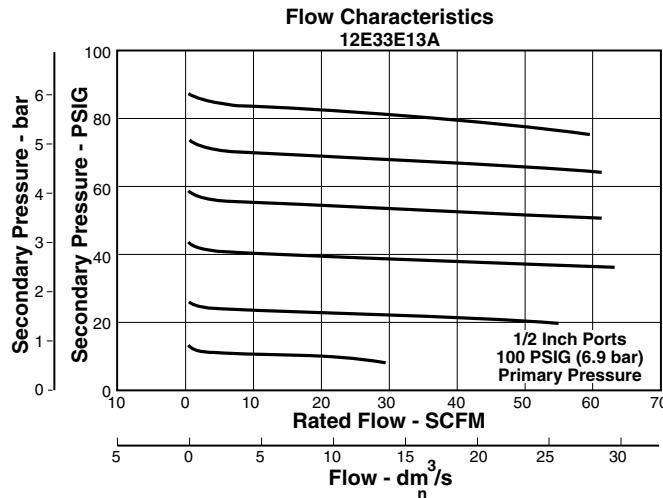
Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.

Ordering Information

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



NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information**A****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 10	PS884P
Grade 10	PS885P
Gauges – 60 PSIG (0 to 414 kPa)	P781641
160 PSIG (0 to 1100 kPa)	P781642
300 PSIG (0 to 2000 kPa)	P781643
Mounting Bracket Kit (Includes Panel Mount Nut)	PS807P
Pressure Sensor – 0 to 145 PSI	MPS-P31N-PC
Service Kits –	
Non-Relieving (Includes Poppet)	PS887P
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 1725 kPa) 32°F to 175°F (0°C to 80°C)	

Secondary Pressure Ranges –

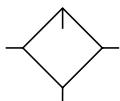
Standard Pressure	2 to 125 PSIG (14 to 863 kPa)
Low Pressure	1 to 60 PSIG (6.9 to 414 kPa)
High Pressure	5 to 250 PSIG (35 to 1725 kPa)
Sump Capacity	
Weight	2.8 Ounces
Weight	2.5 lb. (1.1kg)

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	
(Interchangeable for Field Conversions)	
Operating Range	10 to 250 PSIG (0.7 to 17 kPa)
Housing, Float	Plastic
Seals	Nitrile
Springs, Push Rod	Stainless Steel
Knob	Plastic
Filter Elements	Borosilicate & Felt Glass Fibers
Seals	Nitrile
Sight Gauge	Polyamide
Springs – Poppet	Stainless

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.

- Miniature 14L Series, 1/4 Inch
- 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

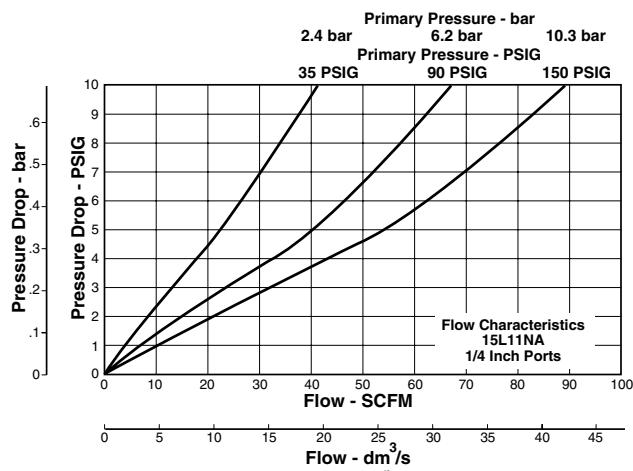
1. Determine maximum system flow requirements.
2. Determine maximum allowable pressure drop at rated flow in SCFM.
3. Refer to flow chart and select lubricator by choosing the curve that offers minimum pressure drop at desired flow in SCFM.



F442 Oil

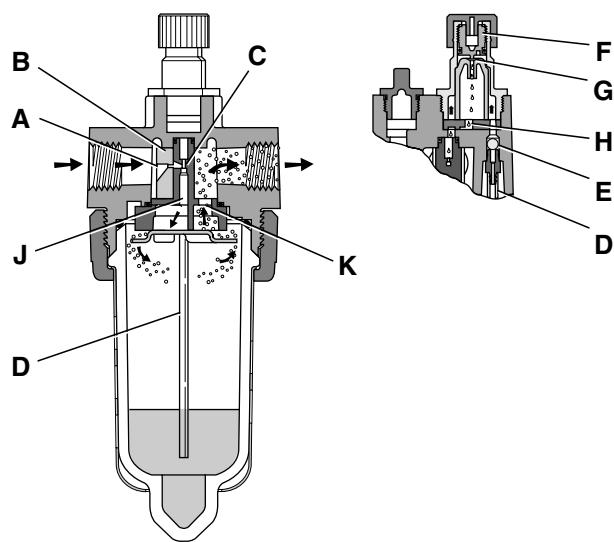
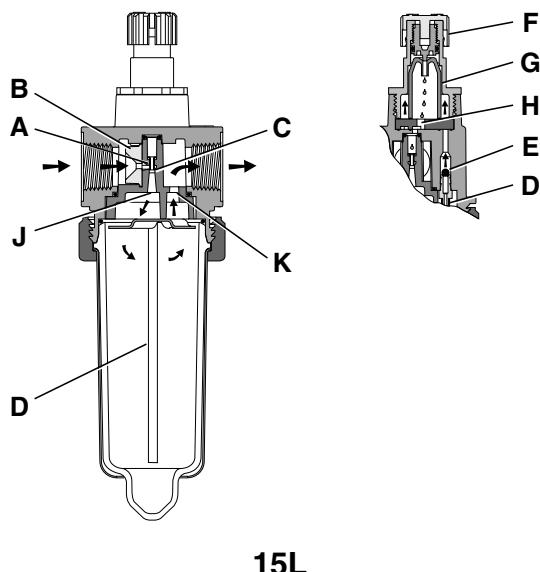
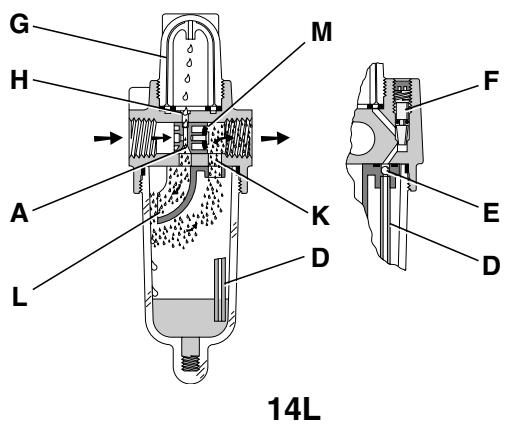
Quantity	Part Numbers
1 Gallon	F442002
12 Quart Case	F442003
4 Gallon Case	F442005

Reading Flow Charts to Size Micro-Mist Lubricators



Once the required flow is determined for a pneumatic application the lubricator can be selected by using the flow chart. To read the lubricator flow chart, first determine the inlet pressure that will be used. Find the appropriate 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.

A



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 14L. 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). 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). On the 14L, it flows through the curved scoop (L) and is deflected against the interior wall of the reservoir. 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), (M). As air flow rate increases, the flapper (B), (M) 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.

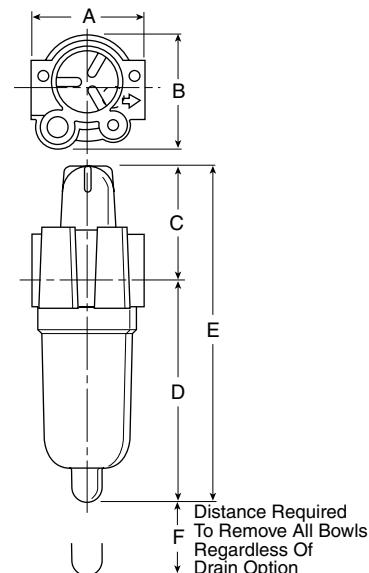
The check ball (E) prevents reverse oil flow down the pickup tube when air flow stops. Thus, oil delivery can resume immediately when air flow restarts. **Micro-Mist Lubricators can only be filled when the air supply is shut off.**

14L Micro-Mist Lubricators – Miniature



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.
- High Flow: 1/4" – 13 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	No Drain	Twist Drain	No Drain
Poly Bowl †				
1/4"	—	14L10GA	—	14L10GA1
Metal Bowl without Sight Gauge				
1/4"	14L13GA	—	14L13GA1	—

14L Lubricator Dimensions		
A	B	C
1.68 (43)	1.61 (41)	1.64 (42)
D	D†	E
3.65 (93)	3.78 (96)	5.29 (134)
E†	F	
5.47 (139)	1.60 (41)	

Inches (mm)

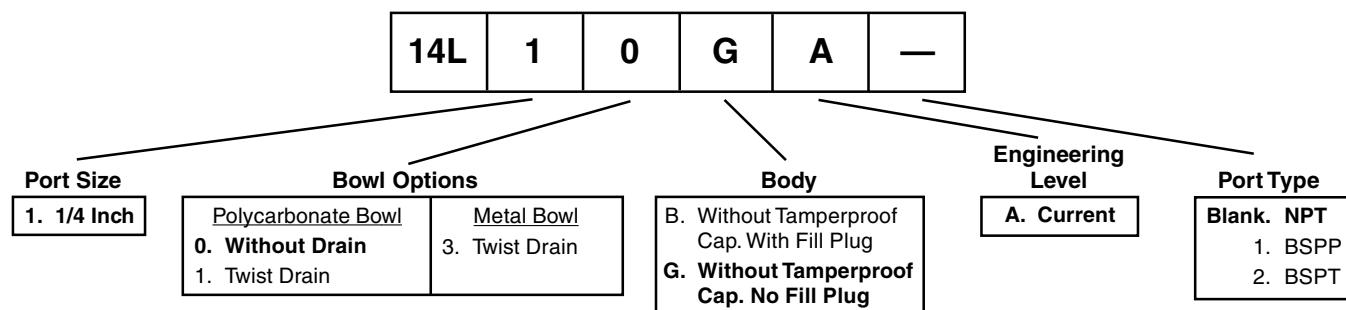
† With Twist Drain

Standard part numbers shown, for other models refer to ordering information below.

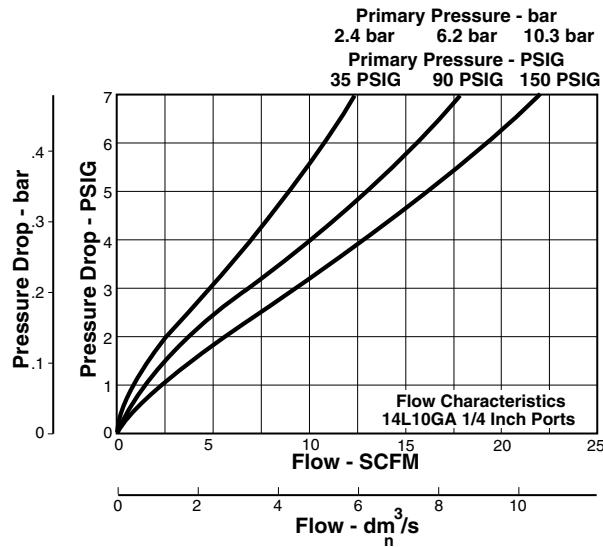
‡ For polycarbonate bowl see Caution on page 2.

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

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****14L Micro-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	PS417BP
-----------------------------------	---------

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	1/4 Inch
---------------------------	----------

Pressure & Temperature Ratings –

Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.3 bar)
32°F to 125°F (0°C to 52°C)

Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)
32°F to 175°F (0°C to 80°C)

Suggested Lubricant – F442 Oil

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

Weight4 lb. (.18 kg)

Materials of Construction

Body Zinc
Bowls – Transparent Polycarbonate

Metal (Without Sight Gauge) Zinc

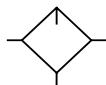
Drains – Twist – Body & Nut Plastic

Seals Nitrile

Sight Dome Polycarbonate

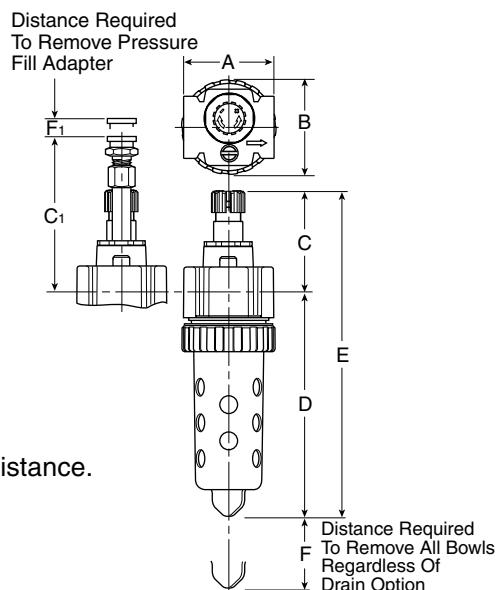


15L Micro-Mist Lubricators – Economy



Features

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



Port Size	NPT		BSPP	
	Twist Drain	No Drain	Twist Drain	No Drain
Poly Bowl[‡] / Metal Guard				
1/4"	—	15L12NA	—	15L12NA1
3/8"	—	15L22NA	—	15L22NA1
Metal Bowl / Sight Gauge				
1/4"	15L14NA	—	15L14NA1	—
3/8"	15L24NA	—	15L24NA1	—

Standard part numbers shown, for other models refer to ordering information below.

‡ For polycarbonate bowl see Caution on page 2.

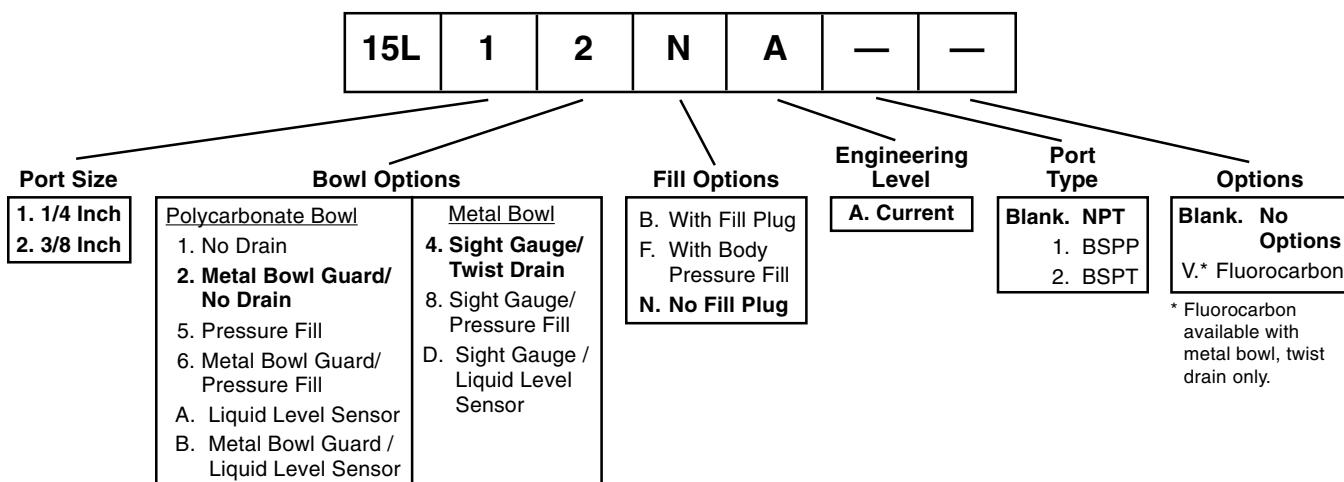
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

15L Lubricator Dimensions		
A	B	C
2.00 (51)	2.06 (52)	2.26 (57)
C ₁	D	D [†]
3.35 (85)	5.12 (130)	5.35 (136)
E	E [†]	F
7.38 (187)	7.61 (193)	1.77 (45)
F ₁		
.39 (10)		

Inches (mm)

† With Twist Drain

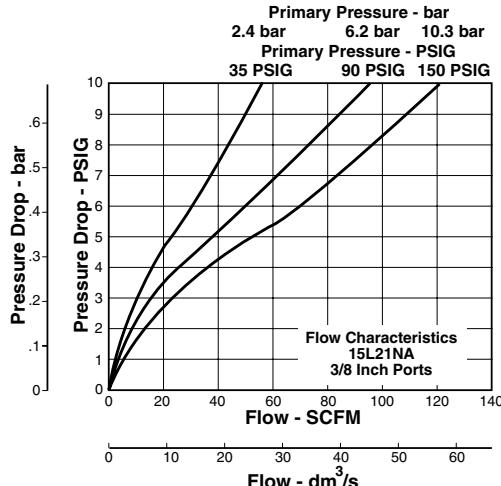
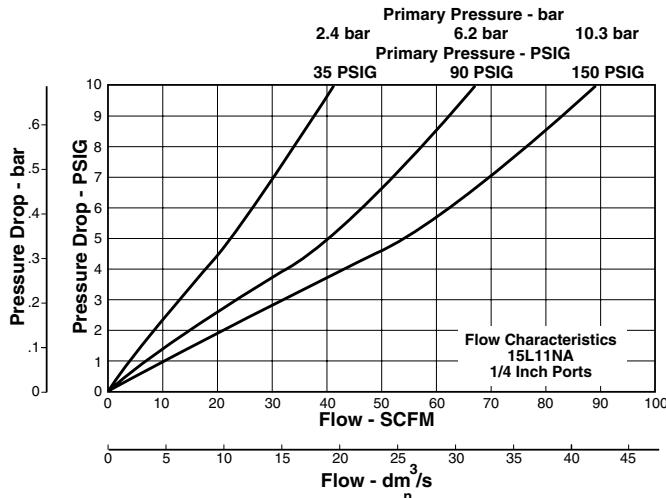
Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**



Technical Information


A

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 and an aniline point greater than 200°F
(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)

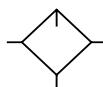
Weight 1 lb. (.45 kg)

Materials of Construction

Body	Zinc
Bowls – 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)

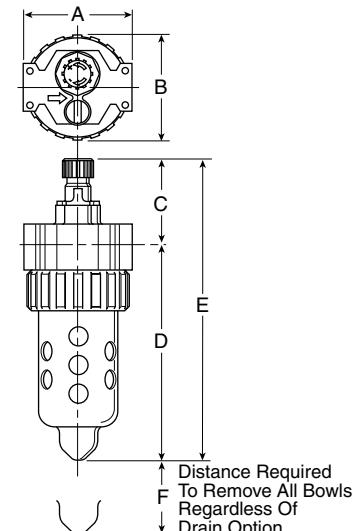


16L Micro-Mist Lubricators – Compact



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 §
3/8" – 60 SCFM §
1/2" – 90 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	No Drain	Twist Drain	No Drain
Poly Bowl [‡] / Metal Guard				
1/4"	—	16L12BE	—	16L12BE1
3/8"	—	16L22BE	—	16L22BE1
1/2"	—	16L32BE	—	16L32BE1
Metal Bowl / Sight Gauge				
1/4"	16L14BE	—	16L14BE1	—
3/8"	16L24BE	—	16L24BE1	—
1/2"	16L34BE	—	16L34BE1	—

Standard part numbers shown, for other models refer to ordering information below.

‡ For polycarbonate bowl see Caution on page 2.

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

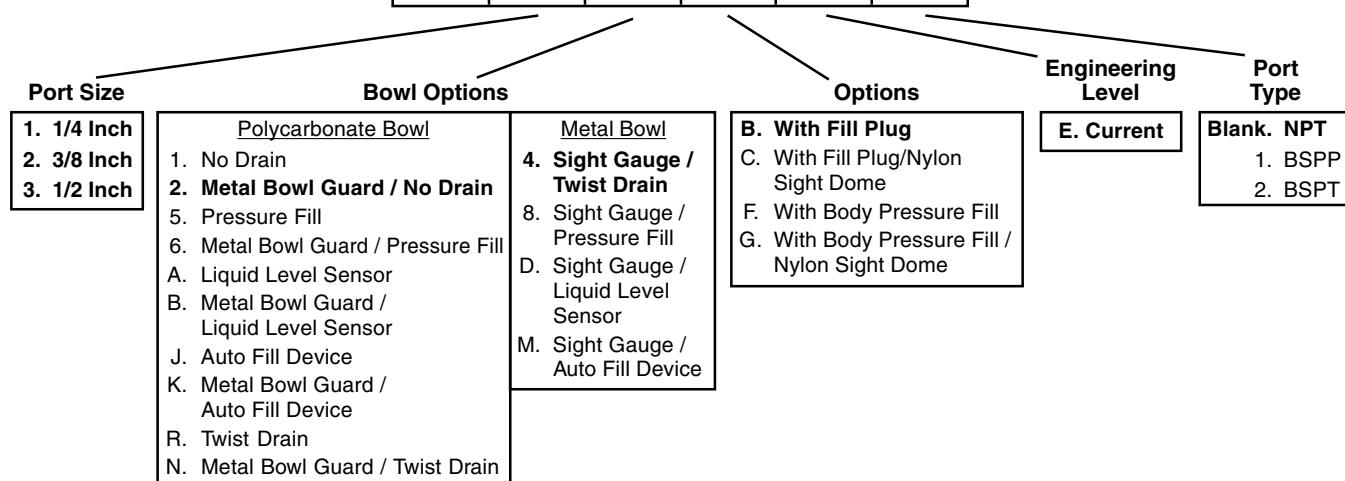
16L Lubricator Dimensions		
A	B	C
2.81 (71)	2.74 (70)	2.24 (57)
D	D [†]	E
5.58 (142)	5.69 (145)	7.82 (199)
E [†]	F	
7.93 (201)	2.25 (57)	

Inches (mm)

[†] With Twist Drain

Ordering Information

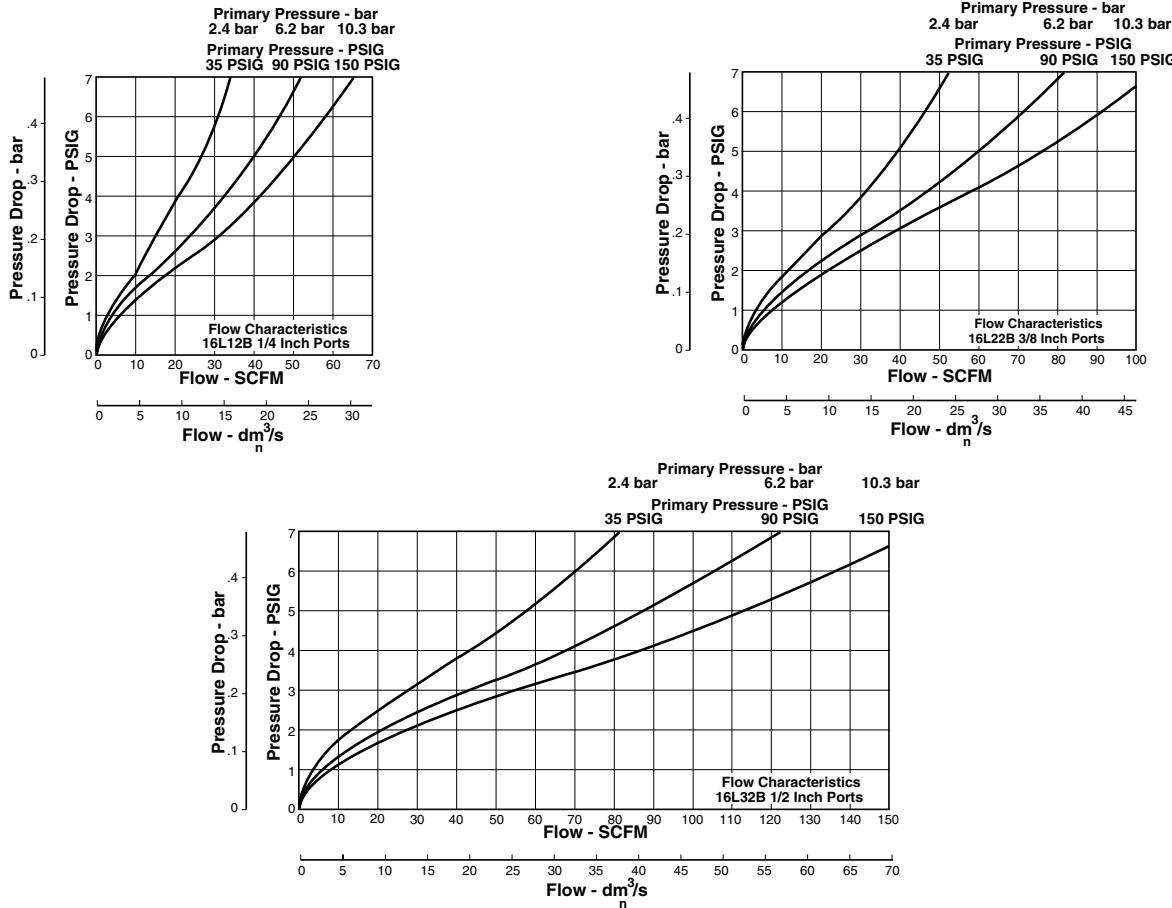
16L	1	2	B	E	—
------------	----------	----------	----------	----------	----------



NOTE: BOLD OPTIONS ARE STANDARD.


A

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
Sight Gauge Kit	PS714P

Specifications

Bowl Capacity	2.60 Ounces
Minimum Flow for Lubrication	1 SCFM At 100 PSIG
Port Threads	1/4, 3/8, 1/2 Inch
Pressure & Temperature Rating –	
Polycarbonate Bowl –	0 to 150 PSIG (0 to 10.3 bar) 32°F to 125°F (0°C to 52°C)
Metal Bowl –	0 to 250 PSIG (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)

Suggested Lubricant	F442 Oil
Petroleum based oil of 100 to 200 SSU viscosity at 100°F and an aniline point greater than 200°F	
(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)	
Weight	1.2 lb. (.5 kg)

Materials of Construction

Body	Zinc
Bowls – Transparent	Polycarbonate
Metal (With Sight Gauge)	Zinc
Bowl Guard	Steel
Collar	Plastic
Drain – Twist – Body & Nut	Plastic
Injector Meter Block & Base Assembly	Plastic
Seals	Nitrile
Sight Dome	Polycarbonate
Sight Gauge	Polyamide (Nylon)

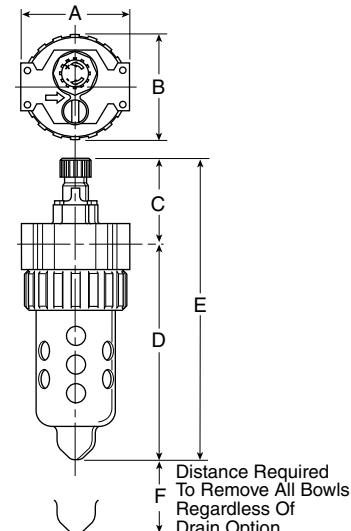


17L Micro-Mist Lubricators – Standard



Features

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



Port Size	NPT		BSPP	
	Twist Drain	No Drain	Twist Drain	No Drain
Poly Bowl[†] / Metal Guard				
3/8"	—	17L22BE	—	17L22BE1
1/2"	—	17L32BE	—	17L32BE1
3/4"	—	17L42BE	—	17L42BE1
Metal Bowl / Sight Gauge				
3/8"	17L24BE	—	17L24BE1	—
1/2"	17L34BE	—	17L34BE1	—
3/4"	17L44BE	—	17L44BE1	—

17L Lubricator Dimensions		
A	B	C
3.24 (82)	3.25 (83)	2.41 (61)
D	D [†]	E
6.86 (174)	6.95 (177)	9.27 (235)
E [†]	F	
7.93 (201)	2.75 (70)	

Inches (mm)

[†] With Twist Drain

Standard part numbers shown, for other models refer to ordering information below.

[‡] For polycarbonate bowl see Caution on page 2.

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

Ordering Information

17L 2 2 B E —

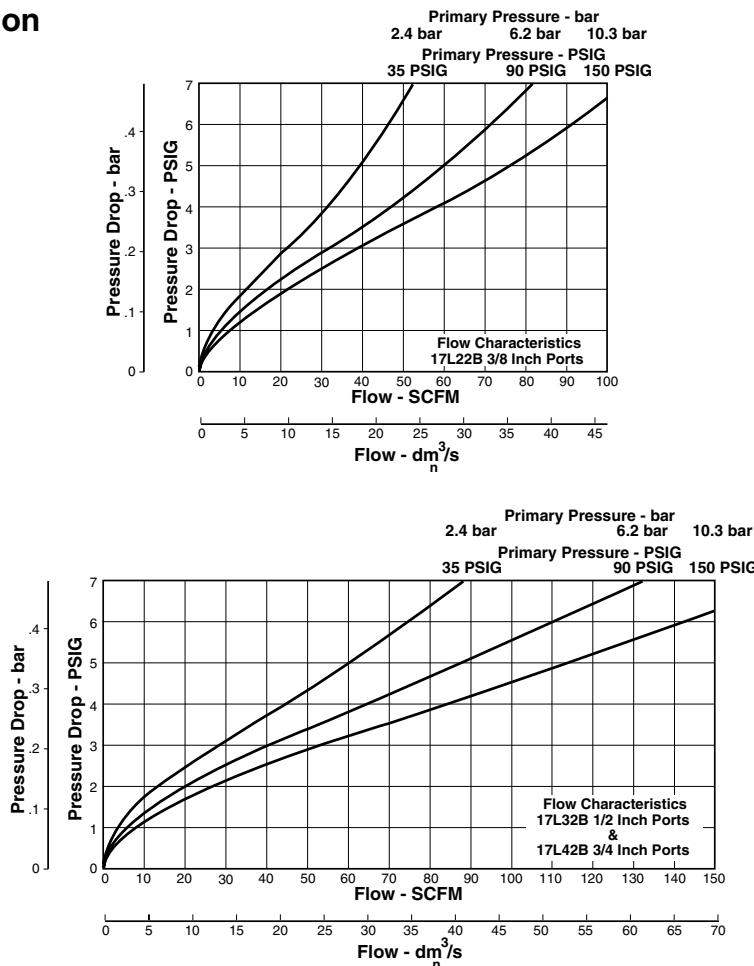
Port Size	Bowl Options	Options	Engineering Level	Port Type
2. 3/8 Inch 3. 1/2 Inch 4. 3/4 Inch	Polycarbonate Bowl 1. No Drain 2. Metal Bowl Guard / No Drain 5. Pressure Fill 6. Metal Bowl Guard / Pressure Fill A. Liquid Level Sensor B. Metal Bowl Guard / Liquid Level Sensor J. Auto Fill Device K. Metal Bowl Guard / Auto Fill Device R. Twist Drain N. Metal Bowl Guard / Twist Drain	Metal Bowl 4. Sight Gauge / Twist Drain 8. Sight Gauge / Pressure Fill D. Sight Gauge / Liquid Level Sensor M. Sight Gauge / Auto Fill Device	B. With Fill Plug C. With Fill Plug/Nylon Sight Dome F. With Body Pressure Fill G. With Body Pressure Fill/Nylon Sight Dome	E. Current Blank. NPT 1. BSPP 2. BSPT

NOTE: BOLD OPTIONS ARE STANDARD.



A

Technical Information



17L Micro-Mist Lubricator Kits &

Accessories

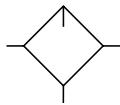
Adjustment Knob	P04121
Bowl Guard Kit	PS805P
Bowl Kits –	
Poly Bowl – No Drain	PS846P
Twist Drain	PS817P
Pressure Fill	PS819P
Remote Fill	PS828P
Metal Bowl – Sight Gauge / Twist Drain	PS829P
Sight Gauge / Pressure Fill	PS820P
Drain Kit – Twist Drain	PS512P
Fill Cap Kit	PS742P
Lubricator Service Kit	PS748P
Mounting Bracket Kit	PS843P
Oil – 1 Gal.	F442002
12 Quart Case	F442003
4 Gallon Case	F442005
Pressure Fill Adapter Kit	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
Sight Gauge Kit	PS814P

Specifications

Bowl Capacity	4.9 Ounces
Minimum Flow for Lubrication	1 SCFM At 100 PSIG
Port Threads	3/8, 1/2, 3/4 Inch
Pressure & Temperature Rating –	
Polycarbonate Bowl –	0 to 150 PSIG (0 to 10.3 bar) 32°F to 125°F (0°C to 52°C)
Metal Bowl –	0 to 250 PSIG (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
Suggested Lubricant	F442 Oil
Petroleum based oil of 100 to 200 SSU viscosity at 100°F and an aniline point greater than 200°F (DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)	
Weight	1.9 lb. (.9 kg)
Materials of Construction	
Body	Zinc
Bowls – Transparent	Polycarbonate
Metal (With Sight Gauge)	Zinc
Bowl Guard	Steel
Collar	Plastic or Metal
Drain – Twist – Body & Nut	Plastic
Injector Meter Block & Base Assembly	Plastic
Seals	Nitrile
Sight Dome	Polycarbonate
Sight Gauge	Polyamide (Nylon)

Mist Lubricators

- Pipe Sizes 1/8 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 P3A-LA 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 PL606 Series, 1, 1-1/4 and 1-1/2 Inch
- Hi-Flow 09L Series, 2 Inch

Lubricator Selection

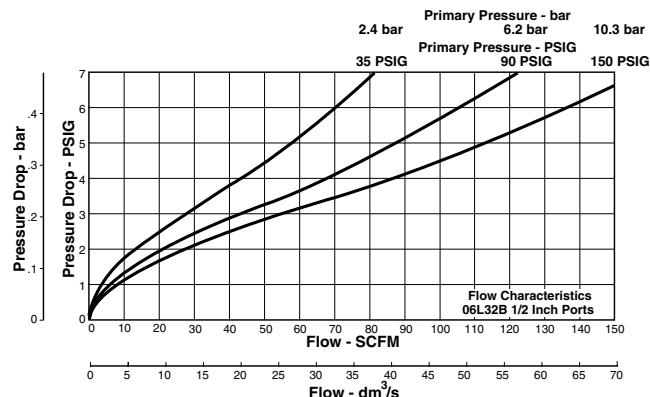
1. Determine maximum system flow requirements.
2. Determine maximum allowable pressure drop at rated flow in SCFM.
3. Refer to flow chart and select lubricator by choosing the curve that offers minimum pressure drop at desired flow in SCFM.



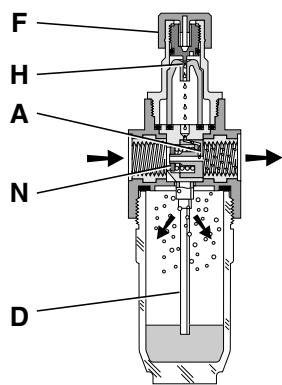
F442 Oil

Quantity	Part Numbers
1 Gallon	F442002
12 Quart Case	F442003
4 Gallon Case	F442005

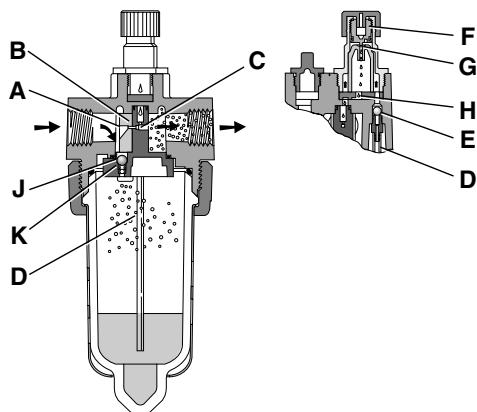
Reading Flow Charts to Size Mist Lubricators



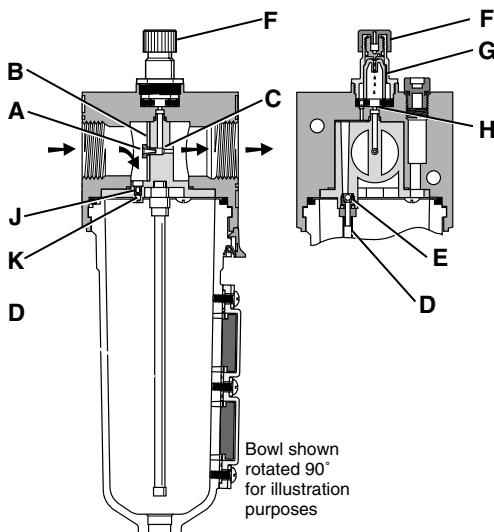
Once the required flow is determined for a pneumatic application the lubricator can be selected by using the flow chart. To read the lubricator flow chart, first determine the inlet pressure that will be used. Find the appropriate pressure curve on the graph. Each graph will contain three pressure curves. 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.



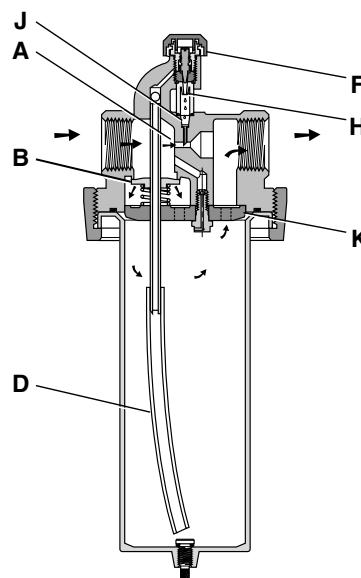
P3A-LA



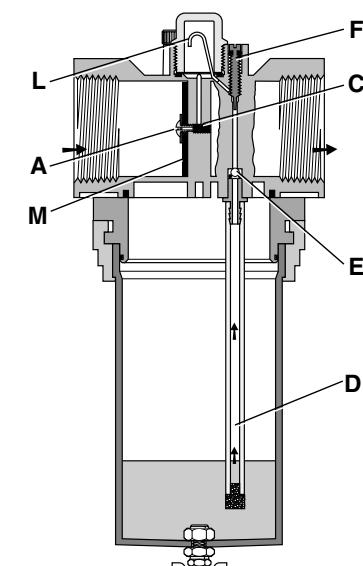
06L / 07L



P3NL



PL606



09L

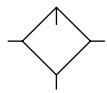
Air flowing through the unit goes through two paths. At low air flow rates, the majority of the air flows through venturi section (A). The rest of the air slightly deflects and flows by the flapper (B), restrictor disc (M) on the 09L. The velocity of the air flowing through venturi section (A) creates 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.

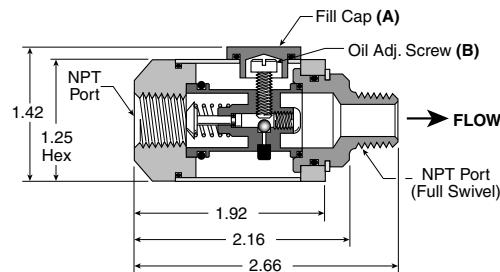
A

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

The 02L lubricator is recommended to be directly attached to the air tool inlet or air appliance. These lubricators allow air tools to operate at full efficiency by preventing sticking, extending service life. Effective tool lubrication saves money by reducing equipment down time.

Operation

When the fill cap (A) is removed, turn oil adjustment screw (B) (counterclockwise for more oil, clockwise for less oil) 1/4 turn at a time to set oil adjustment to user requirements. Connect to air tool. Cycle air tool a few seconds to allow oil adjustment to become apparent. Automatic lubrication of the air occurs upon passage of the rated air flow when the tool is triggered.



Ordering Information

Port Size Model Number

1/4"	02L1A
3/8"	02L2A

02L Accessories

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

02L Specifications

Oil Capacity	9 cc
Flow	32 SCFM At 90 PSIG inlet & 5 PSI pressure drop
Port Threads	Inlet - Stationary 1/4" & 3/8" Outlet - Full Swivel 1/4" & 3/8"
Pressure & Temperature Rating	0 to 250 PSIG (0 to 17.2 bar) 32°F to 125°F (0°C to 52°C)

Suggested Lubricant F442 Oil

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

02L Materials of Construction

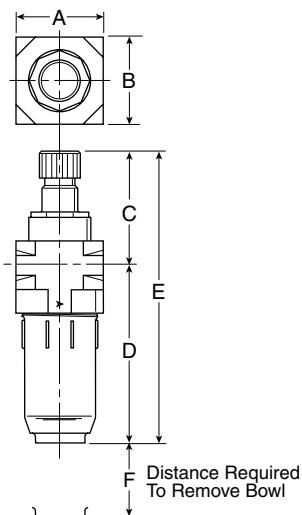
Body	Hard Anodized Aluminum
Insert	Nylon
Nut	Cad. Plated Steel
Seals	Nitrile

P3A-LA Mist Lubricators – Miniature



Features

- Lightweight Plastic Body
- Proportional oil delivery over a wide range of air flow.
- Precision needle valve assures repeatable oil delivery and provides simple adjustments.
- Transparent sight dome for 360° visibility.



Port Size	NPT
	No Drain
1/8"	P3A-LA91ANNP
1/4"	P3A-LA92ANNP

Lubricator Dimensions			
A	B	C	D
1.57 (40)	1.57 (40)	2.44 (62)	3.50 (89)
E	F		
5.51 (140)	2.75 (70)		

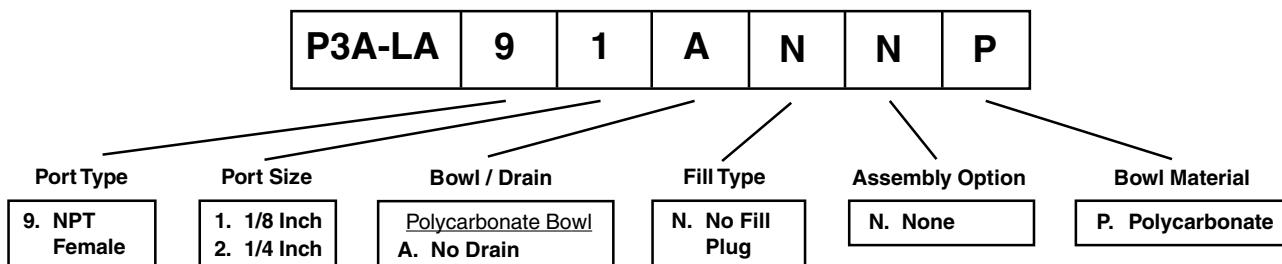
Inches (mm)

[†] With Twist Drain

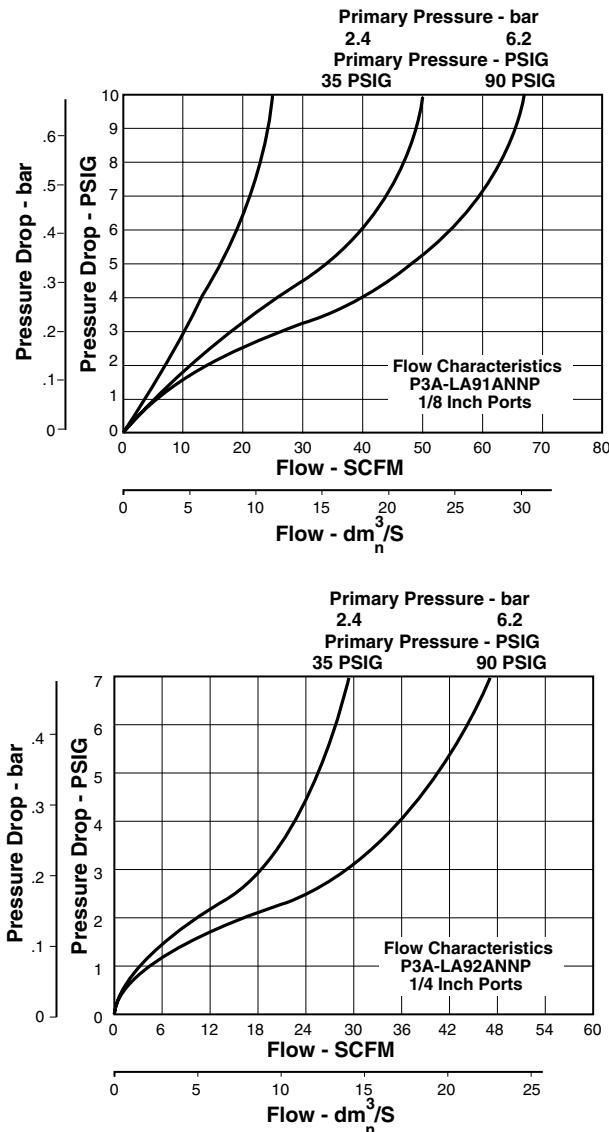
Standard part numbers shown, for other models refer to ordering information below.

[†] For polycarbonate bowl see caution ON page 2.

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****Lubricator Kits and Accessories**

Oil – 1 Gal.	F442002
12 Quart Case	F442003
4 Gallon Case	F442005
Plastic Bowl – No Drain	P3A-KA00BAP
Service Kit	P3A-KA00RLN

Suggested Lubricant F442 Oil

Petroleum based oil of 100 to 200 SSU viscosity at 100°F and an aniline point greater than 200°F.

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

Weight 0.18 lb. (.08 kg.)

Specifications

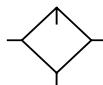
Bowl Capacity	0.9 Ounces
Minimum Flow for Lubrication	0.4 SCFM at 100 PSIG
Operating Pressure Range	PSIG bar kPa
Maximum	120 8.3 828
Operating Temperature Range	32°F to 125°F (0°C to 52°C)
Port Threads	1/8, 1/4 Inch

Materials of Construction

Body	Plastic
Bowl	Transparent Polycarbonate
Metering Screw	Plastic
Port Inserts	Brass
Seals	Nitrile
Sight Dome	Transparent Polycarbonate
Venturi & Check Valve Assembly	Plastic

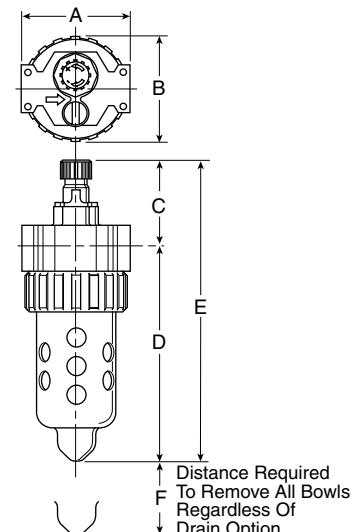


06L Mist Lubricators – Compact



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 §



Port Size	NPT		BSPP	
	Twist Drain	No Drain	Twist Drain	No Drain
Poly Bowl[†] / Metal Guard				
1/4"	—	06L12BE	—	06L12BE1
3/8"	—	06L22BE	—	06L22BE1
1/2"	—	06L32BE	—	06L32BE1
Metal Bowl / Sight Gauge				
1/4"	06L14BE	—	06L14BE1	—
3/8"	06L24BE	—	06L24BE1	—
1/2"	06L34BE	—	06L34BE1	—

Standard part numbers shown, for other models refer to ordering information below.

[†] For polycarbonate bowl see caution in Product Selection Chart page 2.

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

06L Lubricator Dimensions		
A	B	C
2.81 (71)	2.74 (70)	2.24 (57)
D	D [†]	E
5.58 (142)	5.69 (145)	7.82 (199)
E [†]	F	
7.93 (201)	2.25 (57)	

Inches (mm)

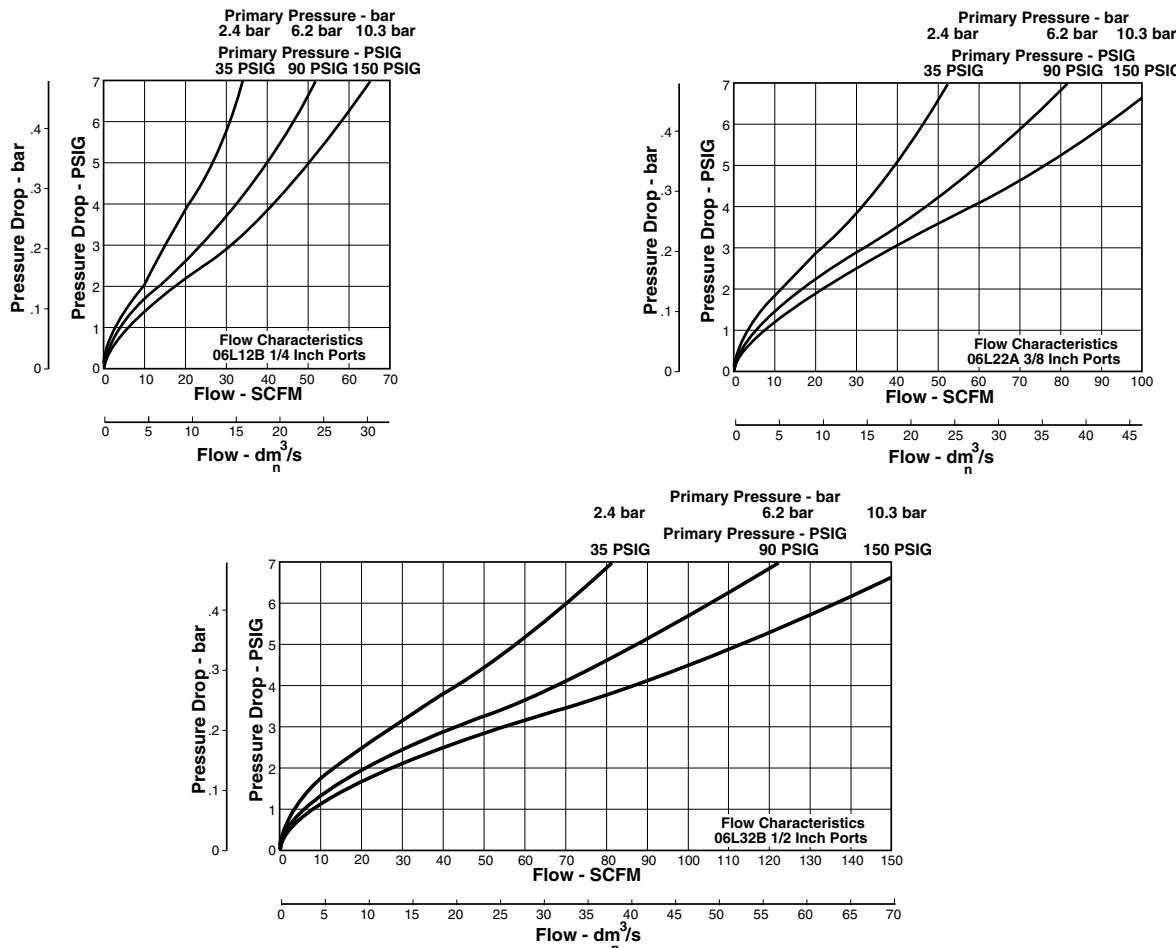
[†] With Twist Drain

Ordering Information

06L 1 2 B E —

Port Size	Bowl Options	Options	Engineering Level	Port Type
1. 1/4 Inch 2. 3/8 Inch 3. 1/2 Inch	Polycarbonate Bowl 1. No Drain 2. Metal Bowl Guard / No Drain 5. Pressure Fill 6. Metal Bowl Guard / Pressure Fill A. Liquid Level Sensor B. Metal Bowl Guard / Liquid Level Sensor J. Auto Fill Device K. Metal Bowl Guard / Auto Fill Device R. Twist Drain N. Metal Bowl Guard / Twist Drain	4. Sight Gauge / Twist Drain 8. Sight Gauge / Pressure Fill D. Sight Gauge / Liquid Level Sensor M. Sight Gauge / Auto Fill Device	B. With Fill Plug C. With Fill Plug/Nylon Sight Dome F. With Body Pressure Fill G. With Body Pressure Fill/Nylon Sight Dome	E. Current Blank. NPT 1. BSPP 2. BSPT

NOTE: **BOLD OPTIONS ARE STANDARD.**

**A****Technical Information****06L 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	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
Sight Gauge Kit	PS714P

Specifications

Bowl Capacity	2.90 Ounces
---------------------	-------------

Minimum Flow for Lubrication5 SCFM At 100 PSIG**Port Threads** 1/4, 3/8, 1/2 Inch**Pressure & Temperature Rating –**Polycarbonate Bowl – 0 to 150 PSIG (0 to 10.3 bar)
32°F to 125°F (0°C to 52°C)Metal Bowl – 0 to 250 PSIG (0 to 17.2 bar)
32°F to 175°F (0°C to 80°C)**Suggested Lubricant** F442 OilPetroleum based oil of 100 to 200 SUS viscosity
at 100°F and an aniline point greater than 200°F
(DO NOT USE OILS WITH ADDITIVES,
COMPOUNDED OILS CONTAINING SOLVENTS,
GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)**Weight** 1.2 lb. (.5 kg)**Materials of Construction**

Body	Zinc
Bowls – Transparent	Polycarbonate
Metal (With Sight Gauge)	Zinc
Bowl Guard	Steel
Collar	Plastic
Drain – Twist – Body & Nut	Plastic
Injector Meter Block & Base Assembly	Plastic
Seals	Nitrile
Sight Dome	Polycarbonate
Sight Gauge	Polyamide (Nylon)

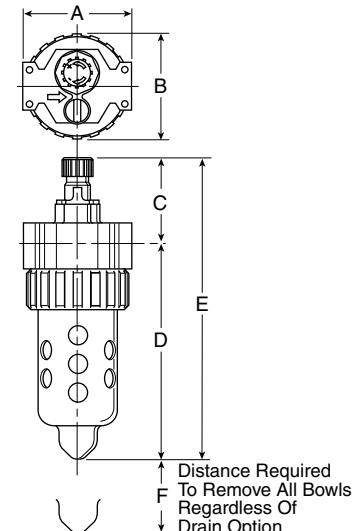


07L Mist Lubricators – Standard



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: 3/8" – 60 SCFM §
1/2" – 90 SCFM §
3/4" – 90 SCFM §



Port Size	NPT		BSPP	
	Twist Drain	No Drain	Twist Drain	No Drain
Poly Bowl[†] / Metal Guard				
3/8"	—	07L22BE	—	07L22BE1
1/2"	—	07L32BE	—	07L32BE1
3/4"	—	07L42BE	—	07L42BE1
Metal Bowl / Sight Gauge				
3/8"	07L24BE	—	07L24BE1	—
1/2"	07L34BE	—	07L34BE1	—
3/4"	07L44BE	—	07L44BE1	—

07L Lubricator Dimensions		
A	B	C
3.24 (82)	3.25 (83)	2.41 (61)
D	D [†]	E
6.86 (174)	6.95 (177)	9.27 (235)
E [†]	F	
9.19 (233)	2.75 (70)	

Inches (mm)

[†] With Twist Drain

Standard part numbers shown, for other models refer to ordering information below.

[‡] For polycarbonate bowl see caution in Product Selection Chart page 2.

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

Ordering Information

07L 2 2 B E —

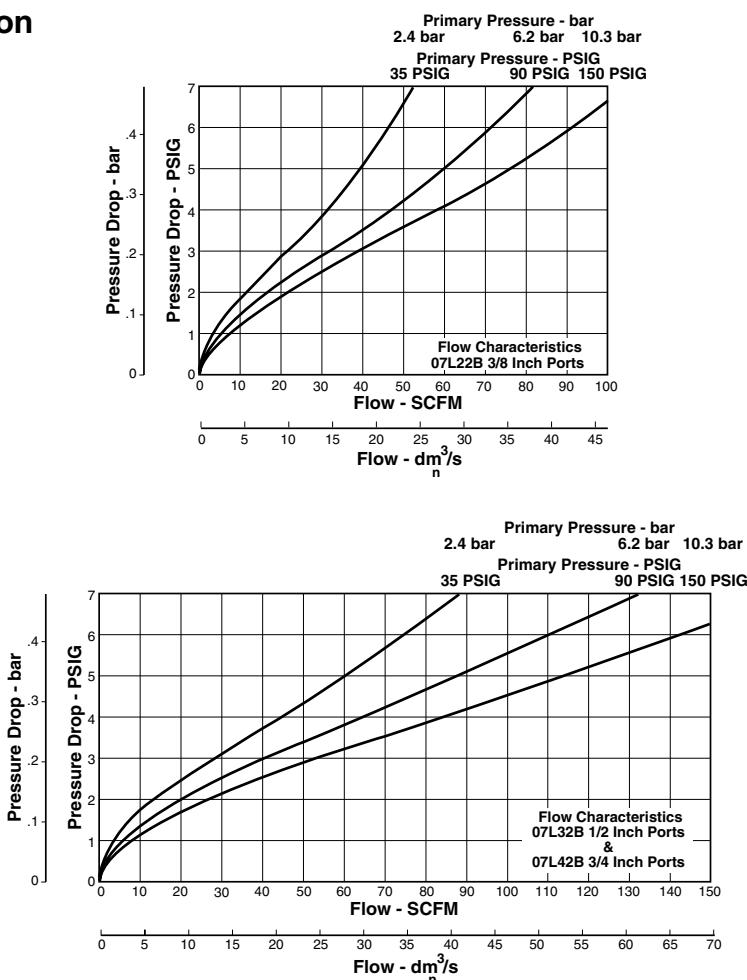
Port Size	Bowl Options	Options	Engineering Level	Port Type
2. 3/8 Inch 3. 1/2 Inch 4. 3/4 Inch	Polycarbonate Bowl 1. No Drain Metal Bowl Guard / No Drain 5. Pressure Fill 6. Metal Bowl Guard / Pressure Fill A. Liquid Level Sensor B. Metal Bowl Guard / Liquid Level Sensor J. Auto Fill Device K. Metal Bowl Guard / Auto Fill Device R. Twist Drain N. Metal Bowl Guard / Twist Drain	Metal Bowl 4. Sight Gauge / Twist Drain 8. Sight Gauge / Pressure Fill D. Sight Gauge / Liquid Level Sensor M. Sight Gauge / Auto Fill Device	B. With Fill Plug C. With Fill Plug/Nylon Sight Dome F. With Body Pressure Fill G. With Body Pressure Fill/Nylon Sight Dome	E. Current Blank. NPT 1. BSPP 2. BSPT

NOTE: BOLD OPTIONS ARE STANDARD.



Technical Information

A



07L 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	PS741P
Lubricator Service Kit	PS718P
Mounting Bracket Kit	PS843P
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
Sight Gauge Kit	PS814P

Specifications

Bowl Capacity	6.0 Ounces
---------------------	------------

Minimum Flow for Lubrication5 SCFM At 100 PSIG

Port Threads 3/8, 1/2, 3/4 Inch

Pressure & Temperature Rating –

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

Suggested Lubricant F442 Oil

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

Weight 1.9 lb. (.9 kg)

Materials of Construction

Body	Zinc
Bowls – Transparent	Polycarbonate
Metal (With Sight Gauge)	Zinc
Bowl Guard	Steel
Collar	Plastic or Metal
Drain – Twist – Body & Nut	Plastic
Injector Meter Block & Base Assembly	Plastic
Seals	Nitrile
Sight Dome	Polycarbonate
Sight Gauge	Polyamide (Nylon)

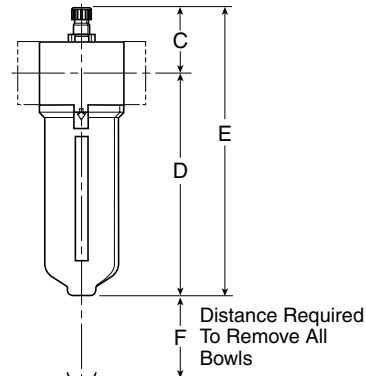
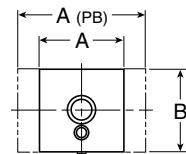


P3NL Mist Lubricators – Hi-Flow



Features

- Port blocks (PB) available to provide 1-1/2" port extension to 1" ported bodies.
- Proportional oil delivery over a wide range of air flows.
- Bowl can be filled while air line is under pressure.
- Transparent sight dome for 360° visibility.
- High Flow: 3/4" – 240 SCFM §
1" – 250 SCFM §
1-1/2" – 260 SCFM §



Port Size	NPT	BSPP
	No Drain	No Drain
Metal Bowl / Sight Gauge		
3/4"	P3NLA96LSN	P3NLA16LSN
1"	P3NLA98LSN	P3NLA18LSN
1-1/2" #	P3NLA9PLSN	P3NLA1PLSN

P3NL Lubricator Dimensions		
A	A (PB)	B
3.62 (92)	5.91 (150)	3.62 (92)
C	D	E
2.81 (71)	9.00 (229)	11.81 (300)
F		
4.92 (125)		

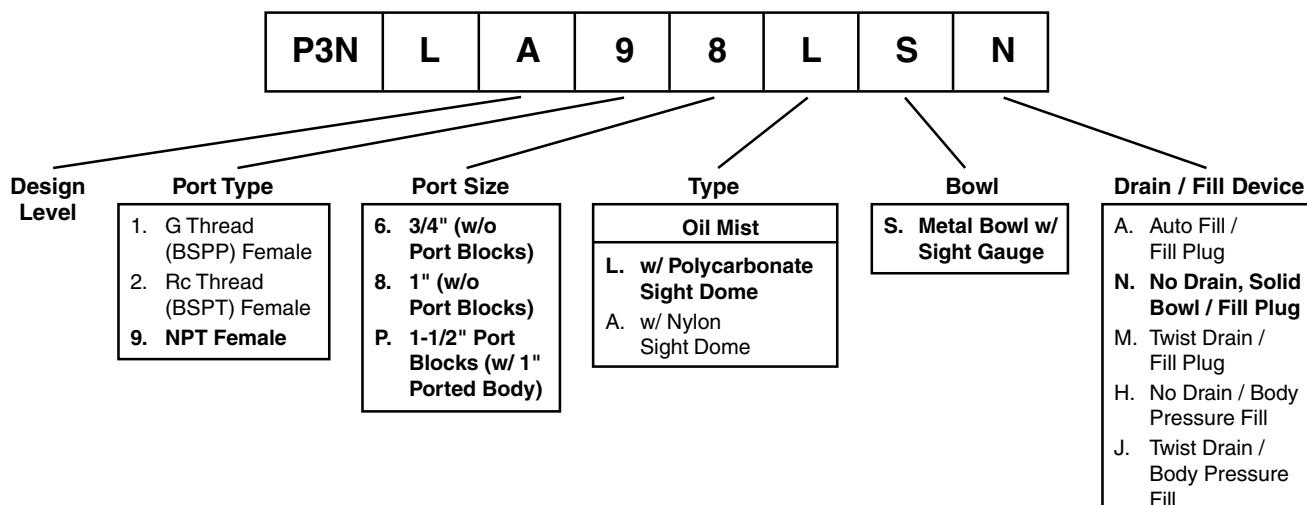
Standard part numbers shown, for other models refer to ordering information below

1" Port Body with 1-1/2" Port Block.

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

Inches (mm)

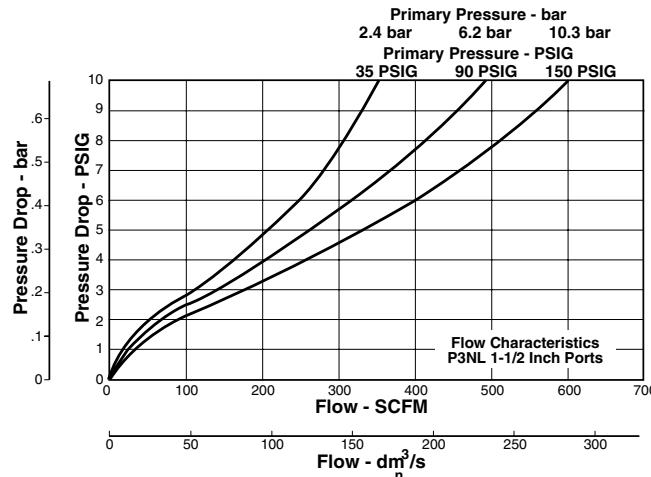
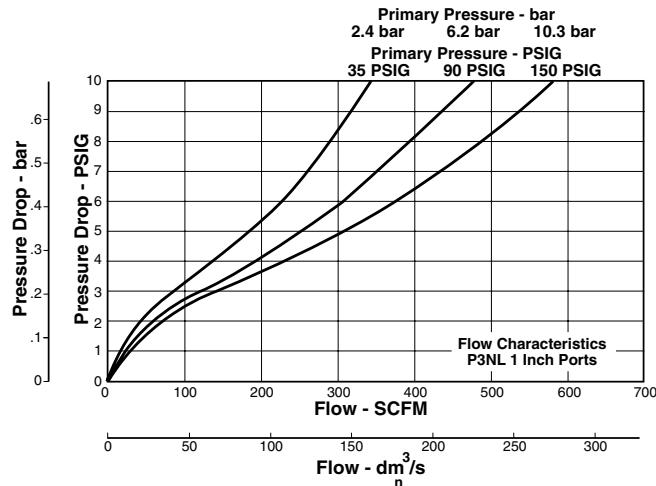
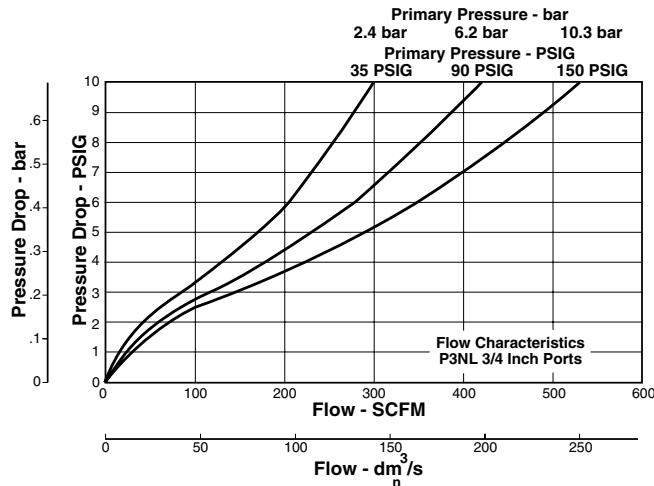
Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

**A**

Technical Information



P3NL Lubricator Kits & Accessories

Adjustment Knob	P04121
Bowl Kits –	
Metal Bowl – Sight Gauge / Twist Drain	P3NKA00BSM
Bowl Latch Kit	C11A33
Drain Kit – Twist Drain	PS512P
Fill Cap Kit	P3NKA00PL
Sight Dome Kit – Polycarbonate	PS740P
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

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

Specifications

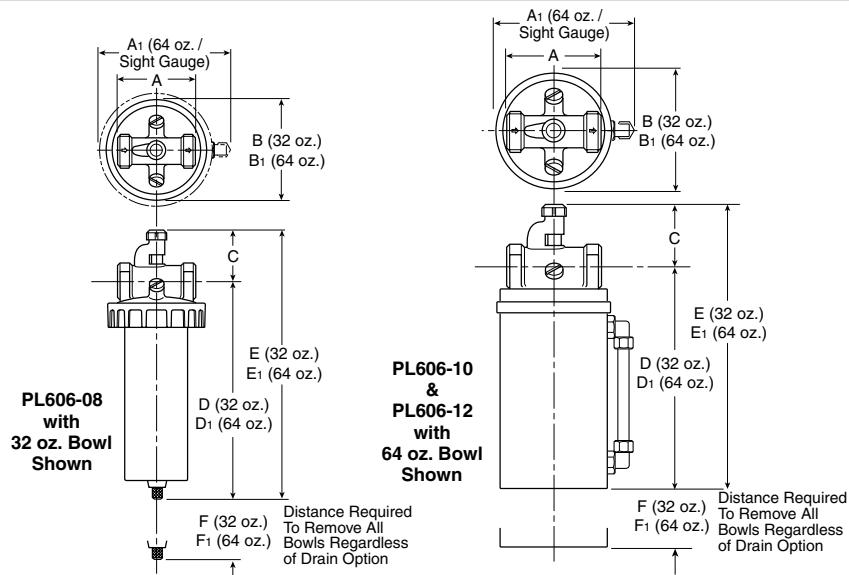
Bowl Capacity	18.0 Ounces
Minimum Flow for Lubrication	6.6 SCFM At 100 PSIG
Pressure & Temperature Rating	0 to 250 PSIG (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
Suggested Lubricant	F442 Oil
Petroleum based oil of 100 to 200 SSU viscosity at 100°F and an aniline point greater than 200°F (DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)	
Weight – 3/4 Inch	3.5 lb. (1.6 kg)
1 Inch	3.5 lb. (1.6 kg)
1-1/2 Inch*	4.6 lb. (2.1 kg)

Materials of Construction

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

1" Port Body with 1-1/2" Port Block.

PL606 Mist Lubricators – Hi-Flow



PL606-08 Lubricator Dimensions											
A	A ₁	B	B ₁	C	D	D ₁	E	E ₁	F	F ₁	
4.06 (103)	6.25 (158)	4.97 (126)	5.28 (134)	2.63 (67)	10.75 (273)	10.00 (250)	13.38 (340)	12.63 (321)	7.75 (196)	6.50 (165)	

PL606-10 & PF606-12 Lubricator Dimensions											
A	A ₁	B	B ₁	C	D	D ₁	E	E ₁	F	F ₁	
4.81 (122)	6.25 (158)	4.97 (126)	5.28 (134)	2.84 (73)	11.13 (283)	10.44 (265)	13.94 (355)	13.28 (337)	7.75 (196)	6.50 (165)	

Inches (mm)

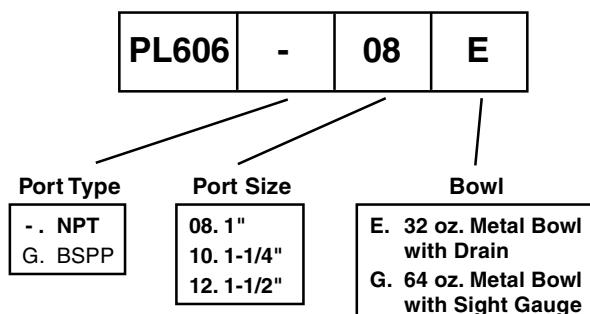
Features

- Proportional oil delivery over a wide range of air flows.
- Bowl can be filled while under pressure.
- Large bowls for oil capacity, 32 oz. and 64 oz..
- High Flow: 1" – 350 SCFM §
1-1/4" – 475 SCFM §
1-1/2" – 525 SCFM §

Port Size	NPT	BSPP
1"	PL606-08E	PL606G08E
1-1/4"	PL606-10E	PL606G10E
1-1/2"	PL606-12E	PL606G12E

Standard part numbers shown, for other models refer to ordering information below.
§ SCFM = Standard cubic feet per minute at 90 PSIG inlet and 5 PSIG pressure drop.

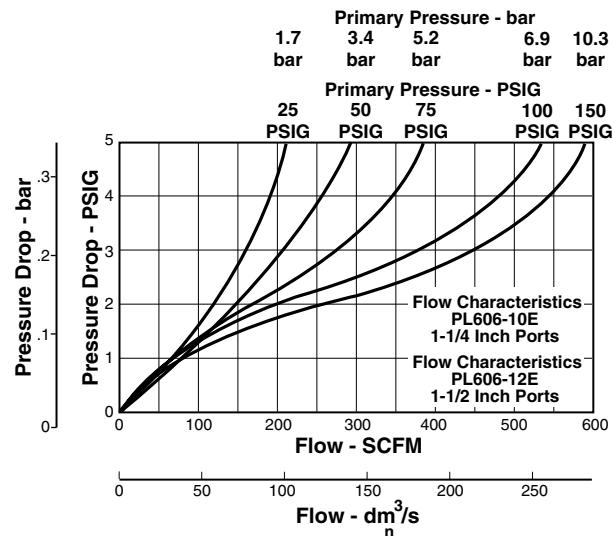
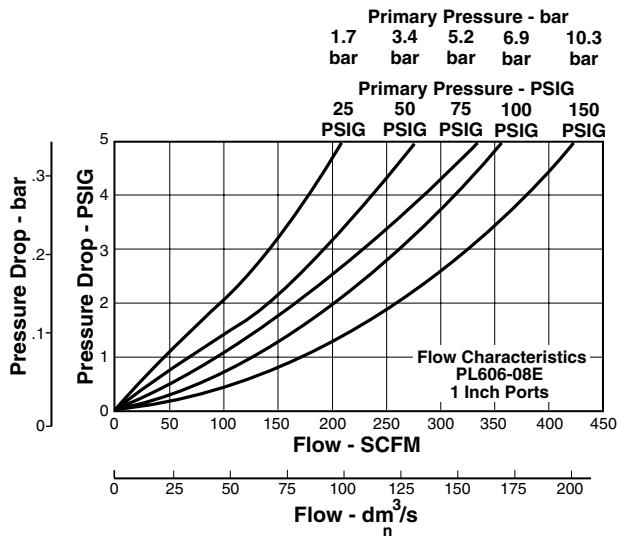
Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information

A



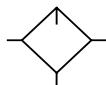
PL606 Filter Kits & Accessories

Bowls –	
32 oz.	PBK603B
64 oz.	PBK606X30B
Button Head Fill Adaptor	SAA606C109-1
Mounting Bracket Kit – 1 Inch Ported Body only	SA200CW57
Oil – 1 Gal.	F442002
12 Quart Case	F442003
4 Gallon Case	F442005
Repair Kit – Needle Valve Assembly	PRK606Y
Sight Gauge for 64 oz. Bowl	PRKB606X30B

Specifications

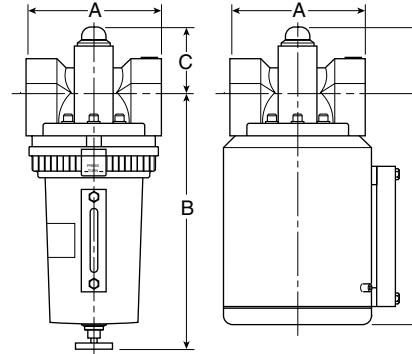
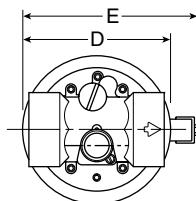
Body	.....	Zinc
Bowl	.....	Aluminum
Bowl Capacity – "E"	.....	32 Ounces
"G"	.....	64 Ounces
Drain	.....	Brass
Pressure & Temperature Rating	-	
"E" 32 oz. Bowl –	0 to 300 PSIG (0 to 20.7 bar)	
	32°F to 180°F (0°C to 82°C)	
"G" 64 oz. Bowl –	0 to 150 PSIG (0 to 10.3 bar)	
	32°F to 120°F (0°C to 49°C)	
Seals	.....	Nitrile
Sight Dome	.....	Polyurethane / Brass
Sight Gauge	.....	PVC
Suggested Lubricant	.....	F442 Oil
Weight – 1 Inch - 32 oz.	.....	5.5 lbs. (2.5 kg)
1-1/4, 1-1/2 Inch - 32 oz.	.....	8.3 lbs. (3.8 kg)
1 Inch - 64 oz.	.....	7.2 lbs. (3.3 kg)
1-1/4, 1-1/2 Inch - 64 oz.	.....	10 lbs. (4.5 kg)

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[§]



Port Size	NPT
Metal Bowl / Sight Gauge – 1 Quart	
2"	09L84BA
Metal Bowl / Sight Gauge – 3 Quart	
2"	09L8PBA

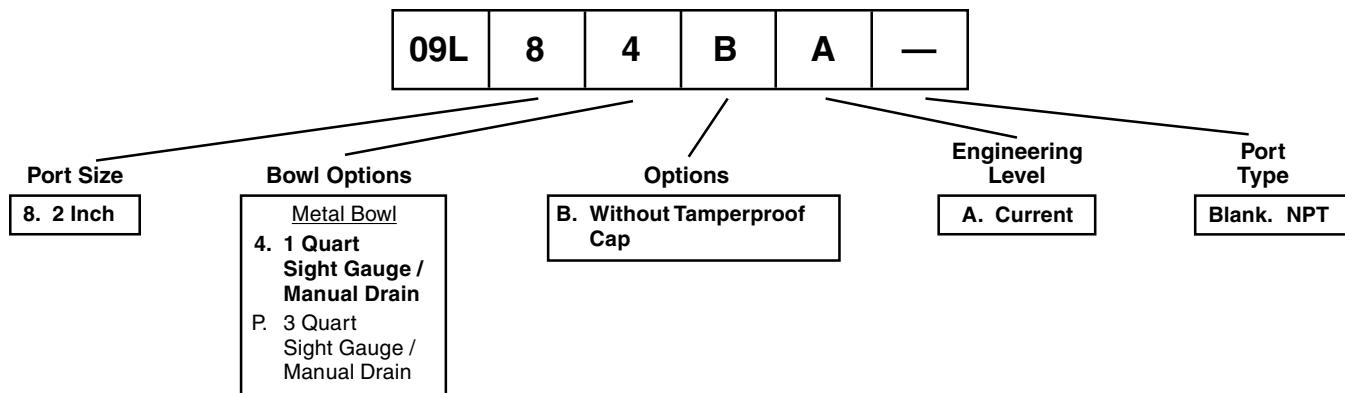
09L Lubricator Dimensions					
	A	B	C	D	E
1 Qt.	5.50 (140)	10.40 (264)	2.64 (67)	—	—
3 Qt.	5.50 (140)	9.44 (240)	2.64 (67)	6.00 (152)	7.12 (181)

Inches (mm)

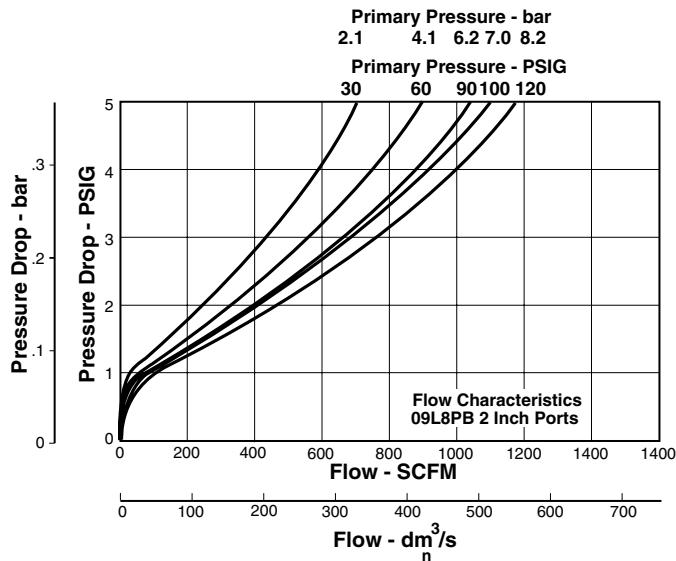
Standard part numbers shown, for other models refer to ordering information below.

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

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Technical Information**A****09L Lubricator Kits & Accessories**

Metal Bowl – Sight Gauge / Twist Drain	PS612P*
Fill Cap Kit	PS610P
Lubricator Service Kit	PS607P
Oil – 1 Gal.	F442002
12 Quart Case	F442003
4 Gallon Case	F442005
Sight Dome Kit	PS613P

* 1 Quart Bowl

Specifications

Bowl Capacity	1 Qt. (Standard) 3 Qt. (Optional)
Bowl	Metal with Sight Gauge
Drain	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 and an aniline point greater than 200°F (DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)	
Weight – 1 Qt	10.2 lb. (4.6 kg)
	3 Qt
	13.7 lb. (6.2 kg)

Materials of Construction

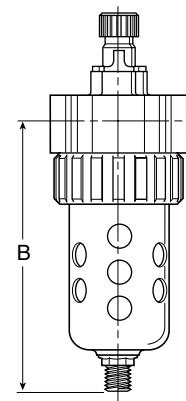
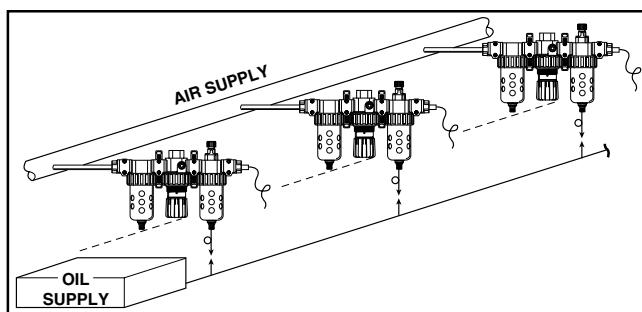
Body	Zinc Alloy, Die Cast
------	----------------------

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.

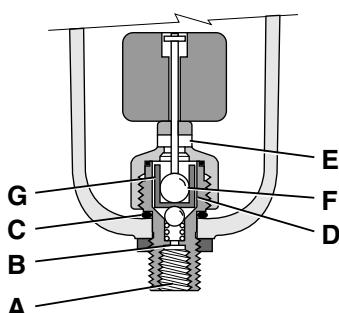


Dimensions

Model	Kit Number	B
06L-16L	PS505CP	5.36 (136)
07L-17L	PS505CP	6.71 (170)

Inches (mm)

Operation



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 1035 kPa)
32°F to 125°F (0°C to 52°C)

Metal Bowl / Sight Gauge – 0 to 250 PSIG (0 to 1725 kPa)
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 and an aniline point greater than 200°F

(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS)

CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)

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 frequently should be based on maintaining oil in lubricator at its highest level.

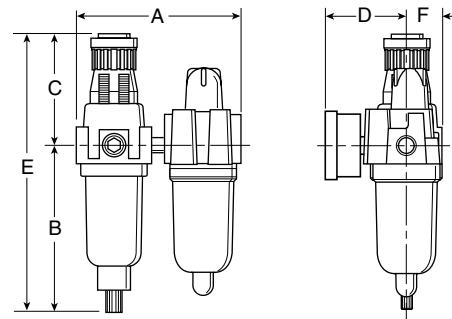
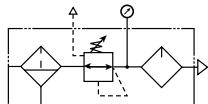
Weight 1.9 lb. (.9 kg)

Materials of Construction

Body, Cap, Stem & Mounting Nut	Aluminum
Float	Polyurethane
Seals	Nitrile
Spring	Stainless

Close Nippled Combinations – 14 Miniature Series

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

**Two-Unit
Combo**

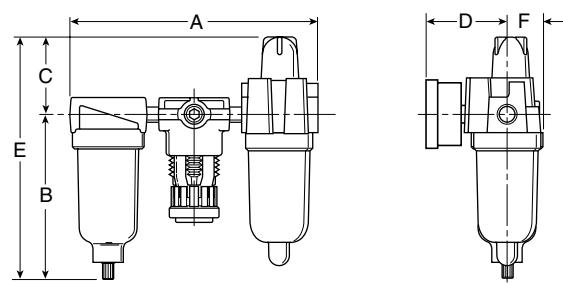
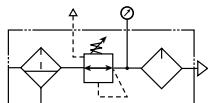
Series	Port	Model Numbers
14G	1/4"	14G11B13F0GB

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

A	B	C	D	E	F
3.58 (91)	3.79 (96)	2.42 (61)	2.07 (53)	6.21 (158)	.48 (12)

Inches (mm)

• All dimensions nominal.

**Three-Unit
Combo**

Series	Port	Model Numbers
14A	1/4"	14A11B13F0GD

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

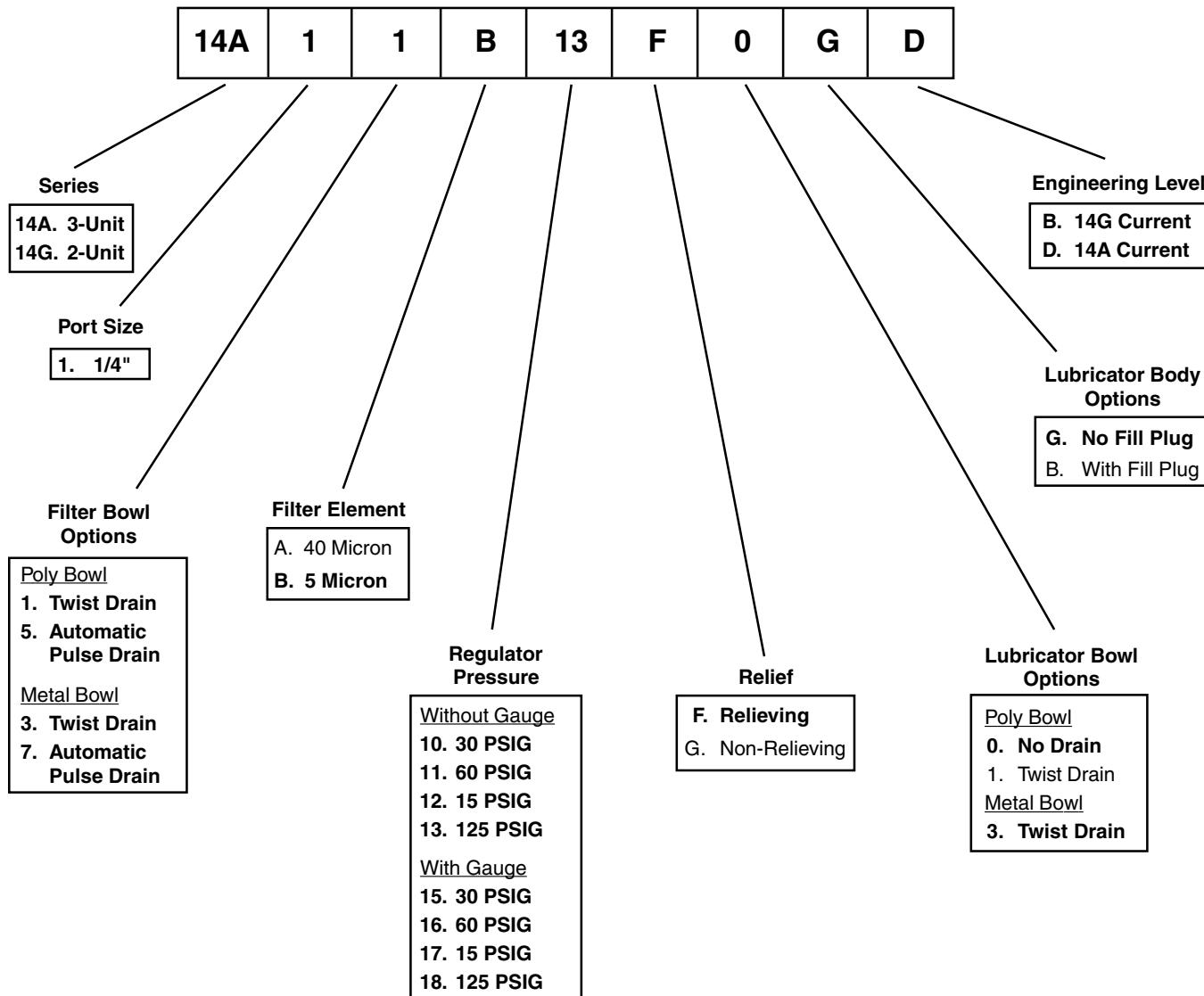
A	B	C	D	E	F
5.77 (147)	3.82 (97)	1.64 (42)	2.07 (53)	5.46 (139)	.48 (12)

Inches (mm)

• All dimensions nominal.

Close Nippled Combinations – 14 Miniature Series

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

CAUTION:

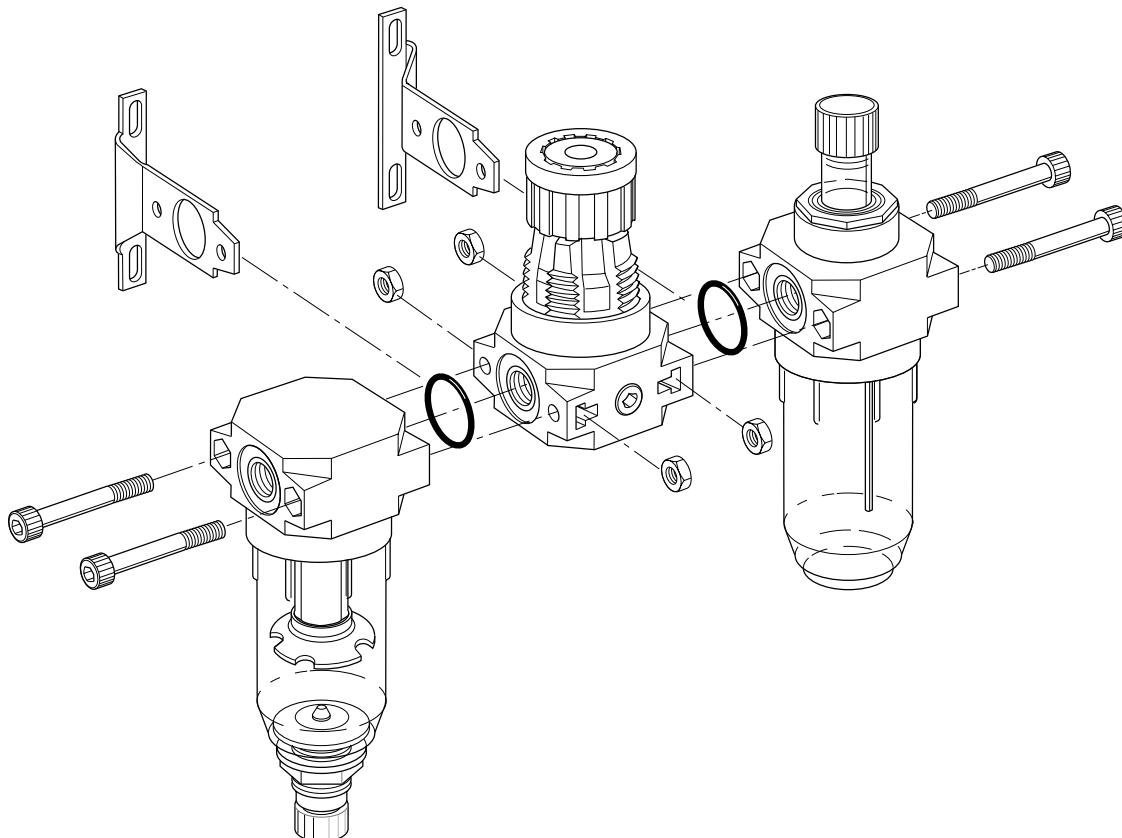
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting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

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

Mounting Bracket KitPS417BP
 (Includes Panel Mount Nut)

Modular Combinations – P3A Miniature Series

- Attractive.
- Versatile.
- Semi-modular design.
- 1/8" & 1/4" pipe sizes available.
- 5 micron filter as standard.
- Light-weight corrosion resistant plastic body.
- Durable piston or diaphragm design regulator.
- Fingertip lubricator adjustment.
- Can be assembled using either standard pipe nipples or semi-modular assembly hardware.

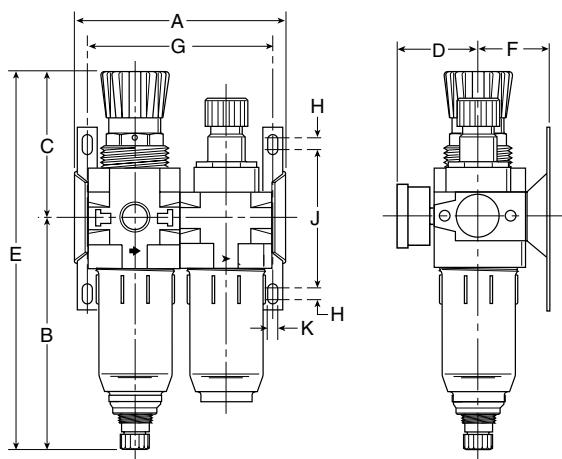


To Assemble and/or Wall Mount a ...				Use for Std. Mounting	Or	Use for Wall Mounting
Filter	Regulator	Filter/Regulator	Lubricator	(Qty) Std. Kit	(Qty) Kit & Wall Mount	
X					(1) P3A-KA00CFN†	
	X				(1) PS417BP†	
		X			(1) P3A-KA00MRN†	
			X		(1) P3A-KA00CFN†	
X	X				(1) P3A-KA00CFN**	
X			X		(1) P3A-KA00CEN*	
	X		X		(1) P3A-KA00CGN**	
		X	X		(1) P3A-KA00CFN**	
X	X		X		(1) P3A-KA00CFN**	

* Includes hardware to assemble semi-modular units to one another.

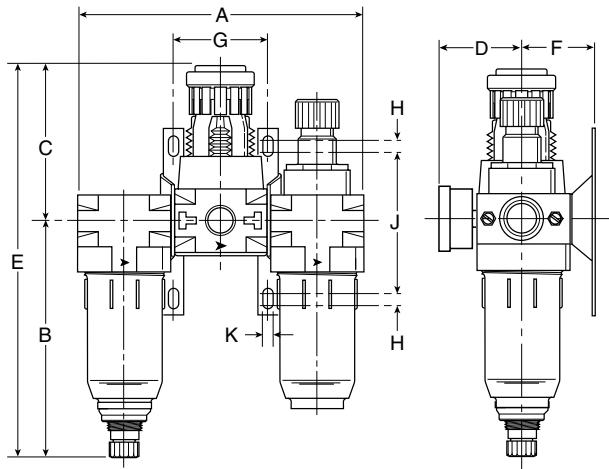
** Includes hardware to assemble semi-modular units to one another and one wall bracket.

† Includes wall bracket and assembly hardware for single unit.

Modular Combinations – P3A Miniature Series**Two-Unit Combo**

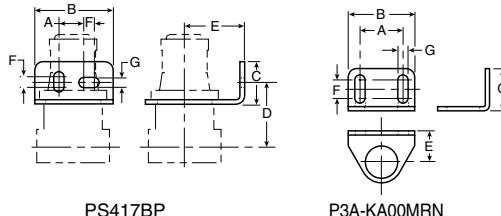
Model	Port Size	A	B	"B" with Auto Drain	C	D	E	F	G	H	J	K
P3A Series	1/8", 1/4"	3.78 (96)	3.98 (101)	3.72 (95)	2.52 (64)	2.06 (52)	6.50 (165)	1.22 (31)	1.57 (40)	.20 (5)	1.97 (50)	.20 (5)

Inches (mm)

Three-Unit Combo

Model	Port Size	A	B	"B" with Auto Drain	C	D	E	F	G	H	J	K
P3A Series	1/8", 1/4"	4.84 (123)	3.98 (101)	3.72 (95)	2.46 (63)	2.06 (52)	6.44 (164)	1.22 (31)	1.63 (42)	.20 (5)	1.97 (50)	.20 (5)

Inches (mm)

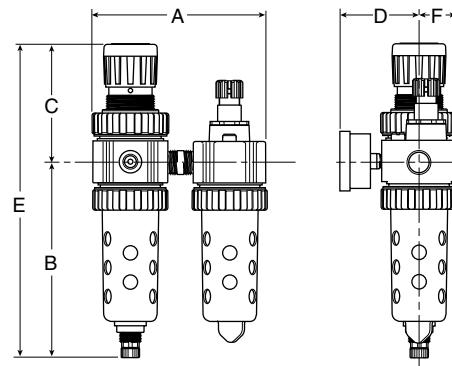
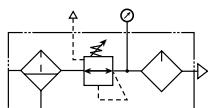
Wall Mounting Bracket

KIT	A	B	C	D	E	F	G
PS417BP	0.54 (14)	1.80 (46)	1.00 (25)	1.50 (38)	1.35 (34)	0.28 (7)	0.22 (6)
P3A-KA00MRN	1.57 (40)	2.05 (52)	0.98 (25)	1.81 (46)	1.23 (31)	0.47 (12)	0.21 (5)

Inches (mm)

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

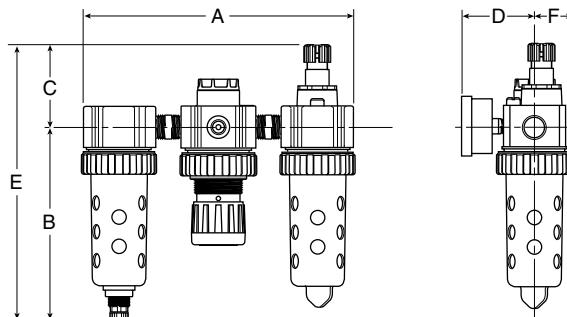
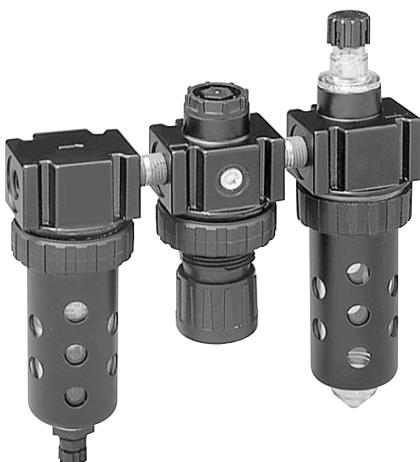
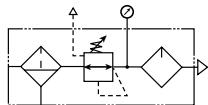
Series	Port	Model Numbers
15G	1/4"	15G12A13A2NE
	3/8"	15G22A13A2NE

A	B	C	D	E	F
4.49 (114)	5.35 (136)	2.24 (57)	2.05 (52)	8.50 (216)	1.03 (26)

Inches (mm)

- All dimensions nominal.

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

Three-Unit Combo

Series	Port	Model Numbers
15A	1/4"	15A12A13A2NE
	3/8"	15A22A13A2NE

A	B	C	D	E	F
7.00 (178)	5.35 (136)	2.24 (57)	2.05 (52)	7.59 (193)	1.03 (26)

Inches (mm)

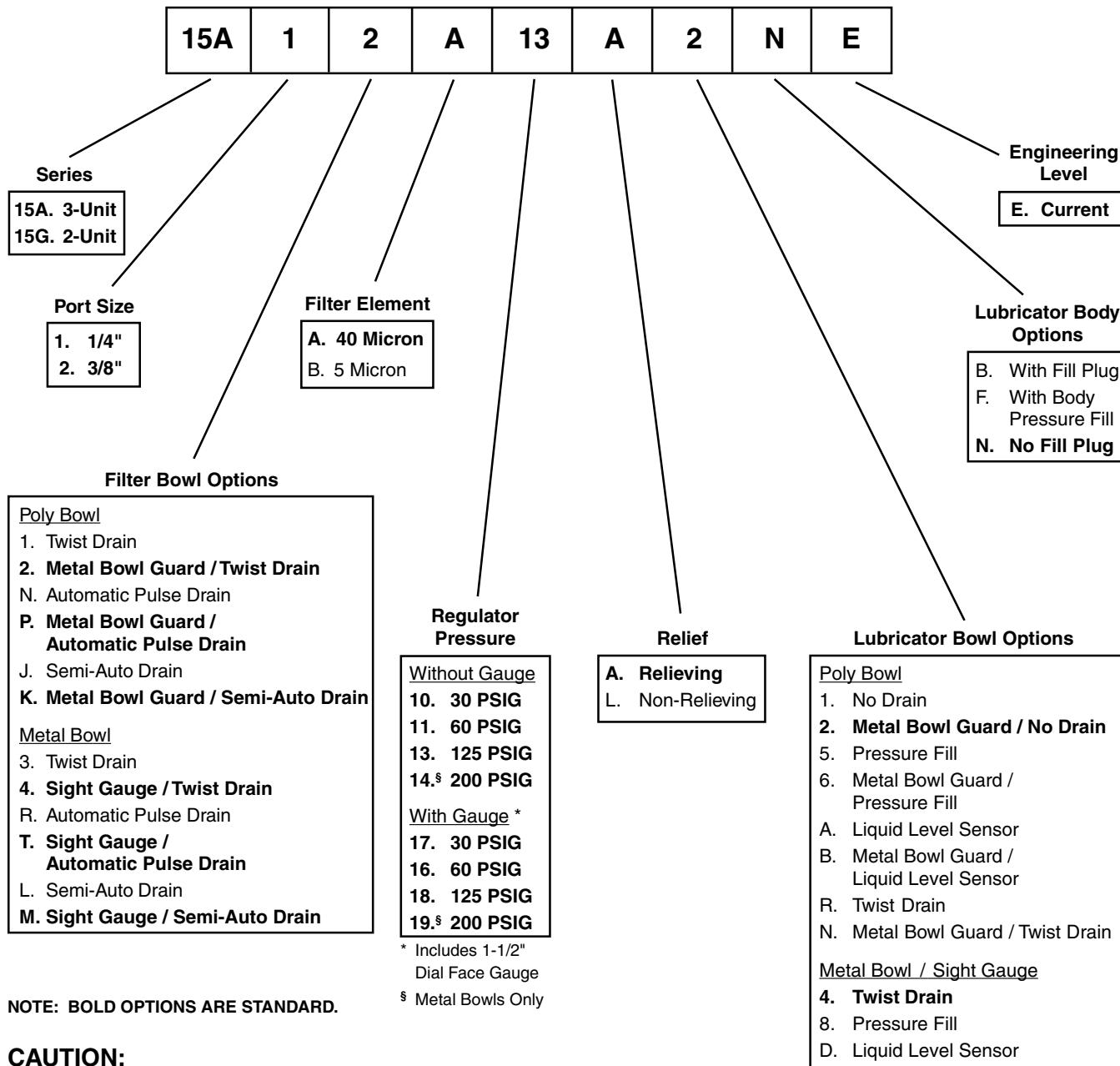
- All dimensions nominal.

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

Close Nippled Combinations – 05 Economy Series

A

Ordering Information



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

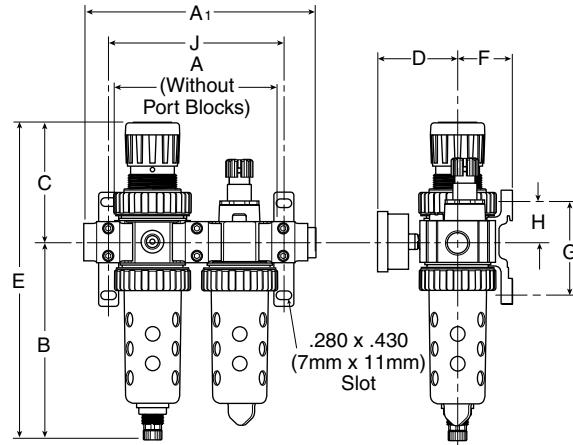
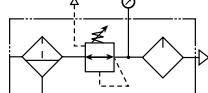
Mounting Bracket Kit PS963P
 (Includes Panel Mount Nut)



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



Series	Port	Model Numbers
15H	1/4"	15H12A13A2NE
	3/8"	15H22A13A2NE

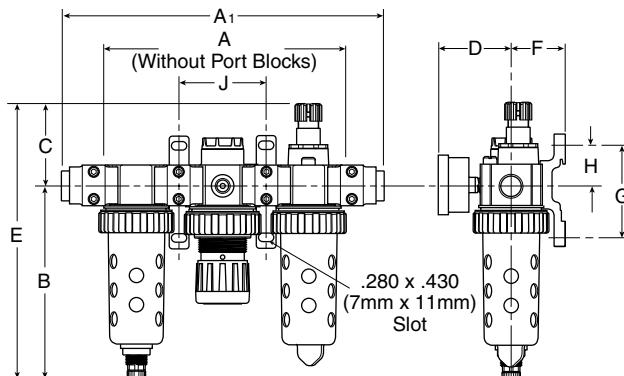
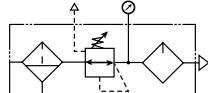
For other models, refer to ordering information on next page.

A	A ₁	B	C	D	E	F
4.33 (110)	6.38 (162)	5.35 (136)	3.15 (80)	2.05 (52)	8.50 (216)	1.45 (37)
G	H	J				
2.60 (66)	1.14 (29)	4.72 (120)				

Inches (mm)

- All dimensions nominal.
- Mounting brackets not included.

Three-Unit Combo



Series	Port	Model Numbers
15B	1/4"	15B12A13A2NE
	3/8"	15B22A13A2NE

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

A	A ₁	B	C	D	E	F
6.70 (170)	8.72 (222)	5.35 (136)	2.24 (57)	2.05 (52)	7.59 (193)	1.45 (37)
G	H	J				
2.60 (66)	1.14 (29)	2.35 (60)				

Inches (mm)

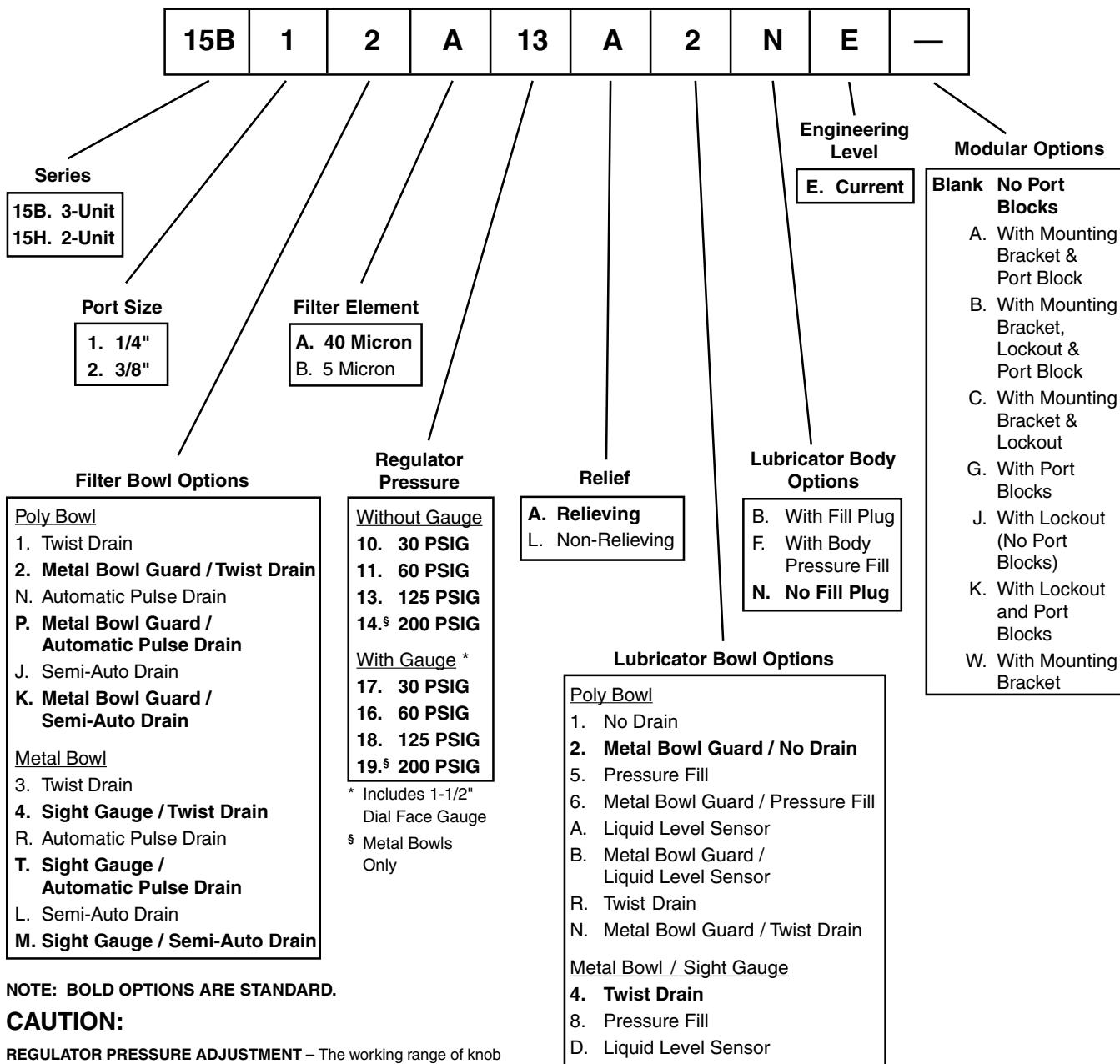
- All dimensions nominal.
- Mounting brackets not included.



A

Modular Combinations – 05 Economy Series

Ordering Information



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

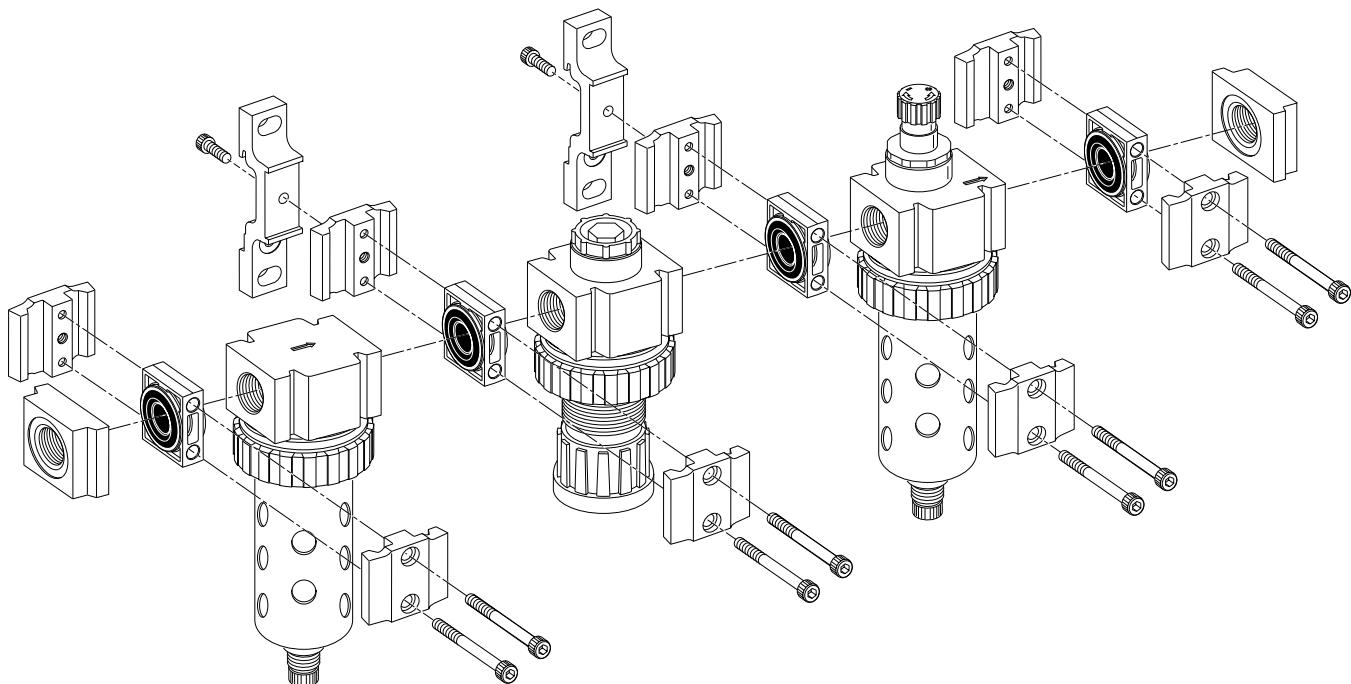
Body Connector Kit	PS954P
Lockout Valve	PS95601P
Manifold Block	PS95701P
3-Way Modular Block	PS97501P
Pressure Switches –	
DIN Connectors	P01909
Flying Leads	P01908

Wall Mounting Kit PS955P

Port Block Kits:	1/8"	1/4"	3/8"
NPT	PS95000P	PS95001P	PS95002P
BSP BSPT	PS95010P	PS95011P	PS95012P
	PS95020P	PS95021P	PS95022P



Modular Accessories – 05 Economy Series

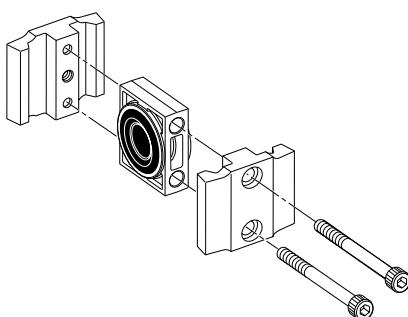


Port Block Connector Kits

	1/8"	1/4"	3/8"
NPT	PS95000P	PS95001P	PS95002P
BSPP	PS95010P	PS95011P	PS95012P
BSPT	PS95020P	PS95021P	PS95022P

Body Connectors

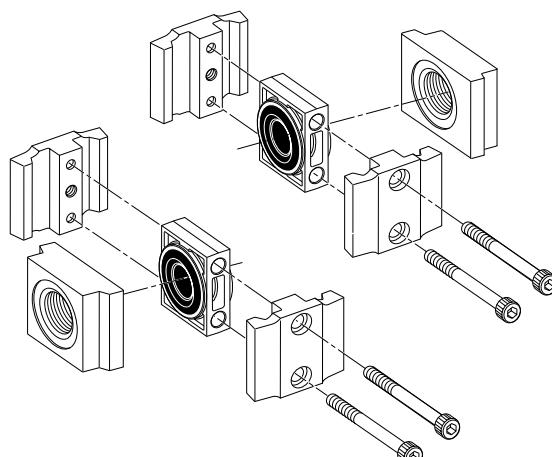
PS954P



Body Connectors allow you to easily assemble and disassemble Modular Combinations.

Body Connectors are required whenever you assemble two or more pieces together.

Each Kit includes one set.



Port Block Connectors allow you to make threaded port connections to Modular units and are available in various port sizes to match your system requirements.

Each Kit includes all the necessary pieces to make two port connections.

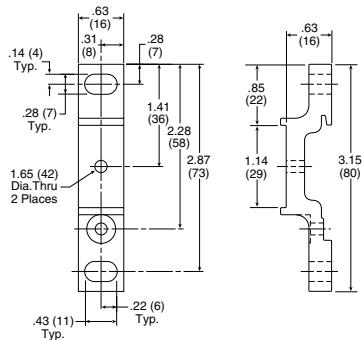
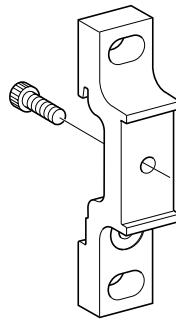


A

Modular Accessories – 05 Economy Series

Wall Mounting Kits

PS955P



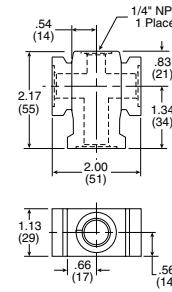
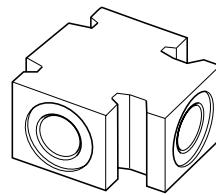
Wall Mounting Kits are available for mounting your Modular Assemblies and can be assembled and used with any standard body connector set.

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

Kit includes 1 assembly.

3-Way Modular Block

PS97501P

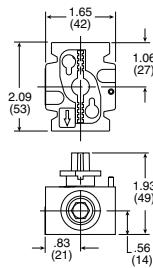
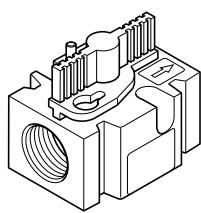


3-Way Modular Block allows for 90° installation for flexibility or for common port regulation

Lockout Valve

PS95601P

1/4" Port



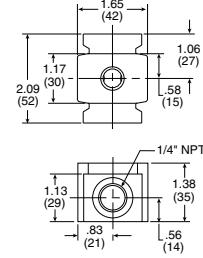
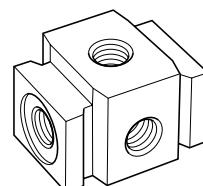
Lockout Valves provide positive shut-off and exhaust capability to isolate Modular units so they can be easily removed from the line and can be locked in a closed position. Center position can be used as a slow start for 06 & 07 series. Accepts #3 padlock.

NOTE: Body Connectors are not supplied with Lockout Valves.

Modular Manifold Block

PS95701P

1/4" Port

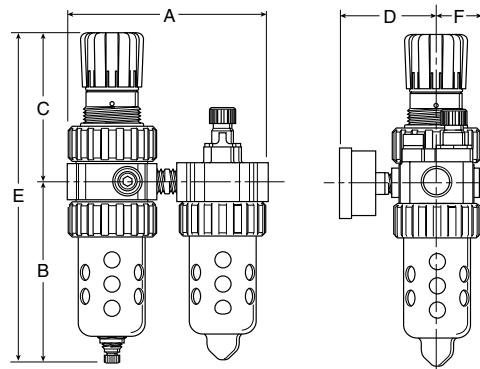
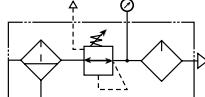


A Modular Manifold Block can be used between any two Modular units to give additional outlet ports. The 1/4" Manifold Block provides three additional outlets. Any standard pipe plug can be used to close off unused ports.

NOTE: Body Connectors are not supplied with Manifold Blocks.

Close Nippled Combinations – 06 Compact & 07 Standard Series

- See individual component pages for details.

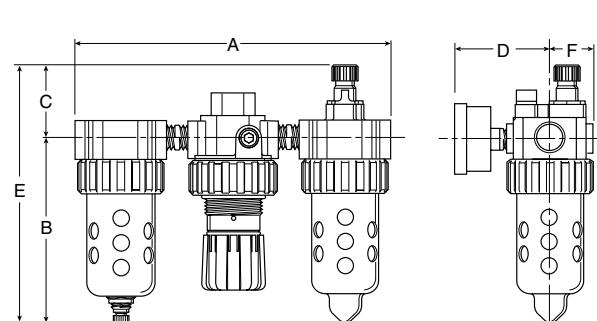
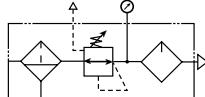
Two-Unit Combo

Series	Model Numbers	Port	Model Numbers	Series
06G	06G12A13A2BC	1/4"	16G12A13A2BC	16G
	06G22A13A2BC	3/8"	16G22A13A2BC	
	06G32A13A2BC	1/2"	16G32A13A2BC	
07G	07G22A13A2BD	3/8"	17G22A13A2BD	17G
	07G32A13A2BD	1/2"	17G32A13A2BD	
	07G42A13A2BD	3/4"	17G42A13A2BD	

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

06G, 16G Series					
A	B	C	D	E	F
6.13 (156)	5.69 (145)	4.69 (119)	3.18 (81)	10.38 (264)	1.37 (35)
07G, 17G Series					
A	B	C	D	E	F
6.99 (178)	6.97 (177)	4.79 (122)	3.44 (87)	11.76 (299)	1.63 (41)

Inches (mm)
• All dimensions nominal.

Three-Unit Combo

Series	Model Numbers	Port	Model Numbers	Series
06A	06A12A13A2BC	1/4"	16A12A13A2BC	16A
	06A22A13A2BC	3/8"	16A22A13A2BC	
	06A32A13A2BC	1/2"	16A32A13A2BC	
07A	07A22A13A2BD	3/8"	17A22A13A2BD	17A
	07A32A13A2BD	1/2"	17A32A13A2BD	
	07A42A13A2BD	3/4"	17A42A13A2BD	

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

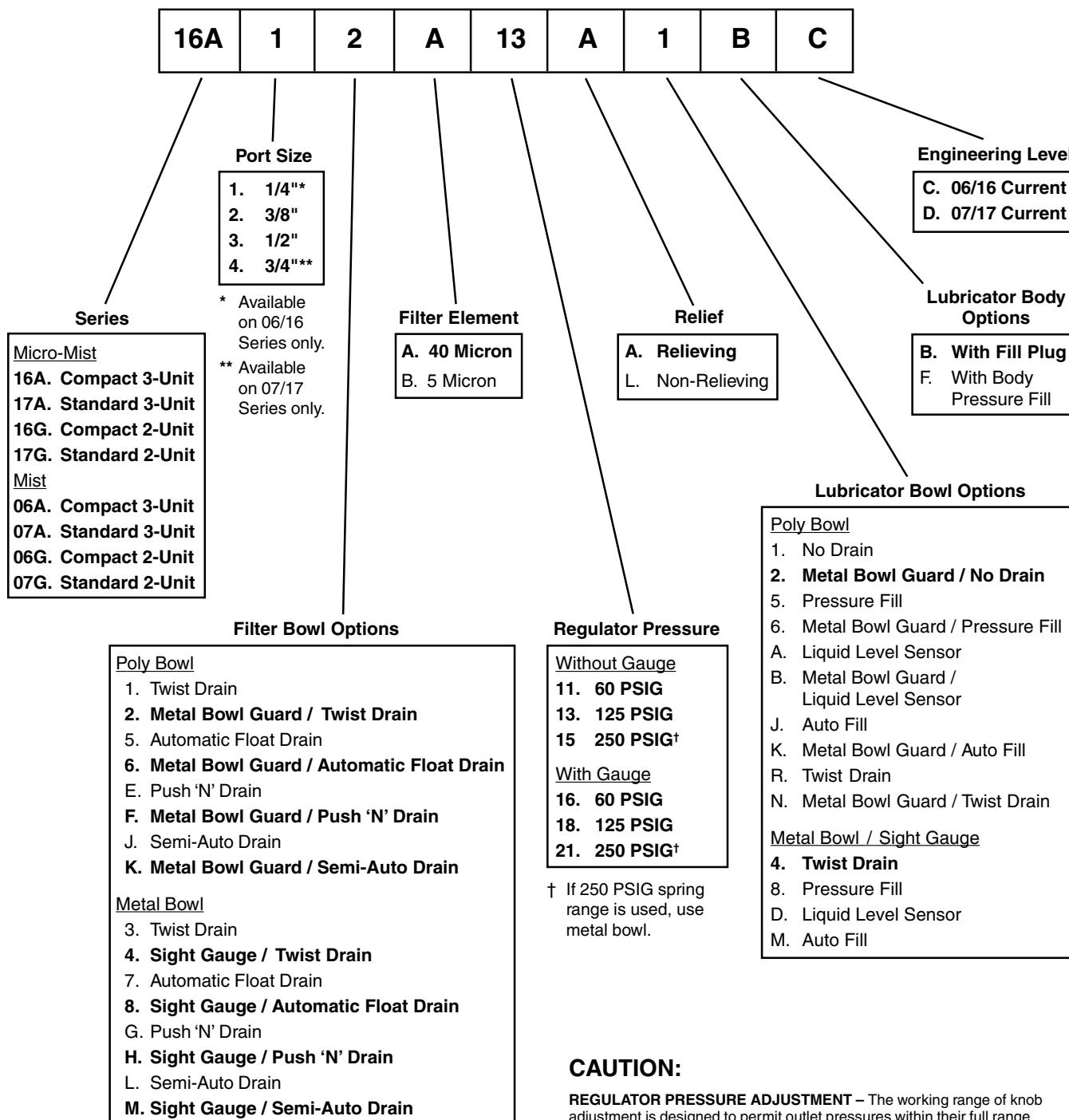
06A, 16A Series					
A	B	C	D	E	F
9.45 (240)	5.69 (145)	2.24 (57)	3.18 (81)	7.93 (201)	1.37 (35)
07A, 17A Series					
A	B	C	D	E	F
10.74 (273)	6.97 (177)	2.41 (61)	3.44 (87)	9.38 (238)	1.63 (41)

Inches (mm)
• All dimensions nominal.

A

Close Nippled Combinations – 06 Compact & 07 Standard Series

Ordering Information



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.

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

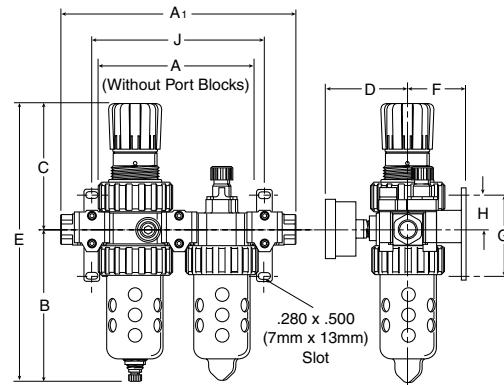
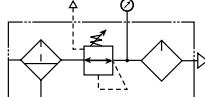
Mounting Bracket Kit (Includes Panel Mount Nut)	
06A, 16A, 06G, 16G	PS707P
07A, 17A, 07G, 17G	PS807P



Modular Combinations – 06 Compact & 07 Standard Series

- See individual component pages for details.

Two-Unit Combo



Series	Model Numbers	Port	Model Numbers	Series
06H	06H12A13A2BC	1/4"	16H12A13A2BC	16H
	06H22A13A2BC	3/8"	16H22A13A2BC	
	06H32A13A2BCG	1/2"*	16H32A13A2BCG	
07H	07H22A13A2BD	3/8"	17H22A13A2BD	17H
	07H32A13A2BD	1/2"	17H32A13A2BD	
	07H42A13A2BD	3/4"	17H42A13A2BD	

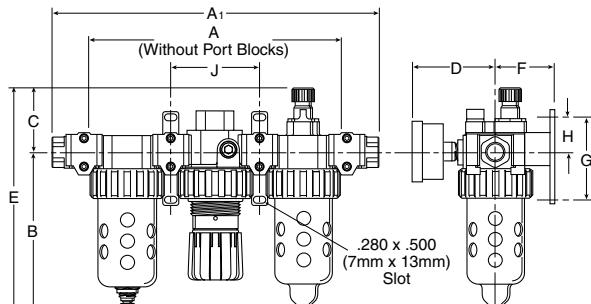
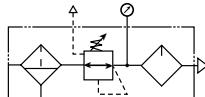
* 06 / 16 available with Port Blocks only.

06H, 16H Series					
A	A ₁	B	C	D	E
6.10 (155)	9.04 (230)	5.69 (145)	4.69 (119)	3.18 (81)	10.38 (264)
F	G	H	J		
2.00 (51)	3.58 (91)	1.40 (36)	6.65 (169)		

07H, 17H Series					
A	A ₁	B	C	D	E
7.00 (178)	10.28 (261)	6.97 (177)	4.79 (122)	3.44 (87)	11.76 (299)
F	G	H	J		
2.18 (55)	3.58 (91)	1.40 (36)	7.51 (191)		

Inches (mm)
• All dimensions nominal.

Three-Unit Combo



Series	Model Numbers	Port	Model Numbers	Series
06B	06B12A13A2BC	1/4"	16B12A13A2BC	16B
	06B22A13A2BC	3/8"	16B22A13A2BC	
	06B32A13A2BCG	1/2"*	16B32A13A2BCG	
07B	07B22A13A2BD	3/8"	17B22A13A2BD	17B
	07B32A13A2BD	1/2"	17B32A13A2BD	
	07B42A13A2BD	3/4"	17B42A13A2BD	

* 06 / 16 available with Port Blocks only.

06B, 16B Series					
A	A ₁	B	C	D	E
9.46 (240)	12.39 (315)	5.69 (145)	2.24 (57)	3.18 (81)	7.82 (199)
F	G	H	J		
2.00 (51)	3.58 (91)	1.40 (36)	3.33 (85)		

07B, 17B Series					
A	A ₁	B	C	D	E
10.75 (273)	14.03 (356)	6.97 (177)	2.41 (61)	3.44 (87)	9.27 (235)
F	G	H	J		
2.18 (55)	3.58 (91)	1.40 (36)	3.76 (95)		

Inches (mm)
• All dimensions nominal.



A

Modular Combinations – 06 Compact & 07 Standard Series

Ordering Information

16B	1	2	A	13	A	2	B	C	—
-----	---	---	---	----	---	---	---	---	---

Series

<u>Micro-Mist</u>
16B. Compact 3-Unit
17B. Standard 3-Unit
16H. Compact 2-Unit
17H. Standard 2-Unit
<u>Mist</u>
06B. Compact 3-Unit
07B. Standard 3-Unit
06H. Compact 2-Unit
07H. Standard 2-Unit

Port Size

- 1. 1/4"**
- 2. 3/8"
- 3. 1/2"***
- 4. 3/4"**

* Available on 06/16 Series only.

** Available on 07/17 Series only.

*** 06/16 available with Port Blocks only.

Filter Element

- A. 40 Micron
- B. 5 Micron

Relief

- A. Relieving
- L. Non-Relieving

Engineering Level

- C. 06/16 Current
- D. 07/17 Current

Modular Options

- | | |
|--------------|---|
| Blank | No Port Blocks |
| A. | With Mounting Bracket & Port Block |
| B. | With Mounting Bracket, Lockout & Port Block |
| C. | With Mounting Bracket & Lockout |
| G. | With Port Blocks |
| J. | With Lockout (No Port Blocks) |
| K. | With Lockout and Port Blocks |
| W. | With Mounting Bracket |

Regulator Pressure

Without Gauge

- 11. 60 PSIG
- 13. 125 PSIG
- 15. 250 PSIG†

With Gauge

- 16. 60 PSIG
- 18. 125 PSIG
- 21. 250 PSIG†

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

Lubricator Body Options

- B. With Fill Plug**
- F. With Body Pressure Fill

Lubricator Bowl Options

Poly Bowl

- 1. No Drain
- 2. **Metal Bowl Guard / No Drain**
- 5. Pressure Fill
- 6. Metal Bowl Guard / Pressure Fill
- A. Liquid Level Sensor
- B. Metal Bowl Guard / Liquid Level Sensor
- J. Auto Fill
- K. Metal Bowl Guard / Auto Fill
- R. Twist Drain
- N. Metal Bowl Guard / Twist Drain

Metal Bowl / Sight Gauge

- 4. Twist Drain**
- 8. Pressure Fill
- D. Liquid Level Sensor
- M. Auto Fill

Filter Bowl Options

Poly Bowl

- 1. Twist Drain
- 2. Metal Bowl Guard / Twist Drain**
- 5. Automatic Float Drain
- 6. Metal Bowl Guard / Automatic Float Drain**
- E. Push 'N' Drain
- F. Metal Bowl Guard / Push 'N' Drain**
- J. Semi-Auto Drain
- K. Metal Bowl Guard / Semi-Auto Drain**

Metal Bowl

- 3. Twist Drain
- 4. Sight Gauge / Twist Drain**
- 7. Automatic Float Drain
- 8. Sight Gauge / Automatic Float Drain**
- G. Push 'N' Drain
- H. Sight Gauge / Push 'N' Drain**
- L. Semi-Auto Drain
- M. Sight Gauge / Semi-Auto Drain**

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.

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

Body Connector Kit	PS754P
Lockout Valve	PS756P
Manifold Block	PS757P
Pressure Switches –	
DIN Connectors	P01909
Flying Leads	P01908
Wall Mounting Kit	PS755P

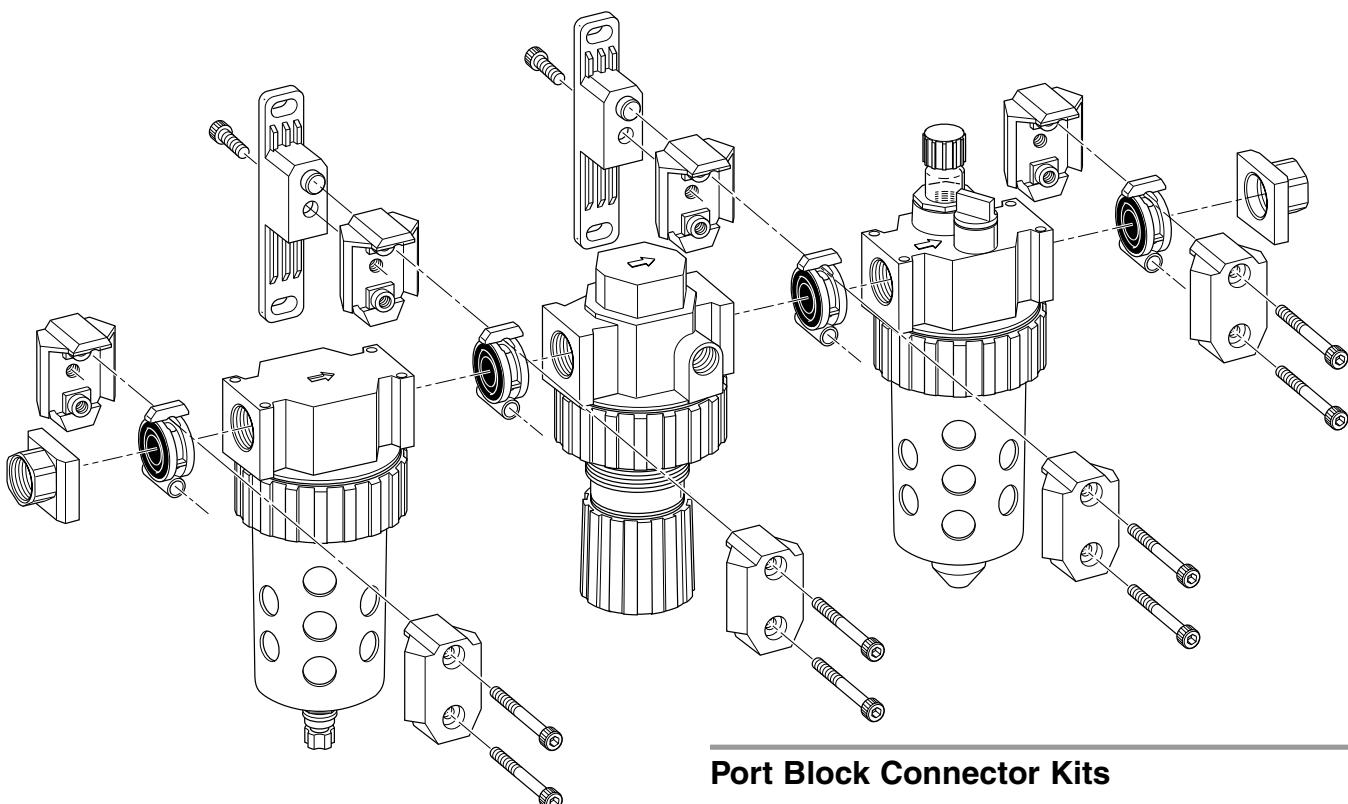
Port Block Kits: Size NPT BSPP BSPT

06 Series	1/4"	PS750P	PS765P	PS761P
	3/8"	PS751P	PS766P	PS762P
	1/2"	PS752P*	PS767P*	PS799P*
07 Series	1/4"	PS850P	PS865P	PS861P
	3/8"	PS851P	PS866P	PS862P
	1/2"	PS852P	PS867P	PS863P
	3/4"	PS853P	PS860P	PS864P

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



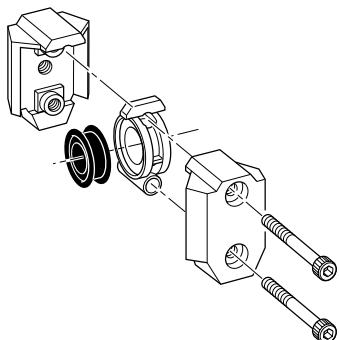
Modular Accessories – 06 Compact & 07 Standard Series



Port Block Connector Kits

Series	Size	NPT	BSPP	BSPT
06 Series	1/4"	PS750P	PS765P	PS761P
	3/8"	PS751P	PS766P	PS762P
	1/2"	PS752P*	PS767P	PS799P
07 Series	1/4"	PS850P	PS865P	PS861P
	3/8"	PS851P	PS866P	PS862P
	1/2"	PS852P	PS867P	PS863P
	3/4"	PS853P	PS860P	PS864P

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

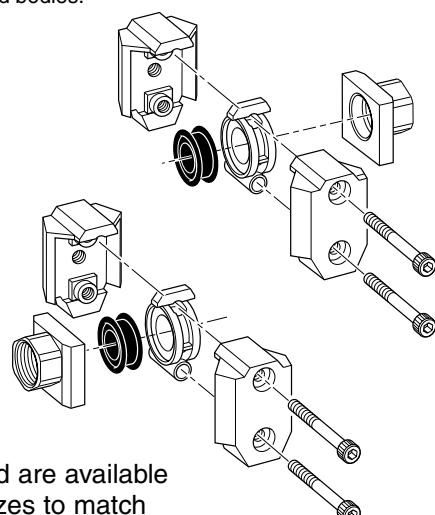


Body Connectors allow you to easily assemble and disassemble Modular Combinations.

Each Kit includes one set.

Body Connectors are required whenever you assemble two or more pieces together.

Port Block 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.

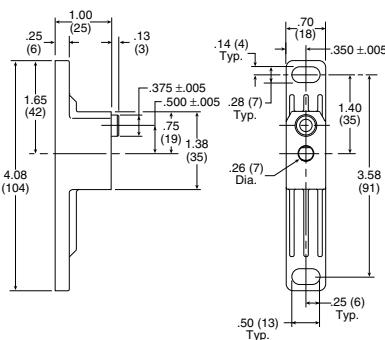
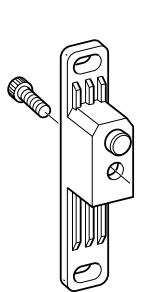


A

Modular Accessories – 06 Compact & 07 Standard Series

Wall Mounting Kits

06 Series & 07 Series PS755P



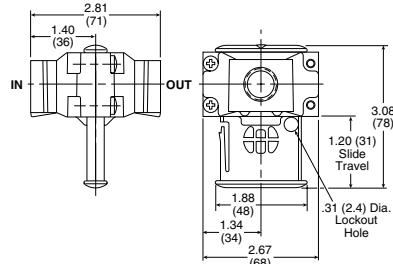
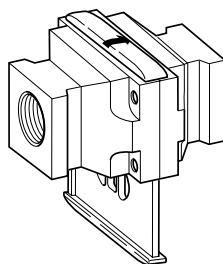
Wall Mounting Kits are available for mounting your Modular Assemblies and can be assembled and used with any standard body connector set.

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

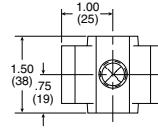
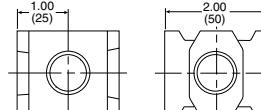
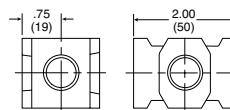
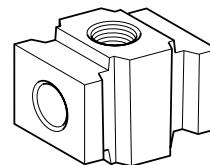


Lockout Valves provide positive shut-off and exhaust capability to isolate Modular units so they can be easily removed from the line and can be locked in a closed position. Center position can be used as a slow start. Accepts #3 padlock.

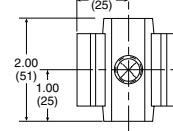
NOTE: Body Connectors are not supplied with Lockout Valves.

Modular Manifold Block

06 Series PS757P 3/8" Port
 07 Series PS857P 1/2" Port



PS757P



PS857P

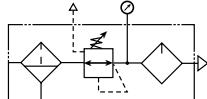
A Modular Manifold Block can be used between any two Modular units to give additional outlet ports. The Manifold Block provides 2 additional outlets in 3/8" and 1/2" sizes. Any standard pipe plug can be used to close off unused ports.

NOTE: Body Connectors are not supplied with Manifold Blocks.

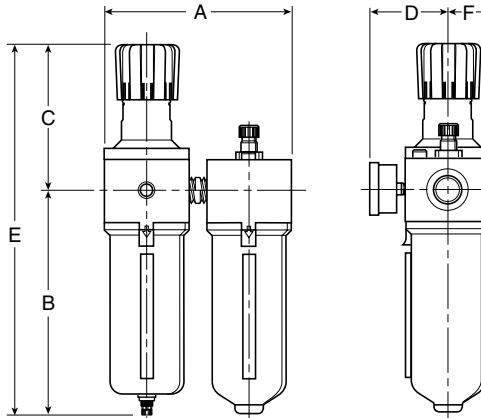
Close Nippled Combinations – P3N Hi-Flow Series

- 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)



Series	Port	Model Numbers
P3N3A	3/4"	P3N3A96SGMNNLNA
	1"	P3N3A98SGMNNLNA
	1-1/2" #	P3N3A9PSGMNNLNA

Notes: All Combo part numbers are with regulator knob in up position.

1" Port Body with 1-1/2" Port Block.

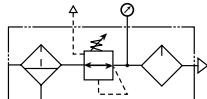
For other models, refer to Ordering Information on next page.

A	B	C	D	E	F
7.76 (197)	9.57 (243)	6.38 (162)	3.56 (90)	15.95 (405)	1.81 (50)

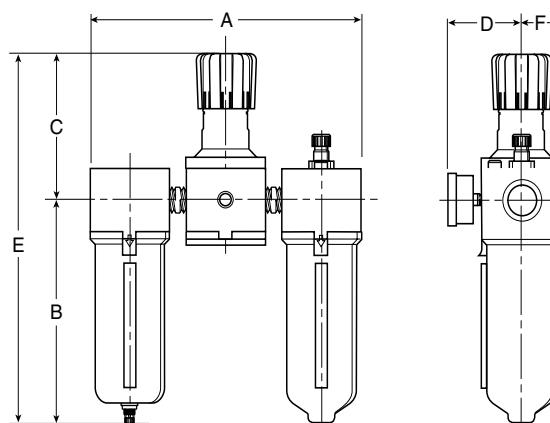
Inches (mm)

- 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
- Relieving Regulator
- 125 PSI (8.6 bar)



Series	Port	Model Numbers
P3N3B	3/4"	P3N3B96SGMNNLNA
	1"	P3N3B98SGMNNLNA
	1-1/2" #	P3N3B9PSGMNNLNA

A	B	C	D	E	F
11.89 (302)	9.57 (243)	6.38 (162)	3.56 (90)	15.95 (405)	1.81 (50)

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).

Notes: All Combo part numbers are with regulator knob in up position.

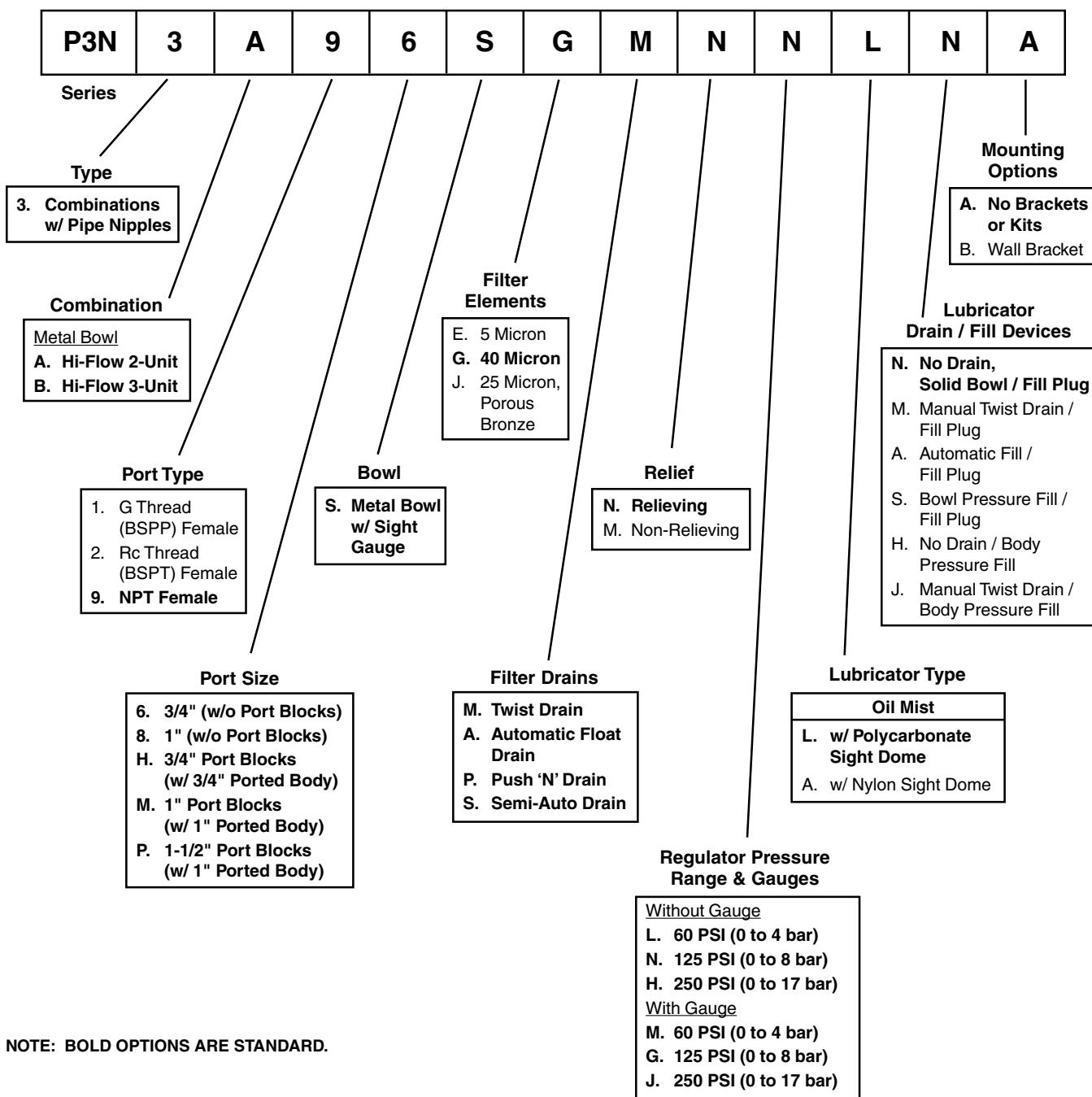
1" Port Body with 1-1/2" Port Block.

For other models, refer to Ordering Information on next page.

Close Nippled Combinations – P3N Hi-Flow Series

A

Ordering Information



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.

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

Wall Mounting Kit* P3NKA00MW

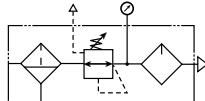
* If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.



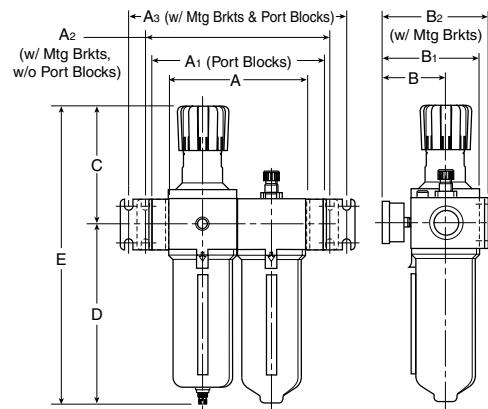
Modular Combinations – P3N Hi-Flow Series

- 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
- Relieving Regulator
- 125 PSI (8.6 bar)



Series	Port	Model Numbers
P3NCA	3/4"	P3NCA96SGMNNLNA
	1"	P3NCA98SGMNNLNA
	1-1/2" #	P3NCA9PSGMNNLNA

A	A ₁	A ₂	A ₃	B	B ₁	B ₂
7.24 (184)	9.53 (242)	9.84 (250)	12.13 (308)	3.62 (92)	5.20 (132)	5.74 (146)
C	D	E				
6.38 (162)	9.57 (243)	15.95 (405)				

Notes: All Combo part numbers are with regulator knob in up position.

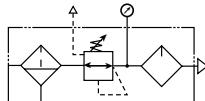
1" Port Body with 1-1/2" Port Block.

For other models, refer to Ordering Information on next page.

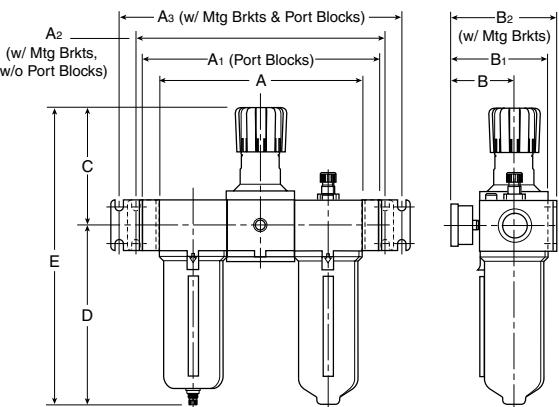
Inches (mm)

- 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
- Relieving Regulator
- 125 PSI (8.6 bar)



Series	Port	Model Numbers
P3NCB	3/4"	P3NCB96SGMNNLNA
	1"	P3NCB98SGMNNLNA
	1-1/2" #	P3NCB9PSGMNNLNA

A	A ₁	A ₂	A ₃	B	B ₁	B ₂
10.87 (276)	13.15 (334)	13.46 (342)	15.75 (400)	3.62 (92)	5.20 (132)	5.74 (146)
C	D	E				
6.38 (162)	9.57 (243)	15.95 (405)				

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).**

Notes: All Combo part numbers are with regulator knob in up position.

1" Port Body with 1-1/2" Port Block.

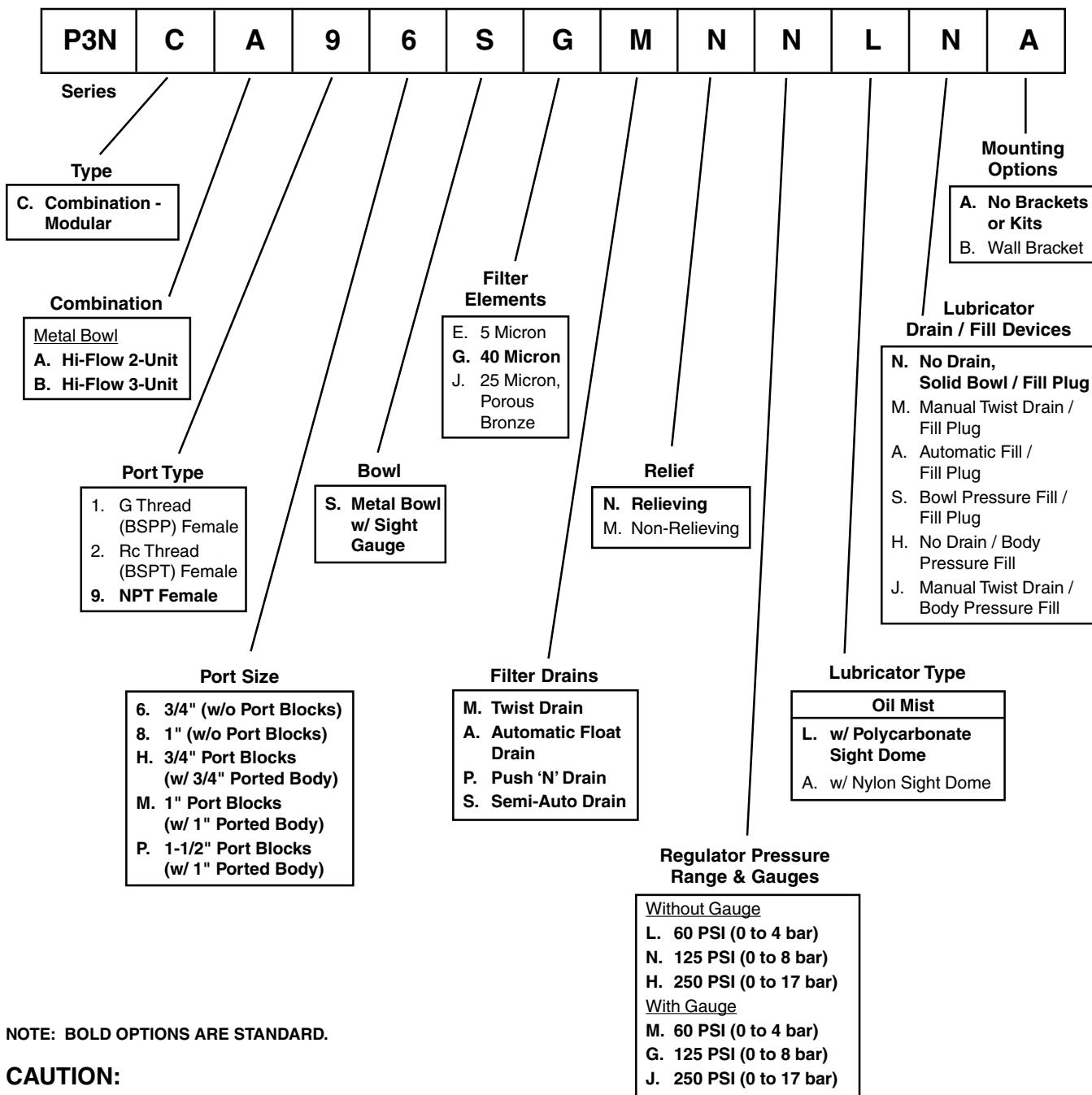
For other models, refer to Ordering Information on next page.



A

Modular Combinations – P3N Hi-Flow Series

Ordering Information



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.

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

Port Block Kits: For Modular Combinations

3/4" 1" 1-1/2"

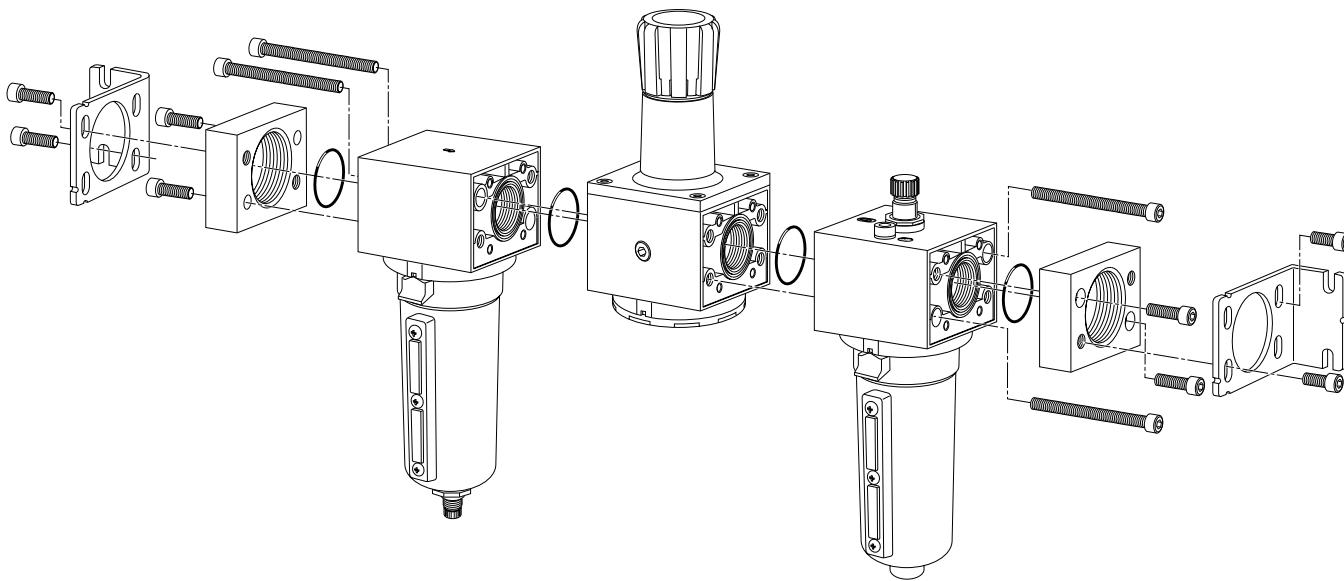
NPT P3NKB96CL P3NKB98CL P3NKB9BCL
BSPP P3NKB16CL P3NKB18CL P3NKB1BCL

Wall Mounting Kit* P3NKA00MW

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

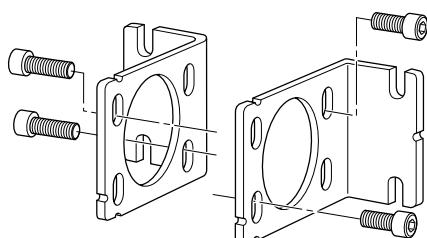


Modular Accessories – P3N Hi-Flow Series



Mounting Brackets

P3NKA00MW

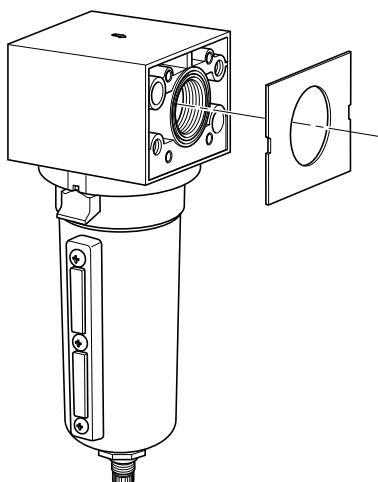


For 1-1/2" BSPP Port Block with E02 fitting application, use
Mounting Bracket Kit
P3NKA0BMW

Replacement Body Covers

P3NKA00PM

Each Kit contains
two covers.
All units are shipped
with body covers.



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

Port Block Kits

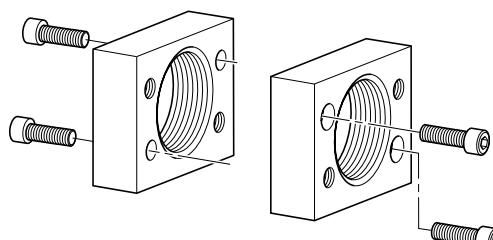
	3/4"	1"	1-1/2"
Individual Units:			
NPT	P3NKB96CP	P3NKB98CP	P3NKB9BCP
BSPP	P3NKB16CP	P3NKB18CP	P3NKB1BCP

Modular Combinations:

NPT	P3NKB96CL	P3NKB98CL	P3NKB9BCL
BSPP	P3NKB16CL	P3NKB18CL	P3NKB1BCL

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.

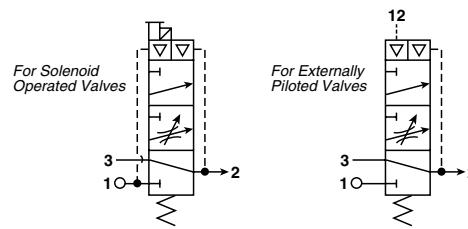


A

05S Soft Start / Quick Dump Valve

Features

- Combines Soft Start and Quick Dump Valve in the same body
- Large flow capacities up to 1.6 Cv
- Inline or Modular mounting
- Air Pilot or Solenoid operation
- Soft Start flow easily adjusted



Operation

When the valve is installed into the pneumatic system and no pilot signal is received in port 12 the air is exhausted through port 3. When a pilot signal is received into port 12 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 throttling control needle, located on the front of the valve. When the downstream pressure reaches approximately 60 PSIG (400 kPa) the main valve spool opens allowing full flow through the valve into your system.

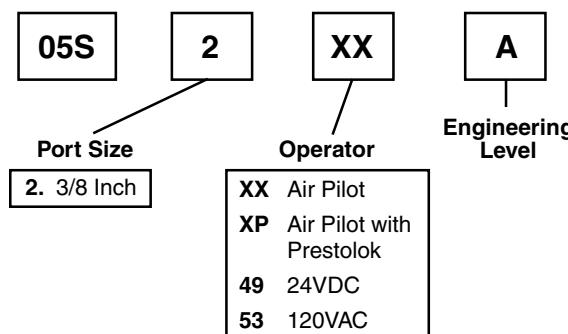
If there is a loss of pilot signal or system pressure at anytime the valve returns to it's initial state venting the downstream pressure through port 3.

The valves pilot signal can either be supplied as a pneumatic pilot directly piped into port 12, on the top of the valve, or 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 having an internal pilot supply. 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.

Ordering Information



Performance Characteristics

**Soft Start Adjustment
Flow vs. Pressure Drop**

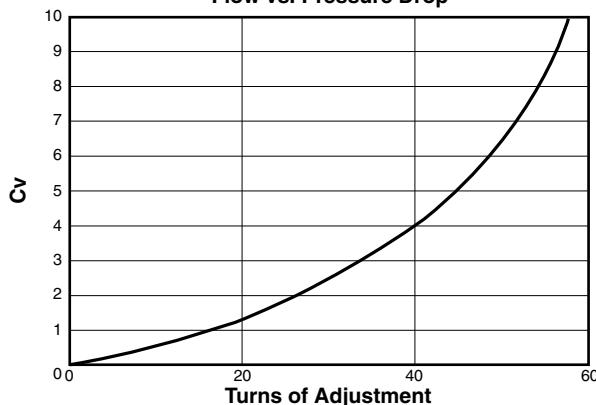


Table 1: Shows the relationship between the inlet pressure and downstream pressure at which the main valve opens.

Inlet Pressure PSIG	Downstream Pressure PSIG
75	50
100	55
125	60
150	65

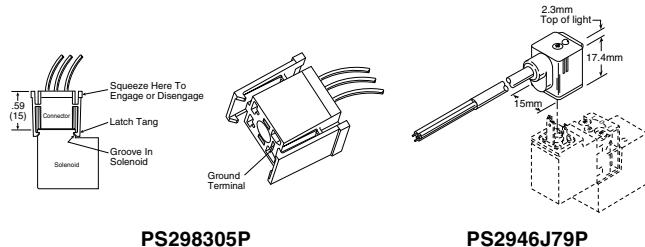
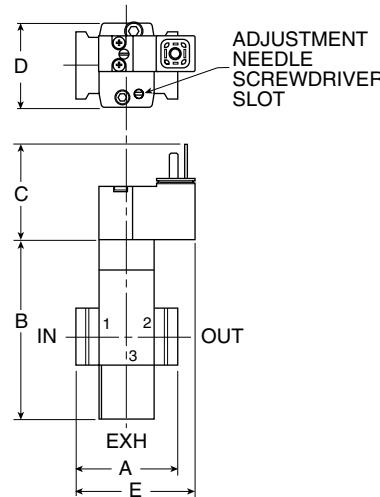
Table 2: Product forward Flow Cv and Exhaust Flow Cv.

	Flow Cv	Exhaust Flow Cv
05S	1.3	1.6

Dimensions

Model	Port Size	A	B	C	D	E
05S	3/8"	2.00 (51)	3.53 (90)	1.42 (36)	1.65 (42)	2.03 (52)

Inches (mm)



Kits & Accessories

- 3-Pin Female Connector Kit*† PS2932P
- 24VAC Lighted 3-Pin Connector Kit*† PS294679P
- 120/110VAC Lighted 3-Pin Connector Kit*† PS294683P
- 3-Pin Connector Kit, 24VAC or 24VDC w/6 Foot Cord* PS2946J79P
- 3-Connector Kit, 120/110VAC w/6 Foot Cord* PS2946J83P
- 1/2 Meter Cord (18 Inch)* PS298305P
- 3/8" Exhaust Silencer (05S) ES37MB

* Conductors: 2 Poles Plus Ground
 Contact Spacing: 8mm

† Cable Range: 6 to 8mm (0.24 to 0.31 Inch)

Specifications

Exhaust Port 3/8 Inch

Port Threads – Inlet and Outlet Ports – 3/8 inch BSPP and BSPT port threads are available through the use of modular port block kits

Pressure & Temperature Ratings –

Solenoid – 60 to 150 PSIG (400 to 1035 kPa)
 32°F to 140°F (0°C to 60°C)

Air Pilot – 60 to 150 PSIG (400 to 1035 kPa)
 32°F to 160°F (0°C to 70°C)

Air Pilot with Prestolok Adaptor – 60 to 150 PSIG (400 to 1035 kPa)
 32°F to 150°F (0°C to 65°C)

CAUTION: The actual maximum pressure and temperature ratings noted above for valves with Prestolok fittings, are dependent upon the type of tubing that is used.

Weight 12.7 oz. (.36 kg)

Materials of Construction

- Body** Aluminum
- Seals** Nitrile
- Slide Rings** Lubricant Filled Thermoplastic
- Springs** Stainless Steel

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



06S



07S

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 its initial state venting the down stream pressure through Port 3.

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.

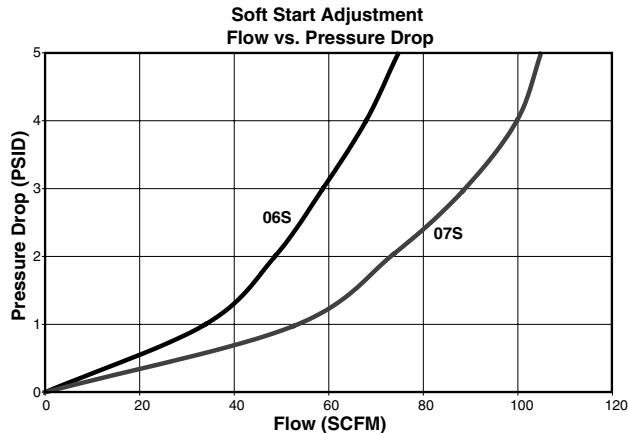
CAUTION: Do not use synthetic, reconstituted, or oils with an alcohol content or detergent additive.

CAUTION: Do not restrict the inlet of valves.

Ordering Information

06S	2	53	B	—
Series	Port Size	Operator / Voltage	Engineering Level	Thread Type / Label
06S. Soft Start / Quick Dump Valve 07S. Soft Start / Quick Dump Valve	2. 3/8 Inch (06S) 3. 1/2 Inch (07S)	30-145 PSI 49. 24VDC 53. 120/60 Hz 145-200 PSI 69. 24VDC 73. 120/60 Hz	B. Current	Blank NPT 1. BSPP (G)

NOTE: **BOLD OPTIONS ARE STANDARD.**

Performance Characteristics**Dimensions:**

Model	Port Size	A	B	C	D	E	F
06S	3/8"	3.36 (85)	5.40 (137)	2.07 (53)	2.08 (53)	1.68 (43)	2.17 (55)
07S	1/2"	3.81 (96)	5.96 (151)	2.07 (53)	2.74 (70)	1.91 (48)	2.54 (65)

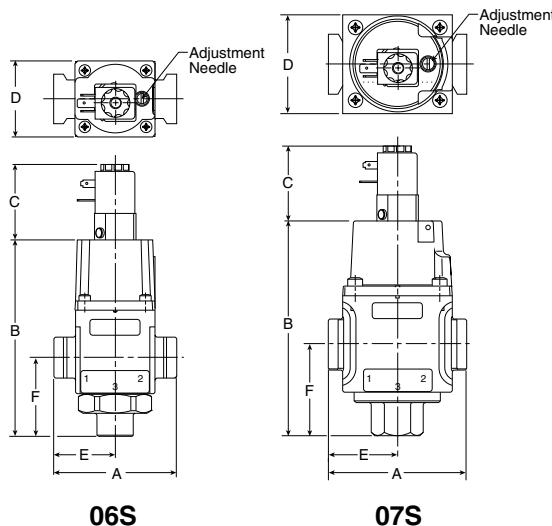
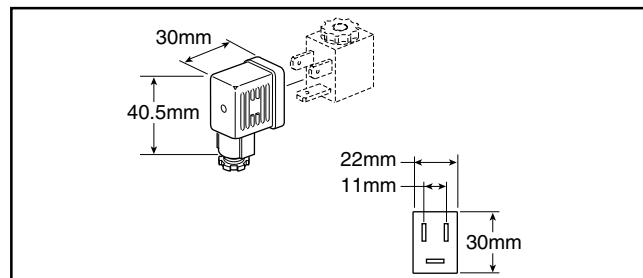
Inches (mm)

Table 1: Shows the relationship between the inlet pressure and downstream pressure at which the main valve opens.

Inlet Pressure PSIG	Downstream Pressure PSIG	
	06S	07S
75	55	52
100	67	68
125	80	82
150	90	92

Table 2: Product forward Flow Cv and Exhaust Flow Cv.

	Flow Cv	Exhaust Flow Cv
06S	4.1	3.4
07S	5.7	4.6

**22mm Rectangular 3-Pin**

Connector	Connector with 6' (2m) Cord	Description
PS2429P	PS2429JP	Unlighted
PS243079P	PS2430J79P*	Light – 24VDC
PS243083P	PS2430J83P*	Light – 120V/60Hz

* 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**Kits & Accessories**

06S Repair Kit	PHRKSS75
07S Repair Kit	PHRKSS105
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 (1000 kPa)
(High Pressure Coil) 200 PSIG (1380 kPa)**Minimum Operating Pressure** 30 PSIG (207 kPa)**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)

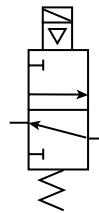
Materials of Construction

Body	Aluminum
Bottom Plug	Brass

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



06T



07T

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.



CAUTION: Do not use synthetic, reconstituted, or oils with an alcohol content or detergent additive.



CAUTION: Do not restrict the inlet of valves having an internal pilot supply. 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.

Ordering Information

06T	2	53	A	—
-----	---	----	---	---

Series

06T. Solenoid Quick Dump Valve
07T. Solenoid Quick Dump Valve

Port Size

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

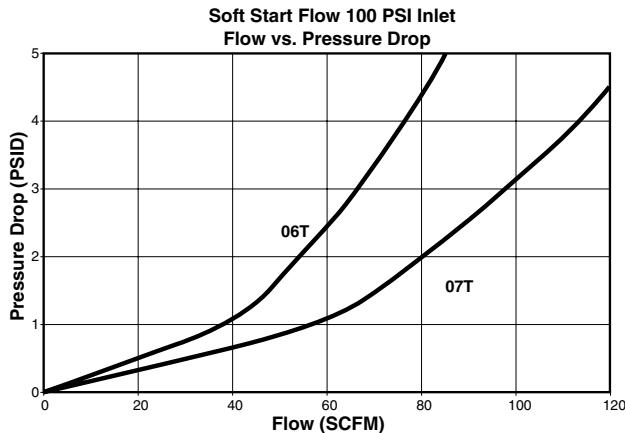
Engineering Level

A. Current

Thread Type / Label

Blank NPT
1. BSPP (G)

NOTE: **BOLD OPTIONS ARE STANDARD.**

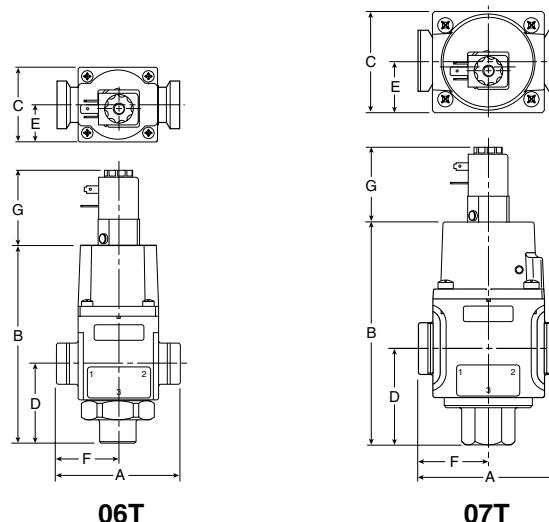
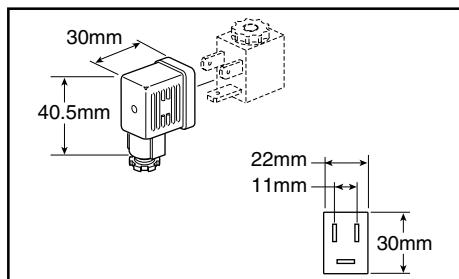
Performance Characteristics**Dimensions:**

Model	Port Size	A	B	C	D	E	F	G	H
06T	3/8"	3.36 (85.4)	5.40 (137)	2.08 (52.8)	2.17 (55.1)	1.04 (26.4)	1.68 (42.7)	2.07 (52.5)	1.90 (48)
07T	1/2"	3.81 (96.8)	5.96 (151)	2.74 (69.5)	2.55 (64.8)	1.37 (34.8)	1.91 (48.4)	2.07 (52.7)	1.90 (48)

Inches (mm)

Table 1: Product forward Flow Cv (1 to 2).

	Flow Cv	Exhaust Flow Cv
06T	3.7	4.1
07T	5.5	5.0

**22mm Rectangular 3-Pin**

Connector	Connector with 6' (2m) Cord	Description
PS2429P	PS2429JP	Unlighted
PS243079P	PS2430J79P*	Light – 24VDC
PS243083P	PS2430J83P*	Light – 120V/60Hz

* 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

Kits & Accessories

06T Repair Kit	PHRKS75
07T Repair Kit	PHRK105
06 Modular Body Connectors	PS754P
07 Modular Body Connectors	PS854P
1/2" Exhaust Silencer	ES50MB
3/4" Exhaust Silencer	ES75MB

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 (1000 kPa)
(High Pressure Coil) 200 PSIG (1380 kPa)**Minimum Operating Pressure** 30 PSIG (207 kPa)**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)

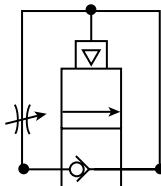
Materials of Construction

Body	Aluminum
Bottom Plug	Brass

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



06P



07P

Operation

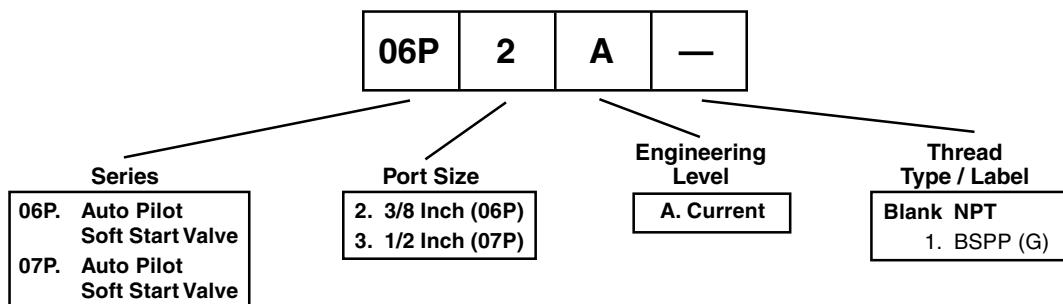
When pressure is supplied to the inlet port, gradual filling of the downstream system occurs through the adjustable needle valve. The piston opens the main valve when the downstream side of the valve reaches approximately 60% of the supply pressure. The ramp up time to reach the switch over pressure 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.

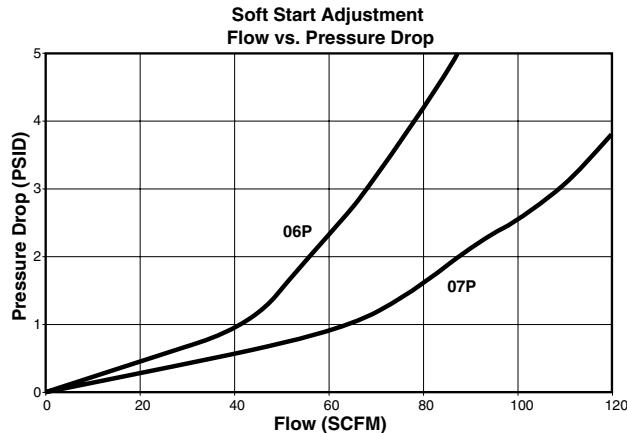
CAUTION: Do not use synthetic, reconstituted, or oils with an alcohol content or detergent additive.

CAUTION: Do not restrict the inlet of valves having an internal pilot supply. 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.

Ordering Information



NOTE: **BOLD OPTIONS ARE STANDARD.**

Performance Characteristics**Table 1:** Shows the relationship between the inlet pressure and downstream pressure at which the main valve opens.

Inlet Pressure PSIG	Downstream Pressure PSIG	
	06P	07P
75	45	25
100	60	33
125	75	38
150	85	45

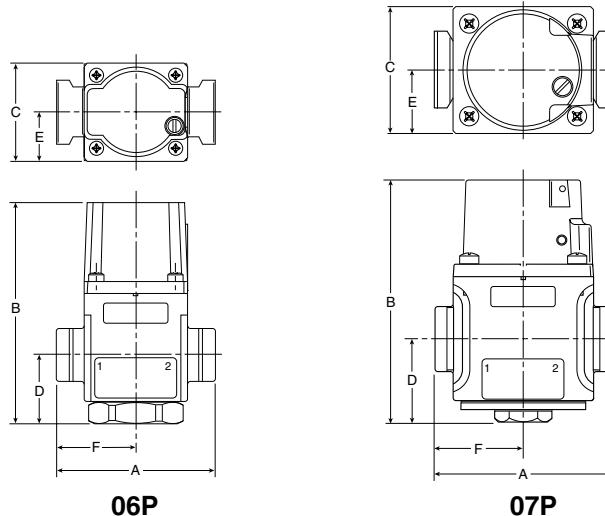
A**Table 2:** Product forward Flow Cv (1 to 2).

	Flow Cv
06P	3.8
07P	5.5

Dimensions:

Model	Port Size	A	B	C	D	E	F
06P	3/8"	3.36 (85.4)	4.70 (119)	2.08 (52.8)	1.48 (37.5)	1.04 (26.4)	1.68 (42.7)
07P	1/2"	3.81 (96.8)	5.21 (132.3)	2.74 (69.5)	1.80 (45.8)	1.37 (34.8)	1.91 (48.4)

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

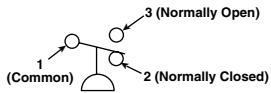
- Body Aluminum
- Bottom Plug
 - 06P Brass
 - 07P Zinc

Specifications

- Maximum Pressure 300 PSIG (2068 kPa)
- Minimum Operating Pressure 30 PSIG (207 kPa)
- 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)

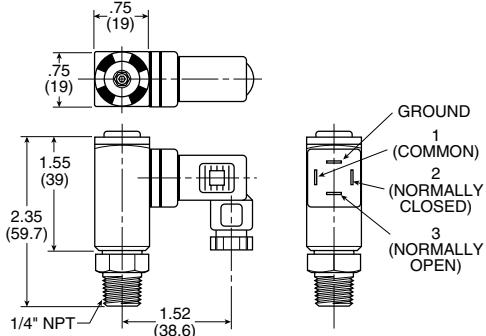


Pressure Switch – P01909



Features:

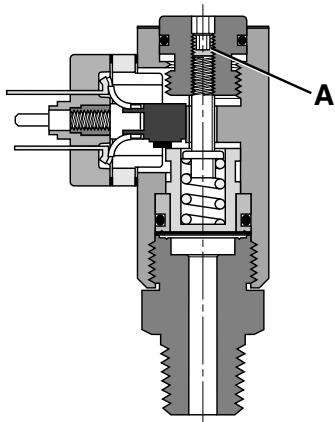
- Inline mounting
- Dial indicator for easy pressure setting
- 5 amp rated snap action micro switch
- Heavy duty Aluminum components
- Compact size
- DIN 43650HCM connector
- IP65 Rated
- Field adjustable 30-150 PSIG
- +/- 2% repeatability
- Single pole/Double throw switch



Operation

The pressure switch monitors the air pressure in your pneumatic system. When the pressure in your system either drops below or exceeds the set point pressure, an electrical output is given.

Using a .125" (3mm) hex wrench, turn the adjusting screw (**A**) clockwise to increase the pressure set point and counterclockwise to decrease the pressure setting. One complete revolution of the adjusting screw covers the complete adjustment range of 30-150 PSIG (2-10 bar).



Definitions and Terminology

Repeatability — Accuracy is the maximum allowable set point deviation of a single pressure or temperature switch under one given set of environmental and operational conditions.

Single Pole Double Throw (SPDT) Switching element — A SPDT switching element has one normally open, one normally closed and one common terminal. Three terminals mean that the switch can be wired with the circuit either normally open (NO), or normally closed (NC), or both.

Dead Band — The dead band, sometimes referred to as "differential" or "hysteresis", is the change in pressure between actuation and deactuation set points.

Kits and Accessories

Bushing 1/4" to 3/8"	209P-6-4
Bushing 1/4" to 1/2"	209P-8-4

Specifications

Electrical	5 AMP, 12/24VDC, 125/250VAC
Maximum Inlet Pressure	300 PSIG (20 bar)
Mechanical Life	10 ⁶ at standard operating conditions
Electrical Connection	DIN 43650HCM
Electrical Protection	IP65
Repeatability	±2% at 70°F (20°C) Ambient
Temperature Range	-40°F to 180°F (-40°C to 80°C)
Weight	0.13 lb. (0.06 Kg)

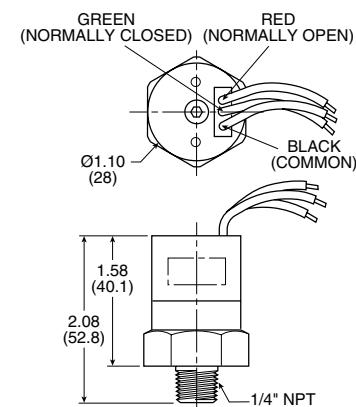
Materials of Construction

Diaphragm	Nitrile
Housing	Anodized Aluminum

Pressure Switch – P01908

A**Features:**

- Inline mounting
- 5 amp rated snap action micro switch
- Brass body
- Compact size
- Flying leads electrical connection
- IP65 Rated
- Field adjustable 25-100 PSIG
- +/- 2% repeatability
- Single pole/Double throw switch

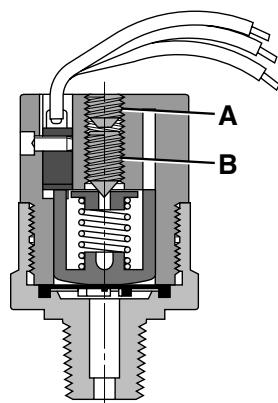
**Operation**

The pressure switch monitors the air pressure in your pneumatic system. When the pressure in your system either drops below or exceeds the set point pressure, an electrical output is given.

Remove screw **(A)** from the top of the switch. Using a .125" (3mm) hex wrench, turn the adjusting screw **(B)** clockwise to increase the pressure set point and counterclockwise to decrease the pressure setting, replace screw **(A)**. Adjustment range of 25 to 100 PSIG (.7 to 7.5 bar).

Standard electrical circuit

Black Common
Green Normally Closed
Red Normally Open

**Kits and Accessories**

Bushing 1/4" to 3/8"	209P-6-4
Bushing 1/4" to 1/2"	209P-8-4

Definitions and Terminology

Repeatability — Accuracy is the maximum allowable set point deviation of a single pressure or temperature switch under one given set of environmental and operational conditions.

Single Pole Double Throw (SPDT) Switching element — A SPDT switching element has one normally open, one normally closed and one common terminal. Three terminals mean that the switch can be wired with the circuit either normally open (NO), or normally closed (NC), or both.

Dead Band — The dead band, sometimes referred to as "differential" or "hysteresis", is the change in pressure between actuation and deactuation set points.

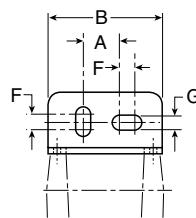
Specifications

Electrical	5 AMP, 12/24VDC, 125/250VAC
Maximum Inlet Pressure	300 PSIG (20 bar)
Mechanical Life	2x10 ⁶ at 75 PSIG (5 bar)
Electrical Connection	18" Flying Leads
Electrical Protection	IP65
Repeatability	±2% at 70°F (20°C) Ambient
Temperature Range	-40°F to 180°F (-40°C to 80°C)
Weight	0.23 lb. (0.11 Kg)

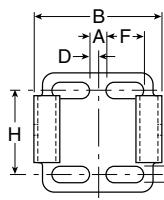
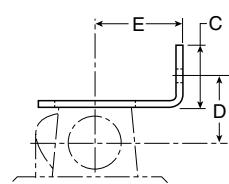
Materials of Construction

Diaphragm	Nitrile
Housing	Brass

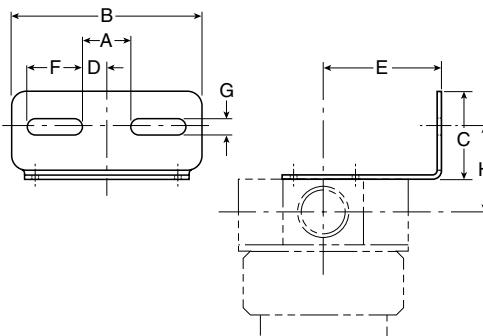
Mounting Bracket Kits



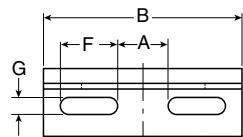
PS417BP
 (Includes Panel Mount Nut)



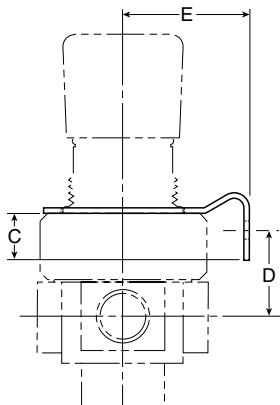
PS943P



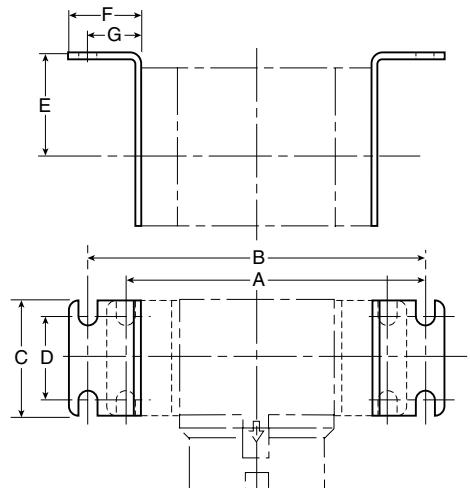
PS743P, PS843P



PS707P & PS807P
 (Includes Panel Mount Nut)



PS963P
 (Includes Aluminum Panel Mount Nut)



P3NKA00MW

Dimensions

	A	B	C	D	E	F	G	H	Kit
inches	.54	1.80	1.00	1.50	1.35	.28	.22	—	PS417BP (10F, 14F, P3A, 14R, 14E, 14L)
mm	14	46	25	38	34	7	6	—	
inches	.84	3.25	1.50	.42	2.00	.94	.28	1.44	PS743P (06F, 11F, 06L, 16L)
mm	21	83	38	11	51	24	7	37	
inches	1.00	3.94	1.57	.50	2.19	1.25	.28	1.68	PS843P (07F, 12F, 07L, 17L)
mm	25	100	40	13	56	32	7	43	
inches	.28	2.12	2.00	.14	1.85	.63	.28	—	PS943P (05F, 15F, 15L)
mm	7	54	51	4	47	16	7	—	
inches	.84	2.59	.49	1.02	1.85	.61	.28	1.41	PS963P (05R, 10R, 05E, 27E)
mm	21	66	12	26	47	15	7	36	
inches	.84	3.26	.77	1.46	2.00	.94	.28	—	PS707P (06R, 06E, 11R)
mm	21	83	20	37	51	24	7	—	
inches	1.00	3.94	.65	1.68	2.19	1.25	.28	—	PS807P (07R, 07E, 12R)
mm	25	100	17	43	56	32	7	—	
inches	6.22	8.19	2.75	1.97	2.36	1.77	1.30	—	P3NKA00MW
mm	158	208	70	50	60	45	33	—	(P3NF, P3NR, P3NE, P3NL)