

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





# **Air Preparation Products**

Filters, Regulators, Lubricators, & Airline Accessories

Catalog 0700P-E







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Filters, Regulators, Lubricators	www.parker.com/pneu/frl	124	С	Filters, Regulators, Lubricators
Stainless Steel FRLs	www.parker.com/pneu/ssfrls		D	Stainless Steel FRLs
Precision Regulators	www.parker.com/pneu/precreg		Ε	Precision Regulators
Proportional Regulators (P31P, P32P & PAR <sup>TM</sup> -15)			F	Proportional Regulators
LV / EZ Lockout Valves (Lockout Valves)	www.parker.com/pneu/lockout		G	"LV" / "EZ" Lockout Valves
Integrated Fittings		\$ \$ \$ \$ \$ \$ \$ \$	Н	Integrated Fittings
Accessories	www.parker.com/pneu/accessories		J	Accessories
Ball Valves / Plug Valves	www.parker.com/pneu/ball	3 3	K	Ball Valves / Plug Valves
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# Filters, Regulators, Lubricators

Mini, Prep-Air® II, General Line

# Section C www.parker.com/pneu/frl



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**BOLD ITEMS ARE MOST POPULAR.** 



C

Product

Filters

Coalescers

Regulators

Lubricators Filter / Regulato

Combos

Accessories

#### **!** CAUTION:

Polycarbonate bowls and sight domes, being transparent and tough, are ideal for use with Filters and Lubricators. They are suitable for use in normal industrial environments, but should not be located in areas where they could be subjected to direct sunlight, an impact blow, nor temperatures outside of the rated range. As with most plastics, some chemicals can cause damage. Polycarbonate bowls and sight domes should not be exposed to chlorinated hydro-carbons, ketones, esters and certain alcohols. They should not be used in air systems where compressors are lubricated with fire-resistant fluids such as phosphate ester and di-ester types.

Metal bowls are recommended where ambient and/or media conditions are not compatible with polycarbonate bowls. Metal bowls resist the action of most such solvents, but should not be used where strong acids or bases are present or in salt laden atmospheres. Consult the factory for specific recommendations where these conditions exist.

TO CLEAN POLYCARBONATE COMPONENTS USE MILD SOAP AND WATER ONLY! DO NOT use cleansing agents such as acetone, benzene, carbon tetrachloride, gasoline, toluene, etc., which are damaging to this plastic.

Metal bowl guards are recommended for all applications.

#### **!** CAUTION:

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



#### **Selection Chart**

#### **Product Selection Chart**

Basic								Port Siz	ze							Bowls			Eleme	ents (M	icron)		
Unit	Series	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	Poly	Metal	Metal SG	Capacity	5	20	40	Adsorber	Page
S E P W E A R	P3TF		Х	Х	Х	Х	Х		х	Х					Aluminum Body				Water Separator			ator	C6
A R T A E T R O R	P3TF												х	Χ	Alur	minum	Body			Water	Separa	ator	C9
	02F		Х												Alur	minum	Body	_	Std.	_	_	_	C13
	14F	Х	Х												Х	Х	_	1 oz.	Std.	_	Opt.	Opt.	C14
	05F		Х	Х											Х	_	_	2 oz.	_	_	Std.	Opt.	C16
F	06F		Х	Х	Χ										Х	Х	Х	4.4 oz.	Opt.	_	Std.	Opt.	C18
L T E	07F			Х	Χ	Х									Х	Х	Х	7.2 oz.	Opt.	_	Std.	Opt.	C20
R S	P3NF					Х	Х		Х						_	_	Х	18 oz.	Opt.	_	Std.	Opt.	C22
	F602					Х	Х	Х	Х	Χ	Х				_	Х	Х	32 oz.	Opt.	_	Std.	-	C24
	35F								Х	Χ					_	Х	_	27.5 oz.	Std.	_	_	_	C30
	43F											Х			_	Х	_	50.72 oz.	Std.	_	_	_	C30
	02F		Х												Nyl	on Hou	sing	_		Grade 6	6, Grad	e 10	C35
	10F	Х	Х												Х	Х	_	1 oz.	Grad	e 6 Std	., Grad	e 10 Opt.	C36
	15F		Х	Х											Х	_	_	2 oz.		Grac	le 6 Sto	d.	C38
C O F	11F		Χ	Х	Χ										Х	Х	Х	4.4 oz.	Grad	e 6 Std	., Grad	e 10 Opt.	C40
^ I	12F			Х	Χ	Х									Х	Х	Х	7.2 oz.	Grad	e 6 Std	., Grad	e 10 Opt.	C42
E T S E C R	P3NF					Х	Χ		Х						_	_	Х	18 oz.	Grad	e 6 Std	., Grad	e 10 Opt.	C44
I S N G	F701					Х	Х								_	Х	Х	32 oz. 100 oz.	Grad	e 6 Std	., Grad	e 10 Std.	C46
	35F								Х	Χ					_	Х	_	27.5 oz.	1.0 8	0.01 N	/licron	Adsorber	C48
	43F											Х			_	Х	_	50.72 oz.	1.0 8	0.01 N	/licron	Adsorber	C48
	P3TF												Х	Χ	_	Х	_	4" & 6" Flange	1.0 8	0.01	/licron	Adsorber	C50

СЗ

(Revised 05-13-14)



Coalescers

Regulators

Accessories Lubricators

#### **Product Selection Chart**

Ba	sic										Spring Range											Page				
U	nit	Series	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	2	15	25	30	40	60	110	120	125	150	160	200	250	raye
		14R	Х	Х									_	Opt.	_	Opt.	_	Opt.	_	_	Std.	_	_	_	_	C54
		P3A-R	Х	Х									_	Std.	_	Std.	_	Std.	_	Std.	_	_	_	_	_	C56
		R34	Х	Х										_	_	Opt.	_	Opt.	_		Std.	_	_	_	_	C58
		R24 / R25	Х	Х										_	_	Std.	_	Std.	_	_	Std.	_	_	_	_	C60
		R45 / R46		Х	Х								_	_	Std.	_	_	Std.	_	_	Std.	_	_	_	_	C62
	S T	20R	Х	Х									_	Std.	_	Std.	_	Std.	_	_	Std.	_	_	_	_	C64
	A N D	15R		Х	Х								_	Opt.	_	Opt.	_	Opt.	_	_	Std.	_	_	_	_	C66
R	A R D	05R		Х	Х								_	_	_	Opt.	_	Std.	_	_	Std.	_	_	Opt.	_	C68
R E G U L		06R		Х	Х	Х							_	_	_	_	_	Std.	_	_	Std.	_	_	_	Opt.	C70
A T O		07R			Х	Х	Х						_	_	_	_	_	Std.	_	_	Std.	_	_	_	Opt.	C72
R S		P3NR					Х	Х		Х			_	_	_	_	_	Opt.	_	_	Std.	_	_	_	Opt.	C74
		R119					Х	Х	Х	Х			_	_	_	_	_	_	_	_	Std.	_	_	_	Opt.	C76
		09R									Х		_	_	_	_	_	_	_	_	Std.	_	_	_	_	C80
		10R		Х	Х								*	*	*	*	*	*	*	*	*	*	*	*	*	C82
	P	11R		Х	Х	Х							*	*	*	*	*	*	*	*	*	*	*	*	*	C84
	L	12R			Х	Х	Х						*	*	*	*	*	*	*	*	*	*	*	*	*	C86
	T	P3NR					Х	Х		Х			*	*	*	*	*	*	*	*	*	*	*	*	*	C88
		R119					Х	Х	Х	Х	Χ	Х	*	*	*	*	*	*	*	*	*	*	*	*	*	C90

<sup>\*</sup> Will follow Pilot Regulator setting.



Accessories

# Prep-Air® II **Air Preparation Units**

#### **Product Selection Chart**

Ba	sic	Series				Po	ort Si	ze					Bowls	s	Conocity		emen Micro		Adaarbar			s	pring	Rang	je			Page
Uı	nit	361162	1/8	1/4	3/8	1/2	3/4	1	1- 1/4	1- 1/2	2	Poly	Metal	Metal SG	Capacity	5	20	40	Adsorber	15	25	30	60	110	125	200	250	raye
	F	14E	Х	Χ								Х	Х	_	1 oz.	Std.	_	Opt.	Opt.	Opt.	_	Opt.	Opt.	_	Std.	_	_	C98
1		B34	Х	Χ								Х	Х		Х	Х	Opt.			_	Opt.	_	Opt.	_	Std.	_	_	C100
I	E R	05E		Χ	Х							Х	Х	Х	2 oz.	Opt.	_	Std.	Opt.	_	_	Opt.	Std.	_	Std.	Opt.	_	C102
1 1	R	06E		Χ	Х	Х						Х	Х	Х	4.4 oz.	Opt.	_	Std.	Opt.	_	_	Std.	Std.		Std.	_	Opt.	C104
(	3	07E			Х	Х	Х					Х	Х	Х	7.2 oz.	Opt.	_	Std.	Opt.	_	_	Std.	Std.		Std.	_	Opt.	C105
4	A   T	P3NE					Х	Х		Х		_	_	Х	18 oz.	Opt.	_	Std.	Opt.	_	_	_	Std.		Std.	_	Std.	C108
F	) R S	12E			Х	Х	Х					_	Х	_	7.2 oz.	6	_	10	_		_	Opt.	Opt.		Std.	_	Opt.	C110
H	М														_	Std.		Opt.									<u> </u>	
	C	15L		Х	Х							Х	Х	Х	2 oz.				Cannot I	oe fille	ed un	der pı	essur	e				C114
	В О М	16L		Χ	Х	Χ						х	Х	Х	2.6 oz.				Cannot I	oe fille	ed un	der pı	russer	е				C116
U B	I S T	17L			Х	Х	Х					Х	Х	Х	4.9 oz.				Cannot I	oe fille	ed un	der pı	russer	е				C118
R	П	02L		Χ	Χ							Alu	minum	Body	.25 oz.				Cannot I	oe fille	ed un	der pı	essur	e				C123
CA		04L	Χ	Χ								Х	Х	_	1 oz.				Cannot I	oe fille	ed un	der pı	essur	е				C124
A	$  \  $	06L		Χ	Χ	Χ						Х	Х	Χ	2.9 oz.				Can be	filled	unde	er pre	ssure		C126			
0 R	M	07L			Х	Х	Х					Х	Х	Χ	6 oz.				Can be	filled	unde	er pre	ssure			C128		
S	s	P3NL					Х	Х		X — X 18 oz. Can be filled under pre				ssure		C130												
	T	L606					Х	Х	Х	Х		_	Х	Х	16 oz. 32 oz. 64 oz.				Can be	filled	l unde	er pre	ssure					C132
		09L									Х	_	_	Х	1 Qt. Std. 3 Qt. Opt.				Can be	filled	l unde	er pre	ssure					C136
Г	П	14G	Χ	Χ								Х	Х	_	1 oz.		Τ\	vo-Un	nit	Opt.		Opt.	Opt.	_	Std.	_	_	0140
		14A	Χ	Χ								Χ	Х	_	1 oz.		Th	ree-U	nit	Opt.		Opt.	Opt.	_	Std.	_	_	C140
		15G		Χ	Χ							Χ	Χ	Χ	2 oz.		T۱	vo-Un	nit	_		Opt.	Std.	_	Std.	Opt.	_	C142
	N	15A		Χ	Χ							Χ	Χ	Χ	2 oz.		Th	ree-U	nit	_		Opt.	Std.	_	Std.	Opt.	_	0142
	1 1 1	06G/16G		Χ	Х	Х						Х	Х	Χ	2 oz.		Τ\	vo-Un	nit	_		_	Std.	_	Std.	_	Opt.	
	lı l	06A/16A		Χ	Х	Х						Х	Х	Χ	2 oz.		Th	ree-U	nit	_		_	Std.	_	Std.	_	Opt.	C148
	E	07G/17G			Χ	Χ	Х					Х	Х	Х	2 oz.			vo-Un		_		_	Std.	_	Std.	_	Opt.	
C	D	07A/17A			Χ	Χ	Х					Х	Х	Х	2 oz.			ree-U		_		_	Std.	_	Std.	_	Opt.	
O M		P3N3A					X	X		X		_	_	X	18 oz.			vo-Un		_		_	Std.		Std.	_	Std.	C154
В		P3N3B					X	X	\ \	X		—		X	18 oz.			ree-U		_		_	Std.	_	Std.	_	Std.	0450
0 S	Н	C628		V	V		Х	Х	Х	Х			X	X	32 & 16			ree-U		_		0=4	C+4	_	Std.	0-4	Std.	C159
		15H		X	X							X	X	X	2 oz.			vo-Un				Opt.			Std.	<u> </u>		C144
	М	15B 06H/16H		X	X	Х						X	X	X	2 oz.			ree-U wo-Un				Opt.			Std.	Opt.	Ont	
	וייו	06B/16B		X		X		_	$\vdash$			Х	X	X	2 oz. 2 oz.			ree-U		_		<u> </u>	Std.		Std.	_	Opt.	
	lul	00B/10B		٨	X	X	Х	_	$\vdash$			X	X	X	2 0Z. 2 0Z.	$\vdash$		vo-Un				$\vdash$	Std.		Std.		Opt.	C150
	Ā	07H/17H 07B/17B			Х	X	X	_				X	X	X	2 0z.			ree-U					Std.		Std.		Opt.	
	R	P3NCA			^	^	X	Х		Х		<u> </u>	_	X	18 oz.			vo-Un		_			Std.		Std.	_	Std.	
		P3NCB					X	X		X				X	18 oz.			ree-U					Std.		Std.		Std.	C156
	ш	I JIVUD					^	_^		^					10 02.			166-0	1111				otu.		otu.		otu.	

#### **Bulk Liquid Separators – P3TF**

#### **Features**

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

#### P3TFA98WEAN

#### **Applications**

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

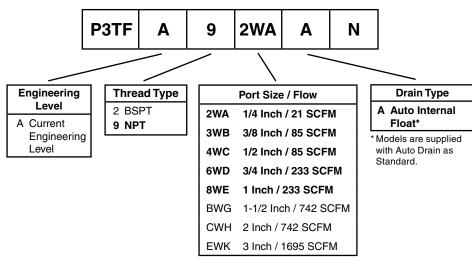
#### **Ordering Information**

Coalescers

Regulators

Lubricators

Accessories

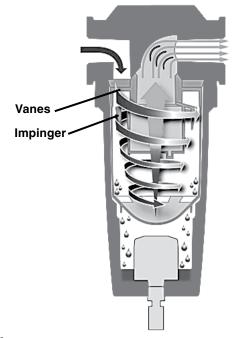




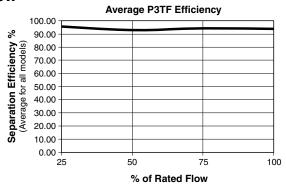
#### **Bulk Liquid Separators P3TF Series**

#### Operation

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



Flow



#### **Specifications**

Pressure Differential at Rated Flow..... 1.0 PSID (0.07 bar)

Model Number	Pipe Size	SCFM (L/s)	Maximum Operating Pressure psig (bar)	Operating Temperature	Weight Lb. (kg)
P3TFA92WAAN	1/4"	21 (10)			0.9 (0.4)
P3TFA93WBAN	3/8"	85 (40)			2.2 (1.0)
P3TFA94WCAN	1/2"	85 (40)			2.2 (1.0)
P3TFA96WDAN	3/4"	233 (110)	232 (16)	Maximum 176°F (80°C)	4.8 (2.2)
P3TFA98WEAN	1	233 (110)	202 (10)	Minimum 35°F (1.5°C)	2.6 (5.7)
P3TFA9BWGAN	1-1/2"	742 (350)			5.3 (11.6)
P3TFA9CWHAN	2"	742 (350)			5.3 (11.6)
P3TFA9EWKAN	3"	1695 (800)			12.0 (26.4)

C7

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



C

Product Selection

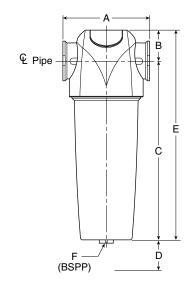
Filters

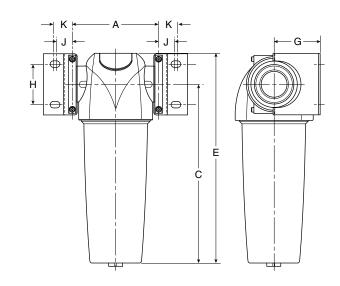
Coalescers

Regulators

Filter / Regulators

Lubricators





#### **Dimensions**

Model Number	Wall Mounting Bracket Kit	Pipe Size	Α	В	С	D	E	BSPP F	G	Н	J	к
P3TFA92WAAN	P3TKA00MWA	1/4"	3.00 (76)	1.12 (28.5)	6.02 (153)	1.58 (40)	7.15 (181.5)	1/2	2.05 (50)	1.18 (30)	0.71 (18)	0.96 (24.5)
P3TFA93WBAN	P3TKA00MWB	3/8"	3.83 (97.5)	1.34 (34)	7.91 (201)	1.97 (50)	9.25 (235)	1/2	2.36 (60)	1.57 (40)	0.81 (20.5)	1.00 (25.5)
P3TFA94WCAN	P3TKA00MWB	1/2"	3.83 (97.5)	1.34 (34)	7.91 (201)	1.97 (50)	9.25 (235)	1/2	2.36 (60)	1.57 (40)	0.81 (20.5)	1.00 (25.5)
P3TFA96WDAN	P3TKA00MWD	3/4"	5.07 (129)	1.67 (42.5)	13.09 (232.5)	2.76 (70)	10.80 (275)	1/2	2.68 (68)	2.36 (60)	0.91 (23)	1.10 (28)
P3TFA98WEAN	P3TKA00MWD	1	5.07 (129)	1.67 (42.5)	12.68 (322)	2.76 (70)	14.35 (364.5)	1/2	2.68 (68)	2.36 (60)	0.91 (23)	1.10 (28)
P3TFA9BWGAN	P3TKA00MWF	1-1/2"	6.70 (170)	1.97 (50)	18.68 (474.5)	3.94 (100)	20.64 (524.5)	1/2	3.62 (92)	3.31 (84)	1.26 (32)	1.54 (39)
P3TFA9CWHAN	P3TKA00MWF	2"	6.70 (170)	1.97 (50)	18.68 (474.5)	3.94 (100)	20.64 (524.5)	1/2	3.62 (92)	3.31 (84)	1.26 (32)	1.54 (39)
P3TFA9EWKAN	P3TKA00MWJ	3"	8.07 (205)	2.36 (60)	30.39 (772)	4.72 (120)	32.76 (832)	1/2	5.31 (135)	3.94 (100)	1.40 (35.5)	1.67 (42.5)

Inches (mm)

#### **Bulk Liquid Separator Kits & Accessories**

Drain KitEFI	
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#### **Materials of Construction**

Automatic Float Drain	Plastic
Housing / Bowl	Aluminum
Seals	Fluorocarbon

For External Drains, please reference WDV3-G **Automatic Electrical Drain or ED Zero Loss Drain** 



Wall Mounting Bracket Kit
Mounting brackets provide additional support to filters installed in flexible piping systems or OEM equipment.



#### 4" & 6"

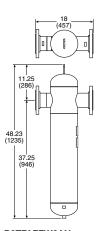
#### **Bulk Liquid Separators - P3TF**

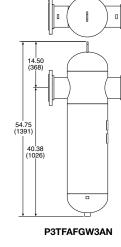


**P3TF Series** 

#### **Features**

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





P3TFAFFW2AN

#### **Bulk Liquid Separators**

Port Size	Flow SCFM	Part Number
4" Flange	2119	P3TFAFFW2AN
6" Flange	3814	P3TFAFGW3AN

#### **Operating Information**

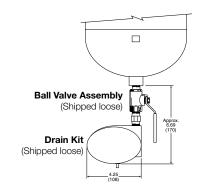
**P3TF Series** Operating Pressure: 232 PSIG (16 bar) 35°F to 150°F (1.5°C to 66°C) Operating Temperature:

#### **Materials of Construction**

Body	Steel
Baffle	Plated Steel
Deflector	Plated Steel
Seals	Fluorocarbon
Stud	Plated Steel

#### Service Kits

Description	P3TF Series
Dp Gauge Replacement Kit	DPG-Kit
Drain Kit - 1/2" NPT	HDF-120-NPT-A



#### **Inlet Air Pressure Correction**

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

																	٠ ,			
PSI	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232	247	261	275	290
bar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Factor	2.65	1.87	1.53	1.32	1.18	1.08	1.00	0.94	0.88	0.84	0.80	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.61	0.59

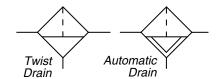
C9





## Prep-Air® II Air Preparation Units

#### **Filters**



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

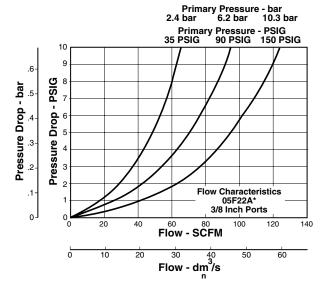
Air filters are designed to remove airborne solid contaminants, pipe scale, rust, pipe dope, etc., which may plug small orifices or cause excessive wear and premature failure of pneumatic components.

- Miniature 02F Series, 1/4 Inch
- Miniature 14F Series, 1/8 and 1/4 Inch
- Economy 05F Series, 1/4 and 3/8 Inch
- Compact 06F Series, 1/4, 3/8 and 1/2 Inch
- Standard 07F Series, 3/8, 1/2 and 3/4 Inch
- Hi-Flow P3NF Series, 3/4, 1 and 1-1/2 Inch
- Hi-Flow F602 Series, 3/4, thru 2 Inch
- Hi-Flow 35F Series, 1-1/2 and 2 Inch
- Hi-Flow 43F Series, 3 Inch

#### **Filter Selection**

- 1. Determine maximum system flow requirements.
- 2. Determine maximum allowable pressure drop at rated flow in SCFM.
- 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.



Product election

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators



#### Particulate Filters:

For the removal of solid particle contaminants down to 5 microns and the separation of bulk liquids.

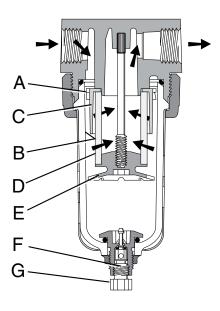
This type of filter is generally used in industrial applications where liquid water and oil, and harmful dirt particles must be removed from the compressed air system. This type of filter should also be used as a prefilter for the Coalescing (oil removal) filter.

#### First Stage Filtration:

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



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.



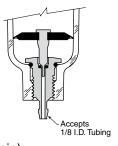
#### Semi Automatic Drain

# 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.

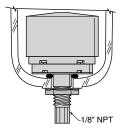
#### **Automatic Pulse Drain**



#### (Spitter Drain)

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

#### **Automatic Float Drain**



The float internal to this drain rises with increased liquid level. When the float rises, it opens a seat area allowing the trapped liquids to drain through the bottom.

A manual override can be pushed in the bottom of the drain to unseat the float if particulates create a block.



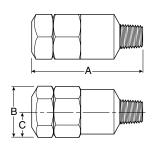
#### 02F Filters - Miniature





#### **Application**

This small, aluminum in-line filter is designed to provide protection for portable pneumatic hand tools. It weighs only 2 ounces with a throw-away filter element rated at 5 micron. Either port may be used as the inlet port. Flow is 17 SCFM (10.3 dm³/s) at 90 psig (6.2 bar) inlet pressure with 5 psig (0.3 bar) pressure drop.



Part Number	02F Filter Dimensions				
	Α	В	С		
02F1BA	2.50	1.00	.50		
	(63.5)	(25)	(13)		

Inches (mm)

#### **Specifications**

Flow Capacity*	17 SCFM (8 dm <sup>3</sup> /s)
Operating Temperature	32° to 150°F (0° to 65.5°C)
Maximum Supply Pressure	200 psig (13.8 bar)
Standard Filtration	5 Micron
Port Size NPT / BSPT	1/4
Weight lb. (kg)	0.40 lb (0.00 lbs)

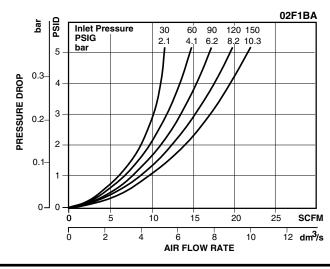
<sup>\*</sup> Inlet pressure 90 psig (6.2 bar). Pressure drop 5 PSID (0.3 bar).

#### **Materials of Construction**

Body	Aluminum
Baffle	Aluminum
Filter Element	Sintered Polyethylene
Seals	Nitrile

#### **Replacement Element Kits**

<b>5 Micron</b> PS4	436
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#### **Ordering Information**

Port Size	5 Micron
1/4"	02F1BA

C13



Coalescers

Regulators

Filter/ Regulators

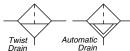
Lubricators

Combos

Accessories

<sup>&</sup>quot;F" Series Filters, Type "A" 5 micron elements: All Parker 5 micron elements meet or exceed ISO Class 3 for maximum particle size and concentration of solid contaminants.

#### 14F Filters - Miniature



Filters

Coalescers

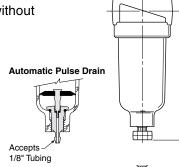
Regulators

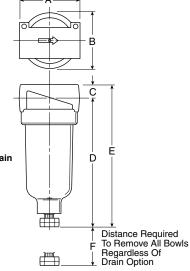
Filter/ Regulators

Combos

#### **Features**

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





Port	NPT			
Size	Twist Drain	Automatic Pulse Drain		
Poly Bowl				
1/8"	14F01BB	14F05BB		
1/4"	14F11BB	14F15BB		
Metal Bowl without Sight Gauge				
1/8"	14F03BB	14F07BB		
1/4"	14F13BB	14F17BB		

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

Inches (mm)

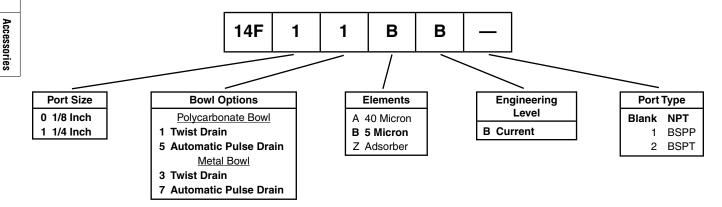
† With Automatic Pulse Drain.

#### Standard part numbers shown bold.

For other models refer to ordering information below.

- <sup>‡</sup> For polycarbonate bowl see Caution on page C2.
- § SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

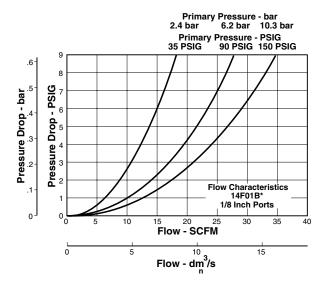
#### **Ordering Information**

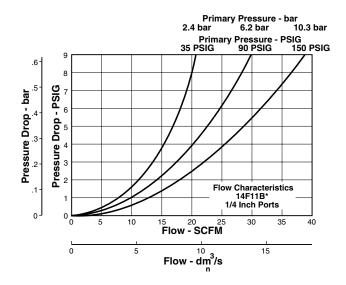


C14



#### **Technical Information**





#### 14F Filter Kits & Accessories

Bowl Kits – Poly Bowl –	DC 400DD
Automatic Pulse Drain Twist Drain	
Metal Bowl –  Automatic Pulse Drain  Twist Drain	
Filter Element Kits –	
40 Micron	
5 Micron Contrides Vit	
5 Micron Cartridge KitAdsorber	
Mounting Bracket Kit	
0	
Specifications	
Specifications Automatic Pulse Drain Tube Barb	1/8 Inch
•	
Automatic Pulse Drain Tube Barb	1 Ounce
Automatic Pulse Drain Tube Barb  Bowl Capacity  Port Threads  Pressure & Temperature Ratings –	1 Ounce
Automatic Pulse Drain Tube Barb  Bowl Capacity  Port Threads  Pressure & Temperature Ratings – Polycarbonate Bowl	1 Ounce
Automatic Pulse Drain Tube Barb  Bowl Capacity	
Automatic Pulse Drain Tube Barb  Bowl Capacity	

#### **Materials of Construction**

Body	Zinc
Bowls	Transparent Polycarbonate Metal (Zinc) Bowl w/o Sight Gauge
Deflector, Element Holder & Ba	afflePlastic
<b>Drains –</b> Twist Drain –	
	Plastic Nitrile
Automatic Pulse Drain – Piston & Seals Stem, Seat, Adaptor & Was	Nitrile shersAluminum
40 Micron (Optional)	PlasticPlasticPlasticActivated Charcoal
Seals	Nitrile



Product election

Filters

Coalescers

ilter/ Regulators

Lubricators

Combos

Accessories



#### 05F Filters - Economy

# Twist Automatic

Coalescers

Regulators

Filter / Regulators

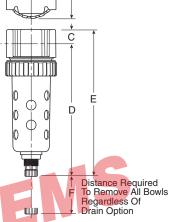
#### **Features**

· Excellent water removal efficiency.

(Revised 05-13-14)

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





Port	NPT				
Size	Twist Drain	Automatic Pulse Drain			
Poly Bowl <sup>2</sup>	<sup>‡</sup> / Metal Guard				
1/4"	05F12A*	05F1PA*			
3/8"	05F22A*	05F2PA*			
Metal Bow	/ Sight Gauge				
1/4"	05F14A*	05F1TA*			
3/8"	05F24A*	05F2TA*			

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

Inches (mm)

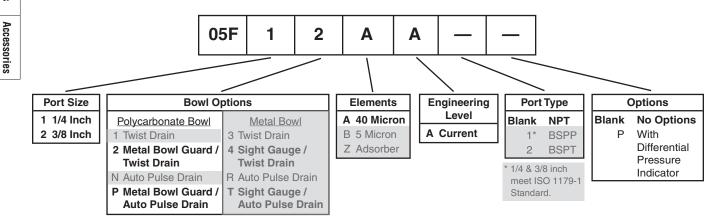
† With Twist or Automatic Pulse Drain

Standard part numbers shown bold.

For other models refer to ordering information below.

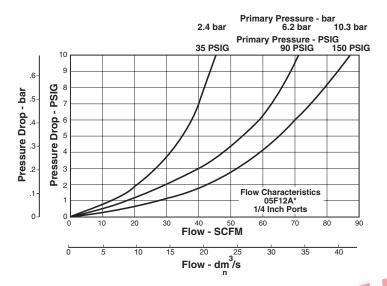
- <sup>‡</sup> For polycarbonate bowl see Caution on page C2.
- § SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

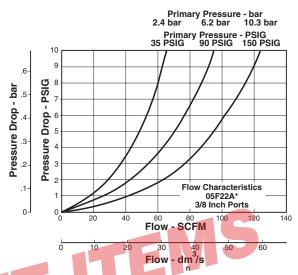
#### **Ordering Information**





#### **Technical Information**





# 05F Filter Kits & Accessories Bowl Guard Kit......

#### Specifications

PS905P

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

#### Pressure & Temperature Ratings -

Without Differential Pressure Indicator:

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

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

With Differential Pressure Indicator: 0 to 150 psig (0 to 10.3 bar) 32°F to 125°F (0°C to 52°C)

Automatic Pulse Drain - 10 to 150 psig (0.7 to 10.3 bar)

#### **Materials of Construction**

Body	Zinc
Bowls	Transparent Polycarbonate or Metal (Zinc) With or Without Sight Gauge
Bowl Guards	Steel
Collar	Plastic
Deflector, Shroud & Bat	fflePlastic
Drain	Plastic
,	Plastic Plastic
	Activated Charcoal
Seals	Nitrile
Sight Gauge, DPI	Polyamide (Nylon)



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# Lubricators



Poly Bowl

#### 06F Filters - Compact

# Twist Automatic Drain

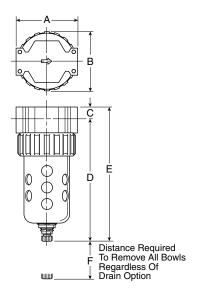
Coalescers

Regulators

#### **Features**

- Excellent water removal efficiency.
- Unique deflector plate and shroud creates a swirling of the air stream ensuring maximum water and dirt separation.
- Large filter element surface guarantees low pressure drop and increased element life.
- · Optional automatic float drain available.
- Shown with recommended metal bowl guard.

 High Flow: 1/4" – 53 SCFM§ 3/8" – 80 SCFM§ 1/2" – 85 SCFM§



Port	NPT	
Size	Twist Drain	Automatic Float Drain
Poly Bowl <sup>‡</sup> / Metal Guard		
1/4"	06F12AC	06F16AC
3/8"	06F22AC	06F26AC
1/2"	06F32AC	06F36AC
Metal Bowl / Sight Gauge		
1/4"	06F14AC	06F18AC
3/8"	06F24AC	06F28AC
1/2"	06F34AC	06F38AC

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

Inches (mm)

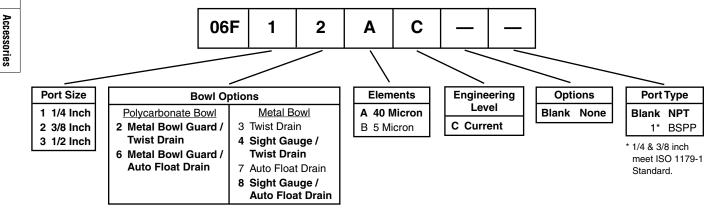
† With Automatic Float Drain

#### Standard part numbers shown bold.

For other models refer to ordering information below.

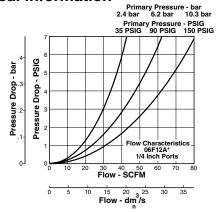
- <sup>‡</sup> For polycarbonate bowl see Caution on page C2.
- § SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

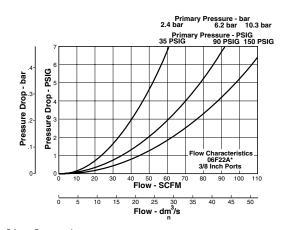
#### **Ordering Information**

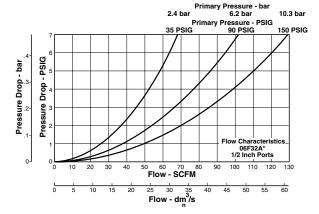




#### **Technical Information**







#### **06F Filter Kits & Accessories**

Bowl Guard Kit	PS705P
Bowl Kits –	
Poly Bowl –	
Automatic Float Drain	PS722P
Twist Drain	PS732P
Metal Bowl –	
Automatic Float Drain	PS726P
Twist Drain	
Sight Gauge / Automatic Float Drain	PS723P
Sight Gauge / Twist Drain	
DPI Replacement Kit	.PS781P
Drain Kits –	
Automatic Float Drain	PS506P
Semi-Auto Drain	.PS511P
Twist Drain	PS512P
Push 'N' Drain	PS513P
Filter Element Kits –	
40 Micron	.PS701P
5 Micron	PS702P
Adsorber	.PS731P
Mounting Bracket Kit	PS743P
Sight Gauge Kit	PS914P
Specifications	
Bowl Capacity4.4	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)

32 F to 123 F (0 C to 32 C)
Automatic Float Drain – 15 to 250 psig (1.0 to 17.2 bar)

#### **Materials of Construction**

Materials of Solistiaction	
Body	Zinc
Bowls Transparent	Polycarbonate or
Metal (Zinc) With or With	hout Sight Gauge
Bowl Guards	Steel
Collar	Plastic
Deflector, Shroud & Baffle	Plastic
Drains -	
Twist Drain - Body & Nut	Plastic
Push 'N' Drain –	
Body	
Stem	Brass
Automatic Float Drain - Housing, Float	Plastic
Seals	Nitrile
Springs, Push Rod	
Filter Elements –	
40 Micron (Standard)	Plastic
5 Micron (Optional)	
Adsorber (Optional) A	ctivated Charcoal
Seals	Nitrile
Sight Gauge	Polyamide



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Regulators	
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#### Filter / Regulator



#### 07F Filters - Standard

# Twist Automatic Drain Drain

Coalescers

Regulators

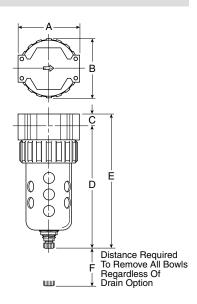
Filter/ Regulators

Lubricators

Accessories

#### **Features**

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



Port	NPT			
Size	Twist Drain	Automatic Float Drain		
Poly Bowl <sup>‡</sup>	Poly Bowl <sup>‡</sup> / Metal Guard			
1/2"	07F32AC	07F36AC		
3/4"	07F42AC	07F46AC		
Metal Bowl / Sight Gauge				
1/2"	07F34AC	07F38AC		
3/4"	07F44AC	07F48AC		

Standard part numbers shown bold.

For other models refer to ordering information below.

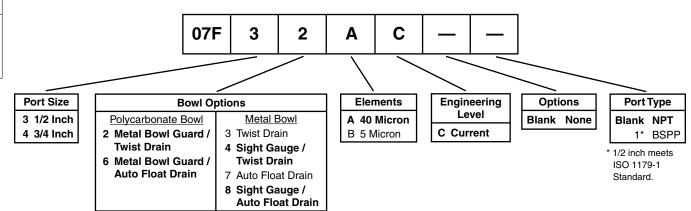
- <sup>‡</sup> For polycarbonate bowl see Caution on page C2.
- § SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

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

Inches (mm)

† With Automatic Float Drain

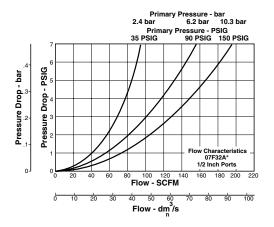
#### **Ordering Information**

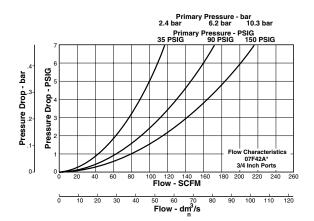


C20



#### **Technical Information**





Bowl Guard KitPS805P
Bowl Kits –
Poly Bowl –
Automatic Float DrainPS822P
Twist DrainPS832P
Metal Bowl –
Automatic Float Drain PS826P
Twist Drain PS834P
Sight Gauge / Automatic DrainPS823P
Sight Gauge / Twist Drain PS835P
DPI Replacement KitPS781P
Drain Kits –
Automatic Float DrainPS506P
Semi-Auto DrainPS511P
Twist DrainPS512P
Push 'N' DrainPS513P
Filter Element Kits –
40 MicronPS801P
5 Micron PS802P
AdsorberPS831P
Mounting Bracket KitPS843P
Sight Gauge Kit PS914P
Specifications
Bowl Capacity7.2 Ounces
Sump Capacity2.8 Ounces
Port Threads

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)

0 to 150 psig (0 to 10.3 bar)

With Differential Pressure Indicator: 32°F to 125°F (0°C to 52°C)

Automatic Float Drain - 15 to 250 psig (1.0 to 17.2 bar) 

Body ......Zinc

#### **Materials of Construction**

C21

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

Sight Gauge ...... Polyamide



Filters

Coalescers Regulators

Filter / Regulators

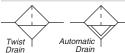
Lubricators

Combos

Accessories

**P3NF Series** 

#### P3NF Filters - Hi-Flow



# Automatic Drain Twist Drain

Filters

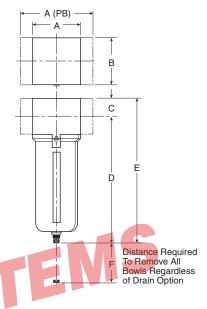
Coalescers

Regulators

Filter/ Regulators

#### **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	NPT	
Size	Twist Drain	Automatic Float Drain
Metal Bowl / S	Sight Gauge	
3/4"	P3NFA96GSM	P3NFA96GSA
1"	P3NFA98GSM	P3NFA98GSA
1-1/2"#	P3NFA9PGSM	P3NFA9PGSA

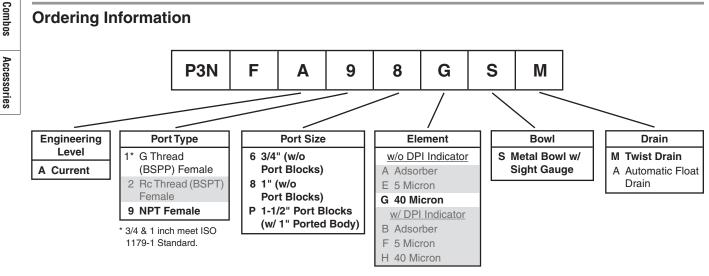
Standard part numbers shown bold. For other models refer to ordering information below.

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

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

Inches (mm)

#### **Ordering Information**

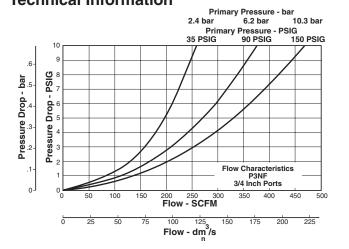


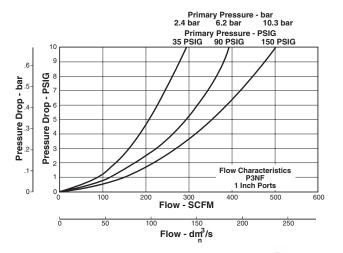
Note: BSPP ported units supplied using NPT ported bodies and BSPP port block kits.

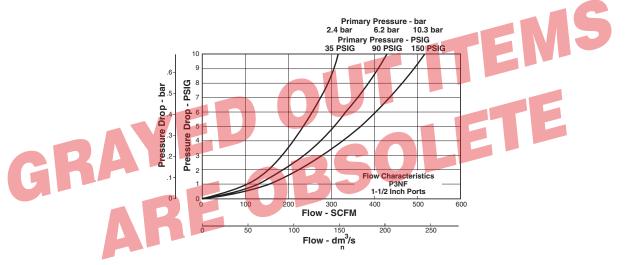


<sup>†</sup> With Twist Drain or Automatic Float Drain

#### **Technical Information**







C23

#### **P3NF Filter Kits & Accessories**

Bowl Kits –  Metal Bowl –  Sight Gauge / Automatic Float Drain
Bowl Latch Kit
DPI Replacement KitPS781P
Drain Kit –Automatic Float DrainPS506PTwist DrainPS512P
Filter Elements –           40 Micron         P3NKA00ESG           5 Micron         P3NKA00ESE           Adsorber         P3NKA00ESA
Mounting Bracket Kit*P3NKA00MW
Sight Gauge Kit P3NKA00PE

#### **Specifications**

0 to 250 psig (0 to 17 bar) 32°F to 175°F (0°C to 80°C) Automatic Float Drain - 15 to 250 psig (1.0 to 17 bar)

Bowl Capacity	18.0 Ounces
Sump Capacity	6.8 Ounces
Weight -	
3/4"	3.5 lb. (1.6 kg)
1"	3.5 lb. (1.6 kg)
1-1/2" #	

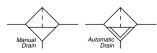
#### **Materials of Construction**

Body	Aluminum
Deflector	Plastic
Drain	Plastic
Filter Elements –	
40 Micron (Standard)	Plastic
5 Micron (Optional)	Plastic
Adsorber (Optional)	
Seals	Nitrile
Sight Gauge	Polyamide (Nylon)
# 1" Port Body with 1-1/2" Port Block.	

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



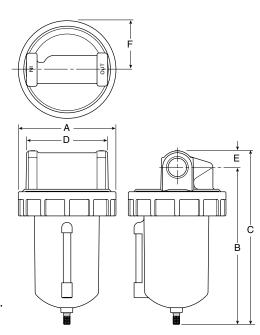
#### F602 Filters - Hi-Flow



#### **Features**

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

F602-08EJR



F602-06W, F602-08W **Filter Dimensions** 

F602-06E, F602-08E

**Filter Dimensions** 

D

4.06

(103)

n

4.06

(103)

Ε

0.84

(21)

F

0.84

(21)

F

2.45

(62)

F

2.45

(62)

С

8.72

(221)

С

11.94

(303)

		1" – 300 \$		
Port	rt NPT			
Size	Twist Drain	Internal Auto Drain		
Metal Bowl	/ Sight Gauge - 16 oz.			
3/4"	F602-06WJ	F602-06WJR		
1"	F602-08WJ	F602-08WJR		
Metal Bowl without Sight Gauge - 32 oz.				
3/4"	F602-06EJ	F602-06EJR		

F	
В	A
7.88	4.90 (124)
F(	
В 11.1	<b>A</b> 4.90 (124)

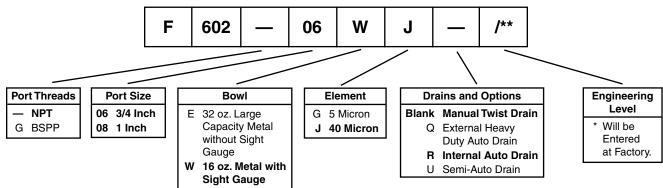
Standard	part	numbers	shown	bold.
Ottariaara	puit	HUHIDCIG	31104411	DOIG.

For other models refer to ordering information below.

F602-08EJ

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

#### **Ordering Information**



C24

**BOLD ITEMS ARE MOST POPULAR.** 



1"

Coalescers

Regulators

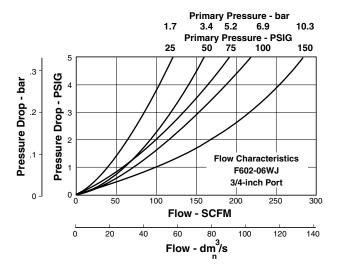
Filter/ Regulators

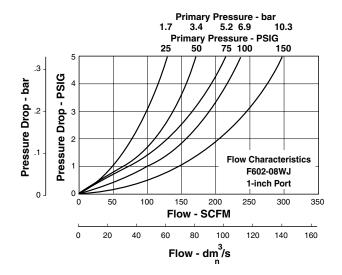
Lubricators

Accessories

#### **Air Line Filters**

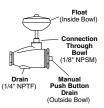
#### **Technical Information**





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

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



#### F602 Filter Kits & Accessories

1 002 I moi rato a Addoccorrec
Bowl Kits –           Aluminum (E) 32 oz.         BK603B           Zinc with Sight Gauge (W) 16 oz.         BK605WB
Drain Kits –
External Auto (E) 32 oz. SA603D  External Auto (W) 16 oz. SA602D  Internal Auto (All) SA602MD  Manual (All) SA600Y7-1  Semi-Automatic "Overnight" Drain SA602A7  (Drains automatically under zero pressure)
Filter Element Kits –
40 Micron (All)
Mounting Bracket Kit (Pair or 2 Kits Pipe Mounted Brackets needed) – (3/4" Unit)SA200AW57
(1" Unit)SA200CW57
Repair Kits -
Deflector, Baffle Assembly, and Retaining Rod (E,W)RK602B External Auto Drain (All)
Specifications
Bowl Capacity – Aluminum Bowl (E) 32 oz

#### Pressure & Temperature Ratings –

Aluminum Bowl (E) 32 oz. – 0 to 300 psig (0 to 20.4 bar) 40°F to 150°F (4.4°C to 65.6°C)

> Zinc (W) 16 oz. – 0 to 250 psig (0 to 17.2 bar) 40°F to 150°F (4.4°C to 65.6°C)

With Internal Auto Drain (R) – 20 to 175 psig (1.4 to 11.9 bar) 40°F to 125°F (4.4°C to 52°C)

With External Auto Drain (Q) – 0 to 250 psig (0 to 17.2 bar) 40°F to 150°F (4.4°C to 65.6°C)

#### Weight -

Aluminum Bowl (E) 32 oz.	
Zinc Bowl (W) 16 oz	

#### **Materials of Construction**

Body	Zinc
Bowls –  (E) 32 oz  (W) 16 oz  Drain –  Manual Twist & Overnight  Housing "R"	Zinc with Sight Gauge
Housing "Q"	Bronze
40 Micron (Standard)5 Micron (Optional)	PolypropylenePolypropylene
Seals	



Product Selection

Filters

Coalescers

Filter / Regulators Regulators

Lubricators

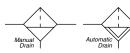
Compos

Accessories



Port Threads
( ) = Bowl Type

#### F602 Filters - Hi-Flow



Coalescers

Regulators

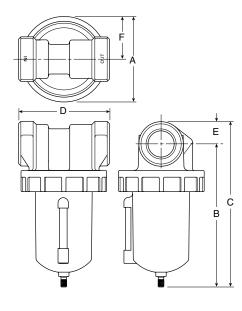
Filter / Regulators

Lubricators

Accessories

#### **Features**

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



Port	NPT			
Size	Twist Drain Internal Auto Drain			
Metal Bowl / Sight Gauge - 16 oz.				
1-1/4"	F602-10WJ	F602-10WJR		
1-1/2"	F602-12WJ	F602-12WJR		
Metal Bowl without Sight Gauge - 32 oz.				
1-1/4"	F602-10EJ	F602-10EJR		
1-1/2"	F602-12EJ	F602-12EJR		

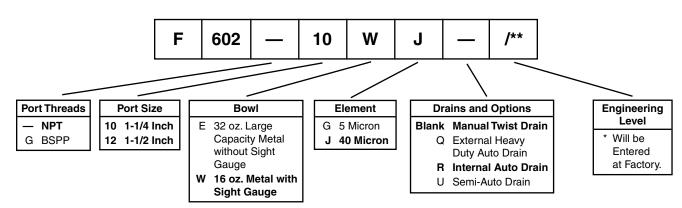
		2-10W, ter Din			
<b>A</b> 4.90 (124)	<b>B</b> 8.18 (208)	<b>C</b> 9.46 (240)	<b>D</b> 5.19 (132)	E 1.28 (32.4)	<b>F</b> 2.45 (62)
F602-10E, F602-12E Filter Dimensions					
<b>A</b> 4.90 (124)	<b>B</b> 11.41 (290)	<b>C</b> 12.69 (322)	<b>D</b> 5.19 (132)	E 1.28 (32.4)	<b>F</b> 2.45 (62)

inches (mm)

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

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

#### **Ordering Information**

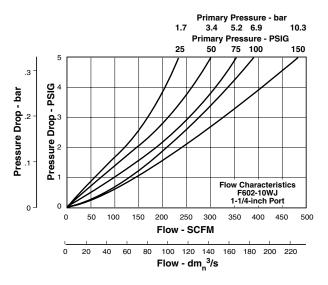


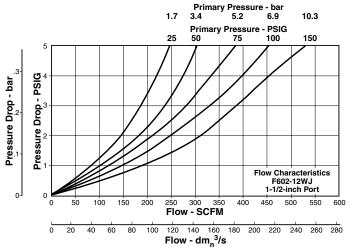
C26



#### **Air Line Filters**

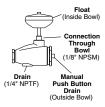
#### **Technical Information**





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

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



#### F602 Filter Kits & Accessories

Bowl Kits – Aluminum (E) 32 ozBK603B Zinc with Sight Gauge (W) 16 ozBK605WB
Drain Kits –
External Auto (E) 32 oz. SA603D  External Auto (W) 16 oz. SA602D  Internal Auto (All) SA602MD  Manual (All) SA600Y7-1  Semi-Automatic "Overnight" Drain SA602A7  (Drains automatically under zero pressure)
Filter Element Kits –
40 Micron (All)
Repair Kits –         Deflector, Baffle Assembly, and Retaining Rod (All)       RK602C         External Auto Drain (All)       RK602D         Internal Auto Drain (All)       RK602MD         Metal Bowl with Sight Gauge (W) 16 oz       RKB605WB
Specifications
Bowl Capacity –         Aluminum (E) 32 oz.       32 Ounces         Zinc (W) 16 oz.       16 Ounces         Port Threads       1-1/4, 1-1/2 Inch

Pressure & Temperature Ratings -

Aluminum Bowl (E) 32 oz. – 0 to 300 psig (0 to 20.4 bar) 40°F to 150°F (4.4°C to 65.6°C)

> Zinc (W) 16 oz. – 0 to 250 psig (0 to 17.2 bar) 40°F to 150°F (4.4°C to 65.6°C)

With Internal Auto Drain (R) - 20 to 175 psig (1.4 to 11.9 bar) 40°F to 125°F (4.4°C to 52°C)

With External Auto Drain (Q) – 0 to 250 psig (0 to 17.2 bar) 40°F to 150°F (4.4°C to 65.6°C)

Weight -

C27

#### **Materials of Construction**

Body	Zinc
Bowls –  (E) 32 oz (W) 16 oz  Drain –  Manual Twist & Overnight Housing "R" Housing "Q".	Zinc with Sight GaugeBrass Acetal
Filter Elements – 40 Micron (Standard) 5 Micron (Optional)	
Seals	Nitrile
Sight Gauge	Nylon



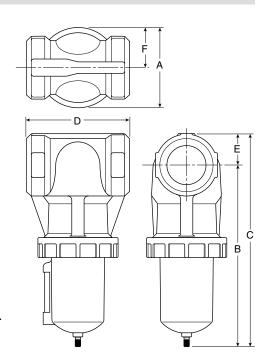
( ) = Bowl Type

#### F602 Filters - Hi-Flow



#### **Features**

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



Port	NPT				
Size	Twist Drain	Internal Auto Drain			
Metal Bowl	/ Sight Gauge - 16 oz.				
2"	F602-16WJ	F602-16WJR			
2-1/2"	F602-20WJ	F602-20WJR			
Metal Bowl	without Sight Gauge - 32 oz	·.			
2"	F602-16EJ	F602-16EJR			
2-1/2"	F602-20F.I	F602-20EJB			

Stan	dard	part	r	numi	oers	shov	٧n	bol	d.	

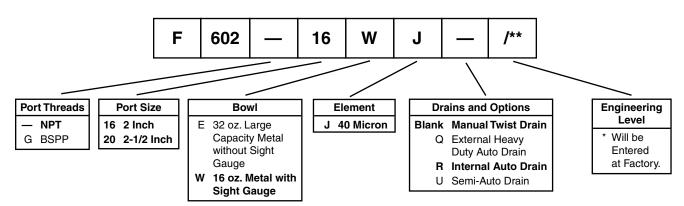
For other models refer to ordering information below.

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

F602-16W, F602-20W Filter Dimensions						
<b>A</b> 4.90 (124)	<b>B</b> 11.08 (281)	<b>C</b> 13.00 (330)	<b>D</b> 6.30 (160)	<b>E</b> 1.92 (48.7)	<b>F</b> 2.45 (62)	
F602-16E, F602-20E Filter Dimensions						
<b>A</b> 4.90	<b>B</b> 14.31	<b>C</b> 16.23	<b>D</b> 6.30	<b>E</b> 1.92	<b>F</b> 2.45	

inches (mm)

#### **Ordering Information**

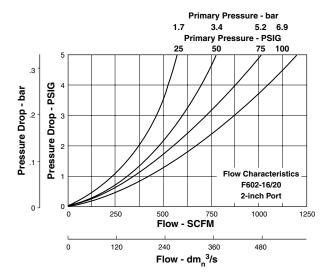


C28



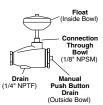
#### **Air Line Filters**

#### **Technical Information**



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

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



#### F602 Filter Kits & Accessories

Bowl Kits – Aluminum (E) 32 oz.	
Zinc with Sight Gauge (W) 16 oz.	BK605WB
Drain Kits –	
External Auto (E) 32 oz	
External Auto (W) 16 oz.	SA602D
Internal Auto (All)	SA602MD
Manual (All)	
Semi-Automatic "Overnight" Drain	SA602A7
(Drains automatically under zero pressure)	
Filter Element Kits –	
40 Micron (All)	EK602G
Repair Kits –	
Deflector, Baffle Assembly, and Retaining Rod (All)	RK602C
External Auto Drain (All)	
Internal Auto Drain (All)	
Metal Bowl with Sight Gauge (W) 16 oz	
Specifications	
Bowl Capacity –	
Aluminum (F) 32 oz	32 Ounces

#### Pressure & Temperature Ratings -

Aluminum Bowl (E) 32 oz. – 0 to 300 psig (0 to 20.4 bar) 40°F to 150°F (4.4°C to 65.6°C)

> Zinc (W) 16 oz. – 0 to 250 psig (0 to 17.2 bar) 40°F to 150°F (4.4°C to 65.6°C)

With Internal Auto Drain (R) - 20 to 175 psig (1.4 to 11.9 bar) 40°F to 125°F (4.4°C to 52°C)

With External Auto Drain (Q) - 0 to 250 psig (0 to 17.2 bar) 40°F to 150°F (4.4°C to 65.6°C)

#### Weight -

C29

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

#### **Materials of Construction**

Body	Aluminum
Bowls –  (E) 32 oz	Zinc with Sight GaugeBrassAcetal
Filter Elements – 40 Micron (Standard)	Polypropylene
Seals	Buna N
Sight Gauge	Nylon



( ) = Bowl Type

#### 35F, 43F Filters - Hi-Flow



Auto Drain

C

Product election

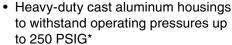
Hilters

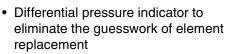
Coalescers

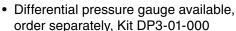
Regulators Filter / Regulators

/ Lubricators ors

#### Features







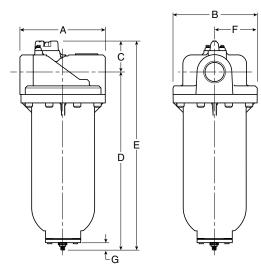
 Unique drain mounting plate design offers a trouble-free method for interchanging and installing external drains

• High Flow: 1-1/2" - 1280 SCFM§

2" - 1400 SCFM§

3" - 2900 SCFM§

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



	Port Element		Part number (NPT)
	size	type	Automatic drain
35F	1-1/2	5 micron	35F77BAP
	2	5 micron	35F87BAP
43F	3	5 micron	43FN7BAP

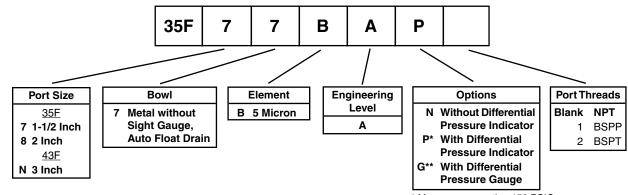
#### Standard part numbers shown bold.

For other models refer to ordering information below.

	35F Filter Dimensions							
<b>A</b> 7.80 (198)	<b>B</b> 7.75 (197)	<b>C</b> 2.81 (71)	<b>D</b> 16.24 (412.5)	<b>E</b> 19.07 (484)	<b>F</b> 3.88 (98.6)	<b>G</b> .55 (14)		
	4	3F Filt	er Dime	ension	S			
Α	В	С	D	Е	F	G		
8.94 (227)	8.88 (225.5)	3.48 (88)	25.96 (659.4)	29.44 (748)	4.44 (112.8)	.55 (14)		

inches (mm)

#### **Ordering Information**



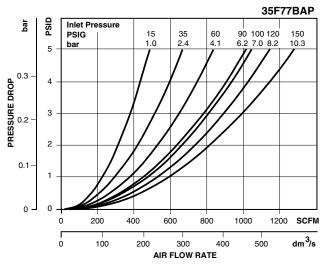
\* Max. pressure rating 150 PSIG.

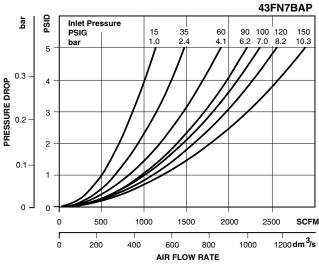


<sup>§</sup> SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

<sup>\*\*</sup> Gauge ships loose.

#### **Technical Information**





#### 35F87BAP Inlet Pressure bar 90 100 120 150 6.2 7.0 8.2 10.3 bar 2.4 5 0.3 PRESSURE DROP 0.2 0.1 1000 1400 SCFM 0 200 400 600 800 1200 dm<sup>3</sup>/s 600 100 200 300 400 500 AIR FLOW RATE

#### 35F & 43F Filter Kits & Accessories

Differential Pressure Indicator Cap –	
For pressures over 150 PSIG	GRP-95-022
Differential Pressure Gauge	DP3-01-000
Differential Pressure Indicator	DP2-02-001
Drain, Automatic, Internal, Fluorocarbon, 1/8 NPT	GRP-95-981
Drain Plate Kit – 1/2 NPT Tapped Drain Port	GRP-95-393
Element 35F, 5 Micron43F, 5 Micron	
Manual Drain Kit with 1/2" Drain Plate	GRP-95-392
Specifications	

without DPI and with

Operating Temperature ......32° to 150°F (0° to 65.5°C)

Pressure Gauge......250 PSIG (17.2 bar)\*

with DPI...... 150 PSIG (10.3 bar)

43F	3 Inch
Standard Filtration	5 Micron
Weight – 35F43F* * Without pressure indicator	
Materials of Construction	
Baffle	Plated Steel
Body	Aluminum
Bowls	Aluminum
Deflector	Plated Steel
Element Retainer	Plated Steel

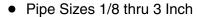
**Maximum Supply** 

**Pressure** 

Port Size -

#### Air Line Coalescing Filters

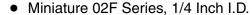
#### **Coalescing Filters**







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

#### **Filter Selection**

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

#### Media Specifications

G r a	Coalescing Efficiency	Maximum Oil Carryover <sup>1</sup>	Micron		Drop (PSID) <sup>2</sup> @ ted Flow
d e	0.3 to 0.6 Micron Particles	PPM w/w	Rating	Media Dry	Media Wet With 10-20 wt. oil
6	99.97%	0.008	0.01	1.0	2-3
10	95%	0.85	1.0	0.5	0.5

<sup>&</sup>lt;sup>1</sup> Tested per BCAS 860900 at 40 ppm inlet.

#### Element Selection

Element Grade	Applications
6 (.01 Micron)	General air coalescing applications when total removal of liquid aerosols and suspended fines is required in all pressure ranges. Protection of air dryers, air gauging, air logic, modulating systems, critical air conveying, most breathing air systems, etc.
10 (.7 Micron)	Precoalescer or prefilter for Grade 6 to remove gross amounts of water and oil, or tenacious aerosols which are difficult to remove. Upgrading existing particulate equipment to coalescing without increase in pressure drop.

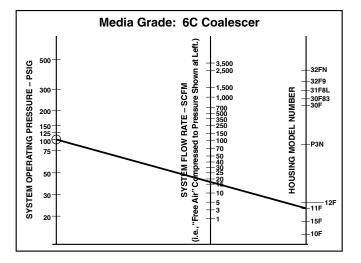
C32

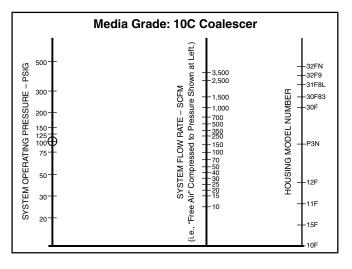
#### Prep-Air® II

#### **Air Preparation Units**

### 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.







<sup>&</sup>lt;sup>2</sup> Add dry + wet for total pressure drop.

D.O.P. = Dioctylphthalate

# Coalescing Filters (Oil Removal)

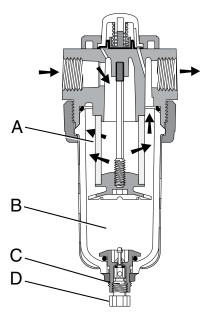
Specifically designed for the removal of solid particles, water and oil aerosols down to 0.01 micron. Maximum remaining oil content of air leaving the filter down to 0.01ppm at 70°F (21°C) at a pressure of 100 psig (6.9 bar) using a typical compressor lubricant. Two filter element grades are offered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

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

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

The contaminated air enters the element interior and is forced through a thick membrane of borosilicate glass fibers coated with epoxy (A). Flow then passes through an outer structural support and, at this stage, has removed up to 99.97% + of the sub-micron particles evident in the contaminated air. These tiny droplets coalesce together and are blotted from the filter surface by the drain and release layers of non-woven glass felt and rayon cloth. The drops now begin

a gravitational passage to the filter sump (**B**) where they can be manually or automatically drained. The clean, filtered air now passes through the outer screen plastic net and out into the pneumatic system. The Air Line Coalescing Filter removes liquid aerosols and sub-micron particulate matter. Collected liquids and particles in the "quiet zone" should be drained before their level reaches a height where they would be reentrained in the flowing air. This can be accomplished by the manual drain (**C**) which is actuated by twisting knob (**D**) counterclockwise. On the 30 Series, unscrew the drain valve (**E**) slightly until the liquid begins to drain.



Product Selection

Filters

Coalescers

Regulators

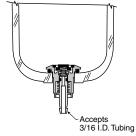
Filter / equlators

Lubricators

Combos

Accessories

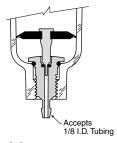
#### **Semi Automatic Drain**



#### (Overnight Drain)

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

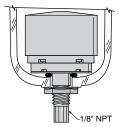
#### **Automatic Pulse Drain**



#### (Spitter Drain)

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

#### **Automatic Float Drain**

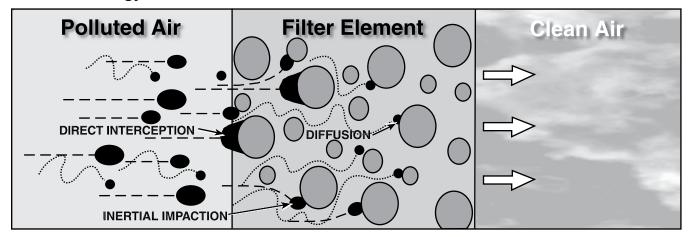


The float internal to this drain rises with increased liquid level. When the float rises, it opens a seat area allowing the trapped liquids to drain through the bottom.

A manual override can be pushed in the bottom of the drain to unseat the float if particulates create a block.



#### Filter Technology – Mechanisms of Filtration



#### **Coalescing Filters**

**Filters** 

Regulators

Filter / Regulators

Accessories

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

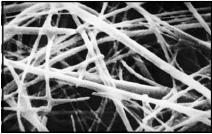


Direct Interception occurs when a particle collides with and adheres to a fiber of the filter material without deviating out of the streamline flow. This mechanism tends to take place on the surface of the filter material and affects mainly larger particles over 1 micron in size.



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

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

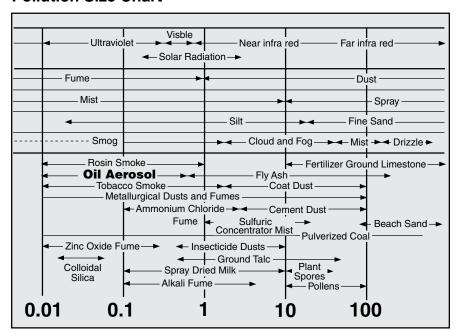


Above: Clean borosilicate microfiber seen at a magnification factor of 3900. Right: The same filter material in a contaminated state at the same degree of magnification.



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

#### **Pollution Size Chart**



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



# 02F Coalescing Filters - Miniature



#### **Features**

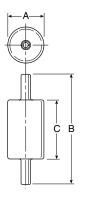
- · Clear nylon housing.
- Full length support tube.
- · Positive tube seals.
- · Optional filter grades available.
- · Disposable.
- High Flow: Grade 6 3.5 SCFM§
   Grade 10 5.3 SCFM§

#### **Application**

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

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

<sup>§</sup> SCFM @ 1 PSID Operating Pressure 100 psig.

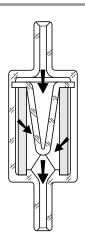


02F Coalescing Filter Dimensions			
ı	Α	В	С
	1.00	3.28	1.69
	(25)	(83)	(43)

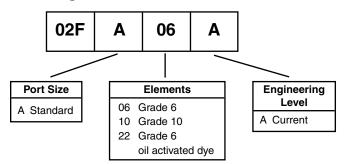
Inches (mm)

# Operation

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



# Ordering Information



# **Specifications**

C35

Port Size .......1/4 I.D. Hose Slip On Tang Standard Pressure & Temperature Ratings –

100 psig at 125°F (0.69 bar at 52°C) or less

#### **Materials of Construction**

Element	Borosilicate & Felt Glass Fibers
Housing	Nylon



C

Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

ompos

# 10F Coalescing Filters - Miniature

# •

Coalescers

Regulators

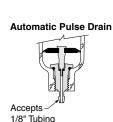
Filter / Regulators

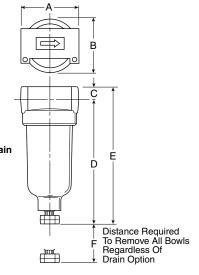
Accessories

#### **Features**

- Removes liquid aerosols and sub-micron particles.
- Liquids gravitate to the bottom of the element and will not re-enter the airstream.
- Oil free air for critical applications, such as air gauging and pneumatic instrumentation and controls.
- Interchangeable twist and automatic pulse drains.
- Grade 6 element, 99.97% DOP efficiency.
- High Flow: Grade 6 Element 1/8" – 17 SCFM<sup>§</sup> 1/4" – 20 SCFM<sup>§</sup>

Grade 10 Element 1/8" – 19 SCFM§ 1/4" – 24 SCFM§





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

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

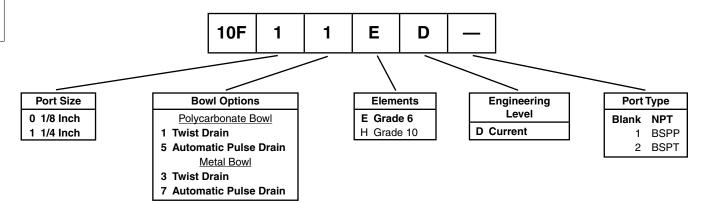
- <sup>‡</sup> For polycarbonate bowl see Caution on page C2.
- § SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

10F Coalescing Filter Dimensions			
<b>A</b>	<b>B</b>	<b>C</b>	
1.69	1.56	0.39	
(43)	(39,6)	(10)	
<b>D</b>	<b>D</b> †	<b>E</b>	
3.82	3.67	4.21	
(97)	(93)	(107)	
<b>E</b> <sup>†</sup> 4.06 (103)	<b>F</b> 1.60 (41)		

Inches (mm)

† With Automatic Pulse Drain.

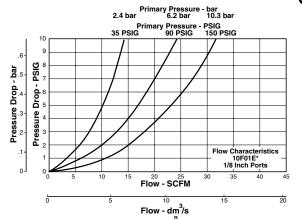
# **Ordering Information**



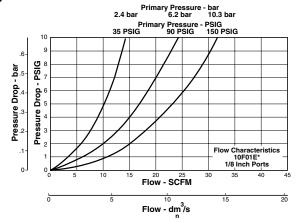
C36

**BOLD ITEMS ARE MOST POPULAR.** 

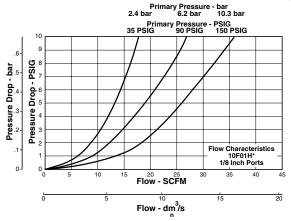


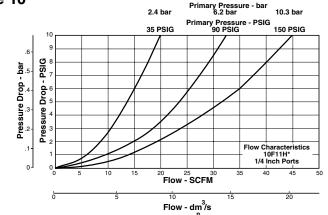


#### Grade 6



# Grade 10





#### 10F Coalescing Filter Kits & Accessories **Bowl Kits**

DOWI KILS -	
Poly Bowl - Automatic Pulse Drain	PS408BP
Twist Drain	PS404P
Metal Bowl - Automatic Pulse Drain	PS451BP
Twist Drain	PS447BP
Filter Element Kits - Grade 6 (Standard)	PS446P
Grade 10 (Optional)	PS456P
Mounting Bracket Kit	PS417BP

Grade 10 (Optional)	
Mounting Bracket Kit	PS417BP
Specifications	
Automatic Pulse Drain Tube Barb	1/8 Inch
Bowl Capacity	1 Ounce
Operation –	
Normal Operating Pressure Drop Maximum Recommended Pressure I (Element should be replaced)	
Port Threads	1/8, 1/4 Inch
Pressure & Temperature Ratings –	
Polycarbonate Bowl	.0 to 150 psig (0 to 10.3 bar) 32°F to 125°F (0°C to 52°C)
Metal Bowl	. 0 to 250 psig (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
Automatic Pulse Drain10	0 to 250 psig (0.7 to 17.2 bar) at 125°F (52°C) or less
Weight	0.41 lb (0.18 kg)

#### **Materials of Construction**

-	Zinc
	Metal (Zinc) Without Sight Gauge
Drains - Twist Drain -	
Body & Stem	Plastic
Seals	Nitrile
Automatic Pulse Drain -	_
Piston & Seals	Nitrile
Stem, Seat, Adaptor	& WashersAluminum
Element Holder	Plastic
Filter Element –	
Borosilicate & felt glass fibers	99.97% DOP efficiency
Largest Aerosol Particle Passe	ed (Grade 6) 0.01 Micron
Largest Solid Particle Passed	(Grade 6) 0.30 Micron
Seals	Nitrile

Automatic

Accepts 1/8" Tubing

# 15F Coalescing Filters – Economy

Coalescers

Regulators

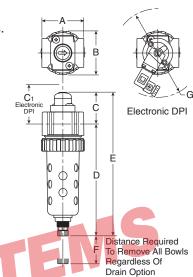
Accessories

#### **Features**

- Removes liquid aerosols and sub-micron particles.
- · Liquids gravitate to the bottom of the element and will not re-enter the airstream.

(Revised 05-13-14)

- Oil free air for critical applications, such as air gauging and pneumatic instrumentation and controls.
- Interchangeable twist and automatic pulse drains.
- · Differential pressure indicator standard.
- High Flow: Grade 6 Element Grade 10 Element 1/4" - 30 SCFM § 1/4" - 51 SCFM§ 3/8" - 30 SCFM § 3/8" - 66 SCFM§



Port	NPT	
Size	Twist Drain	Automatic Pulse Drain
Poly Bowl	<sup>‡</sup> / Metal Guard	
1/4"	15F12E*	15F1PE*
3/8"	15F22E*	15F2PE*
Metal Bow	/ Sight Gauge	
1/4"	15F14E*	15F1TE*
3/8"	15F24E*	15F2TE*

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

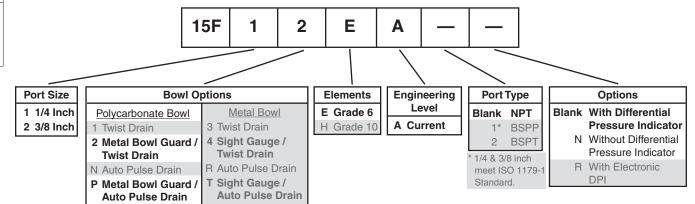
- <sup>‡</sup> For polycarbonate bowl see Caution on page C2.
- § SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

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

Inches (mm)

† With Twist Drain or Automatic Float Drain

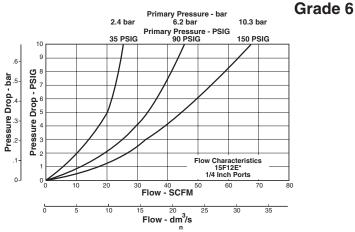
# Ordering Information

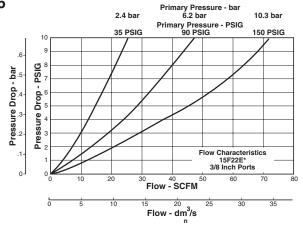


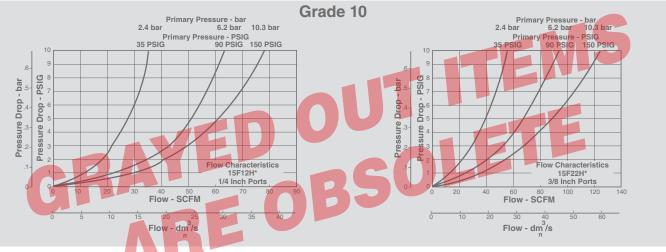
**BOLD ITEMS ARE MOST POPULAR.** 



#### C38







C39

# 15F Coalescing Filter Kits & Accessories

Bowl Guard KitF			
Bowl Kits -			
Poly Bowl –	Automatic Pulse Drain		
	Twist Drain		
Metal Bowl -	Automatic Pulse Drain	PS997P	
	Twist Drain	PS934P	
	Sight Gauge / Automatic Pulse Drain	PS996P	
	Sight Gauge / Twist Drain	PS935P	
DPI Replaceme	ent Kit	PS781P	
<b>Electronic DPI</b>	Replacement Kit	PS764	
Drain Kit -	Automatic Pulse Drain	PS998P	
	Semi-Auto Drain	.PS511P	
	Twist Drain	PS512P	
	Push 'N' Drain	PS513P	
<b>Electrical Coni</b>	nector - 15mm, 3-Pin DIN, 6 Ft. CordPS2	2932JBP	
Filter Element	Kits - Grade 6 (Standard)	PS924P	
	Grade 10 (Optional)	PS930P	
<b>Mounting Brac</b>	ket Kit	PS943P	
Sight Gauge K	it	PS914P	
<b>Specification</b>	ons		
Bowl Capacity2.0 Ounces			
Sump Capacity 0.9 Ounce			
Camp Capacity			

#### 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)

#### **Materials of Construction**

Body	Zinc
BowlsTransp	parent Polycarbonate
Metal (Zinc)	Without Sight Gauge
Bowl Guards	Steel
Collar	Plastic
Drain	Plastic
Filter Element –	
Borosilicate & felt glass fibers 99.97% DOP e	efficiency
Largest Aerosol Particle Passed (Grade 6)	0.01 Micron
Largest Solid Particle Passed (Grade 6)	0.30 Micron
Seals	Nitrile
Sight Gauge, DPI	Polyamide (Nylon)



C

Product Selection

Filters

Coalescers

Regulators

Filter / Regulator

Combos Lubricators

# 11F Coalescing Filters – Compact

# •

Coalescers

Regulators

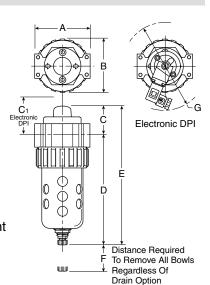
Filter / Regulators

Accessories

#### **Features**

- · Removes liquid aerosols and sub-micron particles.
- Liquids gravitate to the bottom of the element and will not re-enter the airstream.
- Oil free air for critical applications, such as air gauging and pneumatic instrumentation and controls.
- · Interchangeable twist and automatic float drains.
- · Differential pressure indicator standard.
- Shown with recommended metal bowl guard.

High Flow: Grade 6 Element 1/4" - 45 SCFM\$ 1/4" - 60 SCFM\$ 3/8" - 48 SCFM\$ 3/8" - 72 SCFM\$ 1/2" - 65 SCFM\$ 1/2" - 95 SCFM\$



Port	NPT	
Size	Twist Drain	Automatic Float Drain
Poly Bowl ‡	/ Metal Guard	
1/4"	11F12EC	11F16EC
3/8"	11F22EC	11F26EC
1/2"	11F32EC	11F36EC
Metal Bowl / Sight Gauge		
1/4"	11F14EC	11F18EC
3/8"	11F24EC	11F28EC
1/2"	11F34EC	11F38EC

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

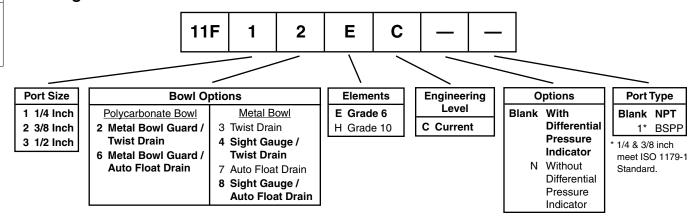
- <sup>‡</sup> For polycarbonate bowl see Caution on page C2.
- § SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

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

Inches (mm)

† With Automatic Float Drain

# **Ordering Information**



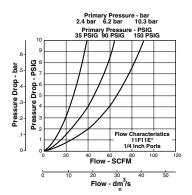
C40

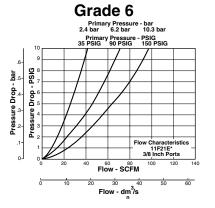
**BOLD ITEMS ARE MOST POPULAR.** 

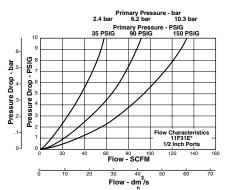


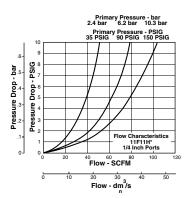
#### **Coalescing Filters (Oil Removal)**

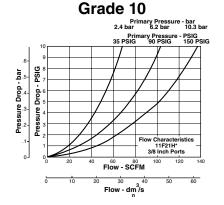
#### **Technical Information**

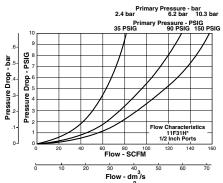












#### 11F Coalescing Filter Kits & Accessories

Bowl Guard KitP	S705P	
Bowl Kits –		
Poly Bowl – Automatic Float DrainP		
Twist DrainP		
Metal Bowl – Automatic Float DrainP		
Twist DrainP		
Sight Gauge / Automatic Float DrainP	S723P	
Sight Gauge / Twist DrainP	S735P	
DPI Replacement Kit	S781P	
Electronic DPI Replacement Kit	PS764	
Drain Kits - Automatic Float Drain	S506P	
Semi-Auto DrainP	S511P	
Twist DrainP	S512P	
Push 'N' DrainP	S513P	
Electrical Connector - 15mm, 3-Pin DIN, 6 Ft. CordPS29	32JBP	
Filter Element Kits - Grade 6 (Standard)P	S724P	
Grade 10 (Optional)P		
Mounting Bracket KitPS743F		
Sight Gauge Kit PS914F		
Specifications		
Bowl Capacity4.4 C	unces	
Sump Capacity1.75 C	unces	
Operation - Normal Operating Pressure Drop		
Maximum Recommended Pressure Drop		
(Element should be replaced)	. o polg	
Minimum Recommended Flow –		
20% Nominal Rating of Element		
Port Threads1/4, 3/8, 1/2	/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)  $$32^{\circ}F$$  to 125°F (0°C to 52°C)

#### **Materials of Construction**

Body	
Bowls	Transparent Polycarbonate
	Metal (Zinc) With or Without Sight Gauge
Bowl Guard	Steel
Collar	Plastic
Push 'N' Drain -	ody & Nut       Plastic         - Body       Nitrile         Stem       Brass         Drain -       Housing, Float Plastic         Seals       Nitrile
	Springs, Push RodStainless Steel

# Filter Element – Recoglicate & felt class fibers 99 97% DOP efficiency

C41

Sight GaugePolyam	ide
SealsNit	rile
Largest Solid Particle Passed (Grade 6)0.30 Mich	ron
Largest Aerosol Particle Passed (Grade 6) 0.01 Mici	ron
bolosilicate & left glass libers 99.97 % DOF efficiency	



# 12F Coalescing Filters – Standard

Coalescers

Regulators

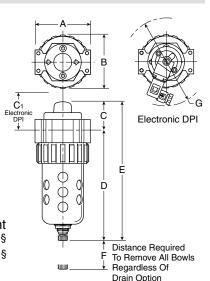
Filter / Regulators

Combos

Accessories

#### **Features**

- · Removes liquid aerosols and sub-micron particles.
- Liquids gravitate to the bottom of the element and will not re-enter the airstream.
- Oil free air for critical applications, such as air gauging and pneumatic instrumentation and controls.
- Interchangeable twist and automatic float drains.
- · Differential pressure indicator standard.
- · Shown with recommended metal bowl guard.
- High Flow: Grade 6 Element 1/2" 75 SCFM\$ 1/2" 125 SCFM\$ 3/4" 80 SCFM\$ 3/4" 160 SCFM\$



Port	NPT	
Size	Twist Drain	Automatic Float Drain
Poly Bowl ‡ / Metal Guard		
1/2"	12F32EC	12F36EC
3/4"	12F42EC	12F46EC
Metal Bowl / Sight Gauge		
1/2"	12F34EC	12F38EC
3/4"	12F44EC	12F48EC

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

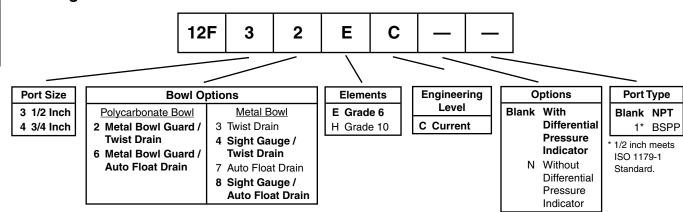
- <sup>‡</sup> For polycarbonate bowl see Caution on page C2.
- § SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

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

Inches (mm)

† With Automatic Float Drain

# Ordering Information



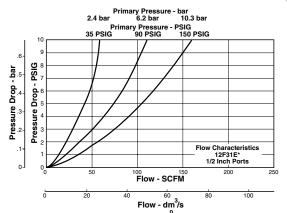
C42

**BOLD ITEMS ARE MOST POPULAR.** 

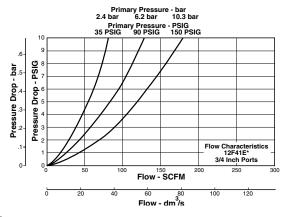


# **Coalescing Filters (Oil Removal)**

#### **Technical Information**

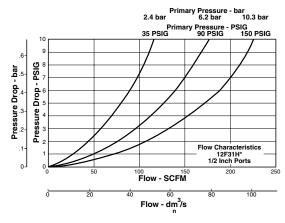


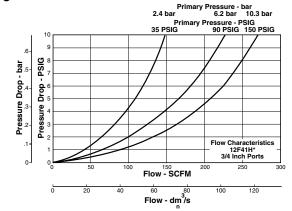
#### Grade 6



#### Grade 10

C43





# 12F Coalescing Filter Kits & Accessories

12F Coalescing Filler Kits & Accessories		
Bowl Guard	Kit	PS805P
Bowl Kits -		
Poly Bowl - Automatic Float Drain		PS822P
	Twist Drain	PS832P
Metal Bowl	-Automatic Float Drain	
	Twist Drain	
	Sight Gauge / Automatic Float Drain	
	Sight Gauge / Twist Drain	PS835P
DPI Replace	ment Kit	PS781P
Electronic D	PI Replacement Kit	PS764
Drain Kits -	Automatic Float Drain	PS506P
	Semi-Auto Drain	PS511P
	Twist Drain	
	Push 'N' Drain	PS513P
Electrical Co	nnector - 15mm, 3-Pin DIN, 6 Ft. Cord F	S2932JBP
Filter Element Kits - Grade 6 (Standard)PS824		PS824P
	Grade 10 (Optional)	PS830P
Mounting Bracket KitPS84		PS843P
Sight Gauge Kit PS9		PS914P
Specifications		
Bowl Capacity7.2 Ounces		
Sump Capacity		
Operation – Normal Operating Pressure Drop		
Maximum Recommended Pressure Drop10 psig		
	(Element should be replaced)	го ролу
	Minimum Recommended Flow –	
	20% Nominal Rating of Element	
	<b>3</b> 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)

Matariala of Canatrustian

uction
Zinc
Transparent Polycarbonate
letal (Zinc) With or Without Sight Gauge
Steel
Plastic or Metal
y & Nut Plastic
BodyNitrile
rain –Housing, Float Plastic SealsNitrile Springs, Push RodStainless Steel
bers 99.97% DOP efficiency Passed (Grade 6) 0.01 Micron ssed (Grade 6)

Sight Gauge ...... Polyamide

Product	Selection
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≡	



Filter / Regulators Regulators

Lubricators

# P3NF Coalescing Filters - Hi-Flow

# <u></u>

Coalescers

Regulators

Filter / Regulators

Lubricators

Accessories

#### **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§

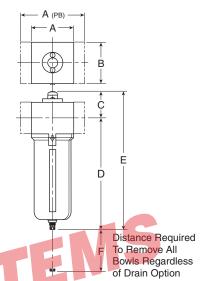
1-1/2"† - 150 SCFM§

Grade 10 Element

3/4" - 195 SCFM§

1" - 215 SCFM§

1-1/2"† - 225 SCFM§



Port	NPT	
Size	Twist Drain	<b>Automatic Float Drain</b>
Metal Bowl	/ Sight Gauge	
3/4"	P3NFA96DSM	P3NFA96DSA
1"	P3NFA98DSM	P3NFA98DSA
1-1/2"†	P3NFA9PDSM	P3NFA9PDSA

Standard part numbers shown bold for Grade 6 Elements

(for Grade 10 Elements, replace "D" with "Q" in the 8th position).

For other models refer to ordering information below.

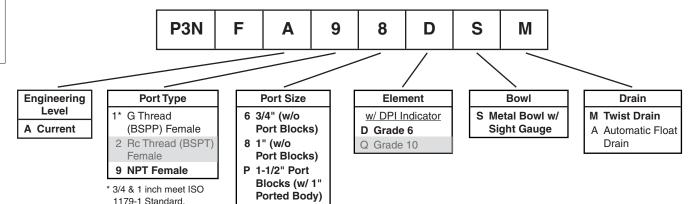
- † 1" Port Body with 1-1/2" Port Block.
- \$ SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

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

Inches (mm)

<sup>†</sup> With Twist Drain or Automatic Float Drain

# Ordering Information

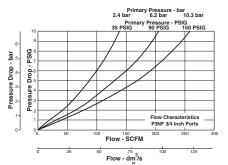


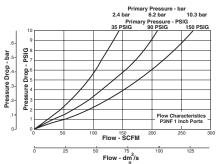
Note: BSPP ported units supplied using NPT ported bodies and BSPP port block kits.

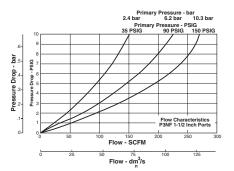
**BOLD ITEMS ARE MOST POPULAR.** 

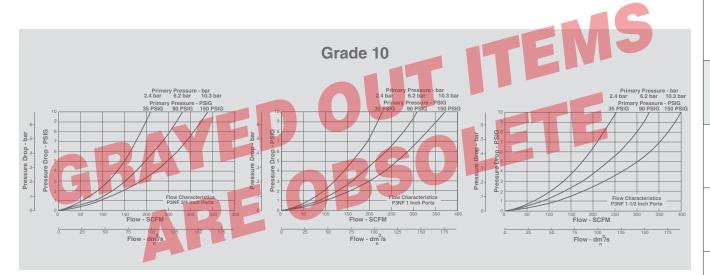


#### Grade 6









# **P3NF Coalescing Filter Kits & Accessories**

Bowl Kits –	
Metal Bowl –	
Sight Gauge / Automatic Float Drain	P3NKA00BSA
Sight Gauge / Twist Drain	P3NKA00BSM
Sight Gauge / Push 'N' Drain	P3NKA00BSP
Bowl Latch Kit	C11A33
DPI Replacement Kit	PS781P
Drain Kit –	
Automatic Float Drain	PS506P
Semi-Auto Drain	PS511P
Twist Drain	PS512P
Push 'N' Drain	PS513P
Filter Elements - Grade 6 (Standard)	P3NKA00ESCB
Grade 10 (Optional)	P3NKA00ES9
Sight Gauge Kit	P3NKA00PE
Mounting Bracket Kit*	P3NKA00MW

<sup>\*</sup> If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.

#### **Specifications**

Bowl Capacity	18.0 Ounces
Sump Capacity	6.8 Ounces
Filter Element –	
Borosilicate & felt glass fibers 99.97% DOP e	fficiency
Largest Aerosol Particle Passed (Grade 6)	0.01 Micron
Largest Solid Particle Passed (Grade 6)	0.30 Micron
Pressure & Temperature Rating – 0 to 25	, ,
32°F to	175°F (0°C to 80°C)

Automatic Float Drain - 15 to 250 psig (1.0 to 17.2 bar)

#### **Materials of Construction**

or conociación	
wl	Aluminum
	Plastic
	Plastic
	Nitrile
je	Polyamide (Nylon)
	3.5 lb. (1.6 kg)
	3.5 lb. (1.6 kg)
-1/2" †	4.6 lb. (2.1 kg)
	wie

<sup>† 1&</sup>quot; Port Body with 1-1/2" Port Block.



Filters

Coalescers

Regulators

Lubricators

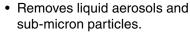
Combos



# F701 Coalescing Filters

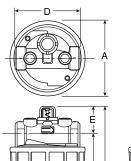
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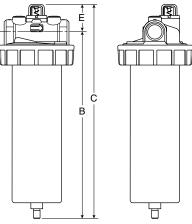
#### **Features**



- Protects pneumatic systems from contamination that standard particulate filters will not catch.
- · Two different grade elements available.
- Differential pressure indicator (pop-up) standard.
- · Differential pressure gauge optional.
- · High flow design.

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





	G	rade 6	Gı	rade 10		
Port Size	Flow (SCFM)*	Part Number	Flow (SCFM)*	Part Number		
Metal Bowl 32 oz.						
3/4"	95	F701-06E3P	158	F701-06E7P		
1"	95	F701-08E3P	158	F701-08E7P		
Metal Bowl 100 oz.						
3/4"	170	F701-06L3P	285	F701-06L7P		
1"	170	F701-08L3P	285	F701-08L7P		

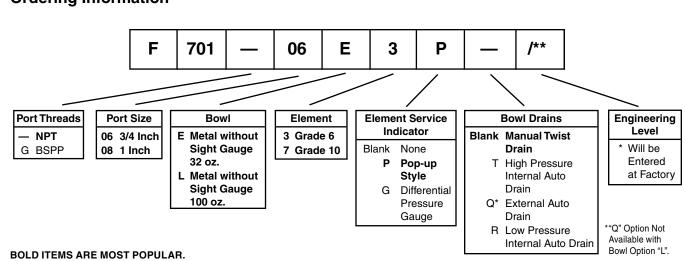
Dry media flow. For wet media info see table on next page.

F701 Coalescing Filter Dimensions						
Port Size	Bowl Capacity	A	В	O	D	Е
3/4 & 1 Inch (E)	32 oz.	4.95 (126)	11.77 (299)	13 (330)	4.00 (101)	1.23 (31)
3/4 & 1 Inch (L)	100 oz.	4.95 (126)	21.39 (543)	22.63 (575)	4.00 (101)	1.23 (31)

<sup>&</sup>quot;G" Differential Pressure Gauge add 2.00 (50.8) to C & E.

inches (mm)

# Ordering Information



C46

Lubricators

<sup>&</sup>quot;Q" External Auto Drain add 1.70 (43.1) to B & C.

# **Coalescing Filters (Oil Removal)**

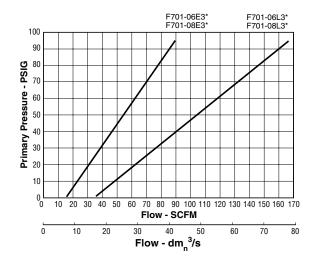
#### **Technical Information**

# **Media Specifications**

G r a	D.O.P. Coalescing Efficiency	Maximum Oil Carryover <sup>1</sup>		Drop (PSID) <sup>2</sup> @ ted Flow
d e	0.3 to 0.6 Micron Particles	PPM w/w	Media Dry	Media Wet With 10-20 wt. oil
6	99.97%	0.008	1.0	2-3
10	95%	0.85	0.5	0.5

<sup>&</sup>lt;sup>1</sup> Tested per BCAS 860900 at 40 ppm inlet.

D.O.P. = Dioctylphthalate



# F701 Filter Kits & Accessories

Mounting Bracket – Port Size	
3/4 (Pair of Pipe Mounted Brackets)	
Bowl Kit – Port Size	
3/4, 1 Inch (E) 32 oz	BK603B
3/4, 1 Inch (L) 100 oz	BK603C
Differential Pressure Pop Up Indicator Repair Kit (only works with originally equipped units)	RK701P
Only works on units without pop-up indicator)	DP276-P
Drain Kits -	
Internal Automatic Drain - High Pressure (T)	SA702MD
Manual Twist Drain	
Filter Element Kits – Port Size / Grade 6	
3/4, 1 Inch (E) 32 oz	F701-C3-0773
3/4, 1 Inch (L) 100 oz	F701-C3-0774
Port Size / Grade 10	
3/4, 1 Inch (E) 32 oz	F701-C7-0773
3/4, 1 Inch (L) 100 oz	
Specifications	

Maximum Recommended Pressure Drop ......10 psig

C47

Minimum Recommended Flow – 20% of Rated Flow
Maximum Pressure (Manual Drains) – 0 to 300 psig (0-20 bar)
Maximum Pressure (Auto Drains) –"R" Drain (Low Pressure Internal)
<b>Maximum Temperature</b> 32°F to 150°F (0°C to 65°C) Maximum temperature with "T", "R", or "Q" Drains 125°F (52°C)
Weight –         3/4 & 1 Inch (E) 32 oz
Materials of Construction
Body & Flange RingZinc
Bowl – Metal Bowl (E) (L)Aluminum
Drains – Auto Float Drain –

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

Element End Caps ......Urethane

Seals ...... Buna N



Operation -

Product Selection

Filters

Coalescei

/ Regulators

Lubricators Fil

sogmo

Accessories



(element should be replaced)

<sup>&</sup>lt;sup>2</sup> Add dry + wet for total pressure drop.

# 35F, 43F Coalescing Filters – Hi-Flow



Auto Drain

C

Product Selection

Filters

Coalescers

Regulators Filter / Regulators

Lubricators

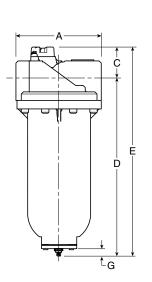
Combos

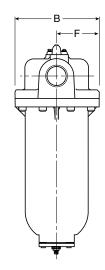
Accessories

#### **Features**

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

<sup>\*</sup> Without Differential Pressure Indicator – Max. supply pressure is 250 PSIG (20.7 bar).





	Port	Element	Part number (NPT)
	size	type	Automatic drain
	1-1/2	0.01 micron	35F77EAP
35F	1-1/2	1.0 micron	35 <b>F</b> 77HAP
	2	0.01 micron	35F87EAP
	2	1.0 micron	35F87HAP
43F	3	0.01 micron	43FN7EAP
43F	3	1.0 micron	43FN7HAP

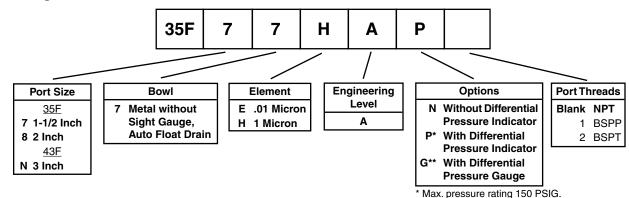
35F Coalescing Filter Dimensions						
<b>A</b> 7.80 (198)	<b>B</b> 7.76 (197)	<b>C</b> 2.83 (72)	<b>D</b> 16.24 (412.5)	<b>E</b> 19.07 (484)	<b>F</b> 3.88 (98.6)	<b>G</b> .55 (14)
43F Coalescing Filter Dimensions						
<b>A</b> 8.94 (227)	<b>B</b> 8.88 (225.5)	<b>C</b> 3.48 (88)	<b>D</b> 25.96 (659.4)	<b>E</b> 29.44 (748)	<b>F</b> 4.44 (112.8)	<b>G</b> .55 (14)

inches (mm)

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

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

# **Ordering Information**



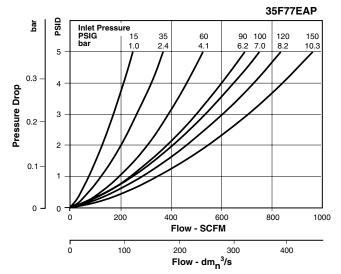
**BOLD ITEMS ARE MOST POPULAR.** 

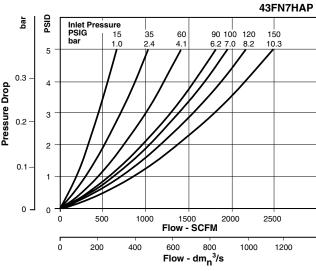


\*\* Gauge ships loose.

# **Coalescing Filters (Oil Removal)**

#### **Technical Information**





#### 35F87EAP bar Inlet Pressure PSIG 1 bar 1 90 100 6.2 7.0 10.3 1.0 0.3 Pressure Drop 0.2 0.1 400 600 Flow - SCFM 0 200 1000 0 100 200 400 Flow - dm<sub>n</sub><sup>3</sup>/s

# 35F & 43F Coalescing Filter Kits & Accessories

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

# **Specifications**

Maximum Supply Pressure	without DPI and with Pressure Gauge250 PSIC	3 (17.2 bar)*
	with DPI 150 PSI	
Operating Temperate	ure32° to 150°F (0	° to 65.5°C)
		*
Standard Filtration*	- MicronActiv	
Weight –	35F19. 43F32.8	, ,
* Filtration temperature	of 70°F (21°C) @100 PSIG (6.9 bar)	with typical

compressor lubricating oil and protected by 0.01 micron filter.

#### **Materials of Construction**

Body		Aluminum
Bowls		Aluminum
Filter Element –	0.01 & 1.0 Micron Adsorber	Borosilicate Cloth Activated Carbon
Seals		Fluorocarbon
Stud		Plated Steel



Product Selection

Filters

Coalescers

Regulators

Filter / Regulators

Lubricators | R

Combos

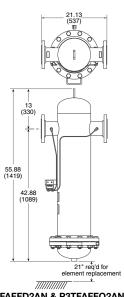


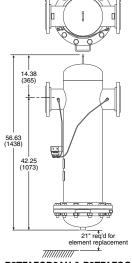
# **P3TF Series Flanged Filters**

# **P3TF Series**

#### **Features**

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





P3TFAFFD2AN & P3TFAFFQ2AN

P3TFAFGD3AN & P3TFAFGQ3AN

#### **Flanged Filters**

Coalescers

Regulators

Filter/ Regulators

Port size	Flow SCFM	Element type	Number of elements	Part number
4" Flange	2755	0.01 micron	4	P3TFAFFD2AN
4" Flange	2755	1.0 micron	4	P3TFAFFQ2AN
6" Flange	4132	0.01 micron	6	P3TFAFGD3AN
6" Flange	4132	1.0 micron	6	P3TFAFGQ3AN

#### **Operating Information**

P3TF Series Operating Pressure: 232 PSIG (16 bar)

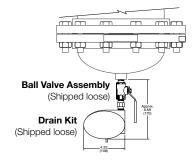
35°F to 212°F (1.5°C to 100°C) Operating Temperature:

#### **Materials of Construction**

Body	Steel
Baffle	Plated Steel
Deflector	Plated Steel
Filter Element 0.01 & 1.0 Micron	Borosilicate Cloth
Seals	Fluorocarbon
Stud	Plated Steel

#### **Service Kits**

Descrip	tion	Number Required	P3TF Series
Dp Gauge Replace	ement Kit		DPG-Kit
Drain Kit - 1/2" NP	Т		HDF-120-NPT-A
Eller Element Kit	0.01 Micron	4 or 6	PSY1035002
Filter Element Kit	1.0 Micron	4 or 6	PSY1035001



#### **Inlet Air Pressure Correction**

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

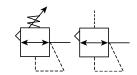
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PSI	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232	247	261	275	290
bar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Factor	0.38	0.53	0.65	0.76	0.85	0.93	1.00	1.07	1.13	1.19	1.25	1.31	1.36	1.41	1.46	1.51	1.56	1.60	1.65	1.70



#### Regulators

# Regulators

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



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

- Miniature 14R Series, 1/8 and 1/4 Inch
- Miniature P3A-R Series, 1/8 and 1/4 Inch
- Miniature R34 Series, 1/8 and 1/4 Inch
- Miniature R25 Series, 1/4 and 3/8 Inch
- Miniature R45 Series, 1/4 and 3/8 Inch
- Economy 15R Series, 1/4 and 3/8 Inch
- Economy 05R Series, 1/4 and 3/8 Inch
- Compact 06R Series, 1/4, 3/8 and 1/2 Inch
- Standard 07R Series, 3/8, 1/2 and 3/4 Inch
- Hi-Flow P3NR Series, 3/4, 1 and 1-1/2 Inch
- Standard R119 Series, 1/4, 3/8 and 1/2 Inch
- Hi-Flow R119 Series, 3/4 thru 2 Inch
- Hi-Flow 09R Series, 2 Inch
- Pilot Operated 10R, 11R, 12R, P3NR Series, 1/4 thru 1-1/2 Inch; R119 Series 1/4 thru 2-1/2 Inch

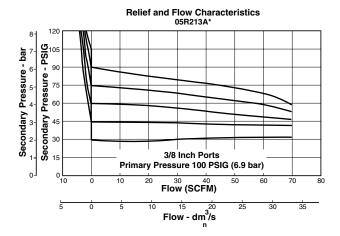
Miniature Regulators for Water Service

- Miniature R24 Series, 1/4 and 3/8 Inch
- Miniature R46 Series, 1/4 and 3/8 Inch
- Miniature 20R Series, 1/8 and 1/4 Inch

#### Regulator Selection

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

#### **Reading Flow Charts to Size Regulators**



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

#### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

#### **CAUTION:**

C52

# REGULATOR PRESSURE ADJUSTMENT – The

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

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



#### **General Purpose Regulators**

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

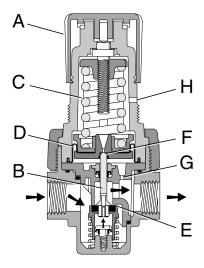
This type of regulator is generally used in a widevariety of applications where reduced pressure is highly desirable for energy conservation, safety requirements, air circuit control and air instrumentation.

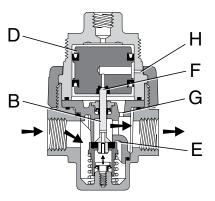
#### Operation

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

During low flow requirements, the amount of opening at the seat (E) is small, while at high flows it is large. The downstream pressure signal, which regulates the amount of opening, requires an adjustment over this range, in order to attempt a constant output. This adjustment is the orifice (G), which is sized and located in such a manner as to provide a compensation to the downstream pressure signal transmitted to the piston. This effect is called aspiration and its effect is to maintain downstream pressure nearly constant over a wide range of flow demands.

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







Filters

Coalescers

Regulators

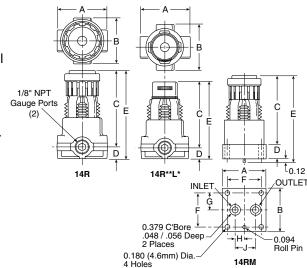
Lubricators

Combos

# 14R Regulators - Miniature

#### **Features**

- Unbalanced poppet standard.
- Solid control piston with lip seal for extended life.
- Non-rising adjusting knob.
- Compact, 2.88 inch (73,2mm) high by 1.65 inch (42mm) wide.
- · Easily serviced.
- High Flow: 1/8" 13 SCFM§ 1/4" - 15 SCFM§



L	Ш
	0

Port Size	NPT
Without Gaug	e
1/8"	14R013FC
1/4"	14R113FC
With Gauge	
1/8"	14R018FC
1/4"	14R118FC

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

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

Ordering Information

§ 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	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>					
	1.65	1.56	2.50	0.38	2.88					
	(42)	(40)	(63.5)	(10)	(73)					
14R**L*	<b>A</b>	<b>C</b>	<b>D</b>	<b>E</b>						
	1.65	2.28	0.38	2.68						
	(42)	(57.9)	(10)	(68)						
14RM	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>					
	1.50	1.50	2.36	0.50	2.98					
	(38)	(38)	(60)	(13)	(73)					
IAUM	<b>F</b> 1.188 (30)	<b>G</b> 0.594 (15)	<b>H</b> 0.325 (8)	<b>J</b> 0.725 (18)						

Inches (mm)

	•	
		_
		_
	Port Size	L
0	1/8 Inch Pipe,	ſ
	1/8 Inch	
	Gauge Port	
1	1/4 Inch Pipe,	
	1/8 Inch	-
	Gauge Port	
В	1/4 Inch Pipe,	
	1/4 Inch	1
	Gauge Port	
С	1/8 Inch Pipe,	

J		14R	1	13	F		C	-	_				
							/	/			_		_
Port Size	Pres	sure Ran	ge	Re	elief	] [	Por	t Type		Options	[r		Pressure
0 1/8 Inch Pipe,	With	nout Gaug	<u>e</u>	F Relie	eving	11	Blank	NPT	Blank	No Option	ns   L	Lir	nited
1/8 Inch Gauge Port 1 1/4 Inch Pipe, 1/8 Inch Gauge Port B 1/4 Inch Pipe.	Yellow Kno 10 30 psig 11 60 psig 12 15 psig 13 125 ps	B0 3 B1 6 B2 1 ig B3 1	k Knob 30 psig 30 psig 5 psig 25 psig	H Low Relie	eving		1 2	BSPP BSPT	L <sup>†</sup> P <sup>†</sup> S <sup>†</sup>	Preset No Adjustable Preset Adjustable Pressure Limiter Ma	; ;   	XXX*	Preset Pressure Pressure Limited
1/4 Inch Gauge Port C 1/8 Inch Pipe, No Gauge Port M Manifold Mounting	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           * Not available with BSPP or BSPT port types.		Leve		Engineeri Level C Curren			T <sup>†</sup> † Inlet Pre	Adjustable Pressure Limiter Max. Non- Adjustable	(1	Pressure Range, in 5 psig For high	es, contact	

Spring Type by Preset / Limited Pressure:

For Preset / Limited Pressure 10 to 25 use 30 PSI Spring For Preset / Limited Pressure 26 to 50 use 60 PSI Spring

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

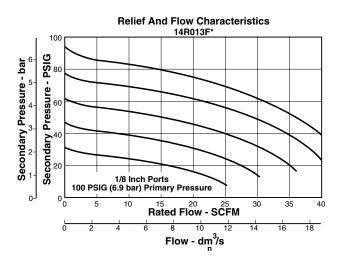
**BOLD ITEMS ARE MOST POPULAR.** 

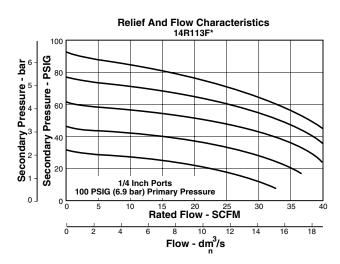


pressures, contact

factory.

065 = 65 psig





#### **CAUTION:**

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

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

#### **⚠ WARNING**

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

#### 14R Regulator Kits & Accessories

Bonnet Assembly Kit	L01369
Bonnet Tamperproof Kit	P01265
Gauges – 30 psig, 1/8" NPT (0 to 2.1 bar)	. K4515N18060 K4515N18160 . K4520N14060
Mounting Bracket Kit* (Includes Panel Mount Nut).	PS417BP
Panel Mount Nuts* – Plastic	
Poppet / Piston Kits – Unbalanced, Non-Relieving Unbalanced, Relieving	
Springs – 1-15 psig Range (Yellow)	P01175 P01174

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

#### **Specifications**

Gauge Ports (2)(Can be used for Full Flow)	1/8 or 1/4 Inch
Port Threads	1/8, 1/4 Inch
Pressure & Temperature Ratings –	
	32°F to 125°F (0°C to 52°C)
Low Temperature	4°F to 125°F (-20°C to 52°C)
Secondary Pressure Ranges –	
Standard Pressure	2 to 125 psig (0 to 8.6 bar)
Medium Pressure	1 to 60 psig (0 to 4.1 bar)
Medium Pressure	1 to 30 psig (0 to 2.1 bar)
Low Pressure	1 to 15 psig (0 to 1 bar)

#### **Materials of Construction**

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



Product election

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Combos

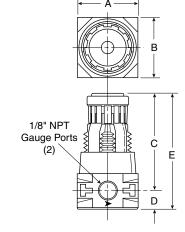


# P3A-R Regulators - Miniature



#### **Features**

- Lightweight plastic body.
- · Non-rising adjusting knob.
- · Solid control piston with lip seal for extended life.
- Unbalanced poppet standard.
- Two full flow 1/8" gauge ports.
- · Reverse flow capability.
- High Flow: 1/8" 13 SCFM§ 1/4" – 15 SCFM§



MAX 1500.

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

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

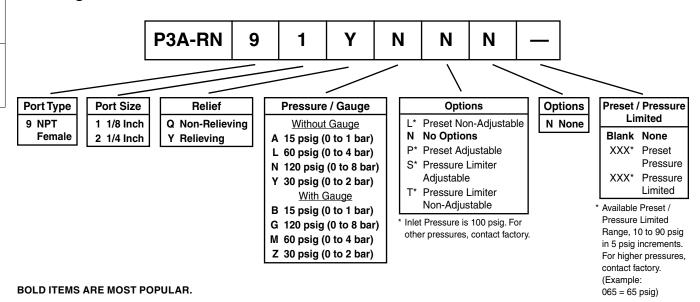
NOTE: 1.218 Dia. (31mm) hole required for panel mounting.

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

P3A-R Regulator Dimensions				
<b>A</b> 1.57 (40)	<b>B</b> 1.57 (40)	<b>C</b> 2.46 (63)		
<b>D</b> 0.46 (12)	<b>E</b> 2.92 (74)			

Inches (mm)

# **Ordering Information**

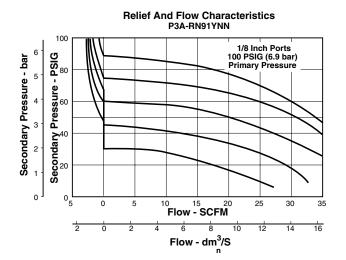


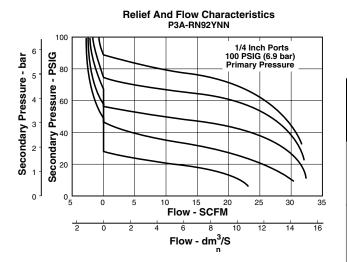
C56

#### •

**Technical Information** 

**Technical Specifications – P3A-R** 





#### **CAUTION:**

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

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

# P3AR Regulator Kits & Accessories

<b>Gauges</b> – 30 psig, 1/8" NPT (0 to 2.1 bar)
Mounting Bracket Kit* (Includes Panel Mount Nut)PS417BP
Panel Mount Nut*P78652
Poppet / Piston Kits – Unbalanced, Non-RelievingPS428P Unbalanced, RelievingPS426P
Springs – 1-15 psig Spring (Yellow)       P01176         1-30 psig Spring (Black)       P01175         1-60 psig Spring (White)       P01174         5-110 psig Spring (Gold)       P01173

#### **⚠ WARNING**

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

#### **Specifications**

Gauge Ports (2)				
Operating Pressure Range –		psig	bar	
Primary –	Maximum	120	8.3	
Secondary –				
15 psig Spring	Minimum	1	0.07	
	Maximum	15	1.0	
30 psig Spring	Minimum	6	0.4	
	Maximum	30	2.1	
60 psig Spring	Minimum	6	0.4	
	Maximum	60	4.1	
110 psig Spring	Minimum	6	0.4	
	Maximum	110	7.6	

 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**

C57

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

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



R34 Series

# R34 Regulators - Miniature





#### **Features**

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



Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

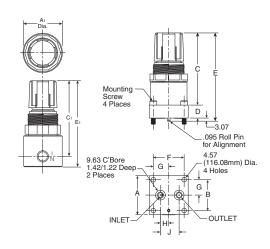
Combos

Accessories



R344-02C

R342-0MC

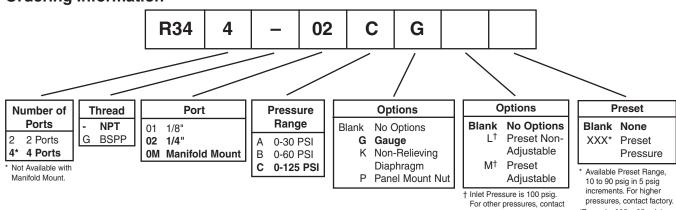


R34 Miniature Regulator				
	Dii	<u>mensio</u>	ns	
Α	<b>A</b> 1	В	B <sub>1</sub>	С
1.50	1.54	1.188	1.56	2.75
(38.1)	(39.2)	(30.18)	(39.6)	(69.9)
C <sub>1</sub>	D	E	E1	F
2.70	0.50	3.25	3.25	1.20
(68.6)	(12.7)	(82.6)	(82.6)	(30.5)
G	Н	J		
0.60	0.32	0.73		
(15.2)	(8.1)	(18.5)		

Model Bort C	Port Size	Without Gauge	Without Gauge	Without Gauge	With Gauge	With Gauge	With Gauge
Туре	Port Size	0 to 30 psig (0.0 to 2.1 bar)	0 to 60 psig (0.0 to 4.1 bar)	0 to 125 psig (0.0 to 8.6 bar)	0 to 30 psig (0.0 to 2.1 bar)	0 to 60 psig (0.0 to 4.1 bar)	0 to 125 psig (0.0 to 8.6 bar)
	1/8"	R344-01A	R344-01B	R344-01C	R344-01AG	R344-01BG	R344-01CG
Relieving	1/4"	R344-02A	R344-02B	R344-02C	R344-02AG	R344-02BG	R344-02CG
	Manifold Mount	R342-0MA	R342-0MB	R342-0MC			

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

# **Ordering Information**

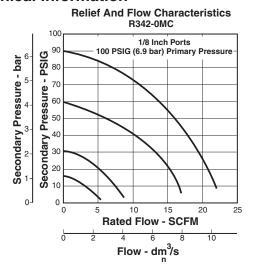


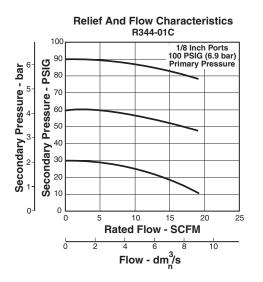
**BOLD ITEMS ARE MOST POPULAR.** 



factory.

(Example: 065 = 65 psig)





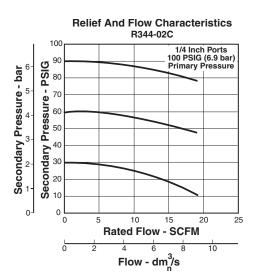
#### **CAUTION:**

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

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

#### **↑** WARNING

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



# **R34 Regulator Kits and Accessories**

RelievingGRP-96-725
<b>Spring, Regulating -</b> 0 to 30 psig (0 to 2.1 bar)
Panel Mount Nut – AluminumR05X51-APlasticR05X51-P
Mounting Bracket Kit (Includes Panel Mount Nut)SA161X57
Gauges - 0 to 60 psig (0 to 4.1 bar), 1-1/2" Dial Face,
1/8 NPT, CBM
1/8 NPT, CBM K4515N18160
Tamperproof Knob Kit

#### **Materials of Construction**

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

#### **Specifications**

C59

Operating Temperature	40° F to 150°F (-40° C to 65.5°C)
Supply Pressure	300 psig Maximum (20.4 bar)
Port Threads	1/8, 1/4 Inch
Gauge Ports	(2) Std 1/8 Inch (No Gauge Port Version Available)
Weight	25 lbs. (0.11 kg)



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Product Selection

Filters

Coalescers

Regulators

Filter / Regulators

Lubricators

Combos

# R24, R25 Regulators - Miniature (Air / Water Service)



Coalescers

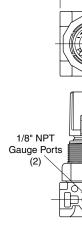
Regulators

Filter/ Regulators

Accessories

#### **Features**

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



_		
	1	K
		R
0	D.	N. C.

	NE	PT
Port Size	Air Service Relieving	Water Service Non-Relieving
	Relieving, 0-125 Reduced Pressure, Without Gauge	
1/8"	R25-01C	R24-01CK
1/4"	R25-02C	R24-02CK

**Bold Items are Most Popular.** 

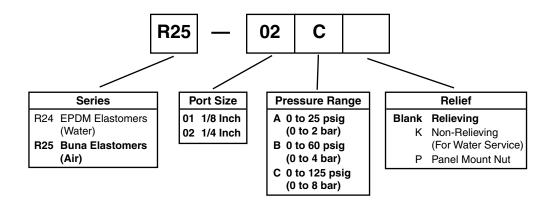
For other models refer to ordering information below.

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

R24, R25 Regulator Dimensions		
<b>A</b> 1.60 (41)	<b>B</b> 1.60 (41)	<b>C</b> 2.61 (66)
<b>D</b> 0.49 (13)	<b>E</b> 3.10 (79)	

Inches (mm)

# **Ordering Information**

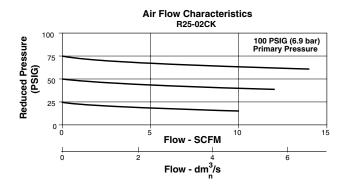


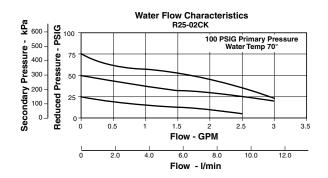
C60



#### **Air Line Regulators**

#### **Technical Information**





#### **CAUTION:**

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

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

#### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

#### R24, R25 Regulator Kits and Accessories

R05X51-P
R05X51-A
SA161X57
RKR25Y
RKR25KY
RKR24Y
RKR24KY
SPR-375-1
SPR-376
SPR-377

#### **Specifications**

Gauge Ports (2)	1/8 Inch
• ( )	(Can be used for full flow)
Pressure Rating - Maximum Inlet F	Pressure 150 psig(10.0 bar)
Port Threads	1/8, 1/4 Inch
Temperature Rating	40°F to 125°F (4°C to 52°C)
Weight	0.25 lb. (0.11 kg)

#### **Materials of Construction**

Adjusting Screw	Steel
Body	Acetal
Bonnet and Seat	Acetal
Diaphragm (R25)	Buna N
Diaphragm (R24)	EPDM
Seals (R25)	Buna N
Seals (R24)	EPDM
Springs	Stainless Steel
Valve Poppet (R25)	Buna N
Valve Poppet (R24)	EPDM



Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Compos

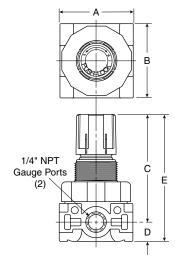


# R45, R46 Regulators – Miniature (Air / Water Service)



#### **Features**

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



	NI	РΤ
Port Size	Air Service Relieving	Water Service Non-Relieving
	Relieving, 0-125 Reduced Pressure, Without Gauge	
1/4"	R45-02C	R46-02CK
3/8"	R45-03C	R46-03CK

**Bold Items are Most Popular.** 

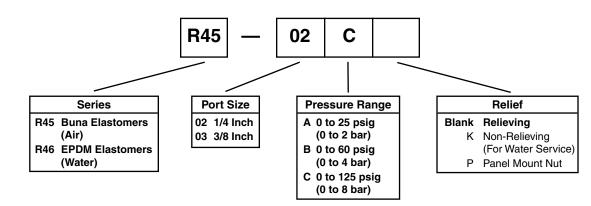
For other models refer to ordering information below.

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

R45, R46 Regulator Dimensions		
<b>A</b> 2.06 (52)	<b>B</b> 2.06 (52)	<b>C</b> 2.90 (74)
<b>D</b> 0.53 (14)	<b>E</b> 3.43 (87)	

Inches (mm)

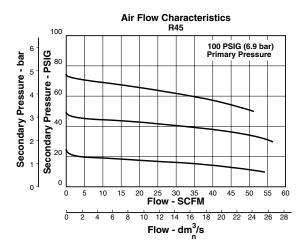
# **Ordering Information**

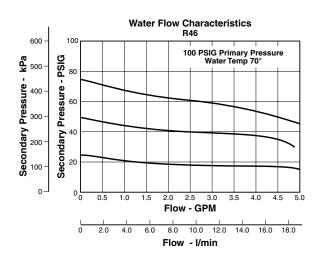


C62

**BOLD ITEMS ARE MOST POPULAR.** 







#### **CAUTION:**

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

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

#### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

#### R45, R46 Regulator Kits and Accessories

Panel Mount Nut - Plastic	R05X51
Aluminum	R05X51A
Mounting Bracket and Nut	SA161X57
Service Kits - Relieving	RKR45Y
Non-Relieving	RKR45KY
Springs – 0-25 psig Spring	SPR-46
0-60 psig Spring	SPR-47
0-125 psig Spring	SPR-48

#### **Specifications**

Gauge Ports (2)	1/4 Inch
• ( )	(Can be used for full flow)
Pressure Rating - Maximum Inlet P	Pressure 150 psig(10.0 bar)
Port Threads	1/4, 3/8 Inch
Temperature Rating	40°F to 125°F (4°C to 52°C)
Weight	0.38 lb. (0.17 kg)

#### **Materials of Construction**

Adjusting Screw	Steel
Body	Acetal
Bonnet and Seat	Acetal
Diaphragm (R45)	Buna N
Diaphragm (R46)	EPDM
Seals (R45)	Buna N
Seals (R46)	EPDM
Springs	Stainless Steel
Valve Poppet (R45)	Buna N
Valve Poppet (R46)	EPDM



Product election

Filters

Coalescers

Regulators

Filter /

Lubricators

Combos

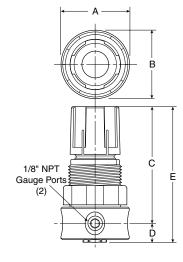


# 20R Regulators - Miniature (Water Service)



#### **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



# C

Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Combos

Accessories

Port Size	NPT
Without Gaug	e
1/8"	20R013GC
1/4"	20B113GC

**Bold Items are Most Popular.** 

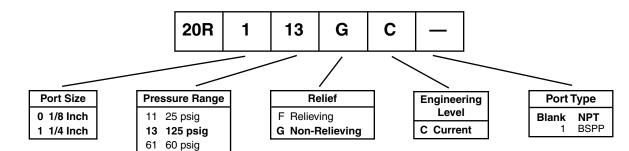
For other models refer to ordering information below.

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

20R Regulator Dimensions		
<b>A</b> 1.56 (40)	<b>B</b> 1.56 (40)	<b>C</b> 2.56 (65)
<b>D</b> 0.50 (13)	<b>E</b> 3.06 (78)	

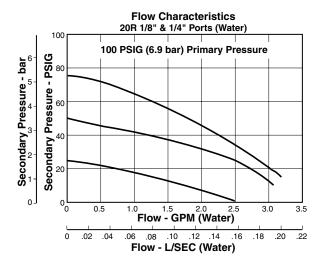
Inches (mm)

# **Ordering Information**



**BOLD ITEMS ARE MOST POPULAR.** 





#### **CAUTION:**

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

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

#### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

#### 20R Regulator Kits & Accessories

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

#### **Specifications**

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

#### **Materials of Construction**

Adjusting Nut & Stem	Steel
Body, Valve Poppet, Bottom Plug, Diaphragm Butto	nBrass
Bonnet, Knob	Plastic
Seals, Diaphragm	Buna N
Springs	Steel



Product selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Combos



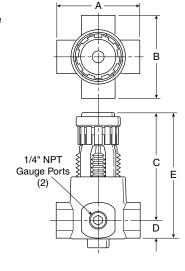
# 15R Regulators – Economy



#### **Features**

- Solid control piston with resilient seat for service-free operation.
- · Non-rising "locking" adjusting knob.
- Compact, 3.30 inch (84mm) high by 2.12 inch (54mm) wide.
- · Easily serviced.
- High Flow: 1/4" 21 SCFM§

3/8" - 28 SCFM§





Port Size	NPT
Without Gauge	
1/4"	15R113FB
3/8"	15R213FB
With Gauge	
1/4"	15R118FB
3/8"	15R218FB

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

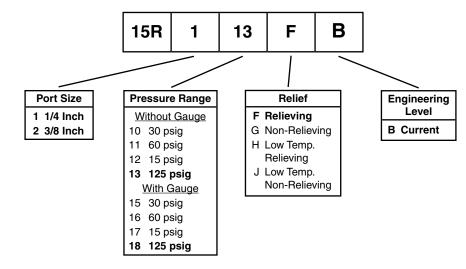
NOTE: 1.218 Dia. (31mm) hole required for panel mounting.

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

15R Regulator Dimensions		
<b>A</b> 2.12 (54)	<b>B</b> 2.00 (51)	<b>C</b> 2.60 (66)
<b>D</b> 0.70 (18)	<b>E</b> 3.30 (84)	

Inches (mm)

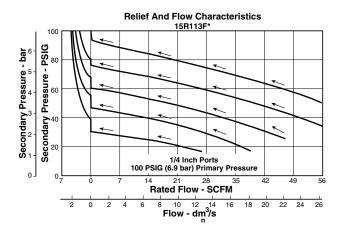
# **Ordering Information**

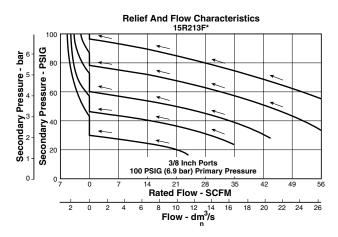


**BOLD ITEMS ARE MOST POPULAR.** 



Coalescers





#### **CAUTION:**

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

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

#### **⚠ WARNING**

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

#### 15R Regulator Kits & Accessories

Dadu Camilaa Kit - Umbalamaad

Body Service Kit – Unbalanced	PS424BP
Bonnet Assembly Kit	L01369
Gauges - 30 psig, 1/8" NPT (0 to 2.1 bar)	
60 psig, 1/8" NPT (0 to 4.1 bar)	K4515N18060
160 psig, 1/8" NPT (0 to 11.0 bar)	
60 psig, 1/4" NPT (0 to 4.1 bar)	K4520N14060
160 psig, 1/4" NPT (0 to 11.0 bar)	K4520N14160
Mounting Bracket Kit* (Includes Panel Mount Nut)	PS417BP
Panel Mount Nuts* - Plastic	P78652
Metal	
Poppet / Piston Kits - Unbalanced, Non-Relieving	jPS428P
Unbalanced, Relieving	PS426P
Seal Kit - Unbalanced	PS454B
Springs - 1-15 psig Range (Yellow)	P01176
1-30 psig Range (Black)	P01175
1-60 psig Range (White)	P01174
2-125 psig Range (Gold)	P01173

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

#### **Specifications**

(Can be used for Full Flow)	1/4 Inch
Port Threads	1/4, 3/8 Inch
Pressure & Temperature Ratings –	0 to 250 psig (0 to 17.2 bar)
	32°F to 125°F (0°C to 52°C)
Low Temperature	-4°F to 125°F (-20°C to 52°C)
Secondary Pressure Ranges –	
Standard Pressure	2 to 125 psig (0 to 8.6 bar)
Medium Pressure	1 to 60 psig (0 to 4.1 bar)
Medium Pressure	1 to 30 psig (0 to 2.1 bar)
Low Pressure	1 to 15 psig (0 to 1 bar)

#### **Materials of Construction**

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



Filters

Coalescers

Regulators

Lubricators

Combos



# 05R Regulators - Economy



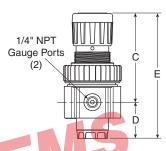
#### **Features**

- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- · Rolling diaphragm for extended life.

(Revised 05-13-14)

- · 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		
Without Gaug	e		
1/4"	05R113A*		
3/8"	05R213A*		
With 160 PSI	Gauge		
1/4"	05R118A*		
3/8"	05R218A*		

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

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

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

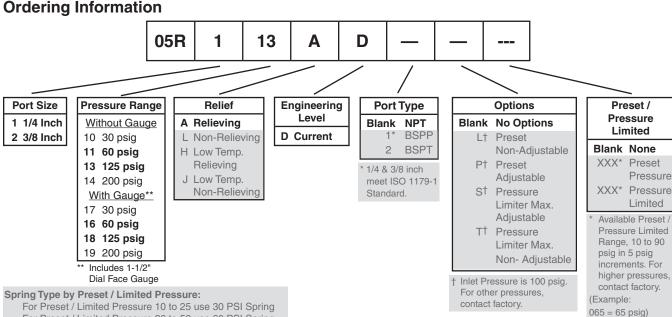
NOTE: 1.53 Dia. (39mm) hole required for panel mounting.

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

05R Regulator Dimensions			
<b>A</b> 2.00 (51)	<b>B</b> 2.06 (52)	<b>C</b> 3.16 (80)	
1.28 (32)	<b>E</b> 4.44 (113)		

Inches (mm)

# **Ordering Information**

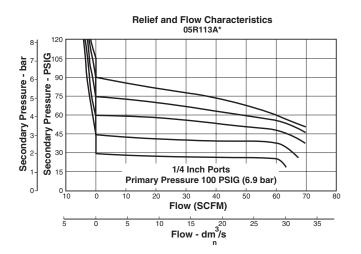


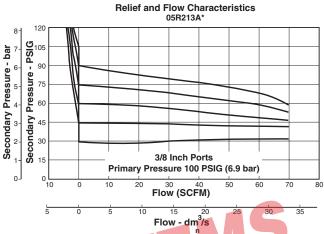


**BOLD ITEMS ARE MOST POPULAR.** 

Coalescers

Regulators





#### **CAUTION:**

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

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

# **⚠ WARNING**

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

#### 05R Regulator Kits & Accessories

Bonnet Assembly Kit	PS915P
Control Knob	P04420
Gauges – 1-1/2" Dial Face	
30 psig (0 to 2.1 bar)	K4515N14030
60 psig (0 to 4.1 bar)	K4515N14060
160 psig (0 to 11.0 bar)	K4515N14160
300 psig (0 to 20.0 bar)	K4515N14300
2" Dial Face	
60 psig (0 to 4.1 bar)	K4520N14060
160 psig (0 to 11.0 bar)	
300 psig (0 to 20.0 bar)	
Mounting Bracket Kit	PS963P
Panel Mount Nut - Metal	PS964P
Springs – 1-30 psig Range	P04427
1-60 psig Range	
2-125 psig Range	
2-200 psig	
Service Kit - Relieving	PS908P
Non-Relieving	

#### **Specifications**

C69

Gauge Ports (2)	1/4 Inch	
Port Threads	1/4, 3/8 Inch	
Primary Pressure Rating –		
Maximum Primary Pressure	300 psig (17.2 bar) Max.	
For Secondary Pressure Ranges see above charts.		
Temperature Rating	32°F to 175°F (0°C to 80°C)	
Low Temperature	4°F to 125°F (-20°C to 52°C)	
Weight	1.1 lb. (0.49 kg)	

#### **Materials of Construction**

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



Product Selection

Filters

Coalescers

Regulators

Filter / Regulators

Lubricators

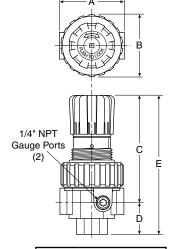
es Combos

## 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§



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

(35) Inches (mm)

Port Size	NPT
Without Gaug	e
1/4"	06R113AC
3/8"	06R213AC
1/2"	06R313AC
With 160 PSI	Gauge
1/4"	06R118AC
3/8"	06R218AC
1/2"	06R318AC

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

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

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

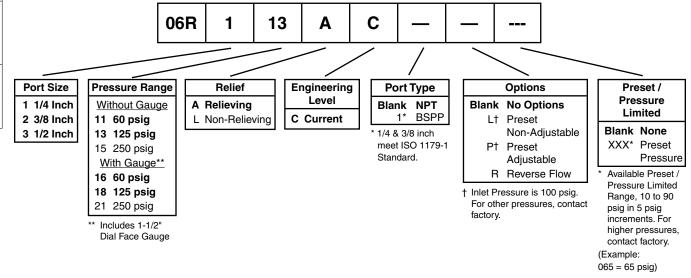
### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### Ordering Information



C70

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

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

**BOLD ITEMS ARE MOST POPULAR.** 



Product Selection

Filters

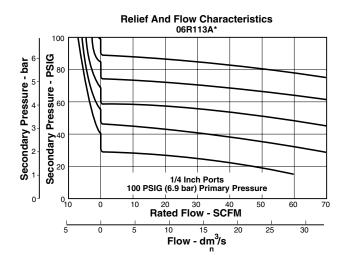
Coalescers

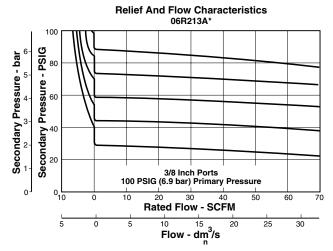
Regulators

Filter / Regulators

Lubricators

Combos



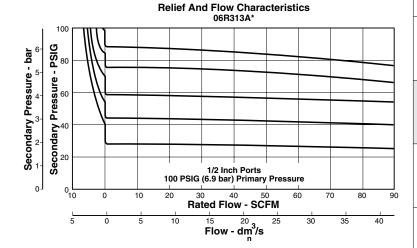


### **CAUTION:**

#### **REGULATOR PRESSURE ADJUSTMENT -**

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

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



### 06R Regulator Kits & Accessories

•	
Bonnet Assembly KitPS715P	)
Control KnobP04069E	3
Gauges – 2" Dial Face       60 psig (0 to 4.1 bar)	)
<b>1-3/4" Digital Round Face</b> 160 psig (0 to 11.0 bar) K4517N14160D	)
Mounting Bracket Kit (Includes Panel Mount Nut) PS707P	)
Panel Mount Nut – PlasticP04082 MetalP04079B	
Reverse Flow Service Conversion Kit – RelievingPS708RP	)
Service Kit – Relieving (Includes Poppet)PS708F Non-Relieving (Includes Poppet)PS709F	
Springs – 1-30 psig Range       P01698         1-60 psig Range       P04062         2-125 psig Range       P04063         5-250 psig Range       P04064	3
Tamperproof KitPS737F	)

### **Specifications**

Gauge Ports (2)	
(Can be used as additional High	n Flow 1/4 Inch Outlet Ports)
Port Threads	1/4, 3/8, 1/2 Inch
Primary Pressure Rating –	
Maximum Primary Pressure	250 psig (17.2 bar)
Secondary Pressure Ranges –	
Standard Pressure	2 to 125 psig (0 to 8.6 bar)
Low Pressure	1 to 60 psig (0 to 4.1 bar)
High Pressure	5 to 250 psig (0.4 to 17.2 bar)
Temperature Rating	32°F to 175°F (0°C to 80°C)
Low Temperature	4°F to 125°F (-20°C to 52°C)
Weight	1.6 lb. (0.7 kg)
Materials of Construction	

### **Materials of Construction**

C71

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



Filters

Coalescers

Regulators

Lubricators

Combos

#### **Features**

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

	A B
1/4" NPT Gauge Ports (2)	C

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

Inches (mm)

Port Size	NPT
Without Gaug	е
1/2"	07R313AC
3/4"	07R413AC
With 160 PSI	Gauge
1/2"	07R318AC
3/4"	07R418AC

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

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

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

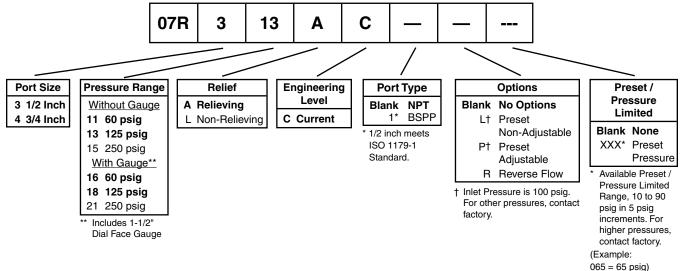
### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### **Ordering Information**

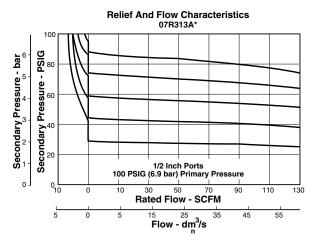


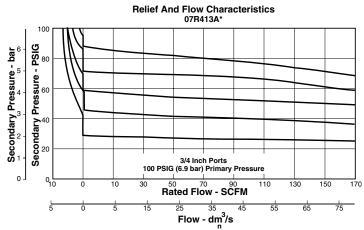
### Spring Type by Preset / Limited Pressure:

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

**BOLD ITEMS ARE MOST POPULAR.** 







### **CAUTION:**

#### **REGULATOR PRESSURE ADJUSTMENT -**

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

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

### 07R Regulator Kits & Accessories

Bonnet Assembly KitPS715P		
Control KnobP040698		P04069B
Gauges - 2	2" Dial Face	
	60 psig (0 to 4.1 bar)	
	160 psig (0 to 11.0 bar)	
3	300 psig (0 to 20.0 bar)	K4520N14300
1	1-3/4" Digital Round Face	
1	160 psig (0 to 11.0 bar)	K4517N14160D
<b>Mounting E</b>	Bracket Kit (Includes Panel Mount N	Nut)PS807P
Panel Mour	nt Nut - Plastic	P04082
	Metal	P04079B
Reverse Flow Service Conversion Kit –		
Relieving		PS808RP
Service Kit	- Relieving (Includes Poppet)	PS808P
	Non-Relieving (Includes Poppet)	
Springs - 1	I-30 psig Range	P01698
. 1	I-60 psig Range	P04062
2	2-125 psig Range	P04063
	5-250 psig Range	
Tamperpro	of Kit	PS737P

### **Specifications**

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

### **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
Control	Steel

Weight ......2.5 lb. (1.1 kg)



Filters

Coalescers

Regulators

Lubricators

Combos



## P3NR Regulators – Hi-Flow

**Filters** 

Coalescers

Regulators

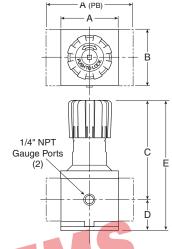
Filter/ Regulators

Lubricators

Accessories

#### **Features**

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



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

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

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

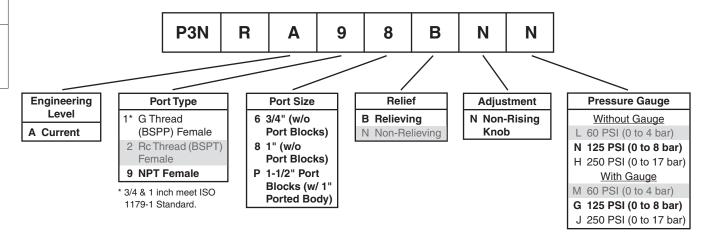
§ SCFM = Standard cubic feet per minute at 100 psig inlet, 90 psig no flow secondary setting and 10 psig pressure drop.

#### **P3NR Regulator Dimensions** Α **A**(PB) В 3.62 5.91 3.62 (92)(92)(150)C D Ε 6.38 2.08 8.46 (162)(53)(215)Inches (mm)

### **⚠ WARNING**

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

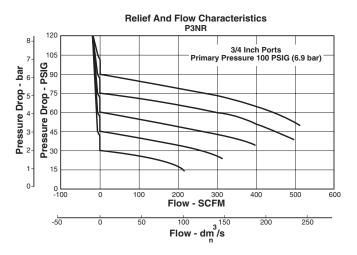
### **Ordering Information**

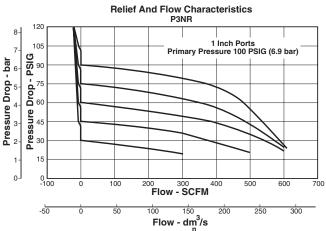


Note: BSPP ported units supplied using NPT ported bodies and BSPP port block kits.

**BOLD ITEMS ARE MOST POPULAR.** 





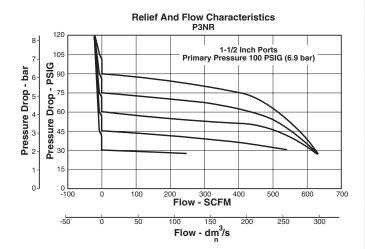


### **CAUTION:**

#### **REGULATOR PRESSURE ADJUSTMENT -**

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

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



### P3NR Regulator Kits & Accessories

Control Knob	P3NKA00PN
Gauges – 2" Dial Face	
60 psig (0 to 4.1 bar)	K4520N14060
160 psig (0 to 11.0 bar)	
300 psig (0 to 20.0 bar)	K4520N14300
1-3/4" Digital Round Face	
160 psig (0 70 11.0 bar)	K4517N14160D
Mounting Bracket Kit*	P3NKA00MW
Service Kit - Relieving	P3NKA00RR
Non-Relieving	P3NKA00RN
Springs - 1-60 psig Range	C10A1304
2-125 psig Range	C10A1308
5-250 psig Range	C10A1317

### **Specifications**

C75

Gauge Ports (2)(Can be used as additional High Flo	
Port Threads	3/4, 1, 1-1/2 Inch
Primary Pressure Rating – Maximum Primary Pressure	250 psig (17.2 bar)
Temperature Rating	32°F to 175°F (0°C to 80°C)
Weight – 3/4"	4.2 lb. (1.9 kg)
	4.2 lb. (1.9 kg)
1-1/2" <sup>†</sup>	5.3 lb. (2.4 kg)

### **Materials of Construction**

materiale of contentration	
Adjusting Stem	Steel
Body	Aluminum
Bonnet	Aluminum
Knob	Plastic
Piston	Plastic
Poppet Assembly	Brass
Seals	Nitrile
Springs - Poppet & Control	Steel
† 1" Port Body with 1-1/2" Port Block	

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



Filters

Coalescers

Regulators

Lubricators

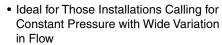
Combos

# R119 Regulators – Standard

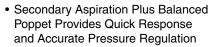
# \*

#### **Features**

 High Flow Performance Featuring Rugged Design for the Most Demanding Applications

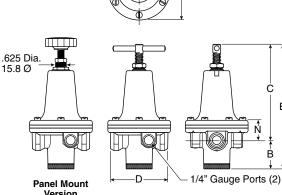






- Heavy Duty Tee Handle Adjustment
- Reverse Flow Version Available
- Panel Mount Version Available
- High Flow: 1/4" 100 SCFM§ 3/8" – 110 SCFM§

1/2" - 150 SCFM§



X80 Reverse Flow

Option

	ersio
	R11
	Α
	R11

el Mouni ersion			,.	Gaago i	0110 (2)
R119 F	Regulato	r Dimen	sions		
Α	В	С	D	E	N
R119-0	2C, R11	9-03C			
3.00 (76)	1.38 (35)	5.29 (134)	2.74 (70.5)	6.67 (169)	.90 (24)
R119-0	4C				

3.25

6.90

(175)

1.45

(37)

inches (mm)

1.56

(40)

5.34

(136)

3.56

(90)

\*\* Brass Bottom Plug Standard with X64 Option.

† Not available with 250 PSIG spring

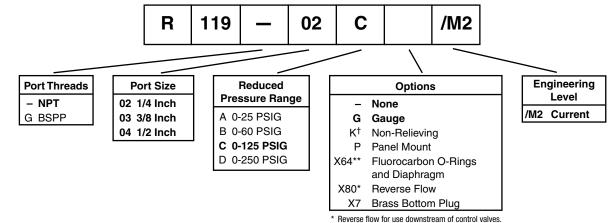
Port	NPT	BSPP		
Size	Relieving	Relieving		
Without Ga	Without Gauge 0-125 PSIG Reduced Pressure			
1/4"	R119-02C	R119G02C		
3/8"	R119-03C	R119G03C		
1/2"	R119-04C	R119G04C		
With Gauge	With Gauge 0-125 PSIG Reduced Pressure			
1/4"	R119-02CG/M2	_		
3/8"	R119-03CG/M2	_		
1/2"	R119-04CG/M2	_		

Standard part numbers shown bold.

For other models refer to ordering information below.

§ SCFM = Standard cubic feet per minute at 100 PSIG inlet, 75 PSIG no flow secondary setting, and 20 PSIG pressure drop.

### **Ordering Information**

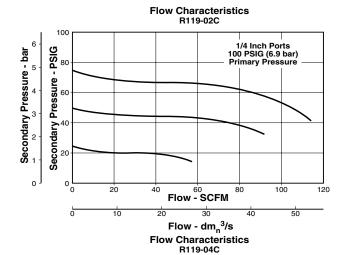


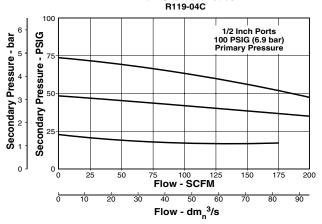
**BOLD ITEMS ARE MOST POPULAR.** 

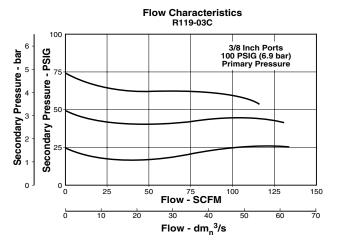


### C76

Coalescers







### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### **∴** CAUTION:

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

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

### R119 Regulator Kits & Accessories

Gauges – 2" Dial Face	
60 psig (0 to 4	4.1 bar)K4520N14060
	11.0 bar)K4520N14160
300 psig (0 to	20.0 bar)K4520N14300
1-3/4" Digita	I Round Face
160 psig (0 to	11.0 bar) K4517N14160D
Mounting Bracket Kit -	
	SA15Y57
	18A57
Panel Mount Conversion	n Kit –
	4202
5	
Repair Kits –	
Repair Kits – Non-Relieving Diaphra	aam.
Non-Relieving Diaphra	•
Non-Relieving Diaphra Valve Assembly (1/4",	agm, 3/8"; All PSIG)RK118Y
Non-Relieving Diaphra Valve Assembly (1/4", Relieving Diaphragm,	•
Non-Relieving Diaphra Valve Assembly (1/4", Relieving Diaphragm, Valve Assembly (1/4",	3/8"; All PSIG)RK118Y 3/8"; All PSIG)RK119Y
Non-Relieving Diaphra Valve Assembly (1/4", Relieving Diaphragm, Valve Assembly (1/4", Non-Relieving Diaphra	3/8"; All PSIG)RK118Y 3/8"; All PSIG)RK119Y
Non-Relieving Diaphra Valve Assembly (1/4", Relieving Diaphragm, Valve Assembly (1/4", Non-Relieving Diaphra Valve Assembly (1/2"; Non-Relieving Diaphra	3/8"; All PSIG)RK118Y  3/8"; All PSIG)RK119Y  agm,  25, 60, 125 PSIG)RK118A  agm,
Non-Relieving Diaphra Valve Assembly (1/4", Relieving Diaphragm, Valve Assembly (1/4", Non-Relieving Diaphra Valve Assembly (1/2"; Non-Relieving Diaphra	3/8"; All PSIG)
Non-Relieving Diaphra Valve Assembly (1/4", Relieving Diaphragm, Valve Assembly (1/4", Non-Relieving Diaphra Valve Assembly (1/2"; Non-Relieving Diaphra	3/8"; All PSIG)RK118Y  3/8"; All PSIG)RK119Y  agm,  25, 60, 125 PSIG)RK118A  agm,
Non-Relieving Diaphra Valve Assembly (1/4", Relieving Diaphragm, Valve Assembly (1/4", Non-Relieving Diaphra Valve Assembly (1/2"; Non-Relieving Diaphra Valve Assembly (1/2"; Relieving Diaphragm,	3/8"; All PSIG)RK118Y  3/8"; All PSIG)RK119Y  agm,  25, 60, 125 PSIG)RK118A  agm,

Relieving Diaphragm, Valve Assembly (1/2"; 250 PSIG)	RK119A250
Spring Cage & T-Handle Kit (1/4 & 3/8)	RKC119Y
Spring Cage & Insert Only Kit (1/2)	SAC18A3/BK
For Fluorocarbon Repair Kits, add X64 to Kit N	lumber suffix.

### **Specifications**

C77

Gauge Ports (2)	1/4 Inch
Port Threads	1/4, 3/8, 1/2 Inch
Reduced Pressure Range.	2 to 125 PSIG (0.15 to 8.5 bar)
Supply Pressure	300 PSIG Maximum (20.4 bar)
Temperature Rating	40°F to 125°F (4.4°C to 52°C)
Weight –	
R119-02, R119-03	1.8 lb. (0.82 kg) / Unit
	26 lb. (11.79 kg) / 12-Unit Master Pack
R119-04	
	27 lb (12 25 kg) / 8-Unit Master Pack

### **Materials of Construction**

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



C

Product Selection

Filters

Coalescers

Regulators

Filter / Regulators

Lubricators

Combos

## R119 Regulators - Hi-Flow

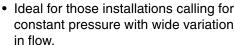
Coalescers

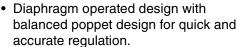
Regulators

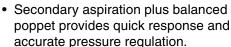
Accessories

#### **Features**

· High flow performance featuring rugged design for the most demanding applications.



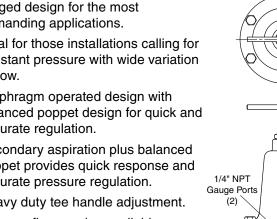


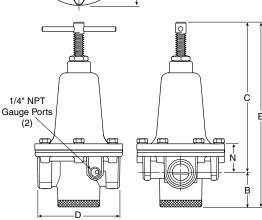


- · Heavy duty tee handle adjustment.
- Reverse flow version available.
- High Flow: 3/4" 300 SCFM§

1" - 400 SCFM§

1-1/4" & 1-1/2" - 500 SCFM§





X80 Reverse Flow Option

R119-06C, R119-08C Regulator Dimensions						
<b>A</b> 4.69 (119)						
R119-10C, R119-12C Regulator Dimensions						
<b>A</b> 4.94 (125)	<b>B</b> 1.81 (46)	<b>C</b> 8.53 (217)	<b>D</b> 4.94 (125)	<b>E</b> 10.34 (263)	<b>N</b> 1.99 (50.6)	

inches (mm)

Dowt Cine	NPT
Port Size	Relieving
Without Gaug	e 0-125 psig Reduced Pressure
3/4"	R119-06C/M2
1"	R119-08C/M2
1-1/4"	R119-10C/M2
1-1/2"	R119-12C/M2
With Gauge 0	0-125 psig Reduced Pressure
3/4"	R119-06CG/M2
1"	R119-08CG/M2
1-1/4"	R119-10CG/M2
1-1/2"	R119-12CG/M2

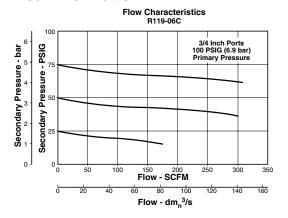
Standard part numbers shown bold. For other models refer to ordering

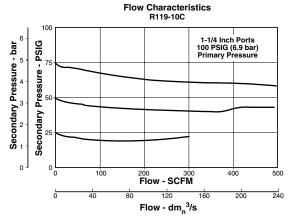
§ SCFM = Standard Cubic Feet Per Minute at 100 psig Inlet, 75 psig No Flow Secondary Setting, and 20 psig Pressure Drop.

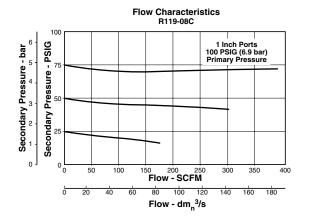
### **⚠ WARNING**

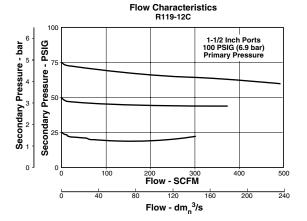
Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

#### **Ordering Information** R 119 06 C G **/M2** Port Threads **Port Size** Options **Engineering** Reduced **Pressure Range** Level NPT 06 3/4 Inch Blank None C 0-125 psig G BSPP 08 1 Inch G Gauge /M2 Current D 0-250 psig 10 1-1/4 Inch K Non-Relieving 12 1-1/2 Inch X64<sup>‡</sup> Fluorocarbon O-Rings and Diaphragm Reverse Flow † Reverse flow for use downstream of ‡ Brass Bottom Plug Standard control valves. with X64 Option. **BOLD ITEMS ARE MOST POPULAR.**









### **CAUTION:**

### **REGULATOR PRESSURE ADJUSTMENT -**

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

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

### R119 Regulator Kits & Accessories

Gauges – 2" Dial Face	
60 psig (0 to 4.1 bar)K4520N14060	
160 psig (0 to 11.0 bar)K4520N14160	
300 psig (0 to 20.0 bar)K4520N14300	
1-3/4" Digital Round Face	
160 psig (0 to 11.0 bar) K4517N14160D	
Mounting Bracket Kit 18B57	,
Repair Kits –	
Non-Relieving Diaphragm,	
Valve Assembly (3/4", 1")RK118B	5
Non-Relieving Diaphragm,	
Valve Assembly (1-1/4", 1-1/2")RK118D	)
Relieving Diaphragm,	
Valve Assembly (3/4", 1")RK119B	6
Relieving Diaphragm,	
Valve Assembly (1-1/4", 1-1/2")RK119D	)
For Fluorocarbon Repair Kits, add X64 to Kit Number suffix.	

### **Specifications**

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

### **Materials of Construction**

Adjusting Screw, Springs	Steel
Body, Spring Cage	Zinc
Bottom Plug, Innervalve	Brass
Seals	Buna N



Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Compos



### Hi-Flow 09R Series

### 09R Regulators - Hi-Flow



Coalescers

Regulators

Filter / Regulators

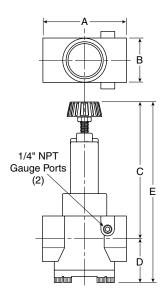
Lubricators

Combos

Accessories

#### **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 Gaug	e
2"	09R813BA

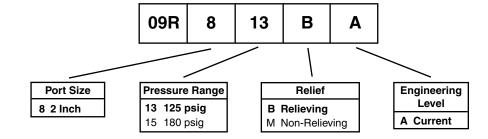
Standard part numbers shown bold. For other models refer to ordering information below.

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

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

Inches (mm)

### **Ordering Information**



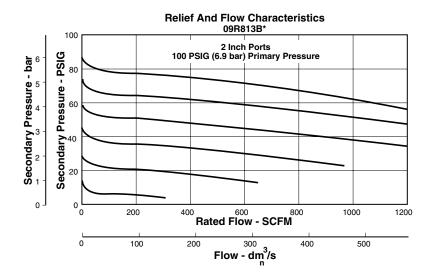
C80

**BOLD ITEMS ARE MOST POPULAR.** 



(Revised 05-13-14)

### **Technical Information**



### **CAUTION:**

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

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

### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### 09R Regulator Kits & Accessories

Body Service Kit	PS603P
Gauges - 2" Dial Face	
160 psig (0 to 11.0 bar)	K4520N14160
300 psig (0 to 20.0 bar)	K4520N14300
1-3/4" Digital Round Face	
160 psig (0 to 11.0 bar)	K4517N14160D
Mounting Bracket Kit	PS605P
Service Kit – Non-Relieving	PS604P
Relieving	PS626P
Springs – 0 to 125 psig Range	PS602P
0 to 180 psig Range	PS627

### **Specifications**

(Can be used as additional Full Fl	
Port Threads	2 Inch
Primary Pressure Rating – Maximum Primary Pressure	300 psig (17.2 bar)
Secondary Pressure Range –	10 to 125 psig (0.7 to 8.6 bar) 10 to 180 psig (0.7 to 12.4 bar)
Temperature Rating	32°F to 150°F (0°C to 66°C)
Weight	10.82 lb. (53 kg)

### **Materials of Construction**

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



Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Combos



# 10R Pilot Controlled Regulator – Economy

Coalescers

Regulators

Filter/ Regulators

Lubricators

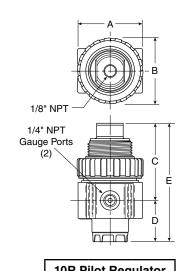
Combos

Accessories

#### **Features**

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

3/8" - 50 SCFM§



Port Size	NPT
Without Gaug	е
1/4"	10R115PB
3/8"	10R215PB
With 160 PSI	Gauge
1/4"	10R121PB
3/8"	10R221PB

Dimensions		
<b>A</b> 2.00 (51)	<b>B</b> 2.06 (52)	<b>C</b> 2.43 (62)
<b>D</b> 1.28 (32)	<b>E</b> 3.71 (94)	

Inches (mm)

Standard part numbers shown bold. 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.

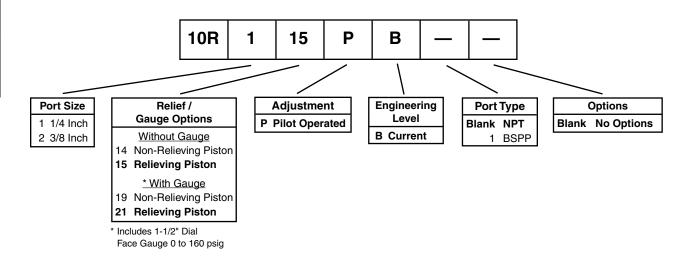
### **↑ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

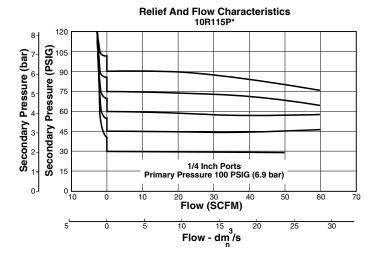
### **Ordering Information**



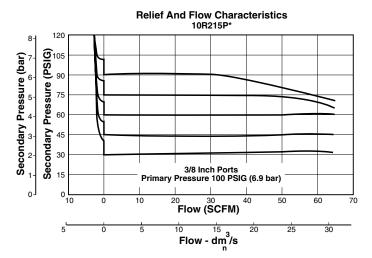
C82

**BOLD ITEMS ARE MOST POPULAR.** 





(Revised 10-08-13)



### 10R Pilot Regulator Kits & Accessories

Gauges – 1-1/2" Dial Face	
30 psig (0 to 2.1 bar)	K4515N14030
60 psig (0 to 4.1 bar)	K4515N14060
160 psig (0 to 11.0 bar)	K4515N14160
300 psig (0 to 20.0 bar)	K4515N14300
2" Dial Face	
60 psig (0 to 4.1 bar)	K4520N14060
160 psig (0 to 11.0 bar)	K4520N14160
300 psig (0 to 20.0 bar)	K4520N14300
Mounting Bracket Kit	PS963P
Panel Mount Nut – Metal	PS964P
Pilot Conversion Kit	PS945P
Service Kits - Relieving	
Non-Relieving	PS94700P

### **Specifications**

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

### **Materials of Construction**

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

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# Coalescers

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# 11R Pilot Controlled Regulator - Compact

Coalescers

Regulators

Filter / Regulators

Lubricators

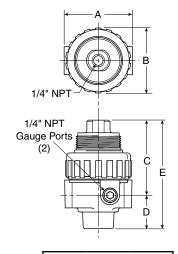
Accessories

### **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§



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

Inches (mm)

Port Size	NPT
Without Gaug	е
1/4"	11R115PB
3/8"	11R215PB
1/2"	11R315PB
With 160 PSI	Gauge
1/4"	11R121PB
3/8"	11R221PB
1/2"	11R321PB

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

NOTE: 2.00 Dia. (50,8mm) hole required for panel mounting.

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

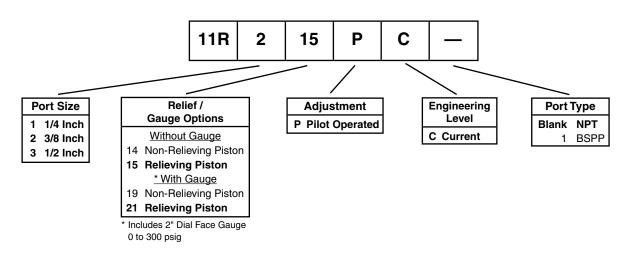
### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### **Ordering Information**



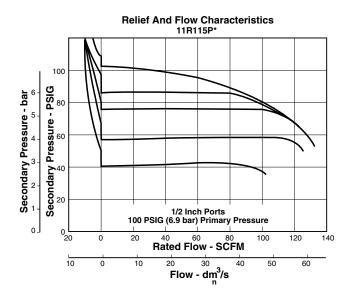
C84

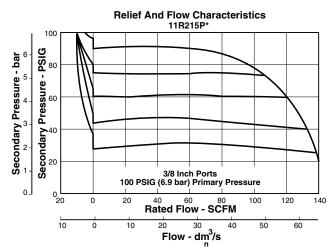
**BOLD ITEMS ARE MOST POPULAR.** 



(Revised 05-13-14)

### **Technical Information**





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

**Specifications** 

Gauge Ports (2)	1/4 Inch	
(Can be used as additional Full Flow 1/4 Inch Outlet Por	ts)	
Port Threads1/4, 3/8	, 1/2 Inch	
Pressure & Temperature Rating – 0 to 250 psig (0 to 17.2 bar)		
32°F to 175°F (0°C	to 80°C)	
Weight1.3 lb.	(0.58 kg.)	

### **Materials of Construction**

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



Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Combos



# 12R Pilot Controlled Regulator - Standard

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

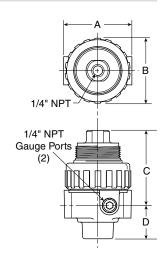
Combos

Accessories

#### **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 Flo Μ§

OW:	1/2" 3/4"	-	_	_	
<u> </u>			1		



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

Inches (mm)

Port Size	NPT		
Without Gaug	Without Gauge		
1/2"	12R315PB		
3/4"	12R415PB		
With 160 PSI	With 160 PSI Gauge		
1/2"	12R321PB		
3/4"	12R421PB		

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

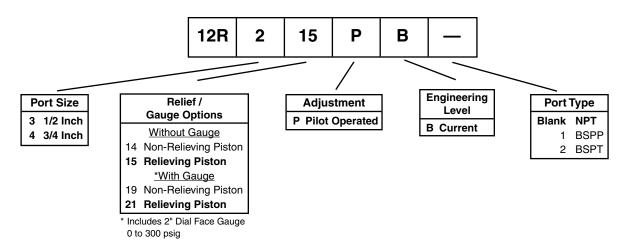
NOTE: 2.00 Dia. (50,8mm) hole required for panel mounting.

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

### **↑ WARNING**

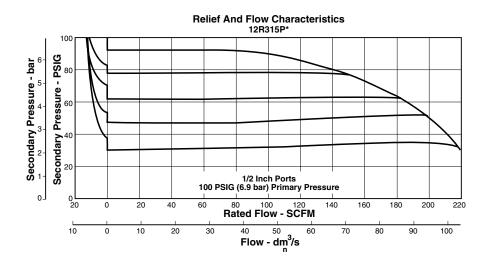
Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

### **Ordering Information**



**BOLD ITEMS ARE MOST POPULAR.** 





(Revised 05-13-14)

Body Service Kits - Seat Insert Kit PS813F			
Gauges – 2" Dial Face			
60 psig (0 to 4.1 bar)	K4520N14060		
160 psig (0 to 11.0 bar)			
300 psig (0 to 20.0 bar)	K4520N14300		
1-3/4" Digital Round Face			
160 psig (0 to 11.0 bar)	. K4517N14160D		
Mounting Bracket Kit (Includes Panel Mount Nut).	PS807P		
Panel Mount Nut - Plastic	P04082		
Metal	P04079B		
Pilot Conversion Kit – Relieving	PS745P		
Service Kits – Non-Relieving	PS847P		
Relieving	PS849P		

### **Specifications**

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

### **Materials of Construction**

Zinc
Plastic
Nitrile
Steel



Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

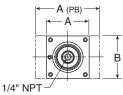
Combos

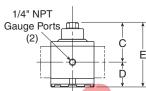


### P3NR Pilot Controlled Regulator - Hi-Flow

#### **Features**

- Port blocks (PB) available to provide 1-1/2" port extension to 1" ported bodies.
- Self relieving feature plus balanced poppet provides quick response and accurate pressure regulation.
- · Solid control piston for extended life.
- High Flow: 3/4" 300 SCFM§
   1" 300 SCFM§
   1-1/2" 350 SCFM§





Port Size	NPT		
Without Gaug	e		
3/4"	P3NRA96BPP		
1"	P3NRA98BPP		
1-1/2" #	P3NRA9PBPP		
With 160 PSI	Gauge		
3/4"	P3NRA96BPG		
1"	P3NRA98BPG		
1-1/2" #	P3NRA9PBPG		

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

- # 1" Port Body with 1-1/2" Port Block
- § SCFM = Standard cubic feet per minute at 100 psig inlet, 90 psig setting and 10 psig pressure drop.

- ITE		Pilot Reg	gulator ns
	<b>A</b>	<b>A</b> (PB)	<b>B</b>
	3.62	5.91	3.62
	(92)	(150)	(92)
COLET	<b>C</b>	<b>D</b>	<b>E</b>
	3.38	2.08	5.46
	(86)	(53)	(139)
	Inches (mi	m)	

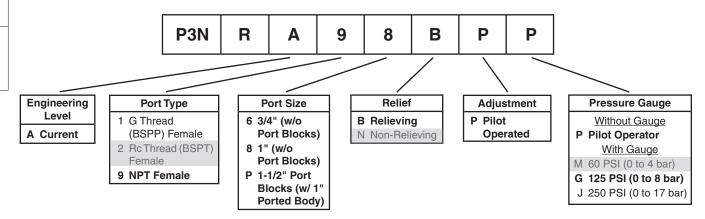
### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### **Ordering Information**



C88

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

**BOLD ITEMS ARE MOST POPULAR.** 



Product Selection

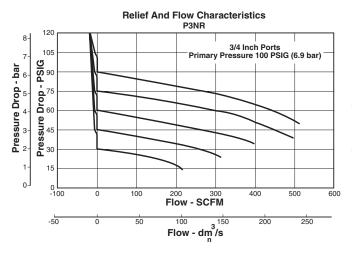
ilters

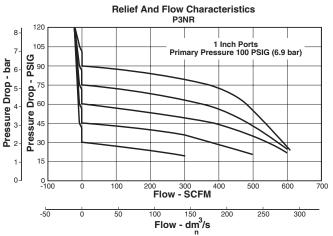
Coalescers

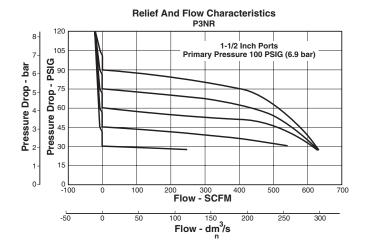
Regulators

Filter/ Regulators

Lubricators







C89

### **P3NR Pilot Regulator Kits & Accessories**

Gauges – 2" Dial Face	
60 psig (0 to 4.1 bar)	K4520N14060
160 psig (0 to 11.0 bar)	K4520N14160
300 psig (0 to 20.0 bar)	K4520N14300
1-3/4" Digital Round Face	
160 psig (0 70 11.0 bar)	K4517N14160D
Mounting Bracket Kit*	P3NKA00MW
Service Kit - Relieving	P3NKA00PD

### **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)

### **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.	

 $^{\star}$  If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.



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Product Selection

Filters

Coalescers

Regulators

Filter/ Regulator

Lubricators

Combos

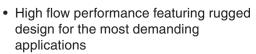
### **R119 Series**

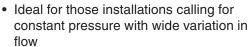
### R119 - Pilot Operated Regulators

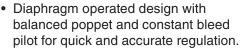


### **Features**

 Adapted for control by a remote or distant small pilot regulator. Ideal for maximum capacity requirements in applications where units are not readily accessible







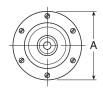
 Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation

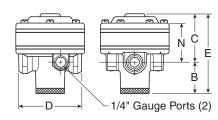
· Reverse flow available

High flow: 1/4" - 100 SCFM§

3/8" - 110 SCFM§

1/2" - 150 SCFM§





R119 Regulator Dimensions					
Α	В	С	D	E	N
R119-	R119-02J, R119-03J				
3.00 (76)	1.38 (35)	1.98 (50)	2.74 (70)	3.55 (90)	1.57 (40)
R119-04J					
3.56 (90)	1.56 (40)	2.33 (59)	3.25 (83)	3.90 (99)	1.91 (49)

inches (mm)

Port Size	NPT Relieving	BSPP Relieving		
	richeving	richeving		
Without Gauge 0-125 PSIG Reduced Pressure				
1/4"	R119-02J/M2	R119G02J		
3/8"	R119-03J/M2	R119G03J		
1/2"	R119-04J/M2	R119G04J		

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

§ SCFM = Standard Cubic Feet Per Minute at 100 PSIG Inlet, 75 PSIG No Flow Secondary Setting, and 20 PSIG Pressure Drop.

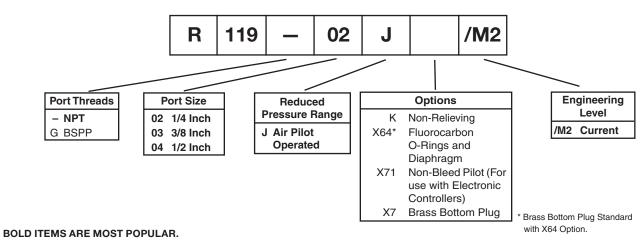
#### **MARNING**

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

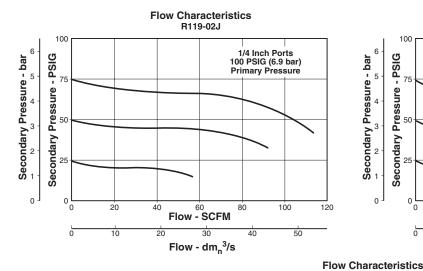
Product rupture can cause serious injury.

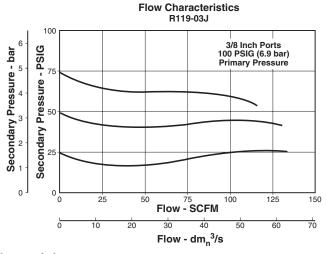
### **Ordering Information**





Coalescers





## R119-04J 100 1/2 Inch Ports Secondary Pressure - PSIG Secondary Pressure - bar 100 PSIG (6.9 bar) Primary Pressure 75 100 12 Flow - SCFM 80 90 Flow - dm<sub>n</sub><sup>3</sup>/s

### **R119 Regulator Kits & Accessories**

Gauges – 2" Dia	I Face	
60 psig	g (0 to 4.1 bar)	K4520N14060
160 ps	ig (0 to 11.0 bar)	K4520N14160
300 ps	sig (0 to 20.0 bar)	K4520N14300
	Digital Round Face	
160 ps	sig (0 to 11.0 bar)	K4517N14160D
Repair Kits – Non-Relieving D	Diaphragm,	
Valve Assembly	· (1/2")	RK118X20A
Non-Relieving D Valve Assembly		RK118X20Y
Relieving Diaph Valve Assembly		RK119X20A
Relieving Diaph Valve Assembly	•	RK119X20Y
For Fluorocarbon Repair Kits, add X64 to Kit Number suffix.		

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

Reduced Pressure Range -

**Specifications** 

Pilot Port -

Adjustable to within 5 to 7 PSIG of Supply Pressure

Supply Pressure ......300 PSIG Maximum (20.4 bar) Air Consumption -Constant bleed from air pilot chamber: approx. 0.17 SCFM (10 SCFH)

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

Weight -R119-02J, R119-03J ...... 1.6 lb. (0.73 kg) / Unit 19 lb. (8.62 kg) / 12-Unit Master Pack R119-04J ...... 2.6 lb. (1.18 kg) / Unit

### **Materials of Construction**

Body, Ring, Top Plate	Zinc
Bottom Plug	Nylon
Innervalve	Brass
Seals	Buna N



Coalescers

Filters

Regulators

Lubricators Combos

Accessories

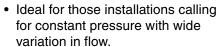
21 lb. (9.53 kg) / 8-Unit Master Pack

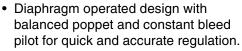
### **R119 Pilot Operated Regulators - Hi-Flow**

#### **Features**

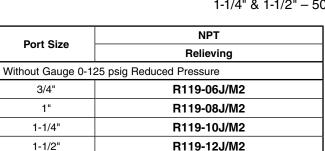
 Adapted for control by a remote or distant small pilot regulator. Ideal for maximum capacity requirements in applications where units are not readily accessible.





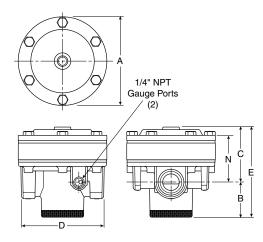


- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- · Reverse flow version available.
- High Flow: 3/4" & 1" 300 SCFM§ 1-1/4" & 1-1/2" – 500 SCFM§



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

§ SCFM = Standard Cubic Feet Per Minute at 100 psig Inlet, 75 psig No Flow Secondary Setting, and 20 psig Pressure Drop.



	R119-06J, R119-08J Pilot Regulator Dimensions				
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	N
4.72	1.87	2.94	4.38	4.81	2.47
(120)	(47))	(75)	(111)	(122)	(63)
R119-10J, R119-12J Pilot Regulator Dimensions					
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	N
4.94	1.81	3.32	4.94	5.13	2.88
(125)	(46)	(84)	(125)	(130)	(73)

inches (mm)

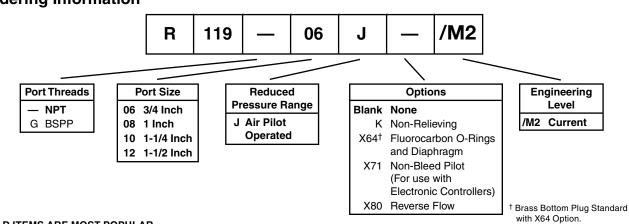
### **↑** WARNING

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### **Ordering Information**



BOLD ITEMS ARE MOST POPULAR.

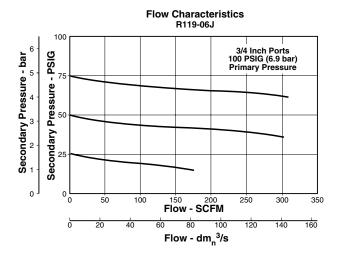


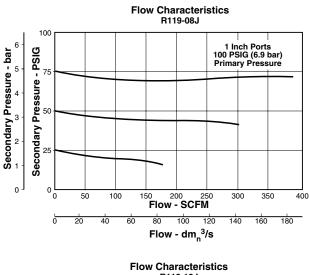
Coalescers

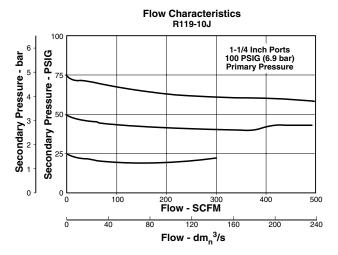
Regulators

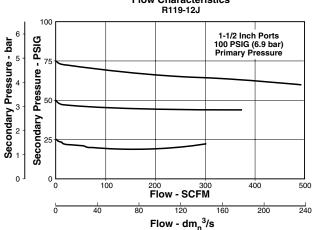
(Revised 05-13-14)

### **Technical Information**









### **R119 Regulator Kits & Accessories**

<b>3</b>	60 psig (0 to 4.1 bar)	K4520N14160
	<b>1-3/4" Digital Round Face</b> 160 psig (0 to 11.0 bar)	K4517N14160D
	<b>ts –</b> ·lieving Diaphragm, ssembly (3/4", 1")	RK118X20B
	lieving Diaphragm, ssembly (1-1/4", 1-1/2")	RK118X20D
	ng Diaphragm, ssembly (3/4", 1")	RK119X20B
	ng Diaphragm, ssembly (1-1/4", 1-1/2")	RK119X20D
For Fluoro	carbon Repair Kits, add X64 to	Kit Number suffix.

### **Specifications**

<b>Port Threads</b>
Reduced Pressure Range – Adjustable to Within 5 to 7 psig of Supply Pressure
Supply Pressure
Air Consumption – Constant Bleed from Air Pilot Chamber: Approximately 0.17 SCFM (10 SCFH)
Temperature Rating40°F to 125°F (4.4°C to 52°C)
<b>Weight –</b> R119-06J, R119-08J 5.2 lb. (2.36 kg) / Unit 42 lb. (19.05 kg) / 8-Unit Master Pack
R119-10J, R119-12J 5.6 lb. (2.54 kg) / Unit

### **Materials of Construction**

C93

Body, Ring, Top Plate	Zinc
Bottom Plug, Innervalve	Brass
Seals	Buna N



Gauges - 2" Dial Face

46 lb. (20.87 kg) / 8-Unit Master Pack

C

Product Selection

Filters

Coalescers

Regulators

Filter / Regulators

Lubricators

Combos

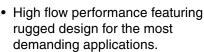
### **Hi-Flow R119 Series**

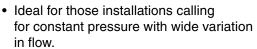
### **R119 Pilot Operated Regulators - Hi-Flow**



#### **Features**

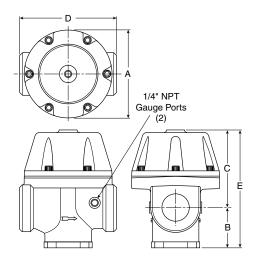
 Adapted for control by a remote or distant small pilot regulator. Ideal for maximum capacity requirements in applications where units are not readily accessible.





 Piston operated design with balanced poppet and dual constant bleed for quick and accurate regulation.

High Flow: 2" & 2-1/2" – 1800 SCFM§



Port Size	NPT	
	Relieving	
Without Gauge 0-125 psig Reduced Pressure		
2"	R119-16J	
2-1/2"	R119-20J	

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

§ SCFM = Standard Cubic Feet Per Minute at 100 psig Inlet, 75 psig No Flow Secondary Setting, and 20 psig Pressure Drop.

R119-16J, R119-20J Pilot Regulator Dimensions					
Α		В	С	D	E
6.63		.09 79)	7.78	7.31	10.87
(168)	(	79)	(147)	(185)	(276)

inches (mm)

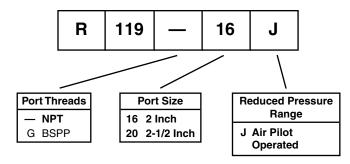
### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### **Ordering Information**



C94

NOTE: Non-Relieving Not Available.

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



Produ Selecti

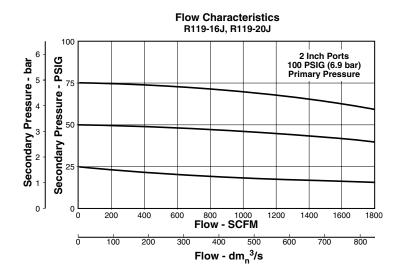
Filters

Coalescers

Regulators

Filter / Regulators

Lubricato



## R119 Regulator Kits & Accessories

Gauges –	2" Dial Face	
	60 psig (0 to 4.1 bar)	K4520N14060
	160 psig (0 to 11.0 bar)	K4520N14160
	300 psig (0 to 20.0 bar)	K4520N14300
	1-3/4" Digital Round Face	
	160 psig (0 to 11.0 bar)	K4517N14160D
Repair Kit	s –	
Piston	Type Regulation (2", 2-1/2")	RK119G

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

(Can be used for Full Flow) High Pressure Outlet for Pilot (Not seen in photo)1/4 Inch
Port Threads2, 2-1/2 Inch
Reduced Pressure Range – Adjustable to Within 5 to 7 psig of Supply Pressure
Supply Pressure
Air Consumption – Constant Bleed from Air Pilot Chamber: Approximately 0.17 SCFM (10 SCFH)
Constant Bleed from Reduced Pressure: Approximately 0.17 SCFM (10 SCFH)
<b>Temperature Rating</b> 40°F to 120°F (4.4°C to 48.9°C)
<b>Weight –</b> R119-16J, R119-20J 15 lb. (6.80 kg) / Unit

### **Materials of Construction**

Body, Piston	Aluminum
Seals	Buna N
Innervalve	Brass & Stainless



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Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Combos

Accessories



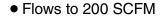
15 lb. (6.80 kg) / 1-Unit Master Pack

# Prep-Air® II Air Preparation Units

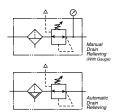
### Filter / Regulators

### Filter / Regulators

• Pipe Sizes 1/8 thru 1-1/2 Inch



Pressures to 250 psig



C

Product Selection

Filters

Coalescers

Regulators

Filter / Regulators

Lubricators

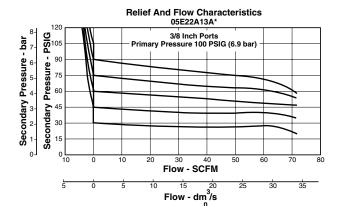
Integral Filter / Regulators are an excellent choice where accurate pressure regulation and high moisture removal efficiency are required in a space saving package.

- Miniature 14E Series, 1/8 and 1/4 Inch
- Miniature B34 Series, 1/8 and 1/4 Inch
- Economy 05E Series, 1/4 and 3/8 Inch
- Compact 06E Series, 1/4, 3/8 and 1/2 Inch
- Standard 07E Series, 3/8, 1/2 and 3/4 Inch
- Hi-Flow P3NE Series, 3/4, 1 and 1-1/2 Inch
- Standard / Coalescing 12E Series, 3/8, 1/2 and 3/4 Inch

### Filter / Regulator Selection

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

# Reading Flow Charts to Size Filter / Regulators



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

#### **↑** WARNING

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### **CAUTION:**

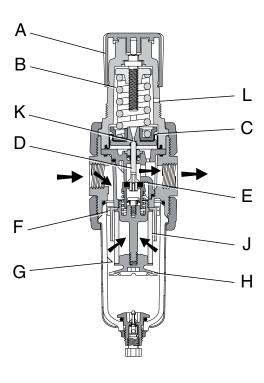
**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and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

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



### Filter / Regulator

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



Filters

Coalescers

Regulators

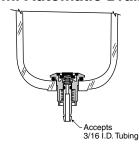
Filter / Regulators

Compos

Lubricators

Accessories

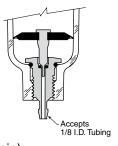
#### **Semi Automatic Drain**



### (Overnight Drain)

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

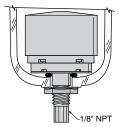
#### **Automatic Pulse Drain**



### (Spitter Drain)

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

#### **Automatic Float Drain**



The float internal to this drain rises with increased liquid level. When the float rises, it opens a seat area allowing the trapped liquids to drain through the bottom.

A manual override can be pushed in the bottom of the drain to unseat the float if particulates create a block.



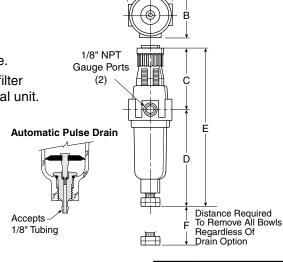
# Features



i catares

- 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	NPT	
Size	Twist Drain	Automatic Pulse Drain
Poly Bowl <sup>‡</sup>		
1/8"	14E01B13FC	14E05B13FC
1/4"	14E11B13FC	14E15B13FC
Metal Bowl		
1/8"	14E03B13FC	14E07B13FC
1/4"	14E13B13FC	14E17B13FC

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

‡For polycarbonate bowl see Caution on page C2.

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

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

14E Filter / Regulator Dimensions			
<b>A</b> 1.62 (41)	<b>B</b> 1.58 (40)	<b>C</b> 2.42 (61)	
<b>D</b> 3.79 (96)	<b>D</b> <sup>†</sup> 3.64 (92)	<b>E</b> 6.21 (158)	
<b>E</b> <sup>†</sup> 6.06 (154)	<b>F</b> 1.60 (41)		

Preset / Pressure

Limited

None

Preset

Pressure

Pressure

Limited

Available Preset /

Pressure Limited

contact factory.

(Example:

065 = 65 psig

Range, 10 to 90 psig

in 5 psig increments.

For higher pressures,

Blank

XXX\*

XXX\*

Inches (mm) † With Auto Drain

## Ordering Information

BOLD ITEMS ARE MOST POPULAR.

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

# Elements

14E

1

1

A 40 Micron
B 5 Micron
Z Adsorber

# Relief F Relieving

В

13

C98

G Non-Relieving
H\* Low Temp Relieving

# Port Type Blank NPT 1 BSPP 2 BSPT

C

Twist Drain Only.

With

### Engineering Level C Current

F

# Options Blank No Options L<sup>†</sup> Preset Non-Adjustable

P<sup>†</sup> Preset Adjustable S<sup>†</sup> Pressure

Limiter Max.

Limiter Max. Adjustable T<sup>†</sup> Pressure

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

# Bowl Options Polycarbonate Bowl

- 1 Twist Drain5 Automatic Pulse Drain
  - Metal Bowl
- 3 Twist Drain7 Automatic Pulse Drain

 Gauge
 Gauge\*

 10 30 psig
 15 30 psig

 11 60 psig
 16 60 psig

 12 15 psig
 17 15 psig

 13 125 psig
 18 125 psig

Without

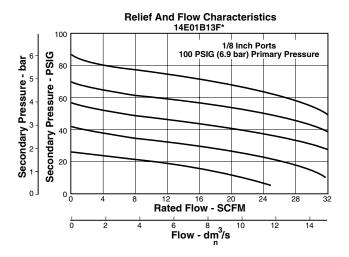
\* Not available with BSPP or BSPT port types.

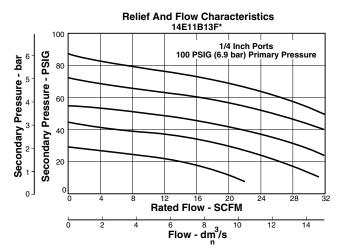
**Pressure Range** 

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

For Preset / Limited Pressure 10 to 25 use 30 PSI Spring For Preset / Limited Pressure 26 to 50 use 60 PSI Spring

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





### **CAUTION:**

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

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

# 14E Filter / Regulator Kits & Accessories Bonnet Tamperproof Kit.......P01

Boillet lamperproof KitF01265
Bowl Kits –
Poly Bowl – Automatic Drain
Twist DrainPS404P
Metal Bowl – Automatic DrainPS451BP
Twist DrainPS447BP
Filter Element Kits – 40 MicronPS401P
5 MicronPS403P
AdsorberPS452P
<b>Gauges –</b> 30 psig (0 to 2.1 bar) K4515N18030
60 psig (0 to 4.1 bar) K4515N18060
160 psig (0 to 11.0 bar)K4515N18160
Mounting Bracket Kit* (Includes Panel Mount Nut)PS417BP
Panel Mount Nut*P78652
Poppet / Piston Kits - Unbalanced, Non-RelievingPS428P
Unbalanced, RelievingPS426P
<b>Springs</b> – 1- 15 psig Range (Yellow)P01176
1- 30 psig Range (Black)
1- 60 psig Range (White)P01174
2- 125 psig Range (Gold)P01173
Specifications
Automatic Pulse Drain Tube Barb
Bowl Capacity1 Ounce
Gauge Ports (2) (Can be used for Full Flow)
Port Threads
*Tighten panel mount nut 2.8 to 3.4 Nm (25 to 30 in-lbs) of torque.

### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### Pressure & Temperature Ratings –

Polycarbonate Bowl

0 to 150 psig (0 to 10.3 bar), 32°F to 125°F (0°C to 52°C)

Metal Bowl

0 to 250 psig (0 to 17.2 bar), 32°F to 175°F (0°C to 80°C)

### Secondary Pressure Ranges -

/ei	aht	0.4 lb (0.18 kg)
	Low Pressure	1 to 15 psig (0 to 1 bar)
	Medium Pressure	1 to 60 psig (0 to 4.1 bar)
	Medium Pressure	1 to 30 psig (0 to 2.1 bar)
	Standard Pressure	2 to 125 psig (0 to 8.6 bar)

### **Materials of Construction**

C99

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



### **B34 Miniature Filter / Regulator**

### **Features**

- Excellent Water Removal Efficiency
- Diaphragm Operated for Fast Operation
- Large Diaphragm to Valve Area for Precise Regulation and High Flow capacity
- Balanced Valve Design for Precise Regulation
- Space Saving Package Offers Both Filter and Regulator Features in One Integral Unit
- Non-rising Adjustment Knob
- FM§

	• High Flow: 1/8" – 17 SCI 1/4" – 19 SCI
Port	NPT
Size	Manual Twist Drain
Poly Bowl <sup>‡</sup>	
1/8"	B344-01AGC
1/4"	B344-02AGC
Metal Bowl wi	thout Sight Gauge
1/8"	B344-01DGC
1/4"	B344-02DGC

**Bold Items are Most Popular.** 

For other models refer to ordering information below.

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

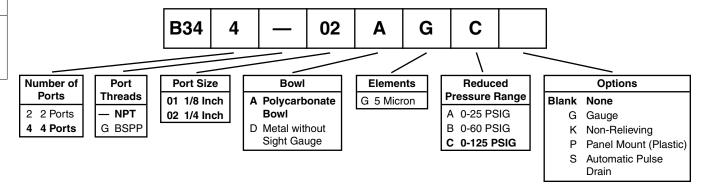
- ‡ For polycarbonate bowl see Caution on page 2.
- § SCFM = Standard cubic feet per minute at 100 PSIG inlet, 75 PSIG no flow secondary setting and 25% pressure drop.

A
1/8" NPT Gauge Ports (2)
D D
Distance Required F To Remove All Bowls Regardless Of Drain Option

B34 Filter / Regulator Dimensions		
<b>A</b> 1.54 (39.2)	<b>C</b> 2.68 (68.1)	<b>D</b> 3.63 (92.1)
<b>E</b> 6.31 (160.2)	<b>F</b> 1.65 (41.9)	

Inches (mm) † With Auto Drain

### **Ordering Information**



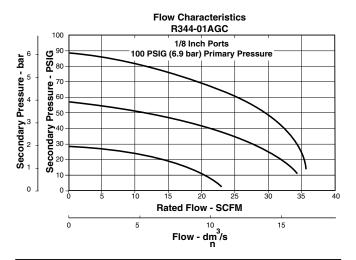
C100

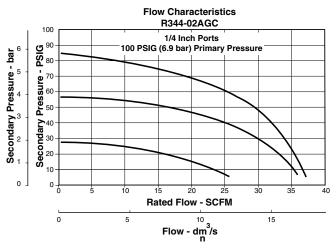
**BOLD ITEMS ARE MOST POPULAR.** 



### Filter / Regulators

### **Technical Information**





### **⚠ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

### **!**CAUTION:

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

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

### **B34 Filter / Regulator Kits & Accessories**

Adjusting Knob	RRP-16-005-000
Bowl Kits -	
Zinc (D)	BK505Y
Zinc with Automatic Pulse Drain (D)	BK505SY
Polycarbonate (A)	
Polycarbonate with Automatic Pulse Drain (A)	BK504SY
Drain Kits –	
Automatic Pulse Drain	
(Maximum Pressure = 175 PSIG)	RK504SY
Filter Element Kits –	
5 Micron (All)	FRP-96-729
Gauges –	
1-1/2" Dial Size, 1/8" Back Connection	
0 to 60 PSIG (0 to 400 kPa)	K4515N18060
1-1/2" Dial Size, 1/8" Back Connection	
0 to 160 PSIG (0 to 1100 kPa)	K4515N18160
Mounting Bracket Kit (Includes Plastic Panel N	lut) SA161X57
Panel Mount Nut –	
Plastic	R05X51-P
Aluminum	R05X51-A
Repair Kits –	
Non-Relieving Diaphragm, Valve Assembly (All	) GRP-96-726
Relieving Diaphragm, Valve Assembly (All)	GRP-96-725
<b>Springs</b> –0-25	GRP-95-111
0-60	
0-125	GRP-96-717

### **Specifications**

1 Ounce
1/8 Inch
0 to 300 PSIG
0 to 150 PSIG
1/8 &1/4 Inch
(0 to 1.7 bar) (A)
(0 to 4.1 bar) (B)
(0.15 to 8.5 bar) (C)
40°F to 125°F (4.4°C to 52°C)
0.6 lb. (0.27 kg) / Unit
12 lb. (5.44 kg) / 24-Unit Master Pack
6 lb. (2.72 kg) / 24-Unit Master Pack

### **Materials of Construction**

C101

Adjusting Knob	Acetal
Body	Aluminum
Bowls -	
Polycarbonate (A)	Polycarbonate
Metal (D)	Zinc
	Zinc with Automatic Pulse Drain
Elastomers	Buna N
Filter Element	Sintered Polyethylene
Filter Retainer, Vane Plate	Acetal
Innervalve, Diaphragm, Button,	DrainBrass



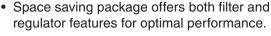
1/4" NPT Gauge Ports

(2)

# 05E Filter / Regulator - Economy

# **Features**





Excellent water removal efficiency.

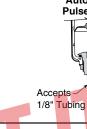
Rolling diaphragm for extended life.

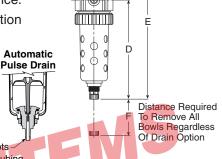
· Removable non-rising knob for tamper resistance.

 Quick response, and accurate pressure regulation regardless of changing flow or inlet pressure.

• 40 micron filter element standard, 5 micron and adsorber available.

 High Flow: 1/4" – 30 SCFM<sup>§</sup> 3/8" - 40 SCFM§





Port	NE	PT
Size	Twist Drain	Automatic Pulse Drain
Poly Bowl <sup>‡</sup> / Metal Guard		
1/4"	05E12A13A*	05E1PA13A*
3/8"	05E22A13A*	05E2PA13A*
Metal Bowl / Sight Gauge		
1/4"	05E14A13A*	05E1TA13A*
3/8"	05E24A13A*	05E2TA13A*

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

‡ For polycarbonate bowl see Caution on page C2.

§SCFM = Standard cubic feet per minute at 100 psig inlet,

90 psig no flow secondary setting and 10 psig pressure drop.

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

### **∕** WARNING

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

05E Filter / Regulator Dimensions			
<b>A</b> 2.00 (51)	<b>B</b> 2.06 (52)	<b>C</b> 3.16 (80)	
<b>D</b> <sup>†</sup> 5.35 (136)	<b>E</b> <sup>†</sup> 8.51 (216)	<b>F</b> 1.77 (45)	

None

Preset

Pressure

Pressure

Limited

Available Preset /

Pressure Limited

contact factory.

065 = 65 psig

(Example:

Range, 10 to 90 psig in 5 psig increments. For

Inches (mm) † With Twist Drain or Auto Pulse Drain

#### Ordering 2 13 05E 1 Α Α В Information Port Size **Elements** Relief **Port Type Preset / Pressure** Limited 1 1/4 Inch A 40 Micron A Relieving **NPT Blank** 2 3/8 Inch B 5 Micron **BSPP** Blank L Non-Relieving **BSPT** XXX\* Adsorber H Low Temp.

Relieving

### **Bowl Options** Polycarbonate Bowl

1 Twist Drain

2 Metal Bowl Guard / Twist Drain

N Automatic Pulse Drain

P Metal Bowl Guard / Auto Pulse Drain Metal Bowl

3 Twist Drain

4 Sight Gauge / Twist Drain

R Automatic Pulse Drain

T Sight Gauge / Auto Pulse Drain

19<sup>§</sup> 200 psig 14<sup>§</sup> 200 psig Includes 1-1/2" Dial Face Gauge § Requires Metal Bowl

Without

<u>Gauge</u>

10 30 psig

11 60 psig

13 125 psig

Spring Type by Preset / Limited Pressure: For Preset / Limited Pressure 10 to 25 use 30 PSI Spring For Preset / Limited Pressure 26 to 50

C102

Gauge\*

17 30 psig

16 60 psig

18 125 psig

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

Pressure Range

Engineering Level

**B** Current

#### Options Blank No Options L<sup>†</sup> Preset

1/4 & 3/8 inch meet

ISO 1179-1 Standard

Non-Adjustable Preset Adjustable

Pressure Limiter

Max. Adjustable Pressure Limiter Max. Non-Adj.

Inlet Pressure is 100 psig For other pressures, contact

**BOLD ITEMS ARE MOST POPULAR.** 



Coalescers

**Filters** 

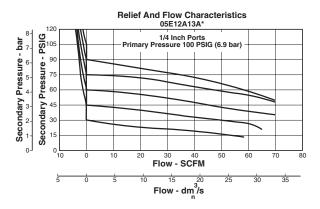
Regulators

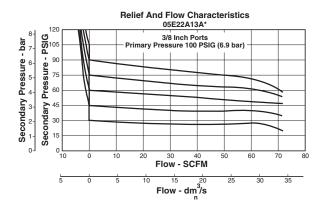
Filter / Regulators

Lubricators

## Technical Specifications – 05E

### **Technical Information**





### **CAUTION:**

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

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

### 05E Filter / Regulator Kits & Accessories

Bowl Guard Kit	PS905P
Bowl Kits –	
Poly Bowl - Automatic Pulse Drain	PS995P
Twist Drain	PS932P
Metal Bowl - Automatic Pulse Drain	P\$997P
Twist Drain	PS934P
Sight Gauge / Automatic Pulse Drain	
Sight Gauge / Twist Drain	PS935P
Drain Kit –	
Automatic Pulse Drain	
Semi-Auto Drain	
Twist Drain	
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 2.1 bar)	K4515N14030
00 ' (01 111 )	
60 psig (0 to 4.1 bar)	K4515N14060
60 psig (0 to 4.1 bar)	
	K4515N14160
160 psig (0 to 11.0 bar)	K4515N14160
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060 K4520N14160
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060 K4520N14160 K4520N14300
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060 K4520N14160 K4520N14300 PS963P
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060 K4520N14160 K4520N14300 PS963P PS964P
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060 K4520N14160 K4520N14300 PS963P PS964P
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060 K4520N14160 K4520N14300 PS963P PS964P P04427
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060 K4520N14160 K4520N14300 PS963P PS964P P04427 P04426
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060 K4520N14160 K4520N14300 PS963P PS964P P04427 P04426 P04425 P02934
160 psig (0 to 11.0 bar)	K4515N14160 K4515N14300 K4520N14060 K4520N14160 K4520N14300 PS963P PS964P P04427 P04426 P04425 P02934 PS908P

Bonnet Assembly Kit ...... PS915P

### **Specifications**

Bowl Capacity	2.0 Ounce	
Gauge Port (2)	1/4 Incl	
Sump Capacity	0.9 Ounce	
Port Threads	1/4, 3/8 Incl	
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)

#### **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)	
Knob	Plastic
Seals	Nitrile
Sight Gauge	Polyamide (Nylon)
Springs - Poppet & Control	Steel



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# Coalescers

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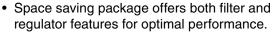
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Lubricators



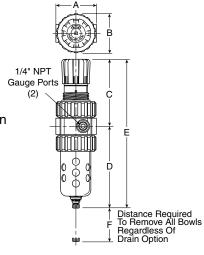
## 06E Filter / Regulator – Compact

### **Features**



- · 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		
	Twist Drain	Automatic Float Drain	
Poly Bowl <sup>‡</sup> / N	Metal Guard		
1/4"	06E12A13AC	06E16A13AC	
3/8"	06E22A13AC	06E26A13AC	
1/2"	06E32A13AC	06E36A13AC	
Metal Bowl / Sight Gauge			
1/4"	06E14A13AC	06E18A13AC	
3/8"	06E24A13AC	06E28A13AC	
1/2"	06E34A13AC	06E38A13AC	

Dimensions			
Α	В	С	D
2.81	2.74	4.69	5.69
(71)	(70)	(119)	(145)
D <sup>†</sup>	Е	Ε <sup>†</sup>	F
5.74	10.38	10.43	2.25
(146)	(264)	(265)	(57)

06E Filter / Regulator

Inches (mm) † With Twist Drain or Auto Pulse Drain

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

Auto Float Drain

**Auto Float Drain** 

8 Sight Gauge /

15§ 250 psig

§ If 250 psig spring range is

used, use metal bowl.

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

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

### **⚠ WARNING**

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

#### Ordering 1 2 06E A 13 C Α Information **Port Size Elements** Relief **Port Type** Preset 1 1/4 Inch A 40 Micron A Relieving Blank None Blank NPT 2 3/8 Inch B 5 Micron L Non-Relieving $XXX^*$ Preset BSPP 3 1/2 Inch Pressure 1/4 & 3/8 inch meet ISO 1179-1 Standard. Available Preset Range, 10 to 90 psig in 5 psig increments **Bowl Options Pressure Range** Engineering **Options** For higher pressures, contact factory. Level Polycarbonate Bowl Metal Bowl Without With **Blank** No Options (Example: 2 Metal Bowl Guard / 3 Twist Drain Gauge <u>Gauge</u> Preset C Current 065 = 65 psig**Twist Drain** 16 60 psig Non-Adjustable 4 Sight Gauge / 11 60 psig 6 Metal Bowl Guard / **Twist Drain** Preset Adjustable 13 125 psig 18 125 psig

**BOLD ITEMS ARE MOST POPULAR.** 



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

† Inlet Pressure is 100 psig. For

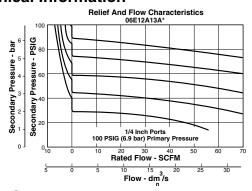
other pressures, contact



**Auto Float Drain** 

250 psig

21§



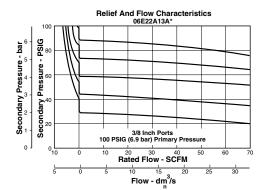
### **CAUTION:**

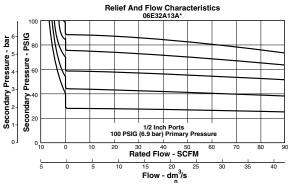
**REGULATOR PRESSURE ADJUSTMENT – The working** range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and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

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

### 06E Filter / Regulator Kits & Accessories

	i / negulator Kits & Acc	
Bonnet Assem	bly Kit	PS715P
<b>Bowl Guard Ki</b>	t	PS705P
Bowl Kits -		
Poly Bowl -	Automatic Float Drain	PS722P
•	Twist Drain	PS732P
Metal Bowl -	Automatic Float Drain	PS726P
	Semi-Auto Drain	PS794P
	Twist Drain	PS734P
	Sight Gauge / Automatic Drain	PS723P
	Sight Gauge / Twist Drain	PS735P
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	PS701P
	5 Micron	PS702P
	Adsorber	PS731P
Gauges - 2"	Dial Face	
	psig (0 to 4.1 bar)	
160	) psig (0 to 11.0 bar)	K4520N14160
300	) psig (0 to 20.0 bar)	K4520N14300
1-3	/4" Digital Round Face	
160	) psig (0 to 11.0 bar)	K4517N14160D
Mounting Brad	ket Kit (Includes Panel Mount Nut)	PS707P
Panel Mount N	ut	P04082
Service Kits -	Non-Relieving (Includes Poppet)	PS711P
	Relieving (Includes Poppet)	
Seat Insert Kit		PS713P
Springs - 1-3	0 psig Range	P01698
	0 psig Range	
	25 psig Range	
5- 2	50 psig Range	P04064
	(it (Key Lock)	
Specifications		
-		4.4.0
Bowl Capacity		
Gauge Ports (2)		
(Can be used	a as Additional Full Flow 1/4" Outlet Ports	5)





#### Pressure & Temperature Ratings -

Polycarbonate Bowl - 0 to 150 psig (0 to 10.4 bar) 32°F to 125°F (0°C to 52°C) Metal Bowl - 0 to 250 psig (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)

Automatic Float Drain - 15 to 250 psig (1.0 to 17.2 bar)

Secondary Pressure Ranges –	
Standard Pressure	2 to 125 psig (0 to 8.6 bar)
Low Pressure	1 to 60 psig (0 to 4.1 bar)
High Pressure	5 to 250 psig (0.4 to 17.2 bar)
Sump Capacity	1.75 Ounces
Weight	1.6 lb. (0.7 kg)

### **Materials of Construction**

Adjusting Stem	
Bonnet, Internal Parts	
Bowls Available – Transparent	
•	,
Metal (With or Without Sight	• ,
Bowl Guard	
Collar	
Diaphragm	Nitrile
Drains - Manual Twist Drain Standard	
Body & Nut	Plastic
Manual Push 'N' Drain Optional	
Body	
Stem	Brass
Automatic Float Drain Optional	
(Interchangeable for Field Conversion	
Operating Range10	,
Housing, Float	
Seals Springs, Push Rod	
Knob	
Filter Elements – 40 Micron (Standard)	
5 Micron (Optional)	
Adsorber (Optional)	
Seals	
Sight Gauge	-
Springs - Poppet	
Control	Steel



Coalescers

Regulators

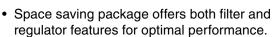
Lubricators

Combos

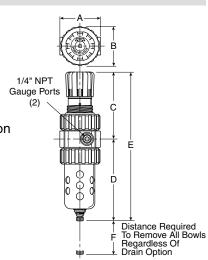


## 07E Filter / Regulator – Standard

#### **Features**



- · Excellent water removal efficiency.
- · Rolling diaphragm for extended life.
- · Quick response, and accurate pressure regulation regardless of changing flow or inlet pressure.
- Two high flow 1/4" gauge ports can be used as additional outlets.
- Shown with recommended metal bowl guard.
- High Flow: 1/2" 90 SCFM§ 3/4" - 90 SCFM§



Port Size	NPT		
	Twist Drain	Automatic Float Drain	
Poly Bowl <sup>‡</sup> / Metal Guard			
1/2"	07E32A13AC	07E36A13AC	
3/4"	07E42A13AC	07E46A13AC	
Metal Bowl / Sight Gauge			
1/2"	07E34A13AC	07E38A13AC	
3/4"	07E44A13AC	07E48A13AC	

Dimensions			
Α	В	С	D
3.24	3.25	4.79	6.97
(82)	(83)	(122)	(177)
D <sup>†</sup> E E <sup>†</sup> F			
7.00	11.76	11.79	2.75
(178)	(299)	(299)	(70)

07E Filter / Regulator

Inches (mm) † With Auto Float Drain

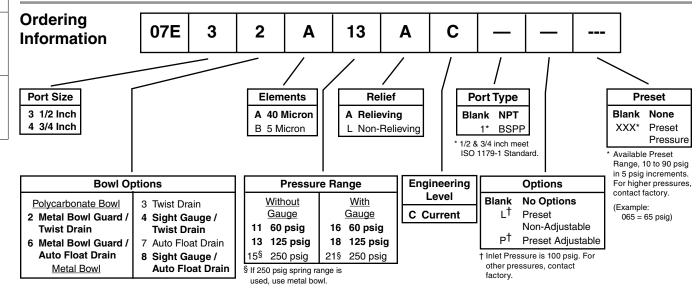
Standard part numbers shown bold. For other models refer to ordering information below.

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

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

#### **⚠ WARNING**

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



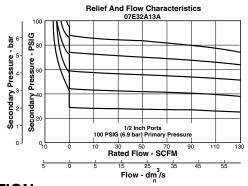
**BOLD ITEMS ARE MOST POPULAR.** 

Spring Type by Preset / Limited Pressure: For Preset / Limited Pressure 26 to 50 use 60 PSI Spring

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



**Technical Specifications – 07E** 



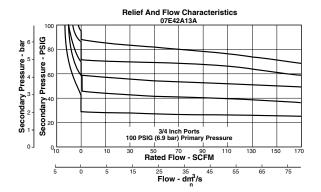
#### **CAUTION:**

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

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

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

Bonnet Assembly KitPS715					
<b>Bowl Guard Ki</b>	Bowl Guard KitPS805P				
Bowl Kits -					
Poly Bowl –	Automatic Float Drain	PS822P			
	Twist Drain	PS832P			
Metal Bowl -	- Automatic Float Drain	PS826P			
	Semi-Auto Drain	PS894P			
	Twist Drain				
	Sight Gauge / Automatic Drain				
	Sight Gauge / Twist Drain				
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 - 2"	Dial Face				
60	psig (0 to 4.1 bar)	K4520N14060			
160	) psig (0 to 11.0 bar)	K4520N14160			
300	) psig (0 to 20.0 bar)	K4520N14300			
1-3/4" Digital Round Face					
160	) psig (0 to 11.0 bar)	K4517N14160D			
Mounting Brad	ket Kit (Includes Panel Mount Nut)	PS807P			
Panel Mount NutP		P04082			
Service Kits - Non-Relieving (Includes Poppet)		PS811P			
	Relieving (Includes Poppet)	PS810P			
Seat Insert Kit		PS813P			
Springs - 1-3	0 psig Range	P01698			
	0 psig Range				
2- 1	25 psig Range	P04063			
5- 2	50 psig Range	P04064			
Tamperproof k	(it (Key Lock)	PS737P			
Specifications					
Bowl Capacity7.2 Ounces					
Gauge Ports (2)					
(Can be used as Additional Full Flow 1/4" Outlet Ports)					



#### Pressure & Temperature Ratings -

Polycarbonate Bowl – 0 to 150 psig (0 to 10.4 bar) 32°F to 125°F (0°C to 52°C)

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

Automatic Float Drain – 15 to 250 psig (1.0 to 17.2 bar)

#### Secondary Pressure Ranges –

s

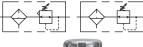
C107

Standard Pressure	2 to 125 psig (0 to 8.6 bar)
Low Pressure	1 to 60 psig (0 to 4.1 bar)
High Pressure	5 to 250 psig (0.4 to 17.2 bar)
Sump Capacity	2.8 Ounces
Veight	2.5 lb. (1.1 kg)

#### **Materials of Construction**

Adjusting StemStee
Body Zinc
Bonnet, Internal PartsPlastic
Bowls Available - TransparentPolycarbonate
Metal (With or Without Sight Gauge)Zinc
Bowl Guard Stee
Collar
DiaphragmNitrile
Drains – Manual Twist Drain Standard
Body & NutPlastic
Manual Push 'N' Drain Optional
BodyNitrile
StemBrass
Automatic Float Drain Optional
(Interchangeable for Field Conversions)
Operating Range 10 to 250 psig (.7 to 17.2 bar)
Housing, FloatPlastic
SealsNitrile
Springs, Push RodStainless Stee
KnobPlastic
Filter Elements – 40 Micron (Standard)Plastic
5 Micron (Optional)Plastic
Adsorber (Optional)Activated Charcoa
Seals Nitrile
Sight Gauge Polyamide
Springs - Poppet Stainless
ControlStee







#### **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§

A (FB)
1/4" NPT Gauge Ports C
(2) F
Bowl F Removal Clearance

- A (PB) →

	Dimensions				
	Α	A(PB)	В	С	
1	3.62	5.91	3.62	6.38	
	(92)	(150)	(92)	(162)	
	D <sup>†</sup>	Ε <sup>†</sup>	F		
-	9.57	15.95	4.92		
	(243)	(405)	(125)		

Inches (mm)

† With Twist Drain or Auto Float Drain

Port Size	NPT			
Port Size	Twist Drain	Automatic Float Drain		
Metal Bowl / Sight Gauge				
3/4"	P3NEA96GSMBNN	P3NEA96GSABNN		
1"	P3NEA98GSMBNN	P3NEA98GSABNN		
1-1/2"*	P3NEA9PGSMBNN	P3NEA9PGSABNN		

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

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

Coalescers

Regulators

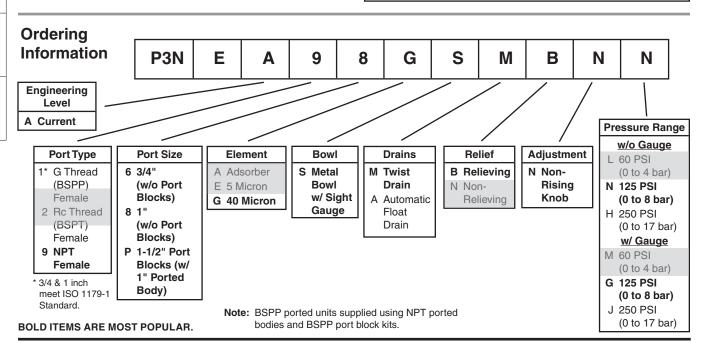
Filter / Regulators

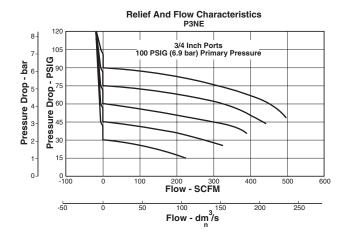
Accessories

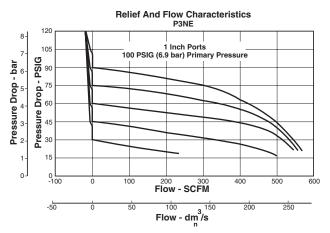
§ SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop, with 40 micron element.

#### **⚠ WARNING**

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







#### **CAUTION:**

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

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

# Relief And Flow Characteristics P3NE 120 105 100 PSIG (6.9 bar) Primary Pressure 100 PSIG (6.9 bar) Primary Pressure

#### P3NE Filter / Regulator Kits & Accessories

TOTAL TITLES / Trogulator Titles & Ao	000001100		
Bowl Kits –			
Metal Bowl – Sight Gauge / Automatic Float Drain			
Sight Gauge / Twist Drain			
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 – 2" Dial Face			
60 psig (0 to 4.1 bar)	K4520N14060		
160 psig (0 to 11.0 bar)	K4520N14160		
300 psig (0 to 20.0 bar)	K4520N14300		
1-3/4" Digital Round Face			
160 psig (0 70 11.0 bar)	K4517N14160D		
Mounting Bracket Kit*	P3NKA00MW		
Service Kit - Relieving	P3NKA00RR		
Non-Relieving			
Sight Gauge Kit	P3NKA00PE		
Springs – 1-60 psig Range	C10A1304		
2-125 psig Range	C10A1308		
5-250 psig Range			
* If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.			

#### **Specifications**

Bowl Capacity		
Port Threads	3/4, 1, 1-1/2* Inch	
Pressure & Temperature Rating 0 to 250 psig (0 to 17.2 b		
32	°F to 175°F (0°C to 80°C)	
For Secondary Pressure Ranges	s see above charts.	
Automatic Float Drain – 15	5 to 250 psig (1.0 to 17.2 bar)	
Sump Capacity	6.8 Ounces	
Weight - 3/4"	5 3 lh (2 4 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

<sup>\* 1&</sup>quot; Port Body with 1-1/2" Port Block.

C109



C

Product Selection

Filters

Coalescers

Regulators

Filter / Regulators

Lubricators

Combos

#### 12E Filter / Regulator – Coalescing





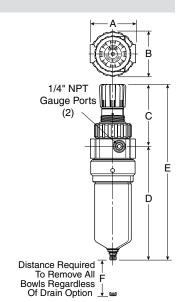
#### **Features**

- Space saving package offers both coalescer and regulator features for optimal performance.
- Removes liquid, aerosol and sub-micron particles.
- · Rolling diaphragm for extended life.
- · Removable non-rising knob for panel mounting and tamper resistance.
- Quick response, and accurate pressure regulation regardless of changing flow or inlet pressure.
- Two high flow 1/4" gauge ports can be used as additional outlets.

High Flow: Grade 6 Element

1/2" - 40 SCFM§

3/8" - 35 SCFM§ 3/4" - 45 SCFM§



12E Filter / Regulator Dimensions					
A         B         C         D           3.24         3.25         4.79         8.20           (82)         (83)         (122)         (208)					
<b>D</b> <sup>†</sup> 8.17 (208)	<b>E</b> 12.99 (330)	<b>E</b> <sup>†</sup> 12.96 (329)	<b>F</b> 3.29 (84)		

Inches (mm)

† With Twist Drain or Auto Float Drain

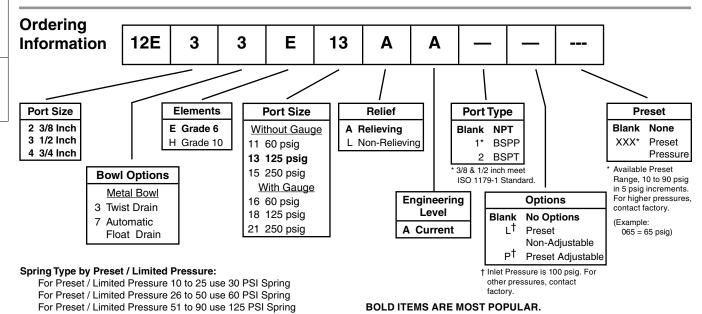
2E23E13AA
2E33E13AA
2E43E13AA
2E27E13AA
2E37E13AA
2E47E13AA
֡

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

§ SCFM = Standard cubic feet per minute at 150 psig inlet, 90 psig no flow secondary setting and 10 psig pressure drop. NOTE: 2.00 Dia. (50.8 mm) hole required for panel mounting.

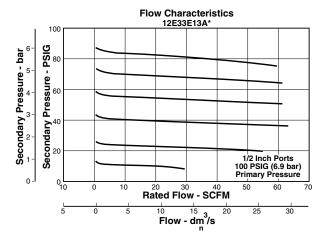
#### ♠ WARNING

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



Coalescers

Regulators



#### **CAUTION:**

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

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

12E Filter / Regula	or Kits & Accessories
---------------------	-----------------------

12E Filter / Regulator Kits & Accessories			
Bonnet Assen	nbly Kit PS715P		
Bowl Kits -			
Metal Bowl -	- Automatic Float DrainPS826P		
	Twist DrainPS834P		
	Push 'N' DrainPS825P		
Control Knob	P04069B		
Drain Kits -	Automatic Float DrainPS506P		
	Twist DrainPS512P		
	Push 'N' DrainPS513P		
Filter Element	<b>Kits</b> – Grade 6PS884P		
	Grade 10PS885P		
Gauges – 2" [	Dial Face		
	osig (0 to 4.1 bar)K4520N14060		
160 psig (0 to 11.0 bar)K4520N14160			
300	psig (0 to 20.0 bar)K4520N14300		
	/4" Digital Round Face		
160	psig (0 to 11.0 bar) K4517N14160D		
Mounting Brad	cket Kit (Includes Panel Mount Nut)PS807P		
Service Kit – Relieving (Includes Poppet)PS886P			
<b>Springs</b> - 1-3	0 psig RangeP01698		
1- 6	0 psig RangeP04062		
	25 psig RangeP04063		
5- 2	50 psig RangeP04064		
Tamperproof Kit (Key Lock)PS737P			
Specificati	ons		
<b>Bowl Capacity</b>	7.2 Ounces		
	2)		
Port Threads			
	mperature Ratings –		

Metal Bowl - 0 to 250 psig (0 to 17.2 bar)

32°F to 175°F (0°C to 80°C)

C111

Second	lary	1	Pressure	Ranges –	
<u> </u>			_		

Standard Pressure	2 to 125 psig (0 to 8.6 bar)
Low Pressure	1 to 60 psig (0 to 4.1 bar)
High Pressure	5 to 250 psig (0.4 to 17.2 bar)
Sump Capacity	2.8 Ounces
Weight	2.5 lb. (1.1 kg)

#### **Materials of Construction**

Adjusting StemSteel
BodyZinc
Bonnet, Internal Parts Plastic
Bowls Available - Metal (Without Sight Gauge)Zinc
Collar For Bonnet Metal
Control SpringSteel
DiaphragmNitrile
Drains - Manual Twist Drain Standard
Body & NutPlastic
Manual Push 'N' Drain Optional
BodyNitrile
StemBrass
Automatic Float Drain Optional (Interchangeable for Field Conversions) Operating Range
Springs, Push RodStainless Steel
Knob
Filter Element –
Borosilicate & felt glass fibers 99.97% DOP efficiency Largest Aerosol Particle Passed (Grade 6)0.75 Microns Largest Solid Particle Passed (Grade 6)
SealsNitrile
Sight Gauge Polyamide

Springs – Poppet ...... Stainless



Product	Selection

Coalescers

Regulators

Lubricators

Combos

#### Prep-Air® II **Air Preparation Units**

#### **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.

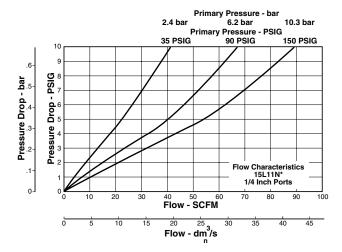


- Compact 16L Series, 1/4, 3/8 and 1/2 Inch
- Standard 17L Series, 3/8, 1/2 and 3/4 Inch

#### **Lubricator Selection**

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

#### **Reading Flow Charts to Size Micro-Mist Lubricators**



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

#### **F442 Oil**



Quantity	Part Numbers
1 Quart	F442001
1 Gallon	F442002
12 Quart Case	F442003
4 Gallon Case	F442005

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.)

C112



#### Lubricators

#### Micro-Mist

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

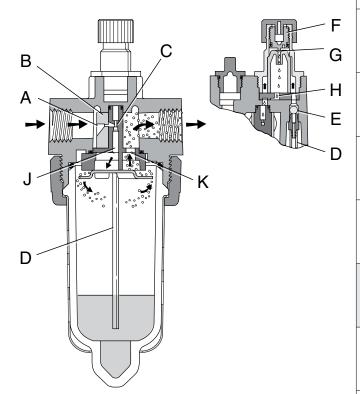
However, a proportion of the inlet air passes through the venturi, assuring that oil delivery increases linearly with increased air flow rate. This proportioning method is advantageous at low inlet flows because the venturi design remains efficient.

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.

#### Operation

Air flowing through the unit goes through two paths. At low air flow rates, the majority of the air flows through venturi section (A). The rest of the air slightly deflects and flows by the flapper (B). The velocity of the air flowing through venturi section (A) creates a pressure drop at throat section (C). This lower pressure allows oil to be forced from the reservoir through the pickup tube (D) past the check ball (E), to the dome assembly where the rate of oil flow is controlled by metering screw (F). Rotation of the metering screw (F) in the counterclockwise direction increases the oil flow rate; in the clockwise direction decreases the oil flow rate.

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





Product Selection

Filters

Coalescers

Regulators

Filter / Regulators

Lubricators

Combos

#### 15L Micro-Mist Lubricators – Economy

Filters

Coalescers

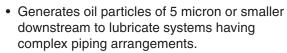
Regulators

Filter/ Regulators

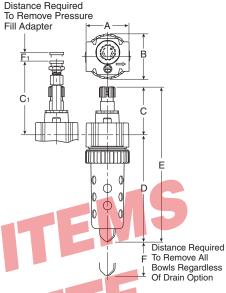
#### **Features**

· Proportional oil delivery over a wide range of air flows.

(Revised 06-17-14)



- · 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§



15L Lubricator Dimensions					
<b>A</b> 2.00 (51)	<b>B</b> 2.06 (52)	<b>C</b> 2.26 (57)	<b>C</b> <sub>1</sub> 3.35 (85)		
<b>D</b>	<b>D</b> †	<b>E</b> 738	<b>E</b> †		

(130)(136)(187)(193)F† F 1.77 .39 (10)

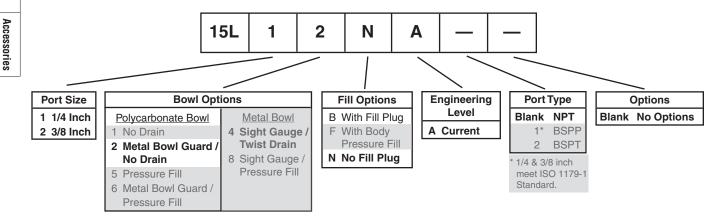
(45)Inches (mm) † With Twist Drain.

#### NPT Port Size **Twist Drain** No Drain Poly Bowl ‡ / Metal Guard 15L12N\* 1/4" 3/8" 15L22N\* Metal Bowl / Sight Gauge 1/4" 15L14N\* 3/8" 15L24N\*

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

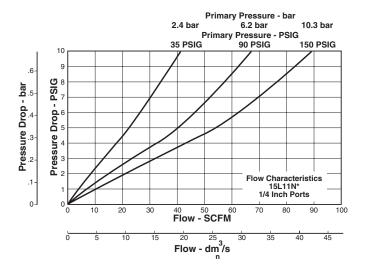
- <sup>‡</sup> For polycarbonate bowl and sight dome, see Caution on page C2.
- § SCFM = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

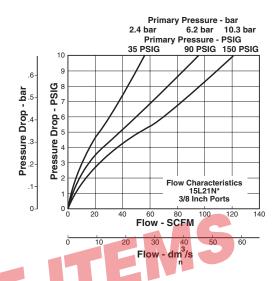
#### **Ordering Information**



**BOLD ITEMS ARE MOST POPULAR.** 







15L Micro-Mist Lubricator Kits & Accessories

Adjustment KnobP0412	1
Bowl Guard KitPS905F	Э
Bowl Kits –	
Poly Bowl - No DrainPS946F	2
Metal Bowl - Sight Gauge / Twist DrainPS929F	)
Drain Kit – Twist DrainPS512F	)
Mounting Bracket KitPS943F	)
Oil – 1 Gal.       F442002         12 Quart Case       F442002         4 Gallon Case       F442002	3
Pressure Fill Adapter KitPS916F	)
Service KitPS948F	כ
Sight Dome KitPS740F	>
Sight Gauge KitPS914F	5

<b>Specifications</b>
-----------------------

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 LubricantF442 C	)il
Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C)	

8°C) and an aniline point greater than 200°F (93 (DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR

SYNTHETIC OILS.) 

#### **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)



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# Coalescers

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# Lubricators

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## **16L Micro-Mist Lubricators – Compact**

Coalescers

Regulators

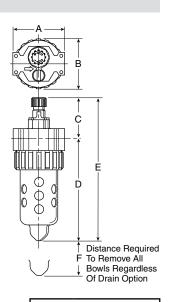
Accessories

#### **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 §



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

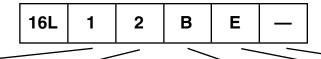
Inches (mm) †With Twist Drain.

Port	NI	РΤ
Size	Twist Drain	No Drain
Poly Bowl ‡ / Metal	Guard	
1/4"	_	16L12BE
3/8"	_	16L22BE
1/2"	_	16L32BE
Metal Bowl / Sight Gauge		
1/4"	16L14BE	1
3/8"	16L24BE	_
1/2"	16L34BE	_

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

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

#### **Ordering Information**



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

#### **Bowl Options** Polycarbonate Bowl 2 Metal Bowl Guard / No Drain

- 6 Metal Bowl Guard / Pressure Fill
- K Metal Bowl Guard / Auto Fill Device
- N Metal Bowl Guard / Twist Drain

#### **Metal Bowl** 4 Sight Gauge /

- Twist Drain Sight Gauge / Pressure Fill
- M Sight Gauge / Auto Fill Device

#### **Options**

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

#### Engineering Level

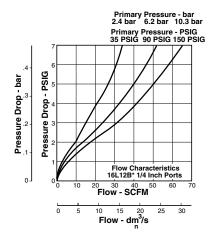
**E** Current

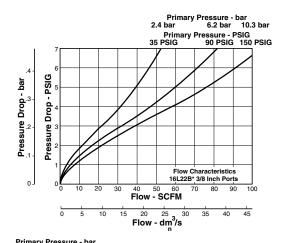
Port Type Blank NPT 1\* BSPP

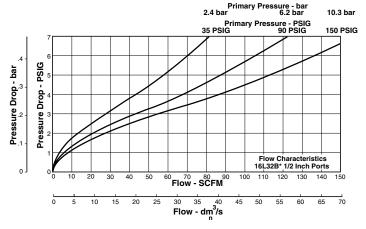
1/4 & 3/8 inch meet ISO 1179-1 Standard.

**BOLD ITEMS ARE MOST POPULAR.** 









#### 16L Micro-Mist Lubricator Kits & Accessories

Adjustment Knob	P04121
Bowl Guard Kit	PS705P
Bowl Kits -	
Poly Bowl – No Drain  Twist Drain  Pressure Fill  Remote Fill	PS717P PS719P
Metal Bowl – Sight Gauge / Twist Drain Sight Gauge / Pressure Fill	
Drain Kit – Twist Drain	PS512P
Fill Cap Kit	PS742P
Lubricator Service Kit	PS748P
Mounting Bracket Kit	PS743P
Oil – 1 Gal.  12 Quart Case 4 Gallon Case	F442003
Pressure Fill Adapter Kit	PS716P
Pressure Fill Button	
Remote Auto-Fill Device Sight Dome / Fill Cap Kit Sight Dome Kit Nylon Sight Dome Kit	PS739P PS740P

#### **Specifications**

Port Threads	1/4, 3/8, 1/2 Inch
Pressure & Temperature Ra	ting –
Polycarbo	nate Bowl - 0 to 150 psig (0 to 10.3 bar)
	32°F to 125°F (0°C to 52°C)
l N	letal Bowl – 0 to 250 psig (0 to 17.2 bar)
	32°F to 175°F (0°C to 80°C)
Suggested Lubricant	F442 Oil
Petroleum based oil of 100	to 200 SSU viscosity at 100°F (38°C)
and an aniline point greater	than 200°F (93
(DO NOT USE OILS WITH	ADDITIVES, COMPOUNDED OILS
CONTAINING SOLVENTS,	GRAPHITE, DETERGENTS, OR
SYNTHETIC OILS.)	
Weight	1.2 lb. (.5 kg)
	( 3,
Materials of Const	ruction

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)

Bowl Capacity .......2.60 Ounces

Coalescers

Regulators

riiter/ Regulators

Lubricators

Compos



#### 17L Micro-Mist Lubricators - Standard

#### **Features**

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

A	В
	C D E D Distance Required F To Remove All Bowls Regardless Of Drain Option

17L Lubricator Dimensions		
<b>A</b> 3.24 (82)	<b>C</b> 2.41 (61)	
<b>D</b> 6.86 (174)	<b>p</b> † 6.95 (177)	<b>E</b> 9.09 (231)
<b>E</b> † 9.35 (237)	<b>F</b> 2.75 (70)	

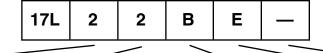
Inches (mm) † With Twist Drain.

Port	NPT Twist Drain No Drain		
Size			
Poly Bowl ‡ / Metal	Guard		
1/2"	_	17L32BE	
3/4"	_	17L42BE	
Metal Bowl / Sight Gauge			
1/2"	17L34BE	_	
3/4"	17L44BE	_	

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

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

#### **Ordering Information**



#### **Port Size** 3 1/2 Inch 4 3/4 Inch

#### Polycarbonate Bowl 2 Metal Bowl Guard / No Drain

**Bowl Options** 

- 6 Metal Bowl Guard / Pressure Fill
- K Metal Bowl Guard / Auto Fill Device
- N Metal Bowl Guard / Twist Drain

#### **Metal Bowl** 4 Sight Gauge / Twist Drain

- 8 Sight Gauge / Pressure Fill
- M Sight Gauge / Auto Fill Device

#### **Options**

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

G With Body Pressure Fill / Nylon Sight Dome

Engineering Level

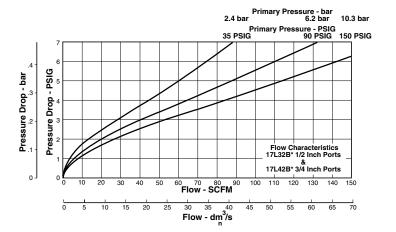
**E** Current

Port Type Blank NPT BSPP

1/2 inch meets ISO 1179-1 Standard.

**BOLD ITEMS ARE MOST POPULAR.** 





# 17L Micro-Mist Lubricator Kits & Accessories

Adjustment KnobP04121		
Bowl Guard KitPS805P		
Bowl Kits –		
Poly Bowl –         No Drain         PS846P           Twist Drain         PS817P           Pressure Fill         PS819P           Remote Fill         PS828P		
Metal Bowl – Sight Gauge / Twist Drain		
Drain Kit – Twist DrainPS512P		
Fill Cap KitPS742P		
Lubricator Service KitPS748P		
Mounting Bracket KitPS843P		
Oil – 1 Gal.       F442002         12 Quart Case       F442003         4 Gallon Case       F442005		
Pressure Fill Adapter KitPS716P		
Pressure Fill ButtonP11912		
Remote Auto-Fill DevicePS505CP		
Sight Dome / Fill Cap KitPS739P		
Sight Dome KitPS740P		
Nylon Sight Dome KitPS740N		

## **Specifications**

I	Bowl Capacity
I	Minimum Flow for Lubrication 1 SCFM at 100 psig
I	Port Threads 1/2, 3/4 Inch
I	Pressure & Temperature Rating –
I	Polycarbonate Bowl – 0 to 150 psig (0 to 10.3 bar)
I	32°F to 125°F (0°C to 52°C)
I	Metal Bowl – 0 to 250 psig (0 to 17.2 bar)
I	32°F to 175°F (0°C to 80°C)
I	Suggested LubricantF442 Oil
I	Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C)
I	and an aniline point greater than 200°F (93°C)
I	(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS
I	CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR
I	SYNTHETIC OILS.)
I	<b>Weight</b> 1.9 lb. (.9 kg)
I	

#### **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)



Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Combos





# Prep-Air<sup>®</sup> II **Air Preparation Units**

#### **Mist Lubricators**

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

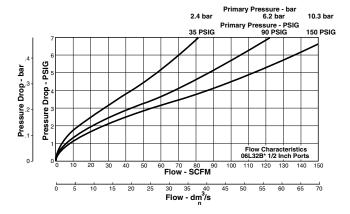
Mist Air Lubricators are designed to provide lubrication for most general applications in a pneumatic system. Units should be installed close to the application ensuring effective distribution of oil to pneumatic components.

- Miniature 02L Series, 1/4 and 3/8 Inch
- Miniature 04L Series, 1/8 and 1/4 Inch
- Compact 06L Series, 1/4, 3/8 and 1/2 Inch
- Standard 07L Series, 3/8, 1/2 and 3/4 Inch
- Hi-Flow P3NL Series, 3/4, 1 and 1-1/2 Inch
- Hi-Flow L606 Series, 3/4, 1, 1-1/4 and 1-1/2 Inch
- Hi-Flow 09L Series, 2 Inch

#### **Lubricator Selection**

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

# Reading Flow Charts to Size Mist Lubricators



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

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

## C

Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Combos

Accessories

#### **F442 Oil**



Quantity	Part Numbers
1 Quart	F442001
1 Gallon	F442002
12 Quart Case	F442003
4 Gallon Case	F442005

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

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

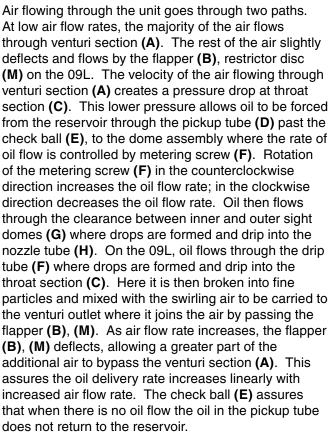


#### Lubricators

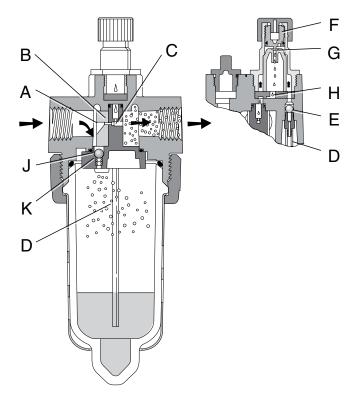
#### Mist

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

#### Operation



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.





Filte

Coalescers

Regulators

Filter/ Regulator

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#### 02L Lubricator - Miniature

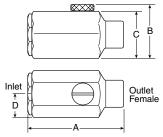


#### **Features**

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

#### **Application**

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



#### **Dimensions**

Part Number	Α	В	С	D
02LFB	2.65	1.305	1.125	.65
UZLFB	(67)	(33)	(28.5)	(16.5)
02L1B	2.93	1.305	1.125	.65
UZLIB	(74)	(33)	(28.5)	(16.5)
02L2B	3.19	1.305	1.125	.65
UZLZD	(81)	(33)	(28.5)	(16.5)

Inches (mm)

#### **Ordering Information**

Port Size	Female Threads Inlet / Female Threads Outlet		
1/4"	02LFB	02L1B	
3/8"	N/A	02L2B	

#### **Specifications**

Flow Capacity*		29 SCFM (13.6 dm <sup>3</sup> /s)
	(3/8)	30 SCFM (14.2 dm <sup>3</sup> /s)
Operating Temp	erature	32° to 150°F (0° to 65.5°C)
Maximum Supp	ly Pressure	200 psig (13.8 bar)
Oil Capacity		0.25 oz. (7.4 cm <sup>3</sup> )
Port Size		1/4, 3/8 NPT / BSPT
Weight		0.2 lb. (0.1 kg)

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

#### **Materials of Construction**

Body	Aluminum
Seals	Nitrile

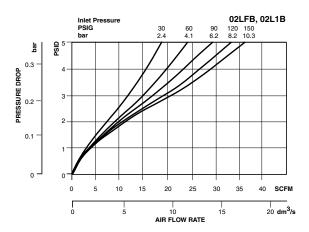
Suggested Lubricant F442 Oil

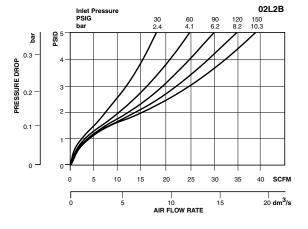
Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C) and an aniline point greater than 200°F (93°C) (DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR

#### **Replacement Kits**

SYNTHETIC OILS.)

Fill Plug Kit – Brass Fill Plug and O-ring	PS434
O-ring Repair Kit	PS435







Product Selection

Filters

Coalescers

Regulators

Filter / Regulators

Lubricators

Combos

## 04L Mist Lubricators - Miniature

# $\leftarrow$

Filters

Coalescers

Regulators

Filter/ Regulators

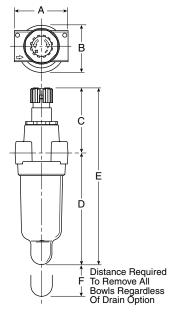
Combos

#### **Features**

#### Proportional oil delivery over a wide range of air flows.

#### Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate.

- Ideal for low and high flow applications with changing air flow.
- Transparent sight dome for 360° visibility.
- High Flow: 1/8" 20 SCFM§ 1/4" – 20 SCFM§



04L Lubricator Dimensions			
<b>A</b> 1.73 (44)	<b>C</b> 2.16 (55)		
<b>D</b> 3.64 (92)	<b>D</b> † 3.78 (96)	<b>E</b> 5.80 (147)	
<b>E</b> † 5.94 (151)	<b>F</b> 1.60 (41)		

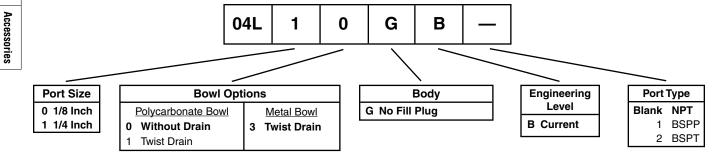
Inches (mm)
† With Twist Drain.

	l Ni	эт	
Port Size	INI	- 1	
	Twist Drain	No Drain	
Poly Bowl ‡			
1/8"	_	04L00GB	
1/4"	_	04L10GB	
Metal Bowl without Sight Gauge			
1/8"	04L03GB	_	
1/4"	04L13GB	_	

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

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

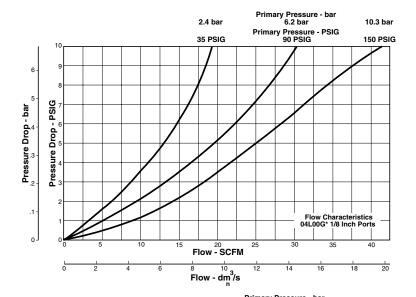
#### **Ordering Information**

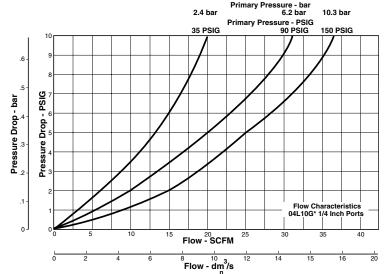


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#### **BOLD ITEMS ARE MOST POPULAR.**







#### 04L Mist Lubricator Kits & Accessories

Bowl Kits –	
Poly Bowl - No Drain	PS421P
Twist Drain	PS420P
Metal Bowl - Twist Drain (No Sight Gauge)	PS447BP
Mounting Bracket KitPS41	
<b>Oil –</b> 1 Gal	F442002
12 Quart Case	F442003
4 Gallon Case	F442005

#### **Specifications**

Bowl Capacity	1 Ounce
Minimum Flow for Lubrication	0.5 SCFM at 100 psig
Port Threads	1/8, 1/4 Inch
Dunantura O Tamananatura Datinara	

Pressure & Temperature Ratings –

Polycarbonate Bowl - 0 to 150 psig (0 to 10.3 bar) 32°F to 125°F (0°C to 52°C)

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

#### Suggested Lubricant – .....F442 Oil

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

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

#### **Materials of Construction**

Body	Zinc
Bowls - Transparent	Polycarbonate
Metal (Without Sight Gauge)	Zinc
Drains – Twist – Body & Nut	Plastic
Seals	Nitrile
Sight Dome	Polycarbonate



Product Selection

ilters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Combos



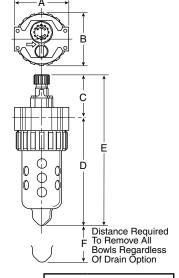
## **06L Mist Lubricators – Compact**

#### **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§



06L Lubricator Dimensions		
<b>A</b> 2.81 (71)	<b>B</b> 2.74 (70)	<b>C</b> 2.24 (57)
<b>D</b> 5.58 (142)	<b>D</b> † 5.69 (145)	<b>E</b> 7.82 (199)
<b>E</b> † 7.93	<b>F</b> 2.25	

(57)

Inches (mm)
†With Twist Drain.

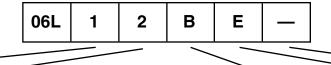
(201)

and the second			
Port Size	NI	PT	
	Twist Drain	No Drain	
Poly Bowl <sup>‡</sup> / Metal Guard			
1/4"	_	06L12BE	
3/8"	_	06L22BE	
1/2"	_	06L32BE	
Metal Bowl / Sight Gauge			
1/4"	06L14BE	_	
3/8"	06L24BE	_	
1/2"	06L34RF	<u> </u>	

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

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

#### **Ordering Information**



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

Coalescers

Regulators

Filter / Regulators

Accessories

## Polycarbonate Bowl 2 Metal Bowl Guard / No Drain

**Bowl Options** 

- 6 Metal Bowl Guard / Pressure Fill
- K Metal Bowl Guard / Auto Fill Device
- N Metal Bowl Guard / Twist Drain

# Metal Bowl 4 Sight Gauge / Twist Drain

- 8 Sight Gauge / Pressure Fill
- M Sight Gauge / Auto Fill Device

# Options B With Fill Plug

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

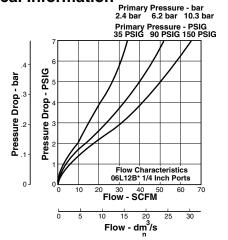
#### Engineering Level E Current

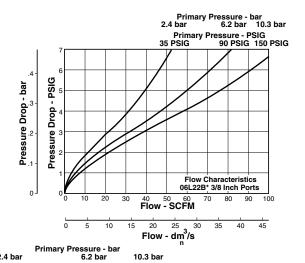
Port Type
Blank NPT
1\* BSPP

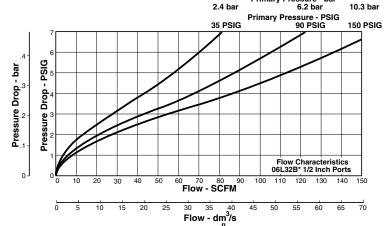
\* 1/4 & 3/8 inch meet ISO 1179-1 Standard.

**BOLD ITEMS ARE MOST POPULAR.** 









C127

#### **06L Mist Lubricator Kits & Accessories**

Adjustment KnobP04121		
Bowl Guard KitPS705		
Bowl Kits –		
Poly Bowl – No Drain	PS717P PS719P PS728P PS729P	
Sight Gauge / Pressure Fill	PS720P	
Drain Kit – Twist Drain	PS512P	
Fill Cap Kit	PS741P	
Lubricator Service KitPS718		
Mounting Bracket KitPS743		
Oil – 1 Gal.       F442         12 Quart Case       F442         4 Gallon Case       F442		
Pressure Fill Adapter Kit	PS716P	
Pressure Fill ButtonP11912		
Remote Auto-Fill Device PS505CI		
Sight Dome / Fill Cap KitPS738P		
Sight Dome KitPS740P		
Nylon Sight Dome Kit		

#### **Specifications**

Minimum Flow for Lubrication5 SCFM At 100 ps	sig		
<b>Port Threads</b>	ch		
Pressure & Temperature Rating –			
Polycarbonate Bowl – 0 to 150 psig (0 to 10.3 ba	,		
32°F to 125°F (0°C to 52°C	C)		
Metal Bowl – 0 to 250 psig (0 to 17.2 ba	,		
32°F to 175°F (0°C to 80°C	,		
Suggested LubricantF442 C	Oil		
Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C) and an aniline point greater than 200°F (93°C)			
(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR			
SYNTHETIC OILS.)			
Weight	(g)		
Materials of Construction			
Body Zir	nc		
Bowls - Transparent Polycarbona			
Metal (With Sight Gauge) Zir			
Bowl GuardSte			
CollarPlast	tic		

Bowl Capacity ......2.9 Ounces



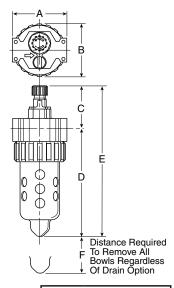
#### 07L Mist Lubricators - Standard

## Features



 Proportional oil delivery over a wide range of air flows.

- Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate.
- Bowl can be filled while air line is under pressure.
- Transparent sight dome for 360° visibility.
- High Flow: 1/2" 90 SCFM§ 3/4" – 90 SCFM§



07L Lubricator Dimensions		
<b>A</b>	<b>B</b>	<b>C</b>
3.24	3.25	2.41
(82)	(83)	(61)
<b>D</b>	<b>p</b> †	<b>E</b>
6.86	6.95	9.09
(174)	(177)	(231)
<b>E</b> † 9.35 (237)	<b>F</b> 2.75 (70)	

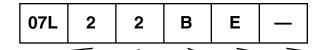
Inches (mm)
† With Twist Drain.

Port	N	PT	
Size	Twist Drain	No Drain	
Poly Bowl <sup>‡</sup> / Metal Guard			
1/2"	_	07L32BE	
3/4"	_	07L42BE	
Metal Bowl / Sight Gauge			
1/2"	07L34BE	_	
3/4"	07L44BE	_	

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

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

#### **Ordering Information**



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

## Polycarbonate Bowl 2 Metal Bowl Guard / No Drain

6 Metal Bowl Guard / Pressure Fill

**Bowl Options** 

- K Metal Bowl Guard /
- Auto Fill Device

  N Metal Bowl Guard / Twist Drain

# Metal Bowl 4 Sight Gauge / Twist Drain

- 8 Sight Gauge / Pressure Fill
- M Sight Gauge / Auto Fill Device

## Options

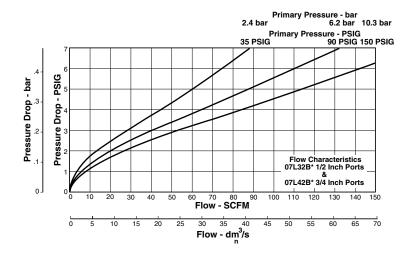
- B With Fill PlugC With Fill Plug/Nylon
- Sight Dome
  F With Body Pressure Fill
- G With Body Pressure Fill / Nylon Sight Dome

Engineering Level E Current Port Type
Blank NPT
1\* BSPP

\* 1/2 inch meets ISO 1179-1 Standard.

**BOLD ITEMS ARE MOST POPULAR.** 





#### 07L Mist Lubricator Kits & Accessories

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## **Specifications**

п	2011 Capacity	
ı	Minimum Flow for Lubrication	5 SCFM At 100 psig
ı	Port Threads	1/2, 3/4 Inch
ı	Pressure & Temperature Rating –	
	Polycarbonate Bo	wl – 0 to 150 psig (0 to 10.3 bar) 32°F to 125°F (0°C to 52°C)
	Metal Bo	wl – 0 to 250 psig (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)
ı	Suggested Lubricant	F442 Oil
	Petroleum based oil of 100 to 200 sand an aniline point greater than 20	SSU viscosity at 100°F (38°C)
ı	(DO NOT USE OILS WITH ADDITI CONTAINING SOLVENTS, GRAPH SYNTHETIC OILS.)	
l	Weight	1.9 lb. (0.9 kg)
l	Materials of Constructi	on
ı	Body	Zinc
	Bowls - Transparent	
ı	Bowl Guard	Steel
ı	Collar	
ı	Drain - Twist - Body & Nut	Plastic
I	Injector Meter Block & Base Asser	
ı	Seals	
1	l a a	<b>5</b>

Sight Gauge ...... Polyamide (Nylon)

Bowl Capacity .......6.0 Ounces



Filters

Coalescers

Regulators

Filter/ Regulator

Lubricators

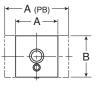
Combos

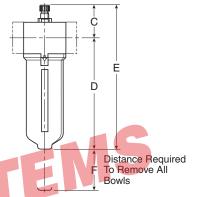
#### P3NL Mist Lubricators – Hi-Flow

#### **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	NPT	
Size	No Drain	
Metal Bowl / Sight	Gauge	
3/4"	P3NLA96LSN	
1"	P3NLA98LSN	
1-1/2"#	P3NLA9PLSN	

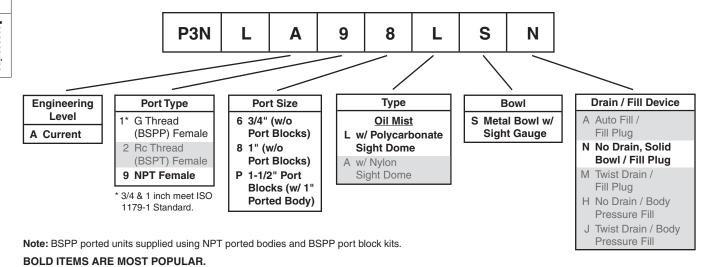
Standard part numbers shown bold. For other models refer to ordering information below

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

P3NL Lubricator Dimensions		
<b>A</b> 3.62 (92)	<b>А</b> <sub>РВ</sub> 5.91 (150)	<b>B</b> 3.62 (92)
<b>C</b> 2.81 (71)	<b>D</b> 9.00 (229)	<b>E</b> 11.81 (300)
<b>F</b> 4.92 (125)		

Inches (mm)

#### **Ordering Information**

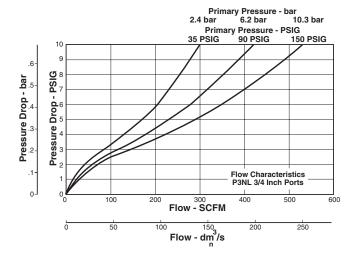


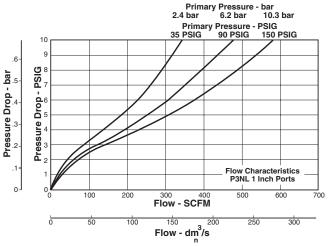
#### C130

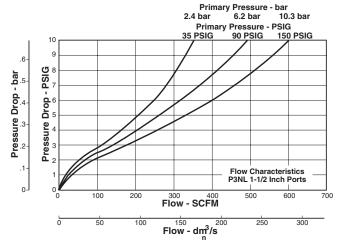
Coalescers

Regulators Filter/ Regulators

Lubricators







#### **P3NL Lubricator Kits & Accessories**

Adjustment Knob	P04121
Bowl Kits -	
Metal Bowl - Sight Gauge / Twist Drain	P3NKA00BSM
Metal Bowl – Sight Gauge / No Drain	P3NKA00BSN
Bowl Latch Kit	C11A33
Drain Kit – Twist Drain	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	
	32°F to 175°F (0°C to 80°C)
Suggested Lubricant	F442 Oil
Petroleum based oil of 100 to 200 SS and an aniline point greater than 200°	, ,
(DO NOT USE OILS WITH ADDITIVE CONTAINING SOLVENTS, GRAPHIT SYNTHETIC OILS.)	

#### **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)

<sup>† 1&</sup>quot; Port Body with 1-1/2" Port Block.

C131



Product Selection

Filters

Coalescers

Regulators

Filter / Regulators

Lubricators

Combos

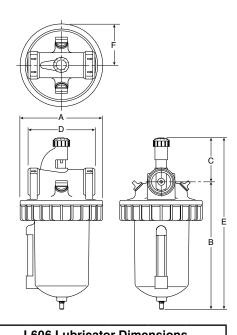
#### **L606 Standard Lubricators**

#### Loud Standard Lubricator



#### **Features**

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



Port Size	NPT	BSPP
Zinc Bowl /	Sight Gauge / Drain	
3/4"	L606-06W/M8	L606G06W/M8
1"	L606-08W/M8	L606G08W/M8
Aluminum Bowl 32 oz. without Sight Gauge, With Drain		
3/4"	L606-06E/M8	L606G06E/M8
1"	L606-08E/M8	L606G08E/M8
Aluminum Bowl 64 oz. with Sight Gauge, No Drain		
3/4"	L606-06G/M8	L606G06G/M8
1"	L606-08G/M8	L606G08G/M8

L606 Lubricator Dimensions					
Α	В	С	D	E	F
	L606-06W, L606-08W				
4.97 (126)	7.25 (184)	2.63 (66.7)	4.06 (103)	9.88 (251)	2.48 (63.1)
	L606-06E, L606-08E				
4.97 (126)	10.75 (273)	2.63 (66.7)	4.06 (103)	13.38 (340)	2.48 (63.1)
L606-06G, L606-08G					
5.00 (127)	9.40 (239)	2.62 (66)	4.06 (103)	12.02 (305)	2.50 (64)
inches					

inches (mm)

**Bold Items are Most Popular.** 

Coalescers

Regulators

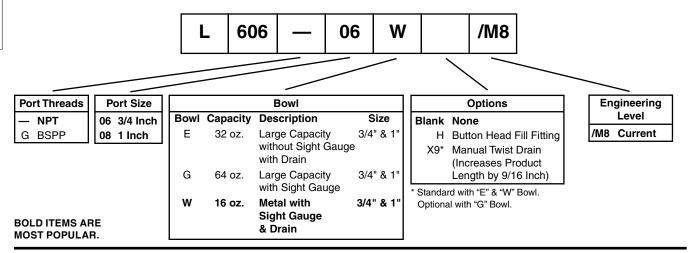
Filter/ Regulators

Accessories

For other models refer to ordering information below.

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

## **Ordering Information**

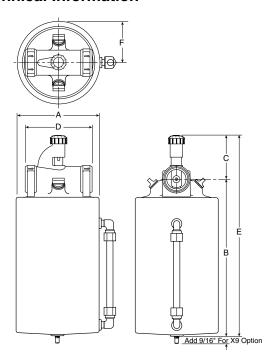


C132



#### **Air Line Mist Lubricators**

#### **Technical Information**



L606-08G

#### L606 Lubricator Kits & Accessories

L606 Lubricator Kits & Accessor	ies
Adjusting Knob	606Y72
Bowl Kits –  Aluminum (E)  Aluminum with Sight Gauge (G)  Zinc with Sight Gauge (W)	BK606X30B
Button Head Fill Fitting (M14 male thread)	L606C14
Dip Tube Kit	DTK606
Drip Spout Kit	RK606SY
Mounting Bracket –  3/4 Inch units (2 required per unit)  1 Inch units (2 required per unit)	
Oil –1 Gal	F442003
Repair Kits –  Needle Valve Assembly (All)	RKB605WB
Specifications	
Bowl Capacity –	
Aluminum (E)	

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

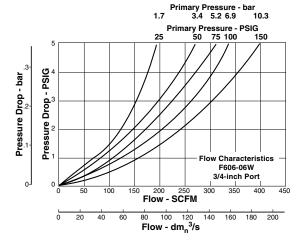
ZIIIC WILII IN	yion Signi Gauge (W)	10 C	,unces
<b>Port Threads</b>		3/4,	1 Inch

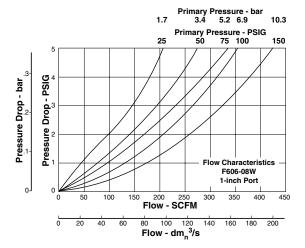
Pressure & Tempe	rature Ratings –
------------------	------------------

Aluminum Bowl (E) ......0 to 300 psig (0 to 20.4 bar) 40°F to 150°F (4.4°C to 65.6°C)

Aluminum Bowl with

Polycarbonate Sight Gauge (G) ....... 0 to 150 psig (0 to 10.2 bar) 40°F to 125°F (4.4°C to 52°C)





Nylon Sight Gauge (W)	0 to 250 psig (0 to 17.2 bar)
	40°F to 150°F (4.4°C to 65.6°C)
Veight –	
Aluminum Bowl (E)	5.5 lb. (2.49 kg) / Unit
	22.3 lb. (10.12 kg) / 4-Unit Master Pack
Aluminum Bowl with	
Polycarbonate Sight Gaug	ge (G)7.2 lb. (3.27 kg) / Unit
	28.8 lb. (13.06 kg) / 4-Unit Master Pack
Zinc Bowl with	
Nylon Sight Gauge (W)	4.2 lb. (1.91 kg) / Unit

Sug	gge	ested	Luk	oricant	 	 	 . F442 Oil
_					 		 <del>.</del> .

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

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

#### **Materials of Construction**

Zinc Bowl with

Body	Zinc
Bowls -	
(E)	Aluminum
(G)	Aluminum with Polycarbonate Sight Gauge
(W)	Zinc with Nylon Sight Gauge
Seals	Runa N



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# Coalescers

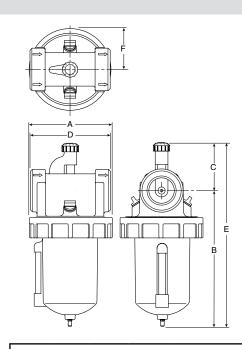
Regulators	
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ators	

16.6 lb. (7.53 kg) / 4-Unit Master Pack

#### **Features**

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



Port Size	NPT	BSPP			
Zinc Bowl / Sight Gauge / Drain					
1-1/4" <b>L606-10W/M8</b>		L606G10W/M8			
1-1/2"	L606-12W/M8	L606G12W/M8			
Aluminum Bowl 32 oz. without Sight Gauge, With Drain					
1-1/4" <b>L606-10E/M8</b>		L606G10E/M8			
1-1/2"	L606-12E/M8	L606G12E/M8			
Aluminum Bowl 64 oz. with Sight Gauge, No Drain					
1-1/4"	L606-10G/M8	L606G10G/M8			
1-1/2"	L606-12G/M8	L606G12G/M8			

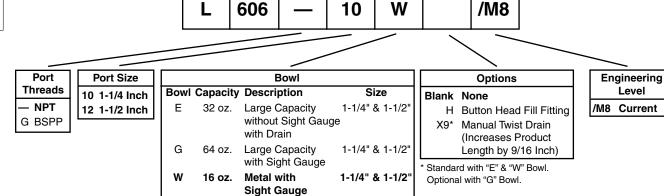
L606 Lubricator Dimensions						
АВ		С	D	E	F	
L606-10W, L606-12W						
4.97	7.63	2.84	4.81	10.47	2.48	
(126)	(194)	(72.2)	(122)	(266)	(63.1)	
L606-10E, L606-12E						
4.97	11.13	2.84	4.81	13.97	2.48	
(126)	(283)	(72.2)	(122)	(255)	(63.1)	
L606-10G, L606-12G						
5.00	7.99	2.84	4.81	12.80	2.50	
(127)	(203)	(72.2)	(122)	(325)	(64)	
inches						

inches (mm)

**Bold Items are Most Popular.** 

For other models refer to ordering information below.

#### **Ordering Information**



& Drain

**BOLD ITEMS ARE MOST POPULAR.** 



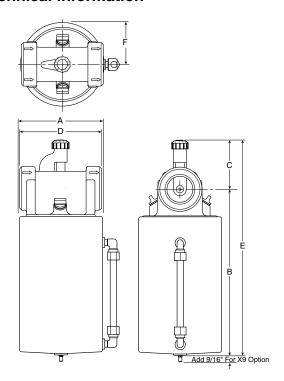
Coalescers

Regulators

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

#### **Air Line Mist Lubricators**

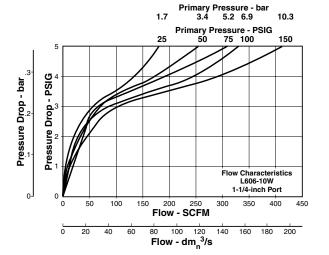
#### **Technical Information**

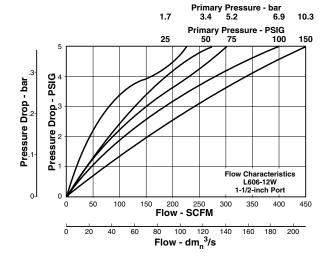


L606-12G

#### L606 Lubricator Kits & Accessories

Adjusting Knob606Y72	
Bowl Kits –           Aluminum (E)         BK603B           Aluminum with Sight Gauge (G)         BK606X30B           Zinc with Sight Gauge (W)         BK609WB	
Button Head Fill Fitting (M14 male thread)L606C14	
Dip Tube KitDTK606	
Drip Spout KitRK606SY	
Oil –1 Gal.       F442002         12 Quart Case.       F442003         4 Gallon Case.       F442005	
Repair Kits –  Needle Valve Assembly (All)RK606Y Sight Gauge Bowl Repair Kit (W)RKB605WB Sight Gauge Bowl Repair Kit (G)RKB606X30B	
Specifications	
Bowl Capacity –  Aluminum (E)	
<b>Port Threads</b>	
Pressure & Temperature Ratings –  Aluminum Bowl (E) 0 to 300 psig (0 to 20.4 bar)  40°F to 150°F (4.4°C to 65.6°C)	
Aluminum Bowl with Polycarbonate Sight Gauge (G) 0 to 150 psig (0 to 10.2 bar) 40°F to 125°F (4.4°C to 52°C)	
Zinc Bowl with  Nylon Sight Gauge (W) 0 to 250 psig (0 to 17.2 bar)  40°F to 150°F (4.4°C to 65.6°C)	





<b>Weight –</b> Aluminum Bowl (E)
Aluminum Bowl with Polycarbonate Sight Gauge (G)10 lb. (4.54 kg) / Unit 40 lb. (18.14 kg) / 4-Unit Master Pack Zinc Bowl with
Nylon Sight Gauge (W)
Suggested LubricantF442 Oil
Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C)

and an aniline point greater than 200°F (93°C). (DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)

#### **Materials of Construction**

Body	Zinc
Bowls -	
(E)	Aluminum
(G)	Aluminum with Polycarbonate Sight Gauge
(W)	Zinc with Nylon Sight Gauge
Seals	Buna N



www.parker.com/pneumatics

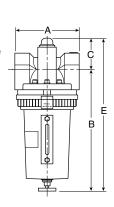
C135

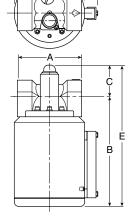
## 09L Mist Lubricators - Hi-Flow

# $\Diamond$

#### **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	t Gauge – 1 Quart		
2"	09L84BA		
Metal Bowl / Sight Gauge – 3 Quart			
2"	09L8PBA		

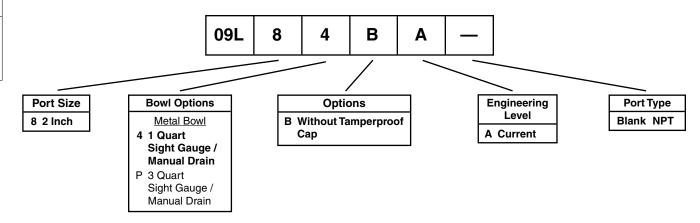
Standard part numbers shown bold. For other models refer to ordering information below.

§ SCFM = Standard Cubic Feet Per Minute at 900 psig Inlet, and 5 psig
Pressure Drop.

09L Lubricator Dimensions									
	Α	В	С	D	E	F			
1 Qt.	5.50 (140)	10.40 (264)	2.64 (67)	D E 13.04 (331) D E 6.00 12.08		_			
	Α	В	С	D	E				
3 Qt.	5.50 (140)	9.44 (240)	2.64 (67)	6.00 (152)	12.08 (307)	7.12 (181)			

Inches (mm)

#### **Ordering Information**



C136

**BOLD ITEMS ARE MOST POPULAR.** 



Prod Selec

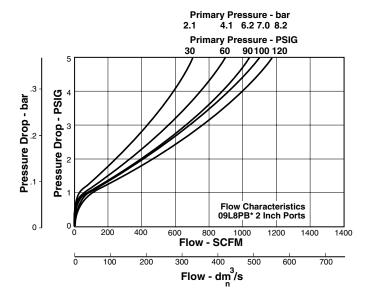
ection

Coalescers

Regulators

Filter/ Regulators

Lubricators



#### 09L Lubricator Kits & Accessories

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

<sup>\* 1</sup> Quart Bowl

#### **Specifications**

opodinoution is
Bowl Capacity
3 Qt. (Optional)
Bowl Metal with Sight Gauge
DrainManual 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 LubricantF442 Oil
Petroleum based oil of 100 to 200 SSU viscosity at 100°F (38°C) and an aniline point greater than 200°F (93°C).
(DO NOT USE OILS WITH ADDITIVES, COMPOUNDED OILS CONTAINING SOLVENTS, GRAPHITE, DETERGENTS, OR SYNTHETIC OILS.)
Weight -1 Qt.       10.2 lb. (4.6 kg)         3 Qt.       13.7 lb. (6.2 kg)
Materials of Construction
BodyZinc Alloy, Die Cast



Filters

Coalescers

Regulators

Lubricators

Combos

Accessories

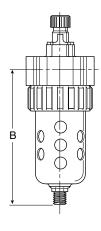
C137

#### **Remote Auto-Fill Device**



#### **Features**

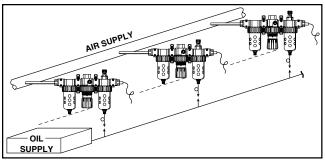
- Wide operating range (oil supply to inlet may be 30 to 270 psig; air operating pressure depends on bowl used).
- · Rugged polyurethane float design.
- · Complete field conversion kit.
- Adaptable on polycarbonate and metal bowls already in service.
- · Oil supply strainer standard.
- Fits 06L / 16L and 07L / 17L Series.



#### **Dimensions**

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

Inches (mm)



#### Operation

**Filters** 

Coalescers

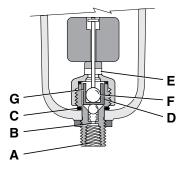
Regulators

Filter / Regulators

Lubricators

Combos

Accessories



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 cause 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

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

Metal Bowl / Sight Gauge – 0 to 250 psig (0 to 17.2 bar) 32°F to 175°F (0°C to 80°C)

Oil inlet pressure must be at least 20 psig above system air pressure and may be up to 300 psig.

Suggested Lubricant .....F442 Oil

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

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

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. (0.9 kg)

#### **Materials of Construction**

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



C139

## Close Nippled Combinations – 14 Miniature Series

• See individual component pages for details.

#### **Two-Unit** Combo

Series

14G

Coalescers

Regulators

Filter / Regulators

Lubricators

Combos

Accessories



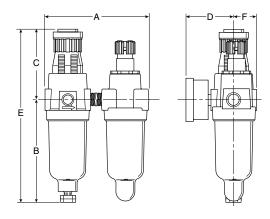
The last	The second secon

Model Numbers	
14G01B13F0GD	
14G11B13F0GD	

1/4" For other models, refer to ordering information on next page.

Port

1/8"

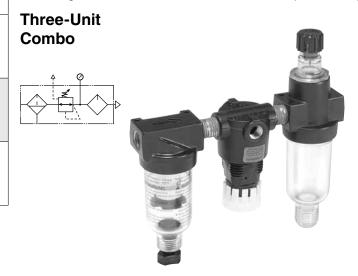


Α	В	С	D	E	F
3.75	3.79	2.42	2.04	6.21	0.79
(95)	(96)	(61)	(52)	(158)	(20)

Inches (mm)

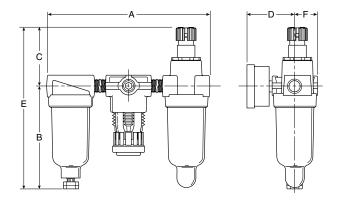
Note: All dimensions nominal.

• Regulator can be mounted with knob in up or down position.



Series	Port	Model Numbers
14A	1/8"	14A01B13F0GF
144	1/4"	14A11B13F0GF

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



Α	В	С	D	E	F
5.77	3.82	2.16	2.04	5.98	0.79
(147)	(97)	(55)	(52)	(152)	(20)

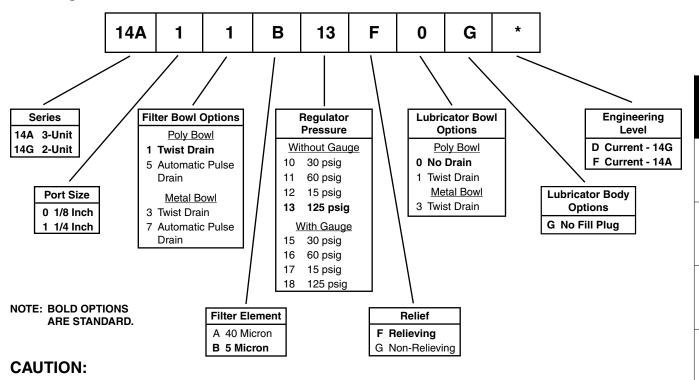
Inches (mm)

Note: All dimensions nominal.



## **Close Nippled Combinations – 14 Miniature Series**

#### **Ordering Information**



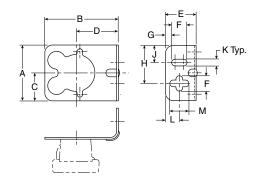
**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and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

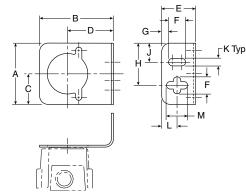
For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

#### **⚠ WARNING**

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

For polycarbonate bowl and sight dome, see Caution on page C2.





#### PS417BP

(Includes Panel Mount Nut)

#### **PS419**

#### **Dimensions**

Α	В	С	D	E	F	G	Н	J	K	L	М	Kit
1.80	2.37	0.90	1.35	1.00	0.50	0.20	1.24	0.56	0.22	0.45	0.62	<b>PS417BP</b> (10F, 14F, P3A, 14R, 14E)
(46)	(60)	(23)	(34)	(25)	(13)	(5)	(31)	(14)	(6)	(11)	(16)	
1.80	2.17	0.90	1.35	1.00	0.50	0.20	1.24	0.56	0.22	0.45	0.62	<b>PS419</b>
(46)	(55)	(23)	(34)	(25)	(13)	(5)	(31)	(14)	(6)	(11)	(16)	(04L)

C141

Inches (mm)



C

Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

Lubricators

Combos

#### **Model Numbers & Dimensions**

# **Close Nippled Combinations – 05 Economy Series**

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

# Combo

Coalescers

Regulators

Filter / Regulators

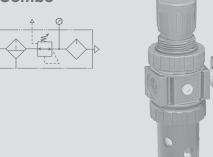
Lubricators

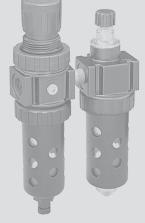
Combos

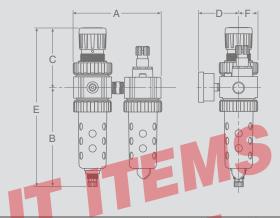
Accessories



Two-Unit







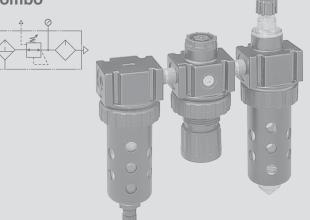
Series	Port	Model Numbers	
15G	1/4"	15G12A13A2N*	
150	3/8"	15G22A13A2N*	

C 8.50 1.03 4.49 5.35 2.05 (26)(136)(80)(216)(114)(52)

Note: All dimensions nomina

# **Three-Unit**





		<del> </del>	— A —	<del></del>	
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	C				
	<u></u>				
Ė					
	В	0 0		0 0	
		0 0		0 0	

Series	Port	Model Numbers
458	1/4"	15A12A13A2N*
15A	3/8"	15A22A13A2N*

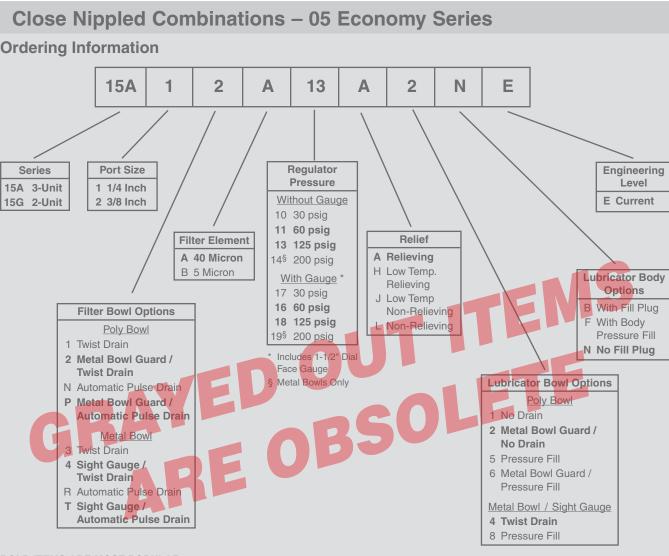
For other models, refer to ordering information on next page.

Α	В	С	D	Е	F
7.00	5.35	2.24	2.05	7.59	1.03
(178)	(136)	(57)	(52)	(193)	(26)

C142

Note: All dimensions nominal.





**BOLD ITEMS ARE MOST POPULAR.** 

#### **CAUTION:**

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

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

#### **↑ WARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

For polycarbonate bowl and sight dome, see Caution on page C2.

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

C143



C

Product Selection

Filters

Coalescers

Regulators

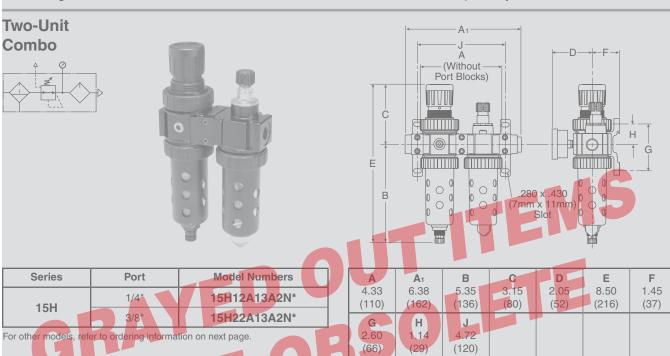
Filter / Regulators

Lubricators

Compos

# **Modular Combinations – 05 Economy Series**

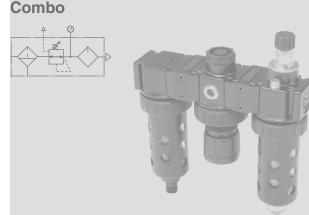
- Regulator can be mounted with knob in up or down position.
- See individual component pages for details.
- Gauges, Port Blocks, Manifold Blocks and Ball Valve must be ordered separately.



Inches (mm)

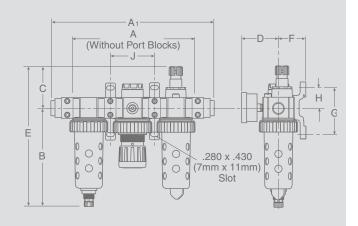
All dimensions nominal.Mounting brackets not included.

Three-Unit



Series	Port	Model Numbers
15D	1/4"	15B12A13A2N*
15B	3/8"	15B22A13A2N*

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



<b>A</b> 6.70 (170)	<b>A</b> <sub>1</sub> 8.72 (222)	<b>B</b> 5.35 (136)	<b>C</b> 2.24 (57)	<b>D</b> 2.05 (52)	<b>E</b> 7.59 (193)	<b>F</b> 1.45 (37)
<b>G</b> 2.60 (66)	<b>H</b> 1.14 (29)	<b>J</b> 2.35 (600)				

Inches (mm)

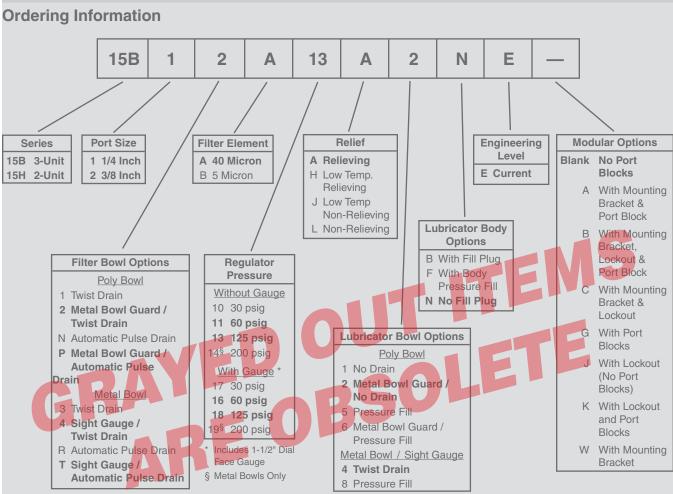
- All dimensions nominal.
- Mounting brackets not included.



Regulators

Coalescers

Accessories



**BOLD ITEMS ARE MOST POPULAR.** 

#### CAUTION:

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

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

#### ♠ WARNING

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

For polycarbonate bowl and sight dome, see Caution on page C2.

C145

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

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

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

\* 1/4 & 3/8 inch meet ISO 1179-1 Standard.



Filters

Coalescers

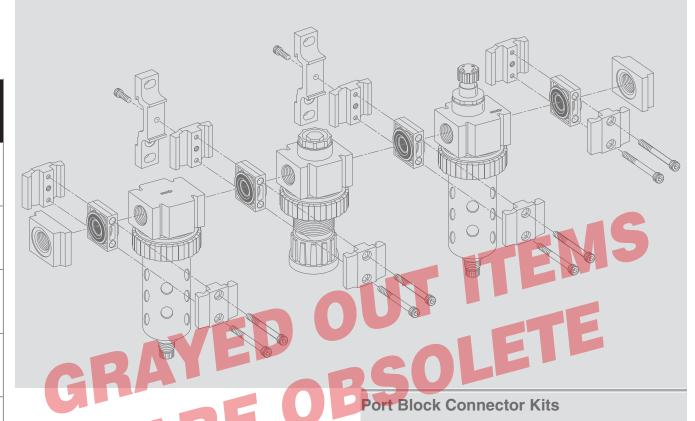
Regulators

Filter / Regulators

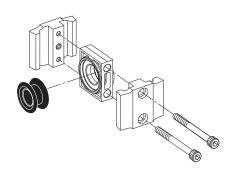
Lubricators

Accessories

# **Modular Accessories – 05 Economy Series**



# **Body Connectors** PS954P



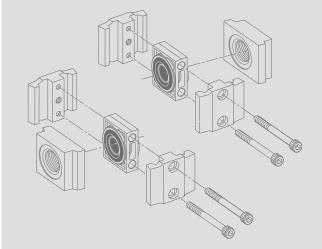
Body Connectors allow you to easily assemble and disassemble Modular Combinations.

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

Each Kit includes one set.

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

1/4 & 3/8 inch meet ISO 1179-1 Standard.



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

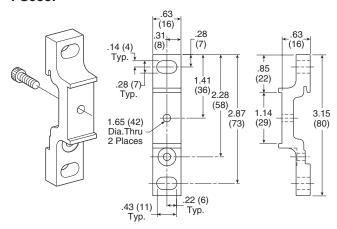
Each Kit includes all the necessary pieces to make two port connections.



# Modular Accessories - 05 Economy Series

(Revised 05-13-14)

#### **Wall Mounting Kits PS955P**



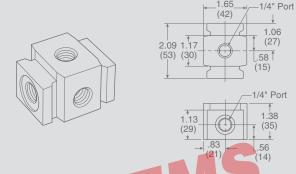
Wall Mounting Kits are available for mounting your Modular Assemblies and can be assembled and used with any standard body connector set.

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

#### Modular Manifold Block PS95701P

1/4" Port

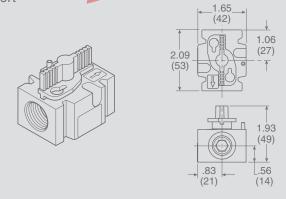
**BSU** 



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.

# **Lockout Valve**

PS95601P 1/4" Port



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

NOTE: Body Connectors are not supplied with Lockout Valves.



Filters

Coalescers

Regulators

Lubricators

# Close Nippled Combinations - 06 Compact & 07 Standard Series

• See individual component pages for details.

# Two-Unit Combo

Filters

Coalescers

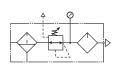
Regulators

Filter / Regulators

Lubricators

Combos

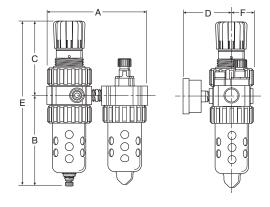
Accessories





Series	Model Numbers	Port	Model Numbers	Series
	06G12A13A2BC	1/4"	16G12A13A2BC	
06G	06G22A13A2BC	3/8"	16G22A13A2BC	16G
	06G32A13A2BC	1/2"	16G32A13A2BC	
07G	07G32A13A2BD	1/2"	17G32A13A2BD	17G
074	07G42A13A2BD	3/4"	17G42A13A2BD	176

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

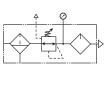


06G, 16G Series					
<b>A</b>	<b>B</b> 5.69 (145)	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
6.13		4.69	3.18	10.38	1.37
(156)		(119)	(81)	(264)	(35)
		07G, 170	G Series		
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
6.99	6.97	4.79	3.44	11.76	1.63
(178)	(177)	(122)	(87)	(299)	(41)

Inches (mm)

All dimensions nominal.

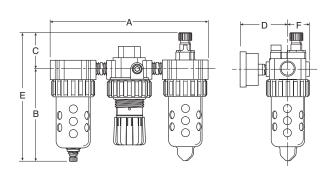
# Three-Unit Combo





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

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



06A, 16A Series						
<b>A</b>	<b>B</b> 5.69 (145)	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	
9.45		2.24	3.18	7.93	1.37	
(240)		(57)	(81)	(201)	(35)	
	07A, 17A Series					
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	
10.74	6.97	2.41	3.44	9.38	1.63	
(2738)	(177)	(61)	(87)	(238)	(41)	

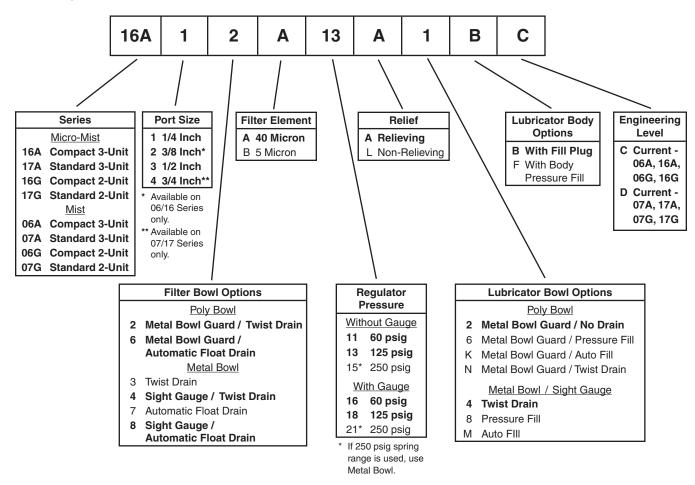
Inches (mm)

All dimensions nominal.



# Close Nippled Combinations - 06 Compact & 07 Standard Series

#### **Ordering Information**



**BOLD ITEMS ARE MOST POPULAR.** 

#### **CAUTION:**

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

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

#### **↑** WARNING

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

For polycarbonate bowl and sight dome, see Caution on page C2.

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

C149

 Mounting Bracket Kit (Includes Panel Mount Nut)

 06A, 16A, 06G, 16G
 PS707P

 07A, 17A, 07G, 17G
 PS807P



C

Product Selection

Filters

Coalescers

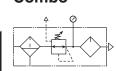
Regulators

Filter / Regulators

lbos Lubricators

• See individual component pages for details.

# Two-Unit Combo

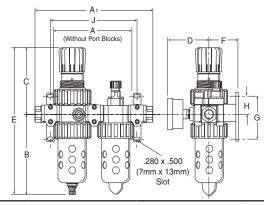




Modular Combinations - 06 Compact & 07 Standard Series

Series	Model Numbers	Port	Model Numbers	Series
	06H12A13A2BC	1/4"	16H12A13A2BC	
06H	06H22A13A2BC	3/8"	16H22A13A2BC	16H
	06H32A13A2BCG	1/2"†	16H32A13A2BCG	
07H	07H32A13A2BD	1/2"	17H32A13A2BD	17H
U/H	07H42A13A2BD	3/4"	17H42A13A2BD	1711

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



06H, 16H Series					
<b>A</b> 6.10 (155)	<b>A</b> <sub>1</sub> 9.04 (230)	<b>B</b> 5.69 (145)	<b>C</b> 4.69 (119)	<b>D</b> 3.18 (81)	E 10.38 (264)
<b>F</b> 2.00 (51)	<b>G</b> 3.58 (91)	<b>H</b> 1.40 (36)	<b>J</b> 6.65 (169)		
		07H, 17I	H Series		
<b>A</b> 7.00 (178)	<b>A</b> <sub>1</sub> 10.28 (261)	<b>B</b> 6.97 (177)	<b>C</b> 4.79 (122)	<b>D</b> 3.44 (87)	<b>E</b> 11.76 (299)
<b>F</b> 2.09 (53)	<b>G</b> 3.58 (91)	<b>H</b> 1.40 (36)	<b>J</b> 7.51 (191)		

Inches (mm)

All dimensions nominal.

# Three-Unit Combo

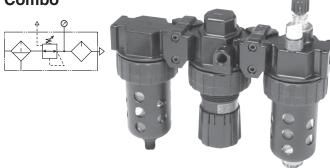
Coalescers

Regulators

Filter / Regulators

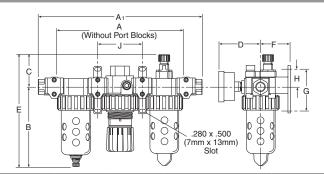
Lubricators

Accessories



Series	Model Numbers	Port	Model Numbers	Series
	06B12A13A2BC	1/4"	16B12A13A2BC	
06B	06B22A13A2BC	3/8"	16B22A13A2BC	16B
	06B32A13A2BCG	1/2"†	16B32A13A2BCG	
070	07B32A13A2BD	1/2"	17B32A13A2BD	170
07B	07B42A13A2BD	3/4"	17B42A13A2BD	17B

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



06B, 16B Series					
Α	<b>A</b> 1	В	С	D	E
9.46	12.39	5.69	2.24	3.18	7.93
(240)	(315)	(145)	(57)	(81)	(202)
F	G	Н	J		
2.00	3.58	1.40	3.33		
(51)	(91)	(36)	(85)		
		07B, 17l	B Series		
Α	<b>A</b> 1	В	С	D	E
10.750	14.03	6.97	2.41	3.44	9.38
(273)	(356)	(177)	(61)	(87)	(238)
F	G	Н	J		
2.18	3.58	1.40	3.76		
(55)	(91)	(36)	(95)		
I I ( )					

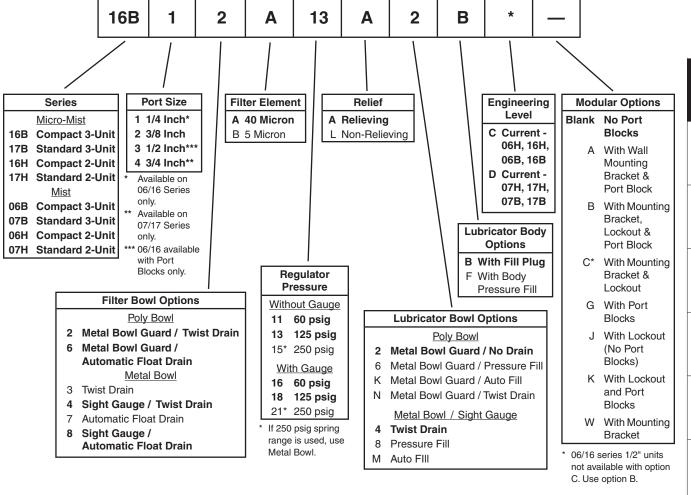
Inches (mm)

• All dimensions nominal.



# Modular Combinations – 06 Compact & 07 Standard Series

#### **Ordering Information**



**BOLD ITEMS ARE MOST POPULAR.** 

#### **CAUTION:**

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

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

#### **⚠ WARNING**

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

For polycarbonate bowl and sight dome, see Caution on page C2.

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

Body Connector Kit	PS754P
Lockout Valve	PS756P
Manifold Block	PS757P
Wall Mounting Kit	PS755P

Port Block Kits:	Size	NPT	BSPP	BSPT
06 Series	1/4"	PS750P	PS765P	PS761P
	3/8"	PS751P	PS766P <sup>†</sup>	PS762P † PS799P*
* Llog 1/4 or 2/9 ported by		PS752P*.	PS767P*	<sup>T</sup> PS799P*

<sup>† 1/4 3/8 &</sup>amp; 1/2 inch meet ISO 1179-1 Standard

., ., 0,0 0 1,2 111011 11		Otarida a.		
07 Series	1/4"	PS850P	PS865P	PS861P
		PS851P		
	1/2"	PS852P	PS867P <sup>‡</sup>	PS863P
	3/4"	PS853P	PS860P	PS864P
1/2 inch mosts ICO	1170 1 Standar	4		

<sup>&</sup>lt;sup>‡</sup> 1/2 inch meets ISO 1179-1 Standard.

C151



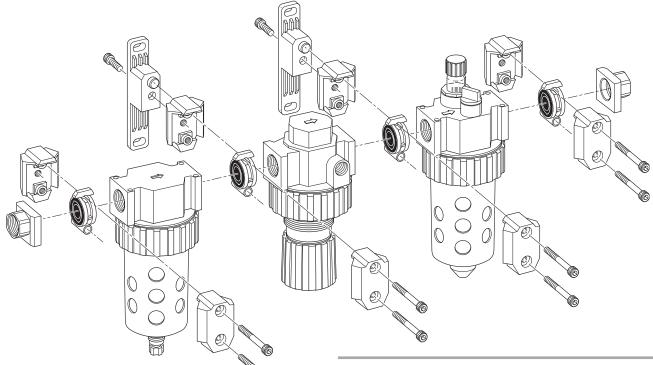
Lubricators Combos

Filters

Coalescers

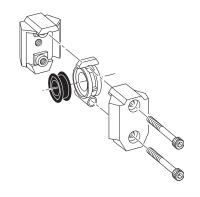
Regulators

# Modular Accessories - 06 Compact & 07 Standard Series



### **Body Connectors**

06 Series	PS754P
07 Series	PS854P



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

Each Kit includes one set.

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

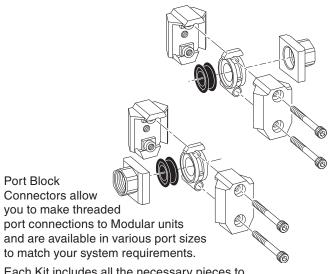
#### **Port Block Connector Kits**

Series	Size	NPT	BSPP	BSPT
06 Series	1/4"	PS750P	PS765P <sup>†</sup> .	PS761P
	3/8"	PS751P	PS766P <sup>†</sup> ,	PS762P
	1/2"	PS752P*.	PS767P* <sup>†</sup>	PS799P*
* Use 1/4 or 3/8 porte	d bodies.			

 $<sup>^{\</sup>dagger}$  1/4, 3/8 & 1/2 inch meet ISO 1179-1 Standard.

07 Series	1/4"	PS850P	PS865P	PS861P
	3/8"	PS851P	PS866P	PS862P
	1/2"	PS852P	PS867P <sup>‡</sup> .	PS863P
	3/4"	DCSESD	DCSCOD	DC864D

<sup>&</sup>lt;sup>‡</sup> 1/2 inch meets ISO 1179-1 Standard



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



Coalescers

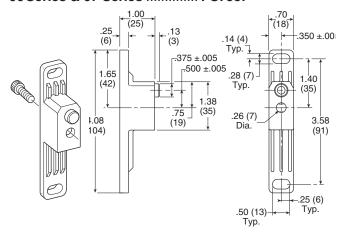
Regulators

#### **Part Numbers**

### Modular Accessories - 06 Compact & 07 Standard Series

#### **Wall Mounting Kits**

06 Series & 07 Series ..... PS755P



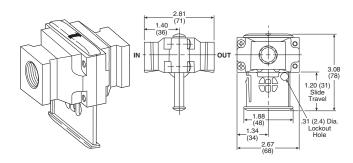
Wall Mounting Kits are available for mounting your Modular Assemblies and can be assembled and used with any standard body connector set.

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

Kit includes 1 assembly.

#### **Lockout Valves**

06 Series ....... PS756P ..... 3/8" Port 07 Series ....... PS856P ..... 1/2" Port

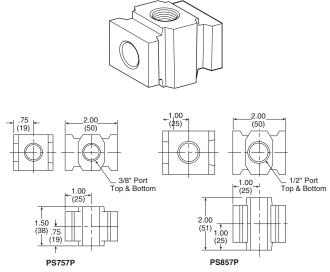


Lockout Valves provide positive shut-off and exhaust capability to isolate Modular units so they can be easily removed from the line and can be locked in a closed position. Center position can be used as a slow start. Accepts #3 padlock.

NOTE: Body Connectors are not supplied with Lockout Valves.

#### **Modular Manifold Block**

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



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

NOTE: Body Connectors are not supplied with Manifold Blocks.



Product Selection

Filters

Coalescers

Regulators

Filter/ Regulators

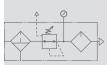
Lubricators

Compos

# 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)

Filters

Coalescers

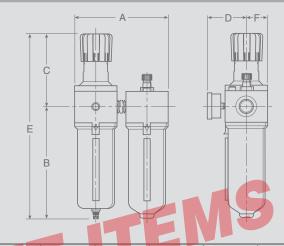
Regulators

Filter/ Regulators

Lubricators

Combos

Accessories



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	В	C	D	Е	F
7.76	9.57	6.38	3.56	1 <mark>5.95</mark>	1.81
(197)	(243)	(162)	(90)	(405)	(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 Elem
- Manual Twist Drain
- Relieving Regulator
- 125 PSI (8.6 bar)

**Series** 

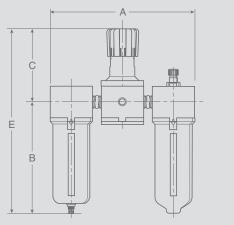
P3N3B

ent	0	

	•
Port	Model Numbers
3/4"	P3N3B96SGMNNLNA
1"	P3N3B98SGMNNLNA
1-1/2"†	P3N3B9PSGMNNLNA

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.



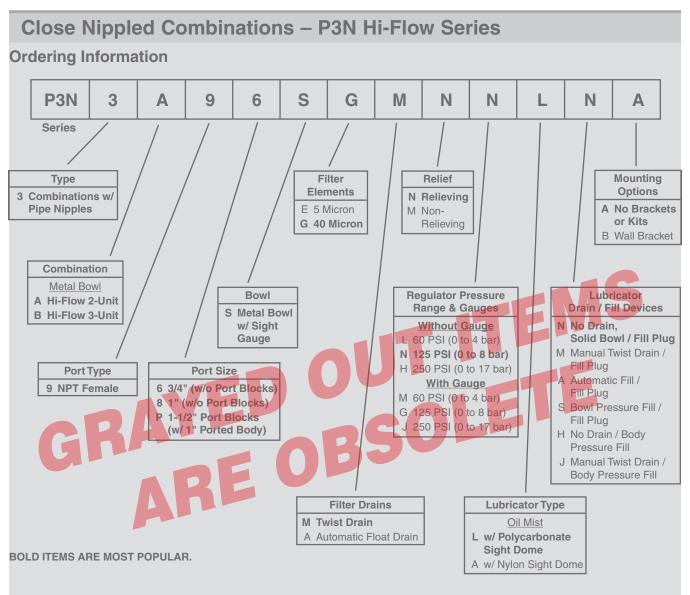
<u> </u>			Ψ,		4
Α	В	С	D	Е	F
11.89	9.57	6.38	3.56	15.95	1.81
(302)	(243)	(162)	(90)	(405)	(50)

Inches (mm)

C154

- 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).





#### **CAUTION:**

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

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

#### **MARNING**

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

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

C155

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

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



t d

Product Selection

Filters

Coalescers

Regulators

Filter / Regulator

Lubricators

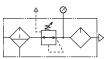
Combos

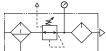
P3N Hi-Flow Series

# Modular Combinations - P3N Hi-Flow Series

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

#### **Two-Unit** Combo





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

•	0

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

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.

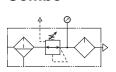
A2 (w/ Mtg Brkts, _ w/o Port Blocks)	←A3 (w/ Mtg Brkts & Port Blocks)→  ←———————————————————————————————————	← B2 ← B1 ← B1 ← B ← B ← B ← B ← B ← B ← B ←
C		

<b>A</b> 7.24 (184)	<b>A</b> <sub>1</sub> 9.53 (242)	<b>A</b> <sub>2</sub> 9.84 (250)	<b>A</b> <sub>3</sub> 12.13 (308)	<b>B</b> 3.62 (92)	<b>B</b> <sub>1</sub> 5.20 (132)	<b>B</b> <sub>2</sub> 5.74 (146)
С	D	Е				
6.38	9.57	15.95				
(162)	(243)	(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).

#### Three-Unit Combo



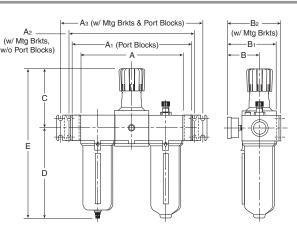


- · Manual Twist Drain Standard on Filter
- Relieving Regulator
- 125 PSI (8.6 bar)

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

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.



Α	<b>A</b> 1	<b>A</b> 2	Аз	В	B <sub>1</sub>	<b>B</b> <sub>2</sub>
10.87	13.15	13.46	15.75	3.62	5.20	5.74
(276)	(334)	(342)	(400)	(92)	(132)	(146)
С	D	E				
6.38	9.57	15.95				
(162)	(243)	(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).

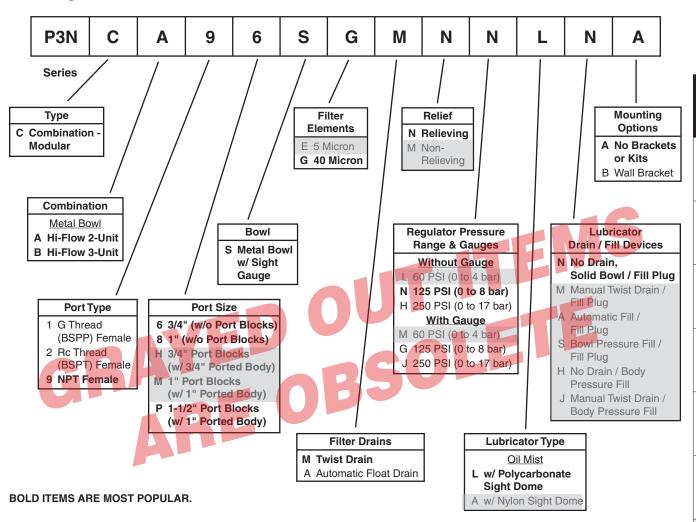


Filters

Coalescers

### Modular Combinations - P3N Hi-Flow Series

#### **Ordering Information**



#### **CAUTION:**

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

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

#### **⚠ WARNING**

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

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

Tito a Aoc	000001100	cc marviadar cc	importent acction	is for other kits and docessories.)
Port Block Kits	: For Modular Con	nbinations		Wall Mounting Kit*P3NKA00MW
	3/4"	1"	1-1/2"	
NPT	P3NKB96CL	P3NKB98CL	P3NKB9BCL	
BSPP	P3NKB16CL*	P3NKB18CL*	P3NKB1BCL*	* If 1-1/2 BSPP E02 fittings are required, use P3NKA0BMW.
* 3/4, 1 & 1-1/2 inc	h meet ISO 1179-1 St	andard.		

C157



Product Selection

Filters

Coalescers

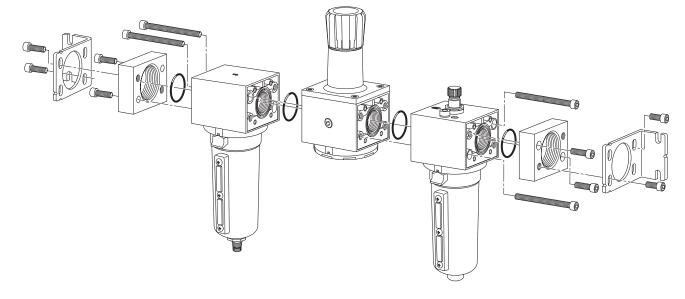
Regulators

Filter /

Lubricators

Combos

#### Modular Accessories - P3N Hi-Flow Series



### **Mounting Brackets**

#### P3NKA00MW

Coalescers

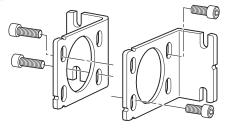
Regulators

Filter/ Regulators

Lubricators

Accessories

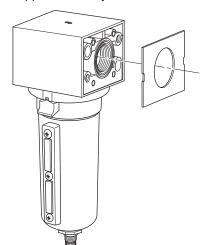
For 1-1/2" BSPP Port Block with E02 fitting application, use **Mounting Bracket Kit P3NKA0BMW** 



#### **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"

1-1/2"

Individual Filters, Individual Regulators and 2-Piece Filter and Regulator Assemblies:

**NPT** P3NKB96CP......P3NKB98CP......P3NKB9BCP **BSPP** P3NKB16CP\*.....P3NKB18CP\*......P3NKB1BCP\*

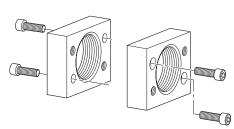
2 and 3 Piece Combinations including a Lubricator (FR/L & FRL), Individual Lubricators, Individual Coalescing Filters and 2-Piece Filter and Coalescer Assemblies:

P3NKB96CL ......P3NKB98CL ......P3NKB9BCL **NPT 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.

3/4, 1 & 1-1/2 inch meet ISO 1179-1 Standard.





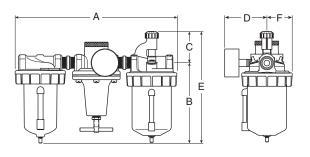
- See individual components for details.
- · Gauges included on combinations.

#### **Three-Unit Combo**



Series	Port	Model Numbers			
	3/4"	C628-06FRLWJCW			
0600	1"	C628-08FRLWJCW			
C628	1-1/4"	C628-10FRLWJCW			
	1-1/2"	C628-12FRLWJCW			

For other models, refer to ordering information below.



Α	ВС		A B C		D	E	F	
C628-06FRL, C628-08FRL								
15.75 (400)	7.75 (197)	2.63 (67)	3.52 (89)	13.00 (330)	2.48 (63)			
C628-10FRL, C628-12FRL								
16.50 (419)	8.13 (206)	2.84 (72)	3.86 (98)	14.13 (359)	2.64 (67)			

Inches (mm)

• All dimensions nominal.

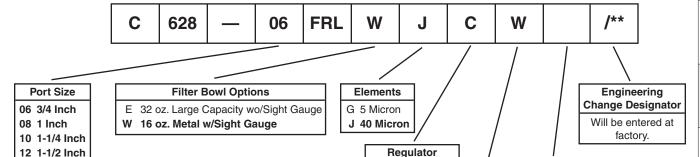
Reduced

**Pressure Range** 

C 0-125 psig

D 0-250 psig

#### **Ordering Information**



C159

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

#### **⚠ WARNING**

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

#### **CAUTION:**

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

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

#### **Lubricator Bowl Options**

E 32 oz. Large Capacity wo/Sight GaugeW 16 oz. Metal w/Sight Gauge

-Packor

**Drains and Options** 

H Button Head Fill Fitting

K Non-Relieving Regulator

Q External Heavy Duty

Auto Drain (Filter)

R Internal Auto Drain (Filter)

X9 Manual Twist Drain on

Lubricator (Increases

Product Length by 9/16 Inch)

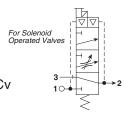
(Lubricator)

### 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



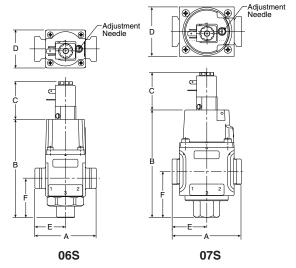




07S

**06S** Operation

When the valve is installed into the pneumatic system and pilot operator receives no signal, the air is blocked at Port 1. When a pilot signal is received at pilot operator, the valve shifts closing the connection between Ports 2 and 3. At the same time air flow begins between Ports 1 and 2 at a slow rate controlled by the needle valve located on the top of the valve. When the down stream pressure reaches approximately 60% of the supply pressure, the main valve spool opens allowing full flow through the valve into the system. If pilot signal or system pressure is lost, the valve returns to it's initial state venting the down stream pressure through Port 3.



#### **Dimensions:**

Model	Port Size	Α	В	С	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)

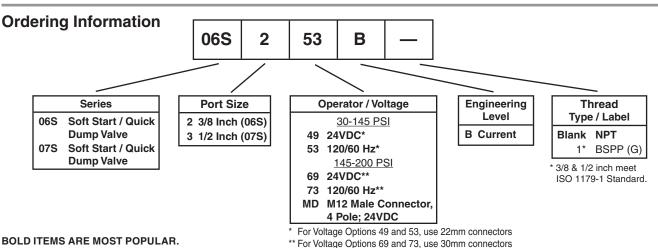
Inches (mm)

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.





Coalescers

Regulators

#### **Air Line Accessories**

#### **Performance Characteristics**

Soft Start / Quick Dump Valve

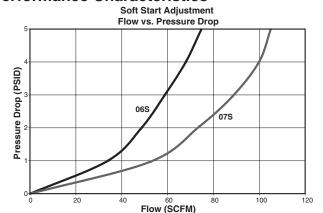


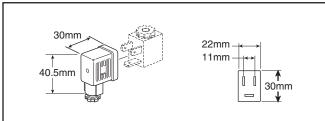
Table 1: Shows the relationship between the inlet pressure and downstream pressure at which the main valve opens.

Inlet Pressure nois	Downstream Pressure psig				
Inlet Pressure psig	06S	07S			
75	55	52			
100	67	68			
125	80	82			

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

Series	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
PS2429BP	PS2429JBP	Unlighted
PS243079BP	PS2430J79BP*	Light – 24VDC
PS243083BP	PS2430J83BP*	Light – 120V/60Hz

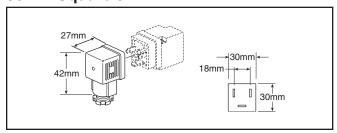
<sup>\*</sup> LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord. IP65 rated when properly installed.

#### **Engineering Data:**

Conductors: 2 Poles Plus Ground; Cable Range (Connector Only): 6 to 8mm (0.24 to 0.31 Inch); Contact Spacing: 11mm

#### 30mm Square 3-Pin



Connector	Connector with 6' (2m) Cord	Description
PS2028BP	PS2028JBP	Unlighted
PS203279BP	PS2032J79BP*	Light – 24VDC
PS203283BP	PS2032J83BP*	Light - 120V/60Hz

<sup>\*</sup> LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord. IP65 rated when properly installed.

#### **Engineering Data:**

Conductors: 2 Poles Plus Ground; Cable Range (Connector Only): 8 to 10mm (0.31 to 0.39 Inch); Contact Spacing: 18mm

#### **Kits & Accessories**

06S Repair Kit	PHRKSC75
07S Repair Kit	PHRKSC105
06 Modular Body Connectors	PS754P
07 Modular Body Connectors	PS854P
1/2" Exhaust Silencer	ES50MB
3/4" Exhaust Silencer	FS75MB

#### **Specifications**

Exhaust Ports 06S	
Inlet and Outlet Ports 06S	
Maximum Pressure – Standard CoilHigh Pressure Coil	
Minimum Operating Pressure	30 psig (2.1 bar)
Temperature Ratings	40°F to 120°F (4°C to 49°C)
Weight 06S 07S	\

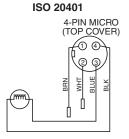
#### **Materials of Construction**

Body	Aluminum
Bottom Plug	Brass

#### **Connections**

Central M12 Male Connector, 4 Pole

Pin Number		Function	Color
1	24V	Supply	Brown
2	0 to 10V or 4 to 20mA	Control Signal Ri = 100k $\Omega$	White
3	0V (GND)	Supply	Blue
4	24V	Alarm Output Signal	Black





Filters

Coalescers

Regulators

Lubricators

Combos



### 06T & 07T Solenoid Quick Dump Valve

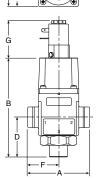
#### **Features**

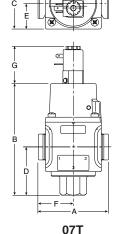
- Shuts off incoming pressure while rapidly exhausting downstream pressure
- · Large exhaust flow capacities up to 5.0 Cv
- Solenoid operation
- · Non-locking manual override
- · Inline or Modular Mounting





07T





06T

**Dimensions:** 

Model	Port Size	Α	В	С	D	E	F	G	Н
06T	3/8"	3.36 (85)	5.40 (137)		2.17 (26)	1.04 (43)	1.68 (43)	2.07 (53)	1.90 (48)
07T	1/2"	3.81 (96)	5.96 (151)	2.74 (70)	2.55 (65)	1.37 (35)	1.91 (48)	2.07 (53)	1.90 (48)

Inches (mm)

#### 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.



Series 06T Solenoid Quick **Dump Valve** Solenoid Quick **Dump Valve** 

**Port Size** 2 3/8 Inch (06T) 3 1/2 Inch (07T)

06T

2

Operator / Voltage 30-145 PSI

53

49 24VDC\*

53 120/60 Hz\* 145-200 PSI

A

69 24VDC\*\*

73 120/60 Hz\*\*

M12 Male Connector. 4 Pole; 24VDC

**Engineering** Level Current

**Thread** Type / Label Blank NPT BSPP (G)

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

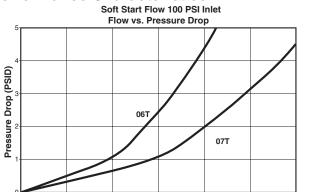
**BOLD ITEMS ARE MOST POPULAR.** 

- \* For Voltage Options 49 and 53, use 22mm connectors
- \*\* For Voltage Options 69 and 73, use 30mm connectors



#### **Solenoid Quick Dump Valve**

#### **Performance Characteristics**



Flow (SCFM)

100

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

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

C

Product

Filters

Coalescers

Regulators

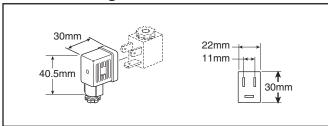
Filter / Regulators

Lubricators

Combos

Accessories

#### 22mm Rectangular 3-Pin



Connector	Connector with 6' (2m) Cord	Description	
PS2429BP	PS2429JBP	Unlighted	
PS243079BP	PS2430J79BP*	Light – 24VDC	
PS243083BP	PS2430J83BP*	Light - 120V/60Hz	

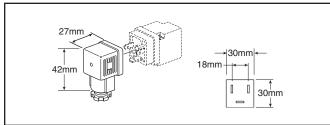
<sup>\*</sup> LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord. IP65 rated when properly installed.

#### **Engineering Data:**

Conductors: 2 Poles Plus Ground; Cable Range (Connector Only): 6 to 8mm (0.24 to 0.31 Inch); Contact Spacing: 11mm

#### 30mm Square 3-Pin



Connector	Connector with 6' (2m) Cord	Description	
PS2028BP	PS2028JBP	Unlighted	
PS203279BP	PS2032J79BP*	Light – 6-24VDC	
PS203283BP	PS2032J83BP*	Light – 120V/60Hz	

<sup>\*</sup> LED with surge suppression.

Note: Max Ø6.5mm cable size required for connector w/o 6' (2m) cord. IP65 rated when properly installed.

#### **Engineering Data:**

Conductors: 2 Poles Plus Ground; Cable Range (Connector Only): 8 to 10mm (0.31 to 0.39 Inch); Contact Spacing: 18mm

#### **Kits & Accessories**

06T Repair Kit	PHRKS75
07T Repair Kit	PHRKS105
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	
07T	1/2 Inch
Maximum Pressure –	
Standard Coil	145 psig (10.0 bar)
High Pressure Coil	200 psig (13.8 bar)
Minimum Operating Pressure	30 psig (2.1 bar)
Temperature Ratings	40°F to 120°F (4°C to 49°C)
Weight	
06T	2.25 lbs. (1.02 kg)
07T	

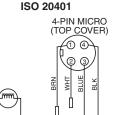
#### **Materials of Construction**

Body	Aluminum
Bottom Plug	Brass

#### **Connections**

Central M12 Male Connector, 4 Pole

Piı	n Number	Function	Color
1	24V	Supply	Brown
2	0 to 10V or 4 to 20mA	Control Signal Ri = 100k $\Omega$	White
3	0V (GND)	Supply	Blue
4	24V	Alarm Output Signal	Black

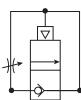




#### 06P & 07P Auto Pilot Soft Start Valve

#### **Features**

- Smooth start-up of pneumatic system
- Air pilot operation
- Large flow capacities up to 5.5 Cv
- · Inline or Modular Mounting





Coalescers

Regulators

Accessories





### 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.

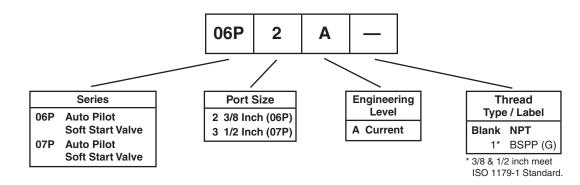
The Auto pilot soft start valve is not intended to be used as a shut off valve and should always be placed after a shut off valve.



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**

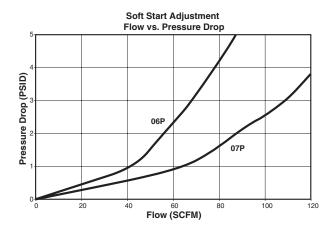


**BOLD ITEMS ARE MOST POPULAR.** 



# Prep-Air<sup>®</sup> II, 06P & 07P **Air Line Accessories**

# Performance Characteristics



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

Inlat Duasauus main	Downstream Pressure psig		
Inlet Pressure psig	06P	07P	
75	45	25	
100	60	33	
125	75	38	
150	85	45	

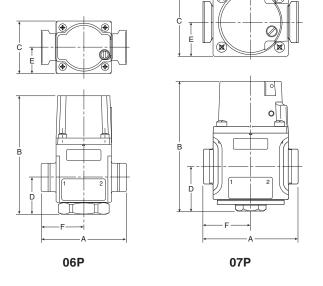
Table 2: Product forward Flow Cv (1 to 2).

Series	Flow Cv
06P	3.8
07P	5.5

#### **Dimensions:**

Model	Port Size	Α	В	C	D	ш	F
06P	3/8"	3.36 (85)	4.70 (119)	2.08 (53)	1.48 (38)	1.04 (26)	1.68 (43)
07P	1/2"	3.81 (96)	5.21 (132)	2.07 (53)	1.80 (46)	1.37 (35)	1.91 (48)

Inches (mm)



#### **Repair Kits**

06P Repair Kit	PHRKSS75
07P Repair Kit	PHRKSS105
06 Modular Body Connectors	PS754P
07 Modular Body Connectors	PS854P

#### **Materials of Construction**

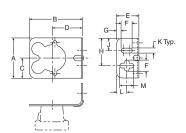
Body	Aluminum
Bottom Plug –	
06P	Brass
07P	Zinc

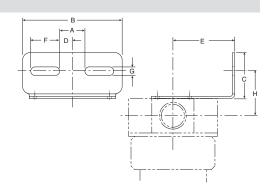
#### **Specifications**

Maximum Pressure	300 psig (20.7 bar)
Minimum Operating Pressure	30 psig (2.1 bar)
Temperature Ratings	40°F to 120°F (4°C to 49°C)
Opens to Full Flow	60% Supply Pressure
Weight -	
06P	2.75 lb. (1.25 kg)
07P	4.50 lb. (2.04 kg)



# **Mounting Bracket Kits**



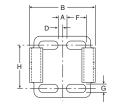


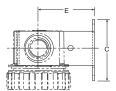
PS417BP

(Includes Panel Mount Nut)

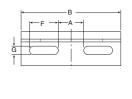
**PS419** (Includes Panel Mount Nut)

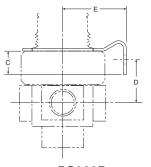
PS743P, PS843P

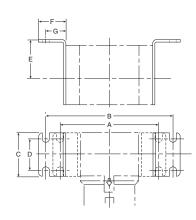




PS943P







**PS707P & PS807P** 

(Includes Panel Mount Nut)

PS963P (Includes Aluminum Panel Mount Nut)

P3NKA00MW

#### **Dimensions**

Α	В	С	D	E	F	G	Н	J	K	L	M	Kit
1.80 (46)	2.37 (60)	0.90 (23)	1.35 (34)	1.00 (25)	0.50 (13)	0.20 (5)	1.24 (31)	0.56 (14)	0.22 (6)	0.45 (11)	0.62 (16)	<b>PS417BP</b> (10F, 14F, P3A, 14R, 14E)
1.80 (46)	2.17 (55)	0.90 (23)	1.35 (34)	1.00 (25)	0.50 (13)	0.20 (5)	1.24 (31)	0.56 (14)	0.22 (6)	0.45 (11)	0.62 (16)	<b>PS419</b> (04L)
0.84 (21)	3.25 (83)	1.50 (38)	0.42 (11)	2.00 (51)	0.94 (24)	0.28 (7)	1.44 (37)	_	_	_	_	<b>PS743P</b> (06F, 11F, 06L, 16L)
1.00 (25)	3.94 (100)	1.57 (40)	0.50 (13)	2.19 (56)	1.25 (32)	0.28 (7)	1.68 (43)	_	_	_	_	<b>PS843P</b> (07F, 12F, 07L, 17L)
0.28 (7)	2.12 (54)	2.00 (51)	0.14 (4)	1.85 (47)	0.63 (16)	0.28 (7)	1.41 (36)	_	_	_	_	<b>PS943P</b> (05F, 15F, 15L)
0.84 (21)	2.59 (66)	0.49 (12)	1.02 (26)	1.85 (47)	0.61 (15)	0.28 (7)	_	_	_	_	_	<b>PS963P</b> (05R, 10R, 05E, 27E)
0.84 (21)	3.26 (83)	0.77 (20)	1.46 (37)	2.00 (51)	0.94 (24)	0.28 (7)	_	_	_	_	_	<b>PS707P</b> (06R, 06E, 11R)
1.00 (25)	3.94 (100)	0.65 (17)	1.68 (43)	2.19 (56)	1.25 (32)	0.28 (7)		_		_		<b>PS807P</b> (07R, 07E, 12R)
6.22 (158)	8.19 (208)	2.75 (70)	1.97 (50)	2.36 (60)	1.77 (45)	1.30 (33)	_	_	_	_	_	<b>P3NKA00MW</b> (P3NF, P3NR, P3NE, P3NL)

inches (mm)



Coalescers

Regulators

# Safety Guide For Selecting And Using Pneumatic Division **Products And Related Accessories**

### **!** WARNING:

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF PNEUMATIC DIVISION PRODUCTS, ASSEMBLIES OR RELATED ITEMS ("PRODUCTS") CAN CAUSE DEATH, PERSONAL INJURY, AND PROPERTY DAMAGE. POSSIBLE CONSEQUENCES OF FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THESE PRODUCTS INCLUDE BUT ARE NOT LIMITED TO:

- Unintended or mistimed cycling or motion of machine members or failure to cycle
- Work pieces or component parts being thrown off at high speeds.
- Failure of a device to function properly for example, failure to clamp or unclamp an associated item or device.
- Explosion
- Suddenly moving or falling objects.
- Release of toxic or otherwise injurious liquids or gasses.

Before selecting or using any of these Products, it is important that you read and follow the instructions below.

#### 1. GENERAL INSTRUCTIONS

- 1.1. Scope: This safety guide is designed to cover general guidelines on the installation, use, and maintenance of Pneumatic Division Valves, FRLs (Filters, Pressure Regulators, and Lubricators), Vacuum products and related accessory components.
- 1.2. Fail-Safe: Valves, FRLs, Vacuum products and their related components can and do fail without warning for many reasons. Design all systems and equipment in a fail-safe mode, so that failure of associated valves, FRLs or Vacuum products will not endanger persons
- 1.3 Relevant International Standards: For a good guide to the application of a broad spectrum of pneumatic fluid power devices see: ISO 4414:1998, Pneumatic Fluid Power - General Rules Relating to Systems. See www.iso.org for ordering information.
- 1.4. Distribution: Provide a copy of this safety guide to each person that is responsible for selection, installation, or use of Valves, FRLs or Vacuum products. Do not select, or use Parker valves, FRLs or vacuum products without thoroughly reading and understanding this safety guide as well as the specific Parker publications for the products considered or selected.
- 1.5. User Responsibility: Due to the wide variety of operating conditions and applications for valves, FRLs, and vacuum products Parker and its distributors do not represent or warrant that any particular valve, FRL or vacuum product is suitable for any specific end use system. This safety guide does not analyze all technical parameters that must be considered in selecting a product. The user, through its own analysis and testing, is solely responsible for:
  - Making the final selection of the appropriate valve, FRL, Vacuum component, or accessory.
  - · Assuring that all user's performance, endurance, maintenance, safety, and warning requirements are met and that the application presents no health or safety hazards.
  - Complying with all existing warning labels and / or providing all appropriate health and safety warnings on the equipment on which the valves, FRLs or Vacuum products are used; and,
  - · Assuring compliance with all applicable government and industry standards.
- 1.6. Safety Devices: Safety devices should not be removed, or defeated.
- 1.7. Warning Labels: Warning labels should not be removed, painted over or otherwise obscured.
- 1.8. Additional Questions: Call the appropriate Parker technical service department if you have any questions or require any additional information. See the Parker publication for the product being considered or used, or call 1-800-CPARKER, or go to www.parker.com, for telephone numbers of the appropriate technical service department.

#### 2. PRODUCT SELECTION INSTRUCTIONS

- 2.1. Flow Rate: The flow rate requirements of a system are frequently the primary consideration when designing any pneumatic system. System components need to be able to provide adequate flow and pressure for the desired application.
- 2.2. Pressure Rating: Never exceed the rated pressure of a product. Consult product labeling, Pneumatic Division catalogs or the instruction sheets supplied for maximum pressure ratings.
- 2.3. Temperature Rating: Never exceed the temperature rating of a product. Excessive heat can shorten the life expectancy of a product and result in complete product failure.
- 2.4. Environment: Many environmental conditions can affect the integrity and suitability of a product for a given application. Pneumatic Division products are designed for use in general purpose industrial applications. If these products are to be used in unusual circumstances such as direct sunlight and/or corrosive or caustic environments, such use can shorten the useful life and lead to premature failure of a product.
- 2.5. Lubrication and Compressor Carryover: Some modern synthetic oils can and will attack nitrile seals. If there is any possibility of synthetic oils or greases migrating into the pneumatic components check for compatibility with the seal materials used. Consult the factory or product literature for materials of construction.
- 2.6. Polycarbonate Bowls and Sight Glasses: To avoid potential polycarbonate bowl failures:
  - · Do not locate polycarbonate bowls or sight glasses in areas where they could be subject to direct sunlight, impact blow, or temperatures outside of the rated range.
  - · Do not expose or clean polycarbonate bowls with detergents, chlorinated hydro-carbons, keytones, esters or certain alcohols.
  - Do not use polycarbonate bowls or sight glasses in air systems where compressors are lubricated with fire resistant fluids such as phosphate ester and di-ester lubricants.



#### **Safety Guide**

- 2.7. Chemical Compatibility: For more information on plastic component chemical compatibility see Pneumatic Division technical bulletins Tec-3, Tec-4, and Tec-5
- 2.8. Product Rupture: Product rupture can cause death, serious personal injury, and property damage.
  - · Do not connect pressure regulators or other Pneumatic Division products to bottled gas cylinders.
  - · Do not exceed the maximum primary pressure rating of any pressure regulator or any system component.
  - Consult product labeling or product literature for pressure rating limitations.

#### 3. PRODUCT ASSEMBLY AND INSTALLATION INSTRUCTIONS

- **3.1. Component Inspection:** Prior to assembly or installation a careful examination of the valves, FRLs or vacuum products must be performed. All components must be checked for correct style, size, and catalog number. DO NOT use any component that displays any signs of nonconformance.
- **3.2.** Installation Instructions: Parker published Installation Instructions must be followed for installation of Parker valves, FRLs and vacuum components. These instructions are provided with every Parker valve or FRL sold, or by calling 1-800-CPARKER, or at www.parker.com.
- **3.3.** Air Supply: The air supply or control medium supplied to Valves, FRLs and Vacuum components must be moisture-free if ambient temperature can drop below freezing

#### 4. VALVE AND FRL MAINTENANCE AND REPLACEMENT INSTRUCTIONS

- **4.1. Maintenance:** Even with proper selection and installation, valve, FRL and vacuum products service life may be significantly reduced without a continuing maintenance program. The severity of the application, risk potential from a component failure, and experience with any known failures in the application or in similar applications should determine the frequency of inspections and the servicing or replacement of Pneumatic Division products so that products are replaced before any failure occurs. A maintenance program must be established and followed by the user and, at minimum, must include instructions 4.2 through 4.10.
- **4.2. Installation and Service Instructions:** Before attempting to service or replace any worn or damaged parts consult the appropriate Service Bulletin for the valve or FRL in question for the appropriate practices to service the unit in question. These Service and Installation Instructions are provided with every Parker valve and FRL sold, or are available by calling 1-800-CPARKER, or by accessing the Parker web site at www.parker.com.
- **4.3. Lockout / Tagout Procedures:** Be sure to follow all required lockout and tagout procedures when servicing equipment. For more information see: OSHA Standard 29 CFR, Part 1910.147, Appendix A, The Control of Hazardous Energy (Lockout / Tagout)
- **4.4. Visual Inspection:** Any of the following conditions requires immediate system shut down and replacement of worn or damaged components:
  - Air leakage: Look and listen to see if there are any signs of visual damage to any of the components in the system. Leakage is an indication of worn or damaged components.
  - Damaged or degraded components: Look to see if there are any visible signs of wear or component degradation.
  - Kinked, crushed, or damaged hoses. Kinked hoses can result in restricted air flow and lead to unpredictable system behavior.
  - Any observed improper system or component function: Immediately shut down the system and correct malfunction.
  - Excessive dirt build-up: Dirt and clutter can mask potentially hazardous situations.

Caution: Leak detection solutions should be rinsed off after use.

#### 4.5. Routine Maintenance Issues:

- · Remove excessive dirt, grime and clutter from work areas.
- · Make sure all required guards and shields are in place.
- **4.6. Functional Test:** Before initiating automatic operation, operate the system manually to make sure all required functions operate properly and safely.
- **4.7. Service or Replacement Intervals:** It is the user's responsibility to establish appropriate service intervals. Valves, FRLs and vacuum products contain components that age, harden, wear, and otherwise deteriorate over time. Environmental conditions can significantly accelerate this process. Valves, FRLs and vacuum components need to be serviced or replaced on routine intervals. Service intervals need to be established based on:
  - · Previous performance experiences.
  - Government and / or industrial standards.
  - When failures could result in unacceptable down time, equipment damage or personal injury risk.
- **4.8. Servicing or Replacing of any Worn or Damaged Parts:** To avoid unpredictable system behavior that can cause death, personal injury and property damage:
  - Follow all government, state and local safety and servicing practices prior to service including but not limited to all OSHA Lockout Tagout procedures (OSHA Standard 29 CFR, Part 1910.147, Appendix A, The Control of Hazardous Energy Lockout / Tagout).
  - · Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
  - Disconnect air supply and depressurize all air lines connected to system and Pneumatic Division products before installation, service, or conversion.
  - Installation, servicing, and / or conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
  - After installation, servicing, or conversions air and electrical supplies (when necessary) should be connected and the product tested
    for proper function and leakage. If audible leakage is present, or if the product does not operate properly, do not put product or
    system into use.
  - Warnings and specifications on the product should not be covered or painted over. If masking is not possible, contact your local representative for replacement labels.
- 4.9. Putting Serviced System Back into Operation: Follow the guidelines above and all relevant Installation and Maintenance Instructions supplied with the valve FRL or vacuum component to insure proper function of the system.





#### Offer of Sale

The items described in this document and other documents and descriptions provided by Parker Hannifin Corporation, its subsidiaries and its authorized distributors ("Seller") are hereby offered for sale at prices to be established by Seller. This offer and its acceptance by any customer ("Buyer") shall be governed by all of the following Terms and Conditions. Buyer's order for any item described in its document, when communicated to Seller verbally, or in writing, shall constitute acceptance of this offer. All goods or work described will be referred to as "Products".

- Terms and Conditions. Seller's willingness to offer Products, or accept an order for Products, to or from Buyer is subject to these Terms and Conditions or any newer version of the terms and conditions found on-line at www.parker.com/saleterms/. Seller objects to any contrary or additional terms or conditions of Buyer's order or any other document issued by Buyer.
- 2. <u>Price Adjustments: Payments.</u> Prices stated on Seller's quote or other documentation offered by Seller are valid for 30 days, and do not include any sales, use, or other taxes unless specifically stated, Unless otherwise specified by Seller, all prices are F.C.A. Seller's facility (INCOTERMS 2010). Payment is subject to credit approval and is due 30 days from the date of invoice or such other term as required by Seller's Credit Department, after which Buyer shall pay interest on any unpaid invoices at the rate of 1.5% per month or the maximum allowable rate under applicable law.
- 3. Delivery Dates; Title and Risk; Shipment. All delivery dates are approximate and Seller shall not be responsible for any damages resulting from any delay. Regardless of the manner of shipment, title to any products and risk of loss or damage shall pass to Buyer upon placement of the products with the shipment carrier at Seller's facility. Unless otherwise stated, Seller may exercise its judgment in choosing the carrier and means of delivery. No deferment of shipment at Buyers' request beyond the respective dates indicated will be made except on terms that will indemnify, defend and hold Seller harmless against all loss and additional expense. Buyer shall be responsible for any additional shipping charges incurred by Seller due to Buyer's acts or omissions.
- 4. Warranty. Seller warrants that the Products sold hereunder shall be free from defects in material or workmanship for a period of twelve months from the date of delivery to Buyer or 2,000 hours of normal use, whichever occurs first. The prices charged for Seller's products are based upon the exclusive limited warranty stated above, and upon the following disclaimer: DISCLAIMER OF WARRANTY: THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO PRODUCTS PROVIDED HEREUNDER. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS AND IMPLIED, INCLUDING DESIGN, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
- 5. Claims; Commencement of Actions. Buyer shall promptly inspect all Products upon delivery. No claims for shortages will be allowed unless reported to the Seller within 10 days of delivery. No other claims against Seller will be allowed unless asserted in writing within 30 days after delivery. Buyer shall notify Seller of any alleged breach of warranty within 30 days after the date the defect is or should have been discovered by Buyer. Any action based upon breach of this agreement or upon any other claim arising out of this sale (other than an action by Seller for an amount due on any invoice) must be commenced within 12 months from the date of the breach without regard to the date breach is discovered.
- 6. LIMITATION OF LIABILITY. UPON NOTIFICATION, SELLER WILL, AT ITS OPTION, REPAIR OR REPLACE A DEFECTIVE PRODUCT, OR REFUND THE PURCHASE PRICE. IN NO EVENT SHALL SELLER BE LIABLE TO BUYER FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR AS THE RESULT OF, THE SALE, DELIVERY, NON-DELIVERY, SERVICING, USE OR LOSS OF USE OF THE PRODUCTS OR ANY PART THEREOF, OR FOR ANY CHARGES OR EXPENSES OF ANY NATURE INCURRED WITHOUT SELLER'S WRITTEN CONSENT, EVEN IF SELLER HAS BEEN NEGLIGENT, WHETHER IN CONTRACT, TORT OR OTHER LEGAL THEORY. IN NO EVENT SHALL SELLER'S LIABILITY UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE OF THE PRODUCTS.
- 7. User Responsibility. The user, through its own analysis and testing, is solely responsible for making the final selection of the system and Product and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application and follow applicable industry standards and Product information. If Seller provides Product or system options, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products or systems.
- 8. Loss to Buyer's Property. Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two consecutive years have elapsed without Buyer ordering the items manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.
- 9. Special Tooling. A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture Products. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the Products, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.
- 10. <u>Buyer's Obligation</u>; <u>Rights of Seller</u>. To secure payment of all sums due or otherwise, Seller shall retain a security interest in the goods delivered and this agreement shall be deemed a Security Agreement under the Uniform Commercial Code. Buyer authorizes Seller as its attorney to execute and file on Buyer's behalf all documents Seller deems necessary to perfect its security interest.
- 11. Improper use and Indemnity. Buyer shall indemnify, defend, and hold Seller harmless from any claim, liability, damages, lawsuits, and costs (including attorney fees), whether for personal injury, property damage, patent, trademark or copyright

- infringement or any other claim, brought by or incurred by Buyer, Buyer's employees, or any other person, arising out of: (a) improper selection, improper application or other misuse of Products purchased by Buyer from Seller; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of patterns, plans, drawings, or specifications turnished by Buyer to manufacture Product; or (d) Buyer's failure to comply with these terms and conditions. Seller shall not indemnify Buyer under any circumstance except as otherwise provided.
- 12. <u>Cancellations and Changes.</u> Orders shall not be subject to cancellation or change by Buyer for any reason, except with Seller's written consent and upon terms that will indemnify, defend and hold Seller harmless against all direct, incidental and consequential loss or damage. Seller may change product features, specifications, designs and availability with notice to Buyer.
- 13. <u>Limitation on Assignment.</u> Buyer may not assign its rights or obligations under this agreement without the prior written consent of Seller.
- 14. Force Majeure. Seller does not assume the risk and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter "Events of Force Majeure") Events of Force Majeure shall include without limitation: accidents, strikes or labor disputes, acts of any government or government agency, acts of nature, delays or failures in delivery from carriers or suppliers, shortages of materials, or any other cause beyond Seller's reasonable control.
- 15. Waiver and Severability. Failure to enforce any provision of this agreement will not waive that provision nor will any such failure prejudice Seller's right to enforce that provision in the future. Invalidation of any provision of this agreement by legislation or other rule of law shall not invalidate any other provision herein. The remaining provisions of this agreement will remain in full force and effect.
- 16. <u>Termination.</u> Seller may terminate this agreement for any reason and at any time by giving Buyer thirty (30) days written notice of termination. Seller may immediately terminate this agreement, in writing, if Buyer: (a) commits a breach of any provision of this agreement (b) appointments a trustee, receiver or custodian for all or any part of Buyer's property (c) files a petition for relief in bankruptcy on its own behalf, or by a third party (d) makes an assignment for the benefit of creditors, or (e) the dissolves or liquidates all or a majority of its assets.
- 17. Governing Law. This agreement and the sale and delivery of all Products hereunder shall be deemed to have taken place in and shall be governed and construed in accordance with the laws of the State of Ohio, as applicable to contracts executed and wholly performed therein and without regard to conflicts of laws principles. Buyer irrevocably agrees and consents to the exclusive jurisdiction and venue of the courts of Cuyahoga County, Ohio with respect to any dispute, controversy or claim arising out of or relating to this agreement.
- 18. Indemnity for Infringement of Intellectual Property Rights. Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Section. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, U.S. trademarks, copyrights, trade dress and trade secrets ("Intellectual Property Rights"). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that a Product sold pursuant to this Agreement infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If a Product is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using the Product, replace or modify the Product so as to make it noninfringing, or offer to accept return of the Product and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to Products delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any Product sold hereunder. The foregoing provisions of this Section shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.
- 19. Entire Agreement. This agreement contains the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of sale. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter are herein merged.
- 20. Compliance with Law, U. K. Bribery Act and U.S. Foreign Corrupt Practices Act. Buyer agrees to comply with all applicable laws and regulations, including both those of the United Kingdom and the United States of America, and of the country or countries of the Territory in which the Buyer may operate, including without limitation the U. K. Bribery Act, the U.S. Foreign Corrupt Practices Act ("FCPA") and the U.S. Anti-Kickback Act (the "Anti-Kickback Act"), and agrees to indemnify and hold harmless Seller from the consequences of any violation of such provisions by Buyer, its employees or agents. Buyer acknowledges that they are familiar with the provisions of the U. K. Bribery Act, the FCPA and the Anti-Kickback Act, and certifies that Buyer will adhere to the requirements thereof. In particular, Buyer represents and agrees that Buyer shall not make any payment or give anything of value, directly or indirectly to any governmental official, any foreign political party or official thereof, any candidate for foreign political office, or any commercial entity or person, for the purpose of influencing such person to purchase products or otherwise benefit the business of Seller.

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