

## Bimba Air Preparation Equipment

Without clean, consistent air pressure, your pneumatic components are susceptible to breakdowns that can disrupt your entire manufacturing process. That's why we offer a full line of Air Preparation Filters, Regulators and Lubricators (FRLs) with optional accessories, including porting blocks, shut-off valves, gauges and more. Plus, with custom options and fast delivery, you get a flexible solution that fits your needs.











#### **Compressed Air Filters**

- Air louvers direct air in a whirling pattern for superior air filtration and liquid separation
- Plastic or bronze filter media available from 5 to 100 micron rating
- Optional automatic drains available to eject collected liquid when the collector bowl is full
- Product lines include oil (coalescing) and vapor removal filter units used for oil-free and more stringent air quality requirements

#### Regulators

- Large size low torque knob to precisely control a diaphragm to respond to flow demand and pressure changes efficiently
- Units are panel mountable with a variety of pressure ranges available

#### Lubricators

- Uniquely atomizes oil to enable it to travel greater distances than drip type lubricators for your pneumatic systems and tools
- A fine adjustable knob with visual indication gives a constant oil/air output ratio

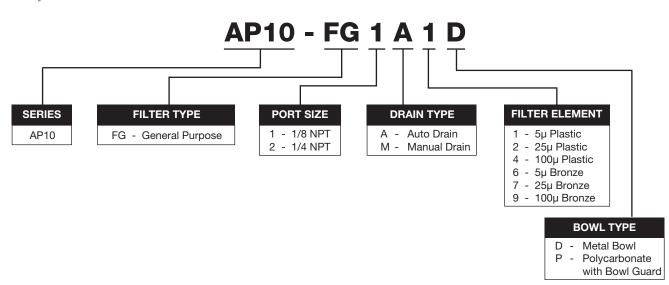
#### Combination F/R Units

- Combination F/R units provide the same features of our standard air filters and regulators in one single unit to save space and installation time
- Optional accessories include slow start/vent valves, shut-off valves, porting blocks and pressure gauges
- All units and accessories stocked for same-day shipment
- All FRL components can be assembled together in any combination at the factory to ship in two days

# **Compressed Air Filter**

## **How to Order**

Model number below is: Miniature Series, General Purpose Filter, 1/8 NPT Ports, Automatic Drain, 5 Micron Plastic Element, Metal Bowl



#### **List Prices**

#### Miniature Series (10), General Purpose Filters

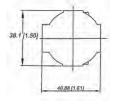
Base Model	Description	List Price
AP10-FG_M_P	General Purpose Filter, Manual Drain, Polycarbonate Bowl with Bowl Guard	\$20.00
Add for options		
A	Automatic Drain	4.50
D	Metal Bowl	3.00
Most popular models, typically ship from stock		
AP10-FG_M1P	Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element	20.00
AP10-FG_A1P	Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element	24.50
AP10-FG_M1D	Manual Drain, Metal Bowl, 5µ Plastic Element	23.00
AP10-FG_A1D	Automatic Drain, Metal Bowl, 5µ Plastic Element	27.50

Options that do not affect price: Port Size, Filter Element

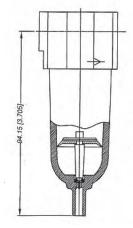
## **Compressed Air Filter**

## **Specifications and Dimensions**

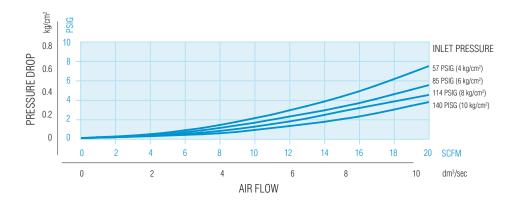
Parameters		Specifications
Pipe Threads	1/8, 1/4 NPT	
Filter Element Size	5, 25, 100 micron	
Element Material	Plastic (Polypropylene) Sintered Bronze	
Body Material	Aluminum Alloy Die Cast	
Bowl Material	Transparent Polycarbonate of	or Aluminum Alloy Die Cast
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	PC Bowl Metal Bowl	125°F (50°C) 175°F (80°C)
Standard Nominal Flow Rate at 85 psig (6 bar) supply pressure and 14.5 psig (1 bar) pressure drop	1/8 NPT 1/4 NPT	18 scfm (8.5 dm³/sec) 21 scfm (10 dm³/sec)
Drain Types Available	Manual Automatic	(operates only when flow change occurs)



AP10-FG 1/4 NPT Inlet pressure as indicated



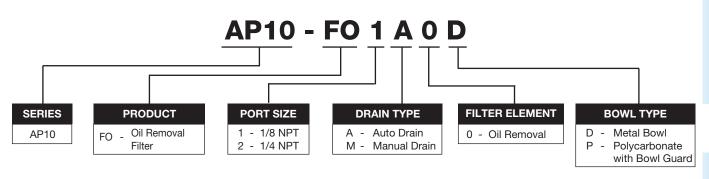
Automatic Drain shown



# **Oil Removal Filter**

## **How to Order**

Model number below is: Miniature Series, Oil Removal Filter, 1/8 NPT Ports, Automatic Drain, Metal Bowl



#### **List Prices**

#### Miniature Series (10), Coalescing Filters

Base Model	Description	List Price
AP10-FO_M0P	Coalescing Filter, Polycarbonate Bowl with Bowl Guard, Manual Drain	\$45.00
Add for options		
A	Automatic Drain	4.50
D	Metal Bowl	3.00
Most popular models, typically ship from stock		
AP10-FO_M0P	Coalescing Filter, Polycarbonate Bowl with Bowl Guard, Manual Drain	45.00
AP10-FO_A0P	Coalescing Filter, Polycarbonate Bowl with Bowl Guard, Automatic Drain	49.50
AP10-FO_M0D	Coalescing Filter, Metal Bowl, Manual Drain	48.00
AP10-FO_A0D	Coalescing Filter, Metal Bowl, Automatic Drain	52.50

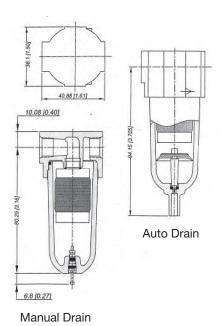
Options that do not affect price: Port Size

## Bimba Air Preparation Equipment - Miniature Series (1/8, 1/4 NPT)

## **Oil Removal Filter**

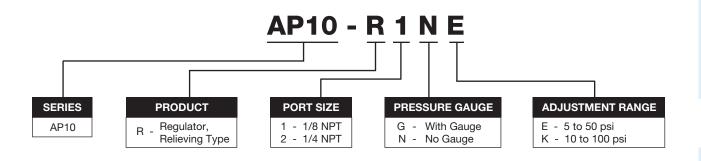
## **Specifications and Dimensions**

Parameters	Specifications
Pipe Threads	1/8, 1/4 NPT
Element Material	Composite Element
Body Material	Aluminum Alloy Die Cast
Bowl Material	Transparent Polycarbonate or Aluminum Alloy Die Cast
Maximum Inlet Pressure	with PC Bowl 150 psig (10.5 kg/cm²) with Metal Bowl 250 psig (17.5 kg/cm²)
Operating Temperature Range (ambient)	with PC Bowl 20°F to 120°F (-6°C to 50°C) with Metal Bowl 20°F to 175°F (-6°C to 80°C)
Recommended Flow at an inlet pressure of 100 psig (7 kg/cm²)	3 scfm (1.4 dm³/sec)
Particle Removal	Up to 0.01 micron
Maximum Oil Removal Content	Up to 0.01 ppm
Drain Types Available	Manual Automatic (operates only on flow changes)
Note: Recommended	Use Pre-Filter with 5 micron Element



# **Pressure Regulator How to Order**

Model number below is: Miniature Series, Pressure Regulator, 1/8 NPT Ports, No Gauge, 5-50 psi Pressure Range Adjustment



#### **List Prices**

#### Miniature Series (10), Air Pressure Regulators

Base Model	Description	List Price
AP10-R	Air Pressure Regulator	\$17.00
Add for options		
G	Pressure Gauge	8.50
Most popular models, typically	ship from stock	
AP10-R_N_	Regulator, No Gauge	17.00
AP10-R_G_	Regulator, with Gauge	25.50

Options that do not affect price: Port Size, Pressure Range

## Bimba Air Preparation Equipment - Miniature Series (1/8, 1/4 NPT)

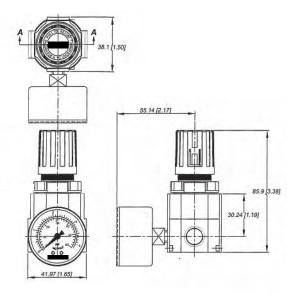
## **Pressure Regulator**

## **Specifications and Dimensions**

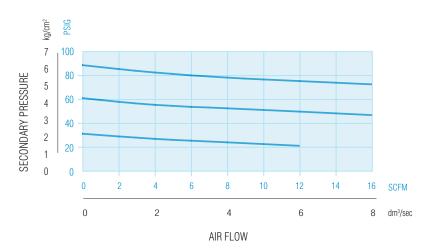
Parameters	Specifications
Pipe Threads	1/8, 1/4 NPT
Regulator Type	Relieving Diaphragm
Body Material	Aluminum Alloy Die Cast
Pressure Adjustment	Non-rising Plastic Knob
Maximum Inlet Pressure	(250 psig) 17.5 kg/cm <sup>2</sup>
Maximum Operating Temperature (ambient)	175°F (80°C)
Regulated Secondary Outlet Pressure Ranges Available*	5 to 50 psig 10 to 100 psig
Gauge Size	40 mm OD
Gauge Port Size	1/8 NPT
Standard Nominal Flow Rate at 145 psig (10 bar) supply pressure, 85 psig (6 bar) secondary pressure, 14.5 psig (1 bar) drop	1/8 NPT 14 scfm (6.5 dm³/sec) 1/4 NPT 16 scfm (7.5 dm³/sec)
Panel Mounting	Nut Included Standard NOTE: 1.28 in. (32.4 mm) diameter hole required for panel mounting

<sup>\*</sup>Note: Regulated pressures can be adjusted to pressures greater than or less than the pressure ranges specified. For best results, pressure should always be set by adjusting the pressure up to the desired setting. Do not use these units to control pressures outside of the specified ranges.

#### Dimensions in mm [inches]

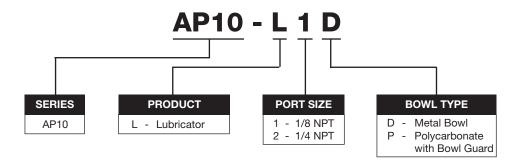


#### AP10-R 1/4 NPT Inlet pressure = 140 PSIG (10kg/cm²)





Model number below is: Miniature Series, Air Line Mist Lubricator, 1/8 NPT Ports, Metal Bowl



#### **List Prices**

#### Miniature Series (10), Air Line Lubricators

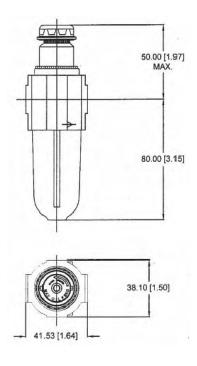
Base Model	Description	
AP10-L_P	Air Line Lubricator, Polycarbonate Bowl with Bowl Guard	\$30.00
Add for options	dd for options	
D	Metal Bowl	3.00
Most popular models, typically ship from stock		
AP10-L_P	Lubricator, Polycarbonate Bowl with Bowl Guard	30.00
AP10-L_D	Lubricator, Metal Bowl	33.00

Options that do not affect price: Port Size

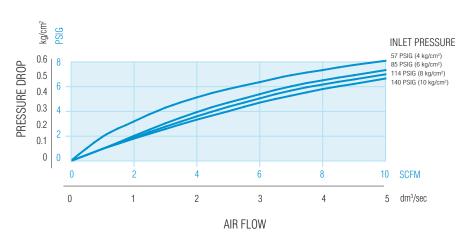
#### **Air Line Lubricator**

## **Specifications and Dimensions**

Parameters		Specifications
Pipe Threads	1/8, 1/4 NPT	
Lubricator Type	Misting Type	
Body Material	Aluminum Alloy Die Cast	
Bowl Material	Transparent Polycarbonate	or Aluminum Alloy Die Cast
Bowl Capacity	17 cc	
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	PC Bowl Metal Bowl	125°F (50°C) 175°F (80°C)
Standard Nominal Flow Rate at 85 psig (6 bar) supply and 14.5 psig (1 bar) drop	16 scfm (7.5 dm³/sec)	
Minimum Flow Required to Start at 85 psig (6 bar) inlet	0.5 scfm (0.24 dm³/sec)	



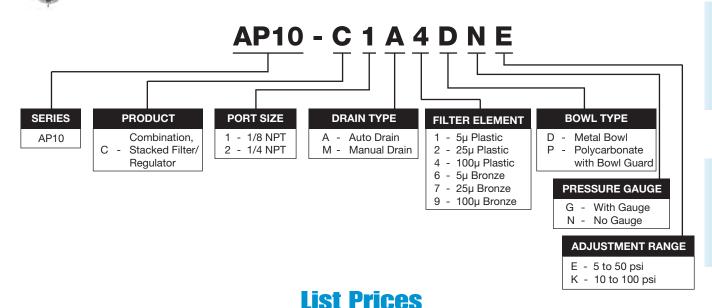
AP10-L 1/4 NPT Inlet pressure as indicated



## **Filter/Regulator Combination Unit**

## **How to Order**

Model number below is: Miniature Series, Filter/Regulator Combination Unit, 1/8 NPT Ports, Automatic Drain, 100 Micron Plastic Filter Element, Metal Bowl, No Gauge, 5-50 psi Pressure Range Adjustment



#### Miniature Series (10), Combinations F/R Unit

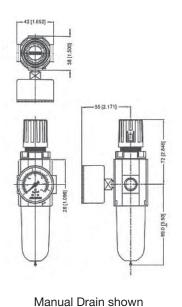
Base Model	Description	List Price
AP10-C_M1PN_	F/R, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	\$35.00
Add for options		
A	Automatic Drain	4.50
D	Metal Bowl	3.00
G	Pressure Gauge	8.50
Most popular models, typically	ship from stock	
AP10-C_M1PN_	F/R, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	35.00
AP10-C_M1DN_	F/R, Manual Drain, Metal Bowl, 5µ Plastic Element, No Gauge	38.00
AP10-C_A1PN_	F/R, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	39.50
AP10-C_A1DN_	F/R, Automatic Drain, Metal Bowl, 5µ Plastic Element, No Gauge	42.50
AP10-C_M1PG_	F/R, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	43.50
AP10-C_M1DG_	F/R, Manual Drain, Metal Bowl, 5µ Plastic Element, Gauge	46.50
AP10-C_A1PG_	F/R, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	48.00
AP10-C_A1DG_	F/R, Automatic Drain, Metal Bowl, 5µ Plastic Element, Gauge	51.00

Options that do not affect price: Port Size, Pressure Range, Filter Element

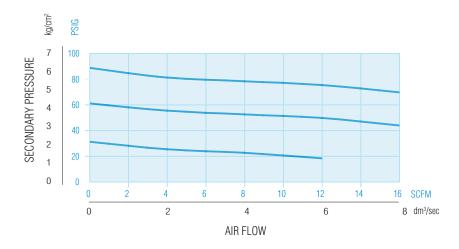
## Filter/Regulator Combination Unit Specifications and Dimensions

Parameters		Specifications
Pipe Threads	1/8, 1/4 NPT	
Body Material	Aluminum Alloy Die Cast	t
Filter Element Size	5, 25, 100 micron	
Filter Element Material	Plastic (Polypropylene) Sintered Bronze	
Bowl Material	Transparent Polycarbona	ate or Aluminum Alloy Die Cast
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	PC Bowl Metal Bowl	125°F (50°C) 175°F (80°C)
Drain Types Available	Manual Automatic	(operates only on flow change)
Regulator Type	Relieving	
Pressure Adjustment	Non-rising Plastic Knob	
Regulated Secondary Outlet Pressure Ranges Available*	5 to 50 psig 10 to 100 psig	
Gauge Size	40 mm OD	
Gauge Port Size	1/8 NPT	
Panel Mounting	Nut Included Standard NOTE: 1.28 in. (32.4 mm	n) diameter hole required for panel mounting

<sup>\*</sup>Note: Regulated pressures can be adjusted to pressures greater than or less than the pressure ranges specified. For best results, pressure should always be set by adjusting the pressure up to the desired setting. Do not use these units to control pressures outside of the specified ranges.



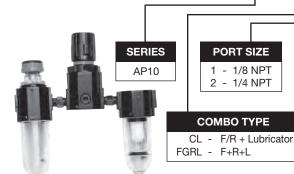
AP10-C 1/4 NPT Inlet pressure = 140 PSIG (10kg/cm²)



#### **Assembled Combinations**

#### **How to Order**

Model number below is: Miniature Series, F/R + Lubricator Assembled Set, 1/8 NPT Ports, Automatic Drain, 5 Micron Plastic Element, Polycarbonate Bowl with Bowl Guard, No Gauge, 10-100 psi Pressure Range Adjustment



#### **DRAIN TYPE PORT SIZE**

1 - 1/8 NPT Auto Drain 2 - 1/4 NPT M - Manual Drain

# - Polycarbonate

D

**BOWL TYPE** 

Metal Bowl

#### N - No Gauge with Bowl Guard **ADJUSTMENT RANGE**

PRESSURE GAUGE

G - With Gauge

E - 5 to 50 psi

K - 10 to 100 psi

#### **FILTER ELEMENT** 1 - 5µ Plastic

- 2 25µ Plastic 4 - 100µ Plastic
- 6 5µ Bronze 7 - 25µ Bronze
- 9 100μ Bronze

#### **List Prices**

#### Miniature Series (10), Assembled Combinations

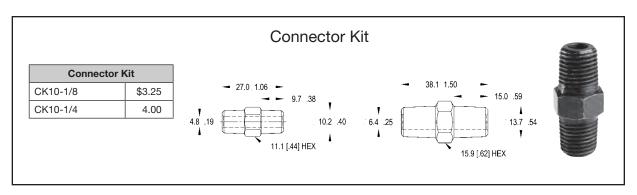
**COMBO TYPE** 

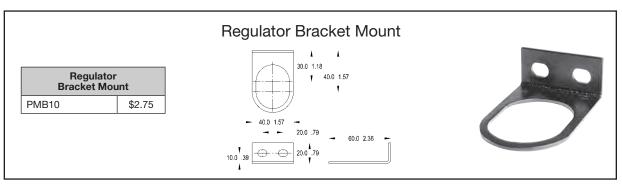
Base Model	Description	List Price
AP10-CL_M1PN_	F/R + L Assembled, Manual, Polycarbonate Bowl with Bowl Guard, 5µ Plastic, No Gauge	\$71.00
AP10-FGRL_M1PN_	F + R + L Assembled, Manual, Polycarbonate Bowl with Bowl Guard, 5µ Plastic, No Gauge	79.00
Add for options		
Α	Automatic Drain	4.50
D	Metal Bowl	6.00
G	Pressure Gauge	8.50
Most popular models		
AP10-CL_M1PN_	F/R+L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	71.00
AP10-CL_M1DN_	F/R+L, Manual Drain, Metal Bowl, 5µ Plastic Element, No Gauge	77.00
AP10-CL_A1PN_	F/R+L, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	75.50
AP10-CL_A1DN_	F/R+L, Automatic Drain, Metal Bowl, 5µ Plastic Element, No Gauge	81.50
AP10-CL_M1PG_	F/R+L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	79.50
AP10-CL_M1DG_	F/R+L, Manual Drain, Metal Bowl, 5µ Plastic Element, Gauge	85.50
AP10-CL_A1PG_	F/R+L, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	84.00
AP10-CL_A1DG_	F/R+L, Automatic Drain, Metal Bowl, 5μ Plastic Element, Gauge	90.00
AP10-FGRL_M1PN_	F+R+L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	79.00
AP10-FGRL_M1DN	F+R+L, Manual Drain, Metal Bowl, 5μ Plastic Element, No Gauge	85.00
AP10-FGRL_A1PN	F+R+L, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	83.50
AP10-FGRL_A1DN	F+R+L, Automatic Drain, Metal Bowl, 5µ Plastic Element, No Gauge	89.50
AP10-FGRL_M1PG	F+R+L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	87.50
AP10-FGRL_M1DG	F+R+L, Manual Drain, Metal Bowl, 5µ Plastic Element, Gauge	93.50
AP10-FGRL_A1PG	F+R+L, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	92.00
AP10-FGRL_A1DG	F+R+L, Automatic Drain, Metal Bowl, 5µ Plastic Element, Gauge	98.00

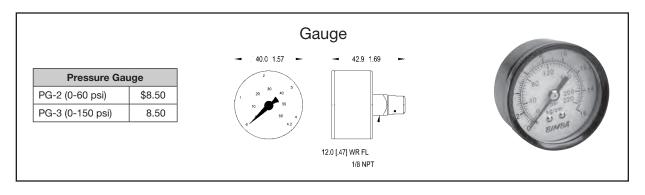
Options that do not affect price: Port Size, Pressure Range, Filter Element

## Bimba Air Preparation Equipment - Miniature Series (1/8, 1/4 NPT)

### **Accessories**





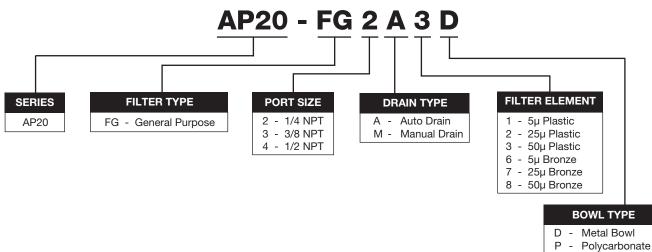


with Bowl Guard

# **Compressed Air Filter How to Order**



Model number below is: Compact Series, General Purpose Filter, 1/4 NPT Ports, Automatic Drain, 50 Micron Plastic Element, Metal Bowl with Sight Glass



#### **List Prices**

#### **Compact Series (20), General Purpose Filters**

Base Model	Description	List Price
AP20-FG_M_P	General Purpose Filter, Manual Drain, Polycarbonate Bowl with Bowl Guide	\$35.50
Add for options		
A	Automatic Drain	14.00
D	Metal Bowl with Sight Glass	10.00
Most popular models, typically	ship from stock	
AP20-FG_M1P	Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element	35.50
AP20-FG_A1P	Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element	49.50
AP20-FG_M1D	Manual Drain, Metal Bowl with Sight Glass, 5µ Plastic Element	45.50
AP20-FG_A1D	Automatic Drain, Metal Bowl with Sight Glass, 5µ Plastic Element	59.50

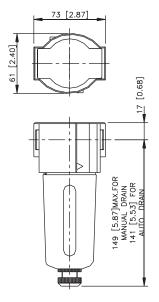
Options that do not affect price: Port Size, Filter Element

## **Compressed Air Filter**

## **Specifications and Dimensions**

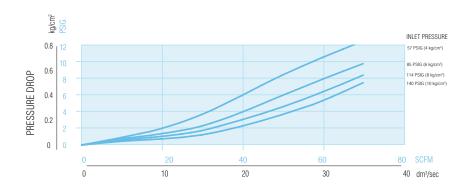
Parameters		Specifications
Pipe Threads	1/4, 3/8, 1/2 NPT	4
Filter Element Size	5, 25, 50 micron	
Element Material	Plastic (Polypropylene) Sintered Bronze	
Body Material	Aluminum Alloy Die Cast	
Bowl Material	Transparent Polycarbonate with Bowl Guard or Aluminum Alloy Metal with Sight Glass	
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	PC Bowl Metal Bowl	125°F (50°C) 175°F (80°C)
Standard Nominal Flow Rate at 85 psig (6 bar) supply pressure and 14.5 psig (1 bar) drop	1/4 NPT 3/8, 1/2 NPT	90 scfm (43 dm³/sec) 100 scfm (48 dm³/sec)
Drain Types Available	Manual Automatic	

#### Dimensions in mm [inches]



Manual Drain shown

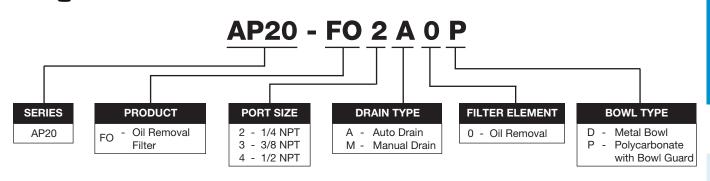
AP20-FG 1/4 NPT Inlet pressure as indicated



# Oil Removal Filter

## **How to Order**

Model number below is: Compact Series, Oil Removal Filter, 1/4 NPT Ports, Automatic Drain, Polycarbonate Bowl with Bowl Guard



#### **List Prices**

#### Compact Series (20), Coalescing Filters

Base Model	Description	List Price
AP20-FO_M0P	Coalescing Filter, Polycarbonate Bowl with Bowl Guard, Manual Drain	\$80.00
Add for options		
Α	Automatic Drain	14.00
D	Metal Bowl	10.00
Most popular models, typically ship from stock		
AP20-FO_M0P	Coalescing Filter, Polycarbonate Bowl with Bowl Guard, Manual Drain	80.00
AP20-FO_A0P	Coalescing Filter, Polycarbonate Bowl with Bowl Guard, Automatic Drain	94.00
AP20-FO_M0D	Coalescing Filter, Metal Bowl, Manual Drain	90.00
AP20-FO_A0D	Coalescing Filter, Metal Bowl, Automatic Drain	104.00

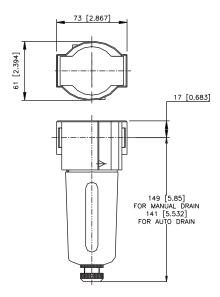
Options that do not affect price: Port Size

## Bimba Air Preparation Equipment - Compact Series (1/4,3/8,1/2 NPT)

### **Oil Removal Filter**

## **Specifications and Dimensions**

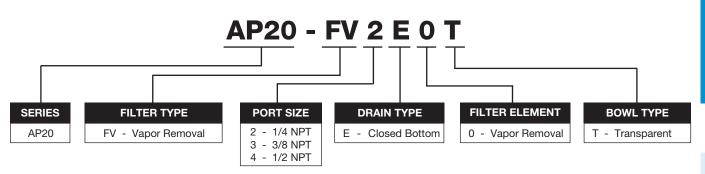
Parameters		Specifications	
Pipe Threads	1/4, 3/8, 1/2 NPT		
Element Material	Borosilicate		
Body Material	Aluminum Alloy Die (	Cast	
Bowl Material		Polycarbonate with Bowl Guard Aluminum Alloy Metal with Sight Glass	
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)	
Operating Temperature Range (ambient)	PC Bowl Metal Bowl	20°F to 120°F (-6°C to 50°C) 80°F to 175°F (-6°C to 80°C)	
Recommended Flow (at an inlet pressure of 7 kg/cm²)	8 scfm (3.8 dm³/sec)		
Particle Removal	Up to 0.01 micron		
Maximum Oil Removal Content	Up to 0.01 ppm		
Drain Types Available	Manual Automatic		
Note: Recommended	Use Pre-Filter with 5	micron Element	



Manual Drain shown

# **Vapor Removal Filter How to Order**

Model number below is: Compact Series, Vapor Removal Filter, 1/4 NPT Ports, Transparent Polycarbonate Bowl with Bowl Guard



#### **List Prices**

#### Compact Series (20), Vapor Removal Filters

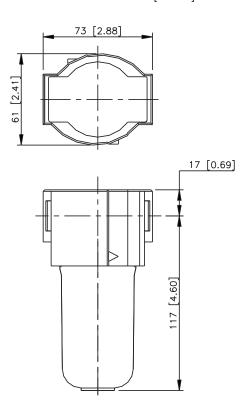
Base Model	Description	List Price
AP20-FV-E0T	Vapor Removal (.003 ppm), Closed Bottom Bowl	\$75.00

Options that do not affect price: Port Size

## **Oil Removal Filter**

## **Specifications and Dimensions**

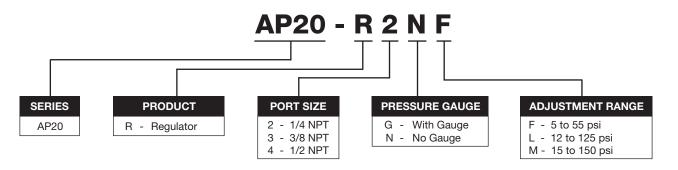
Parameters		Specifications
Pipe Threads	1/4, 3/8, 1/2 NPT	
Element Material	Activated Carbon	
Body Material	Aluminum Alloy Die Cast	
Bowl Material	Polycarbonate	
Maximum Inlet Pressure	PC Bowl	150 psig (10.5 kg/cm²)
Operating Temperature Range (ambient)	PC Bowl	20°F to 120°F (-6°C to 50°C)
Recommended Flow at an inlet pressure of 100 psig (7 kg/cm²)	8 scfm (3.8 dm <sup>3</sup> /sec)	
Particle Removal	Up to 0.01 micron	
Maximum Oil Removal Content	Up to 0.003 ppm	
Note: Recommended	Use Pre-Filter with 5 micron Element	





# **Pressure Regulator How to Order**

Model number below is: Compact Series, Air Pressure Regulator, 1/4 NPT Ports, No Gauge, 5 to 55 psi Pressure Range Adjustment



#### **List Prices**

#### Compact Series (20), Air Pressure Regulators

Base Model	Description	List Price
AP20-R	Air Pressure Regulator	\$35.00
Add for options		
G	Pressure Gauge	8.50
Most popular models, typically ship from stock		
AP20-R_N_	Regulator, No gauge	35.00
AP20-R_G_	Regulator, with Gauge	43.50

Options that do not affect price: Port Size, Pressure Range

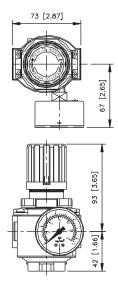
## **Pressure Regulator**

### **Specifications and Dimensions**

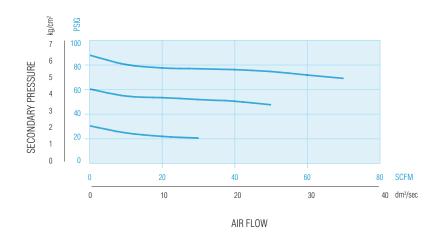
Parameters	Specifications
Pipe Threads	1/4, 3/8, 1/2 NPT
Regulator Type	Relieving Diaphragm
Body Material	Aluminum Alloy Die Cast
Pressure Adjustment	Non-rising Plastic Knob
Maximum Inlet Pressure	300 psig (21.0 kg/cm²)
Maximum Operating Temperature (ambient)	175°F (80°C)
Regulated Secondary Outlet Pressure Ranges Available*	5 to 55 psig 12 to 125 psig 15 to 150 psig
Gauge Size	40 mm OD
Gauge Port Size	1/8 NPT
Standard Nominal Flow Rate at 145 psig (10 bar) supply pressure, 85 psig (6 bar) secondary pressure, 14.5 psig (1 bar) drop	1/4 NPT 49 scfm (23 dm³/sec) 3/8, 1/2 NPT 84 scfm (40 dm³/sec)
Panel Mounting	Nut Included Standard NOTE: 1.89 in. (48.0 mm) diameter hole required for panel mounting

<sup>\*</sup>Note: Regulated pressures can be adjusted to pressures greater than or less than the pressure ranges specified. For best results, pressure should always be set by adjusting the pressure up to the desired setting. Do not use these units to control pressures outside of the specified ranges.

#### Dimensions in mm [inches]

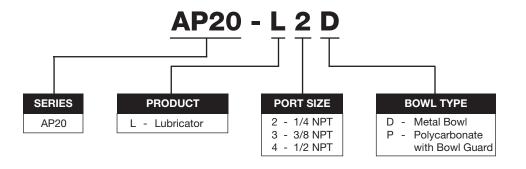


AP20-R 1/4 NPT Inlet pressure = 140 PSIG (10kg/cm²)



## Air Line Lubricator How to Order

Model number below is: Compact Series, Air Line Mist Lubricator, 1/4 NPT Ports, Metal Bowl



#### **List Prices**

#### Compact Series (20), Air Line Lubricators

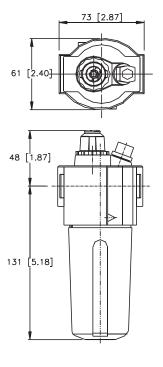
Base Model	Description	List Price
AP20-L_P	Air Line Lubricator, Polycarbonate Bowl with Bowl Guard	\$45.00
Add for options		
D	Metal Bowl with Sight Glass	10.00
Most popular models, typically ship from stock		
AP20-L_P	Lubricator, Polycarbonate Bowl with Bowl Guard	45.00
AP20-L_D	Lubricator, Metal Bowl with Sight Glass	55.00

Options that do not affect price: Port Size

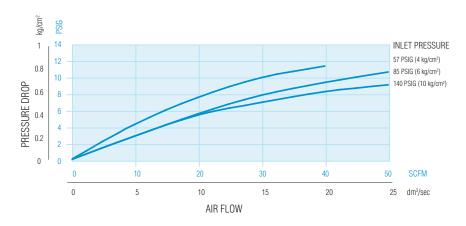
## **Air Line Lubricator**

## **Specifications and Dimensions**

Parameters		Specifications
Pipe Threads	1/4, 3/8, 1/2 NPT	
Lubricator Type	Misting Type	
Body Material	Aluminum Alloy Die Cast	
Bowl Material	Transparent Polycarbonate with Bowl Guard or Aluminum Alloy Metal without Sight Glass	
Bowl Capacity	160 cc	
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	PC Bowl Metal Bowl	125°F (50°C) 175°F (80°C)
Standard Nominal Flow Rate at 85 psig (6 bar) supply and 14.5 psig (1 bar) pressure drop	1/4 NPT 3/8, 1/2 NPT	37 scfm (18 dm³/sec) 74 scfm (35 dm³/sec)
Minimum Flow Required to Start (at 6 bar inlet)	1/4 NPT 3/8, 1/2 NPT	2.5 scfm (1.2 dm³/sec) 4.0 scfm (1.9 dm³/sec)



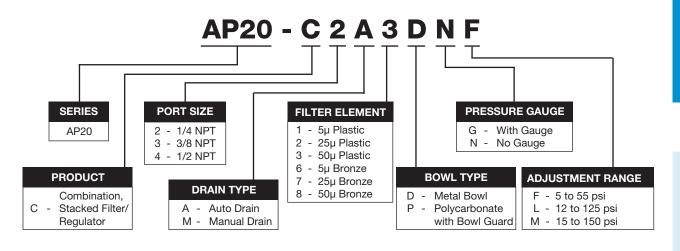
AP20-L 1/4 NPT Inlet pressure as indicated



# **Filter/Regulator Combination Unit**

### **How to Order**

Model number below is: Compact Series, F/R Combination Unit, 1/4 NPT Ports, Automatic Drain, 50 Micron Plastic Filter Element, Metal Bowl, No Gauge, 5 to 55 psi Pressure Range Adjustment



#### **List Prices**

#### Compact Series (20), Combinations F/R Unit

Base Model	Description	List Price
AP20-C_M1PN_	F/R, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	\$61.00
Add for options		
A	Automatic Drain	14.00
D	Metal Bowl with Sight Glass	10.00
G	Pressure Gauge	8.50
Most popular models, typically	ship from stock	
AP20-C_M1PN_	F/R, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	61.00
AP20-C_M1DN_	F/R, Manual Drain, Metal Bowl, 5µ Plastic Element, No Gauge	71.00
AP20-C_A1PN_	F/R, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	75.00
AP20-C_A1DN_	F/R, Automatic Drain, Metal Bowl, 5µ Plastic Element, No Gauge	85.00
AP20-C_M1PG_	F/R, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	69.50
AP20-C_M1DG_	F/R, Manual Drain, Metal Bowl, 5µ Plastic Element, Gauge	79.50
AP20-C_A1PG_	F/R, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	83.50
AP20-C_A1DG_	F/R, Automatic Drain, Metal Bowl, 5µ Plastic Element, Gauge	93.50

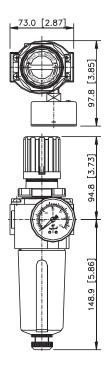
Options that do not affect price: Port Size, Pressure Range, Filter Element

# Filter/Regulator Combination Unit Specifications and Dimensions

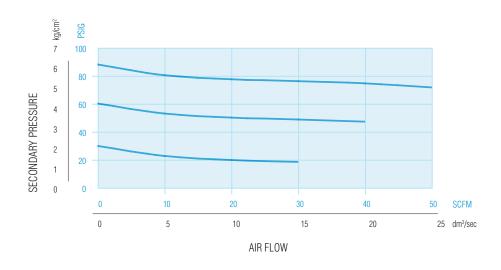
Parameters		Specifications
Pipe Threads	1/4, 3/8, 1/2 NPT	
Body Material	Aluminum Alloy Die Cast	
Filter Element Size	5, 25, 50 micron	
Filter Element Material	Plastic (Polypropylene) Sintered Bronze	
Filter Bowl Material	Transparent Polycarbona Aluminum Alloy Metal wit	
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	PC Bowl Metal Bowl	125°F (50°C) 175°F (80°C)
Standard Nominal Flow Rate (at 10 bar supply pressure and 1 bar in sec pressure of 6 bar)	1/4 NPT 3/8, 1/2 NPT	70 scfm (33 dm³/sec) 73 scfm (35 dm³/sec)
Drain Types Available	Manual Automatic	
Regulator Type	Relieving	
Pressure Adjustment	Non-rising Plastic Knob	
Regulated Secondary Outlet Pressure*	5 to 55 psig 12 to 125 psig 15 to 150 psig	
Gauge Size	40 mm OD	
Gauge Port Size	1/8 NPT	
Panel Mounting	Nut Included Standard NOTE: 1.89 in. (48.0 mm)	diameter hole required for panel mounting

<sup>\*</sup>Note: Regulated pressures can be adjusted to pressures greater than or less than the pressure ranges specified. For best results, pressure should always be set by adjusting the pressure up to the desired setting. Do not use these units to control pressures outside of the specified ranges.

#### Dimensions in mm (inches)



AP20-C 1/4 NPT Inlet pressure = 140 PSIG (10kg/cm²)



## **Assembled Combinations How to Order**

Model number below is: Compact Series, F/R + Lubricator Assembled Set, 1/4 NPT Ports, Manual Drain, 5 Micron Plastic Filter Element, Polycarbonate Bowl with Bowl Guard, No Pressure Gauge, 5 to 55 psi Pressure Range Adjustment, No Mounting Bracket

AP20 - CL 2 M 1

**SERIES** AP20

**COMBO TYPE** CL - F/R + Lubricator

FGRL-F+R+L

**PORT SIZE** 2 - 1/4 NPT 3 - 3/8 NPT 4 - 1/2 NPT DRAIN TYPE

> A - Auto Drain M - Manual Drain

## **FILTER ELEMENT**

1 - 5µ Plastic 2 - 25µ Plastic 3 - 50µ Plastic

6 - 5µ Bronze 7 - 25µ Bronze

**BOWL TYPE** 8 - 50µ Bronze D - Metal Bowl Polycarbonate with Bowl Guard

#### PRESSURE GAUGE **MOUNTING BRACKET** G - With Gauge

B - Include Bracket N - No Bracket

**ADJUSTMENT RANGE** F - 5 to 55 psi

N - No Gauge

L - 12 to 125 psi M - 15 to 150 psi

#### **List Prices**

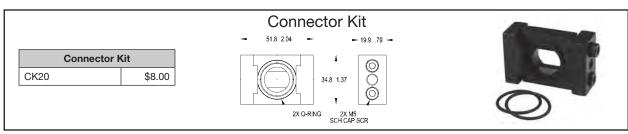
#### Compact Series (20), Assembled Combinations

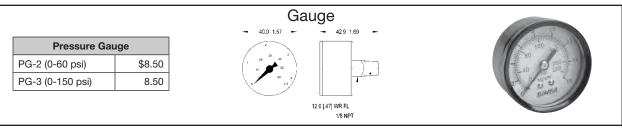
Base Model	Description	List Price
AP20-CL_M1PN	F/R + L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	\$116.00
AP20-FGRL_M1PN	F+R + L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	135.00
Add for options		
A	Automatic Drain	14.00
D	Metal Bowl	20.00
G	Pressure Gauge	8.50
В	Mounting Bracket - CL Mounting Bracket - FGRL	6.00 12.00
Most popular models		
AP20-CL_M1PN_N	F/R+L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	116.00
AP20-CL_M1DN_N	F/R+L, Manual Drain, Metal Bowl, 5µ Plastic Element, No Gauge	136.00
AP20-CL_A1PN_N	F/R+L, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	120.00
AP20-CL_A1DN_N	F/R+L, Automatic Drain, Metal Bowl, 5µ Plastic Element, No Gauge	150.00
AP20-CL_M1PG_N	F/R+L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	124.50
AP20-CL_M1DG_N	F/R+L, Manual Drain, Metal Bowl, 5µ Plastic Element, Gauge	144.50
AP20-CL_A1PG_N	F/R+L, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	128.50
AP20-CL_A1DG_N	F/R+L, Automatic Drain, Metal Bowl, 5µ Plastic Element, Gauge	158.50
AP20-FGRL_M1PN_N	F+R+L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5μ Plastic Element, No Gauge	135.50
AP20-FGRL_M1DN_N	F+R+L, Manual Drain, Metal Bowl, 5μ Plastic Element, No Gauge	155.50
AP20-FGRL_A1PN_N	F+R+L, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	149.50
AP20-FGRL_A1DN_N	F+R+L, Automatic Drain, Metal Bowl, 5µ Plastic Element, No Gauge	169.50
AP20-FGRL_M1PG_N	F+R+L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	144.00
AP20-FGRL_M1DG_N	F+R+L, Manual Drain, Metal Bowl, 5µ Plastic Element, Gauge	164.00
AP20-FGRL_A1PG_N	F+R+L, Automatic Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, Gauge	158.00
AP20-FGRL_A1DG_N	F+R+L, Automatic Drain, Metal Bowl, 5μ Plastic Element, Gauge	178.00

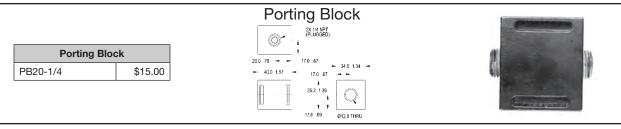
Options that do not affect price: Port Size, Pressure Range, Filter Element

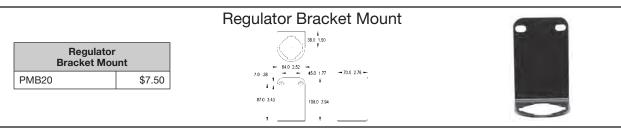
## Bimba Air Preparation Equipment - Compact Series (1/4,3/8,1/2 NPT)

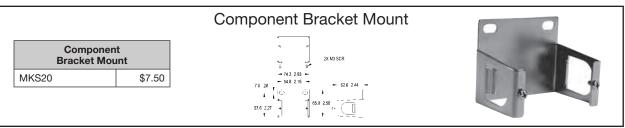
#### **Accessories**

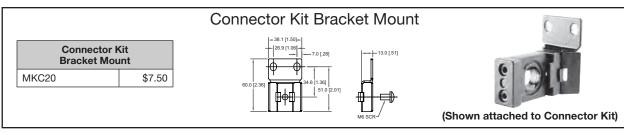












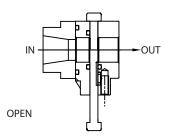
#### **Accessories**

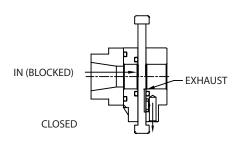
### **Shut-off, Exhaust Valve**

- Designed for modular installation in Compact (20) Series using CK20 Connector Kit
- Valve is 2-way, manually-operated, slide-type
- In closed position, air inlet is blocked, and downstream air is exhausted
- Exhaust port is threaded (#10-32), so exhaust can be remote
- Valve may be locked in closed position with use of external padlock

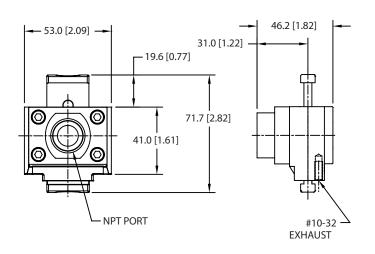
Model Number	Description	List Price
AP20-SLV4	Shut-off, Exhaust, Lockout Valve, 1/2 NPT	\$21.00
AP20-SLV3	Shut-off, Exhaust, Lockout Valve, 3/8 NPT	
AP20-SLV2	Shut-off, Exhaust, Lockout Valve, 1/4 NPT	21.00

## **Operation**





#### **Dimensions**



#### **Accessories**

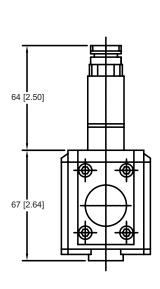
#### **Soft Start/Quick-Vent Valve**

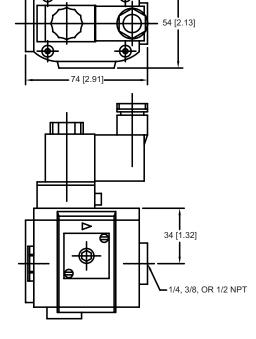
- The Soft Start/Quick-Vent Valve is a 3-port, 2-position, normally closed device
- It can be installed in-line with Bimba's Compact Series (20) Air Preparation Equipment using Connector Kit CK20
- This unit controls the increase of downstream pressure upon startup, slowly bringing the system up to full line pressure
- When the pilot signal is removed, the air inlet is blocked and downstream pressure is exhausted
- Output port is 1/2 NPT



Model Number	Description	List Price
AP20-SSV4-24VDC	1/2 NPT, Soft Start/Quick-Vent Valve, 24 volts DC	\$250.00
AP20-SSV4-110VAC	1/2 NPT, Soft Start/Quick-Vent Valve, 110 volts AC	250.00
SC 24VDC	Replacement Solenoid Coil for 24 Volt DC Soft Start Valve	
SC 110VAC	Replacement Solenoid Coil for 110 Volt AC Soft Start Valve	

#### **Dimensions**





# Accessories Soft Start/Quick-Vent Valve Specifications

Parameters	Specifications	
Operating Pressure Range	35 to 140 psig (2.5 to 10.0 kg/cm²)	
Operating Temperature Range	0°F to 122°F (-10° to 50°C)	
Materials of Construction		
Body	Zinc Diecast	
Cap, Plug, Piston	Aluminum	
Poppet	Brass	
Seals	Nitrile	
Exhaust Port	3/8" NPT	
Solenoid Coil Voltages		
AP20-SSV4-24VDC	24 Volts DC	
AP20-SSV4-110VAC	110 Volts 50HZ	
Time to achieve full system pressure	Adjustable from 20 to 180 seconds	

## **Operating Instructions**

- The valve inlet side is fitted with an adapter, to be held in a modular assembly with Bimba AP20 Series Air Preparation Equipment
- The red lever on the solenoid pilot valve is an override and must be set to exhausting position "O"
- The flat-head adjusting screw on the top cap of the main valve regulates the time to reach full line pressure: minimum 20 seconds, maximum 180 seconds
- When the solenoid valve signal is lost, flow through the soft start valve is blocked, and downstream pressure is exhausted to atmosphere through the exhaust port on the bottom of the unit (3/8 NPT)

## Bimba Air Preparation Equipment - Medium Series (1/2, 3/4 NPT)

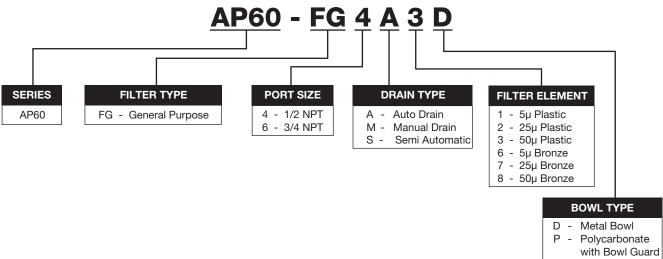


New!

#### **Compressed Air Filter**

#### **How to Order**

Model Number below is: Medium Series, General Purpose Filter, 1/2 NPT Ports, Automatic Drain, 50 Micron Plastic Element, Metal Bowl with Sight Glass



#### **List Prices**

#### Medium Series (60), General Purpose Filters

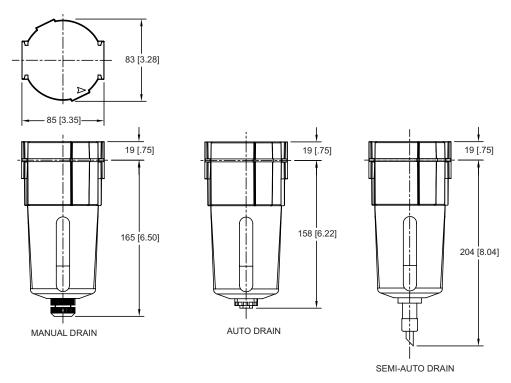
Base Model	Description	List Price
AP60-FG_M_P	General Purpose Filter, Manual Drain, Polycarbonate Bowl with Bowl Guard	\$57.00
Add for options		
А	Automatic Drain	14.00
D	Metal Bowl with Sight Glass	
S	Semi Automatic Drain	7.00

Options that do not affect price: Port Size, Filter Element

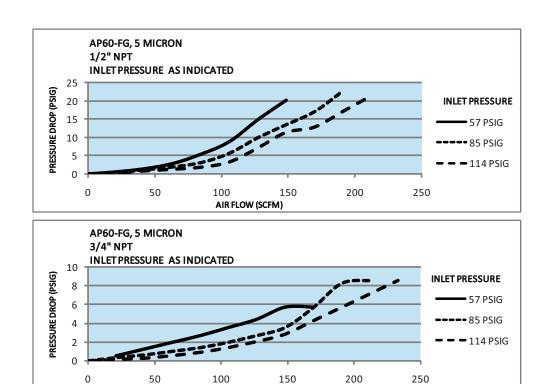
## **Specifications**

Parameters	Specifications	
Pipe Threads	1/2, 3/4 NPT	
Filter Element Size	5, 25, 50 micron	
Element Material	Plastic (Polypropylene) Sintered Bronze	
Body Material	Aluminum Alloy Die Cast	
Bowl Material	Transparent Polycarbonate with Bowl Guard or Aluminum Alloy Metal with Sight Glass	
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	PC Bowl Metal Bowl	125°F (50°C) 175°F (80°C)
Standard Nominal Flow Rate at 85 psig (6 bar) supply pressure and 14.5 psig (1 bar) drop	1/2 NPT 3/4 NPT	190 scfm (90 dm³/sec) 225 scfm (105 dm³/sec)

## **Compressed Air Filter**



Dimensions in mm [inches]



AIR FLOW (SCFM)

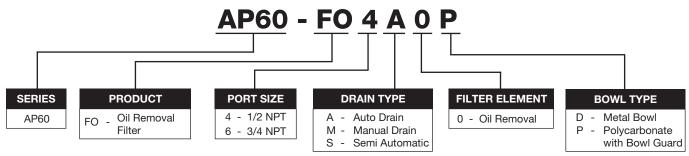
## Bimba Air Preparation Equipment - Medium Series (1/2, 3/4 NPT)



# Oil Removal Filter

#### **How to Order**

Model number below is: Medium Series, Oil Removal Filter, 1/2 NPT Ports, Automatic Drain, Polycarbonate Bowl with Bowl Guard



#### **List Prices**

#### Medium Series (60), Coalescing Filters

Base Model	Description	List Price
AP60-FO_MOP	Coalescing Filter, Polycarbonate Bowl with Bowl Guard, Manual Drain	\$110.00
Add for options		
Α	Automatic Drain	14.00
D	Metal Bowl	14.00
S	Semi Automatic Drain	7.00

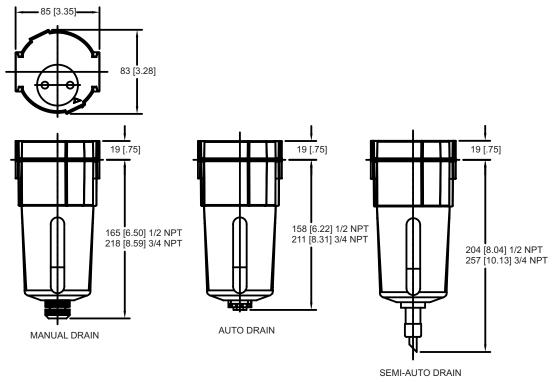
Options that do not affect price: Port Size

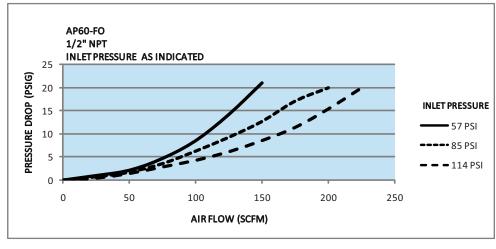
#### **Specifications**

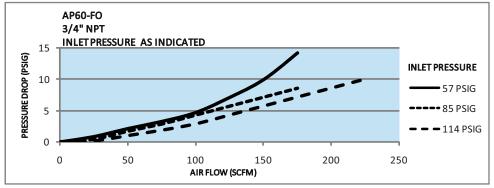
Parameters	Specifications		
Pipe Threads	1/2, 3/4 NPT		
Element Material	Borosilicate		
Body Material	Aluminum Alloy Die Cast		
Bowl Material	Polycarbonate with Bowl Guard or Aluminum Alloy Metal with Sight Glas		
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)	
Operating Temperature Range (ambient)	PC Bowl Metal Bowl	20°F to 125°F (-6°C to 50°C) 80°F to 175°F (-6°C to 80°C)	
Recommended Flow at an inlet pressure of 100 psig (7 kg/cm²)	1/2 NPT 3/4 NPT	36 scfm (17 dm³/sec) <sup>1</sup> 60 scfm (28 dm³/sec)	
Particle Removal	Up to 0.01 micron		
Maximum Oil Removal Content	Up to 0.01 ppm		
Drain Types Available	Manual Automatic Semi Automatic		
Note: Recommended	Use Pre-Filter with 5 micron Element		

<sup>&</sup>lt;sup>1</sup>Higher flow version (60 scfm) of 1/2 NPT models are available upon special request.

### **Oil Removal Filter**







## Bimba Air Preparation Equipment - Medium Series (1/2, 3/4 NPT)

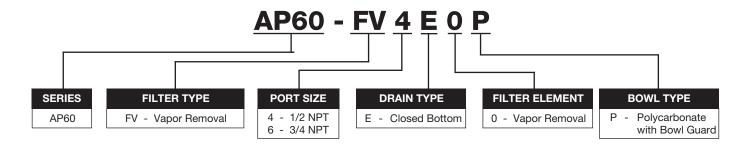


#### **Vapor Removal Filter**

Activated carbon pack acts as an absorbent to assist in the removal of hydro carbon gases and also absorbs oil carry over in the event of any malfunction.

#### **How to Order**

Model number below is: Medium Series, Vapor Removal Filter, 1/2 NPT Ports, Transparent Polycarbonate Bowl with Bowl Guard



#### **List Prices**

#### Medium Series (60), Vapor Removal Filters

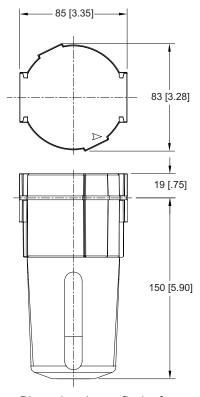
Base Model	Description	List Price
AP60-FV-E0P	Vapor Removal (.003 ppm), Closed Bottom Bowl	

Options that do not affect price: Port Size

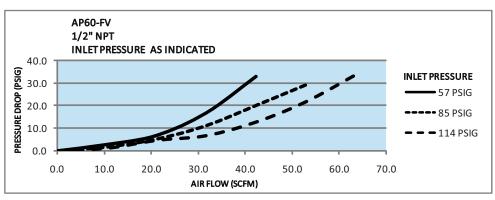
## **Specifications**

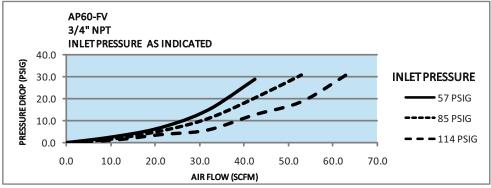
Parameters	Specifications	
Pipe Threads	1/2, 3/4 NPT	
Element Material	Activated Carbon	
Body Material	Aluminum Alloy Die Cast	
Bowl Material	Polycarbonate with Bowl Guard	
Maximum Inlet Pressure	PC Bowl	150 psig (10.5 kg/cm²)
Operating Temperature Range (ambient)	PC Bowl	20°F to 125°F (-6°C to 50°C)
Recommended Flow at an inlet pressure of 100 psig (7 kg/cm²)	21 scfm (10 dm³/sec)	
Particle Removal	Up to 0.01 micron	
Maximum Oil Removal Content	Up to 0.003 ppm	
Note: Recommended	Use Pre-Filter with 5 micron Element	

# **Vapor Removal Filter**



Dimensions in mm [inches]





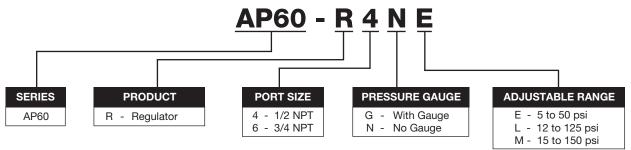
# Bimba Air Preparation Equipment - Medium Series (1/2, 3/4 NPT)



# **Pressure Regulator**

### **How to Order**

Model number below is: Medium Series, Air Pressure Regulator, 1/2 NPT Ports, No Gauge, 5 to 50 psi Pressure Range Adjustment



### **List Prices**

### Medium Series (60), Air Pressure Regulators

Base Model	Description	List Price
AP60-R	Air Pressure Regulator	\$55.00
Add for options		
G	Pressure Gauge	8.50

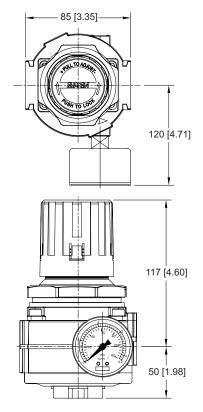
Options that do not affect price: Port Size, Adjustable Range

# **Specifications**

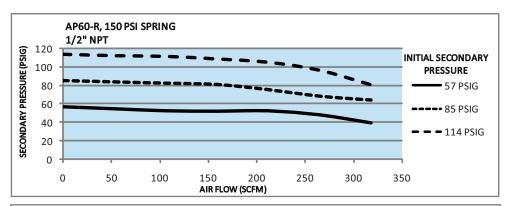
Parameters	Specifications
Pipe Threads	1/2, 3/4 NPT
Regulator Type	Relieving Diaphragm
Body Material	Aluminum Alloy Die Cast
Pressure Adjustment	Non-rising Plastic Knob
Maximum Inlet Pressure	300 psig (21.0 kg/cm²)
Maximum Operating Temperature (ambient)	175°F (80°C)
Regulated Secondary Outlet Pressure Ranges Available*	5 to 50 psig 12 to 125 psig 15 to 150 psig
Gauge Size	40 mm OD
Gauge Port Size	1/8 NPT
Standard Nominal Flow Rate at 145 psig (10 bar) supply pressure, 85 psig (6 bar) secondary pressure, 14.5 psig (1 bar) drop	1/2 NPT 130 scfm (60 dm³/sec) 3/4 NPT 170 scfm (80 dm³/sec)
Panel Mounting	Nut included Standard NOTE: 1.89 in. (48.0 mm) diameter hole required for panel mounting

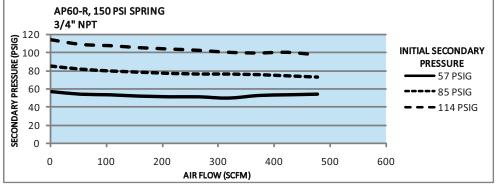
\*Note: Regulated pressures can be adjusted to pressures greater than or less than the pressure ranges specified. For best results, pressure should always be set by adjusting the pressure up to the desired setting. Do not use these units to control pressures outside of the specified ranges.

# **Pressure Regulator**



Dimensions in mm [inches]



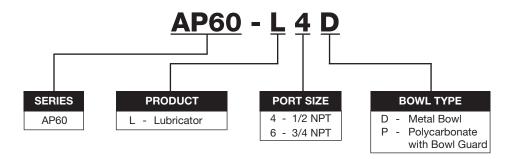


# Bimba Air Preparation Equipment - Medium Series (1/2, 3/4 NPT)



# Air Line Lubricator How to Order

Model number below is: Medium Series, Air Line Mist Lubricator, 1/2 NPT Ports, Metal Bowl



### **List Prices**

### Medium Series (60), Air Line Lubricators

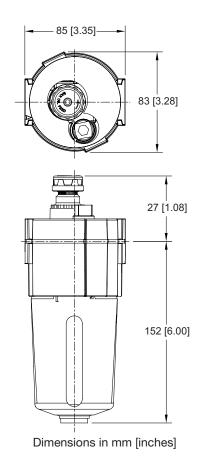
Base Model	Description	List Price
AP60-L_P	Air Line Lubricator, Polycarbonate Bowl with Bowl Guard	\$62.00
Add for options		
D	Metal Bowl with Sight Glass	14.00

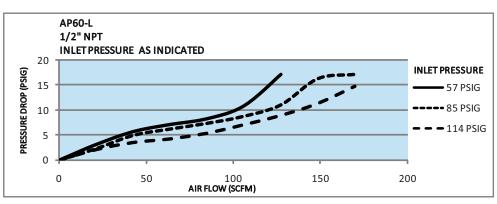
Options that do not affect price: Port Size

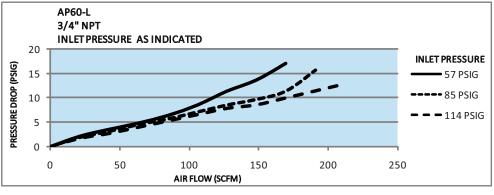
# **Specifications**

Parameters		Specifications
Pipe Threads	1/2, 3/4 NPT	
Lubricator Type	Misting Type	
Body Material	Aluminum Alloy Die Cast	
Bowl Material	Transparent Polycarbonate with Bowl Guard or Aluminum Alloy Metal with Sight Glass	
Bowl Capacity	200 cc	
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	PC Bowl Metal Bowl	125°F (50°C) 175°F (80°C)
Standard Nominal Flow Rate at 85 psig (6 bar) supply pressure and 14.5 psig (1 bar) pressure drop	1/2 NPT 3/4 NPT	110 scfm (52 dm³/sec) 125 scfm (60 dm³/sec)
Minimum Flow Required to Start at 85 psig (at 6 bar inlet)	1/2 NPT 3/4 NPT	3.2 scfm (1.5 dm³/sec) 3.2 scfm (1.5 dm³/sec)

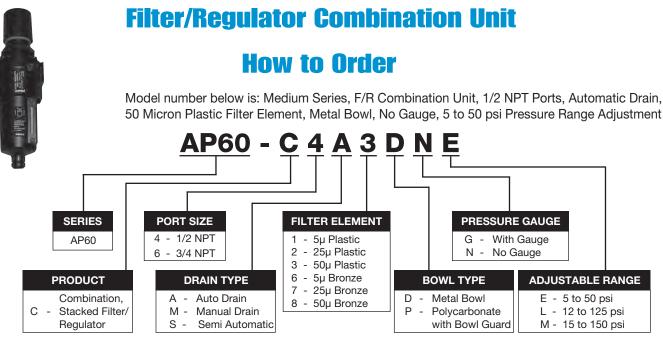
# **Air Line Lubricator**







# Bimba Air Preparation Equipment - Medium Series (1/2, 3/4 NPT)



### **List Prices**

### Medium Series (60), Combinations F/R Unit

Base Model	Description	
AP60-C_M1PN_	F/R, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	\$86.00
Add for options		
A	Automatic Drain	14.00
D	Metal Bowl with Sight Glass	14.00
G	Pressure Gauge	8.50
S	Semi Automatic Drain	7.00

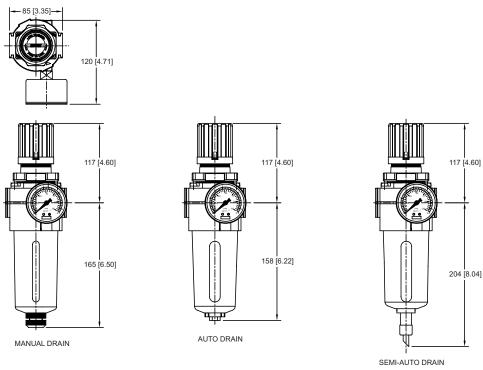
Options that do not affect price: Port Size, Adjustment Range, Filter Element

### **Specifications**

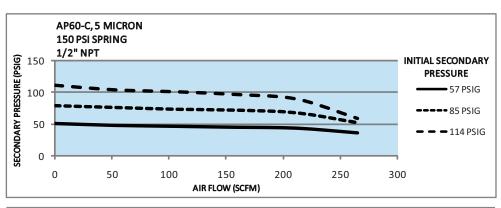
Parameters		Specifications
Pipe Threads	1/2, 3/4 NPT	
Body Material	Aluminum Alloy Die Cas	st
Filter Element Size	5, 25, 50 micron	
Filter Element Material	Plastic (Polypropylene) Sintered Bronze	
Filter Bowl Material	Transparent Polycarbor with Sight Glass	nate with Bowl Guard or Aluminum Alloy Metal
Maximum Inlet Pressure	PC Bowl Metal Bowl	150 psig (10.5 kg/cm²) 250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	PC Bowl Metal Bowl	125°F (50°C) 175°F (80°C)
Standard Nominal Flow Rate at 145 psig (10 bar) supply pressure and 14.5 psig (1 bar) in secondary pressure of 85 psig (6 bar)	1/2 NPT 3/4 NPT	113 scfm (54 dm³/sec) 150 scfm (72 dm³/sec)
Regulator Type	Relieving	
Pressure Adjustment	Non-rising Plastic Knob	)
Regulated Secondary Outlet Pressure*	5 to 50 psig 12 to 125 psig 15 to 150 psig	
Gauge Size	40 mm OD	
Gauge Port Size	1/8 NPT	
Panel Mounting	Nut included Standard NOTE: 1.89 in. (48.0 mn	n) diameter hole required for panel mounting

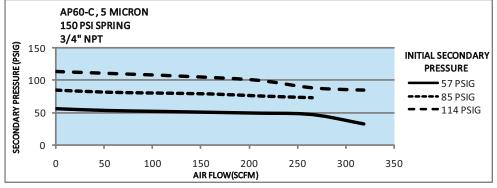
\*Note: Regulated pressures can be adjusted to pressures greater than or less than the pressure ranges specified. For best results, pressure should always be set by adjusting the pressure up to the desired setting. Do not use these units to control pressures outside of the specified ranges.

# **Filter/Regulator Combination Unit**

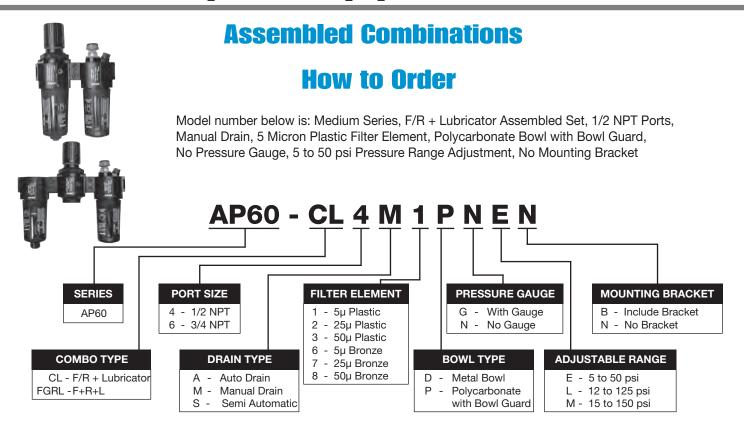


Dimensions in mm [inches]





# Bimba Air Preparation Equipment - Medium Series (1/2, 3/4 NPT)

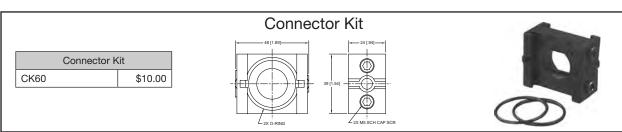


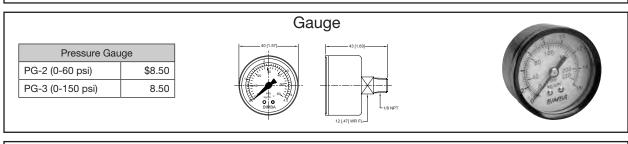
### **List Prices**

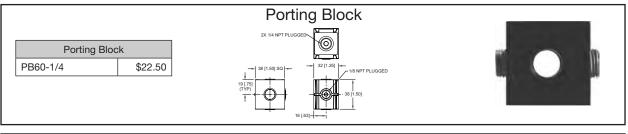
#### Medium Series (60), Assembled Combinations

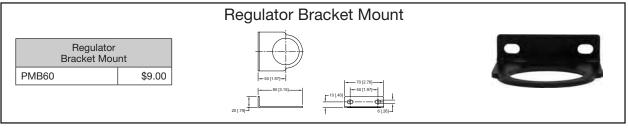
Base Model	Description	List Price
AP60-CL_M1PN	F/R + L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5µ Plastic Element, No Gauge	\$158.00
AP60-FGRL_M1PN	F + R + L, Manual Drain, Polycarbonate Bowl with Bowl Guard, 5μ Plastic Element, No Gauge	194.00
Add for options		
Α	Automatic Drain	28.00
В	Mounting Bracket - CL Mounting Bracket - FGRL	9.00 18.00
D	Metal Bowl	28.00
G	Pressure Gauge	8.50

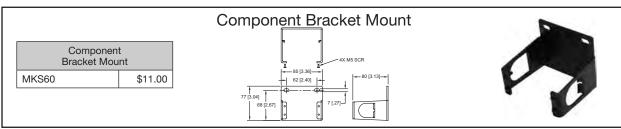
Options that do not affect price: Port Size, Adjustment Range, Filter Element

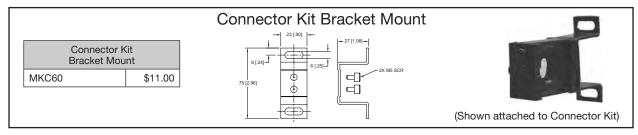












Dimensions in mm [inches]

# **Shut-off, Exhaust Valve**

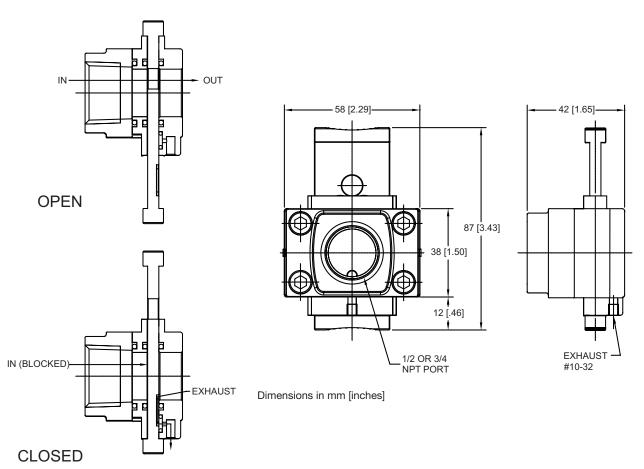
- Designed for modular installation in Medium (60) Series using CK60 Connector Kit
- Valve is 2-way, manually-operated, slide-type
- In closed position, air inlet is blocked, and downstream air is exhausted
- Exhaust port is threaded, so exhaust can be remote
- Valve may be locked in closed position with use of external padlock



Model Number	Description	List Price
AP60-SLV4	Shut-off, exhaust, lockout valve, 1/2 NPT	\$21.00
AP60-SLV6	Shut-off, exhaust, lockout valve, 3/4 NPT	28.60

# **Operation**

# **Dimensions**



# **Soft Start/Quick-Vent Valve**

- The Soft Start/Quick-Vent Valve is a 3-port, 2-position, normally closed device
- It can be installed in-line with Bimba's Medium Series (60) Air Preparation Equipment using Connector Kit CK60
- This unit controls the increase of downstream pressure upon startup, slowly bringing the system up to full line pressure
- When the pilot signal is removed, the air inlet is blocked and downstream pressure is exhausted
- Output port is 1/2 NPT or 3/4 NPT



1/2 NPT Model

3/4 NPT Model

Model Number	Description	List Price
AP60-SSV4-24VDC	1/2 NPT Soft Start/Quick-Vent Valve 24 volts DC	\$280.00
AP60-SSV4-110VAC	1/2 NPT Soft Start/Quick-Vent Valve 110 volts AC	280.00
AP60-SSV6-24VDC	3/4 NPT Soft Start/Quick-Vent Valve 24 volts DC	296.00
AP60-SSV6-110VAC	3/4 NPT Soft Start/Quick-Vent Valve 110 volts AC	296.00
SC24VDC-60	Replacement Solenoid Coil for 24 VDC Soft Start Valve	22.00
SC110VAC-60	Replacement Solenoid Coil for 110 VAC Soft Start Valve	22.00

### **Dimensions**

1/2 NPT 3/4 NPT

Dimensions in mm [inches]

# Bimba Air Preparation Equipment - Medium Series (1/2, 3/4 NPT)

# Accessories Soft Start/Quick-Vent Valve Specifications

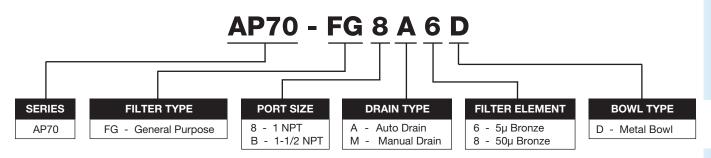
Parameters	Specifications
Operating Pressure Range	35 to 130 psig
Operating Temperature Range	20°F to 140°F
Materials of Construction	
Body	Aluminum
Cap, Plug, Piston	Aluminum
Poppet	Aluminum
Seals	Nitrile
Exhaust Port	1/2 NPT
Solenoid Coil Voltages	
AP60-SSV4-24VDC	24 Volts DC
AP60-SSV4-110VAC	110 Volts 50HZ
AP60-SSV6-24VDC	24 Volts DC
AP60-SSV6-110VAC	110 Volts 50 HZ
Time to achieve full system pressure	Adjustable from 1 to 45 seconds

# **Operating Instructions**

- The red button on the solenoid pilot valve is the manual override
- The socket head adjusting screw provided on the bottom face of the main valve regulates the time to reach full line pressure: minimum 1 second; maximum 45 seconds
- When the solenoid valve signal is lost, flow through the soft start valve is blocked, and downstream pressure is exhausted to atmosphere through the exhaust port on the bottom of the unit

# **Compressed Air Filter How to Order**

Model number below is: Large Series, General Purpose Filter, 1 NPT Ports, Automatic Drain, 5 Micron Bronze Filter Element, Metal Bowl



### **List Prices**

### Large Series (70), General Purpose Filters

Base Model	Description	
AP70-FG_M_D	General Purpose Filter, Manual Drain, Metal Bowl with Sight Glass	\$129.00
Add for options		
Α	Automatic Drain	14.00
Most popular models, typically ship from stock		
AP70-FG_M6D	Manual Drain, Metal Bowl with Sight Glass, 5µ Bronze Element	129.00
AP70-FG_A6D	Automatic Drain, Metal Bowl with Sight Glass, 5µ Bronze Element	143.00

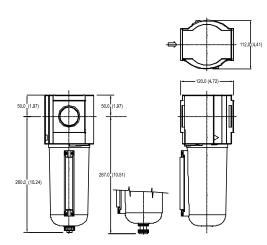
Options that do not affect price: Port Size, Filter Element

# **Compressed Air Filter**

# **Specifications and Dimensions**

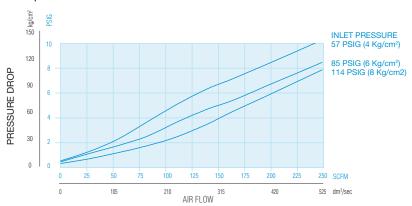
Parameters	Specifications
Pipe Threads	1, 1-1/2 NPT
Filter Element Size	5, 50 micron
Element Material	Sintered Bronze
Body Material	Aluminum Alloy Die Cast
Bowl Material	Aluminum Alloy Metal with Sight Glass
Maximum Inlet Pressure	250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	175°F (80°C)
Standard Nominal Flow Rate at 85 psig (6 bar) supply pressure and 14.5 psig (1 bar) pressure drop	1 to 1-1/2 NPT 700 scfm (333 dm³/sec)
Drain Types Available	Manual Automatic

#### Dimensions in mm [inches]



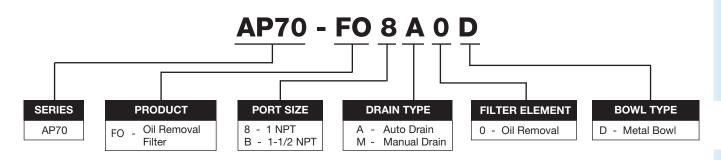
With Auto Drain With Manual Drain

### AP70-FG 1-1/2 NPT Inlet pressure as indicated



# Oil Removal Filter How to Order

Model number below is: Large Series, Oil Removal Filter, 1 NPT Ports, Automatic Drain, Oil Removal Filter Element, Metal Bowl



### **List Prices**

### Large Series (70), Coalescing Filters

Base Model	Description	List Price			
AP70-FO_M0P	Coalescing Filter, Manual Drain, Metal Bowl with Sight Glass	\$220.00			
Add for options					
A	Automatic Drain	14.00			
Most popular models, typically ship from stock					
AP70-FO_M0D	Coalescing Filter, Manual Drain, Metal Bowl	220.00			
AP70-FO_A0D	Coalescing Filter, Automatic Drain, Metal Bowl	234.00			

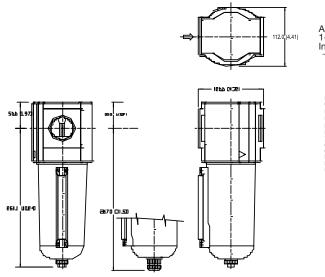
Options that do not affect price: Port Size

# **Oil Removal Filter**

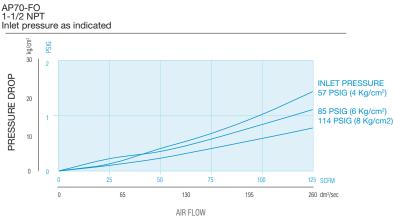
# **Specifications and Dimensions**

Parameters	Specifications
Pipe Threads	1, 1-1/2 NPT
Element Material	Synthetic Fiber and Polyurethane Foam
Body Material	Aluminum Alloy Die Cast
Bowl Material	Aluminum Alloy Metal with Sight Glass
Maximum Inlet Pressure	250 psig (17.5 kg/cm²)
Operating Temperature Range (ambient)	20°F (-6°C) to 175°F (80°C)
Recommended Flow (at an inlet pressure of 7 kg/cm²)	120 scfm (57 dm³/sec)
Particle Removal	Up to 0.01 micron
Maximum Oil Removal Content	Up to 0.01 ppm at +21°C
Drain Types Available	Manual Automatic
Note: Recommended	Use Pre-Filter with 5 micron Element

### Dimensions in mm [inches]

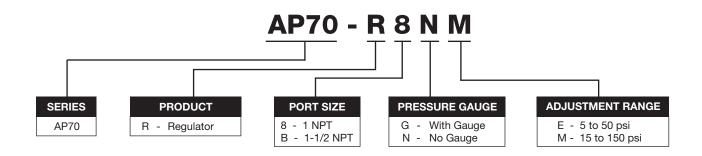


With Auto Drain With Manual Drain



# **Pressure Regulator How to Order**

Model number below is: Large Series, Regulator, 1 NPT Ports, No Pressure Gauge, 15 to 150 psi Pressure Range Adjustment



## **List Prices**

### Large Series (70), Air Pressure Regulators

Base Model	Description						
AP70-R	Air Pressure Regulator						
Add for options							
G	Pressure Gauge	8.50					
Most popular models, typically	ship from stock						
AP70-R_N_	Regulator, No Gauge	85.00					
AP70-R_G_	Regulator, with Gauge	93.50					

Options that do not affect price: Port Size, Pressure Range

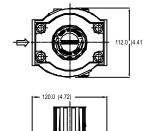
# **Pressure Regulator**

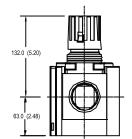
# **Specifications and Dimensions**

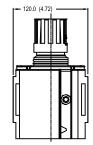
Parameters	Specifications
Pipe Threads	1, 1-1/2 NPT
Туре	Relieving
Body Material	Aluminum Alloy Die Cast
Pressure Adjustment	Non-rising Plastic Knob
Maximum Inlet Pressure	300 psig (21.0 kg/cm²)
Maximum Operating Temperature (ambient)	175°F (80°C)
Regulated Secondary Outlet Pressure*	5 to 50 psig 15 to 150 psig
Gauge Size	52 mm OD
Gauge Port Size	1/8 NPT
Standard Nominal Flow Rate at 145 psig (10 bar) supply pressure, 85 psig (6 bar) secondary pressure, 14.5 psig (1 bar) drop	1 to 1-1/2 NPT 440 scfm (210 dm³/sec)
Panel Mounting	Nut Included Standard NOTE: 2.28 in. (57.9 mm) diameter hole required for panel mounting

<sup>\*</sup>Note: Regulated pressures can be adjusted to pressures greater than or less than the pressure ranges specified. For best results, pressure should always be set by adjusting the pressure up to the desired setting. Do not use these units to control pressures outside of the specified ranges.

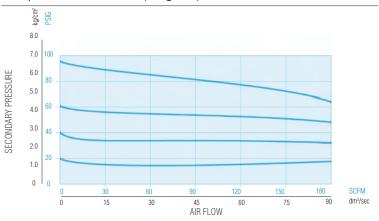
#### Dimensions in mm [inches]







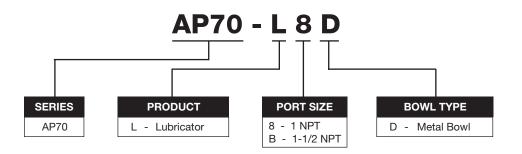
### AP70-R 1-1/2 NPT Inlet pressure = 140 PSIG (10kg/cm²)





# Air Line Lubricator How to Order

Model number below is: Large Series, Air Line Mist Lubricator, 1 NPT Ports, Metal Bowl



### **List Prices**

### Large Series (70), Air Line Lubricators

Base Model	Description					
AP70-L_D	Air Line Lubricator, Metal Bowl with Sight Glass	\$120.00				
Most popular models, typically ship from stock						
AP70-L_D	Lubricator, Metal Bowl with Sight Glass					

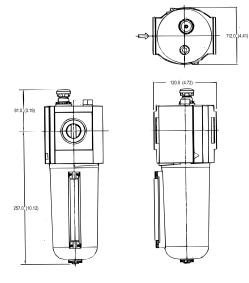
Options that do not affect price: Port Size

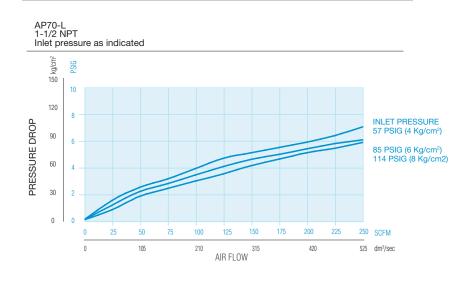
# **Air Line Lubricator**

# **Specifications and Dimensions**

Parameters	Specifications
Pipe Threads	1, 1-1/2 NPT
Lubricator Type	Misting Type
Body Material	Aluminum Alloy Die Cast
Bowl Material	Aluminum Alloy Metal with Sight Glass
Bowl Capacity	1 liter
Maximum Inlet Pressure	250 psig (17.5 kg/cm²)
Maximum Operating Temperature (ambient)	175°F (80°C)
Standard Nominal Flow Rate at 85 psig (6 bar) supply and 14.5 psig (1 bar) drop	1 to 1-1/2 NPT 410 scfm (195 dm³/sec)
Minimum Flow Required to Start at 85 psig (6 bar) inlet	7.2 scfm (3.4 dm³/sec)
Recommended Lubricants	Use any misting type oil rated 50 - 200 SSU (ISO grade 7 - 46) at 38°C (100°F)

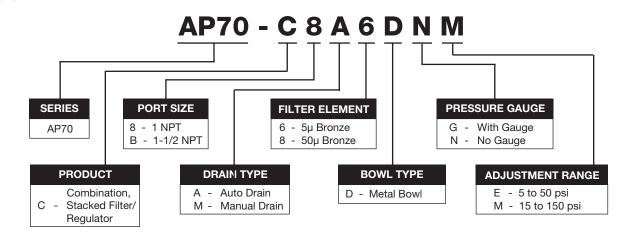
### Dimensions in mm [inches]





# Filter/Regulator Combination Unit How to Order

Model number below is: Large Series, Combination Stacked Filter/Regulator, 1 NPT Ports, Automatic Drain, 6 Micron Bronze Element, Metal Bowl, No Pressure Gauge, 15 to 150 psi Pressure Range Adjustment



### **List Prices**

### Large Series (70), Combinations F/R Unit

Base Model	Description	List Price
AP70-C_M1DN_	F/R, Manual Drain, Metal Bowl with Sight Glass, 5µ Bronze Element, No Gauge	\$160.00
Add for options		
A	Automatic Drain	14.00
G	Pressure Gauge	8.50
Most popular models, typically	ship from stock	
AP70-C_M6DN_	F/R, Manual Drain, Metal Bowl, 5µ Bronze Element, No Gauge	160.00
AP70-C_A6DN_	F/R, Automatic Drain, Metal Bowl, 5µ Bronze Element, No Gauge	174.00
AP70-C_M6DG_	F/R, Manual Drain, Metal Bowl, 5µ Bronze Element, Gauge	168.50
AP70-C_A6DG_	F/R, Automatic Drain, Metal Bowl, 5μ Bronze Element, Gauge	182.50

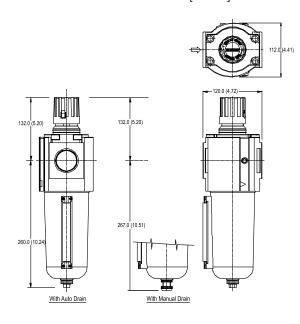
Options that do not affect price: Port Size, Pressure Range, Filter Element

# Bimba Air Preparation Equipment - Large Series (1, 1-1/2 NPT)

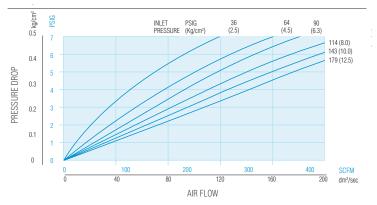
# Filter/Regulator Combination Unit Specifications and Dimensions

Parameters	Specifications				
Pipe Threads	1, 1-1/2 NPT				
Body Material	Aluminum Alloy Die Cast				
Filter Element Size	5, 50 micron				
Filter Element Material	Sintered Bronze				
Filter Bowl Material	Aluminum Alloy Metal with Sight Glass				
Maximum Inlet Pressure	250 psig (17.5 kg/cm²)				
Maximum Operating Temperature (ambient)	175°F (80°C)				
Standard Nominal Flow Rate (at 10 bar supply pressure, 6 bar secondary pressure, 1 bar drop)	1 to 1-1/2 NPT 420 scfm (200 dm³/sec)				
Drain Types Available	Manual Automatic				
Pressure Adjustment	Non-rising Plastic Knob				
Regulated Secondary Outlet Pressure Range	5 to 50 psig 15 to 150 psig				
Gauge Size	50 mm OD				
Gauge Port Size	1/8 NPT				
Panel Mounting	Nut Included Standard NOTE: 2.28 in. (57.9 mm) diameter hole required for panel mounting				

### Dimensions in mm [inches]



#### AP70-C 1 NPT Inlet pressure as indicated



Pressure Gauge							
PG-4 (0-60)	\$8.50						
PG-5 (0-220)	8.50						

50mm OD Gauge



PN70 \$20.00

Nut to Panel Mount AP70-R and AP70-C



Connector Kit
CK70 \$17.00

Interconnect Series 70 Units



(1/8,1/4 NPT)

**Compact Series** (1/4.3/8.1/2 NPT)

(1/2.3/4 NPT)

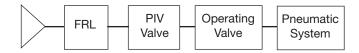
Large Series (1.1-1/2 NPT)

Pneumauc Isolation Valve

# Bimba Manual Pneumatic Isolation Valves - PIV Series



Pneumatic Isolation Valves are typically the first valve following the FRL components in the line supplying compressed air to pneumatic equipment.



Pneumatic Isolation Valves are the critical component in any safety lockout, tagout system. Available sizes range from 1/4" inlet/outlet ports with 3/8" exhaust ports up to 1-1/2" inlet/outlet ports with 2" exhaust ports.

Available accessories include air mufflers, pressure switches, and air pressure "visual" indicators, and connecting hex nipples.

# List Prices Valves

Part Number	Inlet/Outlet Port Size	Exhaust Port Size	C	List Price		
Part Number	inlet/Outlet Port Size	Exhaust Port Size	In/Out Exhaust		LIST FIICE	
PIV-20-025/038	1/4 NPT	3/8 NPT	1.8	1.7	\$75.55	
PIV-20-038/038	3/8 NPT	3/8 NPT	2.6	2.6	75.55	
PIV-20-038/075	3/8 NPT	3/4 NPT	4.7	3.5	103.35	
PIV-60-050/075	1/2 NPT	3/4 NPT	7.1	4.0	103.35	
PIV-60-075/075	3/4 NPT	3/4 NPT	8.2	4.1	103.35	
PIV-60-075/125	3/4 NPT	1-1/4 NPT	13.1	8.9	142.35	
PIV-70-100/125	1 NPT	1-1/4 NPT	16.5	9.5	142.35	
PIV-70-125/125	1-1/4 NPT	1-1/4 NPT	19.2	9.7	142.35	
PIV-70-150/200	1-1/2 NPT	2 NPT	35.5	50.9	453.30	

Note: The part numbers have been configured to provide information on applicable FRL series and port sizes. There is some overlap in the applicable FRL series.

For example: PIV (Pneumatic Isolation Valve) - 60 (60 series FRL) - 050 (Inlet/Outlet Port Size) - 075 (Exhaust Port Size)

#### **Referenced Standards:**

All standards are subject to revision. Parties are encouraged to investigate and apply the most recent editions of the standards indicated below.

OSHA 29 CFR 1910.147

CSA Z142-02

CSA Z460-05

ISO 13849-1

ISO 14118:2000

EN 1037

ANSI/ASSE Z244.1-2003

ANSI/PMMI B155.1-2006

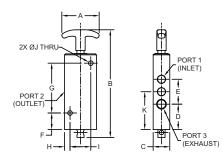
Part Number	Description	Port Size	Average Cv	List Price
PIV-SIL-013	Air Muffler	1/8 NPT	2.0	\$13.15
PIV-SIL-025	Air Muffler	1/4 NPT	2.7	13.15
PIV-SIL-038	Air Muffler	3/8 NPT	3.2	13.15
PIV-SIL-038-HF	Air Muffler (High Flow)	3/8 NPT	4.9	18.30
PIV-SIL-050	Air Muffler	1/2 NPT	5.9	18.30
PIV-SIL-075	Air Muffler	3/4 NPT	5.9	18.30
PIV-SIL-075-HF	Air Muffler (High Flow)	3/4 NPT	13.5	36.85
PIV-SIL-100	Air Muffler	1 NPT	16.7	36.85
PIV-SIL-125	Air Muffler	1-1/4 NPT	17.4	36.85
*PIV-SIL-200	Air Muffler	2 NPT	54.0	102.00
CK10-1/8	10-1/8 Hex Nipple 1/8 NPT		N/A	3.25
CK10-1/4	Hex Nipple 1/4 NPT		N/A	4.00
CK20-3/8	Hex Nipple	pple 3/8 NPT		4.10
CK60-1/2	1/2 Hex Nipple 1/2 NPT		N/A	5.45
CK60-3/4	Hex Nipple	3/4 NPT	N/A	8.95
CK70-1	70-1 Hex Nipple 1 NPT		N/A	14.00
CK70-1-1/4	Hex Nipple	1-1/4 NPT	N/A	28.15
CK70-1-1/2	Hex Nipple	1-1/2 NPT	N/A	50.85

Caution Note: Mufflers only rated to 150 psi.

\*Note: This size contains female threads. All other sizes are male threaded.

# **Dimensions**

### **PIV Valves**



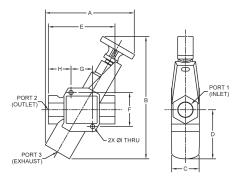
Part Number	In-Out Port Size	Exhaust Port Size	Α	В	С	D	E	F	G	н	I	J	К
PIV-20-025/038	1/4	3/8	2.3	6.9	1.0	1.3	1.0	1.0	3.0	0.3	1.3	0.3	1.9
PIV-20-038/038	3/8	3/8	2.3	6.9	1.0	1.3	1.0	1.0	3.0	0.3	1.3	0.3	1.9

All dimensions are inches.

# Bimba Manual Pneumatic Isolation Valves - PIV Series

# **Dimensions**

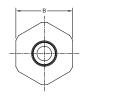
### **PIV Valves**

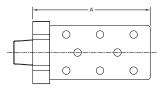


Part Number	In-Out Port Size	Exhaust Port Size	A (open)	B (open)	С	D	E	F	G	н	I
PIV-20-038/075	3/8	3/4	6.6	9.0	2.0	3.0	4.4	2.3	1.3	1.6	0.34
PIV-60-050/075	1/2	3/4	6.6	9.0	2.0	3.0	4.4	2.3	1.3	1.6	0.34
PIV-60-075/075	3/4	3/4	6.6	9.0	2.0	3.0	4.4	2.3	1.3	1.6	0.34
PIV-60-075/125	3/4	1-1/4	7.7	10.8	2.3	3.8	5.5	2.8	1.8	1.9	0.34
PIV-70-100/125	1	1-1/4	7.7	10.8	2.3	3.8	5.5	2.8	1.8	1.9	0.34
PIV-70-125/125	1-1/4	1-1/4	7.7	10.8	2.3	3.8	5.5	2.8	1.8	1.9	0.34
PIV-70-150/200	1-1/2	2	8.2	14.8	3.0	5.0	8.2	3.2	3.4	2.4	0.47

All dimensions are inches.

### **Air Mufflers**

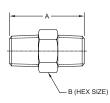




Part Number	Port Size	Α	В
PIV-SIL-013	1/8	1.6	0.8
PIV-SIL-025	1/4	1.6	0.8
PIV-SIL-038	3/8	1.6	0.8
PIV-SIL-038-HF	3/8	2.9	1.3
PIV-SIL-050	1/2	2.9	1.3
PIV-SIL-075	3/4	2.9	1.3
PIV-SIL-075-HF	3/4	4.5	2.0
PIV-SIL-100	1	4.5	2.0
PIV-SIL-125	1-1/4	4.5	2.0
*PIV-SIL-200	2	6.6	3.0

All dimensions are inches.

### **Hex Nipples**



Part Number Thread Size		Α	В	Material	
CK10-1/8	1/8 NPT	1.06	7/16"	Black Oxide Steel	
CK10-1/4	1/4 NPT	1.50	5/8"	Black Oxide Steel	
CK20-3/8	3/8 NPT	1.45	3/4"	Zinc Plated Steel	
CK60-1/2	1/2 NPT	1.89	7/8"	Zinc Plated Steel	
CK60-3/4	3/4 NPT	1.96	1-1/8"	Zinc Plated Steel	
CK70-1	1 NPT	2.34	1-3/8"	Zinc Plated Steel	
CK70-1-1/4	1-1/4 NPT	2.48	1-3/4"	Zinc Plated Steel	
CK70-1-1/2	1-1/2 NPT	2.61	2"	Zinc Plated Steel	

<sup>\*</sup> Note: The PIV-SIL-200 contains female threads. All other sizes are male threaded.

### Pneumatic Energy Release Verification Options

Bimba Manual Pneumatic Isolation Valves - PIV Series

### **Visual Pop-Up Indicator or Pressure Switch (electrical)**

- May be installed on all PIV valves with pressure sensing port
- Provides a means to verify the release of downstream pressure to next obstruction.



Verification Option	Model Number	Inlet Port Size*	List Price	
Pop-Up Indicator	PIV-POI	1/8	\$19.65	
Pressure Switch	PIV-PS	1/8	117.75	

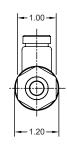
<sup>\*</sup> NPT port threads.

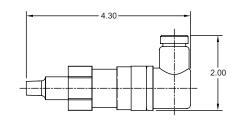
**Pop-Up Indicator** 

#### **Pressure Switch**





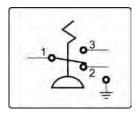




# **Pressure Switch Specifications**

Parameters	Specifications			
Maximum Operating Pressure	600 psig (41 bar)			
Set Point Tolerance	±1 psi or 5% (.07 bar)			
Diaphragm Material	Buna N			
Proof Pressure	1800 psi (124 bar)			
Differential	8-16%			
Current Rating	5 A @ 250 VAC 5 A @ 30 VDC (Resistive)			
Media Connection (2)	1/8" NPT Male			
Circuit Form (C)	DT (Single Pole - Double Throw)			
Electrical Connection (HR)	DIN43650A			

### **Wiring Diagram**



### **PIV Sensing Port**

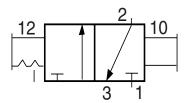
PIV Sensing Port - Bimba Pneumatic Isolation Valves are provided with 1/8 NPT sensing ports, enabling installation of a pressure sensing device such as the Pop-Up Indicator or Pressure Switch shown above. Standards suggest that machine design should include a method for verifying the release of energy after lockout.

The Bimba Pop-Up Indicator is constructed for the industrial environment with a brass body and 1/8" NPT connection. It offers 360° visibility and a redundant verification feature. By pushing on the red plunger, the operator can "feel" the presence of pressure and verify that the indicator is performing its sensing function.

The Bimba Pressure Switch offers an electronic pressure sensing option that can be integrated into a safety monitoring system, which confirms energy isolation throughout the circuit.

## Bimba Manual Pneumatic Isolation Valves - PIV Series

### **How it Works**



Manual PIV valve shown in the closed position. The valve can only be locked in the closed position.

Push/pull operation - Push the handle inward to exhaust downstream air (lockable in this position). Pull the handle outward to supply air downstream.

Following any FRL components, an energy isolation valve is usually the first valve in the line supplying compressed air to equipment. The energy isolation valve should provide a quick means of shutting off the supply of air and exhausting the downstream lines.

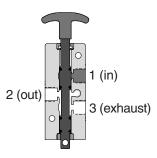
The Bimba PIV valve has a large red operating handle for high visibility. When the handle is pulled out, there is full line pressure. A short, full inward push of the handle closes off the flow of air, and quickly exhausts the pressure in the downstream line. This action is swift and doesn't require a difficult, slow, or confusing twisting action.

### **Valve Operation**

### **PIV-20 Series**

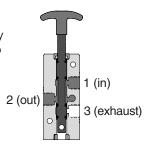
#### **VALVE CLOSED**

When the red handle is pushed inward, the flow of supply air is blocked and downstream air is exhausted via the exhaust port. While servicing or maintaining machinery, the PIV valve should be padlocked in this position to prevent the handle from being pulled outward inadvertently where potential for human injury exists.



#### **VALVE OPEN**

When the red handle is pulled outward supply air flows freely from inlet to outlet and flow to exhaust is blocked. A detent keeps the handle in the open position.



#### **STANDARD SPECIFICATIONS:**

Ambient/Media Temperature: 40° to 175°F (4° to 80°C).

Flow Media: Filtered air; 5 micron recommended. Inlet Pressure: 15 to 145 psig (1 to 10 bar).

Port Threads: NPT standard.

**Lock Hole Diameter:** 0.27 inch (7.06 mm). **Length of Hole:** 0.43 inch (10.92 mm).

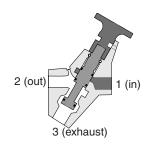
**NOTE:** Per specifications and regulations, these products are defined as energy isolation devices, **NOT AS EMERGENCY STOP DEVICES.** 

### **Valve Operation**

### **PIV-60 Series**

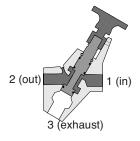
#### **VALVE CLOSED**

With a short push of the red handle inward, the flow of supply air is blocked and downstream air is exhausted via the exhaust port at the bottom of the valve. The PIV valve should be padlocked in this position to prevent the handle from being pulled outward inadvertently where potential for human injury exists or while servicing machinery.



#### **VALVE OPEN**

When the red handle is pulled out, supply air flows freely from inlet to outlet and flow to exhaust is blocked. A detent keeps the handle in the open position. The handle is not designed to be locked in this position, thereby providing for ready shut-off when necessary.



#### STANDARD SPECIFICATIONS:

Ambient/Media Temperature: 40° to 175° F (4° to 80° C). Flow Media: Filtered air; 5 micron filter recommended. Inlet Pressure: 15 to 300 psig (1 to 20 bar).

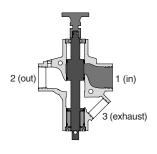
Port Threads: NPT standard.

**NOTE:** Per specifications and regulations, these products are defined as energy isolation devices, **NOT AS EMER-GENCY STOP DEVICES.** 

### **PIV-70 Series**

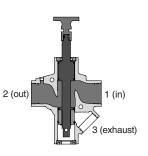
#### **VALVE CLOSED**

With a short push of the red handle inward, the flow of supply air is blocked and downstream air is exhausted via the exhaust port while servicing or maintaining machinery. Padlock the PIV valve in this position to prevent the handle from being pulled outward inadvertently to avoid potential for human injury while servicing machinery.



#### **VALVE OPEN**

When the red handle is pulled out, supply air flows freely from inlet to outlet and flow to exhaust is blocked. A detent keeps the handle in the open position. The handle is not designed to be locked in this position, thereby providing for ready shut-off when necessary.



### STANDARD SPECIFICATIONS:

Ambient/Media Temperature: 40° to 175°F (4° to 80°C). Flow Media: Filtered air; 5 micron recommended. Inlet Pressure: 15 to 300 psig (1 to 20 bar).

Port Threads: NPT standard.

**Lock Hole Diameter:** 0.38 inch (9.6 mm). **Length of Hole:** 0.75 inch (19.1 mm).

**NOTE:** Per specifications and regulations, these products are defined as energy isolation devices, **NOT AS EMERGENCY** 

STOP DEVICES.

## Bimba Manual Pneumatic Isolation Valves - PIV Series

### **Guidelines for a Safe Workplace**

#### **Referenced Standards:**

All standards are subject to revision. Parties are encouraged to investigate and apply the most recent editions of the standards indicated below.

OSHA 29 CFR 1910.147 ISO 14118:2000

CSA Z142-02 EN 1037

CSA Z460-05 ANSI/ASSE Z244.1-2003 ISO 13849-1 ANSI/PMMI B155.1-2006

#### What does this regulation cover?

In general terms, the rule requires that energy sources (pneumatic, electric, hydraulic, etc.) be shut off or disconnected while equipment is being serviced. Furthermore, the disconnected valve or switch must be locked to prevent reactivation while anyone is working on the equipment.

In the case of air-operated equipment, a lockout valve must be used to cut off the air supply to the equipment and exhaust any stored or residual downstream air. (OSHA Regulation 29 CFR 1910.147 lists a number of requirements for the control of hazardous energy sources.) In addition, Bimba PIV products assist manufacturers in complying with European regulation **EN 1037** (Safety of Machinery). For complete information, please read the entire regulations.

#### Does this regulation apply to you?

An estimated 631,000 businesses are affected by this OSHA regulation. The majority of those affected are in the manufacturing and servicing industries. Among individual workers, equipment operators and those performing service on equipment are at the greatest risk of injury. Workers involved with packaging equipment, presses, and conveyor systems are also said to be at high risk.

#### Who benefits?

The Secretary of Labor says the procedures were developed to protect 39 million American workers from injury, and more than six percent of all workplace deaths can be eliminated in the affected industries. Statistics indicate that implementation of the regulation could prevent 120 deaths and 60,000 injuries annually.

#### How can this regulation be addressed?

The rule requires equipment to have "energy isolation devices" (to isolate the equipment from its energy sources), and that such devices be capable of being locked in the "off" position. Formal procedures must be established to de-energize the equipment, isolate it, and ensure that any stored energy (for example, air pressure trapped downstream in a system) has been dissipated. Employee training in these procedures is mandatory.

If your company uses pneumatically-controlled equipment, or if you are a manufacturer of pneumatically operated equipment, OSHA rules can have a substantial effect on your business. As an employer, compliance may involve modifications to the air control systems for equipment in your plant. As a manufacturer, the new machines or equipment you deliver should include lockout-and-exhaust devices as a part of your standard package.

# Bimba Manual Pneumatic Isolation Valves - PIV Series

## **Guidelines for a Safe Workplace**

### Key points regarding the control of pneumatic energy:

· Shut-off valve required

Each piece of equipment must have a shut-off valve to isolate the equipment from its air supply and so render the equipment inoperative.

Shut-off valve should be lockable

The valve is lockable if it is designed to allow the use of a padlock to keep the valve in the closed position.

• Pressurized downstream air must be relieved

In addition to locking out the air supply, all downstream air must be depressurized by providing an exhaust to atmosphere. Workers must also verify isolation and de-energizing, while being certain there is no reaccumulation of pressurized air during service or maintenance activities.

- "Tagout" may replace "lockout" only under certain circumstances
  - (1) If energy isolation device cannot be locked out;
  - (2) If employer shows that tagout provides safety equivalent to lockout. Whenever major replacement, repair, renovation, or modification of equipment is performed, or when new equipment is installed, energy isolating devices for such equipment must be designed to accept a lockout device.

### The Bimba PIV Advantage

### **FEATURES**

- Teflon Seals Standard
- Integral Pressure Sensing Port
- Highest Flow Rates
- Push/Pull Activation
- Valve can only be locked in the "Off" position
- Full or oversized exhaust ports

#### **BENEFITS**

- Competitor's nitrile seals can extrude into the bore and stick; Teflon insures easy motion even after long periods of non-use.
- ANSI/PMMI compliance; competitors need to "T" the line and add additional components.
- Quicker exhaust means more machine "up time."
- Easy operation (ANSI/PMMI)
- ANSI/PMMI compliance; competitive rotary models can be locked in the partially "on" position which is a safety hazard and not in compliance with existing standards.
- ANSI/PMMI compliance requires the exhaust port size to be greater than or equal to the supply port size. Many competitors have exhaust ports smaller than their supply ports.

# **Notes**

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