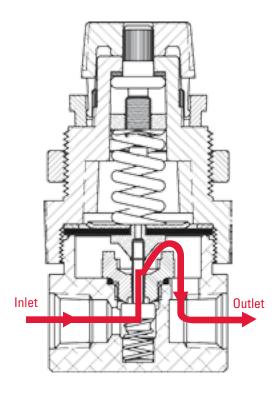


Regulators



Adequate pressure regulation is necessary for the efficient use of pneumatic equipment. Monnier regulators are built in a variety of sizes (1/8" through 1-1/2") and with varied specifications to help suit each application's requirements. Our regulators are built with two basic designs. Diaphragm operated regulators are used to offer a quick response and maximum accuracy. Piston operated regulators provide the highest air flow possible in the larger regulator series. Monnier regulators can also be offered as relieving or non-relieving, depending on the specific needs of the application.

Monnier designs a wide variety of compressed air regulators to provide constant pressure. Standard regulators are suitable for optimal pressure ranges from 0-10 psi to 20-250 psi.

Additional Options

- Preset at the factory
- Preset and tamper-resistant
- Lock and key regulators to eliminate unwanted adjustment
- Reverse flow regulators
- Manifold mount regulators
- Pilot operated regulators
- Anodizing available in any of eight standard colors for any regulator
- Multiple mounting options for all regulators; pipe, bracket or panel mounting

Features

- All regulators will adjust to zero psi (shutoff) and to pressure above the range shown.
- Gauge port plugs are included with all regulators.
- Fluorocarbon seals available in place of Buna-N.
- All regulators available with pressure gauges corresponding to the pressure range.

Specifications

Maximum Inlet Pressure: 250 PSI Maximum Temperature: 175°F

TABLE OF CONTENTS

3000 Miniature Series	1/8 & 1/4	3, 4
Reverse Flow Regulators	1/8, 1/4, 3/8 & 1/2	5
104-1000 Standard Series	1/4, 3/8 & 1/2	6, 7
108-1000 Series	1/4, 3/8 & 1/2	8
101-1000 Series	1/2 & 3/4	9
4000/5000 Heavy Duty Series	3/4, 1, 1 1/4 & 1 1/2	10
Iso-Sized Manifold Mount Regulators		11-13
Piloted Operated Pressure Regulators	1/8 - 1 1/2	14, 15
Subminiature Regulators	1/16 & 1/8	16
UL Label Regulators	1/8, 1/4, 3/8 & 1/2	17
3101 Series Relief Valves	1/8 & 1/4	18



Warning

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

WARRANTY: Monnier, Inc. warrants each product against defects in material and workmanship for a period of one year from the date of manufacture providing its use was in accordance with Monnier, Inc. recommendations. If the product fails to perform as warranted, Monnier, Inc. will, at its option, repair or replace the product free of charge. The company will not be liable for incidental or consequential damages. We make no other warranty, expressed or implied, including warranties of merchantability or fitness for a particular purpose.

REGULATORS: 101-3000/111-3000/102-3000 Miniature Series







Non-Relieving

Features

- Machined aluminum body provides close tolerances for exceptional accuracy, repeatability and responsiveness
- Available with polycarbonate bonnet with locking ring or aluminum bonnet and locking nut
- Diaphragm style regulator for minimal hysteresis and greater accuracy and responsiveness
- Constant bleed fitting available for even greater accuracy
- Relieving and non-relieving versions available
- Gauge port plugs included
- Preset and tamperproof options available
- Also available with brass body for water service (non-relieving recommended)

Materials of Construction

Body: Machined Aluminum or Brass **Bonnet:** 101-3000: Polycarbonate 111/102-3000: Aluminum

Adjustment Screw:

101-3000: Black Oxide Coated Steel 111/102-3000: Zinc Plated Steel (102 series)

Poppet Seat: Nylon

Diaphragm Assembly: Zinc Plated Steel, Brass,

Buna-N (Fluorocarbon available)

Seals: Buna-N (Fluorocarbon available)

Poppet Spring: Stainless Steel

Compression Spring: Music Wire, Spring Steel

Bracket: Zinc Plated Steel **Panel Nut:** Machined Aluminum

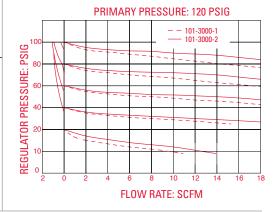
Operating Specifications

Gauge Ports: 1/8" NPT

Maximum Inlet Pressure: 250 PSIG Temperature Range: 0-175°F

Weight: 87 g

Flow Characteristics



Accessories & Kits

Panel Nuts: 13133 (101-3000 Series);

13025 (111/102-3000 Series)

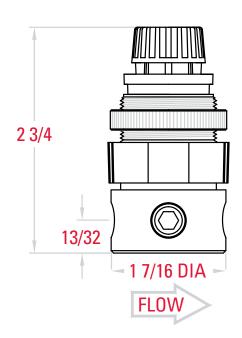
Bracket Kits: 13536 (101-3000 Series);

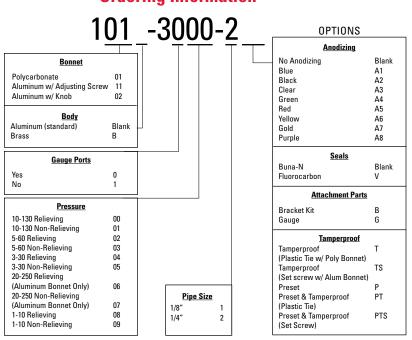
13534 (111/102-3000 Series) **Service Kits**: 13532 (Relieving);

13533 (Non-Relieving)

Constant Bleed Fitting: 13520

Dimensions





REGULATORS: 101-3100 Manifold Mount Series



Features

- Same performance as the 101-3000 series but with easy to mount manifold interface
- 3/8-24 nipple acts as inlet and mounting mechanism
- No mounting screw or hardware required
- Perfect for multiple pressure manifolds or integrating components in a pneumatic circuit

Operating Specifications

Maximum Inlet Pressure: 250 PSIG Temperature Range: 0-175°F

Weight: 87 g

Materials of Construction

Body: Machined Aluminum or Brass **Bonnet:**101-3000: Polycarbonate

111/102-3000: Aluminum Adjustment Screw:

101-3000: Black Oxide Coated Steel

111/102-3000: Zinc Plated Steel (102 series)

Poppet Seat: Nylon

Diaphragm Assembly: Zinc Plated Steel, Brass,

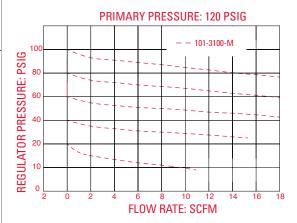
Buna-N (Fluorocarbon available) **Seals:** Buna-N (Fluorocarbon available)

Poppet Spring: Stainless Steel

Compression Spring: Music Wire, Spring Steel

Bracket: Zinc Plated Steel
Panel Nut: Machined Aluminum
Mounting Nipple: Zinc Plated Steel

Flow Characteristics



Accessories & Kits

Panel Nuts: 13133 (101-3000 Series);

13025 (111/102-3000 Series)

Bracket Kits: 13536 (101-3000 Series);

13534 (111/102-3000 Series) **Service Kits:** 13532 (Relieving);

13533 (Non-Relieving) **Constant Bleed Fitting:** 13520

2 25/32 3/8 –24 UNF 2A THREAD

Ordering Information

1<u>01</u>-31<u>00</u>-M

Aluminum w/ Knob	02	
		-
Pressure		
10-130 Relieving	00	
10-130 Non-Relieving	01	
5-60 Relieving	02	
5-60 Non-Relieving	03	
3-30 Relieving	04	
3-30 Non-Relieving	05	
20-250 Relieving		
(Aluminum Bonnet Only)	06	
20-250 Non-Relieving		

07

08

Polycarbonate

ninum w/ Adjusting Screw

(Aluminum Bonnet Only)

1-10 Relieving

1-10 Non-Relieving

 OPTIONS

 Anodizing
 Blank

 Blue
 A1

 Black
 A2

 Clear
 A3

 Green
 A4

 Red
 A5

 Yellow
 A6

 Gold
 A7

 Purple
 A8

REGULATORS: 101C-3000 Reverse Flow Miniature Series



Features

- Provides regulated pressure when flowing inlet to outlet
- Built-in check valve allows unrestricted reverse flow
- Allows regulator to be placed between valve and actuator to regulate cylinder ports independently
- Same accuracy, repeatability and responsiveness as standard 101-3000 regulators

Operating Specifications

Gauge Ports: 1/8" NPT

Maximum Inlet Pressure: 250 PSIG Temperature Range: 0-175°F

Weight: 87 g





Non-Relieving

Accessories & Kits

Panel Nuts: 13133 (101-3000 Series);

13025 (111/102-3000Series)

Bracket Kits: 13536 (101-3000 Series);

13534 (111/102-3000 Series) Service Kits: 13532 (Relieving);

13533 (Non-Relieving)

Constant Bleed Fitting: 13520

Materials of Construction

Body: Aluminum

Bonnet: Polycarbonate or Aluminum

Adjustment Screw:

101-3000: Black Oxide Coated Steel

111/102-3000: Zinc Plated Steel (102 Series)

Poppet Seat: Nylon

Diaphragm Assembly: Zinc Plated Steel, Brass,

Buna-N (Fluorocarbon available)

Seals: Buna-N (Fluorocarbon available)

Poppet Spring: Stainless Steel

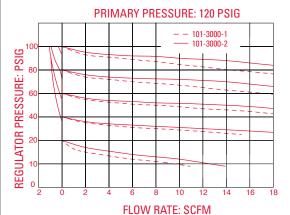
Compression Spring: Music Wire, Spring Steel

Poppet Spring: Stainless Steel **Bracket:** Zinc Plated Steel Panel Nut: Machined Aluminum

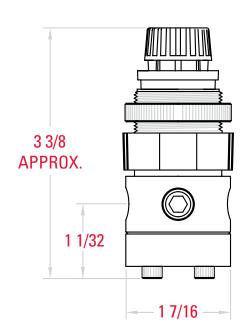
Check Valve Ball: Buna-N (Fluorocarbon Available)

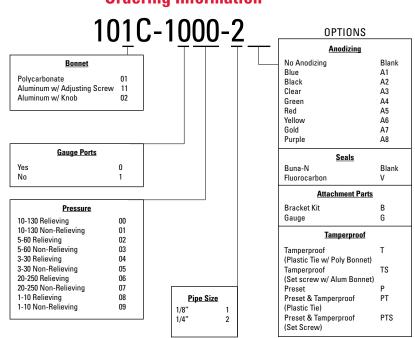
Check Valve Spring: Stainless Steel Check Valve Cover: Aluminum

Flow Characteristics



Dimensions





REGULATORS: 104-1000 Standard Series







Features

- Machined Aluminum body provides close tolerances for exceptional accuracy, repeatability and responsiveness
- Diaphragm style regulator for minimal hysteresis and greater responsiveness
- Constant bleed fitting available for even greater accuracy
- Relieving and non-relieving versions available
- Gauge port plugs included
- Bracket and panel mounting available
- Available with T-handle, knob or lock and key mechanism
- Preset and tamperproof options available

Materials of Construction

Body: Machined Aluminum

Bonnet: Aluminum

Adjustment Screw: Zinc Plated Steel

Poppet Valve: Brass

Poppet Spring: Stainless Steel

Poppet Seat: Brass

Diaphragm Assembly: Buna-N (Fluorocarbon available) and Brass Seals: Buna-N (Fluorocarbon available) **Compression Spring:** Zinc Plated Steel

Spring Guide: Zinc Plated Steel

Operating Specifications

Gauge Ports: two 1/4" NPT (Standard) Maximum Inlet Pressure: 250 PSIG

Temperature Rating: Aluminum Bonnet: 0-175°F

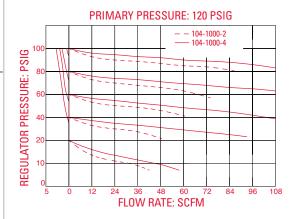
Weight: 430 g

Accessories & Kits

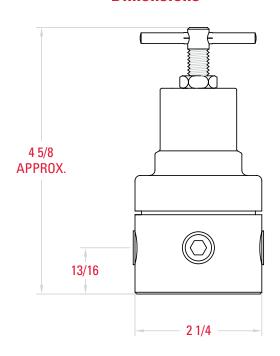
Panel Nuts: 11124 (105 & 106) Repair Kit: (Relieving) 11513; (Relieving -1006) 11959; (Non-Relieving) 11515; (Non-Relieving-1007) 11958

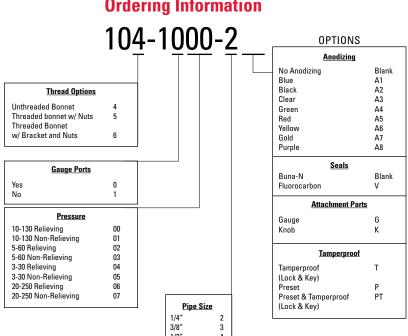
Bracket: 11122 (105 & 106); 11543 (104) Constant Bleed Fitting: (1/4") 13557

Flow Characteristics



Dimensions





REGULATORS: 104C-1000 Standard Series



Features

- Provides regulated pressure when flowing inlet to outlet
- Built-in check valve allows unrestricted reverse flow
- Allows regulator to be placed between valve and actuator to regulate cylinder ports independently
- Same accuracy, repeatability and responsiveness as standard 104-1000 regulators

Materials of Construction

Body: Machined Aluminum

Bonnet: Aluminum

Adjustment Screw: Zinc Plated Steel

Poppet Valve: Brass

Poppet Spring: Stainless Steel

Poppet Seat: Brass

Diaphragm Assembly: Buna-N and Brass

(Fluorocarbon available)

Seals: Buna-N (Fluorocarbon available) **Compression Spring:** Zinc Plated Steel

Check Valve Ball: Buna-N (Fluorocarbon Available)

Check Valve Spring: Stainless Steel Check Valve Cover: Machined Aluminum



Relieving



Operating Specifications

Gauge Ports: 1/4" NPT (Standard)

Maximum Inlet Pressure: 250 PSIG

Temperature Rating: Aluminum Bonnet: 0-175°F

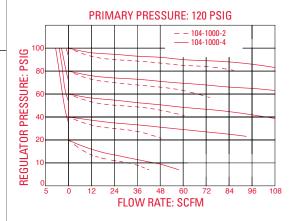
Weight: 430 g

Accessories & Kits

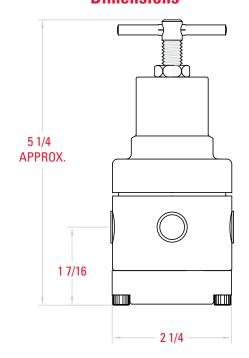
Panel Nuts: 11124 (105 & 106) Repair Kit: (Relieving) 11513; (Relieving –1006) 11959; (Non-Relieving) 11515; (Non-Relieving-1007) 11958

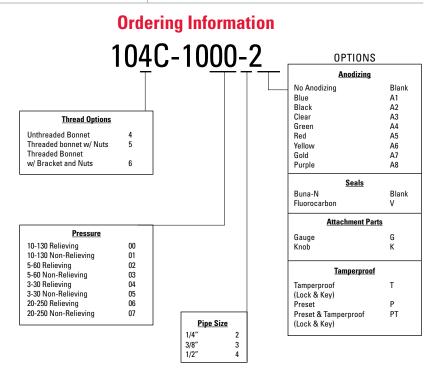
Bracket: 11122 (105 & 106); 11543 (104) **Constant Bleed Fitting:** (1/4") 13557

Flow Characteristics



Dimensions





REGULATORS: 108-1000 Standard Series



Features

- · Convenient push to lock knob design
- Acetal bonnet and knob
- Mounting nut comes standard
- Diaphragm design for minimal hysteresis and greater responsiveness
- Black anodizing standard (other colors available)
- Machined aluminum body
- Can be ordered with gauge

Operating Specifications

Gauge Ports: 1/4" NPT (Standard)
Maximum Inlet Pressure: 250 PSIG

Temperature Rating: Aluminum Bonnet: 0-175°F

Weight: 522g



Accessories & Kits

Mounting Bracket: 11430

 REGULATOR KITS
 0-50 PSI
 0-150 PSI

 Relieving (1/4 & 3/8):
 11472
 11470

 Non-Relieving (1/4 & 3/8):
 11473
 11471

REGULATOR KITS 0-50 PSI 0-150 PSI

Relieving (1/2): 11482 11480

Non-Relieving (1/2): 11483 11481

Materials of Construction

Body: Machined Aluminum **Bonnet:** Glass Filled Acetal

Knob, Adjuster & Mounting Nut: Acetal

Diaphragm Gasket: Acetal

Spring Guide: Machined Aluminum

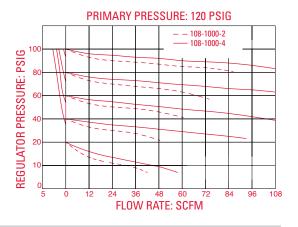
Seat: Brass

Poppet Assembly: Brass

Seals: Buna-N (Fluorocarbon available) **Compression Spring:** Zinc Plated Steel

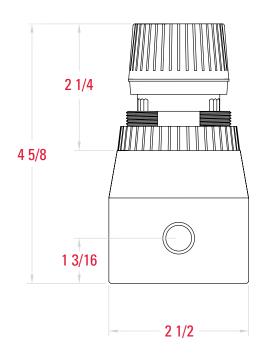
Poppet Spring: Stainless Steel

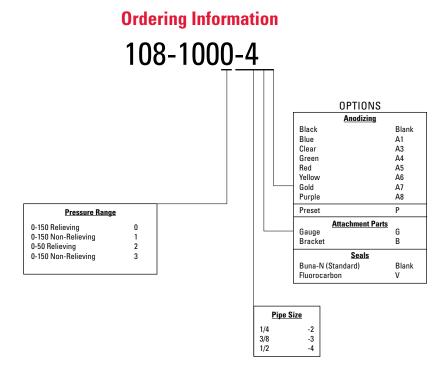
Flow Characteristics



Non-Relieving







REGULATORS: 101-1000 Standard Series





Relieving



Non-Relieving

Features

- Machined aluminum body provides close tolerances for exceptional accuracy, repeatability and responsiveness
- Diaphragm style regulator for minimal hysteresis and greater responsiveness
- Constant bleed fitting available for even greater accuracy
- Relieving and non-relieving versions available
- · Gauge port plugs included
- Available with T-handle, knob or lock and key mechanism
- Available with 1/2" and 3/4" ports

Materials of Construction

Body: Machined Aluminum **Diaphragm Assembly:** Buna-N (Fluorocarbon Available) and Brass **Compression Spring:** Spring Steel

Bonnet: Aluminum Poppet Seat: Brass **Poppet Valve: Brass**

Adjustment Screw: Plated Steel T-Handle: Zinc Plated Steel

Knob: Plastic

Spring Guide: Zinc Plated Steel

Operating Specifications

Gauge Ports: 1/4" NPT (Standard) Maximum Inlet Pressure: 250 PSIG

Temperature Rating: Aluminum Bonnet: 0-175°F

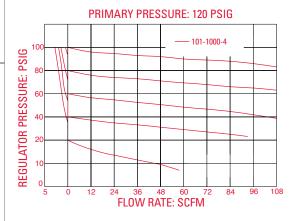
Weight: 522g

Accessories & Kits

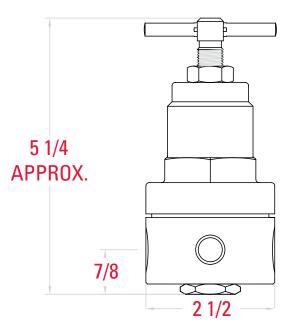
Panel Nuts: 11124 (102 & 103)

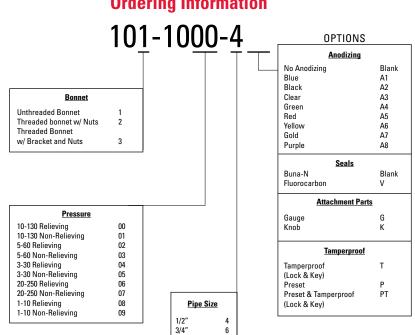
Repair Kit: (Relieving) 11544 (Non-Relieving) 11565 (Relieving-1006) 11545 (Non-Relieving-1007) 11546 **Constant Blend Fitting: 13557**

Flow Characteristics









REGULATORS: 116-4000/5000 Heavy Duty Series







Features

- Pipe size between 3/4" and 1-1/2"
- Machined aluminum body provides close tolerances for exceptional accuracy, repeatability and responsiveness.
- Piston style regulator
- Relieving and non-relieving versions available
- · Gauge port plugs included
- Available with T-handle, knob or lock and key mechanism
- Preset and tamperproof options available
- Gauges available
- Constant bleed fitting available for even greater accuracy

Operating Specifications

Gauge Ports: two 1/4" NPT (Standard) **Maximum Inlet Pressure:** 250 PSIG

Temperature Rating: Aluminum Bonnet: 0-175°F

Weight:

(116-4000): 1520 g (116-5000): 1428 g

Accessories & Kits

Panel Nuts: (w/ 117 only) 11125

Repair Kit: 14520

Constant Bleed Fitting: 13557

Materials of Construction

Body: Machined Aluminum

Piston Assembly: Machined Aluminum **Compression Spring:** Spring Steel

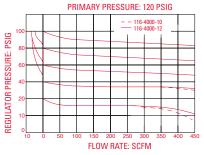
Bonnet: Aluminum

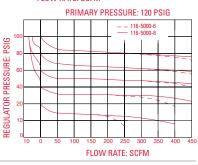
Poppet Seat: Brass **Poppet Valve:** Brass **Adjustment Screw:** Zinc Plated Steel

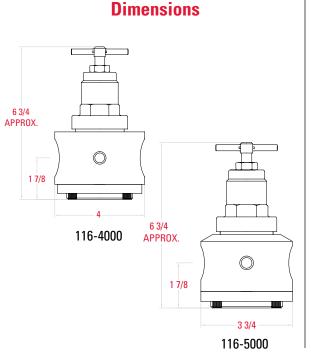
T-Handle: Zinc Plated Steel Locking Nut: Zinc Plated Steel Spring Guide: Zinc Plated Steel

Knob: Plastic

Flow Characteristics







Ordering Information 116-5000-6 **OPTIONS** Anodizing No Anodizing Blank **Thread Options** Black Δ2 АЗ Clear Pipe Mounting (unthreaded) Green Bracket Mounting (threaded) Red A5 A6 Yellow Gold **Body Size** 1 1/4", 1 1/2' 3/4", 1" Buna-N (Standard) Blank Fluorocarbon Attachment Parts **Pressure** Gauge G 10-130 Relieving Knob 10-130 Non-Relieving 01 5-60 Relieving 5-60 Non-Relieving 02 **Tamperproof** 03 3-30 Relieving Tamperproof 3-30 Non-Relieving 05 (Lock & Key) 20-250 Relieving Preset 20-250 Non-Relieving PT Preset & Tamperproof 3/4" (Lock & Key) 1 1/4"

REGULATORS: Iso-Sized Manifold Mount Series







Features

- Manifold mount regulators sized to ISO specifications
- Available with polycarbonate or aluminum bonnets
- Adapter plates available for mounting regulator to your manifold or sandwich block
- Manifolds available call factory for details

Operating Specifications

SIZE 3/8" **Inlet Hole:** 11/16" 13/16" (2) 1/4"(2) 7/16" (2) 7/16" **Outlet Hole:** Mounting Threads: 10-32 UNF 10-32 UNF 1/4-20 UNF Maximum Temperature: 175°F 175°F 175°F **Maximum Inlet** 250 PSI 250 PSI 250 PSI Pressure:

Accessories & Kits

 SIZE
 1
 2
 3

 Repair Kit:
 11716
 11716
 11736

 Mounting Kits:
 11708
 11718
 11733

Materials of Construction

Body: Aluminum

Bonnet: Polycarbonate or Aluminum Adjusting Screw: Zinc Plated Steel Locking Nut: Zinc Plated Steel Spring Guide: Zinc Plated Steel Poppet Valve Guide: Brass

Poppet Valve Spring: Stainless Steel

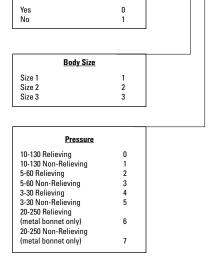
Valve Seat: Brass

Seals: Buna-N (Fluorocarbon available)
Compression Spring: Spring Steel

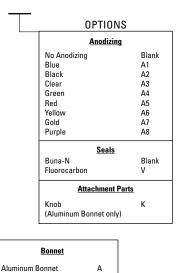
Piston: Aluminum

Ordering Information

R 01-10 A

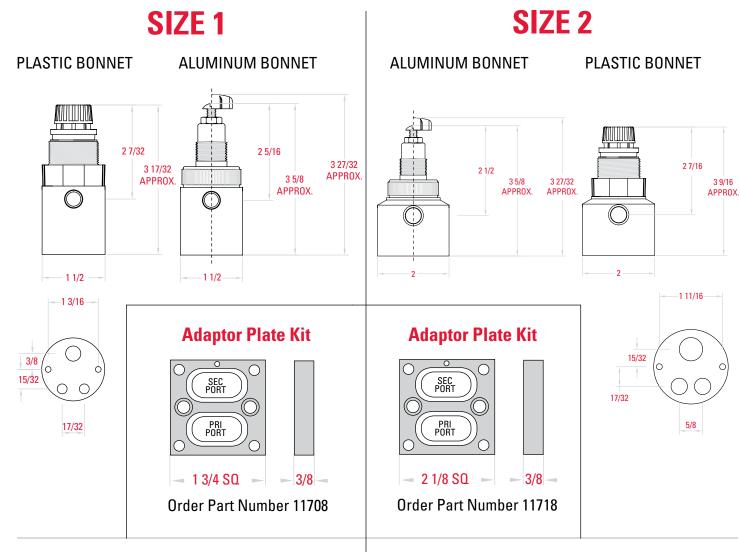


Gauge Ports

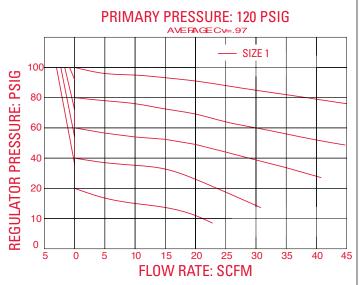


Polycarbonate Bonnet

(Size 1 & 2 only)



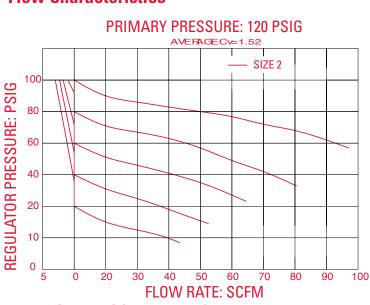
Flow Characteristics



INVERSE PRESSURE EFFECT

For each 25 PSI primary pressure change, the secondary pressure reacts inversely 1 PSI.

Flow Characteristics



INVERSE PRESSURE EFFECT

For each 50 PSI primary pressure change, the secondary pressure reacts inversely 1 PSI.

SIZE 3

ALUMINUM BONNET 3 5/8 4 21/32 APPROX. APPROX. Adaptor Plate Kit PRI PORT PORT PORT A/8

Flow Characteristics

PRIMARY PRESSURE: 120 PSIG AVERAGE CV=3.61 — SIZE 3 40 40 5 0 20 40 60 80 100 120 140 160 180 FLOW RATE: SCFM

Order Part Number 11733

INVERSE PRESSURE EFFECT

For each 50 PSI primary pressure change, the secondary pressure reacts inversely 1 PSI.

REGULATORS: 118-3000/1000 Pilot Operated Pressure Series



Features

- Piston over diaphragm actuation for fast response and compact design
- Large flows with negligible pressure drop
- Two 1/4" NPT gauge ports
- 1/4" NPT pilot port

Operating Specifications

Maximum Pressure: 250 PSI Temperature: 0-175°F

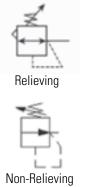
Pilot Port: 1/8" NPT (3000 Series)

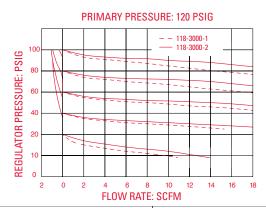
1/4" NPT (1000 Series)

Gauge Port: 1/8" NPT (3000 Series)

1/4" NPT (1000 Series)

Flow Characteristics





Materials of Construction

Body: Machined Aluminum **Piston:** Machined Aluminum **Air Cap:** Machined Aluminum

Poppet:

3000 Series: Buna-N (Fluorocarbon Available)

1000 Series: Brass **Poppet Seat:**

3000 Series: Nylon; 1000 Series: Brass

Poppet Seal: Buna-N (Fluorocarbon Available)
Diaphragm: Buna-N (Fluorocarbon Available)

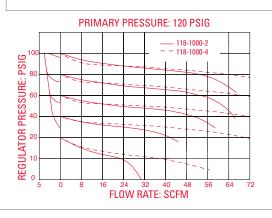
Accessories & Kits

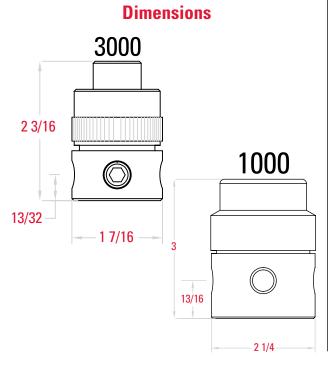
3000 Series Repair Kit:

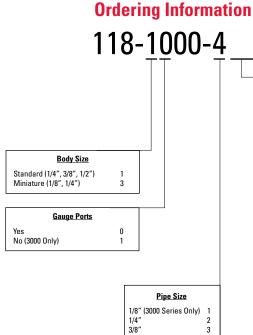
13532 (Relieving); 13533(Non-Relieving)

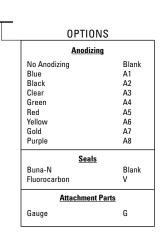
1000 Series Repair Kit:

Relieving-11536, Non-Relieving-11535 Mounting Nut (3000 Series only): 13025









REGULATORS: 118-5000/4000 Pilot Operated Pressure Series



Features

- Piston over piston actuation for fast response and compact design
- Large flow with negligible pressure drop

Operating Specifications

Maximum Pressure: 250 PSI

Temperature: 175°F Pilot Port: 1/4" NPT Gauge Ports: 1/4" NPT

Accessories & Kits

Repair Kit: 14516

118-5000

Materials of Construction

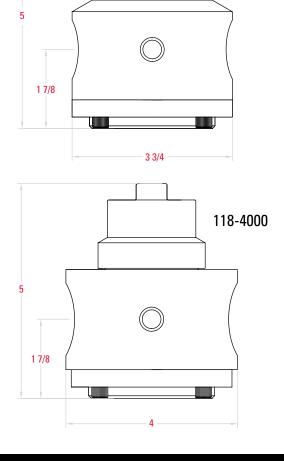
Body: Machined Aluminum Bonnet: Machined Aluminum Piston: Machined Aluminum Air Cap: Machined Aluminum Screws: Zinc Plated Steel

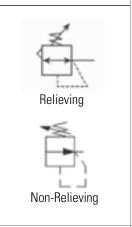
Seals: Buna-N (Fluorocarbon Available)

Poppet Spring: Stainless Steel

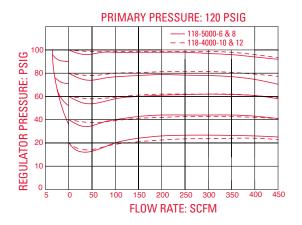
Poppet Seat: Brass
Poppet Valve: Brass

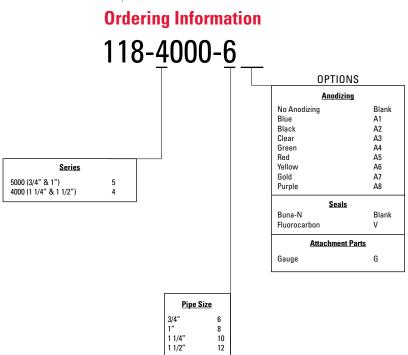
Dimensions





Flow Characteristics





REGULATORS: 101-0500 Subminiature Series



Features

- Specifically designed for use with low-volume air flows or for dead-end service
- Ideal where space is at a premium
- True instrumentation quality
- Lightweight compact design
- Excellent repeatability
- · Available as pilot operated

Operating Specifications

Maximum Pressure: 250 PSI Temperature: 0-175°F

Materials of Construction

Body: Anodized Aluminum **Bonnet:** Anodized Aluminum

Spring: Spring Steel

Adjustment Knob & Screw: Plastic and Plated Steel

Stem: Brass Tube Fittings: Brass

Seals: Buna-N (Fluorocarbon Available)

Panel Nut: Plated Steel

Spring Guide: Zinc Chromate Plated Steel

Poppet Spring: Stainless Steel

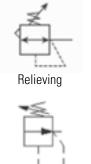
Poppet Valve: Buna-N (Fluorocarbon Available)

Accessories & Kits

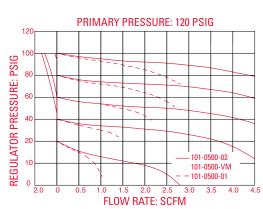
Repair Kit: 10502 Panel Nut: 10015

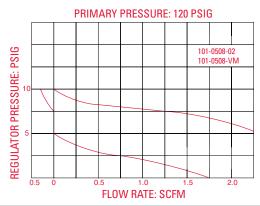
Gasket Mounting Kit: 10514 (VM option only)

Flow Characteristics



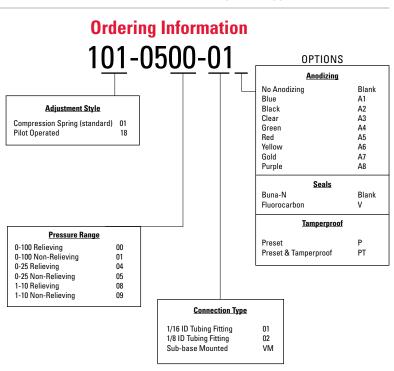
Non-Relieving





2 1/16 APPROX. Pilot Operated 7/8 SQ.

Dimensions



REGULATORS: UL Label Series





Features

- . Monnier UL Label Regulators give the assurance of a UL- listed product
- Available in both miniature and standard sizes
- Excellent for use in dry fire sprinkler systems
- Same features as standard regulators (flow, dimensions, etc.)

Accessories & Kits (104-1000)

Panel Nuts: 11124 (105 & 106)

Repair Kit:

(Relieving) 11513

(Relieving -1006) 11959;

(Non-Relieving) 11515

(Non-Relieving-1007) 11958

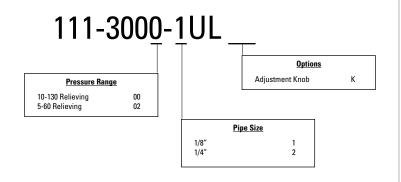
Bracket: 11122 (105 & 106); 11543 (104) Constant Bleed Fitting: (1/4") 13557

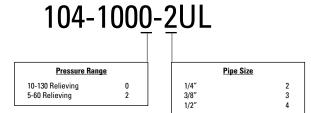
Accessories & Kits (111-3000)

Repair Kit:

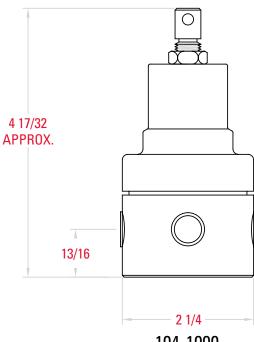
(Relieving) 13532 (Non-Relieving) 13583

Ordering Information

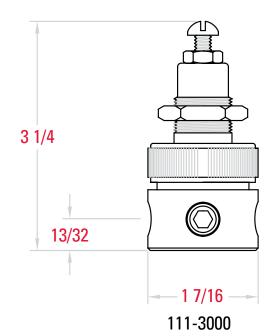




Dimensions



104-1000



REGULATORS: 104-3101 Relief Valves



Features

- Available in 1/8" through 1/4" NPT
- Prevent over pressurization of downstream components

Operating Specifications

Gauge Ports: 1/8" NPT

Maximum Inlet Pressure: 250 PSIG Temperature Range: 0-175°F

Accessories & Kits

Panel Nuts:

13133 (104-3100 Series) 13025 (114/106-3100 Series)

Bracket Kits:

13536 (104-3100 Series) 13534 (114/106-3100 Series)

Service Kits:

13532 (Relieving)

Materials of Construction

Body, Seat: Machined Aluminum

Bonnet:

104-3100: Polycarbonate 114/106-3100: Aluminum **Adjustment Screw:**

101-3000: Black Oxide Coated Steel

111/102-3000:Zinc Plated Steel (102 series)

Diaphragm: Brass, Buna-N (Fluorocarbon available)

Seals: Buna-N (Fluorocarbon available)

Bracket: Zinc Plated Steel **Panel Nut:** Machined Aluminum

Flow Characteristics

