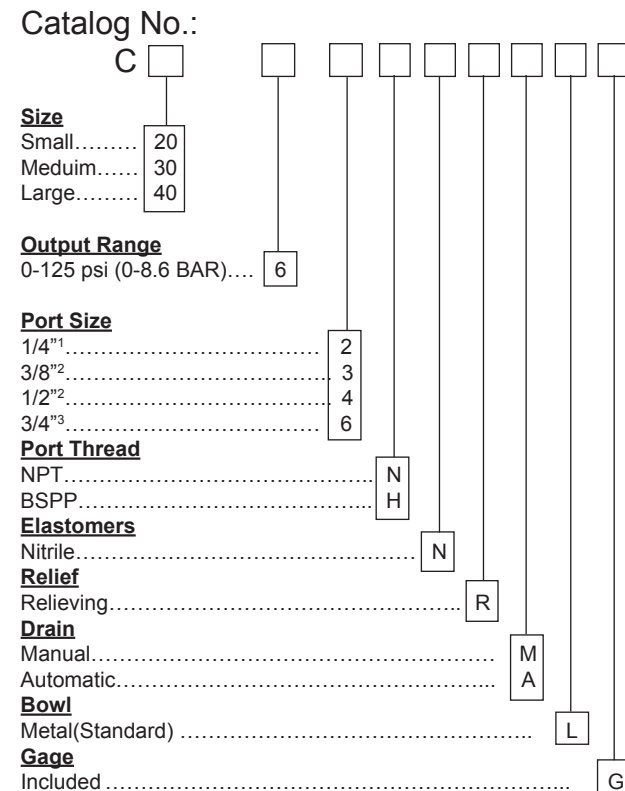


C10 Replacement  
Filter Element: 21518-1



(Shown with optional poly bowl)



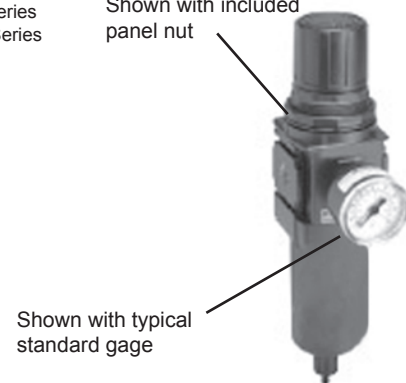
1 Not Available in 40 Series  
2 Not Available in 20 Series  
3 Available only in 40 Series

C20 Replacement  
Filter Element: 21519-1

C30 Replacement  
Filter Element: 21520-1

C40 Replacement  
Filter Element: 21521-1

Shown with included panel nut



Shown with typical standard gage

Materials of Construction		(FR Products)
Body.....	Zinc	
Bonnet/Knob.....	Nylon/Acetal	
Bowl (Metal).....	Zinc, Aluminum	
Diaphragm Ass'y.....	Nitrile/Zinc	
Spring.....	Steel	
Seals.....	Nitrile	
Valve Ass'y.....	Brass/Nitrile /Acetal	

Flow Capacities	Port Size	@ 100 psi Inlet Pressure (FR Products)	
		SCFM	(m <sup>3</sup> /hr)
C10	1/8	16 SCFM	(27m <sup>3</sup> /hr)
	1/4	18 SCFM	(30m <sup>3</sup> /hr)
C20	1/8	28 SCFM	(48m <sup>3</sup> /hr)
	1/4	42 SCFM	(71m <sup>3</sup> /hr)
C30	1/4	88 SCFM	(150m <sup>3</sup> /hr)
	3/8	117 SCFM	(199m <sup>3</sup> /hr)
	1/2	121 SCFM	(206m <sup>3</sup> /hr)
C40	3/8	140 SCFM	(255m <sup>3</sup> /hr)
	1/2	165 SCFM	(280m <sup>3</sup> /hr)
	3/4	175 SCFM	(297m <sup>3</sup> /hr)

**WARNING**

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

**CAUTION:**

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

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

# Engineered Packages Designed for High Flow and Superior Filtration

## NEW FRL Filter Regulator Lubricator and FR Filter Regulator Products

To take full advantage of compressed gases in pneumatic systems, the gas must be adequately prepared. Fairchild's new FRL and FR preparation packages provide the clean, dry, and when necessary, lubricated air, essential for optimum performance of pneumatic systems. With their modular and piggyback construction, the FRL or FR units provide compact efficiency at competitive prices.

Specify the Fairchild A series FRL or C Series FR when you need superior and reliable performance from your instrumentation, equipment or process.

Contact your local distributor or Fairchild's Application support Team today at (336) 659-3400 to discuss the FRL and FR products and our complete line of precise and reliable process and control products.

Fairchild's new FRL and FR air preparation packages meet industry demands with extreme high flow and superior 5 micron filtration. In addition metal bowls and gages are standard for all products. These compact integral packages provide dependable performance with our world class 2 year warranty for protection of your downstream instrumentation or equipment. When your application demands the best, insist on the Fairchild A series FRL or C Series FR products.



F-R-L Filter Regulator Lubricator

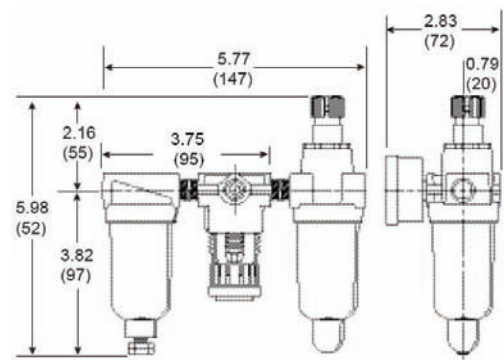


F/R Filter Regulator

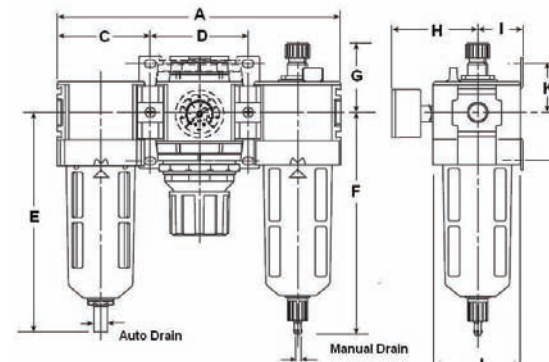
- Two Year Warranty\***
- Highest Flow Capacities**
- 5 Micron Filters (Standard)**
- Metal Bowls Standard**
- Modular or Pipe Mount**
- Quick Disconnects**

\*Does not include filter element periodic replacement

## Dimensions for "A" Style FRL Products

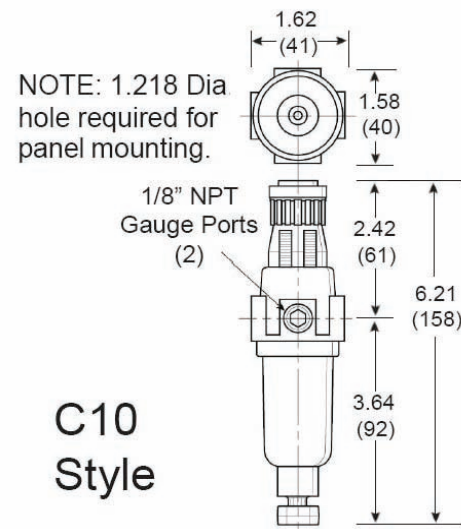


A10 Style

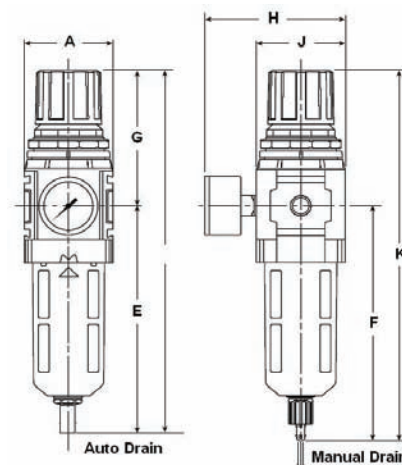


A20, A30, A40 Style

## Dimensions for "C" Style FR Products



C10 Style



C20, C30, C40 Style

## Specifications

### Pressure & Temperature Ratings –

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

Secondary Pressure Ranges –  
Standard Pressure 2 to 125 PSIG (0 to 8.6 bar)  
Medium Pressure 1 to 60 PSIG (0 to 4.1 bar)  
Medium Pressure 1 to 30 PSIG (0 to 2.1 bar)  
Low Pressure 1 to 15 PSIG (0 to 1.0 bar)

Gauge Ports (2) 1/8" (A10, A20, C10, C20)  
1/4" (A30, A40, C30, C40)

Standard Filtration 5 micron

All Fairchild 5 micron elements meet or exceed ISO Class 3 for maximum particle size and concentration of solid contaminants.

## Dimensions

Model	Inches (mm)	C	D	E	F	G	H	I	J	K	L
<b>A20</b>	4.72 (120)	1.57 (40)	1.57 (40)	3.53 (90)	1.61 (41)	2.25 (57)	1.47 (37)	1.61 (41)	1.68 (43)	1.37 (35)	3.15 (80)
<b>A30</b>	7.77 (197)	2.53 (64)	2.70 (69)	4.46 (113)	4.69 (119)	2.31 (59)	2.57 (65)	1.62 (41)	2.36 (60)	1.62 (41)	3.25 (83)
<b>A40</b>	9.32 (237)	3.05 (77)	3.22 (81)	7.00 (178)	7.40 (188)	2.56 (65)	2.83 (72)	1.53 (39)	2.90 (73)	1.63 (41)	3.25 (83)
<b>C20</b>	1.58 (40)	XX	XX	XX	3.86 (98)	2.60 (66)	2.53 (64)	XX	1.68 (43)	6.46 (164)	XX
<b>C30</b>	2.36 (60)	XX	XX	XX	6.11 (155)	6.34 (161)	3.66 (93)	3.74 (95)	XX	2.36 (60)	10.00 (254)
<b>C40</b>	2.90 (74)	XX	XX	XX	7.12 (181)	7.35 (187)	4.09 (104)	4.27 (108)	XX	2.90 (74)	11.44 (291)

## Ordering Information

Catalog No.:

Style FRL ..... A

Size Mini ..... 10

Output Range 0-125 psi (0-8.6 BAR) ... 6

Port Size 1/8" ..... 1  
1/4" ..... 2

Port Thread-NPT ..... N

Elastomers-Nitrile ..... N

Relieving ..... R

Drain Manual ..... M

Bowl Metal (Standard) ..... L

Gage Included ..... G

Size10 Replacement Filter Element: 21518-1

(Shown with optional poly bowl)



Flow Capacities	(FRL Products)		
	Port Size	@ 100 psi Inlet Pressure	
<b>A10</b>	1/8	20 SCFM	(33m <sup>3</sup> /hr)
	1/4	20 SCFM	(33m <sup>3</sup> /hr)
<b>A20</b>	1/8	29 SCFM	(49m <sup>3</sup> /hr)
	1/4	44 SCFM	(75m <sup>3</sup> /hr)
<b>A30</b>	1/4	110 SCFM	(187m <sup>3</sup> /hr)
	3/8	160 SCFM	(272m <sup>3</sup> /hr)
	1/2	160 SCFM	(272m <sup>3</sup> /hr)
<b>A40</b>	3/8	150 SCFM	(255m <sup>3</sup> /hr)
	1/2	175 SCFM	(297m <sup>3</sup> /hr)
	3/4	175 SCFM	(297m <sup>3</sup> /hr)

Materials of Construction		(FR L Products)
Body	.....	Zinc
Bonnet/Knob	.....	Nylon/Acetal
Bowl - Metal	.....	Zinc,Aluminum
Diaphragm Ass'y	.....	Nitrile/Zinc
Spring	.....	Steel
Seals	.....	Nitrile
Valve Ass'y	.....	Brass/Nitrile/Acetal

Catalog No.:

Style FRL ..... A

Size Small ..... 20  
Medium ..... 30  
Large ..... 40

Output Range 0-125 psi (0-8.6 BAR) ... 6

Port Size 1/4" ..... 2  
3/8" ..... 3  
1/2" ..... 4  
3/4" ..... 6

Port Thread NPT ..... N  
BSPP ..... H

Elastomers Nitrile ..... N

Relief Relieving ..... R

Drain Manual ..... M  
Automatic ..... A

Bowl Metal (Standard) ..... L

Gage Included ..... G

1 Not Available in 40 Series  
2 Not Available in 20 Series  
3 Available only in 40 Series

Size 20 Replacement Filter Element: 21519-1

Size 30 Replacement Filter Element: 21520-1

Size 40 Replacement Filter Element: 21521-1



### CAUTION:

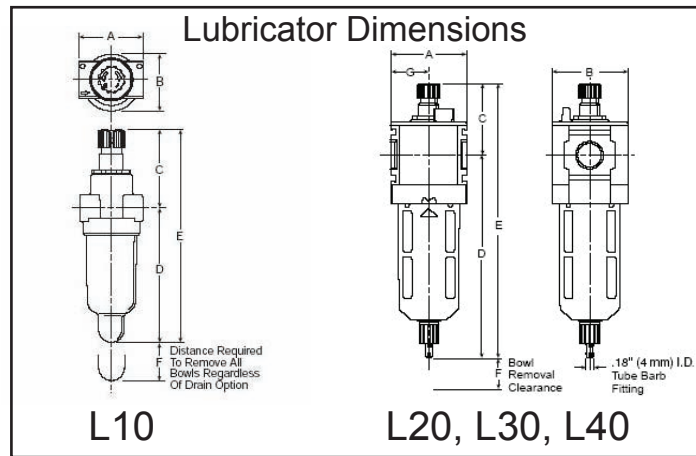
**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and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

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

# Lubricators

L10 Lubricator

L20, L30, L40 Lubricator



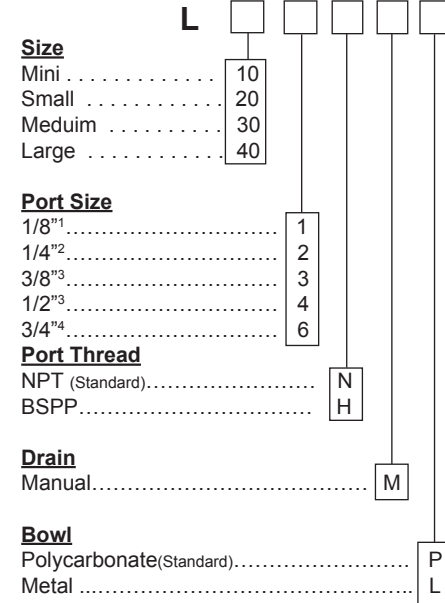
Lubricator Dimensions

Dimensions Table

Model	Inches (mm)	A	B	C	D	E	F	G
L10	1.73 (44)	1.56 (40)	2.16 (55)	3.64 (92)	3.78 (147)	5.80 (147)	XX	
L20	1.58 (40)	1.68 (43)	2.25 (57)	3.75 (95)	6.00 (152)	1.31 (33)	.84 (21)	
L30	2.36 (60)	2.36 (60)	2.31 (59)	6.35 (161)	8.66 (220)	1.60 (41)	1.18 (30)	
L40	2.90 (74)	2.90 (74)	2.56 (65)	7.36 (187)	9.92 (252)	2.00 (51)	1.45 (37)	

Flow Capacities			
	Port Size	@ 150 psi Inlet Pressure, 5 psi drop	
L 10	1/8	20 SCFM	(34 m <sup>3</sup> /hr)
	1/4	20 SCFM	(34 m <sup>3</sup> /hr)
L 20	1/8	24 SCFM	(40 m <sup>3</sup> /hr)
	1/4	58 SCFM	(97 m <sup>3</sup> /hr)
L 30	1/4	88 SCFM	(150 m <sup>3</sup> /hr)
	3/8	90 SCFM	(151 m <sup>3</sup> /hr)
	1/2	96 SCFM	(161 m <sup>3</sup> /hr)
L 40	3/8	176 SCFM	(296 m <sup>3</sup> /hr)
	1/2	184 SCFM	(309 m <sup>3</sup> /hr)
	3/4	200 SCFM	(336 m <sup>3</sup> /hr)

## Catalog No.:



- 1 Only Available in 10, 20 Series
- 2 Not Available in 40 Series
- 3 Not Available in 10,20 Series
- 4 Only Available in 40 Series

## Specifications

### Pressure & Temperature Ratings –

Metal Bowl	0 to 250 PSIG (0 to 17.2 bar) 32°F to 150°F (0°C to 65.5°C)
Plastic Bowl	0 to 150 PSIG (0 to 10 Bar) 32°F to 125°F (0 to 52°C)

Minimum flow of approximately 1 SCFM is required to lubricate

### Materials of Construction

Body.....	Zinc
Bowl.....	Polycarbonate, Zinc, Aluminum
Pick up Filter.....	Sintered Bronze
Seals.....	Nitrile
Sight Dome.....	Polycarbonate
Drains.....	Plastic

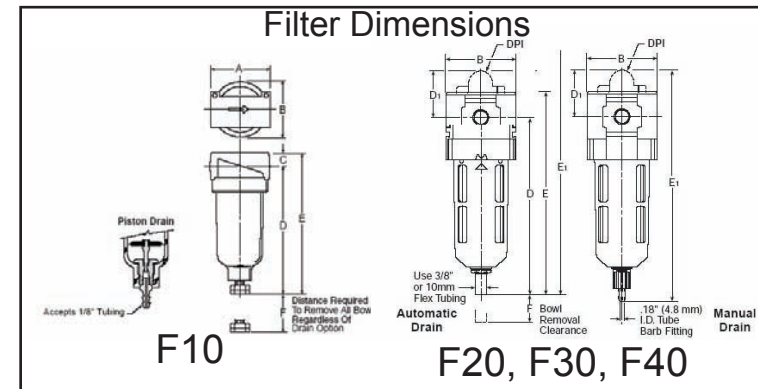
### WARNING

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

# Particulate Filters

F10 Filter

F20, F30, F40 Filter

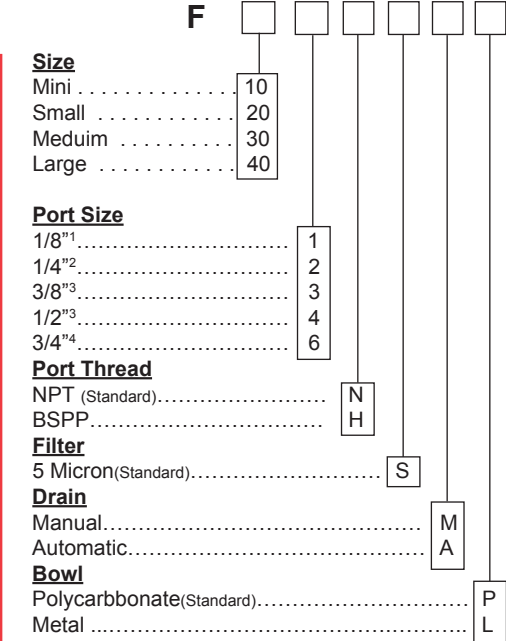


Dimensions Table

Model	Inches (mm)	A	B	C	D	E	E'	F
F10	1.69 (43)	1.53 (39)	.39 (9)	3.82 (97)	4.21 (107)	XX	(41)	
F20	1.58 (40)	1.68 (43)	.72 (18)	3.86 (98)	4.58 (116)	4.36 (111)	1.31 (33)	
F30	2.36 (60)	2.36 (60)	1.02 (26)	6.40 (163)	7.36 (187)	8.23 (209)	1.61 (41)	
F40	2.90 (73)	2.90 (73)	1.02 (26)	7.40 (188)	8.40 (213)	9.25 (235)	2.00 (51)	

Flow Capacities			
	Port Size	@ 150 psi Inlet Pressure, 5 psi drop	
F 10	1/8	22 SCFM	(37 m <sup>3</sup> /hr)
	1/4	24 SCFM	(40 m <sup>3</sup> /hr)
F 20	1/8	25 SCFM	(42 m <sup>3</sup> /hr)
	1/4	50 SCFM	(84 m <sup>3</sup> /hr)
F 30	1/4	110 SCFM	(185 m <sup>3</sup> /hr)
	3/8	120 SCFM	(202 m <sup>3</sup> /hr)
	1/2	145 SCFM	(244 m <sup>3</sup> /hr)
F 40	3/8	144 SCFM	(243 m <sup>3</sup> /hr)
	1/2	160 SCFM	(269 m <sup>3</sup> /hr)
	3/4	165 SCFM	(277 m <sup>3</sup> /hr)

## Catalog No.:



- 1 Only Available in 10 Series
- 2 Not Available in 40 Series
- 3 Not Available in 10, 20 Series
- 4 Only Available in 40 Series

F10 Replacement Filter Element: 21518-1

F20 Replacement Filter Element: 21519-1

F30 Replacement Filter Element: 21520-1

F40 Replacement Filter Element: 21521-1

### Materials of Construction

Body.....	Zinc
Bowl.....	Polycarbona, Zinc, Aluminum
Seals.....	Nitrile
Drains.....	Plastic

## Specifications

### Pressure & Temperature Ratings –

Metal Bowl	0 to 250 PSIG (0 to 17.2 bar) 32°F to 150°F (0°C to 65.5°C)*
Plastic Bowl	0 to 150 PSIG (0 to 10 Bar) 32°F to 125°F (0 to 52°C)

Standard Filtration 5 micron

All Fairchild 5 micron elements **meet or exceed ISO** Class 3 for maximum particle size and concentration of solid contaminants.

\* 32°F to 125°F (0 to 52°C) for autodrain models

### WARNING

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

# Coalescing Filters

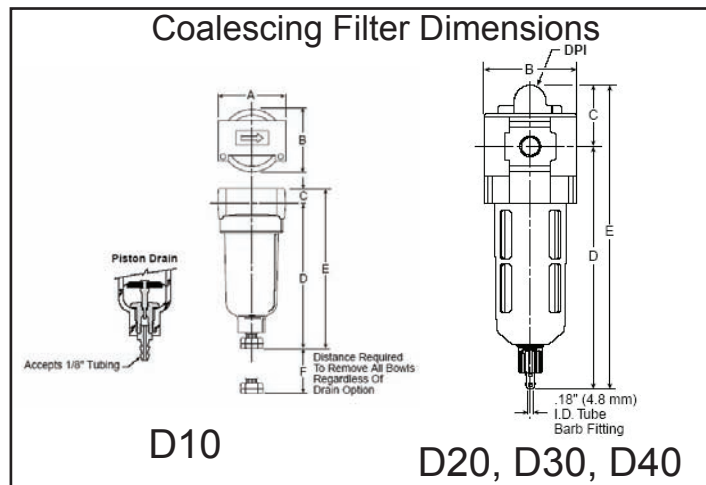
D10 Filter



D20, D30, D40 Filter



DP Indicator on 30, 40 sizes only (Standard)

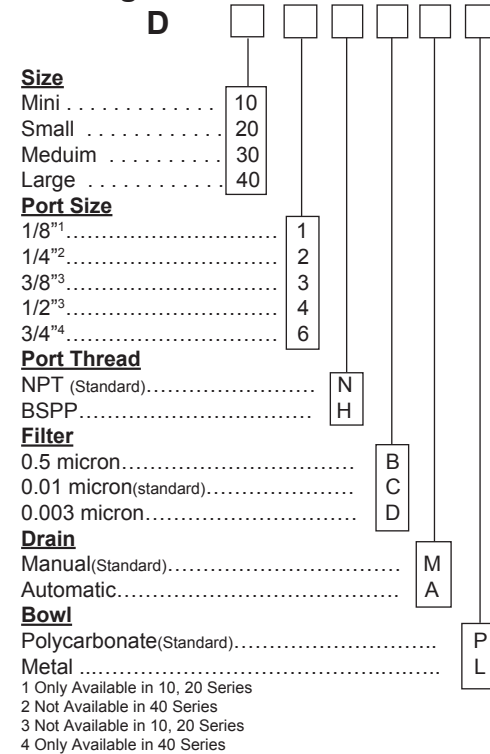


Dimensions Table

Model	Inches (mm)	A	B	C	D	E	F
D10		1.69 (43)	1.53 (39)	.39 (10)	3.82 (97)	4.21 (107)	1.60 (41)
D20		1.58 (40)	1.68 (43)	.72 (18)	3.86 (98)	4.58 (116)	1.31 (33)
D30		2.36 (60)	2.36 (60)	1.90 (48)	6.32 (161)	8.23 (209)	1.60 (41)
D40		2.90 (74)	2.90 (74)	1.90 (48)	7.35 (187)	9.25 (235)	2.00 (51)

Model	Flow Capacities	
	Port Size	@ 150 psi Inlet Pressure, 3 psi drop
D10	1/8	17 SCFM (29m <sup>3</sup> /hr)
	1/4	20 SCFM (32m <sup>3</sup> /hr)
D20	1/8	11 SCFM (19m <sup>3</sup> /hr)
	1/4	11 SCFM (19m <sup>3</sup> /hr)
D30	1/4	40 SCFM (68 m <sup>3</sup> /hr)
	3/8	44 SCFM (74 m <sup>3</sup> /hr)
	1/2	48 SCFM (80 m <sup>3</sup> /hr)
D40	3/8	82 SCFM (138 m <sup>3</sup> /hr)
	1/2	90 SCFM (151 m <sup>3</sup> /hr)
	3/4	98 SCFM (165 m <sup>3</sup> /hr)

## Catalog No.:



Series	0.5m ISO Class 2	0.01m ISO Class 1	0.003m ISO Class 1
D10	21518-2	21518-3	21518-4
D20	21519-2	21519-3	21519-4
D30	21520-2	21520-3	21520-4
D40	21521-2	21521-3	21520-4

## Materials of Construction

Body.....Zinc  
 Bowl (Metal).....Polycarbonate, Zinc, Aluminum  
 Seals.....Nitrile  
 Drains .....Polycarbonate

## Specifications

**Pressure & Temperature Ratings –**  
 Metal Bowl 0 to 150 PSIG (0 to 10 bar) 32°F to 150°F (0°C to 65.5°C)\*  
 Plastic Bowl 0 to 150 PSIG (0 to 10 Bar) 32°F to 125°F (0 to 52°C)  
 Standard Filtration 0.01 micron  
 \* 32°F to 125°F (0 to 52°C) for autodrain models

**⚠ WARNING**

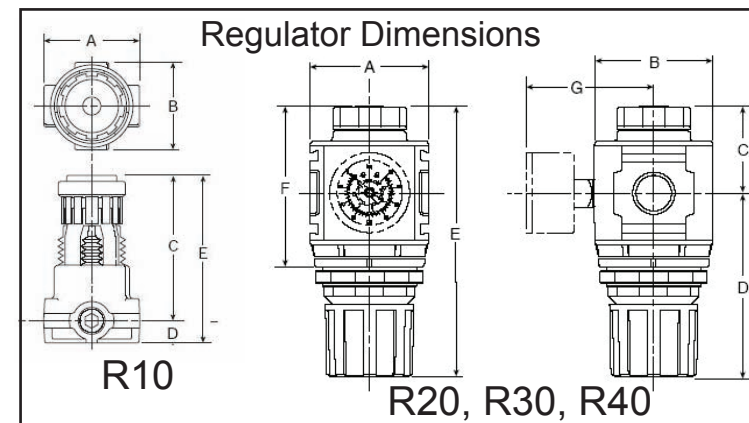
**Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.**

# Pressure Regulators

R10 Regulator



R20, R30, R40 Regulator

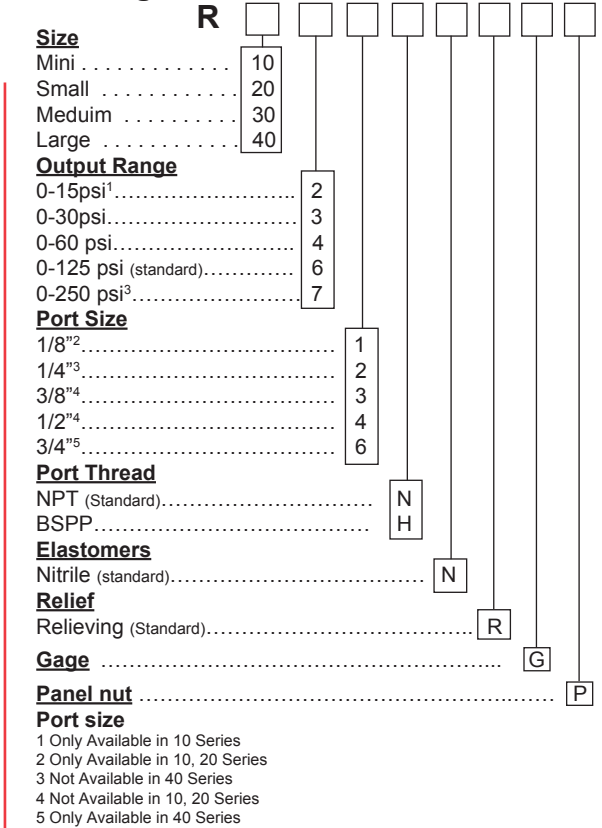


Dimensions Table

Model	Inches (mm)	A	B	C	D	E	F	G
R10		1.65 (42)	1.56 (39.6)	2.50 (63.5)	.38 (9.6)	2.88 (73)	xx	xx
R20		1.58 (40)	1.58 (40)	1.34 (34)	2.60 (66)	3.94 (100)	2.40 (61)	xx
R30		2.36 (60)	2.36 (60)	1.74 (44)	3.66 (136)	5.35 (136)	3.10 (78.7)	3.74 (94)
R40		2.90 (73)	2.90 (73)	1.74 (44)	4.16 (105)	5.87 (149)	3.30 (84)	4.27 (108)

Model	Flow Capacities	
	Port Size	@ 100 psi Inlet Pressure
R10	1/8	13 SCFM (22m <sup>3</sup> /hr)
	1/4	15 SCFM (25m <sup>3</sup> /hr)
R20	1/8	29 SCFM (49m <sup>3</sup> /hr)
	1/4	44 SCFM (74m <sup>3</sup> /hr)
R30	1/4	82 SCFM (138m <sup>3</sup> /hr)
	3/8	97 SCFM (163m <sup>3</sup> /hr)
	1/2	97 SCFM (163m <sup>3</sup> /hr)
R40	3/8	162 SCFM (272m <sup>3</sup> /hr)
	1/2	170 SCFM (286m <sup>3</sup> /hr)
	3/4	176 SCFM (297m <sup>3</sup> /hr)

## Catalog No.:



## Materials of Construction

Body.....Zinc  
 Bonnet/Knob.....Nylon/Acetal  
 Diaphragm Ass'y.....Nitrile/Zinc  
 Spring.....Steel  
 Seals.....Nitrile  
 Valve Ass'y.....Brass/Nitrile/Acetal

## Specifications

**Pressure & Temperature Ratings –**  
 0 to 300 PSIG (0 to 20. bar)  
 32°F to 150°F (0°C to 65.5°C)  
**Adjusting Pressure Ranges –**  
 Standard Pressure 0 to 125 PSIG (0 to 8.6 bar)  
 Medium Pressure 0 to 60 PSIG (0 to 4.1 bar)  
 Medium Pressure 0 to 30 PSIG (0 to 2.1 bar)  
 Low Pressure 0 to 15 PSIG (0 to 1.0 bar)  
 Gauge Ports (2) 1/8" (10, 20, Series) 1/4" (30, 40, Series)

**⚠ WARNING**

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

## CAUTION:

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

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