



ROSS CONTROLS®

**FILTERS, PRESSURE REGULATORS, LUBRICATORS
SILENCERS RECLASSIFIERS**





Filters



Regulators



Integrated Filter/Regulators



Lubricators



Combinations Units

E

Contents

Page

Filters

- Particulate
- Coalescing
- Adsorbing
- Clean Air Package
- Silencers/Reclassifier
- Drip Leg Drain

E1.1 - E1.30

Regulators

- Piston and Diaphragm
- Precision
- Remote
- High Relief
- High Pressure
- Relief Valves

E2.1 - E2.27

Integrated Filter/Regulators

- Modular or Inline mounting
- 5 micron filter element
- Piston or Diaphragm type
- Self-relieving or Non-relieving
- Includes pressure gauge

E3.1 - E3.9

Lubricators

- Modular or inline mounting
- Sight-feed or wick-feed design
- Extended bowl options
- Polycarbonate bowl with steel shatterguard or aluminum bowl with sight glass

E
E4.1 - E4.9

Combination Units

- Filters and Regulators
- Filters and Lubricators
- Integrated Filter/Regulator and Lubricators
- Filter, Regulator and Lubricators

E5.1 - E5.31

Accessories

- Mounting Accessories
- Silencers
- Pressure Gauges
- Differential Gauges
- External Drains

E6.1 - E6.7

Cautions and Warranty

- Compatible Lubricants
- Cautions and Warnings

E6.8
&
Inside Cover



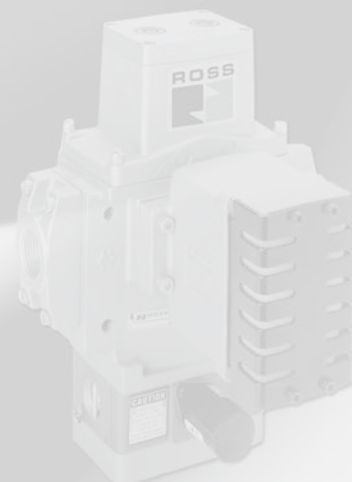
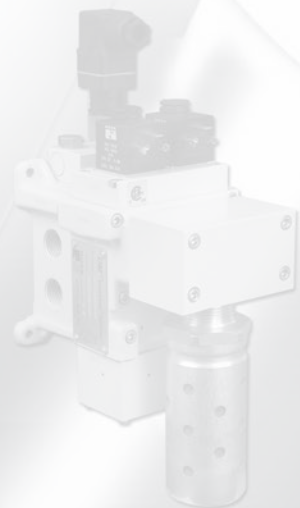
E



ROSS CONTROLS®



FILTERS



FILTERS – KEY FEATURES

- Filters – 5- and 40-micron filtration levels
- Coalescing Filters – 0.3- and 0.01-micron filtration levels
- Oil Vapor Removal (Adsorbing) Filters – removes oil and hydrocarbon vapors
- Filter Drains – manual, automatic, internal float, and automatic external drains
- Modular and inline mounting options
- Metal and High Strength polycarbonate bowl options
- Several Differential Gauge options available

FILTER TYPE/SERIES	AVAILABLE PORT SIZES								MOUNTING		FLOW MAX FLOW (scfm)	OPTIONS				FILTRATION					Page		
	1/8	1/4	3/8	1/2	3/4	1	1¼	1½	2	INLINE		MODULAR	POLYCARBONATE BOWL	METAL BOWL	AUTOMATIC DRAIN	MANUAL DRAIN	0.01 µm	0.3 µm	5 µm	20 µm		40 µm	ACTIVATED CARBON
FILTERS																							
BANTAM												30											E1.3
MINIATURE												23											E1.4
MID-SIZE												75											E1.5
MD3™												92											E1.6
FULL-SIZE												155											E1.7
MD4™												205											E1.8
HIGH-CAPACITY												1000											E1.9 E1.11
COALESCING FILTERS																							
BANTAM												11											E1.12
MINIATURE												10											E1.13
MID-SIZE												100											E1.14
MD3™												125											E1.15
FULL-SIZE												100											E1.16
MD4™												158											E1.17
HIGH-CAPACITY												840											E1.18- E1.22
OIL VAPOR REMOVAL (ADSORBING) FILTERS																							
MD3™												125											E1.23
MD4™												165											E1.24
CLEAN AIR PACKAGES																							
MD3™												125											E1.25 - E1.26
MD4™												158											E1.27 -E1.28
INLINE SILENCERS / RECLASSIFIERS																							
																							E1.29
DRIP LEG DRAINS																							
																							E1.30

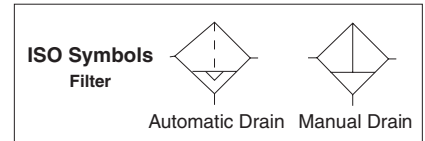
Port Sizes: 1/8 to 1/4 – Flow to 30 scfm

Port Size	Model Numbers			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
With THREADED PORTS				
1/8*	5B01B0100	5B01B0200	5B01B0300	5B01B0400
1/4*	5B02B0100	5B02B0200	5B02B0300	5B02B0400
With Quick-Connect TUBE FITTINGS				
1/4	5B03B0100	5B03B0200	5B03B0300	5B03B0400
3/8	5B04B0100	5B04B0200	5B04B0300	5B04B0400
4mm	5B05B0100	5B05B0200	5B05B0300	5B05B0400
6mm	5B06B0100	5B06B0200	5B06B0300	5B06B0400
8mm	5B07B0100	5B07B0200	5B07B0300	5B07B0400
10mm	5B08B0100	5B08B0200	5B08B0300	5B08B0400

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5B01B0100.

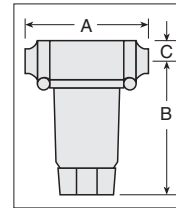


E1



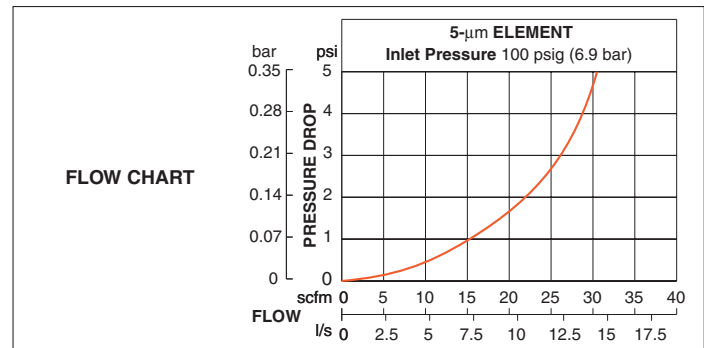
Port Size	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
		A	B**	C	Depth	
No Port	2-oz (60-ml)	1.7 (43)	3.9 (99)	0.5 (13)	1.8 (45)	0.27 (0.12)
1/8, 1/4	2-oz (60-ml)	3.0 (76)	3.9 (99)	0.5 (13)	1.8 (45)	0.49 (0.22)
Models below have quick-connect tube fittings.						
1/4	2-oz (60-ml)	3.4 (86)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)
3/8	2-oz (60-ml)	3.9 (99)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)
4 mm	2-oz (60-ml)	3.4 (86)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)
6 mm	2-oz (60-ml)	3.4 (86)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)
8 mm	2-oz (60-ml)	3.4 (86)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)
10 mm	2-oz (60-ml)	3.9 (99)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)

** Dimension for polycarbonate bowl; metal bowl is 3.8 (97).



E

REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 150°F (4° to 66°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Body: Acetal.

Bowl: Polycarbonate or aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

Port Sizes: 1/8 & 1/4 – Flow to 23 scfm

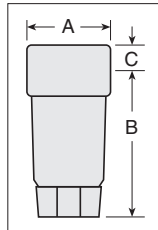
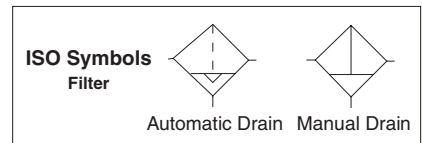
E1

Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/8	5021B1010	5022B1010	5011B1010	5012B1010
1/4	5021B2010	5022B2010	5011B2010	5012B2010

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5021B1010.

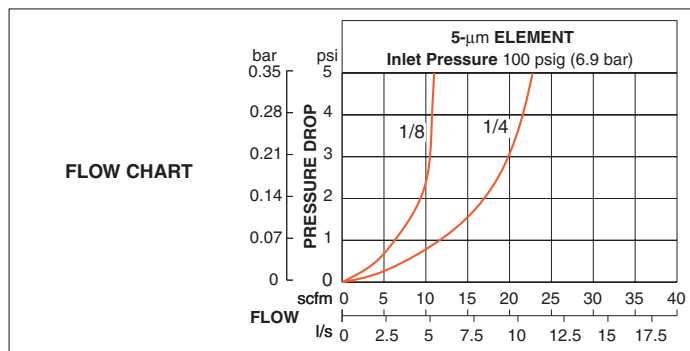


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1/8, 1/4	Polycarbonate	2-oz (60-ml)	1.6 (41)	3.9 (99)	0.4 (9.5)	1.6 (41)	0.33 (0.15)
	Aluminum	2-oz (60-ml)	1.6 (41)	4.3 (109)	0.4 (9.5)	1.6 (41)	0.35 (0.16)



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5- μ m	Polyethylene	933K77

E



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 150°F (4° to 66°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Body: Aluminum.

Bowl: Polycarbonate or aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 75 scfm

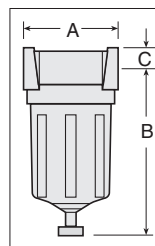
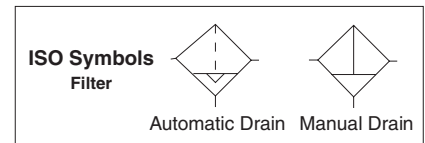
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/4	5021B2007	5022B2007	5011B2007	5012B2007
3/8	5021B3027	5022B3027	5011B3026	5012B3026
1/2	5021B4007	5022B4007	5011B4007	5012B4007

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5021B2007.



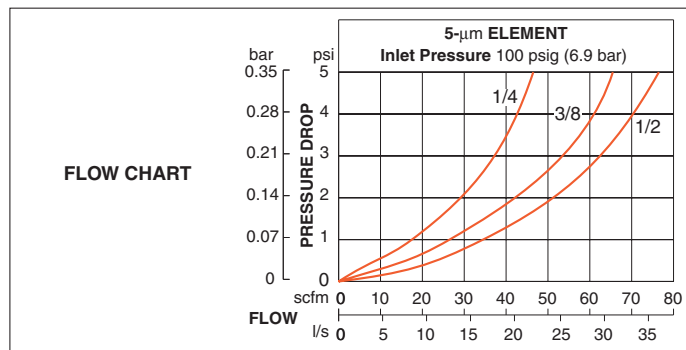
E1

Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1/4, 3/8, 1/2	Polycarbonate	4-oz (120-ml)	2.7 (67)	4.8 (122)	0.6 (16)	2.4 (60)	1.13 (0.51)
	Zinc	4-oz (120-ml)	2.7 (67)	4.9 (123)	0.6 (16)	2.4 (60)	1.50 (0.68)



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5- μ m	Polyethylene	936K77

E



Options: Internal Float Drain, consult ROSS.
Accessories ordered separately, refer to page E6.3-4, E6.7.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 79°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Body: Zinc.

Bowl: Polycarbonate bowl with zinc shatterguard, or zinc bowl.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Port Sizes: 1/4, 3/8 & 1/2 – Flow to 92 scfm

E1

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD3 **50P** **A** **M** **C** **2** **2** **A**

BOWL TYPE	
Polycarbonate Bowl 5.1-oz (151-ml)	50P
Metal Bowl 6-oz (177-ml)	50M

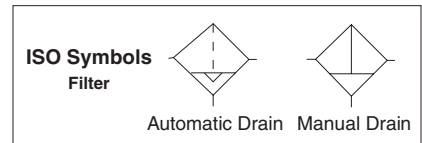
FILTER ELEMENT TYPE	
40 µm sintered bronze	A
5 µm polyethylene	B
5 µm sintered bronze	E
20 µm sintered bronze	F

BOWL DRAIN	
Manual Drain	M
Float Drain	F
Less Drain Fitting (1/4 NPT female instead)	L

PIPE SIZE	
1/4 NPTF	2
3/8 NPTF	3
1/2 NPTF	4
1/4 BSPP	B
3/8 BSPP	C
1/2 BSPP	D

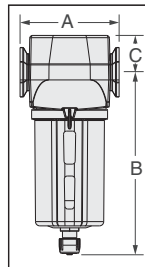
DIFFERENTIAL PRESSURE GAUGE	
No Gauge (without gauge port)	A
Small Slide Gauge	S

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B



Port Size	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A	B*	C	Depth	
1/4, 3/8, 1/2	Polycarbonate	3.0 (76.2)	5.54 (140.6)	1.12 (28.3)	2.51 (63.8)	1.29 (0.59)
	Aluminum	5.0 (127)	6.42 (163.1)	1.12 (28.3)	2.76 (70.1)	1.41 (0.64)

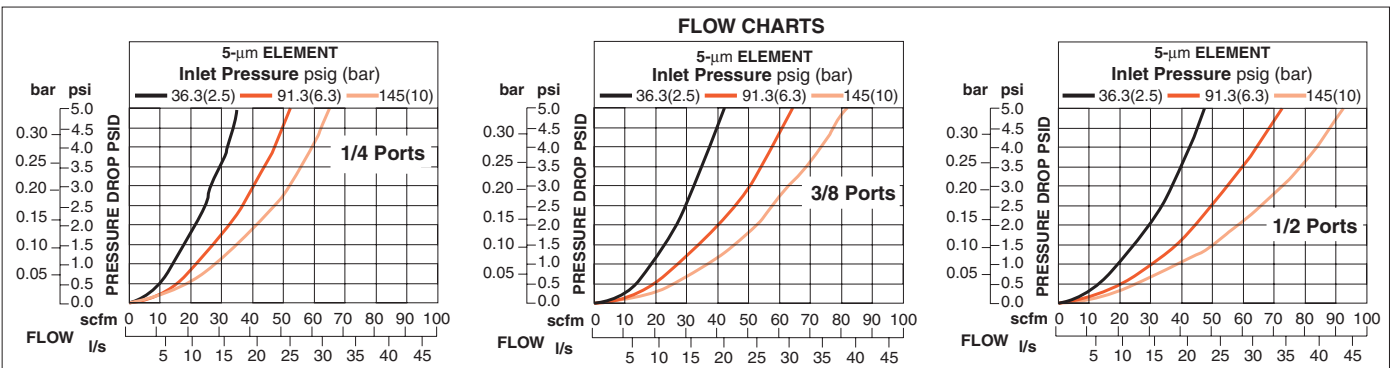
* With small differential gauge, add 1.21 (31) to dimension C.
Bowl removal clearance: add 3.1 (79).



REPLACEMENT FILTER ELEMENTS*		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	R-A60F-03PE5
5-µm	Sintered Bronze	R-A60F-03E5
20-µm	Sintered Bronze	R-A60F-03E4
40-µm	Sintered Bronze	R-A60F-03E3

* For polycarbonate and metal bowl types.

E



Options: Differential Pressure Gauge, for additional information refer to page E6.6.

Options: External Bowl Drains, refer to page E6.7.

Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Sintered or fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 30 to 150 psig (2 to 10 bar).

Metal bowl: 30 to 200 psig (2 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 250 psig (0 to 17 bar).

Filter Element: 5-micron polyethylene, or 5-, 20-, 40-µm sintered bronze.

Body: Die-cast zinc.

Bowl: Polycarbonate bowl with nylon shatterguard, or aluminum bowl with clear nylon sight glass.

Seals: Nitrile

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/4, 3/8, 1/2 & 3/4 – Flow to 155 scfm

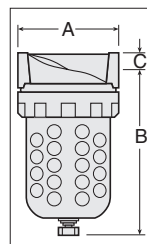
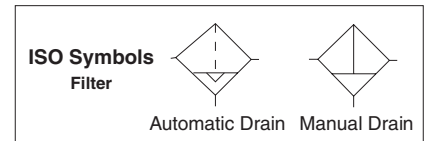
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/4	5021B2008	5022B2005	5011B2008	5012B2006
3/8	5021B3008	5022B3005	5011B3008	5012B3006
1/2	5021B4008	5022B4005	5011B4008	5012B4006
3/4	5021B5018	5022B5015	5011B5018	5012B5016

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5021B2008.



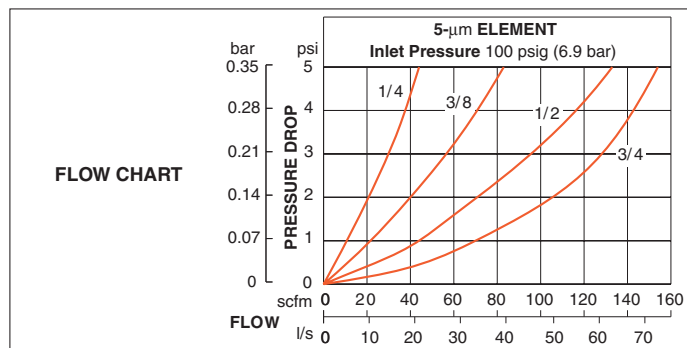
E1

Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1/4, 3/8, 1/2, 3/4	Polycarbonate	8-oz (240-ml)	3.5 (89)	5.8 (146)	0.6 (16)	3.5 (89)	1.93 (0.88)
	Zinc	8-oz (240-ml)	3.5 (89)	6.4 (163)	0.6 (16)	3.5 (89)	2.90 (1.32)



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5- μ m	Polyethylene	939K77

E



Options: Automatic External Drain, refer to page E6.7.
Internal Float Drain, consult ROSS.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Body: Zinc.

Bowl: Polycarbonate bowl with steel shatterguard, or zinc bowl with clear nylon sight glass.

Bowl Ring: Aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

Port Sizes: 3/8, 1/2 & 3/4 – Flow to 205 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD4 **50P** **B** **A** **B** **5** **2** **L**

BOWL TYPE	
Polycarbonate Bowl 9-oz (266-ml)	50P
Metal Bowl 9-oz (266-ml)	50M

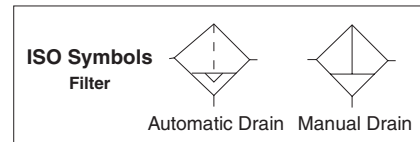
FILTER ELEMENT TYPE	
40-µm sintered bronze	A
5-µm polyethylene	B

BOWL DRAIN	
Automatic Drain	A
Manual Drain	M
Less Drain Fitting - 1/4 NPT female instead	L
Internal Float Drain	F

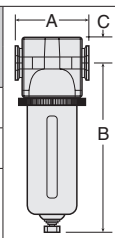
PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

DIFFERENTIAL PRESSURE GAUGE	
No Gauge (without gauge port)	A
Large Dual Face Gauge	L
Small Slide Gauge	S
Large Dual Face Gauge with Normally Open Reed Switch	E
Large Dual Face Gauge with Normally Closed Reed Switch	C

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B



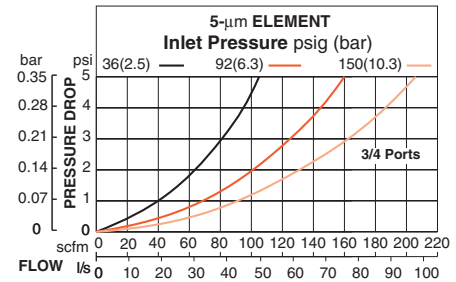
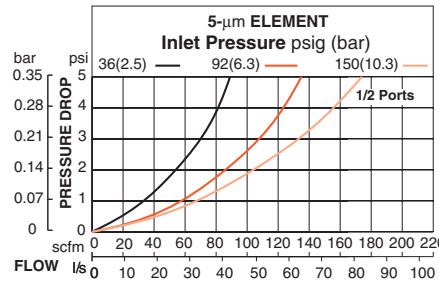
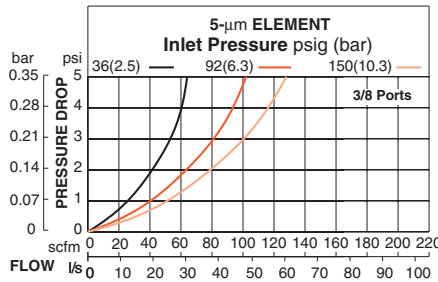
Port Size	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A	B**	C	Depth	
3/8, 1/2, 3/4	Polycarbonate	3.0 (76.2)	7.7 (195)	1.1 (28)	2.9 (73)	2.13 (0.97)
	Aluminum	3.5 (76.2)	7.6 (193)	1.1 (28)	3.1 (79)	2.13 (0.97)



**With small differential gauge, add 1.21 (31) to dimension C.
Bowl removal clearance: add 3.1 (79).

REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Element Number
5-µm	Polyethylene	R-A115-106PE5
40-µm	Sintered Bronze	R-A115-106PE3

FLOW CHARTS



Options: Differential Pressure Gauge, for additional information refer to page E6.6.

Options: External Bowl Drains, refer to page E6.7.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Sintered or fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene, or 40-micron rated sintered bronze.

Body: Die-cast zinc.

Bowl: Polycarbonate bowl with steel shatterguard, or aluminum bowl with clear nylon sight glass.

Bowl Ring: Nylon.

Seals: Nitrile

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 3/4 & 1 – Flow to 275 scfm

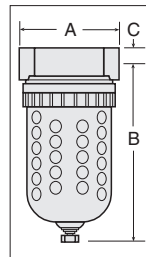
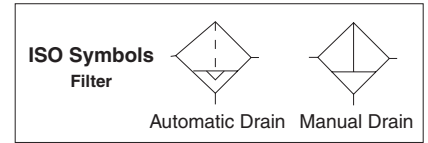
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
3/4	5021B5008	5022B5005	5011B5008	5012B5006
1	5021B6008	5022B6005	5011B6008	5012B6006

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5021B5008.



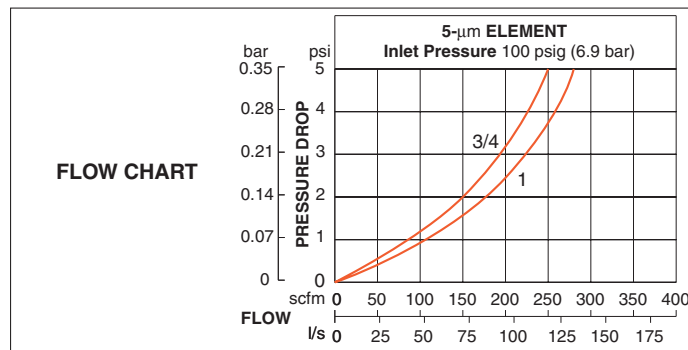
E1

Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
3/4	Polycarbonate	16-oz (480-ml)	4.5 (114)	8.0 (203)	0.8 (21)	4.2 (106)	2.44 (1.11)
1	Aluminum	16-oz (480-ml)	4.5 (114)	8.3 (210)	0.8 (21)	4.2 (106)	3.25 (1.48)



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	1010K77

E



Options: Automatic External Drain, refer to page E6.7.
 Internal float drain, consult ROSS.
 Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Body: Aluminum.

Bowl: Polycarbonate bowl with steel shatterguard, or aluminum bowl with clear nylon sight glass.

Bowl Ring: Aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Port Sizes: 1¼ & 1½ – Flow to 660 scfm

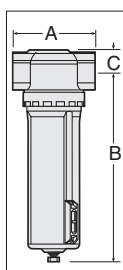
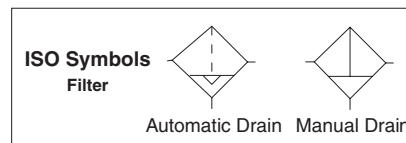
E1

Port Size	Filter Element Rating	Model Numbers*	
		Automatic Drain	Manual Drain
		Metal Bowl	Metal Bowl
1¼	5-µm	5022B7019	5012B7019
	40-µm	5X00B7051	5X00B7052
1½	5-µm	5022B8019	5012B8019
	40-µm	5X00B8037	5X00B8051

* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5022B7019.



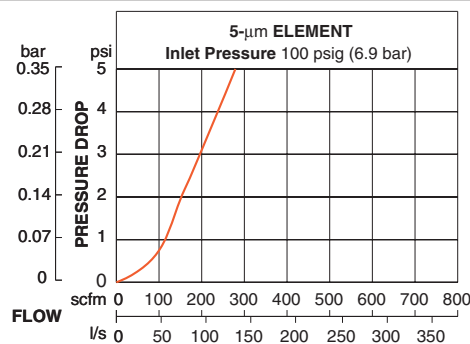
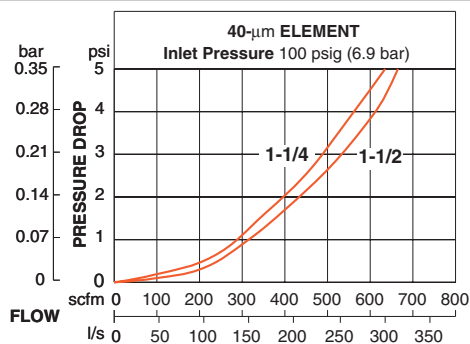
Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1¼	Aluminum	35-oz (1000-ml)	5.5 (140)	10.7 (271)	1.4(36)	4.2 (106)	1.93 (0.88)
1½	Aluminum	35-oz (1000-ml)	5.5 (140)	10.7 (271)	1.4(36)	4.2 (106)	1.93 (0.88)



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Sintered Bronze	1656K77
40-µm	Sintered Bronze	R-A114-106E3

E

FLOW CHARTS



Options: External Automatic Drain, refer to page E6.7.
Internal float drain, consult ROSS.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Sintered.
Ambient/Media Temperature: 40° to 175°F (4° to 80°C).
Fluid Media: Compressed air.
Inlet Pressure:
Automatic drain model: Up to 200 psig (up to 14 bar).
Manual drain model: 0 to 200 psig (0 to 14 bar).

Filter Element: 40-micron rated or 5-micron rated sintered bronze.
Body: Aluminum.
Bowl: Aluminum bowl with clear nylon sight glass.
Bowl Ring: Aluminum.
Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Inline Filters

HIGH-CAPACITY Series

Port Sizes: 1¼, 1½ & 2 – Flow to 1000 scfm

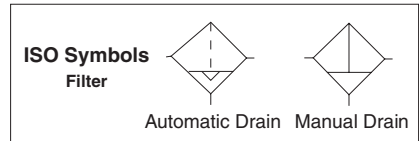
Port Size	Filter Element Rating	Model Numbers*	
		Internal Float Drain	Manual Drain
1¼	5-µm	5022B7018	5012B7018
1¼	40-µm	5X00B7025	5X00B7054
1½	5-µm	5022B8018	5012B8018
1½	40-µm	5X00B8018	5X00B8019
2	5-µm	5022B9018	5012B9018
2	40-µm	5X00B9004	5X00B9003

* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5022B7018.

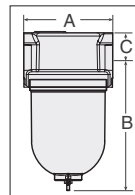


E1

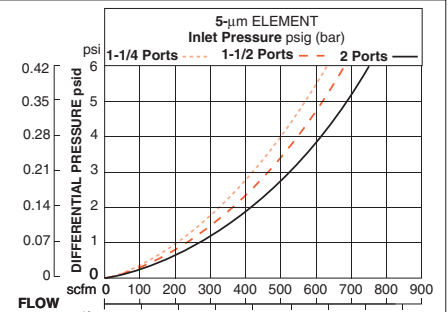
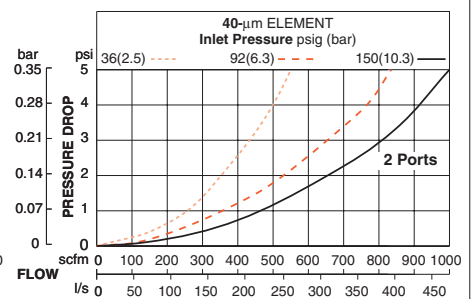
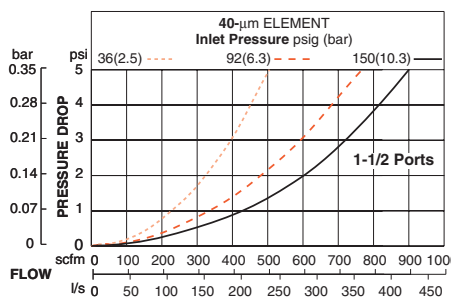
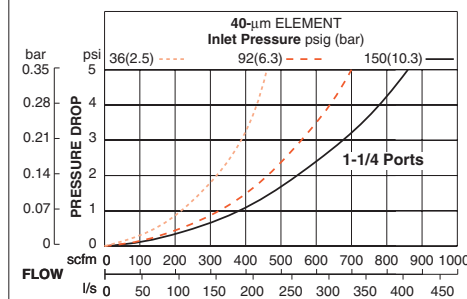
Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1¼, 1½, 2	Aluminum	123-oz (3700-ml)	8.1 (204)	12.0 (305)	2.4 (60.3)	8.0 (203.2)	14.3 (6.59)



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Sintered Bronze	942K77
40-µm	Sintered Bronze	944K77



FLOW CHARTS



E

Options: External Automatic Drain, refer to page E6.7.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Sintered or fiber.

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

Fluid Media: Compressed air.

Inlet Pressure:

Internal float drain model: 30 to 200 psig (2.1 to 14 bar).

Manual drain model: 0 to 200 psig (0 to 14 bar).

Filter Element: 40-micron rated or 5-micron rated sintered bronze.

Body: Aluminum.

Bowl: Aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

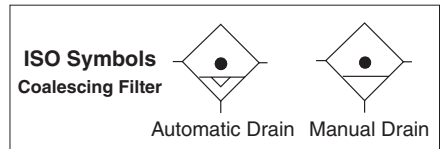
E1.11

Port Sizes: 1/8 & 1/4 – Flow to 11 scfm

E1

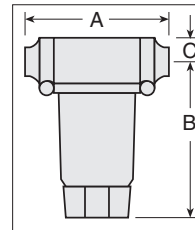
Port Size	Model Numbers			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
With THREADED PORTS				
1/8*	5B01B0700	5B01B0800	5B01B0500	5B01B0600
1/4*	5B02B0700	5B02B0800	5B02B0500	5B02B0600
With Quick-Connect TUBE FITTINGS				
1/4	5B03B0700	5B03B0800	5B03B0500	5B03B0600
3/8	5B04B0700	5B04B0800	5B04B0500	5B04B0600
4mm	5B05B0700	5B05B0800	5B05B0500	5B05B0600
6mm	5B06B0700	5B06B0800	5B06B0500	5B06B0600
8mm	5B07B0700	5B07B0800	5B07B0500	5B07B0600
10mm	5B08B0700	5B08B0800	5B08B0500	5B08B0600

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5B01B0700. Models include 0.3-micron rated filter element.



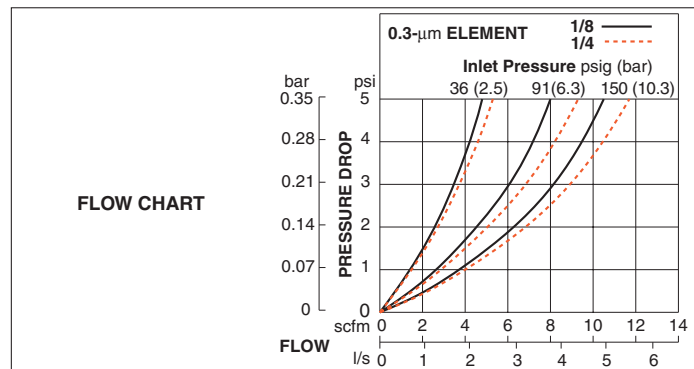
Port Size	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
		A	B**	C	Depth	
No Ports	2-oz (60-ml)	1.7 (43)	3.9 (99)	0.5 (13)	1.8 (45)	0.27 (0.12)
1/8, 1/4	2-oz (60-ml)	3.0 (76)	3.9 (99)	0.5 (13)	1.8 (45)	0.49 (0.22)
Models below have quick-connect tube fittings.						
1/4	2-oz (60-ml)	3.4 (86)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)
3/8	2-oz (60-ml)	3.9 (99)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)
4 mm	2-oz (60-ml)	3.4 (86)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)
6 mm	2-oz (60-ml)	3.4 (86)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)
8 mm	2-oz (60-ml)	3.4 (86)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)
10 mm	2-oz (60-ml)	3.9 (99)	3.9 (99)	0.5 (13)	1.8 (45)	0.47 (0.21)

** Dimension for polycarbonate bowl; aluminum bowl is 3.8 (97).



E

REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
0.3- μ m	Borosilicate-glass-fiber	945K77
0.01- μ m	Borosilicate-glass-fiber	R-A-10F-16E8



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 150°F (4° to 66°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 0.3-micron rated, or 0.01-micron rated borosilicate-glass-fiber element.

Body: Acetal.

Bowl: Polycarbonate or aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Inline Coalescing Filters

MINIATURE Series

Port Sizes: 1/8 & 1/4 – Flow to 10 scfm

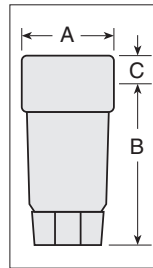
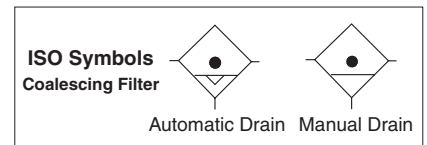


E1

Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/8	5031B1128	5032B1118	5031B1028	5032B1028
1/4	5031B2128	5032B2128	5031B2028	5032B2028

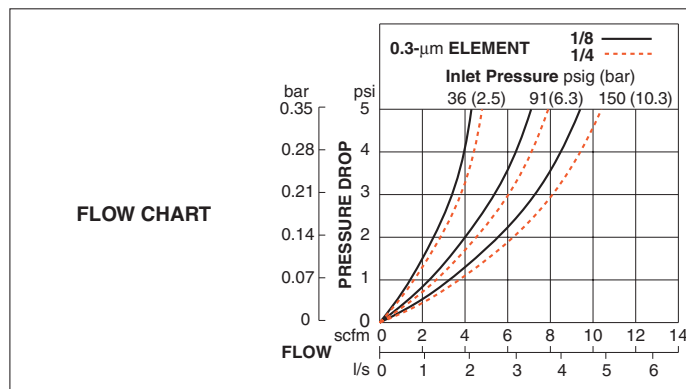
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5031B1128. Models include 0.3-micron rated filter element.

Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1/8, 1/4	Polycarbonate	2-oz (60-ml)	1.6 (41)	3.6 (92)	0.4 (9.5)	1.6 (41)	0.33 (0.15)
1/8, 1/4	Aluminum	2-oz (60-ml)	1.6 (41)	4.3 (109)	0.4 (9.5)	1.6 (41)	0.35 (0.16)



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
0.3- μ m	Borosilicate-glass-fiber	945K77
0.01- μ m	Borosilicate-glass-fiber	R-A-10F-16E8

E



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 150°F (4° to 66°C)

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar)

Filter Element: 0.3-micron rated or 0.01-micron rated borosilicate-glass-fiber coalescing element.

Body: Aluminum.

Bowl: Polycarbonate or aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E1.13

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 85 scfm

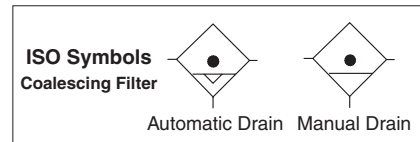
E1

Port Size	Filter Element Rating	Model Numbers*			
		Automatic Drain		Manual Drain	
		Metal Bowl	Extended Metal Bowl	Metal Bowl	Extended Metal Bowl
1/4	0.3-µm	5032B2138	5032B2148	5032B2038	5032B2048
	0.01-µm	5032B2239	5032B2249	5032B2238	5032B2248
3/8	0.3-µm	5032B3138	5032B3148	5032B3038	5032B3048
	0.01-µm	5032B3239	5032B3249	5032B3238	5032B3248
1/2	0.3-µm	5032B4138	5032B4148	5032B4038	5032B4048
	0.01-µm	5032B4239	5032B4249	5032B4238	5032B4248

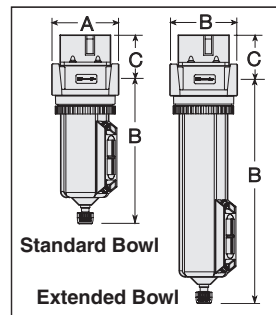
*NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5032B2138. Models include 0.3-micron rated filter element.



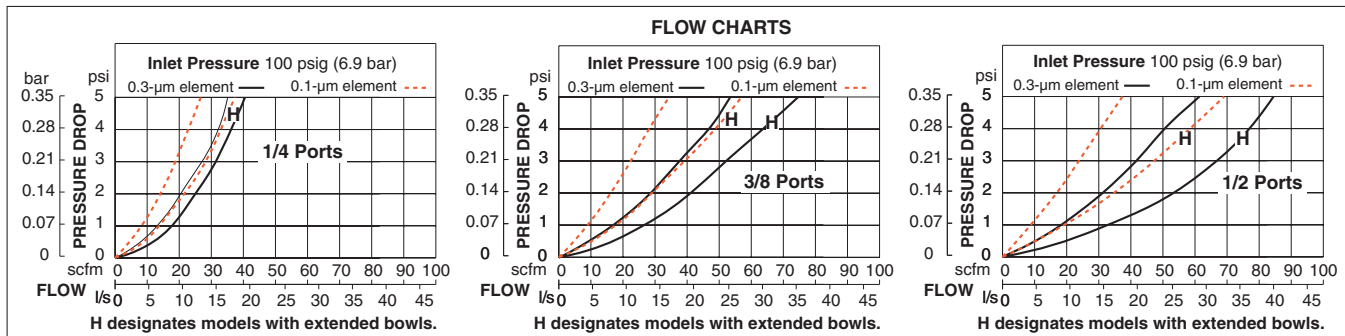
Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1/4, 3/8, 1/2	Standard	6-oz (180-ml)	2.7 (67)	6.5 (165)	1.8 (45)	2.4 (60)	1.75 (0.80)
1/4, 3/8, 1/2	Extended	10-oz (300-ml)	2.7 (67)	9.5 (241)	1.8 (45)	2.4 (60)	2.00 (0.91)



REPLACEMENT FILTER ELEMENTS			
Element Rating	Bowl Type	Element Material	Part Number
0.3-µm	Standard	Borosilicate-glass-fiber	R-A60F-29
0.3-µm	Extended	Borosilicate-glass-fiber	R-A60F-32
0.01-µm	Standard	Borosilicate-glass-fiber	R-A60F-29E8
0.01-µm	Extended	Borosilicate-glass-fiber	R-A60F-32E8



E



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

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

Fluid Media: Compressed air.

Inlet Pressure:

Automatic drain model: Up to 150 psig (up to 10 bar).

Manual drain model: 0 to 150 psig (0 to 10 bar).

Filter Element: 0.3-micron rated or 0.01-micron rated borosilicate-glass-fiber coalescing element.

Body: Zinc.

Bowl: Aluminum bowl with clear nylon sight glass, or extended aluminum bowl with clear nylon sight glass.

Bowl Ring: Nylon.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 125 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD3 **50P** **C** **M** **C** **4** **2** **A**



E1

BOWL TYPE	
Polycarbonate Bowl 5.1-oz (151-ml)	50P
Metal Bowl 6-oz (177-ml)	50M
Extended Metal Bowl 10-oz (295-ml)	50E

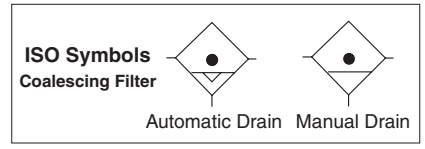
PIPE SIZE	
1/4 NPTF	2
3/8 NPTF	3
1/2 NPTF	4
1/4 BSPP	B
3/8 BSPP	C
1/2 BSPP	D

DIFFERENTIAL PRESSURE GAUGE	
No Gauge (without gauge port)	A
Small Slide Gauge	S

FILTER ELEMENT TYPE	
0.3 µm Borosilicate glass	C
0.01 µm Borosilicate glass	D

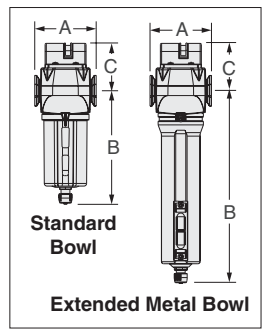
BOWL DRAIN	
Manual Drain	M
Float Drain	F
Less Drain Fitting (1/4 NPT female instead)	L

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B



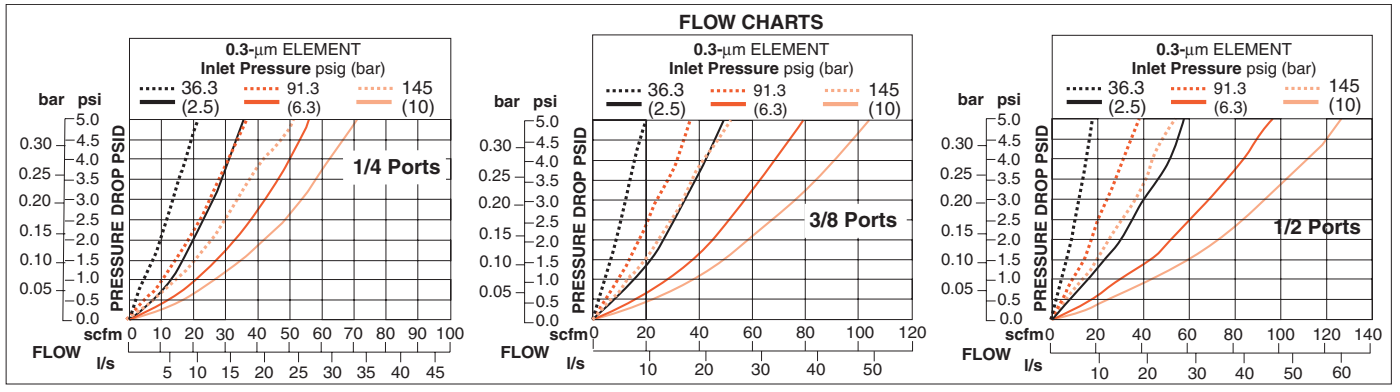
Port Size	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A	B*	C	Depth	
1/4, 3/8, 1/2	Polycarbonate	3.0 (76.2)	5.54 (140.6)	2.33 (59.3)	2.51 (63.8)	1.30 (0.59)
	Aluminum	3.0 (76.2)	6.42 (163.1)	2.33 (59.3)	2.76 (70.1)	1.41 (0.64)
	Extended Aluminum	3.0 (76.2)	9.51 (241.6)	2.33 (59.3)	2.76 (70.1)	1.54 (0.70)

* Bowl removal clearance: add 3.1 (79). Extended Bowl removal clearance: add 6.1 (155).



REPLACEMENT FILTER ELEMENTS					
Element Rating	Bowl Type	Part Number	Element Rating	Bowl Type	Part Number
0.3-µm	Polycarbonate	R-A60F-23	0.01-µm	Polycarbonate	R-A60F-23E8
	Metal	R-A60F-29		Metal	R-A60F-29E8
	Extended Metal	R-A60F-32		Extended Metal	R-A60F-32E8

E



Options: External Bowl Drains, for additional information refer to page E6.7.
Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

- Construction:** Fiber.
- Ambient/Media Temperature:**
 - Polycarbonate bowl: 40° to 125°F (4° to 52°C).
 - Metal bowl: 40° to 175°F (4° to 80°C).
- Fluid Media:** Compressed air.
- Inlet Pressure - Automatic drain model:**
 - Polycarbonate bowl: 30 to 150 psig (2 to 10 bar).
 - Metal bowl: 30 to 200 psig (2 to 14 bar).
- Inlet Pressure - Manual drain model:**
 - Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).
 - Metal bowl: 0 to 250 psig (0 to 17 bar).
- Filter Element:** 0.3-micron rated or 0.01-micron rated borosilicate-glass-fiber coalescing element.
- Body:** Die-cast zinc.
- Seals:** Nitrile.
- Bowl:** Polycarbonate bowl with nylon shatterguard, or aluminum bowl with clear nylon sight glass.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

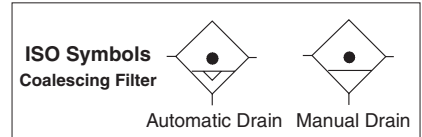
E1.15

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 100 scfm

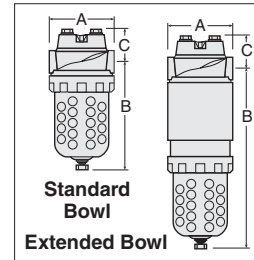
E1

Port Size	Bowl Type	Filter Element Rating	Model Numbers*			
			Automatic Drain		Manual Drain	
			Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/4	Standard	0.3-µm	5031B2108	5032B2118	5031B2008	5032B2018
		0.01-µm	5031B2209	5032B2219	5031B2208	5032B2218
3/8	Standard	0.3-µm	5031B3108	5032B3118	5031B3008	5032B3018
		0.01-µm	5031B3209	5032B3219	5031B3208	5032B3218
1/2	Standard	0.3-µm	5031B4108	5032B4118	5031B4008	5032B4018
		0.01-µm	5031B4209	5032B4219	5031B4208	5032B4218
	Extended	0.3-µm	5031B4128	5032B4128	5031B4028	5032B4028
		0.01-µm	5031B4229	5032B4229	5031B4228	5032B4228

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5031B2108.



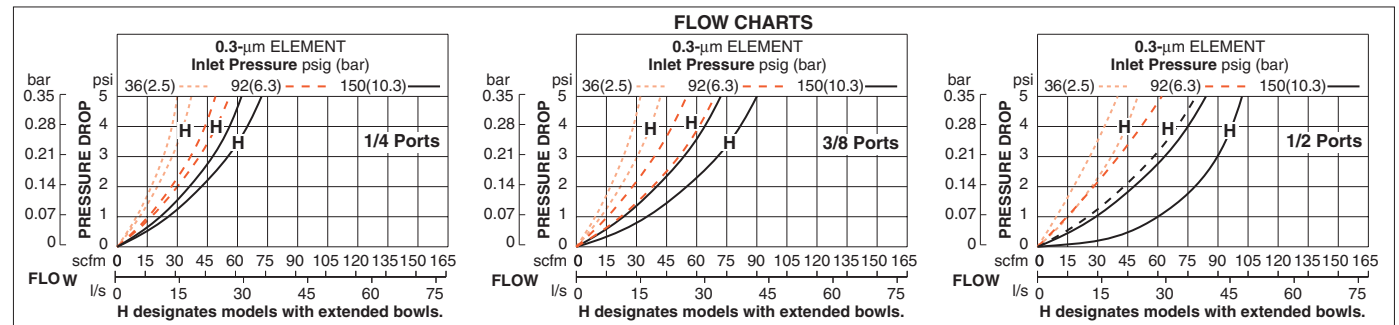
Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1/4, 3/8, 1/2	Standard	8-oz (240-ml)	3.5 (89)	5.8 (146)	1.8 (45)	3.5 (89)	2.13 (0.95)
1/4, 3/8, 1/2	Extended	20-oz (600-ml)	3.5 (89)	10.3 (260)	1.8 (45)	3.5 (89)	3.25 (1.54)



REPLACEMENT FILTER ELEMENTS

Element Rating	Bowl Type	Element Material	Part Number
0.3-µm	Standard	Borosilicate-glass-fiber	947K77
0.3-µm	Extended	Borosilicate-glass-fiber	R-A103-160L
0.01-µm	Standard	Borosilicate-glass-fiber	948K77
0.01-µm	Extended	Borosilicate-glass-fiber	R-A103-160LE8

E



Small slide differential Pressure Gauge included.

Options: Differential Pressure Gauges: Large Dual Face, Large Dual Face with Reed Switch (NO-NC), refer to page E6.6.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 0.3-micron rated or 0.01-micron rated borosilicate-glass-fiber coalescing element.

Body: Zinc.

Bowl: Polycarbonate bowl with steel shatterguard, or zinc bowl with clear nylon sight glass.

Bowl Ring: Aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 3/8, 1/2 & 3/4 – Flow to 158 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD4 **50P** **C** **A** **B** **5** **2** **L**



E1

BOWL SIZE	
Polycarbonate Bowl 9-oz (266-ml)	50P
Metal Bowl 9-oz (266-ml)	50M
Extended Metal Bowl 15-oz (443-ml)	50E

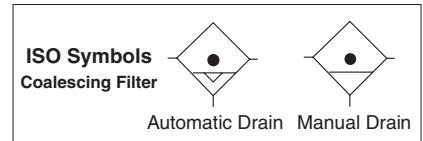
FILTER ELEMENT TYPE	
0.3 µm Borosilicate glass	C
0.01 µm Borosilicate glass	D

PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

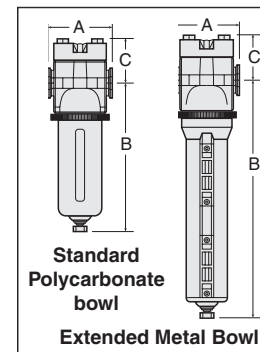
DIFFERENTIAL PRESSURE GAUGE	
No Gauge (without gauge port)	A
Large Dual Face Gauge	L
Small Slide Gauge	S
Large Dual Face Gauge with Normally Open Reed Switch	E
Large Dual Face Gauge with Normally Closed Reed Switch	C

BOWL DRAIN	
Automatic Drain	A
Manual Drain	M
Less Drain Fitting - 1/4 NPT female instead	L
Internal Float Drain	F



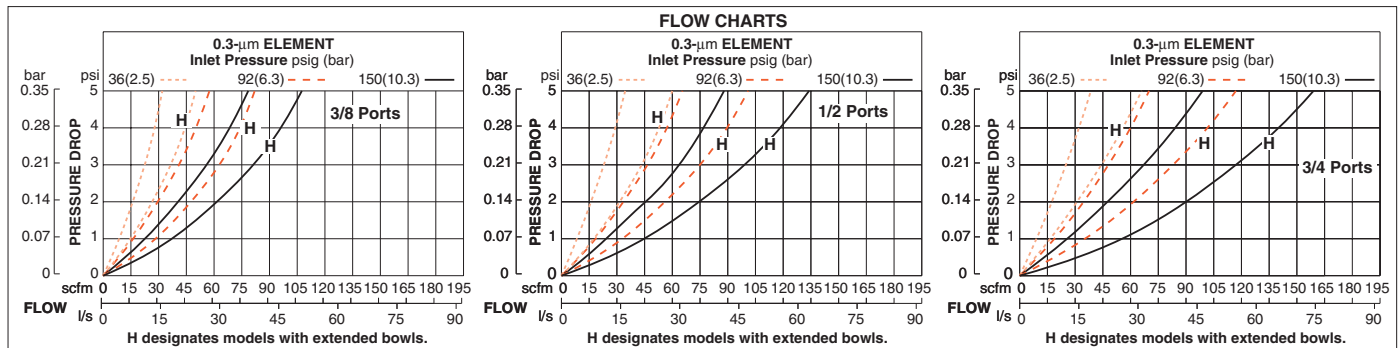
Bowl Type	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A	B*	C	Depth	
3/8, 1/2, 3/4	Polycarbonate	3.5 (88)	7.7 (195)	2.2 (55)	2.9 (73)	2.13 (0.97)
	Aluminum	3.5 (88)	7.6 (193)	2.2 (55)	3.1 (79)	2.13 (0.97)
	Extended Aluminum	3.5 (88)	11.2 (284)	2.2 (55)	3.1 (79)	2.31 (1.05)

* Bowl removal clearance: add 3.1 (79). Extended Bowl removal clearance: add 6.1 (155).



REPLACEMENT FILTER ELEMENTS					
Element Rating	Bowl Type	Part Number	Element Rating	Bowl Type	Part Number
0.3-µm	Standard	R-A115-117	0.01-µm	Standard	R-A115-117E8
	Extended	R-A115-118		Extended	R-A115-118E8

E



Options: Differential Pressure Gauges: Large Dual Face, Large Dual Face with Reed Switch (NO-NC), refer to page E6.6.
Options: External Bowl Drains, for additional information refer to page E6.7.
Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 0.3-micron rated or 0.01-micron rated borosilicate-glass-fiber coalescing element.

Body: Die-cast zinc.

Bowl: Polycarbonate bowl with steel shatterguard, or aluminum bowl with clear nylon sight glass.

Bowl Ring: Nylon.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E1.17

Port Sizes: 3/4 & 1 – Flow to 220 scfm

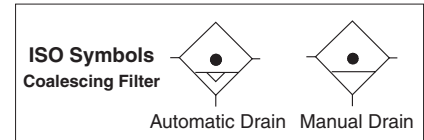
E1

Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
3/4	5X00B5099	5X00B5076	5031B5008	5032B5018
1	5X00B6027	5X00B6054	5031C6008	5032B6117

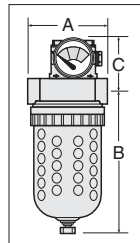
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5X00B5099. Models include 0.3-micron rated filter element.



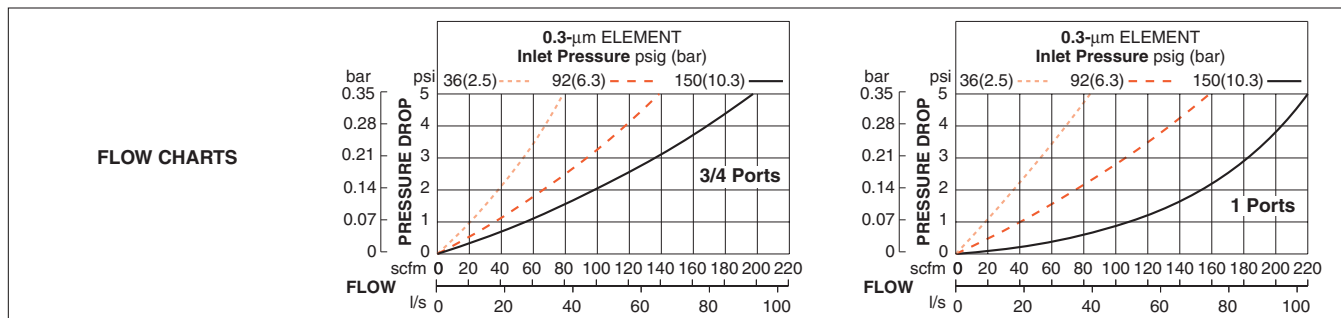
Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B*	C	Depth	
3/4, 1	Polycarbonate	16-oz (480-ml)	4.5 (114)	8.0 (203)	3.1 (78)	4.5 (114)	2.38 (1.09)
3/4, 1	Aluminum	16-oz (480-ml)	4.5 (114)	8.3 (210)	3.1 (78)	4.5 (114)	3.20 (1.46)



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
0.3-µm	Borosilicate-glass-fiber	949K77
0.01-µm	Borosilicate-glass-fiber	R-A109-106E8



E



Large dual face differential Pressure Gauge included.
Options: Differential Pressure Gauges: Small Slide, Large Dual Face with Reed Switch (NO-NC), refer to page E6.6.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 0.3-micron rated or 0.01-micron rated borosilicate-glass-fiber coalescing element.

Body: Aluminum.

Bowl: Polycarbonate bowl with steel shatterguard, or aluminum bowl with clear nylon sight glass.

Bowl Ring: Aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 3/4 & 1 – Flow to 295 scfm

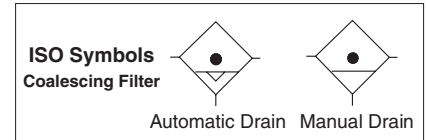


E1

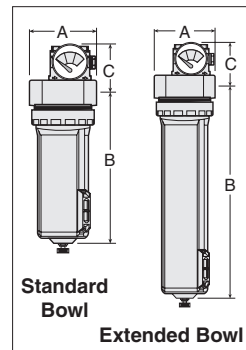
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Metal Bowl	Extended Metal Bowl	Metal Bowl	Extended Metal Bowl
3/4	5X00B5086	5X00B5087	5032B5019	5032B5029
1	5X00B6064	5X00B6065	5032B6019	5032C6028

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5X00B5086. Models include 0.3-micron rated filter element.

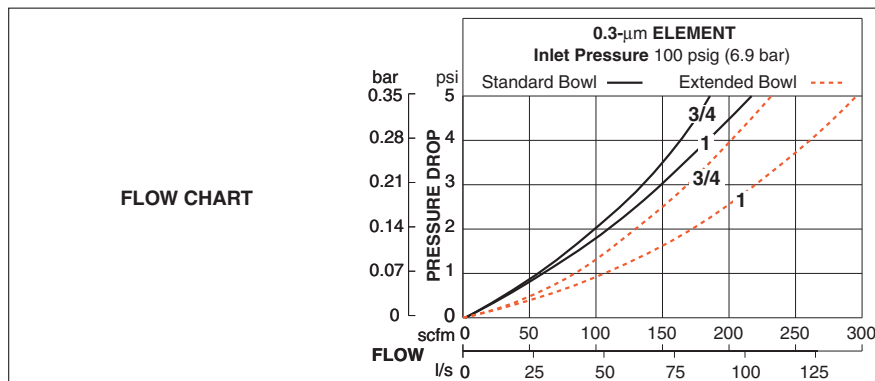
Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
3/4, 1	Standard	35-oz (1050-ml)	4.5 (114)	10.1 (257)	3.3 (83)	4.2 (106)	3.50 (1.59)
3/4, 1	Extended	62-oz (1860-ml)	4.5 (114)	15.7 (399)	3.3 (83)	4.2 (106)	4.25 (1.91)



REPLACEMENT FILTER ELEMENTS			
Element Rating	Bowl Type	Element Material	Part Number
0.3-µm	Standard	Borosilicate-glass-fiber	R-A114-112
	Extended	Borosilicate-glass-fiber	R-A114-113
0.01-µm	Standard	Borosilicate-glass-fiber	R-A114-112E8
	Extended	Borosilicate-glass-fiber	R-A114-113E8



E



Large dual face differential Pressure Gauge included.

Options: Differential Pressure Gauges: Small Slide, Large Dual Face with Reed Switch (NO-NC), refer to page E6.6.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

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

Fluid Media: Compressed air.

Inlet Pressure:

Automatic drain model: Up to 200 psig (up to 14 bar).

Manual drain model: 0 to 200 psig (0 to 14 bar).

Filter Element: 0.3-micron rated or 0.01-micron rated borosilicate-glass-fiber coalescing element.

Body: Aluminum.

Bowl: Aluminum bowl, or extended aluminum bowl.

Bowl Ring: Aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E1.19

Inline Coalescing Filters

HIGH-CAPACITY Series

Port Sizes: 1¼ & 1½ – Flow to 450 scfm

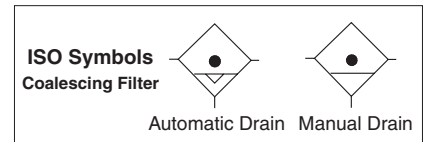
E1

Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Metal Bowl	Extended Metal Bowl	Metal Bowl	Extended Metal Bowl
1¼	5X00B7034	5X00B7036	5032B7019	5032B7029
1½	5X00B8035	5X00B8036	5032B8019	5032B8029

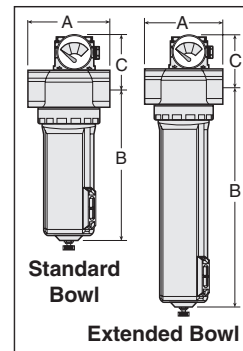
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5X00B7034. Models include 0.3-micron rated filter element.



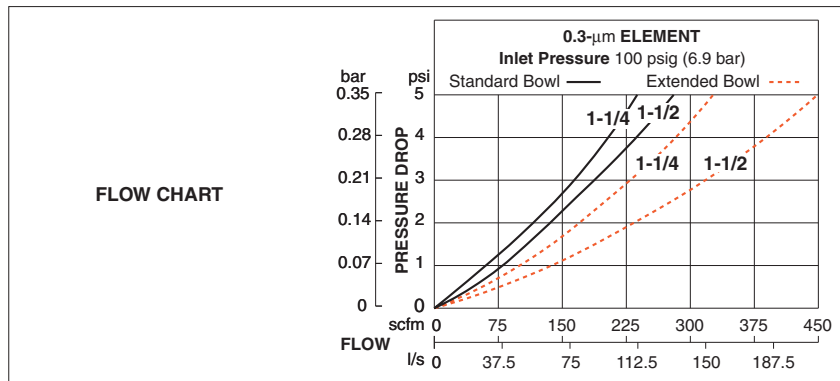
Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1¼, 1½	Standard	35-oz (1050-ml)	5.5 (140)	10.6 (270)	3.7 (94)	4.2 (106)	4.31 (1.94)
	Extended	62-oz (1860-ml)	5.5 (140)	16.2 (412)	3.7 (94)	4.2 (106)	5.00 (2.27)



REPLACEMENT FILTER ELEMENTS			
Element Rating	Bowl Type	Element Material	Part Number
0.3-µm	Standard	Borosilicate-glass-fiber	R-A114-112
	Extended	Borosilicate-glass-fiber	R-A114-113
0.01-µm	Standard	Borosilicate-glass-fiber	R-A114-112E8
	Extended	Borosilicate-glass-fiber	R-A114-113E8



E



Large dual face differential Pressure Gauge included.

Options: Differential Pressure Gauges: Small Slide, Large Dual Face with Reed Switch (NO-NC), refer to page E6.6.

Bowl Drain - Internal Float Drain (on polycarbonate bowl only), consult ROSS.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

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

Fluid Media: Compressed air.

Inlet Pressure:

Automatic drain model: Up to 200 psig (up to 14 bar).

Manual drain model: 0 to 200 psig (0 to 14 bar).

Filter Element: 0.3-micron rated or 0.01-micron rated borosilicate-glass-fiber coalescing element.

Body: Aluminum.

Bowl: Aluminum bowl, or extended aluminum bowl.

Bowl Ring: Aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Inline Coalescing Filters

HIGH-CAPACITY Series

Port Sizes: 1¼ & 1½ – Flow to 465 scfm

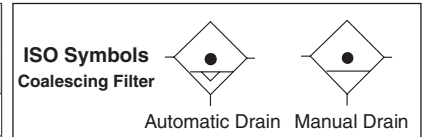
Port Size	Model Numbers ¹ *		
	Internal Float Drain	Manual Drain	
	Metal Bowl	Metal Bowl	Extended Metal Bowl
1¼	5X00B7019	5032B7018	5032B7028
1½	5X00B8008	5032B8018	5032B8028

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5X00B7019. Models include 0.3-micron rated filter element.

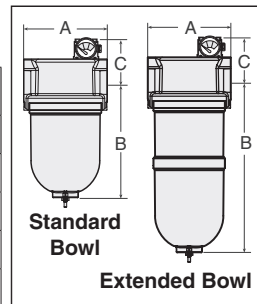


E1

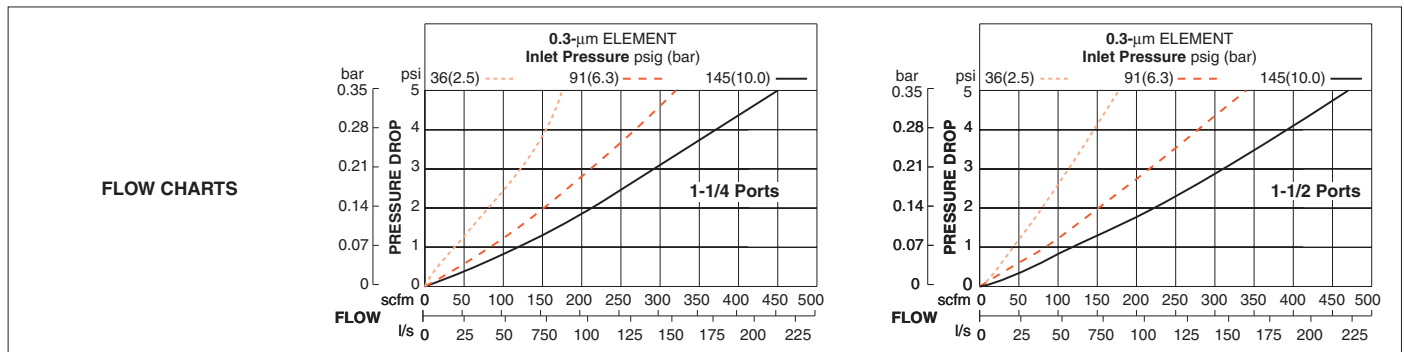
Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1¼, 1½	Standard	123-oz (3700-ml)	8.1 (204.7)	12.0 (305.1)	4.6 (117.4)	8.0 (203.2)	17.0 (7.8)
1¼, 1½	Extended	233-oz (7000-ml)	8.1 (204.7)	18.3 (465.1)	4.6 (117.4)	8.0 (203.2)	26.0 (11.8)



REPLACEMENT FILTER ELEMENTS			
Element Rating	Bowl Type	Element Material	Part Number
0.3-µm	Standard	Borosilicate-glass-fiber	952K77
	Extended	Borosilicate-glass-fiber	953K77
0.01-µm	Standard	Borosilicate-glass-fiber	R-A106-24E8
	Extended	Borosilicate-glass-fiber	R-A106-24LE8



E



Large dual face differential Pressure Gauge included.

Options: Differential Pressure Gauges: Small Slide, Large Dual Face with Reed Switch (NO-NC), refer to page E6.6.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

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

Fluid Media: Compressed air.

Inlet Pressure:

Internal float drain model: 30 to 200 psig (2 to 14 bar).

Manual drain model: 0 to 200 psig (0 to 14 bar).

Filter Element: 0.3-micron rated borosilicate-glass-fiber coalescing element; optional 0.01-micron rated element.

Body: Aluminum.

Bowl: Aluminum bowl, or extended aluminum bowl.

V-Band: Stainless steel.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E1.21

Inline Coalescing Filters

HIGH-CAPACITY Series

Port Sizes: 2 – Flow to 840 scfm

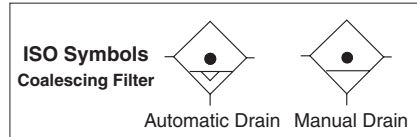


E1

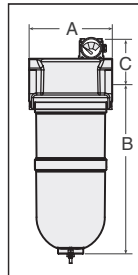
Port Size	Model Numbers*	
	Internal Float Drain	Manual Drain
	Metal Bowl	Metal Bowl
2	5X00B9009	5032B9018

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5X00B9009.
Models include 0.3-micron rated filter element.

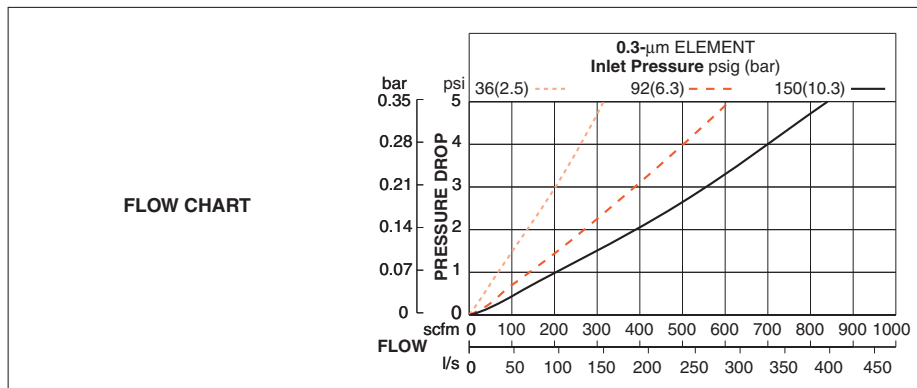
Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
2	Aluminum	233-oz (7000-ml)	8.1 (204.7)	18.3 (465.1)	4.6 (117.4)	8.0 (203.2)	26.0 (11.8)



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
0.3- μ m	Borosilicate-glass-fiber	953K77
0.01- μ m	Borosilicate-glass-fiber	R-A106-24LE8



E



Large dual face differential Pressure Gauge included.

Options: Differential Pressure Gauges: Small Slide, Large Dual Face with Reed Switch (NO-NC), refer to page E6.6.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

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

Fluid Media: Compressed air.

Inlet Pressure:

Internal float drain model: 30 to 200 psig (2 to 14 bar).

Manual drain model: 0 to 200 psig (0 to 14 bar).

Filter Element: 0.3-micron rated borosilicate-glass-fiber coalescing element; optional 0.01-micron rated element.

Body: Aluminum.

Bowl: Aluminum.

V-Band: Stainless steel.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Oil Vapor Removal (Adsorbing) Filters

MD3™ Series

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 125 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD3 **50P** C 4 2

BOWL SIZE	
Polycarbonate Bowl 5.1-oz (151-ml)	50P
Metal Bowl 6-oz (177-ml)	50M
Extended Metal Bowl 10-oz (295-ml)	50E

PIPE SIZE	
1/4 NPTF	2
3/8 NPTF	3
1/2 NPTF	4
1/4 BSPP	B
3/8 BSPP	C
1/2 BSPP	D

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B



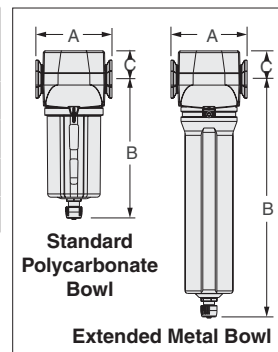
E1

ISO Symbols
Adsorbing Filter
Manual Drain



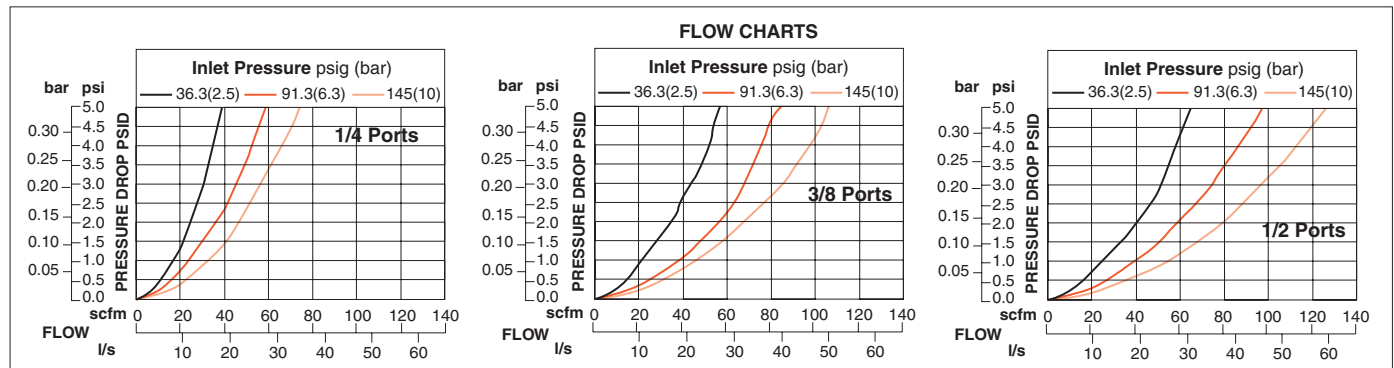
Bowl Size	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A	B*	C	Depth	
1/4, 3/8, 1/2	Polycarbonate	3.0 (76.2)	5.54 (140.6)	1.12 (28.3)	2.51 (63.8)	1.29 (0.59)
	Aluminum	3.0 (76.2)	6.42 (163.1)	1.12 (28.3)	2.76 (70.1)	1.41 (0.64)
	Extended Aluminum	3.0 (76.2)	9.51 (241.6)	1.12 (28.3)	2.76 (70.1)	1.54 (0.70)

* Bowl removal clearance: add 3.1 (79). Extended Bowl removal clearance: add 6.1 (155).



REPLACEMENT FILTER ELEMENTS	
Bowl Type	Part Number
Polycarbonate	R-A60F-29E9
Metal	R-A60F-29E9
Extended Metal	R-A60F-32E9

E



Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

With polycarbonate bowl: 40° to 125°F (4° to 52°C).

With metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure:

With polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

With metal bowl: 0 to 250 psig (0 to 17 bar).

Filter Element: Activated carbon with urethane seals.

Bowl Drain: Manual drain.

Body: Die-cast zinc.

Bowl: Polycarbonate with nylon shatterguard, aluminum bowl with clear nylon sight glass, or extended aluminum bowl with clear nylon sight glass.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E1.23

Port Sizes: 3/8, 1/2 & 3/4 – Flow to 165 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD4 **50P** **B** **5** **2**

BOWL SIZE	
Polycarbonate Bowl 9-oz (270-ml)	50P
Metal Bowl 9-oz (270-ml)	50M
Extended Metal Bowl 15-oz (450-ml)	50E

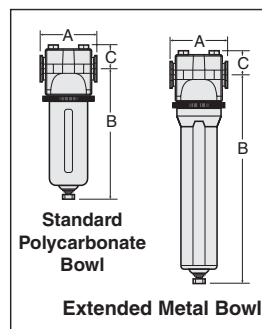
PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

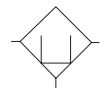


Bowl Size	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A	B*	C	Depth	
3/8, 1/2, 3/4	Polycarbonate	3.5 (88)	7.7 (195)	1.1 (28)	2.9 (73)	2.13 (0.97)
	Aluminum	3.5 (88)	7.6 (193)	1.1 (28)	3.1 (79)	2.13 (0.97)
	Extended Aluminum	3.5 (88)	11.2 (284)	1.1 (28)	3.1 (79)	2.31 (1.05)

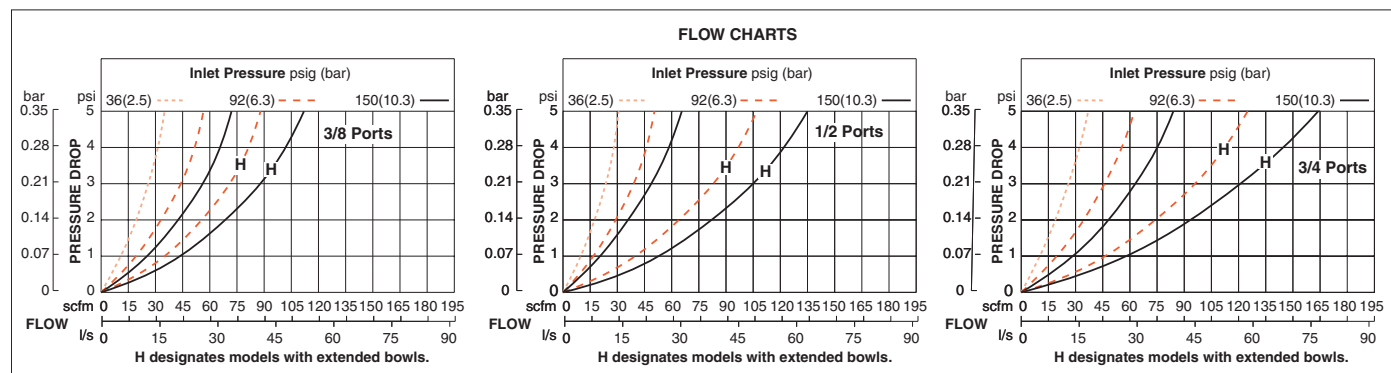
* Bowl removal clearance: add 3.1 (79). Extended Bowl removal clearance: add 6.1 (155).



ISO Symbols
Adsorbing Filter
Manual Drain



REPLACEMENT FILTER CARTRIDGE		
Filter Rating	Bowl Type	Part Number
0.01-µm	Standard	R-A115-117E8
	Extended	R-A115-118E8



Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Fiber.

Ambient/Media Temperature:

With polycarbonate bowl: 40° to 125°F (4° to 52°C).

With metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure:

With polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

With metal bowl: 0 to 200 psig (0 to 14 bar).

Bowl Drain: Manual.

Filter Cartridge: Activated carbon with urethane seals.

Body: Zinc.

Bowl: Polycarbonate bowl with steel shatterguard, aluminum bowl, or extended aluminum bowl.

Bowl Ring: Nylon.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 125 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD3 CAP 1 A C 1 2 2 A 1

BOWL SIZE	
Polycarbonate Bowl 5.1-oz (151-ml)	1
Metal Bowl 6-oz (177-ml)	2
Extended Metal Bowl 10-oz (295-ml)	3

COALESCING FILTER ELEMENT TYPE	
0.3 µm Borosilicate glass	A
0.01 µm Borosilicate glass	B

BOWL DRAIN	
Manual Drain	1
Float Drain	F

PIPE SIZE	
1/4 NPTF	2
3/8 NPTF	3
1/2 NPTF	4
1/4 BSPP	B
3/8 BSPP	C
1/2 BSPP	D

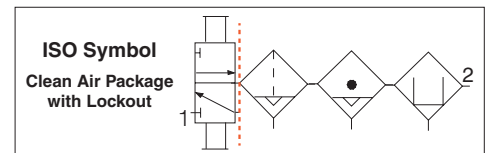
CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

ADD on L-O-X® - Optional	
L-O-X® on outlet side	1
L-O-X® on the inlet side	2
EEZ-ON® on outlet side	3
EEZ-ON® on inlet side	4
Blank - No L-O-X®	

DIFFERENTIAL PRESSURE GAUGE	
No Gauge (without gauge port)	A
Small Slide Gauge	S



E1



REPLACEMENT COALESCING ELEMENTS		
Element Rating	Bowl Type	Part Number
0.3-µm	Polycarbonate	R-A60F-23
	Metal	R-A60F-29
	Extended Metal	R-A60F-32
0.01-µm	Polycarbonate	R-A60F-23E8
	Metal	R-A60F-29E8
	Extended Metal	R-A60F-32E8

REPLACEMENT ADSORBING ELEMENTS	
Bowl Type	Part Number
Polycarbonate	R-A60F-29E9
Metal	R-A60F-29E9
Extended Metal	R-A60F-29

REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	R-A60F-03PE5

E

Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter, Coalescing Filter - Fiber.
Ambient/Media Temperature:
 With polycarbonate bowl: 40° to 125°F (4° to 52°C).
 With metal bowl: 40° to 175°F (4° to 80°C).
 With metal bowl & float drain: 40° to 175°F (4° to 80°C).
Inlet Pressure - Automatic drain model:
 With polycarbonate bowl: 30 to 150 psig (2 to 10 bar).
 With metal bowl: 30 to 200 psig (2 to 14 bar).
Inlet Pressure - Manual drain model:
 With polycarbonate bowl: 0 to 150 psig (0 to 10 bar).
 With metal bowl: 0 to 250 psig (0 to 17 bar).
Filter Element: 5-µm-rated polyethylene.

Coalescing Filter Element: 0.3-micron rated or 0.01-micron rated borosilicate-glass-fiber.
Adsorbing Filter Element: Activated carbon with urethane seals.
Bowl Drain:
 Filter and Coalescing Filter: Internal float drain or manual drain.
 Adsorber Filter: Manual drain only.
Body: Die-cast zinc.
Bowl: Polycarbonate bowl with nylon shatterguard; aluminum bowl with clear nylon sight glass; extended aluminum bowl with clear nylon sight glass and higher flow filter element (for coalescing and adsorber filter only).
Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

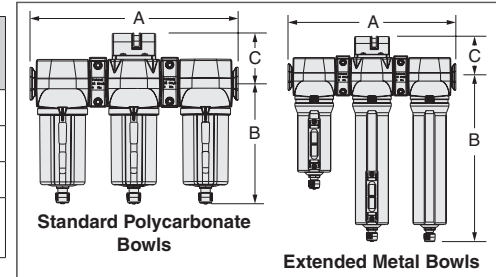
www.rosscontrols.com

E1.25

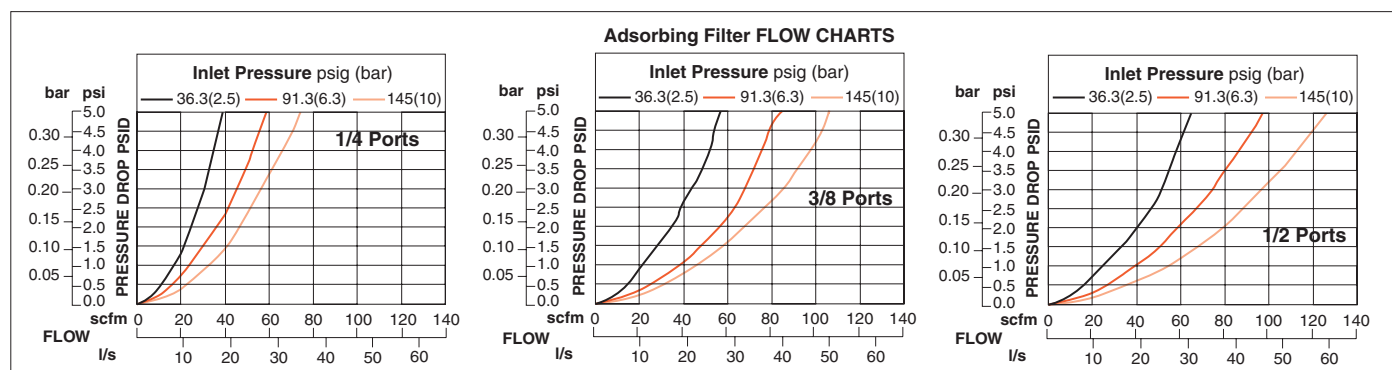
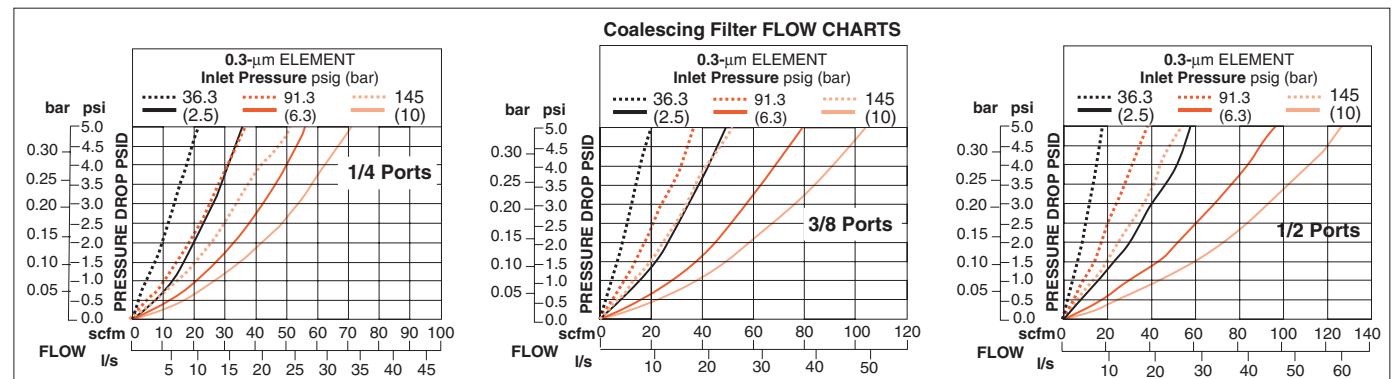
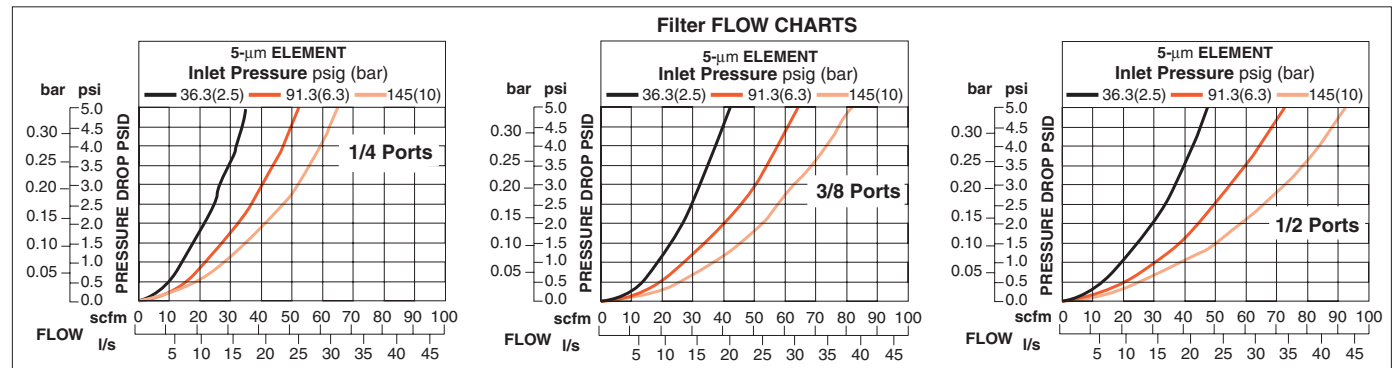
E1

Bowl Size	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A*	B*	C	Depth	
1/4, 3/8, 1/2	Polycarbonate	9.58 (243.3)	5.54 (140.6)	2.38 (59.3)	2.51 (63.8)	4.3 (2.0)
	Aluminum	9.58 (243.3)	6.42 (163.1)	2.38 (59.3)	2.76 (70.1)	4.6 (2.1)
	Extended Aluminum	9.58 (243.3)	9.51 (241.6)	2.38 (59.3)	2.76 (70.1)	4.9 (2.2)

* Lockout: With the lockout valve, add 2.3 (58) to dimension A.
 Bowl removal clearance: add 3.1 (79). Extended Bowl removal clearance: add 6.1 (155).



AIR FLOW and CONSTRUCTION DATA



IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 3/8, 1/2 & 3/4



E1

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD4 **CAP** **1** **A** **B** **1** **5** **2** **L**

BOWL SIZE	
Three Polycarbonate Bowls 9-oz (266-ml)	1
Three Metal Bowls 9-oz (266-ml)	2
One Metal Bowl 9 oz (266-ml) and Two Metal Bowls 15-oz (443-ml)	3

COALESCING FILTER ELEMENT TYPE	
0.3 µm Borosilicate glass	A
0.01 µm Borosilicate glass	B

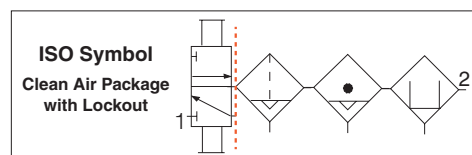
BOWL DRAIN	
Manual	1
Internal Automatic (not available on adsorber)	2
Internal Float drain	F

PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

ADD on L-O-X® - Optional	
L-O-X® on outlet side	1
L-O-X® on the inlet side	2
EEZ-ON® on outlet side	3
EEZ-ON® on inlet side	4
Blank - No L-O-X®	

DIFFERENTIAL PRESSURE GAUGE	
No Gauge (without gauge port)	A
Large Dual Face Gauge	L
Small Slide Gauge	S
Large Dual Face Gauge with Normally Open Reed Switch	E
Large Dual Face Gauge with Normally Open Reed Switch	C



REPLACEMENT FILTER ELEMENTS				
Filter Type	Element Rating	Bowl Type	Element Material	Part Number
Filter	5-µm	Standard	Polyethylene	R-A115-106PE5
Coalescing	0.3-µm	Standard	Borosilicate-glass-fiber	R-A115-117
Coalescing	0.3-µm	Extended	Borosilicate-glass-fiber	R-A115-118
Coalescing	0.01-µm	Standard	Borosilicate-glass-fiber	R-A115-117E8
Coalescing	0.01-µm	Extended	Borosilicate-glass-fiber	R-A115-118E8
Adsorbing	Standard Cartridge	Standard	Activated Carbon	R-A115-117E9
Adsorbing	Extended Standard Cartridge	Extended	Activated Carbon	R-A115-118E9

E

Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter, Coalescing Filter - Fiber.

With polycarbonate bowl: 40° to 125°F (4° to 52°C).

With metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

With polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

With metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Internal float drain model:

With polycarbonate bowl: 30 to 150 psig (2 to 10 bar).

With metal bowl: 30 to 200 psig (2 to 14 bar).

Inlet Pressure - Manual drain model:

With polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

With metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Drains: Internal automatic drains for general purpose and coalescing filters; manual drain for adsorbing filter.

Optional internal float drain on polycarbonate bowl only, consult ROSS.

Filter Elements:

General Purpose: 5-micron rated polyethylene.

Coalescing: 0.3-micron rated or 0.01-micron rated borosilicate-glass-fiber; element.

Adsorbing: Activated carbon with urethane seals.

Bowls: Polycarbonate bowls with steel shatterguards; aluminum bowl with clear nylon sight glasses on general purpose and coalescing units, or extended aluminum bowls for coalescing and adsorbing filters.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

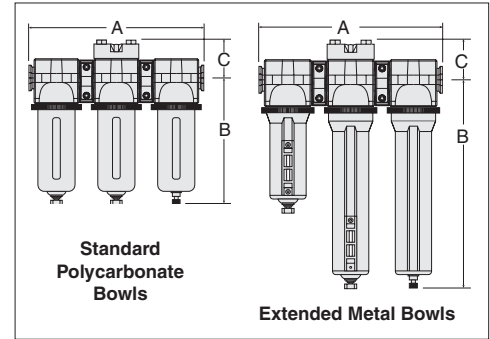
www.rosscontrols.com

E1.27

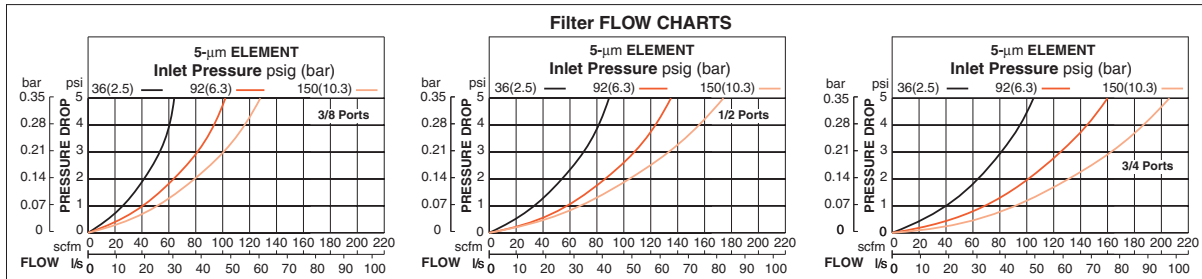
E1

Port Size	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A*	B*	C	Depth	
3/8, 1/2, 3/4	Polycarbonate	10.9 (276)	7.7 (195)	2.2 (55)	2.9 (73)	6.63 (3.01)
	Aluminum	3.5 (88)	7.7 (195)	2.2 (55)	2.9 (73)	6.63 (3.01)
	Extended Aluminum	3.5 (88)	11.2 (284)	2.2 (55)	2.9 (73)	7.00 (3.18)

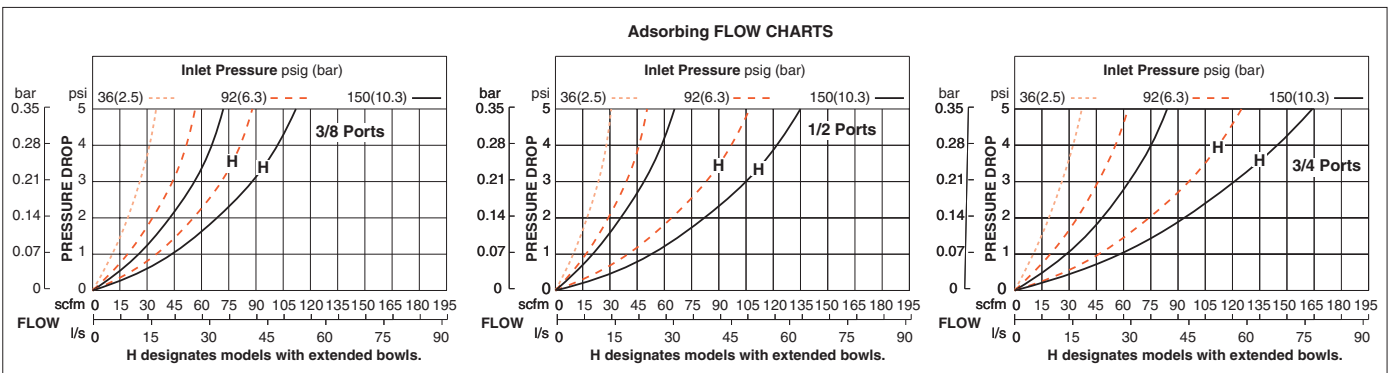
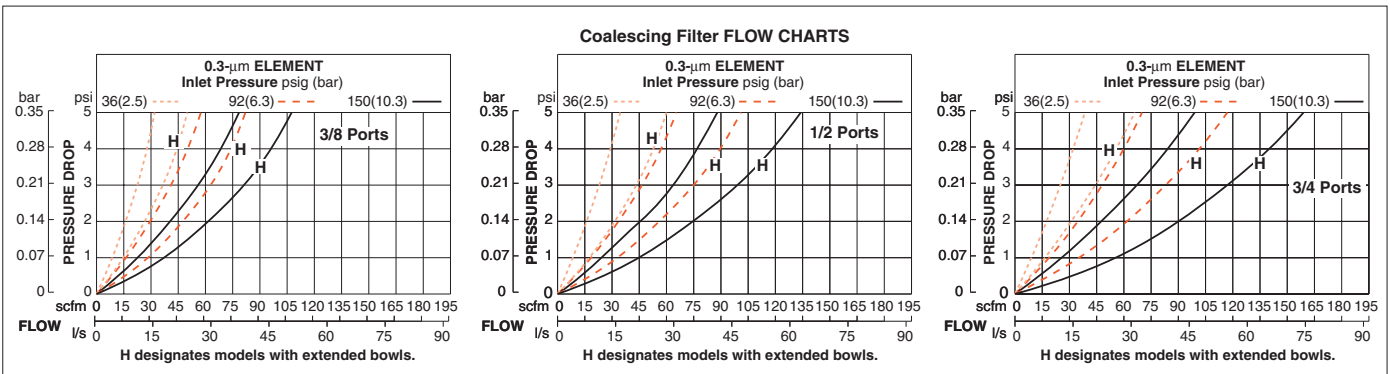
** Lockout: With the lockout valve, add 2.3 (58) to dimension A.
 Bowl removal clearance: add 3.1 (79). Extended Bowl removal clearance: add 6.1 (155).



AIR FLOW and CONSTRUCTION DATA



E



IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Inline Silencers/Reclassifiers

Port Sizes: 1/2, 3/4 & 1

Port Size	Bowl Type	Model Numbers*
1/2	Polycarbonate	5055B4009
3/4	Polycarbonate	5055B5009
1	Polycarbonate	5055B6009

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5055B4009.



1/2 Model



3/4 & 1 Model

Port Size	Dimensions inches (mm)				Weight lb (kg)
	A	B	C	Depth	
1/2	3.5 (89)	5.5 (140)	0.7 (18)	3.5 (89)	1.3 (0.59)
3/4	4.2 (107)	8.4 (213)	2.7 (69)	4.2 (107)	2.8 (1.27)
1	4.2 (107)	8.4 (213)	2.7 (69)	4.2 (107)	2.8 (1.27)

1/2 Model

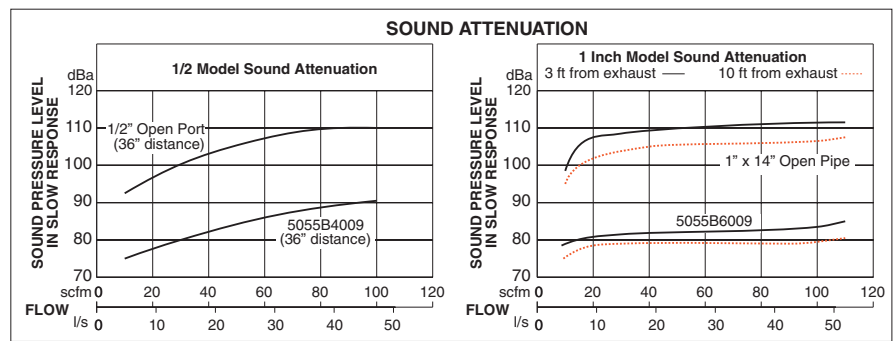
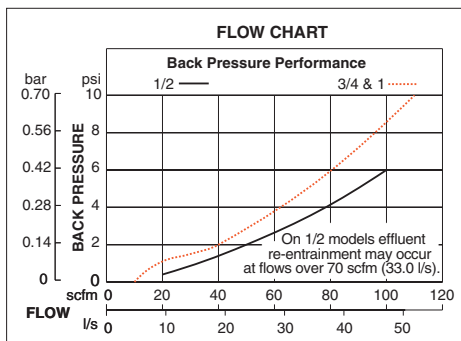
3/4 & 1 Model

REPLACEMENT FILTER ELEMENTS			
Port Size	Element Rating	Element Material	Part Number
1/2	20-µm	Sintered Bronze	940K77
3/4, 1	100-µm	Sintered Bronze	981K77

SOUND ATTENUATION DATA

Constant-flow tests - conducted in a 14' x 22' room with a 14' ceiling.

Sound pressure levels - recorded using a B & K precision impulse sound meter (model 22045), a 1-inch microphone (DB0375), a flexible extension rod (UA0196), and a random incidence corrector (UA0055). Test system was mounted on the 14-foot wall with exhaust port 4 feet from the 14-foot wall.



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Sintered.

Ambient/Media Temperature: 40° to 125°F (4° to 51°C).

Fluid Media: Compressed air.

Inlet Pressure: 5 to 150 psig (0.3 to 10 bar).

Filter Element: Sintered bronze.

Bowl: Polycarbonate.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

Inline Drip Leg

Drains

E1

Port Sizes: 3/4, 1, 1¼, 1½ & 2

Port Size	Model Numbers*						
	with Drain-Cock		with Ball Valve				
	Bowl Capacity ounce (ml)						
	35 (1035)	62 (1833)	35 (1035)	62 (1833)	120 (3548)	230 (6801)	340 (10055)
3/4	RC012-01	RC012-01-62	RC012-01-BV	RC012-01-62-BV	—	—	—
1	RC013-01	RC013-01-62	RC013-01-BV	RC013-01-62-BV	—	—	—
1¼	RC014-01	RC014-01-62	RC014-01-BV	RC014-01-62-BV	—	—	—
1½	RC015-01	RC015-01-62	RC015-01-BV	RC015-01-62-BV	—	—	—
2		—		RC016-01-120	RC016-01-120	RC016-01-225	RC016-01

* NPT port threads. For BSPP threads add a "D" suffix to the model number e.g., RC012-01D.



E

Port Size	Bowl Capacity ounce (ml)	Dimensions inches (mm)				Weight lb (kg)
		A	B*	C	Depth	
3/4	35 (1035)	4.5 (114)	10.6 (269)	0.81 (21)	4.2 (106)	4.25 (1.93)
	62 (1833)	4.5 (114)	16.2 (412)	0.81 (21)	4.2 (106)	5.00 (2.25)
1	35 (1035)	5.5 (140)	10.6 (269)	1.4 (36)	4.2 (106)	4.25 (1.93)
	62 (1833)	5.5 (140)	16.2 (412)	1.4 (36)	4.2 (106)	5.00 (2.25)
1¼	35 (1035)	5.5 (140)	11.2 (285)	1.4 (36)	4.2 (106)	4.50 (2.04)
	62 (1833)	5.5 (140)	16.7 (424)	1.4 (36)	4.2 (106)	5.81 (2.37)
1½	35 (1035)	5.5 (140)	11.2 (285)	1.4 (36)	4.2 (106)	4.50 (2.04)
	62 (1833)	5.5 (140)	16.7 (424)	1.4 (36)	4.2 (106)	5.81 (2.37)
2	120 (3548)	8.1 (206)	15.5 (394)	4.6 (117)	8.0 (203)	17.00 (7.72)
	230 (6801)	8.1 (206)	22.5 (572)	4.6 (117)	8.0 (203)	21.9 (9.82)
	340 (10055)	8.1 (206)	29.5 (749)	4.6 (117)	8.0 (203)	26.8 (11.92)

ISO Symbols

Filter

Drip Leg Drain

* Add 3.5 inches (89 mm) to Dimension "B" and 0.29 lb (0.13 kg) to weight for units with Ball valves (BV option).

The ROSS Drip Leg Drain replaces conventional welded drip legs through improvements in both performance and serviceability resulting in increased machine productivity.

The ROSS Drip Leg Drain has a baffling device that increases the contamination removal efficiency by requiring the air to make more direction changes than a standard drip leg drain. This efficiency gain puts less contamination at the point of filtration, allowing the filter to function longer before maintenance is necessary.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Ambient/Media Temperature: 40° to 175° F (4° to 79°C).

Heads: Aluminum.

Fluid Media: Compressed air.

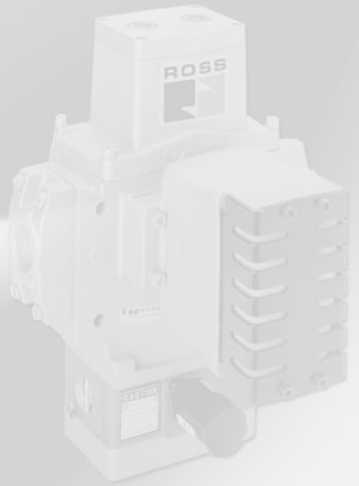
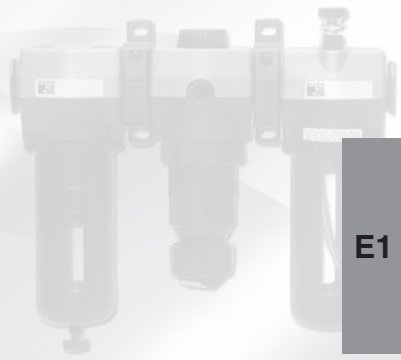
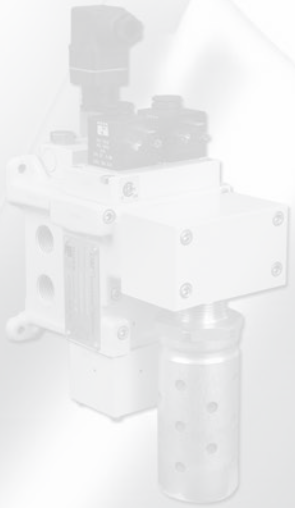
Bowl Rings: Aluminum.

Inlet Pressure: 15 to 200 psig (1 to 14 bar).

Seals: Nitrite.

Filter Drain: Drain-cock or Ball valve.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



E1

E



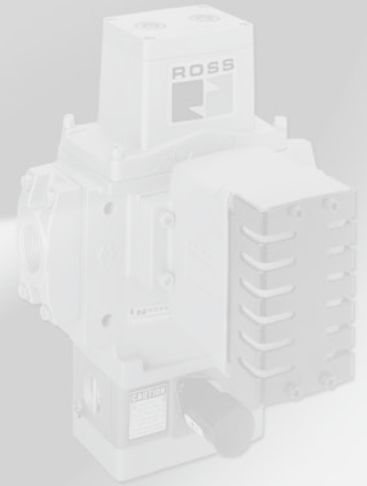
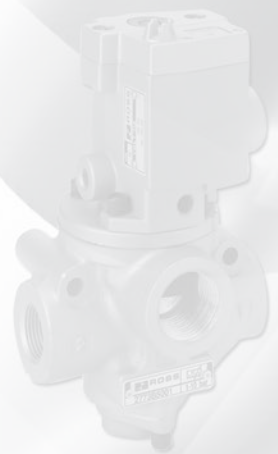
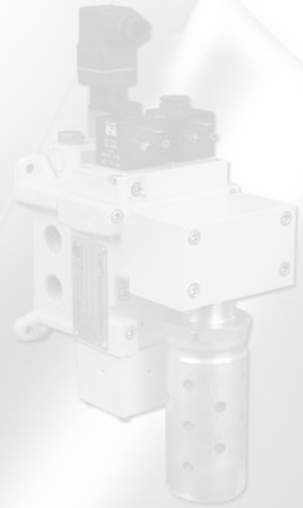
E



ROSS CONTROLS®



PRESSURE REGULATORS



PRESSURE REGULATORS – KEY FEATURES

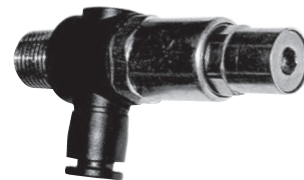
- Two design options available:
Piston design for highest air flow
Diaphragm design for high sensitivity and quick response
- Modular or Inline Mounting options
- Pressure Gauge included
- Removable Adjusting Knob for tamper resistance
- Self-relieving or non-relieving options
- Reverse Flow option available on some regulator models
- T-Handle option available on some regulator models

REGULATOR TYPE/SERIES	AVAILABLE PORT SIZES											MOUNTING		FLOW	CONSTRUCTION		OPTIONS					Page
	1/8	1/4	3/8	1/2	3/4	1	1¼	1½	2	3	INLINE	MODULAR	MAX FLOW (scfm)	PISTON	DIAPHRAM	SELF RELIEVING	NON RELIEVING	REVERSE FLOW	T-HANDLE	LOCKING KNOB		
REGULATORS																						
RIGHT ANGLE													55								E2.3	
BANTAM													23								E2.4	
MINIATURE													40								E2.5	
MID-SIZE													100								E2.6	
MD3™													120								E2.7	
FULL-SIZE													155								E2.8	
MD4™													220								E2.9	
HIGH-CAPACITY													800								E2.10	
HIGH-PRESSURE REGULATORS																						
HIGH-PRESSURE													70								E2.11	
PRECISION REGULATORS																						
MINIATURE													4								E2.12	
FULL-SIZE													155								E2.13	
MD4™													170								E2.14	
HIGH-CAPACITY													800								E2.15	
REMOTE PILOT REGULATORS																						
FULL-SIZE													155								E2.16 - E2.18	
MD4™													190								E2.19	
HIGH-CAPACITY													4000								E2.20 - E2.23	
RELIEF VALVES																						
MINIATURE													40								E2.24	
HIGH-FLOW													450								E2.25	
PROPORTIONAL VALVES																						
RER Series													1000								E2.26	
RB-RER Series													4000								E2.27	

Inline Pressure Regulators

RIGHT-ANGLE Series

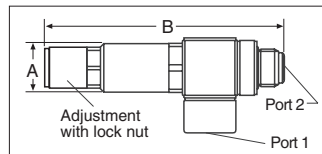
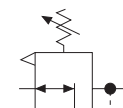
Port Sizes: 1/8, 1/4, 3/8 & 1/2 – Flow to 55 scfm



Models with Threaded Banjo

Port Size		Model Number	Dimensions inches (mm)		Tightening Torque Max. Ft-lb (Nm)
Port 1 (female threads)	Port 2 (male threads)		A	B	
1/8	1/8	5214A1010	0.7 (17)	2.9 (74)	7.38 (10)
1/4	1/4	5214A2010	0.7 (17)	3.2 (81)	8.85 (12)
3/8	3/8	5214A3010	0.9 (22)	3.5 (88)	14.75 (20)
1/2	1/2	5214A4010	1.1 (27)	3.5 (89)	22.13 (30)
G1/8	G1/8	D5214A1010	0.7 (17)	2.9 (74)	11.06 (15)
G1/4	G1/4	D5214A2010	0.7 (17)	3.2 (81)	14.75 (20)
G3/8	G3/8	D5214A3010	0.9 (22)	3.5 (88)	22.13 (20)
G1/2	G1/2	D5214A4010	1.1 (27)	3.5 (89)	22.50 (30)

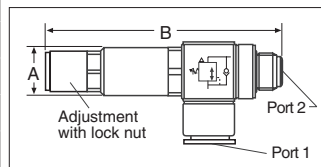
ISO Symbol
Regulator
Self-Relieving



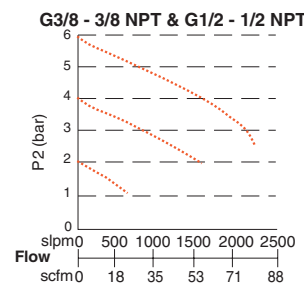
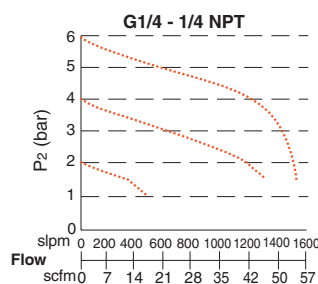
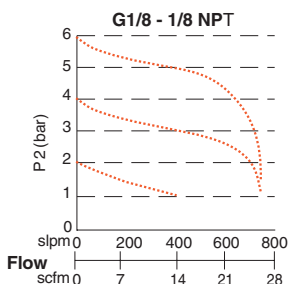
Models with Push-to-Connect Fitting

Port Size		Valve Model Number	Dimensions inches (mm)		Tightening Torque Max. Ft-lb (Nm)
Port 1* (tube size)	Port 2** (thread size)		A	B	
5/32"	1/8	5214A1115	0.7 (17)	2.9 (73)	11.06 (15)
1/4"	1/8	5214A1120	0.7 (17)	2.9 (73)	11.06 (15)
1/4"	1/4	5214A2120	0.7 (17)	3.2 (81)	14.75 (20)
3/8"	1/4	5214A2130	0.7 (17)	3.2 (81)	14.75 (20)
3/8"	3/8	5214A3130	0.9 (22)	3.5 (88)	22.13 (30)
4 mm	G1/8	D5214A1140	0.5 (13)	2.9 (73)	7.38 (10)
6 mm	G1/8	D5214A1160	0.5 (13)	2.9 (73)	7.38 (10)
8 mm	G1/8	D5214A1180	0.5 (13)	2.9 (73)	7.38 (10)
6 mm	G1/4	D5214A2160	0.7 (17)	3.2 (81)	8.85 (12)
8 mm	G1/4	D5214A2180	0.7 (17)	3.2 (81)	8.85 (12)
10 mm	G1/4	D5214A2110	0.7 (17)	3.2 (81)	8.85 (12)
8 mm	G3/8	D5214A3180	0.9 (22)	3.5 (88)	14.75 (20)
10 mm	G3/8	D5214A3110	0.9 (22)	3.5 (88)	14.75 (20)

Port 1 tubing size in inches (") or millimeters (mm). ** Port 2 threads are male.



FLOW CHARTS



STANDARD SPECIFICATIONS (for products on this page):

Construction: Self-relieving.

Ambient/Media Temperature: 15° to 160°F (-10° to 70°C).

Flow Media: Filtered air.

Inlet Pressure: 15 to 240 psig (1 to 17 bar).

Regulated Pressure Range: 15 to 120 psig (1 to 8 bar).

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

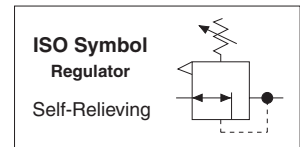
www.rosscontrols.com

E2.3

Port Sizes: 1/8, 1/4 & 3/8 – Flow to 23 scfm

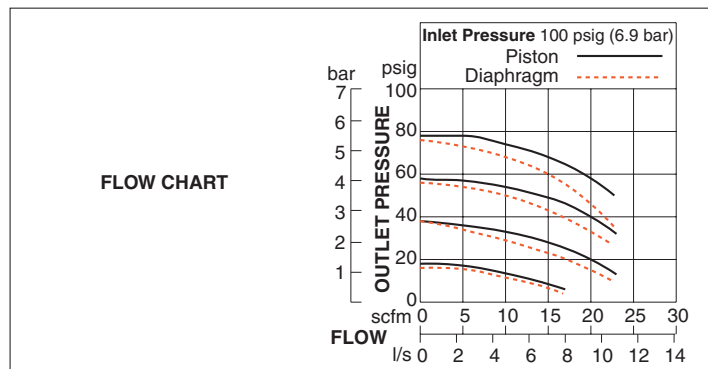
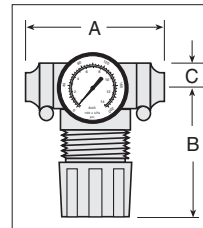
Port Size	Model Numbers*					
	Piston			Diaphragm		
	Regulated Pressure psig (bar)					
	0-50 (0-3.4)	0-100 (0-6.9)	0-125 (0-8.6)	0-50 (0-3.4)	0-100 (0-6.9)	0-125 (0-8.6)
With THREADED PORTS						
1/8	5B01C0030	5B01C0010	5B01C0050	5B01C0040	5B01C0020	5B01C0060
1/4	5B02C0030	5B02C0010	5B02C0050	5B02C0040	5B02C0020	5B02C0060
With Quick Connect TUBE FITTINGS						
1/4	5B03C0030	5B03C0010	5B03C0050	5B03C0040	5B03C0020	5B03C0060
3/8	5B04C0030	5B04C0010	5B04C0050	5B04C0040	5B04C0020	5B04C0060
4mm	5B05C0030	5B05C0010	5B05C0050	5B05C0040	5B05C0020	5B05C0060
6mm	5B06C0030	5B06C0010	5B06C0050	5B06C0040	5B06C0020	5B06C0060
8mm	5B07C0030	5B07C0010	5B07C0050	5B07C0040	5B07C0020	5B07C0060
10mm	5B08C0030	5B08C0010	5B08C0050	5B08C0040	5B08C0020	5B08C0060

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5B01C0030.



Port Size	Dimensions inches (mm)				Weight lb (kg)
	A	B	C	Depth*	
No Port	1.7 (43)	2.6 (67)	0.5 (13)	1.8 (45)	0.21 (0.09)
1/8, 1/4	3.0 (76)	2.6 (67)	0.5 (13)	1.8 (45)	0.43 (0.19)
<i>Models below have quick-connect tube fittings.</i>					
1/4	3.4 (86)	2.6 (67)	0.5 (13)	1.8 (45)	0.21 (0.09)
3/8	3.9 (99)	2.6 (67)	0.5 (13)	1.8 (45)	0.21 (0.09)
4 mm	3.4 (86)	2.6 (67)	0.5 (13)	1.8 (45)	0.41 (0.18)
6 mm	3.4 (86)	2.6 (67)	0.5 (13)	1.8 (45)	0.41 (0.18)
8 mm	3.1 (79)	2.6 (67)	0.5 (13)	1.8 (45)	0.41 (0.18)
10 mm	3.9 (99)	2.6 (67)	0.5 (13)	1.8 (45)	0.41 (0.18)

* Less gauge.



Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Piston or diaphragm.

Self-relieving, for non-relieving option consult ROSS.

Ambient/Media Temperature: 40° to 125°F (4° to 52°C).

Fluid Media: Compressed air.

Inlet Pressure: 150 psig (10 bar) maximum.

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Gauge: 0 to 160 psig (0 to 11 bar); 1/8 gauge ports front and rear.

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Body: Acetal.

Dome and Knob: Acetal.

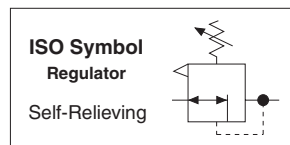
Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/8 & 1/4 – Flow to 40 scfm

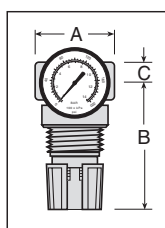
Port Size	Model Numbers*					
	Piston			Diaphragm		
	Regulated Pressure psig (bar)					
	0-50 (0-3.4)	0-100 (0-6.9)	0-125 (0-8.6)	0-50 (0-3.4)	0-100 (0-6.9)	0-125 (0-8.6)
1/8	5212C1004	5211C1004	5213C1004	5212C1005	5211C1005	5213C1005
1/4	5212C2004	5211C2004	5213C2004	5212C2005	5211C2005	5213C2005

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5212C1004.



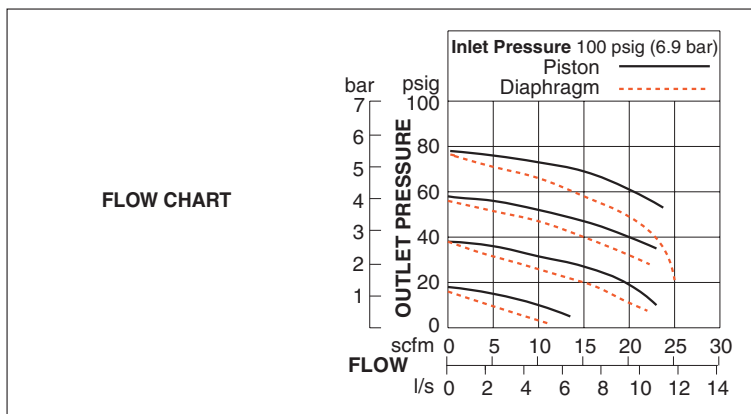
Port Size	Dimensions inches (mm)				Weight* lb (kg)
	A	B	C	Depth*	
1/8, 1/4	1.6 (41)	2.7 (68)	0.4 (10)	1.6 (41)	0.24 (0.11)

* Less gauge.



E2

E



Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Piston or diaphragm.
Self-relieving, for non-relieving option consult ROSS.
Ambient/Media Temperature: 40° to 125°F (4° to 52°C).
Fluid Media: Compressed air.
Inlet Pressure: 300 psig (21 bar) maximum.
Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Gauge: 0 to 160 psig (0 to 11 bar); 1/8 NPT gauge ports front and rear.
Panel Mounting: 1-3/16 inch (30 mm) hole required.
Body: Aluminum.
Dome and Knob: Acetal.
Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Port Sizes: 1/4, 3/8 & 1/2 – Flow to 100 scfm

Port Size	Model Numbers*		
	Pressure Range psig (bar)		
	0-50 (0-3.4)	0-100 (0-6.9)	0-150 (0-10.3)
1/4	5212B2015	5211B2015	5213B2015
3/8	5212B3015	5211B3015	5213B3015
1/2	5212B4015	5211B4015	5213B4015

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5212B2015.

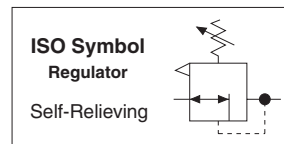


E2

REGULATORS with REVERSE FLOW

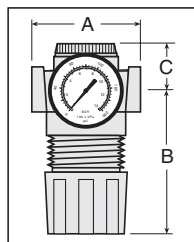
Port Size	Regulated Pressure Range psig (bar)	Model Numbers*	
		Pressure Adjustment	
		Knob	T-Handle
1/4	0-100 (0-6.9)	5X00B2035	5X00B2039
3/8	0-100 (0-6.9)	5X00B3024	5X00B3021
1/2	0-100 (0-6.9)	5X00B4023	5X00B4041

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5X00B2035.



Port Size	Dimensions inches (mm)				Weight* lb (kg)
	A	B	C	Depth*	
1/4, 3/8, 1/2	2.7 (68)	3.3 (83)	1.3 (33)	2.1 (52)	1.0 (0.46)

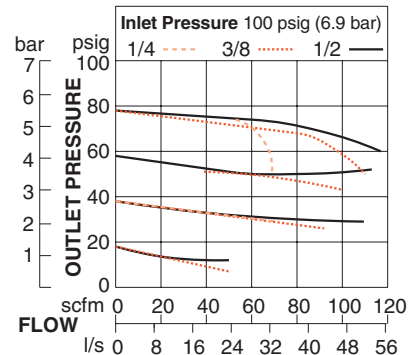
*Less gauge.



E

Reverse-Flow Regulators provide regulated in-to-out pressure control, plus quick exhausting from out-to-in. Used for downstream pressure regulation of weld guns and other applications requiring quick exhausting through the regulator.

FLOW CHART



Pressure Gauge included.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Piston.

Self-relieving, for non-relieving option consult ROSS.

Ambient/Media Temperature: 40° to 125°F (4° to 52°C).

Fluid Media: Compressed air.

Inlet Pressure: 250 psig (17 bar) maximum.

Outlet Pressure: Adjustable up to 150 psig (10 bar).

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Panel Mounting: 1-9/16 inch (40 mm) hole required.

Body: Zinc.

Cap: Nylon.

Dome: Acetal.

Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 120 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD3 **52K** **A** **R** **C** **2** **2** **A**

ADJUSTMENT TYPE	
Knob	52K
Tee Handle	52T
Locking Knob	52L

ADJUSTMENT RANGE	
0-200 psig (0-13.8 bar)	A
0-150 psig (0-10.3 bar)	B
0-100 psig (0-6.9 bar)	C
0-50 psig (0-3.4 bar)	D

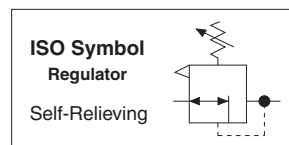
PIPE SIZE	
1/4 NPTF	2
3/8 NPTF	3
1/2 NPTF	4
1/4 BSPP	B
3/8 BSPP	C
1/2 BSPP	D

FLOW OPTIONS	
Reverse Flow	R
Standard Flow	S

GAUGE	
No Gauge (without gauge port)	A
With Gauge 0-200 psig (0-13.8 bar)	B
With Gauge 0-60 psig (0-4.1 bar)	C
No Gauge, With Panel Mount Nut	D
With Panel Mount Nut & Gauge 0-200 psig (0-13.8 bar)	E
With Panel Mount Nut & Gauge 0-60 psig (0-4.1 bar)	F

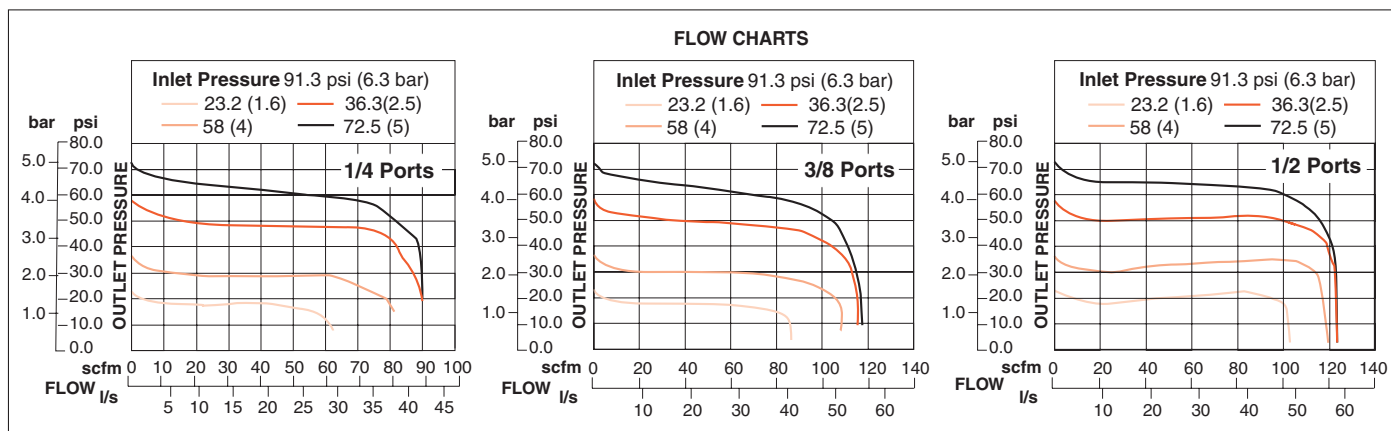


E2



Port Size	Dimensions inches (mm)				Weight† lb (kg)
	A	B*	C**	Depth†	
1/4, 3/8, 1/2, 3/4	3.0 (76.2)	4.52 (114.9)	1.46 (37)	2.51 (63.8)	1.9 (0.86)

* Dome removal clearance: add 0.575 (14.6).
** Cap removal clearance: add 0.750 (19.1).
† Less gauge.



E

Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving, for non-relieving option consult ROSS.
Ambient/Media Temperature: 40° to 175°F (4° to 80°C).
Fluid Media: Compressed Air.
Inlet Pressure: 300 psig (21 bar) maximum.
Outlet Pressure: Adjustable up to 200 psig (14 bar); optional adjusting springs.
Optional Pressure Adjustment Locking Key: Removable.
Pressure Gauge: 0-200 psig (0-14 bar) or 0-60 psig (0-4 bar); 1/4-NPT gauge ports front and rear.

Panel Mounting: 2-1/16 inch (52 mm) hole required.
Self-relieving: Non-relieving optional.
Body: Zinc.
Dome: Nylon.
Knob: Acetal.
Seals: Nitrile.
Valve: Brass.
Valve Cap: Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E2.7

Port Sizes: 1/4, 3/8, 1/2 & 3/4 – Flow to 155 scfm

Port Size	Model Numbers*		
	Pressure Range psig (bar)		
	0-50 (0-3.4)	0-125 (0-8.6)	0-175 (0-12.1)
1/4	5212B2017	5211B2017	5213B2017
3/8	5212B3017	5211B3017	5213B3017
1/2	5212B4017	5211B4017	5213B4017
3/4	5212B5027	5211B5027	5213B5027

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5212B2017.

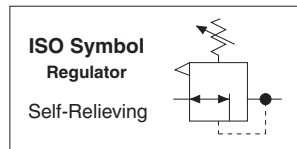


E2

REGULATORS with REVERSE FLOW

Port Size	Model Numbers*	
	Pressure Adjustment 0-125 (0-8.6)	
	Knob	T-Handle
1/4	5X00B2010	–
3/8	5X00B3004	5X00B3012
1/2	5X00B4004	5X00B4047
3/4	5X00B5034	5X00B5044

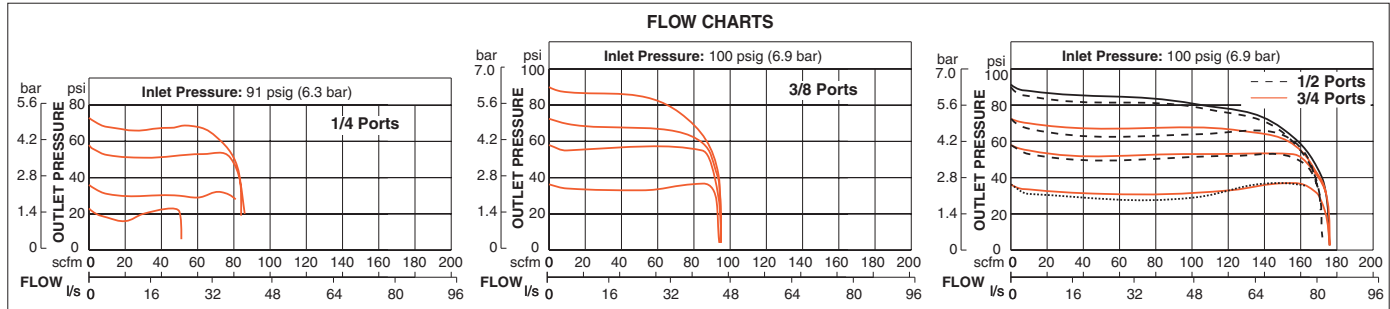
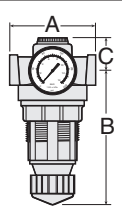
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5X00B2010.



E

Port Size	Dimensions inches (mm)				Weight† lb (kg)
	A	B**	C***	Depth†	
1/4, 3/8, 1/2, 3/4	3.5 (89)	5.8 (146)	1.3 (33)	2.8 (71)	2.06 (0.92)

** Dome removal clearance: add 0.63 (16).
*** Cap removal clearance: add 0.5 (13).
† Less gauge.



Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving, for non-relieving option consult ROSS.
Ambient/Media Temperature: 40° to 175°F (4° to 80°C).
Fluid Media: Compressed air.
Inlet Pressure: 300 psig (21 bar) maximum.
Outlet Pressure: Adjustable up to 175 psig (12 bar).
Pressure Adjustment Locking Key: Removable.
Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Panel Mounting: 2-1/16 inch (52 mm) hole required.
Body: Zinc.
Dome: Nylon; aluminum with optional 0 to 175 psig (0 to 12 bar) spring.
Knob: Acetal.
Seals: Nitrile.
Valve: Brass.
Valve Cap: Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 3/8, 1/2 & 3/4 – Flow to 220 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD4 **52K** **A** **S** **B** **5** **2** **B**



ADJUSTMENT TYPE	
Knob	52K
Tee Handle	52T

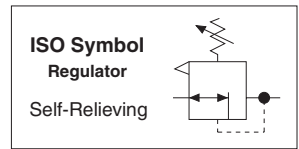
ADJUSTMENT RANGE	
0-175 psig (0-12.1 bar)	A
0-125 psig (0-8.6 bar)	B
0-50 psig (0-3.4 bar)	C
0-20 psig (0-1.4 bar)	D

PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

FLOW OPTIONS	
Reverse Flow	R
Standard Flow	S

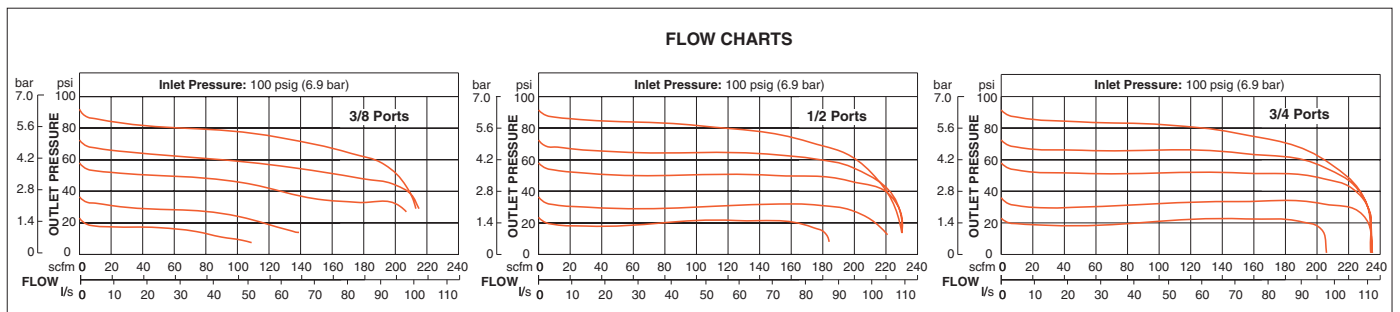
CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

GAUGE	
No Gauge (without gauge port)	A
With Gauge 0-200 psig (0-13.8 bar)	B
With Gauge 0-60 psig (0-4.1 bar)	C
No Gauge, With Panel Mount Nut	D
With Panel Mount Nut & Gauge 0-200 psig (0-13.8 bar)	E
With Panel Mount Nut & Gauge 0-60 psig (0-4.1 bar)	F



Port Size	Dimensions inches (mm)				Weight † lb (kg)
	A	B*	C**	Depth †	
3/8, 1/2, 3/4	3.5 (87)	5.6 (142)	1.6 (40)	2.9 (73)	2.56 (1.16)

*Dome removal clearance: add 0.625 (16).
**Cap removal clearance: add 0.50 (13).
† Dimensions reflect less gauge.



Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving, for non-relieving option consult ROSS.
Ambient/Media Temperature: 40° to 175°F (4° to 80°C).
Fluid Media: Compressed air.
Inlet Pressure: 300 psig (21 bar) maximum.
Outlet Pressure: Adjustable up to 175 psig (12 bar); optional adjusting springs.
Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.
Panel Mounting: 2-1/16 inch (52 mm) hole required.
Body: Zinc.
Dome: Nylon; aluminum with optional 0 to 175 psig (0 to 12 bar) spring.
Knob: Acetal.
Seals: Nitrile.
Valve: Brass.
Valve Cap: Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



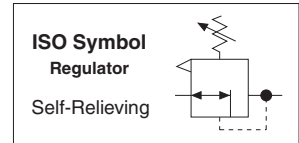
Online Version
Rev. 05/16

www.rosscontrols.com

Port Sizes: 3/4, 1, 1¼ & 1½ – Flow to 800 scfm

Port Size	Model Numbers*	
	Pressure Range psig (bar)	
	0-50 (0-3.4)	0-100 (0-6.9)
3/4	5212D5017	5211D5017
1	5212D6017	5211D6017
1¼	5212C7017	5211C7017
1½	5212C8017	5211C8017

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5212D5017.

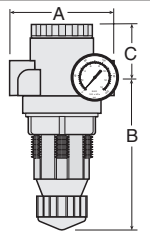


REGULATORS with REVERSE FLOW:

Port Size	Pressure Range psig (bar)	Model Numbers*	
		Pressure Adjustment	
		Knob	T-Handle
3/4	0-100 (0-6.9)	5X00B5049	5X00B5050
1	0-100 (0-6.9)	5X00D6003	5X00B6038
1¼	0-100 (0-6.9)	5X00C7003	5X00B7016
1½	0-100 (0-6.9)	5X00C8001	5X00B8024

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5X00B5049.

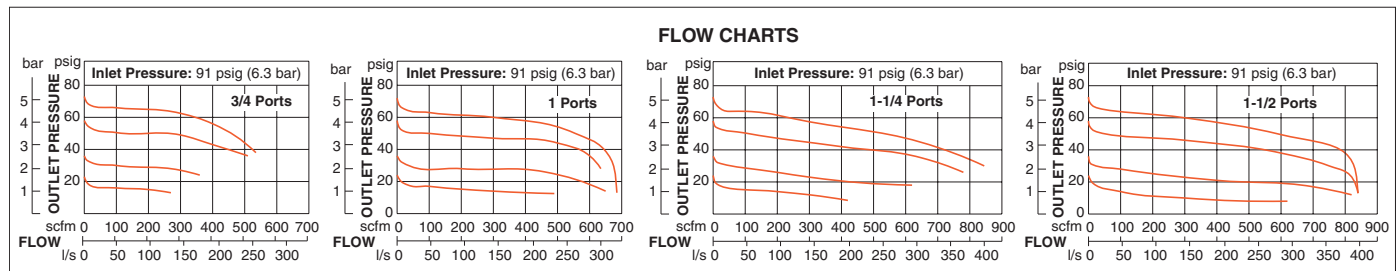
Port Size	Dimensions inches (mm)				Weight † lb (kg)
	A	B**	C***	Depth †	
3/4, 1	4.4 (111)	6.1 (154)	2.4 (62)	2.8 (71)	2.19 (0.99)
1¼, 1½	4.9 (124)	6.4 (162)	2.1 (54)	2.8 (71)	2.50 (1.14)



** Dome removal clearance: add 0.63 (16).

*** Cap removal clearance: add 0.65 (16.5).

† Dimensions reflect less gauge.



Pressure Gauge included.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Piston.
Self-relieving.
Ambient/Media Temperature: 40° to 175°F (4° to 80°C).
Fluid Media: Compressed air.
Inlet Pressure: 300 psig (21 bar) maximum.
Outlet Pressure: Adjustable up to 100 psig (7 bar).
Pressure Adjustment Locking Key: Removable.
Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Panel Mounting: 2-1/16 inch (52 mm) hole required.
Body: Aluminum.
Dome: Nylon; aluminum with optional 0 to 150 psig (0 to 10 bar) spring.
Knob: Acetal
Seals: Nitrile.
Valve: Brass.
Valve Cap: Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/8, 1/4 & 3/8 – Flow to 70 scfm

Port Size	Model Numbers*	
	Piston Type	
	Relieving	Non-relieving
1/8	5215B1004	5X00B1025
1/4	5215B2004	5X00B2076
3/8	5215B3004	5X00B3052

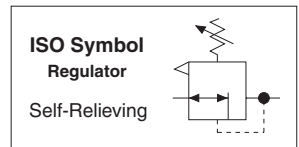
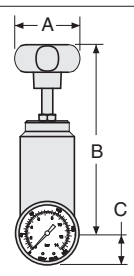
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5215B1004.



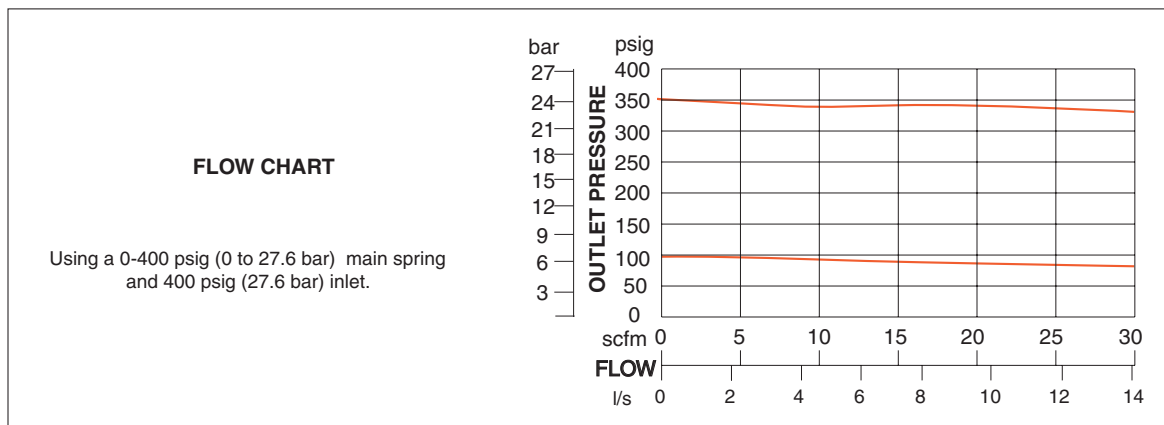
E2

Port Size	Dimensions inches (mm)				Weight** lb (kg)
	A	B	C	Depth**	
1/8, 1/4	1.9 (47)	7.3 (186) max	0.4 (10)	1.9 (47)	1.15 (0.53)
3/8	2.1 (54)	7.4 (188) max	0.5 (13)	2.1 (54)	1.30 (0.59)

** Less gauge.



E



Pressure Gauge included.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Piston.

Self-relieving, Non-relieving.

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

Fluid Media: Compressed air.

Inlet Pressure: 400 psig (28 bar) maximum.

Outlet Pressure: Adjustable up to 390 psig (27 bar).

Pressure Gauge: 0 to 600 psig (0 to 40 bar).

Body and Dome: Aluminum.

Knob: Nylon.

Seals: Fluororelastomer.

Max Flow Rate: 70 scfm (33.0 l/s) @ 400 psi (28 bar).

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E2.11

Port Sizes: 1/8 & 1/4 – Flow to 4 scfm

Port Size	Regulated Pressure Range# psig (bar)	Model Numbers*
1/8	0-50 (0-3.4)	5212C1006
1/4	0-50 (0-3.4)	5212C2006

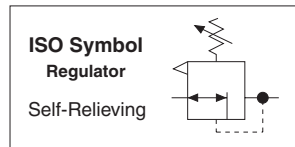
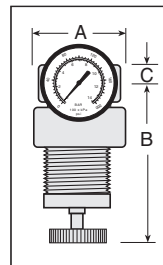
For 0-10 psig (0-0.7 bar), 0-20 psig (0-1.4 bar), and 0-60 psig (0-4.1 bar) ranges, consult ROSS.
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5212C1006.



E2

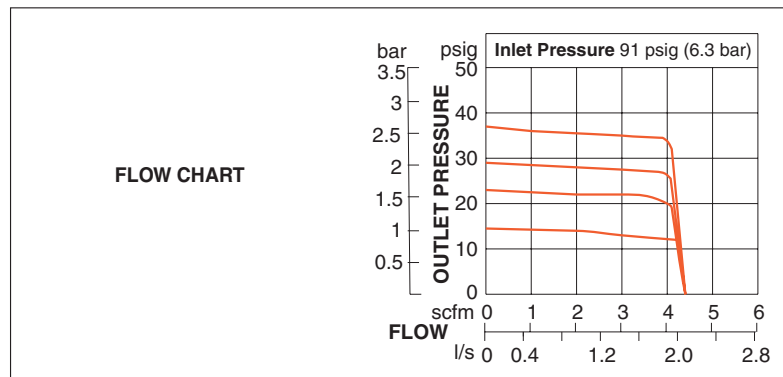
Port Size	Dimensions inches (mm)				Weight** lb (kg)
	A	B	C	Depth**	
1/8, 1/4	1.8 (44)	3.4 (86)	0.4 (10)	1.8 (44)	0.38 (0.16)

**Less gauge.



Precision Regulators have a small valve seat and a large diaphragm area, a combination that allows greater precision, sensitivity, adjustment resolution, and less variation in regulated pressure.

E



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.

Ambient/Media Temperature: 40° to 125°F (4° to 52°C).

Fluid Media: Compressed air.

Inlet Pressure: 300 psig (21 bar) maximum.

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Gauge: 0 to 160 psig (0 to 11 bar); 1/8 NPT gauge ports front and rear.

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Body: Aluminum.

Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/4, 3/8, 1/2 & 3/4 – Flow to 155 scfm

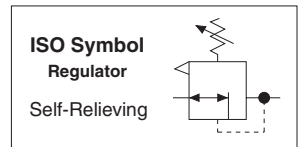


Internally Piloted Regulator		
Port Size	Model Numbers*	
	Pressure Range psig (bar)	
	15-200 (1-13.8)	15-250 (1-17.2)
1/4	5213C2018	5214C2018
3/8	5213C3018	5214C3018
1/2	5213C4018	5214C4018
3/4	5213C5018	5214C5018

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5213C2018.

Port Size	Dimensions inches (mm)				Weight† lb (kg)
	A	B**	C***	Depth†	
1/4, 3/8, 1/2, 3/4	3.5 (89)	4.2 (106)	1.3 (33)	2.8 (71)	2.06 (0.92)

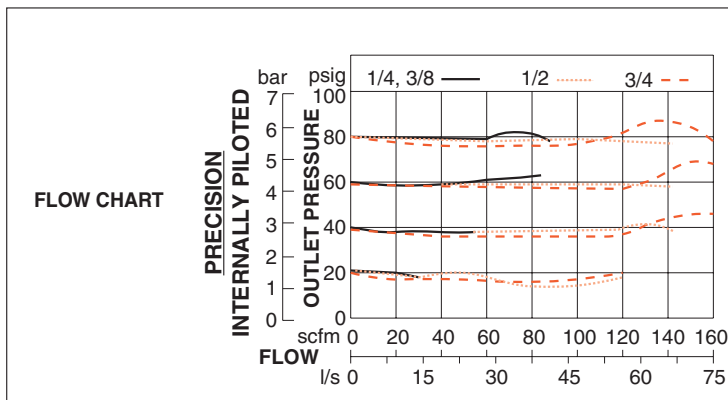
** Dome removal clearance: add 0.63 (16).
 *** Cap removal clearance: add 0.5 (13).
 † Less gauge.



E2

E

Precision internal Pilot Regulators provide improved torque control for pneumatic tools; diaphragm type. Pressure settings held within 3 psig (0.2 bar).



*Pressure Gauge included.
 Accessories ordered separately, refer to page E6.3-4.*

STANDARD SPECIFICATIONS (for products on this page):

- Construction:** Diaphragm. Self-relieving.
- Ambient/Media Temperature:** 40° to 125°F (4° to 52°C).
- Fluid Media:** Compressed air.
- Inlet Pressure:** 300 psig (21 bar) maximum.
- Outlet Pressure:** Adjustable 15 to 250 psig (1 to 17 bar).
- Pressure Adjustment Locking Key:** Removable.
- Pressure Gauge:** 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.
- Panel Mounting:** 2-1/16 inch (52 mm) hole required.
- Body:** Zinc.
- Dome:** Nylon; aluminum with optional 0 to 175 psig (0 to 12 bar) spring.
- Knob:** Acetal.
- Seals:** Nitrile.
- Valve:** Brass.
- Valve Cap:** Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Port Sizes: 3/8, 1/2 & 3/4 – Flow to 170 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

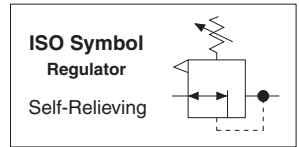
MD4 **52K** **E** **B** **5** **2** **B**

ADJUSTMENT RANGE	
15-200 psig (1.0-13.8 bar)	E
15-250 psig (1.0-17.2bar)	F
15-100 psig (1.0-6.9 bar)	G

PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

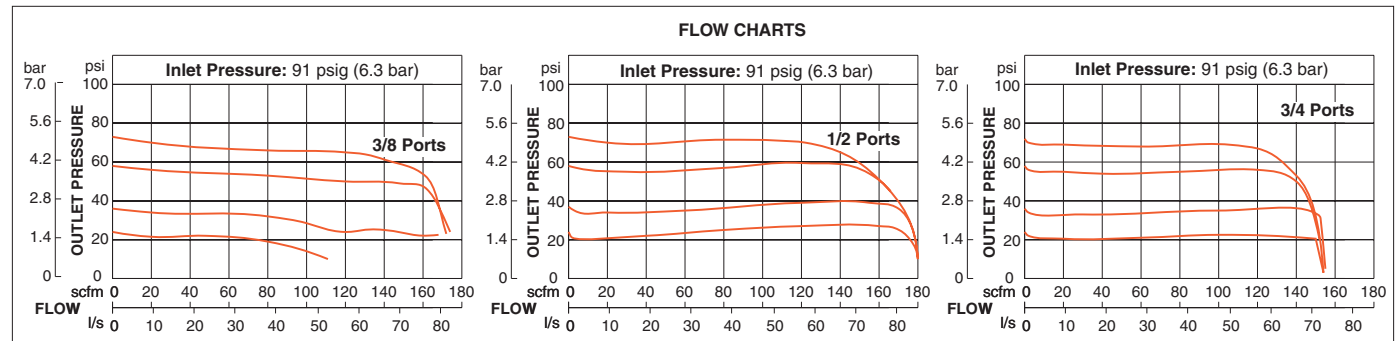
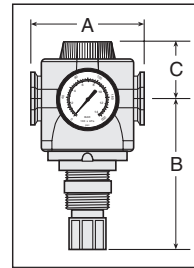
GAUGE	
No Gauge (without gauge port)	A
With Gauge 0-200 psig (0-13.8 bar)	B
No Gauge, With Panel Mount Nut	D
With Panel Mount Nut & Gauge 0-200 psig (0-13.8 bar)	E

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B



Port Size	Dimensions inches (mm)				Weight † lb (kg)
	A	B	C	Depth †	
3/8, 1/2, 3/4	3.5 (87)	4.8 (122)	1.6 (40)	2.9 (73)	2.3 (1.0)

† Dimensions reflect less gauge.



Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.

Ambient/Media Temperature: 40° to 125°F (4° to 52°C).

Fluid Media: Compressed air.

Inlet Pressure: 250 psig (17 bar) maximum.

Outlet Pressure: Adjustable 15 to 250 psig (1 to 17 bar).

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Panel Mounting: 2-1/16 (52 mm) hole required.

Body and Dome: Zinc.

Bonnet and Knob: Acetal.

Seals: Nitrile.

Valve: Brass.

Precision Regulators: Provide improved torque control for pneumatic tools; diaphragm type. Pressure settings held within 3 psig (0.2 bar).

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

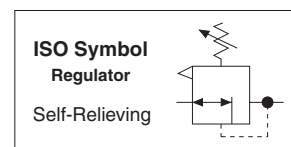
Port Sizes: 3/4, 1, 1 1/4, 1 1/2 – Flow to 800 scfm

Port Size	Model Numbers*	
	Pressure Range psig (bar)	
	15-200 (1-13.8)	15-250 (1-17.2)
3/4	5213D5017	5214D5017
1	5213D6017	5214D6017
1 1/4	5213D7017	5214D7017
1 1/2	5213D8017	5214D8017

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5214D5017.

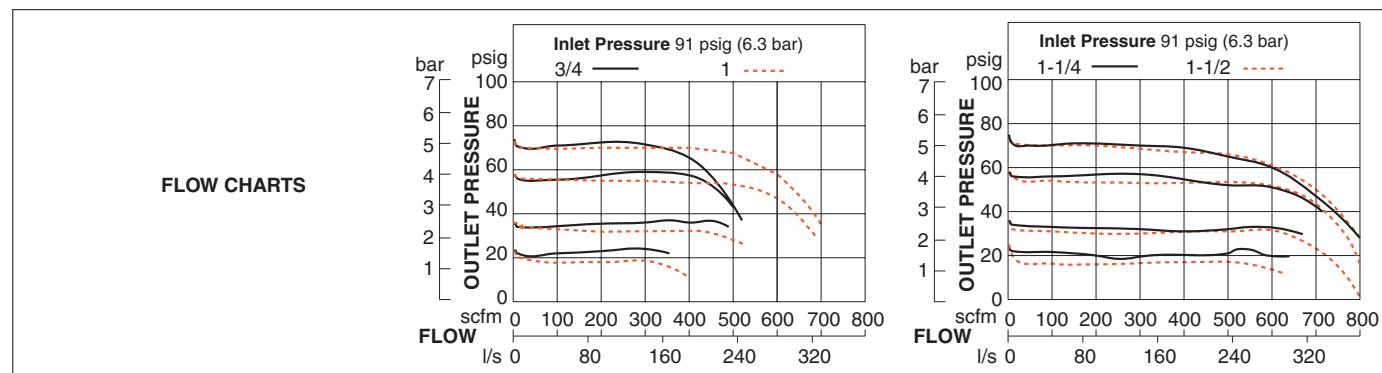


E2



Port Size	Dimensions inches (mm)				Weight † lb (kg)
	A	B	C	Depth †	
3/4, 1	4.4 (111)	4.6 (112)	2.4 (62)	2.8 (71)	2.0 (0.91)
1 1/4, 1 1/2	4.9 (124)	4.9 (125)	2.1 (54)	2.8 (71)	2.38 (1.08)

† Dimensions reflect less gauge.



E

Precision Regulators:

Provide improved torque control for pneumatic tools. Pressure settings held within 3 psig (0.2 bar).

*Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.*

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.

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

Fluid Media: Compressed air.

Inlet Pressure: 300 psig (21 bar) maximum.

Outlet Pressure: Adjustable 15 to 250 psig (1 to 17 bar).

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Panel Mounting: 1-3/16 (30 mm) hole required.

Body: Aluminum.

Bonnet and Knob: Acetal.

Dome: Zinc.

Seals: Nitrile.

Valve: Brass.

Valve Cap: Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

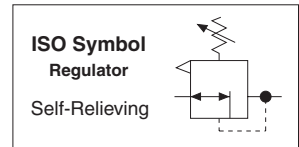
www.rosscontrols.com

E2.15

Port Sizes: 1/4, 3/8, 1/2, 3/4 – Flow to 155 scfm

Port Size	Model Numbers*	
	Pressure Range psig (bar)	
	0-200 (0-13.8)	
1/4	5211C2007	
3/8	5211C3007	
1/2	5211C4007	
3/4	5211C5007	

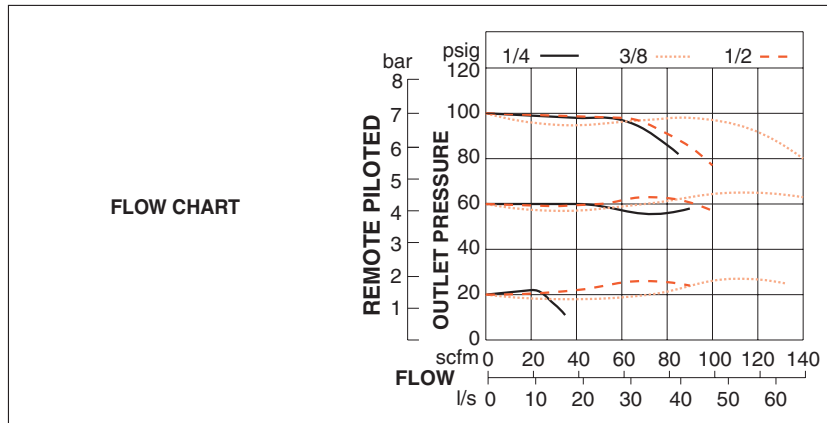
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5211C2007.



Port Size	Dimensions inches (mm)				Weight† lb (kg)
	A	B**	C***	Depth†	
1/4, 3/8, 1/2, 3/4	3.5 (89)	2.4 (62)	1.3 (33)	2.8 (71)	2.06 (0.92)

** Dome removal clearance: add 0.63 (16).
*** Cap removal clearance: add 0.5 (13).
† Less gauge.

Remote Pilot Regulators use any small regulator to provide remote adjustment and to ensure accurate pressure control.



*Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.*

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.
Ambient/Media Temperature: 40° to 175°F (4° to 80°C).
Fluid Media: Compressed air.
Inlet Pressure: 300 psig (21 bar) maximum.
Outlet Pressure: Adjustable 0 to 125 psig (0 to 14 bar).
Pressure Adjustment Locking Key: Removable.
Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Panel Mounting: 2-1/16 inch (52 mm) hole required.
Body: Zinc.
Dome: Zinc.
Knob: Acetal.
Seals: Nitrile.
Valve: Brass.
Valve Cap: Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/4, 3/8, 1/2 & 3/4 – Flow to 150 scfm

Port Size	Model Numbers*
1/4	5X00B2037
3/8	5X00B3025
1/2	5X00B4040
3/4	5X00B5035

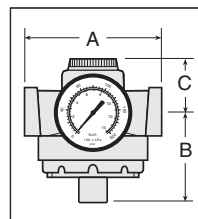
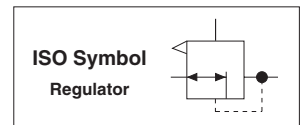
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5X00B2037.



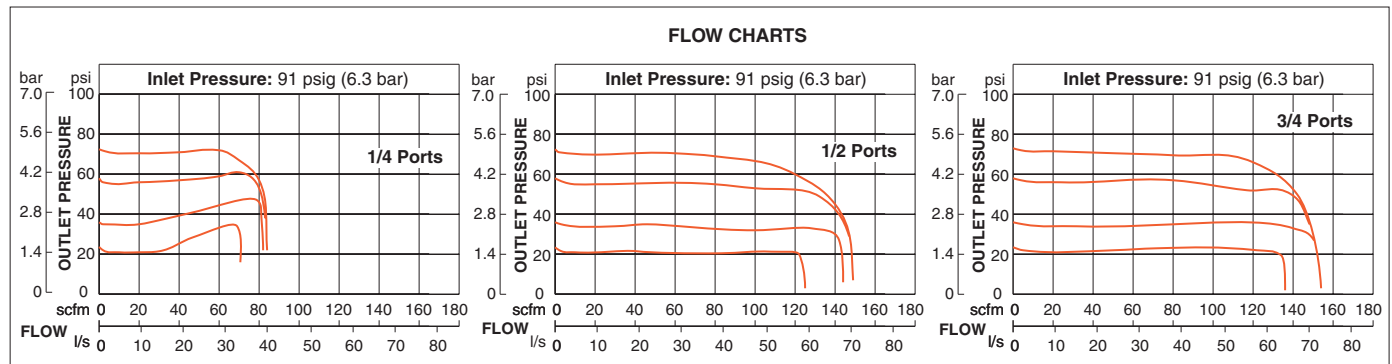
E2

Port Size	Dimensions inches (mm)				Weight † lb (kg)
	A	B	C	Depth †	
1/4, 3/8, 1/2, 3/4	3.5 (87)	2.4 (62)	1.3 (33)	2.8 (71)	2.06 (0.92)

† Dimensions reflect less gauge.



E



*Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.*

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.

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

Fluid Media: Compressed air.

Inlet Pressure: 300 psig (21 bar) maximum.

Outlet Pressure: Adjustable 0 to 200 psig (0 to 14 bar).

Pilot Ports: 1/4 NPTF.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Body and Dome: Zinc.

Seals: Nitrile; Fluororelastomer seals optional, consult ROSS.

Valve: Brass.

Valve Cap: Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E2.17

Inline Premium High-Relief Remote Pilot Regulators

FULL-SIZE Series

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 150 scfm

Port Size	Model Numbers*
1/4	5216A2007
3/8	5216A3007
1/2	5216A4007

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5216A2007.



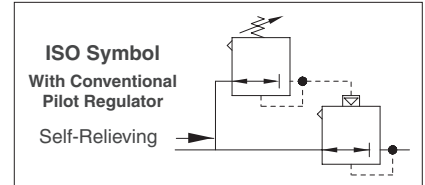
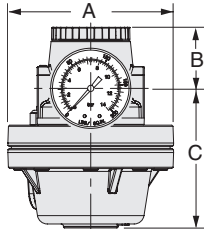
E2

Port Size	Dimensions inches (mm)				Weight† lb (kg)
	A	B**	C***	Depth†	
1/4, 3/8, 1/2	4.18 (106)	1.54 (39.1)	3.52 (89.3)	4.18 (106)	4.84 (2.2)

** Dome removal clearance: add 0.63 (16).

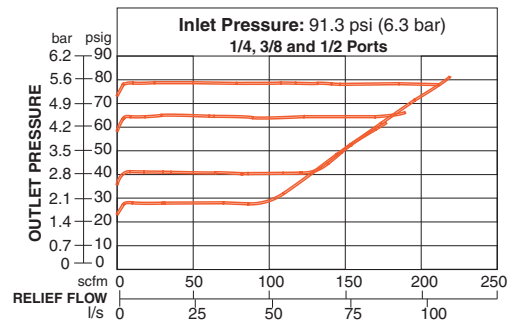
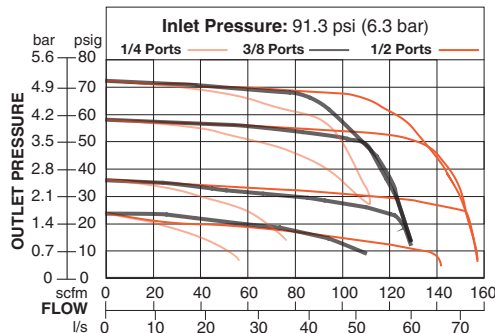
*** Cap removal clearance: add 0.5 (13).

† Less gauge.



E

FLOW CHARTS



Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.

Ambient/Media Temperature: 0° to 158°F (-18° to 70°C).

Fluid Media: Compressed air.

Inlet Pressure: 400 psig (28 bar) maximum.

Outlet Pressure: Adjustable up to 250 psig (17 bar).

Pressure Gauge: 0 to 200 psig (0 to 14 bar) standard, 1/4-NPTF (1/4 BSPP) gauge ports front and rear; 0 to 600 psig (0 to 40 bar) optional.

Body and Dome: Zinc.

Valve: Brass.

Valve Cap: Glass filled Nylon.

Seals: Nitrile

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Remote Pilot Regulators

MD4™ Series

Port Sizes: 3/8, 1/2 & 3/4 – Flow to 190 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

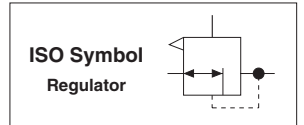
MD4 **52K** **1** **B** **5** **2** **B**

RELIEF OPTION	
Relieving	1
Non-relieving	2

PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

GAUGE	
No Gauge (without gauge port)	A
With Gauge 0-200 psig (0-13.8 bar)	B

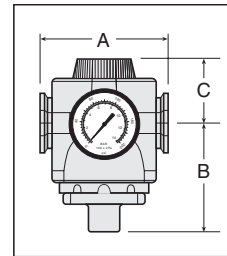
CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B



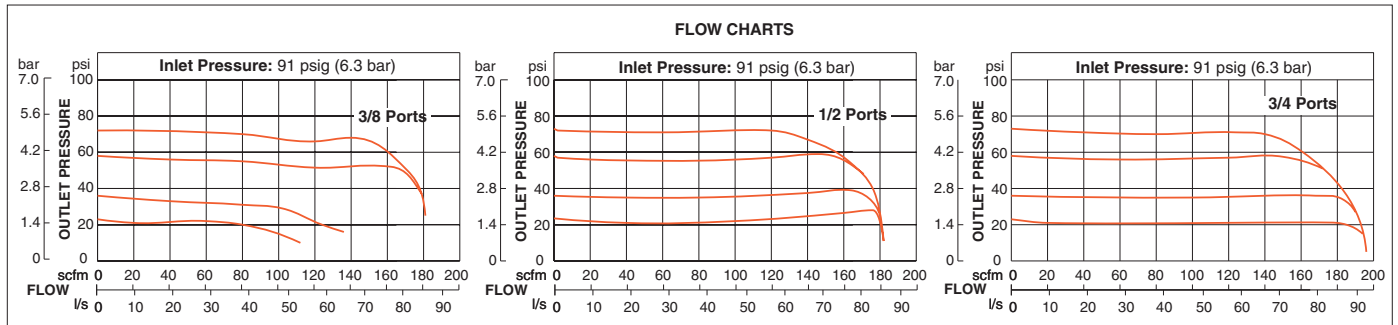
E2

Port Size	Dimensions inches (mm)				Weight † lb (kg)
	A	B	C	Depth †	
1/4, 3/8, 1/2, 3/4	3.5 (87)	2.4 (62)	1.6 (41)	2.9 (73)	2.2 (1.0)

† Dimensions reflect less gauge.



E



Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.

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

Fluid Media: Compressed air.

Inlet Pressure: 300 psig (21 bar) maximum.

Outlet Pressure: Adjustable 0 to 250 psig (0 to 17 bar).

Pilot Ports: 1/4 NPTF.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Body and Dome: Zinc.

Seals: Nitrile.

Valve: Brass.

Valve Cap: Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E2.19

Port Sizes: 3/4, 1, 1 1/4 & 1 1/2– Flow to 740 scfm

Port Size	Model Numbers*
3/4	5211D5006
1	5211D6006
1 1/4	5211D7006
1 1/2	5211D8006

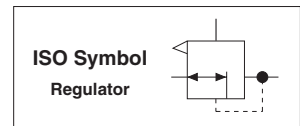
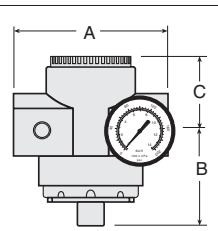
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5211D5006.



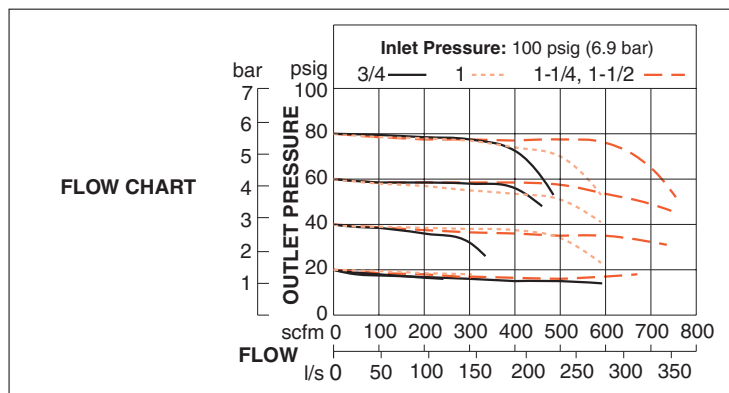
E2

Port Size	Dimensions inches (mm)				Weight† lb (kg)
	A	B*	C**	Depth†	
3/4, 1	4.4 (111)	2.9 (74)	2.4 (62)	2.8 (71)	1.88 (0.85)
1 1/4, 1 1/2	4.9 (124)	3.2 (81)	2.1 (54)	2.8 (71)	2.25 (1.02)

† Less gauge.



E



*Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.*

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.

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

Fluid Media: Compressed air.

Inlet Pressure: 300 psig (21 bar) maximum.

Outlet Pressure: 0 to 200 psig (0 to 14 bar).

NOTE: Outlet pressure depends on the adjustment of the pilot regulator.

Pilot Ports: 1/4 NPTF.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Body: Aluminum.

Dome: Zinc.

Seals: Nitrile.

Valve: Brass.

Valve Cap: Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Inline High-Relief Remote Pilot Regulators

HIGH-CAPACITY Series

Port Sizes: 3/4, 1, 1¼ & 1½ – Flow to 700 scfm

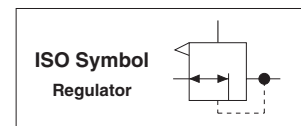
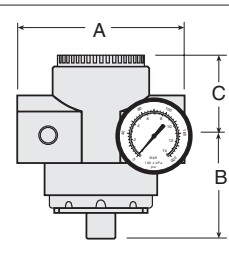
Port Size	Model Numbers*
3/4	5X00B5046
1	5X00B6039
1¼	5X00B7021
1½	5X00B8049

* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5X00B5046.

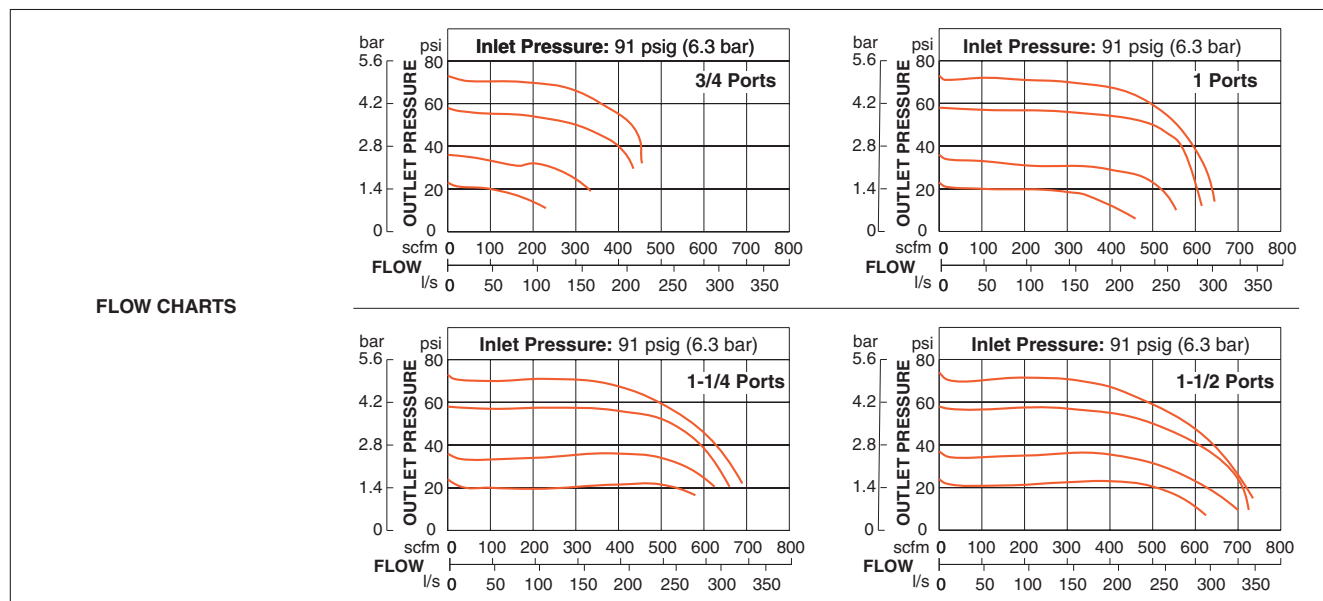


Port Size	Dimensions inches (mm)				Weight† lb (kg)
	A	B**	C***	Depth†	
3/4, 1	4.4 (111)	2.9 (74)	2.4 (62)	2.8 (71)	1.88 (0.85)
1¼, 1½	4.9 (124)	3.2 (81)	2.1 (54)	2.8 (71)	2.25 (1.02)

** Dome removal clearance: add 0.63 (16).
 *** Cap removal clearance: add 0.5 (13).
 † Less gauge.



E2



E

*Pressure Gauge included.
 Accessories ordered separately, refer to page E6.3-4.*

STANDARD SPECIFICATIONS (for products on this page):

- Construction:** Diaphragm. Self-relieving.
- Ambient/Media Temperature:** 40° to 175°F (4° to 80°C).
- Fluid Media:** Compressed air.
- Inlet Pressure:** 300 psig (21 bar) maximum.
- Outlet Pressure:** 0 to 200 psig (0 to 14 bar).
- Pilot Ports:** 1/4 NPTF.
- Pressure Gauge:** 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.
- Body:** Aluminum.
- Dome:** Zinc.
- Seals:** Nitrile.
- Valve:** Brass.
- Valve Cap:** Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
 Rev. 05/16

www.rosscontrols.com

E2.21

Inline Premium High-Relief Remote Pilot Regulators

HIGH-CAPACITY Series

Port Sizes: 3/4, 1 & 1 1/4 – Flow to 400 scfm

Port Size	Model Numbers*
3/4	5216A5007
1	5216A6007
1 1/4	5216A7007

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5216A5007.



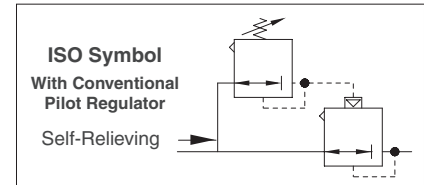
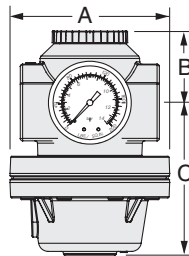
E2

Port Size	Dimensions inches (mm)				Weight† lb (kg)
	A	B**	C***	Depth†	
3/4, 1, 1 1/4	4.18 (117)	1.87 (47.5)	3.99 (101.3)	4.18 (106)	6.44 (3.0)

** Dome removal clearance: add 0.63 (16).

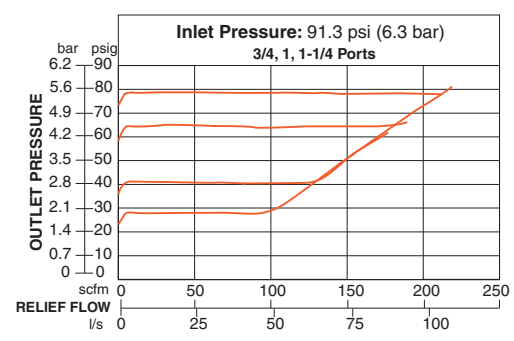
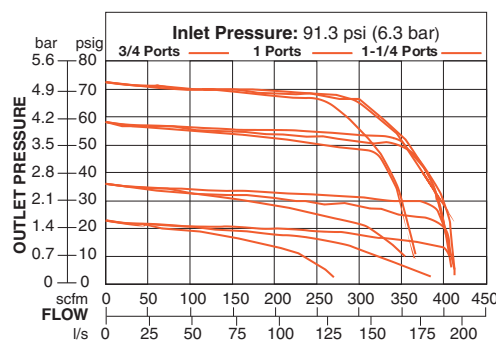
*** Cap removal clearance: add 0.5 (13).

† Less gauge.



E

FLOW CHARTS



Pressure Gauge included.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.

Ambient/Media Temperature: 0° to 158°F (-18° to 70°C).

Fluid Media: Compressed air.

Inlet Pressure: 400 psig (28 bar) maximum.

Outlet Pressure: Adjustable up to 250 psig (17 bar).

Pressure Gauge: 0 to 200 psig (0 to 14 bar) standard, 1/4-NPTF (1/4 BSPP) gauge ports front and rear; 0 to 600 psig (0 to 40 bar) optional.

Body and Dome: Zinc.

Valve: Brass.

Valve Cap: Glass filled Nylon.

Seals: Nitrile

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Inline Remote Pilot Regulators

HIGH-CAPACITY Series

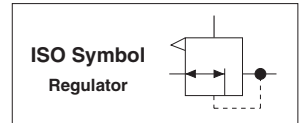
Port Sizes: 1½, 2 & 3 – Flow to 4000 scfm

Flow to 850 scfm	
Port Size	Model Numbers*
1½	5211B8027
2	5211B9007

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5211B8027.

Flow to 4000 scfm		
Port Size	Seals	Model Numbers*
3	Nitrile	5211B9008
3	Fluororelastomer	5X00B9021

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5211B9008.

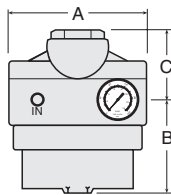


E2

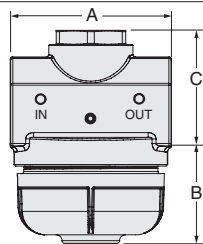
Port Size	Dimensions inches (mm)				Weight† lb (kg)
	A	B	C	Depth†	
1½, 2	6.4 (162)	5.0 (127)	3.0 (76)	2.8 (71)	8.94 (4.06)
3	8.4 (214)	7.36 (187)	3.74 (95)	8.0 (203)	21.77 (9.88)

† Less gauge.

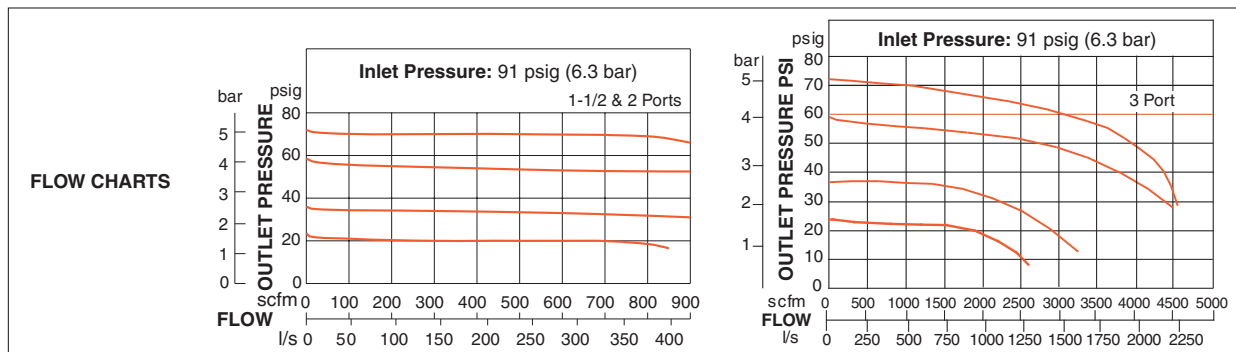
Port Size
1½, 2



Port Size
3



E



Pressure Gauge included.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Piston.

Self-relieving.

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

Fluid Media: Compressed air.

Inlet Pressure: 300 psig (21 bar) maximum.

Outlet Pressure: 0 to 200 psig (0 to 14 bar).

NOTE: Outlet pressure depends on the selection of the pilot regulator.

Pilot Ports: 1/4 NPTF.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Body and Dome: Aluminum.

Seals: Nitrile.

Valve: Brass on ½" & 2" ports; Aluminum on 3" ports.

Valve Cap: Aluminum.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E2.23

Port Sizes: 1/8 & 1/4 – Flow to 40 scfm

Port Size	Model Numbers*			
	Pressure Range psig (bar)			
	1-15 (0.07-1.0)	1-30 (0.07-2.1)	1-50 (0.07-3.4)	1-140 (0.07-9.6)
1/8	5210B1002	5210B1003	5210B1004	5210B1001
1/4	5210B2002	5210B2003	5210B2004	5210B2001

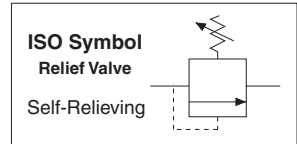
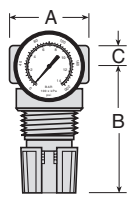
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5210B1002.



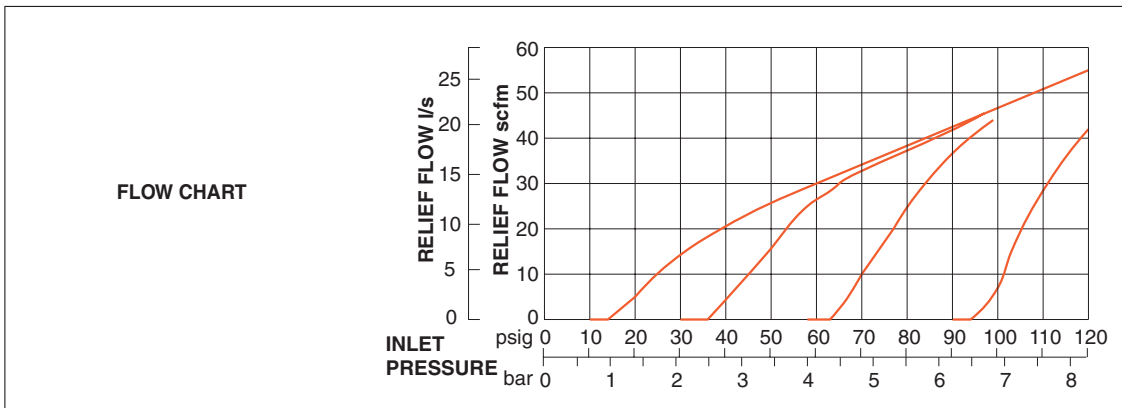
E2

Port Size	Dimensions inches (mm)				Weight† lb (kg)
	A	B	C	Depth†	
1/8, 1/4	1.6 (41)	2.7 (68)	0.4 (10)	1.6 (41)	0.24 (0.11)

† Less gauge.



E



Relief Valves have maximum relief flows of 10 to 20 scfm (4.7 to 9.4 l/s).
For models with increased sensitivity at lower pressure, consult ROSS.

*Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.*

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.

Ambient/Media Temperature: 40° to 125°F (4° to 52°C).

Fluid Media: Compressed air.

Inlet Pressure: 300 psig (21 bar) maximum.

Outlet Pressure: Adjustable 1 to 140 psig (0.07 to 9.6 bar).

Pressure Gauge: 0 to 160 psig (0 to 11 bar); 1/8 NPT gauge ports front and rear.

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Body: Aluminum.

Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Inline Relief Valve

HIGH-FLOW Series

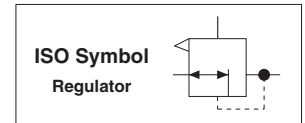
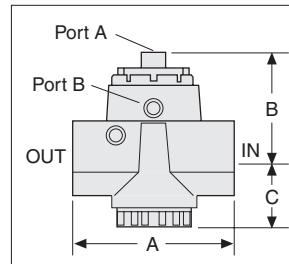
Port Sizes: 1 – Flow to 450 scfm

Port Size	Model Numbers*
1	5X00D6012

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5X00D6012.



Port Size	Dimensions inches (mm)				Weight lb (kg)
	A	B	C	Depth	
1	4.4 (111)	4.8 (122)	2.5 (62)	2.9 (72)	1.8 (0.8)



E2

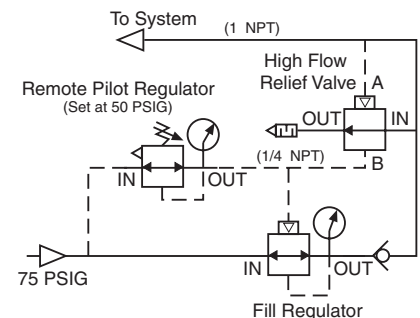
On the right is a typical circuit using the High Flow Relief Valve. The circuit utilizes a remotely piloted "fill" regulator (port size 1 NPT) and a small, remotely mounted, pilot regulator with 1/4 NPT ports.

The required system pressure is set by adjusting the knob on the pilot regulator until the desired system pressure is shown on the pilot regulator's gauge. An example system pressure of 50 PSIG was selected in the circuit.

Outlet pressure from the pilot regulator is sent to the fill regulator's signal port and the Port 2 of the High Flow Relief Valve. The Port 1 of the High Flow Relief Valve is connected to the system, as shown, to monitor system pressure.

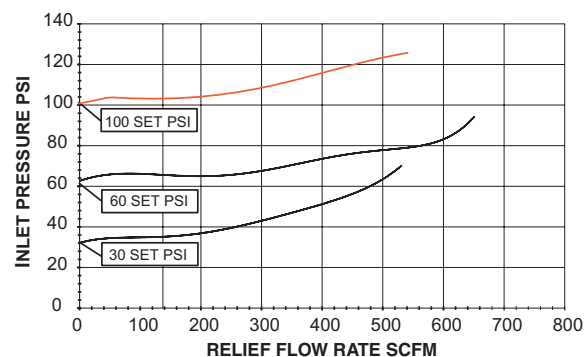
If the system pressure exceeds the pilot regulator setting (set-point), the High Flow Relief Valve will begin to exhaust air after an approximate 2 psig (0.1 bar) rise above the set-point.

Should the system pressure drop below the set-point, the fill valve will open to supply air downstream and maintain the system at the set-point.



E

FLOW CHART



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Diaphragm.
Self-relieving.

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

Fluid Media: Compressed air.

Inlet Pressure: 200 psig (14 bar) maximum.

Outlet Pressure: 0 to 200 psig (0 to 14 bar).

Pilot Ports: 1/4 NPTF.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Body: Aluminum.

Dome: Zinc.

Seals: Nitrile.

Valve: Brass.

Valve Cap: Nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



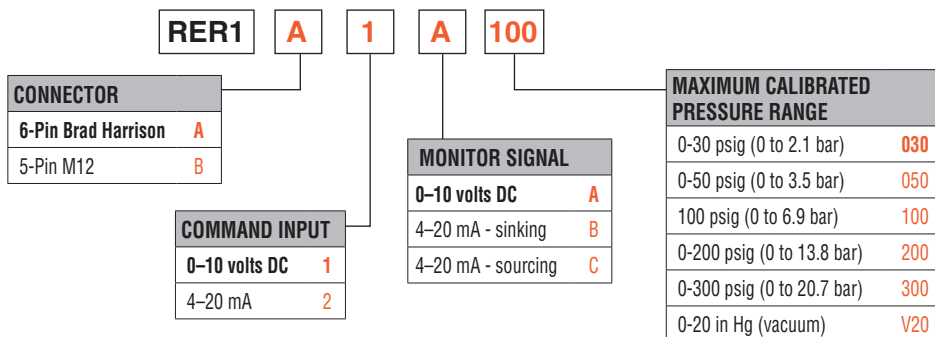
Online Version
Rev. 05/16

www.rosscontrols.com

E2.25

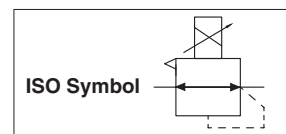
HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)



E2

Accessories ordered separately, see below.



ACCESSORIES

Cables

For 6-Pin Brad Harrison Connector.

E

Cable Length	Part Number*
6 feet (1.8 meters)	RER-CBL-6
12 feet (3.7 meters)	RER-CBL-12
25 feet (7.5 meters)	RER-CBL-25

*For cables for 5-Pin M12 connector, consult ROSS.



STANDARD SPECIFICATIONS (for products on this page):

Supply Voltage/Current: 15 – 24 volts DC/250 mA (required).

Analog Monitor Signal:

Voltage: 0 – 10 volts DC@20 mA maximum.

Current: 4 – 20 mA sinking (sourcing optional).

Command Signal Impedance: Voltage: 4.7 k_Ω, Current: 100_Ω.

Command Signal Voltage/Current: 0 – 10 volts DC/4 – 20 mA.

Electrical Connector: 6-pin Brad Harrison or 5-pin M12.

Ambient/Media Temperature: 32° to 158°F (0° to 70°C).

Fluid Media: Compressed Air.

Input Pressure: 29.9 in Hg to 300 psig (760 mm Hg to 21 bar).

Output Pressure: 0 to 200 psi (0 to 14 bar).

Body and Dome: Zinc.

Housing: Aluminum; powder coated.

Manifold: Brass. **Seals:** Fluorocarbon.

Transducer: Silicon, aluminum.

Valves: Nickel-plated brass.

Accuracy: < ± .25% F.S.

Linearity/Hysteresis: < ± .2% F.S. BFSL.

Repeatability: < ± .2% F.S.

Note: High-pressure Proportional valve ≥175 psi (12 bar) - inlet and exhaust ports reversed from picture shown.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1½, 2 & 3 – Flow to 4000 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

RB **1** **2** **A** **RER1** **A** **1** **A** **100**

REGULATOR TYPE	
1/4 to 3/4 - Self Relieving	1
3/4 to 1½ - Self Relieving	2
1/4 to 1/2 - High-Relief	3
3/4 to 1½ - High-Relief	4

INLET/OUTLET PORTS			
1/4 NPTF	2	1/4 BSPP	B
3/8 NPTF	3	3/8 BSPP	C
1/2 NPTF	4	1/2 BSPP	D
3/4 NPTF	6	3/4 BSPP	E
1 NPTF	8	1 BSPP	F
1¼ NPTF	J	1¼ BSPP	G
1½ NPTF	K	1½ BSPP	H

CONNECTOR	
6-Pin Brad Harrison	A
5-Pin M12	B

COMMAND INPUT	
0-10 volts DC	1
4-20 mA	2

PRESSURE RANGE (Valve)	
No Gauge (without gauge port)	A
0-200 psig (0-13.8 bar)	B
0-600 psig (0-40 bar)	C
0-30 psig (0-2 bar)	D
0-60 psig (0-4 bar)	E

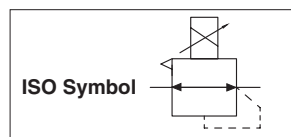
For Electronic Gauge, consult ROSS.

MAXIMUM CALIBRATED PRESSURE RANGE	
0-30 psig (0 to 2.1 bar)	030
0-50 psig (0 to 3.5 bar)	050
0-100 psig (0 to 6.9 bar)	100
0-200 psig (0 to 13.8 bar)	200
0-300 psig (0 to 20.7 bar)	300
0-20 in Hg (vacuum)	V20

MONITOR SIGNAL	
0-10 volts DC	A
4-20 mA - sinking	B
4-20 mA - sourcing	C



E2



Accessories ordered separately, see below.

Regulator Pressure Model	Inlet psi (bar)	Outlet psi (bar)	Relief scfm
RB1 - RB2	300 (20.7)	200 (13.8)	10
RB3 - RB4	400 (27.6)	250 (17.3)	200

Brass Inlet Filter (R37-R288) is included when purchasing a proportional-valve.
NOTE: Cable not included with the product, see choices below.



E

ACCESSORIES

Mounting Bracket Kit

Kit Number	R-A37-381
------------	-----------



Cables

For 6-Pin Brad Harrison Connector.

Cable Length	Part Number*
6 feet (1.8 meters)	RER-CBL-6
12 feet (3.7 meters)	RER-CBL-12
25 feet (7.5 meters)	RER-CBL-25

*For cables for 5-Pin M12 connector, consult ROSS.



STANDARD SPECIFICATIONS (for products on this page):

Supply Voltage/Current: 15 – 24 volts DC/250 mA (required).

Analog Monitor Signal:

Voltage: 0 – 10 volts DC@20 mA maximum.

Current: 4 – 20 mA sinking (sourcing optional).

Command Signal Impedance: Voltage: 4.7 k Ω , Current: 100 Ω .

Command Signal Voltage/Current: 0 – 10 volts DC/4 – 20 mA.

Electrical Connector: 6-pin Brad Harrison or 5-pin M12.

Ambient/Media Temperature: 32° to 158°F (0° to 70°C).

Fluid Media: Compressed Air.

Input Pressure: 29.9 in Hg to 300 psig (760 mm Hg to 21 bar).

Output Pressure: 0 to 200 psi (0 to 14 bar).

Body and Dome: Zinc.

Housing: Aluminum; powder coated.

Manifold: Brass. **Seals:** Fluorocarbon.

Transducer: Silicon, aluminum.

Valves: Nickel-plated brass.

Accuracy: < \pm 2.5% F.S.

Linearity/Hysteresis: < \pm 2.0% F.S. BFSL.

Repeatability: < \pm 0.6% F.S.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E2.27

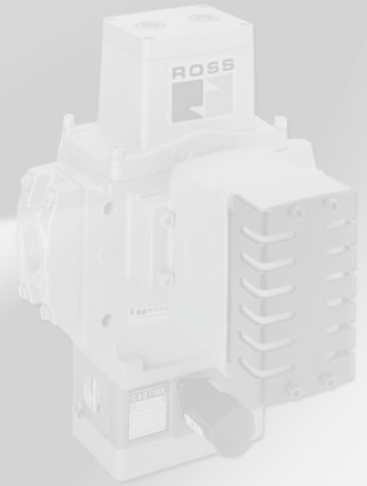
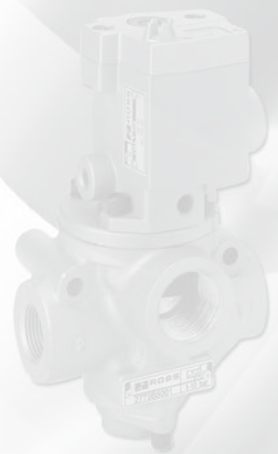
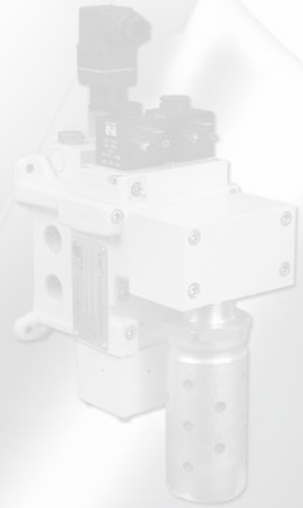
E



ROSS CONTROLS®



INTEGRATED FILTER/REGULATORS



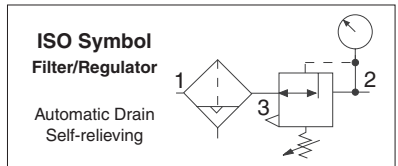
INTEGRATED FILTER/REGULATORS – KEY FEATURES

- Filter and Pressure Regulator combined into a single module to provide the compactness needed where space is limited
- All sizes have essentially the same operating characteristics as their corresponding individual filters and regulators
- All Filter/Regulator include internal automatic filter drain or manual drain options
- Pressure gauge included
- Regulator function is self relieving, and includes front and rear gauge ports
- 5-, 20-, 40-micron filter elements available (see table below)
- Metal or high strength polycarbonate bowl
- Modular or inline mounting
- MD3™ and MD4™ series can be modularly connected to a L-O-X® lockout valve
- Stainless steel Filter/Regulator and L-O-X® lockout valve combination available

INTEGRATED FILTER/REGULATOR TYPE/SERIES	AVAILABLE PORT SIZES					FLOW MAX FLOW (scfm)	FILTRATION			Bowls & Drains OPTIONS				REGULATOR TYPE		OPTIONS		Page
	1/8	1/4	3/8	1/2	3/4		5 μ	20 μ	40 μ	POLYCARBONATE BOWL	METAL BOWL	AUTOMATIC DRAIN	MANUAL DRAIN	PISTON	DIAPHRAM	SELF RELIEVING	NON RELIEVING	
BANTAM						24												E3.3
MINIATURE						24												E3.4
MID-SIZE						105												E3.5
MD3™						110												E3.6
FULL-SIZE						180												E3.7
MD4™						230												E3.8
STAINLESS STEEL with L-O-X® LOCKOUT VALVE																		
																		E3.9

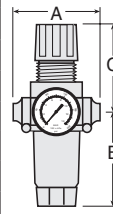
Port Sizes: 1/8 & 1/4 – Flow to 24 scfm

Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
With THREADED PORTS (Piston Type):				
1/8	5D01C0110	5D01C0210	5D01C0310	5D01C0410
1/4	5D02C0110	5D02C0210	5D02C0310	5D02C0410
With Quick-Connect TUBE FITTINGS (Piston Type):				
1/4	5D03C0110	5D03C0210	5D03C0310	5D03C0410
3/8	5D04C0110	5D04C0210	5D04C0310	5D04C0410
4mm	5D05C0110	5D05C0210	5D05C0310	5D05C0410
6mm	5D06C0110	5D06C0210	5D06C0310	5D06C0410
8mm	5D07C0110	5D07C0210	5D07C0310	5D07C0410
10mm	5D08C0110	5D08C0210	5D08C0310	5D08C0410
With Quick-Connect TUBE FITTINGS (Diaphragm Type):				
1/4	5D03C0120	5D03C0220	5D03C0320	5D03C0410
3/8	5D04C0120	5D04C0220	5D04C0320	5D04C0420
4mm	5D05C0120	5D05C0220	5D05C0320	5D05C0420
6mm	5D06C0120	5D06C0220	5D06C0320	5D06C0420
8mm	5D07C0120	5D07C0220	5D07C0320	5D07C0420
10mm	5D08C0120	5D08C0220	5D08C0320	5D08C0420



* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5D01C0110.

Port Size	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
		A	B**	C	Depth †	
No Port	2-oz (60-ml)	1.7 (43)	3.6 (92)	2.6 (67)	1.8 (45)	0.31 (0.15)
1/8, 1/4	2-oz (60-ml)	3.0 (76)	3.6 (92)	2.6 (67)	1.8 (45)	0.53 (0.24)
Models below have quick-connect tube fittings.						
1/4, 4, 6 mm	2-oz (60-ml)	3.4 (86)	3.6 (92)	2.6 (67)	1.8 (45)	0.51 (0.23)
3/8, 10 mm	2-oz (60-ml)	3.9 (99)	3.6 (92)	2.6 (67)	1.8 (45)	0.51 (0.23)
8 mm	2-oz (60-ml)	3.1 (79)	3.6 (92)	2.6 (67)	1.8 (45)	0.51 (0.23)

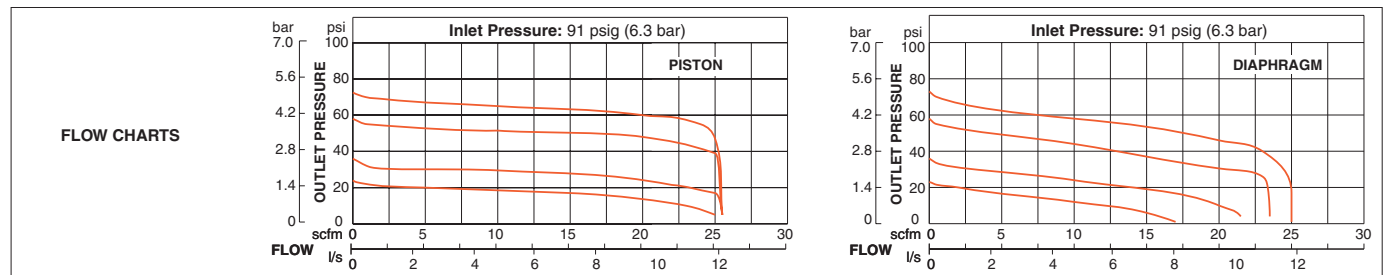


** Dimension for polycarbonate filter bowl; metal bowl is 3.8 (97). † Less gauge.

REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77

E3

E



Pressure Gauge included. Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – fiber; Regulator – Piston.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 150°F (4° to 66°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Gauge: 0 to 160 psig (0 to 11 bar); 1/8 NPT gauge ports front and rear.

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Filter Element: 5-micron rated polyethylene.

Body, Dome and Knob: Acetal.

Bowl: Polycarbonate or aluminum bowl.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E3.3

Port Sizes: 1/8 & 1/4 – Flow to 24 scfm

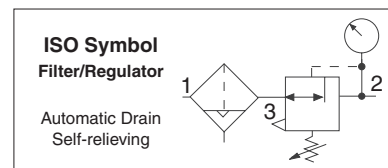
Port Size	Regulator Type	Model Numbers*			
		Automatic Drain		Manual Drain	
		Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/8	Piston	5321C1032	5322C1031	5321C1002	5322C1001
	Diaphragm	5321C1042	5322C1041	5321C1022	5322C1021
1/4	Piston	5321C2032	5322C2031	5321C2002	5322C2001
	Diaphragm	5321C2042	5322C2041	5321C2022	5322C2021

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5321C1032.



Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/8, 1/4	Polycarbonate	2-oz (60-ml)	1.6 (41)	3.6 (92)	2.6 (65)	1.6 (41)	0.53 (0.24)
1/8, 1/4	Aluminum	2-oz (60-ml)	1.6 (41)	4.3 (109)	2.6 (65)	1.6 (41)	0.53 (0.24)

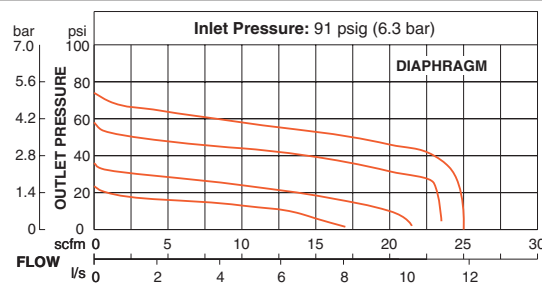
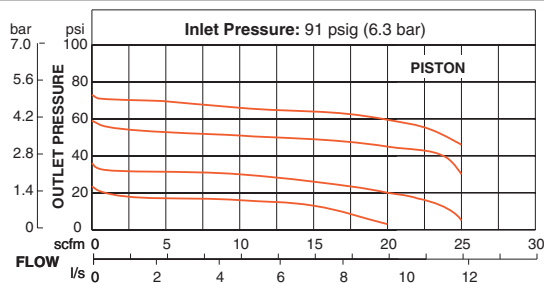
† Less gauge.



REPLACEMENT FILTER ELEMENTS

Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77

FLOW CHARTS



Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – fiber; Regulator – Piston.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 150°F (4° to 66°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Gauge: 0 to 160 psig (0 to 11 bar);

1/8 NPT gauge ports front and rear.

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Filter Drain: Internal automatic drain; optional manual drain.

Filter Element: 5-micron rated polyethylene.

Body: Aluminum.

Bowl: Polycarbonate or aluminum.

Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Integrated Filter/Regulators

MID-SIZE Series

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 105 scfm

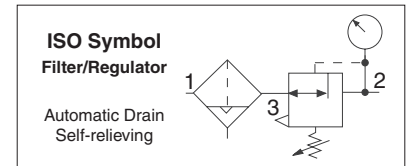


Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate bowl	Metal Bowl	Polycarbonate bowl	Metal Bowl
1/4	5321B2052	5322B2051	5321B2062	5322B2061
3/8	5321B3052	5322B3051	5321B3062	5322B3061
1/2	5321B4052	5322B4051	5321B4062	5322B4061

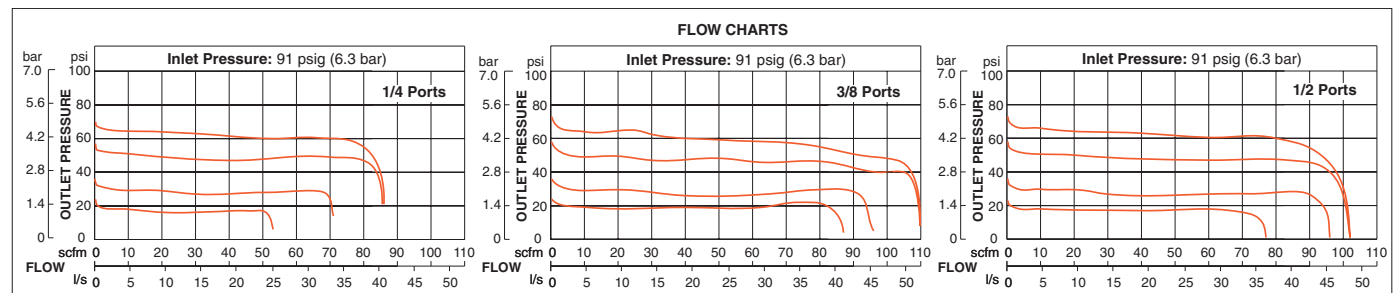
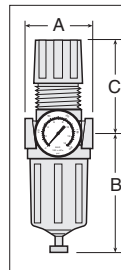
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5321B2052.

Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B**	C***	Depth †	
1/4, 3/8, 1/2	Polycarbonate	4-oz (120-ml)	2.7 (67)	4.6 (116)	3.3 (83)	2.4 (60)	1.44 (0.65)
1/4, 3/8, 1/2	Zinc	4-oz (120-ml)	2.7 (67)	4.9 (123)	3.3 (83)	2.4 (60)	1.50 (0.68)

** Bowl removal clearance: add 3.1 (79). *** Dome removal clearance: add 0.63 (16).
† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	936K77



Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – fiber; Regulator – Piston.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal Bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Filter Drain: Internal automatic drain or manual drain.

Panel Mounting: 1-9/16 inch (40 mm) hole required.

Filter Element: 5-micron rated polyethylene.

Body: Zinc.

Bowl: Polycarbonate with zinc shatterguard, or zinc bowl.

Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E3.5

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 110 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD3 **53P** **B** **M** **C** **2** **A** **A** **1**

BOWL SIZE	
Polycarbonate Bowl 5.1-oz (151-ml)	53P
Metal Bowl 6-oz (177-ml)	53M

FILTER ELEMENT TYPE	
40 µm sintered bronze	A
5 µm polyethylene	B
5 µm sintered bronze	E
20 µm sintered bronze	F

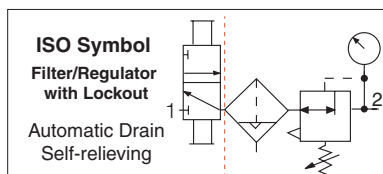
BOWL DRAIN	
Manual Drain	M
Float Drain	F
Less Drain Fitting (1/4 NPT female instead)	L

PIPE SIZE	
1/4 NPTF	2
3/8 NPTF	3
1/2 NPTF	4
1/4 BSPP	B
3/8 BSPP	C
1/2 BSPP	D

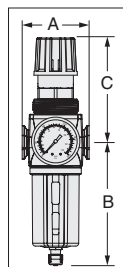
ADJUSTMENT RANGE	
0-200 psig (0-13.8 bar)	A
0-150 psig (0-10 bar)	B
0-100 psig (0-6.9 bar)	C
0-50 psig (0-3.4 bar)	D
Reverse Flow 0-200 psig (0-13.8 bar)	F
Reverse Flow 0-150 psig (0-10.3 bar)	G
Reverse Flow 0-100 psig (0-6.9 bar)	H
Reverse Flow 0-50 psig (0-3.4 bar)	J

ADD on L-O-X® - Optional	
L-O-X® on outlet side	1
L-O-X® on the inlet side (must also choose Reverse Flow)	2
EEZ-ON® on outlet side	3
EEZ-ON® on inlet side (must also choose Reverse Flow)	4
Blank - No L-O-X®	

GAUGE	
No Gauge (without gauge port)	A
With Gauge 0-200 psig (0-13.8 bar)	B
With Gauge 0-60 psig (0-4.1 bar)	C
No Gauge, With Panel Mount Nut	D
With Panel Mount Nut & Gauge 0-200 psig (0-13.8 bar)	E
With Panel Mount Nut & Gauge 0-60 psig (0-4.1 bar)	F



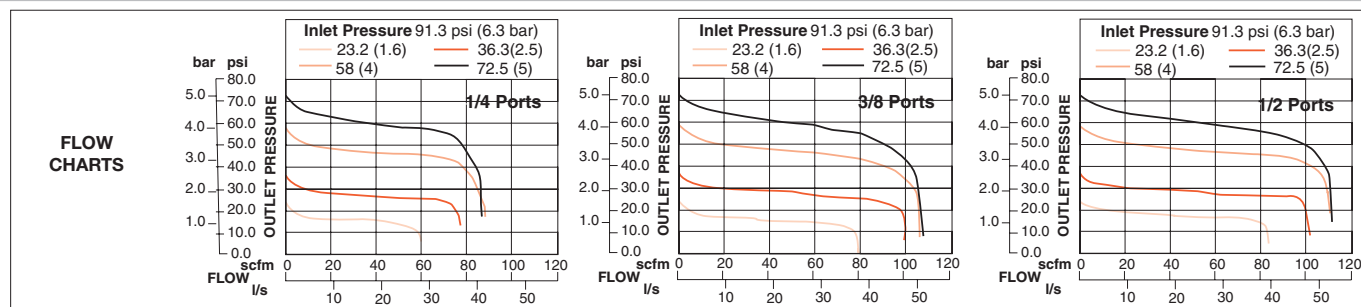
Bowl Type	Dimensions inches (mm)				Weight lb (kg)
	A	B*	C	Depth	
Polycarbonate	3.0 (76.2)	5.54 (140.6)	4.68 (119)	2.51 (63.8)	1.98 (0.90)
Metal	3.0 (76.2)	6.42 (163.1)	4.68 (119)	2.76 (70.1)	2.17 (0.99)



REPLACEMENT FILTER ELEMENTS*		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	R-A60F-03PE5
5-µm	Sintered Bronze	R-A60F-03E5
20-µm	Sintered Bronze	R-A60F-03E4
40-µm	Sintered Bronze	R-A60F-03E3

* For polycarbonate and metal bowl types.

Lockout: With the lockout valve, add 2.3 (58) to dimension A.
 * Bowl (standard) removal clearance: add 3.1 (79)
 * Bowl (extended) removal clearance: add 6.1 (155)
 Dimensions above reflect less gauge.



Options: External Bowl Drains, refer to page E6.7.
 Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Regulator-diaphragm.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal Bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 30 to 150 psig (2 to 10 bar).

Metal bowl: 30 to 200 psig (2 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 250 psig (0 to 17 bar).

Outlet Pressure: Adjustable up to 200 psig (14 bar).

Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar) or 0 to 60 psig (0 to 4 bar); 1/4-NPT gauge ports front and rear.

Panel Mounting: 2-1/16 inch (52 mm) hole required.

Body: Zinc.

Dome: Nylon.

Bowl: Polycarbonate with nylon shatterguard, or aluminum bowl with clear nylon sight glass.

Seals: Nitrile.

Valve: Brass.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/4, 3/8, 1/2 & 3/4 – Flow to 180 scfm

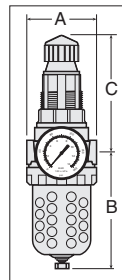
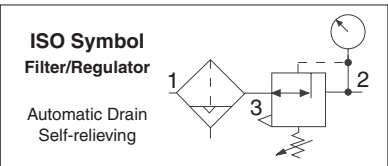


Port Size	Model Numbers *			
	Automatic Drain		Manual Drain	
	Polycarbonate bowl	Metal Bowl	Polycarbonate bowl	Metal Bowl
1/4	5321B2072	5322B2071	5321B2012	5322B2011
3/8	5321B3072	5322B3071	5321B3012	5322B3011
1/2	5321B4072	5322B4071	5321B4012	5322B4011
3/4	5321B5072	5322B5071	5321B5012	5322B5011

* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5321B2072.

Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B**	C***	Depth †	
1/4, 3/8, 1/2, 3/4	Polycarbonate	8-oz (240-ml)	3.5 (89)	5.8 (146)	5.8 (146)	3.5 (89)	2.50 (1.15)
1/4, 3/8, 1/2, 3/4	Zinc	8-oz (240-ml)	3.5 (89)	6.4 (163)	5.8 (146)	3.5 (89)	2.55 (1.17)

** Bowl removal clearance: add 3.1 (79). *** Dome removal clearance: add 0.63 (16). † Less gauge.

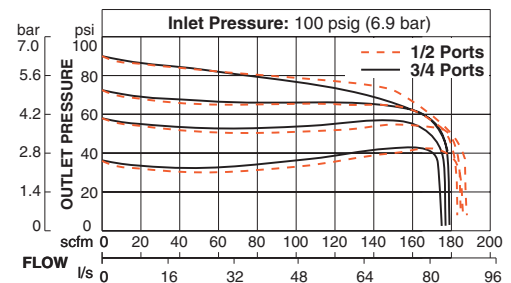
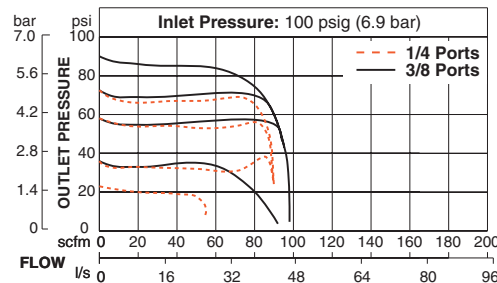


REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	939K77

E3

E

FLOW CHARTS



Pressure Gauge included.

Options: External Automatic Drain, refer to page E6.7.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – fiber; Regulator – Piston.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal Bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 125 psig (9 bar).

Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Panel Mounting: 2-1/16 inch (52 mm) hole required.

Filter Element: 5-micron rated polyethylene.

Body: Zinc.

Dome: Nylon.

Knob: Acetal.

Bowl: Polycarbonate with steel shatterguard, or zinc bowl with clear nylon sight glass.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E3.7

Port Sizes: 3/8, 1/2 & 3/4 – Flow to 230 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD4 **53P** **B** **A** **B** **3** **B** **B** **1**

BOWL SIZE	
Polycarbonate Bowl 9-oz (266-ml)	53P
Metal Bowl 9-oz (266-ml)	53M

FILTER ELEMENT TYPE	
40 µm sintered bronze	A
5 µm polyethylene	B

BOWL DRAIN	
Auto Drain	A
Manual Drain	M

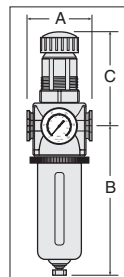
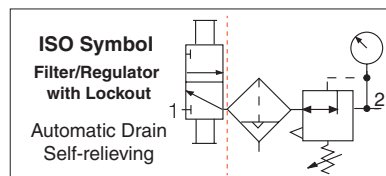
ADJUSTMENT RANGE	
0-175 psig (0-12.1 bar)	A
0-125 psig (0-8.6 bar)	B
0-50 psig (0-3.4 bar)	C
0-20 psig (0-1.4 bar)	D
Reverse Flow 0-175 psig (0-12.1 bar)	F
Reverse Flow 0-125 psig (0-8.6 bar)	G
Reverse Flow 0-50 psig (0-3.4 bar)	H
Reverse Flow 0-20 psig (0-1.4 bar)	J

PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

ADD ON L-O-X® - Optional	
L-O-X® on outlet side	1
L-O-X® on the inlet side (must also choose Reverse Flow)	2
L-O-X® with EEZ-ON® on outlet side	3
L-O-X® with EEZ-ON® on inlet side (must also choose Reverse Flow)	4
Blank - No L-O-X®	

GAUGE*	
No Gauge (without gauge port)	A
With Gauge 0-200 psig (0-14 bar)	B
With Gauge 0-60 psig (0-4.1 bar)	C
No Gauge, With Panel Mount Nut	D
With Panel Mount Nut & Gauge 0-200 psig (0-14 bar)	E
With Panel Mount Nut & Gauge 0-60 psig (0-4 bar)	F

* 1/4 NPT gauge ports front and rear.

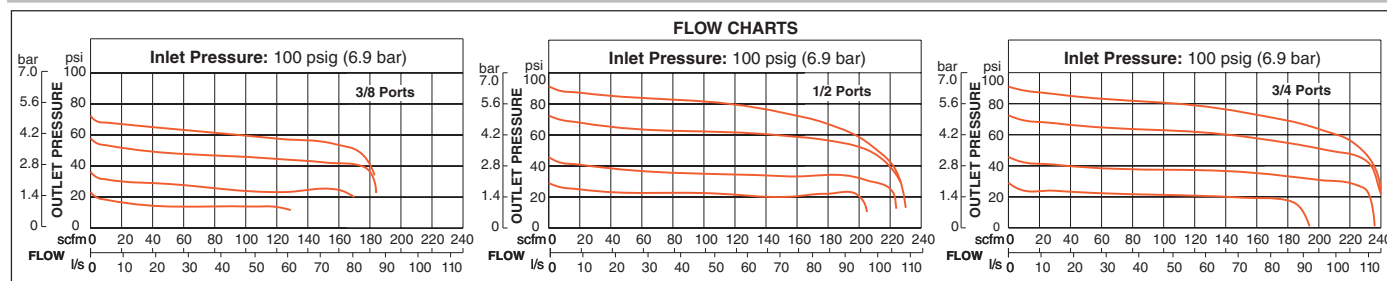


Port Size	Bowl Type	Dimensions inches (mm)				Weight † lb (kg)
		A	B*	C**	Depth †	
3/8, 1/2, 3/4	Polycarbonate	3.5 (88)	7.7 (195)	5.4 (137)	2.9 (73)	3.69 (1.68)
3/8, 1/2, 3/4	Aluminum	3.5 (88)	7.6 (193)	5.4 (137)	2.9 (73)	3.69 (1.68)

* Bowl removal clearance: add 3.1 (79).
** Dome removal clearance: add 0.63 (16).
† Less gauge.

REPLACEMENT FILTER ELEMENTS*		
Element Rating	Element Material	Element Number
5-µm	Polyethylene	R-A115-106PE5
40-µm	Sintered Bronze	R-A115-106PE3

* For polycarbonate and metal bowl types.



Options: External Bowl Drains, refer to page E6.7.
Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – fiber; Regulator – Piston.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal Bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 125 psig (9 bar); optional adjusting springs.

Pressure Adjustment Locking Key: Removable.

Panel Mounting: 2.05 inch (52.1 mm) hole required.

Filter Element: 5-micron rated polyethylene; optional 40-micron.

Body: Zinc.

Bonnet: Nylon; aluminum with optional 0 to 175 psig (0 to 12.1 bar) spring.

Cap Color: Black.

Bowl: Polycarbonate with steel shatterguard, or aluminum bowl with clear nylon sight glass.

Seals: Nitrile. **Valve:** Brass.

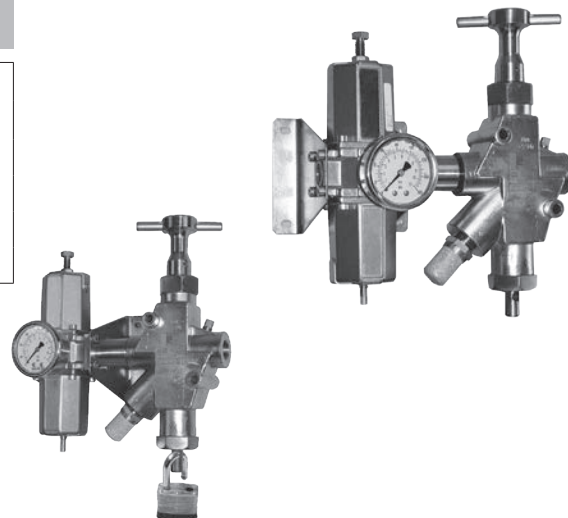
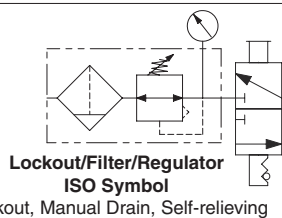
IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Stainless Steel Integrated Filter/Regulators with Lockout L-O-X® Valves

Series 15

Port Sizes: 1/4, 1/2, 3/4 & 1 – Flow to 17 scfm

Port Size		Model Number*	C _v	
1-2	3		1-2	2-3
1/4	1/4	RC010-13	2.14	2.08
1/2	1/2	RC011-13	4.4	6.24
3/4	1	RC012-13	5.0	17.0
1	1	RC013-13	8.0	17.0



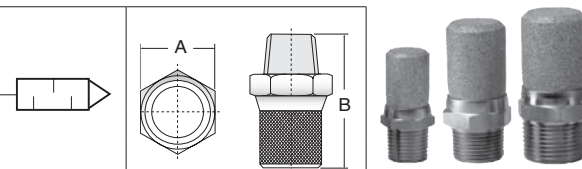
Port Size		Avg. C _v		Dimensions (inches/mm)		
1-2	3	1-2	2-3	Length	Width	Depth
1/4	1/4	2.14	2.08	8.9 (226.1)	7.65 (194.4)	5.86 (149)
1/2	1/2	4.4	6.24	10.24 (260)	8.98 (228)	5.94 (151)
3/4	1	5.0	17.0	15.75 (400)	12.24 (311)	6.49 (165)
1	1	8.0	17.0	15.75 (400)	12.24 (311)	6.49 (165)

ACCESSORIES

Silencers for Stainless Steel L-O-X® Air Entry Combination

- 316 Stainless Steel sintered element silencers used to protect ports open to the atmosphere.

Port Size	Thread Type	Model Number		Avg. C _v	Dimensions inches (mm)	
		NPT Threads	BSPT Threads		A	B
1/4	Male	5500A2005	D5500A2005	1.44	0.67 (17)	1.50 (38)
1/2	Male	5500A4005	D5500A4005	3.01	0.94 (24)	2.17 (55)
1	Male	5500A6005	D5500A6005	10.41	1.41 (36)	2.95 (75)

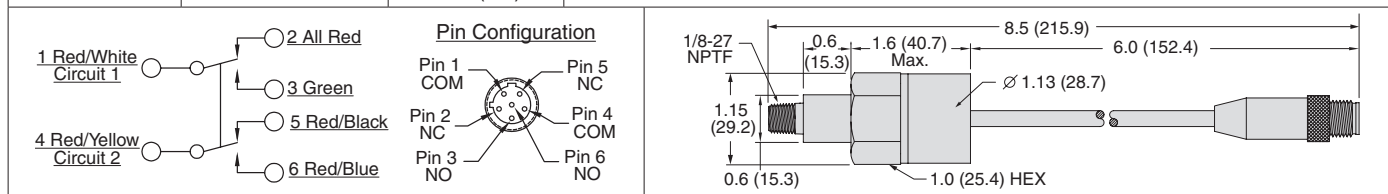


E3

E

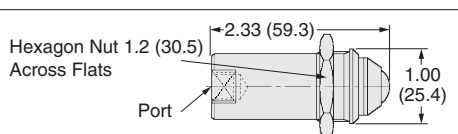
Stainless Steel Pressure Switch

Inlet Port Size	Model Number	Weight lb (kg)
1/8	1162A30	0.23 (.01)



Stainless Steel Visual Indicator

Inlet Port Size	Model Number	Weight lb (kg)
1/8	1155H30	0.22 (0.1)



* NPT threads. For BSPP threads, consult ROSS.

STANDARD SPECIFICATIONS (for valves on this page):

Construction: Poppet, 316 Stainless Steel.

Mounting Type: In-Line.

Ambient/Media Temperature: 30° to 175°F (-1° to 80°C).

Note: For lower temperature ratings, consult ROSS.

Flow Media: Filtered air.

Inlet Pressure: 0 to 300 psig (0 to 21 bar).

Secondary Pressure: 7 to 174 psig (0.5 to 12 bar).

Seals: Fluorocarbon (Viton).

Lock Hole Diameter: Port sizes 1/4 thru 2: 0.34 inch (8.64 mm).

Length of Hole: Port size 1/4: 0.44 in (11.17 mm).

Port size 1/2: 0.47 in (11.93 mm)

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E3.9

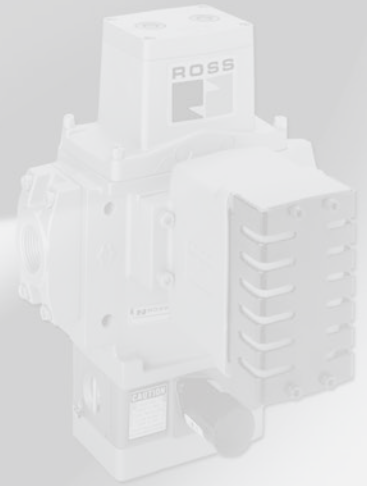
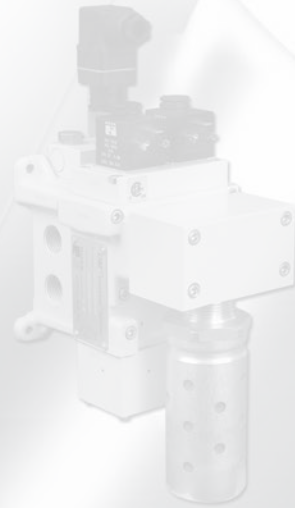
E



ROSS CONTROLS®



LUBRICATORS



LUBRICATORS – KEY FEATURES

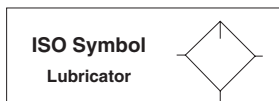
- Sight-feed and wick-feed design options
- Sight-feed Lubricators are easy to adjust, and an indicator on the sight dome measures the amount of oil dispensed
- The adjusting knob can be removed to make the lubricator “tamper-resistant”
- All working parts are in an easily replaceable cartridge
- Modular and inline mounting options
- Metal and High Strength polycarbonate bowl options
- External tamper resistant adjustment
- Quick-fill cap option for full size, MD3™, and MD4™ series
- Extended bowls available for MD3™ and MD4™ series

LUBRICATOR TYPE/SERIES	AVAILABLE PORT SIZES								FLOW MAX FLOW (scfm)	DESIGN		BOWL TYPE		Page
	1/8	1/4	3/8	1/2	3/4	1	1¼	1½		SIGHT FEED	WICK FEED	Polycarbonate	METAL	
BANTAM	■	■							27	■	■	■	■	E4.3
MINIATURE	■	■							25	■	■	■	■	E4.4
MID-SIZE		■	■	■					110	■	■	■	■	E4.5
MD3™		■	■	■					150	■	■	■	■	E4.6
FULL-SIZE		■	■	■	■				140	■	■	■	■	E4.7
MD4™		■	■	■	■	■			205	■	■	■	■	E4.8
HIGH-CAPACITY			■	■	■	■	■	■	500	■	■	■	■	E4.9

Port Sizes: 1/8 & 1/4, and Tube Fittings – Flow to 27 scfm

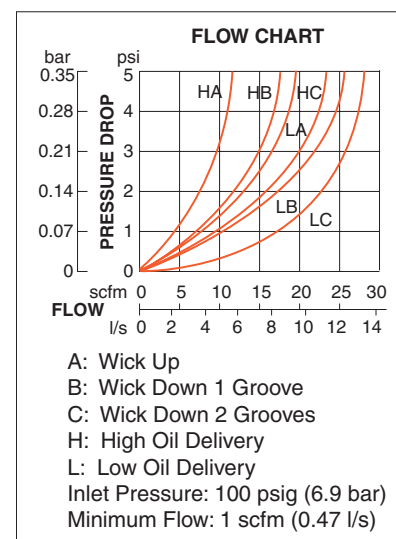
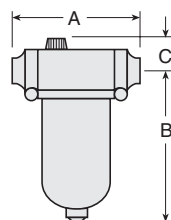
Port Size	Model Numbers*			
	Threaded Ports*		Tube Fittings*	
	Polycarbonate bowl	Metal Bowl	Polycarbonate bowl	Metal Bowl
FILL PORT				
1/8	5B01B0005	5B01B0006	–	–
1/4	5B02B0005	5B02B0006	5B03B0005	5B03B0006
3/8	–	–	5B04B0005	5B04B0006
4mm	–	–	5B05B0005	5B05B0006
6mm	–	–	5B06B0005	5B06B0006
8mm	–	–	5B07B0005	5B07B0006
10mm	–	–	5B08B0005	5B08B0006
QUICK-FILL CAP				
1/8	5B01B0007	5B01B0008	–	–
1/4	5B02B0007	5B02B0008	5B03B0007	5B03B0008
3/8	–	–	5B04B0007	5B04B0008
4mm	–	–	5B05B0007	5B05B0008
6mm	–	–	5B06B0007	5B06B0008
8mm	–	–	5B07B0007	5B07B0008
10mm	–	–	5B08B0007	5B08B0008

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5B01B0005.



Port Size	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
		A	B**	C	Depth	
No Port	2-oz (60-ml)	1.7 (43)	3.6 (91)	0.9 (22)	1.8 (45)	0.17 (0.08)
1/8, 1/4	2-oz (60-ml)	3.0 (76)	3.6 (91)	0.9 (22)	1.8 (45)	0.37 (0.17)
Models below have quick-connect tube fittings.						
1/4	2-oz (60-ml)	3.4 (86)	3.6 (91)	0.9 (22)	1.8 (45)	0.37 (0.17)
3/8	2-oz (60-ml)	3.9 (99)	3.6 (91)	0.9 (22)	1.8 (45)	0.37 (0.17)
4 mm	2-oz (60-ml)	3.4 (86)	3.6 (91)	0.9 (22)	1.8 (45)	0.37 (0.17)
6 mm	2-oz (60-ml)	3.4 (86)	3.6 (91)	0.9 (22)	1.8 (45)	0.37 (0.17)
8 mm	2-oz (60-ml)	3.4 (86)	3.6 (91)	0.9 (22)	1.8 (45)	0.37 (0.17)
10 mm	2-oz (60-ml)	3.9 (99)	3.6 (91)	0.9 (22)	1.8 (45)	0.37 (0.17)

** Dimension for polycarbonate bowl; metal bowl is 3.8 (97).



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 150°F (4° to 66°C).

Fluid Media: Compressed air.

Inlet Pressure:

Polycarbonate bowl: 150 psig (10 bar) maximum.

Metal bowl: 200 psig (14 bar) maximum.

Oil Adjustment: External, no shutoff.

Body: Acetal.

Bowl: Polycarbonate or aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

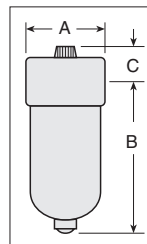
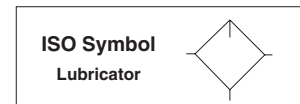
Port Sizes: 1/8 & 1/4 – Flow to 25 scfm

Port Size	Fill Type	Model Numbers*			
		Polycarbonate bowl		Metal Bowl	
		High Flow	Low Flow	High Flow	Low Flow
1/8	Fill Port	5111B1010	5111B1012	5112B1010	5112B1012
1/4	Fill Port	5111B2010	5111B2012	5112B2010	5112B2012
1/8	Quick-Fill Cap	5111B1110	5111B1112	5112B1110	5112B1112
1/4	Quick-Fill Cap	5111B2110	5111B2112	5112B2110	5112B2112

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5111B1010.

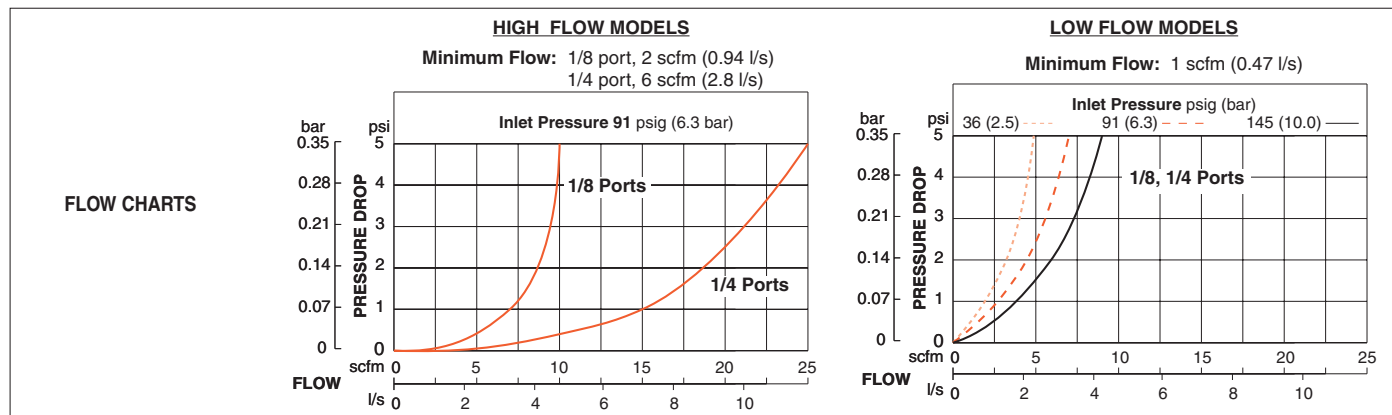


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1/8, 1/4	Polycarbonate	2-oz (60-ml)	1.6 (41)	3.6 (92)	0.7 (17)	1.6 (41)	0.21 (0.10)
1/8, 1/4	Aluminum	2-oz (60-ml)	1.6 (41)	3.8 (97)	0.7 (17)	1.6 (41)	0.21 (0.10)



E

E4



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 150°F (4° to 66°C).

Fluid Media: Compressed air.

Inlet Pressure:

Polycarbonate bowl: 150 psig (10 bar) maximum.

Metal bowl: 200 psig (14 bar) maximum.

Oil Adjustment: Internal, tamper-proof.

Body: Aluminum.

Bowl: Polycarbonate or aluminum.

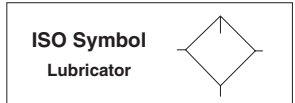
Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

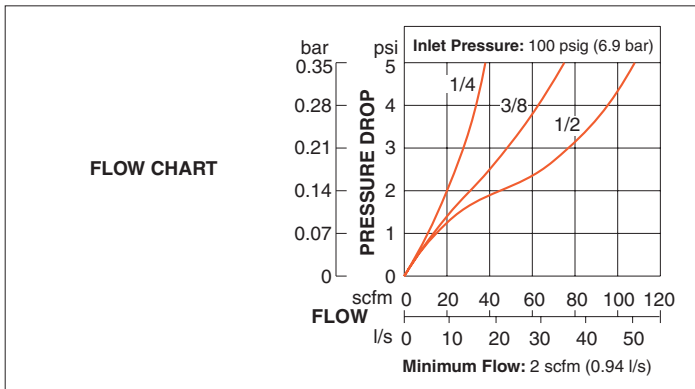
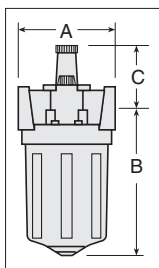
Port Sizes: 1/4, 3/8 & 1/2 – Flow to 110 scfm

Port Size	Fill Type	Model Numbers*	
		Sight-Feed	
		Polycarbonate Bowl	Metal Bowl
1/4	Fill Port	5111B2007	5112B2007
3/8	Fill Port	5111B3007	5112B3007
1/2	Fill Port	5111B4007	5112B4007
1/4	Quick-Fill Cap	5111B2107	5112B2107
3/8	Quick-Fill Cap	5111B3107	5112B3107
1/2	Quick-Fill Cap	5111B4107	5112B4107

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5111B2007.



Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B	C	Depth	
1/4, 3/8, 1/2	Polycarbonate	4-oz (120-ml)	2.7 (68)	4.1 (103)	1.8 (46)	2.4 (60)	1.06 (0.48)
1/4, 3/8, 1/2	Zinc	4-oz (120-ml)	2.7 (68)	4.1 (103)	1.8 (46)	2.4 (60)	1.50 (0.68)



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Sight-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Inlet Pressure:

Polycarbonate bowl: 150 psig (10 bar) maximum.

Metal bowl: 200 psig (14 bar) maximum.

Fluid Media: Compressed air.

Oil Adjustment: External, tamper-resistant.

Body: Zinc.

Bowl: Polycarbonate bowl with zinc shatterguard, or zinc bowl.

Sight Dome: Nylon.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com



Port Sizes: 1/4, 3/8 & 1/2 – Flow to 150 scfm

HOW TO ORDER

(Choose your options (in red) to configure your model number.)

MD3 **51P** **Q** **C** **2** **2**

BOWL SIZE	
Polycarbonate Bowl 5.1-oz (151-ml)	51P
Metal Bowl 6-oz (177-ml)	51M
Extended Metal Bowl 10-oz (295-ml)	51E

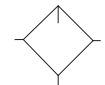
LUBRICATOR FILL TYPE	
Quick Fill Cap	Q
Fill Port	S

PIPE SIZE	
1/4 NPTF	2
3/8 NPTF	3
1/2 NPTF	4
1/4 BSPP	B
3/8 BSPP	C
1/2 BSPP	D

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

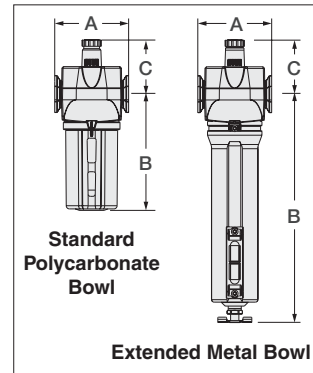


ISO Symbol
Lubricator



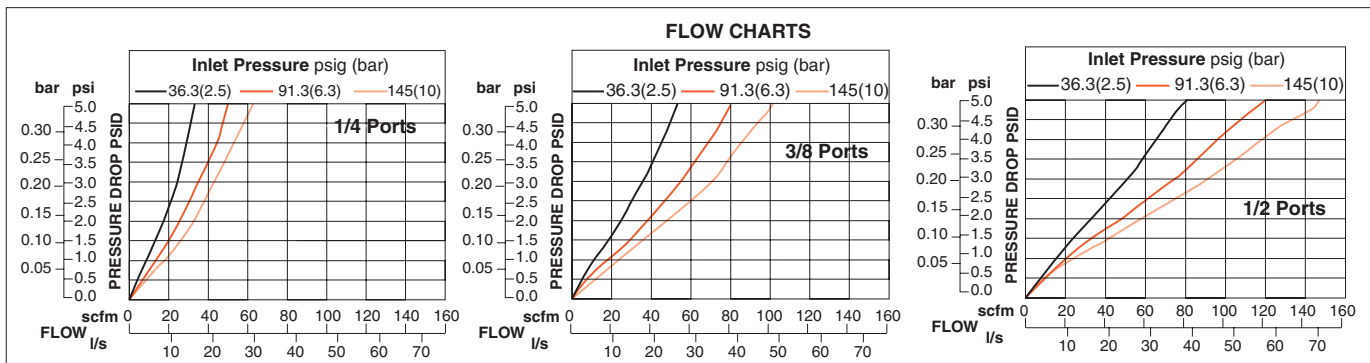
Bowl Type	Dimensions inches (mm)				Weight lb (kg)
	A	B**	C	Depth	
Polycarbonate	3.0 (76.2)	4.72 (119.9)	2.21 (56.1)	2.51 (63.8)	1.30 (0.59)
Aluminum	3.0 (76.2)	6.02 (152.9)	2.21 (56.1)	2.76 (70.1)	1.42 (0.64)
Extended Aluminum	3.0 (76.2)	9.37 (238)	2.21 (56.1)	2.76 (70.1)	1.54 (0.70)

** Bowl removal clearance: add 3.1 (79).
Extended Bowl removal clearance: add 6.1 (155).



E

E4



Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Sight-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure:

Polycarbonate bowl: 150 psig (10 bar) maximum.

Metal bowl: 250 psig (17 bar) maximum.

Oil Adjustment: External; tamper resistant.

Body: Zinc.

Bowl: Polycarbonate with nylon shatterguard, or aluminum bowl with clear nylon sight glass.

Sight-Feed Dome: Nylon.

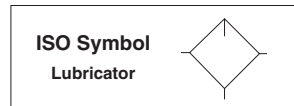
Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Port Sizes: 1/4, 3/8, 1/2 & 3/4 – Flow to 140 scfm

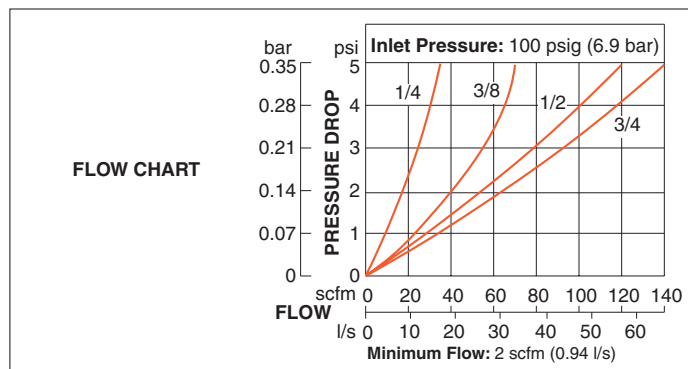
Port Size	Fill Type	Model Numbers*			
		Sight-Feed		Wick-Feed	
		Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/4	Fill Port	5111B2008	5112B2008	5111B2014	5112B2014
3/8	Fill Port	5111B3008	5112B3008	5111B3014	5112B3014
1/2	Fill Port	5111B4008	5112B4008	5111B4014	5112B4014
3/4	Fill Port	5111B5008	5112B5008	5111B5014	5112B5014
1/4	Quick-Fill Cap	5111B2108	5112B2108	5111B2114	5112B2114
3/8	Quick-Fill Cap	5111B3108	5112B3108	5111B3114	5112B3114
1/2	Quick-Fill Cap	5111B4108	5112B4108	5111B4114	5112B4114
3/4	Quick-Fill Cap	5111B5108	5112B5108	5111B5114	5112B5114

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5111B2008.



Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight lb (kg)
			A	B**	C	Depth	
With Sight-Feed							
1/4, 3/8, 1/2, 3/4	Polycarbonate	8-oz (240-ml)	3.5 (88)	5.2 (132)	1.3 (32)	3.5 (89)	2.06 (0.94)
1/4, 3/8, 1/2, 3/4	Zinc	8-oz (240-ml)	3.5 (88)	5.3 (135)	1.3 (32)	3.5 (89)	2.90 (1.32)
With Wick-Feed							
1/4, 3/8, 1/2, 3/4	Polycarbonate	8-oz (240-ml)	3.5 (88)	5.2 (132)	0.7 (17)	3.5 (89)	2.25 (1.02)
1/4, 3/8, 1/2, 3/4	Zinc	8-oz (240-ml)	3.5 (88)	5.3 (135)	0.7 (17)	3.5 (89)	2.85 (1.30)

** Bowl removal clearance: add 3.1 (79).



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

- Construction:** Sight-Feed.
- Ambient/Media Temperature:**
 - Polycarbonate bowl: 40° to 125°F (4° to 52°C).
 - Metal bowl: 40° to 175°F (4° to 80°C).
- Fluid Media:** Compressed air.
- Inlet Pressure:**
 - Polycarbonate bowl: 150 psig (10 bar) maximum.
 - Metal bowl: 200 psig (14 bar) maximum.
- Oil Adjustment:** External, tamper-resistant.
- Adjusting Knob:** Acetal.
- Body:** Zinc.
- Bowl:** Polycarbonate with steel shatterguard, or zinc bowl with sight glass.
- Bowl Ring:** Aluminum.
- Seals:** Nitrile.
- Sight Dome:** Nylon. External, tamper-proof.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Port Sizes: 3/8, 1/2 & 3/4 – Flow to 205 scfm

HOW TO ORDER

(Choose your options (in red) to configure your model number.)

MD4 **51P** **S** **B** **3** **2**

BOWL SIZE	
Polycarbonate Bowl 9-oz (266-ml)	51P
Metal Bowl 9-oz (266-ml)	51M
Extended Metal Bowl 15-oz (443-ml)	51E

LUBRICATOR FILL TYPE	
Quick Fill Cap	Q
Fill Port	S

PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

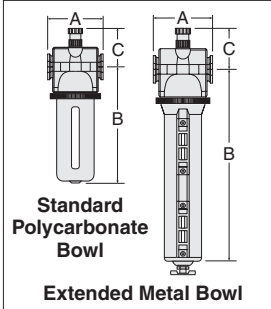
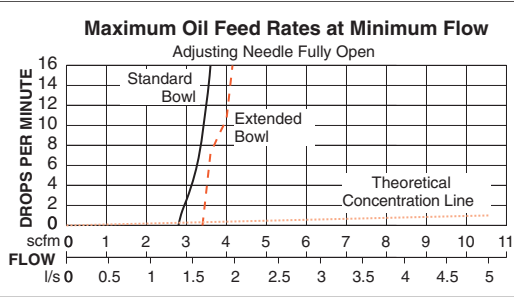


ISO Symbol
Lubricator



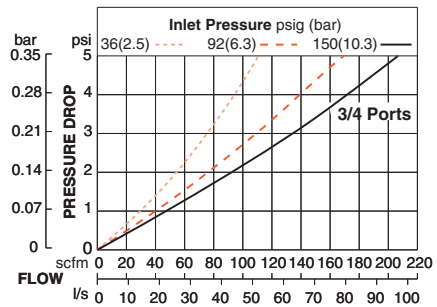
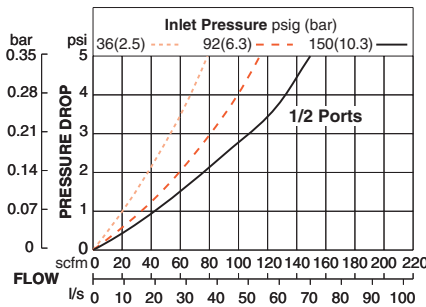
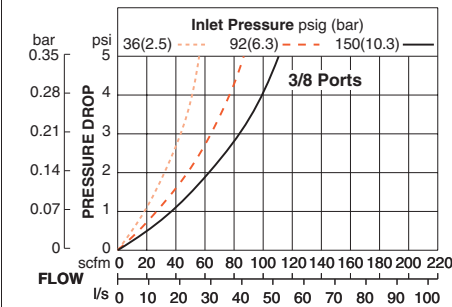
Bowl Size	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A	B**	C	Depth	
3/8, 1/2, 3/4	Polycarbonate	3.5 (88)	7.1 (179)	2.2 (56)	2.9 (73)	2.0 (0.91)
	Aluminum	3.5 (88)	7.4 (188)	2.2 (56)	3.1 (79)	2.0 (0.91)

** Bowl removal clearance: add 3.1 (79).
Extended Bowl removal clearance: add 6.1 (155).



E
E4

FLOW CHARTS



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Sight-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure:

Polycarbonate bowl: 150 psig (10 bar).

Metal bowl: 200 psig (14 bar).

Oil Adjustment: External; tamper resistant.

Body: Zinc.

Bowl: Polycarbonate with steel shatterguard, aluminum bowl with clear nylon sight glass, or extended aluminum bowl with two clear nylon sight glass.

Bowl Ring: Nylon.

Sight-Feed Dome: Nylon.

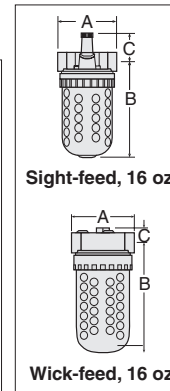
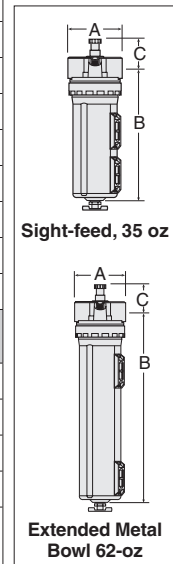
Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

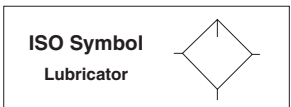
Port Sizes: 3/4, 1, 1 1/4 & 1 1/2 – Flow to 500 scfm

Port Size	Bowl Size oz (ml)	Model Numbers*			
		Metal Bowl			
		FILL-PORT		QUICK-FILL CAP	
		Sight-Feed	Wick-Feed	Sight-Feed	Wick-Feed
3/4	16 (473.2)	5112B5009	—	5112B5109	—
	35 (1035.1)	5112B5019	—	5112B5119	—
	62 (1833.6)	5112B5029	—	5112B5129	—
1	16 (473.2)	5112B6009	5112B6011	5112B6109	5112B6111
	35 (1035.1)	5112B6019	—	5112B6119	—
	62 (1833.6)	5112B6029	—	5112B6129	—
1 1/4	16 (473.2)	5112B7009	—	5112B7109	—
	35 (1035.1)	5112B7019	—	5112B7119	—
	62 (1833.6)	5112B7029	—	5112B7129	—
1 1/2	16 (473.2)	5112B8009	—	5112B8109	—
	35 (1035.1)	5112B8019	—	5112B8119	—
	62 (1833.6)	5112B8029	—	5112B8129	—
Port Size	Bowl Size oz (ml)	Polycarbonate Bowl			
3/4	16 (473.2)	5111B5009	—	5111B5109	—
1	16 (473.2)	5111B6009	5111B6011	5111B6109	5111B6111
1 1/4	16 (473.2)	5111B7009	—	5111B7109	—
1 1/2	16 (473.2)	5111B8009	—	5111B8109	—

* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5111B5009.

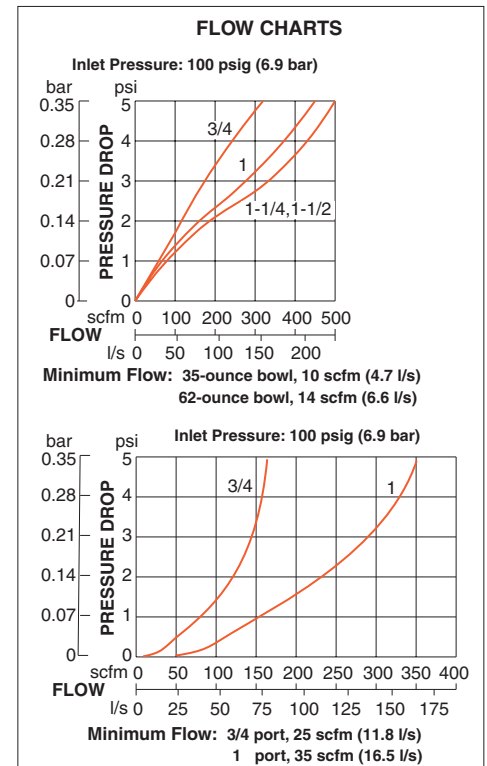


Polycarbonate Bowl Metal Bowl



Port Size	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A	B**	C	Depth	
With Sight-Feed, 16 oz (473.2 ml)						
3/4, 1, 1 1/4, 1 1/2	Polycarbonate	4.3 (108)	8.2 (208)	1.4 (37)	4.2 (106)	2.63 (1.21)
3/4, 1, 1 1/4, 1 1/2	Aluminum	4.3 (108)	7.3 (185)	1.4 (37)	4.2 (106)	2.85 (1.30)
With Wick-Feed, 16 oz (473.2 ml)						
1/4, 3/8, 1/2, 3/4	Polycarbonate	4.5 (114)	7.7 (195)	0.8 (21)	4.3 (108)	2.88 (1.31)
1/4, 3/8, 1/2, 3/4	Aluminum	4.5 (114)	8.2 (208)	0.8 (21)	4.3 (108)	3.00 (1.36)
With Sight-Feed, 35 oz (1035.1 ml)						
3/4, 1	Aluminum	4.3 (108)	10.2 (259)	2.0 (51)	4.2 (106)	2.56 (1.16)
1 1/4, 1 1/2	Aluminum	4.3 (108)	10.6 (268)	1.6 (41)	4.2 (106)	2.53 (1.16)
Extended Bowls, 35oz (1035ml)						
3/4, 1	Aluminum	4.3 (108)	15.8 (400)	2.0 (51)	4.2 (106)	3.38 (1.64)
1 1/4, 1 1/2	Aluminum	4.3 (108)	16.1 (410)	1.6 (41)	4.2 (106)	3.38 (1.64)

** Bowl removal clearance: add 3.1 (79).



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Sight-Feed, or Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure: Polycarbonate bowl: 150 psig (10 bar) maximum.

Metal bowl: 200 psig (14 bar) maximum.

Oil Adjustment: External, tamper-resistant or internal.

Body: Aluminum.

Bowl: Polycarbonate with steel shatterguard; aluminum bowl with sight glass, or extended aluminum bowl with sight glass.

Bowl Ring: Aluminum.

Sight Dome: Nylon.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

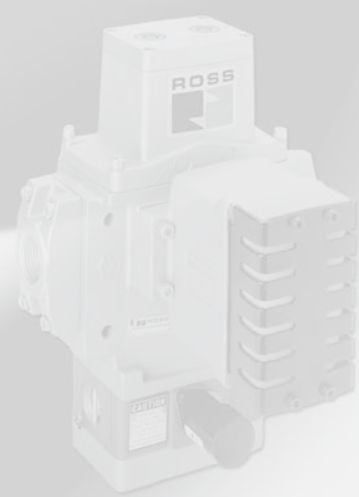
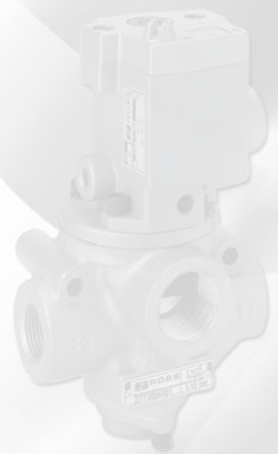
E



ROSS CONTROLS®



FILTER, REGULATOR, AND LUBRICATOR COMBINATIONS



FRLs Combinations – KEY FEATURES

- Combinations include Filter and Regulator, Filter and Lubricator, Integrated Filter / Regulator combined into a single module plus a Lubricator, and Filter, Regulator and Lubricator
- All sizes have essentially the same operating characteristics as their corresponding individual Filters, Regulators, and Lubricators
- All filters include either a manual or internal automatic filter drain and a pressure gauge
- Regulators are either self relieving or non-relieving and have gauge ports front and rear
- 5-, 20-, and 40-micron filter element options available
- Additional available options are the same as those for the corresponding individual filters
- Modular or inline mounting

COMBINATION TYPE/SERIES	AVAILABLE PORT SIZES									FLOW MAX FLOW (scfm)	FILTRATION			OPTIONS			REGULATOR TYPE		OPTIONS		LUBRICATOR TYPE		OPT.	Page
	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	5 µm		20 µm	40 µm	POLYCARBONATE BOWL	METAL BOWL	AUTOMATIC DRAIN	MANUAL DRAIN	PISTON	DIAPHRAGM	SELF RELIEVING	NON RELIEVING	WICK FEED	SIGHT FEED		
FILTER AND REGULATOR																								
MINIATURE									19															E5.3
MID-SIZE									100															E5.4
FULL-SIZE									138															E5.5
HIGH CAPACITY									270															E5.6
FILTER AND LUBRICATOR																								
MINIATURE									19															E5.7
MID-SIZE									100															E5.8
FULL-SIZE									138															E5.9
HIGH CAPACITY									270															E5.10
INTEGRATED FILTER/REGULATOR PLUS LUBRICATOR																								
BANTAM									23															E5.11 - E5.12
MINIATURE									24															E5.13 - E5.14
MID-SIZE									100															E5.15
MD3™									110															E5.16 - E5.17
FULL-SIZE									140															E5.18
MD4™									205															E5.19 - E5.20
FILTER REGULATOR PLUS LUBRICATOR																								
BANTAM									22															E5.21 - E5.22
MINIATURE									19															E5.23
MID-SIZE									100															E5.24
MD3™									110															E5.25 - E5.26
FULL-SIZE									138															E5.27
MD4™									205															E5.28 - E5.28
HIGH CAPACITY									495															E5.30 - E5.31

Inline Filter and Regulator Combinations

MINIATURE Series

Port Sizes: 1/8 & 1/4 – Flow to 19 scfm

FILTER and PISTON type REGULATOR

Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/8	5321C1027	5322C1024	5321C1026	5322C1025
1/4	5321C2027	5322C2024	5321C2026	5322C2025

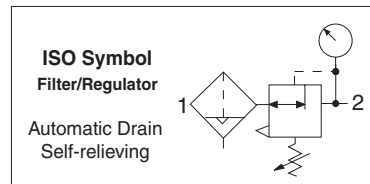
* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5321C1027.



FILTER and DIAPHRAGM type REGULATOR

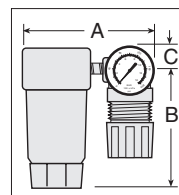
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/8	5321C1037	5322C1034	5321C1036	5322C1035
1/4	5321C2037	5322C2034	5321C2036	5322C2035

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5321C1037.

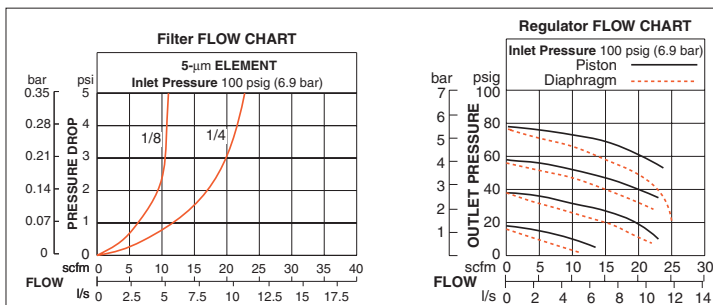


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/8, 1/4	Polycarbonate	2-oz (60-ml)	4.4 (111)	3.6 (90)	0.7 (17)	1.6 (41)	0.77 (0.34)
1/8, 1/4	Aluminum	2-oz (60-ml)	4.4 (111)	4.3 (109)	0.7 (17)	1.6 (41)	0.79 (0.36)

† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77



Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Piston.
Ambient/Media Temperature:
 Polycarbonate bowl: 40° to 125°F (4° to 52°C).
 Metal bowls: 40° to 175°F (4° to 80°C).
Fluid Media: Compressed air.
Inlet Pressure - Automatic drain model:
 Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).
 Metal bowl: 15 to 200 psig (1 to 14 bar).
Inlet Pressure - Manual drain model:
 Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).
 Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 100 psig (7 bar).
Pressure Gauge: 0 to 160 psig (0 to 11 bar); 1/8 NPT gauge ports front and rear.
Oil Adjustment: Internal; tamper-resistant.
Panel Mounting: 1-3/16 inch (30 mm) hole required.
Filter Element: 5-micron rated polyethylene.
Heads: Aluminum.
Bowls: Polycarbonate bowls, or aluminum bowls.
Regulator Dome and Knob: Acetal.
Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.3

Modular Filter and Regulator Combinations

MID-SIZE Series

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 100 scfm

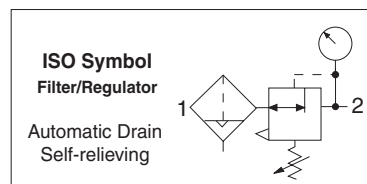
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/4	5M11B2110	5M11B2210	5M11B2310	5M11B2410
3/8	5M11B3110	5M11B3210	5M11B3310	5M11B3410
1/2	5M11B4110	5M11B4210	5M11B4310	5M11B4410

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5M11B2110.

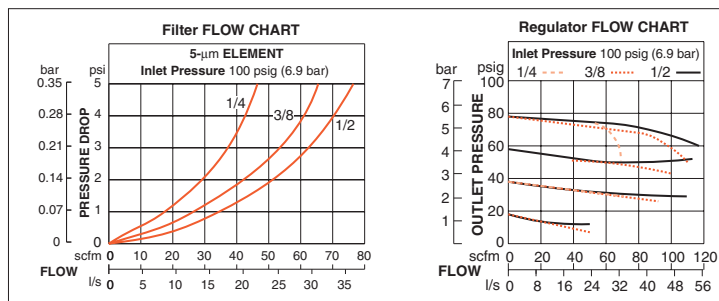
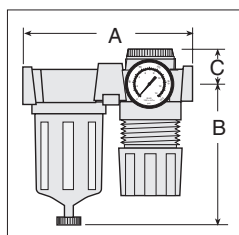


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/4, 3/8, 1/2	Polycarbonate	4-oz (120-ml)	5.4 (137)	6.2 (157)	1.3 (33)	2.8 (71)	2.20 (1.00)
1/4, 3/8, 1/2	Zinc	4-oz (120-ml)	5.4 (137)	6.3 (160)	1.3 (33)	2.8 (71)	2.57 (1.17)

† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	936K77



Pressure Gauge included.
Includes 2 female port blocks.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Piston.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowls: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Filter Element: 5-micron rated polyethylene.

Heads: Zinc.

Oil Adjustment: External; tamper-resistant.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Panel Mounting: 1-9/16 inch (40 mm) hole required.

Regulator Dome and Knob: Acetal. Optional metal regulator dome.

Bowls: Polycarbonate bowls with zinc shatterguards, or zinc bowls.

Sight Dome: Clear nylon.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Filter and Regulator Combinations

FULL-SIZE Series

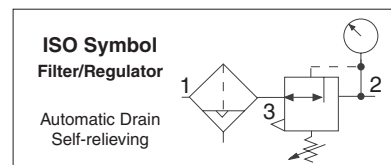
Port Sizes: 1/4, 3/8, 1/2 & 3/4 – Flow to 138 scfm

With THREADED PORTS				
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/4	5F11B2120	5F11B2220	5F11B2320	5F11B2420
3/8	5F11B3120	5F11B3220	5F11B3320	5F11B3420
1/2	5F11B4120	5F11B4220	5F11B4320	5F11B4420
3/4	5F11B5120	5F11B5220	5F11B5320	5F11B5420



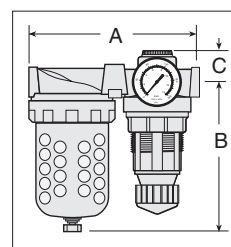
With PIPE NIPPLES				
Fittings for Tubing	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/4	5F00B2120	5F00B2220	5F00B2320	5F00B2420
3/8	5F00B3120	5F00B3220	5F00B3320	5F00B3420
1/2	5F00B4120	5F00B4220	5F00B4320	5F00B4420
3/4	5F00B5120	5F00B5220	5F00B5320	5F00B5420

*NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5F11B2120, C5F00B2120.

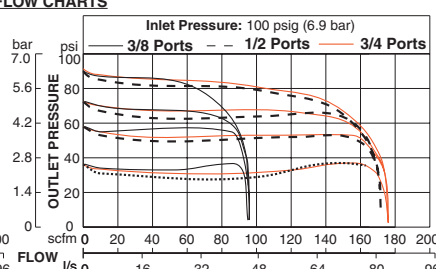
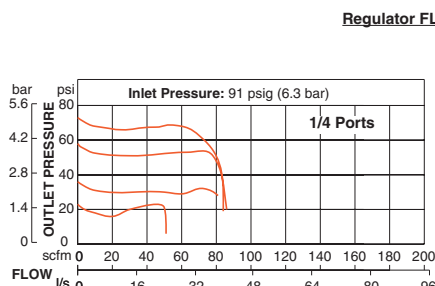
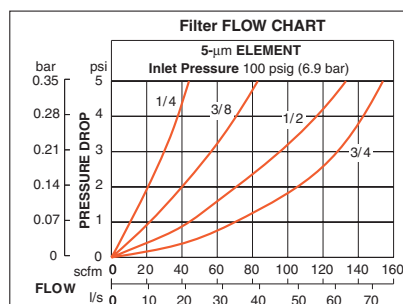


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/4, 3/8, 1/2, 3/4	Polycarbonate	8-oz (240-ml)	7.0 (178)	5.8 (147)	1.3 (33)	2.8 (71)	4.09 (1.86)
1/4, 3/8, 1/2, 3/4	Zinc	8-oz (240-ml)	7.0 (178)	6.4 (163)	1.3 (33)	2.8 (71)	5.06 (2.30)

† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	939K77



Pressure Gauge included. Units with Threaded Ports Include 2 female port blocks.
Options: External Automatic Drain, refer to page E6.7. Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Piston.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 125 psig (9 bar).

Filter Element: 5-micron rated polyethylene.

Heads: Zinc.

Oil Adjustment: External; tamper-resistant.

Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Bowls: Polycarbonate bowl with steel shatterguard, or zinc bowl with clear nylon sight glass.

Bowl Rings: Aluminum.

Regulator: Nylon dome; acetal Knob.

Sight Dome: Clear nylon.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.5

Port Sizes: 3/4 & 1 – Flow to 270 scfm

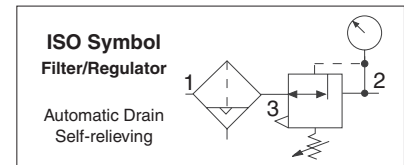
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
3/4	5H00C5110	5H00C5210	5H00C5310	5H00C5410
1	5H00C6110	5H00C6210	5H00C6310	5H00C6410

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5H00C5110.

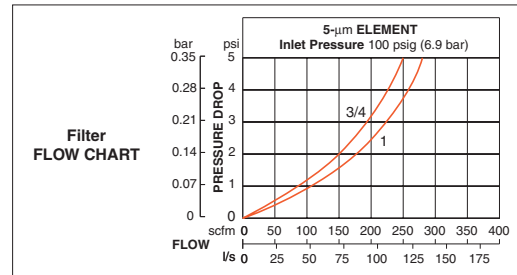
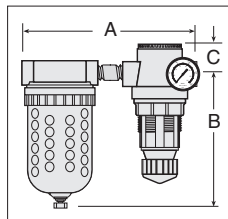


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
3/4, 1	Polycarbonate	16-oz (480-ml)	9.1 (231)	8.0 (203)	2.4 (62)	4.3 (108)	4.53 (2.05)
3/4, 1	Zinc	16-oz (480-ml)	9.1 (231)	8.3 (210)	2.1 (54)	4.3 (108)	5.95 (2.70)

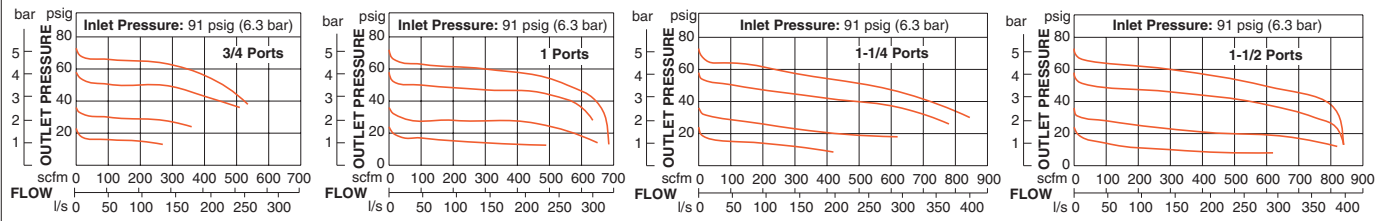
† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	1010K77



Regulator FLOW CHARTS



Pressure Gauge included.
Options: External Automatic Drain, Electronic Drain, refer to page E6.7.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Piston.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Heads: Aluminum.

Oil Adjustment: External; tamper-resistant.

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar);

1/4 NPT gauge ports front and rear.

Bowls: Polycarbonate bowl with steel shatterguard, or zinc bowl with clear nylon sight glass.

Bowl Rings: Aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Inline Filter and Lubricator Combinations

MINIATURE Series

Port Sizes: 1/8 & 1/4 – Flow to 19 scfm

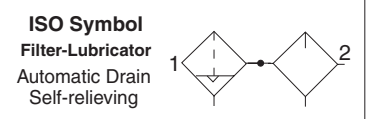
Port Size	Lubricator Fill Type	Model Numbers*			
		Automatic Drain		Manual Drain	
		Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/8	Fill Port	5311C1012	5312C1012	5311C1011	5312C1011
1/4	Fill Port	5311C2012	5312C2012	5311C2011	5312C2011
1/8	Quick-Fill Cap	5311C1112	5312C1112	5311C1111	5312C1111
1/4	Quick-Fill Cap	5311C2112	5312C2112	5311C2111	5312C2111

* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5311C1012.

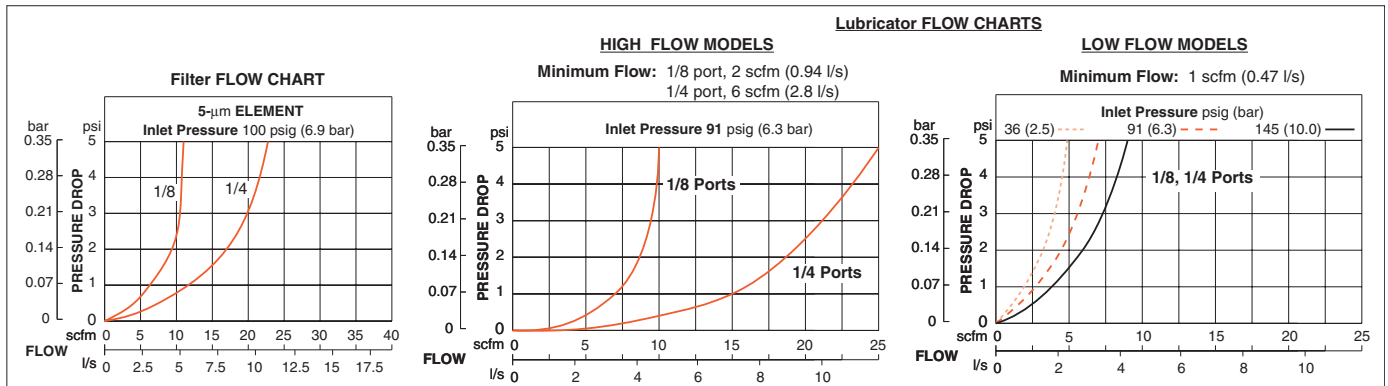
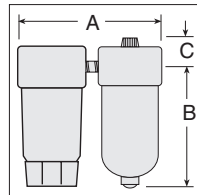


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/8, 1/4	Polycarbonate	2-oz (60-ml)	3.4 (86)	3.6 (90)	0.7 (17)	1.6 (41)	0.59 (0.27)
1/8, 1/4	Metal	2-oz (60-ml)	3.4 (86)	4.3 (109)	0.7 (17)	1.6 (41)	0.59 (0.27)

† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77



E

E5

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, Lubricator – Wick-Feed or Quick-Fill Cap.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Oil Adjustment: Internal; tamper-resistant.

Filter Drain: Internal automatic drain; optional manual drain.

Filter Element: 5-micron rated polyethylene.

Heads: Aluminum.

Bowls: Polycarbonate or aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.7

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 100 scfm

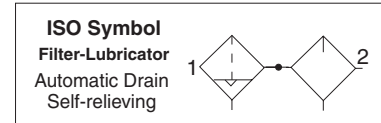
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/4	5M11B2101	5M11B2202	5M11B2301	5M11B2402
3/8	5M11B3101	5M11B3202	5M11B3301	5M11B3402
1/2	5M11B4101	5M11B4202	5M11B4301	5M11B4402

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5M11B2101.

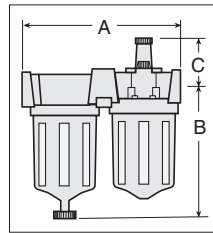


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/4, 3/8, 1/2	Polycarbonate	4-oz (120-ml)	5.6 (137)	4.8 (122)	1.8 (46)	2.8 (71)	2.29 (1.04)
1/4, 3/8, 1/2	Metal	4-oz (120-ml)	5.6 (137)	4.9 (123)	1.8 (46)	2.8 (71)	3.10 (1.41)

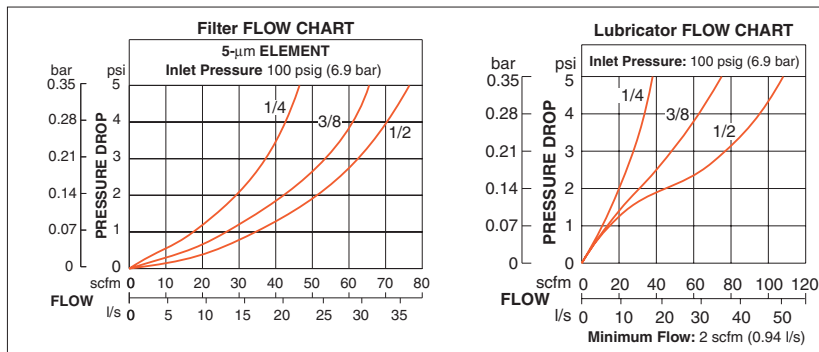
† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	936K77



E



E5

Pressure Gauge included.
Includes 2 female port blocks.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, Lubricator – Sight-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Heads: Zinc.

Oil Adjustment: External; tamper-resistant.

Bowls: Polycarbonate bowls with zinc shatterguards, or zinc bowls.

Sight Dome: Clear nylon.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Filter and Lubricator Combinations

FULL-SIZE Series

Port Sizes: 1/4, 3/8, 1/2 & 3/4 – Flow to 138 scfm

With THREADED PORTS				
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/4	5F11B2101	5F11B2202	5F11B2301	5F11B2402
3/8	5F11B3101	5F11B3202	5F11B3301	5F11B3402
1/2	5F11B4101	5F11B4202	5F11B4301	5F11B4402
3/4	5F11B5101	5F11B5202	5F11B5301	5F11B5402

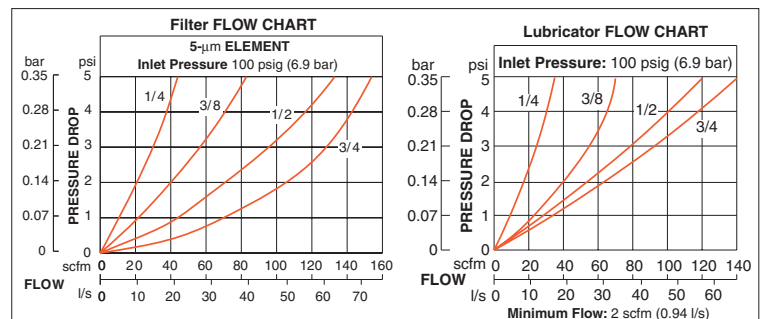
With PIPE NIPPLES				
Fittings for Tubing	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
1/4	5F00B2101	5F00B2202	5F00B2301	5F00B2402
3/8	5F00B3101	5F00B3202	5F00B3301	5F00B3402
1/2	5F00B4101	5F00B4202	5F00B4301	5F00B4402
3/4	5F00B5101	5F00B5202	5F00B5301	5F00B5402

* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5F11B2101, C5F00B2101.

Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/4, 3/8, 1/2, 3/4	Polycarbonate	8-oz (240-ml)	7.1 (180)	5.8 (147)	1.3 (33)	2.8 (71)	4.09 (1.86)
1/4, 3/8, 1/2, 3/4	Zinc	8-oz (240-ml)	7.1 (180)	6.4 (163)	1.3 (33)	2.8 (71)	5.9 (2.68)

† Less gauge.

REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	939K77



Pressure Gauge included. Units with Threaded Ports Include 2 female port blocks.
Options: Electronic Drain, refer to page E6.7.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, Lubricator – Sight-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 125 psig (9 bar).

Filter Element: 5-micron rated polyethylene.

Heads: Zinc.

Oil Adjustment: External; tamper-resistant.

Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

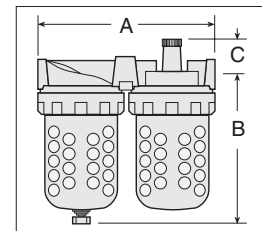
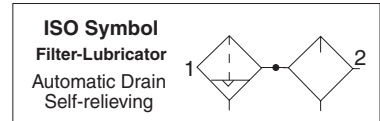
Bowls: Polycarbonate bowl with steel shatterguard, or zinc bowl with clear nylon sight glass.

Bowl Rings: Aluminum.

Regulator: Nylon dome; acetal knob.

Sight Dome: Clear nylon.

Seals: Nitrile.



Port Sizes: 3/4 & 1 – Flow to 270 scfm

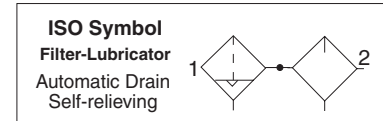
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
3/4	5H00B5101	5H00B5202	5H00B5301	5H00B5402
1	5H00B6101	5H00B6202	5H00B6301	5H00B6402

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5H00B5101.

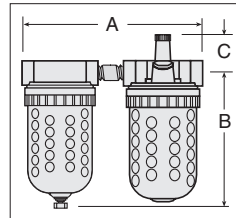


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
3/4, 1	Polycarbonate	16-oz (480-ml)	9.2 (234)	8.0 (204)	1.4 (37)	4.3 (108)	5.27 (2.39)
3/4, 1	Aluminum	16-oz (480-ml)	9.2 (234)	8.3 (210)	1.4 (37)	4.3 (108)	6.3 (2.86)

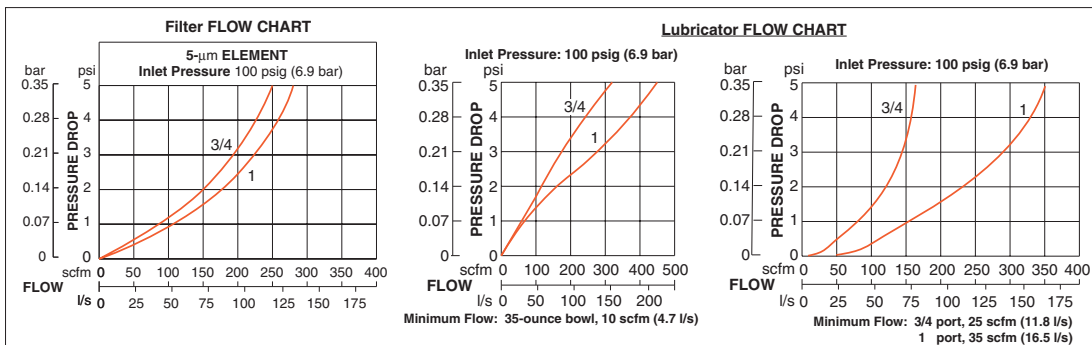
† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	1010K77



E



E5

Pressure Gauge included.
Options: Automatic External Drain, Electronic Drain, refer to page E6.7.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, Lubricator – Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Heads: Aluminum.

Oil Adjustment: External; tamper-resistant.

Bowls: Polycarbonate bowls with steel shatterguard, or aluminum bowls with sight glass.

Bowl Rings: Aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Integrated Filter/Regulator plus Lubricator Combinations

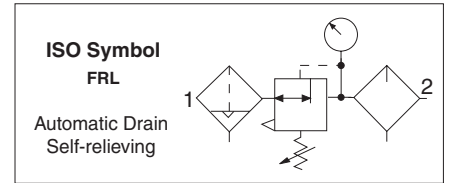
BANTAM Series

Port Sizes: 1/8 & 1/4 and Tube Fittings – Flow to 23 scfm

Combination with PISTON Type REGULATOR

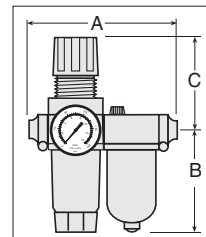
Port Size	Model Numbers*#			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
With THREADED PORTS				
1/8	5D01C0115	5D01C0216	5D01C0315	5D01C0416
1/4	5D02C0115	5D02C0216	5D02C0315	5D02C0416
With Quick Connect TUBE FITTINGS				
1/4	5D03C0115	5D03C0216	5D03C0315	5D03C0416
3/8	5D04C0115	5D04C0216	5D04C0315	5D04C0416
4mm	5D05C0115	5D05C0216	5D05C0315	5D05C0416
6mm	5D06C0115	5D06C0216	5D06C0315	5D06C0416
8mm	5D07C0115	5D07C0216	5D07C0315	5D07C0416
10mm	5D08C0115	5D08C0216	5D08C0315	5D08C0416

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5D01C0115.
#Change the ninth digit to "7" for quick fill lubricator cap e.g., 5D01C0117

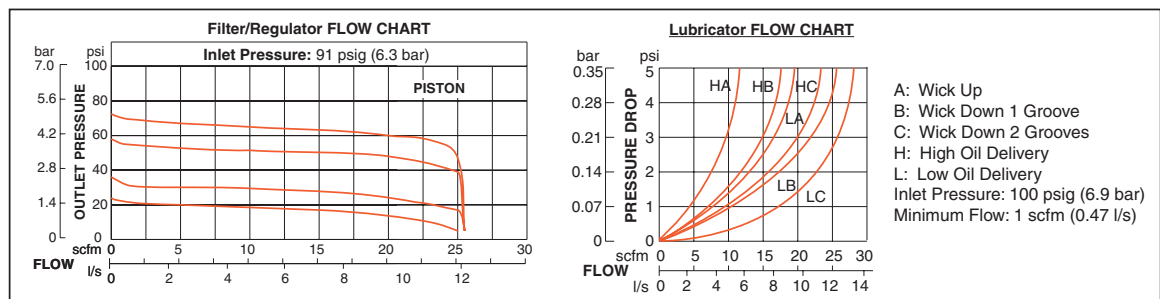


Port Size	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
		A	B**	C	Depth †	
1/8, 1/4	2-oz (60-ml)	4.6 (117)	3.6 (92)	2.6 (67)	1.8 (45)	0.57 (0.32)
Models below have quick-connect tube fittings.						
1/4	2-oz (60-ml)	5.0 (127)	3.6 (92)	2.6 (67)	1.8 (45)	0.55 (0.31)
3/8	2-oz (60-ml)	5.6 (142)	3.6 (92)	2.6 (67)	1.8 (45)	0.55 (0.31)
4, 6 mm	2-oz (60-ml)	5.1 (130)	3.6 (92)	2.6 (67)	1.8 (45)	0.55 (0.31)
8 mm	2-oz (60-ml)	4.7 (120)	3.6 (92)	2.6 (67)	1.8 (45)	0.55 (0.31)
10 mm	2-oz (60-ml)	5.6 (142)	3.6 (92)	2.6 (67)	1.8 (45)	0.55 (0.31)

** Dimension for polycarbonate filter bowl; metal bowl is 3.8 (97).
† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77



Pressure Gauge included. Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, Regulator - Piston;
Lubricator - Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).
Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).
Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).
Metal bowl: 0 to 200 psig (0 to 14 bar).

Pressure Gauge: 0 to 160 psig (11 bar); 1/8 NPT gauge ports front and rear.

Filter Element: 5-micron rated polyethylene.

Oil Adjustment: External, no shutoff.

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Filter/Regulator & Lubricator Bodies: Acetal.

Bowls: Polycarbonate bowls or aluminum bowls.

Regulator Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.11

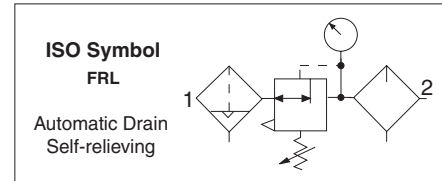
Modular Integrated Filter/Regulator plus Lubricator Combinations

BANTAM Series

Port Sizes: 1/8 & 1/4 and Tube Fittings – Flow to 23 scfm

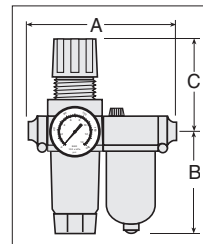
Combination with DIAPHRAGM Type REGULATOR				
Port Size	Model Numbers*#			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
With THREADED PORTS				
1/8	5D01C0125	5D01C0226	5D01C0325	5D01C0426
1/4	5D02C0125	5D02C0226	5D02C0325	5D02C0426
With Quick Connect TUBE FITTINGS				
1/4	5D03C0125	5D03C0226	5D03C0325	5D03C0426
3/8	5D04C0125	5D04C0226	5D04C0325	5D04C0426
4mm	5D05C0125	5D05C0226	5D05C0325	5D05C0426
6mm	5D06C0125	5D06C0226	5D06C0325	5D06C0426
8mm	5D07C0125	5D07C0226	5D07C0325	5D07C0426
10mm	5D08C0125	5D08C0226	5D08C0325	5D08C0426

* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5D01C0115.
#Change the ninth digit to "7" for quick fill lubricator cap e.g., 5D01C0127.

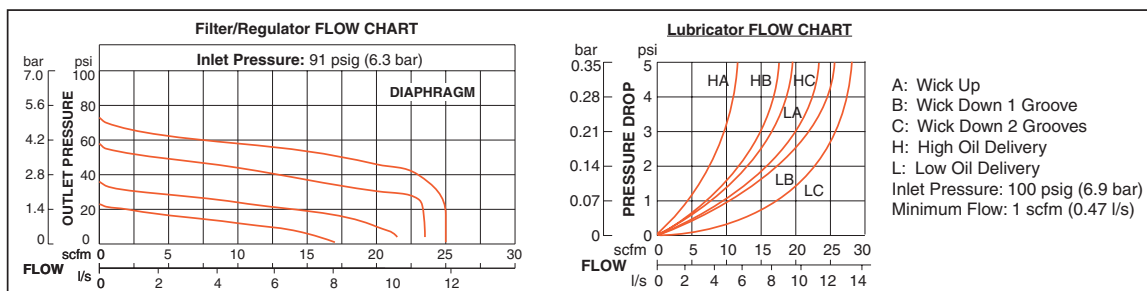


Port Size	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
		A	B**	C	Depth †	
1/8, 1/4	2-oz (60-ml)	4.6 (117)	3.6 (92)	2.6 (67)	1.8 (45)	0.57 (0.32)
Models below have quick-connect tube fittings.						
1/4	2-oz (60-ml)	5.0 (127)	3.6 (92)	2.6 (67)	1.8 (45)	0.55 (0.31)
3/8	2-oz (60-ml)	5.6 (142)	3.6 (92)	2.6 (67)	1.8 (45)	0.55 (0.31)
4, 6 mm	2-oz (60-ml)	5.1 (130)	3.6 (92)	2.6 (67)	1.8 (45)	0.55 (0.31)
8 mm	2-oz (60-ml)	4.7 (120)	3.6 (92)	2.6 (67)	1.8 (45)	0.55 (0.31)
10 mm	2-oz (60-ml)	5.6 (142)	3.6 (92)	2.6 (67)	1.8 (45)	0.55 (0.31)

** Dimension for polycarbonate filter bowl; metal bowl is 3.8 (97).
† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77



Pressure Gauge included. Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, Lubricator – Diaphragm.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Pressure Gauge: 0 to 160 psig (11 bar); 1/8 NPT gauge ports front and rear.

Filter Element: 5-micron rated polyethylene.

Oil Adjustment: External, no shutoff.

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Filter/Regulator & Lubricator Bodies: Acetal.

Bowls: Polycarbonate bowls or aluminum bowls.

Regulator Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

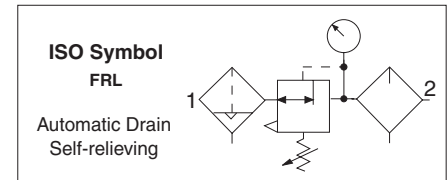
Inline Integrated Filter/Regulator plus Lubricator Combinations

MINIATURE Series

Port Sizes: 1/8 & 1/4 – Flow to 24 scfm

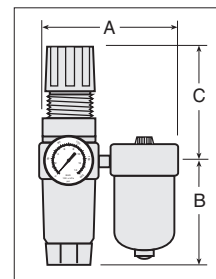
Combination with PISTON Type REGULATOR				
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
Fill Port Lubricator				
1/8	5351C1006	5352C1006	5351C1005	5352C1005
1/4	5351C2006	5352C2006	5351C2005	5352C2005
With QUICK-FILL Cap Lubricator				
1/8	5351C1106	5352C1106	5351C1105	5352C1105
1/4	5351C2106	5352C2106	5351C2105	5352C2105

* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5351C1006.

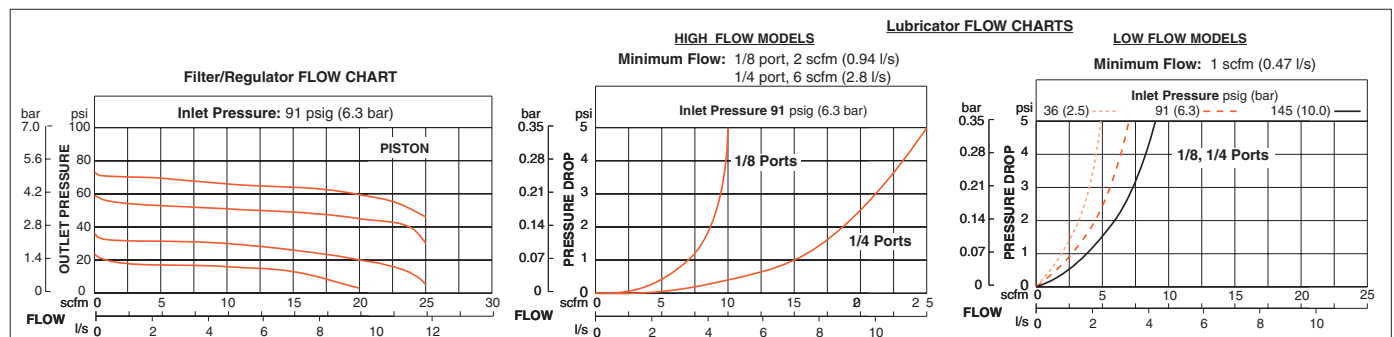


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/8, 1/4	Polycarbonate	2-oz (59.1-ml)	3.7 (94)	3.9 (99)	2.6 (67)	1.6 (41)	0.66 (0.30)
1/8, 1/4	Aluminum	2-oz (59.1-ml)	4.0 (101)	4.3 (109)	2.6 (67)	1.6 (41)	0.66 (0.30)

† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77



Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, Regulator - Piston;
Lubricator - Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Gauge: 0 to 160 psig (11 bar);

1/8 NPT gauge ports front and rear.

Oil Adjustment: Internal; tamper-resistant.

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Filter Drain: Internal automatic drain; optional manual drain.

Filter Element: 5-micron rated polyethylene.

Bodies: Aluminum for filter/regulator and lubricator.

Bowls: Polycarbonate bowls or aluminum bowls.

Regulator Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.13

Inline Integrated Filter/Regulator plus Lubricator Combinations

MINIATURE Series

Port Sizes: 1/8 & 1/4 – Flow to 24 scfm

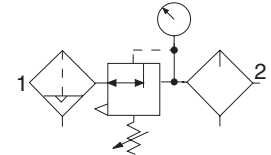
Combination with DIAPHRAGM Type REGULATOR

Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
Fill Port Lubricator				
1/8	5341C1006	5342C1006	5341C1005	5342C1005
1/4	5341C2006	5342C2006	5341C2005	5342C2005
With QUICK-FILL Cap Lubricator				
1/8	5341C1106	5342C1106	5341C1105	5342C1105
1/4	5341C2106	5342C2106	5341C2105	5342C2105

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5351C1006.

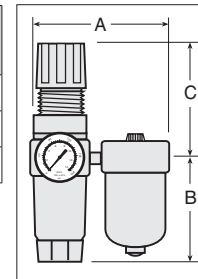


ISO Symbol
FRL
Automatic Drain
Self-relieving



Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/8, 1/4	Polycarbonate	2-oz (59.1-ml)	3.7 (94)	3.6 (92)	2.6 (67)	1.6 (41)	0.66 (0.30)
1/8, 1/4	Aluminum	2-oz (59.1-ml)	4.0 (101)	4.3 (109)	2.6 (67)	1.6 (41)	0.66 (0.30)

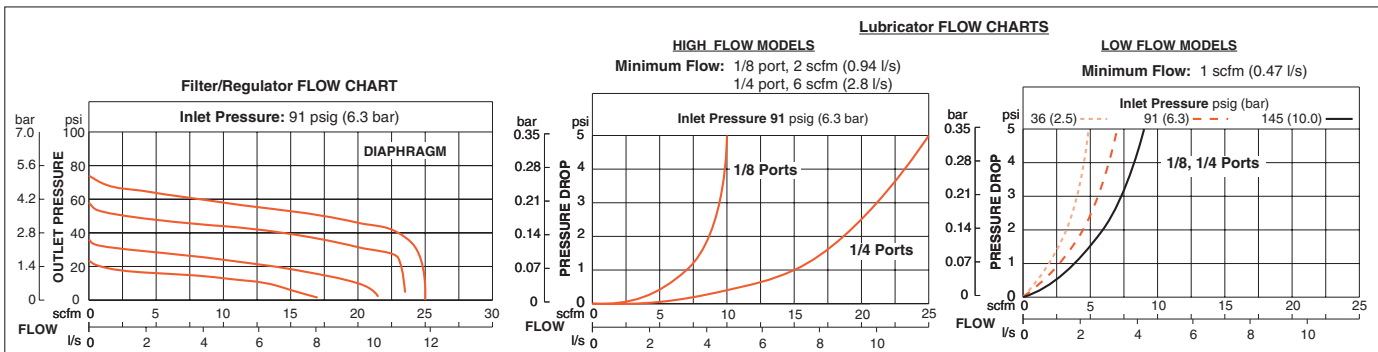
† Less gauge.



REPLACEMENT FILTER ELEMENTS

Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77

E



E5

Pressure Gauge included.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, Lubricator – Diaphragm;
Lubricator - Week-Feed

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Gauge: 0 to 160 psig (11 bar);

1/8 NPT gauge ports front and rear.

Oil Adjustment: Internal; tamper-resistant.

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Filter Drain: Internal automatic drain; optional manual drain.

Filter Element: 5-micron rated polyethylene.

Bodies: Aluminum for filter/regulator and lubricator.

Bowls: Polycarbonate bowls or aluminum bowls.

Regulator Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Integrated Filter/Regulator plus Lubricator Combinations

MID-SIZE Series

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 100 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

5N 00 B 2 1 0 1

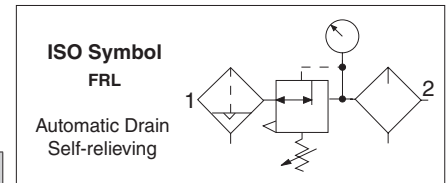
CONNECTIONS	
NPTF Pipe In, Out, Between	00
NPTF Pipe In & Out, Modular Between	09
Modular, Male Ports In & Out	10
Modular, Female Ports In & Out	11

PIPE SIZE	
1/4	2
3/8	3
1/2	4

FILTER DRAIN TYPE	
None	0
Automatic Drain, Plastic Bowl	1
Automatic Drain, Metal Bowl	2
Manual Drain, Plastic Bowl	3
Manual Drain, Metal Bowl	4

Regulator TYPE ADJUSTMENT RANGE	
None	0
0-100 psig (0-6.9 bar)	1
0-50 psig (0-3.4 bar)	3
0-150 psig (0-10 bar)	5

LUBRICATOR FILL TYPE	
None	0
Plastic Bowl	1
Metal Bowl	2
Plastic Bowl, Quick-Fill Cap	3
Metal Bowl, Quick-Fill Cap	4



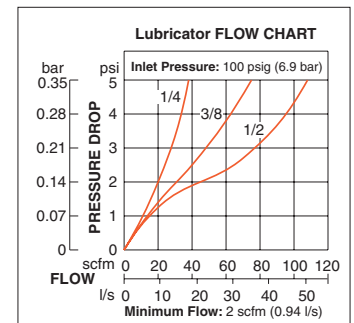
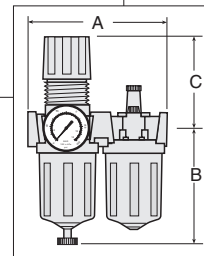
Port Size	Bowl Type	Bowl Capacity	Dimensions* inches (mm)				Weight † lb (kg)
			A	B**	C***	Depth †	
1/4, 3/8, 1/2	Polycarbonate	4-oz (120-ml)	4.9 (124)	4.6 (116)	3.3 (83)	2.4 (60)	2.94 (1.34)
1/4, 3/8, 1/2	Zinc	4-oz (120-ml)	4.9 (124)	4.9 (123)	3.3 (83)	2.4 (60)	2.94 (1.34)

* Dimensions for NPTF Pipe In & Out, Modular Between option; dimensions for other combinations consult ROSS.

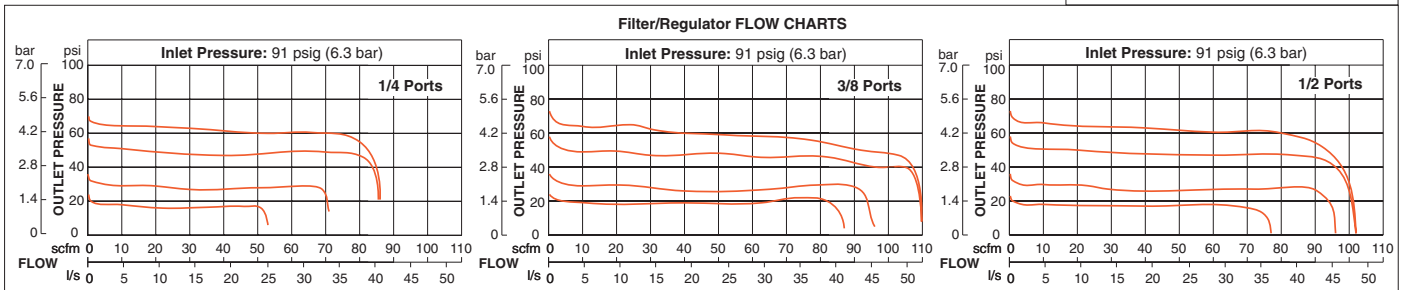
** Bowl removal clearance: add 3.1 (79).

*** Dome removal clearance: add 0.63 (16).

† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	936K77



Pressure Gauge included. Includes 2 Female Port Blocks.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, Regulator - Diaphragm; Lubricator - Sight-feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure:

For automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

For manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Oil Adjustment: External; tamper-resistant.

Panel Mounting: 1-9/16 inch (40 mm) hole required.

Filter Element: 5-micron rated polyethylene.

Bodies: Zinc for filter/regulator and lubricator.

Bowls: Polycarbonate bowls with zinc shatterguard, or zinc bowls.

Regulator Dome and Knob: Acetal.

Seals: Nitrile.

Sight Dome: Clear nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.15

Modular Integrated Filter/Regulator plus Lubricator Combinations

MD3™ Series

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 110 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD3 53P B B 2 C 2 2 Q 1

BOWL SIZE	
Polycarbonate Bowl 5.1-oz (151-ml)	53P
Metal Bowl 6-oz (177-ml)	53M
Metal Bowl 6-oz (177-ml) - on Filter	53E
Metal Bowl 10-oz (295-ml) - on Lubricator	53F
Plastic Bowl 6-oz (177-ml) - on Filter	53F
Metal Bowl 10-oz (295-ml) - on Lubricator	53F

ADJUSTMENT RANGE	
0-200 psig (0-13.8 bar)	A
0-150 psig (0-10.3 bar)	B
0-100 psig (0-6.9 bar)	C
0-50 psig (0-3.4 bar)	D
Reverse Flow 0-200 psig (0-13.8 bar)	F
Reverse Flow 0-150 psig (0-10.3 bar)	G
Reverse Flow 0-100 psig (0-6.9 bar)	H
Reverse Flow 0-50 psig (0-3.4 bar)	J

FILTER ELEMENT TYPE	
40 µm sintered bronze	A
5 µm polyethylene	B
5 µm sintered bronze	E
20 µm sintered bronze	F

PIPE SIZE	
1/4 NPTF	2
3/8 NPTF	3
1/2 NPTF	4
1/4 BSPP	B
3/8 BSPP	C
1/2 BSPP	D

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

BOWL DRAIN	
Manual Drain	2
Float Drain	0

ADD on L-O-X® - Optional	
L-O-X® on outlet side	1
L-O-X® on the inlet side (must also choose Reverse Flow)	2
EEZ-ON® on outlet side	3
EEZ-ON® on inlet side (must also choose Reverse Flow)	4
Blank - No L-O-X®	

LUBRICATOR FILL TYPE	
Quick Fill Cap	Q
Fill Port	S

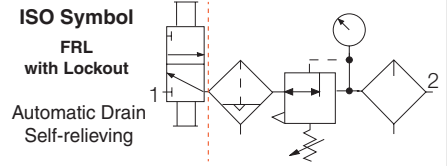


E

REPLACEMENT FILTER ELEMENTS*

Element Rating	Element Material	Part Number
5-µm	Polyethylene	R-A60F-03PE5
5-µm	Sintered Bronze	R-A60F-03E5
20-µm	Sintered Bronze	R-A60F-03E4
40-µm	Sintered Bronze	R-A60F-03E3

* For polycarbonate and metal bowl types.



E5

Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, or Sintered Bronze, Regulator - Diaphragm; Lubricator - Sight-feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Filter Inlet Pressure:

Polycarbonate bowl & Manual drain: 0 to 150 psig (0 to 10 bar).

Polycarbonate bowl & Float drain: 30 to 150 psig (2 to 10 bar).

Filter Inlet Pressure:

Metal bowl & Manual drain: 0-250 psig (0 to 17 bar).

Metal bowl & Float drain: 30-200 psig (2 to 14 bar).

Lubricator Inlet Pressure:

Polycarbonate bowl: 150 psig (10 bar) maximum.

Metal bowl: 250 psig (17 bar) maximum.

Outlet Pressure: Adjustable up to 200 psig (14 bar); optional adjusting springs.

Optional Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0-200 psig (0-13.8 bar); 1/4 NPT gauge ports front and rear.

Panel Mounting: 2-1/16 inch (52 mm) hole required.

Oil Adjustment: External; tamper resistant.

Filter Element: 5-micron rated polyethylene; 5-, 20- or 40-micron rated sintered bronze.

Body: Zinc.

Dome: Nylon.

Bowl: Polycarbonate bowl with nylon shatterguard, or aluminum bowl with clear nylon sight glass. Lubricator bowl only: extended aluminum bowl with clear nylon sight glass.

Seals: Nitrile.

Valve: Brass.

Sight-Feed Dome: Nylon.

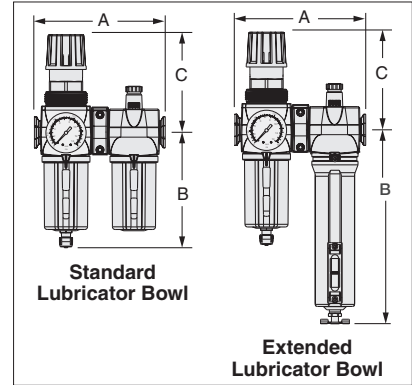
IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Integrated Filter/Regulator plus Lubricator Combinations

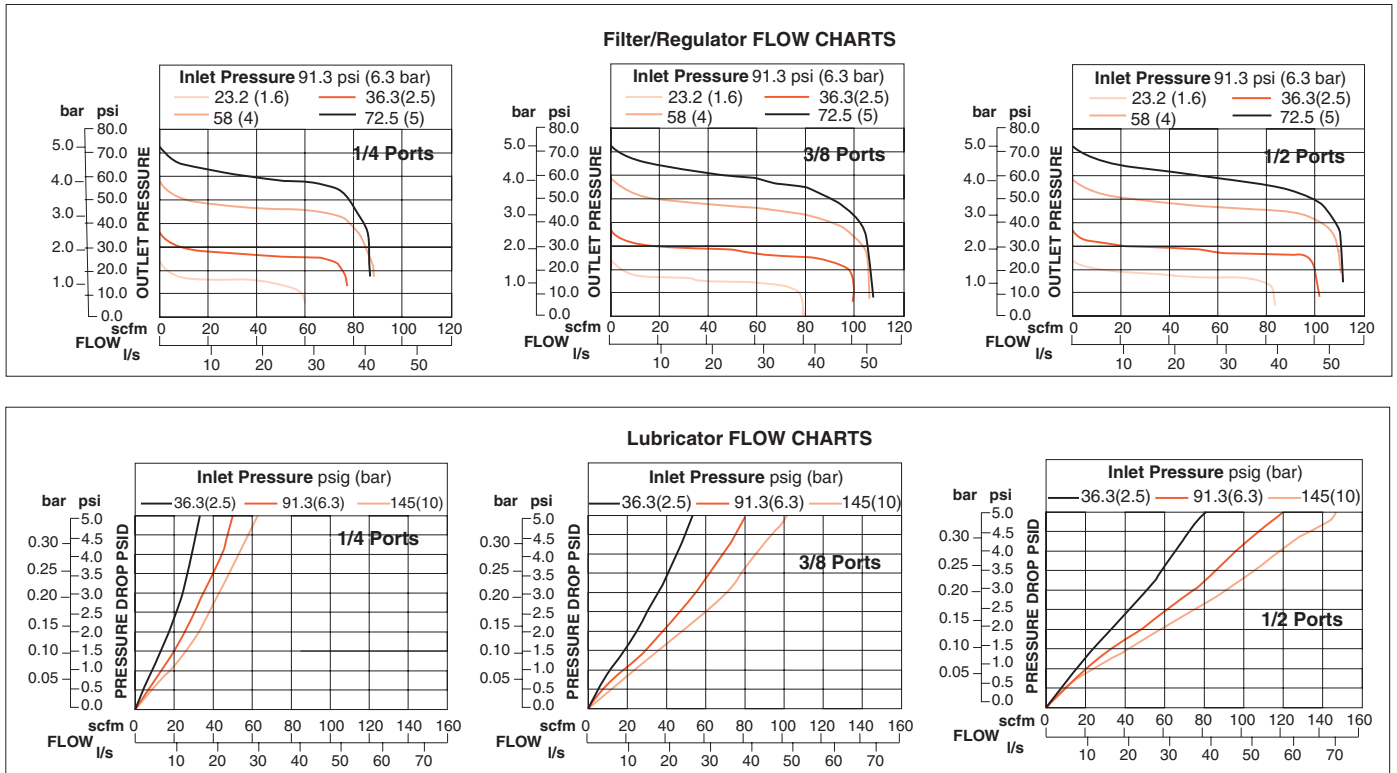
MD3™ Series

Bowl Type	Dimensions inches (mm)				Weight † lb (kg)
	A	B*	C	Depth †	
Polycarbonate	6.46 (164.1)	5.54 (140.6)	4.68 (119)	2.90 (73.7)	4.7 (2.1)
Metal	6.46 (164.1)	6.42 (163.1)	4.68 (119)	2.90 (73.7)	5.1 (2.3)
Extended Metal	6.46 (164.1)	9.37 (238)	4.68 (119)	2.90 (73.7)	5.3 (2.4)

Lockout: With the lockout valve, add 2.3 (58) to dimension A.
 * Bowl (standard) removal clearance: add 3.1 (79)
 * Bowl (extended) removal clearance: add 6.1 (155)
 † Less gauge.



AIR FLOW and CONSTRUCTION DATA



E

E5

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.17

Modular Integrated Filter/Regulator plus Lubricator Combinations

FULL-SIZE Series

Port Sizes: 1/4, 3/8, 1/2 & 3/4 – Flow to 140 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

5E 00 B 2 1 0 5

CONNECTIONS	
NPTF Pipe In, Out, Between	00
NPTF Pipe In & Out, Modular Between	09
Modular, Male Ports In & Out	10
Modular, Female Ports In & Out	11

PIPE SIZE	
1/4	2
3/8	3
1/2	4
3/4	5

FILTER DRAIN TYPE	
None	0
Automatic Drain, Plastic Bowl	1
Automatic Drain, Metal Bowl	2
Manual Drain, Plastic Bowl	3
Manual Drain, Metal Bowl	4

Regulator TYPE ADJUSTMENT RANGE	
None	0
0-125 psig (0-8.6 bar)	2
0-50 psig (0-3.4 bar)	4
0-175 psig (0-12.1 bar)	6

LUBRICATOR FILL TYPE	
None	0
Sight-Feed, Plastic Bowl	1
Sight-Feed, Metal Bowl	2
Sight-Feed, Plastic Bowl, Quick-Fill Cap	3
Sight-Feed, Metal Bowl, Quick-Fill Cap	4
Wick-Feed, Plastic Bowl	5
Wick-Feed, Metal Bowl	6
Wick-Feed, Plastic Bowl, Quick-Fill Cap	7
Wick-Feed, Metal Bowl, Quick-Fill Cap	8



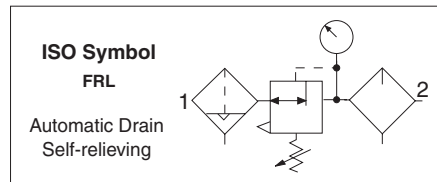
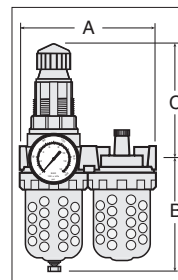
Port Size	Bowl Type	Dimensions* inches (mm)				Weight † lb (kg)
		A	B**	C***	Depth †	
1/4, 3/8, 1/2, 3/4	Polycarbonate 8-oz (240-ml)	6.7 (170)	5.8 (146)	5.8 (146)	3.5 (89)	5.94 (2.69)
1/4, 3/8, 1/2, 3/4	Metal 8-oz (240-ml)	6.7 (170)	6.4 (163)	5.8 (146)	3.5 (89)	5.94 (2.69)

* Dimensions for NPTF Pipe In & Out, Modular Between option; dimensions for other combinations consult ROSS.

** Bowl removal clearance: add 3.1 (79).

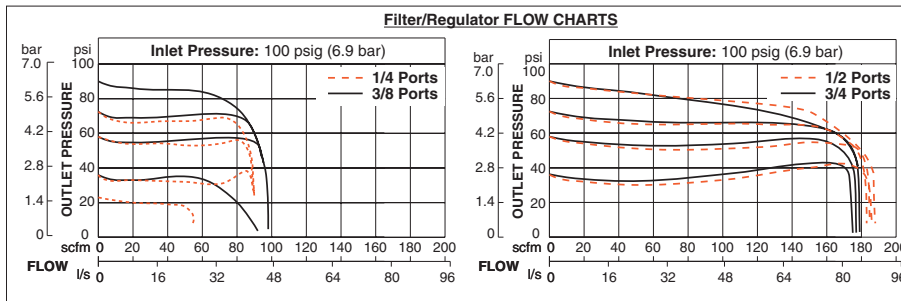
*** Dome removal clearance: add 0.63 (16).

† Less gauge.

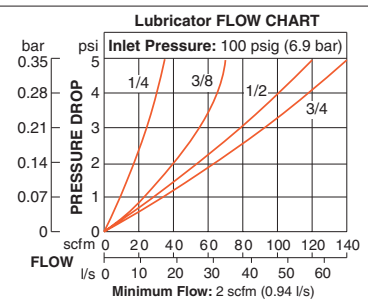


REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	939K77

Filter/Regulator FLOW CHARTS



Lubricator FLOW CHART



Pressure Gauge included. Units with Threaded Ports Include 2 female port blocks.

Options: External Automatic Drain, refer to page E6.7.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, Regulator - Diaphragm; Lubricator - Sight-Feed, or Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig (up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 125 psig (9 bar).

Filter Element: 5-micron rated polyethylene.

Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Oil Adjustment: External; tamper-resistant.

Bodies: Zinc for filter/regulator and lubricator.

Bowls: Polycarbonate bowls with steel shatterguards, or zinc bowls with clear nylon sight glasses.

Bowl Rings: Nylon.

Regulator: Nylon dome; acetal knob.

Sight Dome: Clear nylon. **Seals:** Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Integrated Filter/Regulator plus Lubricator Combinations

MD4™ Series

Port Sizes: 3/8, 1/2 & 3/4 – Flow to 205 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD4 **53P** **B** **B** **1** **B** **5** **2** **S** **1**



BOWL MATERIAL/SIZE	
Two Polycarbonate Bowls 9-oz (270-ml)	53P
Two Metal Bowl 9-oz (270-ml)	53M
Metal Bowl 9-oz (270-ml) - on Filter	
Extended Metal Bowl 15-oz (450-ml) - on Lubricator	53E
Platic Bowl 9-oz (270-ml) - on Filter	
Extended Metal Bowl 15-oz (450-ml) - on Lubricator	53F

ADJUSTMENT RANGE	
0-175 psig (0-12.1 bar) with 0-200 psig (0-13.8 bar) gauge	A
0-125 psig (0-8.6 bar) standard with 0-200 psig (0-13.8 bar) gauge	B
0-50 psig (0-3.4 bar) with 0-60 psig (0-4.1 bar) gauge	C
0-20 psig (0-1.4 bar) with 0-60 psig (0-4.1 bar) gauge	D
Reverse Flow 0-175 psig (0-12.1 bar) with 0-200 psig (0-13.8 bar) gauge	F
Reverse Flow 0-125 psig (0-8.6 bar) standard with 0-200 psig (0-13.8 bar) gauge	G
Reverse Flow 0-50 psig (0-3.4 bar) with 0-60 psig (0-4.1 bar) gauge	H
Reverse Flow 0-20 psig (0-1.4 bar) with 0-60 psig (0-4.1 bar) gauge	J

PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

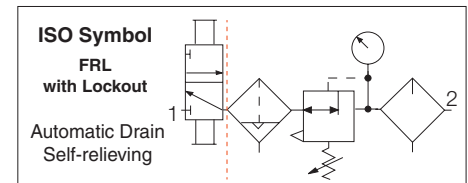
CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

ADD on L-O-X® - Optional	
L-O-X® on outlet side	1
L-O-X® on the inlet side (must also choose Reverse Flow)	2
EEZ-ON® on outlet side	3
EEZ-ON® on inlet side (must also choose Reverse Flow)	4
Blank - No L-O-X®	

FILTER REGULATOR DRAIN TYPE	
Automatic Drain	1
Manual Drain	2

LUBRICATOR FILL TYPE	
Quick Fill Cap	Q
Fill Port	S

FILTER ELEMENT TYPE	
40 µm sintered bronze	A
5 µm polyethylene	B



REPLACEMENT FILTER ELEMENTS*		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	R-A115-106PE5
40-µm	Sintered Bronze	R-A115-106PE3

* For Polycarbonate and metal bowl types.

*Options: External Bowl Drains, refer to page E6.7.
 Accessories ordered separately, refer to page E6.3-5.*

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber or Sintered Bronze, Regulator - Diaphragm; Lubricator - Sight-Feed.
Ambient/Media Temperature:
 Polycarbonate bowl: 40° to 125°F (4° to 52°C).
 Metal bowl: 40° to 175°F (4° to 80°C).
Fluid Media: Compressed air.
Inlet Pressure - Automatic drain model:
 Polycarbonate bowl: Up to 150 psig up to 10 bar).
 Metal bowl: Up to 200 psig (up to 14 bar).
Inlet Pressure - Manual drain model:
 Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).
 Metal bowl: 0 to 200 psig (0 to 14 bar).
Outlet Pressure: Adjustable up to 125 psig (9 bar).

Filter Element: 5-micron rated polyethylene; optional 40-micron element.
Heads: Zinc.
Pressure Adjustment Locking Key: Removable.
Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.
Oil Adjustment: External; tamper-resistant.
Bowls: Aluminum bowl with clear nylon sight glass, polycarbonate bowl with steel shatterguard, or extended aluminum lubricator bowl with clear nylon sight glass.
Regulator Valve: Brass.
Sight Dome: Clear nylon.
Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
 Rev. 05/16

www.rosscontrols.com

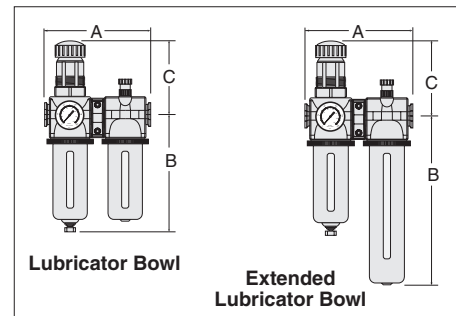
E5.19

Modular Integrated Filter/Regulator plus Lubricator Combinations

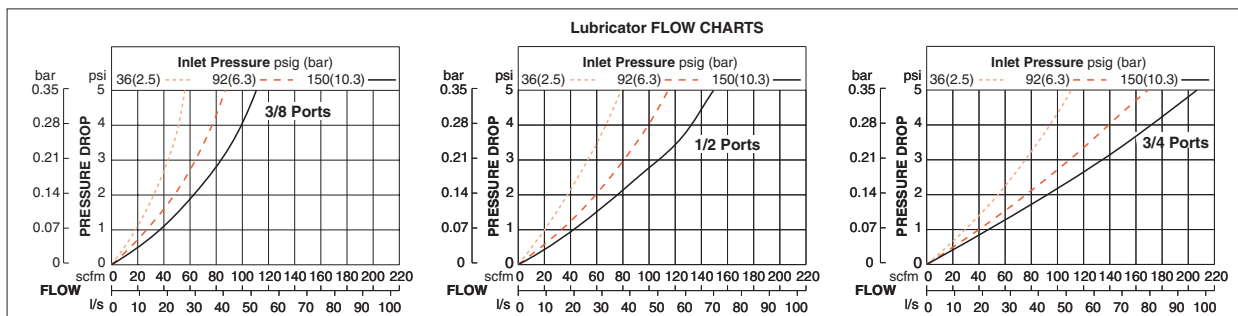
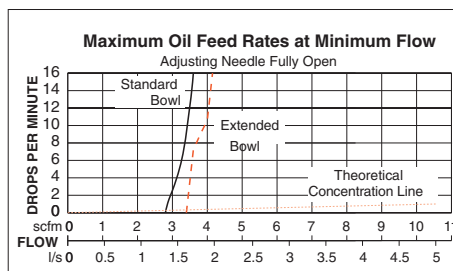
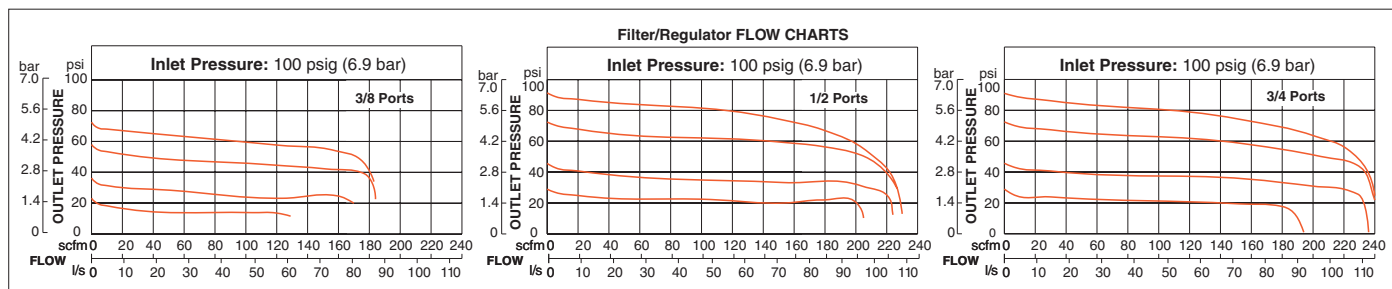
MD4™ Series

Port Size	Bowl Type	Dimensions inches (mm)				Weight † lb (kg)
		A	B*	C	Depth †	
3/8, 1/2, 3/4	Polycarbonate	7.3 (186)	7.7 (195)	5.4 (137)	2.9 (73)	5.81 (2.64)
	Metal	7.3 (186)	7.6 (193)	5.4 (137)	2.9 (73)	5.81 (2.64)
	Extended Metal	7.2 (183)	10.6 (269)	4.68 (119)	5.4 (137)	6.00 (2.73)

Lockout: With the lockout valve, add 2.3 (58) to dimension A.
 * Bowl (standard) removal clearance: add 4.2 (107).
 † Bowl (extended) removal clearance: add 6.1 (155)
 † Less gauge.



AIR FLOW and CONSTRUCTION DATA



IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Filter, Regulator and Lubricator Combinations

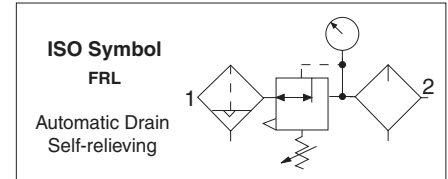
BANTAM Series

Port Sizes: 1/8 & 1/4 – Flow to 22 scfm

Combination with PISTON Type Regulator - Fill Port Lubricator

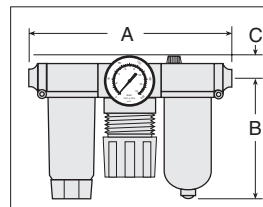
Port Size	Model Numbers*#			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
With THREADED PORTS				
1/8	5B01C0115	5B01C0216	5B01C0315	5B01C0416
1/4	5B02C0115	5B02C0216	5B02C0315	5B02C0416
With Quick Connect TUBE FITTINGS				
1/4	5B03C0115	5B03C0216	5B03C0315	5B03C0416
3/8	5B04C0115	5B04C0216	5B04C0315	5B04C0416
4mm	5B05C0115	5B05C0216	5B05C0315	5B05C0416
6mm	5B06C0115	5B06C0216	5B06C0315	5B06C0416
8mm	5B07C0115	5B07C0216	5B07C0315	5B07C0416
10mm	5B08C0115	5B08C0216	5B08C0315	5B08C0416

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5B01C0115.
#Change the ninth digit to "7" for quick fill lubricator cap e.g., 5B01C0117.

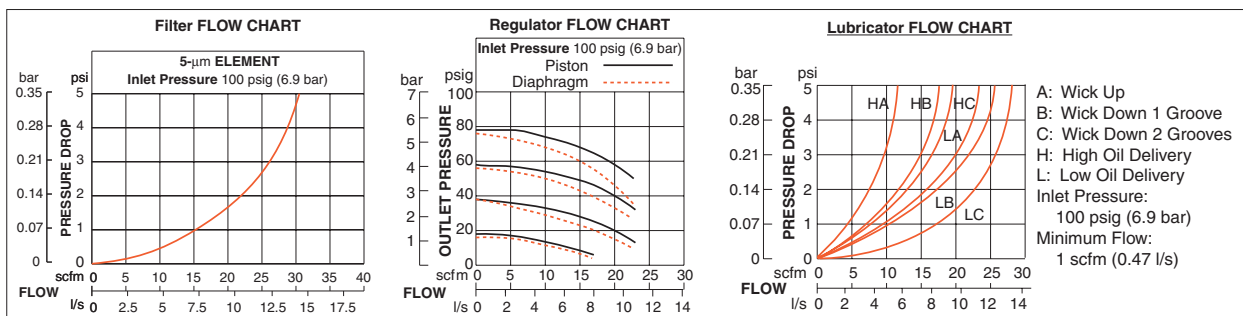


Port Size	Dimensions inches (mm)				Weight † lb (kg)
	A	B**	C	Depth †	
1/8, 1/4	6.3 (160)	3.6 (92)	1.7 (43)	3.6 (92)	0.53 (0.24)
Models below have quick-connect tube fittings.					
1/4	6.7 (170)	3.6 (92)	1.7 (43)	3.6 (92)	0.50 (0.23)
3/8	7.2 (183)	3.6 (92)	1.7 (43)	3.6 (92)	0.50 (0.23)
4, 6 mm	6.7 (170)	3.6 (92)	1.7 (43)	3.6 (92)	0.50 (0.23)
8 mm	6.4 (163)	3.6 (92)	1.7 (43)	3.6 (92)	0.50 (0.23)
10 mm	7.2 (183)	3.6 (92)	1.7 (43)	3.6 (92)	0.50 (0.23)

** Dimension for polycarbonate filter bowl; metal bowl is 3.8 (97).
† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Piston; Lubricator - Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).
Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig up to 10 bar).
Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).
Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Oil Adjustment: External, no shutoff.

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Bodies: Acetal.

Bowls: 2-oz (60-ml) polycarbonate bowls or aluminum bowls.

Regulator Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.21

Modular Filter, Regulator and Lubricator Combinations

BANTAM Series

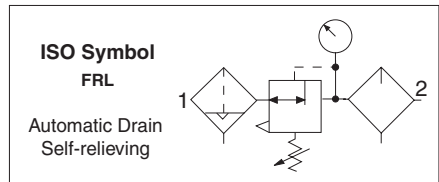
Port Sizes: 1/8 & 1/4 – Flow to 22 scfm



Combination with DIAPHRAGM Type Regulator - Fill Port Lubricator

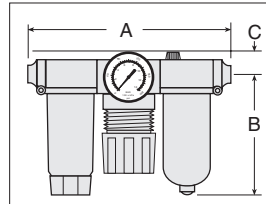
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
With THREADED PORTS				
1/8	5B01C0125	5B01C0226	5B01C0325	5B01C0426
1/4	5B02C0125	5B02C0226	5B02C0325	5B02C0426
With Quick Connect TUBE FITTINGS				
1/4	5B03C0125	5B03C0226	5B03C0325	5B03C0426
3/8	5B04C0125	5B04C0226	5B04C0325	5B04C0426
4mm	5B05C0125	5B05C0226	5B05C0325	5B05C0426
6mm	5B06C0125	5B06C0226	5B06C0325	5B06C0426
8mm	5B07C0125	5B07C0226	5B07C0325	5B07C0426
10mm	5B08C0125	5B08C0226	5B08C0325	5B08C0426

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5B01C0115.
#Change the ninth digit to "7" for quick fill lubricator cap e.g., 5B01C0127.

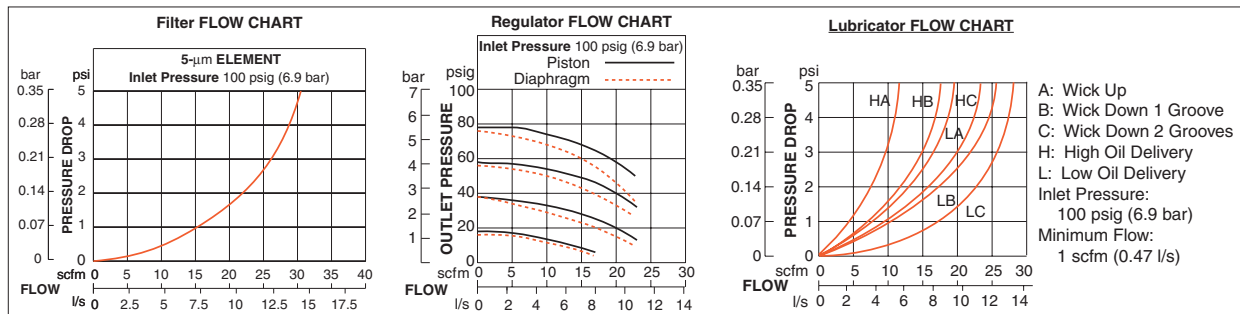


Port Size	Dimensions inches (mm)				Weight † lb (kg)
	A	B**	C	Depth †	
1/8, 1/4	6.3 (160)	3.6 (92)	1.7 (43)	3.6 (92)	0.53 (0.24)
Models below have quick-connect tube fittings.					
1/4	6.7 (170)	3.6 (92)	1.7 (43)	3.6 (92)	0.50 (0.23)
3/8	7.2 (183)	3.6 (92)	1.7 (43)	3.6 (92)	0.50 (0.23)
4, 6 mm	6.7 (170)	3.6 (92)	1.7 (43)	3.6 (92)	0.50 (0.23)
8 mm	6.4 (163)	3.6 (92)	1.7 (43)	3.6 (92)	0.50 (0.23)
10 mm	7.2 (183)	3.6 (92)	1.7 (43)	3.6 (92)	0.50 (0.23)

** Dimension for polycarbonate filter bowl; metal bowl is 3.8 (97).
† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77



Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Diaphragm; Lubricator - Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).
Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig up to 10 bar).
Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).
Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Oil Adjustment: External, no shutoff.

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Bodies: Acetal.

Bowls: 2 oz (60 ml) polycarbonate bowls or aluminum bowls.

Regulator Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

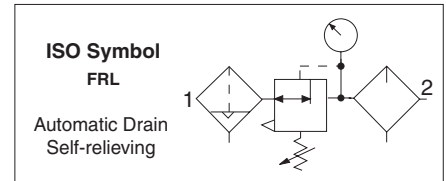
Inline Filter, Regulator and Lubricator Combinations

MINIATURE Series

Port Sizes: 1/8 & 1/4 – Flow to 19 scfm

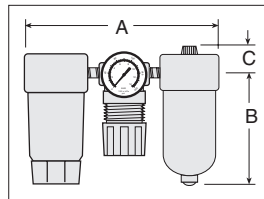
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
FILL Port Lubricator				
1/8	5331C1006	5332C1006	5331C1005	5332C1005
1/4	5331C2006	5332C2006	5331C2005	5332C2005
With QUICK-FILL CAP				
1/8	5331C1106	5332C1106	5331C1105	5332C1105
1/4	5331C2106	5332C2106	5331C2105	5332C2105

* NPT port threads. For BSP threads add a "C" prefix to the model number e.g., C5331C1006.

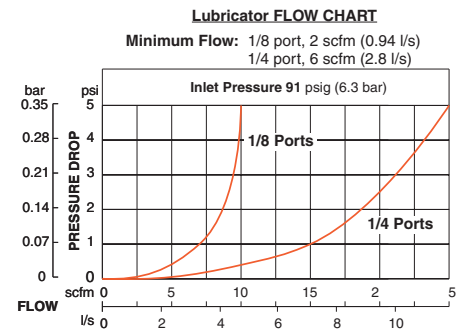
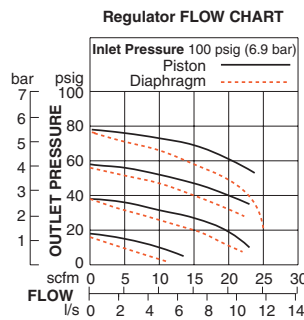
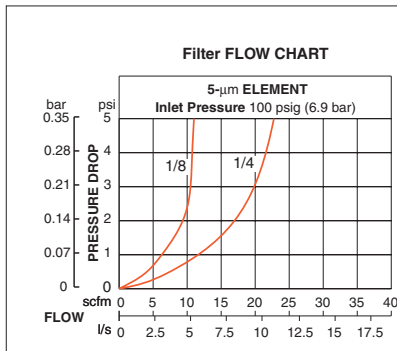


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/8, 1/4	Polycarbonate	2-oz (60-ml)	5.5 (140)	3.6 (90)	0.7 (17)	1.6 (41)	0.76 (0.34)
1/8, 1/4	Aluminum	2-oz (60-ml)	5.5 (140)	4.3 (109)	0.7 (17)	1.6 (41)	0.76 (0.34)

† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	933K77



Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Piston; Lubricator - Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Gauge: 0 to 160 psig (0 to 11 bar); 1/8 NPT gauge ports front and rear.

Oil Adjustment: Internal; tamper-resistant.

Panel Mounting: 1-3/16 inch (30 mm) hole required.

Filter Element: 5-micron rated polyethylene.

Heads: Aluminum.

Bowls: Polycarbonate or aluminum.

Regulator Dome and Knob: Acetal.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.23

Modular Filter, Regulator and Lubricator Combinations

MID-SIZE Series

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 100 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

PIPE THREAD	5M	00	B	2	1	0	1
NPTF (Blank)							
BSPB	C						

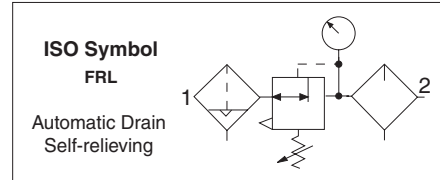
CONNECTIONS	
Pipe In, Out, Between	00
Pipe In & Out, Modular Between	09
Modular, Male Ports In & Out	10
Modular, Female Ports In & Out	11

PIPE SIZE	
1/4	2
3/8	3
1/2	4

ADJUSTMENT RANGE	
None	0
0-100 psig (0-6.9 bar)	1
0-50 psig (0-3.4 bar)	3
0-150 psig (0-10 bar)	5

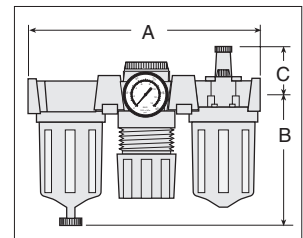
LUBRICATOR BOWL & FILL TYPE	
None	0
Plastic Bowl, Fill Port	1
Metal Bowl, Fill Port	2
Plastic Bowl, Quick-Fill Cap	3
Metal Bowl, Quick-Fill Cap	4

FILTER BOWL & DRAIN TYPE	
None	0
Plastic Bowl, Automatic Drain	1
Metal Bowl, Automatic Drain	2
Plastic Bowl, Manual Drain	3
Metal Bowl, Manual Drain	4

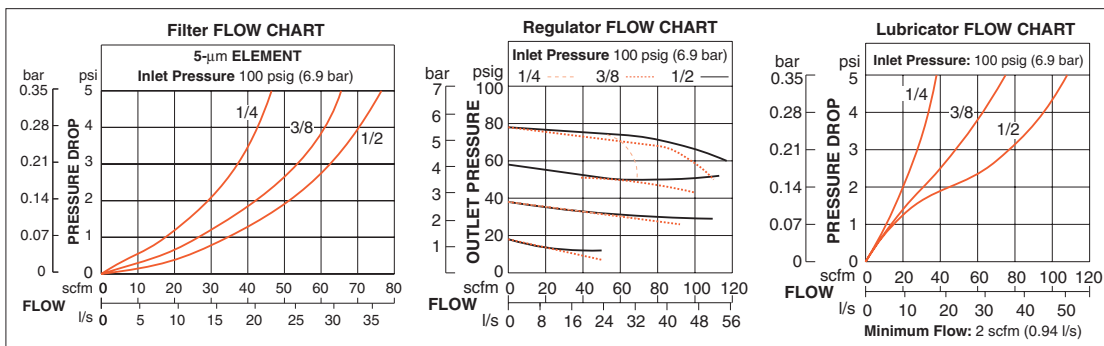


Port Size	Bowl Type	Bowl Capacity	Dimensions* inches (mm)				Weight † lb (kg)
			A	B	C	Depth †	
1/4, 3/8, 1/2	Polycarbonate	4-oz (120-ml)	8.5 (215)	4.6 (117)	1.8 (46)	2.8 (71)	3.75 (1.70)
1/4, 3/8, 1/2	Zinc	4-oz (120-ml)	8.5 (215)	4.7 (119)	1.8 (46)	2.8 (71)	3.75 (1.70)

* Dimensions for NPTF Pipe In & Out, Modular Between option; dimensions for other combinations consult ROSS.
† Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	936K77



Pressure Gauge included. Includes 2 Female Port Blocks.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Piston; Lubricator - Sight-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: Up to 150 psig up to 10 bar).

Metal bowl: Up to 200 psig (up to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Filter Element: 5-micron rated polyethylene.

Heads: Zinc.

Oil Adjustment: External; tamper-resistant.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Panel Mounting: 1-9/16 inch (40 mm) hole required.

Regulator Dome and Knob: Acetal. Optional metal regulator dome.

Bowls: Polycarbonate bowls with zinc shatterguards, or zinc bowls.

Sight Dome: Clear nylon.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Modular Filter, Regulator and Lubricator Combinations

MD3™ Series

Port Sizes: 1/4, 3/8 & 1/2 – Flow to 110 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD3 **53P** **B** **A** **6** **C** **2** **2** **Q** **1**

BOWL SIZE	
Polycarbonate Bowl 5.1-oz (151-ml)	53P
Metal Bowl 6-oz (177-ml)	53M
Metal Bowl 6-oz (177-ml) - on Filter	
Metal Bowl 10-oz (295-ml) - on Lubricator	53E
Plastic Bowl 6-oz (177-ml) - on Filter	
Metal Bowl 10-oz (295-ml) - on Lubricator	53F

ADJUSTMENT RANGE	
0-200 psig (0-13.8 bar)	A
0-150 psig (0-10.3 bar)	B
0-100 psig (0-6.9 bar)	C
0-50 psig (0-3.4 bar)	D
No Regulator	E
Reverse Flow 0-200 psig (0-13.8 bar)	F
Reverse Flow 0-150 psig (0-10.3 bar)	G
Reverse Flow 0-100 psig (0-6.9 bar)	H
Reverse Flow 0-50 psig (0-3.4 bar)	J

FILTER ELEMENT TYPE	
40 µm sintered bronze	A
5 µm polyethylene	B
5 µm sintered bronze	E
20 µm sintered bronze	F

PIPE SIZE	
1/4 NPTF	2
3/8 NPTF	3
1/2 NPTF	4
1/4 BSPP	B
3/8 BSPP	C
1/2 BSPP	D

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

LUBRICATOR FILL TYPE	
Quick Fill Cap	Q
Fill Port	S

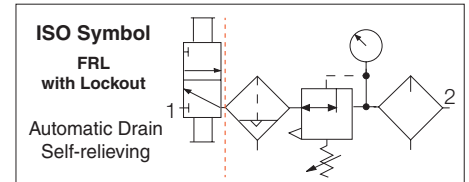
BOWL DRAIN	
Manual Drain	6
Float Drain	9

ADD on L-O-X® - Optional	
L-O-X® on outlet side	1
L-O-X® on the inlet side (must also choose Reverse Flow)	2
L-O-X® with EEZ-ON® on outlet side	3
L-O-X® with EEZ-ON® on inlet side (must also choose Reverse Flow)	4
Blank - No L-O-X®	



REPLACEMENT FILTER ELEMENTS*		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	R-A60F-03PE5
5-µm	Sintered Bronze	R-A60F-03E5
20-µm	Sintered Bronze	R-A60F-03E4
40-µm	Sintered Bronze	R-A60F-03E3

* For polycarbonate and metal bowl types.



Options: Drains: For additional information, refer to page E6.7.
Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, or Sintered Bronze; Regulator - Diaphragm; Lubricator - Sight-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

With metal bowl: 40° to 175°F (4° to 80°C).

Differential Pressure Gauge: Optional.

Fluid Media: Compressed air.

Filter Inlet Pressure:

Polycarbonate bowl & Manual drain: 0 to 150 psig (0 to 10 bar).

Polycarbonate bowl & Float drain: 30 to 150 psig (2 to 10 bar).

Metal bowl & Manual drain: 0 to 250 psig (0 to 17 bar).

Metal bowl & Float drain: 30 to 200 psig (2 to 14 bar).

Outlet Pressure: Adjustable up to 200 psig (13 bar); optional adjusting springs.

Optional Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4-NPT gauge ports front and rear.

Panel Mounting: 2-1/16 inch (52 mm) hole required.

Self-relieving: Non-relieving optional.

Oil Adjustment: External; tamper resistant.

Filter Element: 5-µm-rated polyethylene; 5-µm, 20-µm or 40-µm-rated sintered bronze.

Body: Zinc.

Dome: Nylon.

Regulator Dome: Nylon.

Knob: Acetal.

Bowl: Polycarbonate with nylon shatterguard, or aluminum bowl with clear nylon sight glass. Lubricator bowl only: extended aluminum bowl with clear nylon sight glass.

Seals: Nitrile.

Valve: Brass.

Valve Cap: Nylon.

Sight-Feed Dome: Nylon



IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Online Version
Rev. 05/16

www.rosscontrols.com

E5.25

Modular Filter, Regulator and Lubricator Combinations

MD3™ Series

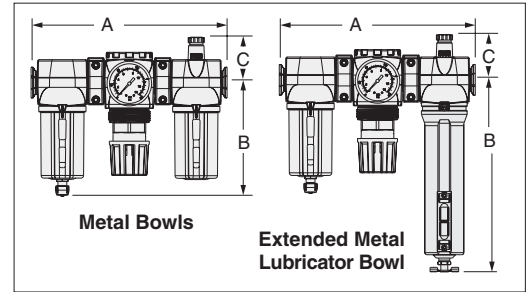
Port Size	Bowl Type	Dimensions inches (mm)				Weight lb (kg)
		A	B*	C	Depth	
1/2, 3/8, 1/2	Polycarbonate	9.72 (247.4)	5.54 (140.6)	2.21 (56.2)	2.90 (73.7)	6.1 (2.8)
	Aluminum	9.72 (247.4)	6.42 (163.1)	2.21 (56.2)	2.90 (73.7)	6.4 (2.9)
	Extended Aluminum	9.72 (247.4)	9.37 (238)	2.21 (56.2)	2.90 (73.7)	6.6 (3.0)

Lockout: With the lockout valve, add 2.3 (58) to dimension A.

* Bowl (standard) removal clearance: add 3.1 (79)

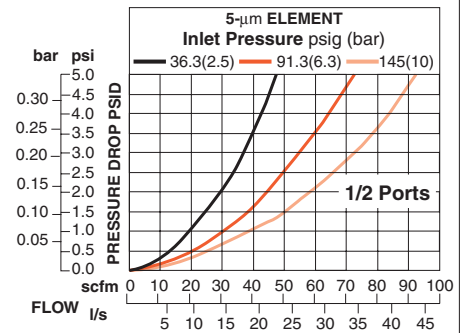
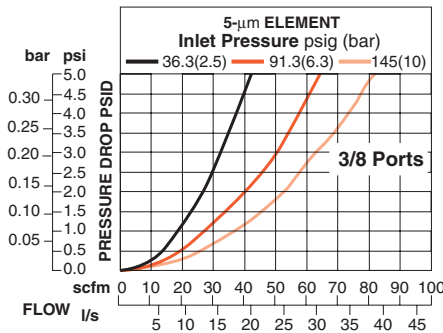
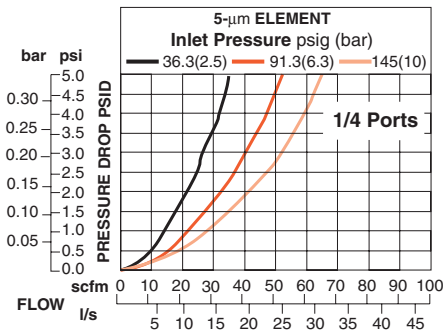
* Bowl (extended) removal clearance: add 6.1 (155)

Dimensions above reflect less gauge.

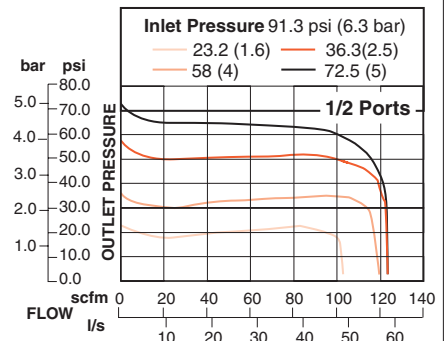
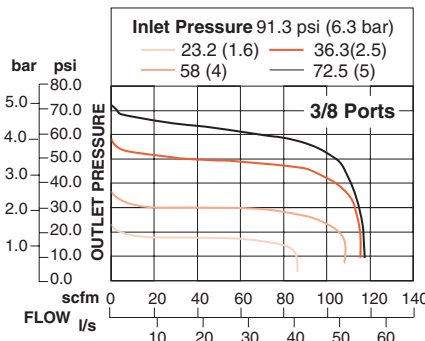
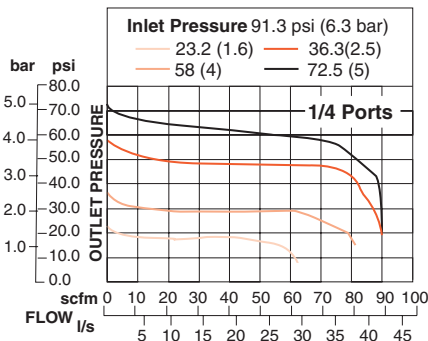


AIR FLOW and CONSTRUCTION DATA

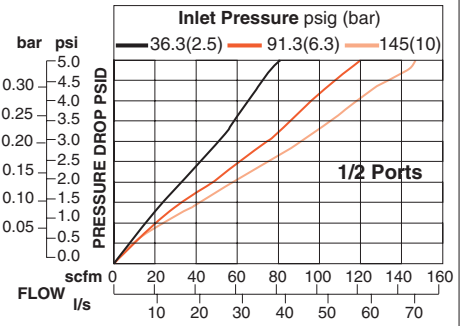
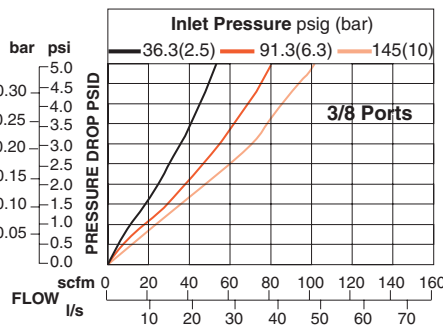
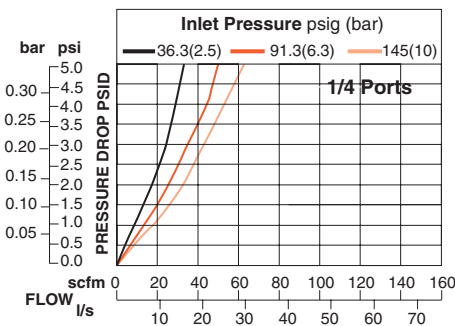
Filter FLOW CHARTS



Regulator FLOW CHARTS



Lubricator FLOW CHARTS



IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Modular Filter, Regulator and Lubricator Combinations

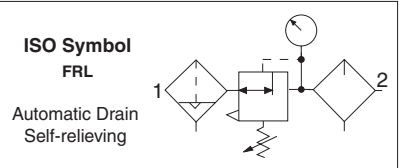
FULL-SIZE Series

Port Sizes: 1/4, 3/8, 1/2 & 3/4 – Flow to 138 scfm

HOW TO ORDER

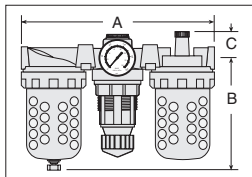
(Choose your options (in red) to configure your valve model number.)

PIPE THREAD	PIPE SIZE	Regulator TYPE	LUBRICATOR FILL & BOWL TYPE
NPTF (Blank)	1/4 2	ADJUSTMENT RANGE	None 0
BSP C	3/8 3	None 0	Sight-Feed, Plastic Bowl, Fill Port 1
	1/2 4	0-125 psig (0-8.6 bar) 2	Sight-Feed, Metal Bowl, Fill Port 2
	3/4 5	0-50 psig (0-3.4 bar) 4	Sight-Feed, Plastic Bowl, Quick-Fill Cap 3
		0-175 psig (0-12.1 bar) 6	Sight-Feed, Metal Bowl, Quick-Fill Cap 4
CONNECTIONS	FILTER DRAIN & BOWL TYPE		Wick-Feed, Plastic Bowl, Fill Port 5
Pipe In, Out, Between 00	None 0		Wick-Feed, Metal Bowl, Fill Port 6
Pipe In & Out, Modular Between 09	Automatic Drain, Plastic Bowl 1		Wick-Feed, Plastic Bowl, Quick-Fill Cap 7
Modular, Male Ports In & Out 10	Automatic Drain, Metal Bowl 2		Wick-Feed, Metal Bowl, Quick-Fill Cap 8
Modular, Female Ports In & Out 11	Manual Drain, Plastic Bowl 3		
	Manual Drain, Metal Bowl 4		

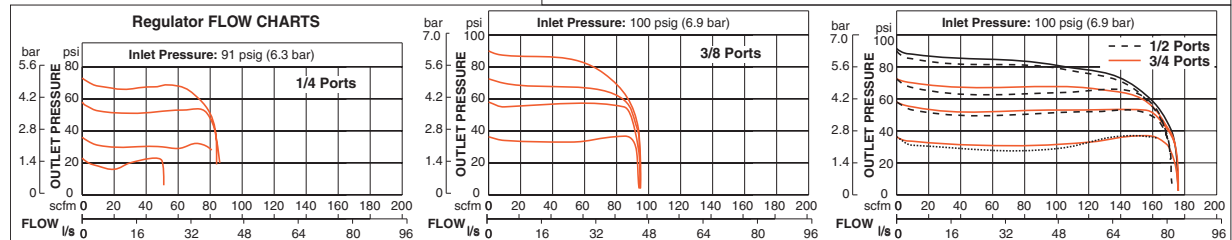
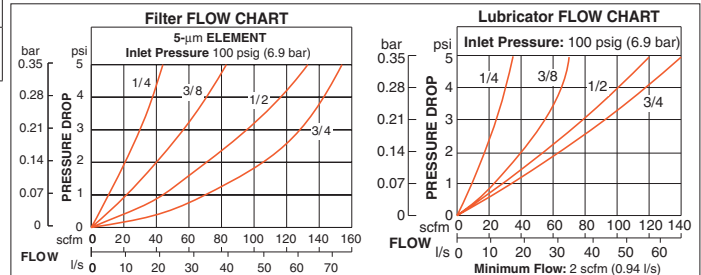


Port Size	Bowl Type	Bowl Capacity	Dimensions* inches (mm)				Weight †
			A	B	C	Depth †	
1/4, 3/8, 1/2, 3/4	Polycarbonate	8-oz (240-ml)	10.1 (256)	5.8 (147)	1.3 (33)	2.8 (71)	7.06 (3.20)
1/4, 3/8, 1/2, 3/4	Zinc	8-oz (240-ml)	10.1 (256)	6.4 (163)	1.3 (33)	2.8 (71)	7.06 (3.20)

* Dimensions for NPTF Pipe In & Out, Modular Between option; dimensions for other combinations consult ROSS. † Less gauge.



REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	939K77



Pressure Gauge included. Units with Threaded Ports Include 2 female port blocks.
Options: Electronic Drain, refer to page E6.7.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Piston; Lubricator - Sight-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).
Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).
Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).
Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 125 psig (9 bar).

Filter Element: 5-micron rated polyethylene.

Heads: Zinc.

Oil Adjustment: External; tamper-resistant.

Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Bowls: Zinc bowl with clear nylon sight glass, or polycarbonate bowl with steel shatterguard.

Bowl Rings: Aluminum.

Regulator: Nylon dome; acetal knob.

Sight Dome: Clear nylon. **Seals:** Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.27

Modular Filter, Regulator and Lubricator Combinations

MD4™ Series

Port Sizes: 3/8, 1/2 & 3/4 – Flow to 205 scfm

HOW TO ORDER

(Choose your options (in red) to configure your valve model number.)

MD4 53P B A 6 B 3 2 Q -

BOWL MATERIAL/SIZE	
Two Polycarbonate Bowls 9-oz (270-ml)	53P
Two Metal Bowl 9-oz (270-ml)	53M
Metal Bowl 9-oz (270-ml) - on Filter	53E
Extended Metal Bowl 15-oz (450-ml) - on Lubricator	
Plastic Bowl 9-oz (270-ml) - on Filter	53F
Extended Metal Bowl 15-oz (450-ml) - on Lubricator	

REGULATOR ADJUSTMENT RANGE	
0-175 psig (0-12.1 bar)	A
0-125 psig (0-8.6 bar)	B
0-50 psig (0-3.4 bar)	C
0-20 psig (0-1.4 bar)	D
No Regulator	E
Reverse Flow 0-175 psig (0-12.1 bar)	F
Reverse Flow 0-125 psig (0-8.6 bar)	G
Reverse Flow 0-50 psig (0-3.4 bar)	H
Reverse Flow 0-20 psig (0-1.4 bar)	J

FILTER ELEMENT TYPE	
40 µm sintered bronze	A
5 µm polyethylene	B

PIPE SIZE	
3/8 NPTF	3
1/2 NPTF	4
3/4 NPTF	5
3/8 BSPP	C
1/2 BSPP	D
3/4 BSPP	E

CAP COLOR	
Gold	2
Gray	G
Yellow	Y
Red	R
Blue	B

LUBRICATOR FILL TYPE	
Quick Fill Cap	Q
Fill Port	S
No lubricator	N

FILTER REGULATOR DRAIN TYPE	
Automatic Drain	5
Manual Drain	6

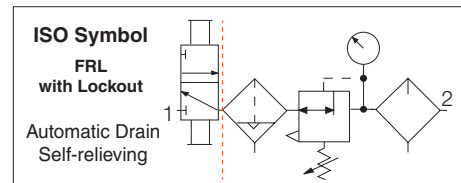
ADD on L-O-X® - Optional	
L-O-X® on outlet side	1
L-O-X® on the inlet side (must also choose Reverse Flow)	2
EEZ-ON® on outlet side	3
EEZ-ON® on inlet side (must also choose Reverse Flow)	4
Blank - No L-O-X®	



E

REPLACEMENT FILTER ELEMENTS*		
Element Rating	Element Material	Part Number
5-µm	Sintered Bronze	R-A115-106PE5
40-µm	Sintered Bronze	R-A115-106PE3

* For polycarbonate and metal bowl types.



E5

Options: External Bowl Drains, refer to page E6.7.
Accessories ordered separately, refer to page E6.3-5.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber, or Sintered Bronze; Regulator – Piston; Lubricator - Sight-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).
Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).
Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).
Metal bowl: 0 to 200 psig (0 to 14 bar).

Outlet Pressure: Adjustable up to 125 psig (9 bar).

Filter Element: 5-micron rated polyethylene or 40-micron element.
Heads: Zinc.

Oil Adjustment: External; tamper-resistant.

Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Bowls: Aluminum bowl with clear nylon sight glass, polycarbonate bowl with steel shatterguard; extended aluminum lubricator bowl with two clear nylon sight glasses.

Bowl Rings: Nylon.

Sight Dome: Clear nylon.

Seals: Nitrile.

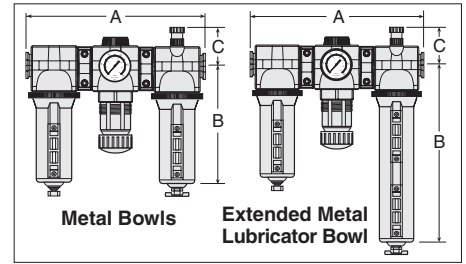
IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Filter, Regulator and Lubricator Combinations

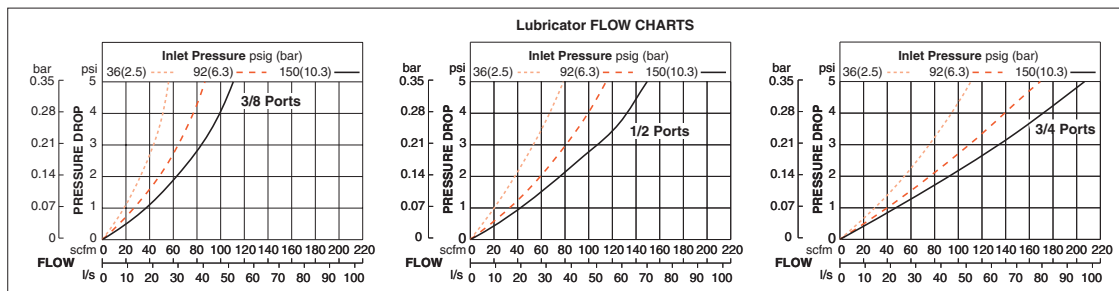
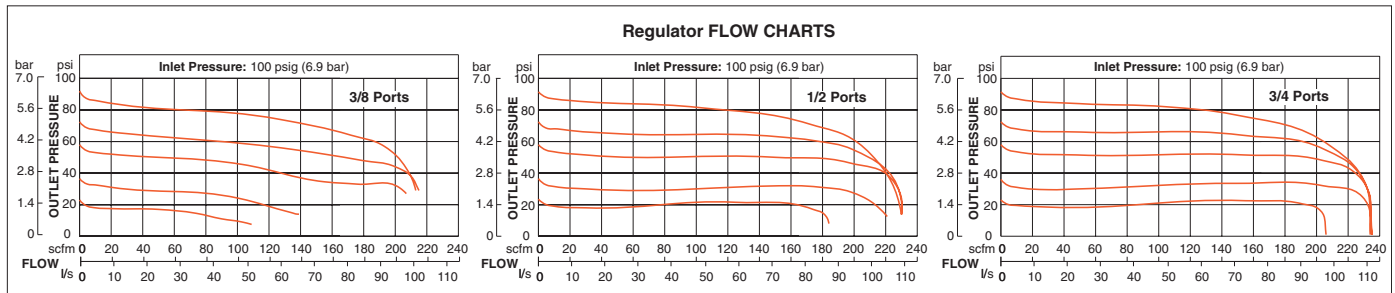
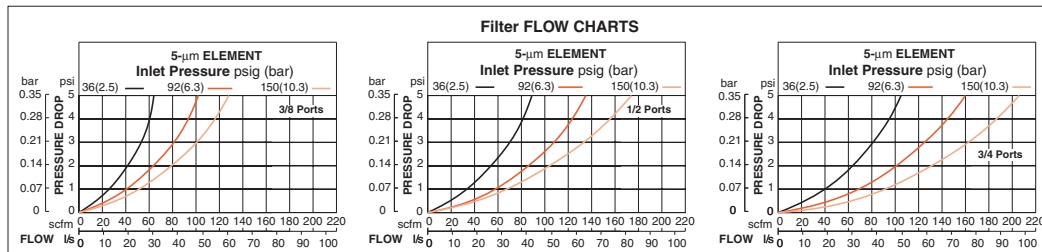
MD4™ Series

Port Size	Bowl Type	Dimensions inches (mm)				Weight † lb (kg)
		A	B*	C	Depth †	
3/8, 1/2, 3/4	Polycarbonate	10.9 (276)	7.7 (195)	2.2 (56)	2.9 (73)	6.94 (3.15)
3/8, 1/2, 3/4	Aluminum	10.9 (276)	7.6 (193)	2.2 (56)	3.1 (79)	6.94 (3.15)
3/8, 1/2, 3/4	Extended Metal	10.9 (276)	10.6 (269)	2.2 (56)	3.1 (79)	7.13 (3.24)

Lockout: With the lockout valve, add 2.3 (58) to dimension A.
 * Bowl (standard) removal clearance: add 4.2 (107).
 * Bowl (extended) removal clearance: add 6.1 (155)
 † Less gauge.



AIR FLOW and CONSTRUCTION DATA



E

E5

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.29

Inline Filter, Regulator and Lubricator Combinations

HIGH-CAPACITY Series

Port Sizes: 3/4 & 1 – Flow to 270 scfm

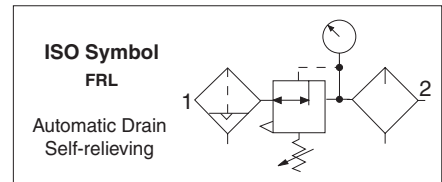
Port Size	Model Numbers*			
	Automatic Drain		Manual Drain	
	Polycarbonate Bowl	Metal Bowl	Polycarbonate Bowl	Metal Bowl
3/4	5H00C5111	5H00C5212	5H00C5311	5H00C5412
1	5H00C6111	5H00C6212	5H00C6311	5H00C6412

* NPT port threads. For BSPP threads add a "C" prefix to the model number e.g., C5H00C5110.

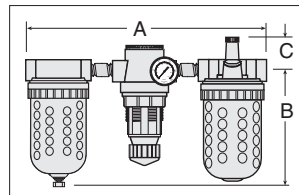


Port Size	Bowl Type	Bowl Capacity	Dimensions inches (mm)				Weight †
			A	B	C	Depth †	
3/4, 1	Polycarbonate	16-oz (480-ml)	15.8 (401)	8.0 (204)	1.2 (31)	4.3 (108)	8.00 (3.64)
3/4, 1	Aluminum	16-oz (480-ml)	15.8 (401)	8.3 (210)	1.2 (31)	4.3 (108)	8.9 (4.03)

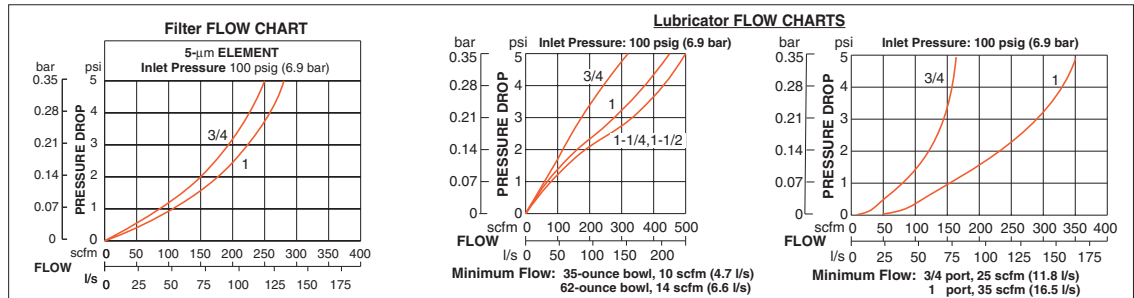
† Less gauge.



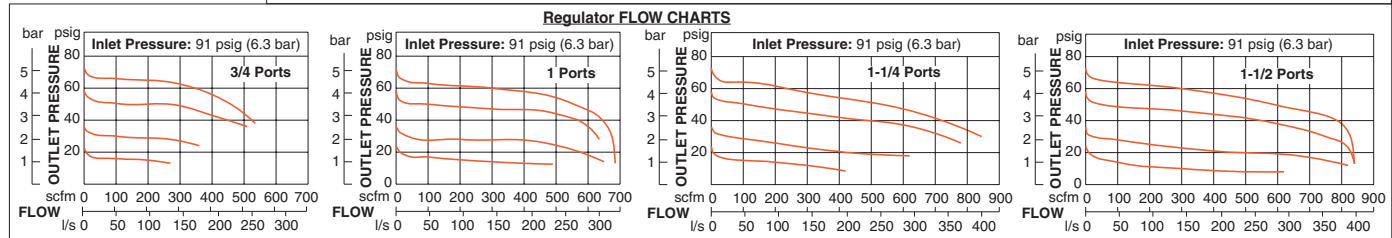
REPLACEMENT FILTER ELEMENTS		
Element Rating	Element Material	Part Number
5-µm	Polyethylene	1010K77



E



E5



Pressure Gauge included.
Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Piston; Lubricator - Wick-Feed.

Ambient/Media Temperature:

Polycarbonate bowl: 40° to 125°F (4° to 52°C).

Metal bowl: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure - Automatic drain model:

Polycarbonate bowl: 15 to 150 psig (1 to 10 bar).

Metal bowl: 15 to 200 psig (1 to 14 bar).

Inlet Pressure - Manual drain model:

Polycarbonate bowl: 0 to 150 psig (0 to 10 bar).

Metal bowl: 0 to 200 psig (0 to 14 bar).

Filter Element: 5-micron rated polyethylene.

Heads: Aluminum.

Oil Adjustment: External; tamper-resistant.

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar);

1/4 NPT gauge ports front and rear.

Bowls: Aluminum bowls with sight glass, or polycarbonate bowls with steel shatterguard.

Bowl Rings: Aluminum.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Inline Filter, Regulator and Lubricator Combinations

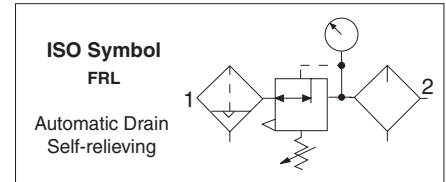
HIGH-CAPACITY Series

Port Sizes: 1¼ & 1½ – Flow to 495 scfm

HOW TO ORDER

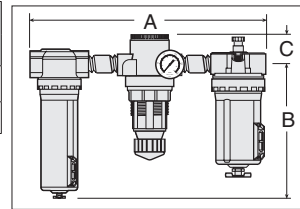
(Choose your options (in red) to configure your valve model number.)

□	5H	00C	7	1	1	2	
PIPE THREAD	PIPE SIZE		LUBRICATOR TYPE				
NPTF (Blank)	1¼	7	None				0
BSPB	1½	8	Sight-feed, Fill port				2
C	FILTER DRAIN & ELEMENT TYPE		REGULATOR TYPE				
	None		None				0
	Automatic drain, 40-µm		Piston, 0-100 psig (0-6.9 bar)				1
	Automatic drain, 5-µm		Internal pilot, 15-200 psig (1.0-13)				2
	Manual drain, 40-µm						
	Manual drain, 5-µm						

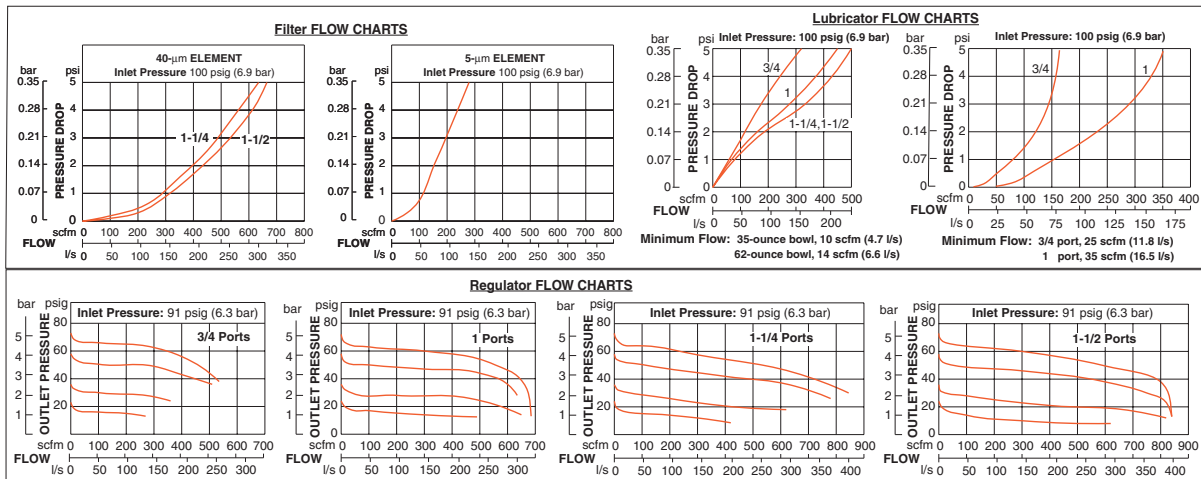


Port Size	Bowl Capacity	Dimensions inches (mm)				Weight† lb (kg)
		A	B	C	Depth†	
1¼, 1½	35-oz (1000-ml)	15.8 (401)	10.6 (268)	2.1 (54)	4.3 (108)	8.00 (3.64)

† Less gauge.



REPLACEMENT FILTER ELEMENTS*		
Element Rating	Element Material	Element Number
5-µm	Polyethylene	1656K77
40-µm	Sintered Bronze	R-A114-106E3



Options: Drains: For additional information, refer to page E6.7.

Accessories ordered separately, refer to page E6.3-4.

STANDARD SPECIFICATIONS (for products on this page):

Construction: Filter – Fiber; Regulator – Piston; Lubricator - Sight-Feed.

Ambient/Media Temperature: 40° to 175°F (4° to 79°C).

Bowls: Aluminum bowls with clear nylon sight glasses.

Bowl Rings: Aluminum.

Filter Drain: Internal automatic drain. Optional manual drain.

Filter Element: 5-micron or 40-micron rated filter element available.

Fluid Media: Compressed air.

Inlet Pressure:

Automatic drain model: 15 to 200 psig (1 to 14 bar).

Manual drain model: 0 to 200 psig (0 to 14 bar).

Heads: Aluminum.

Oil Adjustment: External; tamper-resistant.

Outlet Pressure: Adjustable up to 100 psig (7 bar).

Pressure Adjustment Locking Key: Removable.

Pressure Gauge: 0 to 200 psig (0 to 14 bar); 1/4 NPT gauge ports front and rear.

Regulator: Nylon dome; acetal knob.

Seals: Nitrile.

Sight Dome: Clear nylon.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Online Version
Rev. 05/16

www.rosscontrols.com

E5.31

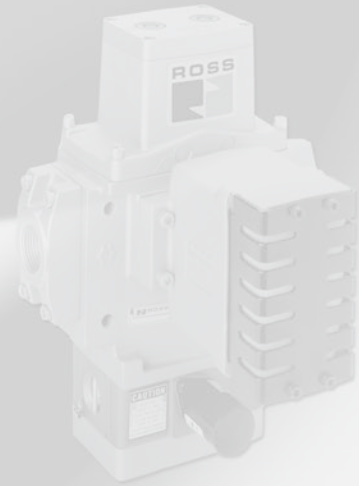
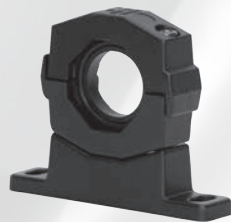
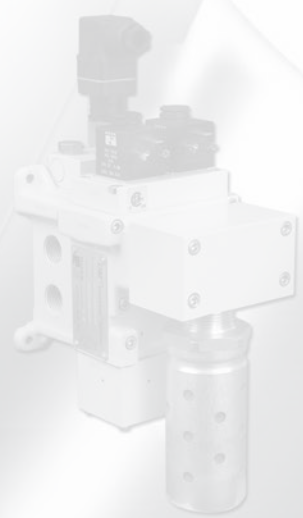
E



ROSS CONTROLS®



**FILTER, REGULATOR, AND LUBRICATOR
ACCESSORIES**



CONTENT	Page
Mounting Accessories	E6.3
Modular Assembly Components	E6.4
Clamp, Brackets, End Ports & Port Blocks	E6.5
Pressure Gauges	E6.6
External Drains, Silencers	E6.7

Mounting Screws for BANTAM Models

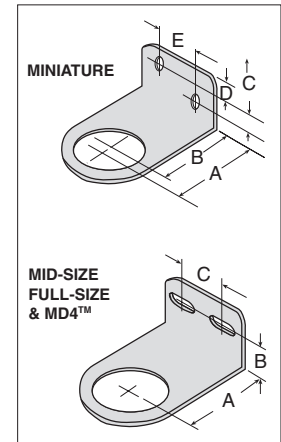
Usage Models	Kit Number
BANTAM	859K77

BANTAM models mounts with long screws that extend through end plates.

Mounting Brackets for Regulators and Integrated Filter/Regulators

Regulators and integrated filter/regulators can be mounted to a surface with a bracket that attaches to the regulator. Brackets and mounting panel nuts can be ordered separately or in a kit which includes both bracket and mounting panel nut.

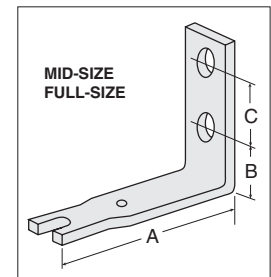
Usage Models	Part Number			Dimensions inches (mm)					Panel Mounting Hole Diameter
	Kit	Bracket	Panel Nut	A	B	C	D	E	
MINIATURE	873K77	872K77	874K77	1.375 (35)	1.125 (29)	0.31 (8)	0.31 (8)	0.69 (17)	1.19 (30)
MID-SIZE	876K77	875K77	877K77	2.38 (60)	1.00 (25)	1.50 (38)	–	–	1.56 (40)
MD3™	R-A127-11	–	R-127-11	2.38 (60)	1.00 (25)	1.50 (38)	–	–	1.56 (40)
FULL-SIZE, MD4™	879K77	878K77	880K77	2.38 (60)	1.00 (25)	1.50 (38)	–	–	2.06 (52)



Modular Mounting Brackets for Filters, Regulators, Lubricators, FRL's, or Clean Air Packages

Two L-shaped metal brackets as shown at the right can be used for wall mounting of modular FRLs or Clean Air Packages. A single bracket can be used to mount individual filters or lubricators. Kits include two brackets and four screws for attaching the brackets to the modules.

Usage Models	Kit Number	Dimensions inches (mm)			
		A	B	C	D
MID-SIZE & FULL-SIZE	915K77	3.0 (76)	0.88 (22)	1.00 (25)	1.20 (31)

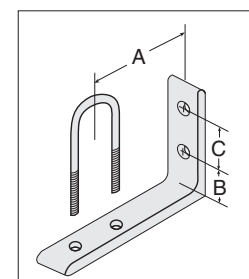


E

FRLs Inline Mounting Pipe Brackets

Two pipe brackets can be used for wall mounting of FRLs assemblies that use pipe nipples to join the components. The bracket kits listed below include two sets of brackets.

Nipple Size	Kit Number	Dimensions inches (mm)		
		A	B	C
1/4	887K77	2.72 (28)	0.50 (13)	1.00 (25)
3/8	888K77	2.72 (28)	0.50 (13)	1.00 (25)
1/2	889K77	2.72 (28)	0.50 (13)	1.00 (25)
3/4	890K77	3.69 (94)	1.13 (29)	1.25 (32)
1	891K77	3.69 (94)	1.13 (29)	1.25 (32)



E6

Bracket Assembly Kit for HIGH-RELIEF Pilot Operated Regulator

High-Relief Pilot Operated Regulator with 1/4- thru 1 1/4 inch ports can be mounted to a vertical surface using a bracket assembly kit.

Kit Number	R-A37-381
------------	-----------



IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.


MID-SIZE and FULL-SIZE Units

The modular designs of the MID-SIZE and FULL-SIZE series offer maximum flexibility in customizing FRLs assemblies. As shown at the right, connector kits are required to interconnect units. Various port kits (shown below) can be used to connect the assemblies to the inlet and outlet piping. Note that all FRLs components have threaded ports so that conventional pipe fittings may be used where desired.

Female Port Block

Used to connect to piping at inlet or outlet.


Port Size	Part Number	
	NPT Threads	BSPP Threads
1/4	897K77	D897K77
3/8	898K77	D898K77
1/2	899K77	D899K77
3/4	900K77	D900K77



Male Port Block

Used to connect modular to non-modular units.

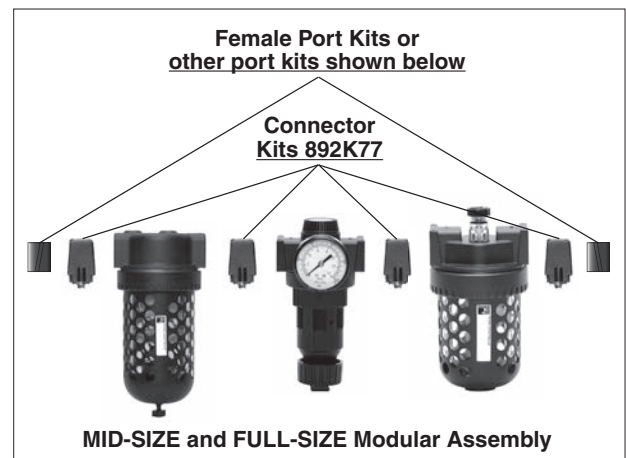
Port Size	Part Number	
	NPT Threads	BSPP Threads
1/4	893K77	D893K77
3/8	894K77	D894K77
1/2	895K77	D895K77
3/4	896K77	D896K77



Connector Kit

Used to connect units to one another as well as to any of the ports shown on this page.

Kit Number	892K77
------------	--------



E

BANTAM Units

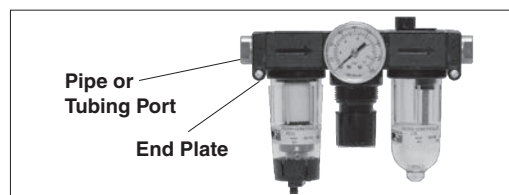
BANTAM modular units use end plates secured with screws to hold the pipe or tubing ports (see below), and also to serve as mounting brackets. Short screws are used to secure the end plates when a single BANTAM unit is used. If two or more units are combined, long screws extend through an end plate and thread into the next unit.

Screw kits required are as follows:


Single Unit: Two short screw kits.

Two-Unit Combination: One each short screw kit and long screw kit.

Three-Unit Combination: Two long screw kits.

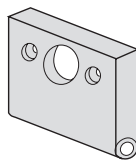


Pipe Ports	
Port Size	Part Number
1/8 NPT	862K77
1/4 NPT	863K77
1/8 BSPP	D864K77
1/4 BSPP	D865K77

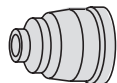


E6

Pipe Ports	
Kit Description	Part Number
END PLATE (1)	857K77
Short Screw (2)	858K77
Long Screw (2)	859K77
Small O-Ring (for inlet or mating ports)	860K77
Large O-Ring (for outlet or mating ports)	861K77



Tube Ports	
Port Size	Part Number
1/4	866K77
3/8	867K77
4 mm	868K77
6 mm	869K77
8 mm	870K77
10 mm	871K77



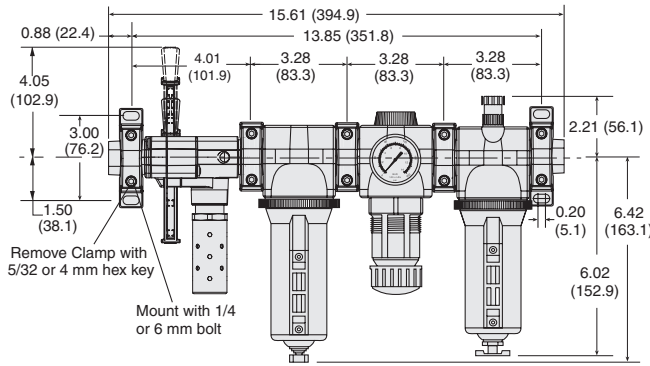
IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

Modular Assemblies

Accessories: Clamp, Brackets, End Ports & Port Blocks

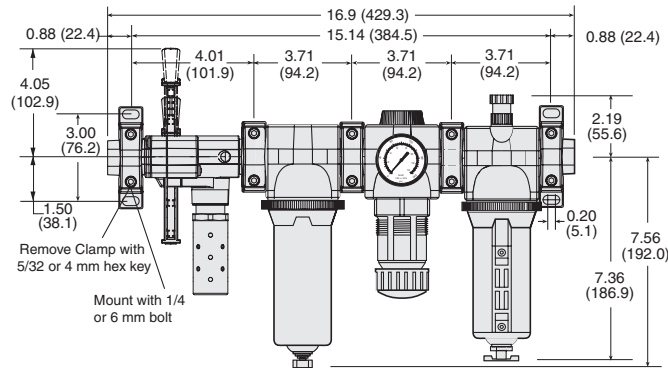
MD Series

MD3™ Series



Dimensions: inches (mm)

MD4™ Series



Clamp for Module Connections

Specially designed clamps provide a quick and easy assembly or disassembly of MD modules. Two allen-head bolts quickly tighten or loosen the clamp using a 5/32 or 4mm hex key. The clamp contains a plate carrying two O-rings to provide positive sealing between modules.

Order clamp by part number **R-A118-105**.

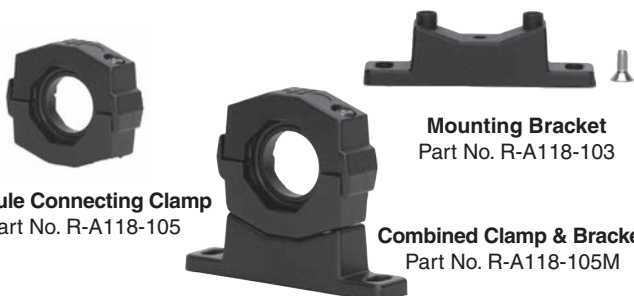
Combined clamp and bracket (below) can be ordered by part number **R-A118-105M**.

Mounting Brackets

Two brackets are normally used to mount an FRL to a vertical surface. The mounting bracket attaches to the module connecting clamp (see above) with a single screw. Each bracket then employs two bolts (1/4" or 6mm) to connect the assembly to the mounting surface.

Order bracket and screw by part number **R-A118-103**.

Combined bracket and clamp (above) can be ordered by part number **R-A118-105M**.



Module Connecting Clamp
Part No. R-A118-105

Mounting Bracket
Part No. R-A118-103

Combined Clamp & Bracket
Part No. R-A118-105M

Male and Female End Ports

Either male or female end ports can be attached to threaded inlet and outlet lines. This allows all modules of an FRL assembly to be removed easily and quickly without having to unthread the end modules. The end ports are attached to the modules with clamps (see at left). End ports can be included in an assembled FRL or ordered separately by the following part numbers:

Port Size	Male Part Number*	Image	Port Size	Female Part Number*	Image
1/4	R-118-109-2F		1/4	R-118-100-2	
3/8	R-118-109-3F		3/8	R-118-100-3	
1/2	R-118-109-4F		1/2	R-118-100-4	
3/4	R-118-109-6F		3/4	R-118-100-6	

* For BSPP threads, add a "W" suffix to the model number, e.g., R-118-109-2FW.

Extra Port Blocks

An extra port block can be placed between modules to provide two auxiliary 1/4 NPTF ports. Its mounting position can be rotated to obtain the most convenient operating orientation. If only one auxiliary port is to be used, the unused port must be closed with a pipe plug. (The inlet and outlet are not threaded.)

Port Size	Part Number*	Image
1/4	R-118-106-2	
3/8	R-118-106-3	
1/2	R-118-106-4	

* For BSPP threads, add a "W" suffix to the model number, e.g., R-118-106-2W.

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.








Pressure Gauges

Port Size	Model Number*	Pressure Range psig (bar)	Case Diameter inches (mm)
1/8	5400A1002	0-160 (0-11)	1.5 (38)
1/4	5400A2010	0-60 (0-4)	2.0 (51)
1/4	5400A2011	0-200 (0-14)	2.0 (51)
1/4	5400A2012	0-300 (0-20)	2.0 (51)
1/4	5400A2014**	0-160 (0-11)	2.5 (64)
1/4	5400A2015***	0-160 (0-11)	2.0 (51)



* Center back mounting; male pipe threads.
 ** 5400A2014 - Stainless steel case liquid filled.
 *** 5400A2015 - Green shade between 40-70 psi (2.7-4.8 bar).

Differential Pressure Gauges

	Small Slide Gauge	Small Slide Gauge	Large Dual Face Gauge	Large Dual Face Gauge with Reed Switch (Normally Open)	Large Dual Face Gauge with Reed Switch (Normally Closed)
DIFFERENTIAL PRESSURE GAUGE TYPE/SERIES	R-A60F-28	R-K103-151	R-106-35	R-106-35E	R-106-35C
					
FILTERS					
BANTAM	-	-	-	-	-
MINIATURE	-	-	-	-	-
MID-SIZE	-	-	-	-	-
MD3™		-	-	-	-
FULL-SIZE	-	-	-	-	-
MD4™	-				
HIGH-CAPACITY	-	-	-	-	-
COALESCING FILTERS					
BANTAM	-	-	-	-	-
MINIATURE	-	-	-	-	-
MID-SIZE		-	-	-	-
FULL-SIZE	-				
MD3™		-	-	-	-
MD4™	-				
HIGH-CAPACITY	-				
OIL VAPOR REMOVAL (ADSORBING) FILTERS					
MD3™	-	-	-	-	-
MD4™	-	-	-	-	-
CLEAN AIR PACKAGES					
MD3™		-	-	-	-
MD4™	-				

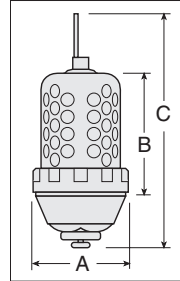
IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.

External Automatic Drains

Pipe Size	Model Number*	
	Polycarbonate Bowl**	Metal Bowl
1/8	5057B1001	5058B1001
1/4*	5057B2001	5058B2001

*Use 1/4 size with FULL-SIZE, HIGH-CAPACITY, MD3™ & MD4™ filters. Use kit 1076K77 to convert standard bowl to accept auto drain unit.
 **Available for FULL-SIZE filters only. Polycarbonate bowl includes metal bowl guard.

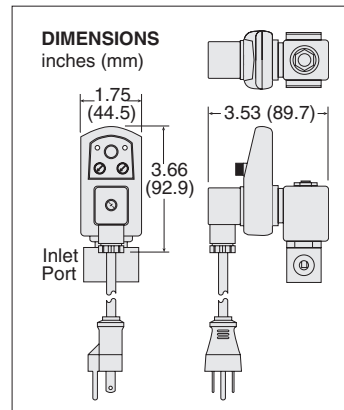
Port Size	Dimensions inches (mm)			Weight lb (kg)
	A	B	C	
1/8, 1/4	3.5 (89)	4.2 (107)	8.3 (211)	2.6 (1.2)



Electronically Controlled Drain

Pipe Size	Voltage	Model Number**
1/4	110-120 volts AC, 50/60 Hz	R-DED-115V-2
3/8	110-120 volts AC, 50/60 Hz	R-DED-115V-3
1/2	110-120 volts AC, 50/60 Hz	R-DED-115V-4
1/4	24 volts DC	R-DED-24V-2
3/8	24 volts DC	R-DED-24V-3
1/2	24 volts DC	R-DED-24V-4

** NPT port threads. For BSPP threads, add a "W" suffix to the model number, e.g., R-DED-115V-2W.



E

STANDARD SPECIFICATIONS (for electronically controlled drain):

Drain Time: Adjustable 0.5 to 10 seconds.
Drain Interval: Adjustable 0.5 to 45 minutes.
Current Consumption: 4 ma maximum.
Ambient Temperature: 35° to 130°F (2° to 54°C).
Media Temperature: 35° to 190°F (2° to 88°C).

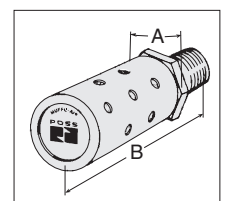
Electrical Connection: DIN 43650A, ISO 440/6952.
Valve Type: 2/2 direct acting, normally closed.
Valve Body: Forged brass; 3/16-inch (4.8 mm) orifice.
Maximum Pressure: 230 psig (15.8 bar).

Silencers



Port Size	Thread Type	Model Number*		Avg. C _v	Dimensions inches (mm)		Weight lb (kg)
		NPT Threads	BSPT Threads		A	B	
3/8	Male	5500A3003	D5500A3003	4.3	1.3 (32)	3.5 (88)	0.2 (0.1)
3/4	Male	5500A5013	D5500A5013	5.1	1.3 (32)	3.6 (92)	0.2 (0.1)
3/4	Male	5500A5003	D5500A5003	11.5	2.0 (51)	5.3 (135)	0.6 (0.3)

Flow Media: Filtered air; 5 micron recommended.
Pressure Range: 0 to 150 psig (0 to 10.3 bar) maximum.



E6

IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



Lubricants, Polycarbonate Bowl Cautions

Compatible Lubricants

Although air line lubrication is not required for most ROSS valves, other mechanisms in the system may need such lubrication. When a lubricator is used, it should be supplied only with oils which are compatible with the materials used in the valves for seals and poppets. Generally speaking, these are petroleum base oils with oxidation inhibitors, and aniline point between 180°F (82°C) and 220°F (104°C) and an ISO 32, or lighter, viscosity. Oils with phosphate type additives, such as zinc dithiophosphate, must be avoided because they can harm polyurethane valve components. The best oils to use in pneumatic systems are those specifically compounded for air line lubricator service.

Cautions on the Use of Polycarbonate Bowls

Use Only with Compressed Air. Filters and lubricators with polycarbonate bowls are specifically designed for compressed air service, and their use with any other fluid (liquid or gas) is a misapplication. The use with or injection of certain hazardous fluids in the system (e.g., alcohol or liquefied petroleum gas) could be harmful to the polycarbonate bowl or result in a combustible condition or hazardous leakage. Before using with a fluid other than air, or for nonindustrial applications, or for life support systems, consult ROSS.

Use Metal Bowl Guard When Supplied. A metal bowl guard is supplied with all but the smallest bowls, and must always be used to minimize danger from fragmentation in the event of failure of a polycarbonate bowl.

Avoid Harmful Substances. Some compressor oils, chemical cleaners, solvents, paints, and fumes will attack polycarbonate bowls and can cause bowl failure. Do not use with or near these materials. When a bowl becomes dirty, replace the bowl or wipe it with a clean dry cloth. Immediately replace any polycarbonate bowl which is crazed, cracked, or deteriorated.

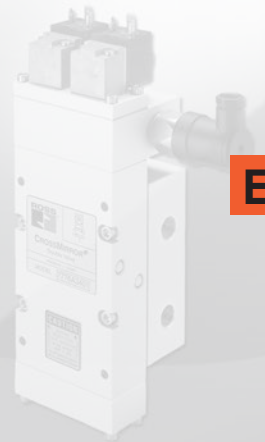
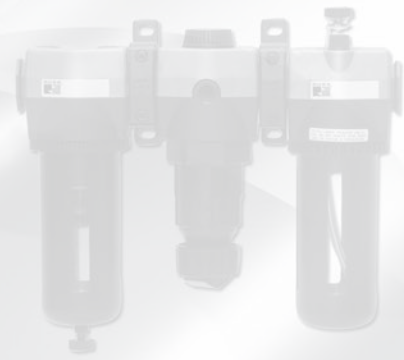
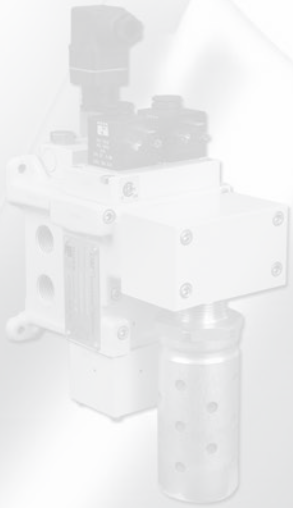
Substances HARMFUL to Polycarbonate Bowls

Acetaldehyde	Carbon disulfide	Ethylene dichloride	Phosphorous trichloride
Acetic acid	Carbon tetrachloride	Ethylene glycol	Propionic acid
Acetone	Caustic potash solution	Formic acid	Pyridine
Acrylonitrile	Caustic soda solution	Freon (refrigerant & propellant)	Sodium hydroxide
Ammonia	Chlorobenzene	Gasoline (high aromatic)	Sodium sulfide
Ammonium fluoride	Chloroform	Hydrazine	Styrene
Ammonium hydroxide	Cresol	Hydrochloric acid	Sulfuric acid
Ammonium sulfide	Cyclohexanol	Lacquer thinner	Sulfural chloride
Anaerobic adhesives & sealants	Cyclohexanone	Methyl alcohol	Tetrahydronaphthalene
Antifreeze	Cyclohexene	Methylene chloride	Thiophene
Benzene	Dimethyl formamide	Methylene salicylate	Toluene
Benzoic acid	Dioxane	Milk of lime (CaOH)	Turpentine
Benzyl alcohol	Ethane tetrachloride	Nitric acid	Xylene
Brake fluids	Ethyl acetate	Nitrobenzene	Perchloroethylene
Bromobenzene	Ethyl ether	Nitrocellulose lacquer	
Butyric acid	Ethylamine	Phenol	
Carbolic acid	Ethylene chlorohydrin	Phosphorous hydroxyl chloride	

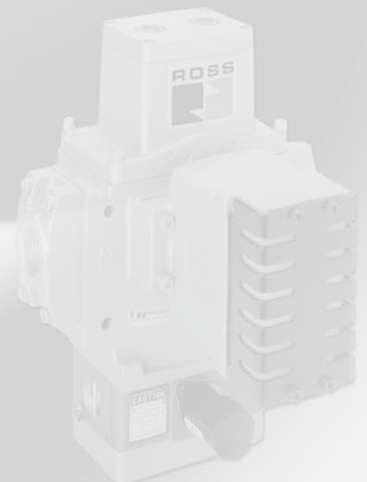
Trade Names of Substances HARMFUL to Polycarbonate Bowls

- Atlas Perma-Guard • Buna N • Cellulube #150 & #220 • Crylex #5 cement • Eastman 910 • Garlock 98403 (polyurethane)
- Haskel 568-023 • Hilgard Company's hil phene • Houghton & Co. oil 1120, 1130, 1055 • Houtosafe 1000 • Kano Kroil
- Keystone penetrating oil #2 • Loctite 271, 290, 601 • Loctite Teflon sealant • Marvel Mystery Oil • Minn. Rubber 366Y
- National Compound N11 • Nylock VC-3 • Parco 1306 Neoprene • Permabond 910 • Petron PD287 • Prestone • Pydraul AC
- Sears Regular Motor Oil • Sinclair oil "Lily White" • Stauffer Chemical FYRQUEL 150 • Stillman SR 269-75 (polyurethane)
- Stillman SR 513-70 (neoprene) • Tannergas • Telar • Tenneco anderol 495 & 500 oils • Titon • Vibra-tite • Zerex

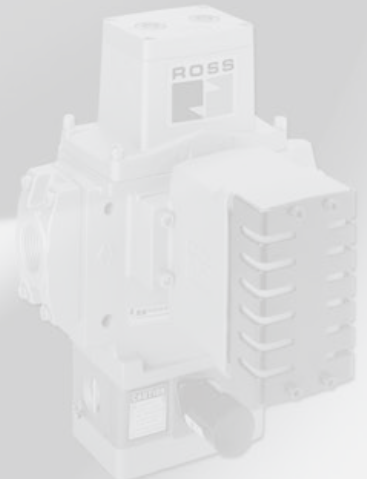
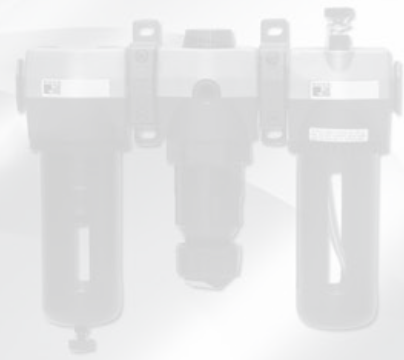
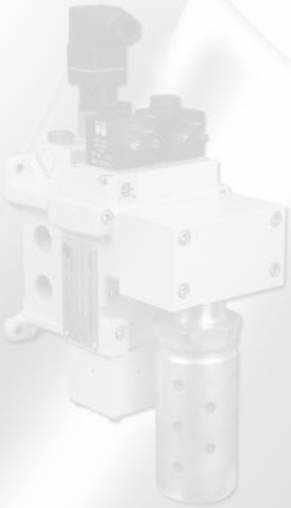
IMPORTANT NOTE: Please read carefully and thoroughly all of the **CAUTIONS, WARNINGS** on the inside back cover.



E



E



General Information

Standard Specifications

The standard specifications for the products on each page of this catalog are given on the same page or referenced. For solenoid pilot valves, models with internal pilot supply are listed. Most models are also available for use with external pilot supply or have a built-in pilot supply selector valve.

The products in this catalog are intended for use in industrial pneumatic systems. Most products are adaptable to other uses and conditions not covered by the standard specifications given in this catalog. Weights shown are approximate and are subject to change. Dimensions given, unless otherwise noted, are envelope dimensions (not for mounting). Consult ROSS for further information.

Port Threads

Ports of valves and bases described in this catalog have NPT (ANSI B2.1) threads. Other thread types can be specified by putting an appropriate prefix letter on the model or part number when ordering.

Thread Types by Model Prefix Letter

Pneumatic Port Threads	Prefix Letter	Threaded Electrical Opening
NPT (ANSI B2.1)	None	NPT
ISO 228 - DIN 259 Parallel, BSPP [#]	C*	—
ISO 228 - DIN 259 Parallel, BSPP [#]	D	G
ISO 228 - JIS B0203 Tapered [#]	J	ISO
SAE 1926- ISO 11926	S	NPT

* Used only for filters, regulators, lubricators.

[#] ISO 228 threads supersedes BSPP, G and JIS thread types.

Flow Ratings

Flow ratings are expressed as C_v where $C_v = 1$ corresponds to a steady state air flow of approximately 32 scfm under the following conditions:

Inlet pressure = 100 psig (6.7 bar)
Pressure drop = 10 psi (0.69 bar)
Air temperature = 68°F (20°C)
Relative humidity = 36 percent

Note: Because widely differing test standards are used to measure C_v values, the figures given in this catalog should not be used to compare ROSS valves with those of other makers. The C_v ratings given here are intended only for use with performance charts published by ROSS. The C_v ratings are averages for the various flow paths through the valve and are for steady flow conditions.

Approvals and Certifications

ROSS products are designed to meet a number of industrial standards, including the Canadian Standards Association (C.S.A.) guidelines. For more information on specific product approvals, contact your local distributor or ROSS.

Solenoids

All ROSS standard solenoids are rated for continuous duty (unless noted otherwise) and will operate the valve within the air pressure range specified in this catalog.

Explosion-Proof Solenoid Pilot available, for more information consult ROSS.

Voltage & Hertz

When ordering a solenoid valve, also specify the desired solenoid voltage and hertz.

Voltage Types by Model Suffix Letter

Voltage	Suffix Letter
120 volts AC	Z
220 volts AC	Y
12 volts DC	H
24 volts DC	W
48 volts DC	M
90 volts DC	K
110 volts DC	P
125 volts DC	C

Recommended Solenoid Voltages: 100-110 volts, 50 Hz; 100-120 volts, 60 Hz; 24 volts DC; 110 volts DC.

In addition, the following voltages are available:

200, 220 volts, 50 Hz
200, 240, 480 volts, 60 Hz
24, 48, 220 volts, 50 Hz
240 volts, 60 Hz
200, 220 volts, 50 Hz
200, 240 volts, 60 Hz.

For example: Model 2773B5001, 120 volts, 60 Hz.
Model W6076B2401, 220 volts, 50 Hz.

Please note that not all configurations are available for all models.

For additional information or help with voltage configuration, please contact your local distributor or ROSS.

Port Identification

Valve symbols in this catalog conform to the ISO 1219-1:1991 standard of the International Organization for Standardization (ISO) and the SAE J2051 standard of the Society of Automotive Engineers (SAE) respectively.

Information or Technical Assistance

For additional information or application assistance concerning ROSS products, consult ROSS or your local ROSS distributor (see contact information on the back cover).

Order Placement

For order placement, consult ROSS or your local ROSS distributor.

For a current list of countries and local distributors, visit ROSS' website at www.rosscontrols.com.

CAUTIONS, WARNINGS and STANDARD WARRANTY

PRE-INSTALLATION or SERVICE

1. Before servicing a valve or other pneumatic component, be sure that all sources of energy are turned off, the entire pneumatic system is shut off and exhausted, and all power sources are locked out (ref: OSHA 1910.147, EN 1037).
2. All ROSS products, including service kits and parts, should be installed and/or serviced only by persons having training and experience with pneumatic equipment. Because any installation can be tampered with or need servicing after installation, persons responsible for the safety of others or the care of equipment must check every installation on a regular basis and perform all necessary maintenance.
3. All applicable instructions should be read and complied with before using any fluid power system in order to prevent harm to persons or equipment. In addition, overhauled or serviced valves must be functionally tested prior to installation and use. If you have any questions, call your nearest ROSS location listed on the cover of this document.
4. Each ROSS product should be used within its specification limits. In addition, use only ROSS parts to repair ROSS products.

WARNING: Failure to follow these directions can adversely affect the performance of the product or result in the potential for human injury or damage to property.

FILTRATION and LUBRICATION

5. Dirt, scale, moisture, etc. are present in virtually every air system. Although some valves are more tolerant of these contaminants than others, best performance will be realized if a filter is installed to clean the air supply, thus preventing contaminants from interfering with the proper performance of the equipment. ROSS recommends a filter with a 5-micron rating for normal applications.
6. All standard ROSS filters and lubricators with polycarbonate plastic bowls are designed for compressed air applications only. Do *not* fail to use the metal bowl guard, where provided, to minimize danger from high pressure fragmentation in the event of bowl failure. Do not expose these products to certain fluids, such as alcohol or liquefied petroleum gas, as they can cause bowls to rupture, creating a combustible condition, hazardous leakage, and the potential for human injury or damage to property. Immediately replace a crazed, cracked, or deteriorated bowl. When bowl gets dirty, replace it or wipe it with a clean dry cloth.

7. Only use lubricants which are compatible with materials used in the valves and other components in the system. Normally, compatible lubricants are petroleum based oils with oxidation inhibitors, an aniline point between 180°F (82°C) and 220°F (104°C), and an ISO 32, or lighter, viscosity. Avoid oils with phosphate type additives which can harm polyurethane components, potentially leading to valve failure which risks human injury, and/or damage to property.

AVOID INTAKE/EXHAUST RESTRICTION

8. Do not restrict the air flow in the supply line. To do so could reduce the pressure of the supply air below the minimum requirements for the valve and thereby cause erratic action.
9. Do not restrict a valve's exhaust port as this can adversely affect its operation. Exhaust silencers must be resistant to clogging and must have flow capacities at least as great as the exhaust capacities of the valves. Contamination of the silencer can result in reduced flow and increased back pressure.

WARNING: ROSS expressly disclaims all warranties and responsibility for any unsatisfactory performance or injuries caused by the use of the wrong type, wrong size, or an inadequately maintained silencer installed with a ROSS product.

POWER PRESSES

10. Mechanical power presses and other potentially hazardous machinery using a pneumatically controlled clutch and brake mechanism must use a press control double valve with a monitoring device. A double valve without a self-contained monitoring device should be used only in conjunction with a control system which assures monitoring of the valve. All double valve installations involving hazardous applications should incorporate a monitoring system which inhibits further operation of the valve and machine in the event of a failure within the valve mechanism.

ENERGY ISOLATION/EMERGENCY STOP

11. Per specifications and regulations, ROSS L-O-X® and L-O-X® with EEZ-ON® operation products are defined as energy isolation devices, NOT AS EMERGENCY STOP DEVICES.

STANDARD WARRANTY

limited to repair or replacement of the product or refund of the purchase price paid solely at the discretion of ROSS and provided such product is returned to ROSS freight prepaid and upon examination by ROSS is found to be defective. This warranty becomes void in the event that product has been subject to misuse, misapplication, improper maintenance, modification or tampering.

THE WARRANTY EXPRESSED ABOVE IS IN LIEU OF AND EXCLUSIVE OF ALL OTHER WARRANTIES AND ROSS EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED WITH RESPECT TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ROSS MAKES NO WARRANTY WITH RESPECT TO ITS PRODUCTS MEETING THE PROVISIONS OF ANY GOVERNMENTAL OCCUPATIONAL SAFETY AND/OR HEALTH LAWS OR REGULATIONS. IN NO EVENT IS ROSS LIABLE TO PURCHASER, USER, THEIR EMPLOYEES OR OTHERS FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM A BREACH OF THE WARRANTY DESCRIBED ABOVE OR THE USE OR MISUSE OF THE PRODUCTS. NO STATEMENT OF ANY REPRESENTATIVE OR EMPLOYEE OF ROSS MAY EXTEND THE LIABILITY OF ROSS AS SET FORTH HEREIN.

All products sold by ROSS CONTROLS are warranted for a one-year period [with the exception of all Filters, Regulators and Lubricators ("FRLs") which are warranted for a period of seven years] from the date of purchase to be free of defects in material and workmanship. ROSS' obligation under this warranty is





ROSS CONTROLS
U.S.A.

Tel: +1-248-764-1800
Customer Svs. 1-800-GET-ROSS
Technical Svs. 1-888-TEK-ROSS
sales@rosscontrols.com
www.rosscontrols.com

ROSS EUROPA GmbH
Germany

Tel: +49-6103-7597-0
sales@rosseuropa.com
www.rosseuropa.com

ROSS ASIA K.K.
Japan

Tel: +81-42-778-7251
www.rossasia.co.jp

ROSS UK Ltd.
United Kingdom

Tel: +44-1543-671495
sales.uk@rosscontrols.com
www.rossuk.co.uk

ROSS CONTROLS INDIA Pvt. Ltd.
India

Tel: +91-44-2624-9040
ross.chennai@rosscontrols.com

ROSS SOUTH AMERICA Ltda.
Brazil

Tel: +55-11-4335-2200
vendas@rosscontrols.com

ROSS FRANCE S.A.S.
France

Tel: +33-1-49-45-65-65
www.rossfrance.com

ROSS CONTROLS (CHINA) Ltd.
China

Tel: +86-21-6915-7961
sales@rosscontrols.com.cn
www.rosscontrolschina.com

ROSS CANADA
Canada

Tel: +1-416-251-7677
sales@rosscanada.com
www.rosscanada.com

6077170 CANADA INC.
AN INDEPENDENT REPRESENTATIVE



Full-Service Global Locations
There are ROSS Distributors Throughout the World

To meet your requirements across the globe, ROSS distributors are located throughout the world. Through ROSS or its distributors, guidance is available for the selection of ROSS products, both for those using pneumatic components for the first time and those designing complex pneumatic systems.

Other literature is available for engineering, maintenance, and service requirements. If you need products or specifications not shown here, please contact ROSS or your ROSS distributor. They will be happy to assist you in selecting the best product for your application.

For a current list of countries and local distributors, visit ROSS' website at www.rosscontrols.com.
