AIR LINE EQUIPMENT

In the varied market of air preparation products, Norgren sets itself apart by offering reliable, easy to use modular and inline products which will last for years of service. Our Excelon® and Olympian® Series air prep products are in use in multiple industry sectors such as Life Science, Packaging, and Transportation. Norgren's products offer premium and durable appearance, unprecedented flexibility and ease of use, unmatched machine uptime, and best-in-class performance




AIR LINE EQUIPMENT

Excelon® Modular system filters

Filter/Regulator-Lubricator boxed sets
1/4" to 1/2"
250 psig*
0°F to 150°F*

ALE-3

F72G, F73G, F74G
General purpose filters
1/4" to 3/4"
250 psig*
-30° to 175°F

ALE-4

F92G Excelon PRO
General purpose filter
1/4"
175 psig*
-4° to 125°F

ALE-6

F72C, F73C, F74C, F74H
Oil removal filters
1/4" to 3/4"
250 psig*
-30°F to -150°F*

ALE-8

F92C Excelon PRO
Oil removal filter
1/4"
116 psig
-4°F to 125°F

ALE-10

F72V, F74V
Oil vapor removal filter
1/4", 1/2", 3/4"
250 psig*
0°F to 150°F*

ALE-12

B72G, B73G, B74G
Filter/regulators
1/4" to 3/4"
250 psig*
-30F to 175°F

ALE-14

B92G Excelon PR
Filter/regulator
1/4"
175 psig*
-4°F to 125°F

ALE-16

Excelon Modular system pressure regulators

R72G, R73G, R74G
1/4" to 3/4"
300 psig
-30°F to 175°F

ALE-18

R92G Excelon PRO
1/4"
175 psig
-4°F to 140°F

ALE-20

Excelon Modular system oil and micro-fog lubricators

L72M/C, L73M/C, L74M/C
1/4" to 1/2"
250 psig*
-30°F to 175°F*

ALE-22

L92C Excelon PRO
1/4"
175 psig
-4°F to 125°F

ALE-24

* See catalog page

AIR LINE EQUIPMENT

Excelon Modular pressure relief valves

V72G, V74G
1/4" to 3/4"
300 psig
-30°F to 175°F*

ALE-26

Excelon combination units

H72G/C, H73G/C, H74G/C
Filter-Filter
1/4" to 3/4"
150 psig*
-30°F to 150°F*

ALE-28

B72/L72, B73/L73, B74/L74
Filter/Regulator-Lubricator
1/4" to 3/4"
250 psig*
0°F to 150°F*

ALE-29

C72A, C73A, C74A
Filter-Regulator-Lubricator
1/4" to 3/4"
250 psig
-30°F to 175°F*

ALE-30

C72C, C73C, C74C
Filter-Lubricator
1/4" to 3/4"
250 psig*
-30°F to 175°F*

ALE-31

Excelon Smooth start, Directional, and Lockout Valves

P72F, P74F, P74F-AD
Smooth Start/exhaust
1/4" to 3/4"
150 psig
0°F to 175°F*

ALE-32

P92E, P72C/E, P74E, P74
Smooth Start valves
1/4" to 1/2"

ALE-34

P92C, P74
1/4" to 1/2"
Directional Control valves, threaded and unthreaded ports

ALE-35

T92, T72, T73, T74,
Smooth Start/exhaust
1/4" to 3/4"
250 psig
-30°F to 150°F

ALE-36

* See catalog page

AIR LINE EQUIPMENT

Olympian Plus Modular system filters

F64G, F68E
General purpose filters
1/2", 1"
250 psig*
-30°F to 175°F*

ALE-40

F64C/H, F68C/H
Oil removal filters
1/4" to 1"
240 psig*
-30°F to 125°F*

ALE-42

F64B/L, F68V/Y
Vapor removal filters
1/4" to 3/4"
250 psig*
-30°F to 125°F*

ALE-44

B64G, B68E/G
Filter/regulators
1/2" to 1-1/2"
250 psig*
-30°F to 175°F*

ALE-46

Olympian Plus Modular system regulators

R64G/R, R68G
General purpose
1/2" to 1-1/2"
250 psig*
-30°F to 175°F*

ALE-48

Olympian Plus Modular system lubricators

L64M/C, L68M/C
1/2" to 1-1/2"
250 psig*
-30°F to 175°F*

ALE-50

Olympian Plus Modular pressure relief valves

V64H, V68H
1/2" to 1-1/2"
300 psig*
-30°F to 175°F*

ALE-52

Olympian Plus Modular smooth start/exhaust valves

P64F, P68F
1/2" to 1-1/2"
250 psig
0°F to 175°F*

ALE-54

Olympian Plus Modular lockout valves

T64, T68
1/4" to 3/4"
250 psig
0°F to 175°F

ALE-56

* See catalog page

AIR LINE EQUIPMENT

Miniature Series

Series PTH
Filter/Regulator-lubricator
1/8" - 1/4"
250 psig*
0°F to 150°F*

ALE-58

F07
General purpose filter
1/8", 1/4"
250 psig*
-30°F to 175°F*

ALE-60

F39
Oil removal filter
1/8", 1/4"
250 psig*
-30°F to 150°F*

ALE-61

R07, R46
General purpose regulator
1/8", 1/4"
300 psig*
-30°F to 150°F*

ALE-62

B07, B39
Filter/Regulators
1/8", 1/4"
250 psig*
-30°F to 150°F*

ALE-64

L07
Micro-fog lubricator
1/8", 1/4"
250 psig*
0°F to 175°F*

ALE-66

Ported inline FRL's

F17
General purpose filter
3/4" to 1-1/2"
250 psig
-30°F to 175°F

ALE-68

F18
General purpose filter
1-1/2", 2"
250 psig
-30°F to 175°F

ALE-69

F46
Oil removal filter
3/4", 1", 1-1/4"
250 psig
-30°F to 150°F

ALE-70

F47
Oil removal filter
1-1/2", 2"
250 psig
-30°F to 150°F

ALE-71

R17, R18
General purpose regulator
3/4" to 2"
450 psig
-30°F to 175°F*

ALE-72

* See catalog page

AIR LINE EQUIPMENT

Pressure, Micro-Trol, and Instrument Regulators

11-002 & 20AG
Pressure regulator
1/4", 3/8", 1/2"
G3/4, G1
400 psig
-30°F to 175°F

ALE-74

R24
Micro-Trol
pressure regulator
1/4" to 1-1/4"
300 psig
0°F to 150°F

ALE-76

11-018
Precision regulator
1/4"
200 psig*
32°F to 160°F

ALE-78

R38 Instrument, and B38 filter/regulator
1/4"
290 psig
-40°F to 175°F

ALE-80

Pilot and Feedback Regulators

R40, R41
Pilot, and Feedback
1/4"
450 psig
0°F to 175°F

ALE-82

11-400, 20AL
Pilot Feedback
1/4"
360 psig
0°F to 175°F

ALE-84

11-104
Feedback pilot
1/4"
400 psig
0°F to 175°F

ALE-86

11-042, 11-008
Pilot operated regulator
1/4" to 1-1/4"
400 psig
0°F to 175°F

ALE-88

R18, R24
Pilot operated regulator
1/4" to 2"
450 psig
0°F to 175°F

ALE-90

Manifolding Regulators

R72M, R74M
1/4" - 3/4"
290 psig
-30°F to 150°F

ALE-92

R30M
8 mm, 10 mm
150 psig
23°F to 104°F

ALE-94

* See catalog page

AIR LINE EQUIPMENT

Stainless Steel products

R05, B05
Regulator, and filter/regulator
1/4"
300 psig
-30°F to 150°F

ALE-96

R38, B38
Regulator, and filter/regulator
1/4", 1/2"
450°F
-40°F to 175°F

ALE-98

F22, R22, L22
Filter, Regulator, Lubricator
1/2"
250 psig
0°F to 175°F

ALE-100

Water or Air Regulators

R06
Brass miniature
1/8", 1/4"
400 psig
-30°F to 150°F*

ALE-102

R14, R16
Miniature, preset, nonadjustable
1/8", 1/4"
400 psig
-30°F to 150°F

ALE-104

11 044
Pressure regulator
1/4" tube connecton
250 psig
-30°F to 150°F*

ALE-106

R91
Pressure regulator
1/4"
150 psig
0°F to 125°F*

ALE-108

R91
Water regulator
1/4" to 1"
400 psig
-30°F to 200°F*

ALE-110

Inline Micro-Fog and Oil Fog lubricators

L17
3/4" to 1-1/2"
250 psig
0°F to 175°F

ALE-112

10-028, 10-076
Oil-fog
1-1/2", 2"
250 psig
0°F to 175°F

ALE-114

* See catalog page

AIR LINE EQUIPMENT

Pressure relief valves

V07, 16-004, V06
1/8", 1/4"
300 psig
-30°F to 200°F*

ALE-116

Inline Lockout Valves

C00
1/4" to 1-1/2"
300 psig
-20° to 175°F

ALE-118

UL Listed Regulators

R44, R83
1/8", 1/4"
250 psig
-30°F to 140°F

ALE-120

R81, R82, R84
Soft drink, beer dispensing
1/4"
3000 psig
0°F to 140°F

ALE-122

Additional Products

CS13, CS15
Coalescing exhaust slencers
1/4" - 1-1/2"

ALE-124

17-001
High pressure needle valves
1/8", 1/4"

ALE-124

17-016
Drip leg drain
1/2"

ALE-124

18-013, 5PG
Gauges

ALE-125

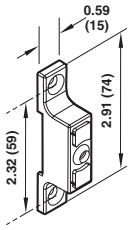
BS Series
Blow guns
1/8", 1/4"

ALE-125

Dryers

ALE-126

Air Prep Accessories



ALE-129

* See catalog page

DEMAND MORE FLEXIBILITY WITH NORGREN'S

Excelon **Pro** Design Advantage

» Design flexibility
Excelon **Pro's** ease of assembly allows last minute changes in product configuration.

» Aesthetic appearance
Excelon **Pro** units have a contemporary, modern appearance designed to enhance any product or application.

» Small Footprint
The compact unit size coupled with integrated fitting connections make the Excelon **Pro** the most compact unit in its class.

» Ease of Installation
Innovative patent pending connection design combined with integral mounting brackets make the Excelon **Pro** user friendly and easy to install.

» Integrated fittings
Integrated fittings reduce installation time, minimize leak paths, and reduce overall footprint dimensions. Offered in 1/4", 3/8", 1/2", 6 mm, 8 mm, 10 mm and 12 mm sizes.

» Flow performance
Patent pending valve provides breakthrough flow capacity. Maximum flow for such a compact product.

Excelon® Filter/Regulator-Lubricator Boxed Sets

B72/L72, B73/L73, B74/L74

Boxed sets


BL72-201A

Boxed sets are an excellent and attractive marketing tool for counter displays.

True modularity with Norgren Quikclamp® connections

Quick release bayonet bowl

Lubricator flow sensor provides a nearly constant oil/air ratio over a wide range of air flows

All around (360°) visibility of the lubricator sight-feed dome simplifies installation and adjustment

Regulator balanced valve minimizes effect of variation in the inlet pressure on the outlet pressure

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)

Metal bowl (manual or semi automatic drain): 250 psig (17 bar)

(72) 150 psig (10 bar)

Operating temperature*:

Transparent bowl:
0° to 125°F (-20° to 50°C)

Metal bowl:
0° to 150°F (-20° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Particle removal:

40 µm filter element

Materials

Body: zinc or aluminum

Bonnet: acetal or aluminum

Bowl:

Metal bowl: (72) polycarbonate
(73, 74) aluminum

Metal bowl liquid level indicator lens: transparent nylon

Sight-feed dome: transparent nylon

Element: sintered polypropylene

Elastomers: neoprene, nitrile

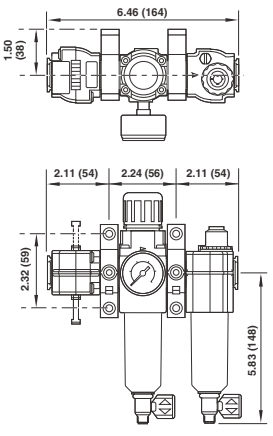
Other combinations are available. Please consult Norgren for more information.

Ordering information

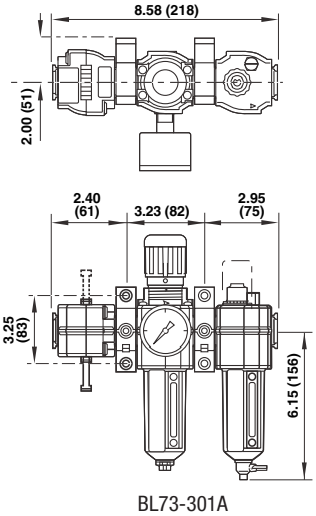
Models include PTF threads. Filter/Regulator (F/R) has knob adjustment, automatic drain, metal bowl with level indicator, 40 µm element, relieving diaphragm, and 150 psig (10 bar) regulating spring, and gauge. Lubricator (L) is a Micro-Fog model with 1/4 turn manual drain and metal bowl with level indicator. Shut off valve is included.

Boxed Set Combination Units (ship within 24 hours)

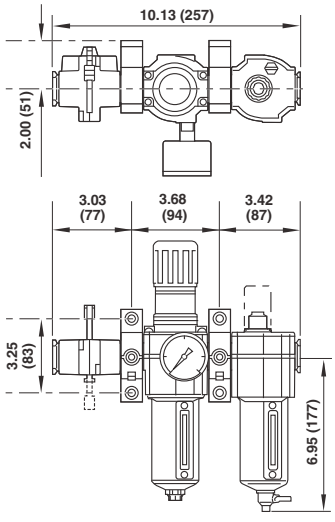
Boxed Set	Port size	Model
Filter/Regulator-Lubricator-Lockout valve-gauge-brackets	1/4"	BL72-201A
Filter/Regulator-Lubricator-Lockout valve-gauge-brackets	3/8"	BL73-301A
Filter/Regulator-Lubricator-Lockout valve-gauge-brackets	1/2"	BL74-401A



BL72-201A



BL73-301A



BL74-401A

Dimensions in inches (mm).

Excelon® Modular System

F72G, F73G, F74G General Purpose Filters

Excelon® design allows in-line or modular installation with other Excelon® products

Quick release bayonet bowl

Highly visible prismatic liquid level indicator lens on metal bowls

Technical data

Fluid: Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)

Metal bowl: 250 psig (17 bar)

F72G w/metal bowl and automatic drain: 150 psig (10 bar)

Operating temperature*:

Transparent bowl: -30° to 125°F (-34° to 50°C)

Metal bowl:

(72) -30° to 150°F (-34° to 66°C)

(73, 74) -30° to 175°F (-34° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C) .

Materials

F72G

Body: zinc

Transparent bowl: polycarbonate

Metal bowl: zinc

Metal bowl liquid level indicator lens: transparent nylon

Element: sintered polypropylene

Elastomers: neoprene and nitrile

F73G & F74G:

Body: aluminum

Transparent bowl: polycarbonate

Transparent with guard: polycarbonate, aluminum guard

Metal bowl: aluminum

Metal bowl liquid level indicator lens: transparent nylon

Element: sintered polypropylene

Elastomers: Neoprene and nitrile

F72G

F73G

F74G

Ordering information

Models listed include PTF threads, automatic drain, metal bowl with liquid level indicator, and a 40 µm element.

Port Size	Model	Flow† scfm (dm3/s)	Weight lb (kg)
1/4"	F72G 2AN AE3	55 (26)	1.15 (0.52)
3/8"	F73G 3AN AD3	65 (31)	1.1 (0.50)
1/2"	F74G 4AN AD3	140 (66)	1.79 (0.81)
3/4"	F74G 6AN AD3	140 (66)	1.75 (0.79)

† Typical flow with a 40µm element at 90 psig (6.3 bar) inlet pressure and 5 psig (0.35 bar) pressure drop.

Options selector

F7★G ★★★ ★★★

Series	Substitute
72	2
73	3
74	4

Port size	Substitute
1/4 (72, 73)	2
3/8 (72, 73 74)	3
1/2 (73, 74)	4
3/4 (74)	6

Threads	Substitute
PTF	A
ISO G parallel	G

Service life indicator	Substitute
Mechanical indicator	D
Electrical indicator	E
Without	N

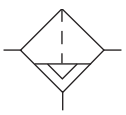
Element	Substitute
5 µm	1
40 µm	3

Bowl	Substitute
Metal w/ liquid level indicator (72*, 73, 74)	D
Long metal w/ liquid level indicator (72)*	E
Long transparent (72)*	L
Transparent with guard (73, 74)	P
Transparent bowl (72*, 73)	T

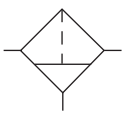
Drain	Substitute
1/4 turn manual	Q
Auto drain*	A

* 72 Series auto drain is available only with long bowl option.

ISO Symbols



Auto Drain



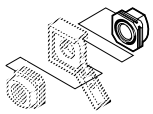
Manual Drain

Excelon® Modular System

F72G, F73G, F74G General Purpose Filters

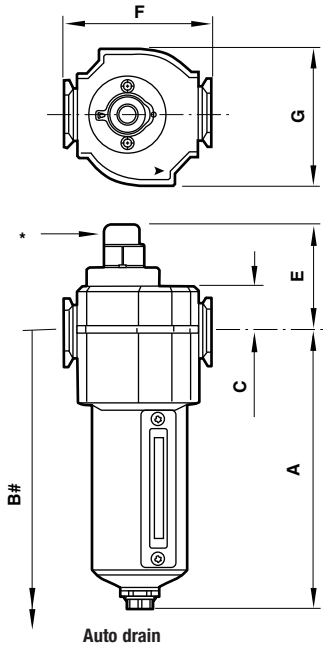
Accessories

Dimensions in inches

	Wall mounting bracket*	Quikmount pipe adapters (quantity of 1) (NPT)	Quikclamp®†	Quikclamp® and wall bracket	Service kit Seal and gasket	Replacement elements
						
F72G	4224-50	4215-02 (1/4)	4214-51	4214-52	4380-500	5925-03 (5µm)
		4215-03 (3/8)				5925-02 (40µm)
F73G	4424-50	4315-01 (1/4)	4314-51	4314-52	4380-600	4438-01 (5µm)
		4315-02 (3/8)				4438-03 (40µm)
		4315-03 (1/2)				
		4315-04 (3/4)				
F74G	4324-50	4315-02 (3/8)	4314-51	4314-52	4380-700	4338-04 (5µm)
		4315-03 (1/2)				4338-05 (40µm)
		4315-04 (3/4)				

* Bracket kit does not include wall mounting screws.

† Quikclamp is patented (US patent 5372392) and foreign patents.



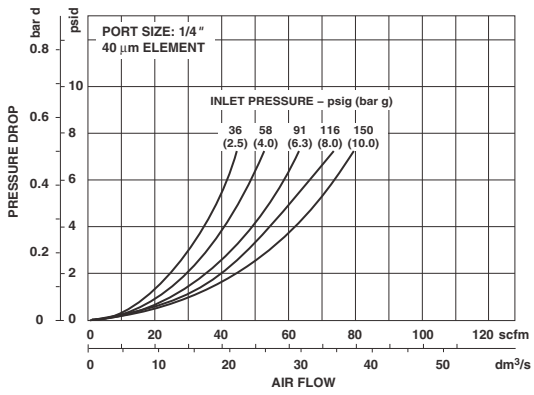
Auto drain

* Optional service indicator

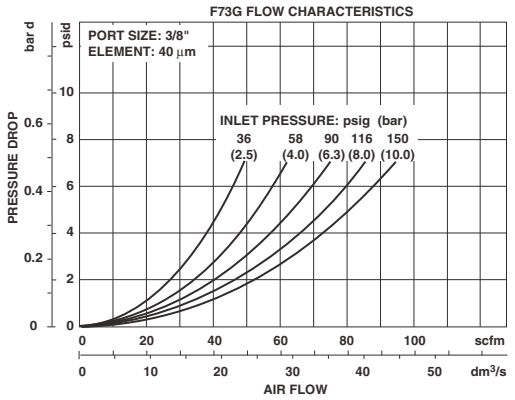
Minimum clearance required to remove bowl

Series	Drain type	A	B	C	E	F	G
72	Auto	5.51	7.52	0.75	2.09	1.97	1.89
	Manual	5.83	7.83	0.75	2.09	1.97	1.89
73	Auto	5.80	8.15	0.98	2.36	2.68	2.44
	Manual	6.15	8.50	0.98	2.36	2.68	2.44
74	Auto	6.35	9.06	0.98	2.36	3.15	2.91
	Manual	6.95	9.69	0.98	2.36	3.15	2.91

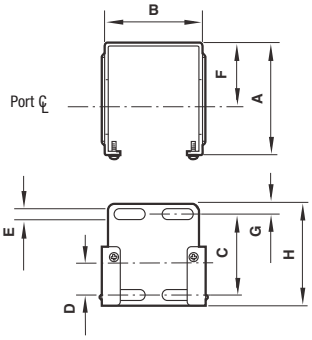
F72G FLOW CHARACTERISTICS



F73G FLOW CHARACTERISTICS

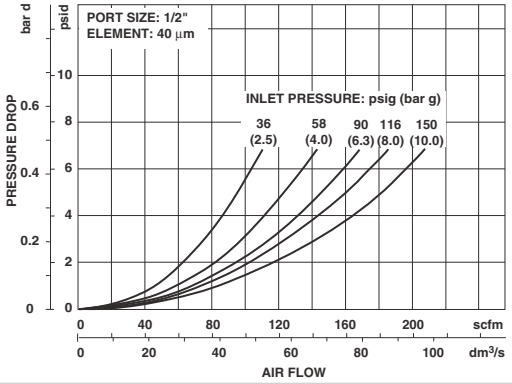


Mounting bracket



Series	A	B	C	D	E	F	G	H
72	2.36	1.65	1.54	0.73	0.16	1.50	0.24	2.01
73	2.64	2.36	1.89	0.75	0.28	1.50	0.24	2.40
74	3.11	2.72	1.97	0.79	0.20	2.01	0.24	2.40

F74G FLOW CHARACTERISTICS



Excelon® Pro F92G

General Purpose Filter

Easy to order
Configuration flexibility
Excellent value
No tools required for assembly
RoHs compliant

Technical data

Fluid: Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure
Manual drain: 175 psig (12 bar)
Automatic drain: 150 psig (10 bar)

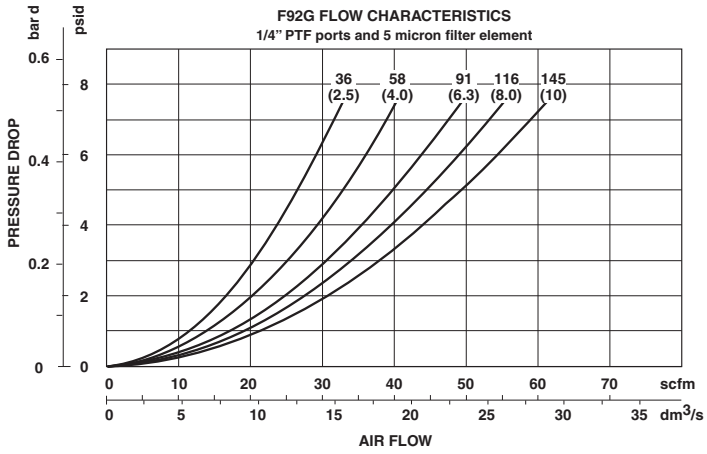
Operating temperature*
-4° to 125°F (-20° to 52°C)
* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials
Body: PBT
Transparent bowl: Polycarbonate
Element: Sintered polypropylene
Elastomers:
Bowl O-ring - Neoprene
All others - nitrile

Automatic drain operating conditions (float operated):
Bowl pressure required to close drain: > than 5 psig (0.35 bar)
Bowl pressure required to open drain: < than 3 psig (0.2 bar)
Minimum air flow required to close drain: 0.2 scfm (0.1 dm^3/s)
Manual operation: Depress pin inside drain outlet to drain bowl

ISO Symbols

Auto Drain Manual Drain



Order Information

Model listed below includes 5µm element, and manual drain.

Port size	Part Number	Drain	Flow* scfm (dm3/s)	Weight lb (kg)
1/4" PTF	F92G**2A**NQT1	Manual	40 (19)	0.40 (0.18)

*Typical flow at 90 psig (6.3 bar) inlet pressure, and 5 psig (0.35 bar) pressure drop.

F92G★★N★T1

Substitute	Description
NN	no connection
1A	1/8" PTF
2A	1/4" PTF
3A	3/8" PTF
1B	1/8" ISO Rc
2B	1/4" ISO Rc
3B	3/8" ISO Rc
1G	1/8" ISO G
2G	1/4" ISO G
3G	3/8" ISO G
6D	6mm PIF
8D	8mm (5/16") PIF
AD	10mm PIF
BD	12mm PIF
4E	1/4" PIF
6E	3/8" PIF
8E	1/2" PIF
2R*	1/4" PTF
2T*	1/4" ISO Rc
2V*	1/4" ISO G

Substitute	Description
A	Automatic drain
Q	Manual drain

* Does not include mounting bracket.

Excelon® Pro Modular System

F92G, General Purpose Filters

All Dimensions in Inches (mm)

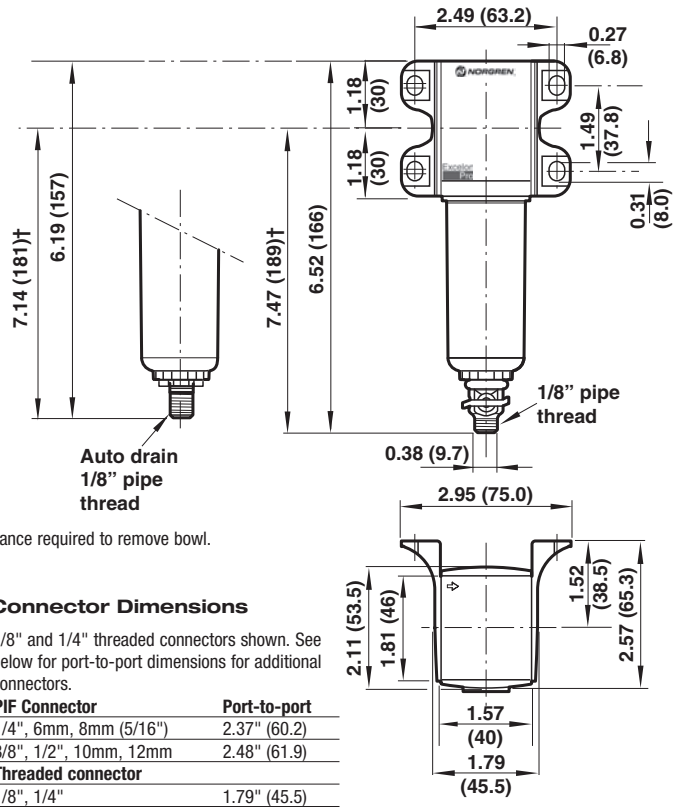
Accessories and Kits

Threaded connector w/mounting bracket*		Push-In-Fitting connector w/mounting bracket*		Threaded connector w/o mounting brackets		Porting block		Quikconnect (quantity of 1)
								
Connection	**P/N**	**Connection**	**P/N**	**Connection**	**P/N**	**Connection**	**P/N**	**P/N**
1/8" PTF	9212KIT-1A	6mm PIF	9213KIT-6D	1/4" PTF	9211KIT-2R	1/4" PTF	9216-50	9210-50
1/4" PTF	9212KIT-2A	8mm (5/16") PIF	9213KIT-8D	1/4" ISO Rc	9211KIT-2T	1/4" ISO G	9216-51	
3/8" PTF	9212KIT-3A	10mm PIF	9213KIT-AD	1/4" ISO G	9211KIT-2V	1/4" ISO Rc	9216-52	
1/8" ISO Rc	9212KIT-1B	12mm PIF	9213KIT-BD					
1/4" ISO Rc	9212KIT-2B	1/4" PIF	9213KIT-4E					
3/8" ISO Rc	9212KIT-3B	3/8" PIF	9213KIT-6E					
1/8" ISO G	9212KIT-1G	1/2" PIF	9213KIT-8E					
1/4" ISO G	9212KIT-2G							
3/8" ISO G	9212KIT-3G							

* Use 1/4" (6 mm) screws and appropriate washers when attaching brackets to a surface.

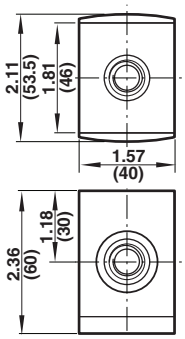
Service kit	Locking plate kits**	
P/N F92G-KIT Includes: bowl O-ring, filter element, louver		
Auto Drain Assembly kit **P/N** 4000-50	**P/N** 9236-88/X10 (qty 10) (fits filter, lubricator, lockout valves, and back of all units)	**P/N** 9236-89/X10 (qty 10) (fits regulator, filter/regulator, porting block)

** Locking plates **MUST** be in place before pressurizing any Excelon Pro unit.



† Distance required to remove bowl.

Porting block



* Connector Dimensions

1/8" and 1/4" threaded connectors shown. See below for port-to-port dimensions for additional connectors.

PIF Connector	Port-to-port
1/4", 6mm, 8mm (5/16")	2.37" (60.2)
3/8", 1/2", 10mm, 12mm	2.48" (61.9)
Threaded connector	
1/8", 1/4"	1.79" (45.5)
3/8"	2.99" (76.1)

Excelon® Modular System

F72C, F73C, F74C, F74H Oil Removal (Coalescing) Filters

Excelon® design allows in-line or modular installation
High efficiency oil and particle removal
Quick release bayonet bowl
Standard visual service life indicator turns from green to red when the filter element needs to be replaced

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)

Metal bowl: 250 psig (17 bar)

(72) metal bowl w/autodrain: 116 psig (8 bar)

Operating temperature*:

Transparent bowl:
-30° to 125°F (-34° to 50°C)

Metal bowl:
-30° to 150°F (-34° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Oil removal: 0.01 µm at 70°F (21°C)

Remaining oil content: 0.01 mg/m³ at 70°F (21°C)

Materials

F72C

Body: zinc
Bowl transparent: polycarbonate
Metal: zinc
Metal bowl liquid level indicator lens: Transparent nylon
Element: synthetic fiber and polyurethane foam
Elastomers: neoprene and nitrile
Service life indicator materials-Body: transparent nylon.
Internal parts: acetal.
Spring: stainless steel.
Elastomers: nitrile

F73C and F74C

Body: aluminum
Transparent bowl: polycarbonate
Transparent with guard: polycarbonate, Guard: aluminum
Metal bowl: aluminum
Metal bowl liquid level indicator lens: Transparent nylon
Element: synthetic fiber and polyurethane foam
Elastomers: neoprene and nitrile
Mechanical service indicator materials
Body: transparent nylon
Internal parts: Acetal
Spring: Stainless steel
Elastomers: Nitrile

F72C

F73C

F74C

Ordering Information

Models listed include PTF threads, service indicator, automatic drain, and a metal bowl with liquid level indicator.

Port Size	Model Number	Maximum Flow* scfm (dm3/s)	Weight lb (kg)
1/4"	F72C 2AD AE0	9.5 (4.5)	1.2 (0.54)
3/8"	F73C 3AD AD0	21.2 (10.0)	1.2 (0.54)
1/2"	F74C 4AD AD0(std)	33.9 (16.0)	1.84 (0.83)
1/2"	F74H 4AD AD0 (hi)	59.3 (28.0)	2.45 (1.11)
3/4"	F74H 6AD AD0 (hi)	59.3 (28.0)	2.40 (1.10)

* Maximum flow with 90 psig (6.3 bar) inlet pressure to maintain stated oil removal performance.

Options selector

F7★★ ★★★ ★★0

Series	Substitute
72	2C
73	3C
74	4C
74 (High flow)	4H

Port size	Substitute
1/4 (72 & 73)	2
3/8 (72, 73, 74)	3
1/2 (73 & 74)	4
3/4 (74)	6

Threads	Substitute
PTF	A
ISO G parallel	G

Bowl	Substitute
Metal w/ liquid level indicator (72, 73, 74)	D
Long metal w/ liquid level indicator (72)	E
Long transparent (72)	L
Transparent with guard (73, 74)	P
Transparent bowl (72, 73)	T

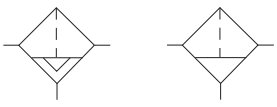
Drain	Substitute
1/4 turn manual	Q
Auto drain*	A

* 72 Series auto drain is available only with long bowl option.

Service life indicator	Substitute
With (visual)	D
With (electrical)	E
Without	N

NOTE: Coalescing filters should be used in conjunction with a 5µm general purpose filter upstream to maximize filter element life and optimize performance.

ISO Symbols


Automatic and Semi Automatic Drain

Manual Drain

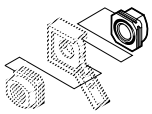
AIR LINE EQUIPMENT

Excelon® Modular System

F72C, F73C, F74C, F74H Oil Removal (Coalescing) Filters

Accessories

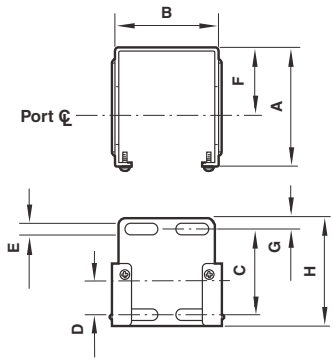
Dimensions in inches.

	Wall mounting bracket*	Quikmount pipe adapters (quantity of 1) (NPT)	Quikclamp®†	Quikclamp® and wall bracket	Visual service indicator	Electrical service life indicator	Service kit Seal and gasket	Replacement elements
								
F72C	4224-50	4215-02 (1/4)	4214-51	4214-52			4380-500	5925-09
		4215-03 (3/8)						
F73C	4424-50	4315-01 (1/4)	4314-51	4314-52	5797-50	4020-51R	4380-602	4444-01
		4315-02 (3/8)						
		4315-03 (1/2)						
		4315-04 (3/4)						
F74C, F74H	4324-50	4315-02 (3/8)	4314-51	4314-52	5797-50	4020-51R	4380-730	4344-01 (F74C)
		4315-03 (1/2)						4344-02 (F74H)
		4315-04 (3/4)						

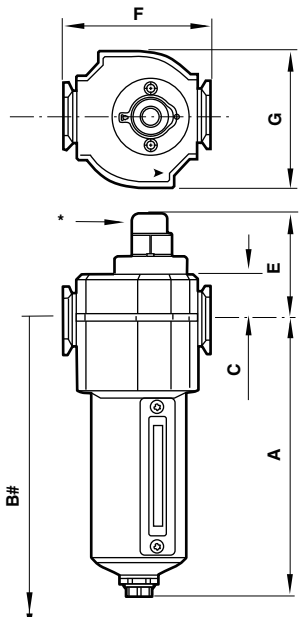
* Bracket kit does not include wall mounting screws.

† Quikclamp is patented (US patent 5372392) and foreign patents.

Mounting bracket



Series	A	B	C	D	E	F	G	H
72	2.36	1.65	1.54	0.73	0.16	1.50	0.24	2.01
73	2.64	2.36	1.89	0.75	0.28	1.50	0.24	2.40
74	3.11	2.72	1.97	0.79	0.20	2.01	0.24	2.40

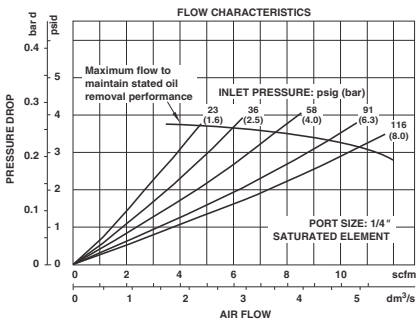


* Standard service indicator

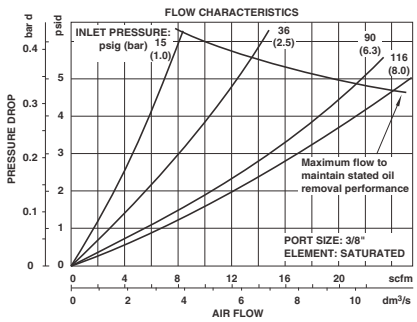
\# Minimum clearance required to remove bowl

Series	Drain type	A	B	C	E	F	G
F72C	Auto	5.51	7.52	0.75	2.09	1.97	1.89
	Manual	5.83	7.83	0.75	2.09	1.97	1.89
F73C	Auto	5.80	8.15	0.98	2.36	2.68	2.44
	Manual	6.15	8.50	0.98	2.36	2.68	2.44
F74C	Auto	6.35	9.17	0.98	2.36	3.15	2.91
	Manual	6.95	9.80	0.98	2.36	3.15	2.91
F74H	Auto	8.44	11.18	0.98	2.36	3.15	2.91
	Manual	9.04	11.81	0.98	2.36	3.15	2.91

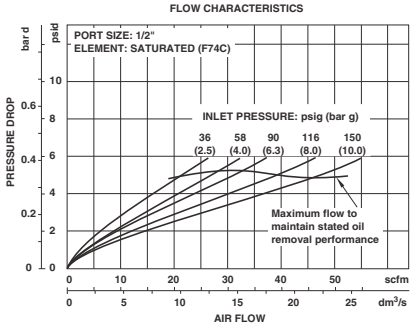
F72



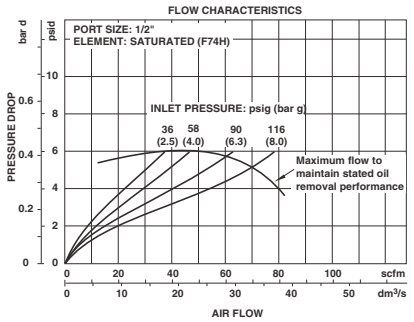
F73



F74C



F74H



Excelon® Pro F92C

Oil Removal (Coalescing) Filter

Easy to order
Configuration flexibility
Excellent value
No tools required for assembly
RoHs compliant

Technical data

Fluid: Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure

Automatic drain: 116 psig (8 bar)

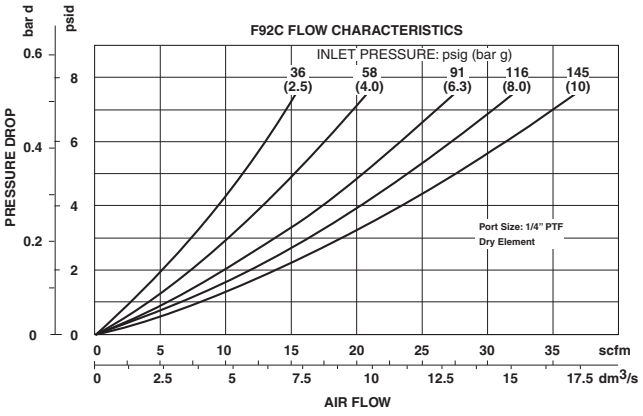
Operating temperature*

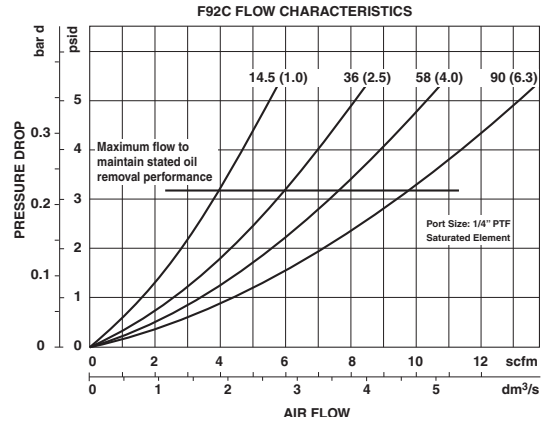
-4° to 125°F (-20° to 52°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

Body: PBT
Transparent bowl: Polycarbonate
Element: Synthetic fiber and polyurethane foam
Elastomers: Bowl O-ring, and service life indicator
O-ring - Neoprene. All others - nitrile
Service Indicator
Body: Polycarbonate
Internal parts: Acetal
Spring: Music wire ASTM 228
Elastomer: Neoprene
Automatic drain operating conditions (float operated):
Bowl pressure required to close drain: > than 5 psig (0.35 bar)
Bowl pressure required to open drain: < than 3 psig (0.2 bar)
Minimum air flow required to close drain: 0.2 scfm (0.1 dm^3/s)
Manual operation: Depress pin inside drain outlet to drain bowl





Order Information

Model listed below includes 0.01µm element, automatic drain, service life indicator

Port size	Part Number	Flow* scfm (dm3/s)	Weight lbs (kg)
1/4" PTF	F92C**2A**DAT0	9.7 (4.6)	.44 (.20)

* Maximum flow with 90 psig (6.3 bar) inlet pressure to maintain stated oil removal performance (saturated element).

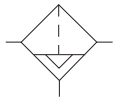
F92C★★DAT0

Substitute	Description
NN	no connection
1A	1/8" PTF
2A	1/4" PTF
3A	3/8" PTF
1B	1/8" ISO Rc
2B	1/4" ISO Rc
3B	3/8" ISO Rc
1G	1/8" ISO G
2G	1/4" ISO G
3G	3/8" ISO G
6D	6mm PIF
8D	8mm (5/16") PIF
AD	10mm PIF
BD	12mm PIF
4E	1/4" PIF
6E	3/8" PIF
8E	1/2" PIF
2R*	1/4" PTF
2T*	1/4" ISO Rc
2V*	1/4" ISO G

* Does not include mounting bracket.

NOTE: Coalescing filters should be used in conjunction with a 5µm general purpose filter upstream to maximize filter element life and optimize performance.

ISO Symbols



Automatic Drain

All Dimensions in Inches (mm)

Excelon® Pro Modular System

F92C , Coalescing Filters

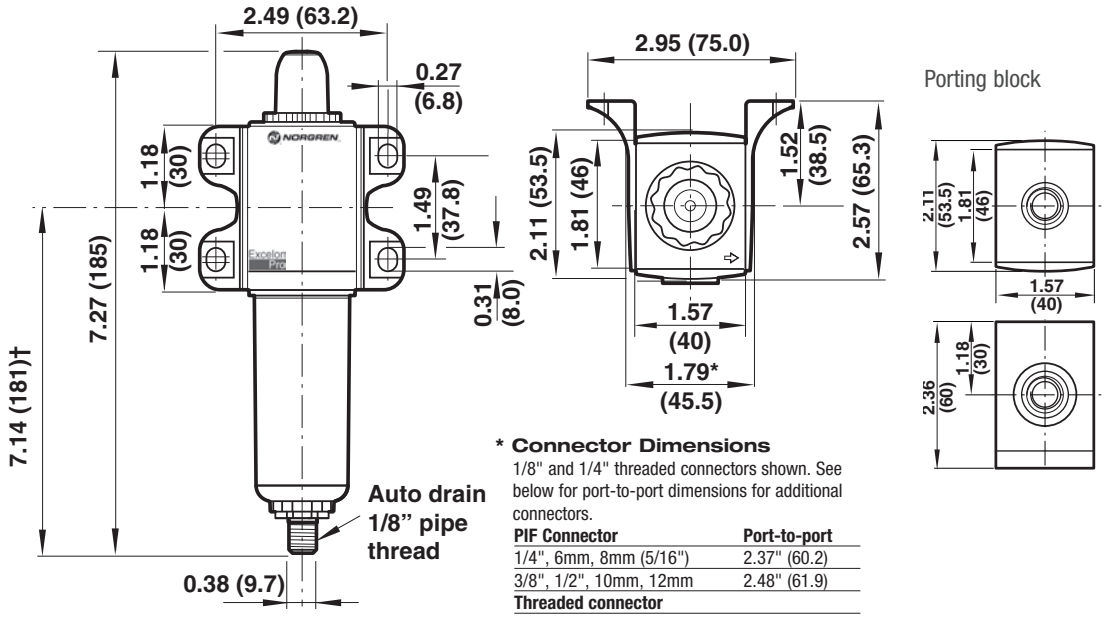
Accessories and Kits

Threaded connector w/mounting bracket*		Push-In-Fitting connector w/mounting bracket*		Threaded connector w/o mounting brackets		Porting block		Quikconnect (quantity of 1)
								
Connection	**P/N**	**Connection**	**P/N**	**Connection**	**P/N**	**Connection**	**P/N**	**P/N**
1/8" PTF	9212KIT-1A	6mm PIF	9213KIT-6D	1/4" PTF	9211KIT-2R	1/4" PTF	9216-50	9210-50
1/4" PTF	9212KIT-2A	8mm (5/16") PIF	9213KIT-8D	1/4" ISO Rc	9211KIT-2T	1/4" ISO G	9216-51	
3/8" PTF	9212KIT-3A	10mm PIF	9213KIT-AD	1/4" ISO G	9211KIT-2V	1/4" ISO Rc	9216-52	
1/8" ISO Rc	9212KIT-1B	12mm PIF	9213KIT-BD					
1/4" ISO Rc	9212KIT-2B	1/4" PIF	9213KIT-4E					
3/8" ISO Rc	9212KIT-3B	3/8" PIF	9213KIT-6E					
1/8" ISO G	9212KIT-1G	1/2" PIF	9213KIT-8E					
1/4" ISO G	9212KIT-2G							
3/8" ISO G	9212KIT-3G							

* Use 1/4" (6 mm) screws and appropriate washers when attaching brackets to a surface.

Service kit	**Locking plate kits****	
P/N F92C-KIT Includes: bowl O-ring, service indicator seal, filter element, screws **Auto drain assembly** 4000-50	 **P/N** 9236-88/X10 (qty 10) (fits filter, lubricator, lockout valves, and back of all units)	 **P/N**9236-89/X10 (qty 10) (fits regulator, filter/regulator, porting block)

Locking plates **MUST be in place before pressurizing any Excelon Pro unit.



† Distance required to remove bowl.

*** Connector Dimensions**

1/8" and 1/4" threaded connectors shown. See below for port-to-port dimensions for additional connectors.

PIF Connector	Port-to-port
1/4", 6mm, 8mm (5/16")	2.37" (60.2)
3/8", 1/2", 10mm, 12mm	2.48" (61.9)
Threaded connector	
1/8", 1/4"	1.79" (45.5)
3/8"	2.99" (76.1)

Excelon® Modular System

F72V, and F74V Oil Vapor Removal (adsorbing) Filters

Element color band changes to blue indicating need for replacement.
Excelon® design allows in-line or modular installation
Adsorbing type activated carbon element removes oil vapors and most hydrocarbon odors
Quick release bayonet bowl
Modular installations with Excelon® 72, 73, and 74 series can be made to suit particular applications

F72V

F74V

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)
Metal bowl: 250 psig (17 bar)

Operating temperature*:

Transparent bowl:
0° to 125°F (-20° to 50°C)
Metal bowl:
0° to 150°F (-20° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

Air quality:

Within ISO 8573-1, Class 1 (oil content) when installed downstream of an oil removal filter.

Maximum remaining oil content in outlet air:

0.003 ppm at 70°F (20°C)

Materials

F72V

Body: zinc
Transparent bowl: polycarbonate
Guard for transparent bowl: zinc
Metal bowl: zinc
Element: Activated carbon and polycarbonate
Elastomers: nitrile

F74V

Body: aluminum
Transparent Bowl: polycarbonate with steel bowl guard
Metal bowl: aluminum
Element: activated carbon and aluminum
Elastomers: neoprene and nitrile

Ordering Information

Models listed include PTF threads.

Port Size	Model	Flow* scfm (dm3/s)	Weight lb (kg)
1/4"	F72V 2AN ELC	3.4 (1.6)	0.88 (0.40)
1/2"	F74V 4AN EMA	21 (10)	2.51 (1.14)
3/4"	F74V 6AN EMA	21 (10)	2.46 (1.12)

* Maximum flow with 90 psig (6.3 bar) inlet pressure to maintain stated oil removal performance.

Options selector

F7★V ★★N E★★

Series	Substitute
72	2
74	4

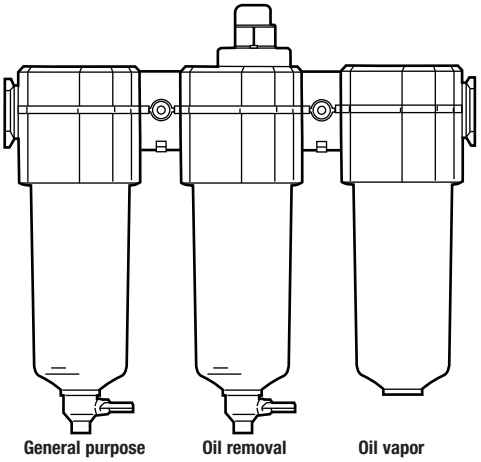
Port size	Substitute
1/4 (72)	2
3/8 (72, 74)	3
1/2 (74)	4
3/4 (74)	6

Threads	Substitute
PTF	A
ISO G parallel	G

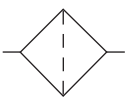
Element	Substitute
Activated carbon (74)	A
Activated carbon (72)	C

Bowl	Substitute
Metal (72)	C
Long transparent (72)	L
Metal (74)	M
Transparent with guard (74)	P

Oil vapor removal filters must be protected upstream by an oil removal filter and general purpose filter.



ISO Symbol



Auto Drain

Excelon® Modular System

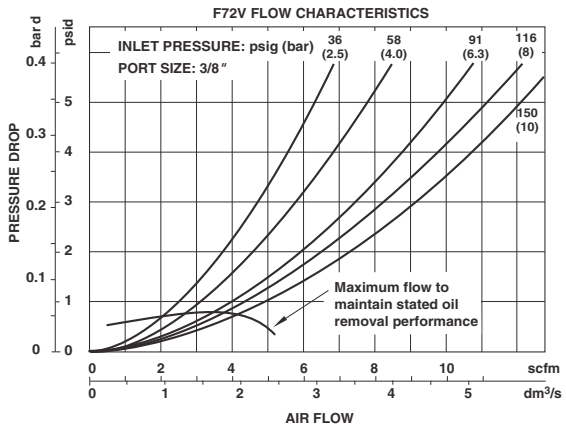
F72V and F74V Oil Vapor Removal (adsorbing) Filters

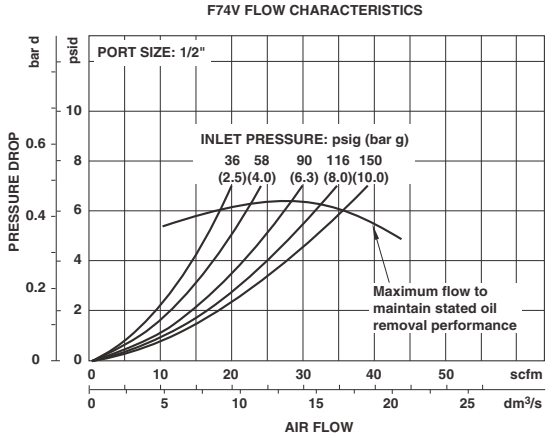
Accessories

	Wall mounting bracket*	Quikmount pipe adapters (quantity of 1) (NPT)	Quikclamp®	Quikclamp® and wall bracket	Service kit seal and gasket	Replacement elements
F72V	4224-50	4215-02 (1/4)	4214-51	4214-52	4380-500	4241-01
		4215-03 (3/8)				
F74V	4324-50	4315-02 (3/8)	4314-51	4314-52	4380-750	4341-01
		4315-03 (1/2)				
		4315-04 (3/4)				

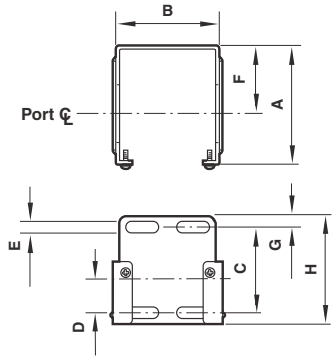
* Bracket kit does not include wall mounting screws.

Typical Performance Characteristics





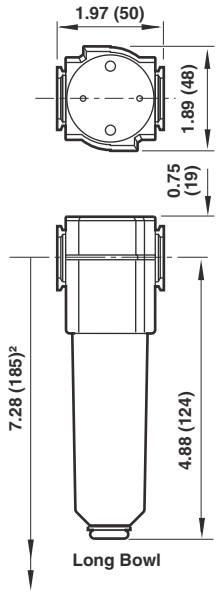
Mounting bracket



Series	A	B	C	D	E	F	G	H
72	2.36	1.65	1.54	0.73	0.16	1.50	0.24	2.01
74	3.11	2.72	1.97	0.79	0.20	2.01	0.24	2.40

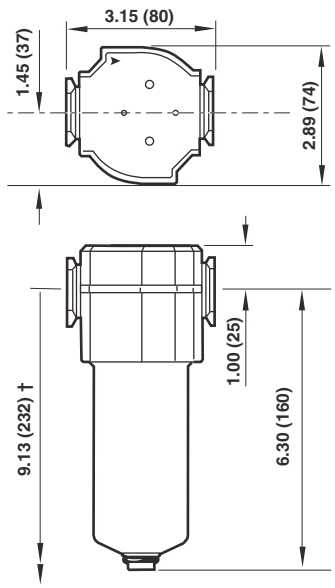
All Dimensions in Inches (mm)

F72V



† Minimum clearance required to remove bowl.

F74V



† Minimum clearance required to remove bowl.

Excelon® modular system

B72G, B73G, B74G Filter/Regulators

Excelon® design allows in-line installation or modular installation with other Excelon® products

High efficiency water and particle removal

Quick release bayonet bowl

Push to lock adjusting knob with tamper resistant accessory

Optional patented quarter turn manual drain

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)
Metal bowl: 250 psig (17 bar)
B72G metal bowl w/ auto drain: 150 psig (10 bar)

Operating temperature*:

Transparent bowl:
-30° to 125°F (-34° to 50°C)
Metal bowl:
(72) -30° to 150°F (-34° to 66°C)
(73, 74) -30° to 175°F (-34° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

B72G

Body: zinc
Bonnet: acetal (Zinc on 250 psi model)
Valve: brass
Transparent bowl: polycarbonate
Metal bowl: zinc
Liquid level indicator lens (metal bowl): transparent nylon
Element: sintered polypropylene
Elastomers: neoprene & nitrile

B73G & B74G:

Body & bonnet: aluminum
Transparent bowl: polycarbonate
Guarded transparent bowl: polycarbonate with steel
Metal bowl: aluminum
Liquid level indicator lens (metal bowl): transparent nylon (Pyrex optional)
Element: sintered polypropylene
Elastomers: neoprene & nitrile

B72G

B73G

B74G

Ordering Information

Models listed include PTF threads, knob adjustment, automatic drain, metal bowl with liquid level indicator, 40 µm element, relieving diaphragm, 5 to 150 psig (0.3 to 10 bar) outlet pressure adjustment range* with gauge.

Port Size	Model	Flow† scfm (dm3/s)	Weight lb (kg)
1/4"	B72G 2AK AE3 RMG	80 (38)	1.3 (0.59)
3/8"	B73G 3AK AD3 RMG	123 (58)	1.76 (0.82)
1/2"	B73G 4AK AD3 RMG	123 (58)	1.76 (0.82)
1/2"	B74G 4AK AD3 RMG	212 (100)	2.59 (1.17)
3/4"	B74G 6AK AD3 RMG	212 (100)	2.55 (1.16)

*Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.
† Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.

Options selector

B7★G ★★★ ★★★ ★★★ ★★★

Series	Substitute
72	2
73	3
74	4

Port size	Substitute
1/4" (72 & 73)	2
3/8" (72, 73, 74)	3
1/2" (73 & 74)	4
3/4" (74)	6

Threads	Substitute
PTF	A
ISO G parallel	G

Adjustment	Substitute
Knob	K
T-bar	T

Drain	Substitute
1/4 turn manual	Q
Auto drain*	A

Gauge	Substitute
With	G
Without	N

Outlet pressure adjustment range*	Substitute
5 to 60 psig (0.3 to 4 bar)	F
5 to 150 psig (0.3 to 10 bar)	M
10 to 250 psig (0.7 to 17 bar)**	S

Diaphragm	Substitute
Relieving	R

Element	Substitute
5 µm	1
40 µm	3

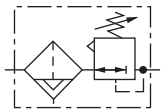
Bowl	Substitute
Metal w/ liquid level indicator (72*, 73, 74)	D
Long metal w/ liquid level indicator (72)*	E
Long transparent (72)*	L
Transparent with guard (73, 74)	P
Transparent bowl (72*, 73)	T

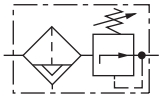
*72 Series auto drain is available only with long bowl option.

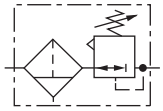
*Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

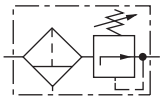
** 250 psig (17 bar) outlet pressure range units are available with t-handle adjustment only and standard metal bowl options.

ISO Symbols


Automatic and Semi Automatic Drain Relieving


Automatic and Semi Automatic Drain Non Relieving


Manual Drain Relieving


Manual Drain Non Relieving

Excelon® modular system

B72G, B73G, B74G Filter/Regulators

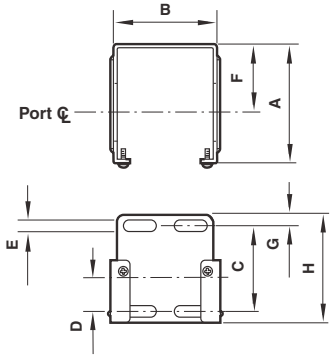
Accessories

Dimensions in inches.

	Wall mounting bracket*	Neck mounting bracket	Gauge 0 ... 160 psig	Panel nut	Tamper resistant cover and seal wire	Pipe adapters (quantity of 1) (NPT)	Quikclamp®	Quikclamp® and wall bracket	Replacement elements
B72G	4224-50	74316-50	18-013-212	4248-89	4255-51	4215-02 (1/4)	4214-51	4214-52	5925-03 (5µm)
						4215-03 (3/8)			5925-02 (40µm)
B73G	4424-50	4461-50	18-013-209	5191-88	4455-51	4315-01 (1/4)	4314-51	4314-52	4438-01 (5µm)
						4315-02 (3/8)			4438-03 (40µm)
						4315-03 (1/2)			
						4315-04 (3/4)			
B74G	4324-50	4368-51	18-013-209	4348-89	4355-51	4315-02 (3/8)	4314-51	4314-52	4338-04 (5µm)
						4315-03 (1/2)			4338-05 (40µm)
						4315-04 (3/4)			

* Bracket kit does not include wall mounting screws.

Mounting bracket

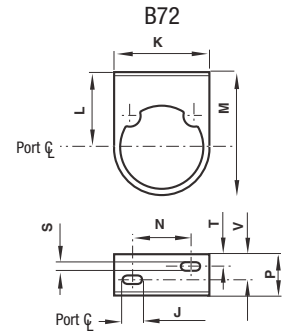


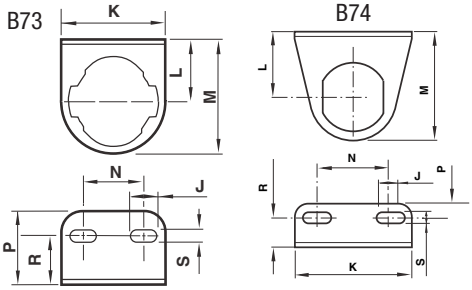
Series	A	B	C	D	E	F	G	H
72	2.36	1.65	1.54	0.73	0.16	1.50	0.24	2.01
73	2.64	2.36	1.89	0.75	0.28	1.50	0.24	2.40
74	3.11	2.72	1.97	0.79	0.20	2.01	0.24	2.40

Service Kits

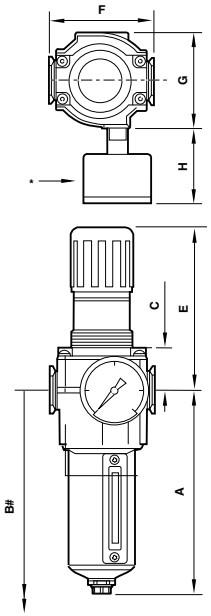
Item	Type	Part Number
72G	Relieving	4383-500
73G	Relieving	4383-600
74G	Relieving	4383-700

Neck mounting brackets





Series	J	K	L	M	N	P	R	S	T	V
72	0.31	1.93	1.50	2.50	1.18	0.94	–	0.17	0.31	0.59
73	0.67	2.52	1.50	2.76	1.50	1.50	0.98	0.28	–	–
74	0.94	3.50	2.05	3.39	2.20	1.38	0.91	0.28	–	–

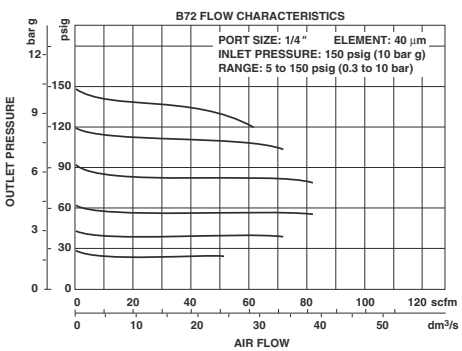


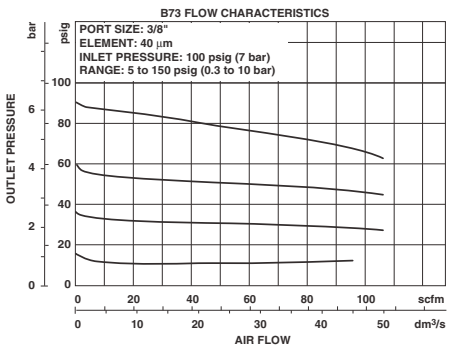
Series	Drain type	A	B	C	E	F	G	H	Panel Ø	Panel depth
72	Auto	5.51	7.52	1.02	2.87	1.97	1.89	1.38	1.57	0 to .16
	Manual	5.83	7.83	1.02	2.87	1.97	1.89	1.38	1.57	0 to .16
73	Auto	5.80	8.15	1.22	3.78	2.68	2.44	2.20	1.89	.07 to .25
	Manual	6.15	8.50	1.22	3.78	2.68	2.44	2.20	1.89	.07 to .25
74	Auto	6.35	9.06	1.22	5.00	3.15	2.91	2.20	2.05	.07 to .25
	Manual	6.95	9.69	1.22	5.00	3.15	2.91	2.20	2.05	.07 to .25

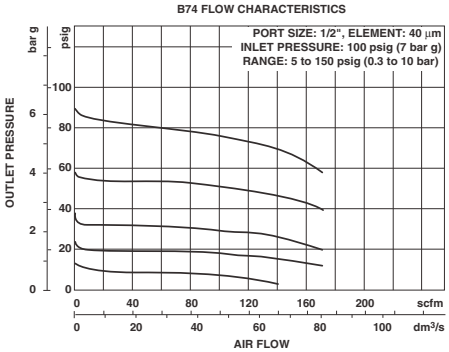
*Optional gauge.

Minimum clearance required to remove bowl.

Typical Performance Characteristics







Excelon® Pro B92G

General Purpose Filter/Regulator

Easy to order
Configuration flexibility
Excellent value
No tools required for assembly
Push-to-lock adjusting knob w/tamper resistant accessory

Technical data

Fluid: Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

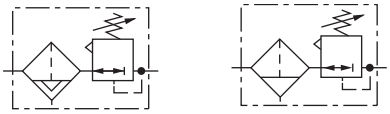
Maximum pressure
- Manual drain: 175 psig (12 bar)
- Automatic drain: 150 psig (10 bar)

Operating temperature*
- -4° to 125°F (-20° to 52°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

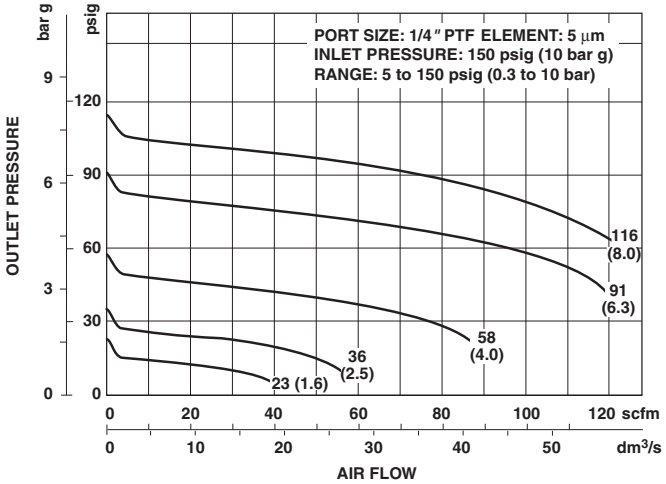
Materials
- Body: PBT
- Bonnet: PBT
- Valve elastomer: Geolast
- Diaphragm: Nitrile
- Transparent bowl: Polycarbonate
- Element: Sintered polypropylene
- Elastomers:
  - Bowl O-ring - Neoprene
  - All others - Nitrile
- Automatic drain operating conditions (float operated):
- Bowl pressure required to close drain: > than 5 psig (0.35 bar)
- Bowl pressure required to open drain: < than 3 psig (0.2 bar)
- Minimum air flow required to close drain: 0.2 scfm (0.1 dm^3/s)
- Manual operation: Depress pin inside drain outlet to drain bowl

ISO Symbols



Automatic Drain Relieving | Manual Drain Relieving

B92 FLOW CHARACTERISTICS



Order Information

Model listed below includes 5µm element, relieving diaphragm, 145 psi outlet pressure adjustment range, manual drain, and bar/psi gauge.

Port size	Part Number	Flow* scfm (dm3/s)	Weight lb (kg)
1/4" PTF	B92G**2A**KQT1RMG	35 (16)	0.62 (0.28)

* Maximum flow with 145 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.

B92G★★K★T1RM★

Substitute	Description
NN	no connection
1A	1/8" PTF
2A	1/4" PTF
3A	3/8" PTF
1B	1/8" ISO Rc
2B	1/4" ISO Rc
3B	3/8" ISO Rc
1G	1/8" ISO G
2G	1/4" ISO G
3G	3/8" ISO G
6D	6mm PIF
8D	8mm (5/16") PIF
AD	10mm PIF
BD	12mm PIF
4E	1/4" PIF
6E	3/8" PIF
8E	1/2" PIF
2R*	1/4" PTF
2T*	1/4" ISO Rc
2V*	1/4" ISO G

Substitute	Description
G	Gauge bar/psi scale
A	Gauge bar/Mpa scale

Substitute	Description
Q	Manual drain
A	Automatic drain

* Does not include mounting bracket

All Dimensions in Inches (mm)

Excelon® Pro Modular System

B92G, General Purpose Filter/Regulator

Accessories and Kits

Threaded connector w/mounting bracket*

Connection	P/N
1/8" PTF	9212KIT-1A
1/4" PTF	9212KIT-2A
3/8" PTF	9212KIT-3A
1/8" ISO Rc	9212KIT-1B
1/4" ISO Rc	9212KIT-2B
3/8" ISO Rc	9212KIT-3B
1/8" ISO G	9212KIT-1G
1/4" ISO G	9212KIT-2G
3/8" ISO G	9212KIT-3G

Push-In-Fitting connector w/mounting bracket*

Connection	P/N
6mm PIF	9213KIT-6D
8mm (5/16") PIF	9213KIT-8D
10mm PIF	9213KIT-AD
12mm PIF	9213KIT-BD
1/4" PIF	9213KIT-4E
3/8" PIF	9213KIT-6E
1/2" PIF	9213KIT-8E

Threaded connector w/o mounting brackets

Connection	P/N
1/4" PTF	9211KIT-2R
1/4" ISO Rc	9211KIT-2T
1/4" ISO G	9211KIT-2V

Wall mounting bracket

P/N 74316-02

Porting block

Connection	P/N
1/4" PTF	9216-50
1/4" ISO G	9216-51
1/4" ISO Rc	9216-52

Panel mount nut (quantity of 10)

P/N 9248-50

Quikconnect (quantity of 1)

P/N 9210-50

Tamper resistant cover and seal wire

P/N 9255-51

* Use 1/4" (6 mm) screws and appropriate washers when attaching brackets to a surface.

Service kit
P/N B92G-KITR
Includes: Diaphragm assembly, valve, valve O-ring, slip ring, bowl O-ring, element, screws

Auto Drain Assembly kit
P/N 4000-50

Locking plate kits**

P/N 9236-88/X10

(qty 10)
(fits filter, lubricator, lockout valves, and back of all units)

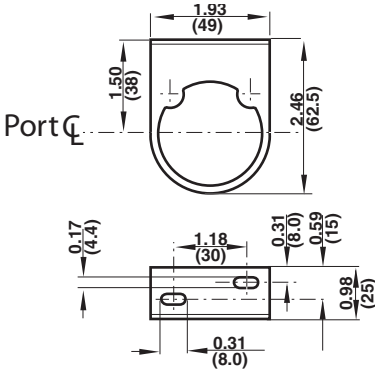
P/N9236-89/X10

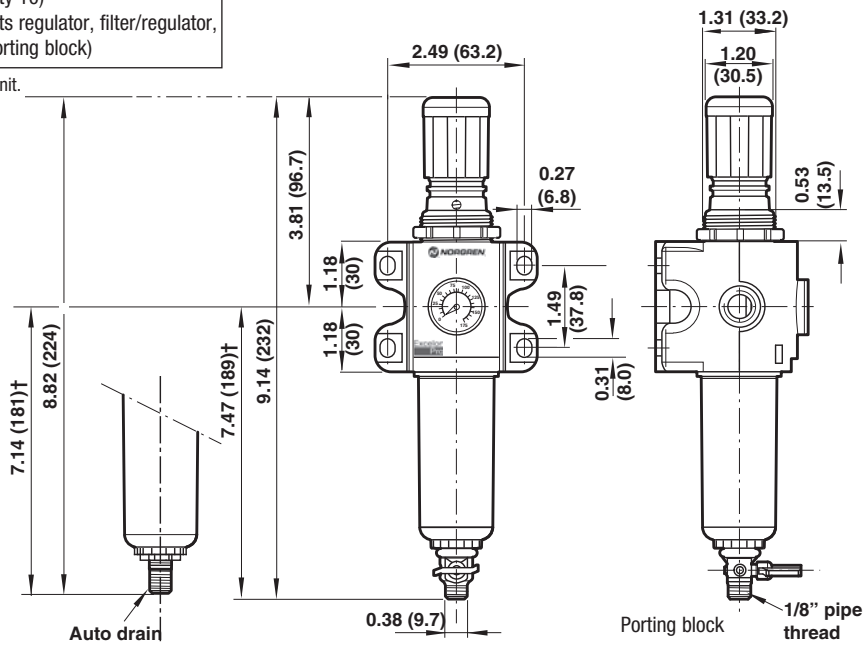
(qty 10)
(fits regulator, filter/regulator, porting block)

** Locking plates **MUST** be in place before pressurizing any Excelon Pro unit.

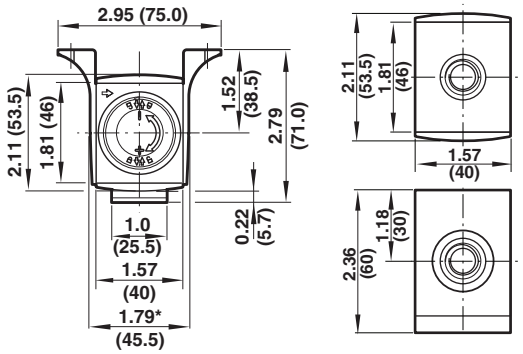
All Dimensions in Inches (mm)

74316-02
Wall mount dimensions





† Distance required to remove bowl.



*** Connector Dimensions**

1/8" and 1/4" threaded connectors shown. See below for port-to-port dimensions for additional connectors.

PIF Connector	Port-to-port
1/4", 6mm, 8mm (5/16")	2.37" (60.2)
3/8", 1/2", 10mm, 12mm	2.48" (61.9)
Threaded connector	
1/8", 1/4"	1.79" (45.5)
3/8"	2.99" (76.1)

Excelon® modular system

R72G, R73G, R74G Pressure regulators

Excelon® design allows in-line or modular installation

Full flow gauge ports

Balanced valve design minimizes effect of variation in the inlet pressure on the outlet pressure

Standard relieving models allow reduction of downstream pressure when the system is dead-ended

R72G R73G R74G

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

300 psig (20 bar)

Operating temperature*:

-30° to 175°F (-34° to 80°C)

*Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

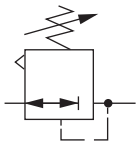
R72G

Body: zinc
Bonnet: acetal (Zinc on 250 psi model)
Elastomers: nitrile
Bottom plug: acetal

R73G, R74G

Body: aluminum
Bonnet: aluminum or zinc
Elastomers: nitrile
Bottom plug: acetal

ISO Symbols



R7*G Relieving

Ordering Information

Models listed include uni-directional flow, PTF threads, knob adjustment, relieving diaphragm, 5 to 150 psig (0.3 to 10 bar) outlet pressure adjustment range*, with gauge.

Port Size	Model	Flow† scfm (dm3/s)	Weight lb (kg)
1/4"	R72G 2AK RMG	70 (33)	0.79 (0.36)
1/4"	R73G 2AK RMG	91 (43)	1.36 (0.6)
3/8"	R73G 3AK RMG	144 (68)	1.36 (0.6)
3/8"	R74G 3AK RMG	208 (98)	1.80 (0.82)
1/2"	R74G 4AK RMG	220 (105)	1.77 (0.80)
3/4"	R74G 6AK RMG	220 (105)	1.73 (0.78)

† Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.

Options selector

R7★G ★★★ R★★

Series	Substitute
72	2
73	3
74	4

Port size	Substitute
1/4" (72, 73)	2
3/8" (72, 73, 74)	3
1/2" (73, 74)	4
3/4" (74)	6

Threads	Substitute
PTF	A
ISO G parallel	G

Gauge	Substitute
With	G
Without	N

Outlet press adj range*	Substitute
5 to 30 psig (72)	C
5 to 60 psig	F
5 to 150 psig	M
10 to 250 psig**	S

Adjustment	Substitute
Knob	K
T-bar	T

*Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

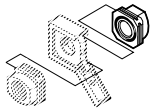
**Units with 250 psig outlet pressure range are available only with the T-bar adjustment, substitute T at the 7th position and S at the 9th position.

Excelon® modular system

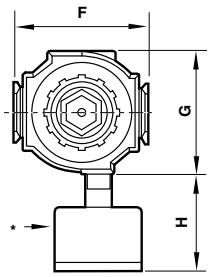
R72G, R73G, R74G Pressure regulators

Dimensions in inches.

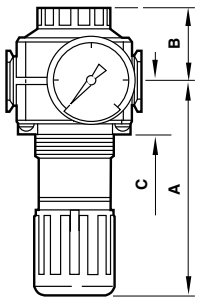
Accessories

	Wall mounting bracket*	Neck mounting bracket	Gauge 0 ... 160 psig	Panel nut	Tamper resistant cover and seal wire	Pipe adapters (quantity of 1) (NPT)	Quikclamp®	Quikclamp® and wall bracket	Service kit
									
R72G	4224-50	74316-50	18-013-212	4248-89	4255-51	4215-02 (1/4)	4214-51	4214-52	4381-500
						4215-03 (3/8)			
R73G	4424-50	4461-50	18-013-209	5191-88	4455-51	4315-01 (1/4)	4314-51	4314-52	4381-600
						4315-02 (3/8)			
						4315-03 (1/2)			
						4315-04 (3/4)			
R74G	4324-50	4368-51	18-013-209	4348-89	4355-51	4315-02 (3/8)	4314-51	4314-52	4381-700
						4315-03 (1/2)			
						4315-04 (3/4)			

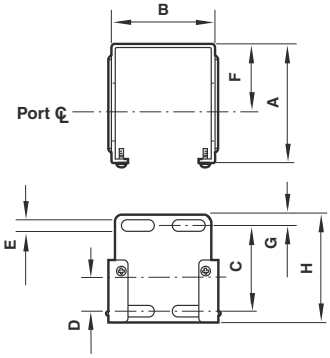
* Bracket kit does not include wall mounting screws.



*Optional gauge



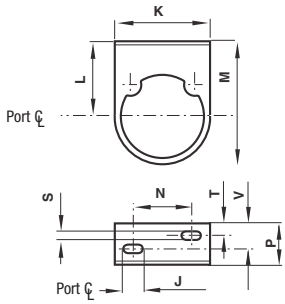
Mounting bracket



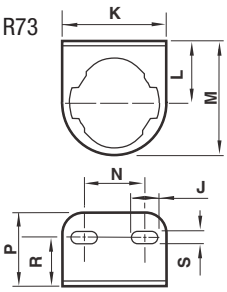
Series	A	B	C	D	E	F	G	H
72	2.36	1.65	1.54	0.73	0.16	1.50	0.24	2.01
73	2.64	2.36	1.89	0.75	0.28	1.50	0.24	2.40
74	3.11	2.72	1.97	0.79	0.20	2.01	0.24	2.40

Neck mounting brackets

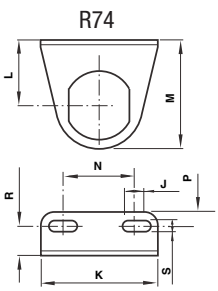
R72



R73



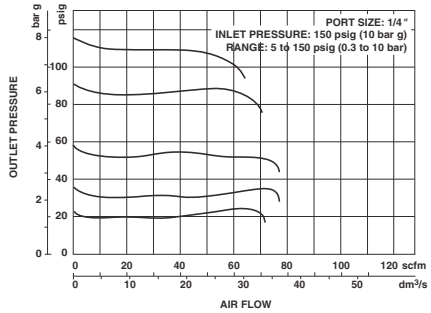
R74



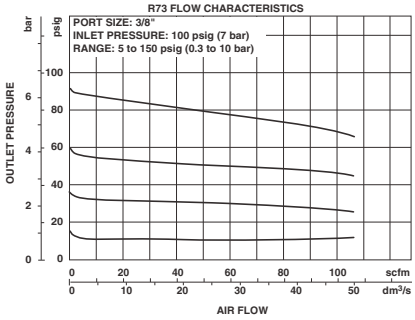
	A	B	C	F	G	H	Panel Ø	Panel depth
72	2.87	1.30	1.02	1.97	1.89	1.38	1.57	0 to .16
73	3.78	1.54	1.22	2.68	2.44	2.20	1.89	.07 to .25
74	5.00	1.69	1.22	3.15	2.91	2.20	2.05	.07 to .25

Series	J	K	L	M	N	P	R	S	T	V
72	0.31	1.93	1.50	2.50	1.18	0.94	–	0.17	0.31	0.59
73	0.67	2.52	1.50	2.76	1.50	1.50	0.98	0.28	–	–
74	0.94	3.50	2.05	3.39	2.20	1.38	0.91	0.28	–	–

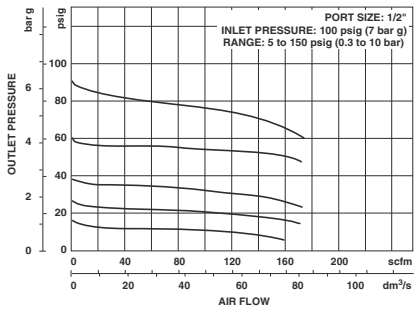
R72 FLOW CHARACTERISTICS



R73 FLOW CHARACTERISTICS



R74 FLOW CHARACTERISTICS



Excelon® Pro R92G

General Purpose Regulator

Easy to order
Configuration flexibility
Excellent value
No tools required for assembly
Push-to-lock adjusting knob w/tamper resistant accessory

Technical data

Fluid: Compressed air, neutral gases

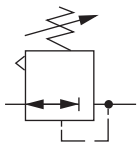
NOTE: Contact Norgren for use with other media.

Maximum pressure
175 psig (12 bar)

Operating temperature*
-4° to 140°F (-20° to 60°C)
* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials
Body: PBT
Elastomers:
Valve elastomer - Geolast
Diaphragm and all other elastomers - nitrile

ISO Symbol



Relieving

Order Information

Model listed below includes relieving diaphragm, 145 psi outlet pressure adjustment range, and bar/psi gauge.

Port size	Part Number	Flow* scfm (dm3/s)	Weight lb (kg)
1/4" PTF	R92G**2A**KRMG	46 (22)	0.55 (0.25)

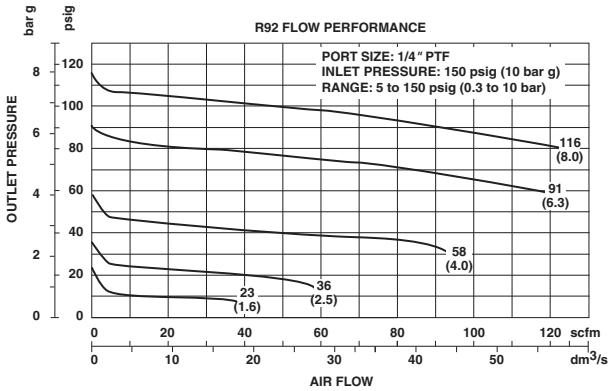
* Maximum flow with 145 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure, and a 15 psig (1 bar) droop from set.

R92G★★KRM★

Substitute	Description
NN	no connection
1A	1/8" PTF
2A	1/4" PTF
3A	3/8" PTF
1B	1/8" ISO Rc
2B	1/4" ISO Rc
3B	3/8" ISO Rc
1G	1/8" ISO G
2G	1/4" ISO G
3G	3/8" ISO G
6D	6mm PIF
8D	8mm (5/16") PIF
AD	10mm PIF
BD	12mm PIF
4E	1/4" PIF
6E	3/8" PIF
8E	1/2" PIF
2R*	1/4" PTF
2T*	1/4" ISO Rc
2V*	1/4" ISO G

Substitute	Description
G	Gauge bar/psi scale
A	Gauge bar/Mpa scale

* Does not include mounting bracket



All Dimensions in Inches (mm)

Excelon® Pro Modular System

R92G, General Purpose Regulator

Accessories and Kits

Threaded connector w/mounting bracket*

Connection	P/N
1/8" PTF	9212KIT-1A
1/4" PTF	9212KIT-2A
3/8" PTF	9212KIT-3A
1/8" ISO Rc	9212KIT-1B
1/4" ISO Rc	9212KIT-2B
3/8" ISO Rc	9212KIT-3B
1/8" ISO G	9212KIT-1G
1/4" ISO G	9212KIT-2G
3/8" ISO G	9212KIT-3G

Push-In-Fitting connector w/mounting bracket*

Connection	P/N
6mm PIF	9213KIT-6D
8mm (5/16") PIF	9213KIT-8D
10mm PIF	9213KIT-AD
12mm PIF	9213KIT-BD
1/4" PIF	9213KIT-4E
3/8" PIF	9213KIT-6E
1/2" PIF	9213KIT-8E

Threaded connector w/o mounting brackets

Connection	P/N
1/4" PTF	9211KIT-2R
1/4" ISO Rc	9211KIT-2T
1/4" ISO G	9211KIT-2V

Wall mounting bracket

P/N 74316-02

Porting block

Connection	P/N
1/4" PTF	9216-50
1/4" ISO G	9216-51
1/4" ISO Rc	9216-52

Panel mount nut (quantity of 10)

P/N 9248-50

Quikconnect (quantity of 1)

P/N 9210-50

Tamper resistant cover and seal wire

P/N 9255-51

* Use 1/4" (6 mm) screws and appropriate washers when attaching brackets to a surface.

Service kit
P/N R92G-KITR
Includes: Diaphragm assembly, valve, valve O-ring, slip ring, bottom plug O-ring

Locking plate kits**

P/N 9236-88/X10

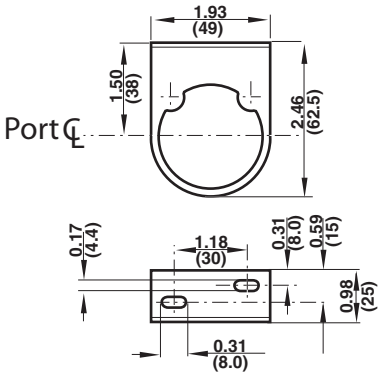
(qty 10)
(fits filter, lubricator, lockout valves, and back of all units)

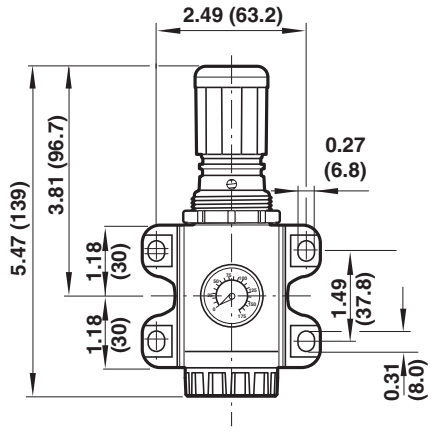
P/N9236-89/X10

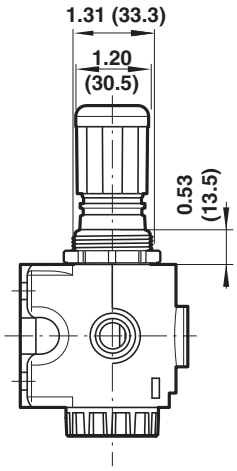
(qty 10)
(fits regulator, filter/regulator, porting block)

** Locking plates **MUST** be in place before pressurizing any Excelon Pro unit.

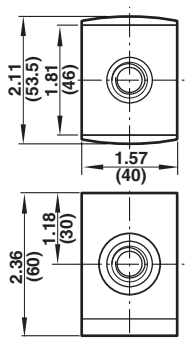
74316-02
Wall mount dimensions

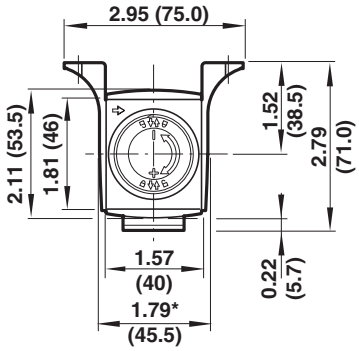






Porting block





*** Connector Dimensions**
1/8" and 1/4" threaded connectors shown. See below for port-to-port dimensions for additional connectors.

PIF Connector	Port-to-port
1/4", 6mm, 8mm (5/16")	2.37" (60.2)
3/8", 1/2", 10mm, 12mm	2.48" (61.9)
Threaded connector	
1/8", 1/4"	1.79" (45.5)
3/8"	2.99" (76.1)

Excelon® modular system

L72M/C, L73M/C, L74M/C Lubricators

Excelon® design allows in-line or modular installation

Quick release bayonet bowl.

Flow sensor provides a nearly constant oil/air ratio over a wide range of flows

Highly visible, prismatic liquid level indicator lens on metal bowls

All round (360°) visibility of sight-feed dome for ease of drip rate setting

Micro-fog and oil-fog

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)
Metal bowl: 250 psig (17 bar)

Operating temperature*:

(72) -30° to 150°F (-34° to 66°C)
(73, 74) -30° to 175°F (-34° to 80°C)

*Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

L72

Body: zinc
Elastomers: nitrile
Transparent bowl: polycarbonate
Metal bowl: zinc
Liquid level indicator lens (metal bowl): transparent nylon
Sight-feed dome: transparent nylon
Elastomers: neoprene, nitrile & Geolast

L73, L74

Body: aluminum
Transparent bowl: polycarbonate
Guarded transparent bowl: polycarbonate with aluminum guard
Metal bowl: aluminum
Liquid level indicator lens (metal bowl: transparent nylon
Sight-feed dome: transparent nylon
Elastomers: neoprene & nitrile

Microfog: Fine mist lubrication with oil particle size typically less than 2µm. For use in lengthy air lines or multiple valve and cylinder circuits.

Oilfog: Suitable for heavy lubrication systems such as single cylinder air motors and air tools.

L72

L73

L74

Ordering Information

Models listed include PTF threads, manual drain, and metal bowl with plastic liquid level indicator.

Type	Port Size	Model*	Flow** scfm (dm3/s)	Nominal bowl capacity (oz)	Weight lb (kg)†
Micro-Fog	1/4"	L72M 2AP QEN	51 (24)	2.2	1.1 (0.49)
Oil Fog	1/4"	L72C 2AP QEN	51 (24)	2.2	1.1 (0.49)
Micro Fog	3/8"	L73M 3AP QDN	60 (28)	3.5	1.1 (0.50)
Oil Fog	3/8"	L73C 3AP QDN	60 (28)	3.5	1.1 (0.50)
Micro Fog	3/8"	L74M 3AP QDN	114 (54)	7.0	1.70 (0.77)
Oil Fog	3/8"	L74C 3AP QDN	118 (56)	7.0	1.70 (0.77)
Micro Fog	1/2"	L74M 4AP QDN	154 (73)	7.0	1.61 (0.73)
Oil Fog	1/2"	L74C 4AP QDN	192 (91)	7.0	1.61 (0.73)

* Models listed in the order table must not be located downstream of frequently cycling directional control valves. Order the optional bi-directional Oil-Fog Lubricator for use under such conditions.

**Typical flow with 90 psig (6.3 bar) inlet pressure and a pressure drop of 7 psig (0.5 bar).

† (74) Lubricators with 1 quart (1 liter) metal bowl: Add 2.01 lbs (0.91 kg).

Options selector

L7★★ ★★ P Q★N

Series	Substitute
72	2
73	3
74	4

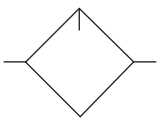
Type	Substitute
Oil-fog	C
Micro-fog	M

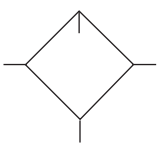
Port size	Substitute
1/4 (72, 73)	2
3/8 (72, 73, 74)	3
1/2 (73, 74)	4
3/4 (74)	6

Threads	Substitute
PTF	A
ISO G parallel	G

Bowl	Substitute
1-qt metal w/liquid level indicator (74)	A
Metal w/ liquid level indicator	D
Long metal w/liquid level indicator (72)	E
Transparent with guard	P
Transparent (72, 73)	T

ISO Symbols


No Drain

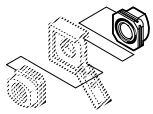

With Drain

Excelon® modular system

L72M/C, L73M/C, L74M/C Lubricators

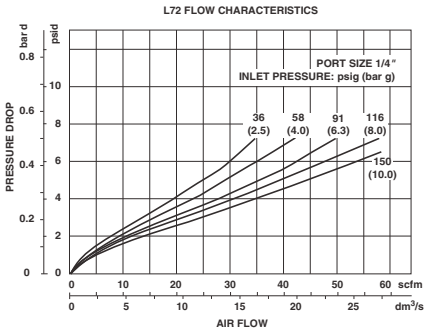
Dimensions in inches.

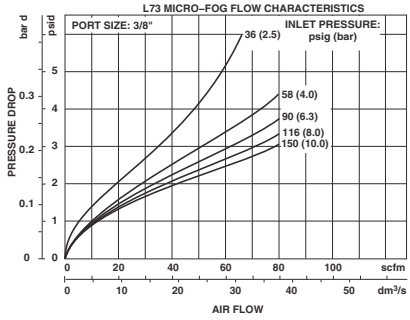
Accessories

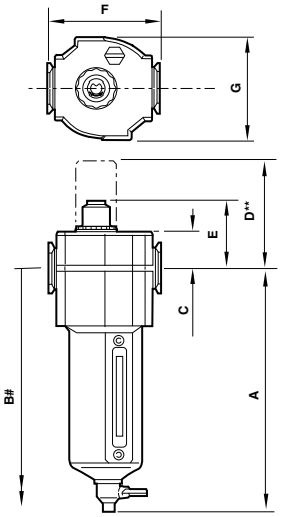
	Wall mounting bracket*	Pipe adapters (quantity of 1) (NPT)	Quikclamp®	Quikclamp® and wall bracket	Quick fill nipple	Service Kit Seal and gasket
						
L72	4224-50	4215-02 (1/4)	4214-51	4214-52		4382-500 (72M/C)
		4215-03 (3/8)				
L73	4424-50	4315-01 (1/4)	4314-51	4314-52	18-011-024	4382-600 (73M/C)
		4315-02 (3/8)				
		4315-03 (1/2)				
		4315-04 (3/4)				
L74	4324-50	4315-02 (3/8)	4314-51	4314-52	18-011-024	4382-700 (74M/C)
		4315-03 (1/2)		4314-55 (1-qt bowl)		
		4315-04 (3/4)				

* Bracket kit does not include wall mounting screws.

Typical Performance Characteristics





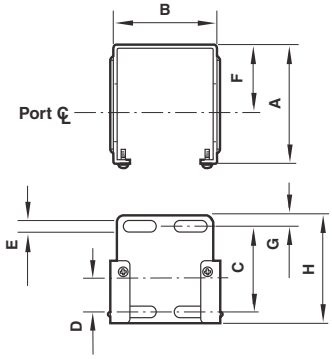


** Optional Pyrex sight-feed dome.

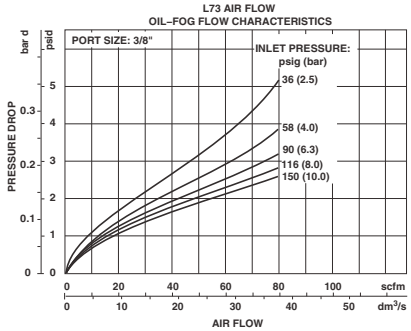
Minimum clearance required to remove bowl.

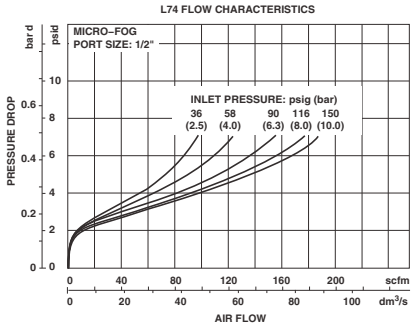
	A	B	C	D	E	F	G
72	5.83	9.13	0.75	2.52	1.61	1.97	1.89
73	6.15	10.04	0.98	2.76	1.85	2.68	2.44
74	6.95	10.87	0.98	2.68	1.85	3.15	2.91
	A	B	C	D	E	F	G
74 w/1 qt bowl closed bottom							
	11.14	20.0	0.98	2.68	1.85	3.15	2.91
74 w/1 qt bowl w/drain							
	11.93	20.0	0.98	2.68	1.85	3.15	2.91

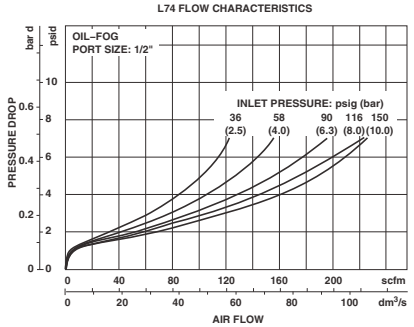
Mounting bracket



Series	A	B	C	D	E	F	G	H
72	2.36	1.65	1.54	0.73	0.16	1.50	0.24	2.01
73	2.64	2.36	1.89	0.75	0.28	1.50	0.24	2.40
74	3.11	2.72	1.97	0.79	0.20	2.01	0.24	2.40







Excelon® Pro L92C

Oil-Fog Lubricator

Easy to order
Configuration flexibility
Excellent value
No tools required for assembly
RoHs compliant
Flow sensor provides a nearly constant oil/air ratio over a wide range of flows
Sight glass dome visible from 360° for ease of drip rate setting

Technical data

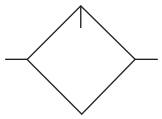
Fluid
Compressed air, neutral gases
NOTE: Contact Norgren for use with other media.

Maximum pressure
Transparent bowl: 175 psig (12 bar)

Operating temperature*
-4° to 125°F (-20° to 52°C)
* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials
Body: PBT
Transparent bowl: Polycarbonate
Elastomers:
Bowl and sight-feed dome O-ring - Neoprene
All others - nitrile
Sight-feed dome: Transparent nylon
Recommended lubricant: DTE Light

ISO Symbol



No Drain

Order Information

Model listed below includes oil-fog lubrication, closed bottom bowl, and sight feed dome.

Port Size	Part Number	Flow* scfm (dm3/s)	Weight lbs (kg)
1/4" PTF	L92C**2A**PETN	50 (24)	0.42 (.19)

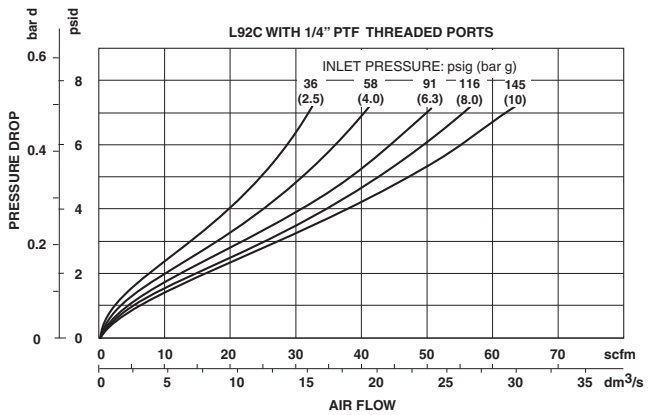
*Typical flow with 90 psig (6.3 bar) inlet pressure and a pressure drop of 7 psig (0.5 bar)

L92C★★PETN

Substitute	Description
NN	no connection
1A	1/8" PTF
2A	1/4" PTF
3A	3/8" PTF
1B	1/8" ISO Rc
2B	1/4" ISO Rc
3B	3/8" ISO Rc
1G	1/8" ISO G
2G	1/4" ISO G
3G	3/8" ISO G
6D	6mm PIF
8D	8mm (5/16") PIF
AD	10mm PIF
BD	12mm PIF
4E	1/4" PIF
6E	3/8" PIF
8E	1/2" PIF
2R*	1/4" PTF
2T*	1/4" ISO Rc
2V*	1/4" ISO G

* Does not include mounting bracket

Flow Characteristics



All Dimensions in Inches (mm)

Excelon® Pro Modular System

L92C, Oil-Fog Lubricator

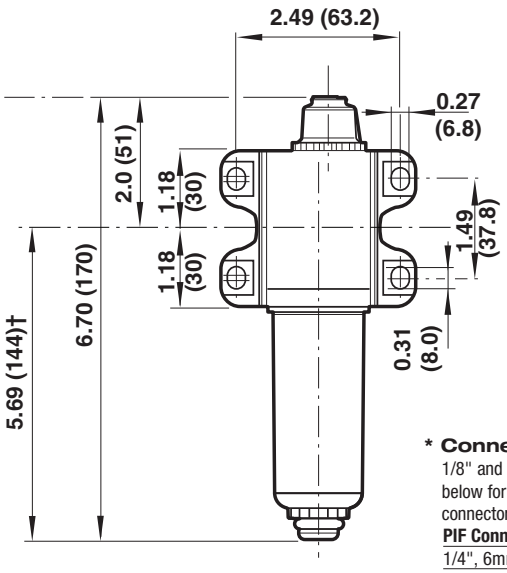
Accessories and Kits

Threaded connector w/mounting bracket*		Push-In-Fitting connector w/mounting bracket*		Threaded connector w/o mounting brackets		Porting block		Quikconnect (quantity of 1)
								
Connection	**P/N**	**Connection**	**P/N**	**Connection**	**P/N**	**Connection**	**P/N**	**P/N**
1/8" PTF	9212KIT-1A	6mm PIF	9213KIT-6D	1/4" PTF	9211KIT-2R	1/4" PTF	9216-50	9210-50
1/4" PTF	9212KIT-2A	8mm (5/16") PIF	9213KIT-8D	1/4" ISO Rc	9211KIT-2T	1/4" ISO G	9216-51	
3/8" PTF	9212KIT-3A	10mm PIF	9213KIT-AD	1/4" ISO G	9211KIT-2V	1/4" ISO Rc	9216-52	
1/8" ISO Rc	9212KIT-1B	12mm PIF	9213KIT-BD					
1/4" ISO Rc	9212KIT-2B	1/4" PIF	9213KIT-4E					
3/8" ISO Rc	9212KIT-3B	3/8" PIF	9213KIT-6E					
1/8" ISO G	9212KIT-1G	1/2" PIF	9213KIT-8E					
1/4" ISO G	9212KIT-2G							
3/8" ISO G	9212KIT-3G							

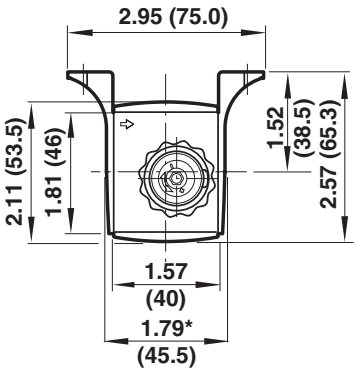
* Use 1/4" (6 mm) screws and appropriate washers when attaching brackets to a surface.

Service kit with bowl O-ring, feed dome seal P/N L92C-KIT	Locking plate kits**	
		
	9236-88/X10	**9236-89/X10**
	(qty 10) (fits filter, lubricator, lockout valves, and back of all units)	(qty 10) (fits regulator, filter/regulator, porting block)

** Locking plates **MUST** be in place before pressurizing any Excelon Pro unit.



† Distance required to remove bowl.

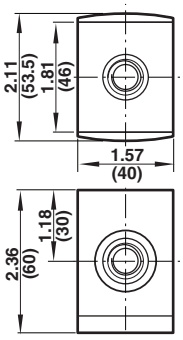


*** Connector Dimensions**

1/8" and 1/4" threaded connectors shown. See below for port-to-port dimensions for additional connectors.

PIF Connector	Port-to-port
1/4", 6mm, 8mm (5/16")	2.37" (60.2)
3/8", 1/2", 10mm, 12mm	2.48" (61.9)
Threaded connector	
1/8", 1/4"	1.79" (45.5)
3/8"	2.99" (76.1)

Porting block



Excelon® modular system

V72G, V74G Pressure Relief Valves

Excelon® design allows in-line installation or modular installation with other Excelon® products

Push to lock adjusting knob with tamper resistant accessory

Helps protect air operated equipment from over pressure by retarding excessive pressure build up

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

300 psig (20 bar)

Operating Temperature*:

(72) -30° to 150°F (-34° to 65°C)

(74) -30° to 175°F (-34° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

V72

Gauge Ports:

1/8" PTF with PTF main ports

1/8" ISO Rc with ISO G main ports

Exhaust Port:

1/4" PTF with PTF main ports

1/4" ISO Rc with ISO G main ports

Materials

V72G

Body: zinc body

Bonnet: acetal

Elastomers: neoprene

Bottom plug: acetal

V74G

Body & bonnet: aluminum

Valve: aluminum and nitrile

Elastomers: neoprene

Bottom plug: acetal

V72G

V74G

Ordering Information

Models listed include PTF threads, knob adjustment, and a 5 to 150 psig (0.3 to 10 bar) relief pressure adjustment range, with gauge.*

Size	Model	Service kit
1/4	V72G 2AK NMG	4209 03
3/8	V74G 3AK NMG	4384 700
1/2	V74G 4AK NMG	4384 700
3/4	V74G 6AK NMG	4384 700

Note: for Excelon 73 combinations use V74G.

Options selector

V7★G ★★★ N★★

Series	Substitute
72	2
74	4

Port size	Substitute
1/4" (72)	2
3/8" (72, 74)	3
1/2" (74)	4
3/4" (74)	6

Threads	Substitute
PTF	A
ISO G parallel	G

Gauge	Substitute
With	G
Without	N

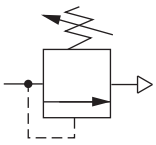
Relief pressure adjustment range*	Substitute
5 to 60 psig (0.3 to 4 bar)	F
5 to 150 psig (0.3 to 10 bar)	M
10 to 250 psig (0.7 to17 bar)	S

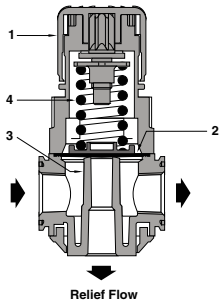
Adjustment	Substitute
Knob	K
T-bar	T

* Relief valve can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

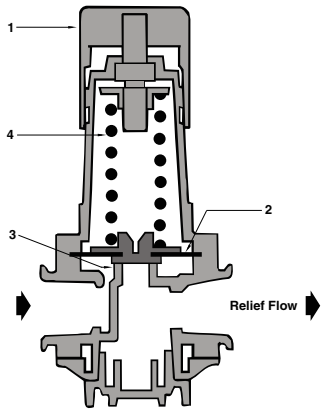
** Units with 250 psig relief pressure range are available only with the T-bar adjustment; therefore substitute T at the 7th position and S at the 9th position.

ISO Symbol





V72G



V74G

Excelon® modular system

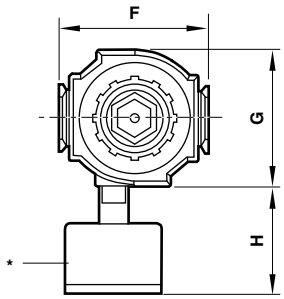
V72G, V74G Pressure Relief Valves

Dimensions in inches.

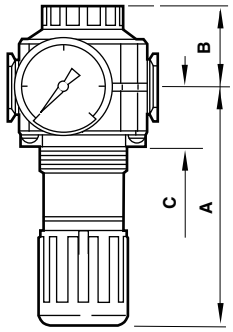
Accessories

	Wall mounting bracket*	Neck mounting bracket	Gauge 0 ... 160 psig	Plastic panel nut	Tamper resistant cover and seal wire	Pipe adapters (quantity of 1(NPT)	Quikclamp®	Quikclamp® and wall bracket	Service kit Diaphragm and seal
V72G	4224-50	74316-50	18-013-212	4248-89	4255-51	4215-02 (1/4)	4214-51	4214-52	4209-03
						4215-03 (3/8)			
V74G	4324-50	4368-51	18-013-209	4348-89	4355-51	4315-02 (3/8)	4314-51	4314-52	4384-700
						4315-03 (1/2)			
						4315-04 (3/4)			

* Bracket kit does not include wall mounting screws.



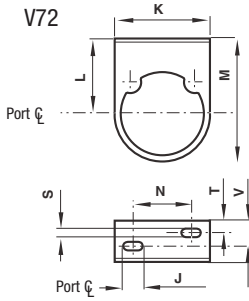
*Optional gauge



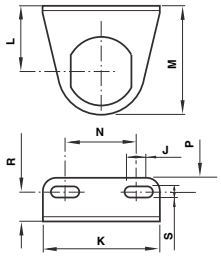
	A	B	C	F	G	H	Panel Ø	Panel depth
72	2.87	0.98	1.02	1.97	1.89	1.38	1.57	0 ... 0.2
74	5.00	1.69	1.22	3.15	2.91	2.20	2.05	0.08 ... 0.2

Neck mounting bracket

V72

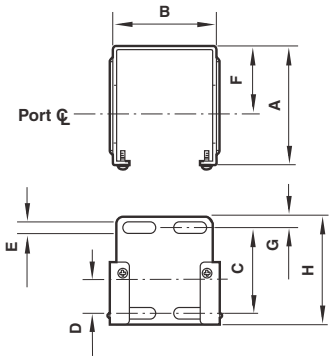


V74



Series	J	K	L	M	N	P	R	S	T	V
72	0.31	1.93	1.50	2.50	1.18	0.94	–	0.17	0.31	0.59
74	0.94	3.50	2.05	3.39	2.20	1.38	0.91	0.28	–	–

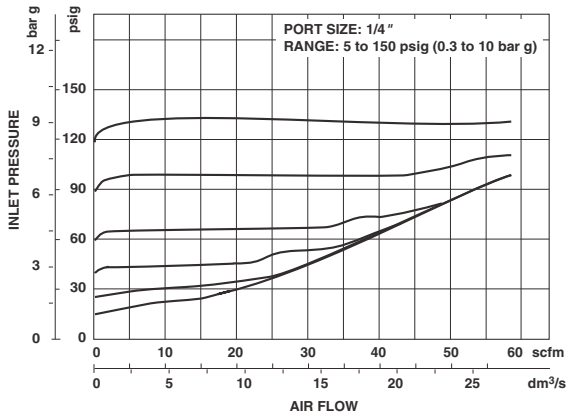
Mounting bracket



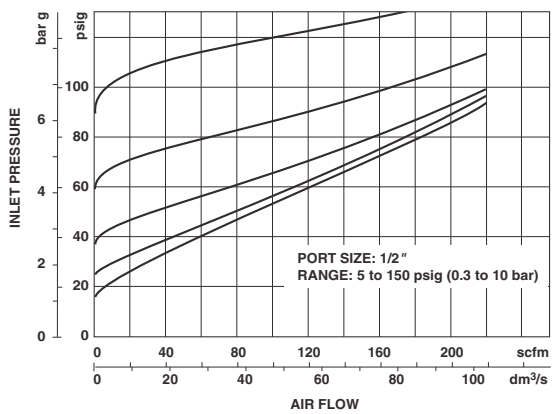
Series	A	B	C	D	E	F	G	H
72	2.36	1.65	1.54	0.73	0.16	1.50	0.24	2.01
74	3.11	2.72	1.97	0.79	0.20	2.01	0.24	2.40

Typical Performance Characteristics

V72 RELIEF CHARACTERISTICS



V74 RELIEF CHARACTERISTICS



Excelon® Filter-Filter

Combination Units

H72G/C, H73G/C, H74G/C

True modularity with Norgren Quikclamp® connections
General purpose and oil removal filter provide high efficiency oil removal and particle removal down to 0.01 µm
Quick release bayonet bowl
Highly visible, prismatic liquid level indicator lens
Service indicator turns from green to red when the filter element needs to be replaced

H72

H74

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)
Metal bowl: 250 psig (17 bar)
(72) metal bowl w/autodrain: 116 psig (8 bar)

Operating temperature*:

Transparent bowl:
-30°F to 125°F (-34° to 50°C)
Metal bowl:
-30°F to 150°F (-34 to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Particle removal:

down to 0.01 µm

Oil removal:

to class level 2: 0.01 mg/m^3

Materials

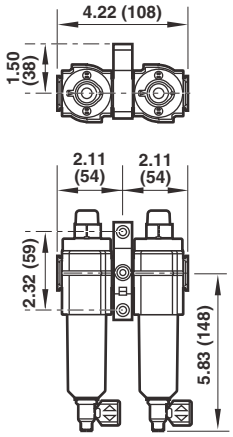
Body: Zinc, or aluminum
Bowl: (72) zinc, (73, 74) aluminum polycarbonate
Metal bowl liquid level indicator lens: Transparent nylon
F72G, F73G, F74G element: sintered polypropylene
F72C, F73C, F74C element: synthetic fiber and polyurethane foam
Elastomers: neoprene and nitrile
Service indicator materials
Body: transparent nylon
Internal parts: acetal
Spring: stainless steel
Elastomers: nitrile

Ordering information

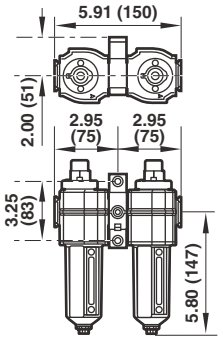
Models listed include PTF threads, service indicator, automatic drain, and metal bowl with level indicator.

Port Size	Model	Weight lb (kg)
1/4"	H72A 2AB AE1 NNN LNN	2 (0.91)
3/8"	H73A 3AB AD1 NNN DNN	2.7 (1.22)
1/2"	H74A 4AB AD1 NNN DNN	4.06 (1.84)
3/4"	H74B 6AB AD1 NNN DNN	4.61 (2.09)

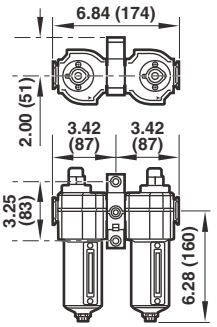
Standard Type H72A-
Shown with optional Quikclamp® wall bracket.



Standard Type H73A-
Shown with optional Quikclamp® wall bracket.



Standard Type H74A Shown (H74B Similar)
Shown with optional Quikclamp® wall bracket.



Excelon® Filter/Regulator-Lubricator Combination Units

B72/L72, B73/L73, B74/L74

C72H

C74H

True modularity with Norgren Quikclamp® connections

Quick release bayonet bowl

Lubricator flow sensor provides a nearly constant oil/air ratio over a wide range of air flows

All around (360°) visibility of the lubricator sight-feed dome simplifies installation and adjustment

Regulator balanced valve minimizes effect of variation in the inlet pressure on the outlet pressure

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)

Metal bowl (manual or semi automatic drain): 250 psig (17 bar)

(72) 150 psig (10 bar)

Operating temperature*:

Transparent bowl:
0° to 125°F (-20° to 50°C)

Metal bowl:
0° to 150°F (-20° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Particle removal:

5 µm, or 40 µm filter element

Materials

Body: zinc or aluminum

Bonnet: acetal or aluminum

Bowl:

Metal bowl: (72) zinc
(73, 74) aluminum

polycarbonate

Metal bowl liquid level indicator lens: transparent nylon

Sight-feed dome: transparent nylon

Element: sintered polypropylene

Elastomers: neoprene, nitrile

Ordering information

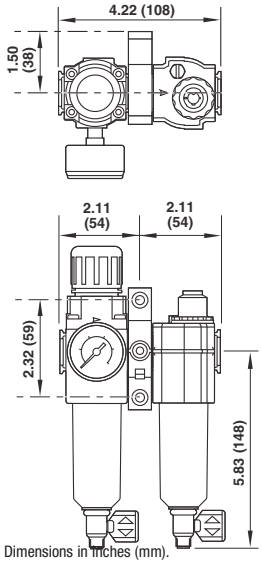
Models include PTF threads. Filter/Regulator (F/R) has knob adjustment, automatic drain, metal bowl with level indicator, 40 µm element, relieving diaphragm, and 150 psig (10 bar) regulating spring, and gauge. Lubricator (L) is a Micro-Fog model with 1/4 turn manual drain and metal bowl with level indicator.

Combination Unit Type	Port Size	Model**	Weight lb (kg)
Filter/Regulator-Lubricator	1/4"	C72H 2AK AE3 RMG QEB	2.37 (1.08)
(F/R L)	3/8"	C73H 3AK AD3 RMG QDB	3.0 (1.36)
(F/R L)	1/2"	C74H 4AK AD3 RMG QDB	5.07 (2.30)
	3/4"	C74H 6AK AD3 RMG QDB	5.00 (2.27)

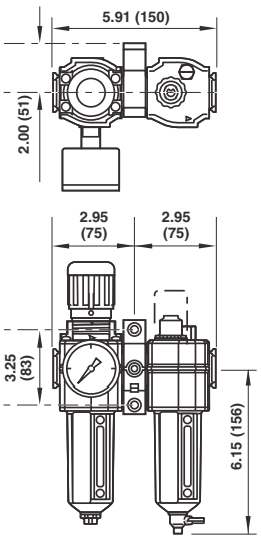
** For oil fog lubricator use "J" in the 4th position.

Other combinations are available. Please consult Norgren for more information.

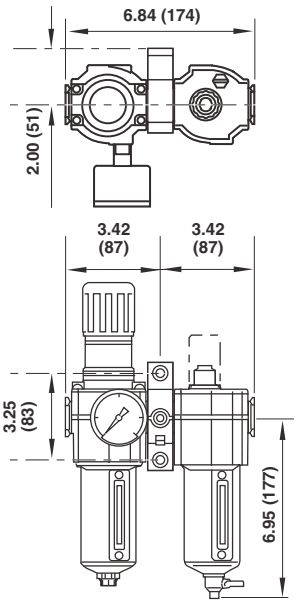
C72H-



C73H-



C74H-



Dimensions in inches (mm).

Excelon® Filter-Regulator-Lubricator

Combination Units

C72A, C73A, and C74A Series

Compact design

Filter has high efficiency water and particle removal

Push to lock adjusting knob with tamper resistant option

Nearly constant oil density output with varying air flow

Use Micro-Fog models in applications containing one or more points of lubrication.

Use Oil-Fog models to lubricate a single tool, cylinder, or other air driven device.

C72A

C74A

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure

Transparent bowl: 150 psig (10 bar)

Metal bowl w/manual drain:

250 psig (17 bar)

(72) 150 psig (10 bar)

Operating temperature*

Transparent bowl:

0° to 125°F (-20° to 50°C)

Metal bowl:

(72) 0° to 150°F (-20° to 65°C)

(73, 74) -30° to 175°F (-34° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Particle removal:

5 µm, or 40 µm filter element

Materials

Body: (72) zinc (73, 74) aluminum

Bonnet: (72) acetal (73, 74) aluminum

Regulator bottom plug: acetal

Bowl: (72) zinc (73, 74) aluminum or polycarbonate

Metal bowl liquid level indicator lens: transparent nylon

Sight-feed dome: transparent nylon

Element: sintered polypropylene

Elastomers: neoprene, nitrile

Ordering information

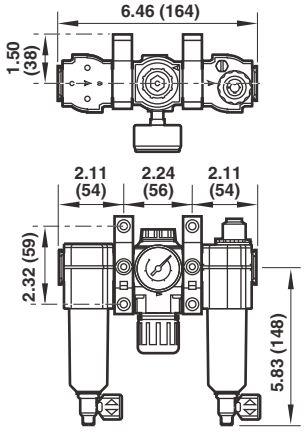
Models listed include PTF threads. Filter (F) includes automatic drain, metal bowl with level indicator, and a 40µm element. Regulator (R) is relieving type with knob adjustment, 150 psig (10 bar) regulating spring, and gauge. Lubricator (L) is a Micro-Fog model with 1/4 turn manual drain and metal bowl with level indicator.

Combination Unit Type	Port Size	Model**	Weight lb (kg)
Filter-Regulator-Lubricator	1/4"	C72A 2AK AE3 RMG QEB	3.23 (1.47)
	3/8"	C73A 3AK AD3 RMG QDB	4.36 (1.98)
	1/2"	C74A 4AK AD3 RMG QDB	6.04 (2.74)
	3/4"	C74A 6AK AD3 RMG QDB	5.91 (2.68)

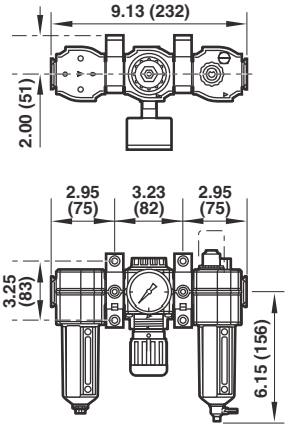
** For oil fog lubricator use "B" in the 4th position.

Other combinations are available. Please consult Norgren for more information.

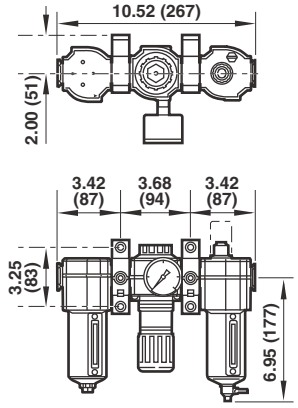
C72A-



C73A-



C74A-



Dimensions in inches (mm).

Filter-Lubricator Combination Units

C72C, C73C, C74C Series

C72C

C74C

True modularity with Norgren Quikclamp® connections

Quick release bayonet bowl

Flow sensor design provides a nearly constant oil/air ratio over a wide range of air flows

Highly visible, prismatic liquid level indicator lens

All around (360°) visibility of the sight-feed dome simplifies installation and adjustment

Use Micro-Fog models in applications containing one or more points of lubrication.

Use Oil-Fog models to lubricate a single tool, cylinder, or other air driven device.

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)

Metal bowl: (72) 150 psig (10 bar)

(74) 250 psig (17 bar)

Operating temperature*:

Transparent bowl:

0° to 125°F (-20° to 50°C)

Metal bowl:

(72) 0° to 150°F (-20° to 65°C)

(73, 74) -30° to 175°F (-34° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Particle removal:

5 µm or 40 µm filter element

Materials

Body: zinc

Bowl: zinc, aluminum, or polycarbonate

Metal bowl liquid level indicator lens: transparent nylon

Element: sintered polypropylene

Sight-feed dome: transparent nylon

Elastomers: neoprene, nitrile

Ordering information

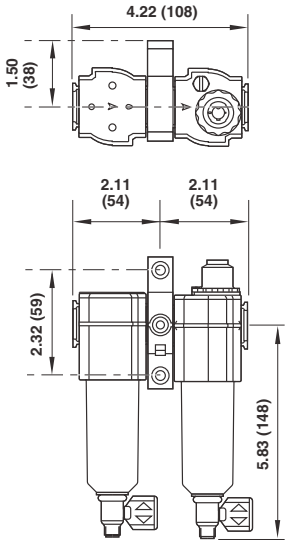
Models listed include PTF threads. Filter (F) has automatic drain,metal bowl with level indicator, and a 40 µm element. Lubricator (L) is a Micro-Fog model with 1/4 turn manual drain and metal bowl with indicator.

Combination Unit Type	Port Size	Model**	Weight lb (kg)
Filter-Lubricator (F-L)	1/4"	C72C 2AN AE3 NNN QEB	2.3 (1.04)
	3/8"	C73C 3AN AD3 NNN QDB	2.6 (1.18)
	1/2"	C74C 4AN AD3 NNN QDB	3.84 (1.74)
	3/4"	C74C 6AN AD3 NNN QDB	3.75 (1.70)

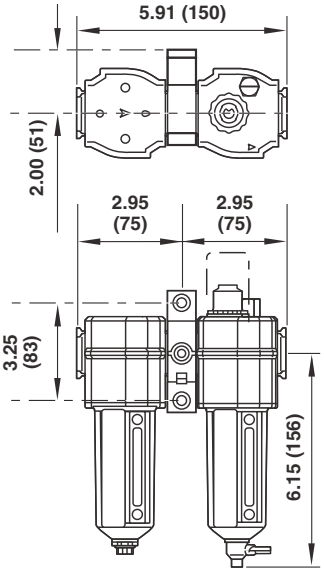
** For oil fog lubricator use "D" in the 4th position.

Other combinations are available. Please consult Norgren for more information.

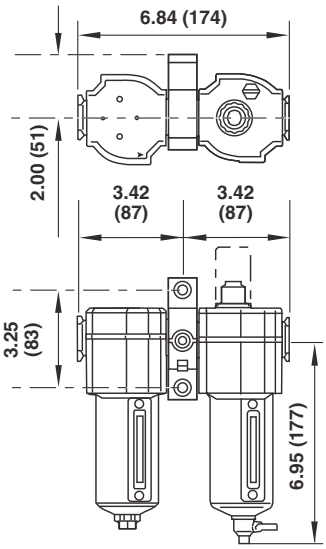
C72C-



C73C-



C74C-



Dimensions in inches (mm).

Excelon® valves

P72F, P74F Smooth start/Exhaust valves

Excelon® design allows in-line or modular installation

Controls increase of downstream pressure on start up. Cylinders and other air operated devices are eased into normal operating positions, reducing the possibility of equipment damage and hazards to the user.

Blocks inlet air and exhausts downstream air when pilot signal is removed or when the optional manual lockout slide is closed

Optional manual slide can be padlocked in closed position

Solenoid pilot or air pilot operation

Designed for use in start-up and shutdown of equipment.

P72F P74F P74F-AD

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure solenoid operated:

Dependent on solenoid rating
[must not exceed 150 psig (10 bar)]

Maximum pressure pilot operated:

150 psig (10 bar) max.

Minimum operating pressure:

44 psig (3 bar)

Operating temperature solenoid operated:

Dependent on solenoid rating
[must be within range
0°* to 150°F (-20°* to 65°C)] (72)

[must be within range
0°* to 175°F (-20°* to 80°C)]

Operating temperature pilot operated:

0°* to 150°F (-20°* to 65°C) (72)

0°* to 175°F (-20°* to 80°C) (74)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

Body: Zinc alloy (72) Aluminum (74)
Elastomers: Synthetic materials
Filter discs: Sintered plastic
Internal components: Brass/steel

Ordering Information

Models listed include PTF threads. Solenoid operated models include 24 VDC coil and plug without indicator.

Port size	Solenoid operated*	lb (kg)	Air pilot operated	lb (kg)
1/4"	P72F-2AC-PFA	2.0 (0.91)	P72F-2AA-NNN	1.93 (0.88)
3/8"	P74F-3AC-PFA	2.4 (1.08)	P74F-3AA-NNN	2.3 (1.05)
1/2"	P74F-4AC-PFA	2.3 (1.05)	P74F-4AA-NNN	2.2 (1.02)
3/4"	P74F-6AC-PFA	3.1 (1.41)	P74F-6AA-NNN	3.0 (1.35)

* Solenoid operated models are supplied with 22 mm 24 V d.c. 2 W coil and connector plug without indicator light. plugs. To select alternative voltages and other options refer to the Options selector below. For connector plugs see next page.

** Factory repair only

Options selector

P7★F-★★★-★★★

Series	Substitute
72	2
74	4

Port size	Substitute
1/4" (72)	2
3/8"	3
1/2" (74)	4
3/4" (74)	6

Threads	Substitute
PTF	A
ISO G parallel	G

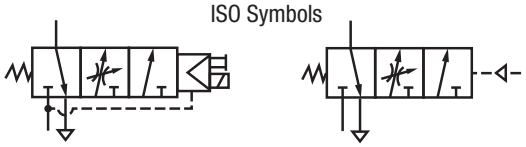
Operator	Substitute
Air pilot	A
Air pilot with manual lockout slide (74)	B
22 mm miniature solenoid	C
22 mm miniature solenoid with manual lockout slide (74)	D

Connectors	Substitute
3 pin plug with cable gland, no indicator light	A
Without	N

Coil voltage	Nominal power rating	Substitute
24 V d.c.	2 W	F
110/120 V	4/2.5 VA, 50/60 Hz	A
No solenoid		N

Solenoid manual operator	Substitute
Shrouded push button	P
None	N

ISO Symbols



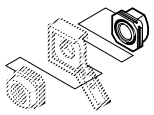
Solenoid operated Air pilot

Excelon® valves

P72F, P74F Smooth start/Exhaust valves

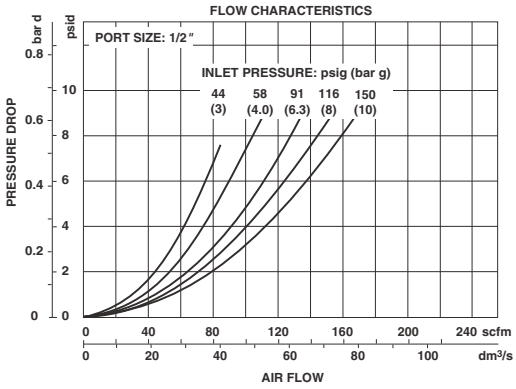
Dimensions in inches (mm)

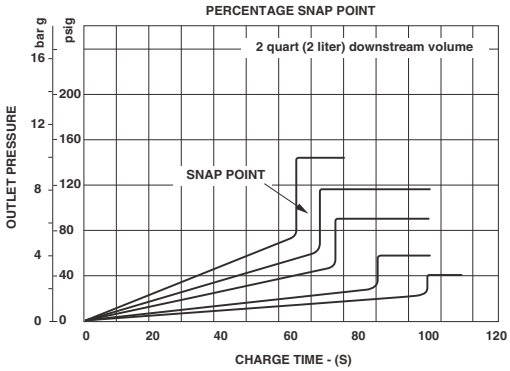
Accessories

	Exhaust port silencer	Quikmount pipe adapters (quantity of 1)	Quikclamp®	Quikclamp® and wall bracket	Plug with cable gland for 22mm solenoid		
					 Indicator type	 No indicator	
P72F	MB002A	4215-02 (1/4)	4214-51	4214-52	54934-08*	12 ... 24 V a.c./d.c.	Indicator type
		4215-03 (3/8)			54934-02	110/120 V a.c.	Indicator type
					54934-01		No indicator
P74F	MB004A	4315-02 (3/8)	4314-51	4314-52	54934-08*	12 ... 24 V a.c./d.c.	Indicator type
		4215-03 (1/2)			54934-02	110/120 V a.c.	Indicator type
		4315-04 (3/4)			54934-01		No indicator

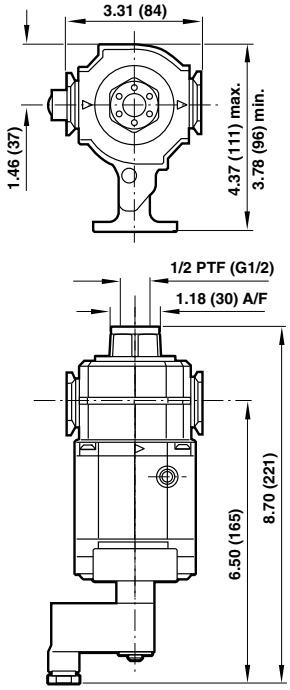
*Reduced light intensity at 12 V.

Typical Performance Characteristics

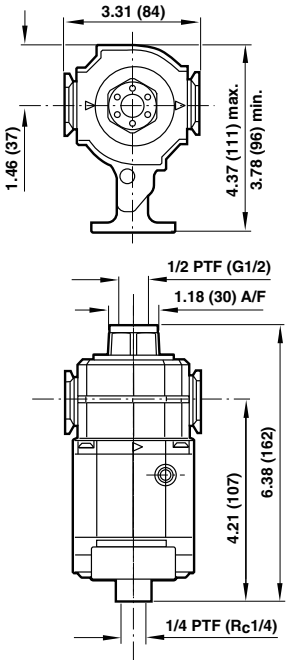




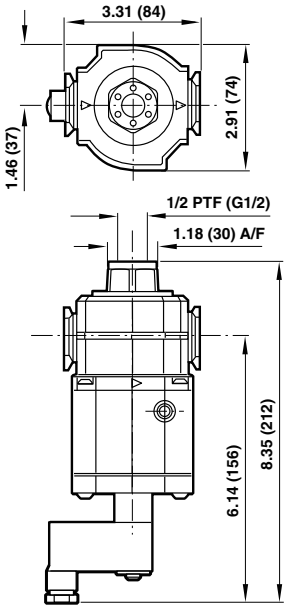
Solenoid operated plus manual shut-off with lockout



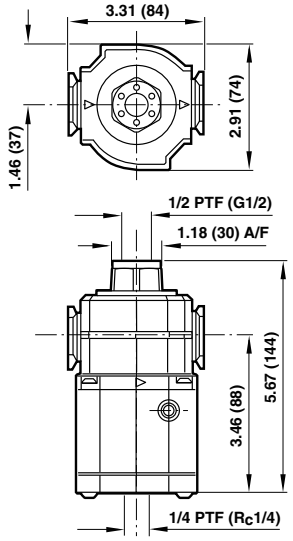
Air pilot operated plus manual shut-off with lockout



Solenoid operated



Air pilot operated

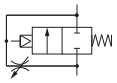


Excelon Valves

Excelon Pro P92E

Smooth Start Valve

ISO Symbol



Order Information

Model listed does not include end caps.

Port size	Part Number	Flow Cv	Weight lb (kg)
1/4" PTF	P92E-2AN-NNN	2.62	0.23 (0.10)

Adjustable rate of pressure increase

Easy to order

Configuration flexibility

Excellent value

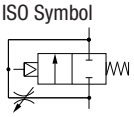
No tools required for assembly

RoHS compliant

P72E and P74E

Excelon® 72 and 74 Smooth Start Valves 1/4", 3/8", and 1/2" Port Sizes

ISO Symbol



Ordering Information

Models listed are with PTF threads.

Port Size	Model	Weight lb (kg)
1/4"	P72E-2AN-NNN	1.86 (0.84)
3/8"	P72E-3AN-NNN	1.80 (0.82)
1/2"	P74E-NNN-NNN	1.17 (0.53)

High-flow, spring return, 2 port/2 position normally closed valves

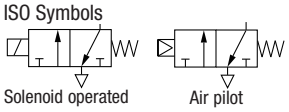
Adjustable rate of pressure increase

Modular installations with Excelon® 72, 73, and 74 series can be made to suit particular applications

P72C

Excelon® 72 Air or Solenoid Operated Directional Control Valves 1/4", 3/8" Port Sizes

ISO Symbols



Solenoid operated | Air pilot

Ordering Information

Models listed are with PTF threads. Solenoid operated models include 24 V d.c. coil and plug without indicator.

Port Size	Solenoid Operated Model	Weight lb (kg)	Air Pilot Operated Model	Weight lb (kg)
1/4"	P72C-2AC-PFA	2.11 (0.96)	P72C-2AA-NNN	1.86 (0.84)
3/8"	P72C-3AC-PFA	2.05 (0.93)	P72C-3AA-NNN	1.80 (0.82)

Excelon® design allows in-line or modular installation

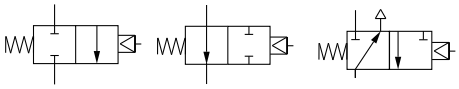
3 port/2 position valves, normally closed

Modular installations with Excelon® 72, 73, and 74 series can be made to suit particular applications

P74 Air Operated

Excelon® 74 Air Operated Directional Control Valves Unthreaded Ports, 1/2" Basic Size

ISO Symbols



2-Port/2-Position Normally Closed | 2-Port/2-Position Normally Open | 3-Port/2-Position Normally Closed

Ordering Information

Models listed include PTF threads in the pilot and exhaust ports.

Installation Type	2 Port/2 Position Normally Closed	2 Port/2 Position Normally Open	3 Port/2 Position Normally Closed	Weight lb (kg)
Modular*	P74A-NAA-NNN	P74B-NAA-NNN	P74C-NAA-NNN	1.20 (0.54)

* Valve main ports are unthreaded. To install in air line or connect to other Excelon® 74 units use Quikclamp® and Quikclamp® pipe adapters.

Modular installation only

2-port/2-position valves available as normally closed or normally open valves

3-port/2-position valves available as normally closed valves.

Excelon Valves

Excelon Pro P92C

Solenoid or air pilot operated 3/2 directional control valve

ISO Symbol

High flow, spring return, normally closed valve

High flow exhaust to vent downstream pressure

Easy to order

Configuration flexibility

Excellent value

No tools required for assembly

RoHS compliant

Order Information

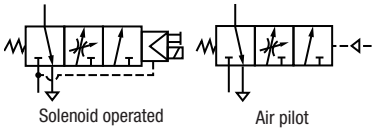
Model listed includes 15 mm pilot solenoid with DIN connector.

Port size	Part Number	Flow (Cv)	Weight lb (kg)	Spares kit
1/4" PTF	P92C-2AT-PFA	2.33	0.36 (0.17)	P92C-KIT

P74 Solenoid Operated Valve

Excelon® 74 Solenoid Operated Directional Control Valve
Unthreaded Ports, 1/2" Basic Size

ISO Symbols



Modular installation only

2-port/2-position valves available as normally closed or normally open valves

3-port/2-position valves available only as normally closed valves.

Ordering Information

Models listed include PTF exhaust port threads, non-locking override,110/120Vac standard coil, and cable grip connector.

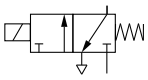
Installation Type	2 Port/2 Position Normally Closed	2 Port/2 Position Normally Open	3 Port/2 Position Normally Closed	Weight lb (kg)
Modular*	P74A-NNC-PJA	P74B-NNC-PJA	P74C-NAC-PJA	1.63 (0.74)

* Valve main ports are unthreaded. To install in air line or connect to other Excelon® 74 units use Quikclamp® and Quikclamp® pipe adapters.

P74 Lockout Valve

Excelon® 74 Solenoid Operated Valve with Lockout Unthreaded Ports, 1/2" Basic Size

ISO Symbol



Modular installation only

High-flow, 3-port/2-position, normally closed

Manually operated lockout slide can be locked in the closed position with a customer supplied padlock.

Ordering Information

Models listed include PTF exhaust port threads, non-locking override, 110/120Vac coil, and cable grip connector.

Installation Type	3 Port/2 Position Normally Closed	Weight lb (kg)
Modular*	P74C-NAD-PJA	2.03 (0.92)

* Valve main ports are unthreaded. To install in air line or connect to other Excelon® 74 units use Quikclamp® and Quikclamp® pipe adapters.

Excelon® lockout valves

1/4" to 3/4" port size

Excelon® design allows in-line or modular installation

Valves can be locked in the closed position only

Excelon® 3-port/2-position lockout valves help conform to OSHA Lockout regulations in USA market.

Technical data

Fluid: Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum Pressure: 250 psig (17 bar)

Operating Temperature*: -30° to 150°F (-34° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Cv factor from IN to OUT ports
- 1/4" ports: 4.0
- 3/8" ports: 8.0
- 1/2" ports: 8.1
- 3/4" ports: 7.7

Cv factor from OUT to Exhaust ports on 3-port/2-position valves: 0.2.

Exhaust port threads on T72T and T73T models: 10-32

Exhaust port threads on T74T models:
1/8 PTF with PTF main ports
1/8" ISO Rc with ISO G and ISO Rc main ports

Hole diameter in slide for padlock 72 and 73: 5/16" (8 mm)

Hole diameter in slide for padlock: 0.29" (7.5 mm)

Materials
- Body: Zinc
- Slide: Acetal plastic
- Elastomers: Nitrile

Ordering Information

Models listed are with PTF threads.

Port Size	2-Port/2-Position No exhaust outlet	3-Port/2-Position (OSHA) Unthreaded exhaust port	3-Port/2-Position Threaded exhaust port	Weight lbs (kg)
1/4"	T72B-2AA-P1N	T72E-2AA-P1N	T72T-2AA-P1N	0.79 (0.36)
3/8"	T72B-3AA-P1N	T72E-2AA-P1N	T72T-3AA-P1N	0.86 (0.39)

Port Size	2-Port/2-Position No exhaust outlet	3-Port/2-Position (OSHA) Unthreaded exhaust outlet	3-Port/2-Position Threaded exhaust port	Weight lbs (kg)
1/4"	T73B-2AA-P1N	T73E-2AA-P1N	T73T-2AA-P1N	0.7 (0.3)
3/8"	T73B-3AA-P1N	T73E-3AA-P1N	T73T-3AA-P1N	0.7 (0.3)
1/2"	T73B-4AA-P1N	T73E-4AA-P1N	T73T-4AA-P1N	0.7 (0.3)

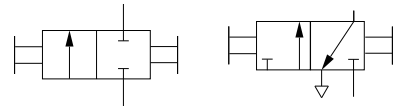
Port Size	2-Port/2-Position Padlock closed only No exhaust outlet	3-Port/2-Position (OSHA) Padlock closed only Unthreaded exhaust port	3-Port/2-Position Padlock closed only Threaded exhaust port	Weight lbs (kg)
3/8"	T74B-3AA-P1N	T74E-3AA-P1N	T74T-3AA-P1N	0.69 (0.32)
1/2"	T74B-4AA-P1N	T74E-4AA-P1N	T74T-4AA-P1N	0.65 (0.30)
3/4"	T74B-6AA-P1N	T74E-6AA-P1N	T74T-6AA-P1N	0.62 (0.28)

Service Kits*

Type	Part Number
T72	4384-513
T73B (black slide)	4384-610
T73E (yellow slide)	4384-611
T73T (red slide)	4384-612
T74B (black slide)	4384-711
T74E (yellow slide)	4384-710
T74T (red slide)	4384-713

* Service kit includes seals and slide.

ISO Symbols



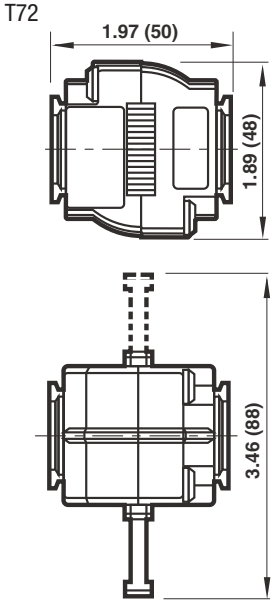
2-Port/2-Position 3-Port/2-Position

Excelon lockout valves

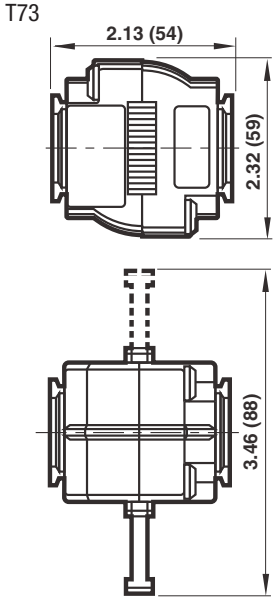
1/4" to 3/4" port size

Dimensions in inches (mm)

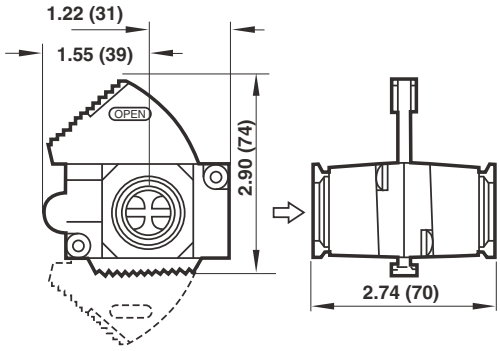
T72



T73



T74



Excelon® Pro T92

Lockout/shut-off valve

Easy to order
Configuration flexibility
Excellent value
No tools required for assembly
RoHs compliant

Technical data

Fluid: Compressed air, neutral gases

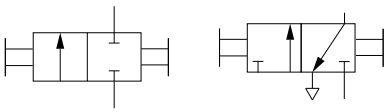
NOTE: Contact Norgren for use with other media.

Maximum pressure
175 psig (12 bar)
Cv factor from IN to OUT ports
1/4" PTF: 2.57
3/8" PIF: 1.77

Operating temperature*
-4° to 140°F (-20° to 60°C)
* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials
Body: PBT
Elastomers: Nitrile

ISO Symbols



2-Port/2-Position 3-Port/2-Position

Port Size	2-Port/2-Position No exhaust outlet Black slide	3-Port/2-Position (OSHA) Unthreaded exhaust port Yellow slide	3-Port/2-Position 10-32 (M5) threaded exhaust port, Red slide	Weight lbs (kg)
1/4" PTF	T92B-2AN-B1N	T92E-2AN-B1N	T92T-2AN-B1N	.35 (.16)

T92★★★NB1N

Substitute	Exhaust port
B	Plugged
E	Unthreaded
T	Threaded M5 (10-32 UNF)

Substitute	Description
NN	no connection
1A	1/8" PTF
2A	1/4" PTF
3A	3/8" PTF
1B	1/8" ISO Rc
2B	1/4" ISO Rc
3B	3/8" ISO Rc
1G	1/8" ISO G
2G	1/4" ISO G
3G	3/8" ISO G
6D	6mm PIF
8D	8mm (5/16") PIF
AD	10mm PIF
BD	12mm PIF
4E	1/4" PIF
6E	3/8" PIF
8E	1/2" PIF
2R*	1/4" PTF
2T*	1/4" ISO Rc
2V*	1/4" ISO G

* Does not include mounting bracket

Excelon® Pro Modular System

T92, Lockout/shut-off valve

Accessories and Kits

Threaded connector w/mounting bracket*		Push-In-Fitting connector w/mounting bracket*		Threaded connector w/o mounting brackets		Porting block		Quikconnect™ (quantity of 1)
								
Connection	**P/N**	**Connection**	**P/N**	**Connection**	**P/N**	**Connection**	**P/N**	**P/N**
1/8" PTF	9212KIT-1A	6mm PIF	9213KIT-6D	1/4" PTF	9211KIT-2R	1/4" PTF	9216-50	9210-50
1/4" PTF	9212KIT-2A	8mm (5/16") PIF	9213KIT-8D	1/4" ISO Rc	9211KIT-2T	1/4" ISO G	9216-51	
3/8" PTF	9212KIT-3A	10mm PIF	9213KIT-AD	1/4" ISO G	9211KIT-2V	1/4" ISO Rc	9216-52	
1/8" ISO Rc	9212KIT-1B	12mm PIF	9213KIT-BD					
1/4" ISO Rc	9212KIT-2B	1/4" PIF	9213KIT-4E					
3/8" ISO Rc	9212KIT-3B	3/8" PIF	9213KIT-6E					
1/8" ISO G	9212KIT-1G	1/2" PIF	9213KIT-8E					
1/4" ISO G	9212KIT-2G							
3/8" ISO G	9212KIT-3G							

* Use 1/4" (6 mm) screws and appropriate washers when attaching brackets to a surface.

Locking plate kit**

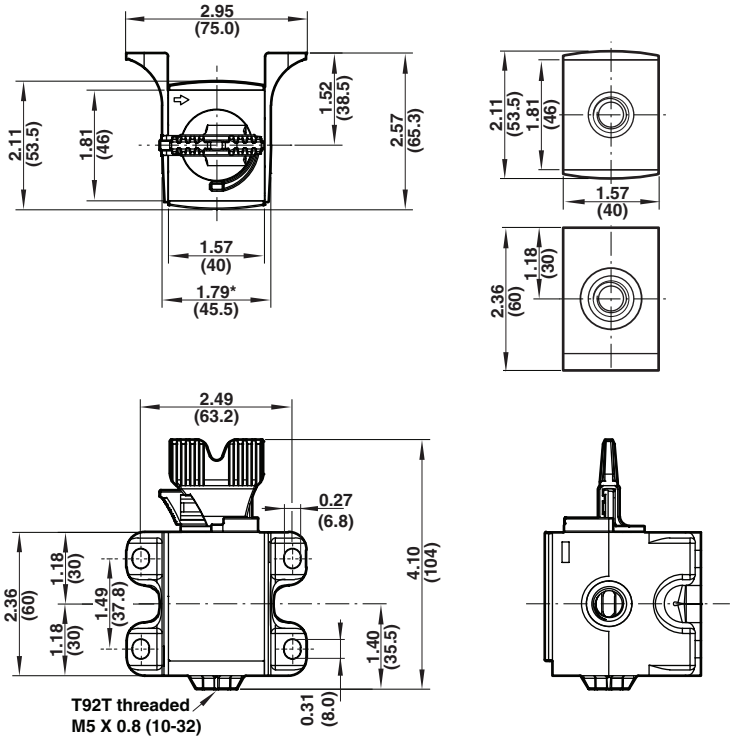
9236-88/X10
(qty 10)
(fits filter, lubricator, lockout valves, and back of all units)

** Locking plates **MUST** be in place before pressurizing any Excelon Pro unit.

*** Connector Dimensions**

1/8" and 1/4" threaded connectors shown. See below for port-to-port dimensions for additional connectors.

PIF Connector	Port-to-port
1/4", 6mm, 8mm (5/16")	2.37" (60.2)
3/8", 1/2", 10mm, 12mm	2.48" (61.9)
Threaded connector	
1/8", 1/4"	1.79" (45.5)
3/8"	2.99" (76.1)



Olympian Plus General Purpose Filter

F64G, F68E General purpose filters

Olympian Plus plug in system

Effective liquid removal and positive solid particle filtration

Large filter element area provides minimum pressure drop

Optional visual service indicator turns from green to red when the filter element needs to be replaced

Factory option electrical service life indicator provides electrical output when the filter element needs to be replaced

F64G

F68E

Technical data

Fluid: Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

64 Series

Maximum pressure

Guarded transparent bowl:
150 psig (10 bar)

Metal bowl: 250 psig (17 bar)

Operating temperature*:

Guarded transparent bowl:
-30° to 125°F (-34° to 50°C)

Metal bowl:
-30° to 175°F (-34° to 80°C)

68 Series

Maximum pressure:

250 psig (17 bar)

Operating temperature*:

0° to +175°F (-20° to +80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C).

Materials

F64G

Body: Zinc

Yoke: Zinc

Metal bowl: Aluminum

Standard metal bowl prismatic liquid level indicator lens: Grilamid

Optional metal bowl sight glass: Pyrex

Optional transparent bowl: Polycarbonate

Element: Polypropylene

Elastomers: Nitrile

F68E

Body: Aluminum

Yoke: Aluminum

Bowl: Aluminum

Liquid level indicator: Pyrex

Element: Sintered bronze or polypropylene

Elastomers: Nitrile

Ordering Information

Models listed are with PTF threads, metal bowl with sight glass, automatic drain, and 40 µm element.

Port Size	Model	Flow† scfm (dm3/s)	Weight lb (kg)
1/2"	F64G-4AN-AD3	125 (59)	2.91 (1.32)
1"	F68E-8AN-AU3	403 (190)	5.1 (2.33)

†Typical flow with 40 µm element at 90 psig (6.3 bar) inlet pressure and a 5 psig (0.35 bar) pressure drop.

Options selector (F64G)

F64G-★★N-★D★

Port size	Substitute
1/4	2
3/8	3
1/2	4
3/4	6
No yoke	N

Threads	Substitute
PTF	A
ISO G parallel	G
No yoke	N

Element	Substitute
5 µm	1
40 µm	3

Drain	Substitute
Manual	Q
Auto drain	A

Options selector (F68E)

F68E-★★★-★★★

Port size	Substitute
3/4	6
1	8
1-1/4	A
1-1/2	B
No yoke	N

Threads	Substitute
PTF	A
ISO G parallel	G
No yoke	N

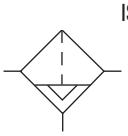
Service life indicator	Substitute
Mechanical	D
Electrical	E
Without	N

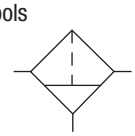
Element	Substitute
5 µm	1
50 µm	3

Bowl	Substitute
1 qt	C
1 qt with liquid level indicator	U

Drain	Substitute
Manual, 1/4 turn	Q
Auto drain	A

ISO Symbols


Auto Drain

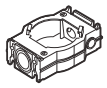
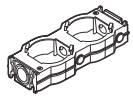

Manual Drain

Olympian Plus General Purpose Filter

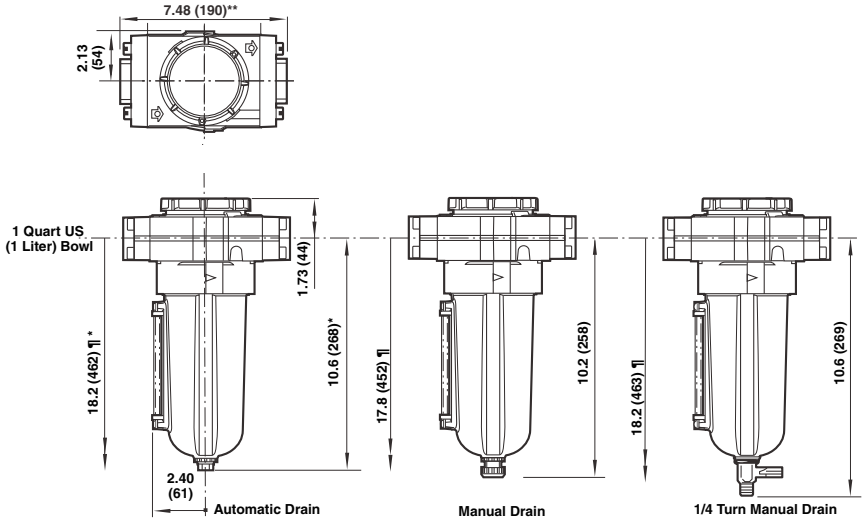
F64G, F68G General purpose filters

Dimensions in inches (mm)

Accessories

		Bracket kit	Bracket kit	3/2 Shut-off valve	Single Yoke	Double Yoke	Service Kit & elements
							
F64G	1/4	–	74504-50	T64E-2AB-P1N	Y64A-2AA-N1N	Y64A-2AA-N2N	F64G Seal & gasket 4380-200
	3/8	–	74504-50	T64E-3AB-P1N	Y64A-3AA-N1N	Y64A-3AA-N2N	Filter element 5 µm 4338-01
	1/2	–	74504-50	T64E-4AB-P1N	Y64A-4AA-N1N	Y64A-4AA-N2N	Filter element 40 µm 4338-02
	3/4	–	74504-50	T64E-6AB-P1N	Y64A-6AA-N1N	Y64A-6AA-N2N	F68G Seal & gasket 4380-300
F68G	1/2	18-001-979	–	T68E-4AB-B2N	Y68A-4AN-N1N	Y68A-4AN-N2N	Element 5 µm (1 quart bowl) 5311-01
	3/4	18-001-979	–	T68E-6AB-B2N	Y68A-6AN-N1N	Y68A-6AN-N2N	Element 5 µm (1 quart bowl) 5311-01
	1	18-001-979	–	T68E-8AB-B2N	Y68A-8AN-N1N	Y68A-8AN-N2N	Element 40 µm (1 quart bowl) 5311-03
	1-1/4	18-001-978	–	T68E-AAB-B2N	Y68A-AAN-N1N	Y68A-AAN-N2N	Element 5 µm (1 quart bowl) 5311-01
	1-1/2	–	–	T68E-BAB-B2N	Y68A-BAN-N1N	Y68A-BAN-N2N	Element 40 µm (1 quart bowl) 5311-03

F68E

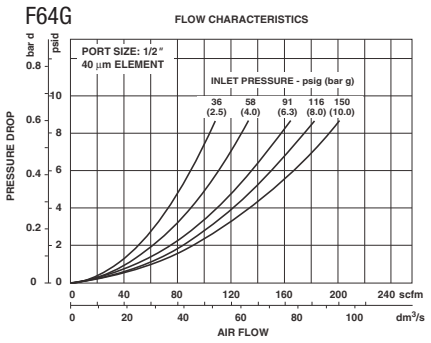


*Dimension also applies to closed bottom bowl.
** For 1-1/4" and 1-1/2" ported yokes add 0.39" (10 mm).

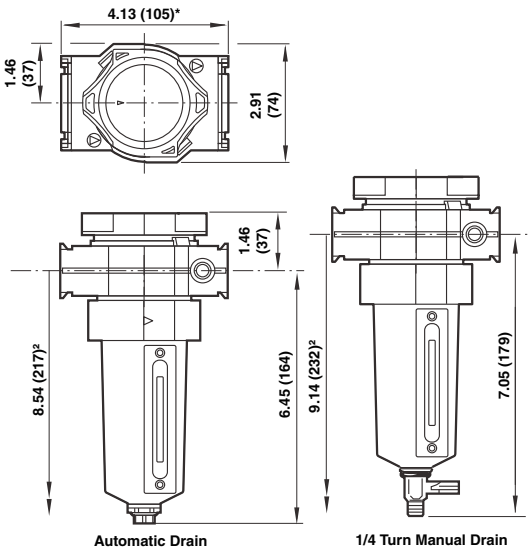
¶Minimum clearance required to remove bowl.

Typical Performance Characteristics

F64G



F64G

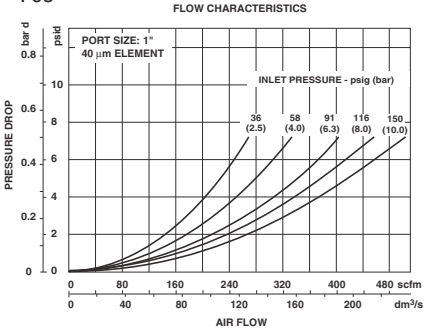


* 6.18" (157 mm) for 3/4" models

† Minimum clearance required to remove bowl.

Typical Performance Characteristics

F68



Olympian Plus Oil Removal (coalescing) Filter

F64C/H, F68C/H

Olympian Plus plug in design

High efficiency oil and particle removal

Quick release bayonet bowl

High visibility prismatic sight glass

Coalescing element service indicator

Install a pre-filter with a 5 µm filter element upstream of the filter for optimum coalescing element life.

F64C/H

F68C/H

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Guarded transparent bowl:
150 psig (10 bar)

Operating temperature*:

0° to +150°F (-20° to +65°C)

Guarded transparent bowl:
-30° to 125°F (-34° to 50°C)

* Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C).

Materials

Body: Aluminum
Yoke: Aluminum
Bowl: Aluminum
Liquid level indicator: Pyrex
Element: Synthetic fiber and polyurethane foam
Elastomers: Nitrile
Service life indicator:
Body: Transparent nylon
Internal parts: Acetal
Spring: Stainless steel
Elastomers Nitrile

Ordering Information

Models listed are with PTF threads, metal bowl with sight glass, service indicator, and automatic drain.

Port Size	Model	Maximum Flow* scfm (dm3/s)	Weight lb (kg)
1/4"	F64C-2AD-AD0	34 (16)	3.26 (1.48)
1/2"	F64H-4AD-AD0	60 (28)	3.68 (1.67)
3/4"	F64H-6AD-AD0	60 (28)	4.43 (2.01)
1/2 (Standard flow, short element)	F68C-4AD-AR0	1/2" ports: 74 (35)	5.19 (2.36)
3/4 (High flow, long element)	F68H-6AD-AU0	3/4" ports: 74 (35)	5.85 (2.66)
1 (High flow, long element)	F68H-8AD-AU0	1" ports: 127 (60)	5.72 (2.60)

* Maximum flow at 90 psig to maintain stated oil removal performance.

Options selector (F64C/H)

F64★-★★D-★★0

Body size	Substitute
Standard flow	C
High flow	H

Port size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6

Threads	Substitute
PTF	A
ISO G parallel	G

Bowl	Substitute
Metal with liquid level indicator	D
Transparent with guard	P

Drain	Substitute
Manual, 1/4 turn	Q
Auto drain	A

Options selector (F68C/H)

F68★-★★D-★★0

Flow	Substitute
Standard flow	C
High flow	H

Port size	Substitute
3/4"	6
1	8
1-1/4	A
1-1/2	B

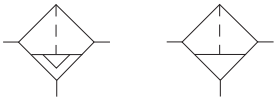
Threads	Substitute
PTF	A
ISO G parallel	G

Bowl	Substitute
1 pt with liquid level indicator	R*
1 qt with liquid level indicator	U**

Drain	Substitute
Auto drain	A
Manual (1/4 turn)	Q

* Only available with F68C
** Only available with F68H

ISO Symbols



Automatic and Semi Automatic Drain

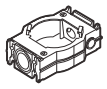
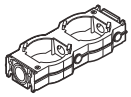
Manual Drain

Olympian Plus Oil Removal (Coalescing) Filter

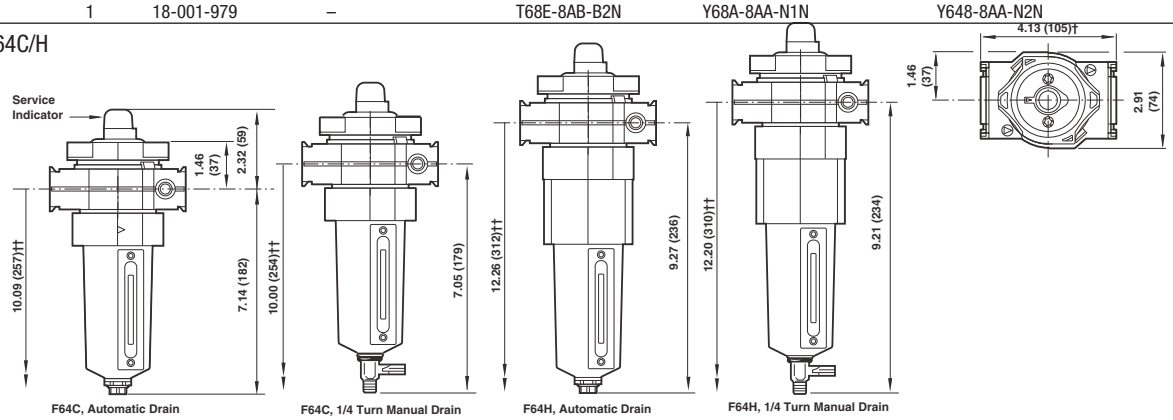
F64C/H, F68C/H

Dimensions in inches (mm)

Accessories

		Bracket kit	Bracket kit	3/2 Shut-off valve	Single Yoke	Double Yoke	Elements
							
F64C/F64H	1/4	–	74504-50	T64E-2AB-P1N	Y64A-2AA-N1N	Y64A-2AA-N2N	F64G (pre-filter) 5 µm 4338-01
	3/8	–	74504-50	T64E-3AB-P1N	Y64A-3AA-N1N	Y64A-3AA-N2N	F64C Coalescing 4344-01
	1/2	–	74504-50	T64E-4AB-P1N	Y64A-4AA-N1N	Y64A-4AA-N2N	F64H Coalescing 4344-02
	3/4	–	74504-50	T64E-6AB-P1N	Y64A-6AA-N1N	Y64A-6AA-N2N	
F68C/F68H	1/2	18-001-979	–	T68E-4AB-B2N	Y68A-4AA-N1N	Y648-4AA-N2N	Standard flow (F68C) 5351-08
	3/4	18-001-979	–	T68E-6AB-B2N	Y68A-6AA-N1N	Y648-6AA-N2N	High flow (F68H) 5351-03
	1	18-001-979	–	T68E-8AB-B2N	Y68A-8AA-N1N	Y648-8AA-N2N	

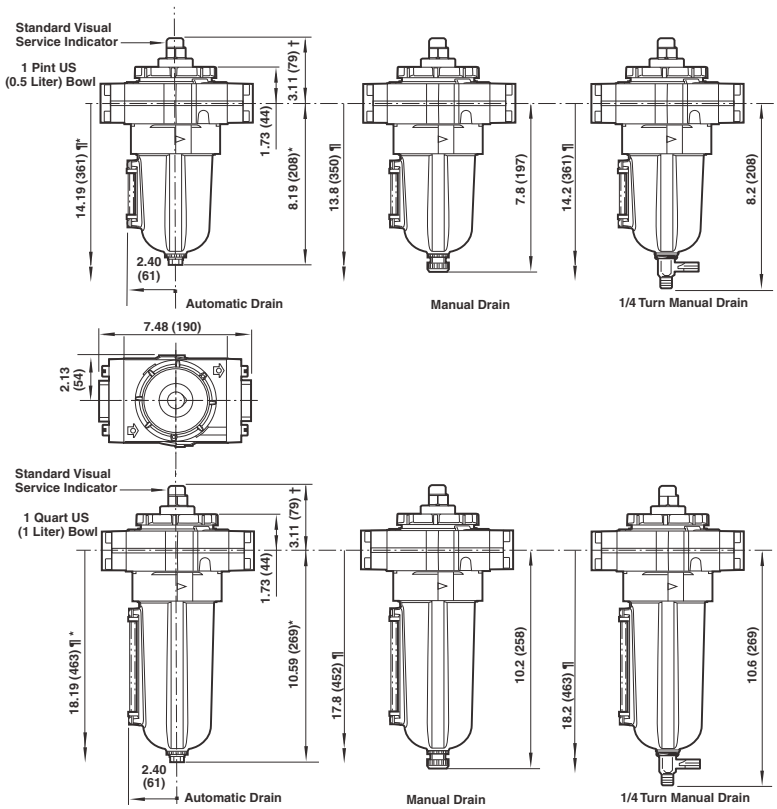
F64C/H



F64C, Automatic Drain — F64C, 1/4 Turn Manual Drain — F64H, Automatic Drain — F64H, 1/4 Turn Manual Drain

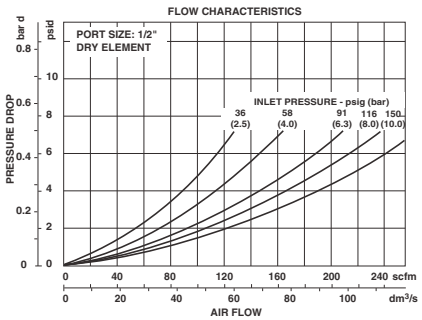
† 6.18" (157) for 3/4" ports.
†† Minimum clearance required to remove unit.

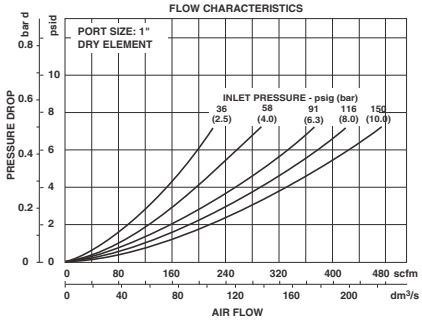
F68C/H



† For optional electrical service life indicator, add 0.02" (5 mm). * Dimension also applies to closed bottom bowl.
¶ Minimum clearance required to remove bowl.

F68C/H





Olympian Plus Oil Vapor Removal Filter

F64B/L, F68V/Y

Olympian Plus plug in system

Adsorbing type activated carbon element removes oil vapors and most hydrocarbon odors

Long service life of filter element. Minimum life of 400 hours when the required oil removal filter is installed upstream and the filtration temperature is between 70° to 80°F (20° to 26°C).

Oil and dirt contamination in outlet air within ISO 8573-1: Quality Class 1.7.1. F68 V/Y inlet air must be prefiltered with an F68G and F68 C/H

F64B/L

F68V/Y

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Guarded transparent bowl:
150 psig (10 bar)

Operating temperature*:

0° to +150°F (-20° to +65°C)

Guarded transparent bowl:
-30° to 125°F (-34° to 50°C)

* Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C).

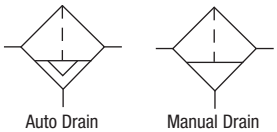
Maximum remaining oil content:

0.01 mg/m^3 at +70°F (+20°C) with an inlet concentration of 17 mg/m^3.

Materials

Body: F64- Zinc, F68-Aluminum
Yoke: F64- Zinc, F68-Aluminum
Bowl: F64- Zinc, F68-Aluminum
Elastomers: Nitrile
Service Kits:
F64 B/L 4380-21
F68V/Y 4380-302

ISO Symbols



Auto Drain Manual Drain

Ordering Information

Models listed are with PTF threads, and metal bowl.

Port Size	Model	Maximum flow* scfm (dm^3/s)	Weight lb (kg)
1/4"	F64B-2AN-AR0	15.0 (7.0)	4.07 (1.83)
1/2"	F64L-4AN-AR0	23.3 (11.0)	5.56 (2.50)
3/4 "	F64L-6AN-AR0	23.3 (11.0)	6.40 (2.88)
Standard flow (short element)	F68V-4AN-EMA	53 (25)	5.13 (2.33)
High flow (long element)	F68Y-8AN-ECA	127 (60)	5.70 (2.59)

*Maximum flow at 90 psig (6.3 bar) inlet pressure to maintain stated oil removal performance.

Options selector (F64B/L)

F64★-★★N-★★0

Body size	Substitute
Standard flow	B
High flow	L

Port size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6

Threads	Substitute
PTF	A
ISO G parallel	G
None	N

Bowl	Substitute
Metal with liquid level indicator	R
Transparent	T

Drain	Substitute
Manual	M
Auto drain	A

Options selector (F68V/Y)

F68★-★★N-E★A

Body size	Substitute
Standard flow	V
High flow	Y

Port size	Substitute
1/2"	4*
3/4"	6
1"	8
None	N

Threads	Substitute
PTF	A
ISO G parallel	G
None	N

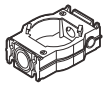
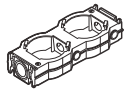
Bowl	Substitute
1 pint (0.5 liter)	M*
1 quart (1 liter)	C**

Only available with F68V
** Only available with F68Y

Olympian Plus Oil Vapor Removal Filter

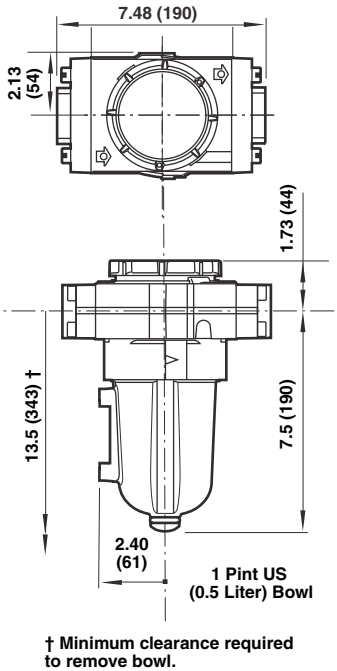
F64C/H, F68V/Y

Accessories

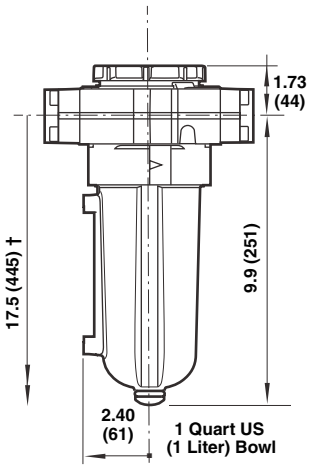
		Bracket kit	Bracket kit	3/2 Shut-off valve	Single Yoke	Double Yoke	Replacement Elements	
								
F64B/F64L	1/4		74504-50	T64E-2AB-P1N	Y64A-2AA-N1N	Y64A-2AA-N2N	F64G (pre-filter) 5 µm	4338-01
	3/8		74504-50	T64E-3AB-P1N	Y64A-3AA-N1N	Y64A-3AA-N2N	F64B Coalescing	5350-99
	1/2		74504-50	T64E-4AB-P1N	Y64A-4AA-N1N	Y64A-4AA-N2N	F64L Coalescing	5350-98
	3/4		74504-50	T64E-6AB-P1N	Y64A-6AA-N1N	Y64A-6AA-N2N	Integral pre-filter (F64B/L)	3698-02
							Activated carbon (F64B/L)	5568-01
F68V/Y	1/2	18-001-979		T68E-4AB-B2N	Y68A-4AN-N1N	Y68A-4AN-N2N	Standard Flow (F68V)	665-72
	3/4	18-001-979		T68E-6AB-B2N	Y68A-6AN-N1N	Y68A-6AN-N2N	High Flow (F68Y)	665-70
	1	18-001-979		T68E-8AB-B2N	Y68A-8AN-N1N	Y68A-8AN-N2N		

Dimensions in inches (mm)

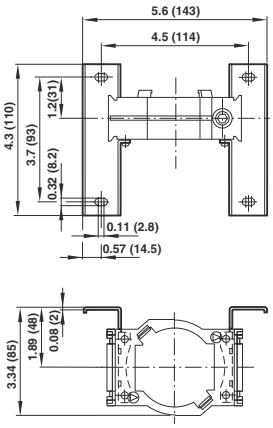
F68V/Y



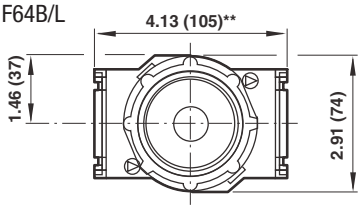
† Minimum clearance required to remove bowl.

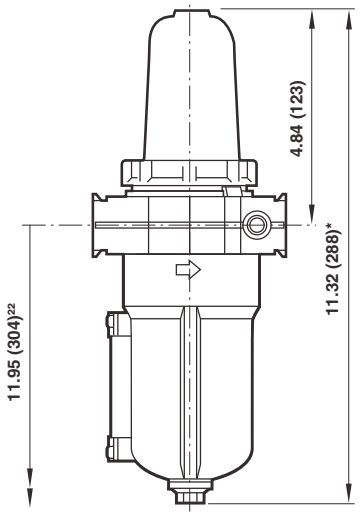


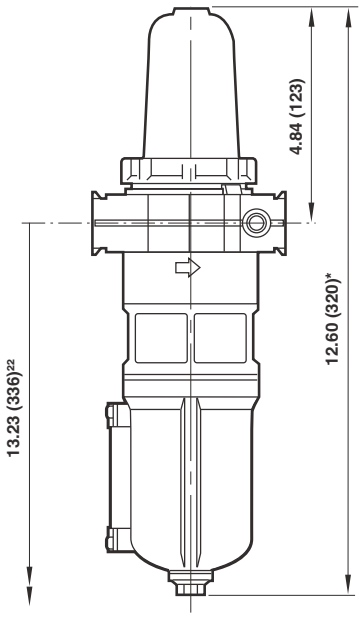
Mounting bracket (F64B/L)



F64B/L

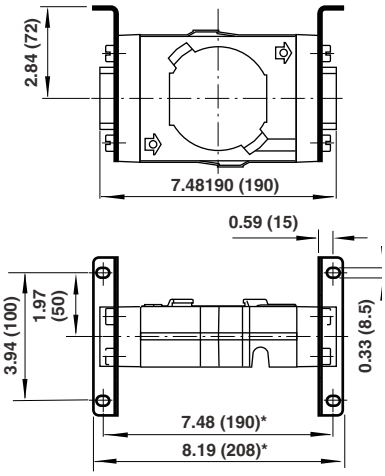






*Automatic drain shown. Subtract 0.3" (mm) for manual drain.
††Minimum clearance required to remove bowl.
** 6.18 (157 mm) for models with 3/4" ports.

Mounting bracket (F68V/Y)



* Add 0.39" (10) for 1-1/4" ported yokes.

Olympian Plus Filter/Regulators

B64G, B68E/G

Olympian Plus plug in system
Effective liquid removal and particulate filtration
Large filter element area provides minimum pressure drop
High flow unit with large valve and diaphragm
Push to lock adjusting knob with tamper resistant option

B64G

B68E/G

Technical data

Fluid:
Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

B64G

Maximum pressure
Guarded transparent bowl:
150 psig (10 bar)

Metal bowl: 250 psig (17 bar)

Operating temperature*
Guarded transparent bowl:
-30° to 125°F (-34° to 50°C)

Metal bowl:
-30° to 175°F (-34° to 80°C)

B68E/G

Maximum pressure :
250 psig (17 bar)

Operating temperature*:
0° to +175°F (-20° to +80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C).

Particle removal:
5, or 40 µm. Within ISO 8573-1, class 3 and Class 5

Materials

B64G
Body: Zinc
Bonnet: Aluminum
Yoke: Zinc
Metal bowl: Aluminum
Standard metal bowl prismatic liquid level indicator lens: Grilamid
Optional metal bowl sight glass: Pyrex
Optional transparent bowl: Polycarbonate
Element: Sintered polypropylene
Elastomers: Nitrile

B68E/G
Body: Aluminum
Yoke: Aluminum
Bonnet: Aluminum
Adjusting knob: Acetal resin
Optional T-bar adjusting screw: Steel
Valve: Aluminum
Bowl: Aluminum
Sight glass: Pyrex
Element: Sintered bronze or polypropylene
Elastomers: Nitrile

Ordering Information

Models listed are with PTF threads, metal bowl with automatic drain, and 40 µm element.

Port Size	Model	Flow† scfm (dm3/s)	Weight lb (kg)	Replacement elements
1/2"	B64G-4AK-AD3-RMG	225 (106)	3.69 (1.66)	4338-01 5 µm
1"	B68E-8AK-AU3-RLN	440 (215)	6.20 (2.82)	4338-02 40 µm
1-1/4"	B68E-AAK-AU3-RLN	440 (215)	6.42 (2.92)	1qt 5 µm 5511-01
1-1/2"	B68E-BAK-AU3-RLN	440 (215)	6.07 (2.76)	1qt 40 µm 5511-03

Options selector B64G-★★★-★★★-R★★

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

Threads	Substitute
PTF	A
ISO G parallel	G

Adjustment	Substitute
Knob	K
T-bar	T

Drain	Substitute
1/4 turn manual	Q
Automatic	A

Gauge	Substitute
With	G
Without	N

Outlet Pressure Adjustment Range*	Substitute
5 to 60 psig (0.3 to 4 bar)	F
5 to 150 psig (0.3 to 10 bar)	M
10 to 250 psig (0.7 to 17 bar)	S**

Element	Substitute
5 µm	1
40 µm	3

Bowl	Substitute
Metal with liquid level indicator	D
Guarded Transparent	P

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.
** Units with 250 psig (17 bar) adjustment range are available only with the T-bar adjustment; therefore substitute T at the 7th digit and S at the 12th position.

Options selector B68E-★★★-★U★-R★★

Bowl/Element Type	Substitute
1 quart (1 liter) bowl w/long element	E
1 pint (0.5 liter) bowl w/short element	G

Port Size	Substitute
3/4"	6
1"	8
1-1/4"	A
1-1/2"	B

Threads	Substitute
PTF	A
ISO G parallel	G
No Yoke (N in 5th position)	
1/8 Rc threaded gauge ports	N
No Yoke (N in 5th position)	
PTF threaded gauge ports	A

Adjustment	Substitute
Knob	K
T-bar	T

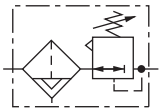
Drain	Substitute
Automatic	A
Manual, 1/4 turn	Q

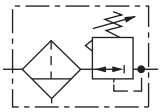
Gauge	Substitute
With	G
Without	N

Outlet Pressure Adjustment Range*	Substitute
0 to 60 psig(0 to 4 bar)	F
5 to 120 psig (0.4 to 8 bar)	L
10 to 250 psig (0.7 to 17 bar)	S***

Element	Substitute
5 µm	1
40 µm	3

ISO Symbols


Automatic Drain Relieving


Manual Drain Relieving

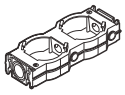
† Only available with B68E
* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.
** Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.
*** Units with 250 psig (17 bar) adjustment range are available only with the T-bar adjustment; therefore substitute T at the 7th digit and S at the 12th position.

Olympian Plus Filter/Regulators

B64G, B68E/G

Dimensions in inches (mm)

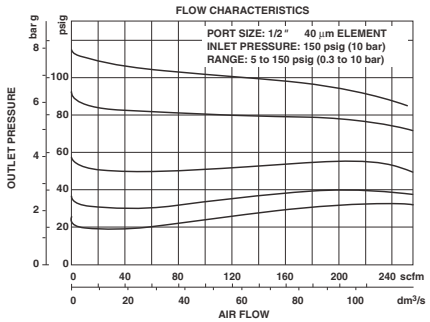
Accessories

	Bracket kit	Bracket kit	Gauge 0 to 160 psig	3/2 Shut-off valve*	Single yoke	Double yoke	Tamper resistant kit	Service Kit
								
B64G		74504-50	18-013-204	T64E-2AB-P1N – G 1/4	Y64A-2AA-N1N	Y64A-2AA-N2N	4355-50	Relieving 4383-200
				T64E-3AB-P1N – G 3/8	Y64A-3AA-N1N	Y64A-3AA-N2N	4355-50	Non-relieving 4383-201
				T64E-4AB-P1N – G 1/2	Y64A-4AA-N1N	Y64A-4AA-N2N	4355-50	
				T64E-6AB-P1N – G 3/4	Y64A-6AA-N1N	Y64A-6AA-N2N	4355-50	
B68G	18-001-979 – 3/4		18-013-204	T68E-6AB-B2N – G 3/4	Y68A-6AN-N1N	Y68A-6AN-N2N	4355-50	Relieving 4383-300
	18-001-979 – 1			T68E-8AB-B2N – G 1	Y68A-8AN-N1N	Y68A-8AN-N2N	4355-50	Non-relieving 4383-3201
	18-001-978 – 1-1/4			T68E-AAB-B2N – G 1-1/4	Y68A-AAN-N1N	Y68A-AAN-N2N	4355-50	
	–			T68E-BAB-B2N – G 1-1/4	Y68A-BAN-N1N	Y68A-BAN-N2N	4355-50	

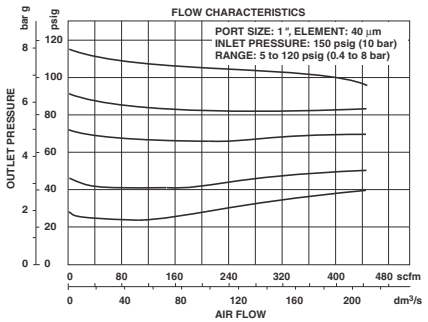
*68 Series uses a ball handle.

Typical Performance Characteristics

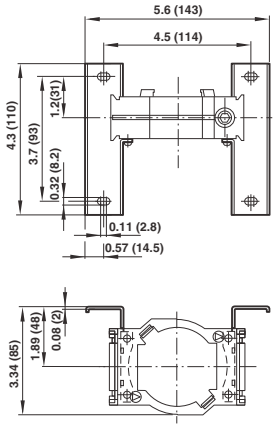
B64G



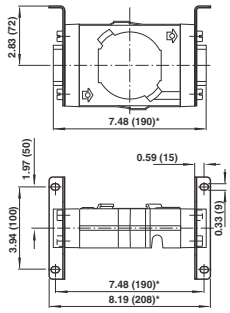
B68E/G



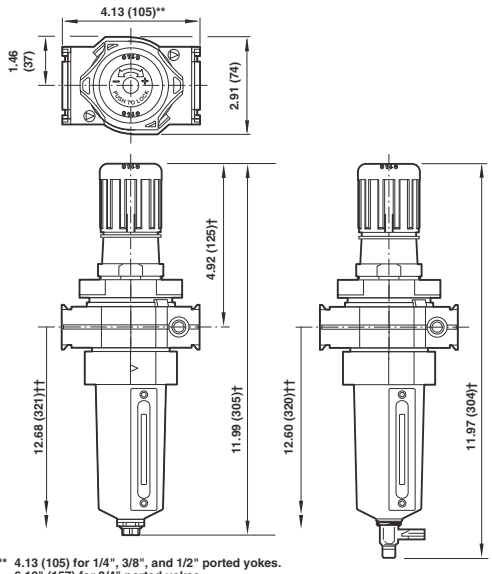
Mounting bracket (B64G)



Mounting bracket (B68G)



B64G



** 4.13 (105) for 1/4", 3/8", and 1/2" ported yokes.
6.18" (157) for 3/4" ported yokes.
† Add 1.46 (37) for units with T-handle adjustment.
†† Minimum clearance required to remove unit.
Add 1.46 (37) for units with T-handle adjustment.

B68E/G

† Add 1.46" (37 mm) for unit with T-bar adjustment.
** For 1-1/4" and 1-1/2" ported yokes, add 0.39" (10 mm).
* Dimension also applies to closed bottom bowl.
¶ Minimum clearance required to remove bowl.

Olympian Plus Regulators

R64G/R, R68G

Olympian Plus plug in design

High flow general purpose regulator

Push to lock adjusting knob with tamper resistant option

Mount in any orientation

R64G/R

R68G

Technical data

R64G/R

Maximum pressure:

250 psig (17 bar)

Typical flow at 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 15 psig (1 bar) from set:

254 scfm (120 dm3/s)

Operating temperature*:

-30° to 175°F (-34° to 80°C)

R68G

Maximum pressure:

300 psig (20 bar)

Typical flow at 150 psig (10 bar) inlet pressure, 90 psig
(6.3 bar) set pressure and a droop of 15 psig (1 bar) from set (68):

370 scfm (170 dm3/s)

Operating temperature*:

0° to +175°F (-20° to +80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C).

Materials

R64G/R

Body: Zinc
Bonnet: Aluminum
Yoke: Zinc
Elastomers: Nitrile

R68G

Body: Aluminum
Yoke: Aluminum
Bonnet: Aluminum
Adjusting knob: Acetal resin
Valve: Aluminum
Optional T-bar adjusting screw: Steel
Elastomers: Nitrile

Ordering Information

Models listed are with PTF threads, knob adjustment, relieving type, with gauge (not shown).

Port Size	Model	Flow† scfm (dm3/s)	Weight lb (kg)
1/2"	R64G-4AK-RMG	254 (120)	3.31 (1.49)
1"	R68G-8AK-RLG	360 (170)	4.16 (1.89)
1-1/4"	R68G-AAK-RLG	360 (170)	4.24 (1.93)
1-1/2"	R68G-BAK-RLG	360 (170)	4.33 (1.97)

† Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.

Options selector (R64G)

R64G-★★★-R★★

Flow type	Substitute
Standard	G

Port size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6

Threads	Substitute
PTF	A
ISO G parallel	G

Adjustment	Substitute
Knob	K
T-bar	T

Gauge	Substitute
With	G
Without	N

Outlet pressure adjustment range*	Substitute
5 to 60 psig (0.3 to 4 bar)	F
5 to 150 psig (0.3 to 10 bar)	M
10 to 250 psig (0.7 to 17 bar)	S**

* Can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

** Units with 250 psig outlet pressure range are available only with the T-bar adjustment; therefore substitute T at the 7th digit and S at the 9th position.

Options selector (R68G)

R68G-★★★-R★★

Port size	Substitute
3/4"	6
1"	8
1¼"	A
1½"	B
None	N

Threads	Substitute
PTF	A
ISO G parallel	G
No Yoke (N in 5th position)	
1/8 Rc threaded gauge ports	N
No Yoke (N in 5th position)	
PTF threaded gauge ports	A

Adjustment	Substitute
Knob	K
T-bar	T

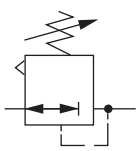
Gauge	Substitute
With	G
Without	N

Outlet pressure adjustment range*	Substitute
0 to 60 psig (0.3 to 4 bar)	F
5 to 120 psig (0.4 to 8 bar)	L
10 to 250 psig (0.7 to 17 bar)	S**

* Can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

** Units with 250 psig outlet pressure range are available only with the T-bar adjustment; therefore substitute T at the 7th digit and S at the 9th position.

ISO Symbol

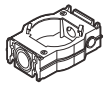
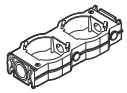

Relieving

Olympian Plus Regulators

R64G/R, R68G

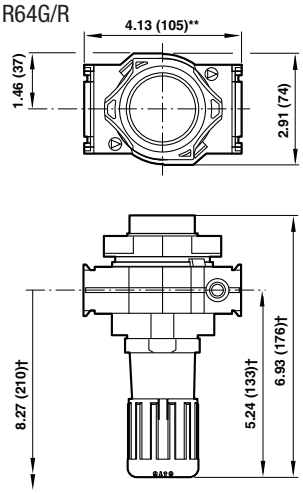
Dimensions in inches (mm)

Accessories

		Bracket kit	Bracket kit	Gauge 0 ... 160 psig*	3/2 Shut-off valve	Single yoke	Double yoke	Panel nut	Tamper resistant kit	Service Kits
										
R64G	1/4	–	74504-50	18-013-204	T64E-2AB-P1N	Y64A-2AA-N1N	Y64A-2AA-N2N	4348-89	4355-50	Relieving 4381-200
	3/8	–	74504-50	18-013-204	T64E-3AB-P1N	Y64A-3AA-N1N	Y64A-3AA-N2N	4348-89		Non relieving 4381-201
	1/2	–	74504-50	18-013-204	T64E-4AB-P1N	Y64A-4AA-N1N	Y64A-4AA-N2N			
	3/4	–	74504-50	18-013-204	T64E-6AB-P1N	Y64A-6AA-N1N	Y64A-6AA-N2N	4348-89		
R68G	3/4	18-001-979	–	18-013-204	T68E-6AB-B2N	Y68A-6AN-N1N	Y68A-6AN-N2N	–	4355-50	Relieving 4381-300
	1	18-001-979	–	18-013-204	T68E-8AB-B2N	Y68A-8AN-N1N	Y68A-8AN-N2N	–		Non relieving 4381-301
	1-1/4	18-001-978	–	18-013-204	T68E-AAB-B2N	Y68A-AAN-N1N	Y68A-AAN-N2N	–		
	1-1/2			18-013-204	T68E-BAB-B2N	Y68A-BAN-N1N	Y68A-BAN-N2N	–		

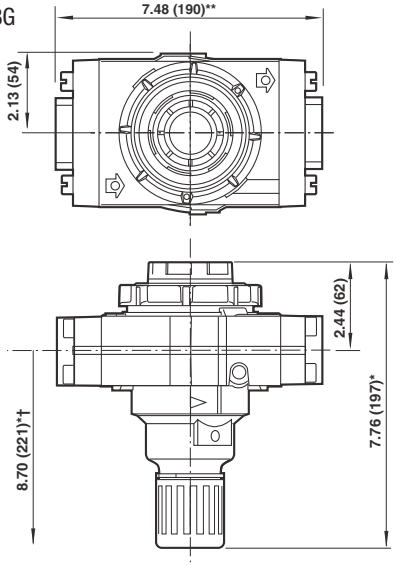
* For additional pressures and options see our website.

R64G/R



† Reduces by 4 mm with knob in locked position. Add 37 mm for unit with 'T' handle.
** 6.18" (157 mm) for models with 3/4" ports

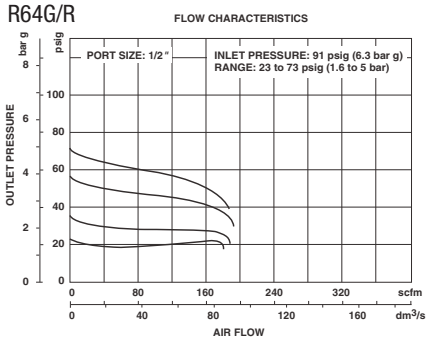
R68G

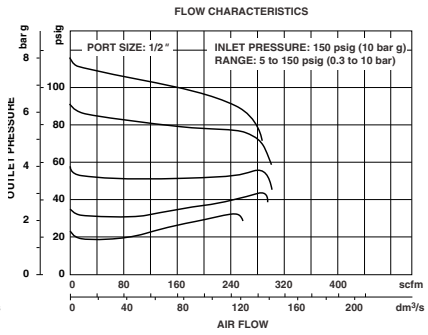


* Add 1.46" (37mm) for unit with T-bar.
** Add 0.39" (10mm) 1-1/4" and 1-1/2" models.
† Minimum clearance required to remove unit.

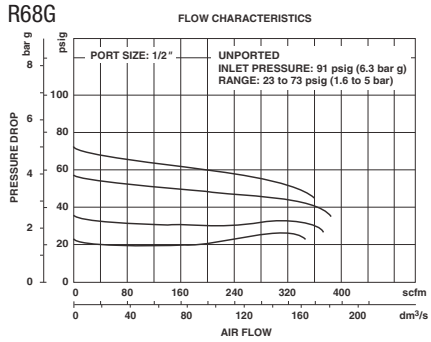
Typical Performance Characteristics

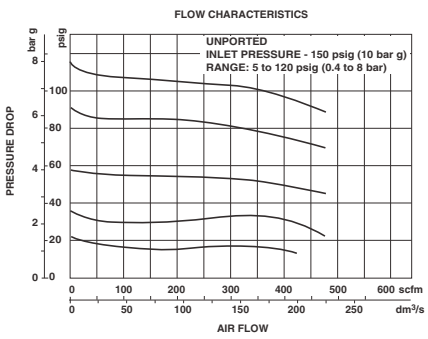
R64G/R





R68G





Panel mounting hole diameter: 2.06" (52 mm)
Maximum panel thickness: 0.25" (6 mm)

Olympian Plus Lubricators

L64M/C, L68M/C

Olympian Plus plug in design

High flow general purpose regulator

Push to lock adjusting knob with tamper resistant option

Mount in any orientation

L64M/C

L68M/C

Technical data

L64M/C

Maximum pressure:

250 psig (17 bar)

Guarded transparent bowl: 150 psig (10 bar)

Operating temperature*:

-30° to 175°F (-34° to 80°C)

Guarded transparent bowl: 0° to 125°F (-20° to 50°C)

L68M/C

Maximum pressure:

250 psig (20 bar)

Operating temperature*:

0° to +175°F (-20° to +80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C).

Materials:

L64M/C

Body: Zinc

Bowl: Aluminum

Yoke: Zinc

Elastomers: Nitrile

L68M/C

Body: Aluminum

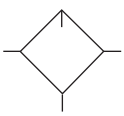
Bowl: Aluminum

Yoke: Aluminum

Adjusting knob: Acetal resin

Elastomers: Nitrile

ISO Symbol



Ordering Information

Models listed include yoke with PTF threads, manual drain, and metal bowl with liquid level indicator.

Type	Port Size	Model	Flow scfm (dm3/s)	Weight lb (kg)	Service Kit
Micro-Fog	1/2"	L64M-4AP-QDN	153 (72)	3.02 (1.37)	4382-200
	1"	L68M-8AP-QUN	424 (200)	4.49 (2.04)	4382-301*
	1-1/4"	L68M-AAP-QUN	424 (200)	4.59 (2.08)	
	1-1/2"	L68M-BAP-QUN	424 (200)	4.67 (2.12)	

* For micro-fog only. For oil-fog order 4382-300

Options selector (L64)

L64★-★★P-Q★★

Type	Substitute
Oil-fog	C
Micro-fog	M

Port size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6
No yoke	N

Threads	Substitute
PTF	A
ISO G parallel	G
No yoke	N

Options	Substitute
None	N
Quick fill device	Q

Bowl	Substitute
7 oz metal with liquid level indicator	D
7 oz transparent with guard	P
1 qt long metal bowl with liquid level indicator	A

Options selector (L68)

L68★-★★P-QU★

Type	Substitute
Oil-fog	C
Micro-fog	M

Port size	Substitute
3/4"	6
1"	8
1¼"	A
1½"	B
None	N

Threads	Substitute
PTF	A
ISO G parallel	G
None	N

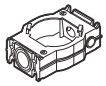
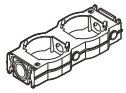
Options	Substitute
None	N
Quick fill device	Q

Olympian Plus Lubricators

L64M/C, L68M/C

Dimensions in inches (mm)

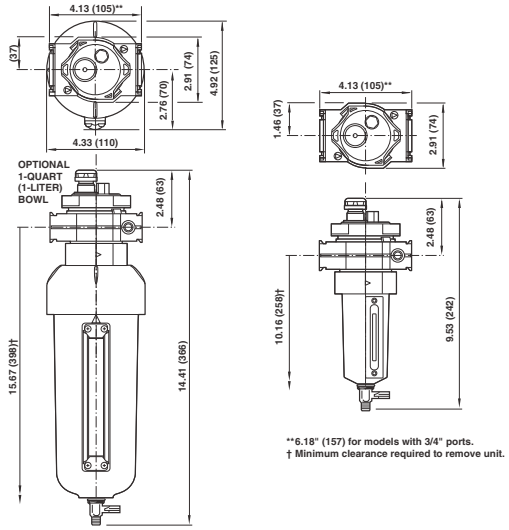
Accessories

		Bracket kit	Bracket kit		3/2 Shut-off valve	Single yoke	Double yoke	Tamper resistant wire	Quick fill adapter
									
L64	1/4"	–	74504-50	74504-52*	T64E-2AB-P1N	Y64A-2AA-N1N	Y64A-2AA-N2N	2117-01	18-011-024
	3/8"	–	74504-50	74504-52*	T64E-3AB-P1N	Y64A-3AA-N1N	Y64A-3AA-N2N	2117-01	18-011-024
	1/2"	–	74504-50	74504-52*	T64E-4AB-P1N	Y64A-4AA-N1N	Y64A-4AA-N2N	2117-01	18-011-024
	3/4"	–	74504-50	74504-52*	T64E-6AB-P1N	Y64A-6AA-N1N	Y64A-6AA-N2N	2117-01	18-011-024
L68	3/4"	18-001-979	74504-50	74504-52*	T68E-6AB-B2N	Y68A-6AN-N1N	Y68A-6AN-N2N	2117-01	18-011-021
	1"	18-001-979	74504-50	74504-52*	T68E-8AB-B2N	Y68A-8AN-N1N	Y68A-8AN-N2N	2117-01	18-011-021
	1-1/4"	18-001-978	74504-50	74504-52*	T68E-AAB-B2N	Y68A-AAN-N1N	Y68A-AAN-N2N	2117-01	18-011-021
	1-1/2"	–	74504-50	74504-52*	T68E-BAB-B2N	Y68A-BAN-N1N	Y68A-BAN-N2N	2117-01	18-011-021

*To fit 1 liter bowl version.

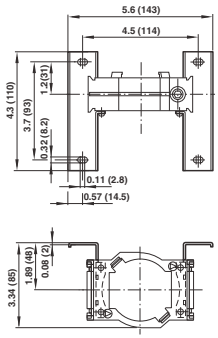
Optional 1 quart US (1 liter) bowl

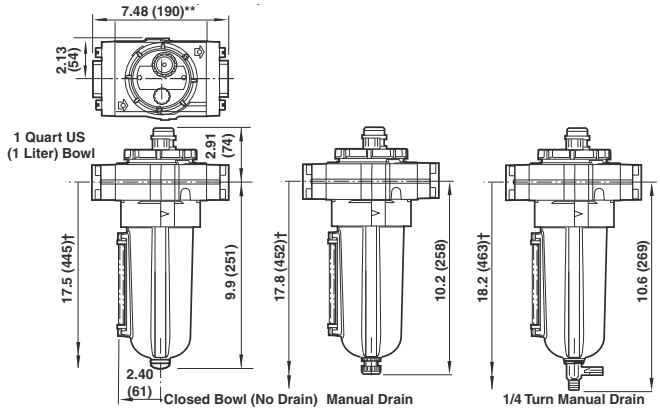
L64



**6.18" (157) for models with 3/4" ports.
† Minimum clearance required to remove unit.

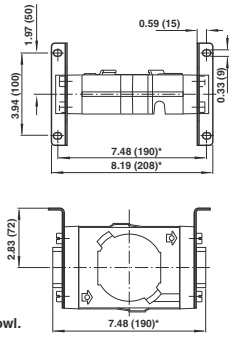
Mounting bracket (L64)





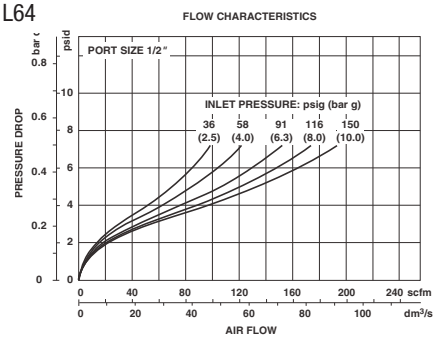
** Add 0.39" (10 mm) for 1-1/4" and 1-1/2"models. † Minimum clearance required to remove bowl.

Mounting bracket (L68)

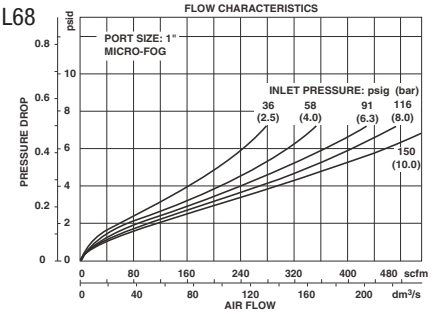


Typical Performance Characteristics

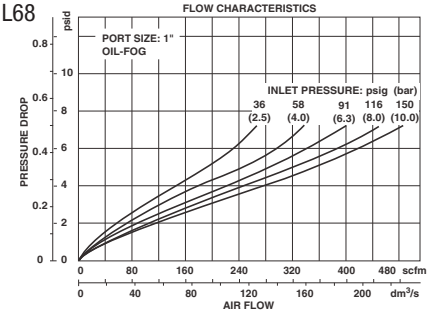
L64



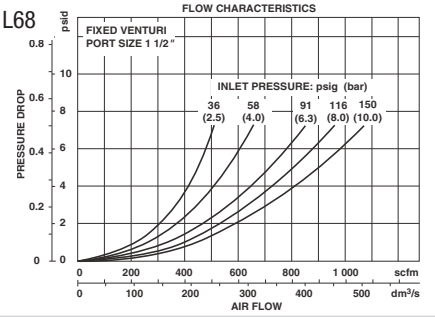
L68



L68



L68



AIR LINE EQUIPMENT

Olympian Plus Pressure Relief Valves

V64H, V68H

Olympian plug in system

Helps protect compressed air systems from over pressure by retarding excessive pressure build up

Integral pilot design provides superior sensitivity, accuracy, and quick response to over pressure conditions

High relief flow

Threaded relief port for silencer or piped exhaust

Technical data

V64H

Maximum pressure :
250 psig (17 bar)

Operating temperature*:
-30° to 175°F (-34° to 80°C)

V68H

Maximum pressure :
300 psig (20 bar)

Operating temperature*:
0° to +175°F (-20° to +80°C)

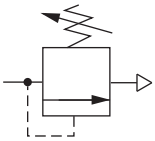
* Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C).

Materials

V64H
Body: Zinc
Bonnet: Aluminum
Adjusting screw: steel
Yoke: Zinc
Elastomers: Nitrile

V68H
Body: Aluminum
Yoke: Aluminum
Bonnet: Aluminum
Adjusting screw: steel
Valve: Aluminum
Optional T-bar adjusting screw: Steel
Elastomers: Nitrile

ISO Symbol



V64H


V68H

Ordering Information

Models listed include PTF threads, no gauge.

Port Size	Model	Weight lb (kg)	Service kit
1/2"	V64H-4AD-RMN	3.62 (1.63)	4384-200
1"	V68H-8AD-RMN	4.89 (2.20)	4384-300 (all models)
1-1/4"	V68H-AAD-RMN	4.93 (2.22)	
1-1/2"	V68H-BAD-RMN	5.02 (2.26)	

Options selector (V64H)

V64H-★★D-R★★

Port size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6

Threads	Substitute
PTF	A
ISO G parallel	G
No yoke	N**

Gauge	Substitute
With	G
Without	N

Outlet pressure adjustment range*	Substitute
5 to 60 psig(0.3 to 4 bar)	F
15 to 150 psig (1 to 10 bar)	M
10 to 250 psig (0.7 to 17 bar)	S

*Relief valve can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

**V64H Gauge ports:
1/8" PTF with PTF main ports
1/8" ISO Rc with ISO Rc main ports
1/8" ISO Rc with ISO G main ports

V64H Exhaust port:
1/2" PTF with PTF main ports
1/2" ISO Rc with ISO Rc main ports
1/2" ISO Rc with ISO G main ports

Options selector (V68H)

V68H-★★D-R★★

Port size	Substitute
3/4"	6
1"	8
1-1/4"	A
1-1/2"	B
None	N

Threads	Substitute
PTF	A
ISO G parallel	G
No Yoke	N**

Gauge	Substitute
With	G
Without	N

Outlet pressure adjustment range*	Substitute
0 to 60 (0.3 to 4 bar)	F
15 to 150 (1 to 10 bar)	M
10 to 250 psig (0.7 to 17 bar)	S

*Relief valve can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

**V68H Gauge ports:
1/8 PTF with PTF yoke ports
Rc1/8 with ISO Rc yoke ports
Rc1/8 with ISO G yoke ports

V68H Exhaust port:
1" PTF with PTF yoke ports
Rc1 with ISO Rc yoke ports
Rc1 with ISO G yoke ports

Olympian Plus Pressure Relief Valves

V64H, V68H

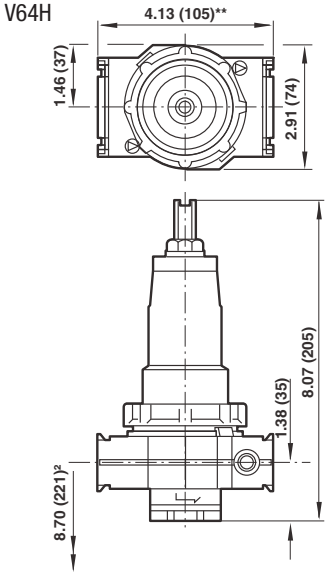
Dimensions in inches (mm)

Accessories

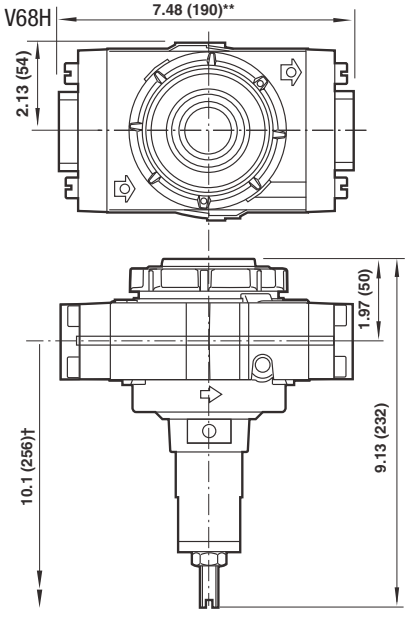
	Size	Bracket kit 	Bracket kit 	Gauge 0 ... 160 psig 	Silencer 	Tamper resistant cap 	3/2 Shut-off valve 
V64H	1/4"		74504-50	18-013-204	MB004A	1581-90	T64E-2AB-P1N
	3/8"		74504-50	18-013-204	MB004A	1581-90	T64E-3AB-P1N
	1/2"		74504-50	18-013-204	MB004A	1581-90	T64E-4AB-P1N
	3/4"		74504-50	18-013-204	MB004A	1581-90	T64E-6AB-P1N
V68H	3/4"	18-001-979		18-013-204	MB008A	1581-90	T68E-6AB-B2N
	1"	18-001-979		18-013-204	MB008A	1581-90	T68E-8AB-B2N
	1-1/4"	18-001-978		18-013-204	MB008A	1581-90	T68E-AAB-B2N
	1-1/2"	–		18-013-204	MB008A	1581-90	T68E-BAB-B2N

For additional options see website.

V64H

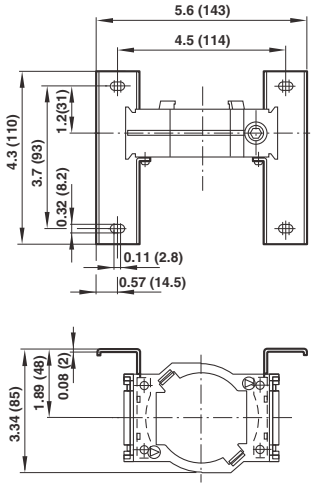


V68H

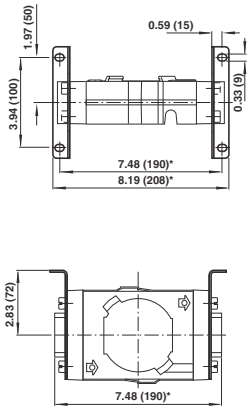


** Add 0.39" (10mm) 1-1/4" and 1-1/2" models.
† Minimum clearance required to remove unit.

Mounting bracket (V64H)

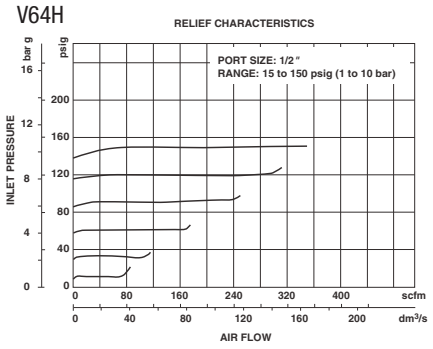


Mounting bracket (V68H)

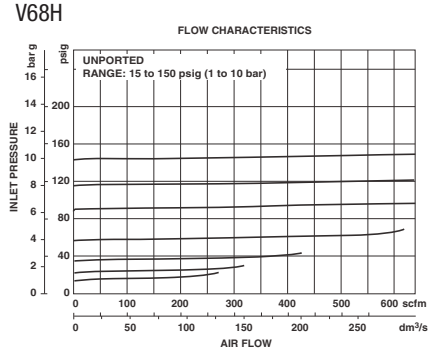


Typical Performance Characteristics

V64H



V68H



Olympian Plus Smooth Start/Exhaust Valves

P64F, P68F

Olympian Plus plug in design controls increase of downstream pressure on start up. Cylinders and other air operated devices are eased into normal operating positions, reducing the possibility of equipment damage and hazards to the user.

3 port/2 position, normally closed, soft start valve with optional manual lockout slide

Blocks inlet air and exhausts downstream air when pilot signal is removed or when the optional manual lockout slide is closed

Optional manual slide can be padlocked in closed position

Solenoid pilot or air pilot operation

Designed primarily for use in start-up and shutdown of equipment, not as a frequently cycling directional control valve. Norgren offers a wide variety of valves designed for frequent cycling and other applications. Please refer to the P72C and P74C valves, and to other Norgren valve catalogs.

P64F

P68F

Technical data

Fluid:
Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure solenoid operated:
Dependent on solenoid rating [must not exceed 250 psig (17 bar)]

Max. pressure pilot operated:
250 psig (17 bar) max.

Minimum operating pressure:
44 psig (3 bar)

Operating temperature solenoid operated:
Dependent on solenoid rating
[must be within range 0°* to 125°F (-20°* to 50°C)](64)
[must be within range 0°* to 175°F (-20°* to 80°C)] (68)

Operating temp. pilot operated:
0°* to 175°F (-20°* to 80°C)

Operating temp. pilot operated:
0°* to +175°F (-20°* to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

P64F
Body: Zinc alloy
Intermediate body and top plate: Aluminum
Exhaust bonnet: Zinc alloy
Yoke: Zinc alloy
Elastomers: Synthetic materials
Filter discs: Sintered plastic
Internal components: Brass/steel

P68F
Body: Aluminum
Top plate: Aluminum
Bottom plate: Aluminum
Yoke: Aluminum
Elastomers: Synthetic materials
Filter discs: Sintered plastic
Internal components: Brass/steel

Ordering Information

Models listed include PTF threads.

Port Size	Solenoid Operated* Model	Weight lb (kg)	Air Pilot Operated Model	Weight lb (kg)
1/2"	P64F-4AC-PFA	4.4 (2.02)	P64F-4AA-NNN	4.2 (1.91)
3/4"	P64F-6AC-PFA	5.2 (2.38)	P64F-6AA-NNN	5.0 (2.27)
1"	P68F-8AD-PFA	6.51 (2.93)	P68F-8AB-NNN	6.11 (2.75)
1-1/4"	P68F-AAD-PFA	6.44 (2.90)	P68F-AAB-NNN	6.04 (2.72)
1-1/2"	P68F-BAD-PFA	6.49 (2.92)	P68F-BAB-NNN	6.09 (2.74)

Options selector

P6★F-★★★-★★★

Series	Substitute
64	4
68	8

Port size	Substitute
1/4"*	2
3/8"*	3
1/2"*	4
3/4"	6
1"**	8
1-1/4"**	A
1-1/2"**	B

Threads	Substitute
PTF	A
ISO G parallel	G
No Yoke (N in 5th position) ISO G pilot and exhaust ports	N
No Yoke (N in 5th position) PTF pilot and exhaust ports	A

Operator	Substitute
Air pilot	A
Air pilot with manual lockout	B
22 mm miniature solenoid	C
22 mm miniature solenoid with manual lockout	D

* 64 series only ** 68 series only

Connectors	Substitute
3 pin plug with cable grip, no indicator	A
Without	N

P64F (22 mm solenoid)

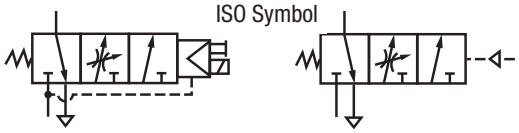
Coil voltage	Nominal power rating	Substitute
24 V d.c.	2 W	F
110/120 V, 50/60 Hz	4/2.5 V A	A
No solenoid	–	N

P68F (32 mm solenoid)

Coil voltage	Nominal power rating	Substitute
24 V d.c.	4.5 W	P
110/120 V, 50/60 Hz	14/10 V A	J
No solenoid	–	N
No coil		Z

Solenoid manual operator	Substitute
Shrouded push button	P
None	N

ISO Symbol

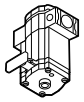
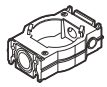
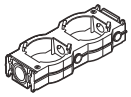

Sloenoid operated Air pilot

AIR LINE EQUIPMENT

Olympian Plus Smooth Start/Exhaust Valves

P64F, P68F

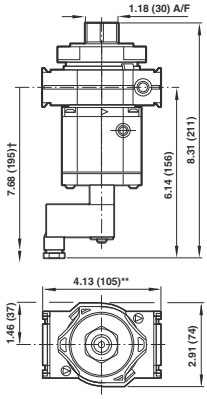
Accessories

	Size	Bracket kit	Bracket kit	3/2 Shut-off valve	Manual shut-off with lockout	Single yoke	Double yoke	Exhaust port silencer	Connector plug with cable gland		
									 Indicator type	 No indicator	
P64F	1/4"	74504-50	–	T64E-2AB-P1N	–	Y64A-2AA-N1N	Y64A-2AA-N2N	MB004A	54934-08*	10-50 V a.c./d.c.	Indicator type
	3/8"	74504-50	–	T64E-3AB-P1N	Factory fit option only.	Y64A-3AA-N1N	Y64A-3AA-N2N	MB004A	54934-02	110/120 V a.c.	Indicator type
	1/2"	74504-50	–	T64E-4AB-P1N	See Options selector	Y64A-4AA-N1N	Y64A-4AA-N2N	MB004A	54934-01	–	No indicator
	3/4"	74504-50	–	T64E-6AB-P1N	–	Y64A-6AA-N1N	Y64A-6AA-N2N	MB004A	–	–	–
P68F	3/4"	–	18-001-979	T68E-6AB-B2N	Standard	Y68A-6AN-N1N	Y68A-6AN-N2N	MB008A	54934-08*	10-50 V a.c./d.c.	Indicator type
	1"	–	18-001-979	T68E-8AB-B2N	Standard	Y68A-8AN-N1N	Y68A-8AN-N2N	MB008A	54934-02	110/120 V a.c.	Indicator type
	1¼"	–	18-001-978	T68E-AAB-B2N	Standard	Y68A-AAN-N1N	Y68A-AAN-N2N	MB008A	54934-01	–	No indicator
	1½"	–	–	T68E-BAB-B2N	Standard	Y68A-BAN-N1N	Y68A-BAN-N2N	MB008A	–	–	–

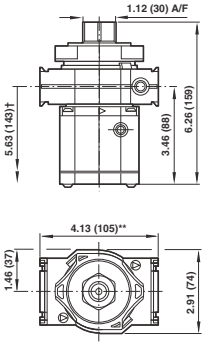
* Reduced light intensity at 12 V.

P64F

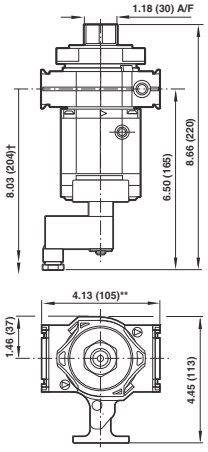
Solenoid operated



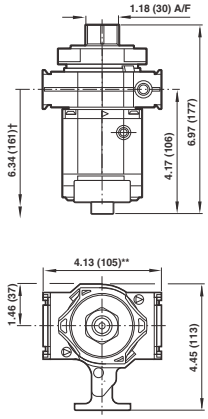
Air pilot operated



Solenoid operated plus manual shut-off with lockout

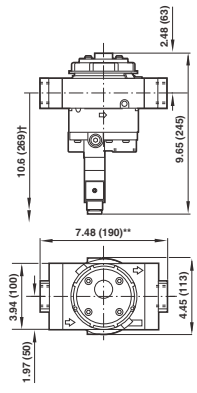


Air pilot operated plus manual shut-off with lockout

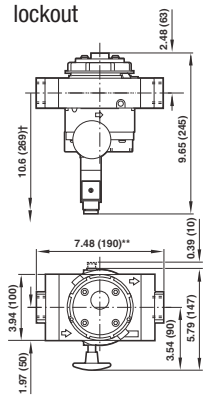


P68F

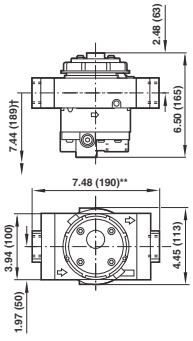
Solenoid operated



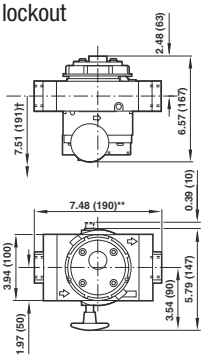
Solenoid operated plus manual shut-off with lockout



Air pilot operated

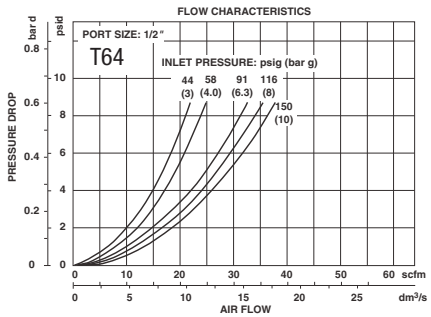


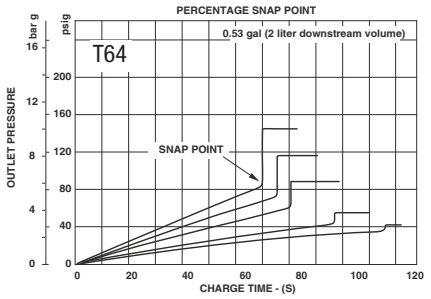
Air pilot operated plus manual shut-off with lockout

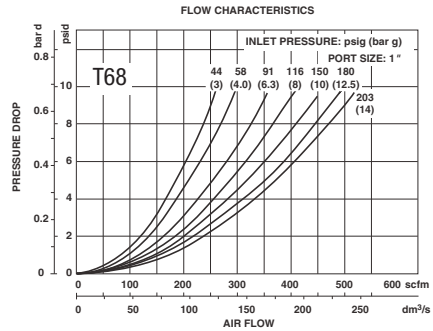


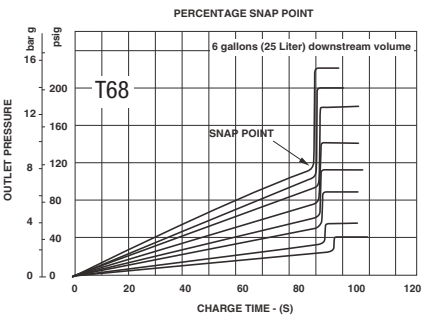
** 7.87" (200 mm) for 1-1/4, 1-1/2 models. † Minimum clearance required to remove unit.

Typical Performance Characteristics









64 Series lockout valves

1/4" to 3/4" port size

Olympian Plus plug in design

Attaches to yoke, upstream or downstream of air processing units.

T64E 3-port/2-position lockout valves help conform to OSHA Lockout Regulations in USA market.

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature*:

0° to 175°F (-20° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Cv factor from IN to OUT ports

1/4 port size: 2.6
3/8 port size: 5.5
1/2 port size: 6.7
3/4 port size: 7.5

Exhaust port threads on T64T models:

1/8 PTF with PTF main ports 1/8 ISO Rc with ISO G and ISO Rc main ports

Materials

Body: Zinc
Slide: Acetal plastic
Elastomers: Nitrile

Ordering Information

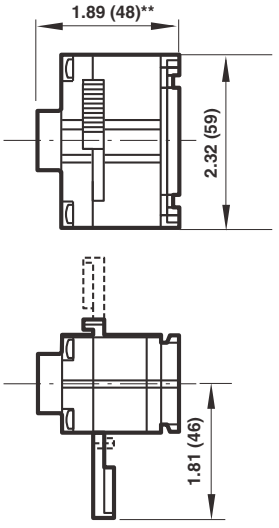
Models listed include PTF threads in the pilot and exhaust ports.

	2-Port/2-Position	3-Port/2-Position (OSHA)	3-Port/2-Position	
Port Size	**No exhaust port**	**Unthreaded exhaust port**	**Threaded exhaust port**	**Weight lbs (kg)**
1/4"	T64B-2AB-P1N	T64E-2AB-P1N	T64T-2AB-P1N	0.89 (0.40)
3/8"	T64B-3AB-P1N	T64E-3AB-P1N	T64T-3AB-P1N	0.88 (0.40)
1/2"	T64B-4AB-P1N	T64E-4AB-P1N	T64T-4AB-P1N	0.84 (0.38)
3/4"	T64B-6AB-P1N	T64E-6AB-P1N	T64T-6AB-P1N	0.84 (0.38)

Service Kits

Type	Part Number
T64B (red slide)	4384-210
T64E (yellow slide)	4384-211
T64T (red slide)	4384-210

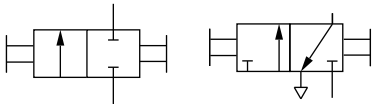
Service kit includes seals and slide.



** Models with 3/4" ports

All Dimensions in Inches (mm)

ISO Symbols



2-Port/2-Position 3-Port/2-Position

T68

Olympian Plus T68 Shut-off & Lockout Valves

3/4", 1", 1-1/4", 1-1/2" Port Sizes

Olympian plug in system

2-port/2-position and 3-port/2-position shut-off valves

Can be locked in open or closed position

T68E 3-port/2-position lockout valves help conform to OSHA Lockout Regulations in USA market. Exhaust outlet is not tapped.

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature*:

0° to +175°F (-20° to +80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C).

Cv factor:

IN to OUT port: 27.5

OUT to EXHAUST port: 0.16

Exhaust port threads on T68H models: 1/4

Materials:

Body: Aluminum

Handle: Zinc

Seals: Nitrile

Ball: Brass

Ordering Information

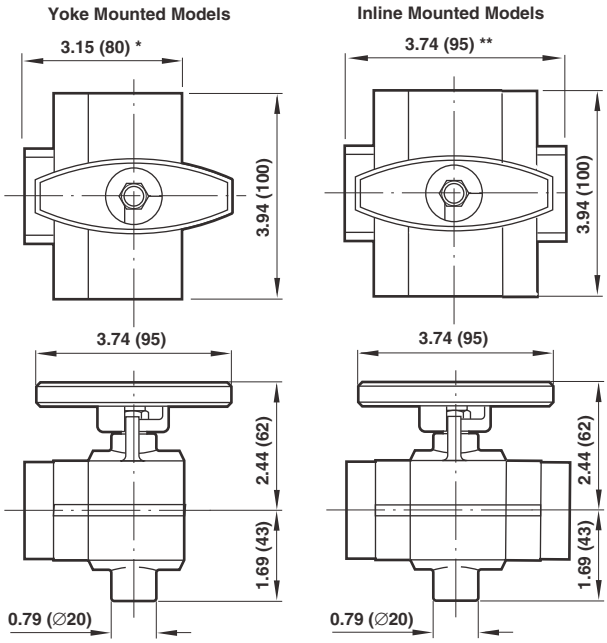
Models listed are with PTF threads.

	3-Port/2-Position (OSHA)		2-Port/2-Position	
Port Size	**Unthreaded exhaust port**	**Weight lbs (kg)**	**No exhaust port**	**Weight lbs (kg)**
3/4"	T68E-6AB-B2N	2.21 (1.00)	T68A-6AB-B2N	2.21 (1.00)
1"	T68E-8AB-B2N	2.12 (0.96)	T68A-8AB-B2N	1.92 (0.87)
1-1/4"	T68E-AAB-B2N	2.07 (0.94)	T68A-AAB-B2N	2.21 (1.00)
1-1/2"	T68E-BAB-B2N	2.16 (0.98)	T68A-BAB-B2N	2.16 (0.98)

Service Kits

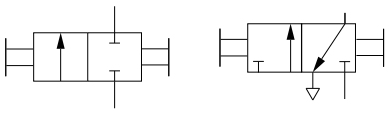
Item	Part Number
Service kit	4384-300

Service kit includes, valve spring, slip ring, valve assembly, diaphragm assembly and necessary seals and 'o' rings.



*** 3.35" (85 mm) for 1-1/2" ported models.**
**** 4.13" (105 mm) for 1-1/2" ported models.**

ISO Symbols



2-Port/2-Position 3-Port/2-Position

Dimensions in inches (mm)

PTH Filter/Regulator-Lubricator Combination Units

07 Series

Compact design

Filter removes liquids and solid particles down to 5 µm

Push to lock adjusting knob with tamper resistant option

Micro-Fog lubricator provides air line lubrication to one or more air driven tools or other devices

Nearly constant oil density output with varying air flow

Fluid:
Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure
Transparent bowl: 150 psig (10 bar)

Metal bowl: 250 psig (17 bar)

Operating temperature*
Transparent bowl: 0° to 125°F (-20° to 50°C)

Metal bowl: 0° to 150°F (-20° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

Typical flow at 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 15 psig (1 bar) from set:

1/8" ports: 10 scfm (5 dm3/s)

1/4" ports: 14 scfm (7 dm3/s)

Drain connection:
1/8" male pipe

Filter/Regulator

Particle removal:
5 µm or 40 µm. Within ISO 8573-1, Class 3 and Class 5

Gauge ports:
1/8" PTF with PTF main ports

1/8" ISO Rc with ISO Rc main ports

1/8" ISO Rc with ISO G main ports

Automatic drain operation:
Spitter type drain operates momentarily when a rapid change in air flow occurs or when the supply pressure is reduced.

Lubricator
Start point (i.e., minimum flow required for lubricator operation): 0.5 scfm (0.24 dm3/s) at 90 psig (6.3 bar) inlet pressure

Nominal bowl capacity:
1 fluid ounce (31 ml)

Materials

Bodies: Zinc

Filter/Regulator bonnet: Acetal

Filter/Regulator valve seat: Acetal

Bowls

Transparent: Polycarbonate

Metal: Zinc

Lubricator sight-feed dome: Transparent nylon

Filter element: Sintered polypropylene

Elastomers: Nitrile

Ordering Information

Models listed include PTF threads, transparent bowls, filter/regulator with relieving diaphragm, automatic drain, 5 µm element, 5 to 100 psig (0.3 to 7 bar) outlet pressure adjustment range*, gauge, and microfog lubricator .

Port Size	Model Number	Weight lbs (kg)
1/8"	PTH-100-A1AA	0.87 (40)
1/4"	PTH-200-A1AA	0.87 (40)

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

PTH Filter/Regulator-Lubricator Combination Units

07 Series

Alternative Models

PTH-★★★-★★★A

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

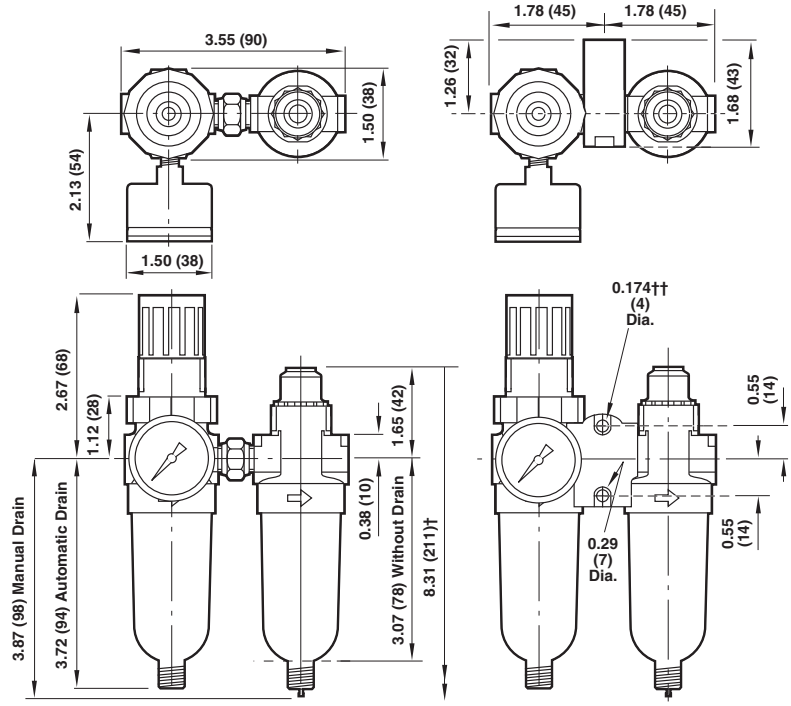
Filter/Regulator Bowl	Outlet Pressure Adjustment Range* bar	psig	Relief Type	Gauge	Substitute
Transparent	5 to 100	0.3 to 7	Relieving	With	00
Transparent	5 to 100	0.3 to 7	Relieving	Without	01
Metal / no sight glass	5 to 100	0.3 to 7	Relieving	With	40
Metal / no sight glass	5 to 100	0.3 to 7	Relieving	Without	41

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Lubricator Reservoir	Substitute
Transparent with drain	A
Metal with drain	M

Filter/Regulator Element	Substitute
5 µm	1
40 µm	3

Filter/Regulator Drain	Substitute
Automatic	A
Manual	M



†Minimum distance required to remove bowl
†† Mounting holes

All Dimensions in Inches (mm)

Service Kits

Item	Type	Part number
Service kits, filter/regulator	relieving, 5 µm element	3820-02
	non relieving, 5 µm element	3820-01
Service kit, lubricator		3795-03
Replacement drains	Manual	773-03
	Automatic	3654-02
Replacement wall bracket for PTH unit	Integral 2 piece	6700-30

Filter/regulator service kit contains slip ring, diaphragm, valve seat with o-ring, valve, valve spring, element, element gasket, and bowl o-ring.
Lubricator service kit contains sight-feed dome seal, cartridge o-ring, and bowl o-ring.

F07

Miniature Series 07 General Purpose Filter

1/8" and 1/4" Port Sizes

Compact design

Protects air operated devices by removing liquid and solid contaminants

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)
Metal bowl: 250 psig (17 bar)

Operating temperature:*

Transparent bowl:
-30° to 125°F (-34° to 50°C)
Metal bowl:
-30° to 175°F (-34° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

Particle removal:

5 µm or 40 µm filter element

Air quality:

Within ISO 8573-1, Class 3 and Class 5 (particulates)

Drain connection:

1/8" male pipe thread

Materials

Body: zinc
Transparent bowl: Polycarbonate
Metal bowl: Zinc (without sight glass)
Element: sintered polypropylene
Elastomers: neoprene & nitrile

Ordering Information

Models listed include PTF threads, automatic drain, transparent bowl and 5 µm element.

Port Size	Model Numbers	Flow scfm (dm3/s) *	Weight lbs (kg)	Replacement elements	Service kit**
1/8"	F07 100 A1TA	19 (9)	0.28 (0.13)	3652-17 (5µm)	3652-17
1/4"	F07 200 A1TA	24 (11.5)	0.28 (0.13)	3652-18 (40µm)	3652-18

* Approximate flow at 90 psig (6.3 bar) inlet pressure and 5 psig (0.35 bar) pressure drop.

** Service kit includes element, element gasket, and bowl o-ring.

Alternative Models

F07 ★00 ★★★★

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

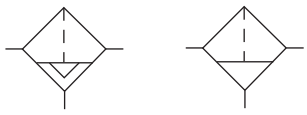
Threads	Substitute
PTF	A
ISO G parallel	G

Bowl	Substitute
Transparent	T
Metal	M

Element	Substitute
5 µm	1
40 µm	3

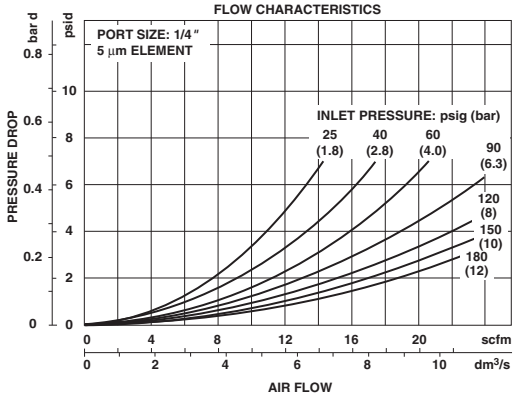
Drain	Substitute
Automatic	A
Manual	M

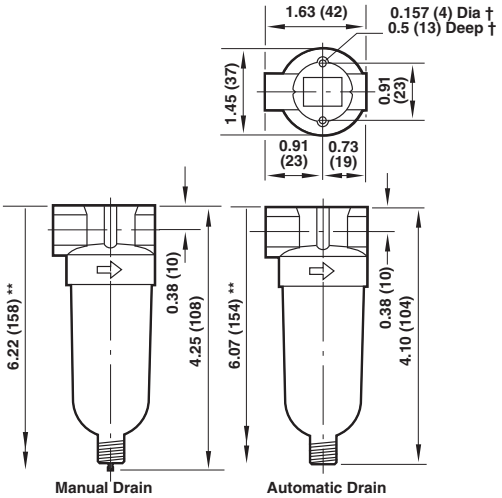
ISO Symbols



Auto Drain Manual Drain

Typical Performance Characteristics





** Minimum clearance to remove bowl.
† Mounting holes.

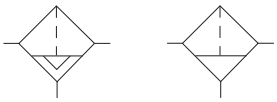
Dimensions in inches (mm).

F39

Oil removal (Coalescing) Filter

1/8" and 1/4" Port Sizes

ISO Symbols



Automatic Drain | Manual Drain

Compact design

High efficiency oil and particle removal

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

Transparent bowl: 150 psig (10 bar)

Metal bowl: 250 psig (17 bar)

Operating temperature:*

Transparent bowl:

-30° to 125°F (-34° to 50°C)

Metal bowl:

-30° to 150°F (-34° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 2°C (35°F)

Oil aerosol removal:

Down to 0.01 µm

Air quality:

Within ISO 8573-1, Class 1 (particulates) and Class 2 (oil content)

Maximum remaining oil content of air leaving the filter: 0.01ppm at 70°F (21°C) with an inlet oil concentration of 17 ppm.

Maximum flow with 90 psig (6.3 bar) inlet pressure†:

1/8 ports, 6.0 scfm (2.8 dm3/s)

1/4 ports, 6.4 scfm (3 dm3/s)

† Maximum flow to maintain stated oil removal performance.

Nominal bowl size:

1 fluid ounce (31 ml)

Drain connection:

1/8" male pipe thread

Automatic drain operation:

Spitter type drain operates momentarily when a rapid change in air flow occurs or when the supply pressure is reduced.

Materials

Body: Zinc

Bowl:Transparent: Polycarbonate

Metal: Zinc

Element: Synthetic fiber and polyurethane foam

Elastomers: Neoprene & nitrile

Ordering Information

Models listed include PTF threads, automatic drain and transparent bowl.

Port Size	Model Numbers	Saturated Flow* scfm (dm3/s)	Dry Flow scfm (dm3/s)	Weight lbs (kg)	Element Kit**
1/8"	F39 100 A0TA	6.0 (2.8)	11.2 (5.3)	0.28 (0.13)	4141-10
1/4"	F39 200 A0TA	6.4 (3.0)	12.2 (5.8)	0.28 (0.13)	4141-10

* Maximum flow at 90 psig (6.3 bar) inlet pressure to maintain stated oil removal performance.

** Includes element and O-rings

Alternative Models

F39 ★00 ★0★★

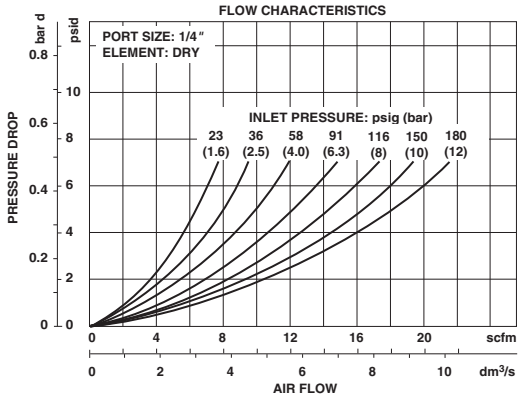
Port Size	Substitute
1/8"	1
1/4"	2

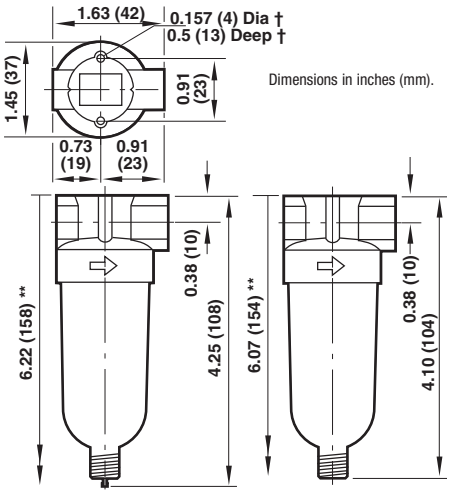
Threads	Substitute
PTF	A
ISO G parallel	G

Bowl	Substitute
Transparent	T
Metal	M

Drain	Substitute
Automatic	A
Manual	M

Typical Performance Characteristics





Dimensions in inches (mm).

** Minimum clearance to remove bowl.

† Mounting holes.

Miniature General Purpose Regulators

R07, R46

R07 General purpose

Snap action knob locks pressure setting when pushed in

Standard relieving models allow reduction of outlet pressure even when the system is dead-ended

R46 Non-repairable

Wrench flats for easy installation

Relieving piston design allows reduction of downstream pressure when the system is dead-ended

Choice of left to right or right to left flow

R07

R46

Technical data

R07

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

300 psig (20 bar)

Operating temperature:

-34° to 150°F (-35° to 65°C) *

* Air supply must be dry enough to avoid ice formation at temperatures below 2°C (35°F).

R46

Fluid:

Compressed air

Maximum pressure:

250 psig (17 bar)

Operating temperature*:

-30° to 150°F (-34° to 65°C)

*Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

R07

Body: zinc

Bonnet: acetal

Knob: Acetal

Valve seat: acetal

Elastomers: nitrile

R46

Body: zinc

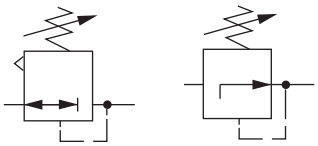
Knob: nylon

Valve: nitrile compound

Valve seat: acetal

Elastomers: nitrile

ISO Symbols



Relieving Non relieving

Ordering Information

Port Size	Model	Flow† scfm (dm3/s)	Weight lb (kg)
1/8"	R07 100 RGKA	14 (6.5)	0.31 (0.19)
1/4"	R07 200 RGKA	15 (7)	0.31 (0.19)
1/4"	R46 200 RGLA	13 (6)	0.2 (0.09)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

† Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and 15 psig (1 bar) droop from set.

Alternative Models

R07 ★00 ★★★★

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

Diaphragm	Substitute
Relieving	R
Non relieving	N

Gauges	Substitute
With	G
Without	N

Threads	Substitute
PTF	A
ISO G parallel	G

Outlet Pressure Adjustment Ranges*	Substitute
1 to 10 psig (0.1 to 0.7 bar)	A
5 to 50 psig (0.3 to 3.5 bar)	E
5 to 100 psig (0.3 to 7 bar)	K
5 to 125 psig (0.3 to 8.6 bar)	L

R46-★★★-R★★★

Port Size	Substitute
1/4"	2

Flow Direction With Knob Up and Gauge Visible	Substitute
Left to Right	00
Right to Left	02

Gauges	Substitute
With	G
Without	N

Threads	Substitute
PTF	A
ISO G parallel	G

Outlet Pressure Adjustment Ranges*	Substitute
5 to 50 psig (0.3 to 3.5 bar)	E
5 to 125 psig (0.3 to 8.5 bar)	L
5 to 150 psig (0.3 to 10 bar)	M

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

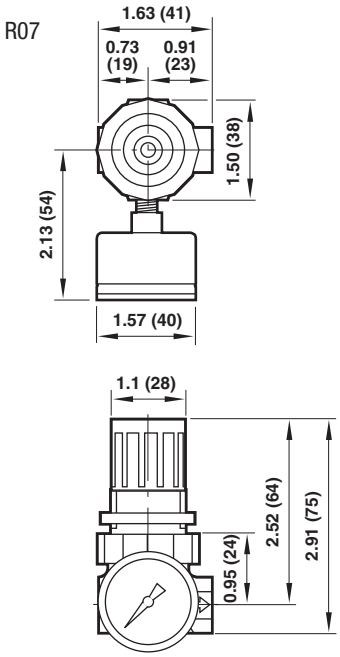
Miniature General Purpose Regulators

R07, R46

Dimensions in inches (mm).

Panel mounting hole diameter 1.19" (30 mm)
Maximum panel thickness 0.25" (6 mm)

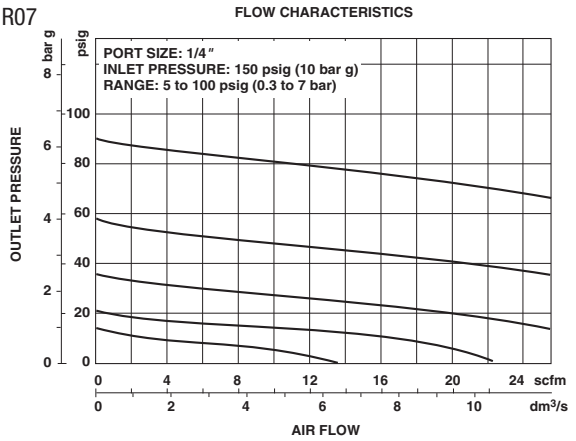
R07



All Dimensions in Inches (mm)

Typical Performance Characteristics

R07

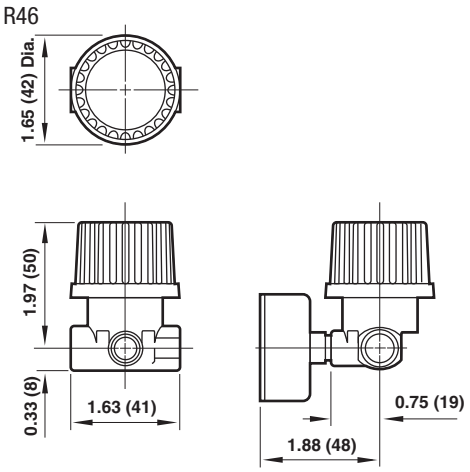


R07 Service Kits

Item	Type	Part number
Service kit	Relieving	3407-02
	Non relieving	3407-01

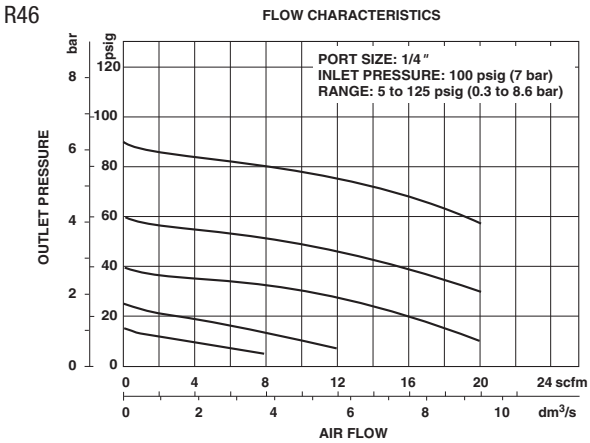
Service kit includes slip ring, diaphragm, standard valve seat with o-ring, valve, valve spring.

R46



Typical Performance Characteristics

R46



Miniature Filter/Regulators

B07 General purpose, and B39 Oil removal (coalescing) filter/regulators

Full flow gauge ports
High efficiency oil and particle removal
Excellent flow and regulation characteristics

B07

B39

Technical data

B07 Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure

Transparent bowl: 150 psig (10 bar)
Metal bowl: 250 psig (17 bar)

Particle removal:

5µm

Operating temperature*

Transparent bowl:
30° to 125°F (-34° to 50°C)
Metal bowl:
-30° to 150°F (-34° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

B39

Fluid:

Compressed air

Maximum pressure

Transparent bowl: 150 psig (10 bar)
Metal bowl: 250 psig (17 bar)

Aerosol oil removal:

Down to 0.01 µm

Operating temperature*

Transparent bowl:
-30° to 125°F (-34° to 50°C)
Metal bowl:
-30° to 150°F (-34° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

Materials

B07

Body: zinc
Bonnet: acetal
Valve seat: acetal
Transparent bowl: polycarbonate
Metal: zinc
Element: sintered polypropylene
Elastomers: nitrile

B39

Body: zinc
Bonnet: acetal
Valve: brass/nitrile
Valve seat: acetal
Transparent bowl: Polycarbonate
Metal: zinc
Element: synthetic fiber and polyurethane foam
Elastomers: nitrile

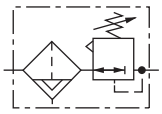
Ordering Information

Models listed include PTF threads, transparent bowl, relieving diaphragm, gauge, automatic drain, 5 to 100 psig (0.3 to 7 bar) outlet pressure adjustment range* .

Port Size	Model Number	Flow scfm (dm3/s)	Weight lbs (kg)	Service kit
1/8"	B07 102 A1KA	13 (6.2 dm3/s)	0.57 (0.26)	3820-02
1/4"	B07 202 A1KA	14 (6.5 dm3/s)	0.57 (0.26)	3820-02
1/8"	B39 102 A0KA	4.0 (1.9)	0.57 (0.26)	3407-66
1/4"	B39 202 A0KA	4.0 (1.9)	0.57 (0.26)	3407-66

*Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

ISO Symbols



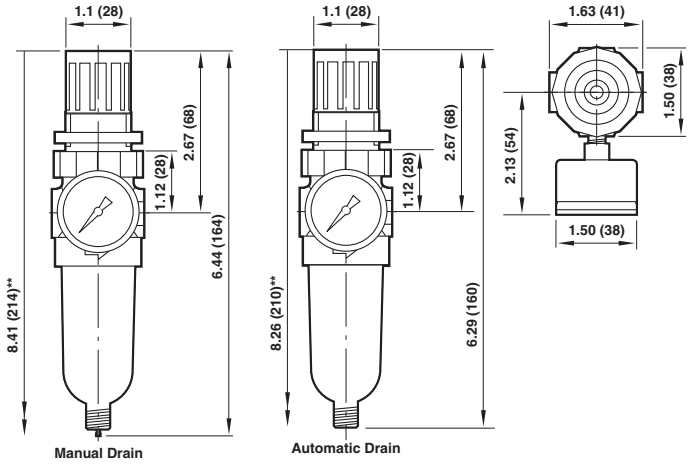
Automatic Drain
Relieving

Miniature Filter/Regulators

B07, and B39

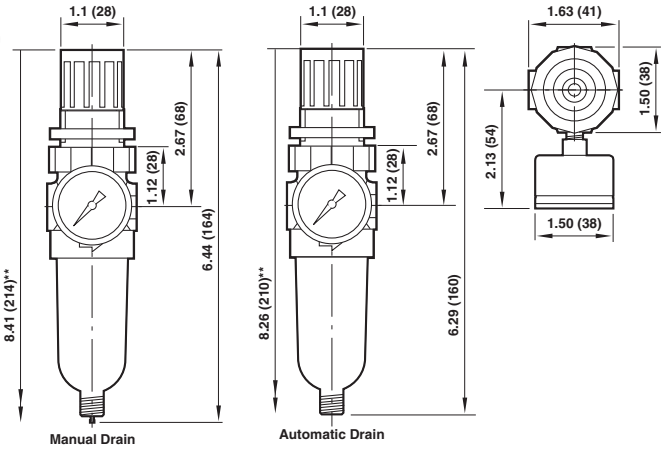
Dimensions in inches (mm).

B07



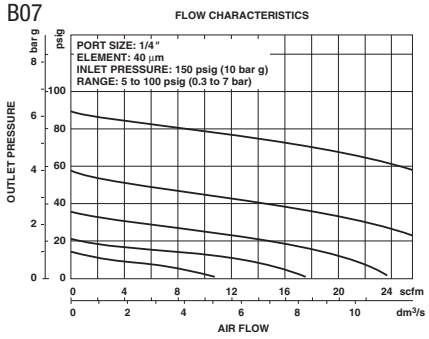
** Minimum clearance to remove bowl
Panel mounting hole diameter 1.19" (30 mm)
Panel thickness: 0.25" (6 mm)

B39

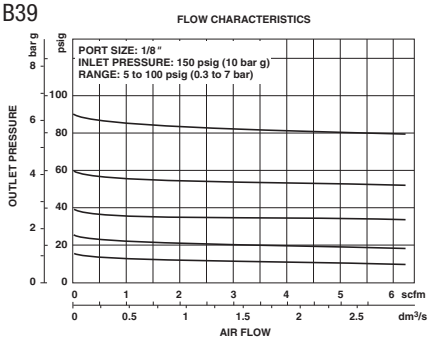


Typical Performance Characteristics

B07



B39



Miniature Micro-Fog Lubricator

L07 Lubricators

All around (360°) visibility of the sight-feed dome simplifies installation and adjustment

Screw-on bowl reduces maintenance time

Can be disassembled without the use of tools or removal from the air line

Technical data

L07

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure

Transparent bowl: 150 psig (10 bar)

Metal bowl: 250 psig (17 bar)

Operating temperature*

Transparent bowl: 0° to 125°F (-20° to 50°C)

Metal bowl: 0° to 175°F (-20° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

Start point (i.e. minimum flow required for lubricator operation):

0.5 scfm (0.24 dm3/s) at 90 psig (6.3 bar) inlet pressure

Nominal bowl size:

1 fluid ounce (31 ml)

Drain connection:

Will fit 1/8-27 and 1/8-28 pipe thread

Materials

Body: Zinc

Bowl

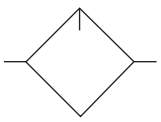
Transparent: Polycarbonate

Metal: Zinc

Sight-feed dome: Transparent nylon

Elastomers: Neoprene & nitrile

ISO Symbol



L07 with drain

Ordering Information

Models listed have PTF threads.

Port Size	Model Numbers	Flow scfm (dm3/s)*	Weight lbs (kg)
1/8"	L07-100-MPAA	10 (5.0 dm3/s)	0.28 (0.13)
1/4"	L07-200-MPAA	14 (6.7 dm3/s)	0.28 (0.13)

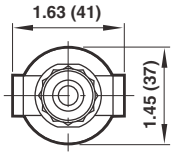
* Approximate flow at 90 psig (6.3 bar) inlet pressure and 7 psig (0.5 bar) pressure drop.

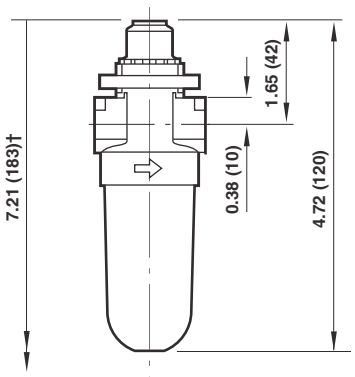
Miniature Micro-Fog Lubricator

L07 Lubricators

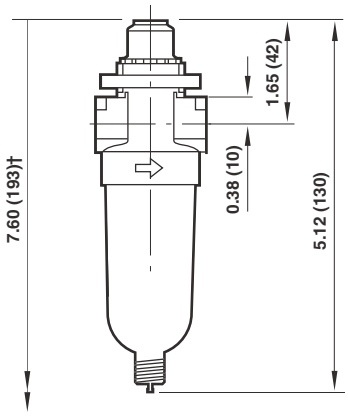
Dimensions in inches (mm)

L07





Without Drain

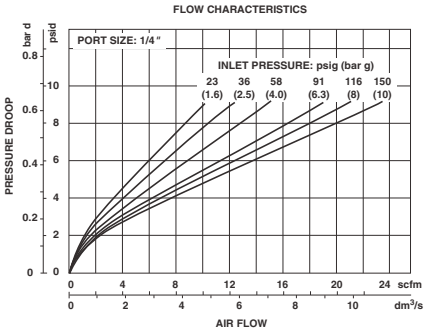


Manual Drain

Panel mounting hole diameter: 1.9" (30 mm)
Maximum panel thickness: 0.25" (6 mm)
† Minimum clearance to remove bowl.

Typical Performance Characteristics

L07



L07 Service Kits

Item	Type	Part number
Service kit	Seal and o-ring	3795-03
Replacement drain	Manual	773-03

Service kit includes o-ring, seal, and bowl o-ring.

F17

17 Series General Purpose Filter

3/4", 1", 1-1/4", 1-1/2" Port Sizes

Screw-on bowl reduces maintenance time

Can be serviced without the use of tools or removal from the air line

Optional visual service indicator Optional electrical service indicator also available

Protects air operated devices by removing liquid and solid contaminants

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature:*

-30° to 175°F (-34° to 80°C)

*Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

Oil aerosol removal:

5 µm, or 40 µm filter element

Air quality:

Within ISO 8573-1, Class 3 and Class 5 (particulates)

Nominal bowl size:

1 quart (1 liter)

Manual drain connection:

Will fit 1/8-27 and 1/8-28 male pipe thread.

Automatic drain connection:

Will fit 1/8-27 and 1/8-28 female pipe thread.

Materials

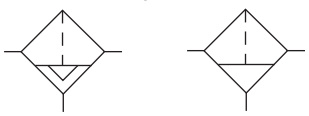
Body: Aluminum

Bowl: Aluminum

Bowl sight glass: Pyrex

Elastomers: Neoprene and nitrile

ISO Symbols



Auto Drain | Manual Drain

Ordering Information

Models listed include automatic drain, 40 µm element, metal bowl with sight glass, and PTF threads.

Port Size	Model Numbers	Flow scfm (dm3/s)*	Weight lbs (kg)	Filter elements**	Service kit††
3/4"	F17 600 A3DA	325 (153)	4.26 (1.93)	5311-01 (5µm)	5578 05 (all filters)
1"	F17 800 A3DA	425 (201)	4.15 (1.88)	5311-03 (40µm)	
1-1/4"	F17 A00 A3DA	425 (201)	4.39 (1.99)		
1-1/2"	F17 B00 A3DA	425 (201)	4.30 (1.95)		

* Typical flow with a 40 µm element at 90 psig (6.3 bar) inlet pressure and 5 psig (0.35 bar) pressure drop.
** Filter elements are sintered bronze
††Service kit includes bowl o-ring, drain gasket, and element gasket.

Alternative Models

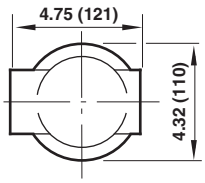
F17 ★00 ★★D★

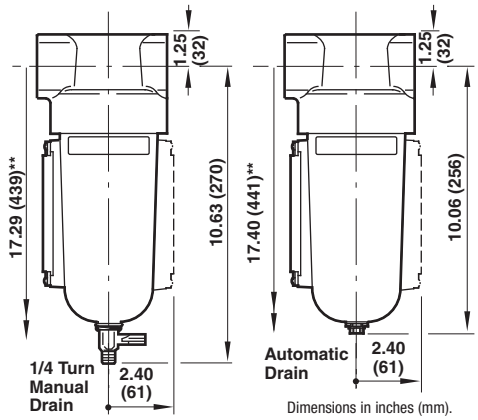
Port Size	Substitute
3/4"	6
1"	8
1-1/4"	A
1-1/2"	B

Threads	Substitute
PTF	A
ISO G parallel (not available with 1-1/2" ported units)	G

Element	Substitute
5 µm	1
40 µm	3

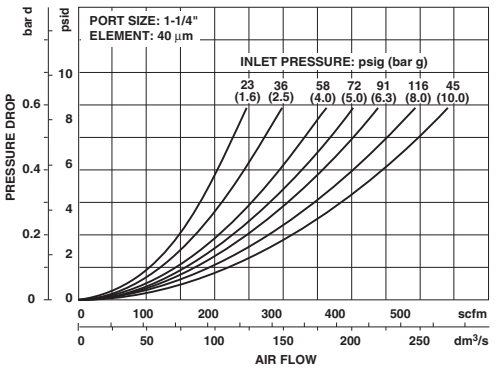
Drain	Substitute
Automatic	A
Manual 1/4 turn	M





Dimensions in inches (mm).

Typical Performance Characteristics



F18

18 Series General Purpose Filter

1-1/2" and 2" Port Sizes

Highly visible, prismatic liquid level indicator lens

Can be disassembled without removal from the air line

Optional visual service indicator

Optional electrical service indicator

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature*:

-30° to 175°F (-34° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Particle removal:

5 µm, or 40 µm filter element

Air quality:

Within ISO 8573-1, Class 3 and Class 5 (particulates)

Manual drain connection:

Will fit 1/8-27 and 1/8-28 male pipe thread.

Automatic drain connection:

Will fit 1/8-27 and 1/8-28 female pipe thread. - Flexible tube with 3/16" (5mm) minimum I.D. can be connected to the automatic drain. Drain may fail to operate if the tube I.D. is less than 3/16" (5mm). Avoid restrictions in the tube.

Materials

Body: Aluminum

Intermediate body: Aluminum

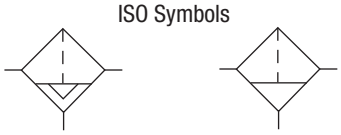
Bowl: Aluminum

Metal bowl liquid level indicator: Transparent nylon

Filter element: Sintered bronze

Elastomers: Neoprene and nitrile

ISO Symbols



Ordering Information

Models listed include automatic drain, 40 µm element, metal bowl with sight glass, and PTF threads.

Port Size	Model Numbers	Flow scfm (dm3/s) *	Weight lbs (kg)	Replacements elements	Service kit**
1-1/2"	F18 B00 A3DA	1400 (661)	14.90 (6.76)	5882-11 (5µm)	5945 50
2"	F18 C00 A3DA	1400 (661)	14.65 (6.65)	5882-13 (40µm)	

* Typical flow with a 40 µm element at 90 psig (6.3 bar) inlet pressure and 5 psig (0.35 bar) pressure drop.

** Service kit contains body o-ring, element gasket, automatic drain gasket, and bowl o-ring.

Alternative Models

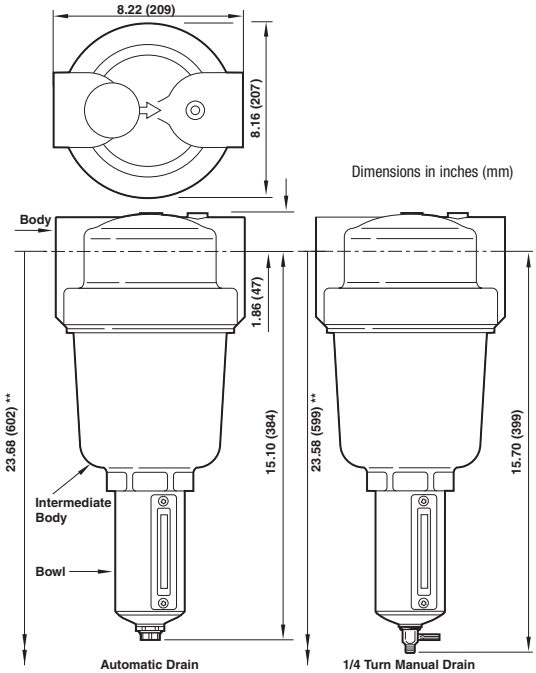
F18 ★00 ★★D★

Port Size	Substitute
1-1/2"	B
2"	C

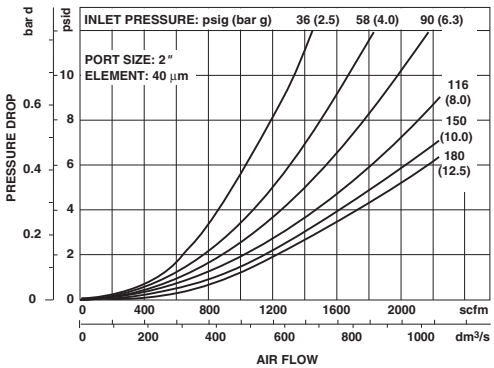
Threads	Substitute
PTF	A
ISO G parallel	G

Element	Substitute
5 µm	1
40 µm	3

Drain	Substitute
Automatic	A
Manual 1/4 turn	M



Typical Performance Characteristics



F46

F46 Oil Removal (Coalescing)

Filter 3/4", 1", and 1-1/4" Port Sizes

High efficiency oil and particle removal

Standard service indicator turns from green to red when the filter element needs to be replaced

NOTE: Install an F17 filter with a 5 µm filter element upstream of the F46 filter for maximum service life.

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature:*

-30° to 150°F (-34° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

Oil aerosol removal:

Down to 0.01 µm

Air quality:

Within ISO 8573-1, Class 1 (particulates) and Class 2 (oil content)

Maximum remaining oil content in outlet air:

0.01ppm at 70°F (20°C) with an inlet oil concentration of 17 ppm.

Nominal bowl size:

1 quart US (1 liter)

Manual drain connection:

Will fit 1/8-27 and 1/8-28 male pipe thread.

Automatic drain connection:

Will fit 1/8-27 and 1/8-28 female pipe thread. - Flexible tube with 3/16" (5mm) minimum I.D. can be connected to the automatic drain. Drain may fail to operate if the tube I.D. is less than 3/16" (5mm). Avoid restrictions in the tube.

Materials

Body: Aluminum

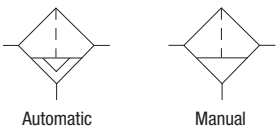
Bowl: Aluminum

Bowl sight glass: Pyrex

Elastomers: Neoprene and nitrile

Filter element: Synthetic fiber and polyurethane foam

ISO Symbols



Ordering Information

Models listed include service indicator, automatic drain, metal bowl with sight glass, and PTF threads.

Port Size	Model Numbers	Maximum Flow* scfm (dm3/s)	Weight lbs (kg)	Element Kit**
3/4"	F46 601 A0DA	90 (42)	4.11 (1.86)	5351-04
1"	F46 801 A0DA	125 (59)	4.05 (1.84)	
1-1/4"	F46 A01 A0DA	125 (59)	4.29 (1.95)	

* Maximum flow for oil-saturated element at 90 psig (6.3 bar) inlet pressure to maintain stated oil removal performance.

**Service kit contains coalescing element, element o-ring, bowl o-ring, and drain gasket.

Alternative Models

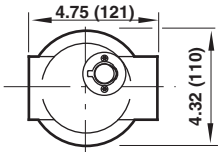
F46 ★01 ★0★★

Port Size	Substitute
3/4"	6
1"	8
1-1/4"	A

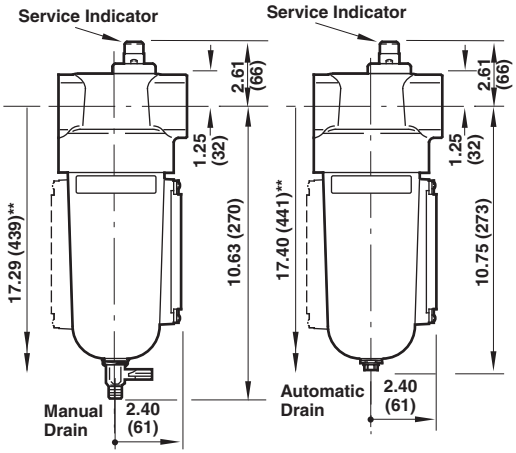
Threads	Substitute
PTF	A
ISO G parallel	G

Bowl	Substitute
Metal with sight glass	D

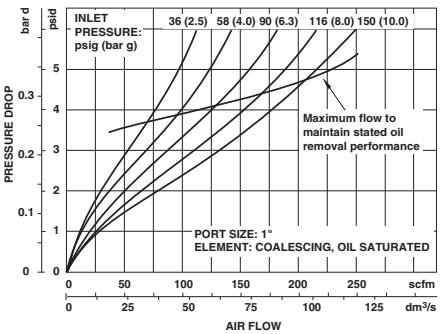
Drain	Substitute
Automatic	A
Manual	M



Dimensions in inches (mm).



Typical Performance Characteristic



F47

18 Series Oil Removal Filter

(Coalescing) 1-1/2" and 2" Port Sizes

Can be disassembled without removal from the air line

Standard service indicator

Optional electrical service indicator

NOTE: Install an F18 filter with a 5 µm filter element upstream of the F47 filter for maximum service life.

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature:*

-30° to 150°F (-34° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Oil aerosol removal:

Down to 0.01 µm

Air quality:

Within ISO 8573-1, Class 1 (particulates) and Class 2 (oil content)

Maximum remaining oil content in outlet air:

0.01 ppm at 70°F (20°C) with an inlet concentration of 17 ppm

Nominal bowl size:

7 fluid ounce (0.2 liter)

Manual drain connection:

Will fit 1/8-27 and 1/8-28 male pipe thread.

Automatic drain connection:

Will fit 1/8-27 and 1/8-28 female pipe thread. - Flexible tube with 3/16" (5mm) minimum I.D. can be connected to the automatic drain. Drain may fail to operate if the tube I.D. is less than 3/16" (5mm). Avoid restrictions in the tube.

Materials

Body, intermediate body, bowl: Aluminum

Metal bowl liquid level indicator lens: Transparent nylon

Filter element: Synthetic fiber and polyurethane foam

Elastomers: Neoprene and nitrile

Service indicator

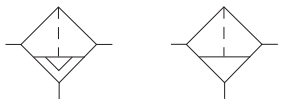
Body: Transparent nylon

Internal parts: Acetal

Spring: Stainless steel

Elastomers: Nitrile

ISO Symbols



Ordering Information

Models listed include service indicator, automatic drain, metal bowl with sight glass, and PTF threads.

Port Size	Body and Element	Model Numbers	Flow scfm (dm3/s)*	Weight lbs (kg)	Element kit
1-1/2"	Standard	F47-B01-A0DA	250 (118)	15.51 (7.04)	std flow 3203-02
2"	Standard	F47-C01-A0DA	300 (142)	14.26 (6.47)	hi-flow 3203-05
2"	High Flow	F47-C21-A0DA	600 (283)	22.17 (10.06)	

* Maximum flow at 90 psig (6.3 bar) inlet pressure to maintain stated oil removal performance.

Alternative Models

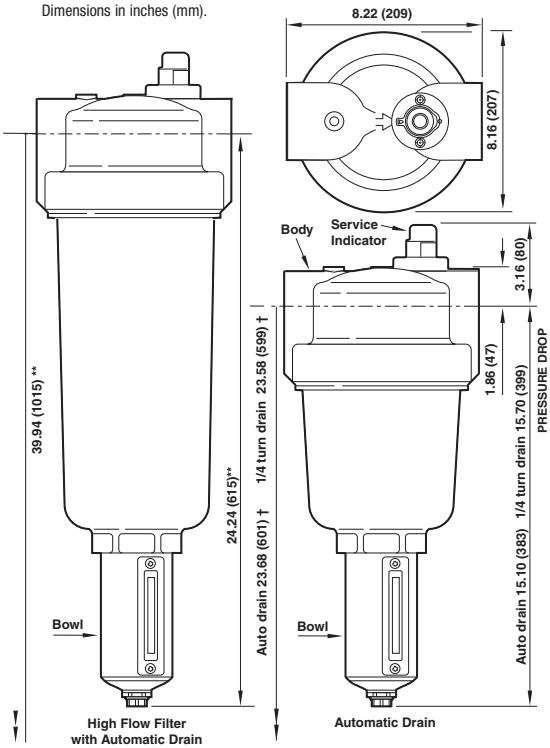
F47-★01-★0D★

Port Size	Substitute
1-1/2"	B
2"	C

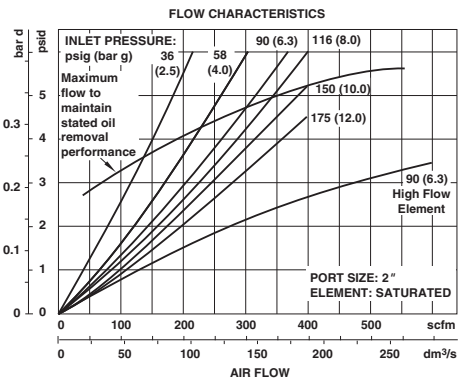
Threads	Substitute
PTF	A
ISO G parallel	G

Drain	Substitute
Automatic	A
Manual, 1/4 turn	M

Dimensions in inches (mm).



Typical Performance Characteristics



General Purpose Regulators

R17, R18

R17

High flow regulator, 3/4" to 1-1/2" ports

R18

High flow pilot regulator, 1-1/2" and 2"

Provides rapid response, superior pressure regulation, and excellent stability.

Constant bleed feature in pilot regulator provides quick response and maintains accurate downstream pressures

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

R17

Maximum pressure:

300 psig (20 bar)

Operating temperature:

-30°F to 175°F (-34° to 80°C) (R17)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

Materials

Body: aluminum
Bonnet: aluminum
Bottom plug: acetal
Valve: aluminum and nylon
Elastomers: nitrile

R18

Inlet pressure range:

10 psig (0.7 bar) minimum to 450 psig (31 bar) maximum

Operating temperature:

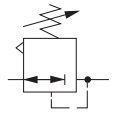
0°F to 175°F (-18° to 80°C) (R17)

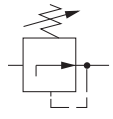
* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

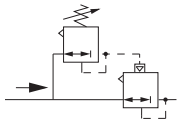
Materials

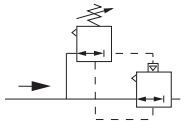
Body: aluminum
Bonnet: aluminum
Bottom plug: aluminum
Pilot Operated Regulator: aluminum
Elastomers: Nitrile

ISO Symbols


R 17 Relieving


R17 Non relieving


R18 with Conventional Pilot Regulator


R18 with Feedback Pilot Regulator


R17


R18

Ordering Information

Models listed have PTF threads, knob adjustment, relieving type diaphragm, and gauge,

Port Size	Model Number	Flow† scfm (dm3/s)	Weight lbs (kg)
1"	R17 800 RGLA	480 (227)	2.02 (0.92
2"	R18 C05 RGLA	2000 (944)	8.27 (3.75)

† Typical flow with 100 psig (0.7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 15 psig (1 bar) from set.

Alternative Models

R17 ★0★ ★★★★

Port Size	Substitute
3/4"	6
1"	8
1-1/4"	A
1-1/2"	B

Adjustment	Substitute
Knob	0
T-bar	1

Threads	Substitute
PTF	A
ISO G	G

Outlet Pressure Adjustment Ranges*	Substitute
5 to 50 psig (0.3 to 3.5 bar)	E
5 to 125 psig (0.3 to 8.5 bar)	L
10 to 250 psig (0.7 to 17 bar)	S

Gauges	Substitute
With	G
Without	N

Diaphragm	Substitute
Relieving	R

R18 ★★★ ★★★★

Port Size	Substitute
1-1/2"	B
2"	C

Pilot Regulator Type	Substitute
R40 Conventional	05
R41 Feedback **	06

Diaphragm	Substitute
Relieving	R
Non relieving	N

Port Threads	Substitute
PTF	A
ISO G	G

Outlet Pressure Adjustment Ranges*	Substitute
5 to 50 psig (0.3 to 3.5 bar)	E
5 to 125 psig (0.3 to 8.5 bar)	L
10 to 250 psig (0.7 to 17 bar)	S

Gauges	Substitute
With	G
Without	N

* Outlet pressures can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

** Requires relieving diaphragm and 250 psig (17 bar) spring (**R** in 7th position and **S** in 9th position) e.g. R18-B06-**R**N**S**G . The 06 option cannot be used at an outlet pressure below 100 psig. For feedback control at pressures below 100 psig use an 11-104-001 with a pilot operated R18.

NOTE: The R18 can be used with other pilot regulators and proportional valves such as 11-400, 20-AL, 11-104, VP50 and VP51

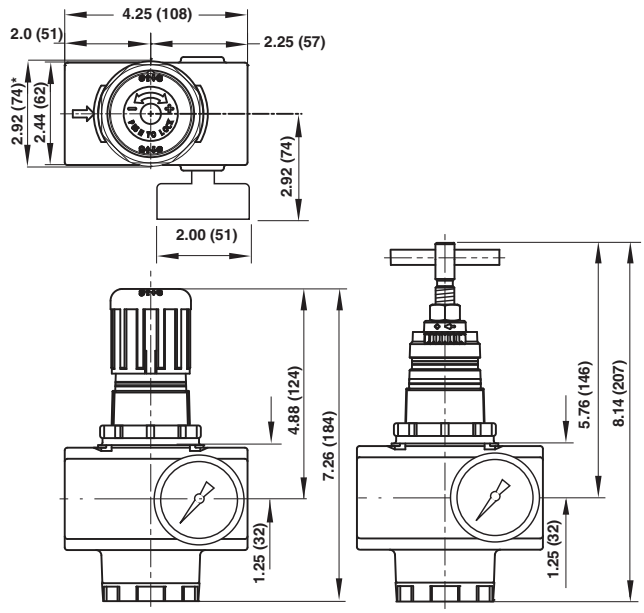
General Purpose Regulators

R17, R18

Dimensions in inches (mm).

Panel mounting hole diameter: 2.28" (58 mm)
Panel thickness: 0.06" to 0.16" (2 to 4 mm)

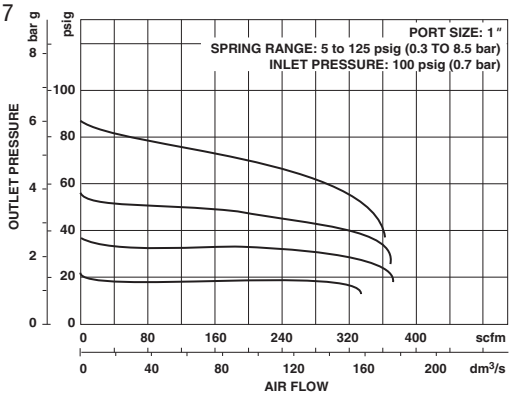
R17



Panel mounting hole diameter: 2.28" (58 mm)
Panel thickness: 0.06" to 0.16" (2 to 4 mm)
***OD of panel mount nut. Nut not included**

Typical Performance Characteristics

R17

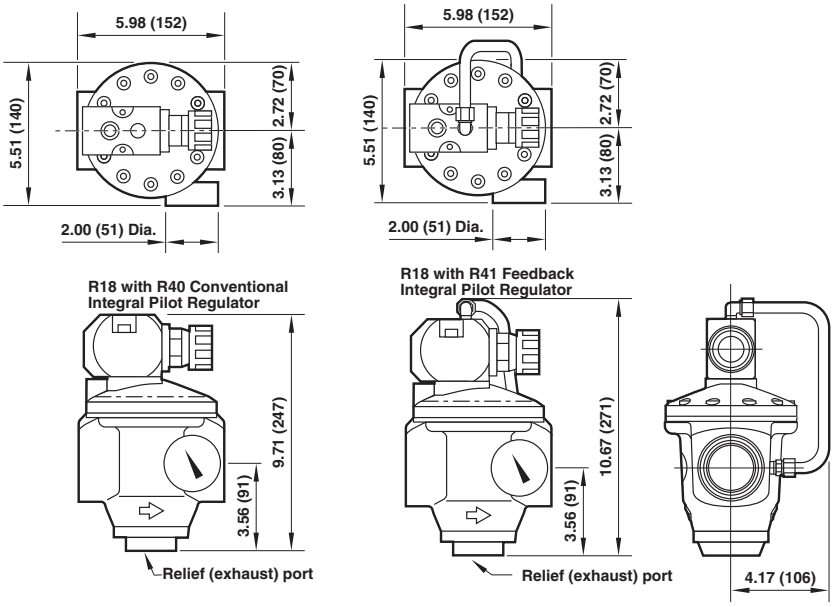


Service Kits

Item	Type	Part number
Service kit	Relieving	5578-02
	Non relieving	5578-01

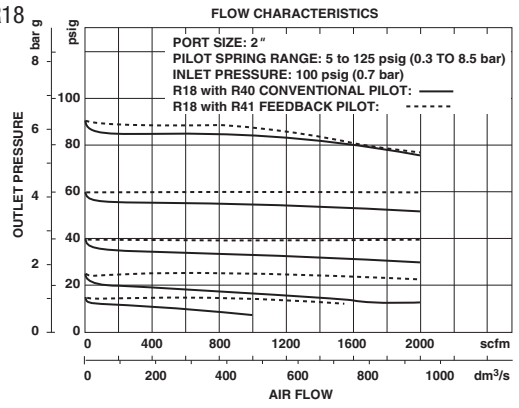
Service kit contains, diaphragm, all o-rings, valve, and valve spring.

R18



Typical Performance Characteristics

R18



Service Kits

Item	Type	Part number
Service kits	R18 Pilot operated regulator**	5945-40
	R40 and R41 Pilot regulators†	5945-41

** Contains filter screen and all o-rings for R18 pilot operated regulator.

† Contains diaphragm, valve spring, valve, guide bushing, filter screen, and all o-rings for R40 and R41 pilot regulators.

11-002 & 20AG Pressure Regulator

1/4", 3/8", and 1/2", G3/4, and G1 ports

Large diaphragm provides accurate and quick response to changing flow demands and line pressure

Floating valve pin provides positive valve seating

Balanced valve minimizes effect of variations in inlet pressure on outlet pressure

Standard relieving models allow reduction of downstream pressure when the system is dead-ended

11-002

20AG

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

400 psig (28 bar)

Operating temperature*:

-30° to 175°F (-34° to 80°C)

*Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and 15 psig (1 bar) droop from from set:

1/4" and 3/8" ports: 60 scfm (28 dm3/s)

1/2" ports: 200 scfm (95 dm3/s)

Gauge ports

1/8" PTF with PTF main ports

Rc1/8 with ISO G and ISO Rc main ports

Materials

Body: Zinc

Bonnet: Aluminum

Valve: Brass and nitrile

Valve seat: Brass

Elastomers: Nitrile

Bottom plug

1/4" and 3/8" Ports: Brass

1/2" Ports: Nylon

Ordering Information

Models listed have T-bar adjustment, relieving diaphragm. PTF models are 5 to 125 psig (0.3 to 8.5 bar) outlet pressure adjustment range*. For alternative models please contact the factory.

Port Size	Model Number	Flow scfm (dm3/s)	Weight lbs (kg)
1/4"	11-002-013	60 (30)†	1.9 (0.86)
3/8"	11-002-037	60 (30)†	1.9 (0.86)
1/2"	11-002-061	200 (100)†	2.0 (0.91)
G3/4	20AG-X6G/PD100	160 (80)**	6.1 (2.75)
G3/4	20AG-X6G/PH100	160 (80)**	6.3 (2.85)
G1	20AG-X8G/PD100	200 (100)**	5.4 (2.44)
G1	20AG-X8G/PH100	200 (100)**	6.4 (2.90)

† Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and 15 psig (1 bar) droop from set.

*Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

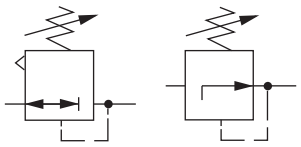
** Maximum flow with 7 bar inlet pressure, 4 bar outlet pressure and a pressure droop of 1 bar.

Service Kits

Type	Part number
Relieving, 1/4" and 3/8" ports	529-03
Relieving, 1/2" ports	535-03
Non-relieving, 1/4" and 3/8" ports	529-01
Non-relieving, 1/2" ports	535-01

Kit includes diaphragm, valve, valve spring, and o-rings.

ISO Symbols

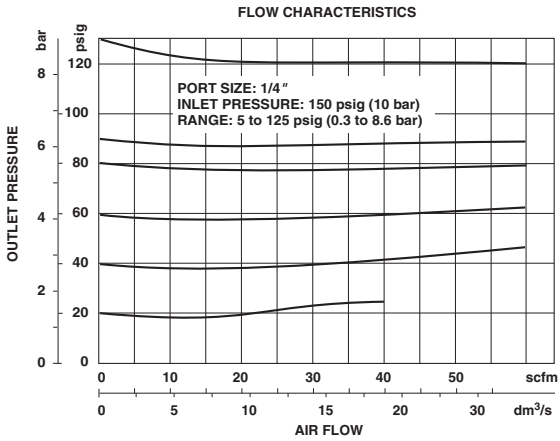


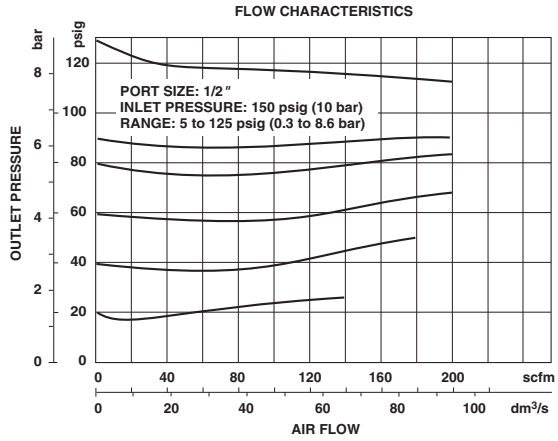
Relieving Non relieving

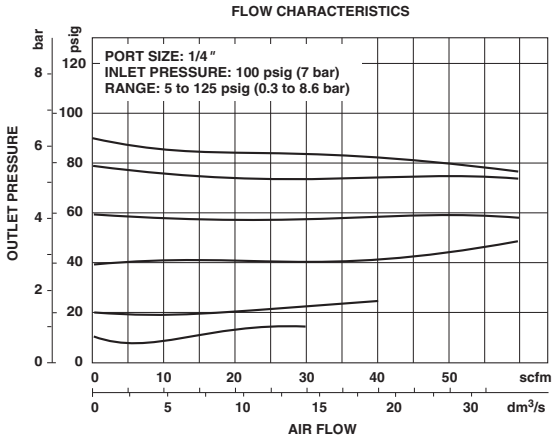
11-002 Pressure Regulator

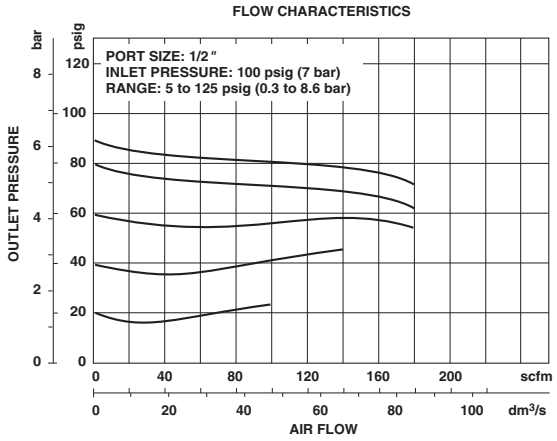
1/4", 3/8", and 1/2" ports

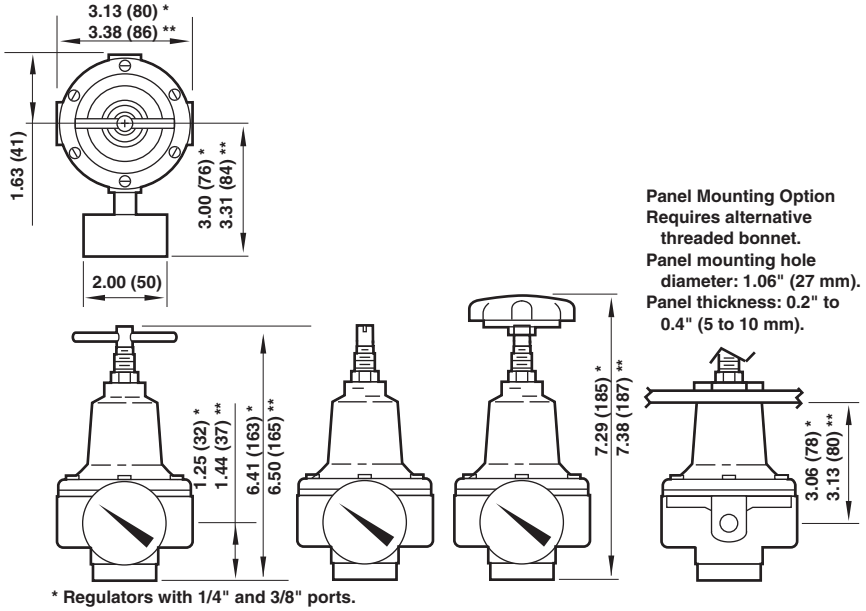
Typical Performance Characteristics











Panel Mounting Option
Requires alternative threaded bonnet.
Panel mounting hole diameter: 1.06" (27 mm).
Panel thickness: 0.2" to 0.4" (5 to 10 mm).

*** Regulators with 1/4" and 3/8" ports.**
**** Regulators with 1/2" ports.**

Dimensions in inches (mm)

R24 Micro-Trol Pressure Regulator

1/4" to 1-1/4" ports

High flow regulator with exceptional high relief flow

Adjusting knob can be set in the field to stop at some maximum pressure setting or some minimum pressure setting

Easy to adjust even at high output pressures

Balanced valve minimizes effect of variations in inlet pressure on outlet pressure

Constant bleed feature provides maximum sensitivity to system changes

Relieving feature allows reduction of downstream pressure when the system is dead-ended

Full flow gauge ports

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum inlet pressure:

300 psig (20 bar)

Operating temperature:

0° to 150°F (-20° to 80°C)*

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Maximum bleed rate at 50 psig (3.5 bar) outlet pressure:

0.031 scfm (0.016 dm^3/s) †

† Maximum bleed rate occurs under dead-end (no flow) conditions.

Port sizes:

Main	Gauge
1/4"	1/4"
3/8"	3/8"
1/2", 3/4", 1", 1-1/4"	1/2"

Thread type: PTF, ISO G, or Rc

Materials

Body, top cap: Zinc

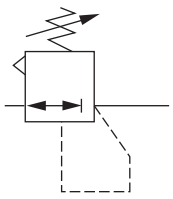
Main valve, adjusting screw: Brass

Pilot valve, relief valve: Acetal

Elastomers: Nitrile

Bottom Plug: Acetal

ISO Symbol



Relieving

Ordering Information.

Models listed are constant bleed units with relieving diaphragm, 10 to 125 psig (0.7 to 8 bar) outlet pressure adjustment range, and PTF threads.

Port Size	Model	Flow (scfm)	Weight lb (kg)
1/2"	R24-400-RGLA	200	1.79 (0.81)
1-1/4"	R24-A00-RGLA	700	2.65 (1.20)

Alternative Models

R24 ★00 R★★★

Port Size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6
1"	8
1-1/4"	A

Threads	Substitute
PTF	A
ISO G parallel	G

Outlet Pres Adj. Ranges*	Substitute
5 to 30 psig (0.3 to 2 bar)	C
5 to 60 psig (0.3 to 4 bar)	F
10 to 125 psig (0.7 to 8 bar)	L
10 to 250 psig (0.7 to 17 bar)	S

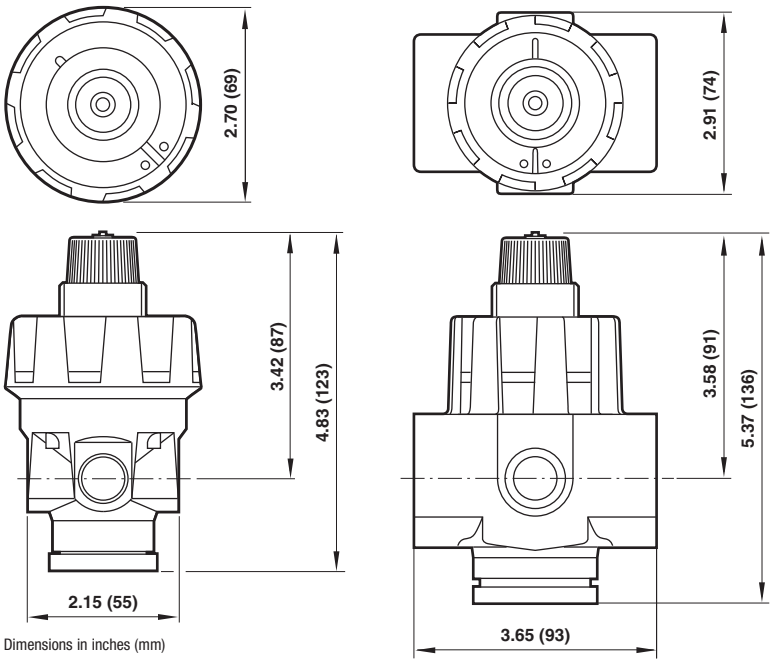
Gauge	Substitute
With	G**
Without	N

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

** A factory installed gauge is only available with PTF threads (A in last position of model number). If a gauge is desired with ISO threads (B or G in last position), order the desired gauge and appropriate reducing bushing from Accessories.

R24 Micro Trol Pressure Regulator

1/4" to 1-1/4" ports



Dimensions in inches (mm)

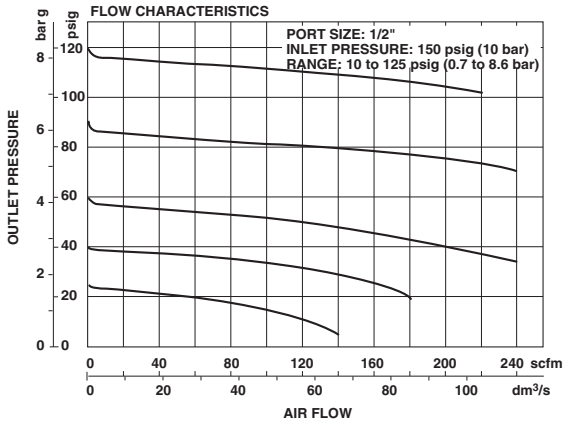
Panel mounting hole diameter: 1.26" (32 mm)
Maximum panel thickness: 0 to 0.12" (3 mm)

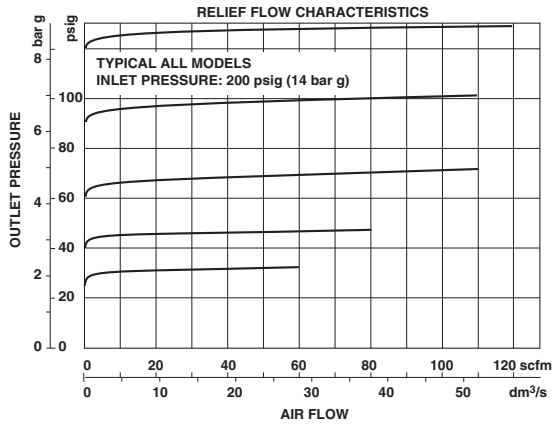
Service Kits

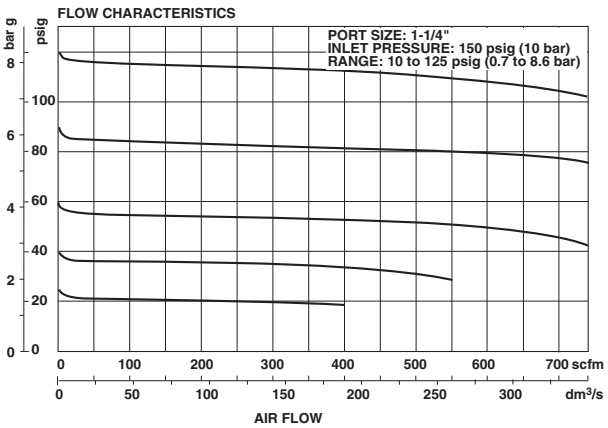
Item	Type	Part number
Service kit	1/4, 3/8, 1/2	5292-52
Service kit	3/4, 1, 1-1/4	5292-53

Service kits include seals, main valve and spring.

Typical Performance Characteristics
RANGE: 10 to 232 psi (0.7 to 16 bar)







11-018 Precision Air Pressure Regulator

1/4" Port Size

Fast response

Minimum overshoot during flow changes

Constant bleed feature provides maximum sensitivity to system changes

Relieving feature allows reduction of downstream pressure when the system is dead-ended

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Note: 5 micron prefiltration and oil-free air required.

Inlet pressure range*

Low Pressure Models: 8 to 150 psig (0.55 to 10.3 bar)

High Pressure Models: 10 to 200 psig (0.7 to 13.8 bar)

* Inlet pressure must be at least 7 psig (0.5 bar) greater than the adjusted outlet pressure for proper operation.

Operating temperature**:

32° to 160°F (0° to 70°C)

** Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Repeatability

Low Pressure Models: 0.02 psig (0.001 bar) for flow change; 0.05 psig (0.004 bar) when turning supply off and on

High Pressure Models: 0.08 psig (0.006 bar) for flow change; 0.16 psig (0.011 bar) when turning supply off and on

Constant bleed feature: Under dead-end conditions, a small, constant bleed of pilot air will escape thru the relief passage in the bottom plug. This will be accompanied by a slight residual outlet pressure of 1 to 4 inches H20 (2.5 to 10 millibar).

Gauge ports:

1/4" PTF

Materials

Body and bonnet: Zinc

Main valve: Polycarbonate

Main valve seat: Teflon

Pilot valve: Stainless steel

Pilot valve seat: Aluminum

Main diaphragm: Nitrile

Pilot diaphragm

Low Pressure Models:302 SS

High Pressure Models: Nitrile

Bottom plug: Brass

Elastomers: Nitrile, neoprene, polyurethane

Ordering Information

Models listed have PTF threads, hand wheel adjustment, and relieving diaphragm. A gauge is not included.

Port Size	Outlet Pressure Adjustment Range*	Model Number	Flow scfm (dm3/s)	Weight lbs (kg)
1/4"	0.4 to 10 psig (0.03 to 0.69 bar)	11-018-146 (low pressure)	12 (5.66)†	1.4 (0.64)
1/4"	1.0 to 60 psig (0.1 to 4.1 bar)	11-018-100 (low pressure)	12 (5.66)†	1.4 (0.64)
1/4"	3 to 150 psig (0.2 to 10.3 bar)	11-018-110 (high pressure)	12 (5.66)††	1.4 (0.64)

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

† Typical flow with 100 psig (7 bar) inlet pressure, 60 psig (4.1 bar) set pressure and 0.125 psig (0.009 bar) droop from set.

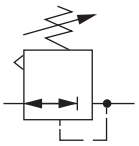
†† Typical flow with 200 psig (14 bar) inlet pressure, 60 psig (4.1 bar) set pressure and 0.250 psig (0.017 bar) droop from set.

Service Kits

Type	Part number
Low Pressure Models	2787-01
High Pressure Models	2787-02
Special tool to install main valve seat	681-01

Service kit includes o-rings, seals, pilot diaphragm, pilot spring, main diaphragm, main valve, main valve seat, diffuser screen, constant bleed orifice and orifice filter

ISO Symbols

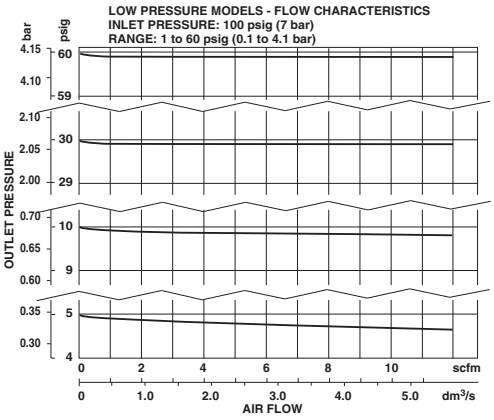


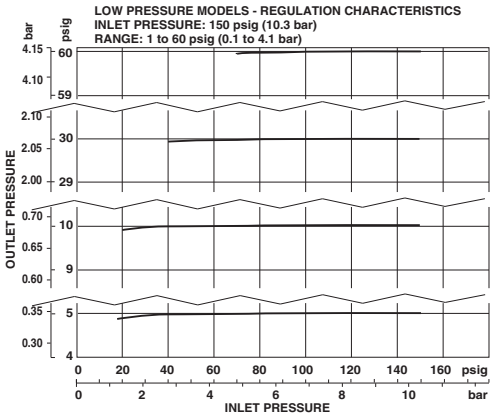
Relieving

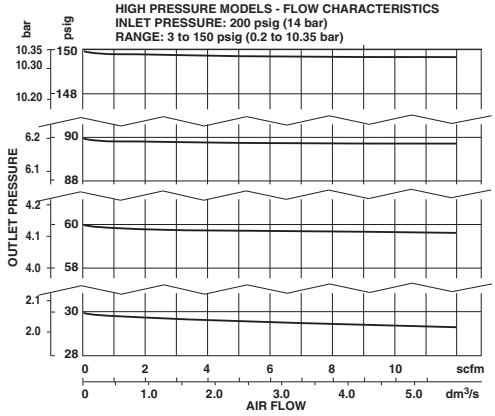
11-018 Precision Air Pressure Regulator

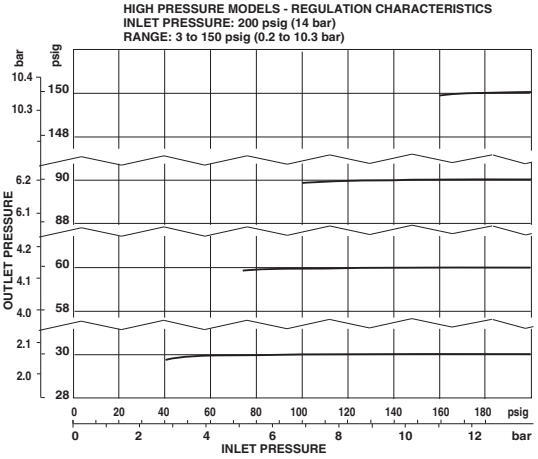
1/4" Port Size

Typical Performance Characteristics

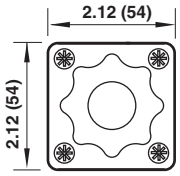


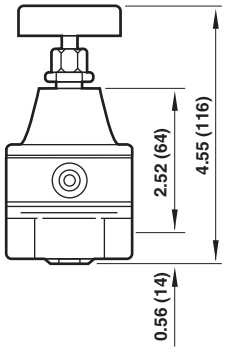






Panel mounting hole diameter: 0.47" (12 mm)
Maximum panel thickness: 0.094" (2.4 mm)





Dimensions in inches (mm)

R38 Instrument Regulator and B38 Filter/Regulator

Aluminum Model 1/4" Port Size

B38

R38

Compact instrument units with high performance

Stable regulation with temperature compensation

Excellent flow and regulation characteristics

Panel Mounting facility

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

290 psig (20 bar)

Operating temperature:

-40° to 175°F (-40° to 80°C) *

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Typical relief differential at 30 psig (2 bar) outlet pressure:

2.3 psig (0.16 bar)

Maximum bleed flow at 30 psig (2 bar) outlet pressure (relieving types only):

0.003 scfm (1.5 cm3/s)†

† Maximum bleed rate occurs under dead-end (no flow) conditions.

Gauge ports:

1/4 NPT

Materials

Body: Aluminum

Bonnet: Aluminum

Adjusting screw: Steel

Elastomeric materials: Nitrile

Ordering Information

Models listed are relieving type with 0.6 to 30 psig (0.04 to 2 bar) outlet pressure adjustment range *, and PTF threads. A gauge is not included.

Port Size	Model Number	Flow† scfm (dm3/s)	Weight lbs (kg)
1/4" PTF	R38-200-RNCA	17 (8)	1.06 (0.48)
1/4" PTF	B38-200-B2CA	17 (8)	1.18 (0.54)

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

† Typical flow with 100 psig (7 bar) inlet pressure, 15 psig (1 bar) set pressure and 1 psig (0.05 bar) droop from set.

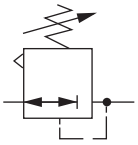
Service Kits

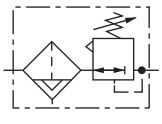
R38 Item	Type	Part number
30 psig (2 bar) Range	Relieving	R38-100-R
	Non relieving	R38-100-NR
60, 100 psig (4 bar, 7 bar) Range	Relieving	R38-101-R
	Non relieving	R38-101-NR

Service kit includes diaphragm assembly, o-ring, valve, valve spring and 8 pan head screws.

B38 Filter Elements	
B38-100A (5)	5 µm
B38-100A (25)	25 µm

ISO Symbols


R38

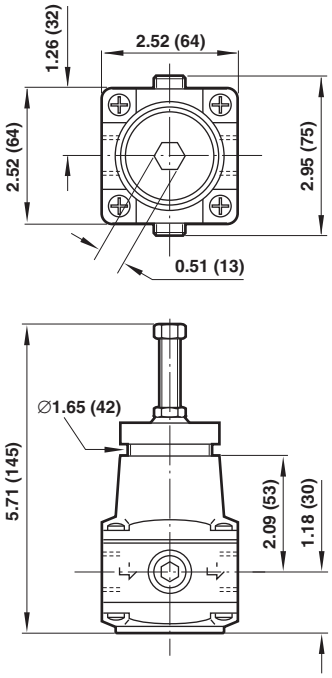

B38

All Dimensions in Inches (mm)

R38 Instrument Regulator

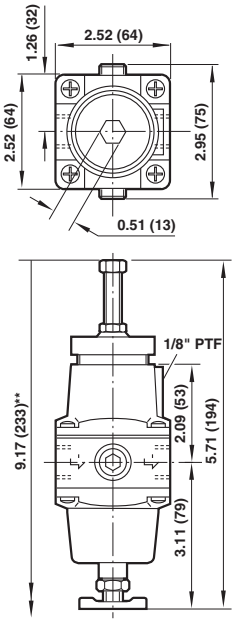
Aluminum Model 1/4" Port Size

R38



Panel mounting hole diameter: 1.65" (42 mm)
Panel thickness: 0" to 0.24" (0 to 6 mm)

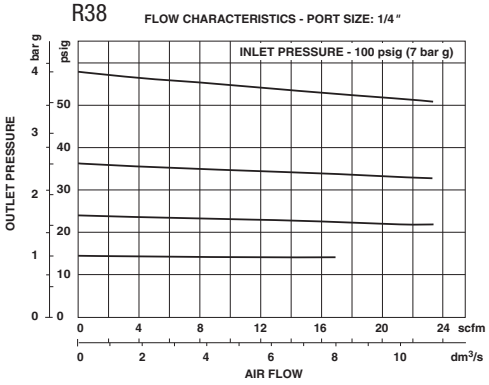
B38

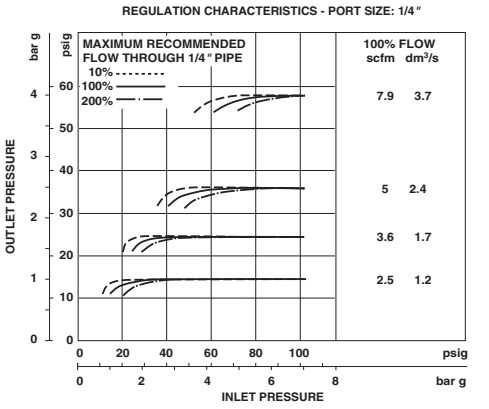


** Minimum clearance required to remove bowl.
Panel mounting hole diameter: 1.65" (42 mm)
Maximum panel thickness: 0.24" (6 mm)

Typical Performance Characteristics

R38





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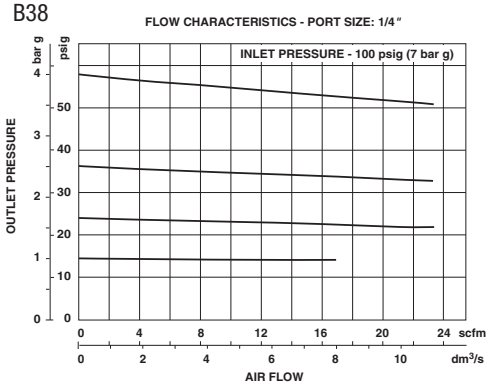
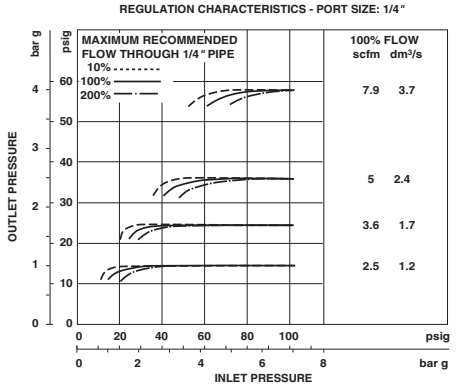




R40, R41

R40 Conventional Pilot Regulator, and R41 Feedback Pilot Regulator

1/4" Port Size

Pilot regulators are used to control the outlet pressure of a pilot operated regulator (ordered separately)

R41 can be close coupled to a 2" R18 pilot regulator

Conventional pilot regulator provides good pressure regulation, rapid response to changing flow demands, and excellent stability.

Feedback pilot regulator provides superior pressure regulation under changing flow demands where changes in flow demand are not sudden or cyclic.

Constant bleed feature provides maximum sensitivity to system changes

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Inlet pressure range:

10 psig (0.7 bar) to 450 psig (31 bar) maximum

Operating temperature:

0° to 175°F (-20° to 80°C) **

** Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Maximum bleed rate at 50 psig (3.5 bar) outlet pressure:

0.25 scfm (0.12 dm3/s)†

†Maximum bleed rate occurs under dead-end (no flow) conditions.

Pilot ports:

1/4" PTF, ISO G, or ISO Rc

R41 feedback port: 1/8" PTF, ISO G, or ISO Rc

Materials

Body, bonnet: Aluminum

Valve: Teflon

Elastomers: Nitrile

Ordering Information

Models listed are relieving with constant bleed, 10 to 250 psig (0.7 to 17 bar) outlet pressure adjustment range *, PTF ports.

Port Size	Type	Model	Flow† scfm (dm3/s)	Weight lb (kg)
1/4"	Conventional Pilot	R40-200-BNSA	6.4 (3)	1.66 (0.75)
1/4"	Feedback Pilot	R41-204-BNSA††	6.4 (3)	1.66 (0.75)

† Typical flow with 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and 15 psig (1 bar) droop from set.

†† Do not use the R41 feedback pilot regulator to control outlet pressures at or less than 100 psig (7 bar). Use the 11-104 feedback pilot regulator at those pressures.

Alternative Models

R★★ 2★★ BN★★

Type	Substitute
R40 Conventional	40
R41 Feedback	41

Mounting/Type	Substitute
Remote/R40 Conventional	00
Remote/R41 Feedback	04

Threads	Substitute
PTF	A
ISO G parallel	G

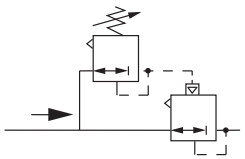
Outlet Pressure Adjustment Ranges*	Substitute
2 to 50 psig (0.1 to 3.5 bar) R40 only	E
5 to 125 psig (0.3 to 8.5 bar) R40 only	L
10 to 250 psig (0.7 to 17 bar)	S

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

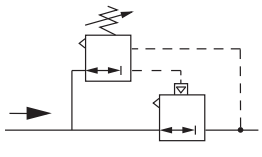
Feedback Pilot Regulator Warning

The feedback line must sense the pilot operated regulator outlet pressure and must be connected before turning on the air supply. If the feedback line is not connected, the pilot operated regulator outlet pressure will rapidly increase to the inlet pressure when the adjusting knob on the pilot regulator is turned clockwise.

ISO Symbols



R40 Conventional Pilot Regulator with Pilot Operated Regulator

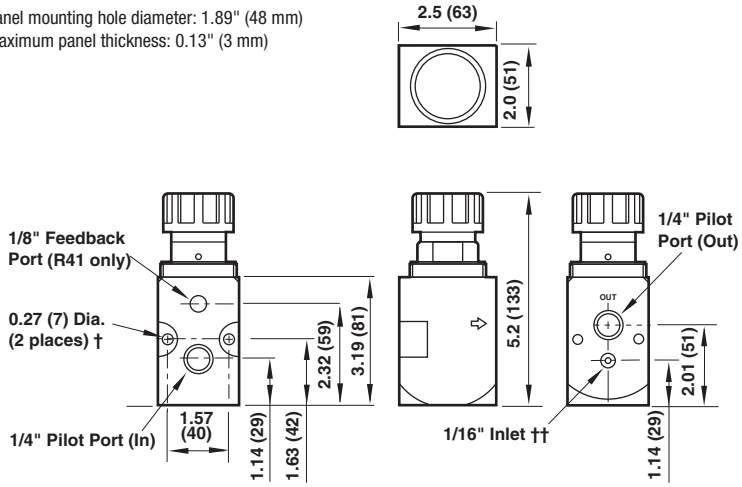


R41 Feedback Pilot Regulator with Pilot Operated Regulator

R40, R41

R40 Conventional Pilot Regulator, and R41 Feedback Pilot Regulator 1/4" Port Size

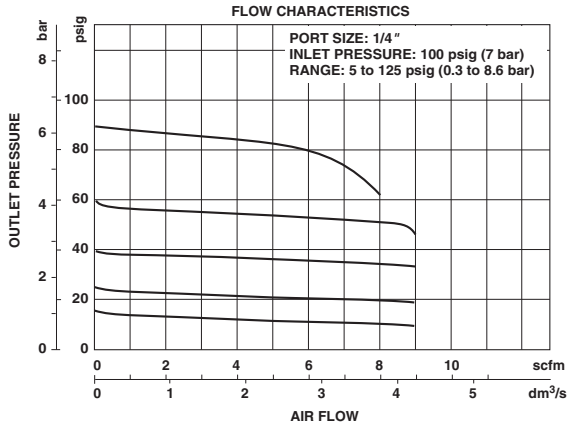
Panel mounting hole diameter: 1.89" (48 mm)
Maximum panel thickness: 0.13" (3 mm)



† Mounting holes for subbase mounting.
†† Air inlet for subbase mounting.

Dimensions in inches (mm)

Typical Performance Characteristics



Service Kits

Type	Part number
R40, R41	5945-41

Service kit contains diaphragm, valve spring, guide bushing, valve, valve spring, filter screen, and all o-rings.

11-400, 20AL

Conventional Pilot Regulators

1/4" Port Size

Pilot regulators are used to control the outlet pressure of a pilot operated regulator (ordered separately)

The pilot regulator is installed in an accessible location in the compressed air system; pilot operated regulator is installed at any point without regard to accessibility

Conventional pilot regulator provides good pressure regulation, rapid response to changing flow demands, and excellent stability.

Constant bleed feature provides maximum sensitivity to system changes

Relief feature allows reduction of downstream pressure when the system is dead-ended

Technical data

Fluid:

Compressed air filtered to 5µm, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum inlet pressure:

360 psig (25 bar)

Operating temperature:

0° to 175°F (-20° to 80°C) *

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Typical flow: with 100 psig (7 bar) inlet pressure, 23 psig (1.6 bar) set pressure and 1.5 psig (0.1 bar) droop from from set: 4.2 scfm (2 dm3/s)

Gauge ports:

1/8" PTF

Materials:

Body, bonnet: Zinc

Elastomers: Nitrile

Ordering Information.

Models listed are relieving with constant bleed, PTF threads, without gauge.

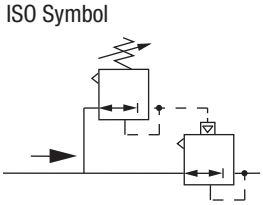
Port Size	Model Number	Range psig (bar)	Weight lbs (kg)
1/4"	11-400-2G/AC103	1 to 30 (0.06 to 2)	1.98 (0.90)
1/4"	11-400-2G/AE103	1 to 60 (0.06 to 4)	2.07 (0.94)
1/4"	11-400-2G/AG103	2 to 100 (0.16 to 7)	2.2 (1.00)
1/4"	20AL-X2G/AK103	100 to 300 (7 to 20)	2.3 (1.05)

Service Kits

Type	Part number
11 400-20AL-X	11 400-100/20AL

Service kit includes: diaphragm assemblies, valve assembly, valve spring o-rings and valve seats for pilots.

ISO Symbol



Conventional Pilot Regulator
with Pilot Operated Regulator

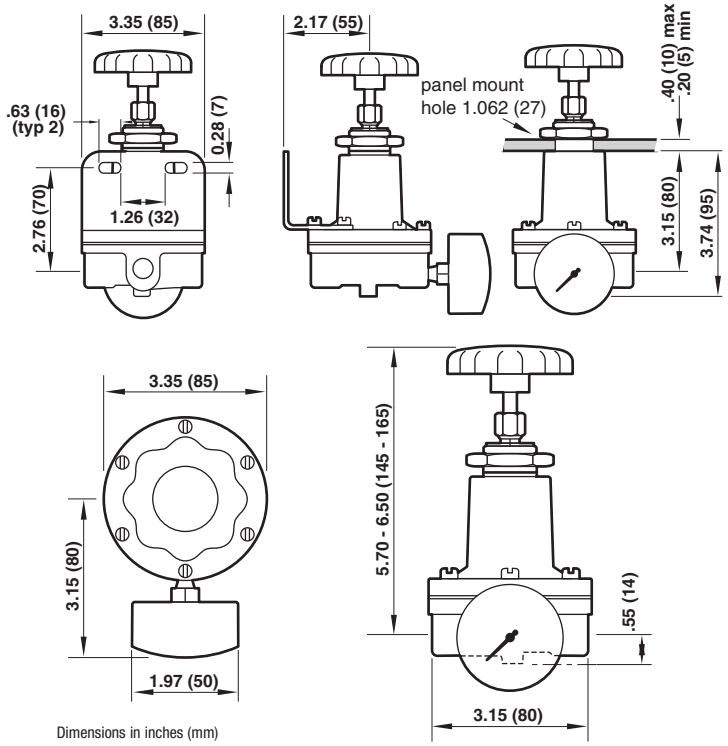
11-400, 20AL

Conventional Pilot Regulators

1/4" Port Size

Mounting Dimensions

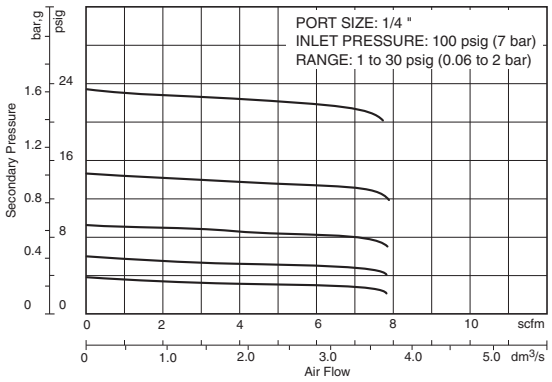
(Shown with optional gauge and mounting bracket)



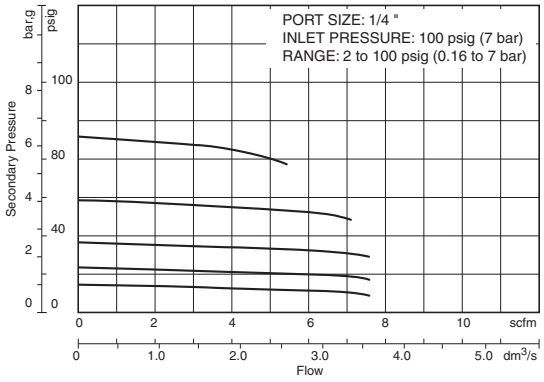
Dimensions in inches (mm)

Typical Performance Characteristics

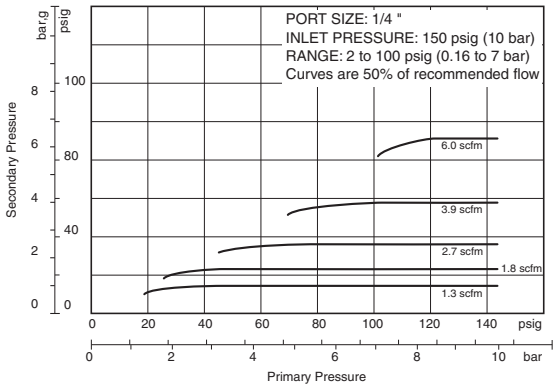
FLOW CHARACTERISTICS



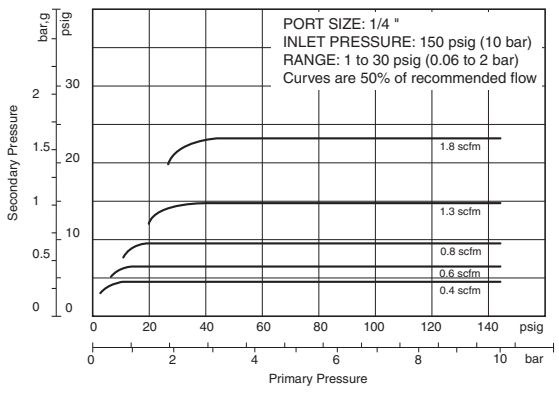
FLOW CHARACTERISTICS



REGULATION CHARACTERISTICS



REGULATION CHARACTERISTICS



11-104

Feedback Pilot Regulator

1/4" Port Size

Pilot regulators are used to control the outlet pressure of a pilot operated regulator (ordered separately)

The pilot regulator is installed in an accessible location in the compressed air system; pilot operated regulator is installed at any point without regard to accessibility

Feedback pilot regulator provides superior pressure regulation under changing flow demands where changes in flow demand are not sudden or cyclic.

Constant bleed feature provides maximum sensitivity to system changes

Relief feature allows reduction of downstream pressure when the system is dead-ended

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Inlet pressure range:

10 psig (0.7 bar) to 400 psig (27.6 bar) maximum

Operating temperature:

0 to 175°F (-20° to 80°C) *

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Maximum bleed rate at 50 psig (3.5 bar) outlet pressure:

0.25 scfm (0.12 dm3/s)†

†Maximum bleed rate occurs under dead-end (no flow) conditions.

Pilot ports:

1/4" PTF

Feedback port:

1/8" PTF

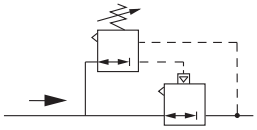
Materials

Body, bonnet: Zinc

Valve seat: Brass

Valve ball: Stainless steal

ISO Symbols



11-104 Feedback Pilot Regulator with Pilot Operated Regulator

Ordering Information.

Model listed is relieving, constant bleed, 5 to 100 psig (0.3 to 7 bar) outlet pressure adjustment range†, with PTF ports.

Port Size	Type	Model	Weight lb (kg)	Pressure psig (bar)
1/4" PTF	Feedback Pilot	11-104-001	3.38 (1.53)	5-105 (.3-7)
1/4" PTF	Feedback Pilot	11-104-002	3.38 (1.53)	50-250 (3-17)

† Outlet pressures can be adjusted to pressures in excess or, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Service Kits

Type	Part number
11-104	1970-11

Service kit includes: diaphragm assemblies, valve assembly, valve spring o-rings and valve seats for pilots.

Feedback Pilot Regulator Warning

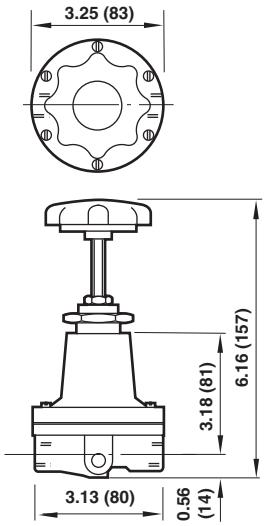
The feedback line must sense the pilot operated regulator outlet pressure and must be connected before turning on the air supply. If the feedback line is not connected, the pilot operated regulator outlet pressure will rapidly increase to the inlet pressure when the adjusting knob on the pilot regulator is turned clockwise.

11-104

Feedback Pilot Regulator

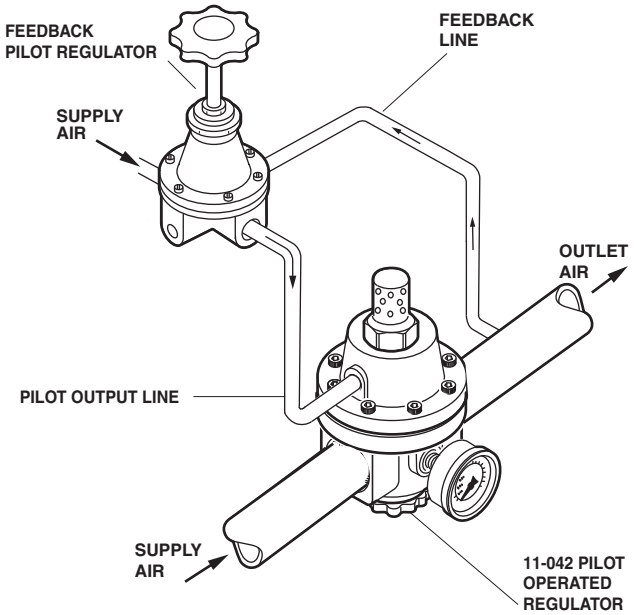
1/4" Port Size

Panel mounting hole diameter: 1.06" (27 mm)
Maximum panel thickness: 0.38" (10 mm)



Dimensions inches (mm)

Typical installation



Pilot Operated Regulators

11-042 and 11-008

Designed for systems that require pressure regulation at an inaccessible location.

A pilot regulator (ordered separately) controls the outlet pressure of the pilot operated regulator.

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Inlet pressure range:

10 psig (0.7 bar) to 400 psig (27.6 bar)

Operating temperature:

0° to 175°F (-20° to 80°C) **

** Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

11-042

Body: zinc

Bonnet: aluminum

Bottom plug: acetal

Valve: brass

Elastomers: nitrile

Port sizes

Main	Gauge	Pilot	Exhaust
1/4"	1/4"	1/4"	3/4"
3/8"	3/8"	1/4"	3/4"
1/2", 3/4", 1", 1-1/4"	1/2"	1/4"	3/4"

11-008

Body: zinc

Bonnet: aluminum

Bottom plug:
1/2", 3/4 ports: glass filled nylon
1" ports: brass

Gauge port: 1/8" NPT

Pilot port: 1/4" NPT

Valve: brass

Elastomers: nitrile

11-042

11-008
Constant bleed type

11-042 and 11-008 Pilot Operated Regulator Ordering Information

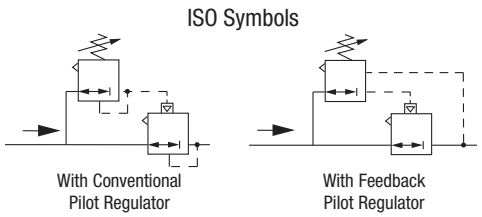
Models listed include relieving diaphragm and PTF threads. Also order a pilot regulator.

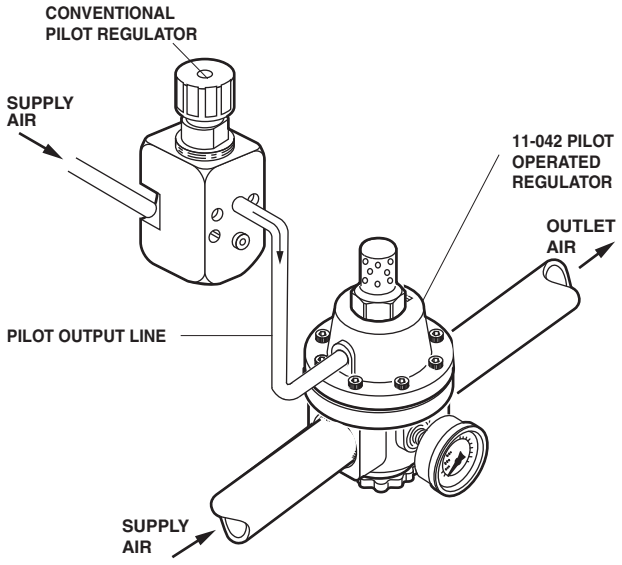
Port Size	Model	Flow* scfm (dm3/s)	Weight lb (kg)
1/4"	11-042-001	120 (57)	2.8 (1.3)
3/8"	11-042-002	120 (57)	2.7 (1.2)
1/2"	11-042-003	120 (57)	2.6 (1.2)
3/4"	11-042-007	300 (142)	4.8 (2.2)
1"	11-042-008	300 (142)	4.6 (2.1)
1-1/4"	11-042-009	300 (142)	4.3 (2.0)
1/2"	11-008-130	70 (33)	1.6 (0.7)
3/4"	11-008-009	110 (52)	4.9 (2.2)
1"	11-008-110	180 (85)	4.6 (2.1)

* Typical flow with 100 psig (0.7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 5 psig (0.35 bar) from set.
For additional models contact the factory

Feedback Pilot Regulator Warning

The feedback line must sense the pilot operated regulator outlet pressure and must be connected before turning on the air supply. If the feedback line is not connected, the pilot operated regulator outlet pressure will rapidly increase to the inlet pressure when the adjusting knob on the pilot regulator is turned clockwise.

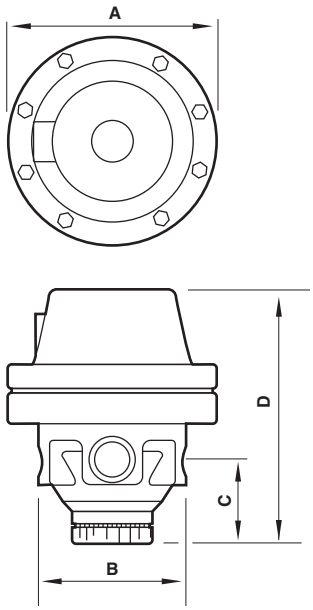




Pilot Operated Regulators

11-042 and 11-008

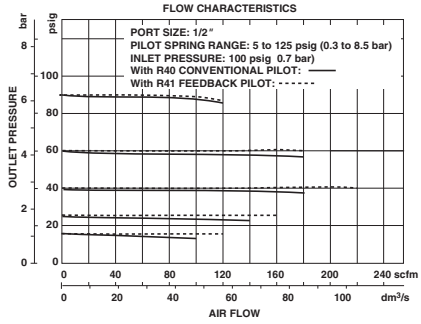
11-042

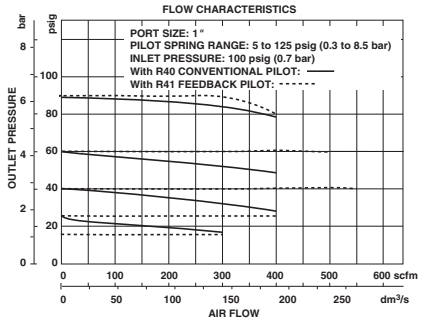


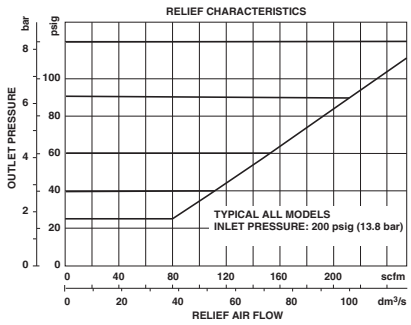
Port Size	A	B	C	D
1/4", 3/8", 1/2"	4.16 (106)	2.71 (69)	1.48 (38)	5.07 (129)
3/4", 1", 1-1/4"	4.16 (106)	3.65 (93)	1.86 (47)	5.97 (152)

Dimensions in inches (mm)

Typical Performance Characteristics







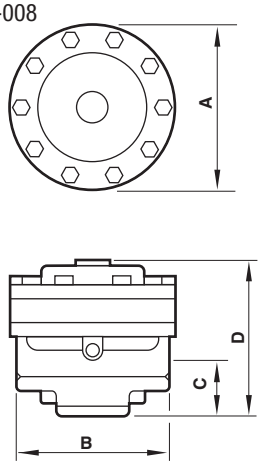
11-042 Service Kits

Type	Part number
Kit for 1/4", 3/8", 1/2" units	4158-01
Kit for 3/4", 1", 1-1/4" units	4158-02
O-ring kit for 1/4", 3/8", 1/2" units	4158-03
O-ring kit for 3/4", 1", 1-1/4" units	4158-04

Kit contains filter screen, diaphragm, and all o-rings.

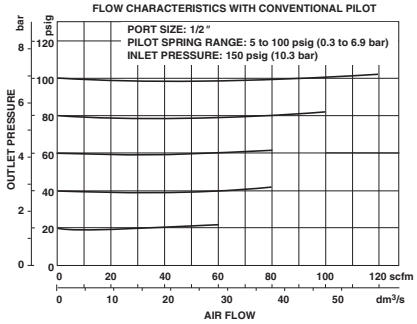
O-ring kit contains filter screen and all o-rings.

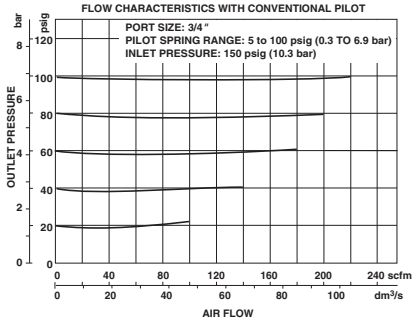
11-008



Port Size	A	B	C	D
1/2"	3.34 (85)	3.38 (86)	1.50 (38)	3.30 (84)
3/4", 1"	4.91 (125)	4.63 (118)	1.69 (43)	4.36 (111)

Dimensions in inches (mm)

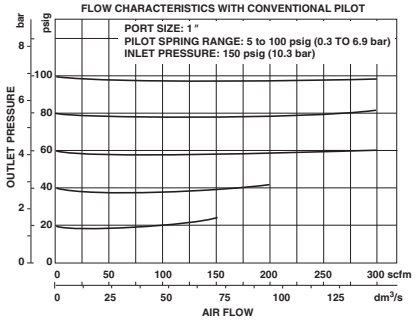




11-008 Service Kits

Type	Part number
1/2" ported units	695-01
3/4", 1" ported units	696-01

Kit contains diaphragm, valve, and all o-rings.



Pilot Operated Regulators

R18 and R24

Designed for systems that require pressure regulation at an inaccessible location.

A pilot regulator (ordered separately) controls the outlet pressure of the pilot operated regulator.

Technical data

R18

Fluid:

Compressed air

Inlet pressure range:

10 psig (0.7 bar) minimum to
450 psig (31 bar) maximum

Operating temperature:

0° to 175°F (-18° to 80°C)*

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

R24

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Inlet pressure range:

10 psig (0.7 bar) to 300 psig (20 bar)

Operating temperature:

0° to 175°F (-20° to 80°C)**

** Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

R18

Body, bonnet, bottom plug, valve: Aluminum

Elastomers: Nitrile

R24

Body, top cap: zinc
main valve, adjusting screw: brass
pilot valve, relief valve: acetal

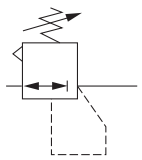
Elastomers: nitrile

Bottom plug: acetal

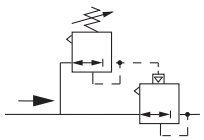
Port sizes

Main	Gauge	Pilot
1/4"	1/4"	1/4"
3/8"	3/8"	1/4"
1/2", 3/4", 1", 1-1/4"	1/2"	1/4"

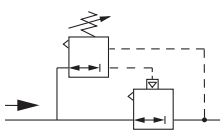
ISO Symbols



R24 Relieving



R18 with Conventional Pilot Regulator



R18 with Feedback Pilot Regulator

R18

R24

Ordering Information

Models listed include relieving diaphragm and PTF threads. Also order a pilot regulator.

Port Size	Model	Flow† scfm (dm3/s)	Weight lb (kg)
1-1/2"	R18-B00-RNXA††	2000 (944)	6.82 (3.09)
2"	R18-C00-RNXA††	2000 (944)	6.61 (2.99)
1/4"	R24-201-RNXA		1.16 (0.73)
3/8"	R24-301-RNXA		1.54 (0.70)
1/2"	R24-401-RNXA		1.50 (0.68)
3/4"	R24-601-RNXA		2.60 (1.18)
1"	R24-801-RNXA		2.60 (1.18)
1-1/4"	R24-A01-RNXA††		2.51 (1.14)

† Typical flow with 100 psig (0.7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 15 psig (1 bar) from set.
†† Do not use the R41 feedback pilot regulator to control outlet pressures at or less than 100 psig (7 bar). Use the 11-104 feedback pilot regulator at those pressures.

Alternative Models - R18

R18-★00-★★X★

Port Size	Substitute
1-1/2"	B
2"	C

Threads	Substitute
PTF	A*
ISO G parallel	G

Diaphragm	Substitute
Relieving	R
Non relieving (do not use with a feedback pilot regulator)	N

Gauge*	Substitute
Without	N

* A factory installed gauge is only available with PTF threads (A in last position of model number). For additional options see the website for this product.

Alternative Models - R24

R24-★01-RNX★

Port Size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6
1"	8
1-1/4"	A

Threads	Substitute
PTF	A
ISO G parallel	G

Feedback Pilot Regulator Warning

The feedback line must sense the pilot operated regulator outlet pressure and must be connected before turning on the air supply. If the feedback line is not connected, the pilot operated regulator outlet pressure will rapidly increase to the inlet pressure when the adjusting knob on the pilot regulator is turned clockwise.

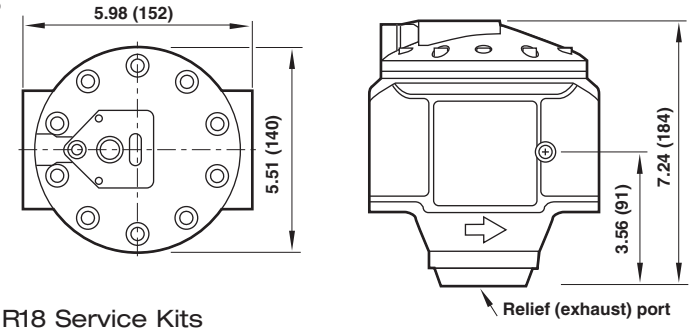
NOTE: Do not use the R41 feedback pilot regulator to control outlet pressures at or less than 100 psig (7 bar). Use the 11-104 feedback pilot regulator at those pressures.

Pilot Operated Regulators

R18 and R24

Dimensions in inches (mm)

R18

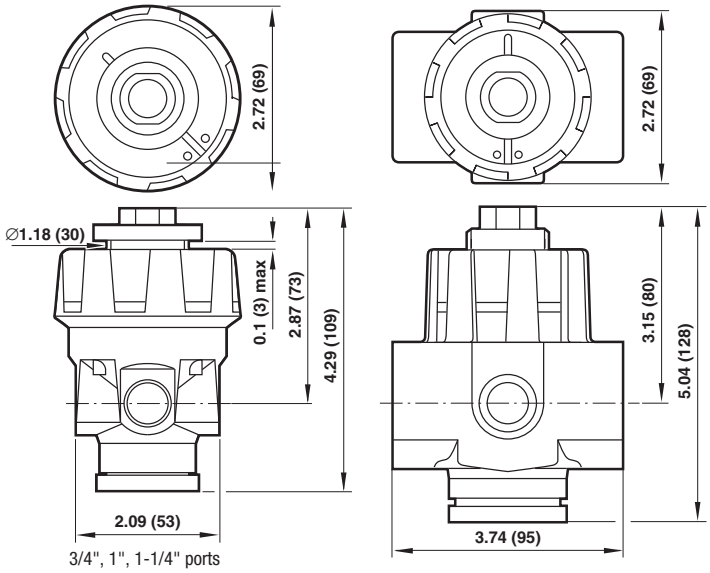


R18 Service Kits

Type	Part number
R18	5945-40

R18 service lit contains filter screen and all o-rings.

R24



3/4", 1", 1-1/4" ports

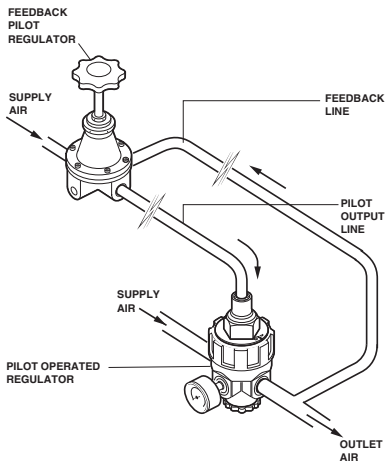
R24 Service Kits

Item	Port Size	Part number
Service kit	1/4", 3/8", 1/2"	5292-54
Service kit	3/4", 1", 1-1/4"	5292-55

Service kits include seals, main valve and spring.

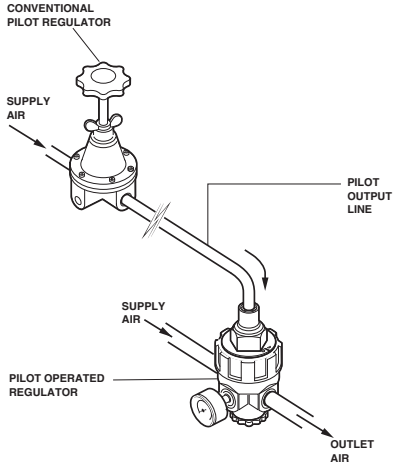
Typical Installation

Feedback Pilot and Pilot Operated Regulator



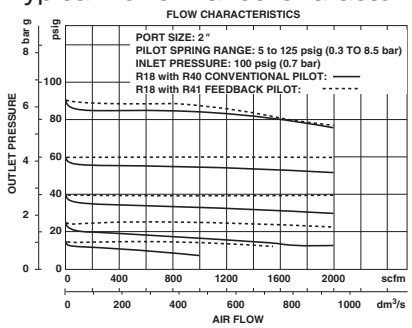
Typical Installation

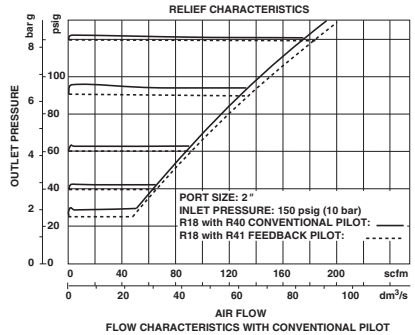
Conventional Pilot and Pilot Operated Regulator



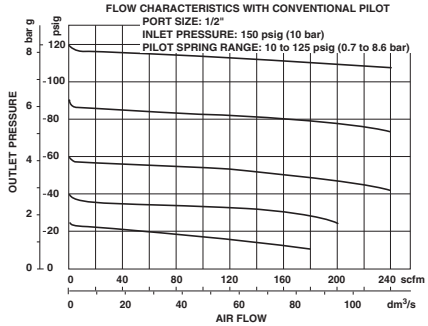
Typical Performance Characteristics

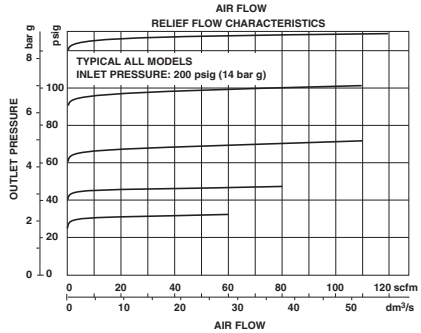
R18

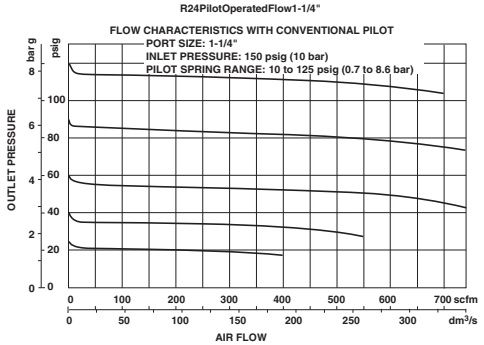




R24







Excelon® R72M and R74M
Manifold Regulator
1/4", 3/8", 1/2" and 3/4" port sizes

Excelon® design allows in-line or modular installation

Manifold typically up to six regulators without booster signal

RoHS compliant


R72M


R74M

Technical data

Fluid:

Compressed air, neutral gases
NOTE: Contact Norgren for use with other media.

R72M

Maximum pressure:
300 psig (20 bar)

Operating temperature*:
-30° to 150°F (-34° to 65°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Ports:
Inlet ports (2):
1/4" or 3/8" PTF or ISO G
Outlet port (1):
1/4" PTF with PTF inlet ports, or
1/4" ISO Rc with ISO G inlet ports
Gauge port (1):
1/8" PTF with PTF inlet ports
1/8" ISO Rc with ISO G inlet ports

Materials
Body: Zinc
Bonnet: Acetal
(Zinc on 250 psi (17 bar) T-handle version)
Elastomers: Nitrile
Bottom plug: Acetal

R74M

Maximum pressure:
300 psig (20 bar)

Operating temperature*:
R74M: -30° to 175°F (-34° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Ports
Inlet ports (2):
1/2" or 3/4" PTF or ISO G
Outlet port (1):
1/2" PTF with PTF inlet ports, or
1/2" ISO Rc with ISO G inlet ports
Gauge port (1):
1/8" PTF with PTF inlet ports
1/8" ISO Rc with ISO G inlet ports

Materials
Body: Aluminum
Bonnet: Aluminum
Elastomers: Nitrile
Bottom plug: Acetal

Ordering Information.

Models listed include PTF threads, knob adjustment, relieving diaphragm, 5 to 150 psig (0.3 to 10 bar) outlet pressure adjustment range* with gauge.

Inlet Port (2)	Outlet Port (1)	Model	Flow† scfm (dm3/s)	Weight lb (kg)
1/4"	1/4"	R72M 2AK RMG	83 (39)	0.79 (0.36)
3/8"	1/4"	R72M 3AK RMG	83 (39)	0.79 (0.36)
1/2"	1/2"	R74M 4AK RMG	220 (105)	1.77 (0.8)
3/4"	1/2"	R74M 6AK RMG	220 (105)	1.73 (0.78)

† Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.

Alternative Models

R7★M ★★★ ★★★

Series	Substitute
72	2
74	4

Inlet Port Size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6

Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	G

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Gauge	Substitute
With	G
Without	N

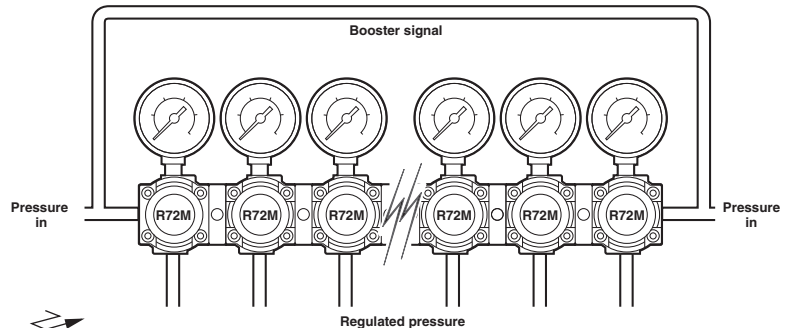
Outlet Pressure Adjustment Range*	Substitute
5 to 30 psig (0.3 to 2 bar) (R72M)	C
5 to 60 psig (0.3 to 4 bar)	F
5 to 150 psig (0.3 to 10 bar)	M
10 to 250 psig (0.7 to 17 bar)**	S

Diaphragm	Substitute
Relieving	R
Non relieving	N

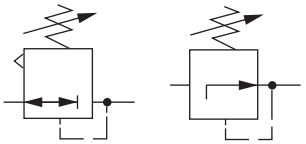
Adjustment	Substitute
Knob	K
T-bar	T

** Units with 250 psig (17 bar) outlet pressure range are available only with the T-bar adjustment. Substitute "T" in the 7th position and "S" in the 9th position.

Typical Manifold Regulator Application (R72M shown)



ISO Symbols


Relieving

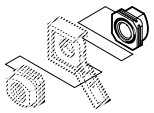
Non Relieving

Dimensions in inches (mm)

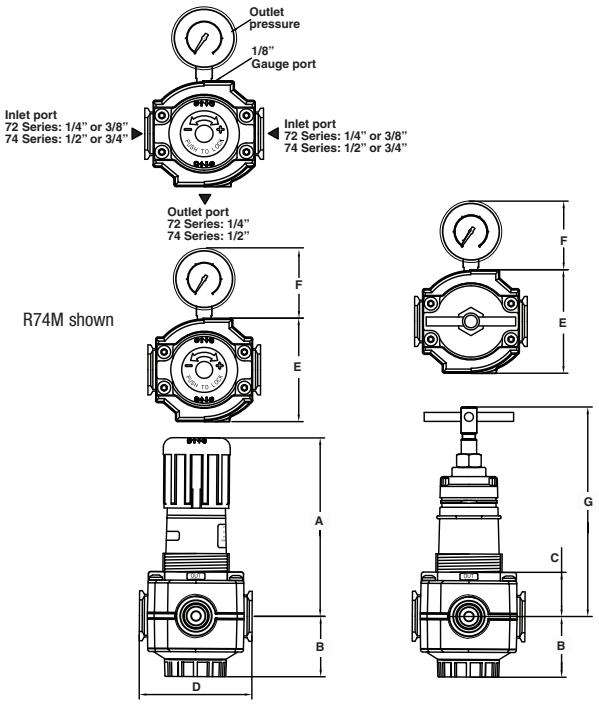
R72M and R74M Manifold Regulators

1/4", 3/8", 1/2", and 3/4"

Accessories

	Wall mounting bracket*	Neck mounting bracket	Gauge 0 ... 160 psig	Panel nut	Tamper resistant cover and seal wire	Pipe adapters (quantity of 1) (NPT)	Quikclamp®	Quikclamp® and wall bracket	Service kit
									
R72G	4224-50	74316-50	18-013-212	4248-89	4255-51	4215-02 (1/4)	4214-51	4214-52	4381-500
						4215-03 (3/8)			
R74G	4324-50	4368-51	18-013-209	4348-89	4355-51	4315-02 (3/8)	4314-51	4314-52	4381-700
						4315-03 (1/2)			
						4315-04 (3/4)			

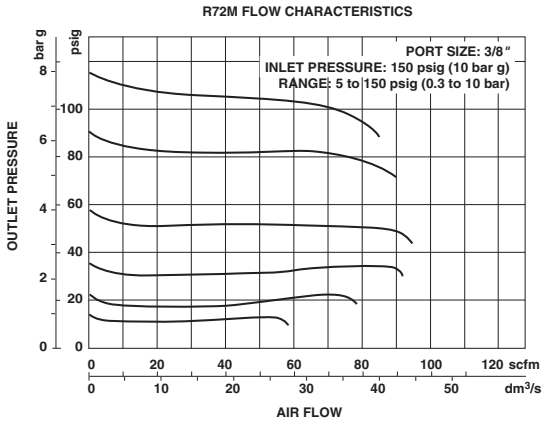
* Bracket kit does not include wall mounting screws.

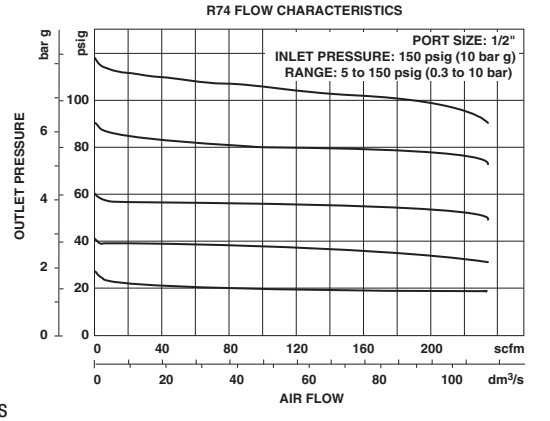


Series	A	B	C	D	E	F	G	Panel Ø	Panel depth
72	2.88	1.31	1.01	1.98	1.91	1.90	4.03/4.25**	1.57	0 to .16
	(73.3)	(33.2)	(25.7)	(50.2)	(48.4)	(48.3)	(102.2/108)	(39)	(0 to 4)
74	4.98	1.69	1.24	3.1	2.89	2.72	5.86	2.05	.07 to .25
	(126.6)	(43.0)	(31.4)	(80.0)	(73.5)	(69.0)	(148.8)	(52)	(1.8 to 6)

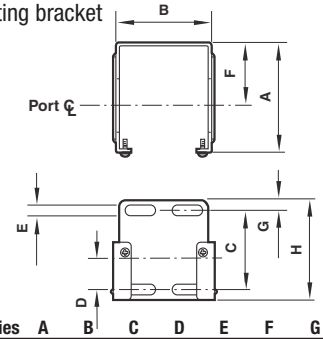
** 72 Series 250 psi version with Zinc bonnet and T-handle.

Typical Performance Characteristics





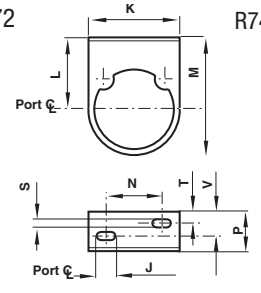
Mounting bracket



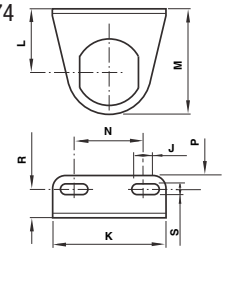
Series	A	B	C	D	E	F	G	H
72	2.36	1.65	1.54	0.73	0.16	1.50	0.24	2.01
	(60)	(42)	(39)	(19)	(4)	(38)	(6)	(51)
74	3.11	2.72	1.97	0.79	0.20	2.01	0.24	2.40
	(79)	(69)	(50)	(20)	(5)	(51)	(6)	(61)

Neck mounting brackets

R72



R74



Series	J	K	L	M	N	P	R	S	T	V
72	0.31	1.93	1.50	2.50	1.18	0.94	–	0.17	0.31	0.59
	(8)	(49)	(38)	(64)	(30)	(24)	–	(4)	(8)	(15)
74	0.94	3.50	2.05	3.39	2.20	1.38	0.91	0.28	–	–
	(24)	(89)	(52)	(86)	(56)	(35)	(23)	(7)	–	–

R30M Series Manifold Regulator

8 mm and 10 mm Port Sizes

Push-in fittings in ports. No need for threaded connectors and fittings

Integral base mounting

Water or compressed air only

Technical data

Fluid:

Compressed air or water, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

150 psig (10 bar)

Operating temperature*:

23° to 104°F (-5° to 40°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Gauge port:

(can be used as additional outlet port) 10 mm OD tube with 10 mm OD tube main ports: 8 mm OD tube with 8 mm OD tube main ports

Two inlet ports: 10 mm OD tube or 8 mm o/d tube

One outlet port: 10 mm OD tube with 10 mm OD tube inlet

8 mm OD tube with 8 mm OD tube inlet

Materials:

Body: Acetal

Bonnet: Acetal

Valve: Brass/nitrile

Elastomers: Nitrile

Valve seat: Acetal

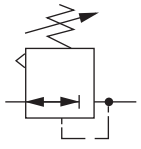
Ordering Information.

Models listed include 10 mm push-in fittings, knob adjustment, relieving diaphragm, 0 to 70 psig (0 to 4.8 bar) outlet pressure adjustment range* with gauge, with porting plug.

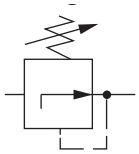
Port	Model	Flow† scfm (dm3/s)	Weight lb (kg)
8 mm	R30M 8DK RGG	17 (8)	0.22 (0.10)
10 mm	R30M ADK RGG	17 (8)	0.22 (0.10)

† Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.

ISO Symbols



Relieving

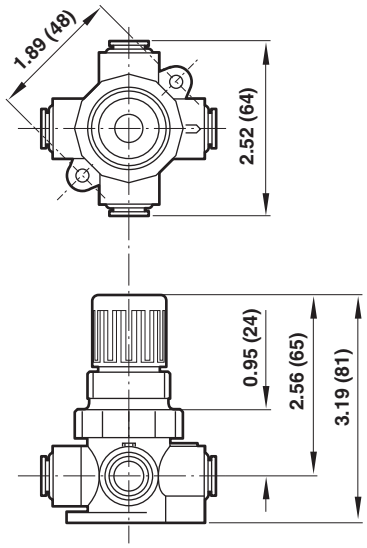


Non relieving

R30M Series Manifold Regulator

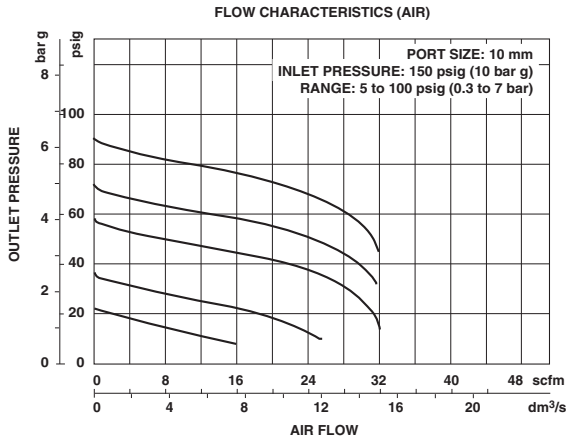
8 mm and 10 mm Port Sizes

Panel mounting hole diameter: 1.19" (30 mm)
Maximum panel thickness: 0.25" (6 mm)

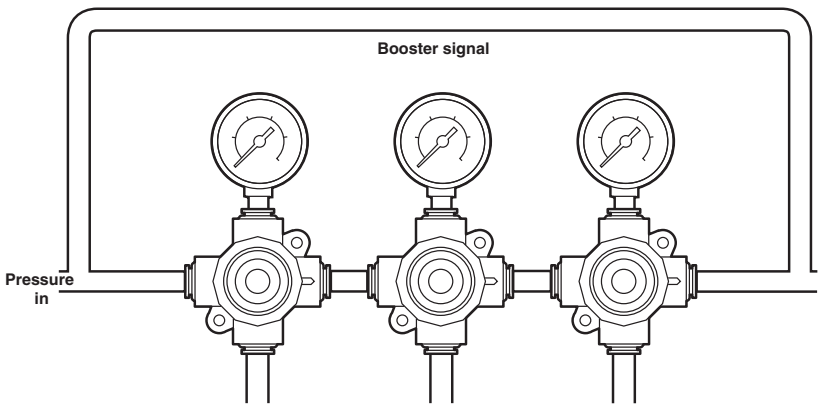


Dimensions in inches (mm)

Typical Performance Characteristics



Typical Manifold Regulator Application



Stainless Steel Products

R05, and B05

Designed for use in corrosive environments

Metallic parts meet NACE Standard MR-01-75*

* National Association of Corrosion Engineers (NACE) MR-01-75 defines requirements for sulphide stress cracking resistant materials used in well-head and other corrosive environments.

B05 Filter/Regulators

R05 Regulators

Technical data

R05

Fluid:
Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:
300 psig (20 bar)

Operating temperature:
With Acetal bonnet
-13° to 150°F (-25°C to 66°C)*
With metal bonnet
-13°F to 175°F (-25°C to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C). Contact Norgren for use below -13°F (-25°C).

NOTE: Low temperature options available to -40°F (-40°C).

B05

Fluid:
Compressed air

Maximum pressure:
300 psig (20 bar)

Operating temperature:
With Acetal bonnet
-13° to 150°F (-25°C to 66°C)*
With metal bonnet
-13°F to 175°F (-25°C to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C). Contact Norgren for use below -13°F (-25°C).

NOTE: Low temperature options available to -40°F (-40°C).

Particle removal:
5 µm or 40 µm filter element

Materials

R05

Body: 316 stainless steel
Bonnet: 316 Stainless steel with T-handle or Acetal with stainless steel adjusting screw
Valve: 316 Stainless steel with fluorocarbon elastomer
Valve seat: Acetal
Springs: 302 Stainless steel
Elastomers: Fluorocarbon

B05

Body and bowl: 316 stainless steel
Bonnet: 316 Stainless steel with T-handle or Acetal with stainless steel adjusting screw
Valve: 316 Stainless steel with fluorocarbon elastomer
Valve seat: Acetal
Springs: 302 Stainless steel
Drain: Stainless steel or Acetal
Element: Sintered polypropylene
Elastomers: Fluorocarbon
Autodrain: Nitrile

R05 Ordering Information

Standard models listed are relieving type with 5 to 125 psig (0.3 to 8.5 bar) outlet pressure adjustment range* and PTF threads. A gauge is not included.

Port Size	Model	Bonnet type	Flow** scfm (dm3/s)	Weight lb (kg)	Service kit†
1/4" PTF	R05-200-RNLA	Acetal	15 (7)	0.32 (0.15)	3407-71
1/4" PTF	R05-232-RNLA	Stainless steel w/ T-handle	15 (7)	0.58 (0.26)	3407-71

B05 Ordering Information

Standard models listed include a relieving diaphragm, manual drain, 5 µm element, 5 to 125 psig (0.3 to 8.5 bar) outlet pressure adjustment range* and PTF threads. A gauge is not included.

Port Size	Model	Bonnet type	Drain type (material)	Flow** scfm (dm3/s)	Weight lb (kg)	Service kit†
1/4" PTF	B05-233-M1LA	Acetal	manual (Acetal)	15 (7)	0.85 (0.38)	3820-08
1/4" PTF	B05-238-M1LA	Stainless steel w/ T-handle	manual (SS)	15 (7)	1.20 (0.54)	3820-08
1/4" PTF	B05-233-A1LA	Acetal	automatic (SS)	15 (7)	0.85 (0.38)	3820-08

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified.Do not use these units to control pressures outside of the specified ranges.
** Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and 15 psig (1 bar) droop from set.
† Service kit includes diaphragm, seals, o-rings, and valve

Additional Options††

R 0 5 - 2 ★ ★ - ★ N ★ A

Bonnet	Substitute
Standard knob (Acetal)	00
T-handle (Stainless steel)	32

Outlet Pressure Adjustment Ranges*	Substitute
5 to 50 psig (0.3 to 3.5 bar)	E
5 to 125 psig (0.3 to 8.5 bar)	L

Diaphragm	Substitute
Relieving	R
Non relieving	N

B 0 5 - 2 ★ ★ - ★ ★ ★ ★

Diaphragm & Bonnet	Substitute
Relieving, acetal knob	33
Non relieving, acetal knob	35
Relieving, stainless steel T-handle	38¶
Non-relieving, stainless steel T-handle	41¶

Drain	Substitute
Automatic (stainless steel)	A
Manual (Acetal)	M

Threads	Substitute
PTF	A

Outlet Pressure Adjustment Ranges*	Substitute
5 to 50 psig (0.3 to 3.5 bar)	E
5 to 125 psig (0.3 to 8.5 bar)	L

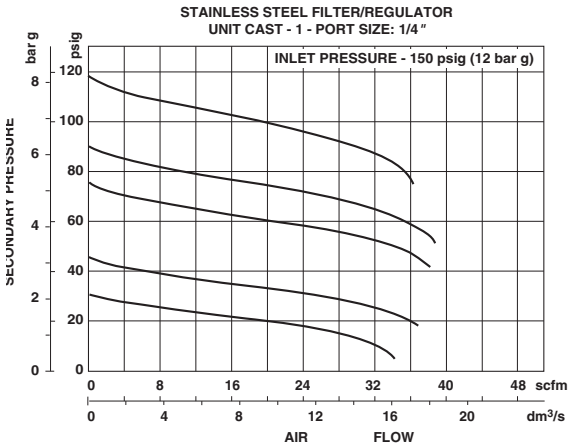
Element	Substitute
5 µm	1
40 µm	2

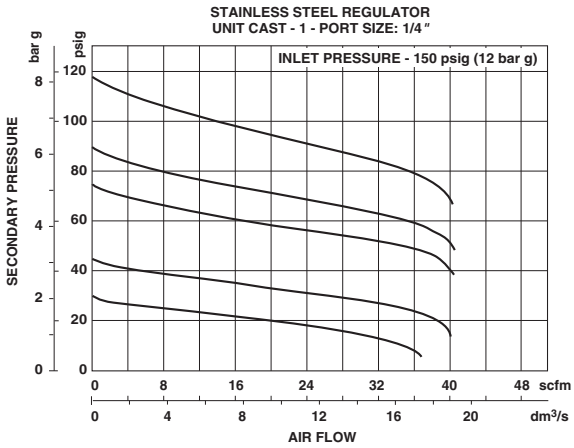
†† These options may require minimum order quantities and may have longer lead times.
¶ Options 38 and 41 have stainless steel manual drains as standard.

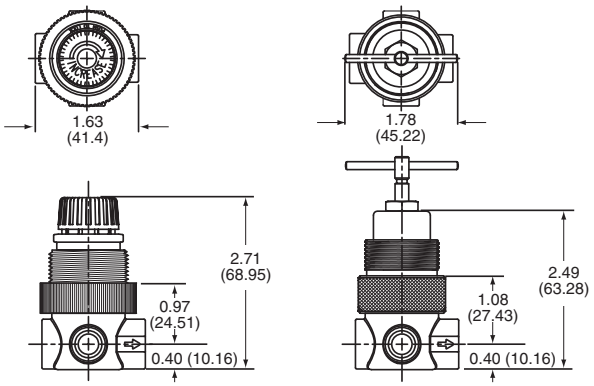
Stainless Steel Products

R05, and B05

Dimensions in inches (mm)







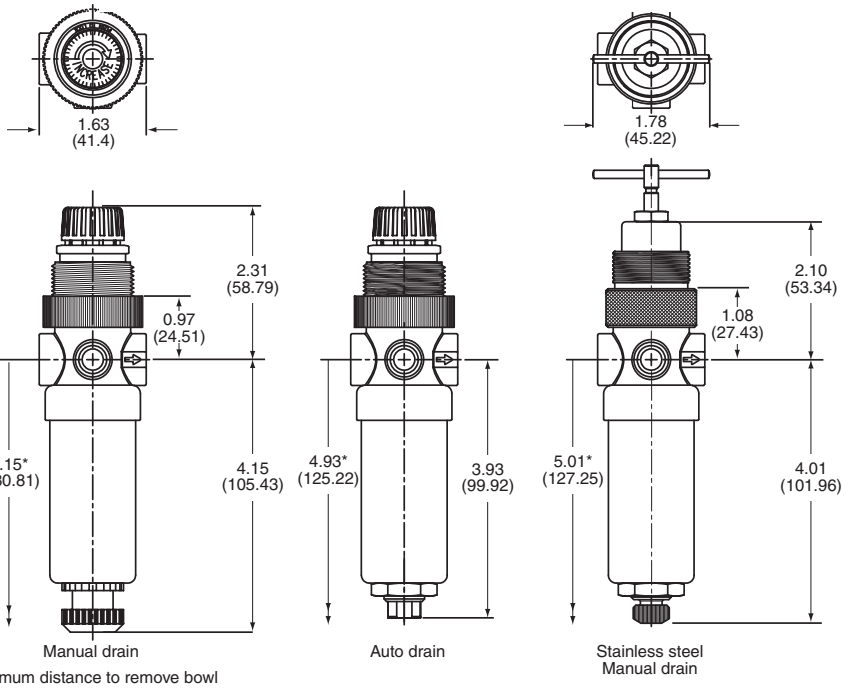
Accessories

Panel nut
(Acetal)

2962-89

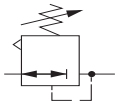
Gauge
(Stainless steel)
0 ... 140 psig

18-013-844

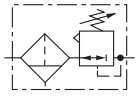


*Minimum distance to remove bowl

ISO Symbols



R05 Relieving



B05 Manual Drain, Relieving

AIR LINE EQUIPMENT

Stainless Steel Products

R38, and B38

Designed for use in corrosive environments

Metallic parts meet NACE Standard MR-01-75*

* National Association of Corrosion Engineers (NACE) MR-01-75 defines requirements for sulphide stress cracking resistant materials used in well-head and other corrosive environments.

Technical data

R38

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

450 psig (31 bar)

Operating temperature:

-40° to 175°F (-40° to 80°C) *

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

B38

Fluid:

Compressed air

Maximum pressure:

Manual drain: 450 psig (31 bar)

Automatic drain: 250 psig (17 bar)

Operating temperature:

-40° to 175°F (-40° to 80°C) *

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Particle removal:

5 µm or filter element

Materials

R38

Body: Stainless steel

Bonnet: Stainless steel

Adjusting screw: Stainless steel

Elastomeric materials: Nitrile

B38 (standard option)

Body: Stainless steel

Bonnet: Stainless steel

Bowl: Stainless steel

Adjusting screw: Stainless steel

Elements

5 µm: High density polyethylene

1/4" only 5 µm: Ceramic pyrolith

Elastomeric materials: Nitrile

R38

B38

R38 Ordering Information

Models listed are relieving type with 0.6 to 30 psig (0.04 to 2 bar) outlet pressure adjustment range **, and PTF threads. A gauge is not included.

Port Size	Model Number	Flow† scfm (dm^3/s)	Weight lbs (kg)
1/4" PTF	R38-240-RNCA	17 (8)	1.56 (0.71)

** Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

† Typical flow with 100 psig (7 bar) inlet pressure, 15 psig (1 bar) set pressure and 1 psig (0.05 bar) droop from set.

B38 Ordering Information

Models listed are relieving type with manual drain, 5µm element, and PTF threads. A gauge is not included.

Port Size	Model Number	Outlet pressure range psig (bar)	Flow** scfm (dm^3/s)	Weight kg (lbs)
1/4" PTF	B38-240-B1KA	4 to 100 (0.3 to 7)	15 (7)	3.11 (1.4)
1/2" PTF	B38-440-M1LA	4 to 125 (0.3 to 9)	106 (50)	4.75 (2.2)

** Typical flow with 175 psig (12 bar) inlet pressure, 115 psig (8 bar) set pressure and 15 psig (1 bar) droop from set.

Accessories

Neck mounting bracket

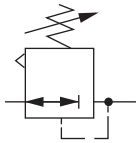
18-001-959

Gauge 0 ... 140 psig

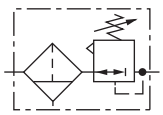
18-013-909

* Bracket kit does not include wall mounting screws.

ISO Symbols



R38



B38 Manual Drain, Relieving

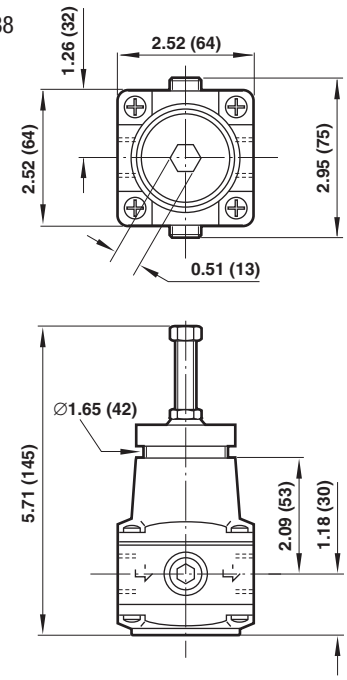
Stainless Steel Products

R38, and B38

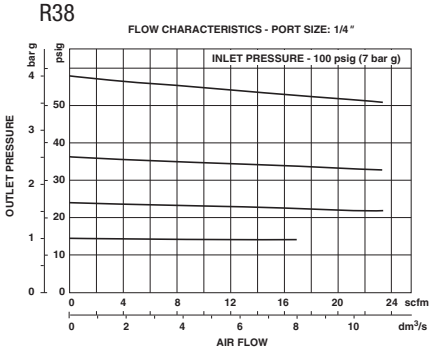
Dimensions in inches (mm)

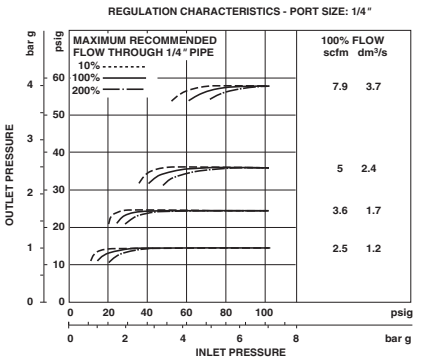
Panel mounting hole diameter: 1.65" (42 mm)
Maximum panel thickness: 0.24" (6 mm)

R38

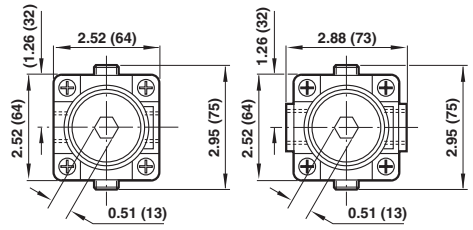


R38

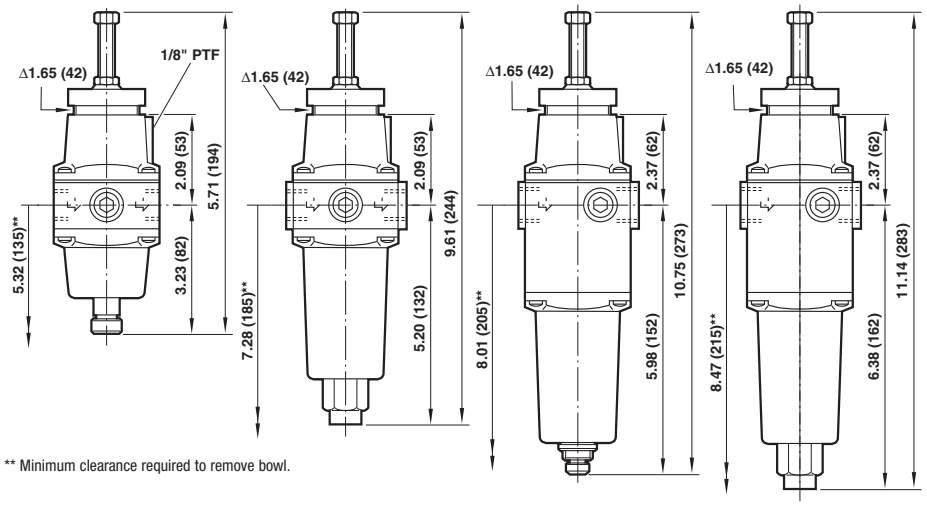




B38

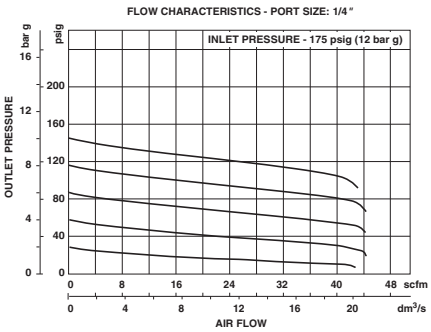


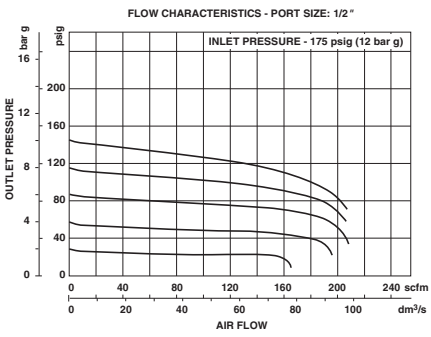
Panel mounting hole diameter: 1.65" (42 mm)
Maximum panel thickness: 0.24" (6 mm)



** Minimum clearance required to remove bowl.

B38

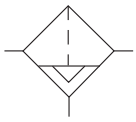


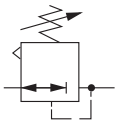


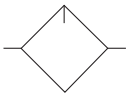
Stainless Steel Products

F22, R22, L22

ISO Symbols


F22 Automatic Drain


R22 Relieving


L22 No Drain

F22 R22 L22

Designed for use in corrosive environments

Metallic parts meet NACE Standard MR-01-75*

* National Association of Corrosion Engineers (NACE) MR-01-75 defines requirements for sulphide stress cracking resistant

Technical data

F22

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature:

0° to 175°F (-20° to 80°C)*

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Particle removal:

5 µm optional

Air quality:

Within ISO 8573-1, Class 3 and Class 5 (particulates)

R22

Fluid:

Compressed air

Maximum pressure:

290 psig (20 bar)

Operating temperature:

-4° to 175°F (-20° to 80°C)*

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

L22

Fluid:

Compressed air

Maximum pressure:

250 psig (17 bar)

Operating temperature:

-4° to 175°F (-20° to 80°C)*

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Filters

Model listed has PTF threads, automatic drain, and 25 µm element.

Port Size	Model Number	Flow† scfm (dm3/s)	Weight lbs (kg)
1/2 PTF	F22-405-A2DA	98 (46)	4.18 (1.88)

† Typical flow with element at 90 psig (6.3 bar) inlet pressure, and 5 psig (0.35 bar) pressure drop.

Regulators

Models listed have T-handle adjustment, relieving diaphragm, 5 to 150 psig (0.4 to 10 bar) outlet pressure adjustment range and PTF threads. A gauge is not included.

Port Size	Model Number	Flow** scfm (dm3/s)	Weight lbs (kg)
1/2 PTF	R22-401-RNMA (T-handle adjustment)	106 (50)	3.35 (1.52)
1/2 PTF	R22-405-RNMA (handwheel adjustment)	106 (50)	3.35 (1.52)

** Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3) set pressure, and a 15 psig (1 bar) droop from set.

Lubricators

Model listed is oil-fog unit with closed bowl (no drain) and PTF threads.

Type	Model Number	Flow† scfm (dm3/s)	Weight lbs (kg)
Oil-Fog	L22-405-OP8A	102 scfm (48 dm^3/s)	4.29 (1.93)

†Typical flow with 90 psig (6.3 bar) inlet pressure and 7 psig (0.5 bar) pressure drop.

Materials

F22

Body: Stainless steel

Bowl: Stainless steel

Element: Sintered stainless steel

Elastomers: Nitrile

R22

Body: Stainless steel

Bonnet: Stainless steel

Adjusting screw: Stainless steel

Handwheel: Stainless steel, acetal

Elastomers: Nitrile

L22

Body: Stainless steel

Bowl: Stainless steel

Elastomers: Nitrile

Accessories

Neck mounting bracket	Wall mounting bracket	Gauge 0 ... 140 psig
		
18-001-959	18-001-962	18-013-909

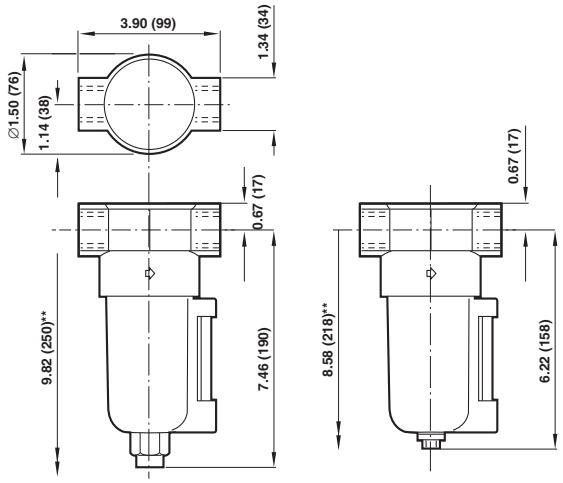
* Bracket kit does not include wall mounting screws.

Stainless Steel Products

F22, R22, L22

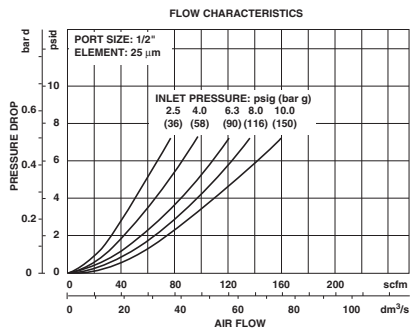
Dimensions in inches (mm)

F22

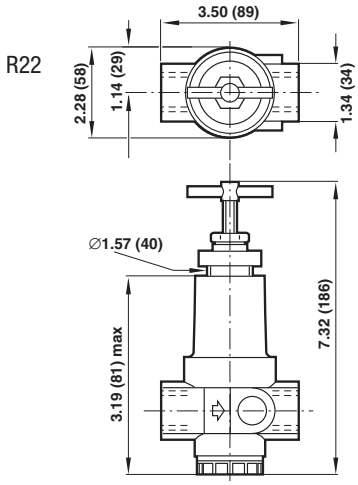


**Minimum clearance required to remove bowl

F22

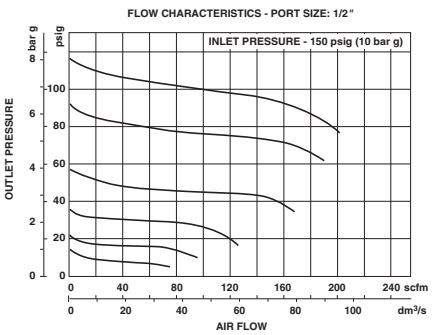


R22

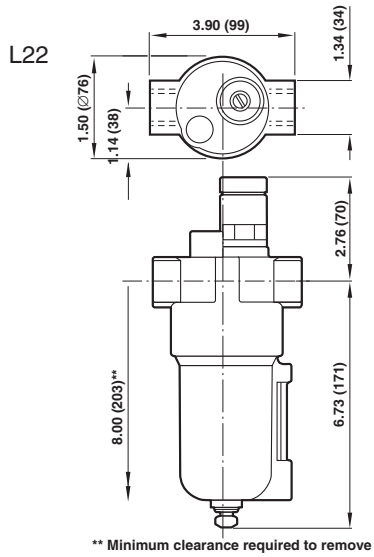


Panel mounting hole diameter: 1.65" (42 mm)
Maximum Panel thickness: 0.37" (9.5 mm)

R22

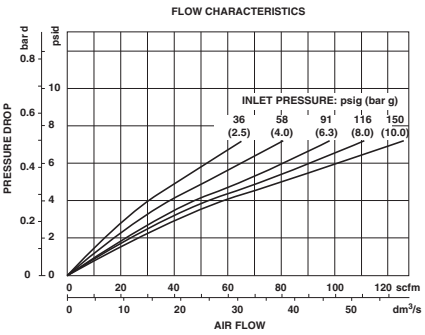


L22



** Minimum clearance required to remove bowl.

L22



R06 Miniature Brass Water/Air Regulator

1/8" and 1/4" PTF Port Sizes

Compact design, corrosion resistant construction

Brass body with choice of plastic or brass bonnet

Brass bonnet equipped with pressure adjusting screw

Non-relieving models for water and air service

R06 221

R06 222

Technical data

Fluid:

Water and compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

400 psig (27 bar)

Operating temperature

Water service: 35° to 150°F (2° to 65°C)†

Air service: -30° to 150°F (-34° to 65°C) *†

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Typical flow for water service at 100 psig (7 bar) inlet pressure, 60 psig (4 bar) set pressure and a droop of 15 psig (1 bar) from set: 1.3 gpm (4.9 lpm)

Typical flow for compressed air service at 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 15 psig (1 bar) from set:12 scfm (5.7 dm3/s)

Gauge ports:

1/8" PTF

Materials

Body: Brass

Bonnet

Standard: Acetal resin

Optional: Brass

Valve: Brass/nitrile

Valve seat: Acetal resin

Elastomers: Nitrile

Ordering Information

Models listed have PTF threads, non-relieving diaphragm, and no gauge.

Port	Model	Flow* scfm (dm3/s)	Flow** gpm (lpm)	Weight lb (kg)
1/8" PTF	R06 121 NNKA	12 (5.7)	1.3 (4.9)	0.2 (0.09)
1/4" PTF	R06 221 NNKA	12 (5.7)	1.3 (4.9)	0.2 (0.09)

* Approximate flow with 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.

** Approximate flow with100 psig (7 bar) inlet pressure, 60 psig (4 bar) set pressure and a 15 psig (1 bar) droop from set.

Alternative Models

R06 ★★★ ★★★A

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

Bonnet	Substitute
Plastic	21
Brass	22

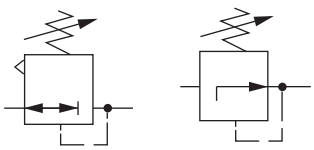
Diaphragm	Substitute
Relieving	R
Non relieving	N

Outlet Pres Adj†	Substitute
1 to 10 psig (0.1 to 0.7 bar)	A
5 to 50 psig (0.3 to 3.5 bar)	E
5 to 100 psig (0.3 to 7 bar)	K
5 to 125 psig (0.3 to 8.6 bar)	L

Gauges	Substitute
With	G
Without	N

† Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

ISO Symbols



Relieving

Non relieving

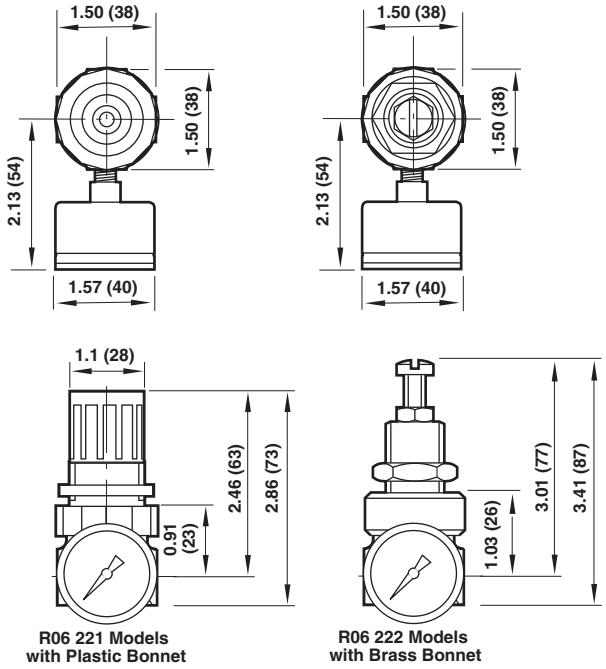
R06 Miniature Brass Body Regulator

Water and Compressed Air Service

1/8" and 1/4" PTF Port Sizes

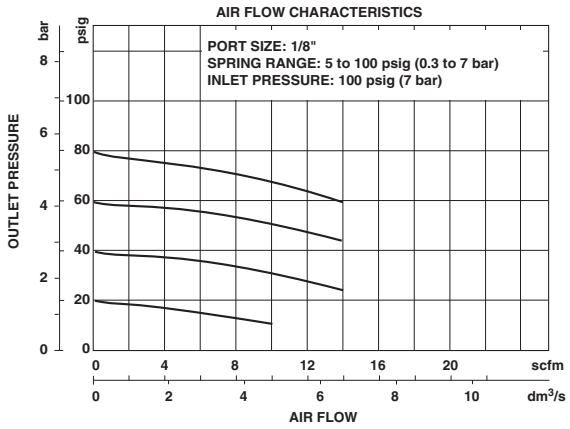
Dimensions in inches (mm).

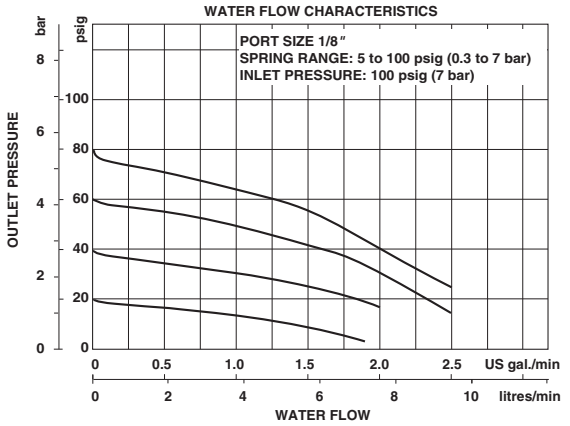
Panel mounting hole diameter:
Models with plastic bonnet: 1.19" (30 mm)
Models with brass bonnet: 0.81" (21mm)
Maximum panel thickness: 0.25" (6 mm)



† Brass bonnet & body combination max temperature 200°F

Typical Performance Characteristics





Service Kits

Item	Type	Part number
Service Kit	Relieving	3407-18
	Non relieving	3407-17

Service kit includes slip ring, diaphragm, standard valve seat with o-ring, valve, valve spring.

R14, R16 Miniature, Preset, Nonadjustable Pressure Regulator

Water and Compressed Air Service

1/8" or 1/4" PTF Port Sizes

Non-relieving models for air and water service

Relieving models for air service allow reduction of outlet pressure even when the system is dead-ended

R14 has aluminum body and bonnet

R16 has brass body and bonnet

Factory preset, tamper resistant pressure setting

R14

R16

Technical data

Fluid

R14: Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

R16: Water and compressed air

Maximum pressure:

400 psig (27 bar)

Operating temperature

Water service: 35° to 175°F (2° to79°C)†

Air service: -30° to 175°F (-34° to 79°C)*

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

† R16 bras bonnet & body combination max temp. 200°F.

Type

R14: Piston, relieving or non-relieving

R16: Diaphragm, relieving or non-relieving

Gauge ports:

1/8" PTF

Factory preset outlet pressure settings:

3 to 99 psig (0.2 to 6.8 bar)

Outlet pressure tolerance:

Outlet pressure setting - psig (bar) Tolerance - psig (bar)**

3 to 20 psig (0.21 to 1.38 bar) ± 1.0 psig (0.07 bar) 21 to 50 psig (1.45 to 3.45 bar) ± 2.0 psig (0.14 bar)

51 to 99 psig (3.52 to 6.84 bar) ± 3.0 psig (0.21 bar)

** When outlet pressure is preset at the factory, the following conditions exist

Inlet pressure:

100 psig (6.9 bar) for outlet pressures up through 95 psig (6.6 bar)

125 psig (8.6 bar) for outlet pressures of 96 through 99 psig (6.7 through 6.8 bar)

Materials

Body and bonnet

R14: Aluminum

R16: Brass

Valve: Brass

Valve seat: Acetal resin

Elastomers: Nitrile

Ordering Information.

Models listed are relieving type for compressed air service with PTF threads and with gauge ports

Port	Model	Flow† scfm (dm3/s)	Flow†† U.S. gpm (lpm)	Weight lb (kg)
1/8" PTF	R14 100 R**A	12 (5.7)	1.3 (4.9)	0.2 (0.09)
1/8" PTF	R16 100 R**A	12 (5.7)	1.3 (4.9)	0.7 (0.32)
1/4" PTF	R14 200 R**A	12 (5.7)	1.3 (4.9)	0.2 (0.09)
1/4" PTF	R16 200 R**A	12 (5.7)	1.3 (4.9)	0.7 (0.32)

† Approximate flow with 100 psig (7 bar) inlet pressure, 80 psig 5.5 bar() set pressure and a 15 psig (1 bar) droop from set.

†† Approximate flow with 100 psig (7 bar) inlet pressure, 60 psig (4 bar) set pressure and a 15 psig (1 bar) droop from set.

Alternative Models

R★★ ★★★ ★★★★

Type/Service	Substitute
Piston; air service only	14
Diaphragm; air and water service	16

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

Gauge ports in body	Substitute
With gauge ports	00
Without gauge ports	01

Diaphragm	Substitute
Relieving	R
Non relieving	N

Threads	Substitute
PTF	A

**** The 8th and 9th positions of the model number contain the Modified Outlet Pressure Setting. The Modified Outlet Pressure Setting is the desired outlet pressure,modified to allow for inlet pressures other than 100 psig, and for flows other than zero. Insert the modified outlet pressure setting in positions 8 and 9 as described below.**

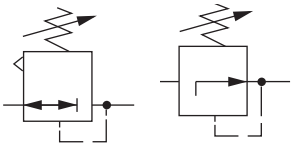
1. Write down the desired outlet pressure and the flow through the regulator. EXAMPLE: 30 psig outlet pressure at 10 scfm flow.

2. Modifications for inlet pressures other than 100 psig: If inlet pressure exceeds 100 psig*, add 1 psig to the desired outlet pressure for each 20 psig the inlet pressure is above 100 psig*. EXAMPLE: If the inlet pressure is 180 psig, add 4 to the desired outlet pressure. Following through with the example in step 1, add 4 to 30 for a modified outlet pressure setting of 34 psig. If inlet pressure is less than 100 psig*, subtract 1 psig from the desired outlet pressure for each 20 psig the inlet pressure is below 100 psig*. EXAMPLE: If the inlet pressure is 60 psig, subtract 2 from the desired outlet pressure. Following through with the example in step 1, subtract 2 from 30 for a modified outlet pressure setting of 28 psig.

3. Modifications for flows other than zero: Determine the pressure drop from the appropriate flow curve above. Add the pressure drop to the modified outlet pressure setting. EXAMPLE: If the desired outlet pressure is 30 psig at a flow of 10 scfm, add 10 to the modified outlet pressure setting. The quantity of 10 is the difference between the outlet pressure (30 psig) at the desired flow (10 scfm) and outlet pressure (40 psig) at no flow. See dashed lines on the air flow curve for example. Following through with the first example in Step 2 above, add 10 to the 34 to obtain a modified outlet pressure setting of 44. Enter 44 in the 8th and 9th positions of the model number.

* 125 psig for outlet pressure settings of 95 through 99 psig.

ISO Symbols



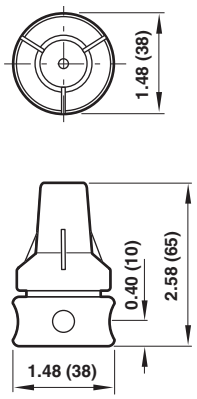
Relieving Non relieving

R14, R16 Miniature, Preset, Nonadjustable Pressure Regulator

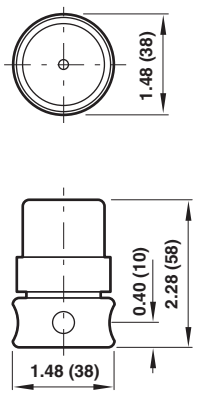
Water and Compressed Air Service

1/8" or 1/4" PTF Port Sizes

R14

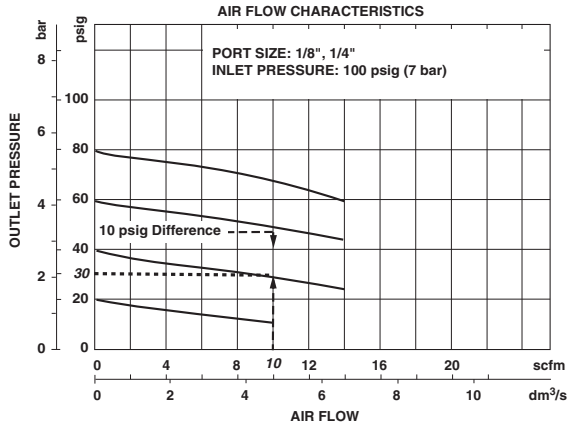


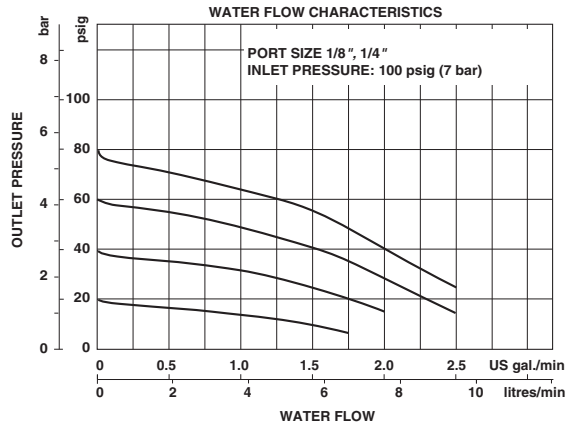
R16



Dimensions in inches (mm)

Typical Performance Characteristics





11 044 Pressure Regulator

Water and Compressed Air Service

1/4" Tube connection

Non-relieving models.

Acetal plastic, corrosion resistant construction

Low torque, non-rising adjusting knob.

Designed for use with deionized water and potable water systems. Plastic (not assembly) is NSF approved. All elastomers are CFR 21 FDA food and water contact compliant. Non-relieving models only.

Technical data

Fluid:

Water and compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature:

Water service: 35° to 150°F (2° to 66°C)

Air service: -30° to 150°F (-34° to 66°C) *

*When used in air service, air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Port connections:

1/4" OD tube (brass nut and plastic ferrule supplied)

Recommended tubing: 1/4" soft PVC or Polyethylene tubing. Avoid aluminum, copper, and hard plastic tubing.

Typical flow:

Compressed air service at 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 15 psig (1 bar) from set: 3.0 scfm (1.4 dm3/s)

Water service at 100 psig (7 bar) inlet pressure, 60 psig (4 bar) set pressure and a droop of 15 psig (1 bar) from set: 0.7 U.S. gpm (2.65 liters per minute)

No gauge ports

Materials

Body: Acetal

Bonnet: Acetal

Valve: Stainless steel with EPDM seal (CFR21 FDA food and water contact compliant)

Valve seat: Acetal

Diaphragm: Stainless steel and nitrile (CFR21 FDA food and water contact compliant)

Ordering Information

Model listed has non-relieving diaphragm, and 5 to 100 psig (0.3 to 7 bar) outlet pressure adjustment range.†

Port Connection	Model	Flow* scfm (dm3/s)	Flow** U.S. gpm (lpm)	Weight lb (kg)
1/4" tube nut and ferrule	11 044 003	3.0 (1.4)	0.7 (2.65)	0.16 (0.08)

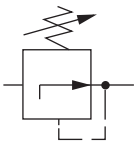
For additional models contact the factory.

* Approximate flow with 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.

* Approximate flow with 100 psig (7 bar) inlet pressure, 60 psig (4 bar) set pressure and a 15 psig (1 bar) droop from set.

† Outlet pressure can be adjusted to pressures in excess, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

ISO Symbols



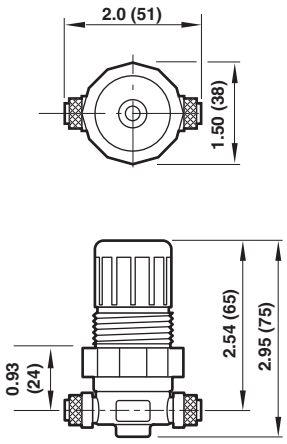
Non relieving

11 044 Pressure Regulator

Water and Compressed Air Service

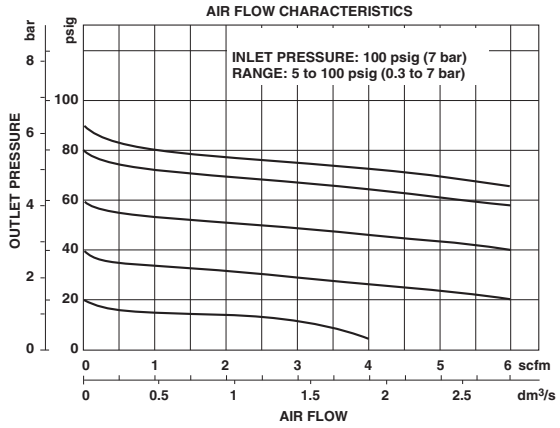
1/4" Tube connection

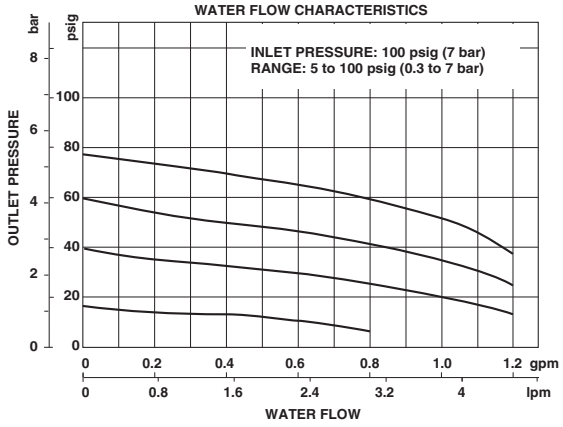
Panel mounting hole diameter: 1.19" (30 mm)
Maximum panel thickness: 0.25" (6 mm)



Dimensions in inches (mm)

Typical Performance Characteristics





Service Kits

Type	Part number
Non-relieving	3407-59

Service kit includes slip ring, valve seat, valve, valve spring, and diaphragm.

R91 Water or Compressed Air Pressure Regulator

Regulator 1/4" Port Size

R91W: Use with deionized water and potable water systems. Plastic (not assembly) is NSF approved. All elastomers are CFR 21 FDA food and water contact compliant. Non relieving models only.

R91G: Use with non-potable water (non-relieving only) and compressed air systems (Non relieving and relieving models.)

Technical data

Fluid

R91G: Compressed air and non-potable water, neutral gases

NOTE: Contact Norgren for use with other media.

R91W: Potable water, deionized water

Maximum pressure:

150 psig (10 bar)

Operating temperature

Water service: 35° to 125°F (2° to 52°C)

Air service: 0° to 125°F (-20° to 52°C)*

* When used in air service, air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Gauge ports:

1/8 PTF with PTF main ports

R1/8 with ISO Rc main ports

R1/8 with ISO G main ports

Materials

Body and bonnet: Acetal

Valve

R91G: Brass/nitrile

R91W: Stainless steel/food grade EPDM

Valve seat: Acetal

Valve seat o-ring

R91G: Nitrile

R91W: Food grade EPDM

Diaphragm

R91G: Acetal/nylon inserted nitrile

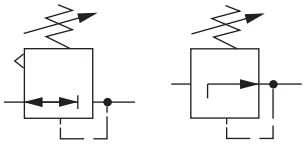
R91W: Acetal/nylon inserted nitrile, food grade

Gauge port plugs: Nylon for NPT

Brass for ISO G & Rc

(furnished only with PTF-ported units)

ISO Symbols



Relieving Non Relieving

Ordering Information

Models listed include PTF threads, knob adjustment, non relieving diaphragm, 5 to 125 psig (0.3 to 8.6 bar) outlet pressure adjustment range†, and without gauge.

Inlet Port	Application	Model	Flow* scfm (dm3/s)	Flow** gpm (lpm)	Weight lb (kg)
1/4"	Industrial air and non-potable water	R91G 2AK NLN	24 (11)	1.75 (6.6)	0.15 (0.07)
1/4"	Potable water and deionized water	R91W 2AK NLN	24 (11)	1.75 (6.6)	0.15 (0.07)

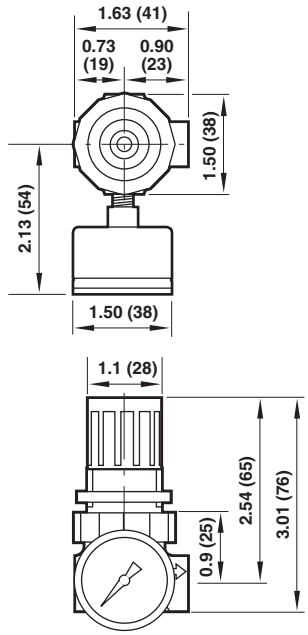
* Typical flow for compressed air service at 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 15 psig (1 bar) from set.

** Typical flow for water service at 100 psig (7 bar) inlet pressure, 60 psig (4 bar) set pressure and a droop of 15 psig (1 bar) from set.

R91 Water or Compressed Air Pressure Regulator

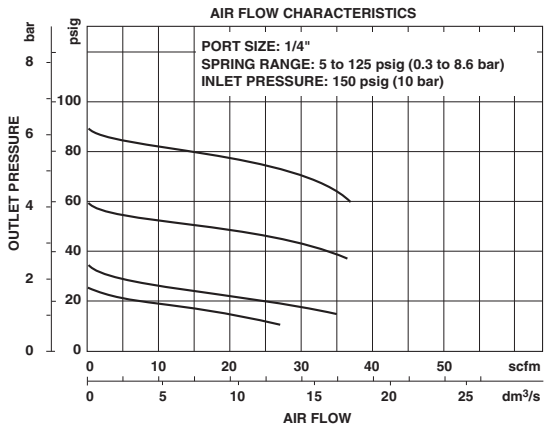
Regulator 1/4" Port Size

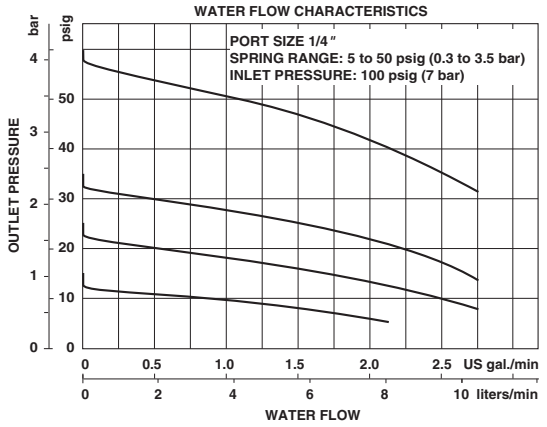
Panel mounting hole diameter 1.19" (30 mm)
Maximum panel thickness 0.25" (6 mm)



Dimensions in Inches (mm)

Typical Performance Characteristics





Service Kits

Item	Type	Part number
Service Kit	R91W, non relieving	3407-93
	R91G, non relieving	3407-94
	R91G, relieving	3407-95

Service kit contains slip ring, diaphragm, valve seat with o-ring, valve, and valve spring.

Water Regulator

1/4", 3/8" and 1/2" Port Sizes

Non-relieving models

Brass body, corrosion resistant construction

Full flow gauge ports can be used as auxiliary outlets

Technical data

Fluid:

Water and compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

400 psig (27 bar)

Operating temperature:

Water service: 35° to 200°F (2° to 93°C)

Air service: -30° to 200°F (-34° to 93°C)*

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

R43 Gauge ports

1/4" PTF with PTF main ports

1/4" ISO G with ISO G main ports

1/4" ISO Rc with ISO Rc main ports

11-009 Gauge ports:

1/8" PTF with PTF main ports

G1/8 with ISO G main ports

Rc1/4 with ISO Rc main ports

Materials:

Body: Brass

Bonnet: Aluminum

Valve: Brass

Bottom plug: Brass

Elastomers: Nitrile

R43

11-009

R43 Ordering Information

Models listed have T-handle adjustment, 5 to 125 psig (0.3 to 8.5 bar) outlet pressure adjustment range*, and PTF threads. A gauge is not included.

Port	Model	Flow† U.S. gpm (lpm)	Weight lb (kg)
1/4"	R43 201 NNLA	6 (23)	2.4 (1.09)
3/8"	R43 301 NNLA	6 (23)	2.4 (1.09)
1/2"	R43 406 NNLA	9 (34)	2.4 (1.09)

† Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and 15 psig (1 bar) droop from set.

11-009 Ordering Information

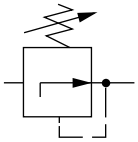
Models listed have PTF threads, T-bar adjustment, non-relieving diaphragm, and 5 to 125 psig (0.3 to 8.5 bar) outlet pressure adjustment range*. A gauge is not included.

Port Size	Model Number	Flow † U.S. gpm (lpm)	Weight lbs (kg)
3/4"	11 009 065	27.5 (104)	3.54 (7.8)
1"	11 009 081	27.5 (104)	3.40 (7.5)

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

† Typical flow with 100 psig (6.9 bar) inlet pressure, 60 psig (4 bar) set pressure and 15 psig (1 bar) droop from set.

ISO Symbols

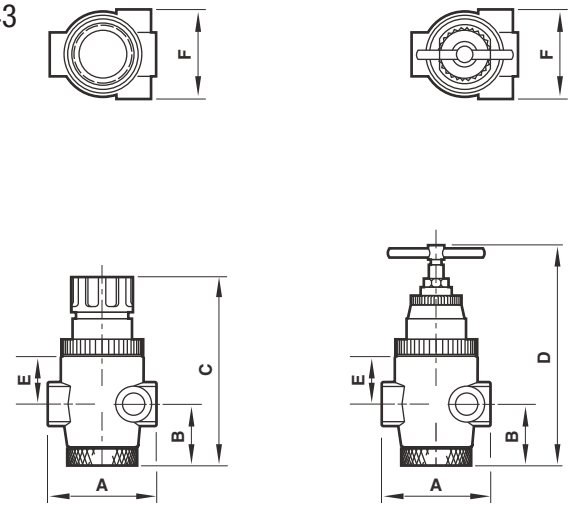


R43 Water Pressure Regulator

1/4", 3/8" and 1/2" Port Sizes

Panel mounting hole diameter: 1.89" (48 mm)
Maximum panel thickness: 0.19" (5 mm)

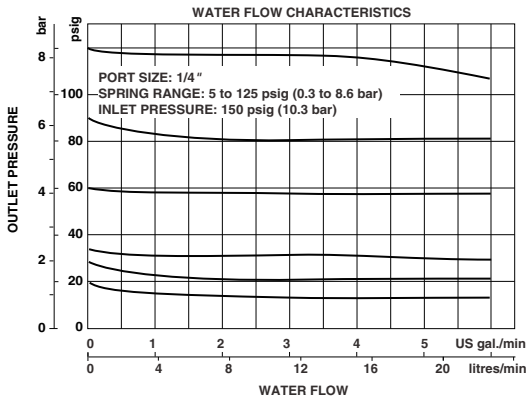
R43

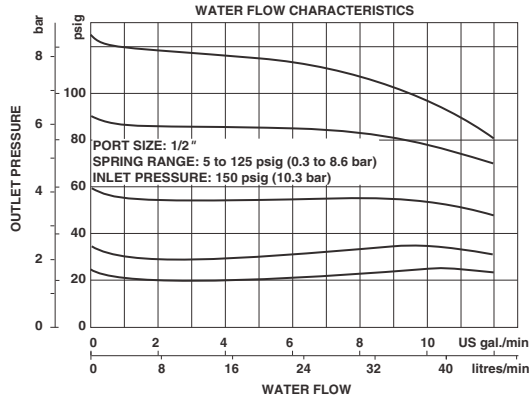


Port Size	A	B	C	D	E	F
1/4", 3/8"	2.76	1.52	4.86	5.75	1.21	2.31
	(70)	(39)	(124)	(146)	(31)	(59)
1/2"	3.34	1.59	5.01	5.90	1.28	2.44
	(85)	(41)	(127)	(150)	(33)	(62)

Dimensions in inches (mm)

Typical Performance Characteristics



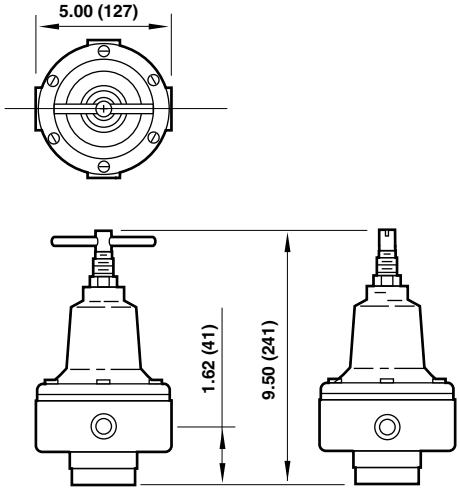


Service Kits

Item	Type	Part number
Service Kit	For 1/4" and 3/8" ported units	5298-03
	For 1/2" ported units	5298-10

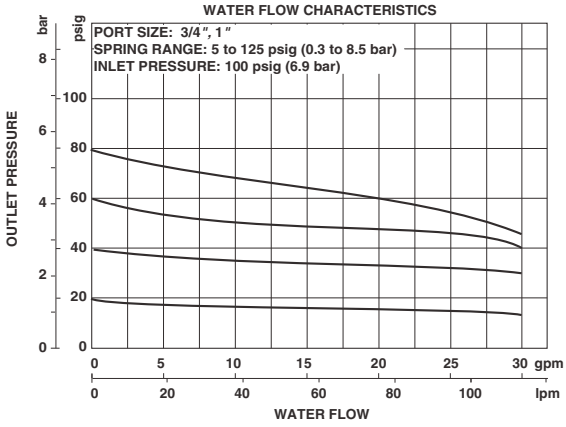
Service kit includes diaphragm, o-rings, valve, valve spring.

11-009



Dimensions in inches (mm)

Typical Performance Characteristics



Service Kits

Type	Part number
Non-relieving	2436-03

Service kit includes diaphragm, valve seat, valve pin, valve pin gasket, valve, valve spring, and o-rings.

Inline Micro-Fog and Oil Fog Lubricators

L17 Lubricators

All around (360°) visibility of the sight-feed dome simplifies installation and adjustment

Screw-on bowl reduces maintenance time

Can be disassembled without the use of tools or removal from the air line

Technical data

L17

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature*:

0° to 175°F (-20° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Start point (minimum flow required for lubricator operation):

8 scfm (3.8 dm3/s) at 90 psig (6.3 bar) inlet pressure

1" ports: 275 scfm (130 dm3/s)

Nominal reservoir size

Standard: 1 quart US (1 liter)

Optional: 2 gallon US (8 liter)**
5 gallon US (20 liter)

Manual drain connection on 1 quart reservoir: Will fit 1/8-27 and 1/8-28 pipe thread

Materials

Body: Aluminum

Reservoir:

1 quart US (1 liter): Aluminum

2 and 5 gal: Steel**

Reservoir sight glass: Pyrex

Sight-feed dome

Standard: Transparent nylon

Optional: Pyrex and aluminum

Elastomers: Neoprene and nitrile

** The 2 and 5 gallon (8 and 20 liter) steel reservoirs are ASME rated according to the ASME Pressure Vessel Code, Section VIII

Ordering Information

Models listed have PTF threads.

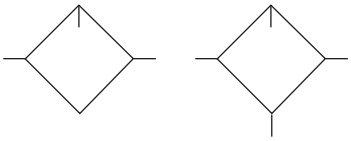
Port Size**	Micro-Fog Models**	Oil-Fog Models*	Flow scfm (dm3/s)†	Weight lbs (kg)
3/4"	L17-600-MPDA	L17-600-OPDA	160 (76)	3.73 (1.69)
1"	L17-800-MPDA	L17-800-OPDA	275 (130)	3.56 (1.62)
1-1/4"	L17-A00-MPDA	L17-A00-OPDA	275 (130)	4.65 (2.11)
1-1/2"	L17-B00-MPDA	L17-B00-OPDA	275 (130)	3.67 (1.67)

* Models listed in the order table must not be located downstream of frequently cycling directional control valves. Order the optional bi-directional Oil-Fog Lubricator for use under such conditions.

** Smaller port sizes available upon request.

† Typical flow with 90 psig (6.3 bar) inlet pressure and a pressure drop of 5 psig (0.35 bar).

ISO Symbols



L07 with drain

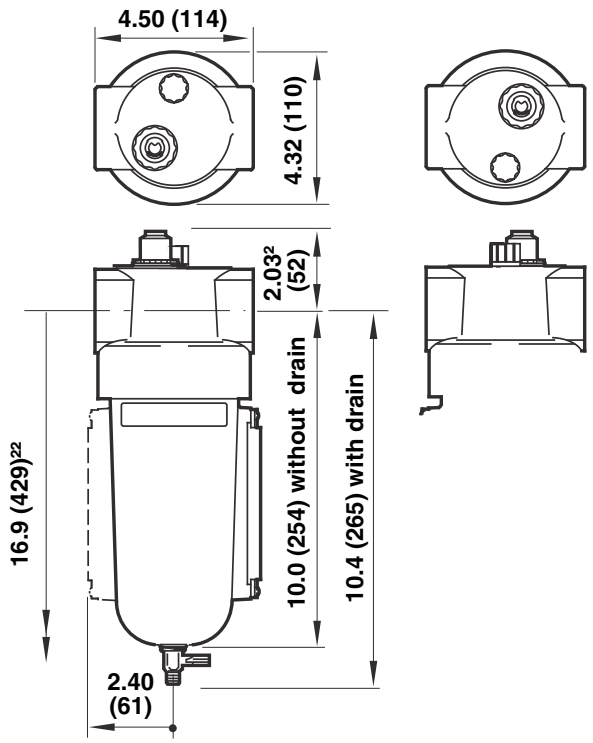
L17 manual drain

Inline Micro-Fog and Oil-Fog Lubricators

L17 Lubricators

Dimensions in inches (mm)

L17 Micro–Fog **L17 Oil–Fog**

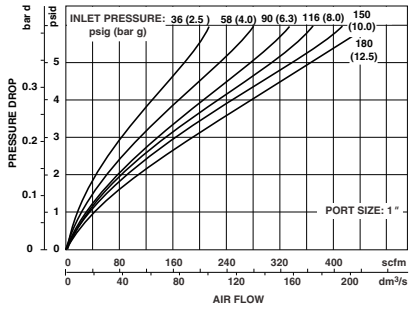


1 quart US (1 liter) reservoir
1/4 turn drain

† Standard dome: 2.03" (52 mm) Pyrex dome: 2.72" (69 mm)
†† Minimum clearance required to remove bowl.

Reservoir	A	B	C
2 gallon US (8 liter)	21.2 (538)	6.25 (159)	7.44 (189)
5 gallon US (20 liter)	24.2 (614)	10.3 (260)	11.4 (291)

L17



L17 Service Kits

Item	Type	Part Number
Service kit	Oil-Fog and Micro-Fog	5771-02
Reservoir sight glass kit	1 quart US (1 liter)	2273-22
	2/5 gallon US (8/20 liter)	2274-01
Replacement drain	1/4 Turn	619-50

Service kit 5771-02 includes o-rings, seals and gaskets.

Reservoir sight glass kits, include all o-rings, seals, glass, guard, and sight glass hardware.

Inline Oil-Fog Lubricators

10-028, and 10-076 Lubricators

1-1/2" and 2" port sizes

Designed to lubricate a single tool, valve, cylinder, air motor, or other air driven device.

One Oil-Fog lubricator should be provided for each device requiring lubrication

All around (360°) visibility of the sight-feed dome simplifies installation and adjustment

The 2 and 5 U.S. gallon (8 and 20 liter) reservoirs are rated to ASME Pressure Vessel Code, Section VIII

10-076

Technical data

10-028

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature*:

0° to 175°F (-20° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Start point (minimum flow required for lubricator operation) at 90 psig (6.3 bar) inlet pressure: 103 scfm (49 dm3/s)

Typical flow at 90 psig (6.3 bar) inlet pressure and 5 psig (0.35 bar) pressure drop: 568 scfm (268 dm3/s)

Nominal reservoir sizes:

1 quart (1 liter)
2 U.S. gallon (8 liter)
5 U.S. gallon (20 liter)

Materials

Body: Aluminum

Reservoir: Steel

Reservoir liquid level indicator lens: Pyrex

Sight-feed dome

Standard: Transparent nylon

Optional: Pyrex and aluminum

Elastomers: Neoprene and Nitrile

10-076

Fluid:

Compressed air

Maximum pressure:

250 psig (17 bar)

Operating temperature*:

0° to 175°F (-20° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Start point (minimum flow required for lubricator operation) at 90 psig (6.3 bar) inlet pressure: 240 scfm (123 dm3/s)

Typical flow with 90 psig (6.3 bar) inlet pressure and 5 psig (0.35 bar) pressure drop: 1300 scfm (614 dm3/s)

Nominal reservoir sizes:

2 U.S. gallon (8 liter)
5 U.S. gallon (20 liter)

Materials

Body and adapter: Aluminum

Reservoir: Steel

Reservoir liquid level indicator lens: Pyrex

Sight-feed dome

Standard: Transparent nylon

Optional: Pyrex and aluminum

Elastomers: Nitrile

Ordering Information

Models listed have PTF threads.

Model Number	Reservoir Nominal Size	Reservoir Working Capacity Fluid Ounce (Liter)	Recommended Operating Flow Range scfm (dm3/s)	Weight lbs (kg)
10-028-545	1 quart (1 liter)**	19 (0.56)	110 to 590 (52 to 278)	5 (0.91)
10-028-047	2 U.S. gallon (8 liter)	113 (3.34)	110 to 590 (52 to 278)	16 (7.26)
10-028-048	5 U.S. gallon (20 liter)	316 (9.34)	110 to 590 (52 to 278)	28 (12.70)

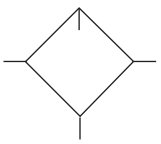
Model Number	Reservoir Nominal Size	Reservoir Working Capacity Fluid Ounce (Liter)	Recommended Operating Flow Range scfm (dm3/s)†	Weight lbs (kg)
10-076-004	2 U.S. gallon (8 liter)	113 (3.34)	250 to 1000 (118 to 472)	19 (8.6)
10-076-005	5 U.S. gallon (20 liter)	316 (9.34)	250 to 1000 (118 to 472)	32 (14.5)

* Models listed in the order table must not be located downstream of frequently cycling directional control valves. Order the optional bi-directional Oil-Fog Lubricator for use under such conditions.

** Models with 1 quart reservoirs must not be located downstream of frequently cycling directional control valves. Models with the 2 and 5 gallon reservoirs may be located downstream of frequently cycling directional control valves.

† At 100 psig (6.9 bar) inlet pressure drop of 5 psid (0.35 bar)

ISO Symbol



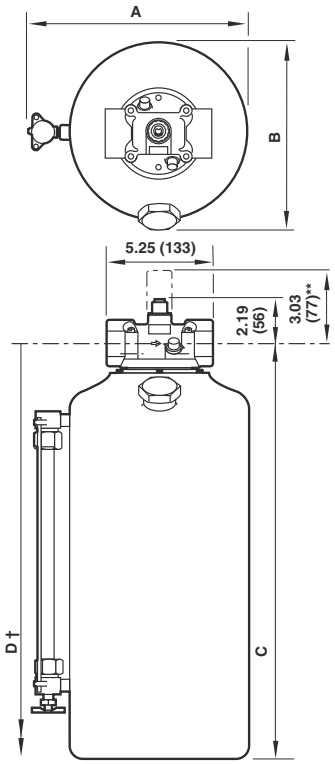
With Drain

Inline Oil-Fog Lubricators

10-028, and 10-076 Lubricators

1-1/2" and 2" port sizes

Dimensions in inches (mm)

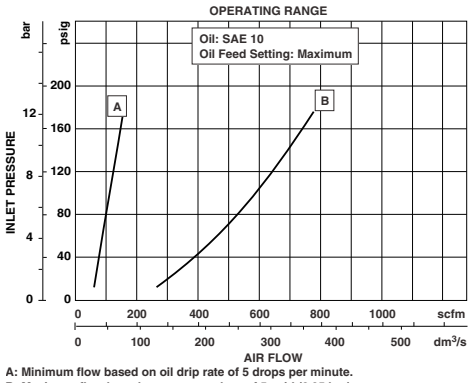


2 and 5 gallon (8 and 20 liter) reservoir

Reservoir	A	B	C	D
1 quart (1 liter)	4.72 (120)	4.06 (103)	8.27 (210)	15 (376)
2 gallon (8 liter)	7.81 (198)	7.18 (182)	18.34 (466)	32 (813)
5 gallon (20 liter)	11.81 (300)	11.18 (284)	21.59 (548)	37 (940)

10-028

Typical Performance Characteristics

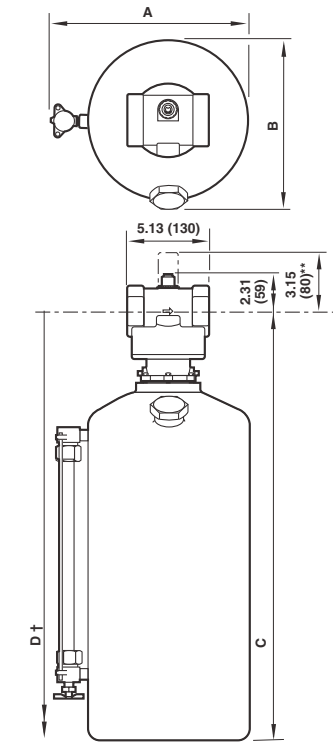


A: Minimum flow based on oil drip rate of 5 drops per minute.
B: Maximum flow based on pressure drop of 5 psid (0.35 bar).

10-028 Service Kits

Item	Type	Part Number
Liquid level lens kit	1 quart reservoir	2273-22
	2 and 5 gallon reservoir	2274-01
Replacement drain	Manual petcock	684-01

Liquid level lens kit include sight glass, sight glass guards, seals, and hardware.



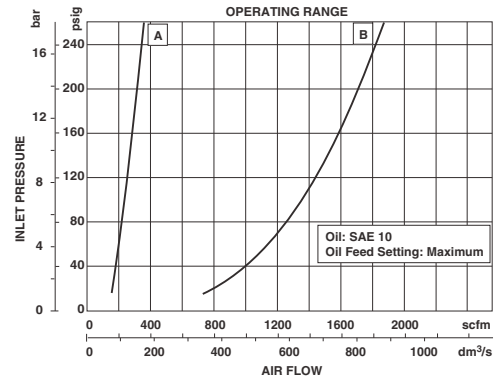
2 and 5 gallon (8 and 20 liter) reservoir

** Optional pyrex sight-feed dome.
† Minimum clearance required to remove bowl.

Reservoir	A	B	C	D
2 gallon (8 liter)	7.81 (198)	7.18 (182)	21.53 (547)	35 (887)
5 gallon (20 liter)	11.81 (300)	11.18 (284)	24.78 (629)	40 (1014)

10-076

Typical Performance Characteristics



A: Minimum flow based on oil drip rate of 5 drops per minute.
B: Maximum flow based on pressure drop of 5 psid (0.35 bar).

10-076 Service Kits

Item	Type	Part Number
Liquid level lens kit	8 and 20 liter reservoir	2274-01
Replacement drain	Manual petcock	684-01
Seal kit	Models after 2000	3035-06
Seal kit	Models prior 2000	3035-02

Reservoir sight glass kits include sight glass, sight glass guards, seals, and hardware.

Pressure Relief Valves

V07, 16-004, and V06

Compact design

V07 helps protect air operated equipment from over pressure by retarding excessive pressure buildup

16-004: Used in low-volume air tanks to retard excessive pressure buildup

V06: Helps protect water systems from excessive pressure buildup by venting water when pressure exceeds setting of the relief valve. Relief valve closes when pressure is reduced to the relief pressure setting.


V07


16-004


V06

Technical data

V07

Fluid:
Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:
300 psig (20 bar)

Operating temperature:
-30° to 150°F (-34° to 65°C) *

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Gauge ports:
1/8" PTF with PTF main ports
1/8" ISO Rc with ISO Rc main ports
1/8" ISO Rc with ISO G main ports

16-004

Fluid:
Compressed air

Maximum pressure:
300 psig (20 bar)

Operating temperature*:
-30° to 200°F (-34° to 93°C)

*Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Repeatability:
± 20% of relief pressure setting

V06

Fluid:
Water and compressed air

Maximum pressure:
400 psig (27.6 bar)

Operating temperature:
Plastic bonnet:
35° to 150°F (2° to 65°C)
Brass bonnet:
35° to 200°F (2° to 94°C)

Gauge ports:
1/8" PTF

Ordering Information

Port Size	Model Number	Weight lbs (kg)
1/8"	V07-100-NNKA	0.28 (0.13)
1/4"	V07-200-NNKA	0.28 (0.13)
1/8"	V06-121-NNKA	0.2 (0.09)
1/4"	V06-221-NNKA	0.2 (0.09)

Port Size	5 to 25 psig*	25 to 50 psig*	25 to 75 psig*	70 to 150 psig*	125 to 300 psig*	Weight lbs (kg)
1/8"	16-004-030	16-004-001	16-004-002	16-004-003	16-004-004	0.11 (0.05)
1/4"	16-004-031	16-004-009	16-004-010	16-004-011	16-004-012	0.11 (0.05)

* Pressure relief ranges. Relief valves can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Materials:

V07
Body: Zinc
Bonnet: Acetal
Valve seat: Polyphenylene
Elastomers: Nitrile

16-004
Body, cap, spring rest: Brass
Valve: Brass and nitrile
Regulating spring: Stainless steel

V06
Body: Brass
Bonnet
Standard: Acetal resin
Optional: Brass
Valve seat: Acetal resin
Elastomers: Nitrile

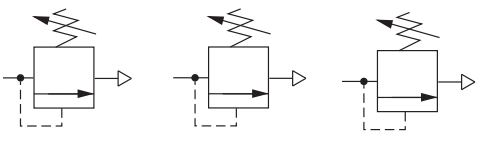
V07 Service Kits

Type	Part number
Diaphragm and valve seat seal	3407-80
Valve seat and valve seat seal	3439-11
Diaphragm seat and seal	3407-19

V06 Service Kits

Type	Part number
Valve seat and seal	3439-11
Diaphragm	3440-03

ISO Symbols

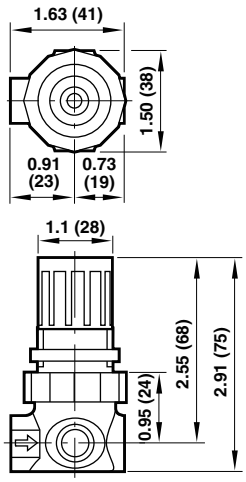


Pressure Relief Valves

V07, 16-004, and V06

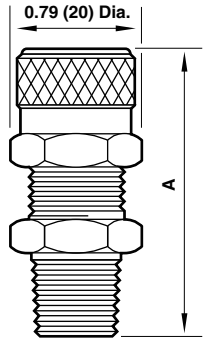
Dimensions in inches (mm)

V07



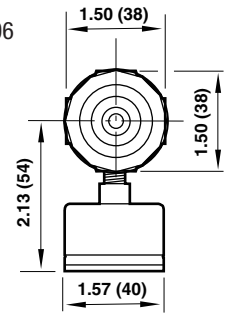
Panel mounting hole diameter: 1.19" (30 mm)
Maximum panel thickness: 0.25" (6 mm)

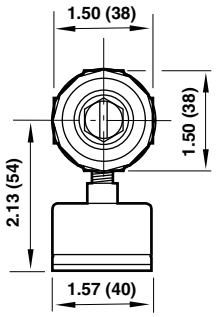
16-004

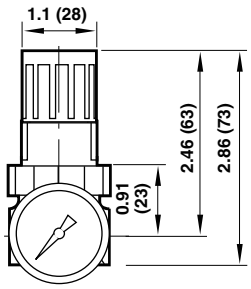


A: 1.56 (62) for 1/8" pipe size
1.75 (44) for 1/4" pipe size

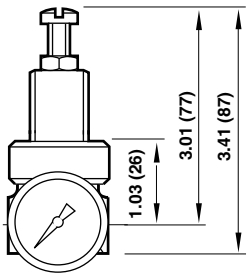
V06







Models with Plastic Bonnet

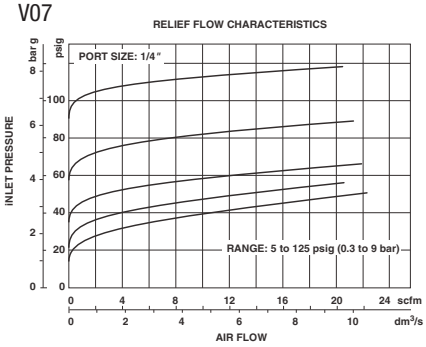


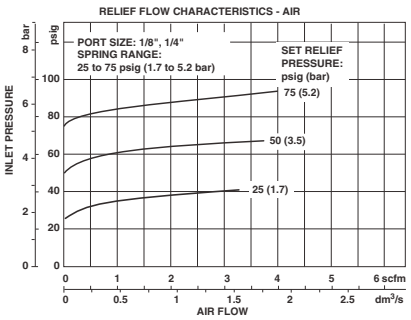
Models with Brass Bonnet

Panel mounting hole diameter:
Models with plastic bonnet: 1.19" (30 mm)
Models with brass bonnet: 0.81" (21mm)
Maximum panel thickness: 0.25" (6 mm)

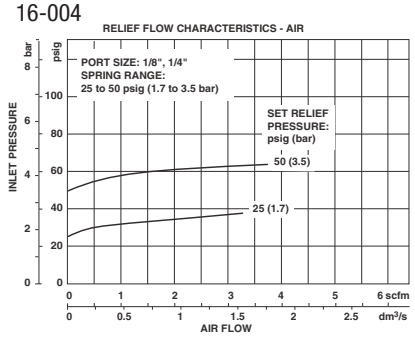
Typical Performance Characteristics

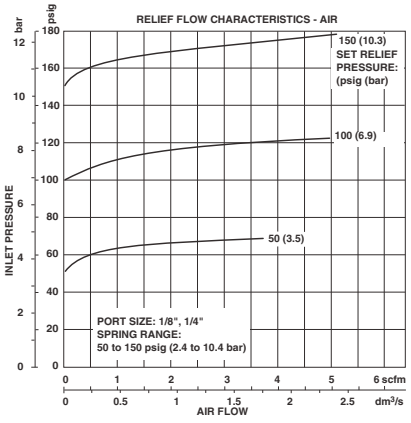
V07

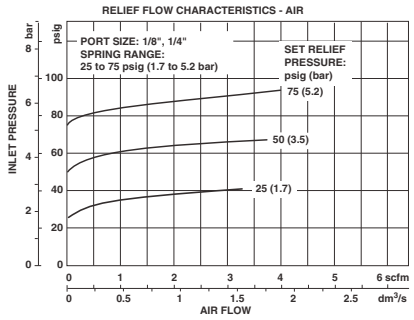




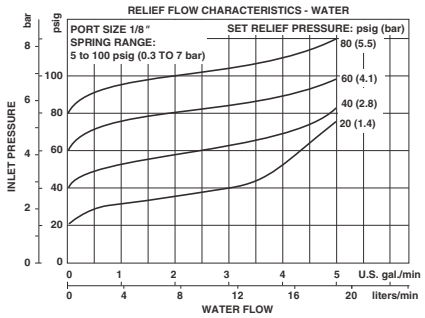
16-004







V06



Inline Lockout Valves

For installation in 1/4" through 1-1/2" air lines.

3-way, manually operated, full flow lockout valves can be locked in the closed position with a customer supplied padlock.

Helps you comply to OSHA regulations, as they relate to OSHA regulation 29 CFR Part 1910, standard for lockout/tagout procedures.

Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum Pressure:

300 psig (20.4 bar)

Temperature Range:

-20° to 175°F* (-29° to 79°C)

*With a dew point of supply air less than air temperature below 35°F (2°C).

Maximum Diameter of Lock Shackle:

5/16" (8mm)

Materials

Valve Body: Aluminum

Muffler Base: Zinc

Spool, T-Handle, Muffler Shell: Aluminum

Spring Detent: Stainless Steel

Elastomers

Standard: Nitrile and Polyurethane

Optional: Fluorocarbon

Repair Kits

C0021A/D and C0023A/D Valves:
Standard Elastomers: 53474-43
Fluorocarbon Elastomers: 53474-44

C0022A/D and C0024A/D Valves:
Standard Elastomers: 53475-34
Fluorocarbon Elastomers: 53475-36

Replacement Mufflers* for C0021A/C0024D Valves

C0021A/D and C0023A/D Valves: ML004F

C0022A/D and C0024A/D Valves: ML008F

*Contains all bolts and washers required to flange mount with the respective sized lockout valve.

Lockout Hasp
Part Number: 54547-01

Note: The 1-1/2" diameter jaws can be used with all Norgren Inline, Olympian, and Poppet Lockout Valves except the T15. High-tensile steel affords extra protection against unauthorized access. Red vinyl coated and plated to resist rust. Locking holes accommodate padlocks up to 11/32" shackle diameter.

Ordering Information

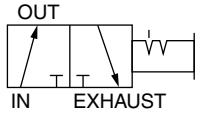
Models listed are with PTF threads.

Basic Size	Port Size	Model Without Muffler	Model With Muffler	Basic Size	Size ISO G	Model Without Muffler	Model With Muffler	Cv Factor In-Out Ports	Cv Factor Out-Exhaust Ports
1/2"	1/4"	C0021A	C0023A	1/2"	G1/4	C0041A	C0043A	4.2	6.0
	3/8"	C0021B	C0023B		G3/8	C0041B	C0043B	6.6	6.6
	1/2"	C0021C	C0023C		G1/2	C0041C	C0043C	9.3	7.9
	3/4"	C0021D	C0023D		G3/4	C0041D	C0043D	12.6	8.6
1"	3/4"	C0022A	C0024A	1"	G3/4	C0042A	C0044A	10.6	8.
	1"	C0022B	C0024B		G1	C0042B	C0044B	16.2	9.2
	1-1/4"	C0022C	C0024C		G1-1/4	C0042C	C0044C	25.3	8.9
	1-1/2"	C0022D	C0024D		–	–	–	22.4	10.0

Options

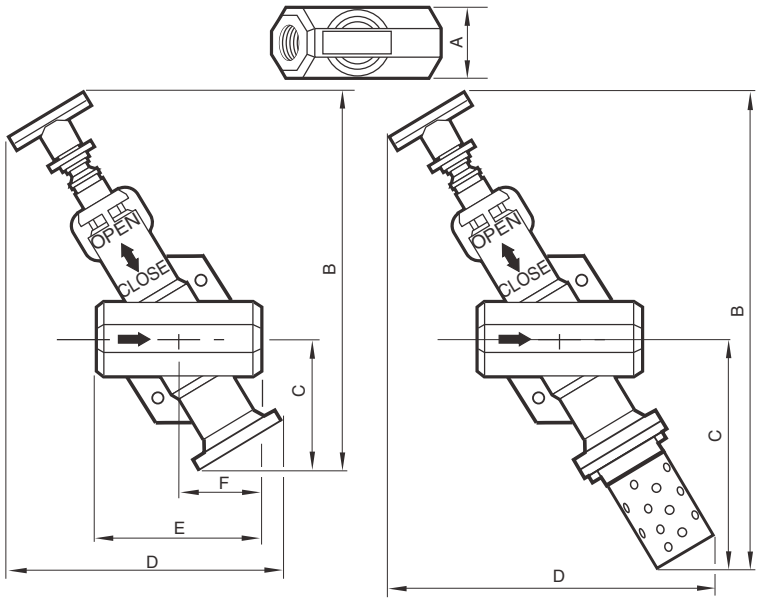
C0021A/D and C0023A/D Valves with fluorocarbon elastomers: Specify 1FA after the desired valve model number.
C0022A/D and C0024A/D Valves with fluorocarbon elastomers: Specify 1EX after the desired valve model number.
C0021A/D Valves with tapped muffler base that accepts a muffler with 3/4" NPT male threads: Specify 1M2 after the desired valve model number. Recommended muffler: MB006A.
C0022A/D Valves with tapped muffler base that accepts a muffler with 1" NPT male threads: Specify 1M1 after the desired valve model number. Recommended muffler MB008A.
Note: Standard valves have a black handle. To order valves with a red handle, change the second position of the model number to an R (e.g., C0021A would change to CR021A).

Graphic Symbol



Inline Lockout Valves

For installation in 1/4" through 1-1/2" air lines.



Lockout Hasp

Valve Type	A	B Without Muffler	B With Muffler	C Without Muffler	C With Muffler	D Without Muffler	D With Muffler	E	F
All	1.87	9.33	11.78	2.90	5.35	6.97	7.97	4.00	2.00
1/2" basic	(48)	(237)	(299)	(74)	(136)	(177)	(202)	(102)	(51)
All	2.26	12.07	15.72	4.13	7.78	8.65	10.46	5.00	2.50
1" basic	(57)	(307)	(399)	(105)	(198)	(220)	(266)	(127)	(64)

All Dimensions in Inches (mm)

UL Listed Regulators for Industrial Service

Regulators for use with compressed air and inert gases

Underwriters Laboratories, Inc. listed (file number SA1089) for use with air, argon, carbon dioxide, krypton, neon, nitrogen, xenon. For use with other gases, including oxygen, consult Norgren.

Non-relieving and relieving models. Relieving models allow reduction of outlet pressure even when the system is dead-ended

R44

Fluid:

Compressed air, carbon dioxide, inert gases, neutral gases

NOTE: Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature:

-30° to 150°F (-34° to 66°C) *

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

R83

Fluid:

Air, argon, carbon dioxide, krypton, neon, nitrogen, and xenon. For use with other gases, including oxygen, consult Norgren. Do not use the R83 regulator in beverage dispensing applications. Other Norgren regulators (R81 for soft drink, R82 for beer, R84 for carbonators) are available for use in dispensing systems.

Maximum pressure:

3000 psig (207 bar)

Operating temperature:

-30° to 140°F (-34° to 60°C) *

* Fluid must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

R44

Body and bonnet

R44-100/-200: Aluminum body; acetal plastic bonnet

R44-121/-221: Brass body; acetal plastic bonnet

R44-122/-222: Zinc body; acetal plastic bonnet

R44-133/-233: Brass body; brass bonnet

Valve: Brass/nitrile

Valve seat: Acetal

Elastomers: Nitrile

R83

Body: Brass

Bonnet: Zinc

Cartridge valve: Teflon, brass, stainless steel

Diaphragm: Acetal and nitrile

Seals: Nitrile

R44

R83

Ordering Information

Models listed have PTF threads, and relieving diaphragm.

Body	Bonnet	Medium	Port PTF	Model	Flow* scfm (dm3/s)	Weight lb (kg)
Aluminum	Plastic	Air, inert	1/8"	R44-100-RNKA	10 (4.7)	0.23 (0.11)
		gases	1/4"	R44-200-RNKA	10 (4.7)	0.23 (0.11)
Brass	Plastic	Air, CO2,	1/8"	R44-121-RNKA	10 (4.7)	0.45 (0.21)
		inert gases	1/4"	R44-221-RNKA	10 (4.7)	0.45 (0.21)
Zinc	Plastic	Air, inert	1/8"	R44-122-RNKA	10 (4.7)	0.31 (0.14)
		gases	1/4"	R44-222-RNKA	10 (4.7)	0.31 (0.14)
Brass	Brass	Air, CO2,	1/8"	R44-133-RNKA	10 (4.7)	0.54 (0.25)
		inert gases	1/4"	R44-233-RNKA	10 (4.7)	0.54 (0.25)

Alternative Models - R44

R44-★★★-★★★★

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

Body/Bonnet	Substitute
Aluminum/Plastic	00
Brass/Plastic	21
Zinc/Plastic	22
Brass/Brass	33

Threads	Substitute
PTF	A

Outlet Pres Adj Range†	Substitute
1 to 10 psig (0.1 to 0.7 bar)	A
5 to 50 psig (0.3 to 3.5 bar)	E
5 to 100 psig (0.3 to 7 bar)	K

Gauges	Substitute
With	G
Without	N

Diaphragm	Substitute
Relieving	R
Non relieving	N

* Approximate flow with 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.

† Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Port	Model	Flow * scfm dm3/s()	Weight lb (kg)
1/4"	R83-200-RNLA	11 (5.2)	1.3 (0.59)

Alternative Models - R83

R83-200-★N★A

Diaphragm	Substitute
Relieving	R
Non relieving	N

Outlet Pres Adj Ranges †	Substitute
2 to 50 psig (0.1 to 3.5 bar)	E
5 to 125 psig (0.3 to 8.5 bar)	L
10 to 175 psig (0.7 to 12 bar)	N

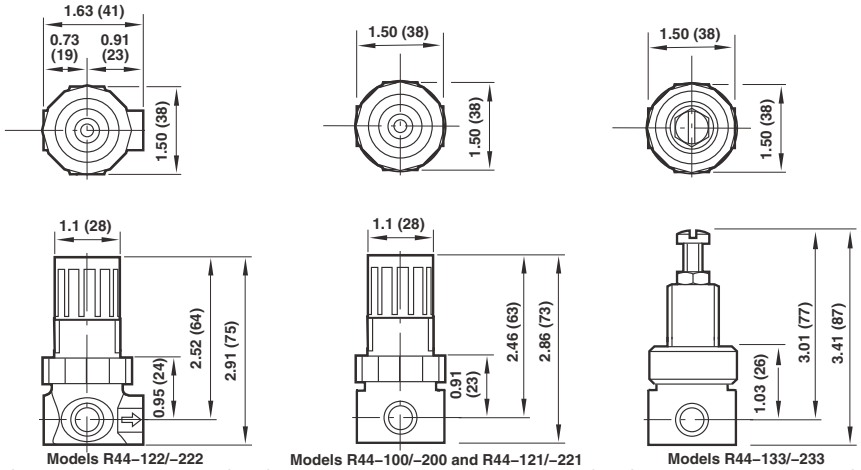
* Approximate flow with 1000 psig (69 bar) inlet pressure, 60 psig (4 bar) set pressure and a 5 psig (0.35 bar) droop from set.

† Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

UL Listed Regulators for Industrial Service

Regulators for use with compressed air and inert gases

R44

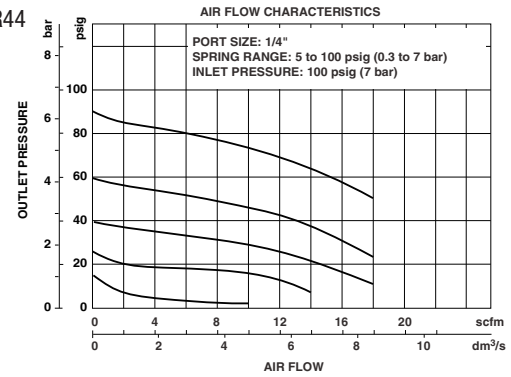


Models R44–122/–222 (Zinc Body and Plastic Bonnet)

Models R44–100/–200 and R44–121/–221 (Aluminum or Brass Body and Plastic Bonnet)

Models R44–133/–233 (Brass Body and Brass Bonnet)

R44



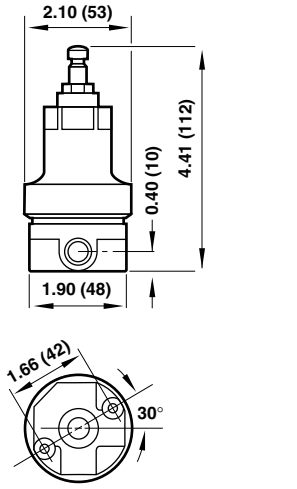
Panel mounting hole diameter:
Models with plastic bonnet: 1.19" (30 mm)
Models with brass bonnet: 0.81" (21mm)
Maximum panel thickness: 0.25" (6 mm)

R44 Service Kits

Item	Type	Part number
Service kit	Relieving	3407-02
	Non relieving	3407-01

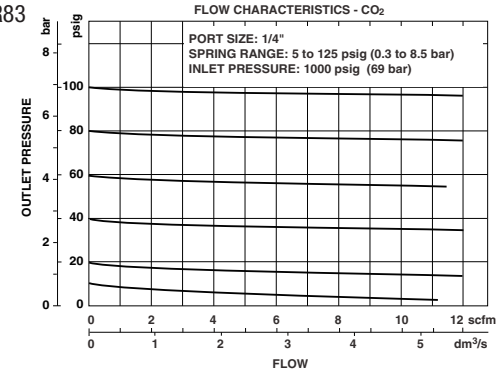
Service kit includes slip ring, diaphragm, standard valve seat with seal, valve, valve spring.

R83



Mounting Holes (2 Places)
0.18" (4.6mm) dia. by 0.39 (10mm) deep.
Use 10-32 thread forming screws.

R83



R83 Service Kits

Item	Type	Part number
Service kits	Diaphragm, relieving	570-51
	Diaphragm, non relieving	570-10
	Valve cartridge	5086-55

Valve cartridge includes the sealed cartridge and cartridge o-ring.

U.L. Listed Beverage Regulators

Cylinder gas pressure (CO2) regulators for Soft drink and Beer dispensing systems


R84

Underwriters Laboratories, Inc. listed (file number SA1089)

The R81 regulator and C81 regulator configurations with integral relief valve and outlet check valves meet the requirements of paragraphs 4.5 and 4.6 of NSDA Pamphlet TD02, Installation and Operational Procedures for Pressurized Soft Drink Dispensing Systems, dated July, 1980.

The R82 regulator with integral relief valve meets the requirements of Proposed Section 9.7, Draught Beer Dispensing Equipment and Related Components (Seventh Draft dated October 17, 1980), of ANSI-ASME F2.1-1975, Food, Drug, and Beverage Equipment.

Technical data

R84

Fluid:

Carbon dioxide.

Maximum pressure:

3000 psig (207 bar)

Operating temperature:

0° to 140°F (-18° to 60°C)

Integral relief valve cracking pressure:

150 ± 5 psig (10.4 ± 0.33 bar)

R81

Fluid:

Carbon dioxide.

Maximum pressure:

3000 psig (207 bar)

Operating temperature:

0° to 140°F (-18° to 60°C)

Integral relief valve cracking pressure:
130 ± 4 psig (9.0 ± 0.28 bar)

R82

Fluid:

Carbon dioxide.

Maximum pressure:

3000 psig (207 bar)

Operating temperature:

0° to 140°F (-18° to 60°C)

Ordering Information

Models listed have PTF threads, integral relief valve, and relieving diaphragm.

Port	Model	Weight lb (kg)
1/4"	R84-200-MNLA	1.3 (0.59)
1/4"	R81-200-LNKA	1.3 (0.59)
1/4"	R82-200-ENEA	1.3 (0.59)

Alternative Models

R81-200-LN★A

Outlet Pressure Adjustment Ranges †	Substitute
1 to 25 psig (0.07 to 1.7 bar)	T
2 to 50 psig (0.14 to 3.4 bar)	E
5 to 100 psig (0.34 to 6.9 bar)	K

† Outlet pressure can be adjusted to pressures in excess of, and less than, that specified. Do not use these units to control pressures outside of the specified range.

Maximum outlet pressure adjustment limit:

Factory set at 40 to 45 psig
(2.8 to 3.1 bar)

Integral relief valve cracking pressure:

60 ± 4 psig (4.1 ± 0.28 bar)

Materials

R84

Body: Brass

Bonnet: Zinc

Valve cartridge: Teflon, brass, stainless steel

Diaphragm: Acetal and nitrile

Relief valve: Brass, polycarbonate, nitrile, aluminum

Seals: Nitrile

R81

Body: Brass

Bonnet: Zinc

Valve cartridge: Teflon, brass, stainless steel

Diaphragm: Acetal and nitrile

Relief valve: Brass, polycarbonate, nitrile, aluminum

Seals: Nitrile

R82

Body: Brass

Bonnet: Zinc

Valve cartridge: Teflon, brass, stainless steel

Diaphragm: Acetal and nitrile

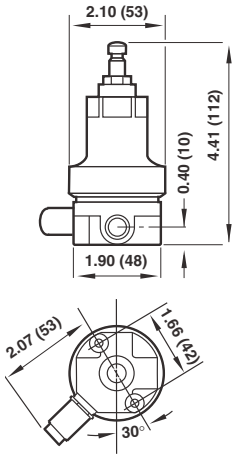
Relief valve: Brass, polycarbonate, nitrile, aluminum

Seals: Nitrile

U.L. Listed Beverage Regulators

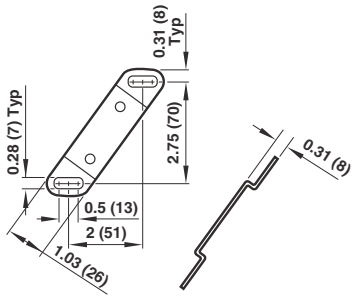
Cylinder gas pressure (CO2) regulators for Soft drink and Beer dispensing systems

R81 and R84 Regulator

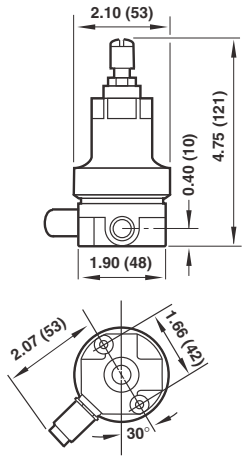


Mounting Holes (2 Places)
0.18" (4.6mm) dia. by 0.39 (10mm) deep.
Use 10-32 thread forming screws.

5095-51 Strap Type Bracket



R82 Regulator



Mounting Holes (2 Places)
0.18" (4.6 mm) dia. by 0.39" (10 mm) deep.
Use 10-32 thread forming screws.

R84 WARNING

For safety in systems using Norgren Model R84 regulators, the following procedures must be followed.

1. Pressure relief valves of sufficient capacity must always be used in the secondary (outlet) lines downstream of each pressure regulator, whether as an integral part of the regulator, as is the case with Norgren Model R84 Regulator, or separately installed elsewhere in the outlet lines. Do not remove or attempt to adjust, plug, block or otherwise defeat the purpose of the relief valve. Do not replace a relief valve with any but an identical model. The relief valve used on the R84 regulator is preset and marked **150 PSIG RELIEF VALVE.** Replace only with the same 150 psig relief valve, part number 5779-54. The end cap on the 5779-54 relief valve is color coded red for visual identification. Failure to provide a pressure relief valve of sufficient capacity to hold outlet pressure below the lowest working pressure rating of any piece of equipment installed in the outlet lines can result in equipment damage and/or personal injury.
2. A back flow check valve must always be installed at the regulator or at each manifold outlet in liquid dispensing applications to prevent reverse flow through the regulator and possible introduction of liquids and other contaminants into the regulator.
3. Regulators must not be used where temperature or pressure may exceed those specified in the **Technical data** paragraph.
4. The accuracy of the indication of pressure gauges can change, both during shipment (despite care in packaging) and during the service life. If a pressure gauge is to be used in conjunction with these products and if inaccurate indications may be hazardous to personnel or property, the gauge should be calibrated before initial installation and at regular intervals during use. For gauge standards refer to ANSI B40.1.
5. These regulators are not intended for use in life support systems, beer dispensing systems, with soft drink product (syrup) containers, or industrial cylinder gas systems.

R81 WARNING

Soft drink dispensing systems must be designed, installed, and operated in accordance with the guidelines set forth in NSDA pamphlet TD02, **Installation and Operational Procedures for Pressurized Soft Drink Dispensing Systems**, dated July, 1980 or subsequent revisions.

1. Pressure relief valves of sufficient capacity must always be used in the secondary (outlet) lines downstream of each pressure regulator, whether as an integral part of the regulator, as is the case with Norgren Model R81 Regulator, or separately installed elsewhere in the outlet lines. Do not remove or attempt to adjust, plug, block or otherwise defeat the purpose of the relief valve. Do not replace a relief valve with any but an identical model. The relief valve used on the R81 regulator is preset and marked **130 PSIG RELIEF VALVE.** Replace only with the same 130 psig relief valve, part number 5779-55. The end cap on the 5779-55 relief valve is color coded black for visual identification. Failure to provide a pressure relief valve of sufficient capacity to hold outlet pressure below the lowest working pressure rating of any piece of equipment installed in the outlet lines can result in equipment damage and/or personal injury.
2. A back flow check valve must always be installed at the regulator or at each manifold outlet in liquid dispensing applications to prevent reverse flow through the regulator and possible introduction of liquids and other contaminants into the regulator.
3. Regulators must not be used where temperature or pressure may exceed those specified in the **Technical data** paragraph.
4. The accuracy of the indication of pressure gauges can change, both during shipment (despite care in packaging) and during the service life. If a pressure gauge is to be used in conjunction with these products and if inaccurate indications may be hazardous to personnel or property, the gauge should be calibrated before initial installation and at regular intervals during use. For gauge standards refer to ANSI B40.1.
5. These regulators are not intended for use in life support systems, beer dispensing systems, soft drink carbonator systems, or industrial cylinder gas systems.

R82 WARNING

Beer dispensing systems must be designed, installed, and operated in accordance with the applicable guidelines such as the proposed Section 9.7, **Draught Beer Dispensing Equipment and Related Components** (Seventh Draft dated October 17, 1980), of ANSI-ASME F2.1-1975, Food, Drug and Beverage Equipment or subsequent revisions.

1. Pressure relief valves of sufficient capacity must always be used in the secondary (outlet) lines downstream of each pressure regulator, whether as an integral part of the regulator, as is the case with Norgren Model R82 Regulator, or separately installed elsewhere in the outlet lines. Do not remove or attempt to adjust, plug, block or otherwise defeat the purpose of the relief valve. Do not replace a relief valve with any but an identical model. The relief valve used on the R82 regulator is preset and marked **60 PSIG RELIEF VALVE.** Replace only with the same 60 psig relief valve, part number 5779-56. The end cap on the 5779-56 relief valve is color coded silver for visual identification. Failure to provide a pressure relief valve of sufficient capacity to hold outlet pressure below the lowest working pressure rating of any piece of equipment installed in the outlet lines can result in equipment damage and/or personal injury.
2. A back flow check valve must always be installed at the regulator or at each manifold outlet in liquid dispensing applications to prevent reverse flow through the regulator and possible introduction of liquids and other contaminants into the regulator.
3. Regulators must not be used where temperature or pressure may exceed those specified in the **Technical data** paragraph.
4. The accuracy of the indication of pressure gauges can change, both during shipment (despite care in packaging) and during the service life. If a pressure gauge is to be used in conjunction with these products and if inaccurate indications may be hazardous to personnel or property, the gauge should be calibrated before initial installation and at regular intervals during use. For gauge standards refer to ANSI B40.1.
5. These regulators are not intended for use in life support systems, soft drink carbonator systems, with soft drink product (syrup) containers, or industrial cylinder gas systems.

Additional Products

CS13 and CS15

Olympian Coalescing Exhaust Silencers
1/4", 3/8", 1/2", 3/4", 1", 1-1/4",
1-1/2" Port Sizes

- **Olympian plug in design**
- **Reduces noise from multi valve and cylinder circuits**
- **Removes oil mist and sub micron particles from exhausting air**
- **Flow in either direction**
- **Single or double 15 Series units for high flow rates**

Ordering Information

Port Size	Model	Weight lb (kg)
1/4"	CS13-264-10AA	2.98 (1.35)
3/8"	CS13-364-10AA	2.93 (1.33)
1/2"	CS13-464-10AA	2.87 (1.30)
3/4"	CS13-664-10AA	3.66 (1.66)

Port Size	Single	Weight lb (kg)	Double	Weight lb (kg)
3/4"	CS15-600-10AA	5.20 (2.34)	CS15-600-20AA	9.47 (4.26)
1"	CS15-800-10AA	5.09 (2.29)	CS15-800-20AA	9.36 (4.21)
1-1/4"	CS15-A00-10HA	5.22 (2.35)	CS15-A00-20AA	9.49 (4.27)
1-1/2"	CS15-B00-10HA	5.24 (2.36)	CS15-B00-20AA	9.51 (4.28)

High Pressure Needle Valves

1/8" and 1/4" Port Sizes

- **Adjustable stem packing nut with Teflon® seal**
- **Accurate metering of fluids**
- **3,000 psig inlet pressure**

Ordering Information

Size (NPT)	Port In	Port Out	Part Number
1/8"	Male	Male	17-001-106
	Female	Female	17-001-109
	Female	Male	17-001-112
1/4"	Male	Male	17-001-107
	Female	Female	17-001-110
	Male	Female	17-001-114

17-016

Drip Leg Drain
1/2" Port Size

- **Automatically expels liquids from the piping network**
- **Automatic drain valve opens when system is unpressurized, allowing water to escape by gravity**
- **Automatic drain valve is float operated when system is pressurized**

Ordering Information

Port Size	Bowl Type	Bowl Size	Model Number	Weight lbs (kg)
1/2" PTF	Transparent	1/3 pint (0.16 liter)	17-016-104	0.8 (0.38)
1/2" PTF	Metal with sight glass	1/3 pint (0.16 liter)	17-016-107	1.3 (0.59)
1/2" PTF	Transparent	3 fluid ounce (0.09 liter)	17-016-102	0.8 (0.38)

Additional Products

18-013, 5PG

Air Pressure Gauges
1/8" and 1/4" Port Sizes

Triple calibrated scale indicates pressure in psi, bar, and Mpa (megapascal)

Back or bottom connection

Panel mount, stainless steel, and Underwriters Laboratories, Inc. listed gauges available

Center Back Connection

Scale Range Outer Scale psig	Middle Scale bar	Inner Scale Mpa	1/8 NPT 1.5" (40mm) Diameter	1/8 NPT 2" (50mm) Diameter	1/4 NPT 2" (50mm) Diameter	R1/4 2" (50mm) Diameter
0 to 30	0 to 2	0 to 0.2	18-013-214	18-013-201	18-013-207	—
0 to 60	0 to 4	0 to 0.4	18-013-211	18-013-202	18-013-208	18-013-268
0 to 100	0 to 7	0 to 0.7	—	18-013-203	18-013-235	—
0 to 160	0 to 11	0 to 1.1	18-013-212	18-013-204	18-013-209	18-013-269
0 to 300	0 to 20	0 to 2.1	—	18-013-205	18-013-210	18-013-270
0 to 400	0 to 28	0 to 2.8	—	18-013-206	—	—

Bottom Connection

2" (50 mm) diameter gauges do not have the Mpa scale

Outer Scale Range-psig	Middle Scale Range-bar	Inner Scale Range-Mpa	1/8 NPT 1.5" (40mm) Dia.	1/4 NPT 2" (50mm) Dia.
0 to 15	0 to 1	—	—	18-013-082
0 to 30	0 to 2	0 to 0.2	18-013-224	18-013-030 *
0 to 60	0 to 4	0 to 0.4	18-013-225	18-013-083 *
0 to 100	0 to 7	0 to 0.7	18-013-265	18-013-084 *
0 to 160	0 to 11	0 to 1.1	18-013-273	18-013-085 *
0 to 300	0 to 20	—	—	18-013-086 *
0 to 2000	0 to 135	—	—	18-013-244 *†
0 to 3000	0 to 205	—	—	18-013-087 *†

* Underwriters Laboratories Inc. Listed

† Shipped with pulsation dampener installed.

Center Back Connection, Panel Mount

Outer Scale Range-psig	Middle Scale Range-bar	Inner Scale Range-Mpa	1/8 NPT Male and 10-32 Female 1.5" (40mm) Diameter
0 to 30	0 to 2	0 to 0.2	5PG-306-000 **
0 to 60	0 to 4	0 to 0.4	5PG-312-000 **
0 to 100	0 to 7	0 to 0.7	5PG-320-000 **

Center Back Connection

Outer Scale Range-bar	Middle Scale Range-Mpa	Inner Scale Range-psi	R1/8 1.5" (40mm) Diameter	R1/8 2" (50mm) Diameter	R1/8 2.5" (63mm) Diameter
0 to 1.6	0 to 0.16	0 to 23	18-013-991	18-013-010	—
0 to 4	0 to 0.4	0 to 56	18-013-990	18-013-011	—
0 to 6	0 to 0.6	0 to 84	—	18-013-012	—
0 to 10	0 to 1.0	0 to 140	18-013-989	18-013-013	18-013-856
0 to 16	0 to 1.6	0 to 240	—	—	18-013-855
0 to 25	0 to 2.5	0 to 360	18-013-908	18-013-014	—

Stainless Steel Gauges

Gauges do not have the Mpa scale

Outer Scale Range-bar	Inner Scale Range-psi	1/8 PTF 1.5" (40mm) Dia.	1/4 PTF 1.5" (40mm) Dia.
0 to 6	0 to 84	—	18-013-913
0 to 10	0 to 140	18-013-844	18-013-909
0 to 25	0 to 360	—	18-013-905

Bottom Connection

Outer Scale Range-bar	Middle Scale Range-Mpa	Inner Scale Range-psi	R1/8 2" (50mm) Dia.	G1/4A 2.5" (63mm) Dia.
0 to 1.6	0 to 0.16	0 to 23	18-013-024	—
0 to 4	0 to 0.4	0 to 56	18-013-277	—
0 to 6	0 to 0.6	0 to 84	18-013-026	—
0 to 10	0 to 1.0	0 to 140	18-013-279	18-013-854
0 to 16	0 to 1.6	0 to 240	—	18-013-853
0 to 25	0 to 2.5	0 to 360	18-013-028	—

Center Back Connection, Panel Mount

Outer Scale Range-bar	Middle Scale Range-Mpa	Inner Scale Range-psi	G1/8A 2" (50mm) Dia.	G1/4A 2.5" (63mm) Dia.
0 to 6	0 to 0.6	0 to 84	18-013-858 *	—
0 to 10	0 to 1.0	0 to 140	18-013-857 *	18-013-852 †
0 to 16	0 to 1.6	0 to 240	—	18-013-851 †

* Requires 2.01" (51 mm) diameter panel hole.

† Requires 2.52" (64 mm) diameter panel hole.

Blow Guns BG Series

1/4" Port Size

OSHA compliant**

Exhausts air when nozzle is blocked

Ordering Information

Port (PTF)	Part Number	Description
1/4"	BG4200	Metal blow gun
1/4"	BG3200	Plastic blow gun
1/8"	BG0200	Rubber Tip**

** Units are not O.S.H.A. compliant without air exhaust mechanism. Air exhaust mechanism must be removed to use the rubber tip.

BG0200

BG4200

BG3200

Dryers

D11 Series Dryers

Refrigerated Compressed Air Dryers

Continuous compressor operation adds years to compressor life, and maintains a 35° to 42° (2° to 6°C) pressure dew point per ANSI/B93.45M.

D10 Series Dryers

Water or Air-Cooled Refrigerated Compressed Air Dryers

Refrigerant compressor runs continuously when power is applied to the dryer, providing a nearly constant dew point at all times

High efficiency heat exchangers.

Heat exchangers are modular in design and may be replaced in the field.

D50 Series Dryers

Compact Heatless Regenerative Compressed Air Dryers

The twin desiccant-packed towers alternate operation continuously to provide ultra-dry air for critical applications.

Timer controlled shuttle valves direct the compressed air into the active tower for drying.

Calibrated needle valve adjusts purge flow to actual outlet flow and pressure conditions.

Overlapping cycle times provide constant downstream pressure and dew point.

Dryers

D51 Series Dryers

Heatless Regenerative
Compressed Air Dryers

-40°F pressure dew point ultra-dry air.
Automatic operation
Provides continuous supply of dry air.
Precision timing control.

D60 Series Dryers

Externally Heated Regenerative
Compressed Air Dryers

Delivers -40°pressure dew point
Provides continuous supply of dry air
Operates automatically with flexible controls
Reduces purge air requirements

D70 Series Dryers

Blower Purge Regenerative
Compressed Air Dryers

Delivers -40°pressure dew point
Provides continuous supply of dry air
Operates automatically with flexible controls
Reduces purge air requirements

Dryers

W74D

Excelon® 74 Desiccant Compressed Air Dryer
1/4", 3/8", and 1/2" Port Sizes

Helps eliminate condensate at point-of-use.

Typical dew point suppression of 15°F (-10°C) below inlet ambient pressure dew point.

F21 / F61

F21and F61 Mainline Filters

High flow mainline system filters

The F21 provides 1 micron particle removal filtration

The F61 provides 0.01 oil coalescing

The F61 carbon type vapor removal filtration

Optional automatic or timer drains available

Membrane Dryers

W07M, W72M, and W74M Series Membrane Dryer
1/4", and 1/2" Port Size

Removes water vapor from compressed air providing condensate-free air at the point of application.

Provides dewpoint suppression up to 80°F (44°C) depending on air flow through the membrane

Dewpoint suppression of 20°F (11°C) below the inlet temperature is suitable for most industrial applications.

Utilizes the latest membrane technology to achieve optimal water vapor removal rates.

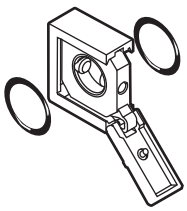
72 Series Modular Components

Quikclamp

Maximum Pressure: 17 bar (250 psig)
Maximum Temperature: 65°C (150°F)

Use with all Excelon 72 Products to provide modular installation capability. Flanges on the products slide into V grooves in the Quikclamp. Two face-sealing o-rings in the Quikclamp provide a positive seal when the clamp is closed and the captive screw is tightened. Tighten screw with a 3 mm hex wrench or a T15 Torx wrench.

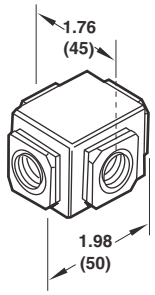
Quikclamp Service Kit (contains 2 Nitrile o-rings): 4384-570
A Quikclamp adds 0.26" (6.5 mm) to the overall length of a combination unit.



Part Number: 4214-51

Manifold Block

Installs with Quikclamps. Ports are threaded 3/8" pipe to provide manifolding capability for up to three components.

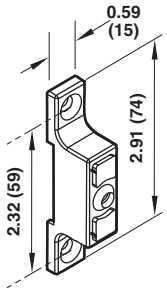


Side

Port Threads	Part Number
3/8" PTF	4228-01
3/8" ISO Rc	4228-02
3/8" ISO G	4228-03

Quikclamp Wall Mounting Bracket

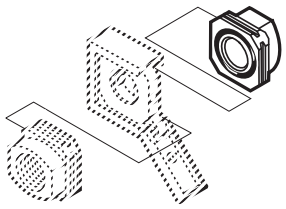
Use with the Quikclamp to provide secure mounting to a wall, machine panel or other flat surface.
Use 3/16" (5 mm) screws to mount bracket to wall.



Part Number 4213-89

Quikmount Pipe Adapters

Use with the Quikclamp to provide threaded connections to the system piping.

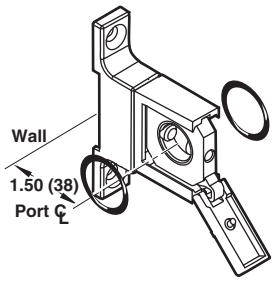


A pipe adapter adds 0.63" (16 mm) to the overall length of a combination unit.

Port Size and Thread	Part No. (Quantity of 1)
1/4" PTF	4215-02
3/8" PTF	4215-03
1/4" ISO R_C	4215-05
3/8" ISO R_C	4215-06
1/4" ISO G	4215-08
3/8" ISO G	4215-09

Quikclamp and Wall Mounting Bracket

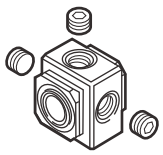
See Quikclamp paragraph for descriptions and dimensions.
Use 3/16" (5 mm) screws to mount bracket to wall.



Part Number 4214-52

Porting Block

Installs between two Quikclamps to provide three additional 1/4" outlets for auxiliary air.
A Porting Block adds 1.13" (28.5 mm) to the overall length of a combination unit.

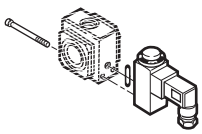


Auxiliary Port

Size & Thread	Part Number
1/4" NPT	4216-50
1/4" ISO Rc	4216-51
1/4" ISO G	4216-52

Replacement Pressure Switch

Use only with pressure switch sub-base. Cannot be used with the standard porting block.



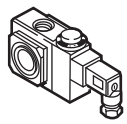
Part Number: 4246-01

Sub-base Mounted Pressure Switch

Monitors air pressure and provides an electrical output when the pressure drops below or exceeds an adjustable preset pressure. Installs between two Quikclamps. Also provides two additional 1/4" outlets for auxiliary air.

P_1 max:	250 psig (17 bar)
Temperature:	14° to 150°F (-10° to 65°C)
Adjustable	30 to 150 psig (2 to 10 bar). Shipped from factory preset at 90 psig (6.3 bar)
Max. Voltage:	240 V a.c./d.c.
Max. Current:	5 Amp
Hysteresis at Midpoint:	12%

A Sub-base Mounted Pressure Switch adds 1.13" (29 mm) to the overall length of a combination unit.



Auxiliary Port

Threads	Part Number
1/4" PTF	4246-50
1/4" ISO G	4246-52

Transition Connector

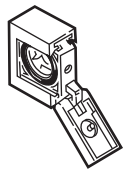
Enables connection of Excelon 72 to 74 units. Typically this will allow F74C/H high grade coalescing filters to be flow matched with R72 regulators.

Part Number: 4417-01

73 and 74 Series Modular Components

Quikclamp

Use with all 73 and 74 Series Products to provide modular installation capability. Flanges on the products slide into V grooves in the Quikclamp. Two face-sealing o-rings in the Quikclamp provide a positive seal when the clamp is closed and the captive screw is tightened. A Quikclamp adds 0.54" (13.6 mm) to the overall length of a combination unit. Tighten screw with a 5/32" (4 mm) hex or T25 Torx wrench. (30 in. lbs. Torque)

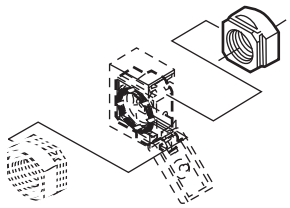


Material: Zinc

Quikclamp part number:	4314-51
O-ring kit part number:	4384-770

Quikmount Pipe Adapters

Use with the Quikclamp to provide threaded connections to the system piping.
Each pipe adapter adds 0.71" (18 mm) to the overall length of a combination unit (each kit contains one adapter).

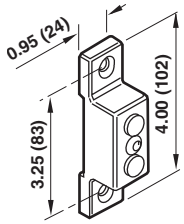


Material: Aluminum

Part number 1)	Port size and thread (Qty)
4315-01	1/4" PTF
4315-02	3/8" PTF
4315-03	1/2" PTF
4315-04	3/4" PTF
4315-05	1/4" ISO Rc
4315-06	3/8" ISO Rc
4315-07	1/2" ISO Rc
4315-08	3/4" ISO Rc
4315-09	1/4" ISO G
4315-10	3/8" ISO G
4315-11	1/2" ISO G
4315-12	3/4" ISO G

Quikclamp Wall Mounting Bracket

Use with the Quikclamp to provide secure mounting to a wall, machine panel or other flat surface.
Use No. 12 (6 mm) screws to mount bracket to wall.

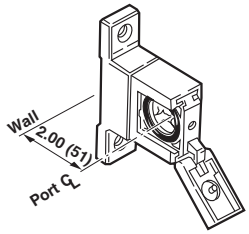


Material: Zinc

Part number: 4313-50

Quikclamp and Wall Mounting Bracket

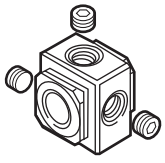
See preceding paragraphs for descriptions and dimensions.



Material:	Zinc
Part number:	4314-52
L74 1 quart	4314-55

Porting Block

Installs between two Quikclamps to provide three additional 1/4" outlets for auxiliary air.
A Porting Block adds 1.30" (33 mm) to the overall length of a combination unit.

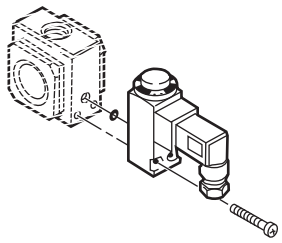


Material: Zinc

Part number	Auxiliary port size and thread
4316-50	1/4" PTF
4316-51	1/4" ISO Rc
4316-52	1/4" ISO G

Replacement Pressure Switch

Use only with the pressure switch subbase. Cannot be used with the standard porting block.

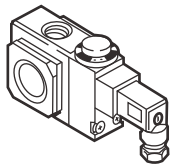


Material: Aluminum

Pressure switch part number:	4346-01
Replacement connector:	4346-01R

Subbase Mounted Pressure Switch

Monitors air pressure and provides an electrical output when the pressure drops below or exceeds an adjustable preset pressure. Installs between two Quikclamps. Also provides three additional 1/4" outlets for auxiliary air. A Subbase Mounted Pressure Switch adds 1.30" (33 mm) to the overall length of a combination unit.



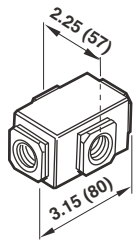
Specifications

Maximum Pressure:	300 psig (20 bar)
Maximum Temperature:	175°F (80°C)
Adjustable Range:	30 to150 psig (2 to 10 bar) Shipped from factory preset at 90 psig (6.2 bar).
Maximum Voltage:	240V ac/dc
Maximum Current:	5 Amp
Hysteresis at Midpoint:	12%
Materials:	Zinc subbase, Aluminum switch

Part number	Auxiliary port thread
4346-50	1/4" PTF
4346-51	1/4" ISO Rc
4346-52	1/4" ISO G

Manifold Block

Installs with Quikclamps. Ports are threaded 3/4" pipe to provide manifolding capability for up to three components.



Material: Zinc

Part number	Side port threads
4328-50	3/4" PTF
4328-53	3/4" ISO G
4328-52	3/4"ISO Rc

Transition Connector

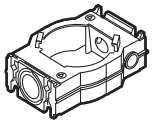
Enables connection of Excelon 72 to 74 units. A transition connector adds 0.06" (1.5mm) to the overall length of a combination unit.

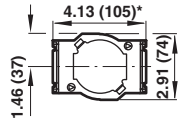
Material: Aluminum

Part Number: 4417-01

64 Series Modular Components

Single Yoke

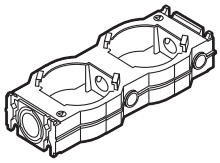


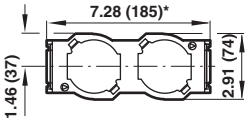


* 3/4= 6.18 (157)

1/4	Y64A-2AA-N1N
3/8	Y64A-3AA-N1N
1/2	Y64A-4AA-N1N
3/4	Y64A-6AA-N1N

Double Yoke

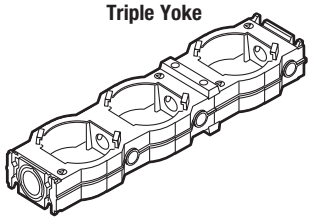


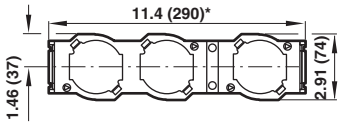


* 3/4 = 9.33 (237)

1/4	Y64A-2AA-N2N
3/8	Y64A-3AA-N2N
1/2	Y64A-4AA-N2N
3/4	Y64A-6AA-N2N

Triple Yoke

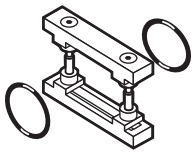




* 3/4 = 13.46 (342)

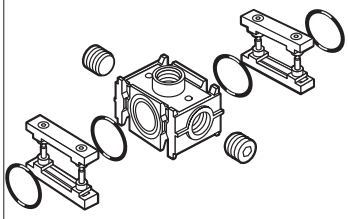
1/4	Y64A-2AA-N3N
3/8	Y64A-3AA-N3N
1/2	Y64A-4AA-N3N
3/4	Y64A-6AA-N3N

Yoke Connector

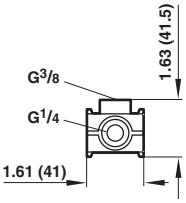


74503-51

Porting Block



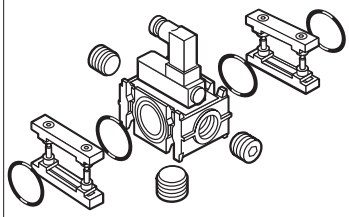
- (2) 1/4 outlets
- (1) 3/8 outlet



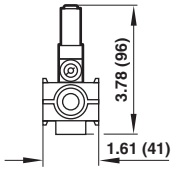
P_1 max. = 250 psi (17 bar)
T max. = 175°F (80°C)

74507-52 PTF
74507-50 ISO G
74507-51 ISO Rc

Adjustable Pressure Switch



- 30-150 psi (2–10 bar) adjustable
- Porting block mounted
- DIN 43650 form C connector

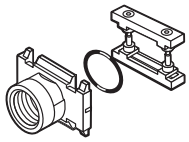


P_1 max. = 250 psi (17 bar)
T max. = 175°F (80°C)
I max. = 5 A
V max. = 240 V

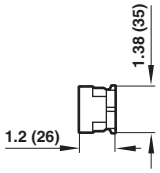
Reset differential
= 15 psi (1 bar) nominal

4346-99

End Connector

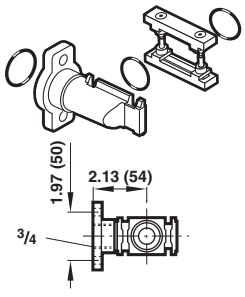


- For use with end mounted porting block
- 1/2 or 3/4 over porting



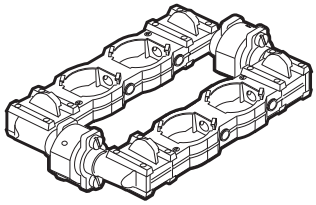
1/2	74505-52 PTF
3/4	74505-55 PTF
1/2	74505-50 ISO G
3/4	74505-53 ISO G

Rear Entry Bracket Kit



18-026-981

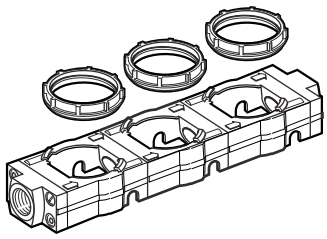
Duplex Kit

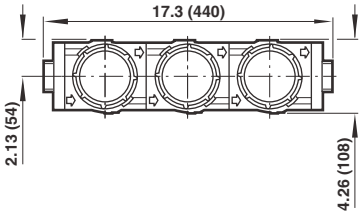


18-026-978

68 Series Modular Components

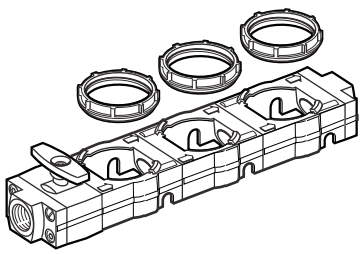
Triple Yoke Assembly

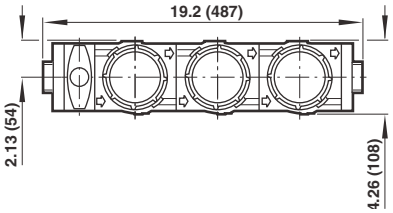




Port Size	
NPT 1/2	Y68A-4AN-N3N
NPT 3/4	Y68A-6AN-N3N
NPT 1	Y68A-8AN-N3N
NPT 1-1/4	Y68A-AAN-N3N
NPT 1-1/2	Y68A-BAN-N3N

Triple Yoke Assembly with Shut-off





Port Size	
NPT 1/2	Y68B-4AN-E3N
NPT 3/4	Y68B-6AN-E3N
NPT 1	Y68B-8AN-E3N
NPT 1-1/4	Y68B-AAN-E3N
NPT 1-1/2	Y68B-BAN-E3N

Alternative 68 Series Yoke Assembly Models

Y 6 8 ★ - ★ ★ N - ★ ★ ★

Shut-Off Valve and Porting Block	Substitute
No shut-off valve, No porting block	A
With shut-off valve, No porting block	B
With shut-off valve, With porting block	E
No shut-off valve, With porting block	F

Port Size	Substitute
3/4"	6
1"	8
1 1/4"	A
1 1/2"	B

Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	G

Wall Mounting Bracket	Substitute
Without	N
With	B

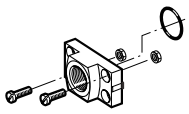
Yoke	Substitute
Single	1
Double	2
Triple	3

Shut-Off Valve Type	Substitute
2-port/2-position, Padlocks open or closed, No exhaust, Black handle	A
3-port/2-position, Padlocks open or closed, Unthreaded exhaust, Black handle	C
3-port/2-position, Not lockable, Threaded exhaust, Black handle	D
3-port/2-position, Padlocks closed only, Unthreaded exhaust, Yellow handle	E *
2-port/2-position, Not lockable, No exhaust, Black handle	G
No shut-off valve	N

* Meets OSHA requirements.

68 Series Modular Components

End Connector Kit



Note: Two kits are required per unidaptor. Each kit contains end connector, screws, nuts and o-ring.

Port Size	
NPT 1/2	5524-56
NPT 3/4	5524-53
NPT 1	5524-50
NPT 1-1/4	5523-50
NPT 1-1/2	5523-95

Yoke Connecting Kit

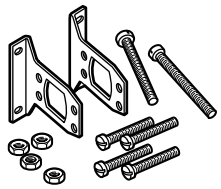
Comprising seal, screws and nuts.Part Number 18-026-987

Mounting Bracket

Brackets slip over end connectors and are bolted to Yoke Assembly with nuts and screws provided.

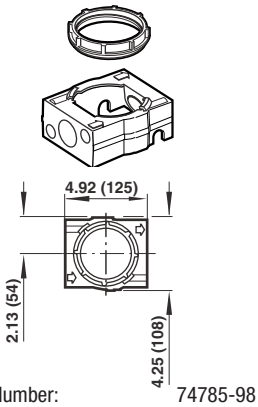
Note: Each kit contains 6 screws (2 x 80 mm and 4 x 35 mm) and 4 nuts.

Part Number



1/2" ported yoke	18-001-979
3/4" ported yoke	18-001-979
1" ported yoke	18-001-979
1-1/4" ported yoke	18-001-978
1-1/2" ported yoke	N/A

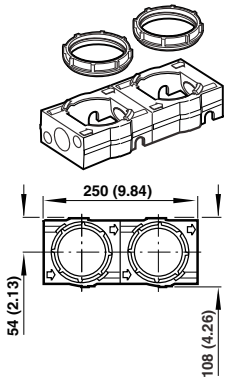
Single Yoke



Part Number: 74785-98

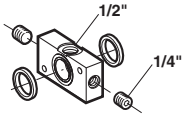
Double Yoke

Part Number: 74785-51



Porting Block

May be fitted to end connectors, shut-off valves, or yokes. Provides additional outlets for auxiliary air.



A porting block adds 29 mm (1.14") to the overall length of a combination unit.

To order separately:

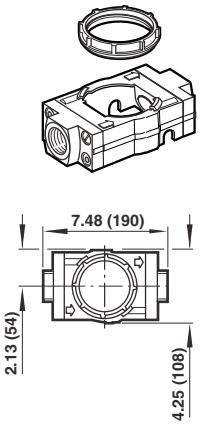
Thread Type	Part Number
ISO G	18-026-986
NPT	18-026-983

To order unidaptor with porting block installed after 1st yoke:

With shut-off valve and porting block: Change **B** to **E** in 4th position of unidaptor model number.

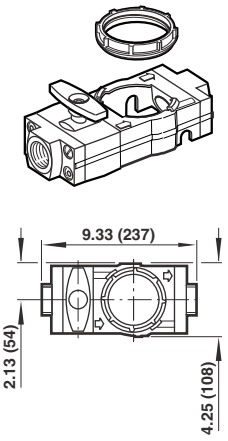
Without shut-off valve, with porting block: Change A to **F** in 4th position of unidaptor model number.

Single Yoke Assembly



Port Size	
NPT 1/2	Y68A-4AN-N1N
NPT 3/4	Y68A-6AN-N1N
NPT 1	Y68A-8AN-N1N
NPT 1-1/4	Y68A-AAN-N1N
NPT 1-1/2	Y68A-BAN-N1N

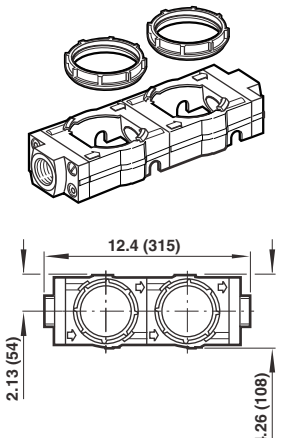
Single Shut-off Yoke Assembly



Port Size	
NPT 1/2	Y68B-4AN-E1N
NPT 3/4	Y68B-6AN-E1N
NPT 1	Y68B-8AN-E1N
NPT 1-1/4	Y68B-AAN-E1N
NPT 1-1/2	Y68B-BAN-E1N

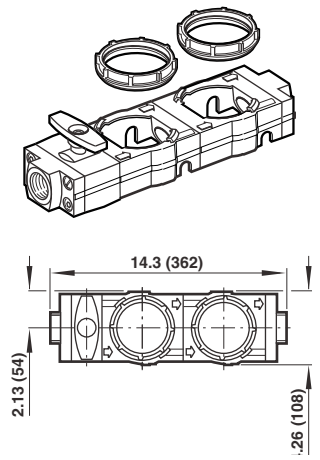
Double Yoke Assembly

Port Size



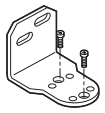
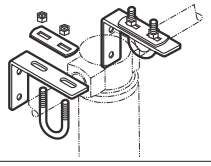
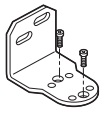
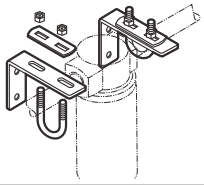
NPT 1/2	Y68A-4AN-N2N
NPT 3/4	Y68A-6AN-N2N
NPT 1	Y68A-8AN-N2N
NPT 1-1/4	Y68A-AAN-N2N
NPT 1-1/2	Y68A-BAN-N2N

Double Shut-off Yoke Assembly



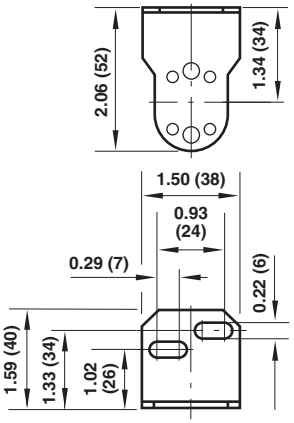
Port Size	
NPT 1/2	Y68B-4AN-E2N
NPT 3/4	Y68B-6AN-E2N
NPT 1	Y68B-8AN-E2N
NPT 1-1/4	Y68B-AAN-E2N
NPT 1-1/2	Y68B-BAN-E2N

Filter Accessories

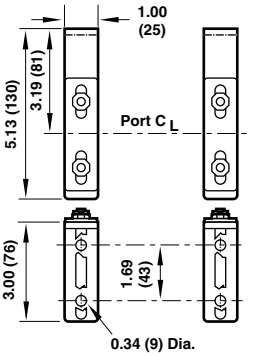
Product	Accessory	Part No.
F07	Wall bracket 	5939-06
F17	Wall bracket 	3/4", 1" Ports: 6212-50 1-1/4", 1-1/2" Ports: 6212-51
F22	Wall bracket 	18-001-962
F39	Wall bracket 	5939-06
F46	Wall bracket 	3/4", 1" Ports: 6212-50 1-1/4", 1-1/2" Ports: 6212-51
F64	Wall bracket 	74504-50

All Dimensions in Inches (mm)

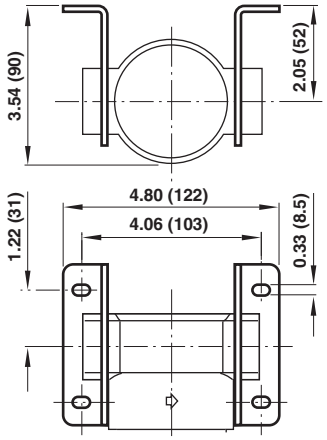
F07, F39 Bracket (5939-06)



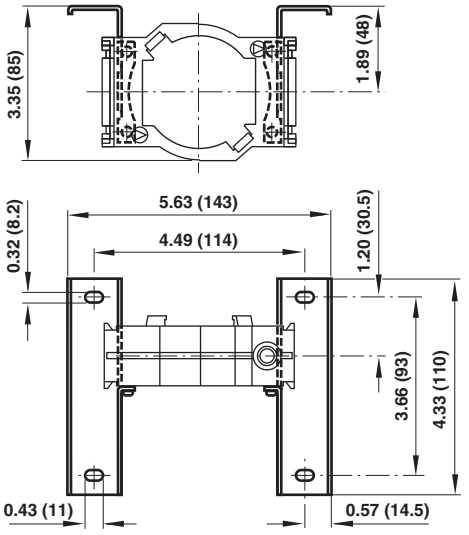
F17, F46 Bracket (6212-50, 6212-51)



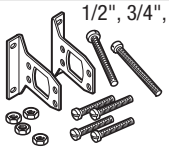
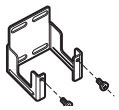
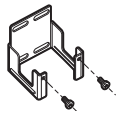
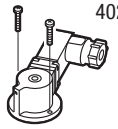
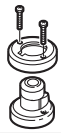
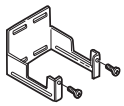
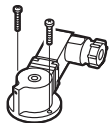
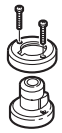
F22 Bracket (18-001-962)



F64 Bracket (74504-50)

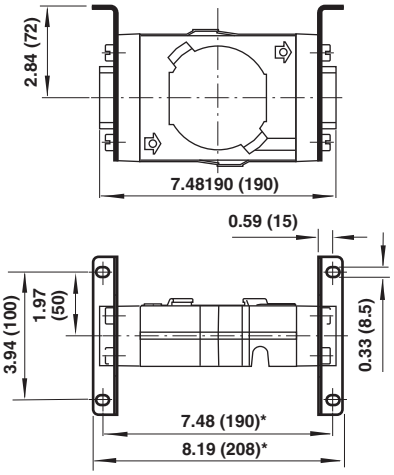


Filter Accessories

Product	Accessory	Part No.
F68	Wall bracket 	1/2", 3/4", 1", 1-1/4" Ports: 18-001-978 1-1/2" Ports: Not Available
F72	Wall bracket 	4224-50
F73	Wall Bracket 	4424-50
	Electric service indicator Provides electrical signal when element needs to be replaced. Rated NEMA 4. 	4020-51R
	Visual service indicator Turns from green to red when element needs to be replaced. 	5797-50
F74	Wall bracket 	4324-50
	Electric service indicator Rated NEMA 4 Provides electrical signal when element needs to be replaced. 	4020-51R
	Visual service indicator Turns from green to red when element needs to be replaced. 	5797-50

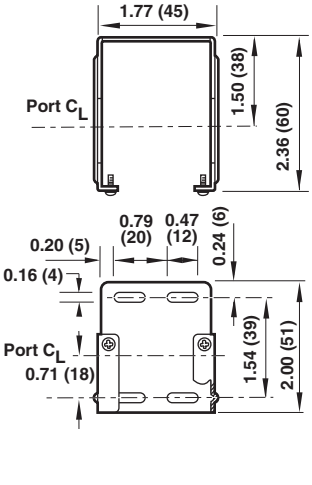
All Dimensions in Inches (mm)

F68 Bracket (18-001-978)

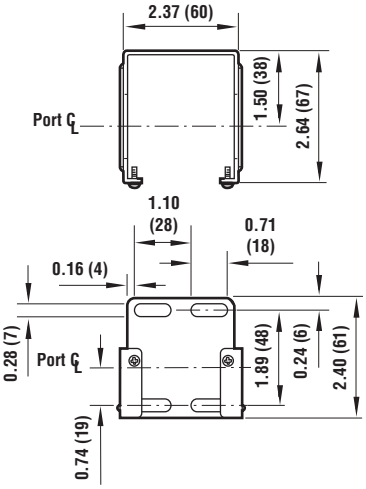


*** Add 0.39" (10) for 1-1/4" ported yokes.**

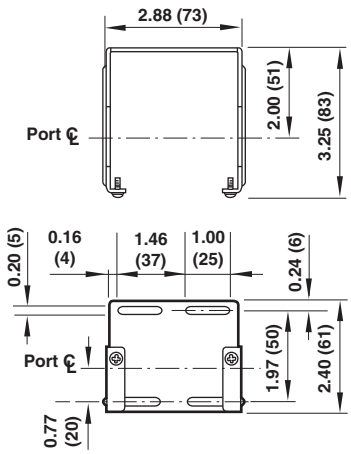
F72 Bracket (4224-50)



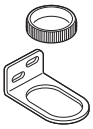
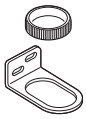
F73 Bracket (4424-50)



F74 Bracket (4324-50)

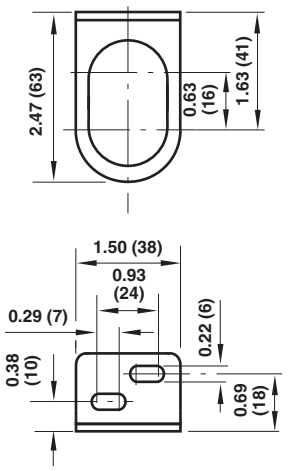


Regulator Accessories

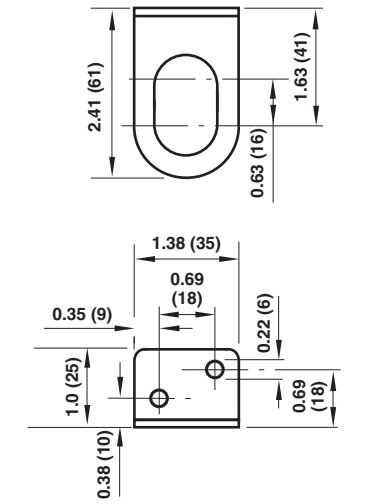
Product	Accessory	Part No.
R05	Plastic panel nut 	2962-89
R06	Wall bracket for R06 with plastic bonnet 	Bracket and plastic nut: 18-025-003 Plastic nut: 2962-89 Metal nut: 2962-04
	Wall bracket for R06 with brass bonnet 	Bracket and metal nut: 18-001-021 Metal nut: 616-01
	Tamper resistant knob kit 	18-001-092
R07	Wall bracket with plastic nut 	Bracket and plastic nut: 18-025-003 Plastic nut: 2962-89 Metal nut: 2962-04
	Tamper resistant knob kit 	18-001-092
R17	Wall bracket with plastic nut 	Bracket and metal nut: 5570-04 Metal nut: 5226-97
	Tamper resistant seal wire 	2117-01
R18	Muffler 	3/4 PTF: MB006A R 3/4: MB006B

All Dimensions in Inches (mm)

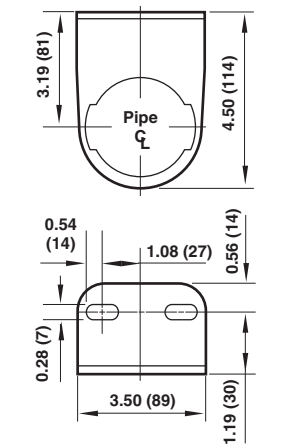
R06, R07 Bracket (18-025-003)



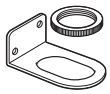
R06 Bracket for Brass Bonnet (18-001-021)



R17 Bracket (5570-04)

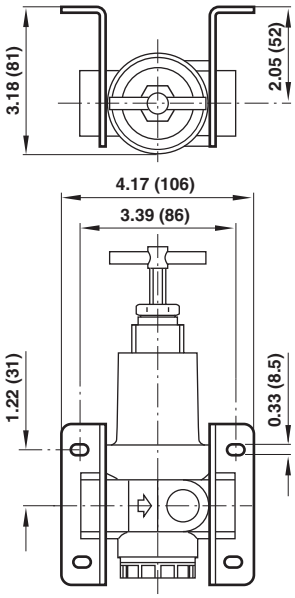


Regulator Accessories

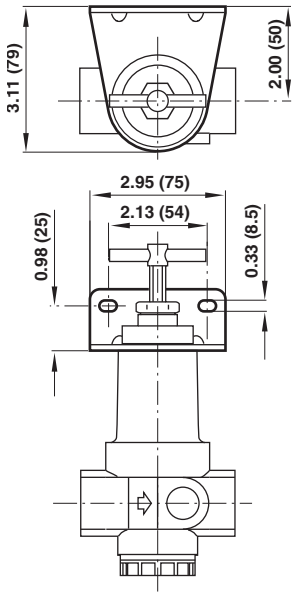
Product	Accessory		Part No.
R22	Stainless steel wall bracket		18-001-962
	Wall bracket (neck mount)		Stainless steel wall bracket and metal nut: 18-001-959 Metal nut: 5988-02
R24	Wall bracket with metal nut		Bracket and metal nut: 18-999-412 Bracket: 18-001-996 Plastic nut: 2962-89 Metal nut: 2962-04
	Reducing bushing for gauge ports		3/8 to 1/4 PTF: 5950-01 1/2 to 1/4 PTF: 2339-04 R1/4 to G1/8: 150232818 R3/8 to G1/8: 150233818 R1/2 to G1/8: 150234818
	Tamper resistant cap		18-021-006
R30M	Plastic panel nut Metal panel nut		2962-89 2962-04
	Tamper resistant knob kit		18-001-092
	Push-in connector		8 mm: 11-002-0800 10 mm: 11-002-1000
	Push-in plug		8 mm: 11-004-0800 10 mm: 11-004-1000
	Push-in gauge adapter		8 mm: 74679-02 10 mm: 74679-03

All Dimensions in Inches (mm)

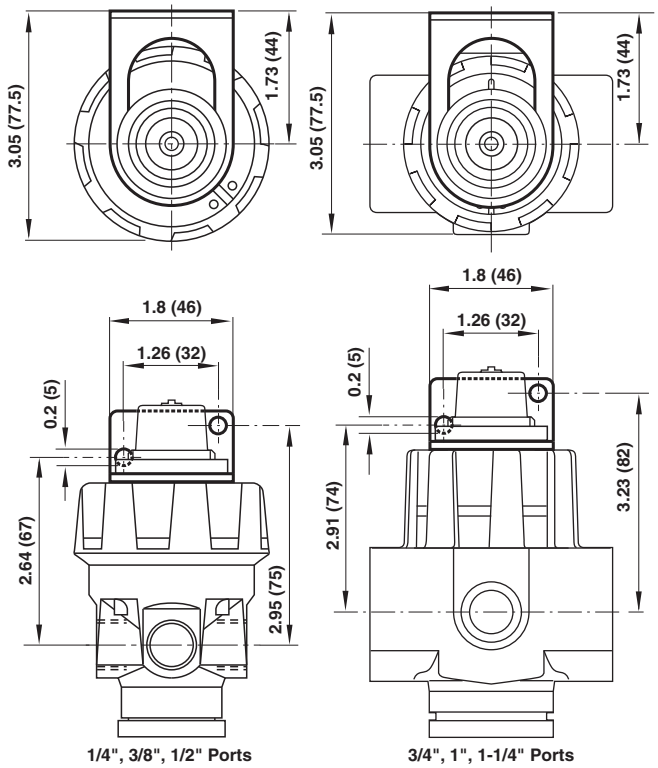
R22 Bracket (18-001-962)



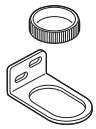
R22 Neck Bracket (18-001-959)



R24 Bracket (18-999-412)

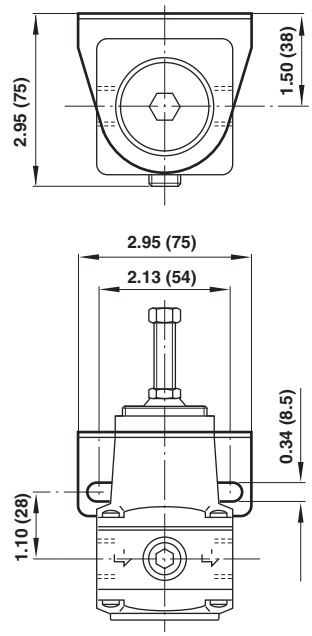


Regulator Accessories

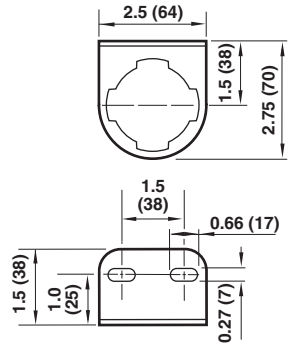
Product	Accessory	Part No.
R38	Aluminum wall bracket and nut: 18-001-974 Aluminum nut: 5988-01  Stainless steel wall bracket and nut: 18-001-973 Stainless steel nut: 5988-02	
	Plastic adjusting knob 	655-97
	Tamper resistant cap 	18-004-987
R40 R41 R43	Wall bracket with metal nut 	Bracket and metal nut: 5203-06 Plastic nut: 5191-89 Metal nut: 5191-88
	Tamper resistant seal wire 	2117-01
R44	Wall bracket for R44 with plastic bonnet 	Bracket and plastic nut: 18-025-003 Plastic nut: 2962-89 Metal nut: 2962-04
	Wall bracket for R44 with brass bonnet 	Bracket and metal nut: 18-001-021 Metal nut: 616-01
	Tamper resistant knob 	18-001-092

All Dimensions in Inches (mm)

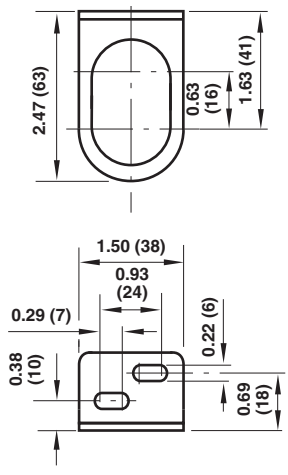
R38 Bracket (18-001-974)



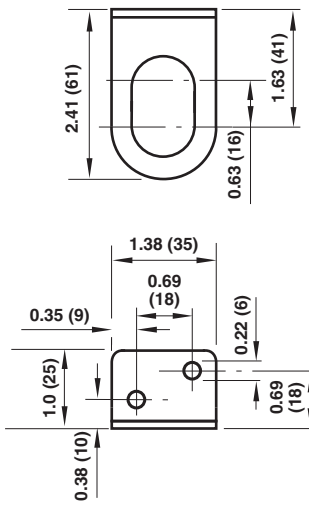
R40, R41, R43 Bracket (5203-06)



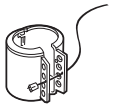
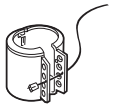
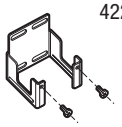
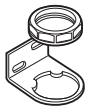
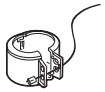
R44 Bracket (18-025-003)



R44 Bracket for Brass Bonnet (18-001-021)

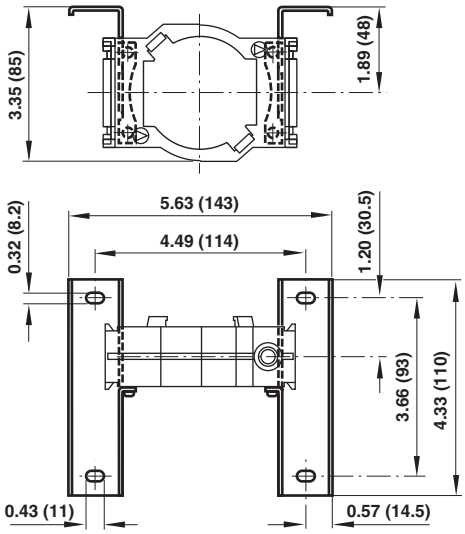


Regulator Accessories

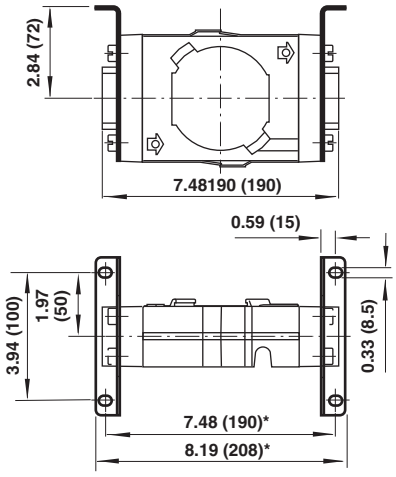
Product	Accessory	Part No.
R64	Wall bracket 	74504-50
	Metal panel nut 	4348-89
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 4 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used. 	Cover and wire: 4355-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
R68	Wall bracket 	1/2", 3/4", 1", 1-1/4" Ports: 18-001-978 1-1/2" Ports: Not Available
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 4 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used. 	Cover and wire: 4355-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
R72	Wall bracket 	4224-50
	Wall bracket/plastic nut 	Bracket and plastic nut: 74316-50 Plastic nut: 4248-89 Metal Nut: 4248-01
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 2 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used. 	Cover and wire: 4255-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01

All Dimensions in Inches (mm)

R64 Bracket (74504-50)

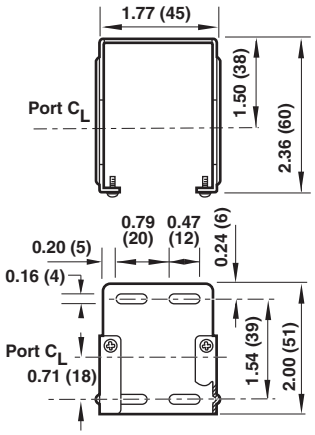


R68 Bracket (18-001-978)

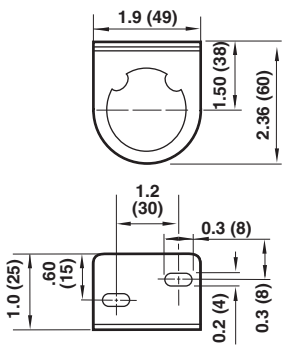


* Add 0.39" (10) for 1-1/4" ported yokes.

R72 Bracket (4224-50)

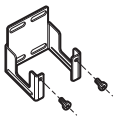
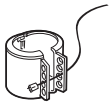
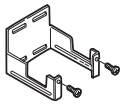
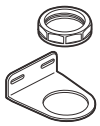
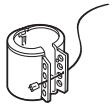


R72 Neck Bracket (74316-02)



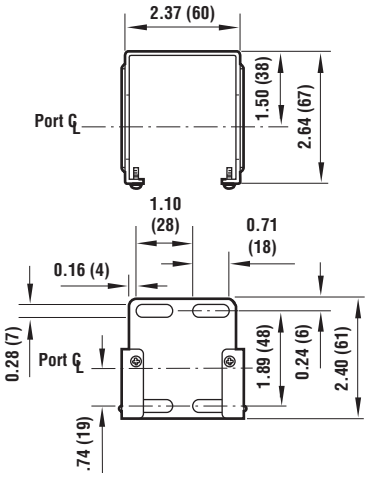
AIR LINE EQUIPMENT

Regulator Accessories

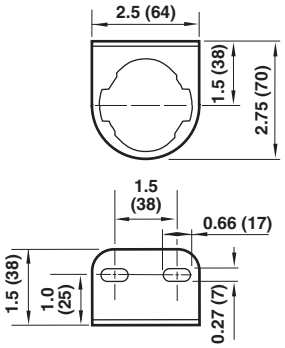
Product	Accessory	Part No.
R73	Wall bracket 	4424-50
	Wall bracket/metal nut 	Bracket and metal nut: 4461-50 Metal Nut: 5191-88 Plastic Nut: 5191-89
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 4 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used. 	Cover and wire: 4455-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
R74	Wall bracket 	4324-50
	Wall bracket/metal nut 	Bracket and metal nut: 4368-51 Metal Nut: 4348-89
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 4 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used. 	Cover and wire: 4355-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01

All Dimensions in Inches (mm)

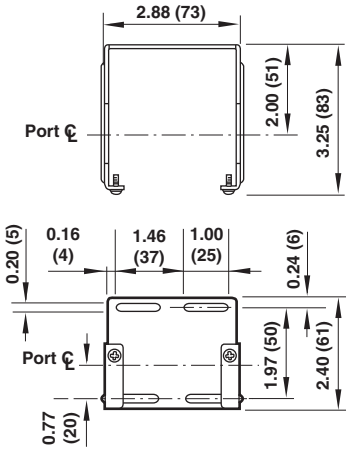
R73 Bracket (4424-50)



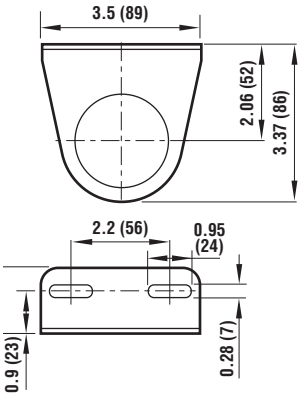
R73 Neck Bracket (4461-50)



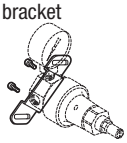
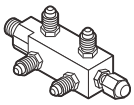
R74 Bracket (4324-50)



R74 Neck Bracket (4368-51)

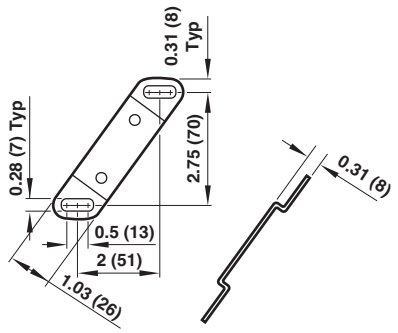


Regulator Accessories

Product	Accessory	Part No.
R81 R82 R83 R84	Wall bracket 	5095-51
	Pipe plug, hex socket 	1/4 PTF: 2891-97
	Nipple 	1/4 PTF male: 18-006-067
	Union adapter with cap 	1/4 PTF to 1/4 tube (45° flare): 18-006-068 Adapter only: 18-006-027 Cap only: 3302-50
	Cylinder connector, nitrogen service, 0.906-14 RH external thread 	CGA No. 580: 18-008-004
	Cylinder connector, carbon dioxide service, 0.830-14 RH internal thread 	CGA No 320: 18-008-002 With 2.25" (57mm) long nipple: 18-008-015 Replacement gasket: 1390-02
	Check valves * 	1/4 PTF male to 1/4 tube (45° flare): 16-009-001 1/4 PTF male to 1/2-16 BSF: 16-009-002 1/4 PTF male to 1/4 PTF female: 16-009-003
	Check and relief valve ** Relief cracking pressure: 130±4 psig (9 ±0.28 bar) 	1/4 PTF male to 1/4 tube (45° flare): 16-006-107
	Manifolds with integral check valve *  	2 or 3 outlets, 1/4 PTF male to 1/4 tube (45° flare): 3228-54 2 or 3 outlets, 1/4 PTF male to 1/2-16 BSF: 3228-55 4 or 5 outlets, 1/4 PTF male to 1/4 tube (45° flare): 3228-60 4 or 5 outlets, 1/4 PTF male to 1/2-16 BSF: 3228-61
	Manifold extension 	1/4 PTF male to 1/4 PTF female: 2340-50
	Streamline wye † 	1/4 PTF male to 1/4 PTF female: 18-006-016

All Dimensions in Inches (mm)

R81, R82, R83, R84 Bracket (5095-51)



* The listed check valves and manifolds with integral check valves are designed for use with Norgren beverage regulators (R81, R82, R84) to help prevent the back flow of liquids into the regulator.

** The 16-006-107 check and relief valve meets the pressure and flow requirements of paragraphs 4.5 and 4.6 of NSDA Pamphlet TD02, Installation and Operational Procedures for Pressurized Soft Drink Dispensing Systems, dated July, 1980.

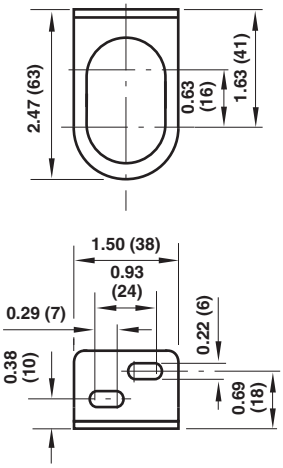
† Check valves, or manifolds with integral check valves, must be installed in the outlet ports of the wye when the wye is installed in the outlet port of Norgren beverage regulators.

Regulator Accessories

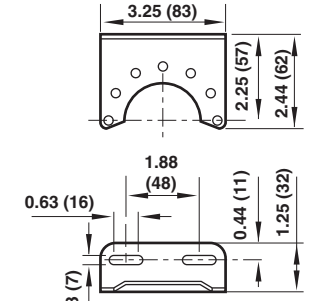
Product	Accessory	Part No.
R91	Wall bracket with plastic nut	Bracket and plastic nut: 18-025-003 Plastic nut: 2962-89 Metal nut: 2962-04
	Tamper resistant knob	18-001-092
11-002	Wall bracket	18-001-003
	Panel mount kit with T-bar adjustment Bonnet included	18-003-004
	Panel mount kit with hand wheel adjustment Bonnet included	18-003-002
	Panel mount kit with screw adjustment Bonnet included	18-003-006
11-008	Wall bracket	Units with 1/2" ports: 18-001-003 Units with 3/4" and 1" ports: 18-001-027

All Dimensions in Inches (mm)

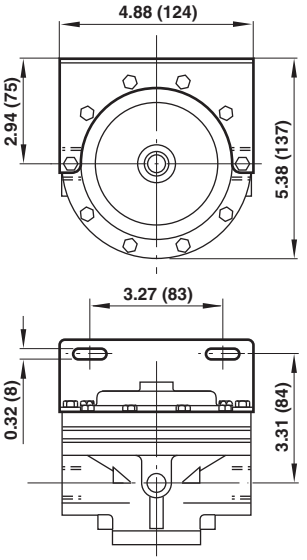
R91 Bracket (18-025-003)



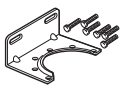
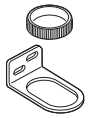
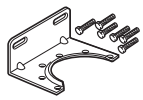
11-002 Bracket
11-008 Bracket (Units with 1/2" Ports)
(18-001-003)



11-008 Bracket (Units with 3/4" and 1" Ports) (18-001-027)

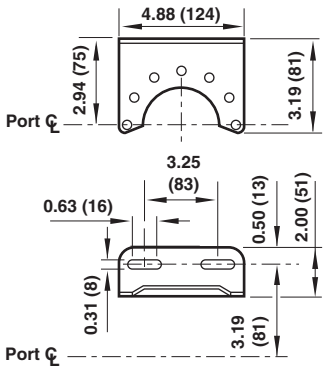


Regulator Accessories

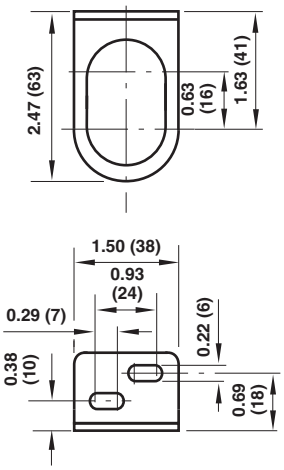
Product	Accessory	Part No.
11-009	Wall bracket 	18-001-029
	Screw adjustment 	1095-02
11-018	Tamper resistant cap 	639-02
11-042	Muffler 	3/4 PTF: MB006A R3/4: MB006B
11-044	Wall bracket with plastic nut 	Bracket and plastic nut: 18-025-003 Plastic nut: 2962-89 Metal nut: 2962-04
	Tamper resistant knob 	18-001-092
11400- 20AL- 11-104-	Wall bracket 	18-001-003

All Dimensions in Inches (mm)

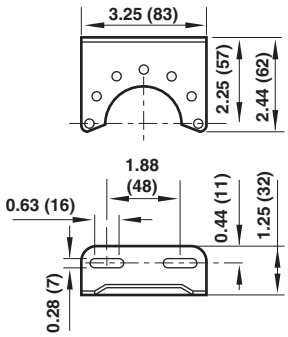
11-009 Bracket (18-001-029)



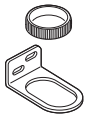
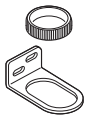
11-044 Bracket (18-025-003)



11400- Bracket
20AL Bracket
(18-001-003)

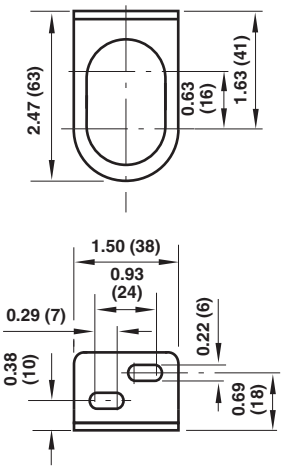


Filter/Regulator Accessories

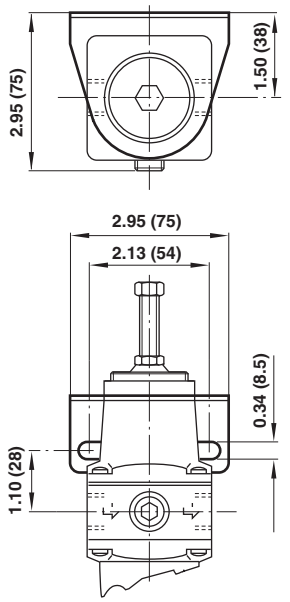
Product	Accessory	Part No.
B05	Plastic Panel Nut	2962-89
		
B07	Wall bracket with plastic nut	Bracket and plastic nut: 18-025-003 Plastic nut: 2962-89 Metal nut: 2962-04
		
	Tamper resistant knob	18-001-092
		
B38		Aluminum wall bracket and nut: 18-001-974 Aluminum nut: 5988-01
		Stainless steel wall bracket and nut: 18-001-973 Stainless steel nut: 5988-02
	Plastic adjusting knob	655-97
		
	Tamper resistant cap	18-004-987
		
B39	Wall bracket with plastic nut	Bracket and plastic nut: 18-025-003 Plastic nut: 2962-89 Metal nut: 2962-04
		
	Tamper resistant knob	18-001-092
		

All Dimensions in Inches (mm)

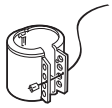
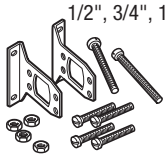
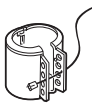
B07, B39 Bracket (18-025-003)



B38 Bracket (18-001-974)

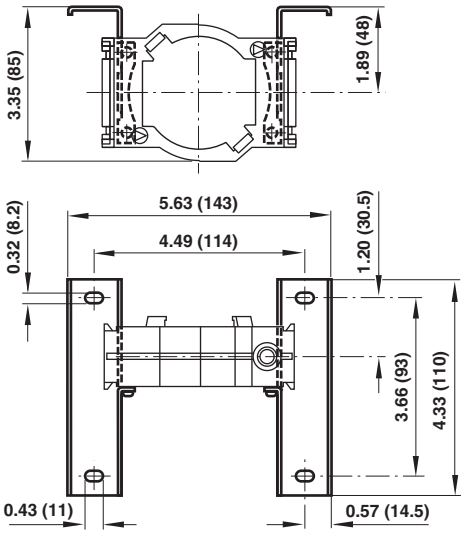


Filter/Regulator Accessories

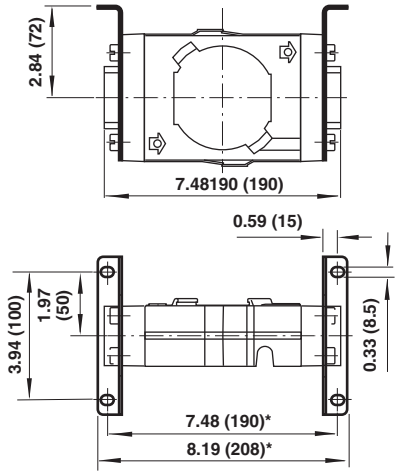
Product	Accessory	Part No.
B64	Wall bracket 	74504-50
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 4 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used. 	Cover and wire: 4355-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
B68	Wall bracket 	1/2", 3/4", 1", 1-1/4" Ports: 18-001-978 1-1/2" Ports: Not Available
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 4 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used. 	Cover and wire: 4355-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01

All Dimensions in Inches (mm)

B64 Bracket (74504-50)



B68 Bracket (18-001-978)



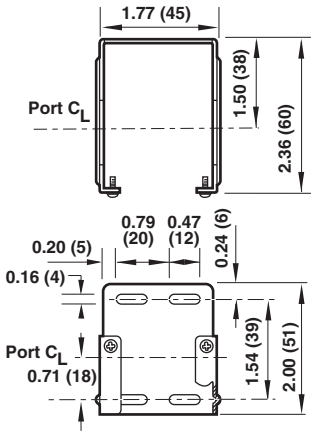
*** Add 0.39" (10) for 1-1/4" ported yokes.**

F/R Accessories

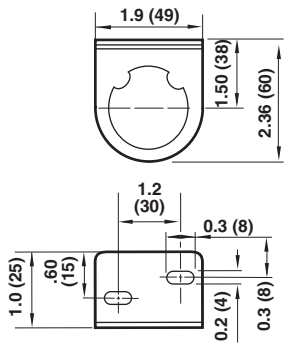
Product	Accessory	Part No.
B72	Wall bracket	4224-50
	Wall bracket/plastic nut	Bracket and plastic nut: 74316-50 Plastic nut: 4248-89 Metal Nut: 4248-01
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 2 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used.	Cover and wire: 4255-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle.	54547-01
B73	Wall bracket	4424-50
	Wall bracket/metal nut	Bracket and metal nut: 4461-50 Metal Nut: 5191-88 Plastic Nut: 5191-89
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 4 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used.	Cover and wire: 4455-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle.	54547-01
B74	Wall bracket	4324-50
	Wall bracket/metal nut	Bracket and metal nut: 4368-51 Metal Nut: 4348-89
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 4 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used.	Cover and wire: 4355-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle.	54547-01

All Dimensions in Inches (mm)

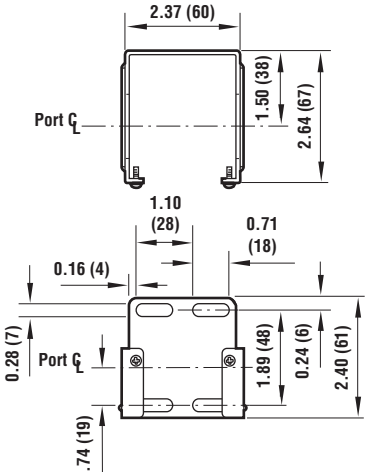
B72 Bracket (4224-02)



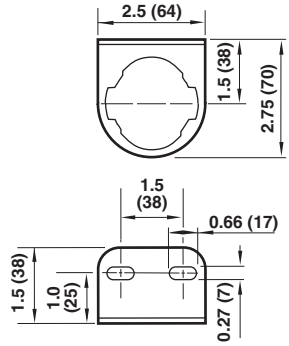
B72 Neck Bracket (74316-02)



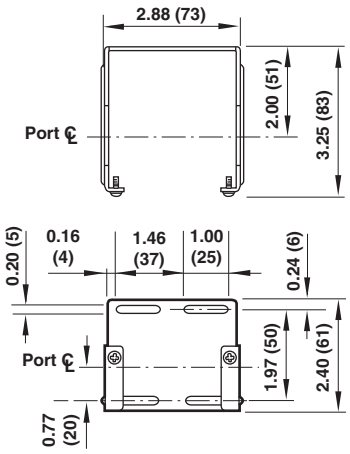
B73 Bracket (4424-50)



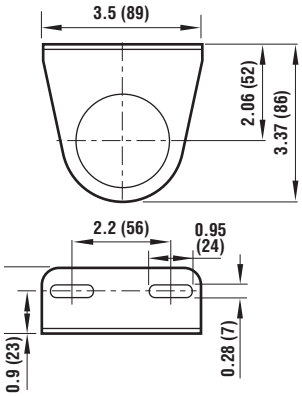
B73 Neck Bracket (4461-50)



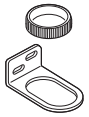
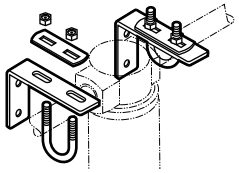
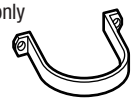
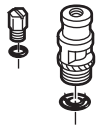
B74 Bracket (4324-50)



B74 Neck Bracket (4368-51)

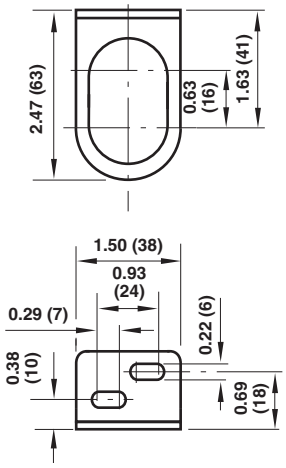


Lubricator Accessories

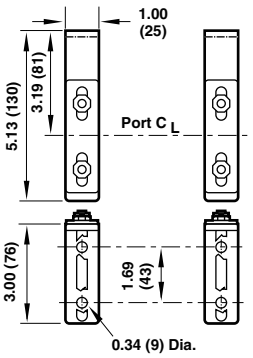
Product	Accessory	Part No.
L07	Wall bracket with plastic nut 	Bracket and plastic nut: 18-025-003 Plastic nut: 2962-89 Metal nut: 2962-04
L17	Wall bracket - use with 1 and 2 quart reservoirs only 	3/4", 1" Ports: 6212-50 1-1/4", 1-1/2" Ports: 6212-51
	Wall strap - use with 2 and 5 gal reservoirs only 	2 gal reservoir: 18-001-056 5 gal reservoir: 18-001-039
	Low oil level switch. Provides electrical signal for warning or shut-down when oil level is low. 	2 qt reservoir: 18-023-612 2 gal reservoir: 18-023-614 5 gal reservoir: 18-023-616
	High/Low Level switch Provides electrical signal for warning or shut-down when oil level is full or low.	5 gal reservoir: 18-023-658
	Pyrex dome and metal fill plug 	5605-60
	Quick fill cap. Use with Norgren 18-010-003 oil pump, pail, and hose assembly (see catalog sheet NC-26) to refill reservoir without shutting off air supply. Replaces fill plug. 	18-011-021
	Fill plug with 1/8 PTF tapped hole. Use with customer supplied pressurized oil source to refill reservoir without shutting off air supply. Replaces standard fill plug. 	5301-52
L22	Wall bracket 	18-001-962

All Dimensions in Inches (mm)

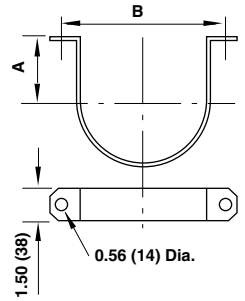
L07 Bracket (18-025-003)



L17 Bracket (6212-50, 6212-51)

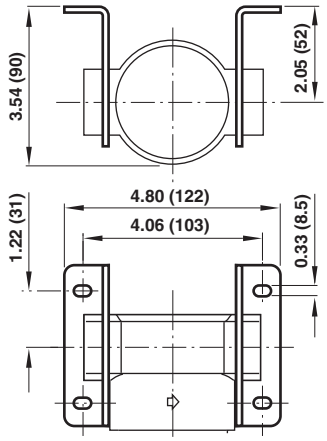


L17 Strap (18-001-039/056)

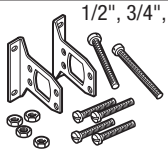


Bracket	A	B
18-001-056	3.00 (76)	8.84 (225)
18-001-039	5.00 (127)	13.0 (330)

L22 Bracket (18-001-962)

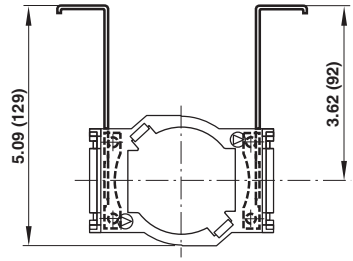


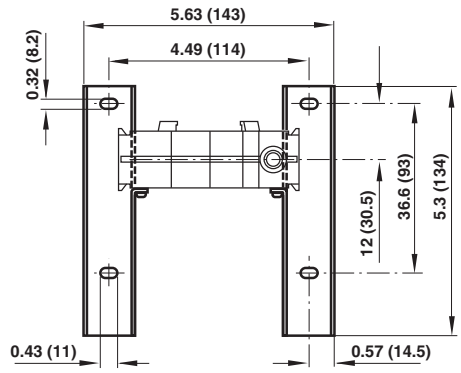
Lubricator Accessories

Product	Accessory	Part No.
L64	Wall bracket 	7 ounce bowl: 74504-50 1 quart bowl: 74504-52
	Tamper resistant seal wire for sight-feed dome 	2117-01
	Low oil level switch. Provides electrical signal for warning or shut-down when oil level is low. 	1 qt reservoir: 18-023-610
	Quick fill cap. Use with Norgren 18-010-003 oil pump, pail, and hose assembly (see catalog sheet NC-26) to refill reservoir without shutting off air supply. Replaces fill plug. 	18-011-024
	Remote fill - use with 7 ounce reservoir only Use with customer supplied pressurized oil source to automatically refill reservoir. 	5335-50
L68	Wall bracket 	1/2", 3/4", 1", 1-1/4" Ports: 18-001-978 1-1/2" Ports: Not Available
	Tamper resistant seal wire for sight-feed dome 	2117-01
	Low oil level switch. Provides electrical signal for warning or shut-down when oil level is low. 	2 gal reservoir: 18-007-975 5 gal reservoir: 18-007-974
	Quick fill cap. Use with Norgren 18-010-003 oil pump, pail, and hose assembly (see catalog sheet NC-26) to refill reservoir without shutting off air supply. Replaces fill plug. 	18-011-021
	Remote fill - use with 1 qt reservoirs only Use with customer supplied pressurized oil source to automatically refill reservoir. 	5335-52

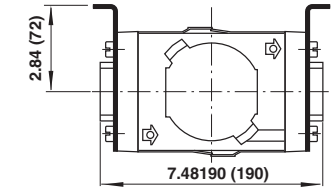
All Dimensions in Inches (mm)

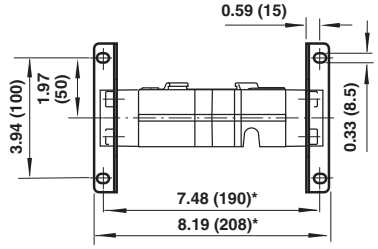
L64 Bracket
(74504-52)



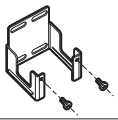
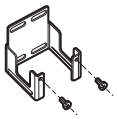
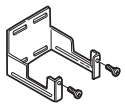


L68 Bracket
(18-001-978)



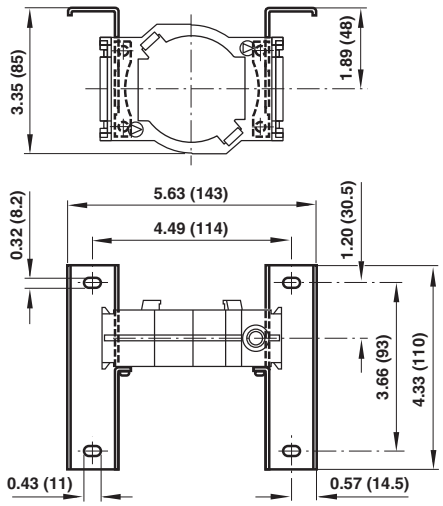


Lubricator Accessories

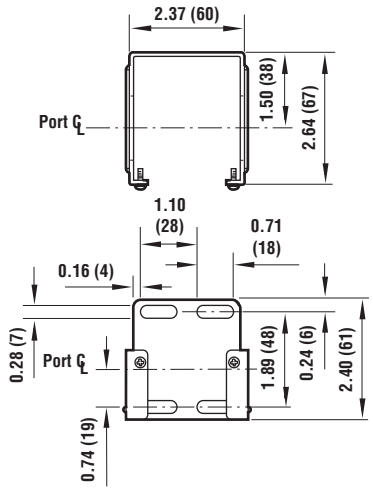
Product	Accessory	Part No.
L72	Wall bracket 	4224-50
L73	Wall bracket 	4424-50
	Quick fill cap. Use with Norgren 18-010-003 oil pump, pail, and hose assembly (see catalog sheet NC-26) to refill reservoir without shutting off air supply. Replaces fill plug. 	18-011-024
L74	Wall bracket 	7 ounce bowl: 4324-50 1 quart bowl: 4324-51
	Low oil level switch - use with 1 qt reservoir only. Provides electrical signal for warning or shut-down when oil level is low. 	18-023-610
	Quick fill cap. Use with Norgren 18-010-003 oil pump, pail, and hose assembly (see catalog sheet NC-26) to refill reservoir without shutting off air supply. Replaces fill plug. 	18-011-024
	Remote fill - use with 7 ounce reservoir only. Use with customer supplied pressurized oil source to automatically refill reservoir. 	5335-50

All Dimensions in Inches (mm)

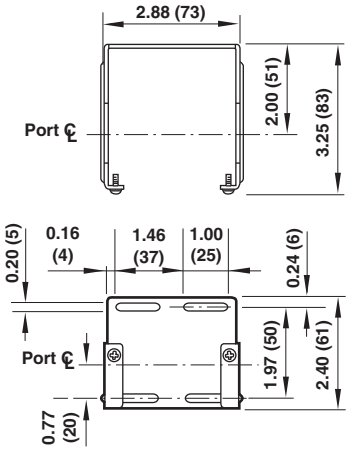
L64 Bracket (74504-50)



L73 Bracket (4424-50)

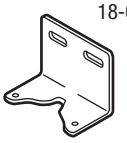


L74 Bracket (4324-50)



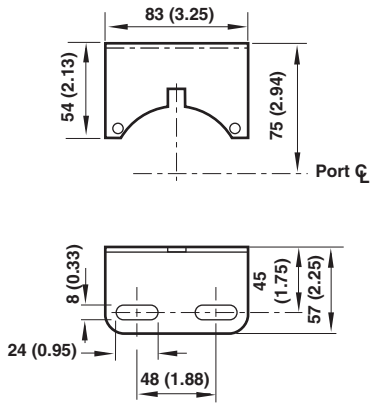
AIR LINE EQUIPMENT

Lubricator Accessories

Product	Accessory	Part No.
10-015 and 10-065	Wall bracket kit - use with 10-015 only. Includes screws to attach lubricator 	18-001-009
	Low oil level switch. Provides electrical signal for warning or shut-down when oil level is low. 	10-015-504: 18-023-018 10-015-005: 18-023-018 10-065-006: 18-023-022 10-065-007: 18-023-024
	Pyrex dome kit 	1804-03
	Quick fill cap. Use with Norgren 18-010-003 oil pump, pail, and hose assembly (see catalog sheet NC-26) to refill reservoir without shutting off air supply. Replaces fill plug. 	18-011-006
	Bowl guard for 10-015-002 and 10-015-100 	18-012-002
	Streamline wye 	1/4 PTF male to 1/4 PTF female: 18-006-016
	Quick fill cap. Use with Norgren 18-010-003 oil pump, pail, and hose assembly (see catalog sheet NC-26) to refill reservoir without shutting off air supply. Replaces fill plug. 	18-011-008
	Pyrex/aluminum dome 	5605-50

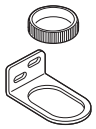
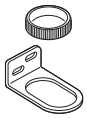
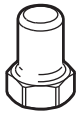
All Dimensions in Inches (mm)

10-015 Bracket
(18-001-009)

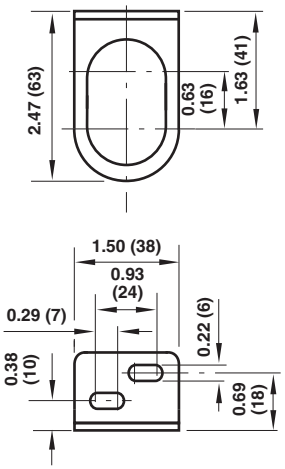


Relief Valve Accessories

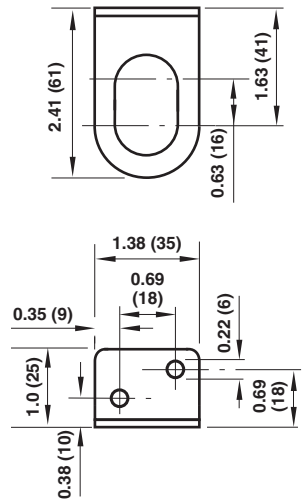
All Dimensions in Inches (mm)

Product	Accessory	Part No.
V06	Wall bracket for V06 with plastic bonnet 	Bracket and plastic nut: 18-025-003 Plastic nut: 2962-89 Metal nut: 2962-04
	Wall bracket for V06 with brass bonnet 	Bracket and metal nut: 18-001-021 Metal nut: 616-01
	Tamper resistant knob kit 	18-001-092
V07	Wall bracket with plastic nut 	Bracket and plastic nut: 18-025-003 Plastic nut: 2962-89 Metal nut: 2962-04
	Tamper resistant knob kit 	18-001-092
V64	Wall bracket 	74504-50
	Muffler 	1/2 PTF: MB004A R1/2: MB004B
	Tamper resistant cap 	1581-90
V68	Wall bracket 	3/4", 1", 1-1/4" Ports: 18-001-978 1-1/2" Ports: Not Available
	Muffler 	1/2 PTF: MB008A R1/2: MB008B

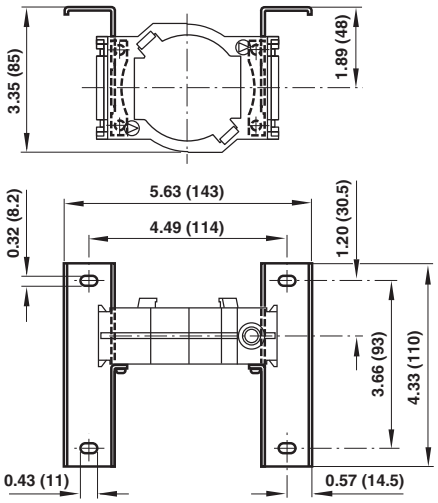
V06, V07 Bracket (18-025-003)



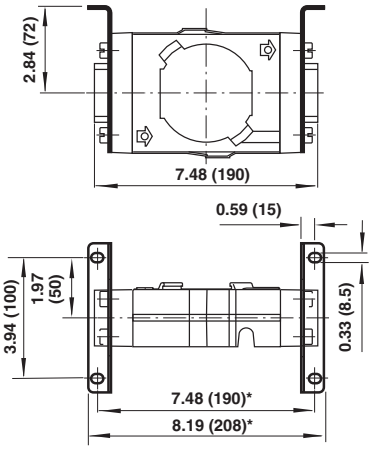
V06 Bracket for Brass Bonnet (18-001-021)



V64 Bracket (74504-50)

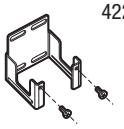
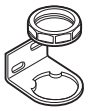
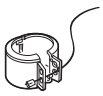
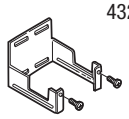
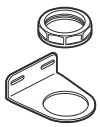


V68 Bracket (18-001-978)



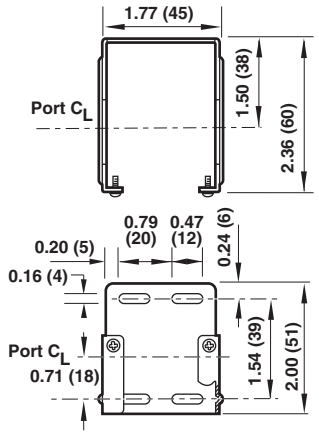
*** Add 0.39" (10) for 1-1/4" ported yokes.**

Relief Valve Accessories

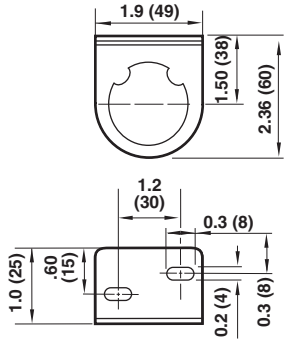
Product	Accessory	Part No.
V72	Wall bracket 	4224-50
	Wall bracket/plastic nut 	Bracket and plastic nut: 74316-50 Bracket and metal nut: 74316-51 Plastic nut: 4248-89 Metal Nut: 4248-01
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 2 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used. 	Cover and wire: 4255-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
V74	Wall bracket 	4324-50
	Wall bracket/metal nut 	Bracket and metal nut: 4368-51 Metal Nut: 4348-89
	Tamper resistant cover and wire. Install over knob to help prevent tampering of pressure setting. Use up to 4 padlocks with 5/16" (8mm) diameter shackle to secure cover. Lockout hasp may also be used. 	Cover and wire: 4355-51 Wire: 2117-01
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01

All Dimensions in Inches (mm)

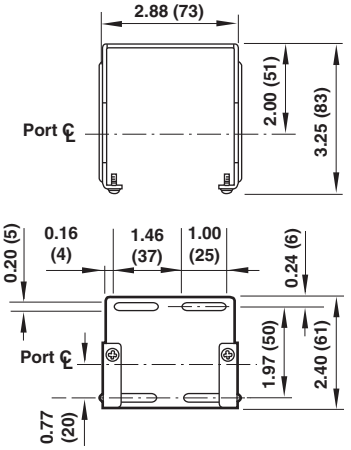
V72 Bracket (4224-50)



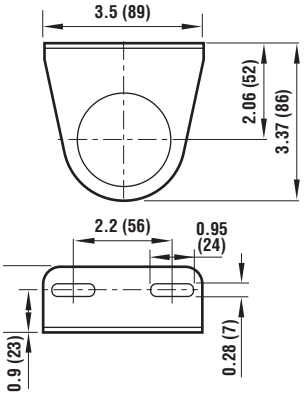
V72 Neck Bracket (74316-02)



V74 Bracket (4324-50)



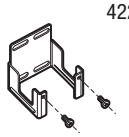
V74 Neck Bracket (4368-51)



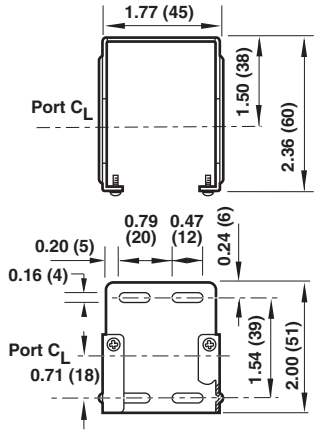
AIR LINE EQUIPMENT

Accessories

All Dimensions in Inches (mm)

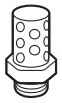
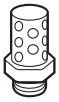
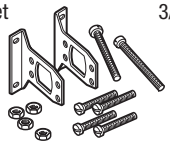
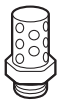
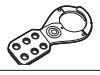
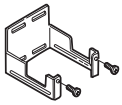
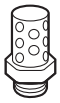
Product	Accessory	Part No.
T72	Wall bracket 	4224-50
	Mufflers (T72T)   Diffuser (10-32 and M5): 54463-01 Muffler (10-32): MS000A Muffler (M5): T40M0500	
	Lockout hasp.(use only with T72E and T72T) Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
T64	Muffler (T64T)  Muffler (1/8 PTF): MS001A Muffler (R1/8): T40B1800	
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
T68	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
T73	Mufflers (T73T)   Diffuser (10-32 and M5): 54463-01 Muffler (10-32): MS000A Muffler (M5): T40M0500	
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
T74	Muffler (T74T)  Muffler (1/8 PTF): MS001A Muffler (R1/8): T40B1800	
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01

T72 Bracket (4224-50)

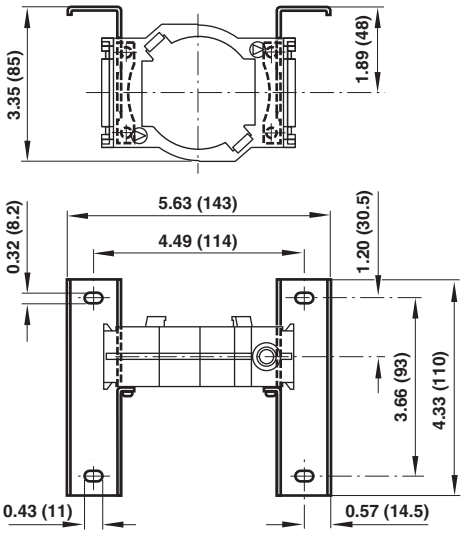


Accessories

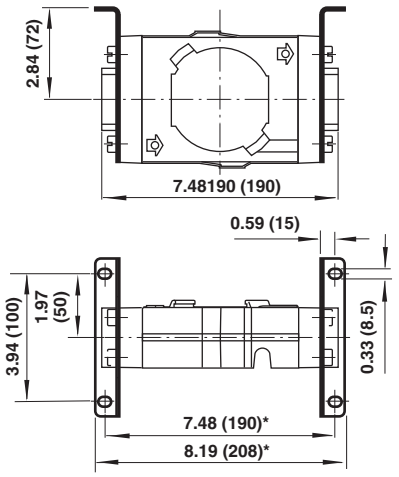
All Dimensions in Inches (mm)

Product	Accessory	Part No.
P72	Mufflers for P72C and P72F 	1/4 PTF: MB002A R1/4: MB002B
	Lockout hasp for P72F. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
P64F	Wall bracket 	74504-50
	Muffler 	1/2 PTF: MB004A R1/2: MB004B
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
P68F	Wall bracket 	3/4", 1", 1-1/4" Ports: 18-001-978 1-1/2" Ports: Not Available
	Muffler 	1" PTF: MB008A R1 : MB008B
	Lockout hasp. Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01
P74	Wall bracket 	4324-50
	Mufflers for P74C and P74F 	1/2 PTF: MB004A R1/2: MB004B
	Lockout hasp for P74F and P74C with lockout slide: Allows use of up to 6 padlocks with 5/16" (8mm) diameter shackle. 	54547-01

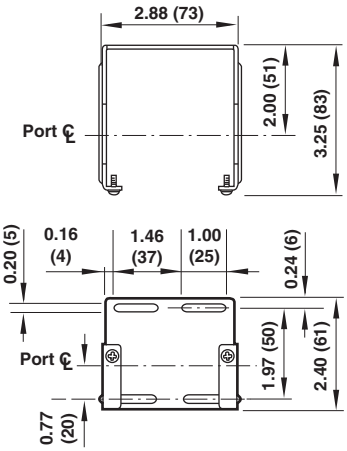
P64 Bracket (74504-50)



P68 Bracket (18-001-978)



P74 Bracket (4324-50)



Accessories

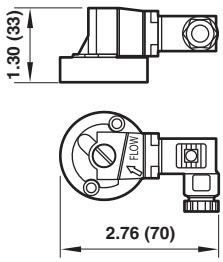
4020-51R

ELECTRICAL SERVICE INDICATOR

- **Switches when the differential pressure across the filter element exceeds the factory set differential pressure**
- **Can replace the standard mechanical Service Indicator on Norgren filters**
- **Can be field installed on Norgren F55, F73G, F73C, F74G, F74C, and F74H filters**

Note: 17, 18, 72, 64, and 68 Series cannot be field converted. The electrical service indicator must be factory installed. It can be used replace the mechanical service life indicator.

Dimensions inches (mm)



Technical Data

Maximum pressure: 250 psig (17 bar)
Operating temperature*: +14° to +175°F (-10° to +80°C)
* Air supply must be dry enough to avoid ice formation at temperatures below + 35°F (+2°C).
Maximum voltage: 240VAC/DC
Maximum current: 5 Amp
Protection: NEMA 4, IP 65
Contacts: SPDT
Connector: DIN 43650-C
Connector plug: Cable grip for cables 1/4" to 9/32" (6.3 to 7.1 mm) diameter
Switching pressures: Switches when differential pressure rises to between 8 and 12 psid (0.55 and 0.83 bar d). Resets when differential pressure falls below 3 psid (0.21 bar d).
Body material: Nylon 6-GF
Elastomer material: Nitrile

Ordering Information

Model	Differential Pressure Factory Setting
4020-51R	10 psid (0.7 bar d)