

## Filter/Regulators

Compressed air, general purpose,  
and Instrument Filter/Regulators  
1/8" to 1-1/2" port sizes

B07 Miniature General Purpose Filter/Regulator 1/8" and 1/4" ports	ALE-13-2
B72G Excelon General Purpose Filter/Regulator 1/4" and 3/8" ports	ALE-13-4
B73G Excelon General Purpose Filter/Regulator 1/4", 3/8", and 1/2" ports	ALE-13-6
B74G Excelon General Purpose Filter/Regulator 3/8", 1/2", and 3/4" ports	ALE-13-8
B64G Olympian Plus General Purpose Filter/Regulator 1/4", 3/8", 1/2", and 3/4" ports	ALE-13-10
B68G Olympian Plus General Purpose Filter/Regulator 3/4", 1", 1-1/4", and 1-1/2" ports	ALE-13-12
B39 Miniature Oil Removal Filter/Regulator 1/8" and 1/4" ports	ALE-13-14
B38 Instrument Filter/Regulator Aluminum 1/4" ports	ALE-13-16
Filter/Regulator Overview and FAQ's	ALE-13-18



**B07**



**B72G**



**B73G**



**B74G**



**B64G**



**B68G**



**B39**



**B38**

**Series 07 General Purpose Filter/Regulator**  
**1/8" and 1/4" Port Sizes**

- **Compact design**
- **Full flow gauge ports**
- **Low torque, non-rising adjusting knob**
- **Snap action knob locks pressure setting when pushed in**
- **Standard relieving models allow reduction of outlet pressure even when the system is dead-ended**
- **Protects air operated devices by removing liquid and solids contaminants**
- **Screw-on bowl reduces maintenance time**
- **Can be disassembled without the use of tools or removal from the air line**



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

Port Size	Model Number	Flow† scfm (dm <sup>3</sup> /s)	Weight lbs (kg)
1/8"	B07-101-A1KA	13 (6.2 dm <sup>3</sup> /s)	0.57 (0.26)
1/4"	B07-201-A1KA	14 (6.5 dm <sup>3</sup> /s)	0.57 (0.26)

\* 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, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) drop from set.

**Alternative Models**

B 0 7 - ★ ★ ★ - ★ ★ ★ ★

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

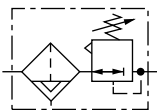
Bowl	Relief Type	Gauge	Substitute
Transparent	Relieving	Without	01
Transparent	Relieving	With	02
Transparent	Non-relieving	Without	03
Transparent	Non-relieving	With	23
Metal	Relieving	Without	33
Metal	Relieving	With	34
Metal	Non-relieving	Without	35
Metal	Non-relieving	With	36

Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	G

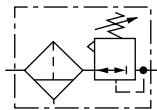
Outlet Pressure Adjustment Ranges*	Substitute
1 to 10 psig (0.1 to 0.7 bar)	A
5 to 50 psig (0.3 to 3.5 bar)	E
5 to 100 psig (0.3 to 7 bar)	K

Element	Substitute
5 µm	1
40 µm	3

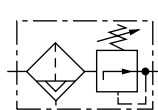
Drain	Substitute
Automatic	A
Manual	M

**ISO Symbols**


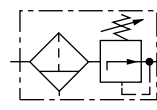
Automatic Drain  
Relieving



Manual Drain  
Relieving



Automatic Drain  
Non Relieving



Manual Drain  
Non Relieving

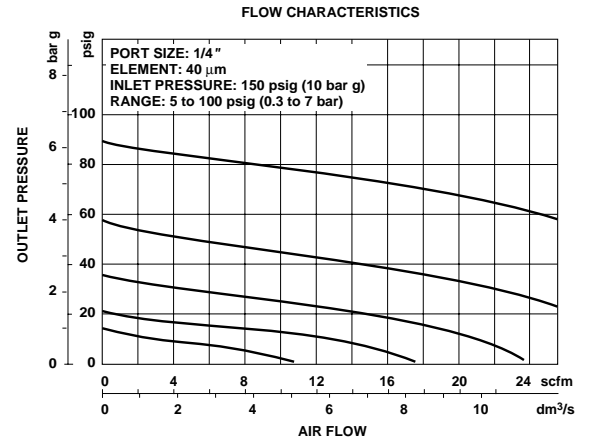
**See Section ALE-25 for Accessories**



**Technical Data**

Fluid: Compressed air  
 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 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)  
 Typical flow at 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a drop of 15 psig (1 bar) from set  
     1/8" Ports: 13 scfm (6.2 dm³/s) with 5 µm element  
     1/4" Ports: 14 scfm (6.5 dm³/s) with 5 µm element  
 Nominal bowl size: 1 fluid ounce (31 ml)  
 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  
 Drain connection: Will fit 1/8-27 and 1/8-28 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  
     Bonnet: Acetal  
     Valve: Brass/nitrile  
     Valve seat: Acetal  
     Bowl  
         Transparent: Polycarbonate  
         Metal: Zinc  
     Element: Sintered polypropylene  
     Elastomers: Nitrile

**Typical Performance Characteristics**

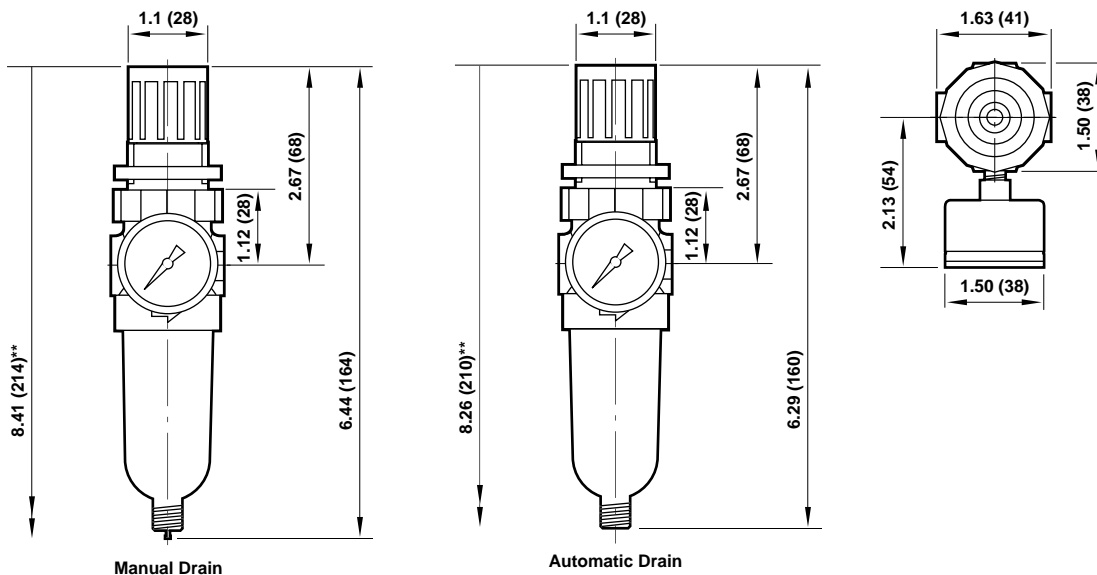


**Service Kits**

Item	Type	Part number
Service kit	Relieving models, 40 µm element	3820-14
	Non relieving models, 40 µm element	3820-13
Replacement drains	Manual	773-03
	Automatic	3654-02

Service kit includes slip ring, diaphragm, valve seat with o-ring, valve, valve spring, element, element gasket, and bowl o-ring.

All Dimensions in Inches (mm)



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

**Excelon® 72 Series Filter/Regulator**  
**1/4" and 3/8" Port Sizes**

- **EXCELON design allows in-line or modular installation**
- **High efficiency water and particle removal**
- **Quick release bayonet bowl**
- **Highly visible, prismatic liquid level indicator lens on metal bowls**
- **Full flow gauge ports**
- **Balanced valve design for optimum pressure control**
- **Push to lock adjusting knob with tamper resistant accessory**
- **Modular installations with EXCELON 72, 73, and 74 series can be made to suit particular applications**



**Ordering Information.** Models listed include PTF threads, knob adjustment, automatic drain, long transparent bowl without guard, 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-AL3-RMG	80 (38)	1.3 (0.59)
3/8"	B72G-3AK-AL3-RMG	80 (38)	1.3 (0.59)

† 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.

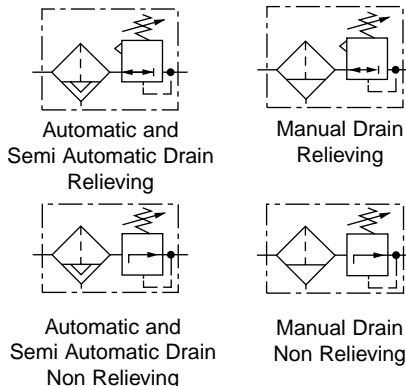
**Alternative Models**

B 7 2 G - ★ ★ ★ - ★ ★ ★ - ★ ★ ★

Port Size	Substitute	Gauge	Substitute
1/4"	2	With	G
3/8"	3	Without	N
Threads	Substitute	Outlet Pressure Adjustment Range*	Substitute
PTF	A	5 to 30 psig (0.3 to 2 bar)	C
ISO Rc taper	B	5 to 60 psig (0.3 to 4 bar)	F
ISO G parallel	G	5 to 150 psig (0.3 to 10 bar)	M
Adjustment	Substitute	Diaphragm	Substitute
Knob	K	Relieving	R
T-bar	T	Non relieving	N
		Element	Substitute
		5 µm	1
		25 µm	2
		40 µm	3
		Bowl	Substitute
		Short metal with liquid level indicator	D
		Long metal with liquid level indicator	E
		Short transparent without guard	T
		Long transparent without guard	L
		Long transparent with guard	W
		Drain	Substitute
		1/4 turn manual	Q
		Semi automatic	S
		Auto drain**	A

\* 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.

\*\* Supplied in long bowl options only

**ISO Symbols**


**See Section ALE-25 for Accessories**



## Technical Data

Fluid: Compressed air

Maximum pressure: Transparent bowl: 150 psig (10 bar)

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

Automatic drain: 150 psig (10 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).

Particle removal: 5 µm, 25 µm or 40 µm. Within ISO 8573-1, Class 3 and Class 5  
 Typical flow at 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 1 bar (15 psig) from set: 80 scfm (38 dm³/s)

Manual drain connection: Will fit 1/8-27 and 1/8-28 pipe thread

Semi automatic drain connection: Push on 5/16" (8 mm) ID tube

Semi automatic drain operating conditions (pressure operated):

Bowl pressure required to close drain: Greater than 1.5 psig (0.1 bar)

Bowl pressure required to open drain: Less than 1.5 psig (0.1 bar)

Minimum air flow required to close drain: 1 scfm (0.5 dm³/s)

Manual operation: Lift stem to drain bowl

Automatic drain connection: Will fit 1/8-27 and 1/8-28 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.

Automatic drain operating conditions (float operated):

Bowl pressure required to close drain: Greater than 5 psig (0.3 bar)

Bowl pressure required to open drain: Less than 3 psig (0.2 bar)

Minimum air flow required to close drain: 0.2 scfm (0.1 dm³/s)

Manual operation: Depress pin inside drain outlet to drain bowl

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

Nominal bowl size: Short bowl: 1.9 fluid ounce (56 ml)

Long bowl: 2.2 fluid ounce (65 ml)

Materials

Body: Zinc

Bonnet: Acetal

Valve: Brass

Bowl

Transparent: Polycarbonate

Guard for transparent bowl: Zinc

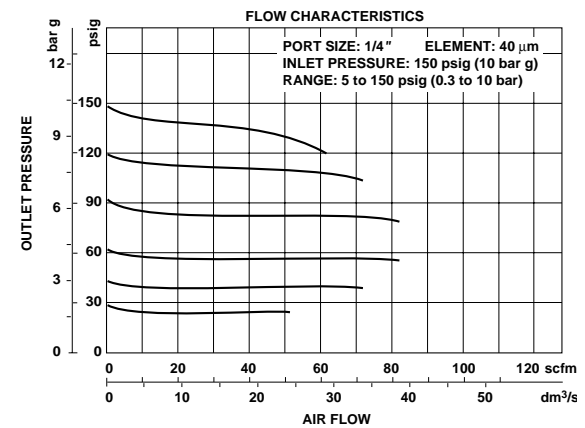
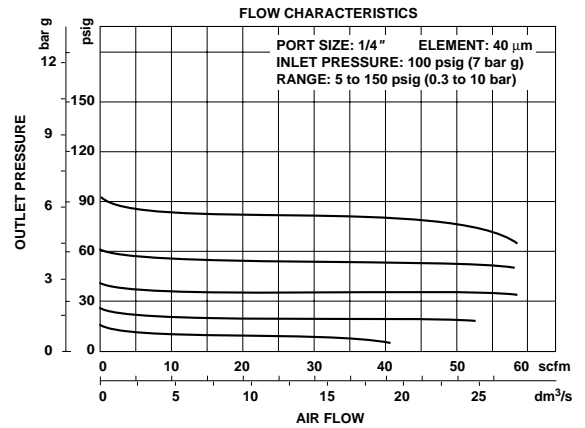
Metal bowl liquid level indicator lens:

Transparent nylon

Element: Sintered polypropylene

Elastomers: Neoprene and nitrile

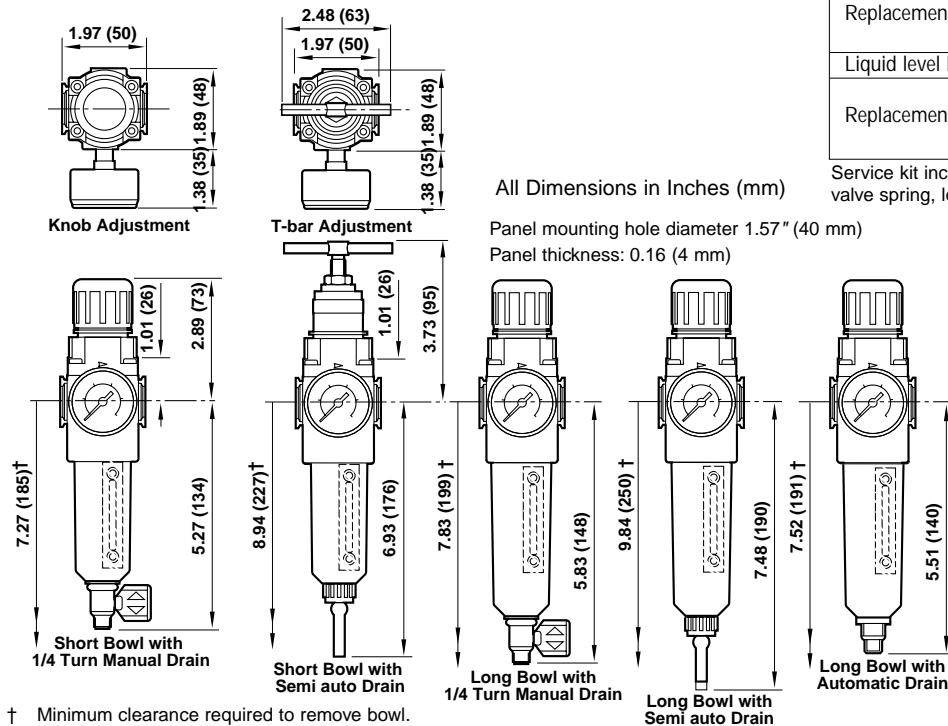
## Typical Performance Characteristics



## Service Kits

Item	Type	Part Number
Service kit	Relieving	4383-500
	Non relieving	4383-501
Replacement elements	5 µm	5925-03
	25 µm	5925-01
	40 µm	5925-02
Liquid level lens kit	Prismatic	4380-030
Replacement drains	1/4 turn manual	619-50
	Semi automatic	5379-RK
	Automatic	4000-50R

Service kit includes diaphragm assembly, valve assembly, valve spring, louvre o-ring, bowl o-ring, drain seal.



All Dimensions in Inches (mm)

Panel mounting hole diameter 1.57" (40 mm)

Panel thickness: 0.16 (4 mm)

**Excelon® 73 Series Filter/Regulator**  
**1/4", 3/8", 1/2" Port Sizes**

- Excelon design allows in-line or modular installation
- Quick release bayonet bowl
- Highly visible, prismatic liquid level indicator lens
- Full flow gauge ports
- Balanced valve design minimizes effect of variation in the inlet pressure on the outlet pressure
- Modular installations with Excelon 72, 73, and 74 series can be made to suit particular applications



**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.

Main Port Size	Model Number	Flow <sup>†</sup> scfm (dm <sup>3</sup> /s)	Weight lb (kg)
1/4"	B73G-2AK-AD3-RMG	78 (37)	1.76 (0.82)
3/8"	B73G-3AK-AD3-RMG	123 (58)	1.76 (0.82)
1/2"	B73G-4AK-AD3-RMG	123 (58)	1.76 (0.82)

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

**Alternative Models**

		B	7	3	G	-	★	★	★	-	★	★	★	-	★	★	★
Port Size	Substitute															Gauge	Substitute
1/4"	2															With	G
3/8"	3															Without	N
1/2"	4															Outlet Pressure Adjustment Range*	Substitute
Threads	Substitute															5 to 60 psig (0.3 to 4 bar)	F
PTF	A															5 to 150 psig (0.3 to 10 bar)	M
ISO Rc taper	B															10 to 250 psig (0.7 to 17 bar)**	S
ISO G parallel	G															Diaphragm	Substitute
Adjustment	Substitute															Relieving	R
Knob	K															Non relieving	N
T-bar	T															Element	Substitute
Drain	Substitute															5 µm	1
Automatic	A															25 µm	2
Manual, 1/4 turn	Q															40 µm	3
Bowl	Substitute																
Metal with liquid level indicator	D																
Transparent with guard	P																
Transparent	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 (17 bar) outlet pressure range are available only with the standard metal bowl.

**See Section ALE-25 for Accessories**



## B73G Filter/Regulators

All Dimensions in Inches (mm)

### Technical Data

Fluid: Compressed air

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, 25 µm or 40 µm filter element

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

Typical flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and 15 psig (1 bar) droop from set: 123 scfm (58 dm<sup>3</sup>/s)

Manual drain connection: Will fit 1/8-27 and 1/8-28 pipe thread

Automatic drain connection: Will fit 1/8-27 and 1/8-28 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.

Automatic drain operating conditions (float operated):

Bowl pressure required to close drain: Greater than 5 psig (0.3 bar)

Bowl pressure required to open drain: Less than 3 psig (0.2 bar)

Minimum air flow required to close drain: 0.2 scfm (0.1 dm<sup>3</sup>/s)

Manual operation: Depress pin inside drain outlet to drain bowl

Nominal bowl size: 3.5 fluid ounce (0.1 liter)

Gauge ports:

1/4" PTF with PTF main ports

Rc1/4 with ISO Rc main ports

Rc1/8 with ISO G main ports

Materials

Body: Aluminum

Bonnet: Aluminum or Zinc

Valve: Brass

Bowl:

Transparent: Polycarbonate

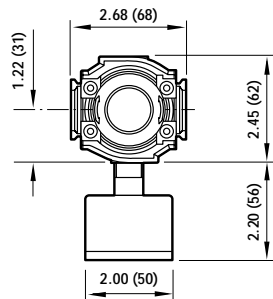
Transparent with guard: Polycarbonate, steel guard

Metal: Aluminum

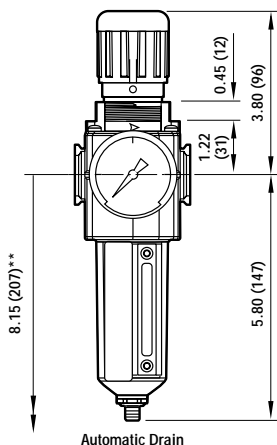
Metal bowl liquid level indicator lens: Transparent nylon

Element: Sintered polypropylene

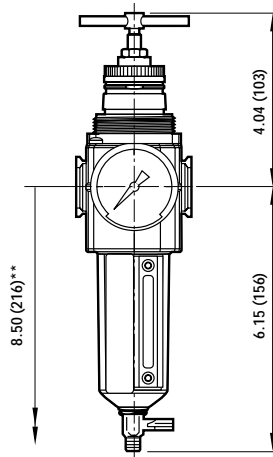
Elastomers: Neoprene and nitrile



Panel mounting hole diameter 1.89" (48 mm)  
Panel thickness: 0.25 (6 mm)



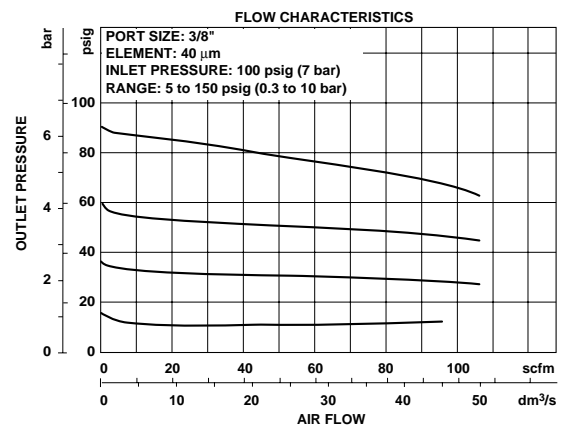
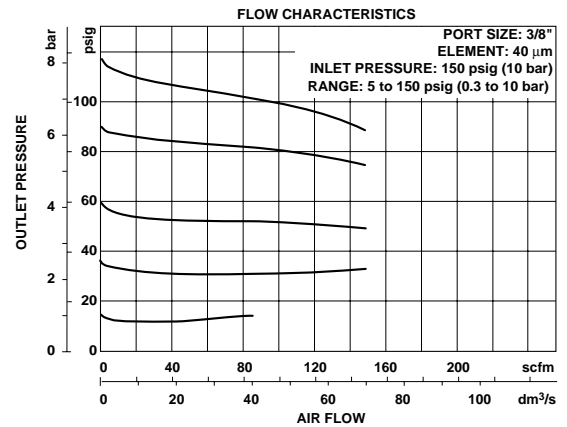
Automatic Drain



1/4 Turn Manual Drain

\*\* Minimum clearance to remove bowl.

### Typical Performance Characteristics

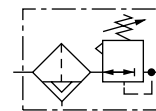


### Service Kits

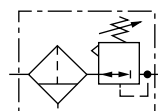
Item	Type	Part Number
Service kit	Relieving	4383-600
	Non-relieving	4383-601
Replacement elements	5 µm	4438-01
	40 µm	4438-03
Liquid level lens kit	Prismatic	4380-020
Replacement drains	Automatic	4000-51R
	Manual quarter turn	619-50

Service kit includes diaphragm assembly, valve assembly, valve spring, bowl o-ring, and automatic drain seal.

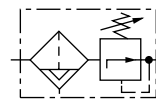
### ISO Symbols



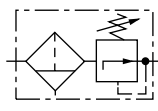
Automatic Drain, Relieving



Manual Drain, Relieving



Automatic Drain, Non-Relieving



Manual Drain, Non-Relieving

**Excelon<sup>®</sup> 74 Series Filter/Regulator**  
**3/8", 1/2", 3/4" Port Sizes**

- **EXCELON design allows in-line or modular installation**
- **Quick release bayonet bowl**
- **Highly visible, prismatic liquid level indicator lens**
- **Full flow gauge ports**
- **Balanced valve design minimizes effect of variation in the inlet pressure on the outlet pressure**
- **Modular installations with EXCELON 72, 73, and 74 series can be made to suit particular applications**



**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.

Main Port Size	Model Number	Flow <sup>†</sup> scfm (dm <sup>3</sup> /s)	Weight lb (kg)
3/8"	B74G-3AK-AD3-RMG	163 (77)	2.62 (1.19)
1/2"	B74G-4AK-AD3-RMG	212 (100)	2.59 (1.17)
3/4"	B74G-6AK-AD3-RMG	212 (100)	2.55 (1.16)

<sup>†</sup> 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**

B 7 4 G - ★ ★ ★ - ★ ★ ★ - ★ ★ ★

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

Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	G

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
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
Element	Substitute
5 µm	1
25 µm	2
40 µm	3
Bowl	Substitute
Metal with liquid level indicator	D
Transparent with guard	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) outlet pressure range are available only with the T-bar adjustment; therefore substitute **T** at the 7th digit and **S** at the 12th position.

**See Section ALE-25 for Accessories**



## Technical Data

Fluid: Compressed air

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, 25 or 40 µm filter element

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

Typical flow with 150 psig (10 bar) inlet pressure, 6.3 (90 psig) set pressure and a droop of 15 psig (1 bar) from set: 212 scfm (100 dm³/s)

Manual drain connection: Will fit 1/8-27 and 1/8-28 pipe thread

Automatic drain connection: Will fit 1/8-27 and 1/8-28 pipe thread

Automatic drain operating conditions (float operated):

Bowl pressure required to close drain: Greater than 5 psig (0.3 bar)

Bowl pressure required to open drain: Less than 3 psig (0.2 bar)

Minimum air flow required to close drain: 2 scfm (1 dm³/s)

Manual operation: Depress pin inside drain outlet to drain bowl

Nominal bowl size: 7 fluid ounce (0.2 liter)

Gauge ports:

1/4" PTF with PTF main ports

Rc1/4 with ISO Rc main ports

Rc1/8 with ISO G main ports

Materials

Body: Aluminum

Bonnet: Aluminum

Valve: Brass

Bowl

Transparent: Polycarbonate with steel bowl guard

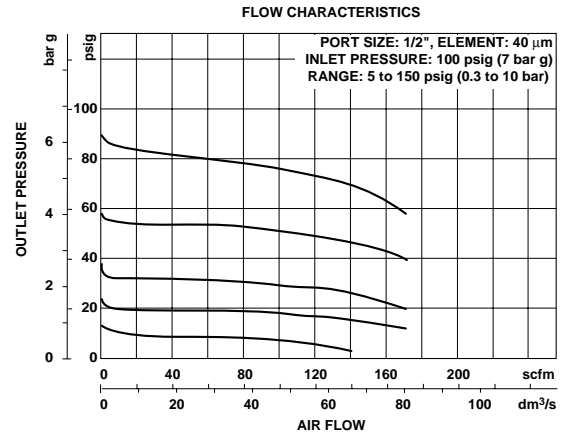
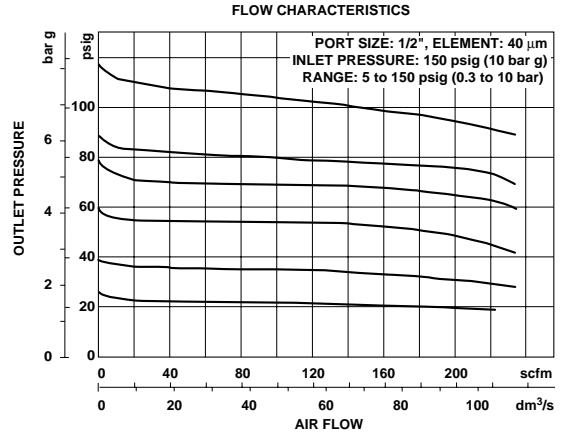
Metal: Aluminum

Metal bowl liquid level indicator lens: Transparent nylon

Element: Sintered plastic

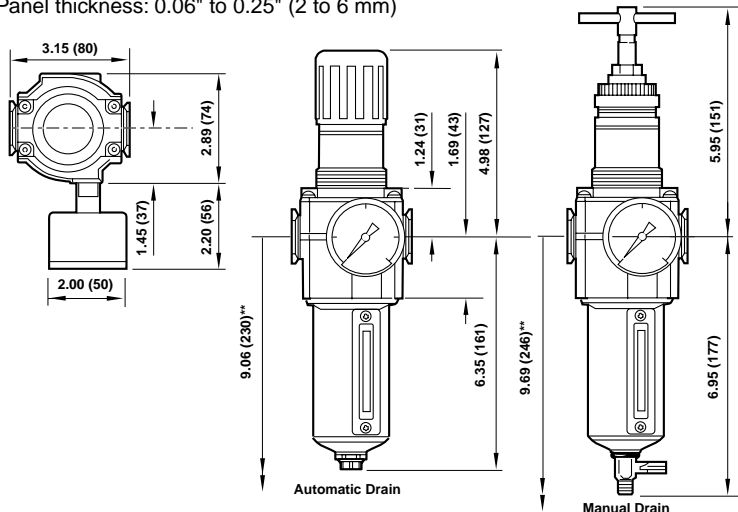
Elastomers: Neoprene and Nitrile

## Typical Performance Characteristics



Panel mounting hole diameter: 2.06" (52 mm)

Panel thickness: 0.06" to 0.25" (2 to 6 mm)



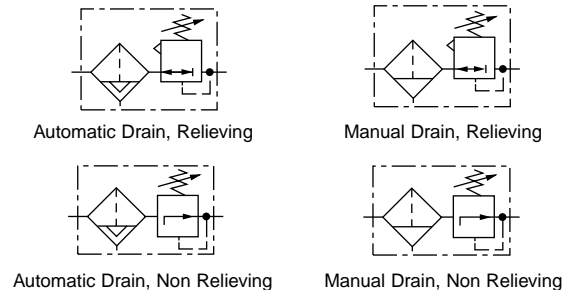
\*\* Minimum clearance to remove bowl.

## Service Kits

Item	Type	Part Number
Service kit	Relieving	4383-700
	Non relieving	4383-701
Replacement elements	5 µm	4338-04
	25 µm	4338-07
	40 µm	4338-05
Liquid level lens kit	Prismatic	4380-050
Replacement drains	Automatic (1/8 NPT outlet)	3000-10
	Manual quarter turn	619-50

Service kit includes diaphragm assembly, valve assembly, valve spring, louvre o-ring, bowl o-ring, drain seal.

## ISO Symbols



**Olympian Plus Filter/Regulator**  
**1/4", 3/8", 1/2", 3/4" Port Sizes**

- Olympian Plus plug in design
- High Efficiency water and particle removal
- Quick release bayonet bowl
- High visibility prismatic sight glass
- Push to lock adjusting knob with tamper resistant option



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

Port Size	Model	Flow <sup>†</sup> scfm (dm <sup>3</sup> /s)	Weight lb (kg)
1/4"	B64G-2AK-AD3-RMG	64 (30)	3.80 (1.71)
3/8"	B64G-3AK-AD3-RMG	161 (76)	3.76 (1.69)
1/2"	B64G-4AK-AD3-RMG	225 (106)	3.69 (1.66)
3/4"	B64G-6AK-AD3-RMG	225 (106)	4.49 (2.02)

† 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**

Port Size		B 6 4 G - ★ ★ ★ - ★ ★ ★ - ★ ★ ★			Gauge		
1/4"	Substitute 2				With	Substitute G	
3/8"	3				Without	N	
1/2"	4				Outlet Pressure Adjustment Range*		Substitute
3/4"	6				5 to 60 psig (0.3 to 4 bar)	F	
Threads					5 to 150 psig (0.3 to 10 bar)	M	
PTF	A				10 to 250 psig (0.7 to 17 bar)	S**	
ISO Rc taper	B				Diaphragm		Substitute
Adjustment					Relieving	R	
Knob	K				Non relieving	N	
T-bar					Element		Substitute
T-bar					5 µm	1	
T-bar					25 µm	2	
					Bowl		Substitute
					40 µm	3	Metal with liquid level indicator
					Drain		Substitute
					Metal with liquid level indicator	P	1/4 turn manual
					Automatic		A
					Guarded Transparent	P	Automatic

\* 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.

See Section ALE-25 for Accessories

# B64G Filter/Regulators

All Dimensions in Inches (mm)



## Technical Data

Fluid: Compressed air

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)

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

Particle removal: 5, 25 or 40 µm. Within ISO 8573-1, Class 3 and Class 5

Typical flow at 90 psig (6.3 bar) inlet pressure:

225 scfm (106 dm³/s)

Manual drain connection: Will fit 1/8-27 and 1/8-28 pipe thread

Automatic drain connection: Will fit 1/8-27 and 1/8-28 pipe thread

Automatic drain operating conditions:

Minimum pressure: 10 psig (0.7 bar).

Drain opens when bowl pressure drops below 3 psig (0.2 bar).

Minimum air flow: 2 scfm (1 dm³/s) required to close drain.

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

Nominal bowl size:

7 fluid ounce (0.2 liter)

Materials:

Body: Zinc

Bonnet: Aluminum

Valve: Brass

Yoke: Zinc

Metal bowl: Aluminum

Standard metal bowl prismatic liquid level indicator lens: Grilamid

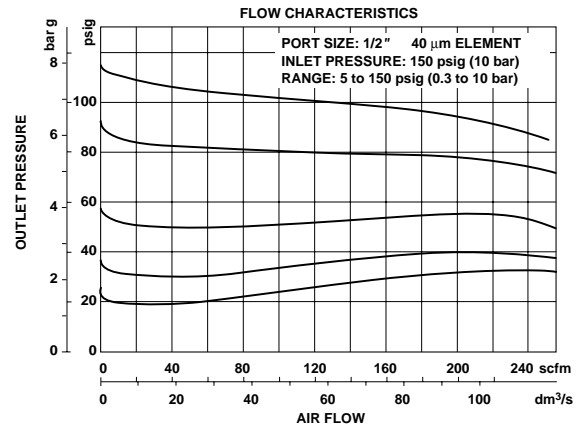
Optional metal bowl sight glass: Pyrex

Optional transparent bowl: Polycarbonate

Element: Sintered plastic

Elastomers: Synthetic rubber

## Typical Performance Characteristics

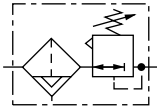


## Service Kits

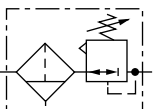
Item	Type	Part Number
Service kit	Relieving	4383-200
	Non relieving	4383-201
Replacement elements	5 µm	4338-01
	25 µm	4338-99
	40 µm	4338-02
Replacement Sight Glass	Prismatic (standard)	4380-040
	Pyrex	4380-041
Replacement Drains	Automatic	3000-10
	Manual	684-84

Service kit includes diaphragm assembly, valve assembly, valve spring, louver o-ring, bowl o-ring, drain seal.

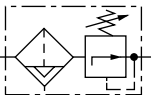
## ISO Symbols



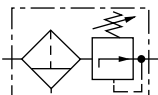
Automatic Drain Relieving



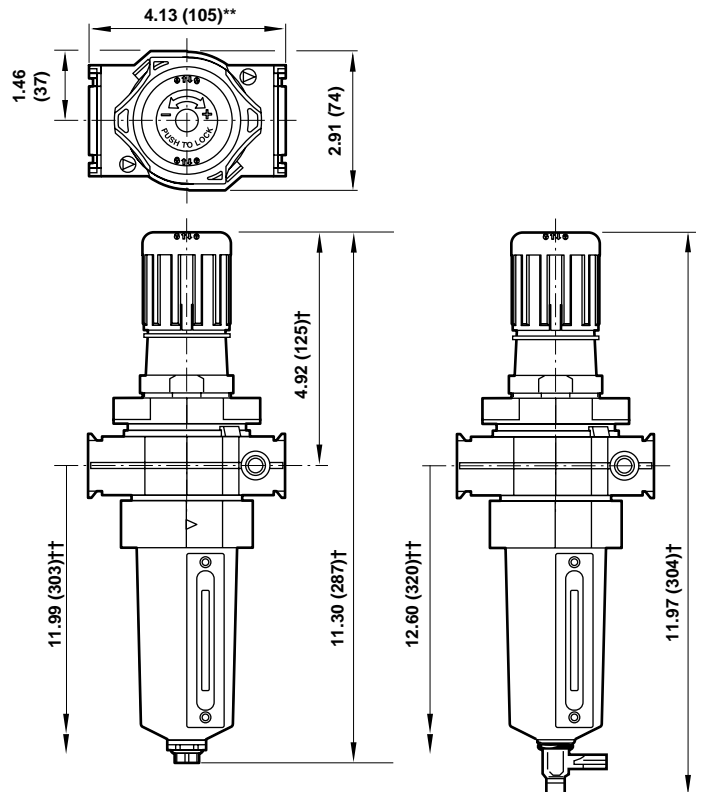
Manual Drain Relieving



Automatic Drain Non Relieving



Manual Drain Non Relieving



\*\* 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.

**Olympian Plus Filter/Regulator**  
**3/4", 1", 1-1/4", 1-1/2" Port Sizes**

- **Olympian Plus plug in system**
- **Effective liquid removal and positive solid particle 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**
- **Excellent flow and regulation characteristics**



**Ordering Information.** Models listed include a 1 quart w/long element, yoke with PTF threads, knob adjustment, automatic drain, 40 µm element, relieving diaphragm, and a 5 to 120 psig (0.4 to 8 bar) outlet pressure adjustment range\*. A gauge is not included.

Port Size	Model	Flow** scfm (dm³/s)	Weight lb (kg)
3/4	B68E-6AK-AU3-RLN	509 (240)	6.47 (2.94)
1	B68E-8AK-AU3-RLN	509 (240)	6.20 (2.82)
1-1/4	B68E-AAK-AU3-RLN	509 (240)	6.42 (2.92)
1-1/2	B68E-BAK-AU3-RLN	509 (240)	6.07 (2.76)

**Alternative Models**

B 6 8 E - ★ ★ ★ - ★ ★ ★ - ★ ★ ★

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
No Yoke	N

Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	G
No Yoke ( <i>N</i> in 5th position) Rc threaded gauge ports	N
No Yoke ( <i>N</i> in 5th position) PTF threaded gauge ports	A

Adjustment	Substitute
Knob	K
T-bar	T

Drain	Substitute
Automatic	A
No drain (Closed bowl)	E
Manual	M
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***

Diaphragm	Substitute
Relieving	R
Non relieving	N

Element	Substitute
5 µm	1
25 µm	2
40 µm	3

Bowl	Substitute
1 quart (1 liter) without liquid level indicator	C††
1 pint (0.5 liter) without liquid level indicator	M†
1 pint (0.5 liter) with liquid level indicator	R†
1 quart (1 liter) with liquid level indicator	U††

\* 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.

† Only available with B68G.

†† Only available with B68EE

# B68E/G Filter/Regulators

All Dimensions in Inches (mm)



## Technical Data

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).  
 Particulate removal: 5, 25 or 40 µm  
 Air quality: Within ISO 8573-1, Class 3 and Class 5 (particulates)  
 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: 509 scfm (240 dm<sup>3</sup>/s)  
 1/4 turn manual drain connection: 1/8" pipe thread  
 Automatic drain connection: 1/8" pipe thread  
 Automatic drain operating conditions (float operated):  
 Bowl pressure required to close drain: Greater than 5 psig (0.3 bar)  
 Bowl pressure required to open drain: Less than 3 psig (0.2 bar)  
 Minimum air flow required to close drain: 2 scfm (1 dm<sup>3</sup>/s)  
 Manual operation: Depress pin inside drain outlet to drain bowl

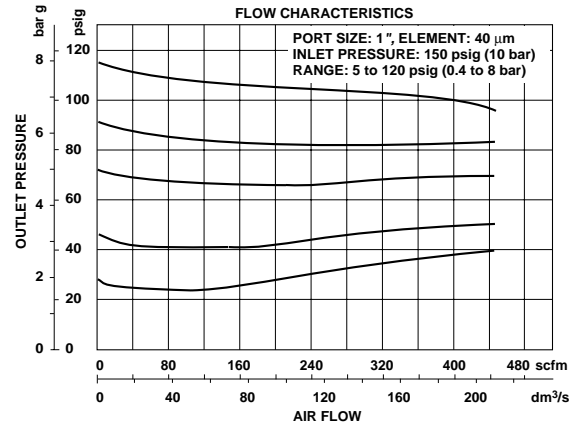
Nominal bowl size:  
 1 pint U.S. (0.5 liter)  
 1 quart U.S. (1 liter)

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

Materials:  
 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: Synthetic rubber

## See Section ALE-25 for Accessories

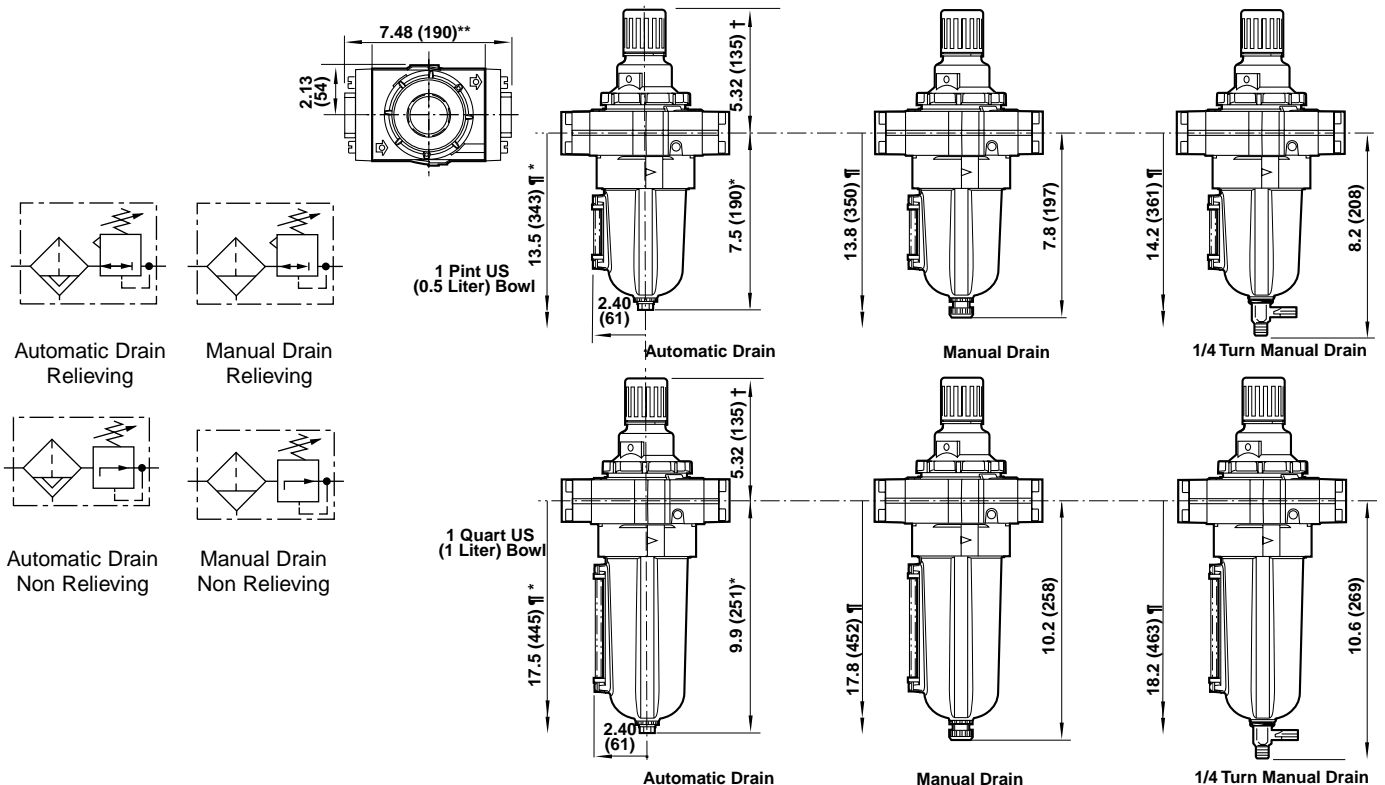
## Typical Performance Characteristics



## Service Kits

Item	Type	Part Number
Service kit	Relieving	4383-300
	Non relieving	4383-301
Replacement elements	5 µm (1 pint bowl)	5576-97
	25 µm (1 pint bowl)	5576-98
	40 µm (1 pint bowl)	5576-99
	5 µm (1 quart bowl)	5311-01
	25 µm (1 quart bowl)	5511-02
	40 µm (1 quart bowl)	5511-03
Replacement sight glass kit	1 pint bowl	4380-060
	1 quart bowl	4380-061
Replacement Drains	Automatic (G 1/8 outlet)	3000-97
	Automatic (1/8 NPT outlet)	3000-10
	Manual	684-84
	Manual quarter turn	619-50

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



† 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.

**Miniature Series 07 Oil Removal Filter/Regulator 1/8" and 1/4" Port Sizes**

- Compact design
- High efficiency oil and particle removal
- Low torque, non-rising adjusting knob
- Snap action knob locks pressure setting when pushed in
- Standard relieving models allow reduction of outlet pressure even when the system is dead-ended



**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 (dm <sup>3</sup> /s)	Weight lbs (kg)
1/8"	B39-102-A0KA	4.0 (1.9)	0.57 (0.26)
1/4"	B39-202-A0KA	4.0 (1.9)	0.57 (0.26)

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

**Alternative Models**

B 3 9 - ★ ★ ★ - ★ ★ ★ ★

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

Bowl	Relief Type	Gauge	Substitute
Transparent	Relieving	Without	01
Transparent	Relieving	With	02
Transparent	Non-relieving	Without	03
Transparent	Non-relieving	With	23
Metal	Relieving	Without	33
Metal	Relieving	With	34
Metal	Non-relieving	Without	35
Metal	Non-relieving	With	36

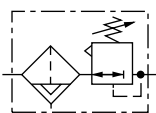
Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	G

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

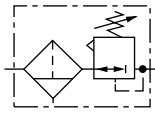
Element	Substitute
Coalescing	0

Drain	Substitute
Automatic	A
Manual	M

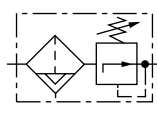
\* Do not use these units to control pressures outside of the specified ranges.

**ISO Symbols**


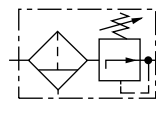
Automatic Drain  
Relieving



Manual Drain  
Relieving



Automatic Drain  
Non Relieving



Manual Drain  
Non Relieving

**See Section ALE-25 for Accessories**



**Technical Data**

Fluid: Compressed air

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 35°F (2°C)

Particle 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 (21°C) with an inlet concentration of 17 ppm.

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

4.0 scfm (1.9 dm³/s)

† Maximum flow to maintain stated oil removal performance.

Nominal bowl size: 1 fluid ounce (31 ml)

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

Drain connection: Will fit 1/8-27 and 1/8-28 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

Bonnet: Acetal

Valve: Brass/nitrile

Valve seat: Acetal

Bowl

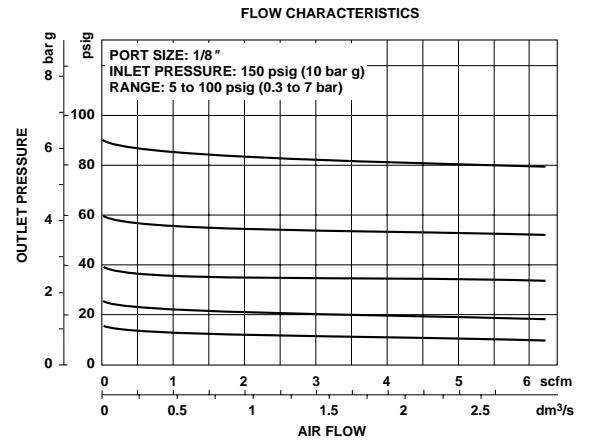
Transparent: Polycarbonate

Metal: Zinc

Element: Synthetic fiber and polyurethane foam

Elastomers: Nitrile

**Typical Performance Characteristics**



**Service Kits**

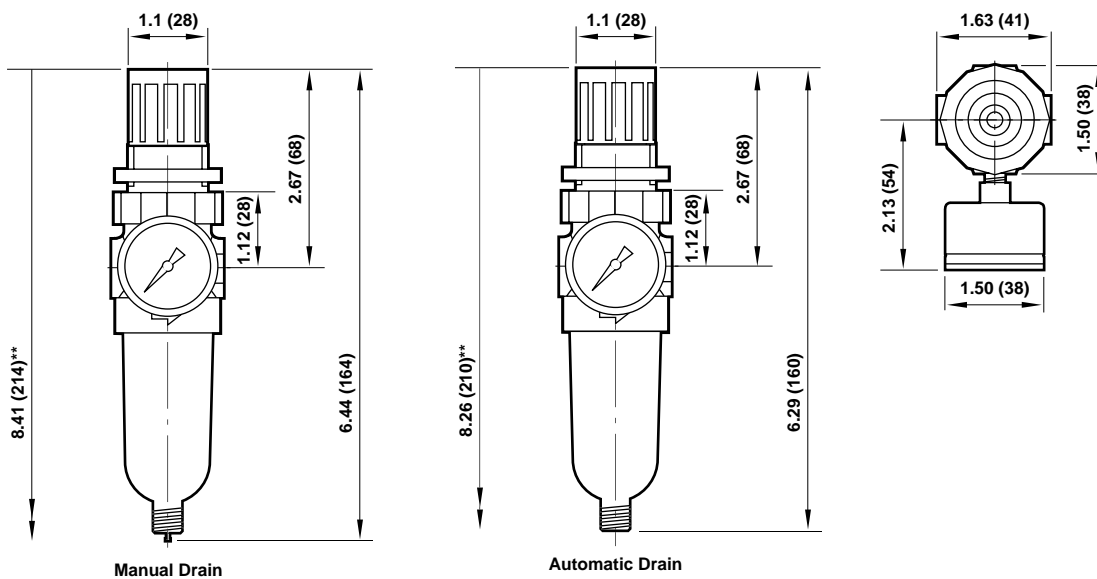
Item	Type	Part number
Service kit	Relieving models	3407-66
	Non relieving models	3407-65
	Element	4141-10
Replacement drains	Manual	773-03
	Automatic	3654-02

Relieving and non-relieving service kits include slip ring, diaphragm, valve seat with o-ring, valve, and valve spring. Element kit contains element, element gasket, and bowl o-ring.

All Dimensions in Inches (mm)

Panel mounting hole diameter: 1.19" (30 mm)

Maximum panel thickness: 0.25" (6 mm)



**Instrument Filter/Regulator  
Aluminum Model 1/4" PTF**

- Compact instrument units with high performance
- Stable regulation and temperature compensation
- Excellent flow and regulation characteristics



**Ordering Information.** Models listed are relieving type with PTF threads, manual drain, 25 µm element, screw adjustment, 0.6 to 30 psig (0.04 to 2 bar) outlet pressure adjustment range and without gauge.

Port Size	Model Number	Flow† scfm (dm³/s)	Weight lbs (kg)
1/4" PTF	B38-200-B2CA	17 (8)	1.18 (0.53)

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

**Alternative Models**

B 3 8 - ★ ★ ★ - ★ ★ ★ ★

Port Size	Substitute
1/4" PTF	2

Type	Substitute
Aluminum	0

Diaphragm	Substitute
Relieving	0
Non relieving	1
Relieving, bracket and nut	2
Non relieving, bracket and nut	3
Relieving with nut	4
Non relieving with nut	5

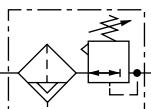
Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	D
API.LP.INT	K

Outlet Pressure Adjustment Ranges*	Substitute
0.6 to 30 psig (0.04 to 2 bar)	C
1 to 60 psig (0.07 to 4 bar)	F
3.6 to 100 psig (0.25 to 7 bar)	K

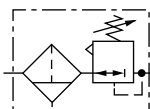
Element	Substitute
5 µm	1
25 µm	2

Drain	Substitute
Manual	B

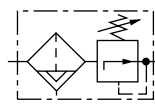
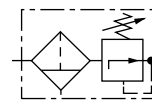
\* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

**ISO Symbols**


Automatic Drain, Relieving



Manual Drain, Relieving


 Automatic Drain,  
Non Relieving

 Manual Drain,  
Non Relieving

**See Section ALE-25 for Accessories**



**Technical Data**

Fluid: Compressed air

Maximum pressure

Manual drain: 300 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).

Particle removal: 5 µm or 25 µm filter element

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

Typical flow with 100 psig (7 bar) inlet pressure, 15 psig (1 bar) set pressure and a droop of 1 psig (0.05 bar) from set:

17 scfm (8 dm³/s)

Manual Drain

Nominal bowl size:

2.4 fluid ounce (70 ml)

Gauge ports:

1/4" PTF

Materials

Body: Aluminum

Bonnet: Aluminum

Bowl: Aluminum

Adjusting screw: Steel

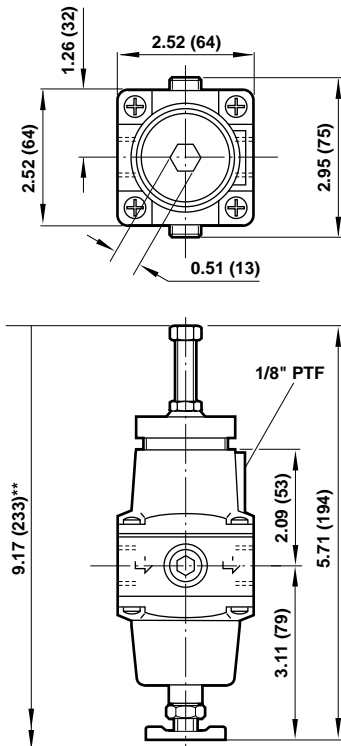
Elements

25 µm: High density polyethylene

5 µm: Ceramic pyrolyth

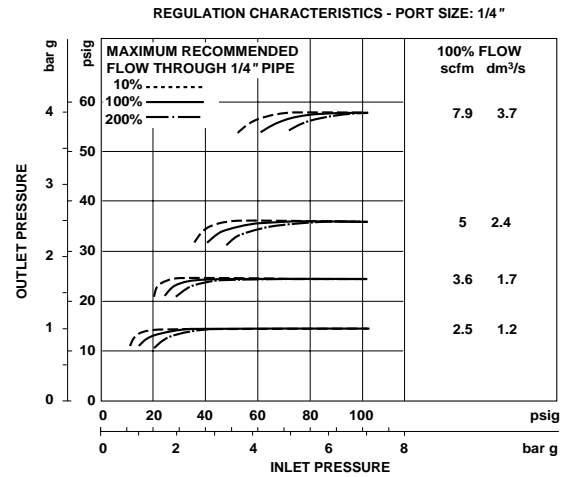
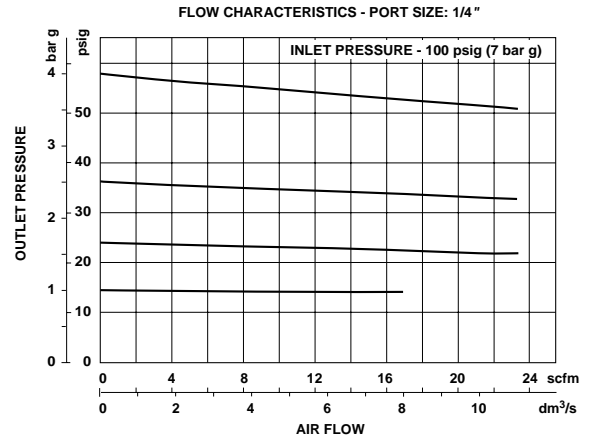
Elastomeric materials: Synthetic rubber

All Dimensions in Inches (mm)



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

**Typical Performance Characteristics**



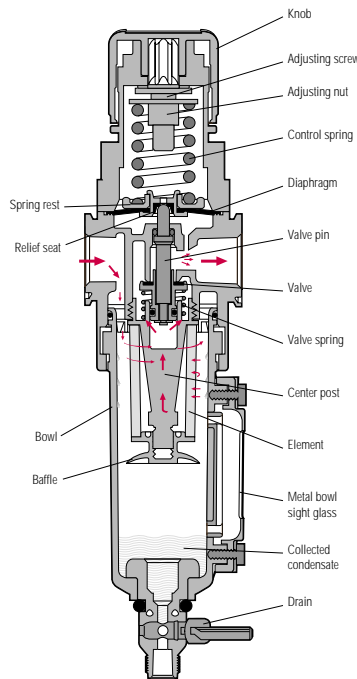
**Service Kits**

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

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



## GENERAL PURPOSE FILTER/REGULATOR



### 1.1 GENERAL OVERVIEW

Filter/regulators combine the features of a filter and regulator with a single compact body.

Air passes through the filter section first removing water and particle contaminants, and is then regulated by the top regulator section.

See individual filter and regulator sections for details.

### 1.2 PERFORMANCE CHARACTERISTICS

The regulator section of the filter/regulator determines the flow and regulation characteristics of the unit.

Flow is therefore measured in terms of pressure droop from set pressure (see regulators) and not flow versus pressure drop as in a filter.

Regulation characteristics are determined in the same way as regulators.

### 1.3 SPECIALS

#### 1.3.1 Can we do a Coalescing Filter/Regulator?

Yes. We have a B39 unit in the 07 Series. Other sizes could be considered for volume customers.

#### 1.3.2 Can we do special materials?

Units are available in stainless steel (B05 and B38) for harsh environments and process applications.