

Oil Vapor Removal (Adsorbing) Filters

available in port sizes 1/4" to 1".

F72V Excelon Oil Vapor Removal Filter 1/4" and 3/8" Ports	.ALE-3-2
F74V Excelon Oil Vapor Removal Filter 3/8", 1/2", and 3/4" Ports	.ALE-3-4
F64B/L Coalescing/Oil Vapor Removal Filter 1/4", 3/8", 1/2", and 3/4" Ports	.ALE-3-6
F68V/Y Olympian Plus Oil Vapor Removal Filter 1/2", 3/4", and 1" Ports	.ALE-3-8
F46 Oil Vapor Removal Filter 3/8", 1/2", and 3/4" Ports	.ALE-3-10



F72V



F74V



F64 B/L



F68



F46

**Excelon 72 Oil Vapor Removal
Filter 1/4", 3/8" Port Sizes**

- Excelon design allows in-line or modular installation
- Adsorbing type activated carbon element removes oil vapors and most hydrocarbon odors
- Quick release bayonet bowl
- Long service life of filter element.
- Color indicator for oil presence.
- Modular installations with EXCELON 72, 73, and 74 series can be made to suit particular applications



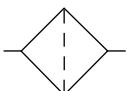
Ordering Information. Models listed include PTF threads and a long transparent bowl without guard and closed bottom.

Port Size	Model	Flow* scfm (dm ³ /s)	Weight lb (kg)
1/4"	F72V-2AN-ELC	3.4 (1.6)	0.88 (0.40)
3/8"	F72V-3AN-ELC	3.4 (1.6)	0.88 (0.40)

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

Alternative Models

Port Size		Threads		Bowl	
Port Size	Substitute	Threads	Substitute	Bowl	Substitute
1/4"	2	PTF	A	Long metal	C
3/8"	3	ISO Rc taper	B	Short metal	M
		ISO G parallel	G	Short transparent without guard	T
				Long transparent without guard	L
				Long transparent with guard	W

ISO Symbols

Auto Drain
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: 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).

Required prefilter: Norgren oil removal filter with equivalent pipe size and flow capacity equal to or greater than the vapor removal filter.

Air quality: Within ISO 8573-1, Class 1** (oil content) when installed downstream of an oil removal filter

** See ALE-1-G for specification details.

Maximum remaining oil content in outlet air: 0.003 ppm at 70°F (20°C)

Maximum flow at 90 psig (6.3 bar) inlet pressure to maintain stated oil removal performance: 3.4 scfm (1.6 dm³/s)

Nominal bowl size

Short bowl: 1.9 fluid ounce (56 ml)

Long bowl: 2.2 fluid ounce (65 ml)

Materials

Body: Zinc

Bowl

Transparent: Polycarbonate

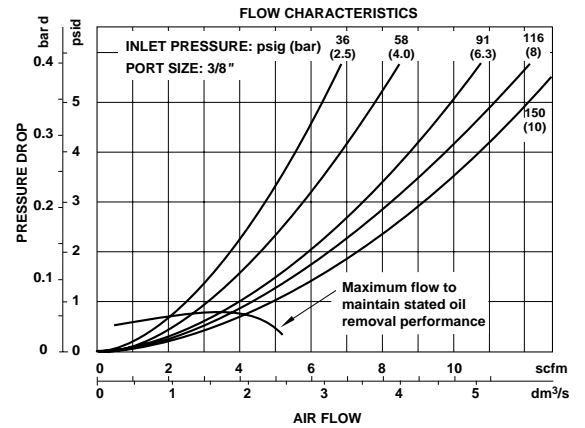
Guard for transparent bowl: Zinc

Metal: Zinc

Element: Activated carbon and polycarbonate

Elastomers: Nitrile

Typical Performance Characteristics

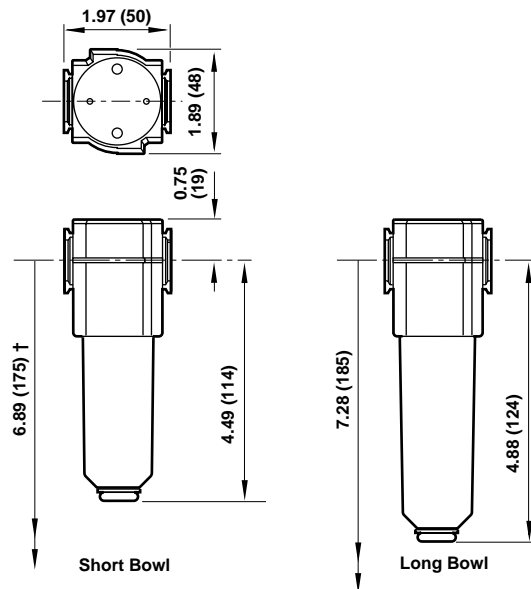


Service Kits

Item	Type	Part Number
Service kit	Seal and Gasket	4380-500
Replacement element	Adsorbing	4241-01

Service kit includes element seal and bowl seal.

All Dimensions in Inches (mm)



† Minimum clearance required to remove bowl.

**Excelon 74 Oil Vapor Removal
Filter 3/8", 1/2", 3/4" Port Sizes**

- Excelon design allows in-line or modular installation
- Adsorbing type activated carbon element removes oil vapors and most hydrocarbon odors
- Quick release bayonet bowl
- Long service life of filter element. Minimum life of 400 hours when an oil removal filter is installed upstream and the filtration temperature is in the region of 70° to 80°F (20° to 26°C).
- Modular installations with Excelon 72, 73, and 74 series can be made to suit particular applications



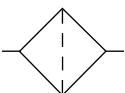
Ordering Information. Models listed include PTF threads and a closed bottom metal bowl.

Port Size	Model	Flow* scfm (dm ³ /s)	Weight lb (kg)
3/8"	F74V-3AN-EMA	27 (13)	2.54 (1.15)
1/2"	F74V-4AN-EMA	27 (13)	2.51 (1.14)
3/4"	F74V-6AN-EMA	27 (13)	2.46 (1.12)

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

Alternative Models

		F 7 4 V - ★ ★ ★ - ★ ★ ★				
Port Size	Substitute				Element	Substitute
3/8"	3				Adsorbing (Activated carbon without color indicator)	A
1/2"	4					
3/4"	6					
Threads	Substitute				Bowl	Substitute
PTF	A				Metal	M
ISO Rc taper	B				Transparent with guard	P
ISO G parallel	G					
Options	Substitute				Drain	Substitute
No options	N				Closed bottom (no drain)	E

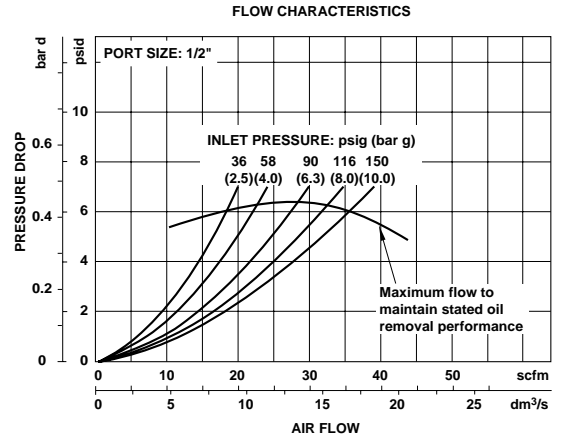
ISO Symbols

Auto Drain
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: 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
 ** See ALE-1-G for specification details.
 Maximum remaining oil content in outlet air: 0.003 ppm at 70°F (20°C)
 Maximum flow at 90 psig (6.3 bar) inlet pressure to maintain stated oil removal performance: 27 scfm (13 dm³/s)
 Nominal bowl size: 7 fluid ounce (0.2 liter)
 Required prefilter: Oil removal filter with equivalent pipe size and flow capacity equal to or greater than the vapour removal filter.
Materials
 Body: Aluminum
 Bowl:
 Transparent: Polycarbonate with steel bowl guard
 Metal: Aluminum
 Element: Activated carbon and aluminum
 Elastomers: Neoprene and Nitrile

Typical Performance Characteristics

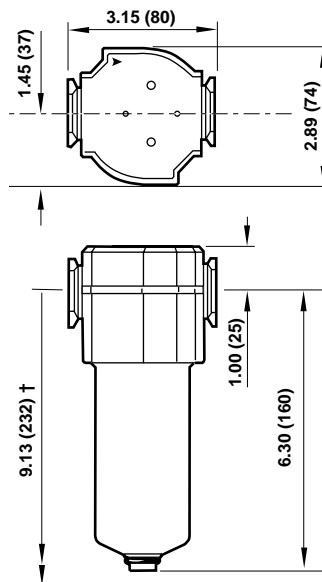


Service Kits

Item	Type	Part Number
Service kit	Seal and Gasket	4380-750
Replacement element	Adsorbing	4341-01

Service kit includes element seal and bowl seal.

All Dimensions in Inches (mm)



† Minimum clearance required to remove bowl.

Olympian Plus Coalescing/Adsorbing Filter 1/4", 3/8", 1/2", 3/4" Port Sizes

- Olympian Plus plug in design
- Combined oil and vapor removal filter
- Oil and dirt contamination in outlet air within ISO 8573-1: Quality class 1.7.1

For optimum coalescing filter element life install a 5 µm F64G pre-filter upstream.



Ordering Information. Models listed include PTF threads, automatic drain and metal bowl.

Drain Type	Port Size	F64B/L (only)		With 5 µm F64G Pre-filter	
		Model	Weight lb (kg)	Model	Weight lb (kg)
Automatic	1/4"	F64B-2AN-ARO	4.07 (1.83)	FFB64-208	7.11 (3.20)
	3/8"	F64L-3AN-ARO	4.91 (2.21)	FFB64-308	7.93 (3.57)
	1/2"	F64L-4AN-ARO	5.56 (2.50)	FFB64-408	8.00 (3.60)
	3/4"	F64L-6AN-ARO	6.40 (2.88)	FFB64-608	8.84 (3.98)

For replacement Filter (without yoke or pre-filter) substitute 'N' at the 5th and 6th digits eg: F64L-**NNN**-ARO.

Alternative Models

F 6 4 ★ - ★ ★ ★ - ★ ★ ★

Body type	Substitute
For 1/4" ports	B
For 3/8", 1/2", 3/4" ports	L

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

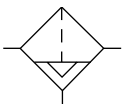
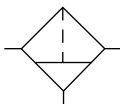
Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	G

Element	Substitute
Coalescing	0

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

Drain	Substitute
Manual	M
Auto drain	A

Option	Substitute
None	N

ISO Symbols

Auto Drain

Manual Drain

See Section ALE-25 for Accessories

F64 B/L Coalescing/Vapor Removal Filters



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: 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).

Partial removal: 0.01 µm.

Air quality: Within ISO 8573-1, Class 1.7.1**

** See ALE-1-G for specification details.

Maximum remaining oil content in outlet air:

0.003 ppm at 70°C (21°C) with an inlet concentration of 17 ppm

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

15 scfm (7 dm³/s) F64B, 23 scfm (11 dm³/s) F64L

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 dm³/s)

Manual operation: Depress pin inside drain outlet to drain bowl

For F64G pre-filter technical data please refer to separate sheet.

Materials

Body: Zinc

Yoke: Zinc

Metal bowl: Zinc

Optional transparent bowl: Polycarbonate

Integral pre-filter element: Sintered bronze

Main filter element and activated carbon pack: Composite materials

Elastomers: Synthetic rubber

Standard sight glass for metal bowl: Pyrex

Typical Performance Characteristics

Inlet Pressure		Maximum Flow†			
		F64B		F64L	
psig	(bar)	scfm	(dm³/s)	scfm	(dm³/s)
15	(1)	6	(2.8)	9.3	(4.4)
45	(3)	10	(4.8)	16	(7.6)
70	(5)	13	(6.2)	20.8	(9.8)
90	(6.3)	15	(7.0)	23.3	(11.0)
100	(7)	15.5	(7.3)	24.4	(11.5)
130	(9)	17.8	(8.4)	28	(13.2)

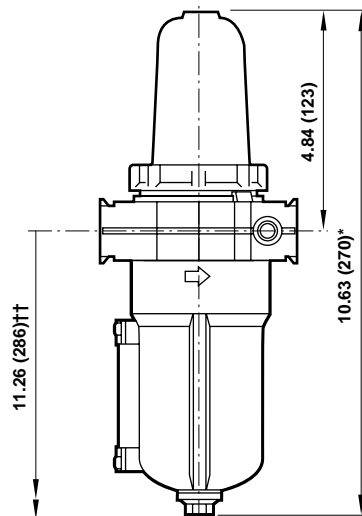
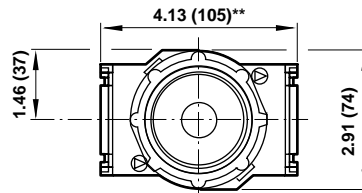
† Maximum flow to maintain stated oil removal performance.

Service Kits

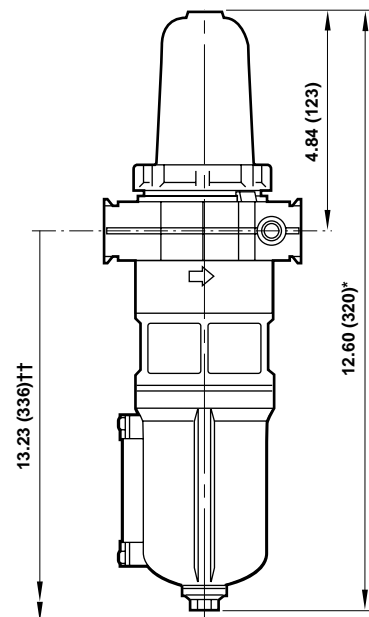
Item	Type	Part Number
Service kit	F64B/L	4380-201
Service kit (pre-filter)	F64G	4380-200
Element F64G (pre-filter)	5 µm	4338-01
Elements (F64B/L)	Coalescing (F64B)	5350-99
	Coalescing (F64L)	5350-98
	Integral pre-filter (F64B/L)	3698-02
	Activated carbon (F64B/L)	5568-01
Replacement sight glass	Prismatic (F64G)	4380-040
	Pyrex (F64G option)	4380-041
Replacement drains	Pyrex (F64B/L)	2273-97
	Automatic	3000-10
	Manual	684-84

Service kit includes port seals, bowl o-ring and drain gasket.

All Dimensions in Inches (mm)



F64B (automatic drain)



F64L (automatic drain)

* Automatic drain shown.

Add 0.39" (10 mm) for manual drain

†† Minimum clearance required to remove bowl.

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

Olympian Plus Oil Vapor Removal (Adsorbing) Filter
1/2", 3/4", 1" Port Sizes

- Olympian Plus plug in system
- Adsorbing type activated carbon element removes oil vapours and most hydrocarbon odours
- Long service life of filter element. Minimum life of 400 hours when an oil removal filter is installed upstream and the filtration temperature is in the region of 70° to 80°F (20° to 26°C).
- Oil and dirt contamination in outlet air within ISO 8573-1: Quality Class 1.7.1 when inlet air is prefiltered with an F68G and F68C/H.



Ordering Information. Models listed include a yoke with PTF threads, and a filter with closed bottom (no drain) bowl.

Port Size	Type	Model	Weight lb (kg)
1/2	Standard flow (short element)	F68V-4AN-EMA	5.13 (2.33)
3/4	High flow (long element)	F68Y-6AN-ECA	5.74 (2.61)
1	High flow (long element)	F68Y-8AN-ECA	5.70 (2.59)

Alternative Models

F 6 8 ★ - ★ ★ ★ - ★ ★ ★

Flow	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 Rc taper	B
ISO G parallel	G
None	N

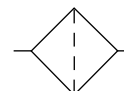
Option	Substitute
No options	N

Element	Substitute
Adsorbing (Activated carbon without color indicator)	A

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

Drain	Substitute
Closed bottom (no drain)	E

* Only available with F68V.
 ** Only available with F68Y.

ISO Symbols


Closed Bottom



Technical Data

Fluid: Compressed air

Maximum pressure: 250 psig (17 bar)

Operating temperature*: 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: 70°F (0.003 mg/m³ at 20°C)

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

1/2" ports: 53 scfm (25 dm³/s)

3/4" ports: 74 scfm (35 dm³/s)

1" ports: 127 scfm (60 dm³/s)

Nominal bowl sizes:

1 quart US (1 liter)

1 pint US (0.5 liter)

Required pre-filter: Oil removal filter with equivalent pipe size and flow capacity equal to or greater than the vapor removal filter. It is recommended that a general purpose filter with a 5µm element be installed upstream of the oil removal filter.

Materials:

Body: Aluminum

Yoke: Aluminum

Bowl: Aluminum

Element: Activated carbon and aluminum

Elastomers: Synthetic rubber

Typical Performance Characteristics

Inlet Pressure		Maximum Flow *			
		F68V 1/2" Ports		F68Y 1" Ports	
psig	(bar)	scfm	(dm ³ /s)	scfm	(dm ³ /s)
36	(2.5)	33.3	(15.7)	80.1	(37.8)
58	(4)	42.4	(20)	101.8	(48)
90	(6.3)	53	(25)	127.2	(60)
116	(8)	60	(28.3)	143.7	(67.8)
150	(10)	66.8	(31.5)	160.3	(75.6)

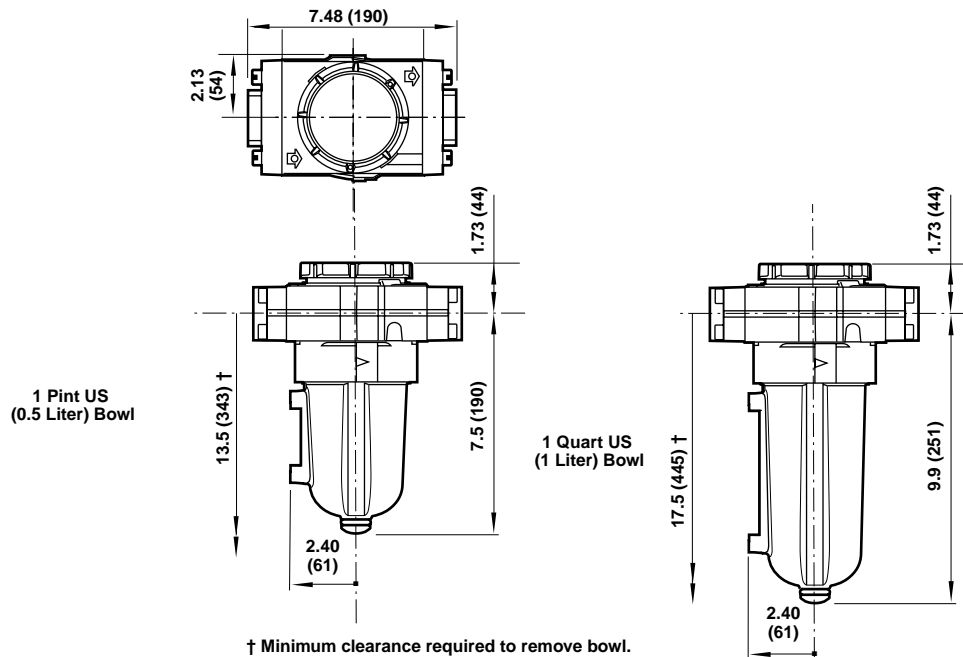
* Maximum flow to maintain stated oil removal performance.

Service Kits

Item	Type	Part Number
Service kit	Seal and Gasket	4380-302
Replacement element	Standard Flow (F68V)	665-72
	High Flow (F68Y)	665-70

Service kit includes element seal and bowl seal.

All Dimensions in Inches (mm)



F46 Oil Vapor Removal Filter

17 Series Oil Vapor Removal (Adsorbing)
Filter 3/8", 1/2", and 3/4" Port Sizes

- Adsorbing type activated-carbon filter element removes oil vapors
- Long service life of filter element. Minimum life of 1000 hours when an oil removal filter is installed upstream and filtration temperature is in the range of 70° to 80°F (21° to 26°C).
- Use in critical industrial applications that require compressed air virtually free of oil vapors
- Typical applications include precision pneumatic instrumentation, temperature control, paper separation, film processing, and production of electronic equipment
- 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 manual drain, metal bowl, and PTF threads.

Type	Port Size	Model Numbers	Flow* scfm (dm ³ /s)	Weight lbs (kg)
F46 Compact bowl	3/8"	F46-323-MAGA	60 (28)	3.62 (1.64)
	1/2"	F46-423-MAGA	60 (28)	3.53 (1.60)
F46 Standard bowl	1/2"	F46-424-MAMA	60 (28)	4.01 (4.01)
	3/4"	F46-624-MAMA	60 (28)	3.92 (1.78)

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

Alternative Models

F 4 6 - ★ ★ ★ - ★ ★ ★ ★

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

Element	Substitute
Compact	23 **
Standard	24 **

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

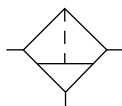
Bowl	Substitute
Metal, Compact	G **
Metal, Standard	M **

Element	Substitute
Adsorbing	A

Drain	Substitute
Manual	M

** A **23** requires a **G** in the 9th position of the model number, and a **24** requires an **M**.

ISO Symbols



Manual Drain

See Section ALE-25 for Accessories



Technical Data

Fluid: Compressed air

Maximum pressure: 250 psig (17 bar)

Operating temperature: *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 air is prefiltered with a Norgren oil removal filter

** See ALE-1-G for specification details.

Maximum remaining oil content of air leaving the filter: 0.003 ppm at 70°F (20°C) when air is prefiltered with a Norgren oil removal filter

Maximum flow at 90 psig (6.3 bar) inlet pressure to maintain stated oil removal performance: 60 scfm (28 dm³/s)

Required prefilter: Oil removal filter with equivalent pipe size and flow capacity equal to or greater than the vapor removal filter.

Materials:

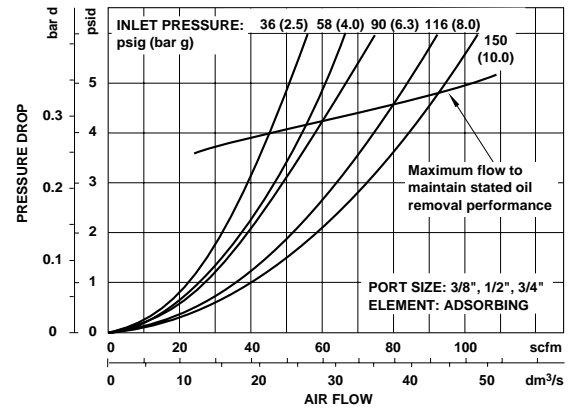
Body: Aluminum

Bowl: Aluminum

Filter element: Activated carbon, nylon, aluminum

Elastomers: Neoprene and nitrile

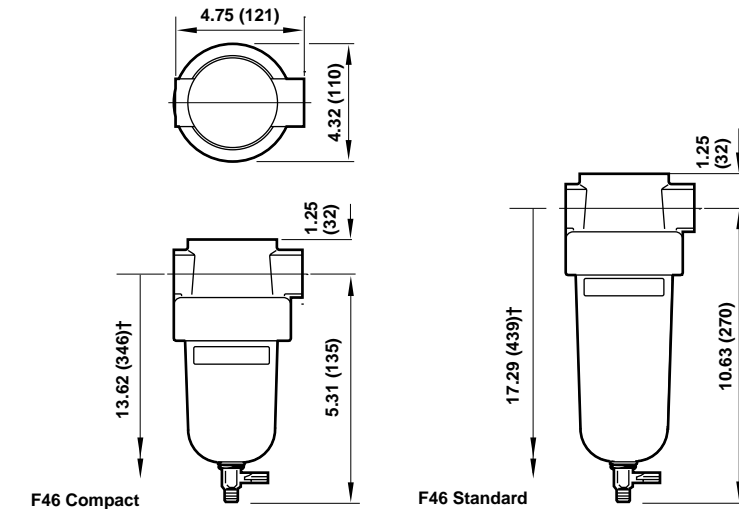
Typical Performance Characteristics



Service Kit

Item	Type	Part number
Service kit	Element and element o-ring	665-08
Replacement drain	Manual (1/4 Turn)	619-50

All Dimensions in Inches (mm)



† Minimum clearance required to remove bowl.