

**Filter/Regulator Stainless Steel Model  
1/4 or 1/2" PTF**

- Compact instrument units with high performance
- Stable regulation with temperature compensation
- Excellent flow and regulation characteristics
- Panel Mounting facility
- Designed for use in corrosive environments
- Metallic parts meet NACE Standard MR-01-75\*
- Applications include marine environments, oil and gas production, chemical and food processing, medical analysis
- Relieving or non relieving models. Relieving models allow reduction of outlet pressure even when the system is dead-ended



\* 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.

**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 <sup>3</sup> /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.

**Alternative Models**

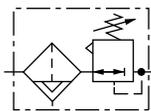
B 3 8 - ★ ★ ★ - ★ ★ ★ ★		Threads	Substitute
Port Size	Substitute	PTF	A
1/4" PTF	2	ISO Rc taper	B
1/2" PTF	4	ISO G parallel	D
		API.LP.INT	K
Materials	Substitute	Outlet Pressure Adjustment Ranges*	Substitute
Stainless steel, nitrile elastomers	4	0.6 to 30 psig (0.04 to 2 bar)	C
Stainless steel, Viton elastomers	5 †	1 to 60 psig (0.07 to 4 bar)	F
		3.6 to 100 psig (0.25 to 7 bar)	K †
Diaphragm	Substitute	4 to 125 psig (0.3 to 9 bar)	L ††
Relieving	0	7.2 to 150 psig (0.5 to 10 bar)	M †
Non relieving	1		
Relieving, bracket and nut	2	Element	Substitute
Non relieving, bracket and nut	3	5 µm	1
Relieving with nut	4	25 µm	2
Non relieving with nut	5	Bowl/Drain	Substitute
Relieving with handwheel and nut	6	Long bowl with automatic drain	A
Non relieving with handwheel and nut	7	Short bowl with manual drain	B
Relieving with handwheel, bracket and nut	8	Long bowl with manual drain	M
Non relieving with handwheel, bracket and nut	9		

\* 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.

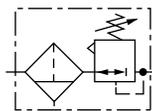
† 1/4" ported units only.

†† 1/2" ported units only.

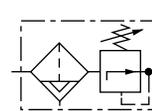
**See Section ALE-24 for Accessories**

**ISO Symbols**


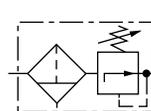
Automatic Drain, Relieving



Manual Drain, Relieving



Automatic Drain, Non Relieving



Manual Drain, Non Relieving



## Technical Data

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 25 µm filter element

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

Typical flow with 175 psig (12 bar) inlet pressure, 115 psig (8 bar) set pressure and a droop of 15 psig (1.0 bar) from set

1/4": 15 scfm (7 dm³/s)

1/2": 106 scfm (50 dm³/s)

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)

Nominal bowl size

Short bowl with manual drain: 25 ml (1 fluid ounce)

Long bowl with manual drain: 3 fluid ounce (90 ml)

Long bowl with automatic drain: 1 fluid ounce (25 ml)

Gauge ports:

1/4" PTF

Relief port:

1/8" PTF

Materials (standard option)

Body: Stainless steel

Bonnet: Stainless steel

Bowl: Stainless steel

Adjusting screw: Stainless steel

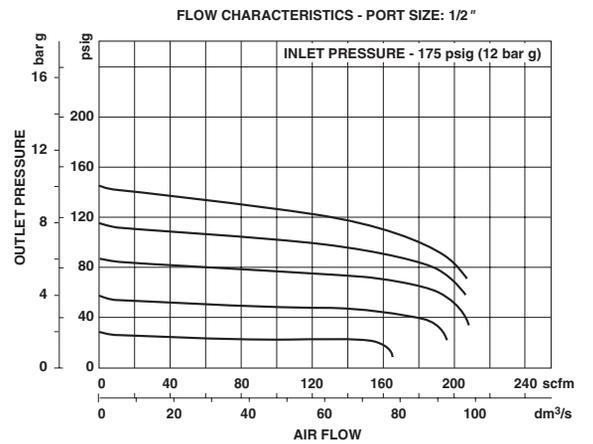
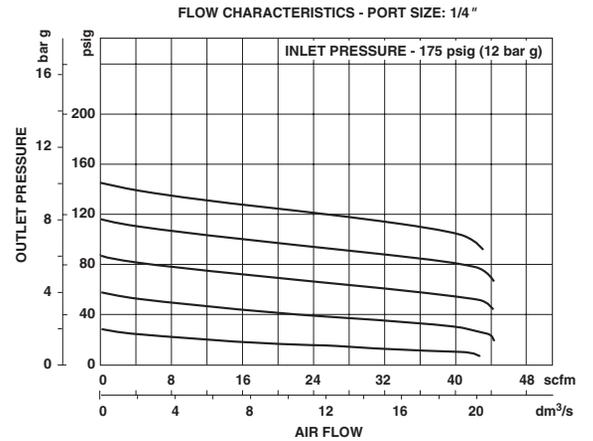
Elements

5 µm & 25 µm: High density polyethylene

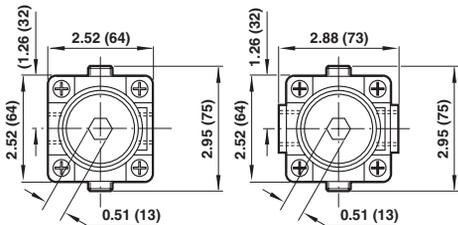
1/4" only 5 µm: Ceramic pyrolyth

Elastomeric materials: Synthetic rubber

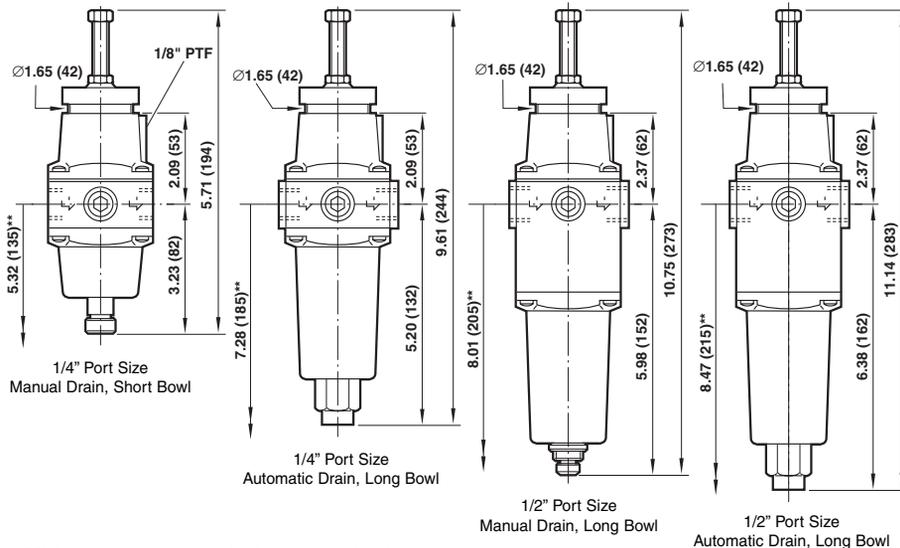
## Typical Performance Characteristics



All Dimensions in Inches (mm)



Panel mounting hole diameter: 1.65" (42 mm)  
Maximum panel thickness: 0.24" (6 mm)



\*\* Minimum clearance required to remove bowl.

## Service Kits (standard option)

### 1/4" Filter

Item	Part number
5 µm	B38-100A (5)
25 µm	B38-100S (25)

### 1/2" Filter

Item	Part number
5 µm	2787-43
25 µm	2787-44

Filter service kits include element, seals and screws.

## Automatic Drain Assembly

Item	Part number
Automatic Drain Assembly	3000-90

## 1/4" Regulator

Item	Type	Part number
30 psig spring	Relieving	R38-100R
	Non relieving	R38-100NR
60 & 100 psig spring	Relieving	R38-101R
	Non relieving	R38-101NR
150 psig spring	Relieving	R38-102R
	Non relieving	R38-102NR

## 1/2" Regulator

Item	Type	Part number
All available spring ranges	Relieving	2787-41
	Non relieving	2787-42

Regulator service kits include diaphragm assembly, o-ring, valve, valve spring and 8 pan head screws.