Compendium of A,B Series preparation unit

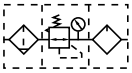
P217	Product feature	Photo	P219	Product feature	Photo
AC、BC Series F.R.L Unit	●The efficiency of water separating is high ●The pressure loss is low ●The flow of miststart is low ●Convenient for installation and application ●AC/BC series is optional ●High-strength plastic shields is optional ●Port size: 1/8" 1/4" 3/8" 1/2"		AFC、BFC Series FR.L Unit	●The efficiency of water separating is high ●The pressure loss is low ●The flow of miststart is low ●Convenient for installation and application ●AFC/BFC series is optional ●High-strength plastic shields is optional ●Port size: 1/8" 1/4" 3/8" 1/2"	
P221	Product feature	Photo	**P223**	Product feature	Photo
AFR、BFR Series Filter-Regulator	●The efficiency of water separating is high ●The pressure loss is low ●With fixing bracket convenient for use ●AFR/BFR series is optional ●High-strength plastic shields is optional ●Port size: 1/8" 1/4" 3/8" 1/2"		AF、BF Series Filter	●The pressure loss is low ●High-strength plastic shields is optional ●The filter precision includes 5μm and 40μm(optional) ●AF/BF series is optional ●Port size: 1/8" 1/4" 3/8" 1/2"	
P224	Product feature	Photo	**P226**	Product feature	Photo
AR、BR Series Regulator	●Adjusting pressure steadily ●Faceplate fixing and bracket fixing is optional ●Standard type, lower pressure type is optional ●AR/BR series is optional ●Port size: 1/8" 1/4" 3/8" 1/2"		AL、BL Series Lubricator	●The flow of miststart is low ●The pressure loss is low ●High-strength plastic shields is optional ●AL/BL series is optional ●Port size: 1/8" 1/4" 3/8" 1/2"	

Installation and application

1. Check whether the components have been damaged during transportation before installing and using.
2. Pay attention to whether the flow direction of air (notice "→" direction) and thread type are correct.
3. Please notice whether installation condition accords with technical requirements (such as "working pressure" and "applied temperature range").
4. The medium used or installation environment shall be noticed. The matters with chlorine, carbon compound, aromatic compound and oxidizing acid and alkali shall be avoided to prevent the damage of bowl and oil bowl.
5. Regularly clean or change filter core. Lubricators and regulators shall be in descending order.
6. Keep dust away. The dust cover shall be installed in intake and outlet when the device is dismantled and stored.

AC、BC Series F.R.L. Combination

Symbol



Product feature

1. The structure is delicate and compact, which is convenient for installation and application.
2. The pressed-in self-locking mechanism can prevent the abnormal movement of the set pressure caused by external interfere.
3. The pressure loss is low and the efficiency of water separating is high.
4. The quantity of oil dripping can be directly observed through transparent check-dome.
5. In addition to standard type, lower pressure type is optional (The highest adjustable pressure is 0.4MPa).

Specification

Model		Ac1500	AC2000	BC2000	BC3000	BC4000
Fluid		Air				
Port size [Note1]		1/8"	1/4"	1/4"	3/8"	1/2"
Filtering grade		40μm or 5μm				
Pressure range		Semi-auto and automatic drain:0.15~0.9MPa(20~130Psi) Manual drain:0.05~0.9MPa(7~130Psi)				
Max. pressure		1.0MPa(145Psi)				
Proof pressure		1.5MPa(215Psi)				
Temperature range		−5~70°C(unfreeze)				
Capacity of drain bowl		15CC		60CC		
Capacity of oil bowl		25CC		90CC		
Recommended lubricant		ISO VG 32 or equivalent				
Weight		700g		900g		
Constitute	Filter	AF1500	AF2000	BF2000	BF3000	BF4000
	Regulator	AR1500	AR2000	BR2000	BR3000	BR4000
	Lubricator	AL1500	AL2000	BL2000	BL3000	BL4000

[Note1] PT thread, G thread and NPT thread are available.

Ordering code

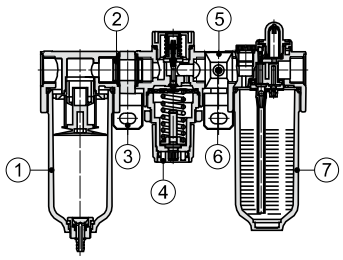
AC 2000 M □ □ 1 W □

1 2 3 4 5 6 7 8

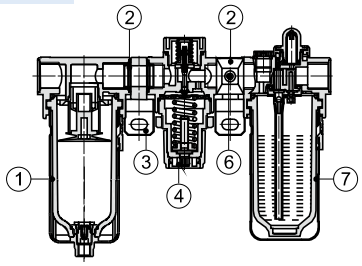
① Model	②Port size	③Drain type	④Type code	⑤Pressure gauge	⑥Scale	⑦Filtering grade	⑧Thread type
AC: A Series F.R.L unit	1500: 1/8" 2000: 1/4"	Blank: Semi-auto drain M: Manual drain	Blank: Standard (0.9MPa) L: Lower pressure (0.4MPa)	Blank: Pressure gauge N: No pressure gauge	1: MPa 2: psi 3: bar 4: kgf/cm² & psi	Blank: 40μm W: 5μm	Blank: PT (Scale: MPa or kgf/cm² & psi) G: G(Scale:bar) T: NPT(Scale:psi)
BC: B Series F.R.L unit	2000: 1/4" 3000: 3/8" 4000: 1/2"	Blank: Semi-auto drain M: Manual drain A: Automatic drain					

Inner structure

AC Series



BC Series

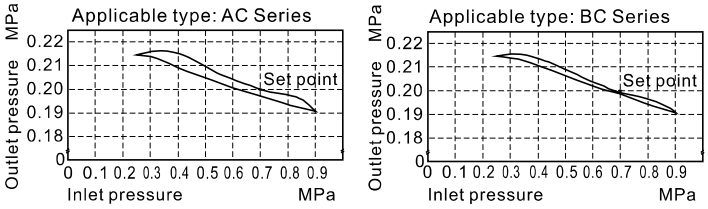


No.	Item	No.	Item
1	AF, BF Series filter	5	A, B Series fix kit
2	A, B Series gasket	6	Screw
3	A, B Series bracket	7	AL, BL Series lubricator
4	AR, BR Series regulator		

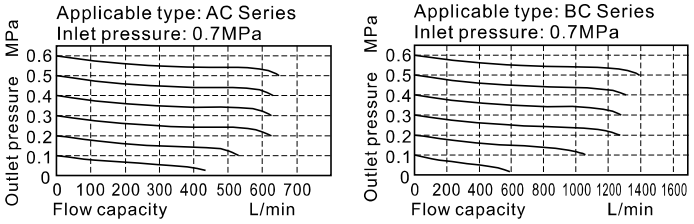
AC、BC Series F.R.L. Combination

Pressure and feature of flow

Pressure chart

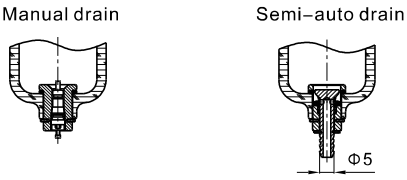


Flow chart



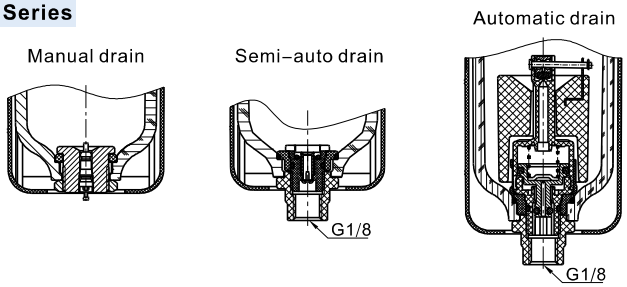
Selection of drain mode

AC Series



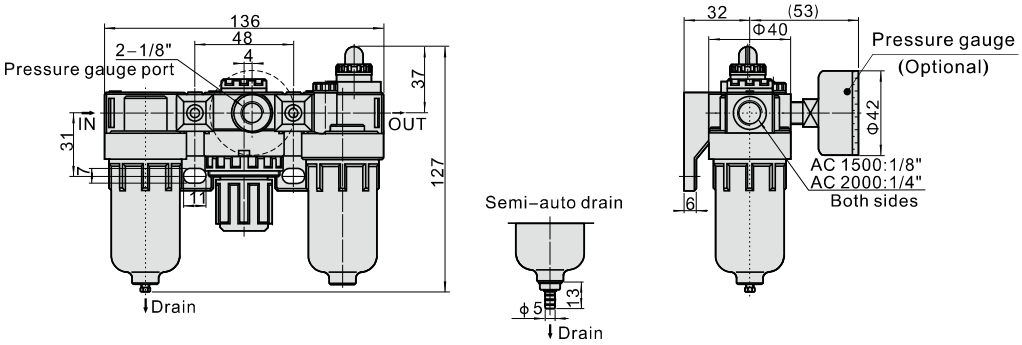
This semi-auto drain can also achieve the function of manual drain.
PU tube with an inner diameter ofΦ4mm is recommended

BC Series

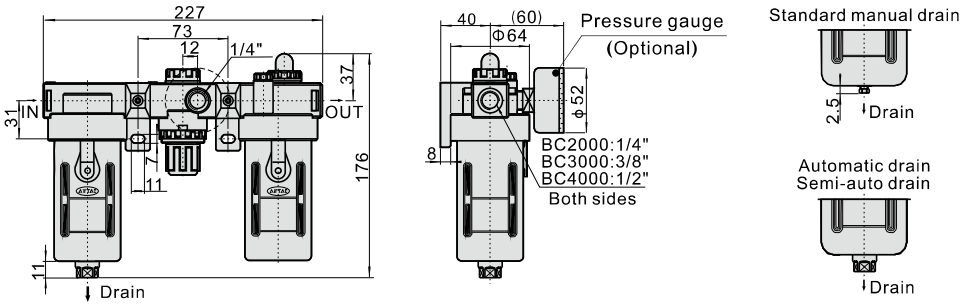


Dimensions

AC Series

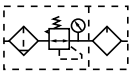


BC Series



AFC、BFC Series FR.L. Combination

Symbol



Product feature

1. The structure is delicate and compact, which is convenient for installation and application.
2. The pressed-in self-locking mechanism can prevent the abnormal movement of the set pressure caused by external interfere.
3. The pressure loss is low and the efficiency of water separating is high.
4. The quantity of oil dripping can be directly observed through transparent check dome.
5. In addition to standard type, lower pressure type is optional (The highest adjustable pressure is 0.4MPa).

Specification

Model		AFC1500	AFC2000	BFC2000	BFC3000	BFC4000
Fluid		Air				
Port size [Note1]		1/8"	1/4"	1/4"	3/8"	1/2"
Filtering grade		40μm or 5μm				
Pressure range		Semi-auto and automatic drain:0.15~0.9MPa(20~130Psi) Manual drain:0.05~0.9MPa(7~130Psi)				
Max. pressure		1.0MPa(145Psi)				
Proof pressure		1.5MPa(215Psi)				
Temperature range		-5~70°C(unfreeze)				
Capacity of drain bowl		15CC		60CC		
Capacity of oil bowl		25CC		90CC		
Recommended lubricant		ISO VG 32 or equivalent				
Weight		500g		700g		
Constitute	Filter-Regulator	AFR1500	AFR2000	BFR2000	BFR3000	BFR4000
	Lubricator	AL1500	AL2000	BL2000	BL3000	BL4000

[Note1] PT thread, G thread and NPT thread are available.

Ordering code

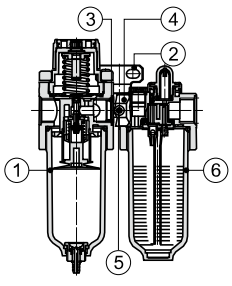
AFC 2000 M □ □ 1 W □

1 2 3 4 5 6 7 8

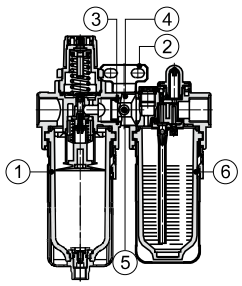
① Model	②Port size	③Drain type	④Type code	⑤Pressure gauge	⑥Scale	⑦Filtering grade	⑧Thread type
AFC: A Series FR.L unit	1500: 1/8" 2000: 1/4"	Blank: Semi-auto drain M: Manual drain	Blank: Standard (0.9MPa) L: Lower pressure (0.4MPa)	Blank: Pressure gauge N: No pressure gauge	1: MPa 2: psi 3: bar 4: kgf/cm² & psi	Blank: 40μm W: 5μm	Blank: PT (Scale: MPa or kgf/cm² & psi) G: G(Scale:bar) T: NPT(Scale:psi)
BFC: B Series FR.L unit	2000: 1/4" 3000: 3/8" 4000: 1/2"	Blank: Semi-auto drain M: Manual drain A: Automatic drain					

Inner structure

AFC Series



BFC Series

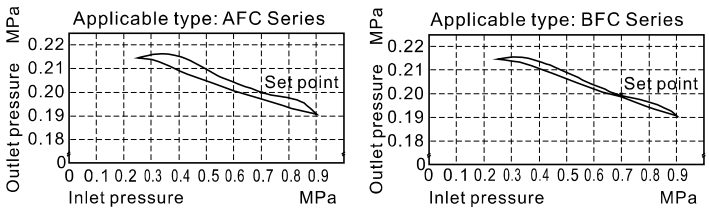


No.	Item
1	AFR, BFR Series filter & regulator
2	A, B Series bracket
3	A, B Series gasket
4	A, B Series fixed kit
5	Screw
6	AL, BL Series lubricator

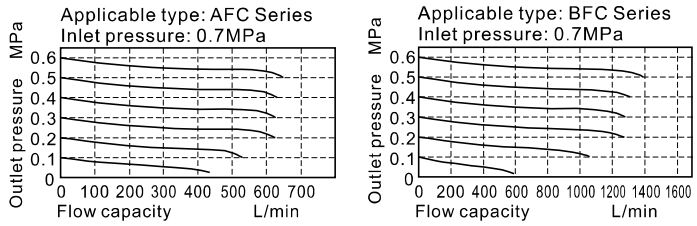
AFC、BFC Series FR.L. Combination

Pressure and feature of flow

Pressure chart



Flow chart

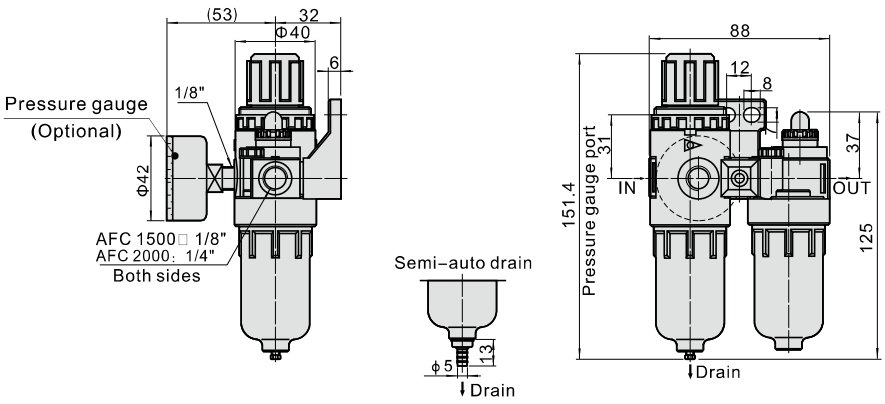


Selection of drain mode

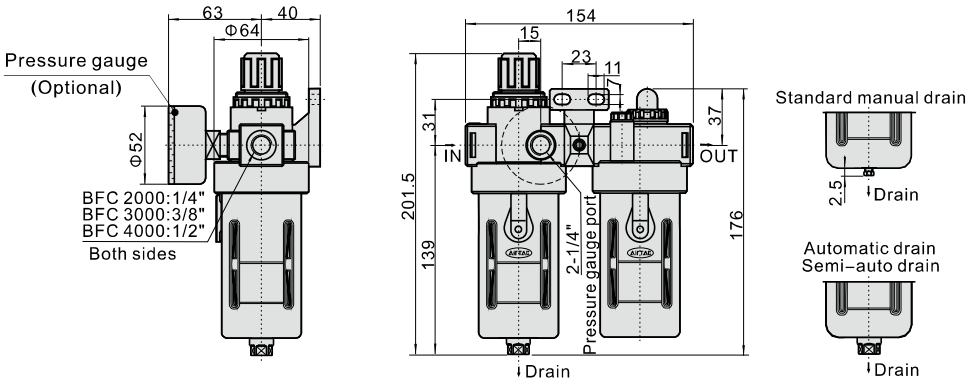
The drain modes of different series are different. Please refer to P218 for details.

Dimensions

AFC Series



BFC Series



AFR、BFR Series Filter & regulator

Symbol

Product feature

1. The structure is delicate and compact, which is convenient for installation and application.
2. The pressed-in self-locking mechanism can prevent the abnormal movement of the set pressure caused by external interfere.
3. The pressure loss is low and the efficiency of water separating is high;
4. In addition to standard type, lower pressure type is optional(The highest adjustable pressure is 0.4MPa).

Specification

Model	AFR1500	AFR2000	BFR2000	BFR3000	BFR4000
Fluid	Air				
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"
Filtering grade	40μm or 5μm				
Pressure range	Semi-auto and automatic drain:0.15~0.9MPa(20~130Psi) Manual drain:0.05~0.9MPa(7~130Psi)				
Max. pressure	1.0MPa(145Psi)				
Proof pressure	1.5MPa(215Psi)				
Temperature range	-5~70°C(unfreeze)				
Capacity of drain bowl	15CC		60CC		
Weight	260g		400g		

[Note1] PT thread, G thread and NPT thread are available.

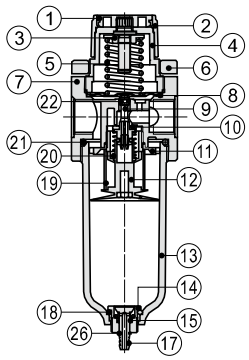
Ordering code

AFR 2000 M □ □ □ 1 W □

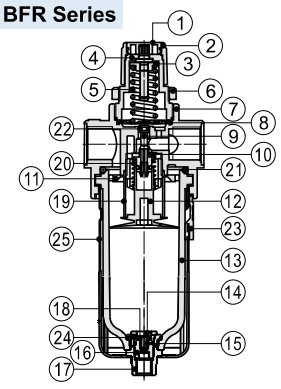
① Model	②Port size	③Drain type	④Type code	⑤Accessories	⑥Pressure gauge	⑦Scale	⑧Filtering grade	⑨Thread type
AFR: A Series Filter & regulator	1500: 1/8" 2000: 1/4"	Blank: Semi-auto drain M: Manual drain	Blank: Standard (0.9MPa) L: Lower pressure (0.4MPa)	Blank: Bracket J: No bracket	Blank: Pressure gauge N: No pressure gauge	1: MPa 2: psi 3: bar 4: kgf/cm² & psi	Blank: 40μm W: 5μm	Blank: PT (Scale: Mpa orkgf/cm² & psi) G: G(Scale:bar) T: NPT(Scale:psi)
BFR: B Series Filter & regulator	2000: 1/4" 3000: 3/8" 4000: 1/2"	Blank: Semi-auto drain M: Manual drain A: Automatic drain						

Inner structure

AFR Series



BFR Series

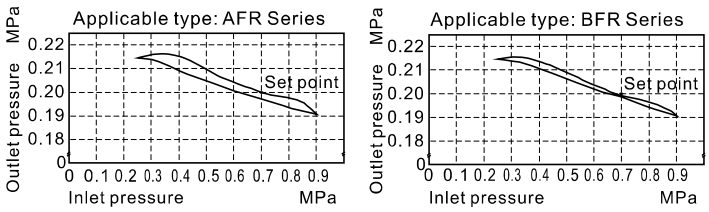


No.	Item	Material	No.	Item		Material
1	Push button	POM	14	Drain kit		POM
2	Adjusting button	POM	15	Return spring		Stainless steel
3	Adjusting nut	Steel	16	Drain seat		POM
4	Adjusting seat	POM	17	Drain pillar		POM
5	Adjusting spring	SWC	18	Drain O-ring		NBR
6	Fixed ring	POM	19	Filter element	5μm	HDPE
7	Body	Aluminum alloy			40μm	HDPE
8	Diaphragm	SUS304 & rubber	20	Return spring		Stainless steel
9	Balance needle	POM	21	Drain bowl O-ring		NBR
10	Needle gasket	Aluminum alloy & rubber	22	Needle O-ring		NBR
11	Air guider	POM	23	Bowl guard switch		POM
12	Umbrella baffle	POM	24	Gasket		POM
13	Drain bowl	PC	25	Bowl guard		PA66
			26	Clip		Spring steel

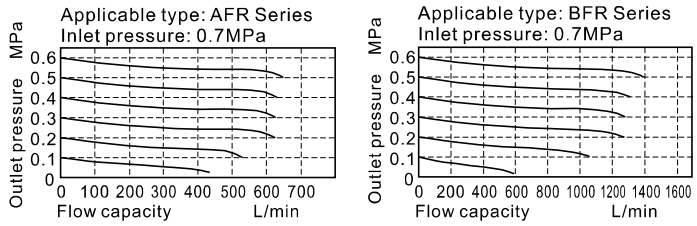
AFR、BFR Series Filter & regulator

Pressure and feature of flow

Pressure chart



Flow chart

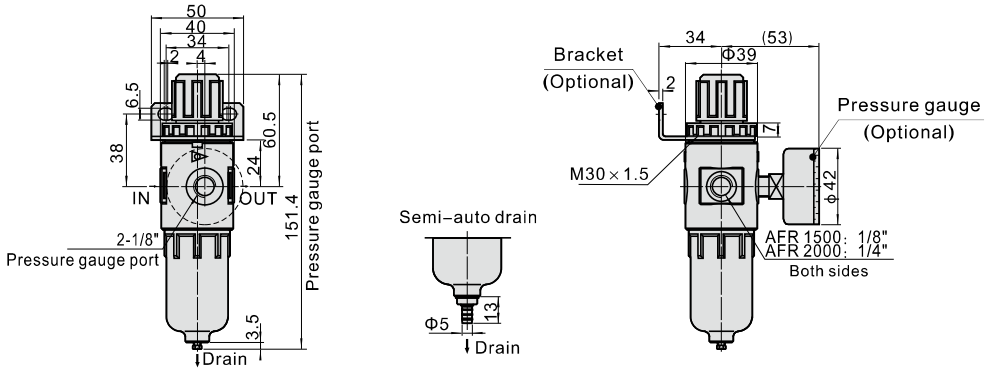


Selection of drain mode

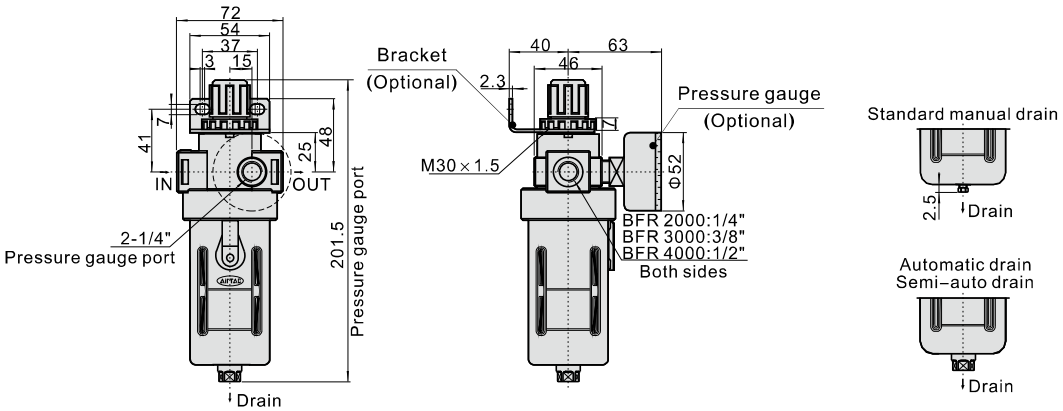
The drain modes of different series are different. Please refer to P218 for details.

Dimensions

AFR Series



BFR Series



AF、BF Series Filter

Symbol

Product feature

AF Series

1. The structure is delicate and compact.
2. The pressure loss is low and the efficiency of water separating is high;
3. The filter precision includes 5 μ m and 40 μ m(optional);

BF Series

1. The pressure loss is low and the efficiency of water separating is high.
2. The bowl has high-strength plastic shields outside,which is more safe and reliable to use.
3. The filter precision includes 5 μ m and 40 μ m (optional).

Specification

Model	AF1500	AF2000	BF2000	BF3000	BF4000
Fluid	Air				
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"
Filtering grade	40 μ m or 5 μ m				
Pressure range	Semi-auto and automatic drain:0.15~1.0MPa(20~145Psi) Manual drain:0~1.0MPa(0~145Psi)				
Proof pressure	1.5MPa(215Psi)				
Temperature range	−5~70°C(unfreeze)				
Capacity of drain bowl	15CC		60CC		
Weight	140g		330g		

[Note1] PT thread, G thread and NPT thread are available.

Ordering code

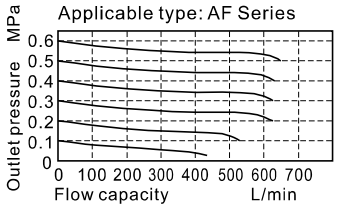
AF 2000 M W □

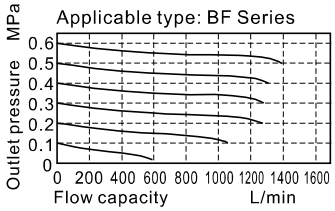
1 2 3 4 5

①Model	②Port size	③Drain type [Note]	④Filtering grade	⑤Thread type
AF:A Series Filter	1500: 1/8" 2000: 1/4"	Blank: Semi-auto drain M: Manual drain	Blank: 40 μ m W: 5 μ m	Blank: PT G: G T: NPT
BF:B Series Filter	2000: 1/4" 3000: 3/8" 4000: 1/2"	Blank: Semi-auto drain M: Manual drain A: Automatic drain		

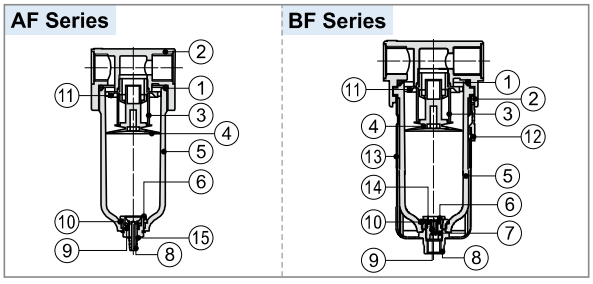
[Note1] The drain modes of different series are different.
Please refer to P218 for details.

Flow chart





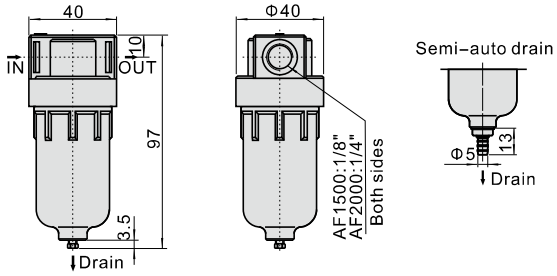
Inner structure



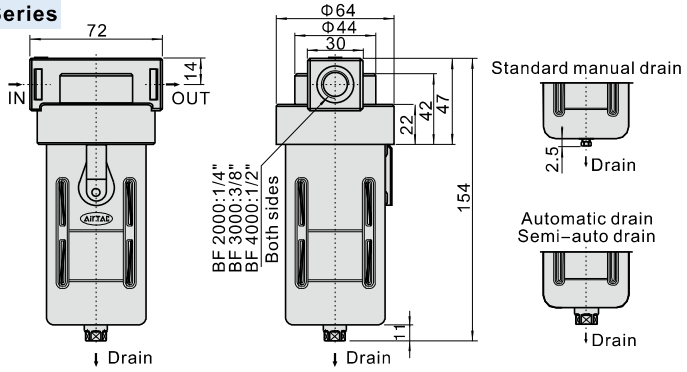
No.	Item		Material	No.	Item	Material
1	Drain bowl O-ring		NBR	8	Drain pillar	POM
2	Body		Aluminum alloy	9	Return spring	Stainless steel
3	Filter element	5 μ m	HDPE	10	Gasket	POM
		40 μ m	HDPE	11	Air guider	POM
4	Umbrella baffle		POM	12	Bowl guard switch	POM
5	Drain bowl		PC	13	Bowl guard	PA6
6	Drain kit		POM	14	Drain seat O-ring	NBR
7	Drain seat		POM	15	Clip	Spring steel

Dimensions

AF Series



BF Series



AR、BR Series Regulator

Symbol

Product feature

1. The structure is delicate and compact, which is convenient for installation and application.
2. The pressed-in self-locking mechanism can prevent the abnormal movement of the set pressure caused by external interfere.
3. In addition to standard type, lower pressure type is optional (The highest adjustable pressure is 0.4MPa).

Specification

Model	AR1500	AR2000	BR2000	BR3000	BR4000
Fluid	Air				
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"
Pressure range	0.05~0.9MPa(7~130Psi)				
Max. pressure	1.0MPa(145Psi)				
Proof pressure	1.5MPa(215Psi)				
Temperature range	-20~70℃				
Weight	200g		230g		

[Note1] PT thread, G thread and NPT thread are available.

Ordering code

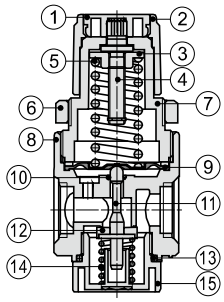
AR 2000 L □ □ 1 □

1 2 3 4 5 6 7

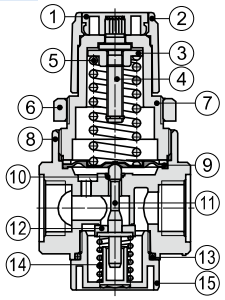
①Model	②Port size	③Type code	④Accessories	⑤Pressure gauge	⑥Scale	⑦Thread type
AR: A Series Regulator	1500: 1/8" 2000: 1/4"	Blank: Standard (0.9MPa) L: Lower pressure (0.4MPa)	Blank: Bracket J: No bracket	Blank: Pressure gauge N: No pressure gauge	1: MPa 2: psi 3: bar 4: kgf/cm² & psi	Blank: PT (Scale: Mpa orkgf/cm² & psi) G: G(Scale:bar) T: NPT(Scale:psi)
BR: B Series Regulator	2000: 1/4" 3000: 3/8" 4000: 1/2"					

Inner structure

AR Series



BR Series

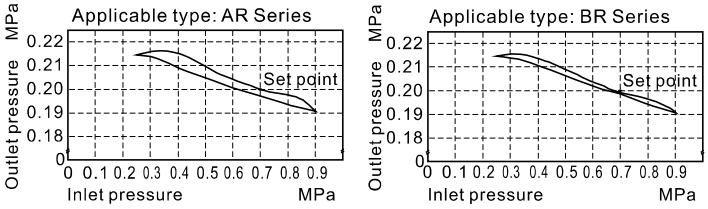


No.	Item	Material
1	Push button	POM
2	Adjusting button	POM
3	Adjusting nut	Steel
4	Adjusting pillar	Steel
5	Adjusting spring	SWC
6	Fixed ring	POM
7	Adjusting seat	POM
8	Body	Aluminum alloy
9	Diaphragm	SUS304 & rubber
10	Needle O-ring	NBR
11	Balance needle	Brass
12	Needle gasket	Aluminum alloy & rubber
13	Cap O-ring	NBR
14	Return spring	Stainless steel
15	Regulator cap	POM

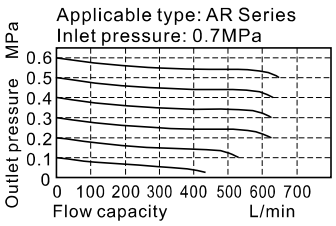
AR、BR Series Regulator

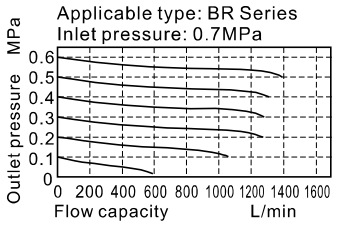
Pressure and feature of flow

Pressure chart



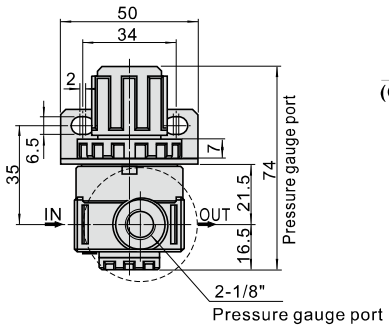
Flow chart

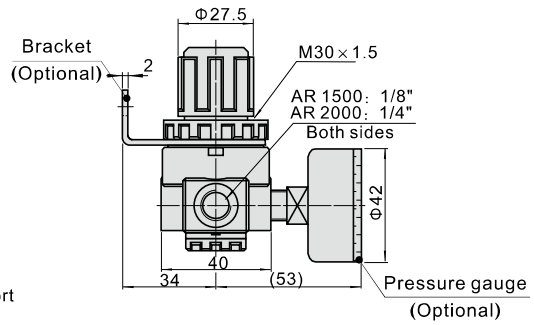




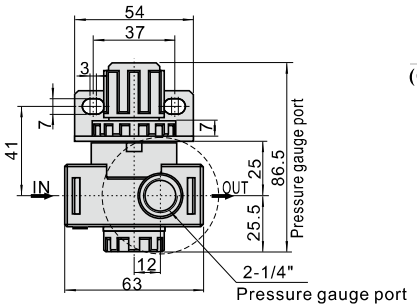
Dimensions

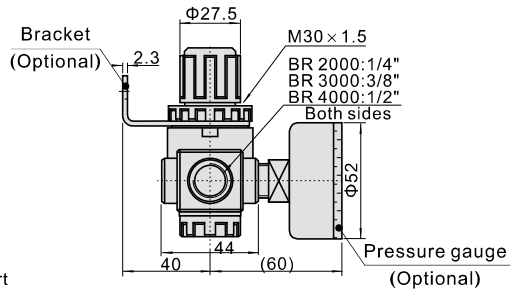
AR Series





BR Series





AL、BL Series Lubricator

Symbol

Product feature

1. The structure is delicate and compact.
2. The quantity of oil dripping can be directly observed through transparent inspection sheet.
3. BL has high-strength plastic shields, which is more safe and reliable to use.
4. The pressure loss and the flow of miststart is low.

Specification

Model	AI1500	AL2000	BL2000	BL3000	BL4000
Fluid	Air				
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"
Pressure range	0.05~1.0MPa(7~145Psi)				
Proof pressure	1.5MPa(215Psi)				
Temperature range	-5~70°C(unfreeze)				
Capacity of oil bowl	25CC		90CC		
Recommended lubricant	ISO VG 32 or equivalent				
Weight	170g		250g		

[Note1] PT thread, G thread and NPT thread are available.

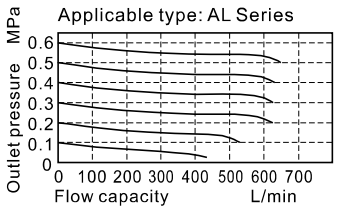
Ordering code

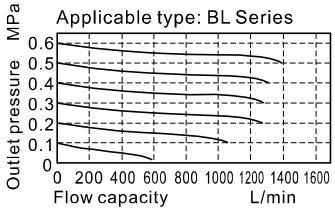
AL 2000 □

① ② ③

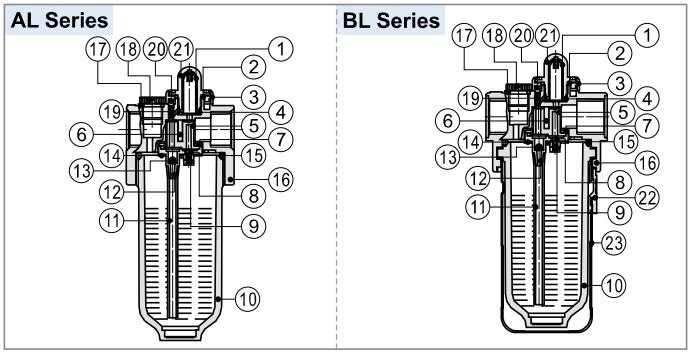
① Model	②Port size	③Thread type
AL：A Series Lubricator	1500: 1/8" 2000: 1/4"	Blank: PT G: G T: NPT
BL：B Series Lubricator	2000: 1/4" 3000: 3/8" 4000: 1/2"	

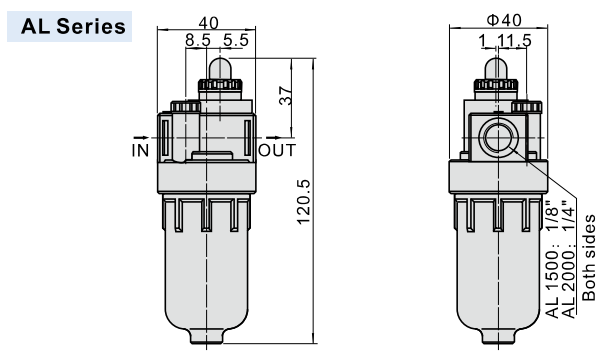
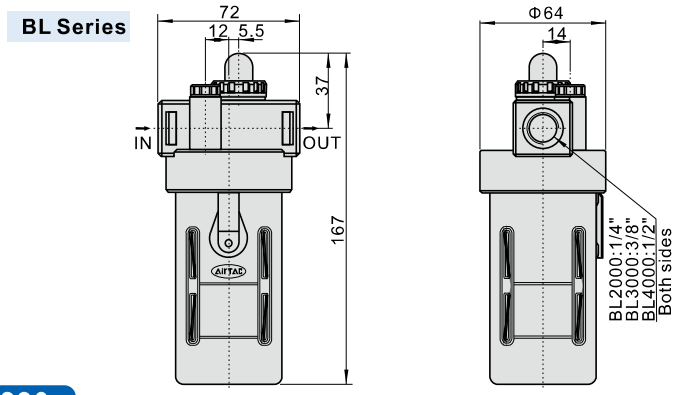
Flow chart





Inner structure



No.	Item	Material	No.	Item	Material
1	Drip pipe	PC	13	Ball	Stainless steel
2	Dripper O-ring	NBR	14	Lubricator fixed plate	SPCC
3	Oil adjusting dial	POM	15	Oil bowl O-ring	NBR
4	Adjusting ring	NBR	16	Body	Aluminum alloy
5	Lubricator seat	POM	17	Oil filling nut O-ring	NBR
6	Partition	PU	18	Oil filling plug	Steel
7	Lubricator kit gasket	NBR	19	Needle spring	Stainless steel
8	Adjustor	HDPE	20	Injector pin	Bronze
9	Return spring	Stainless steel	21	Check-dome	PC
10	Oil bowl	PC	22	Bowl guard switch	POM
11	Sunk tube	PU	23	Bowl guard	PA6
12	Lubricator kit	POM			

Dimensions