

To achieve the optimization of system performance, the first thing is to get the gas source which accords with the specifications. Preparation unit with good performance are the precondition to make sure the gas source. AirTAC has many kinds of preparation unit for your choice:

1. GA series; 2. GP series; 3. A, B series; 4. Other accessory series.

GA Series



- GAC200~600 Series F.R.L combination.....
- G AFC200~600 Series FR.L combination.....
- GAFR200~600 Series Filter & regulator.....
- GAF200~600 Series Filter.....
- GAR200~600 Series Regulator.....
- GAL200~600 Series Lubricator.....
- GT Series preparation unit.....
- GA Series Gas distribution block.....

GP Series



- GPF200~400 Series Oil mist filter.....
- GPR200~400 Series precision regulator.....
- GPFR Series precision Filter-Regulator.....

A, B Series



- AC, BC Series F.R.L combination.....
- AFC, BFC Series FR.L combination.....
- AFR, BFR Series Filter & regulator.....
- AF, BF Series Filter.....
- AR, BR Series Regulator.....
- AL, BL Series Lubricator.....

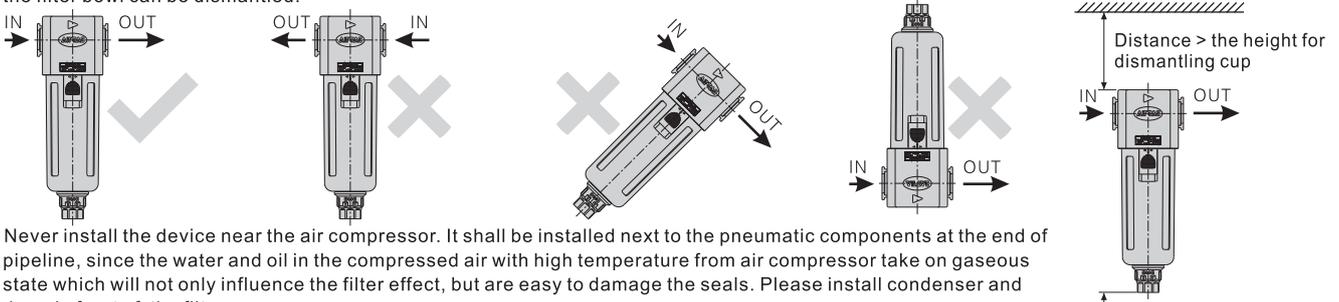
Others



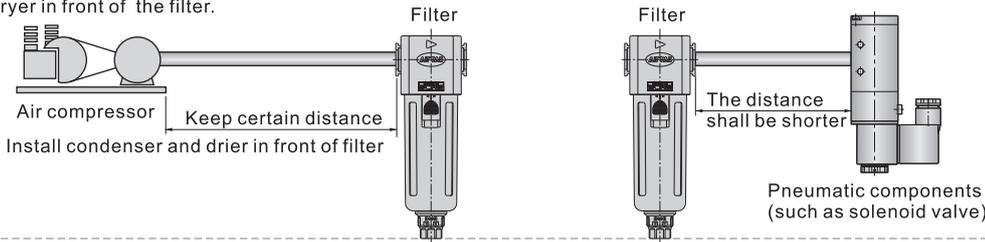
- SR Series Regulator.....
- SDR Series Regulator.....
- ADW Series Drip leg drain.....
- DPS Series Digital Display Pressure Switch.....
- DPH Series Digital Display Pressure Switch(Analog output).....
- DPC Series Mini type No Display Pressure Switch.....
- GS, GF, GU, GP, GV Series Pressure gauge.....
- GVF Series Vacuum Filter..... **New**.....
- GVR Series Vacuum Regulator.....

The installation and application of the filter

- Before installation, the sundry granule such as dust, oil pollution and chipping in pipeline shall be cleaned up to prevent the mixture of fragments of seal materials.
- Never install reversingly the direction of intake and outlet. It shall be installed vertically and the bowl is downward. For the convenient of maintenance, proper space around the device shall be left. The installation height of filter shall accord with the elevation that the filter bowl can be dismantled.



- Never install the device near the air compressor. It shall be installed next to the pneumatic components at the end of pipeline, since the water and oil in the compressed air with high temperature from air compressor take on gaseous state which will not only influence the filter effect, but are easy to damage the seals. Please install condenser and dryer in front of the filter.



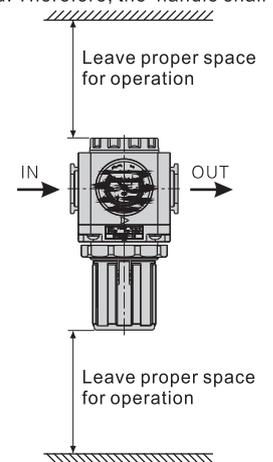
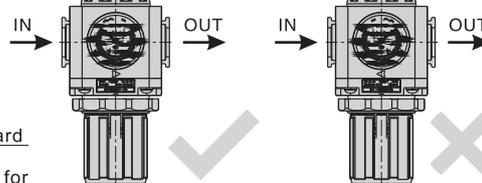
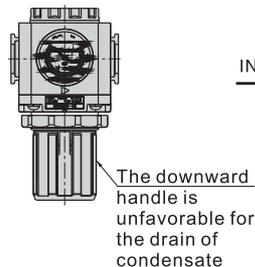
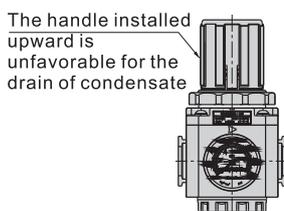
Attention

- To prevent the external force to damage the filter bowl, never install it in the side of access of delivery vehicles or a protection barrier may be built.
- The drain bowl is made of polycarbonate which can not be used in the environment with synthetic oil, organic solvent, chemicals, cooling fluid, alkali and acidic matter, glue water; and the site additive with the above matters. Meanwhile, the direct sunshine shall be avoided.
- Regular draining of bowl shall be conducted. Once water level surpasses the breakwater, the sewage filtered will be carried to the output compressed air again, causing secondary pollution.
- To guarantee the filter effect, the filter core shall be cleaned or changed regularly.
- Please regularly examine whether the plastic drain bowl has crack, damage or other aging.

Warning

Installation and application of regulator

- Before installation, the sundry granule such as dust, oil pollution and chipping in pipeline shall be cleaned up to prevent the mixture of fragments of seal materials.
- When there is more condensate, and if the condensate stays in the valve, poor action of Regulator will be easily caused. Therefore, the handle shall be installed downward.

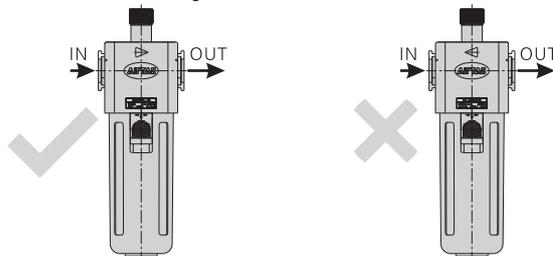


- The direction of intake and outlet shall not be installed reversingly, otherwise the Regulator will leak for a long time and lose pressure-adjustment function.
- The set pressure at the outlet sides of Regulator shall be less than 85% of the pressure of intake side, which is to avoid overlarge pressure drop and failing in meeting the application requirement.
- Two Regulator act as the loop for the intake by turns of high and low pressure. Please use free flow valve to prevent reflux.
- If there are condensate, oil pollution and dust in pressure pipe at intake side, the jam in discharge orifice and restriction orifice and poor action of valve will be caused. Therefore, filter shall be installed additionally in front of Regulator.
- It shall be applied in the stipulated temperature range and direct sunshine shall be avoided.
- Proper space around the device shall be left for pressure-adjustment operation and maintenance.
- After the pressure-adjustment operation is finished, the adjustment button of Regulator shall be locked.

Attention

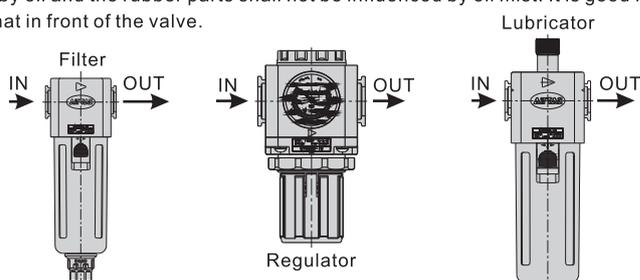
The installation and application of oil feeder

1. The direction of intake and outlet shall not be installed reversingly. Before installation, the sundry granule such as dust, oil pollution and chipping in pipeline shall be cleaned up to prevent the mixture of fragments of sealmaterial.



2. It will be difficult to supply oil and conduct maintenance if the Lubricator is set too high.

3. Lubricator shall be installed after the air filter and Regulator to prevent moisture entering the oil bowl and avoid oil emulsification. The throttle orifice in Regulator shall not be polluted by oil and the rubber parts shall not be influenced by oil mist. It is good for the atomization of oil that the velocity of low after Regulator is higher than that in front of the valve.



The correct installation sequence of Filter Regulator and Lubricator

4. The number in dial in adjustment ring of Lubricator shows the position of oil quantity adjustment.

The larger the number is, the more the oil dripping is. It is not for oil drops.

5. When Lubricator works, if there is a part in the pipeline loop that can not be supplied with oil, this part shall be set with one-way valve to prevent reflux.

6. The air flow that is used by Lubricator must meet the requirement of necessary quantity of oil dripping (minimal flow for mist). The insufficient air flow will cause the failure of oil dripping.

7. The Lubricator can be added oil under pressure. When oil is added, the oil-fill plug shall be slowly opened and dismantled after the pressure in oil bowl has been completely eliminated to prevent oil-fill plug flying off or oil spraying.

8. The oil level in oil bowl shall stay between the up limit and down limit, and please supplement oil on a timely basis.

◆Method for supplementing oil

When Lubricator is supplemented with oil, the oil-fill plug shall be turned off. Turbine oil poured into the oil bowl shall reach 80% of its volume.

Oil shall be regularly examined and supplemented to allow the device to work under the situation that oil is sufficient.

(As when the oil level is under the oil suction pipe, it can not supply oil for the system. Therefore, the oil shall be supplemented before the bottom of oil suction pipe is exposed).

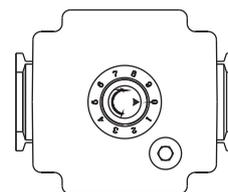
◆Oil quantity and its adjustment

Generally speaking, the free air of each 10m³ uses 1cm³ as the benchmark oil supply quantity.

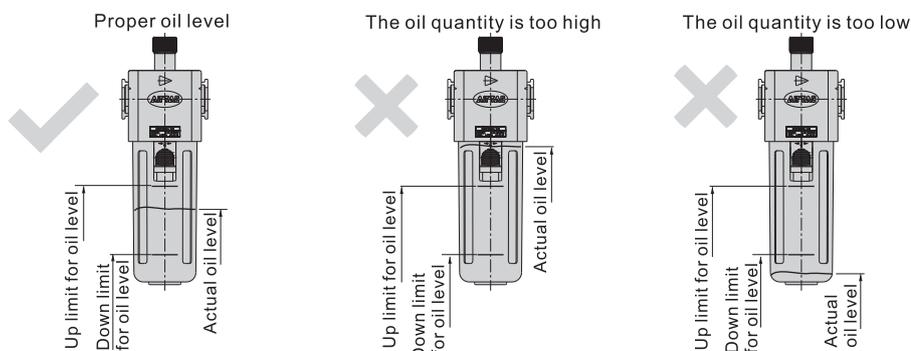
◆Lubricant

The lubricant that is recommended for pneumatic components is one kind (ISO VG32) of turbine oil. Especially when pneumatic components are lubricated, its particularity shall be considered. Lubricant shall be anti-rust and avoid swelling, shrink and deterioration of seal materials (pneumatic components mostly adopt NBR as the seal's material).In addition, the performance of oil dripping of lubricant shall be considered. The viscosity that is too high or too low is not proper.

9. Please regularly examine whether the plastics bowl and inspection window of Lubricator have crack, damage or other aging situation.



The bigger the number in dial is, the higher the quantity of oil dripping is



Compendium of GA Series preparation unit

P189	Product feature	Photo	P191	Product feature	Photo
GAC Series F.R.L Unit	<ul style="list-style-type: none"> ● The efficiency of eliminating moisture and solid grain is high. ● Adjusting pressure steadily ● The flow of miststart is low. ● Filling oil under pressure is possible. ● 200/300/400/500/600 Series ● Port size: 1/8" 1/4" 3/8" 1/2" 3/4" 1" 		GAFC Series FR.L Unit	<ul style="list-style-type: none"> ● The efficiency of eliminating moisture and solid grain is high. ● Adjusting pressure steadily ● The flow of miststart is low. ● Filling oil under pressure is possible. ● 200/300/400/500/600 Series ● Port size: 1/8" 1/4" 3/8" 1/2" 3/4" 1" 	
P193	Product feature	Photo	P195	Product feature	Photo
GAFR Series Filter-Regulator	<ul style="list-style-type: none"> ● The efficiency of eliminating moisture and solid grain is high. ● Adjusting pressure steadily ● With fixing bracket ● 200/300/400/500/600 Series ● Port size: 1/8" 1/4" 3/8" 1/2" 3/4" 1" 		GAF Series Filter	<ul style="list-style-type: none"> ● Low pressure loss ,high efficiency in separating water ● 5µm and 40µm filtering grade(Optional) ● Manual drain, semi-auto drain and automatic drain ● With fixing bracket ● 200/300/400/500/600 Series ● Port size: 1/8" 1/4" 3/8" 1/2" 3/4" 1" 	
P197	Product feature	Photo	P199	Product feature	Photo
GAR Series Regulator	<ul style="list-style-type: none"> ● Adjusting pressure steadily ● Faceplate fixing and bracket fixing is optional ● Standard type, lower pressure type is optional ● 200/300/400/500/600 Series ● Port size: 1/8" 1/4" 3/8" 1/2" 3/4" 1" 		GAL Series Lubricator	<ul style="list-style-type: none"> ● The flow of miststart is low. Filling oil under pressure is possible. ● With fixing bracket. ● The adjustment of oil supply more reliable. ● 200/300/400/500/600 Series ● Port size: 1/8" 1/4" 3/8" 1/2" 3/4" 1" 	
P202	Product feature	Photo	P204	Product feature	Photo
GT Series preparation unit	<ul style="list-style-type: none"> ● Short PC bowl type ● GTC/GTFC/GTFR/GTF/GTL ● Port size: 1/8" 1/4" 		GA Series Gas distribution block	<ul style="list-style-type: none"> ● Be used with G series ● The air flow can be divided by the device ● 200/300/400/500/600 Series ● Port size: 1/8" 1/4" 3/8" 1/2" 3/4" 1" 	

Installation and application

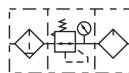


1. Check whether the components have been damaged during transportation before installing and using.
2. Pay attention to whether the flow direction of air (notice "→" direction) and thread type are correct.
3. Please notice whether installation condition accords with technical requirements (such as "working 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.

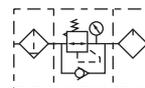


Symbol

No reflux valve is attached



Reflux valve is attached



Product feature

- Oil dripping adopts gap seal structure, which makes the adjustment of oil supply more reliable.
- Oil feed ring can only make one full turn. The quantity of oil supply, basically taking on linear distribution. The quantity of oil supply can be generally calculated according to the position of graduation ring.
- Filling of oil while the lubricator is under pressure is made possible.
- Special drip nozzle structure will produce negative pressure in oil dripping outlet and the mist flow is minimal.
- Quick and reliable mounting clamps makes it convenient to install and use.
- The performance of pressure adjustment is reliable with high precision.
- The efficiency of eliminating moisture and solid grain is high.
- Two drain types are available: manual drain+semi-auto drain and automatic drain.
- Three bowl materials are available: PC, Metal and Nylon.

Specification

Model	GAC200-06	GAC200-08	GAC300-08	GAC300-10	GAC300-15	GAC400-10	GAC400-15	GAC500-20	GAC600-20	GAC600-25	
Fluid	Air										
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"	3/8"	1/2"	3/4"	3/4"	1"	
Filtering grade	40 μm or 5 μm										
Pressure range	0.15~0.9MPa(20~130psi)										
Max. pressure	1.0MPa(145psi)										
Proof pressure	1.5MPa(215psi)										
Temperature range	-5~70°C(Unfreeze)										
Capacity of drain bowl	25CC		60CC			100CC		108CC	205CC		
Capacity of oil bowl	36CC		98CC			185CC		225CC	410CC		
Recommended lubricant	ISO VG 32 or equivalent										
Weight	750g		1300g			2390g		2460g	4600g		
Constitute	Filter	GAF200-06	GAF200-08	GAF300-08	GAF300-10	GAF300-15	GAF400-10	GAF400-15	GAF500-20	GAF600-20	GAF600-25
	Regulator	GAR200-06	GAR200-08	GAR300-08	GAR300-10	GAR300-15	GAR400-10	GAR400-15	GAR500-20	GAR600-20	GAR600-25
	Lubricator	GAL200-06	GAL200-08	GAL300-08	GAL300-10	GAL300-15	GAL400-10	GAL400-15	GAL500-20	GAL600-20	GAL600-25

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

Ordering code

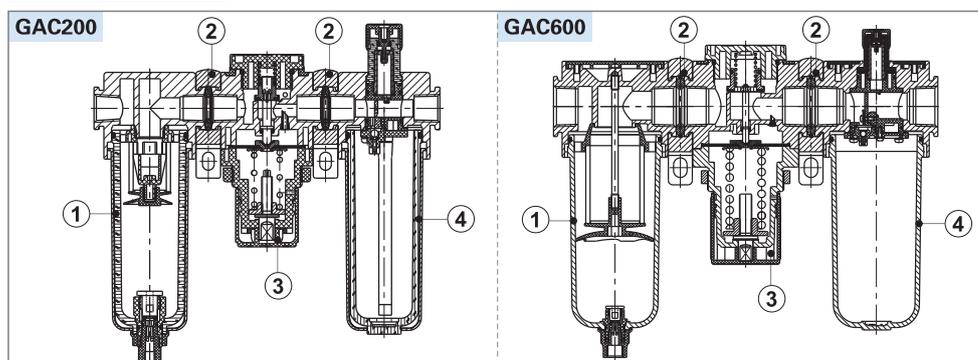
GAC300 □ 10 □ S □ W G K



① Model	② Bowl material	③ Port size	④ Drain type	⑤ Type code	⑥ Pressure gauge	⑦ Filtering grade	⑧ Thread type	⑨ Code of reflux valve
GAC200:GA200 Series F.R.L unit	Blank: PC bowl	06: 1/8"	Blank: Semi-auto drain +Manual drain	S: Standard	Blank: Circular	Blank: 40μm	Blank: PT (MPa/psi)	Blank: No reverse flow valve is attached
GAC300:GA300 Series F.R.L unit		08: 1/4"						
GAC400:GA400 Series F.R.L unit	10: 3/8"	A: Automatic drain		N: No gauge [Note2]				
GAC500:GA500 Series F.R.L unit	15: 1/2"		W: 5μm		G: G (bar/MPa)			
GAC600:GA600 Series F.R.L unit	20: 3/4"	T: NPT (psi/bar)		K: Reverse flow valve is attached [Note2]				
	C: Metal bowl		25: 1"		S: Standard			

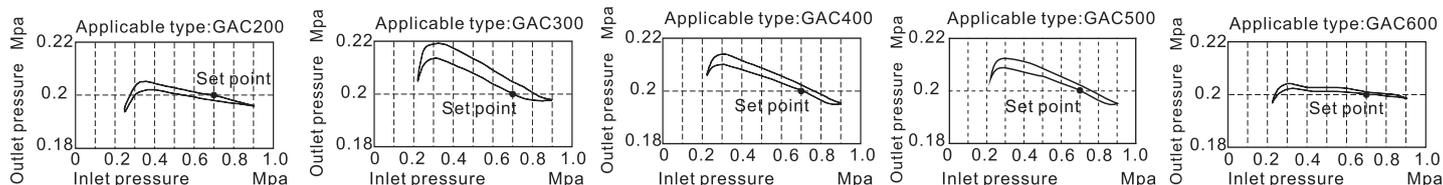
[Note1] The maximum work pressure of lower pressure type is 0.4MPa(58psi); [Note2] Please refer to page 201 for details of sealing plate Installation and reflux valve.

Inner structure

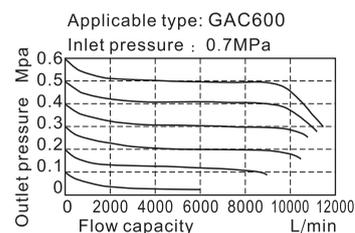
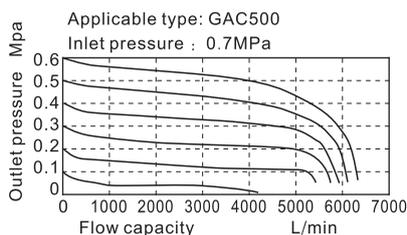
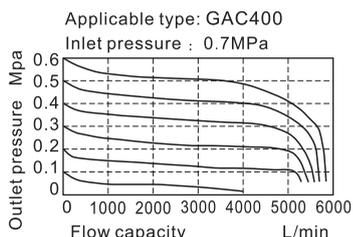
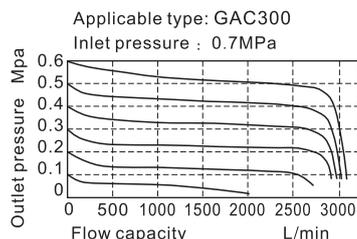
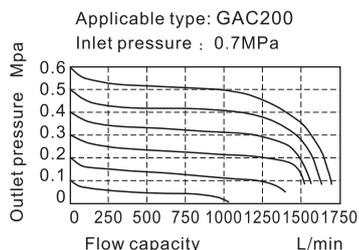


No.	Item	No.	Item
1	GA series filter	3	GA series regulator
2	Bracket	4	GA series lubricator

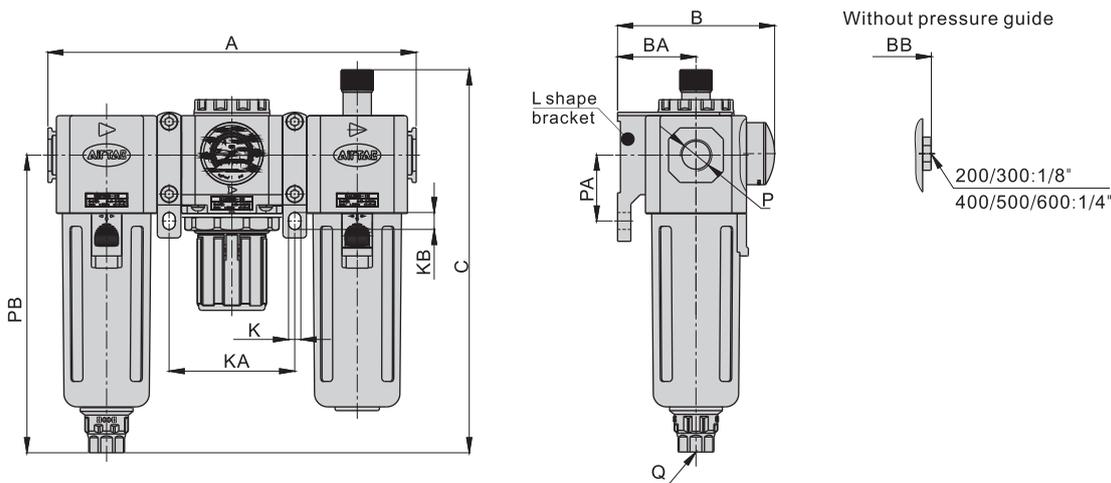
Pressure chart



Flow chart



Dimensions

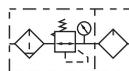


Model\Item	A	B	BA	BB	C	K	KA	KB	P	PA	PB	Q
GAC200-06	163.5	69	30	55.5	160	5.5	55.5	8.5	1/8"	25	120	M5X0.8
GAC200-08	163.5	69	30	55.5	160	5.5	55.5	8.5	1/4"	25	120	M5X0.8
GAC300-08	195	83	41.5	71.5	203.5	6.5	66.5	9	1/4"	35	158	G1/4
GAC300-10	195	83	41.5	71.5	203.5	6.5	66.5	9	3/8"	35	158	G1/4
GAC300-15	195	83	41.5	71.5	203.5	6.5	66.5	9	1/2"	35	158	G1/4
GAC400-10	248	99	50	88	227	8.6	84	12	3/8"	40	177.5	G1/4
GAC400-15	248	99	50	88	227	8.6	84	12	1/2"	40	177.5	G1/4
GAC500-20	254	100	50	89	241	8.6	86	12	3/4"	40	191.5	G1/4
GAC600-20	312	128	70	117	267.5	11	106	16	3/4"	50	205	G1/4
GAC600-25	312	128	70	117	267.5	11	106	16	1"	50	205	G1/4

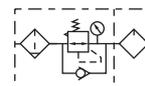


Symbol

No reflux valve is attached



Reflux valve is attached



Product feature

1. Quick and reliable mounting clamps makes it convenient to install and use.
2. The performance of pressure adjustment is reliable with high precision.
3. The efficiency of eliminating moisture and solid grain is high.
4. Two drain types are available: manual drain+semi-auto drain and automatic drain.
5. Three bowl materials are available: PC, Metal and Nylon.

Specification

Model	GAFC200-06	GAFC200-08	GAFC300-08	GAFC300-10	GAFC300-15	GAFC400-10	GAFC400-15	GAFC500-20	GAFC600-20	GAFC600-25	
Fluid	Air										
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"	3/8"	1/2"	3/4"	3/4"	1"	
Filtering grade	40 μm or 5 μm										
Pressure range	0.15~0.9MPa(20~130psi)										
Max. pressure	1.0MPa(145psi)										
Proof pressure	1.5MPa(215psi)										
Temperature range	-5~70°C(Unfreeze)										
Capacity of drain bowl	25CC		60CC			100CC		108CC	205CC		
Capacity of oil bowl	36CC		98CC			185CC		225CC	410CC		
Recommended lubricant	ISO VG 32 or equivalent										
Weight	590g		1020g			1810g		1910g	3430g		
Constitute	Filter & Regulator	GAFR200-06	GAFR200-08	GAFR300-08	GAFR300-10	GAFR300-15	GAFR400-10	GAFR400-15	GAFR500-20	GAFR600-20	GAFR600-25
	Lubricator	GAL200-06	GAL200-08	GAL300-08	GAL300-10	GAL300-15	GAL400-10	GAL400-15	GAL500-20	GAL600-20	GAL600-25

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

Ordering code

GAFC300 □ 10 □ S □ W G K

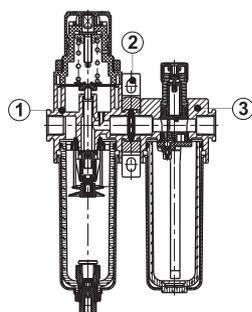


① Model	② Bowl material	③ Port size	④ Drain type	⑤ Type code	⑥ Pressure gauge	⑦ Filtering grade	⑧ Thread type	⑨ Code of reflux valve
GAFC200:GA200 Series FR.L unit	Blank: PC bowl C: Metal bowl N: Nylon bowl C: Metal bowl	06: 1/8" 08: 1/4"	Blank: Semi-auto drain +Manual drain A: Automatic drain	S: Standard	Blank: Circular N: No gauge [Note2]	Blank: 40μm W: 5μm	Blank: PT (MPa/psi) G: G (bar/MPa) T: NPT (psi/bar)	Blank: No reverse flow valve is attached K: Reverse flow valve is attached [Note2]
GAFC300:GA300 Series FR.L unit		08: 1/4" 10: 3/8" 15: 1/2"		L: Lower pressure [Note1]				
GAFC400:GA400 Series FR.L unit		10: 3/8" 15: 1/2"		S: Standard				
GAFC500:GA500 Series FR.L unit		20: 3/4"						
GAFC600:GA600 Series FR.L unit		20: 3/4" 25: 1"						

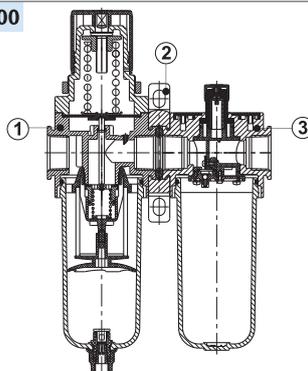
[Note1] The maximum work pressure of lower pressure type is 0.4MPa(58psi); [Note2] Please refer to page 201 for details of sealing plate Installation and reflux valve.

Inner structure

GAFC200

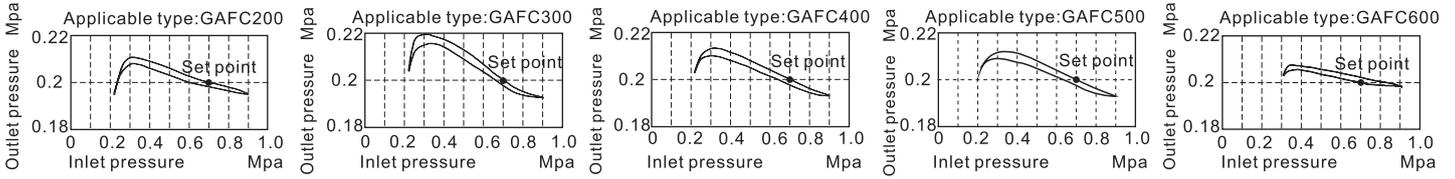


GAFC600

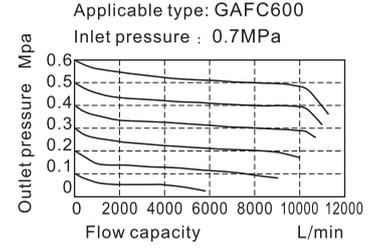
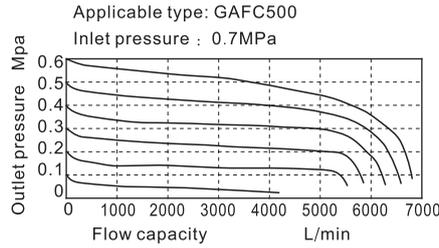
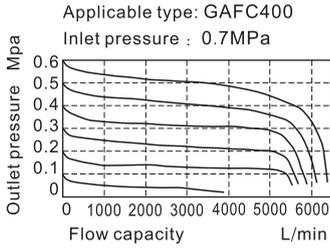
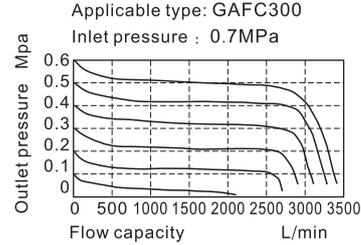
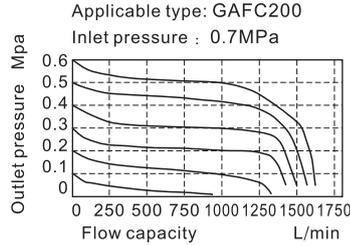


No.	Item
1	GA series filter & regulator
2	Bracket
3	GA series lubricator

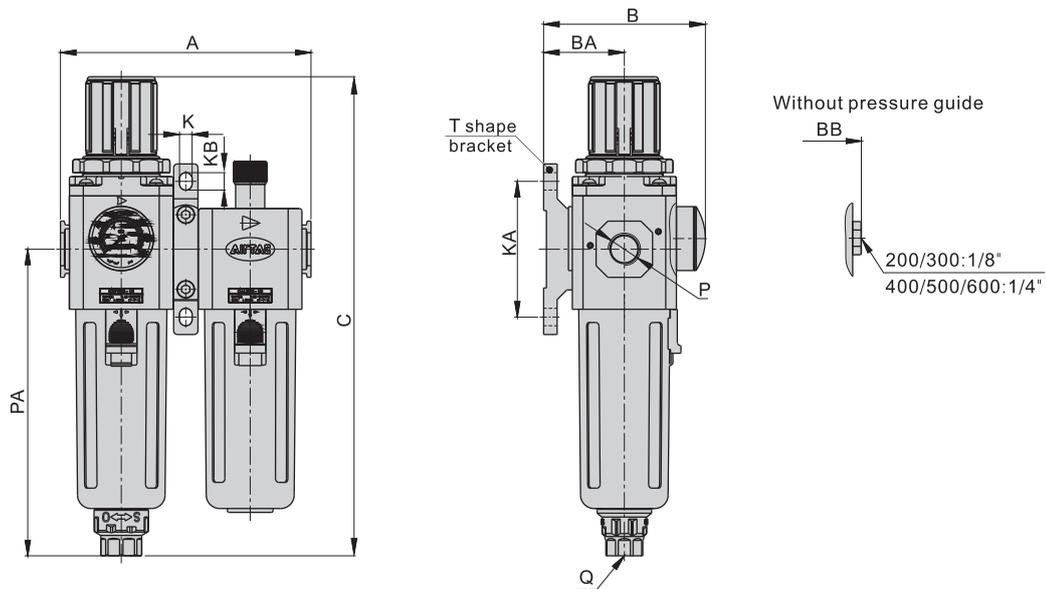
Pressure chart



Flow chart



Dimensions



Model\Item	A	B	BA	BB	C	K	KA	KB	P	PA	Q
GAFC200-06	107.5	69	30	55.5	192.5	5.5	50	8.5	1/8"	120	M5X0.8
GAFC200-08	107.5	69	30	55.5	192.5	5.5	50	8.5	1/4"	120	M5X0.8
GAFC300-08	128.5	83	41.5	71.5	247	6.5	70	9	1/4"	158	G1/4
GAFC300-10	128.5	83	41.5	71.5	247	6.5	70	9	3/8"	158	G1/4
GAFC300-15	128.5	83	41.5	71.5	247	6.5	70	9	1/2"	158	G1/4
GAFC400-10	164	99	50	88	285.5	8.6	80	12	3/8"	177.5	G1/4
GAFC400-15	164	99	50	88	285.5	8.6	80	12	1/2"	177.5	G1/4
GAFC500-20	168	100	50	89	299.5	8.6	80	12	3/4"	191.5	G1/4
GAFC600-20	206	128	70	117	336.5	11	100	16	3/4"	205	G1/4
GAFC600-25	206	128	70	117	336.5	11	100	16	1"	205	G1/4

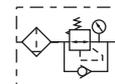


Symbol

No reflux valve is attached



Reflux valve is attached



Product feature

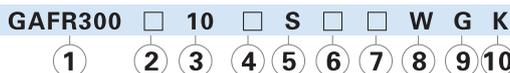
1. Circular square pressure gauge which with clip and magnifier is used to save installation space.
2. The pressed-in self-locking mechanism can prevent the abnormal movement of the set pressure caused by external interfere.
3. Balanced design is adopted for the pressure adjustment mechanism.
4. Unique diversion structure spins the air flowing through to effectively separate the liquid from the air and reliably filter the solid grain.
5. The filtering grade includes 5 μm and 40 μm (optional).
6. Two drain types are available: semi-auto drain and automatic drain.
7. Three material of bowl are available: PC, Nylon and metal.
8. The bracket can be selected for installation.

Specification

Model	GAFR200-06	GAFR200-08	GAFR300-08	GAFR300-10	GAFR300-15	GAFR400-10	GAFR400-15	GAFR500-20	GAFR600-20	GAFR600-25
Fluid	Air									
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"	3/8"	1/2"	3/4"	3/4"	1"
Filtering grade	40 μm or 5 μm									
Pressure range	0.15~0.9MPa(20~130psi)									
Max. pressure	1.0MPa(145psi)									
Proof pressure	1.5MPa(215psi)									
Temperature range	-5~70°C(Unfreeze)									
Capacity of drain bowl	25CC		60CC		100CC		108CC		205CC	
Weight	290g		500g		880g		950g		1880g	

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

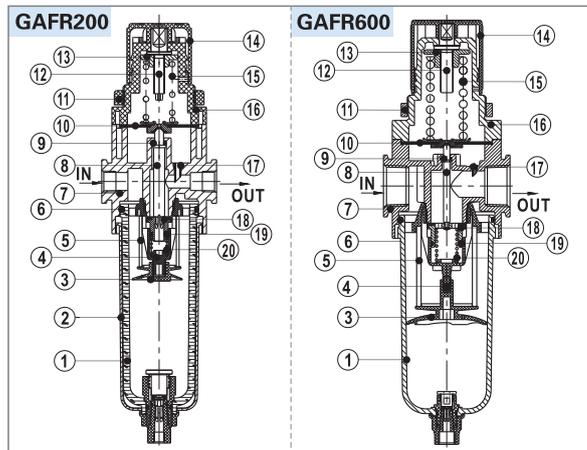
Ordering code



① Model	② Bowl material	③ Port size	④ Drain type	⑤ Type code	⑥ Accessories	⑦ Pressure gauge	⑧ Filtering grade	⑨ Thread type	⑩ Code of reflux valve
GAFR200:GA200 Series Filter & regulator	Blank: PC bowl	06: 1/8"	Blank: Semi-auto drain +Manual drain	S: Standard	Blank: Bracket	Blank: Circular	Blank: 40μm	Blank: PT (MPa/psi)	Blank: No reverse flow valve is attached
GAFR300:GA300 Series Filter & regulator		08: 1/4"							
GAFR400:GA400 Series Filter & regulator	C: Metal bowl	10: 3/8"	A: Automatic drain	L: Lower pressure [Note1]	J: No bracket	N: No gauge [Note2]	W: 5μm	G: G (bar/MPa)	K: Reverse flow valve is attached [Note2]
	N: Nylon bowl	15: 1/2"							
GAFR500:GA500 Series Filter & regulator	C: Metal bowl	10: 3/8"		S: Standard				T: NPT (psi/bar)	
GAFR600:GA600 Series Filter & regulator		20: 3/4"							
		25: 1"							

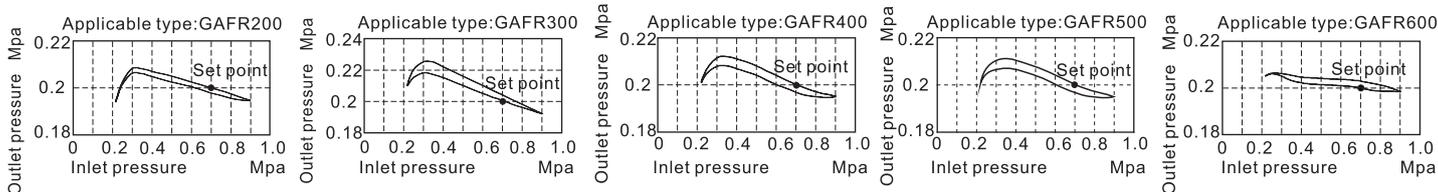
[Note1] The maximum work pressure of lower pressure type is 0.4MPa(58psi); [Note2] Please refer to page 201 for details of sealing plate Installation and reflux valve.

Inner structure

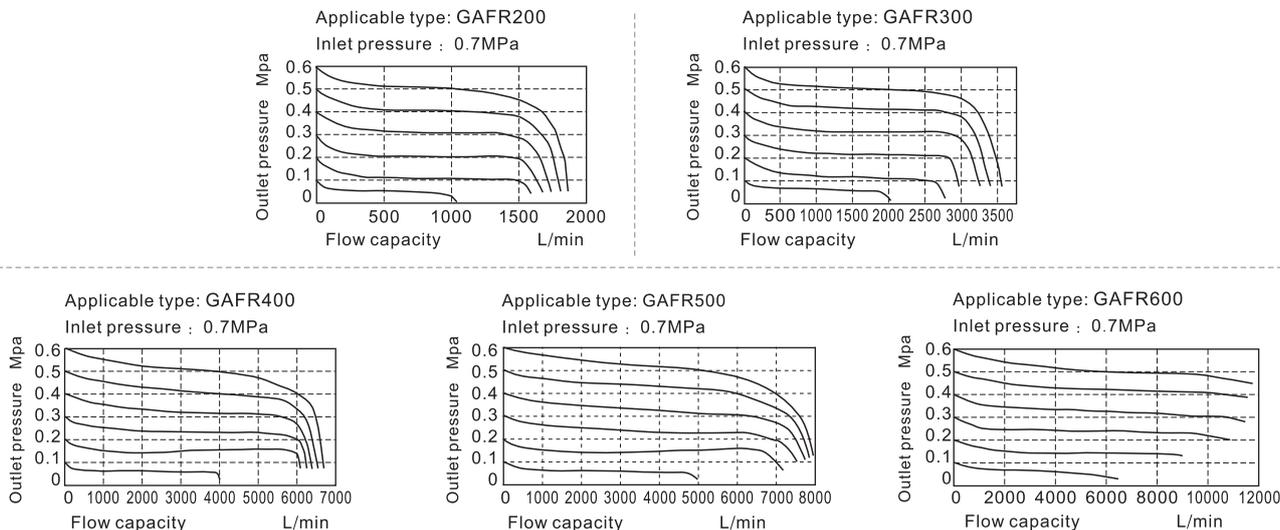


No.	Item	Material
1	Drain bowl	Aluminum alloy \ PC \ Nylon
2	Meter cover	SPCC
3	Umbrella baffle	High viscosity POM
4	Air guider	High viscosity POM
5	Filter core	HDPE
6	O-ring	NBR
7	Body of filter-regulator	Aluminum alloy
8	Adjusting spool	Brass(GAFR600)\POM(others)
9	O-ring	NBR
10	Diaphragm	NBR
11	Fixation ring cap	Aluminum alloy (GAFR600)\POM(others)
12	Adjusting spindle	Steel
13	Regulator nut	Steel
14	Pressure knob	POM
15	Spring	SWPB
16	Adjusting seat	Aluminum alloy (GAFR600)\POM(others)
17	Feedback tube	POM
18	Adjusting plug	Brass & Rubber
19	O-ring	NBR
20	Spring	SWPB

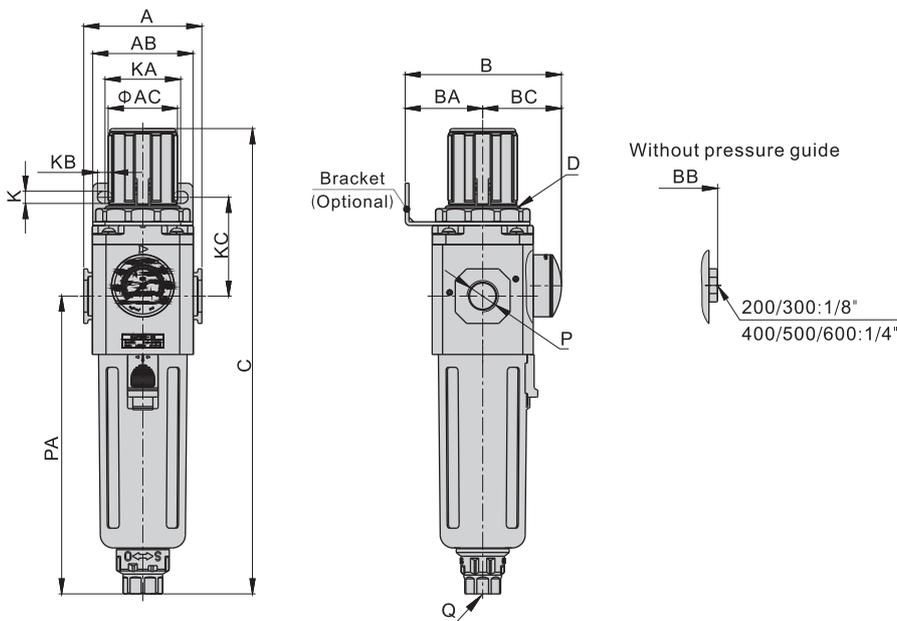
Pressure chart



Flow chart



Dimensions



Model/Item	A	AB	AC	B	BA	BB	BC	C	D	K	KA	KB	KC	P	PA	Q
GAFR200-06	52.5	55	31	69	30	55.5	39	192.5	M33x1.5	5.4	34	15.4	52	1/8"	120	M5X0.8
GAFR200-08	52.5	55	31	69	30	55.5	39	192.5	M33x1.5	5.4	34	15.4	52	1/4"	120	M5X0.8
GAFR300-08	62.5	53	38	82.5	41	71.5	41.5	247	M40x1.5	6.5	40	8	52.5	1/4"	158	G1/4
GAFR300-10	62.5	53	38	82.5	41	71.5	41.5	247	M40x1.5	6.5	40	8	52.5	3/8"	158	G1/4
GAFR300-15	62.5	53	38	82.5	41	71.5	41.5	247	M40x1.5	6.5	40	8	52.5	1/2"	158	G1/4
GAFR400-10	80	72	52	99	50	88	49	285.5	M55x2.0	8.5	55	11	57	3/8"	177.5	G1/4
GAFR400-15	80	72	52	99	50	88	49	285.5	M55x2.0	8.5	55	11	57	1/2"	177.5	G1/4
GAFR500-20	82	72	52	100	50	89	50	299.5	M55x2.0	8.5	55	11	57	3/4"	191.5	G1/4
GAFR600-20	100	90	59	128	70	117	58	336.5	M62x1.5	11	66	13	76	3/4"	205	G1/4
GAFR600-25	100	90	59	128	70	117	58	336.5	M62x1.5	11	66	13	76	1"	205	G1/4



Symbol



Product feature

1. Unique diversion structure spins the air flowing through to effectively separate the liquid from the air and reliably filter the solid grain.
2. It has low pressure loss, high efficiency in separating water and large drain bowl capacity.
3. Filtering grade includes 5µm and 40µm (Optional).
4. Three drain types are available: manual drain, semi-auto drain and automatic drain.
5. Two drain types are available: semi-auto drain and automatic drain.
6. Three material of bowl are available: PC, Nylon and metal.
7. The bracket can be selected for installation.

Specification

Model	GAF200-06	GAF200-08	GAF300-08	GAF300-10	GAF300-15	GAF400-10	GAF400-15	GAF500-20	GAF600-20	GAF600-25
Fluid	Air									
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"	3/8"	1/2"	3/4"	3/4"	1"
Filtering grade	40 µm or 5 µm									
Pressure range	0.15~0.9MPa(20~130psi)									
Proof pressure	1.5MPa(215psi)									
Temperature range	-5~70°C(Unfreeze)									
Capacity of drain bowl	25CC		60CC			100CC		108CC	205CC	
Weight	200g		360g			640g		680g	1040g	

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

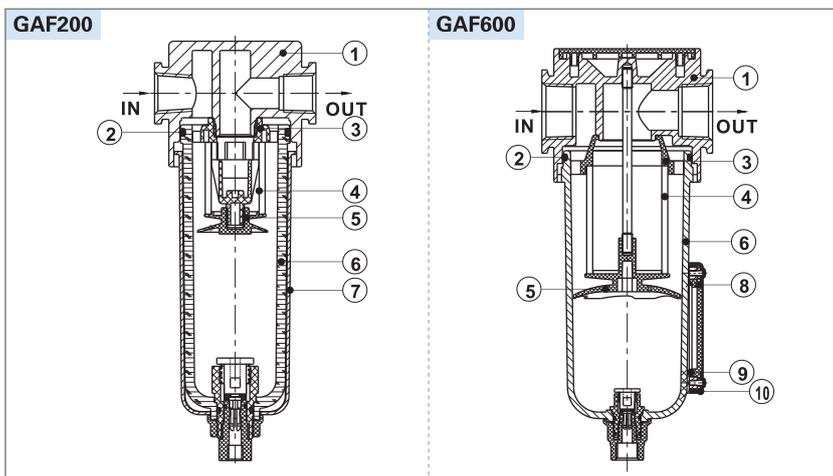
Ordering code

GAF 300 □ 10 □ □ W G



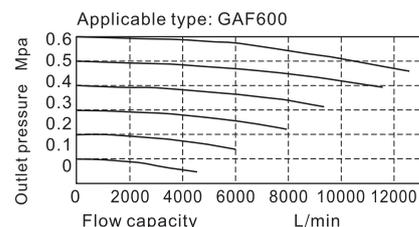
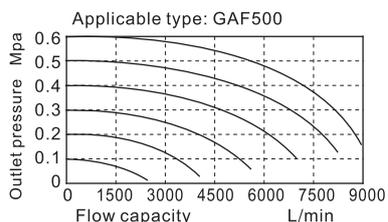
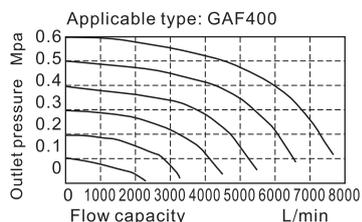
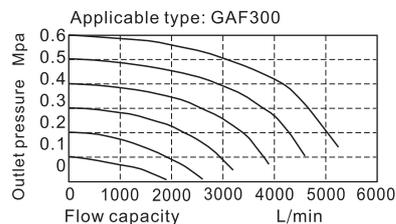
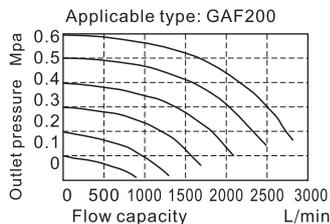
① Model	② Bowl material	③ Port size	④ Drain type	⑤ Accessories	⑥ Filtering grade	⑦ Thread type
GAF200:GA200 Series Filter	Blank: PC bowl C: Metal bowl N: Nylon bowl	06: 1/8" 08: 1/4"	Blank: Semi-auto drain +Manual drain A: Automatic drain	Blank: Bracket J: No bracket	Blank: 40µm W: 5µm	Blank: PT G: G T: NPT
GAF300:GA300 Series Filter		08: 1/4" 10: 3/8" 15: 1/2"				
GAF400:GA400 Series Filter		10: 3/8" 15: 1/2"				
GAF500:GA500 Series Filter		20: 3/4"				
GAF600:GA600 Series Filter		20: 3/4" 25: 1"				

Inner structure

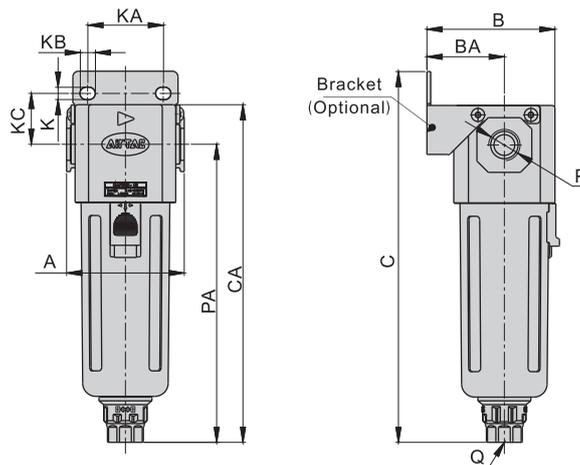


No.	Item	Material
1	Body	Aluminum alloy
2	O-ring	NBR
3	Air guide	High viscosity POM
4	Filter core	HDPE
5	Umbrella baffle	High viscosity POM
6	Drain bowl	Aluminum alloy\PC\Nylon
7	Meter cover	SPCC
8	Liquid meter inside cover	PC
9	Liquid meter seal	NBR
10	Liquid meter cover	SPCC

Flow chart



Dimensions



Model/Item	A	B	BA	C	CA	K	KA	KB	KC	P	PA	Q
GAF200-06	52.5	54.5	33	150	137	5.4	27	8.4	23	1/8"	120	M5X0.8
GAF200-08	52.5	54.5	33	150	137	5.4	27	8.4	23	1/4"	120	M5X0.8
GAF300-08	62.5	67.5	41	197	179	6.5	40	8	27	1/4"	158	G1/4
GAF300-10	62.5	67.5	41	197	179	6.5	40	8	27	3/8"	158	G1/4
GAF300-15	62.5	67.5	41	197	179	6.5	40	8	27	1/2"	158	G1/4
GAF400-10	80	84	50	220	202.5	8.5	55	11	33.5	3/8"	177.5	G1/4
GAF400-15	80	84	50	220	202.5	8.5	55	11	33.5	1/2"	177.5	G1/4
GAF500-20	82	85	50	234	216.5	8.5	55	11	33.5	3/4"	191.5	G1/4
GAF600-20	100	113	70	266	242	11	66	13	50	3/4"	205	G1/4
GAF600-25	100	113	70	266	242	11	66	13	50	1"	205	G1/4

Symbol



No reflux valve is attached



Reflux valve is attached



Product feature

1. Circular square pressure gauge which with clip and magnifier is used to save installation space.
2. The pressed-in self-locking mechanism can prevent the abnormal movement of the set pressure caused by external interfere.
3. Balanced design is adopted for the pressure adjustment mechanism.
4. In addition to panel installation, the bracket is optional for installation.

Specification

Model	GAR200-06	GAR200-08	GAR300-08	GAR300-10	GAR300-15	GAR400-10	GAR400-15	GAR500-20	GAR600-20	GAR600-25
Fluid	Air									
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"	3/8"	1/2"	3/4"	3/4"	1"
Pressure range	0.05~0.9MPa(7~130psi)									
Max. pressure	1.0MPa(145psi)									
Proof pressure	1.5MPa(215psi)									
Temperature range	-20~70°C									
Weight	170g		300g			570g		580g	1390g	

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

Ordering code

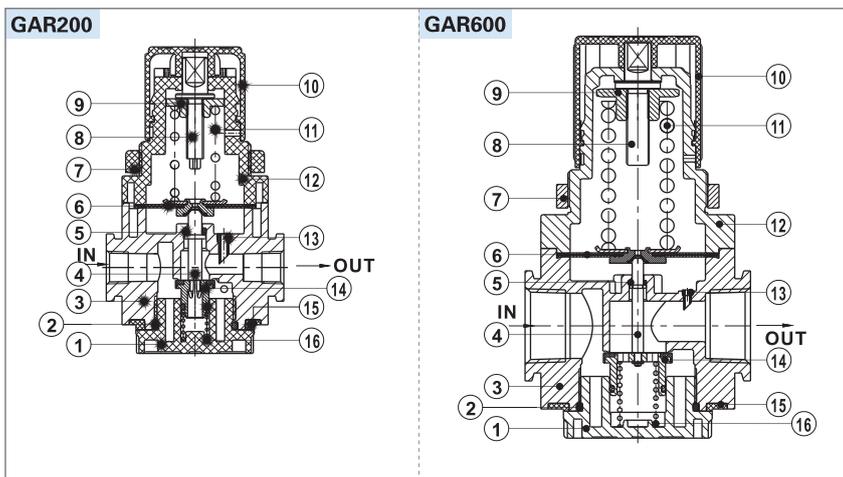
GAR300 10 S □ □ G K



① Model	② Port size	③ Type code	④ Accessories	⑤ Pressure gauge	⑥ Thread type	⑦ Code of reflux valve
GAR200:GA200 Series regulator	06: 1/8" 08: 1/4"	S: Standard L: Lower pressure [Note1]	Blank: Bracket J: No bracket	Blank: Circular N: No gauge [Note2]	Blank: PT (MPa/psi) G: G (bar/MPa) T: NPT (psi/bar)	Blank: No reverse flow valve is attached K: Reverse flow valve is attached [Note2]
GAR300:GA300 Series regulator	08: 1/4" 10: 3/8" 15: 1/2"					
GAR400:GA400 Series regulator	10: 3/8" 15: 1/2"					
GAR500:GA500 Series regulator	20: 3/4"					
GAR600:GA600 Series regulator	20: 3/4" 25: 1"	S: Standard				

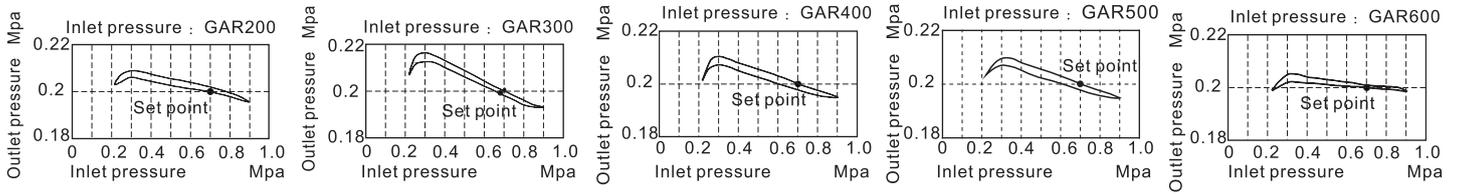
[Note1] The maximum work pressure of lower pressure type is 0.4MPa(58psi); [Note2] Please refer to page 201 for details of sealing plate Installation and reflux valve.

Inner structure

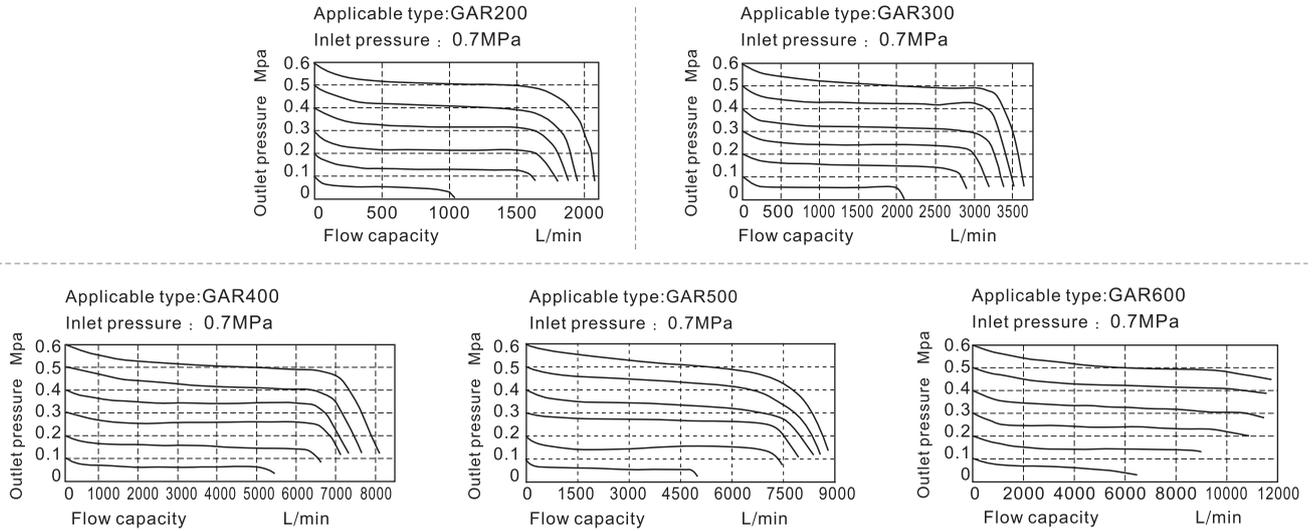


No.	Item	Material
1	Valve cap	Aluminum alloy(GR600)\POM(others)
2	O-ring	NBR
3	Body	Aluminum alloy
4	Spool	Brass(GR600)\POM(others)
5	O-ring	NBR
6	Diaphragm	NBR
7	Fixed ring	Aluminum alloy (GR600)\POM(others)
8	Adjusting spindle	Steel
9	Regulator nut	Steel
10	Pressure knob	POM
11	Pressure spring	SWPB
12	Adjusting seat	Aluminum alloy (GR600)\POM(others)
13	Feed back tube	POM
14	Pressure plug	Aluminum alloy & steel
15	Bottom cover	POM
16	Spring	SWPB

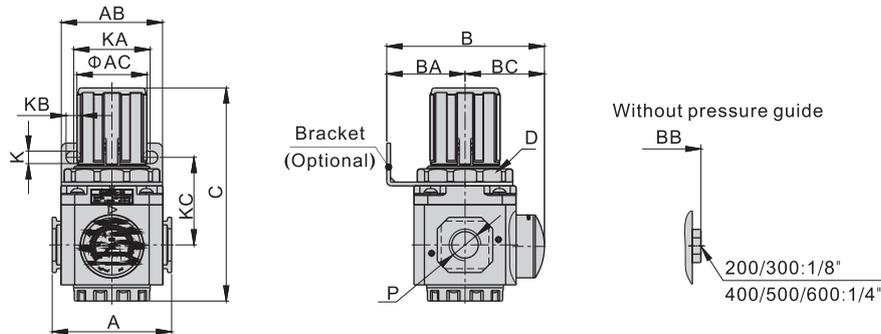
Pressure chart



Flow chart



Dimensions



Model\Item	A	AB	AC	B	BA	BB	BC	C	D	K	KA	KB	KC	P
GAR200-06	52.5	55	31	69	30	55.5	39	91	M33x1.5	5.4	34	15.4	45	1/8"
GAR200-08	52.5	55	31	69	30	55.5	39	91	M33x1.5	5.4	34	15.4	45	1/4"
GAR300-08	62.5	53	38	82.5	41	71.5	41.5	112	M40x1.5	6.5	40	8	46	1/4"
GAR300-10	62.5	53	38	82.5	41	71.5	41.5	112	M40x1.5	6.5	40	8	46	3/8"
GAR300-15	62.5	53	38	82.5	41	71.5	41.5	112	M40x1.5	6.5	40	8	46	1/2"
GAR400-10	80	72	52	99	50	88	49	140.5	M55x2.0	8.5	55	11	53	3/8"
GAR400-15	80	72	52	99	50	88	49	140.5	M55x2.0	8.5	55	11	53	1/2"
GAR500-20	82	72	52	100	50	89	50	140.5	M55x2.0	8.5	55	11	53	3/4"
GAR600-20	100	90	59	128	70	117	58	179.5	M62x1.5	11	66	13	73.5	3/4"
GAR600-25	100	90	59	128	70	117	58	179.5	M62x1.5	11	66	13	73.5	1"



Symbol



Product feature

1. The structure of oil dripping adopts gap seal type, which makes the adjustment of oil supply more reliable.
2. Oil feed ring can only make one full turn. The quantity of oil supply basically takes on linear distribution. The quantity of oil supply can be generally calculated according to the position of graduation ring.
3. Special drip nozzle structure will produce negative pressure in oil dripping outlet and the mist flow is minimal.
4. Three material of bowl are available: PC, Nylon and metal.
5. Filling of oil while the lubricator is under pressure is made possible, and the oil bowl is large.
6. The bracket can be selected for installation.

Specification

Model	GAL200-06	GAL200-08	GAL300-08	GAL300-10	GAL300-15	GAL400-10	GAL400-15	GAL500-20	GAL600-20	GAL600-25
Fluid	Air									
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"	3/8"	1/2"	3/4"	3/4"	1"
Pressure range	0.05~0.9MPa(7~130psi)									
Proof pressure	1.5MPa(215psi)									
Temperature range	-5~70°C(Unfreeze)									
Recommended lubricant	ISO VG 32 or equivalent									
Capacity of oil bowl	36CC		98CC			185CC		225CC	410CC	
Weight	200g		370g			660g		700g	1040g	

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

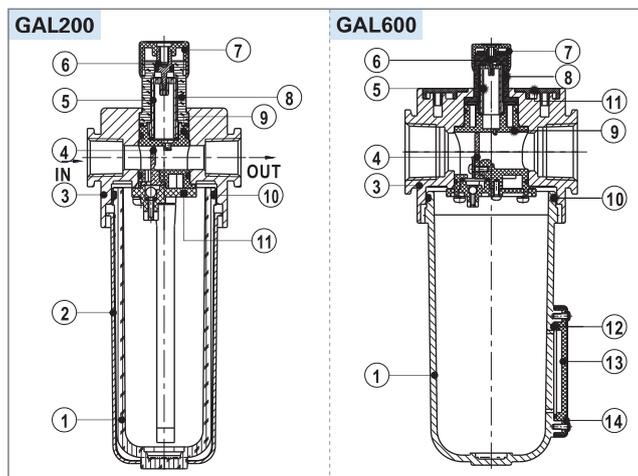
Ordering code

GAL300 □ 10 □ G



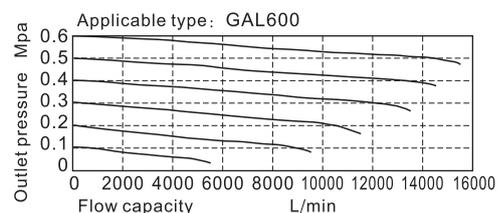
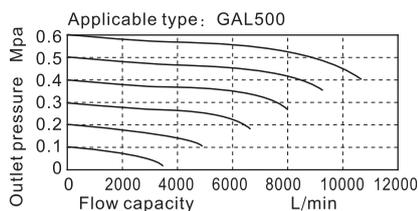
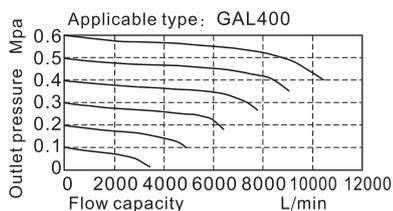
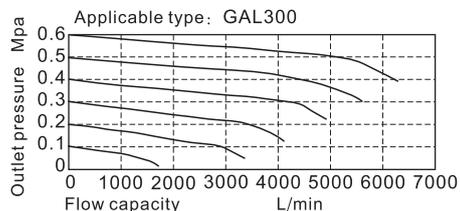
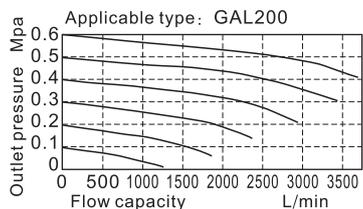
① Model	② Bowl material	③ Port size	④ Accessories	⑤ Thread type
GAL200: GA200 Lubricator		06: 1/8" 08: 1/4"	Blank: Bracket J: No bracket	Blank: PT G: G T: NPT
GAL300: GA300 Lubricator	Blank: PC bowl C: Metal bowl	08: 1/4" 10: 3/8" 15: 1/2"		
GAL400: GA400 Lubricator	N: Nylon bowl	10: 3/8" 15: 1/2"		
GAL500: GA500 Lubricator		20: 3/4"		
GAL600: GA600 Lubricator	C: Metal bowl	20: 3/4" 25: 1"		

Inner structure

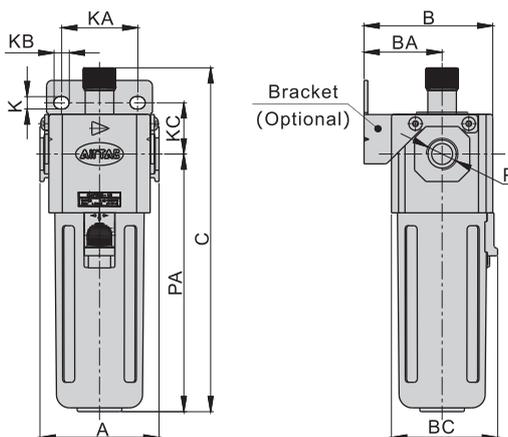


No.	Item	Material
1	Oil bowl	Aluminum alloy \ PC \ Nylon
2	Meter cover	SPCC
3	Body of lubricator	Aluminum alloy
4	Distance block	PU
5	Drip pipe	PC
6	Ejector pin	Brass
7	Adjusting ring	POM
8	Adjusting looker	PC
9	Sprayer body	PA66
10	O-ring	NBR
11	Sprayer bottom cap	POM
12	Liquid meter seal	NBR
13	Liquid meter inside cover	PC
14	Liquid meter cover	SPCC

Flow chart



Dimensions



Model\Item	A	B	BA	C	K	KA	KB	KC	P	PA
GAL200-06	52.5	54.5	33	146.5	5.4	27	8.4	23	1/8"	107
GAL200-08	52.5	54.5	33	146.5	5.4	27	8.4	23	1/4"	107
GAL300-08	62.5	67.5	41	181	6.5	40	8	27	1/4"	136
GAL300-10	62.5	67.5	41	181	6.5	40	8	27	3/8"	136
GAL300-15	62.5	67.5	41	181	6.5	40	8	27	1/2"	136
GAL400-10	80	84	50	204.5	8.5	55	11	33.5	3/8"	155
GAL400-15	80	84	50	204.5	8.5	55	11	33.5	1/2"	155
GAL500-20	82	85	50	218.5	8.5	55	11	33.5	3/4"	169
GAL600-20	100	113	70	246	11	66	13	50	3/4"	182.5
GAL600-25	100	113	70	246	11	66	13	50	1"	182.5



Product feature

1. This reverse flow valve can be used with GA series regulator but can not be ordered individually.
2. When it is used with GA series regulator, one only needs to change the seal board in the back of regulator for the reverse flow valve. It is convenient to install and won't change the external dimension of regulator.

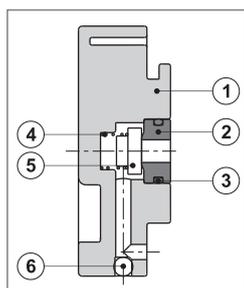
Applicable products

Reflux valve type\Applicable products's type	GA F.R.L Comintation	GA FR.L Comintation	GA Filter & regulator	GA Regulator
GAR200-P1	GAC200	GAFC200	GAFR200	GAR200
GAR300-P1	GAC300、400、600	GAFC300、400、600	GAFR300、400、600	GAR300、400、600

Ordering code

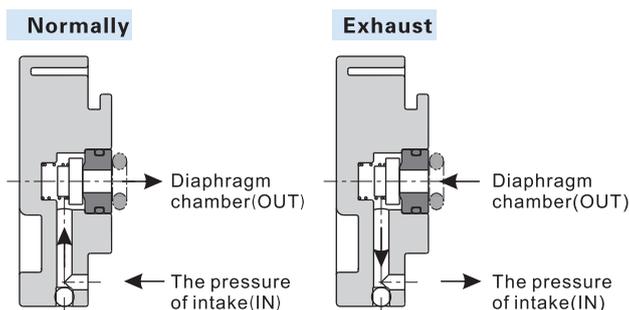
When GA series regulator is assembled with the reverse flow valve, the valve can be ordered together with the standard product. What needs to do is to add "-K" to the end of the ordering code of the standard product. Please refer to relevant content for more detailed order method.

Inner structure



No.	Item	Material
1	Reverse flow valve's body	PBT
2	Plug	Brass
3	O-ring	NBR
4	Spring	SUS304
5	Gasket	NBR
6	Steel ball	SUS304

Working principle

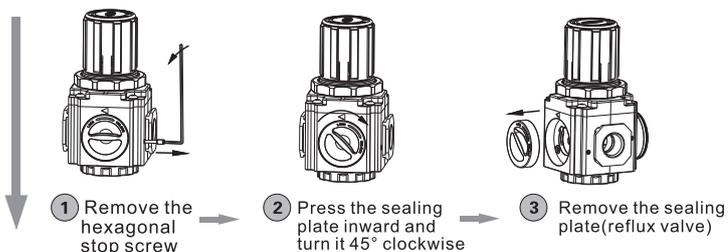


Normally, as the pressure of intake (IN) is higher than the set valve (pressure of outlet), the reverse flow valve closed; if the pressure of intake (IN) is cut off and starts exhaust, reverse flow valve opens. The pressure of diaphragm chamber is exhausted from IN orifice. At this moment, the pressure of diaphragm chamber decreases and the diaphragm is pressed down by the force from adjusting spring to open valve. The pressure from outlet is exhausted from IN port.

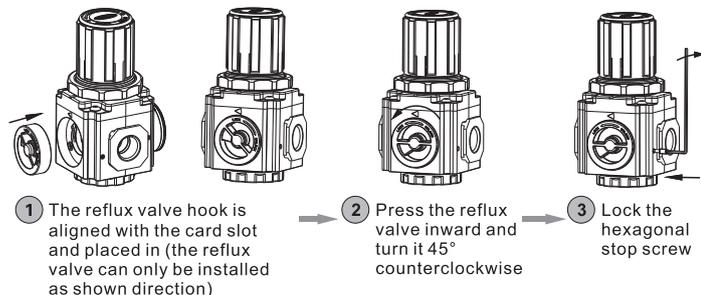
Example for assemble the reflux valve

1. Reflux valve installation steps:

a Disassembly sealing plate

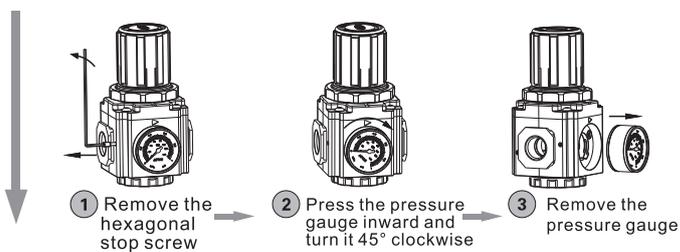


b Reflux valve installation

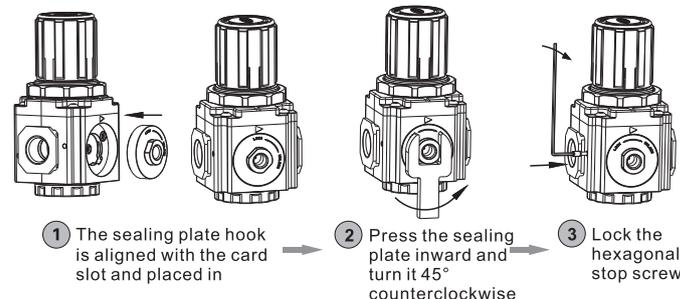


2. Sealing plate (used when no pressure gauge is attached) Installation steps:

a Disassembly pressure gauge



b Sealing plate installation

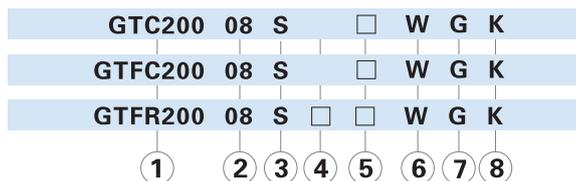


Product feature

1. The short PC bowl type is upgraded GA200 series. Besides its speciality are the same as GA200 series, it's below speciality:
2. The bowl is made of PC and is short which allows for litter space application.
3. Two drain types are available: semi-auto drain, and automatic drain.

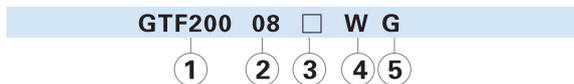


Ordering code

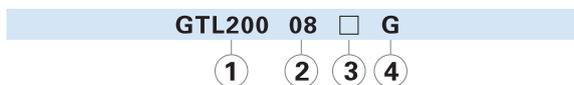


① Model	② Port size	③ Type code	④ Accessories	⑤ Pressure gauge	⑥ Filtering grade	⑦ Thread type	⑧ Code of reflux valve
GTC200: GT200 Series F.R.L unit (Short PC bowl)	06: 1/8" 08: 1/4"	S: Standard L: Lower pressure [Note1]	No this code	Blank: Circular N: No gauge [Note2]	Blank: 40 μm W: 5 μm	Blank: PT(MPa/psi) G: G(bar/MPa) T: NPT(psi/bar)	Blank: No reverse flow valve is attached K: Reverse flow valve is attached [Note2]
GTFC200: GT200 Series FR.L unit (Short PC bowl)							
GTFR200: GT200 Series Filter & regulator (Short PC bowl)			Blank: Bracket J: No bracket				

[Note1] The maximum work pressure of lower pressure type is 0.4MPa(58psi); [Note2] Please refer to page 201 for details of sealing plate Installation and reflux valve.



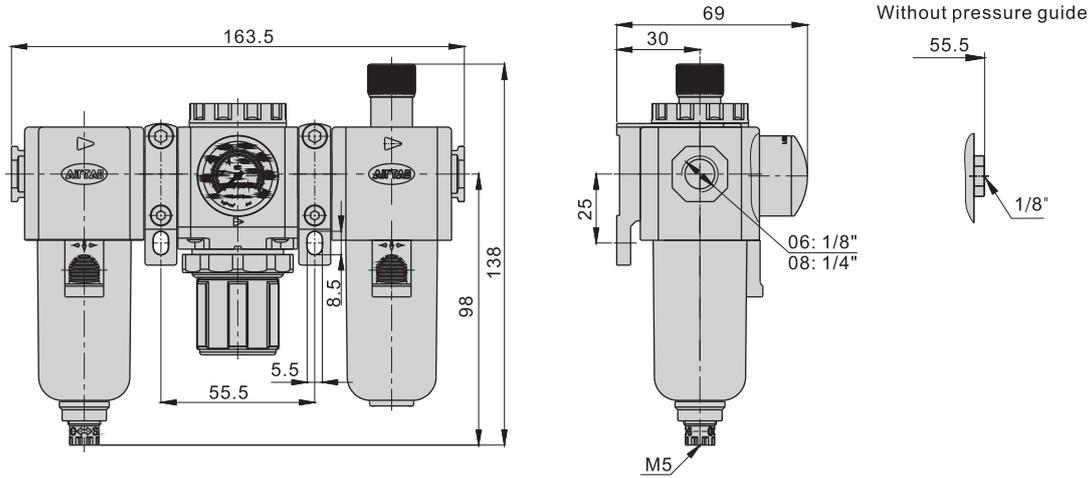
① Model	② Port size	③ Accessories	④ Filtering grade	⑤ Thread type
GTF200: GT200 Series Filter (Short PC bowl)	06: 1/8" 08: 1/4"	Blank: Bracket J: No bracket	Blank: 40 μm W: 5 μm	Blank: PT G: G T: NPT



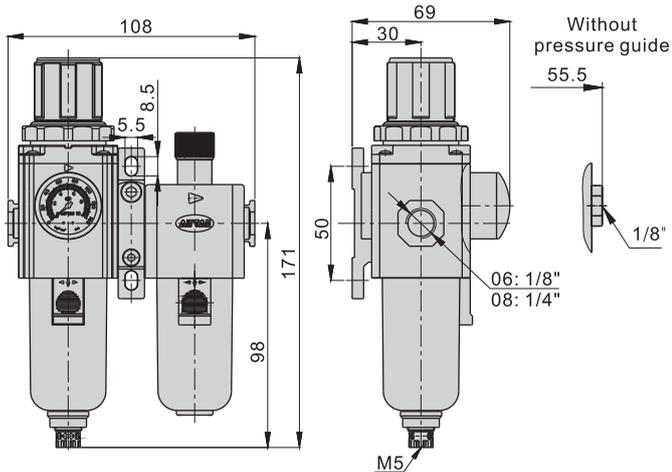
① Model	② Port size	③ Accessories	④ Thread type
GTL200: GT200GA200 Lubricator (Short PC bowl)	06: 1/8" 08: 1/4"	Blank: Bracket J: No bracket	Blank: PT G: G T: NPT

Dimensions

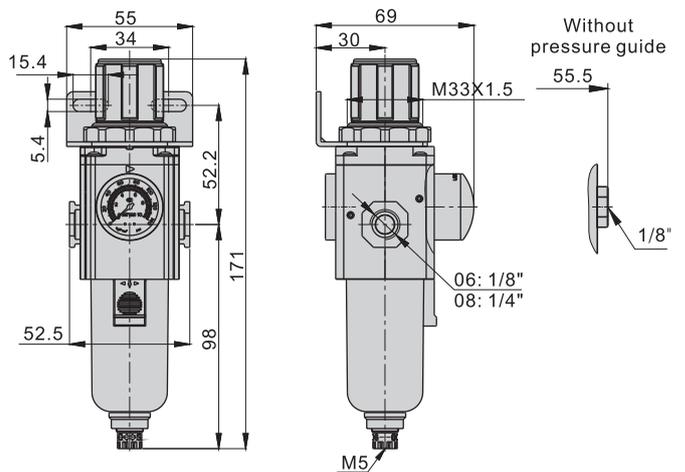
GTC200



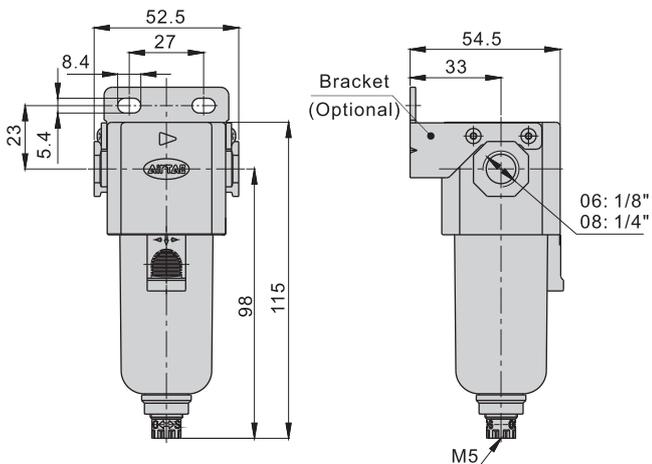
GTFC200



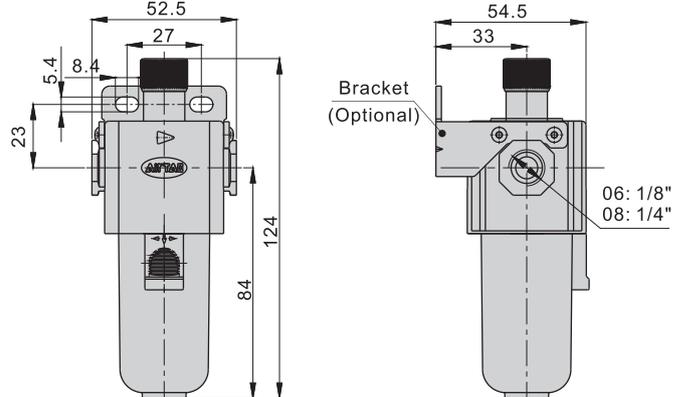
GTFR200



GTF200



GTL200





Product feature

1. It is installed between GA series regulator (or filter & regulator) and G series Lubricator. The air flow is divided by the device that one enters Lubricator to supply oil for lubrication and the other (the second way) directly enters the equipment.
2. Several kinds of bracket can be selected to connect regulator and lubricator. Optional brackets are type T, type L and type U.

Specification

Model	GA200-06	GA200-08	GA300-08	GA300-10	GA400-10	GA400-15	GA600-20	GA600-25
Fluid	Air							
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
Way number	Four							
Pressure range	0~1.0MPa(0~145psi)							
Proof pressure	1.5MPa(215psi)							
Temperature range	-20~70°C							

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

Ordering code

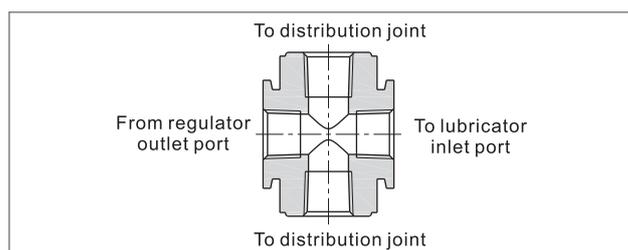
GA200 08 G

① ② ③

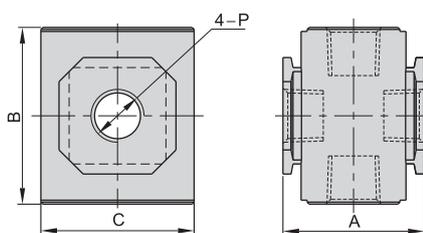
① Model	② Port size	③ Thread type
GA200: 200 Series gas-distribution block	06: 1/8" 08: 1/4"	Blank: PT G: G T: NPT
GA300: 300 Series gas-distribution block	08: 1/4" 10: 3/8"	
GA400: 400/500 Series gas-distribution block	10: 3/8" 15: 1/2"	
GA600: 600 Series gas-distribution block	20: 3/4" 25: 1"	

Note : When it is used with F.R.L. combination, extra mounting bracket needed. Please refer to P205 for order detail.

Inner structure



Dimensions



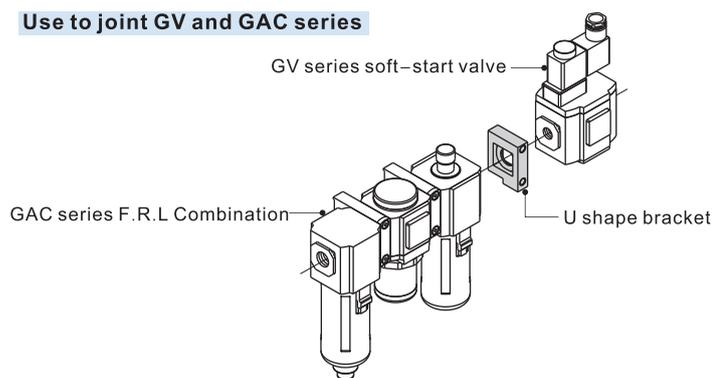
Model\Item	A	B	C	P	
GA200	06	28.5	36	30	1/8"
	08	28.5	36	30	1/4"
GA300	08	35	44	38	1/4"
	10	35	44	38	3/8"
GA400	10	42	52	52	3/8"
	15	42	52	52	1/2"
GA600	20	60	76	68	3/4"
	25	60	76	68	1"

How to select the bracket

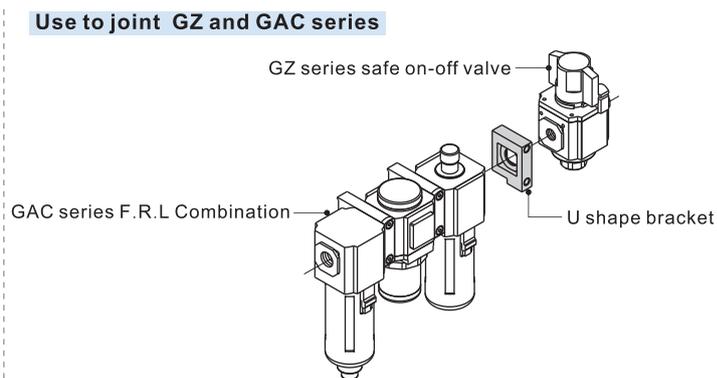
Bracket name	Code	Photo	Adapt accessories model		
T shape bracket	GA200T-P1		GV200	GZ200	GA200\GT200
	GA300T-P1		GV300	GZ300	GA300
	GA400T-P1		GV400	GZ400	GA400\GA500
	GA600T-P1		-	-	GA600
L shape bracket	GA200L-P1		GV200	GZ200	GA200\GT200
	GA300L-P1		GV300	GZ300	GA300
	GA400L-P1		GV400	GZ400	GA400\GA500
	GA600L-P1		-	-	GA600
U shape bracket	GA200U-P1		GV200	GZ200	GA200\GT200
	GA300U-P1		GV300	GZ300	GA300
	GA400U-P1		GV400	GZ400	GA400\GA500
	GA600U-P1		-	-	GA600

How to use the bracket

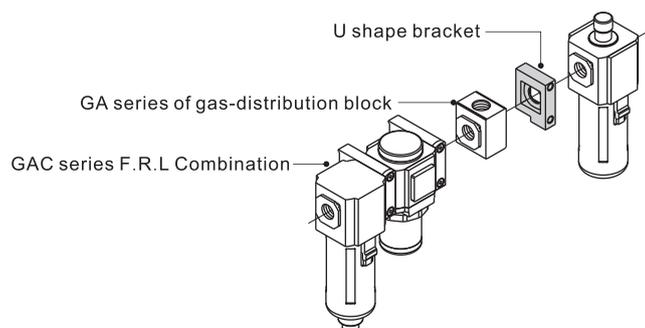
Use to joint GV and GAC series



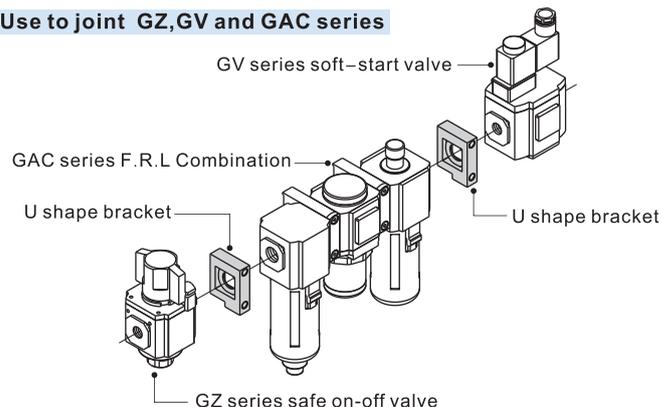
Use to joint GZ and GAC series



Use to joint GA and GAC series



Use to joint GZ, GV and GAC series



Compendium of GP Series preparation unit

P207	Product feature	Photo	P209	Product feature	Photo
GPF Series Oil mist filter	<ul style="list-style-type: none"> ● The pressure loss is low ● Filter efficiency more than 99% ● 0.3µm and 0.01µm filtering grade(Optional) ● With fixing bracket ● 200/300/400 Series ● Port size: 1/8" 1/4" 3/8" 1/2" 		GPR Series Precision regulator	<ul style="list-style-type: none"> ● Higher precision adjustment pressure, sensitive to reaction ● Excellence pressure chart and flow chart ● Lower, Middle and high pressure are optional ● With fixing bracket ● Port size: 1/8" 1/4" 3/8" 1/2" 	
P213	Product feature	Photo			
GPFR Series precision Filter-Regulator	<ul style="list-style-type: none"> ● The pressure loss is low ● Filter efficiency more than 99% ● 0.3µm and 0.01µm filtering grade(Optional) ● With fixing bracket ● 200/300/400 Series ● 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.

Specification



Model	GPF20006	GPF20008	GPF30008	GPF30010	GPF40010	GPF40015
Fluid	Air					
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	3/8"	1/2"
Filtering grade	M	0.3 μm (Capture efficiency 99.9%)				
	D	0.01 μm (Capture efficiency 99.9%)				
Pressure range	0.15~1.0MPa(20~145psi)					
Proof pressure	1.5MPa(215psi)					
Temperature range	-5~70°C(Unfreeze)					
Rated flow capacity [2]	M	200L/min	450L/min		1100L/min	
	D	120L/min	240L/min		600L/min	
Bowl Material	Polycarbonate, Nylon, Metal					
Capacity of drain bowl	19CC		54.5CC		89CC	
Weight	PC bowl	207g	356g		620g	
	Metallic bowl	238g	397g		627g	

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

[Note2] Conditions: inlet pressure 0.7MPa, outlet pressure 0.5MPa. The rated flow varies with the inlet pressure. If the flow exceeds the rated flow, oil will flow to the secondary side. Please note.

Symbol



Product feature

1. Low pressure drop, high oil mist remove efficiency up to 99% and large drain bowl.
2. 0.3 μm and 0.01 μm filtering grade are available.
3. Two drain types are available: manual and semi-auto drain, and automatic drain.
4. To meet the needs of different environment the bowl material has Poly Carbonate, nylon and metal can be selected.
5. Monomeric products can select the bracket for installation, others can be used with F.R.L Combination.

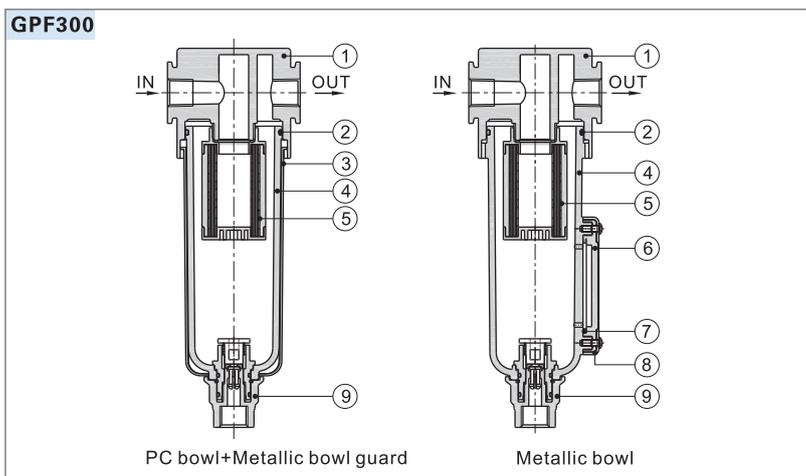
Ordering code

GPF300 08 M G



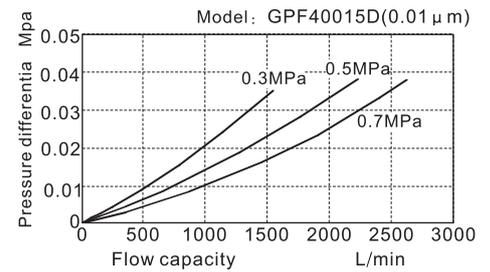
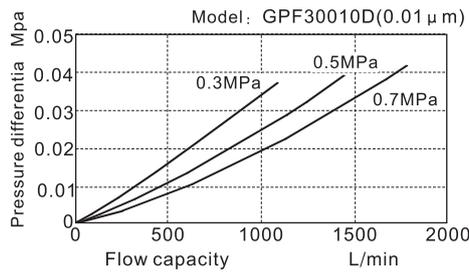
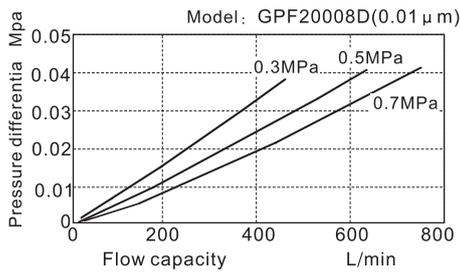
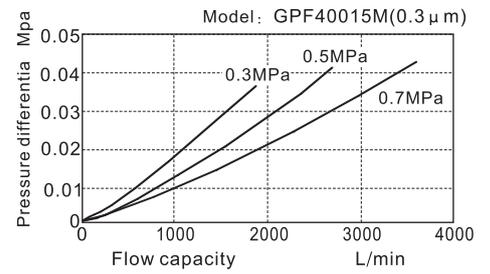
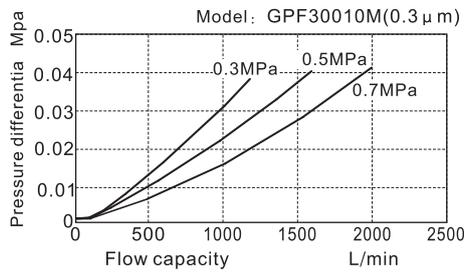
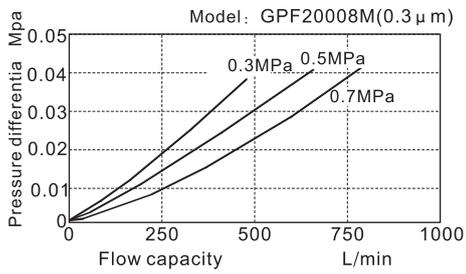
① Model	② Bowl Material	③ Port size	④ Drain type	⑤ Accessories	⑥ Filtering grade	⑦ Thread type
GPF200: 200 Series Oil mist filter	Blank: PC bowl+Metallic bowl guard	06: 1/8" 08: 1/4"	Blank: Manual and Semi-auto drain A: Automatic drain	Blank: Bracket J: No bracket	M: 0.3 μm D: 0.01 μm	Blank: PT G: G T: NPT
GPF300: 300 Series Oil mist filter	C: Metallic bowl N: Nylon bowl+Metallic bowl guard	08: 1/4" 10: 3/8"				
GPF400: 400 Series Oil mist filter		10: 3/8" 15: 1/2"				

Inner structure



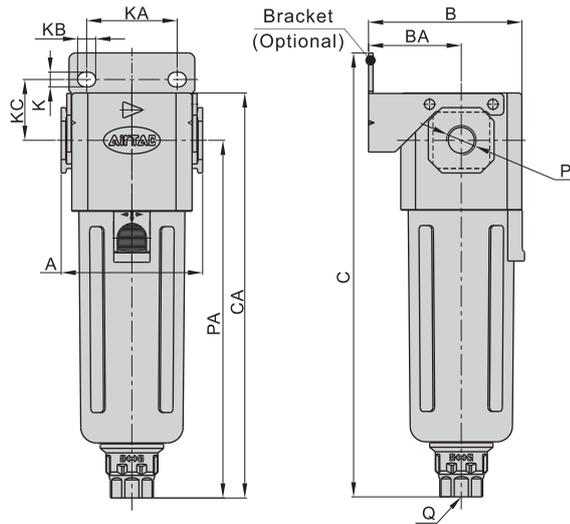
No.	Item	Material
1	Body	Aluminium alloy
2	O-ring	NBR
3	Meter cover	SPCC
4	Drain bowl	PC\nylon/aluminium alloy
5	Filter core	Polymer materials
6	Liquid meter inside cover	PC
7	Liquid meter seal	NBR
8	Liquid meter cover	SPCC
9	Drain connection	Plastic

Flow chart

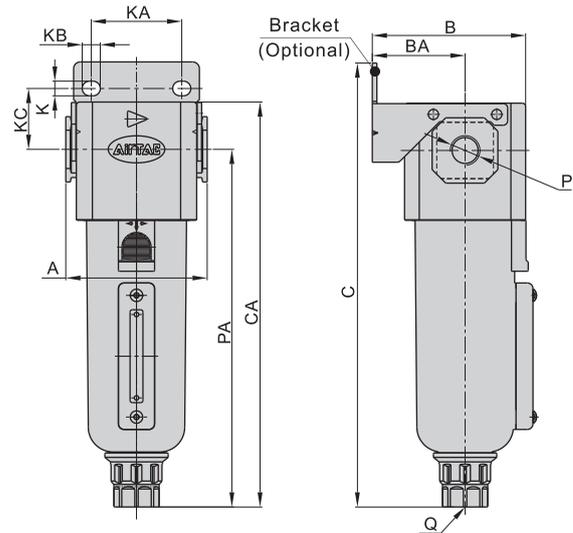


Dimensions

PC bowl+Metallic bowl guard



Metallic bowl



Model/Item	A	B	BA	C	CA	K	KA	KB	KC	P	PA	Q
GPF200(C/N)06	52.5	54.5	33	150	137	5.4	27	8.4	23	1/8"	120	M5X0.8
GPF200(C/N)08	52.5	54.5	33	150	137	5.4	27	8.4	23	1/4"	120	M5X0.8
GPF300(C/N)08	62.5	67.5	41	197	179	6.5	40	8	27	1/4"	158	G1/4
GPF300(C/N)10	62.5	67.5	41	197	179	6.5	40	8	27	3/8"	158	G1/4
GPF400(C/N)10	80	84	50	220	202.5	8.5	55	11	33.5	3/8"	177.5	G1/4
GPF400(C/N)15	80	84	50	220	202.5	8.5	55	11	33.5	1/2"	177.5	G1/4



Specification

Model	GPR20006	GPR30008	GPR40008	GPR40010	GPR40015
Fluid	Air				
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"
Max. supply pressure	1.0MPa(145psi)				
Operating pressure	Lower pressure	0.005~0.2MPa(0.73~29psi)		0.01~0.2MPa(1.45~29psi)	
	Medium pressure	0.01~0.4MPa(1.45~58psi)			
	High pressure	0.01~0.8MPa(1.45~116psi)			
Sensitivity	Within 0.2%F.S.				
Repeatability	Within ±0.5%F.S.				
Air consumption (ANR)	≤4L/min	≤4L/min	≤9.5L/min	≤11.5L/min	
Temperature range	-20~70°C(Unfreeze)				
Weight	144g	336g	717g		

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

Symbol



Product feature

1. High pressure regulating accuracy and rapid-response.
2. Good pressure and flow chart.
3. Easy installation, it can be installed independently by bracket or directly with existing filter combination components of module type.
4. In addition to high pressure type, the type of medium pressure and lower pressure can be selected.

Ordering code

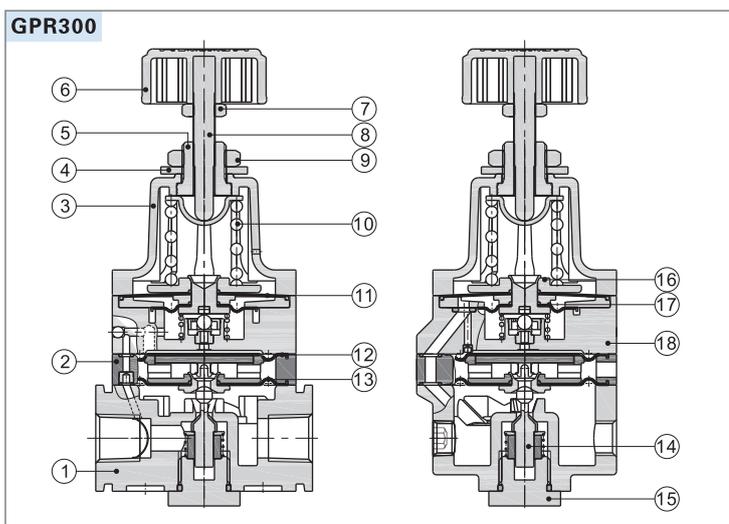
GPR300 08 H □ □ G

① ② ③ ④ ⑤ ⑥

① Model	② Port size	③ Regulating pressure range	④ Accessories	⑤ Pressure gauge	⑥ Thread type [Note1]
GPR200: 00 Series Precision Regulator	06: 1/8"	L: 0.005~0.2MPa(0.73~29psi) M: 0.01~0.4MPa(1.45~58psi) H: 0.01~0.8MPa(1.45~116psi)	Blank: Bracket J: No bracket	Blank: With pressure gauge N: Without pressure gauge	Blank: PT(Scale :MPa&psi) G: G(Scale:MPa&bar) T: NPT(Scale:bar&psi)
GPR300: 300 Series Precision Regulator	08: 1/4"	L: 0.01~0.2MPa(1.45~29psi) M: 0.01~0.4MPa(1.45~58psi) H: 0.01~0.8MPa(1.45~116psi)			
GPR400: 400 Series Precision Regulator	08: 1/4" 10: 3/8" 15: 1/2"	L: 0.01~0.2MPa(1.45~29psi) M: 0.01~0.4MPa(1.45~58psi) H: 0.01~0.8MPa(1.45~116psi)			

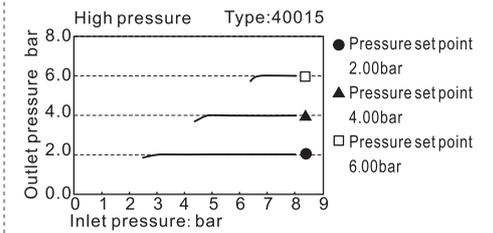
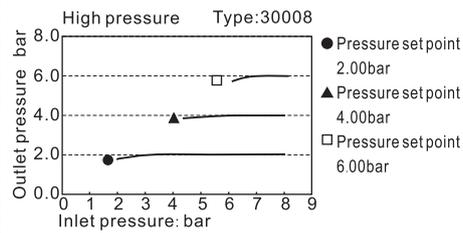
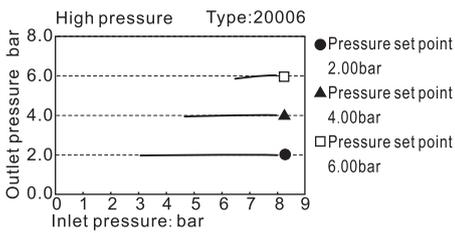
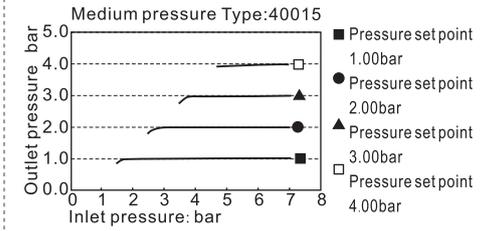
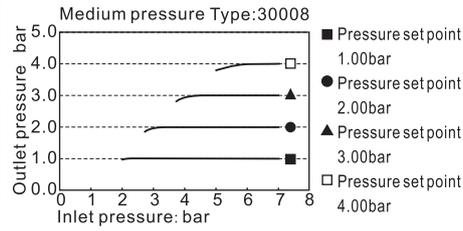
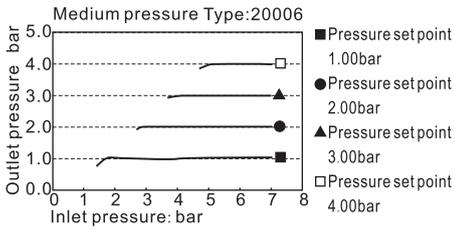
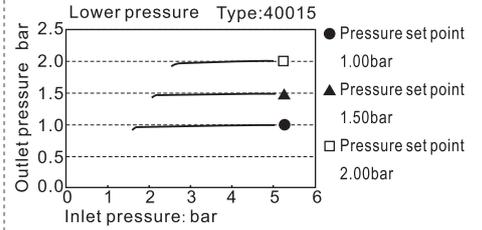
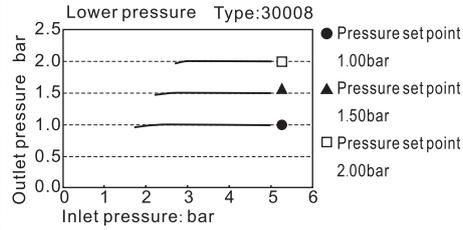
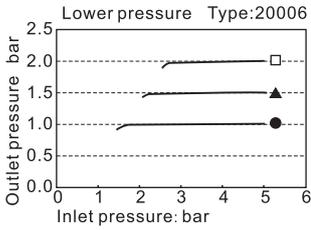
[Note1] Please consult us for special correspondence.

Inner structure

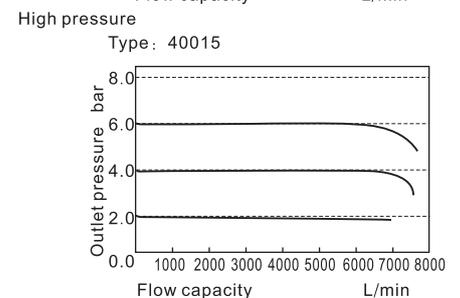
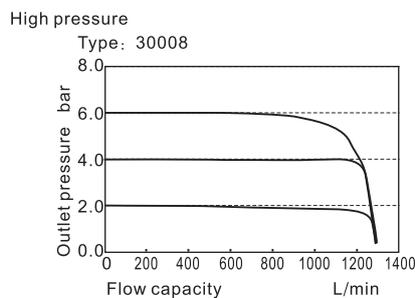
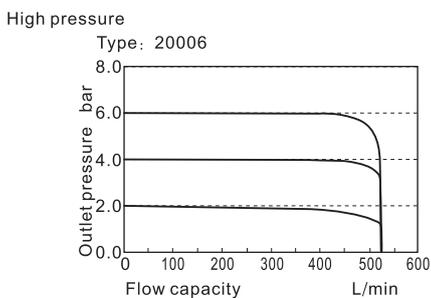
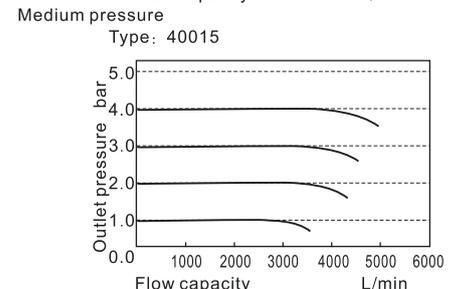
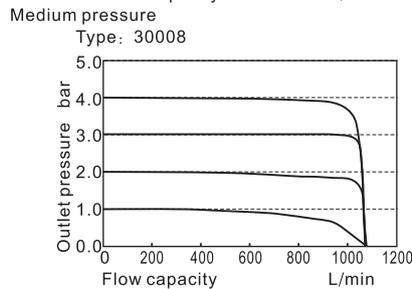
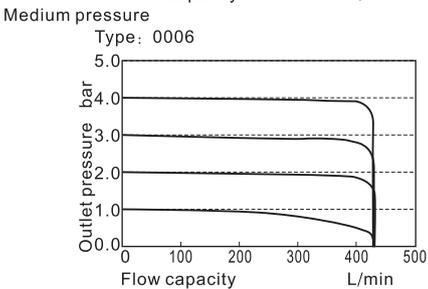
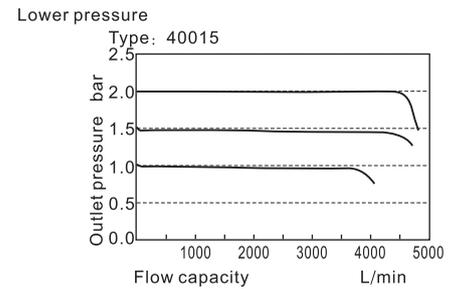
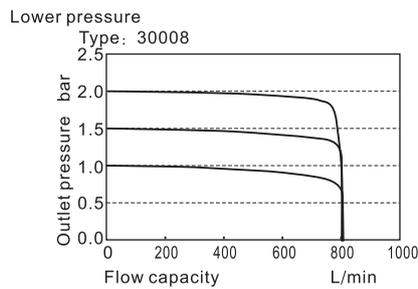
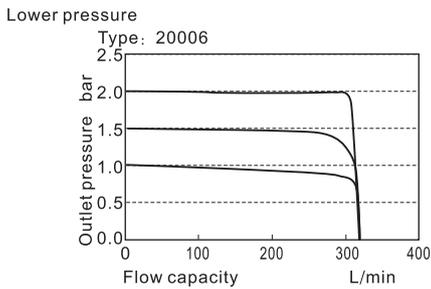


No.	Item	Material
1	Regulator body	Aluminum alloy
2	Pilot body	Plastic
3	Regulator seat	Aluminum alloy
4	Bracket gasket	SPCC
5	Adjusting nut	Carbon steel
6	Regulator knob	Plastic
7	Nut	Carbon steel
8	Regulator spindle	Carbon steel
9	Nut	Carbon steel
10	Spring	Spring steel
11	Pilot upper diaphragm	NBR
12	Regulator upper diaphragm	NBR
13	Regulator lower diaphragm	NBR
14	Main valve	Stainless steel+NBR
15	Bonnet	Carbon steel
16	Pilot diaphragm upper hard core	Aluminum alloy
17	Pilot lower diaphragm	NBR
18	Nozzle body	Aluminum alloy

Pressure chart

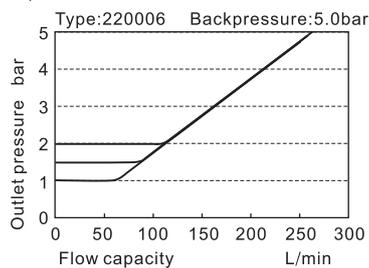


Flow chart

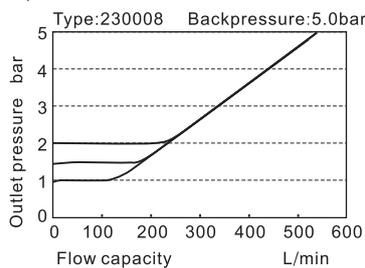


Overflow chart

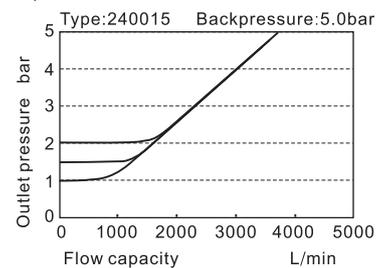
Lower pressure



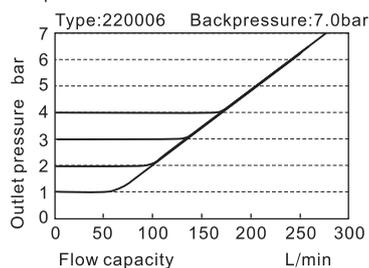
Lower pressure



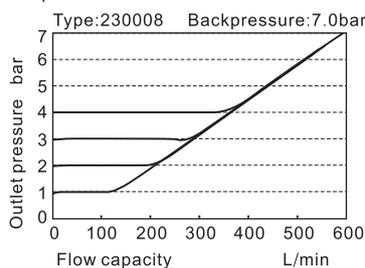
Lower pressure



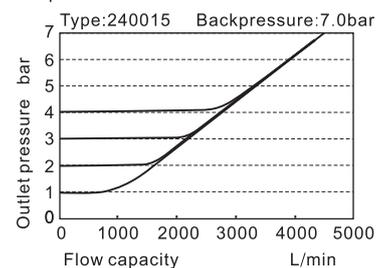
Medium pressure



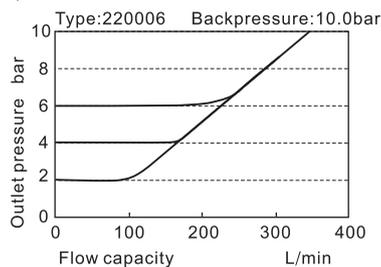
Medium pressure



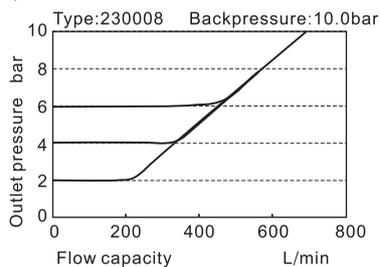
Medium pressure



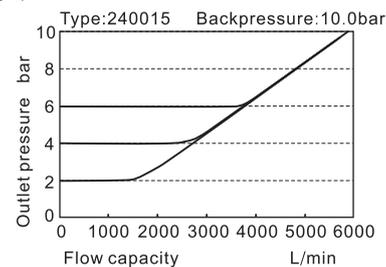
High pressure



High pressure

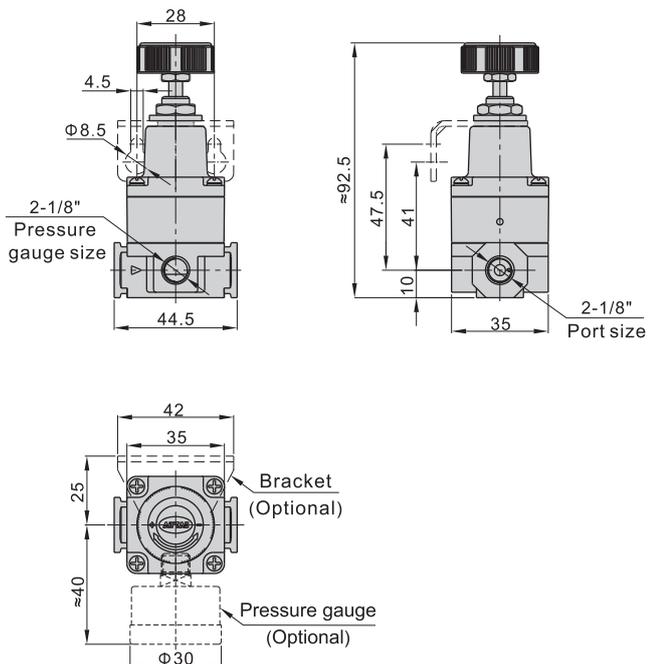


High pressure

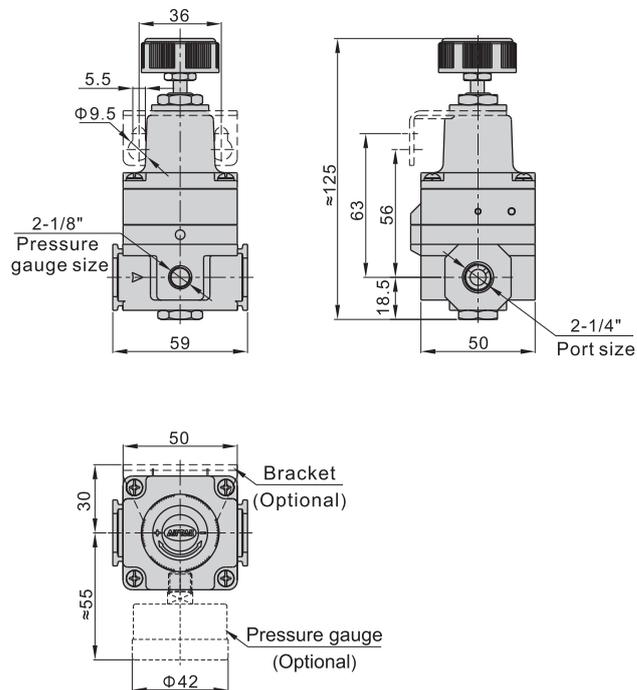


Dimensions

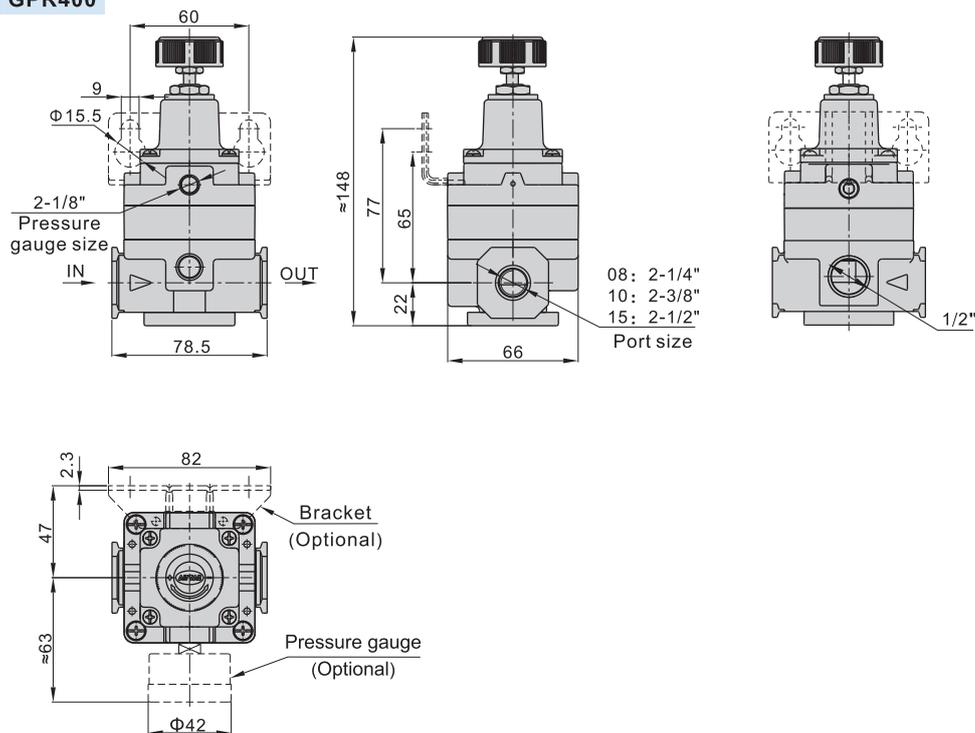
GPR200



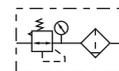
GPR300



GPR400



Symbol



Product feature

1. Circular square pressure gauge which with clip and magnifier is used to save installation space.
2. The pressed-in self-locking mechanism can prevent the abnormal movement of the set pressure caused by external interfere.
3. Balanced design is adopted for the pressure adjustment mechanism.
4. Unique diversion structure spins the air flowing through to effectively separate the liquid from the air and reliably filter the solid grain.
5. The filtering grade includes 0.3 μm and 0.01 μm (optional).
6. Two drain types are available: semi-auto drain and automatic drain.
7. Three material of bowl are available: PC, Nylon and metal.
8. The bracket can be selected for installation.

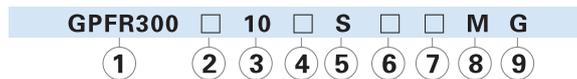
Specification

Model	GPFR200-06	GPFR200-08	GPFR300-08	GPFR300-10	GPFR400-10	GPFR400-15
Fluid	Air					
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	3/8"	1/2"
Filtering grade	0.3 μm or 0.01 μm					
Pressure range	0.15~0.9MPa(20~130psi)					
Max. pressure	1.0MPa(145psi)					
Proof pressure	1.5MPa(215psi)					
Temperature range	-5~70°C(Unfreeze)					
Rated flow capacity [Note2]	M	150L/min		330L/min		820L/min
	D	90L/min		180L/min		450L/min
Capacity of drain bowl	25CC		60CC		100CC	
Weight	310g		500g		910g	

[Note1] G thread, NPT thread are available.

[Note2] Conditions: inlet pressure 0.7MPa, outlet pressure 0.5MPa. The rated flow varies with the inlet pressure. If the flow exceeds the rated flow, oil will flow to the secondary side. Please note.

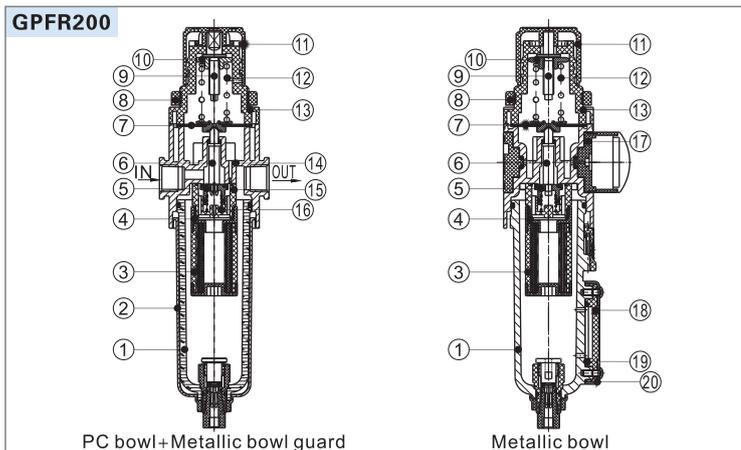
Ordering code



① Model	② Material of bowl	③ Port size	④ Drain type	⑤ Type code	⑥ Accessories	⑦ Pressure gauge	⑧ Filtering grade	⑨ Thread type
GPFR200:GP200 Series Precision filter-regulator	Blank: PC N: Nylon C: Metal	06: 1/8" 08: 1/4"	Blank: Semi-auto drain	S: Standard	Blank: Bracket	Blank: Circular with clip	M: 0.3μm D: 0.01μm	Blank: PT (MPa/psi) G: G(bar/MPa) T: NPT(psi/bar)
GPFR300:GP300 Series Precision filter-regulator		08: 1/4" 10: 3/8"		A: Automatic drain				
GPFR400:GP400 Series Precision filter-regulator		10: 3/8" 15: 1/2"						

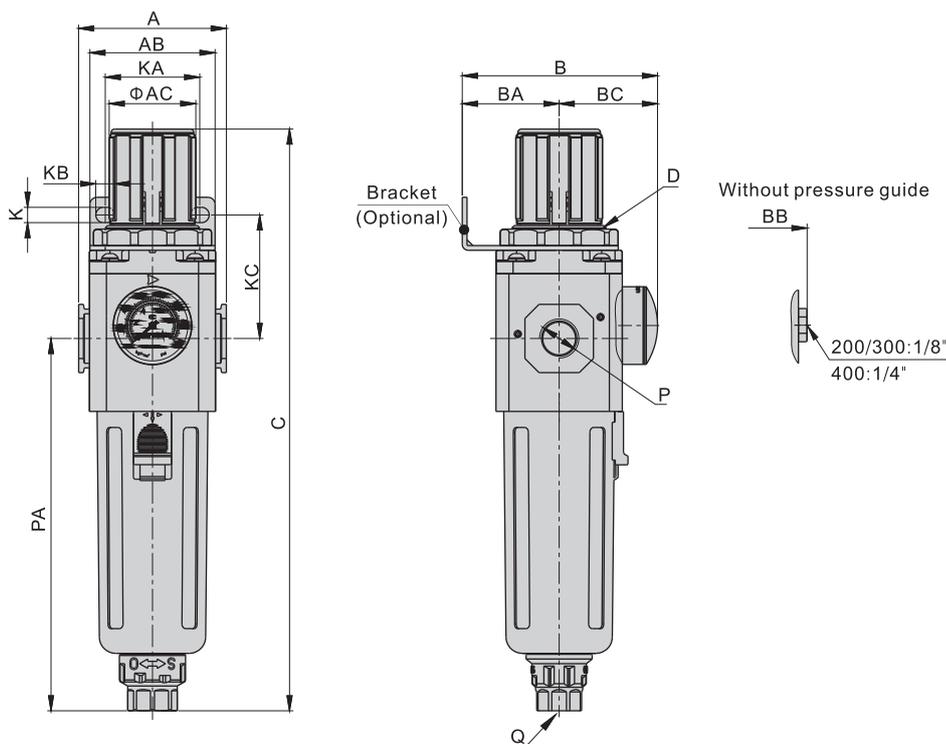
[Note1] The maximum work pressure of lower pressure type is 58psi(0.4MPa). [Note2] Please refer to page 201 for details of sealing plate Installation.

Inner structure



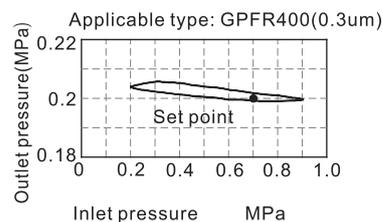
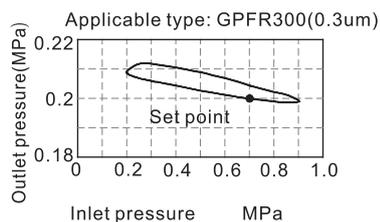
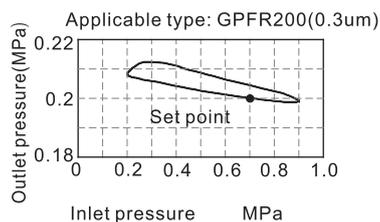
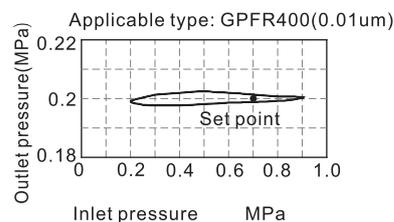
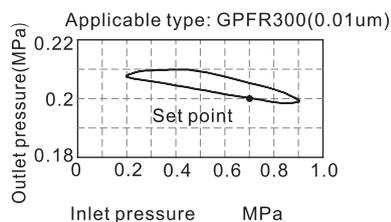
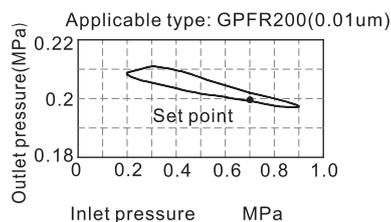
No.	Item	Material
1	Drain bowl	PC\nylon\aluminium alloy
2	Meter cover	SPCC
3	Filter core	Polymer materials
4	Gasket	NBR
5	Adjusting plug	Aluminum alloy & Rubber
6	Adjusting spool	POM
7	Diaphragm	NBR
8	Fixation ring cap	POM
9	Adjusting spindle	Steel
10	Regulator nut	Steel
11	Pressure knob	POM
12	Spring	SWPB
13	Adjusting seat	POM
14	Body of filter-regulator	Aluminium alloy
15	Gas distribution	POM
16	Spring	SWPB
17	Gauge	-
18	Liquid meter inside cover	PC
19	Liquid meter seal	NBR
20	Liquid meter cover	SPCC

Dimensions

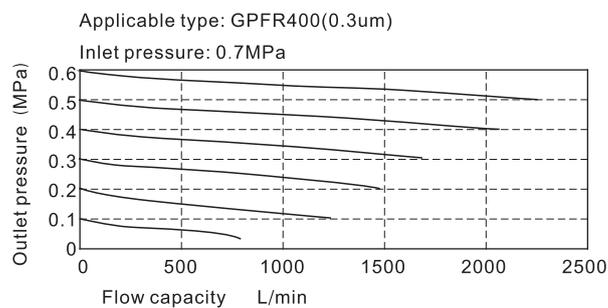
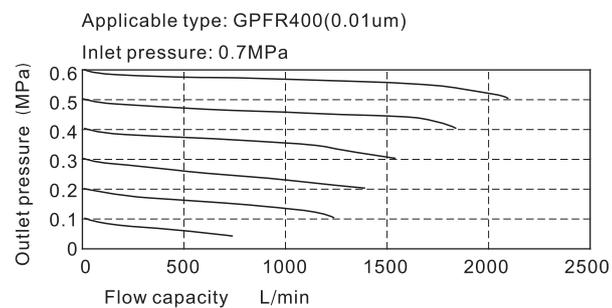
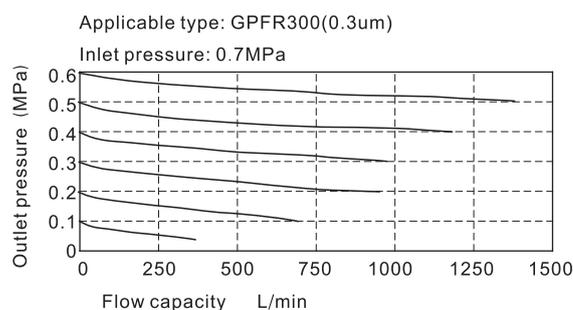
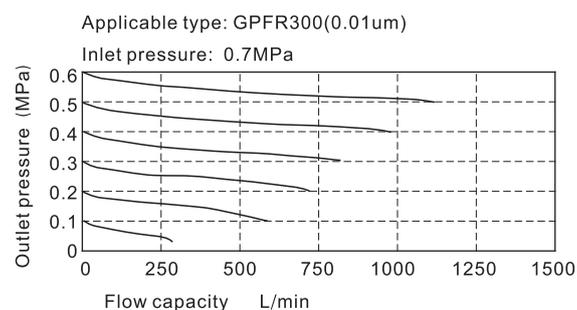
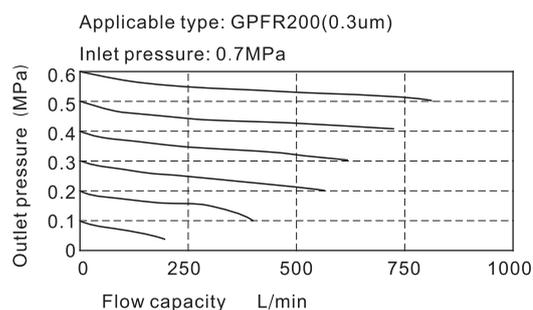
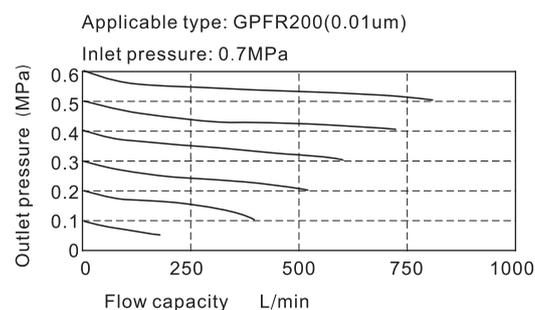


Model\Item	A	AB	AC	B	BA	BB	BC	C	D	K	KA	KB	KC	P	PA	Q
GPFR200-06	52.5	55	31	69	30	55.5	39	192.5	M33x1.5	5.4	34	15.4	52	1/8"	120	M5X0.8
GPFR200-08	52.5	55	31	69	30	55.5	39	192.5	M33x1.5	5.4	34	15.4	52	1/4"	120	M5X0.8
GPFR300-08	62.5	53	38	82.5	41	71.5	41.5	247	M40x1.5	6.5	40	8	52.5	1/4"	158	G1/4
GPFR300-10	62.5	53	38	82.5	41	71.5	41.5	247	M40x1.5	6.5	40	8	52.5	3/8"	158	G1/4
GPFR400-10	80	72	52	99	50	88	49	285.5	M55x2.0	8.5	55	11	57	3/8"	177.5	G1/4
GPFR400-15	80	72	52	99	50	88	49	285.5	M55x2.0	8.5	55	11	57	1/2"	177.5	G1/4

Pressure chart



Flow chart



Compendium of A,B Series preparation unit

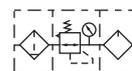
P217	Product feature	Photo	P219	Product feature	Photo
AC、BC Series F.R.L Unit	<ul style="list-style-type: none"> ●The efficiency of water separating is high ●The pressure loss is low ●The flow of miststart is low ●Convenient for installation and application ●AC/BC series is optional ●High-strength plastic shields is optional ●Port size: 1/8" 1/4" 3/8" 1/2" 		AFC、BFC Series FR.L Unit	<ul style="list-style-type: none"> ●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	<ul style="list-style-type: none"> ●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	<ul style="list-style-type: none"> ●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	<ul style="list-style-type: none"> ●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	<ul style="list-style-type: none"> ●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.

Symbol



Product feature

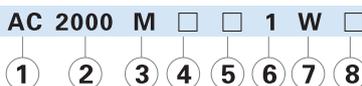
1. The structure is delicate and compact, which is convenient for installation and application.
2. The pressed-in self-locking mechanism can prevent the abnormal movement of the set pressure caused by external interfere.
3. The pressure loss is low and the efficiency of water separating is high.
4. The 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	40 μm or 5 μm					
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

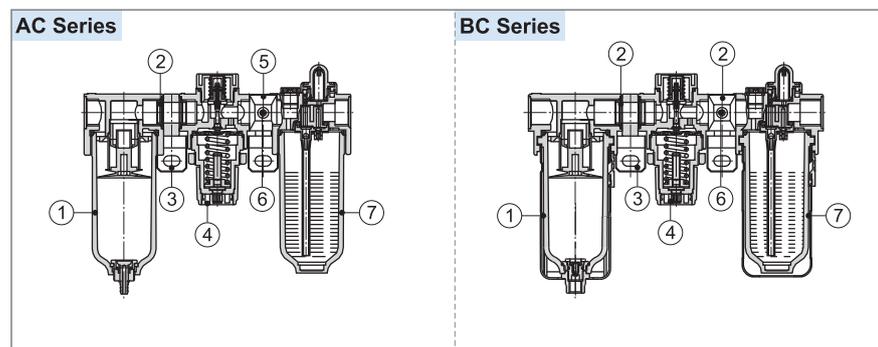
[Note1] PT thread, G thread and NPT thread are available.

Ordering code



① Model	② Port size	③ Drain type	④ Type code	⑤ Pressure gauge	⑥ Scale	⑦ Filtering grade	⑧ Thread 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/cm ² & psi	Blank: 40 μm W: 5 μm	Blank: PT (Scale: MPa or kgf/cm ² & 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					

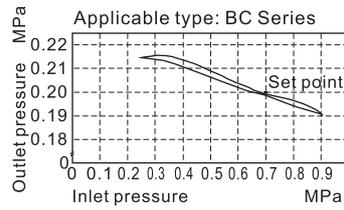
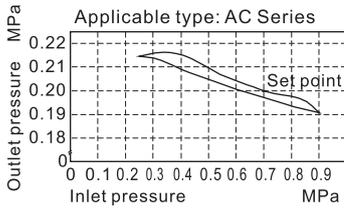
Inner structure



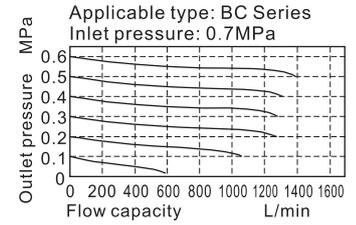
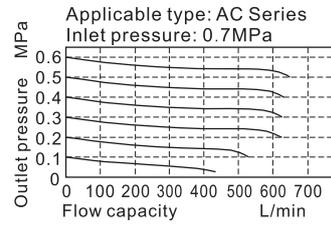
No.	Item	No.	Item
1	AF, BF Series filter	5	A, B Series fix kit
2	A, B Series gasket	6	Screw
3	A, B Series bracket	7	AL, BL Series lubricator
4	AR, BR Series regulator		

Pressure and feature of flow

Pressure chart



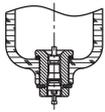
Flow chart



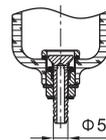
Selection of drain mode

AC Series

Manual drain



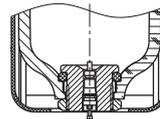
Semi-auto drain



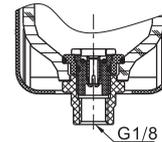
This semi-auto drain can also achieve the function of manual drain. PU tube with an inner diameter of $\phi 4$ mm is recommended

BC Series

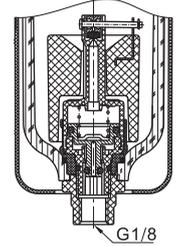
Manual drain



Semi-auto drain

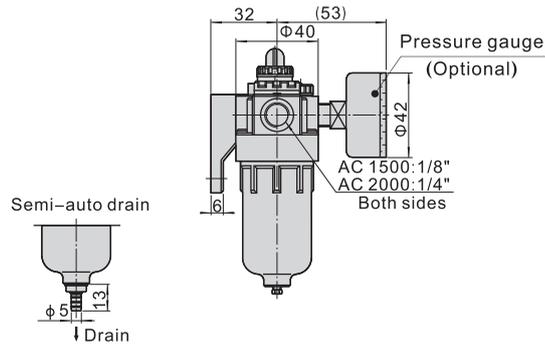
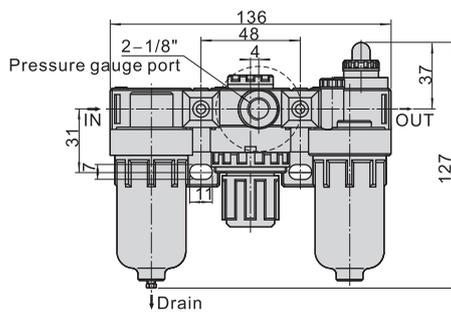


Automatic drain

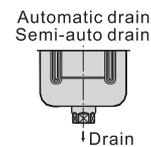
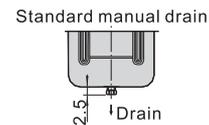
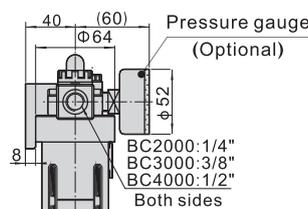
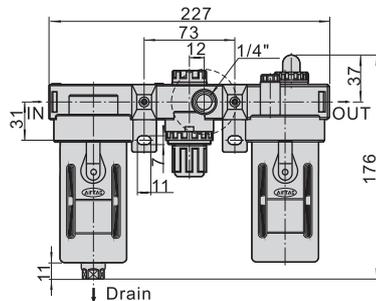


Dimensions

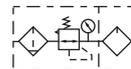
AC Series



BC Series



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	40 μm or 5 μm					
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.

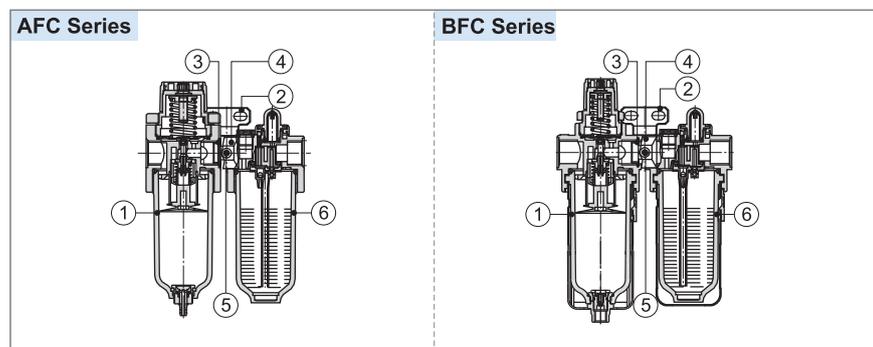
Ordering code

AFC 2000 M □ □ 1 W □



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

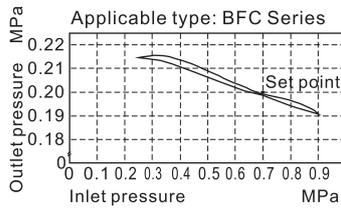
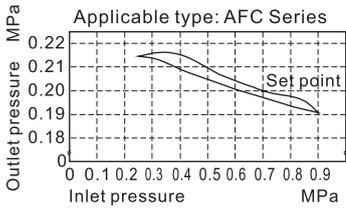
Inner structure



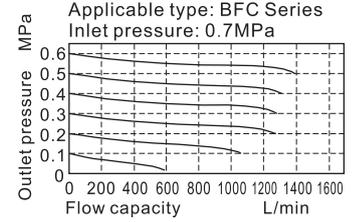
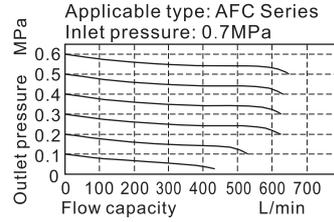
No.	Item
1	AFR, BFR Series filter & regulator
2	A, B Series bracket
3	A, B Series gasket
4	A, B Series fixed kit
5	Screw
6	AL, BL Series lubricator

Pressure and feature of flow

Pressure chart



Flow chart

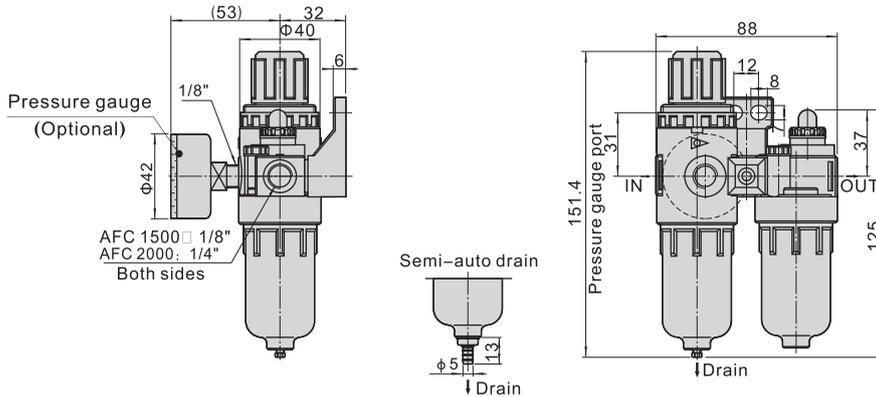


Selection of drain mode

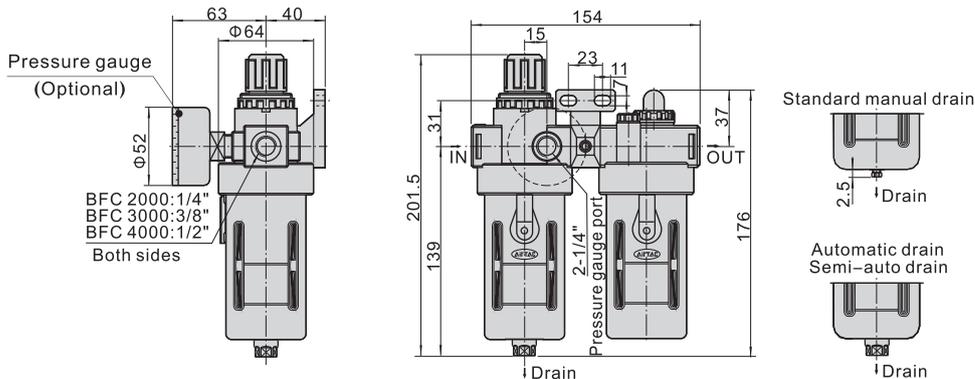
The drain modes of different series are different. Please refer to P218 for details.

Dimensions

AFC Series



BFC Series





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	40 μm or 5 μm				
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.

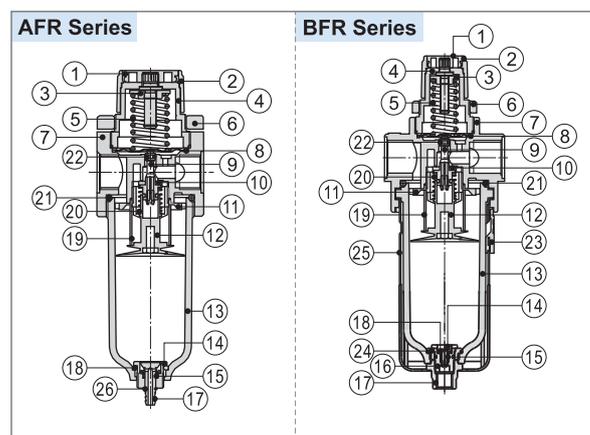
Ordering code

AFR 2000 M □ □ □ 1 W □

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Model	② Port size	③ Drain type	④ Type code	⑤ Accessories	⑥ Pressure gauge	⑦ Scale	⑧ Filtering grade	⑨ Thread 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/cm ² & psi	Blank: 40 μm W: 5 μm	Blank: PT (Scale: Mpa or kgf/cm ² & 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						

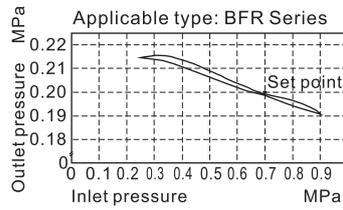
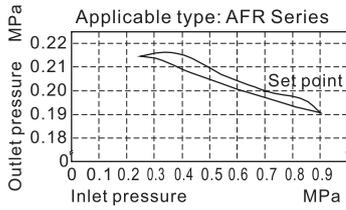
Inner structure



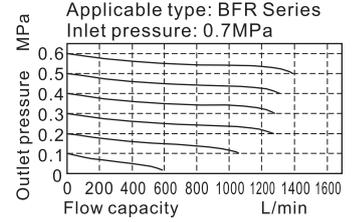
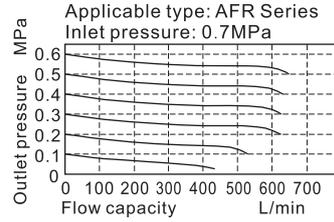
No.	Item	Material	No.	Item	Material	
1	Push button	POM	14	Drain kit	POM	
2	Adjusting button	POM	15	Return spring	Stainless steel	
3	Adjusting nut	Steel	16	Drain seat	POM	
4	Adjusting seat	POM	17	Drain pillar	POM	
5	Adjusting spring	SWC	18	Drain O-ring	NBR	
6	Fixed ring	POM	19	Filter element	5 μm 40 μm	HDPE
7	Body	Aluminum alloy			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	

Pressure and feature of flow

Pressure chart



Flow chart

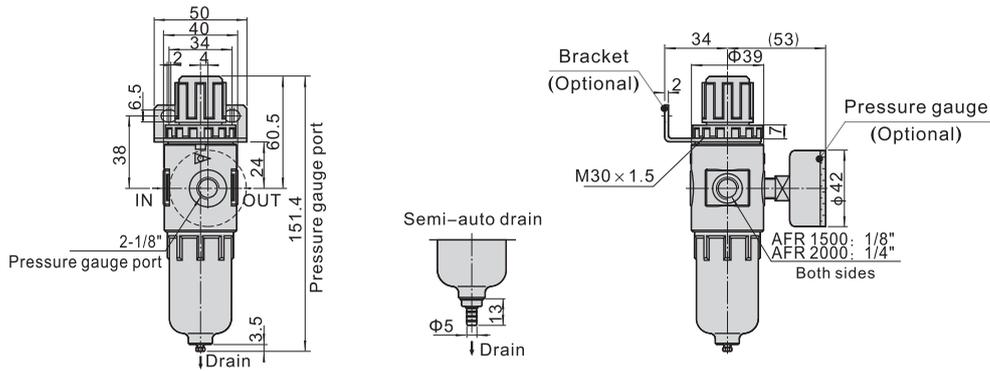


Selection of drain mode

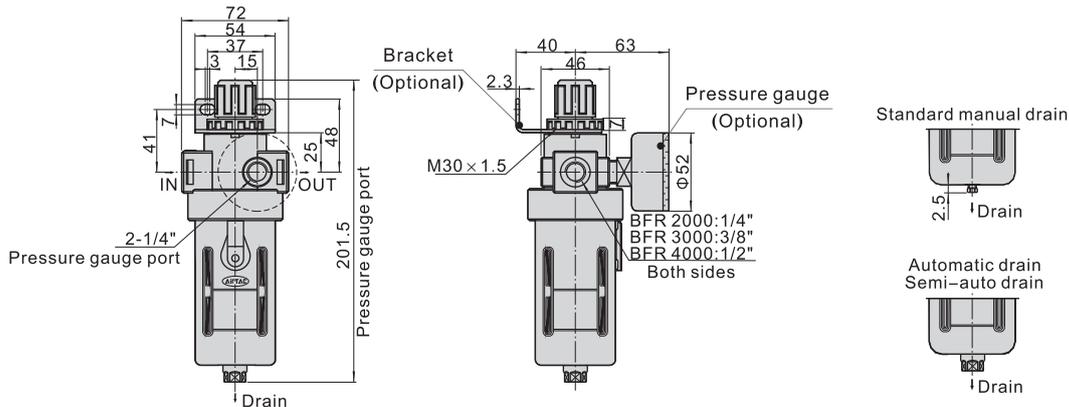
The drain modes of different series are different. Please refer to P218 for details.

Dimensions

AFR Series



BFR Series





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 μm and 40 μm (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 μm and 40 μm (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 μm or 5 μm		
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

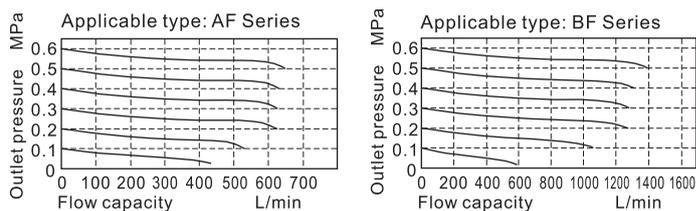
AF 2000 M W □

① ② ③ ④ ⑤

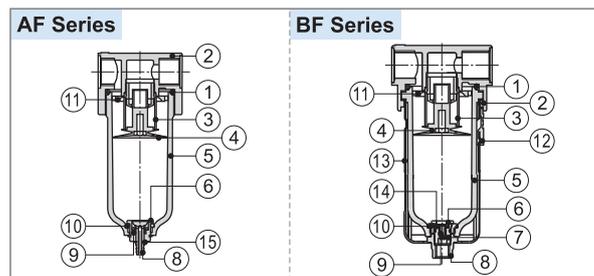
① Model	② Port size	③ Drain type [Note]	④ Filtering grade	⑤ Thread type
AF:A Series Filter	1500: 1/8" 2000: 1/4"	Blank: Semi-auto drain M: Manual drain	Blank: 40 μm W: 5 μm	Blank: PT G: G T: NPT
BF:B Series Filter	2000: 1/4" 3000: 3/8" 4000: 1/2"	Blank: Semi-auto drain M: Manual drain A: Automatic drain		

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

Flow chart



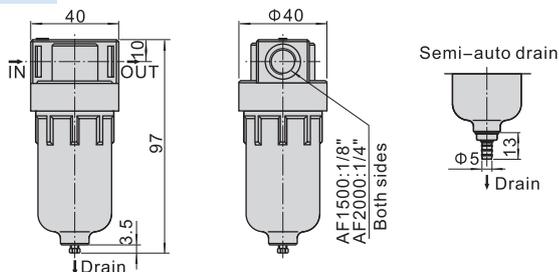
Inner structure



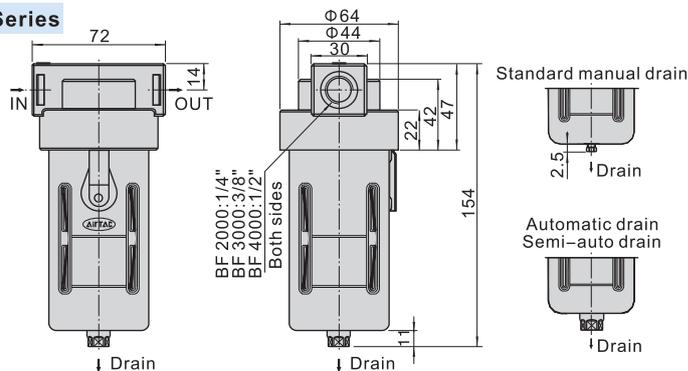
No.	Item	Material	No.	Item	Material
1	Drain bowl O-ring	NBR	8	Drain pillar	POM
2	Body	Aluminum alloy	9	Return spring	Stainless steel
3	Filter element	5 μm	10	Gasket	POM
		40 μm	11	Air guider	POM
4	Umbrella baffle	POM	12	Bowl guard switch	POM
5	Drain bowl	PC	13	Bowl guard	PA6
6	Drain kit	POM	14	Drain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

Dimensions

AF Series



BF Series





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°C				
Weight	200g			230g	

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

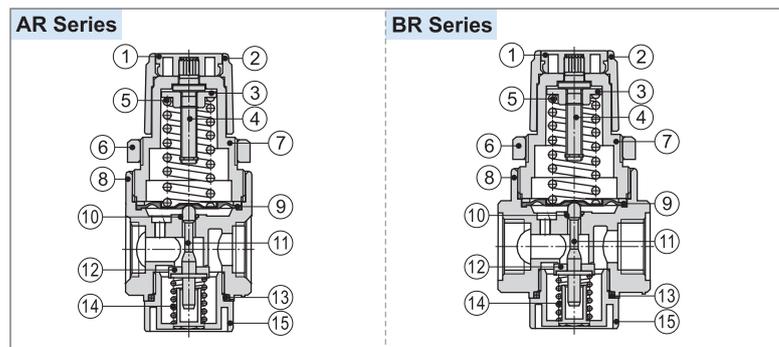
Ordering code

AR 2000 L 1

① ② ③ ④ ⑤ ⑥ ⑦

① Model	② Port size	③ Type code	④ Accessories	⑤ Pressure gauge	⑥ Scale	⑦ Thread 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/cm ² & psi	Blank: PT (Scale: Mpa or kgf/cm ² & psi) G: G(Scale:bar) T: NPT(Scale:psi)
BR: B Series Regulator	2000: 1/4" 3000: 3/8" 4000: 1/2"					

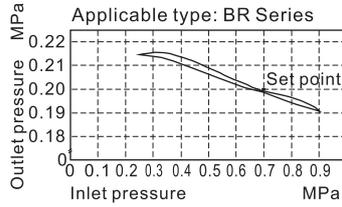
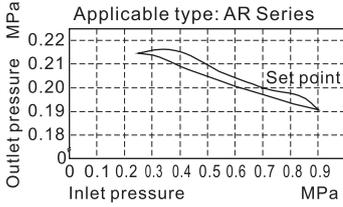
Inner structure



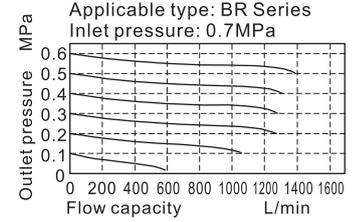
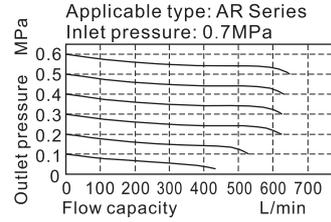
No.	Item	Material
1	Push button	POM
2	Adjusting button	POM
3	Adjusting nut	Steel
4	Adjusting pillar	Steel
5	Adjusting spring	SWC
6	Fixed ring	POM
7	Adjusting seat	POM
8	Body	Aluminum alloy
9	Diaphragm	SUS304 & rubber
10	Needle O-ring	NBR
11	Balance needle	Brass
12	Needle gasket	Aluminum alloy & rubber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

Pressure and feature of flow

Pressure chart

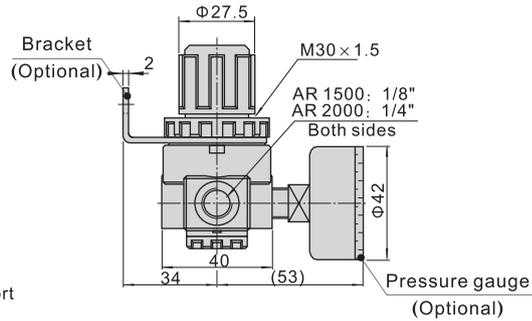
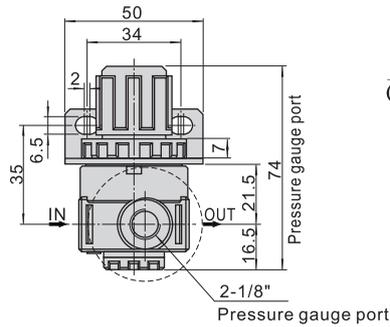


Flow chart

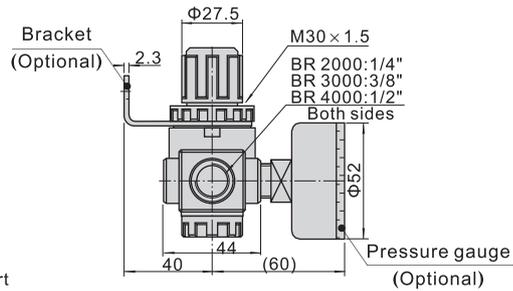
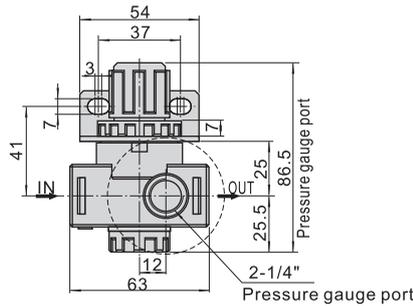


Dimensions

AR Series



BR Series





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

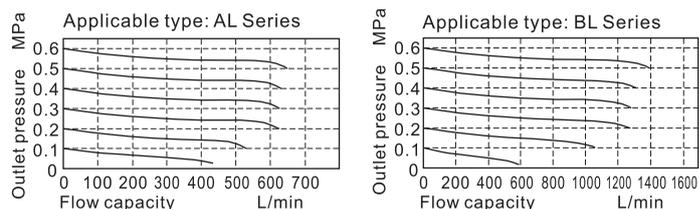
Model	AL1500	AL2000	BL2000	BL3000	BL4000
Fluid	Air				
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"
Pressure range	0.05~1.0MPa(7~145Psi)				
Proof pressure	1.5MPa(215Psi)				
Temperature range	-5~70°C(unfreeze)				
Capacity of oil bowl	25CC		90CC		
Recommended lubricant	ISO VG 32 or equivalent				
Weight	170g		250g		

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

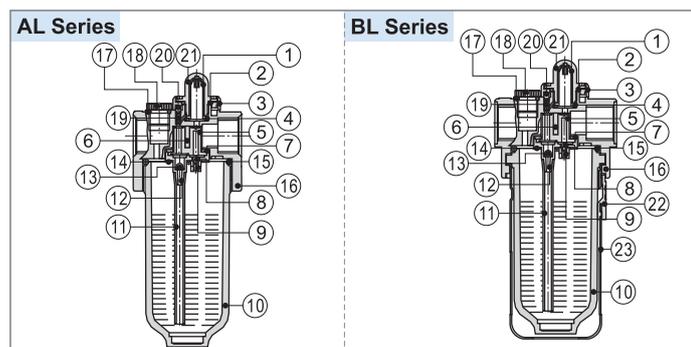
Ordering code

AL 2000 <input type="checkbox"/>		
① Model	② Port size	③ Thread 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

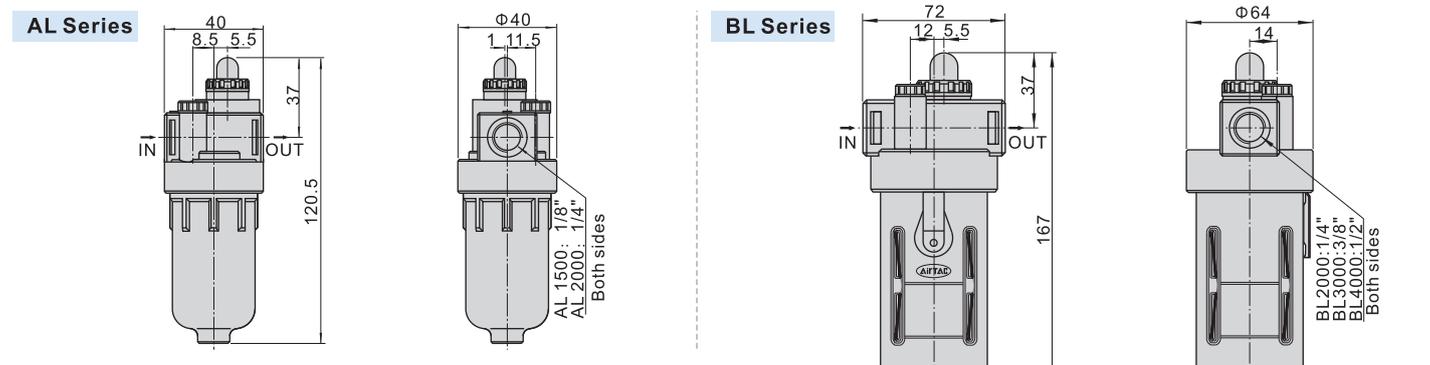


Inner structure



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



Compendium of Other Series preparation unit

P228	Product feature	Photo	P229	Product feature	Photo
SR200 Series Regulator	<ul style="list-style-type: none"> ●Delicate and compact design ●Panel support or be used in pipeline ●Adjustment is reliable and steady. ●Standard and lower pressure type are available ●Port size: 1/8" 1/4" 		SDR Series Regulator	<ul style="list-style-type: none"> ●Back pressure structure ●Compact type, cost-effective ●Broad regulating range ●Standard and lower pressure type are available ●Single unit installation ●Port size: M5 1/8" 1/4" 	
P231	Product feature	Photo	P232	Product feature	Photo
ADW Series Drip leg drain	<ul style="list-style-type: none"> ●The float is with lever structure ●Low position enables more stable drain ●Large capacity bowl ●Large size inlet port ●Double strainer ●Port size: 3/8" 1/2" 		DPS Series Digital Display Pressure Switch	<ul style="list-style-type: none"> ●PNP □ NPN Output type ●Terminal and grommet to be choused ●Wide measurement range ●Higher precision ●Digital Display type Precision and intuitionistic 	
P235	Product feature	Photo	P242	Product feature	Photo
DPH Series digital display pressure sensor (Analog output)	<ul style="list-style-type: none"> ●PNP、NPN Output type ●Terminal and grommet to be choused ●Wide measurement range ●Higher precision ●Digital Display type Precision and intuitionistic 		DPC Series Minitype No Display Pressure Switch	<ul style="list-style-type: none"> ●Wide measurement range ●Easy to install ●Two lines or three lines or NPN/PNP outlet types ●Single button to finish learning setting ●Facility and middle va 	
P244	Product feature	Photo	P245	Product feature	Photo
GS, GF, GU GP, GV Series Pressure gauge	<ul style="list-style-type: none"> ●Sensitive reaction Can work under low pressure ●Several pressure units to be selected ●Several installation ways ●Several installation accessories to be selected ●Various dimensions of screw thread are available 		GVF Series Vacuum filter	<ul style="list-style-type: none"> ●Low pressure loss ,high efficiency in separating water ●5μm and 40μm filtering grade(Optional) ●With fixing bracket ●200/300 Series ●Port size: 1/8" 1/4" 3/8" 1/2" 	
P247	Product feature	Photo			
GVR Series Vacuum regulator	<ul style="list-style-type: none"> ●In addition to panel installation, the bracket is optional for installation. ●Suitable to adjust the vacuum pressure. ●The pressure regulation is stable, the drift is small and the pressure characteristic is good. ●Port size: 1/8" 1/4" 3/8" 				

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.

Symbol



Product feature

1. Panel support can be chosen for the installation of regulator with independent use in pipeline.
2. The structure is delicate and compact, which is convenient for installation and application.
3. The performance of pressure adjustment is reliable and steady.
4. In addition to standard type, lower pressure type is optional (The highest adjustable pressure is 0.4 MPa).

Specification

Model	SR200-06	SR200L-06	SR200-08	SR200L-08
Fluid	Air			
Port size [Note1]	1/8"		1/4"	
Pressure range	Standard type:0.05~0.9MPa(7~130psi); Lower pressure type:0.03~0.4MPa(4~57psi)			
Max. pressure	1.0MPa(145psi)			
Proof pressure	1.5MPa(215psi)			
Temperature range	-20~70°C			

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

Ordering code

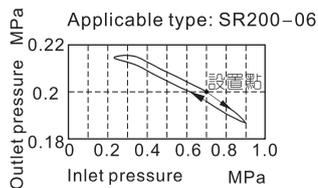
SR 200 08 L 1

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

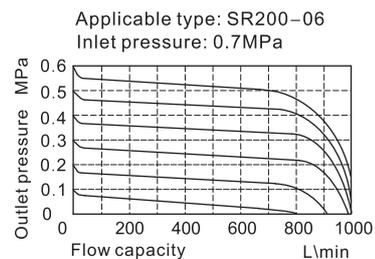
① Model	② Series code	③ Port size	④ Type code	⑤ Accessories	⑥ Pressure gauge	⑦ Scale	⑧ Thread type
SR: Regulator (Mini type)	200: 200 Series	06: 1/8" 08: 1/4"	Blank: Standard L: Lower pressure	Blank: Bracket J: No bracket	Blank: Pressure gauge N: No pressure gauge	1: MPa 2: psi 3: bar 4: kgf/cm ² & psi	Blank:PT (Scale:Mpa or kgf/cm ² & psi) G:G(Scale:bar) T:NPT(Scale:psi)

Pressure and feature of flow

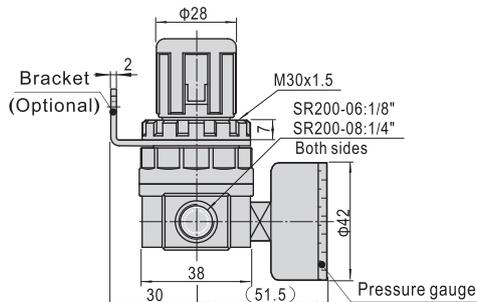
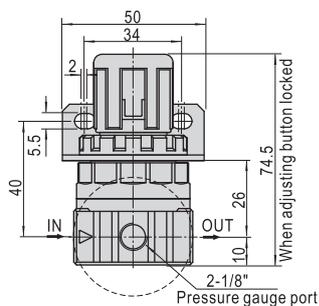
Pressure chart



Flow chart



Dimensions





Symbol



Product feature

1. Back pressure structure, compact type, cost-effective, installation time saving.
2. Broad regulating range; low-pressure type is optional other than the standard type; stable output pressure; applicable to situation which has low expectation on output pressure but high expectation on performance and cost-effectiveness.
3. Single unit installation; easy to mount

Specification

Model	SDR100-M5	SDR100-06	SDR200-06	SDR200-08	SDR100L-M5	SDR100L-06	SDR200L-06	SDR200L-08
Fluid	Air							
Pressure range	0.05~0.9MPa(7~130psi)				0.03~0.4MPa(4~57psi)			
Max. pressure	1.0MPa(145psi)							
Proof pressure	1.5MPa(215psi)							
Temperature range	-20~70□							
Port size [Note1]	M5	1/8"	1/4"	1/4"	M5	1/8"	1/4"	1/4"

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

Ordering code

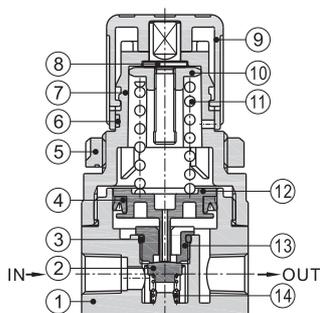
SDR 200 08 L □ □ 1 □



① Model	② Series code	③ Port size	④ Type code	⑤ Accessories	⑥ Pressure gauge	⑦ Scale	⑧ Thread type
SDR: SDR series regulator	100: 100 series 200: 200 series	M5: M5 06: 1/8"	Blank: Standard L: Lower pressure	Blank: Bracket J: No bracket	Blank: Pressure gauge N: No pressure gauge	1: MPa 2: psi 3: bar	Blank:PT G:G T:NPT

Inner structure and material of major parts

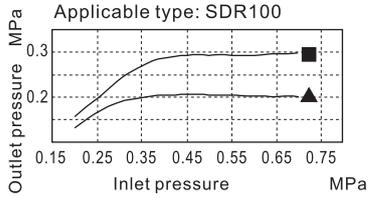
SDR Series



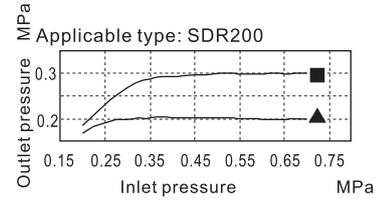
No.	Item	Material
1	Body	Aluminum alloy
2	Needle gasket	NBR
3	O-ring	NBR
4	O-ring	NBR
5	Fixed ring	POM
6	Identification ring	POM
7	Adjusting seat	POM
8	Adjusting pillar	Free-cutting steel
9	Adjusting button	POM
10	Adjusting nut	Steel
11	Adjusting spring	SWC
12	Piston rod	POM
13	Adjusting seat	POM
14	Return spring	SUS304

Pressure and feature of flow

Pressure chart

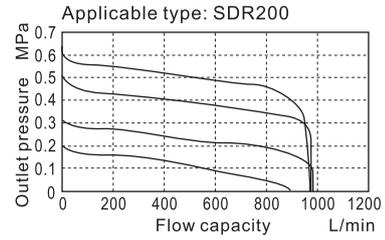
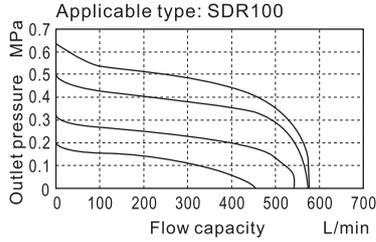


▲ Inlet pressure 0.2MPa ■ Inlet pressure 0.3MPa

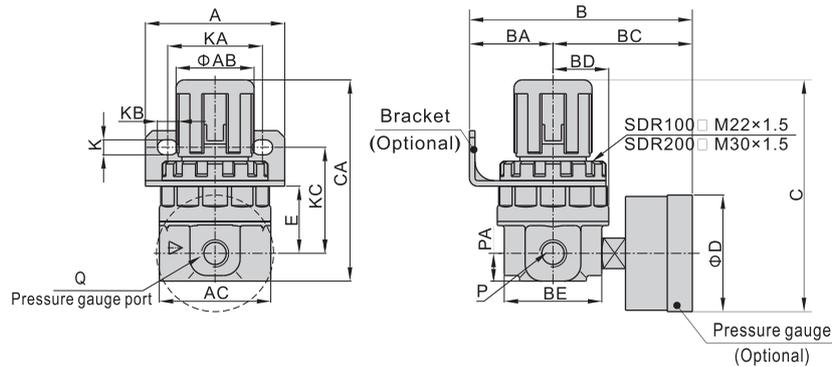


▲ Inlet pressure 0.2MPa ■ Inlet pressure 0.3MPa

Flow chart



Dimensions



Model\Item	A	AB	AC	B	BA	BC	BD	BE	C	CA	D	E	K	KA	KB	KC	P	PA	Q
SDR100□M5	35	20	32	65.5	26	39.5	14.5	29	62.5	54.5	33	17	5.5	22	7	29	M5	7.5	1/16"
SDR100□06	35	20	32	65.5	26	39.5	14.5	29	62.5	54.5	33	17	5.5	22	7	29	1/8"	7.5	1/16"
SDR200□06	50	28	40	80	30	50	20	35	83.5	72.5	42	24	5.5	34	7.5	38	1/8"	10	1/8"
SDR200□08	50	28	40	80	30	50	20	35	83.5	72.5	42	24	5.5	34	7.5	38	1/4"	10	1/8"

Note: Bracket and pressure gauge are optional.

Attentions of application

Unlock the regulating knob before pressure adjustment, then lock it after the adjustment. Otherwise, may cause the regulating knob damage or the outlet pressure change.

1. Pull the regulating knob to unlock, when the orange marking ring below the regulating knob appears, indicating that the regulating knob is unlocked.
2. Push the regulating knob to lock, when the orange marking ring below the regulating knob disappears completely, indicating that the regulating knob is locked.





Symbol



Product feature

1. The float is with lever structure. Low position enables more stable drain.
2. The bowl made of High intensity PC and covered by steel case is safer to use.
3. Double strainer guarantees the operation of the drainer.
4. Inlet with large port size prevents accumulation of particles or rust.
5. The drainage bowl with large capacity can keep more rust and dirt than general drains.
6. The drain is equipped with large float and sensitive to control.
7. The bowl with large size can store a certain amount of water which reduces discharging time and extends the service life.

Specification

Model	ADW400-10	ADW400-15
Fluid	Air	
Pressure range	0.15~1.0MPa(22~145psi)	
Max. pressure	1.0MPa(145psi)	
Proof pressure	1.5MPa(215psi)	
Temperature range	-5~70℃ (Unfreezing)	
Port size [Note1]	IN=3/8"	IN=1/2"

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

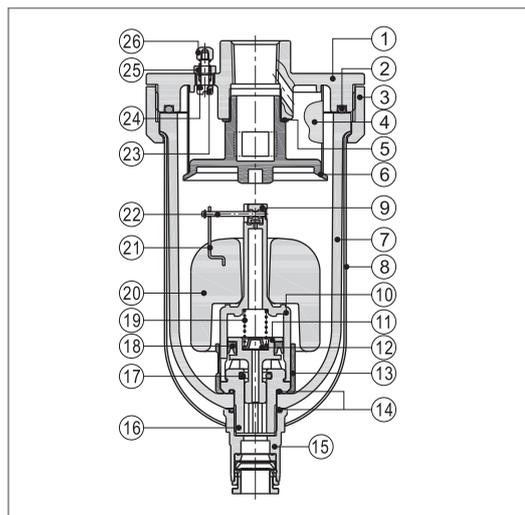
Ordering code

ADW 400 10 □

① ② ③ ④

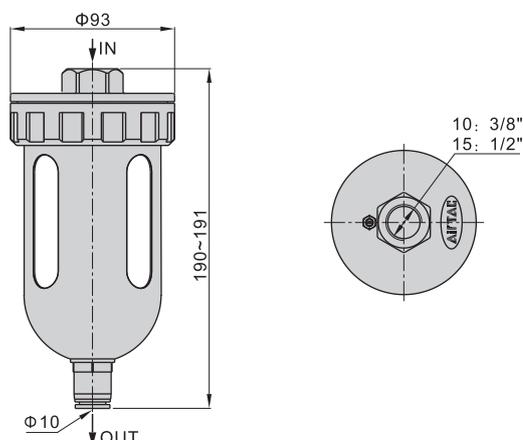
① Model	② Series code	③ Port size	④ Thread type
ADW: Dripleg drain	400: 400 Series	10: 3/8" 15: 1/2"	Blank: PT G: G T: NPT

Inner structure and material of major parts



No.	Item	Material	No.	Item	Material
1	Body	Aluminum alloy	14	O-ring	NBR
2	O-ring	NBR	15	Drain joint set	
3	Body nut	Aluminum alloy	16	Drain baffle	POM
4	Filter gauze	Stainless steel	17	O-ring	VITON
5	Fixed ring	NBR	18	O-ring	NBR
6	Filter	POM	19	Spring	Spring steel
7	Drain bowl	PC	20	Float	PU rigid foam
8	Bowl guard	08F	21	Link iron	Stainless steel
9	Valve	Stainless steel & rubber	22	Lever	Stainless steel
10	Piston	Aluminum alloy	23	Adjustable screw	Stainless steel
11	Float	PC+ABS	24	Gasket	EPDM
12	Silencer	Agglomerated by brass grain	25	Balance needle seat	Stainless steel
13	Filter element	Stainless steel & rubber	26	Screw	Steel

Dimensions



Installation and application

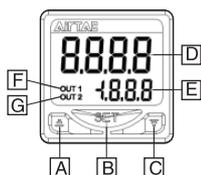
1. ADW400 series are applicable to following air compressing equipments: air storage tank, dryer, filter, and piping.
2. Minimum 300mm room is required if the bottom end of above-mentioned equipments being connected with a (1/2") joint.
3. Using a 1/2" hand lever valve between the air compressing equipment and the inlet of ADW400 is good for maintenance.
4. The air displacement of the air compressing equipment can't be lower than 182 L/min.
5. Make sure the drain is vertical downward and the drain pipe is not bended upside.
6. Do not use acidoid or volatile oil gas (hydrochloric acid, petrol, methylbenzene, etc.) to clean the PC bowl. This may cause break.
7. Push the hexagon nut of the body to release the residual pressure before dissembling the PC bowl and metal protection case to avoid any injury or harm.



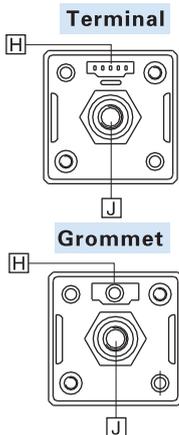
Symbol



User interface Instruction



No.	Item
A	Value up button
B	Setting button
C	Value Down button
D	Pressure display area
E	Set pressure display area
F	Output 1 indicator light
G	Output 2 indicator light
H	Power and signal connector
J	Pressure input



Specification

Input power	Voltage	12~24 VDC ± 10% Ripple(p-p) < 10%
	Fluid	Non-corrosive gas
Measurement range	DPSN1(P1)-01:	-100kPa~100kPa
	DPSN1(P1)-10:	-100kPa~1,000kPa
Pressure range	Withstand pressure	DPSN1(P1)-01: 200kPa DPSN1(P1)-10: 1500kPa
	Measurement error	± 2% F.S. , ± 1digit(Temperature:25 ± 3°C)
	Repeatability accuracy	± 0.2% F.S.
	Temperature error	± 3% F.S.(Base 25°C, Range 0 to 50°C)
Display	Type	Double row LCD display,4-digit measurement, 3.5-digit setting
	Color	2-color LCD (Red/Green)
	Display period	100ms, 250ms, 500ms, 1,000ms
Output	Output group	DPSN1:Built-in two sets of NPN output DPSP1:Built-in two sets of PNP output
	Transistor output	NPN:Maximum applied voltage 30V/100mA,Retained voltage <1.5V PNP:Maximum applied voltage 30V/100mA,Retained voltage <1.5V
	Output delay time	2ms, 20ms, 50ms, 100ms, 250ms, 500ms 1,000ms, 2,500ms, 5,000ms
	Hysteresis	DPSN1(P1)-01: 0.1、0.2、0.3..... 0.8(kPa) DPSN1(P1)-10: 1、2、3..... 8(kPa)
Pressure Unit	DPSN1(P1)-01	kPa, kgf/cm ² , bar, psi, mmHg, inHg
	DPSN1(P1)-10	MPa, kPa, kgf/cm ² , bar, psi, cmHg, inHg
	Vibration resistance	10 to 500Hz with 10mm Amplitude in X, Y, Z directions for 2hrs
	Impact resistance	Maximum 100m/s ² , X, Y, Z directions 3 times each
	Operating Temp. range	0~50°C
	Stored Temp. range	-20~65°C
	Humidity range	35%~80% RH(No condensation)

Ordering code

DPS N1 □ -01 020 □

① ② ③ ④ ⑤ ⑥

① Model	② Output type	③ Electrical entry	④ Measurement range	⑤ Lead wire length	⑥ Piping specifications
DPS: Digital Display Pressure Switch	N1: NPN P1: PNP	Space: Plug-in connector B: Pre-wired type [Note1]	01: -100kPa~100kPa 10: -100kPa~1,000kPa	020: Length 2m 030: Length 3m 050: Length 5m C08:150mm with M8 plug connector[Note2]	Space: PT 1/8 with M5 female thread T: Male thread NPT1/8; female thread: 10-32UNF G: Male thread G1/8; female thread: M5

[Note1] The safety grade of pre-wired type is IP63.

[Note2] There is no plug-in connector type for C08.

The sockets of C08 need additional order. Please check on the right.

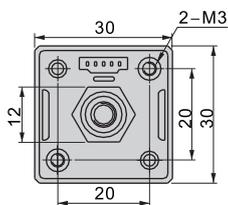
Ordering code of Socket F - DPS C08 4 020



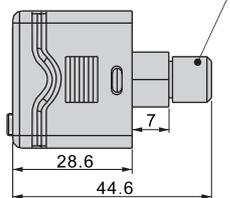
Category code	F: Accessory
Specification code	DPS: Digital Display Pressure Switch
Socket type	C08:M8 socket
Wire type	4: 4-wire type
Wire length	020: 2 meters 030:3meters 050:5meters

Dimensions

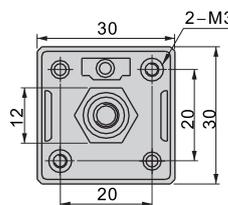
Plug-in connector



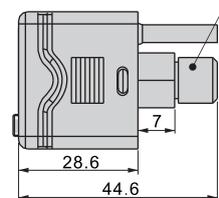
Piping specifications:
Space: PT 1/8 with M5 female thread
T: Male thread NPT1/8; female thread: 10-32UNF
G: Male thread G1/8; female thread: M5



Pre-wired type

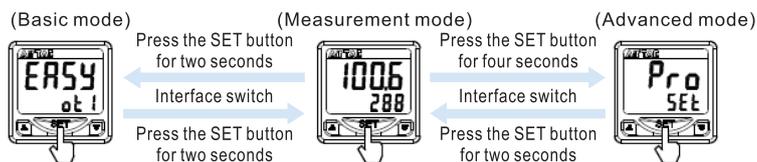


Piping specifications:
Space: PT 1/8 with M5 female thread
T: Male thread NPT1/8; female thread: 10-32UNF
G: Male thread G1/8; female thread: M5

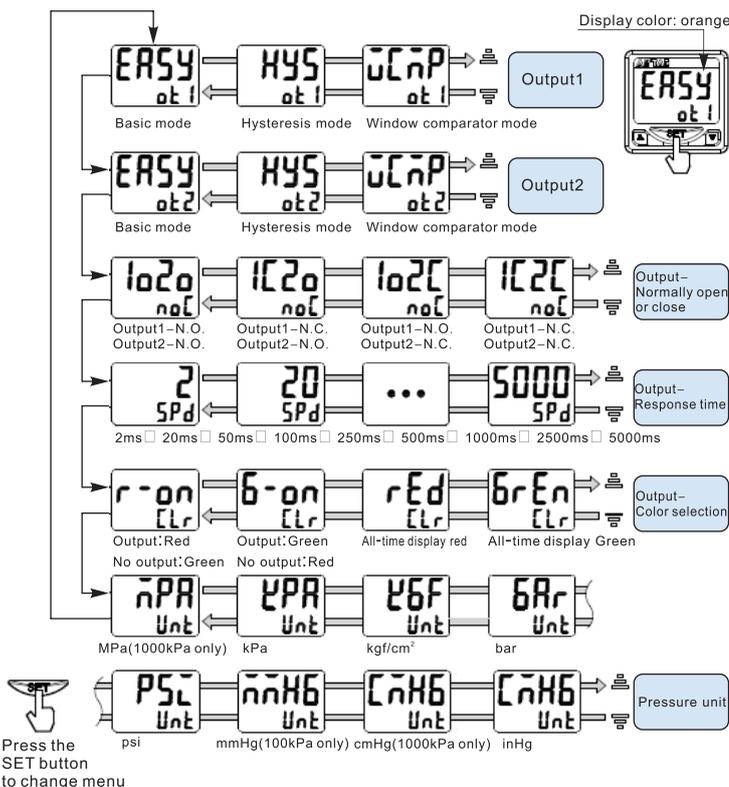


User Interface Instructions

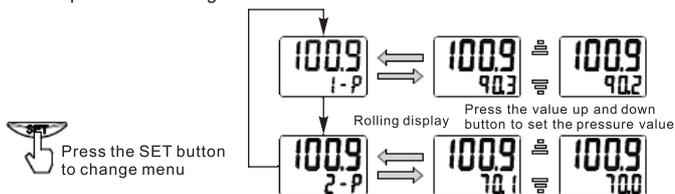
1. Mode switch



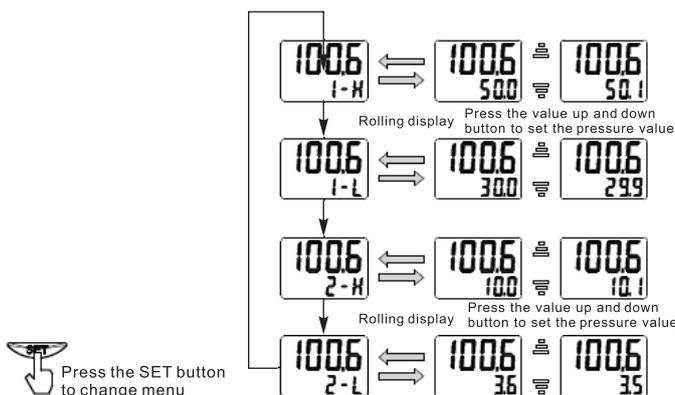
2. Basic mode



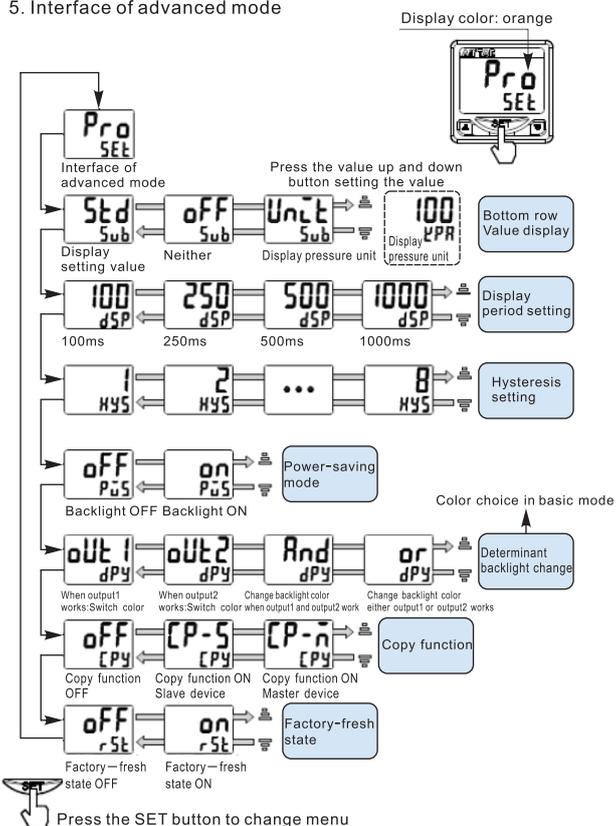
3. Base mode pressure setting



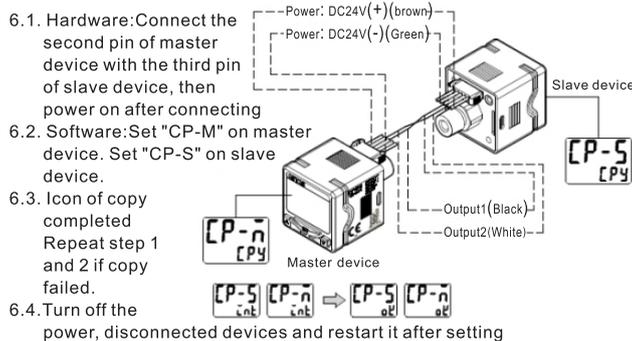
4. Hysteresis /window comparator mode



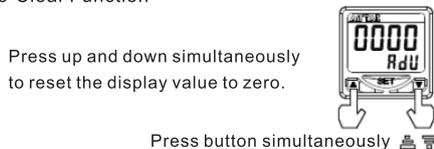
5. Interface of advanced mode



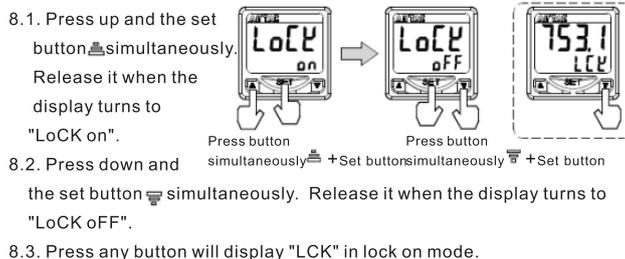
6. Copy function



7. Zero-Clear Function

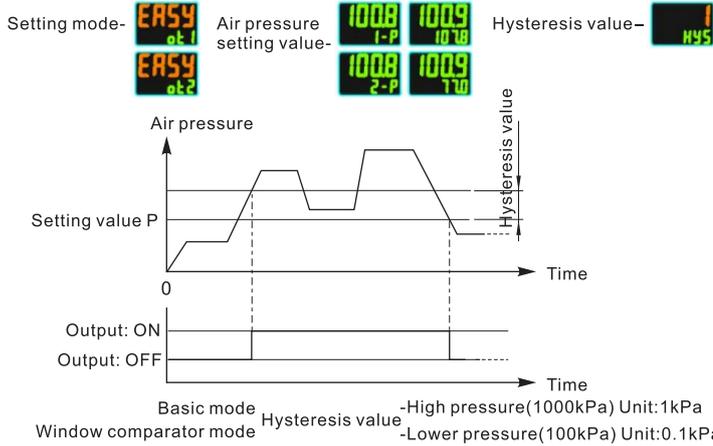


8. Key lock Function

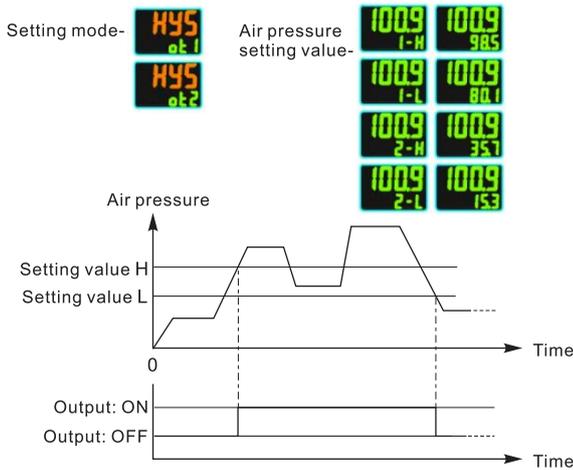


Output mode

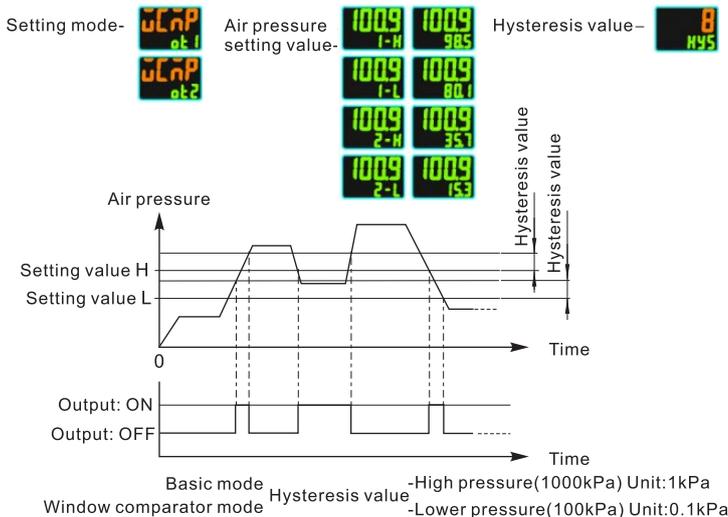
1. Basic mode: Air pressure setting value 'P'. When air pressure large then (Setting value P+Hysteresis value), the output is 'NO' □ When air pressure less than setting value 'P', the output is 'OFF'.



2. Hysteresis mode: Air pressure setting value 'H/L'. When air pressure large then setting value 'H', the output is 'NO' □ When air pressure less than setting value 'L', the output is 'OFF'.

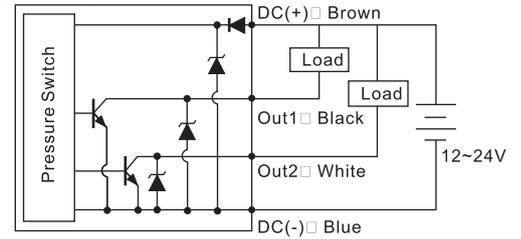


3. Window comparator mode: Air pressure setting value 'H/L'. When air pressure large then value 'H' or less than value 'L', the output is 'OFF' □ When air pressure large then value 'L' and less than value 'H', the output is 'ON'.

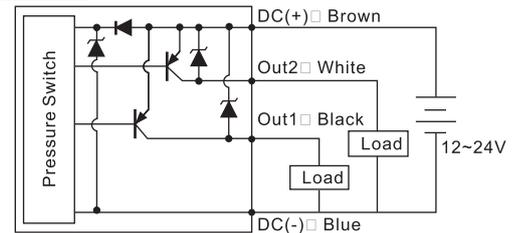


Connection Example

NPN Output



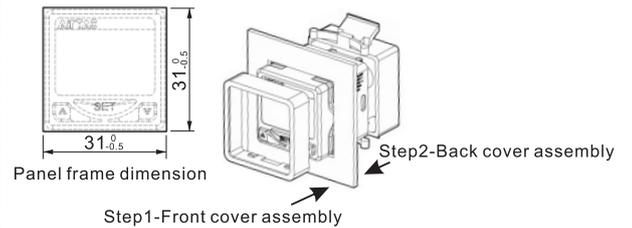
PNP Output



Dimensions/Assembly Instruction

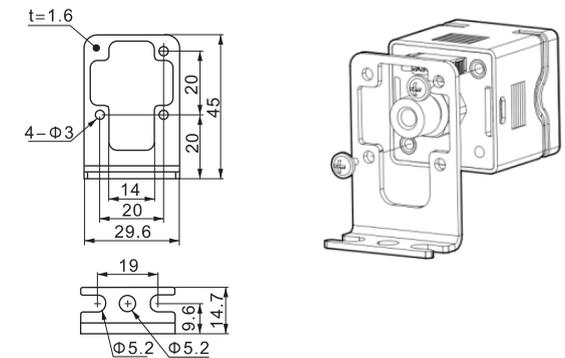
Panel mount adapter + Front protective cover

Order the Install accessories (Ordering code: F-DPSEB)



Bracket

Order the Install accessories (Ordering code: F-DPSLB)



Notes

- Do not drop · knock or apply excessive impact while handling. Otherwise could cause damage and a malfunction.
- The tensile strength of the cord is 60N. Applying a greater pulling force on it can cause a malfunction.
- Do not exceed the screw-in torque of 7N.m when installing piping. Exceeding this value may cause malfunctioning of the sensor.
- Do not use it with corrosive and/or flammable gases or liquids.
- Please use it within rated pressure range.
- Turn off the power before connecting the wires.
- Don't use in an environment with spattering liquid of oil or solvent.
- Separate power lines from high voltage lines, avoiding wiring in the same conduit with these lines.

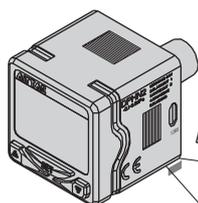
Specification

Model	DPHN2(3)(B)-01 / DPHP2(3)(B)-01 / DPHN2(3)(B)-10 / DPHP2(3)(B)-10	
Input power	Voltage	12~24 VDC ± 10% Ripple(p-p) < 10%
	Current Consumption	40mA or less
Pressure range	Fluid	Non-corrosive gas
	Measurement range	DPHN2(3)(B)-01/DPHP2(3)(B)-01: -15psi~15psi DPHN2(3)(B)-01/DPHP2(3)(B)-10: -15psi~150psi
	Withstand pressure	DPHN2(3)(B)-01/DPHP2(3)(B)-01: -15psi~22psi DPHN2(3)(B)-01/DPHP2(3)(B)-10: -15psi~175psi
	Measurement error	± 2% F.S. , ± 1digit(Temperature:25 ± 3°C)
	Repetitive accuracy	± 0.2% F.S.
	Temperature error	± 3% F.S.(Base 25°C, Range 0 to 50°C)
	Display	Type
Output		LCD Analog and Double row LCD display
Color		2-color LCD (Red/Green)
Switch Output	Output model	Basic mode, Hysteresis mode, Window comparator mode Suction check mode, Leakage mode
	Transistor output	NPN:Maximum applied voltage 30V/100mA,Retained voltage <2V PNP:Maximum applied voltage 30V/100mA,Retained voltage <2V
	Analog Voltage Output	1 to 5V ± 3% F.S. (Minimum load impedance 1KΩ)
	Analog Current Output	4 to 20mA±3% F.S.(Range of Load impedance is 50 ~ 260Ω)
	Output-delay time	2ms, 20ms, 100ms, 500ms, 1000ms, 2000ms
Pressure Unit	DPHN2(3)(B)-01 DPHP2(3)(B)-01	kPa, kgf/cm ² , bar, psi, mmHg, inHg
	DPHN2(3)(B)-10 DPHP2(3)(B)-10	MPa, kPa, kgf/cm ² , bar, psi, cmHg, inHg
Vibration resistance		10 to 500Hz with 10mm Amplitude in X, Y, Z directions for 2hrs
Impact resistance		Maximum 100m/s ² , X, Y, Z directions 3 times each
Operating Temp. range		0~50°C
Stored Temp. range		-20~65°C
Humidity range		35%~80% RH(No condensation)

Symbol



On-line Manual



QR Code



Get full documentation

1. Install QR Code APP, and scan the QR Code on the shall.
2. Documentation website, <http://www.airtac.net/OM/main.htm>.

Ordering code

DPH N2 □ - 01 020 □

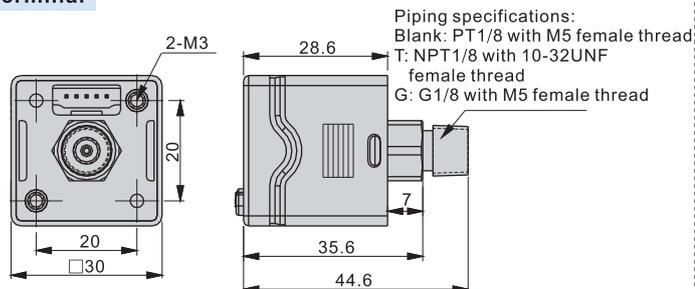
① ② ③ ④ ⑤ ⑥

① Model	② Output type	③ Electrical entry	④ Measurement range	⑤ Lead wire length	⑥ Piping specifications
DPH: Digital Display Pressure Sensor (Analog output)	N2: NPN+Analog voltage output(1-5V) P2: PNP+Analog voltage output(1-5V) N3: NPN+Analog current output(4-20mA) P3: PNP+Analog current output(4-20mA)	Space: Terminal B: Grommet [Note]	01: -100kPa~100kPa 10: -100kPa~1,000kPa	020: Length 2m 030: Length 3m 050: Length 5m	Blank: PT1/8 with M5 female thread T: NPT1/8 with 10-32UNF female thread G: G1/8 with M5 female thread

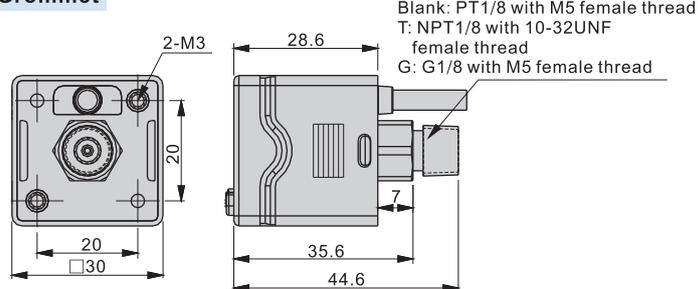
[Note] The safety grade of grommet type is IP63.

Dimensions

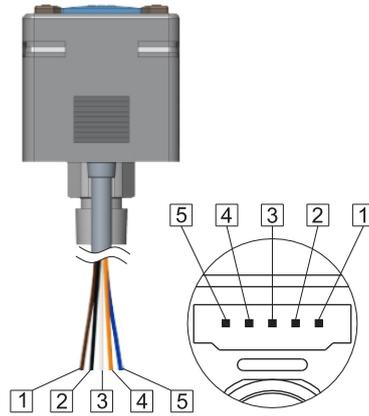
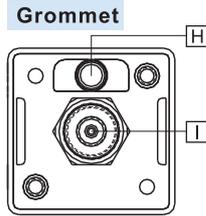
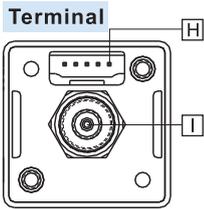
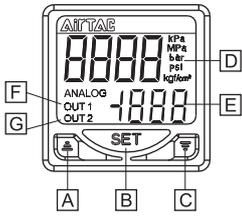
Terminal



Grommet



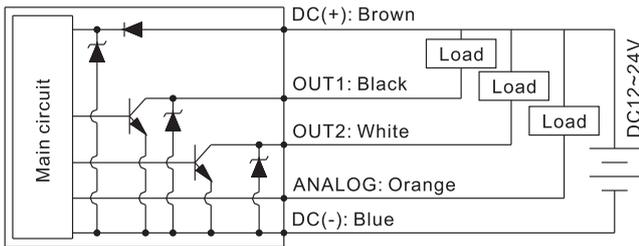
User interface Instruction



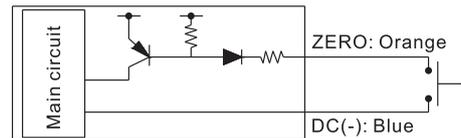
No.	Item
A	Value up button
B	Setting button
C	Value Down button
D	Pressure display area
E	Set pressure display area
F	Output 1 indicator light
G	Output 2 indicator light
H	Power and signal connector
I	Pressure input
1	DC(+) input (Brown)
2	OUT1 (Black)
3	OUT2 (White)
4	Analog/Zero (Orange)
5	DC(-) input (Blue)

Connection Example

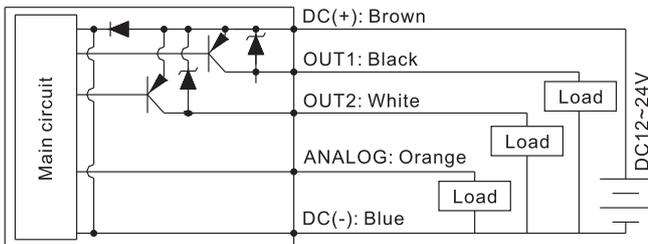
NPN Output



Zero-shift Input



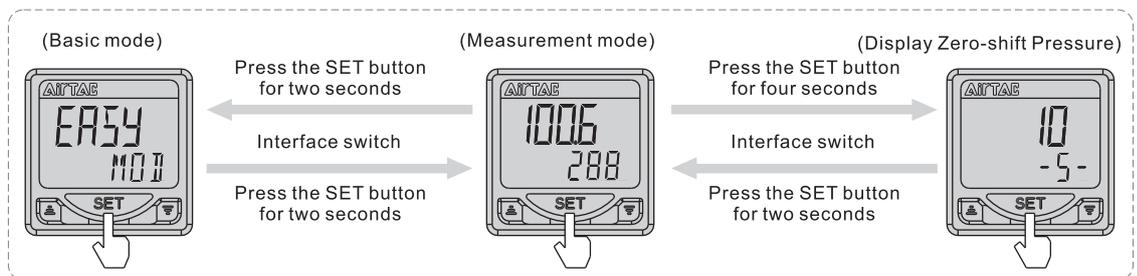
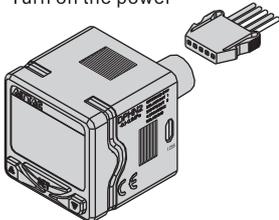
PNP Output



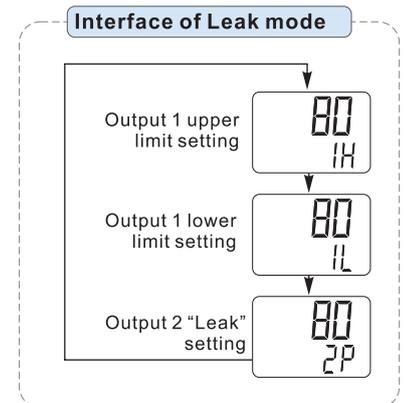
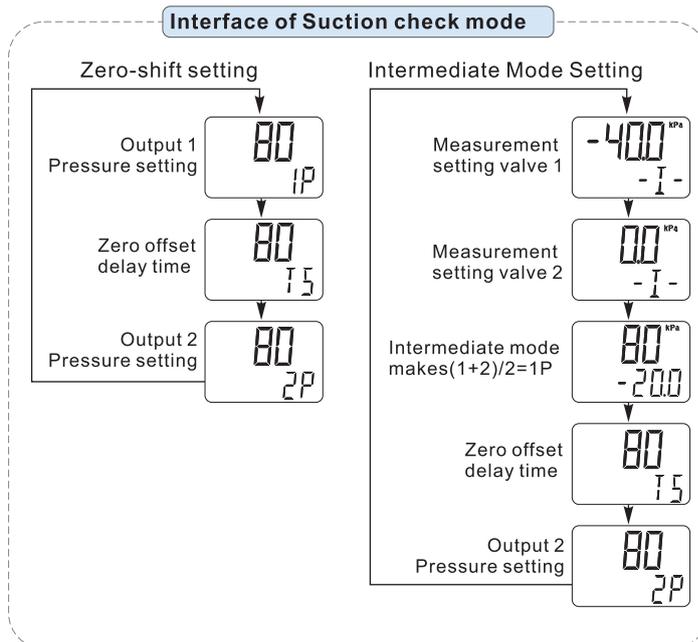
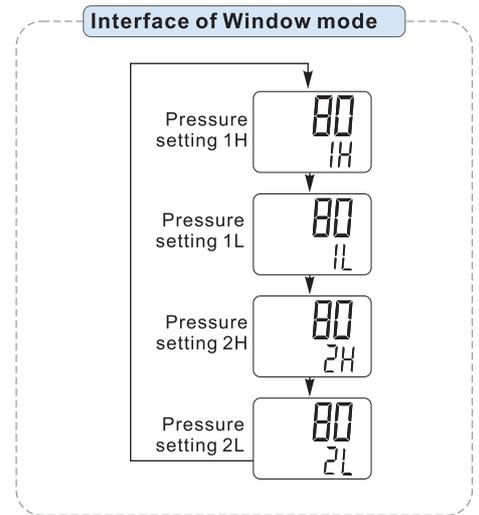
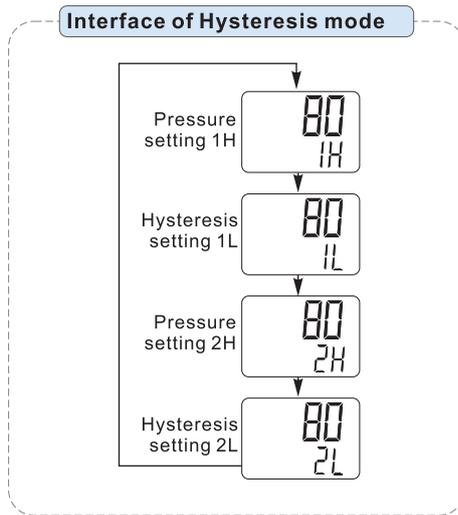
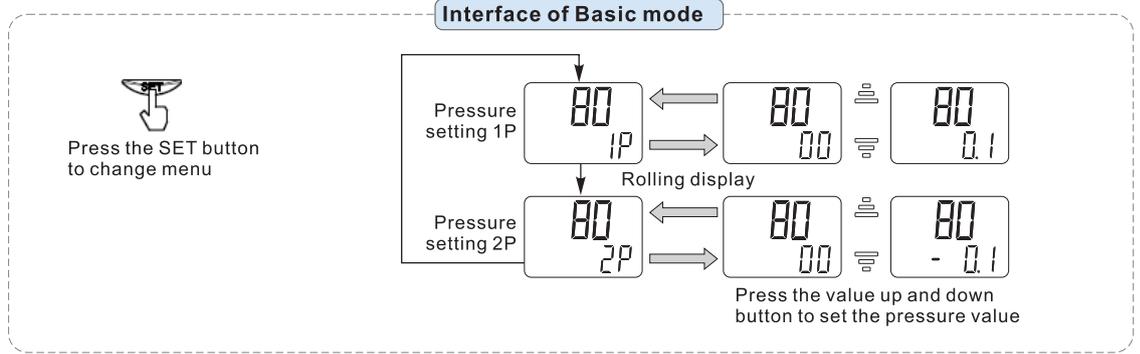
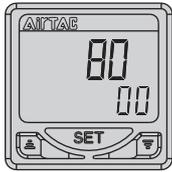
User Interface Instructions

1. Mode switch

Install the connector
Turn on the power



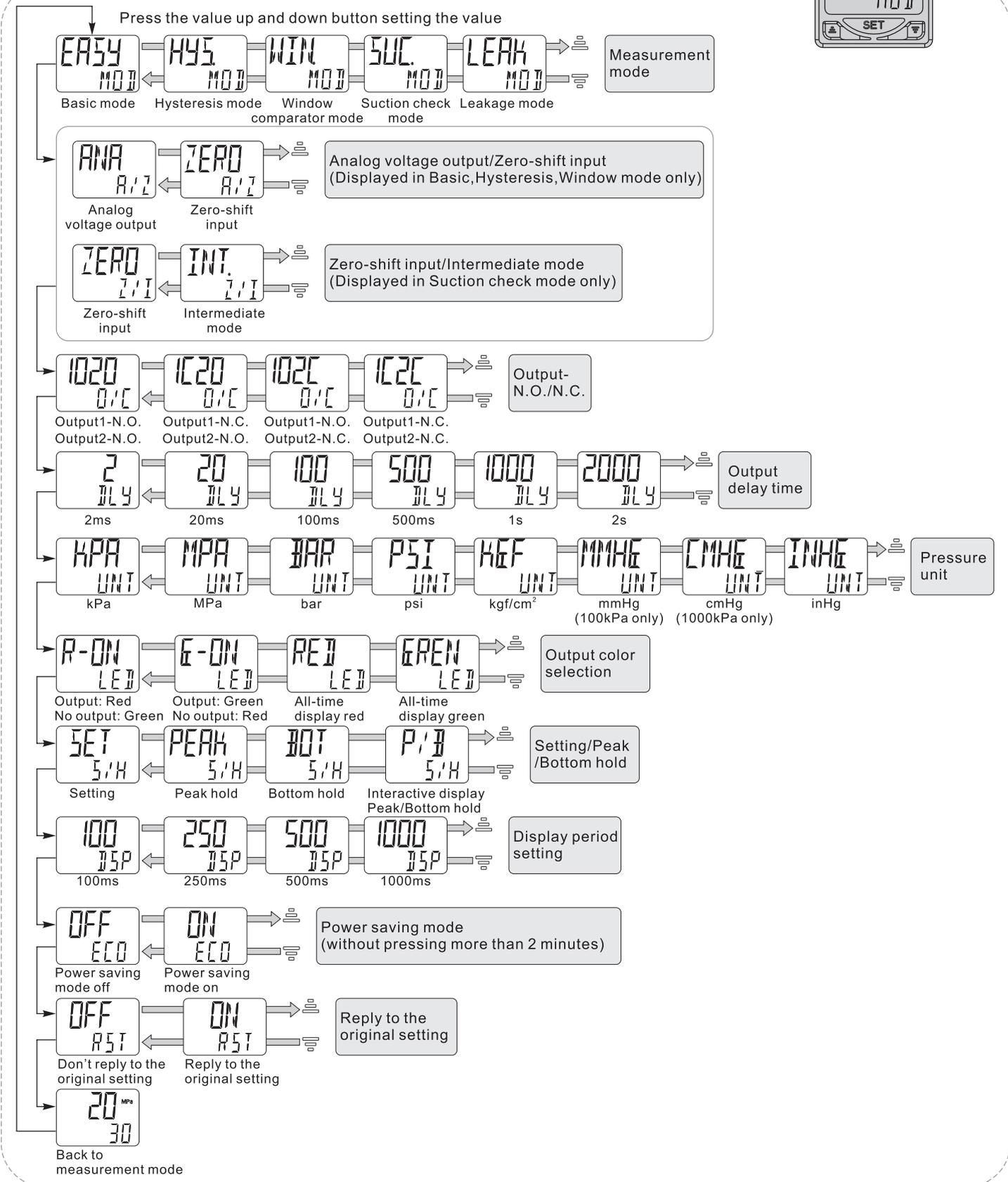
2. Measurement mode



3. Basic mode

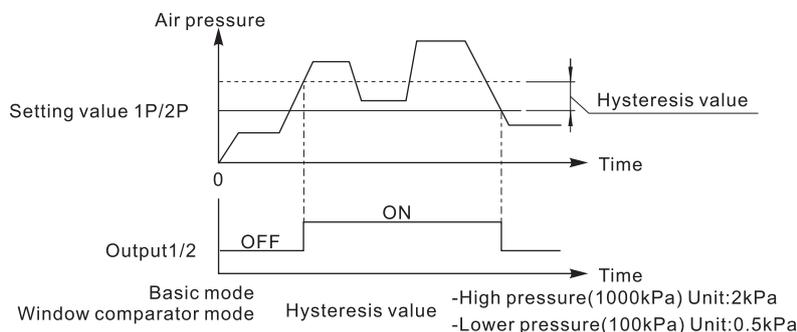


Interface of Basic mode

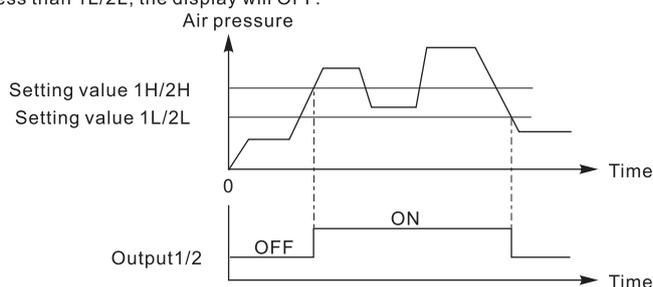


Output mode description

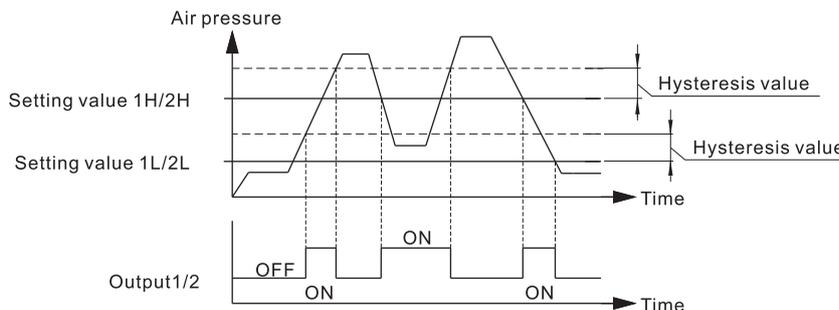
1. Basic mode: Set the pressure value 1P/2P. When the applied pressure value is greater than 1P/2P + hysteresis value, the display will ON. When the applied pressure value is less than P + hysteresis value, the display will OFF.



2. Hysteresis mode: Set the pressure value 1H/2H/1L/2L. When the applied pressure value is greater than 1H/2H, the display will ON. When the applied pressure is less than 1L/2L, the display will OFF.



3. Window comparator mode: Set the pressure value H/L. When the pressure is greater than the H value or less than the L value, the output is OFF; when the air pressure is greater than the L value and less than the H value, the output is ON.



4. Suction check mode: Generally used for suction check detection applications. After the zero-shift signal is triggered, the zero-shift is completed after the TS time.

- TS: Zero-shift delay time.
- 1P: "Pressure" setting value of output 1 before zero-shift (or without zero-shift).
- 1P': Output 1 after zero-shift. Relative to the reference value of the suction starting point pressure (zero offset point).
- 2P: Pressure setting of output 2.

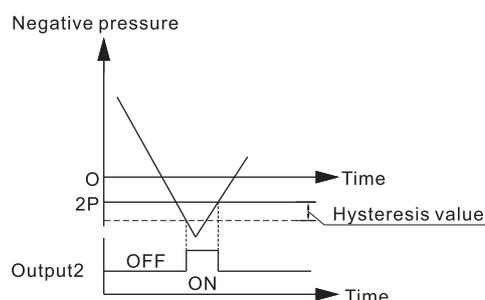
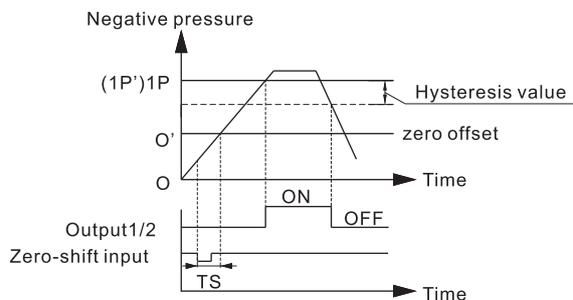
Output 1: Suction pressure detection,

In (N.O.) mode, the output 1 is ON when the measured pressure value is less than the setting value 1P (1P');

Without zero-shift input, output 1 ON/OFF judgment based on 1P, which is the suction pressure setting value relative to atmospheric pressure.

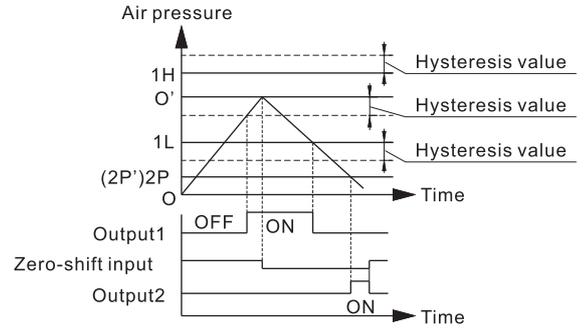
With a zero-shift input, output 1 ON/OFF judgment based on 1P', which is the reference setting value with relative to the zero-shift point.

Output 2: Vacuum plate break detection. In (N.O.) mode, output 2 turns ON when the air pressure is greater than the setting value 2P.



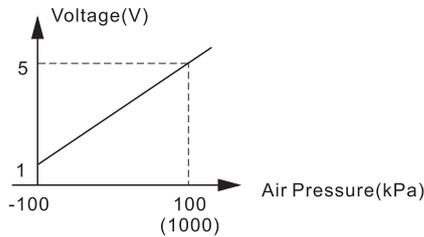
5. Leakage Mode: Generally used for leak detection applications.
The zero-shift is completed after the zero-shift signal is triggered

- ◇ 1H: Output 1 upper limit setting value; 1L: Output 1 lower limit setting value.
- ◇ 2P(2P'): Output 2's "Leak" setting (Negative value).
- Output 1: Fill pressure detection. In the normally mode, output 1 is ON when the pressure is between 1H and 1L
- Output 2: Leakage detection. when only the zero-shift input, it will make output 2 ON/OFF judgment; In the normal mode, Output 2 is ON when the leakage is greater than the setting value 2P (2P ').



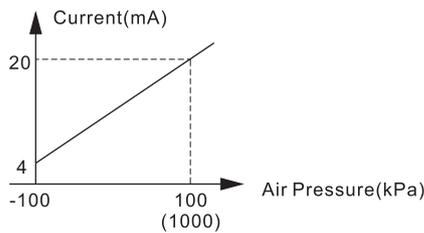
6. Analog output

6.1) Analog Voltage Output (1-5V)



- ◆ In the analog voltage output mode, the orange line should pay attention to the following wiring:
 1. Don't directly connect 0V or any bias voltage under no load to avoid internal circuit damage.
 2. The minimum load impedance needs to be >1kΩ (Don't float) to avoid distortion of the output voltage.

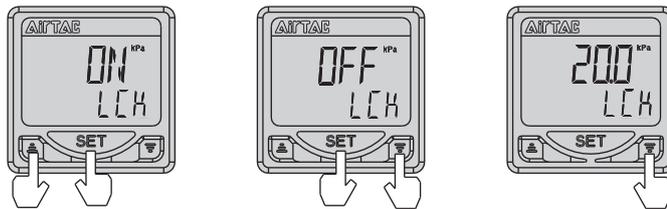
6.2) Analog Current Output (4-20mA)



- ◆ In the analog current output mode, the orange line should pay attention to the following wiring:
 1. Don't directly connect 0V or any bias voltage under no load to avoid internal circuit damage.
 2. The range of load impedance is 50Ω to 260Ω. (Don't float) to avoid distortion of the output current.

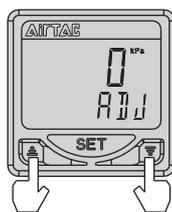
7. Key lock Function

Lock: Press and the SET button simultaneously. Release it when the display turns to "LCK on".
Unlock: Press and the SET button simultaneously. Release it when the display turns to "LCK OFF".
Press any button will display "LCK" in lock on mode.



8. Zero-Clear Function

Press and simultaneously to reset the display value to zero.

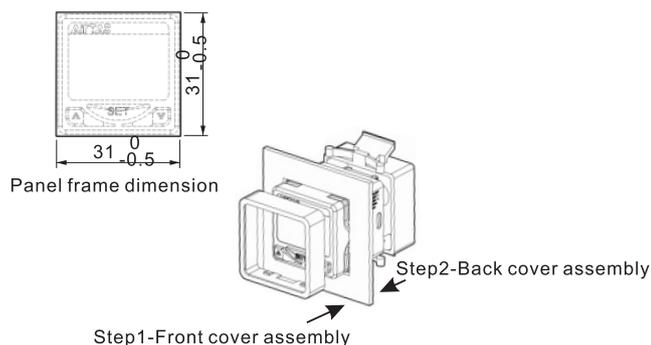


Press and simultaneously.

Dimensions/Assembly Instruction

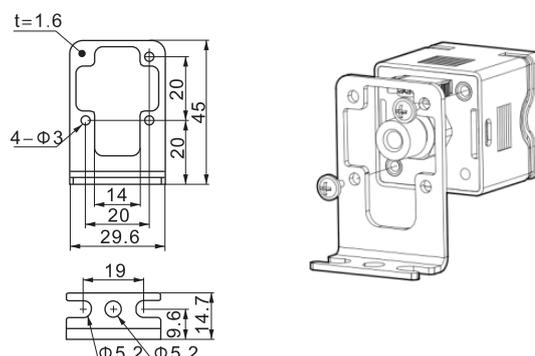
Panel mount adapter + Front protective cover

Order the Install accessories (Ordering code: F-DPSEB)



Bracket

Order the Install accessories (Ordering code: F-DPSLB)



Notes

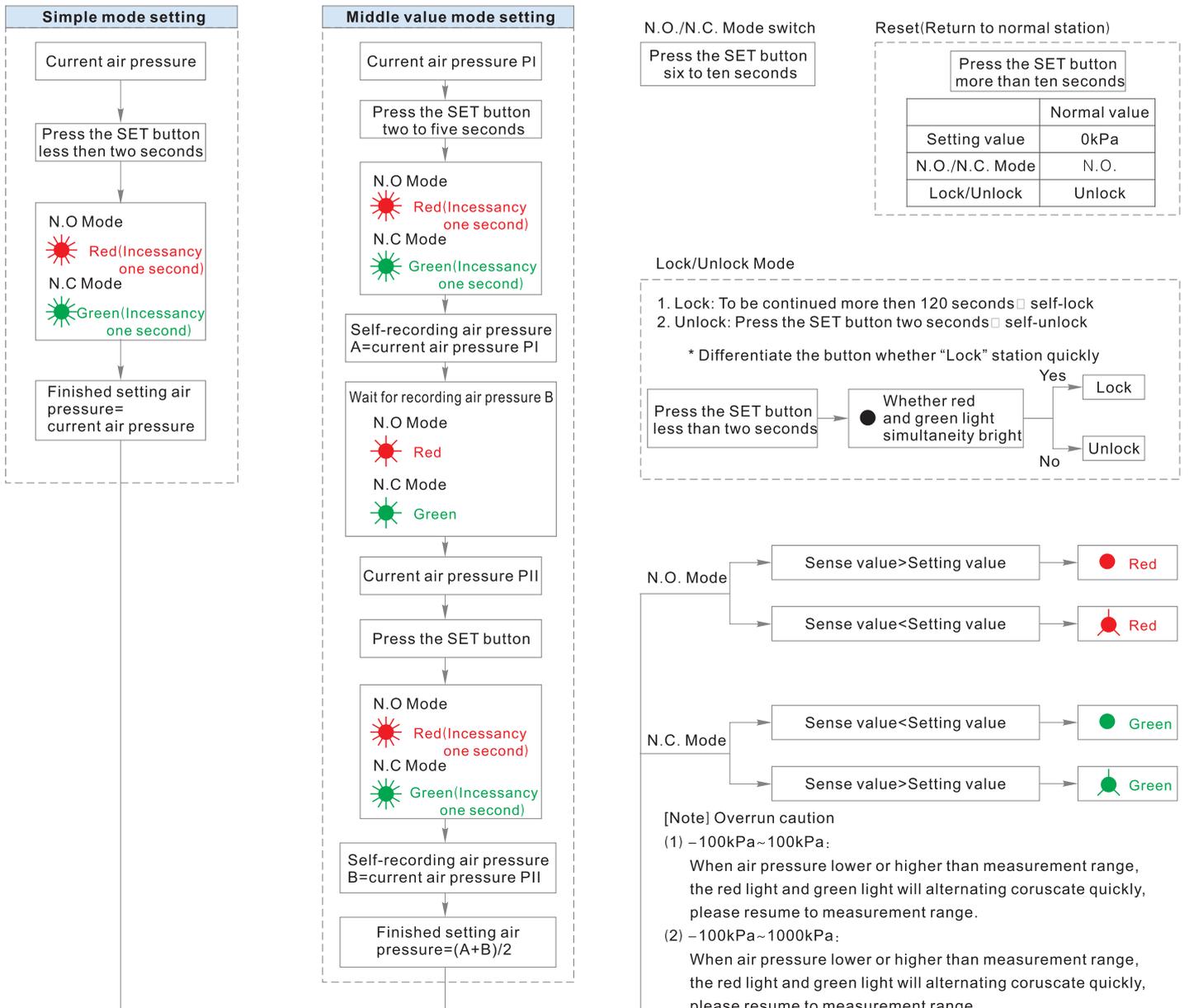
1. Do not drop, knock or apply excessive impact while handling. Otherwise could cause damage and a malfunction.
2. The tensile strength of the cord is 60N. Applying a greater pulling force on it can cause a malfunction.
3. Do not exceed the screw-in torque of 7N.m when installing piping. Exceeding this value may cause malfunctioning of the sensor.
4. Do not use it with corrosive and/or flammable gases or liquids.
5. Please use it within rated pressure range.
6. Turn off the power before connecting the wires.
7. Don't use in an environment with spattering liquid of oil or solvent.
8. Separate power lines from high voltage lines, avoiding wiring in the same conduit with these lines.

Cresset explanation

● Invariance light 🌞 Coruscate quickly(Per 0.1 sec.) 🌞 Coruscate(Per 1 sec.) 🌞 Slowness coruscate(Per 3 sec.)

Simple mode			Middle value mode		
Light station	DPC station		Light station	DPC station	
🌞	Red(continuance 1 sec.): N.O. mode Green(continuance 1 sec.): N.C.mode	Finished setting action	🌞	Red(continuance 1 sec.): N.O. mode Green(continuance 1 sec.): N.C.mode	Finished setting air pressure value
●	Red N.O. mode, Sense value>Setting value Green N.C. mode, Sense value<Setting value		🌞	Red N.O. mode Green N.C. mode	Wait to press
🌞	Red N.O. mode, Sense value<Setting value Green N.C. mode, Sense value>Setting value		●	Red N.O. mode, Sense value>Setting value Green N.C. mode, Sense value<Setting value	
			🌞	Red N.O. mode, Sense value<Setting value Green N.C. mode, Sense value>Setting value	
To be continued mode			Overrun caution		
Light station	DPC station		Light station	DPC station	
🌞	Red and green counterchange: DPC wait to set		🌞	Red and green alternating coruscate: Overrun caution	

Operation explanation



Symbol



Product feature

1. It has sensitive reaction and can work under low pressure.
2. The displayed words in the dial are clear and there are several pressure units to be selected.
3. There are several installation ways and installing accessories to be selected.
4. Various dimensions of screw thread are available.

Specification

Model	GS-40, GF-40, GU-40	GS-50, GF-50, GU-50	GF-60, GU-60
Fluid	Air		
Port size	1/8"	1/4"	1/4"
Temperature range	-20~70°C		
Accuracy grade	2.5		
The pressure range of units and instructions	M	0~1.0MPa(Standard type); 0~0.4MPa(Lower pressure type)	
	B	0~10 bar (Standard type); 0~4 bar (Lower pressure type)	
	P	0~140psi(Standard type); 0~60psi(Lower pressure type)	
	Z	0~10kgf/cm ² and 0~140psi(Dual-scale display, Standard type) 0~4kgf/cm ² and 0~60psi(Dual-scale display, Lower pressure type)	
Material of major parts	Shell: SPCC ; Core: Brass		

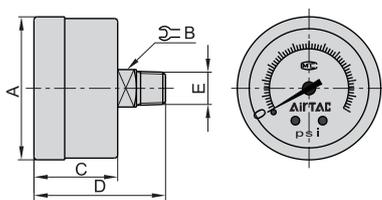
Model	GP-30	GP-40	GV-40
Fluid	Air		
Port size	1/8"	1/8"	1/8"
Temperature range	-20~70°C		
Accuracy grade	2.5		
The pressure range of units and instructions	P	0~1.0MPa&0~140psi(Standard type) 0~0.4MPa&0~60psi(Middle pressure type) 0~0.2MPa&0~30psi(Lower pressure type)	-100~0kPa & -14~0psi
	G	0~1.0MPa&0~10bar(Standard type) 0~0.4MPa&0~4bar(Middle pressure type) 0~0.2MPa&0~2bar(Lower pressure type)	-100~0kPa & -14~0psi
	T	0~10bar&0~140psi(Standard type) 0~4bar&0~60psi(Middle pressure type) 0~2bar&0~30psi(Lower pressure type)	-100~0kPa & -14~0psi
Material of major parts	Shell: Stainless steel ; Core: Brass		

Ordering code

F-G S 40 10 M						F-G P 40 10 P					
① Accessories code	② Model	③ Mount Type Code	④ Dial diameter	⑤ Max. pressure scale	⑥ Scale and thread type	① Accessories code	② Model	③ Mount Type Code	④ Dial diameter	⑤ Max. pressure scale	⑥ Scale and thread type
F: Accessories	G: Pressure gauge	S: Standard Mount F: Flange Mount U: Pannel Mount	30: OD 30 40: OD 40 50: OD 50 60: OD 60	04: 0.4MPa 10: 1.0MPa	M: MPa(PT) P: psi(NPT) B: bar(G) Z: kgf/cm ² & psi(PT)	F: Accessories	G: Pressure gauge	P: Stainless steel shell V: Vacuum type	30: OD 30 40: OD 40 40: OD 40	02: 0.2MPa 04: 0.4MPa 10: 1.0MPa 10: -100kPa	G: MPa&bar(G) P: MPa&psi(PT) T: bar&psi(NPT) G: kPa&psi(G) P: kPa&psi(PT) T: kPa&psi(NPT)

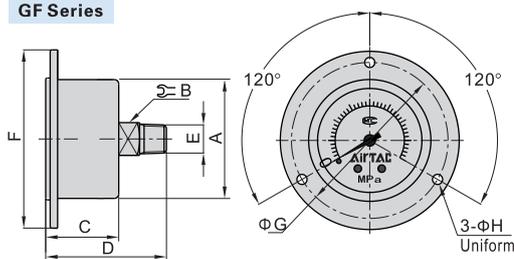
Dimensions

GS Series



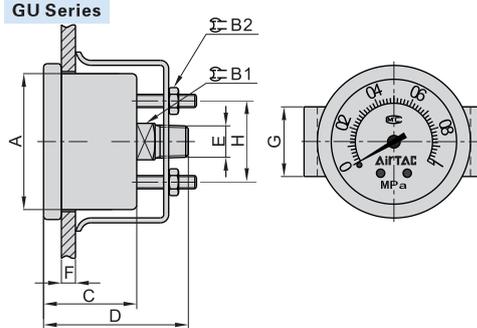
Model	A	B	C	D	E
GS-30	33	11	21	31	1/16"
GS-40	42	11	24.5	37.5	1/8"
GS-50	52	14	26.5	44.5	1/4"

GF Series



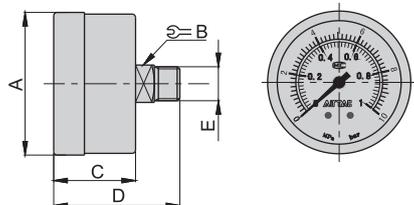
Model	A	B	C	D	E	F	G	H
GF-40	42	11	21	37	1/8"	60	52.5	3.4
GF-50	52	14	26	47	1/4"	71	62	4.4
GF-60	62	14	25	46	1/4"	82	71.5	4.4

GU Series



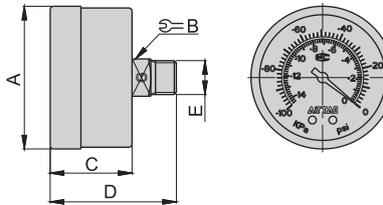
Model	A	B	B1	C	D	E	F(max)	G	H
GU-40	42	11	7	28	44	1/8"	5	21	24.5
GU-50	52	14	8	30.5	50	1/4"	7	24	35
GU-60	62	14	8	30.5	50	1/4"	7	25	35

GP Series



Model	GP-30	GP-40
A	30	42
B	11	11
C	17.5	24
D	30.5	37
E	1/8"	1/8"

GV Series



Model	GV-40
A	42
B	11
C	24
D	37
E	1/8"



Symbol



Product feature

1. Unique diversion structure spins the air flowing through to effectively separate the liquid from the air and reliably filter the solid grain.
2. It has low pressure loss, high efficiency in separating water and large drain bowl capacity.
3. Filtering grade includes 5µm and 40µm (Optional).
4. Three material of bowl are available: PC, Nylon and metal.
5. The bracket can be selected for installation.

Specification

Model	GVF200-06	GVF200-08	GVF300-08	GVF300-10	GVF300-15
Fluid	Air				
Port size [Note1]	1/8"	1/4"	1/4"	3/8"	1/2"
Filtering grade	40 µm or 5 µm				
Pressure range	-100~0KPa				
Proof pressure	0.5MPa				
Temperature range	-5~70°C(Unfreeze)				
Capacity of drain bowl	25CC		45CC		
Material of bowl	PC bowl、Nylon bowl、Metal bowl				
Weight(Plastic bowl/Metal bowl)	220g/225g	210g/215g	370g/380g	360g/375g	350g/360g
Flow capacity [Note2] (L/min ANR)	5µm	80	100	150	200
	40µm	100	160	200	280

[Note1] PT thread, G thread and NPT thread are available. [Note2] The flow capacity at the inlet pressure loss of 4 Kpa.

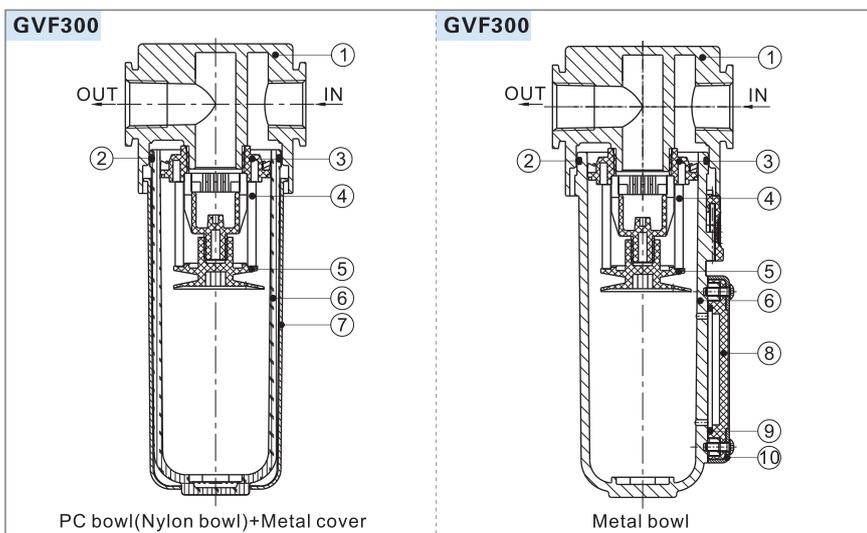
Ordering code

GVF 300 □ 10 □ W G



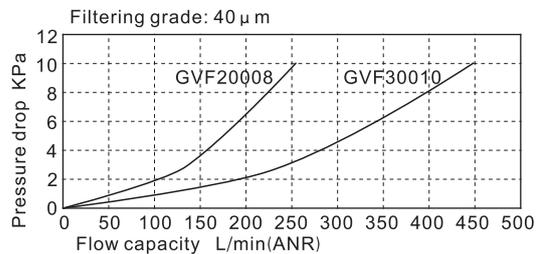
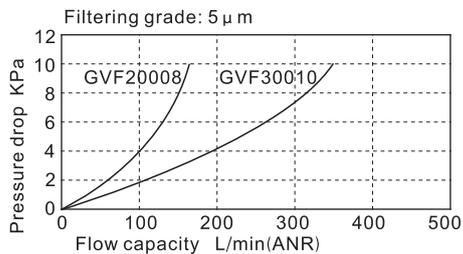
① Model	② Bowl material	③ Port size	④ Accessories	⑤ Filtering grade	⑥ Thread type
GVF200: GVF200 Series Vacuum Filter	Blank: PC bowl C: Metal bowl N: Nylon bowl	06: 1/8" 08: 1/4"	Blank: Bracket J: No bracket	Blank: 40µm W: 5µm	Blank: PT G: G T: NPT
GVF300: GVF300 Series Vacuum Filter		08: 1/4" 10: 3/8" 15: 1/2"			

Inner structure

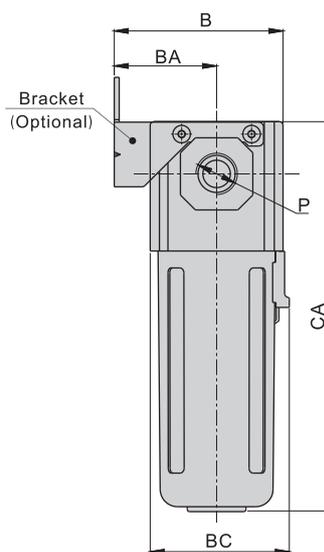
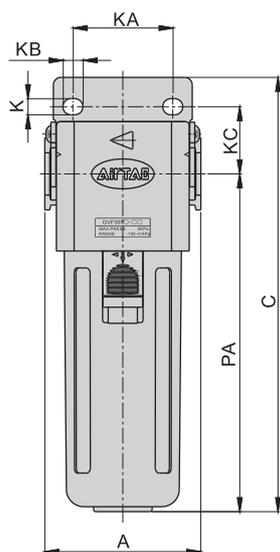


No.	Item	Material
1	Body	Aluminum alloy
2	O-ring	NBR
3	Air guide	High viscosity POM
4	Filter core	HDPE
5	Umbrella baffle	High viscosity POM
6	Drain bowl	Aluminum alloy\PC\Nylon
7	Meter cover	SPCC
8	Liquid meter inside cover	PC
9	Liquid meter seal	NBR
10	Liquid meter cover	SPCC

Flow chart



Dimensions



Model/Item	A	B	BA	C	CA	K	KA	KB	KC	P	PA
GVF200-06	52.5	54.5	33	136.5	123.5	5.4	27	8.4	23	1/8"	106.5
GVF200-08	52.5	54.5	33	136.5	123.5	5.4	27	8.4	23	1/4"	106.5
GVF300-08	62.5	67.5	41	174.5	156.5	6.5	40	8	27	1/4"	135.5
GVF300-10	62.5	67.5	41	174.5	156.5	6.5	40	8	27	3/8"	135.5
GVF300-15	62.5	67.5	41	174.5	156.5	6.5	40	8	27	1/2"	135.5

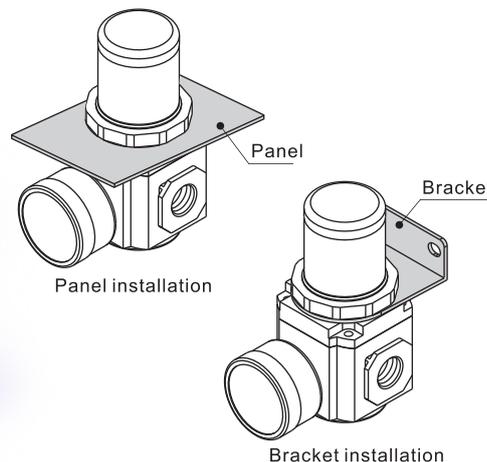
Compendium of GVR Series

Pressed-in self-locking mechanism

The pressed-in self-locking mechanism can prevent the abnormal movement of the set pressure caused by external interfere.

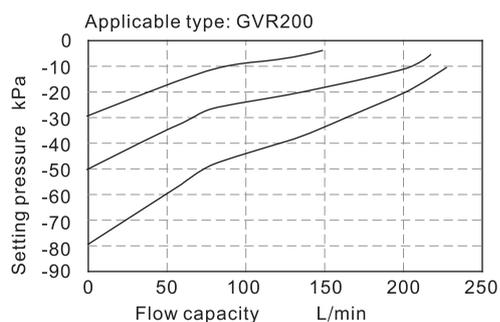
Suitable to adjust the vacuum pressure

Panel installation and bracket installation are optional

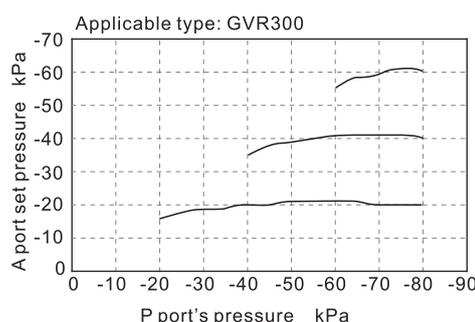
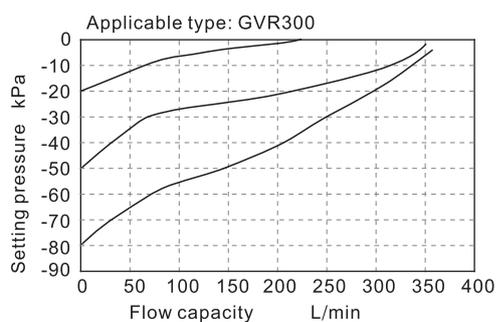
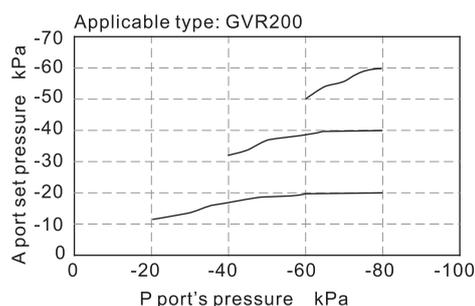


Flow chart and Pressure chart

Flow chart



Pressure chart



Installation and Application

1. Please be used with safety circuit to avoid accidents when power failure, vacuum pump and vacuum regulator fail.
2. When checking, please set the pressure to 0 (atmospheric pressure) and completely cut off the pressure of the vacuum pump before pulling down the tube of the regulator.
3. The vacuum regulator can not be used to regulate the pressure of the vacuum pump, if the flow capacity of the vacuum generator is less than the flow capacity of the vacuum regulator, it is not suitable as a vacuum source.
4. The regulating knob rotates clockwise, the atmospheric pressure changes to the vacuum pressure, turns counterclockwise, the vacuum pressure changes to atmospheric pressure.
5. After setting the pressure, press the button on the pressure adjusting button until you hear the click.
6. The vacuum regulator is used for negative pressure, and no positive pressure should be applied.



Symbol



Specification

Model	GVR200-06	GVR200-08	GVR300-08	GVR300-10
Fluid	Air			
Port size [Note1]	1/8"	1/4"	1/4"	3/8"
Pressure range	-100~-1.3kPa			
Max. pressure	-1.0kPa			
Air inhalation consumption	0.6 L/min(ANR) and below			
Temperature range	-20~70°C			
Weight g	204	198	342	336

[Note1] NPT thread and G thread are available.

Product feature

1. The pressed-in self-locking mechanism can prevent the abnormal movement of the set pressure caused by external interfere.
2. The pressure regulation is stable, the drift is small and the pressure characteristic is good.
3. In addition to panel installation, the bracket is optional for installation.

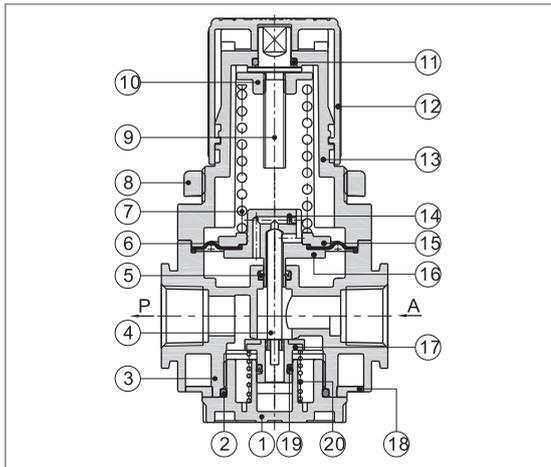
Ordering code

GVR300 10

① ② ③ ④ ⑤

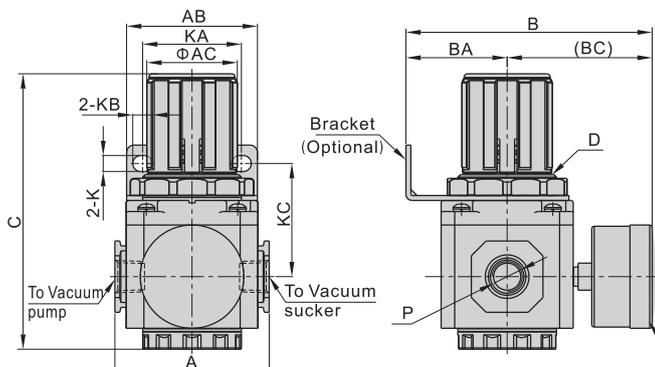
① Model	GVR200: 200 series vacuum regulator	GVR300: 300 series vacuum regulator
② Port size	06: PT1/8 08: PT1/4	08: PT1/4 10: PT3/8
③ Accessories	Blank: Bracket	J: No bracket
④ Pressure gauge	Blank: Pressure gauge	N: No pressure gauge
⑤ Thread type	Blank: PT(kPa & psi)	G: G(kPa & psi) T: NPT(kPa & psi)

Inner structure



No.	Item	Material	No.	Item	Material
1	Valve cap	POM	11	O-ring	NBR
2	O-ring	NBR	12	Pressure knob	POM
3	Body	Aluminum alloy	13	Adjusting seat	POM
4	Spool	Aluminum alloy	14	Gas resistance	Aluminum alloy
5	O-ring	NBR	15	Diaphragm up core	Aluminum alloy
6	Diaphragm	NBR	16	Diaphragm down core	Aluminum alloy
7	Spring	SWC	17	Pressure plug	Aluminum alloy
8	Fixed ring	PA66+Glass fibre	18	Bottom cover	POM
9	Adjusting spindle	Steel	19	O-ring	NBR
10	Regulator nut	Steel	20	Spring	Stainless steel

Dimensions



Model\Item	A	AB	AC	B	BA	BC	C	D	K	KA	KB	KC	P
GVR20006	52.5	55	31	83	30	53	89	M33X1.5	5.4	34	15.4	43	1/8"
GVR20008	52.5	55	31	83	30	53	89	M33X1.5	5.4	34	15.4	43	1/4"
GVR30008	62.5	53	38	99.5	41	58.5	112	M40X1.5	6.5	40	8	46	1/4"
GVR30010	62.5	53	38	99.5	41	58.5	112	M40X1.5	6.5	40	8	46	3/8"