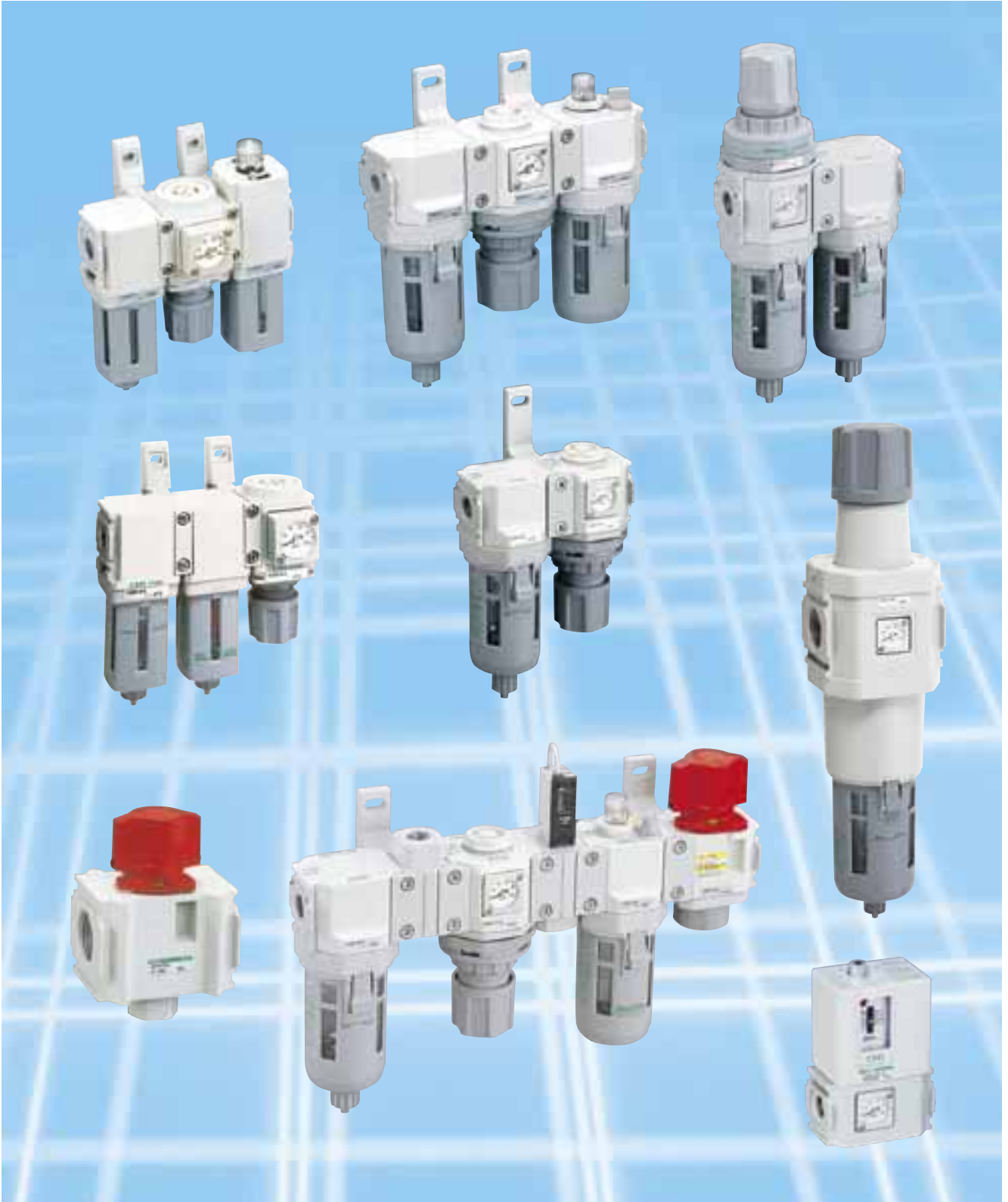


Modular design F.R.L. Standard white Series

MODULAR TYPE FRL STANDARD WHITE SERIES



Enhanced Systems Using Full-Scale Modules

Systems are easily upgraded using unified key dimensions and a diverse range of options and variations.

F.R.L. combination

"C*000-W"
Products using air filter, regulator, and lubricator combined.

■ Lubricator "L*000-W"
Supplies oil mist to pneumatic lines.

■ Regulator
Standard type "R*000-W"
Reverse type "R*100-W"
Depressurizes supply pressure and supplies stable set pressure.

■ Air filter "F*000-W"
Effectively removes dust and moisture.

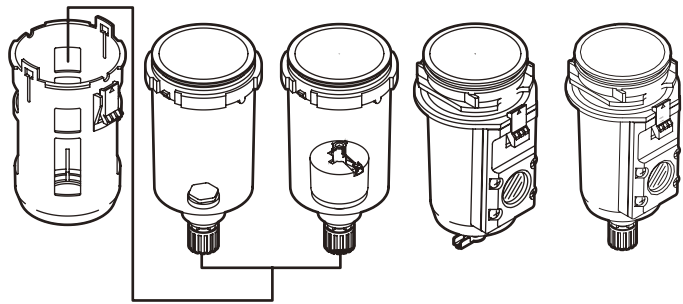
Element For air filter F*000-W/filter regulator W*000-W, W*100-W

■ Standard (5µm) element "blank"
This long-life element filters out harmful dirt and foreign matter, etc., from air.

■ Submicron (0.3µm) element "Y"
Option
This dedicated element effectively separates tar and carbon. (Nonreusable)

Bowl, bowl guard and drainage For air filter F*000-W/oil mist filter M*000-W/filter regulator W*000-W, W*100-W

* A bowl guard is installed on the plastic bowl as a standard.



▲ Plastic bowl and bowl guard ▲ Metal bowl

		Bowl			
		Polycarbonate bowl	Nylon bowl	Metal bowl	Metal bowl with manual drain cock
Drainage	Manual drain cock	Blank (standard)	Z	M	M1
	Automatic drain with manual override NO type	F	FZ	FM*	FM1
	Automatic drain with manual override NC type	F1	F1Z	F1M*	F1M1

Refer to page 17 for the chemical resistance of the bowl.
A metal bowl is not available for 1000 Series.
The asterisk (*) indicates the manual cock with an Rc1/4 port.

Mounting bracket Page 148

■ T type bracket "B*10-W"
This bracket has two holes on the top and bottom to fix the device, together with the system upgrade, to a wall.
The 3000-W Series and 4000-W Series are coupled using B410-W.

Pressure gauge Pages 195 to 203

■ Standard-body type pressure gauge "G401-W"
Pressure gauge protrusions are eliminated while maintaining a class equivalent to JIS3.

Filter and regulator

Standard type "W*000-W" (page 67)
Reverse type "W*100-W" (page 73)
The air filter and regulator are integrated to simplify the space-saving assembly.

Oil mist filter Page 91

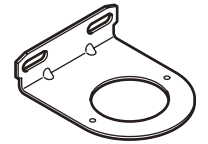
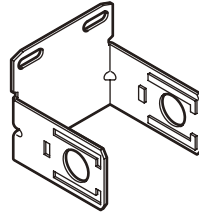
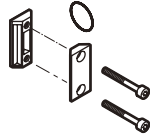
"M*000-W" "MX000-W"
Effectively removes oil and oil mist from pneumatic lines.

Shut-off valve Pages 139 to 144

"V*000-W"
The pneumatic line is shut off and residual pressure is released.
This is also used to prevent accidents from residual pressure during maintenance.
The V3010-W with key holes is also used.

* indicates model no. 1, 2, 3, 4, 6, 8

Outlines are shown on this page. Refer to individual pages for details.



■ Joiner "C*000-J*00-W"

Use this as a joint when upgrading the system. The J400-W is also used to couple the 3000-W Series and 4000-W Series.

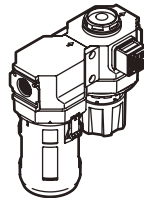
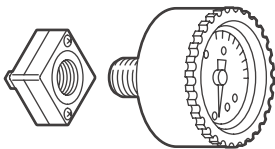
■ C type bracket "B*20"

This bracket fixes isolated parts just by fitting them in.

■ L type bracket "B*30"

This bracket fixes parts using the panel mounting nut on the filter regulator or regulator.

For regulator R*000-W, R*100-W/filter regulator W*000-W, W*100-W



■ Pressure gauge with safety mark "G*0D"

The pressure's actual usage range is displayed with red and green zones making visible control easier. * This gauge is assembled with the gauge plug.

■ Pressure switch with digital display "PPD"

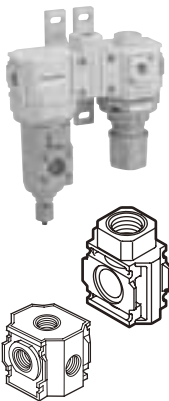
This unit functions as the pressure detector and display, the ON-OFF switch, and the switch's external output. Assembly is an option, indicated by "R1."

Distributor

Page 149

Piping adapter

Page 151

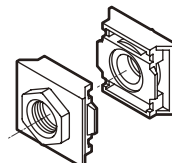


■ One way branch type "D*01-W"
This distributor, which is installed facing either upward or downward, branches pneumatic pressure piping. The effective area of the branch is large.

■ 4 way branch type "D300-W"
The pipe branches in four directions.
* For 3000-W/4000-W Series.



Straight



L type

■ Straight "A*00-W"

Using an adapter, isolated devices are removed for maintenance instead of piping being removed. The adapter is convenient for changing the connection bore size of the isolated device.

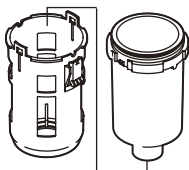
■ L type "A*01-W"
The device's in and out ports are turned by 90° and piped from top or bottom.
* Check with CKD for the vertical piping type.

Bowl/bowl guard

For lubricator L*000-W

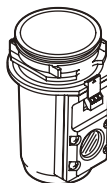
Pressure switch

Pages 133 to 138



■ Plastic bowl and bowl guard

Material: Polycarbonate "blank" standard nylon "Z" option
* Manual drain cock is a "C" option.
* A bowl guard is installed on the plastic bowl as a standard.



■ Metal bowl

Use the metal bowl in an atmosphere where plastic bowls cannot be used. Material: Aluminum "M" option
* A metal bowl is not available for 1000-W Series.

Pneumatic line pressure is repeatedly and accurately checked.



"P4000-W"











"PPD"



"PPX"

Series variation

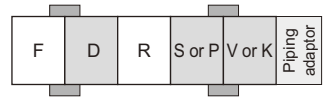
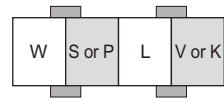
F.R.L. unit (Combination)

Series	Model no.	Combination, application					Assembled option, application				
		F	R	L	W	M	D	S	P	V	K
		Filter	Regulator	Lubricator	Filter regulator	Oil mist filter	Distributor	Pressure switch	Shut-off valve		
● F.R.L. combination  Note 5 P.19	C1000-W	F1000-W	R1000-W	L1000-W			D101-W	P1100-W		V1000-W	
	C2500-W	F3000-W	R2000-W	L3000-W			D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C3000-W	F3000-W	R3000-W	L3000-W			D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C4000-W	F4000-W	R4000-W	L4000-W			D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C4000-20-W	F4000-W	R4000-W	L4000-W			D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C6500-W	F6000-W	R6000-W	L8000-W			D801-W	P8100-W			V6010-W
	C8000-W	F8000-W	R8000-W	L8000-W			D801-W	P8100-W			V6010-W
● W.L. combination  Note 5 P.27	C1010-W			L1000-W	W1000-W			P1100-W		V1000-W	
	C3010-W			L3000-W	W3000-W			P4100-W	P4000-W	V3000-W	V3010-W
	C4010-W			L4000-W	W4000-W			P4100-W	P4000-W	V3000-W	V3010-W
	C4010-20-W			L4000-W	W4000-W			P4100-W	P4000-W	V3000-W	V3010-W
	C8010-W			L8000-W	W8000-W			P8100-W			V6010-W
● F.R. combination  Note 5 P.33	C1020-W	F1000-W	R1000-W				D101-W	P1100-W		V1000-W	
	C2520-W	F3000-W	R2000-W				D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C3020-W	F3000-W	R3000-W				D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C4020-W	F4000-W	R4000-W				D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C4020-20-W	F4000-W	R4000-W				D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C6020-W	F6000-W	R6000-W				D801-W	P8100-W			V6010-W
	C8020-W	F8000-W	R8000-W				D801-W	P8100-W			V6010-W
● F.M.R. combination  Note 5 P.39	C1030-W	F1000-W	R1000-W			M1000-W	D101-W	P1100-W		V1000-W	
	C2530-W	F3000-W	R2000-W			M3000-W	D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C3030-W	F3000-W	R3000-W			M3000-W	D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C4030-W	F4000-W	R4000-W			M4000-W	D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C4030-20-W	F4000-W	R4000-W			M4000-W	D401-W	P4100-W	P4000-W	V3000-W	V3010-W
	C6030-W	F6000-W	R6000-W			M6000-W	D801-W	P8100-W			V6010-W
	C8030-W	F8000-W	R8000-W			M8000-W	D801-W	P8100-W			V6010-W
● W.M. combination  Note 5 P.45	C1040-W				W1000-W	M1000-W		P1100-W		V1000-W	
	C3040-W				W3000-W	M3000-W		P4100-W	P4000-W	V3000-W	V3010-W
	C4040-W				W4000-W	M4000-W		P4100-W	P4000-W	V3000-W	V3010-W
	C4040-20-W				W4000-W	M4000-W		P4100-W	P4000-W	V3000-W	V3010-W
	C8040-W				W8000-W	M8000-W		P8100-W			V6010-W
● R.M. combination  Note 5 P.51	C1050-W		R1000-W			M1000-W					
	C2550-W		R2000-W			M3000-W					
	C3050-W		R3000-W			M3000-W					
	C4050-W		R4000-W			M4000-W					
	C4050-20-W		R4000-W			M4000-W					
	C6050-W		R6000-W			M6000-W					
	C8050-W		R8000-W			M8000-W					
● F.M. combination  Note 5 P.57	C1060-W	F1000-W				M1000-W					
	C3060-W	F3000-W				M3000-W					
	C4060-W	F4000-W				M4000-W					
	C4060-20-W	F4000-W				M4000-W					
	C6060-W	F6000-W				M6000-W					
	C8060-W	F8000-W				M8000-W					
● F.F.M. combination  Note 5 P.63	C3070-W	F3000-W (5µm) F3000-W (0.3µm)				M3000-W					
	C4070-W	F4000-W (5µm) F4000-W (0.3µm)				M4000-W					
	C4070-20-W	F4000-W (5µm) F4000-W (0.3µm)				M4000-W					
	C6070-W	F6000-W (5µm) F6000-W (0.3µm)				M6000-W					
	C8070-W	F8000-W (5µm) F8000-W (0.3µm)				M8000-W					

Modular design (F.R.L.)

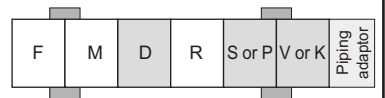
⚠ Read the " Safety Precautions " before starting use.

Combination option list (U***)																	Combination position
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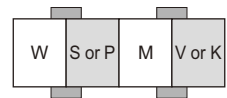
Note 3

The piping adaptor can be assembled on models marked with ●



Note 3

The piping adaptor can be assembled on models marked with ●



Note 1: Two T-brackets are included with the combination option.

Note 2: A T type bracket installation position changes depending on the combination.

Note 3: T-type bracket standard mounting is on the inner side of the end product of each combination.



Note that □

Note 4: Use custom combination specifications to change the bracket mounting position and for combinations other than combination options.



Note 5: Piping adapter set A400-20-W is assembled on both ends of the C40*0-20-W (port size Rc3/4).

For products other than the piping adapter, the port size is "15" (Rc1/2).




(Filter and regulator)

Series	Model no.	Port size						Page
		1/8	1/4	3/8	1/2	3/4	1	
● Filter and regulator 	W1000-W	●	●					67
	W3000-W		●	●				
	W4000-W		●	●	●			
	W8000-W					●	●	
● Reverse filter and regulator 	W1100-W	●	●					73
	W3100-W		●	●				
	W4100-W		●	●	●			
	W8100-W					●	●	




(Filter)

Series	Model no.	Port size						Page
		1/8	1/4	3/8	1/2	3/4	1	
● Filter 	F1000-W	●	●					81
	F3000-W		●	●				
	F4000-W		●	●	●			
	F6000-W					●	●	
	F8000-W					●	●	
● Filter/medium pressure type 	FM3000-W		●	●				155
	FM4000-W		●	●	●			
	FM6000-W					●	●	
	FM8000-W					●	●	


(Oil mist filter)

Series	Model no.	Port size						Page
		1/8	1/4	3/8	1/2	3/4	1	
● Oil mist filter 	M1000-W	●	●					91
	M3000-W		●	●				
	M4000-W		●	●	●			
	M6000-W					●	●	
	M8000-W					●	●	
● High performance oil mist filter 	MX1000-W	●	●					99
	MX3000-W		●	●				
	MX4000-W		●	●	●			
	MX6000-W					●	●	
	MX8000-W					●	●	
● Oil mist filter/medium pressure type 	MM3000-W		●	●				161
	MM4000-W		●	●	●			
	MM6000-W					●	●	
	MM8000-W					●	●	

(Regulator)

Series	Model no.	Port size						Page	
		1/8	1/4	3/8	1/2	3/4	1		
● Regulator 	R1000-W	●	●					109	
	R2000-W		●	●					
	R3000-W		●	●					
	R4000-W		●	●	●				
	R6000-W						●		●
	R8000-W						●		●
● Reverse regulator 	R1100-W	●	●					117	
	R2100-W		●	●					
	R3100-W		●	●					
	R4100-W		●	●	●				
	R6100-W					●	●		
	R8100-W					●	●		
● Regulator/medium pressure type 	RM3000-W		●	●	●			167	
	RM4000-W		●	●	●				

(Lubricator)

Series	Model no.	Port size						Page
		1/8	1/4	3/8	1/2	3/4	1	
● Lubricator 	L1000-W	●	●					125
	L3000-W		●	●				
	L4000-W		●	●	●			
	L8000-W					●	●	

Series variation



F.R.L. unit (Other related products/attachment)

(Other related products)

Series	Model no.	Port size														Page		
		ø4	ø6	ø8	ø10	ø12	1/16	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2		2	
● Automatic drain	DT3000/4000-W									●	●							209
● Pneumatic pressure switch	P4000-W								●	●	●							133
	P*100-W							●	●	●	●	●	●					135
	APS-W							●										205
● Shut-off valve	V1000-W							●	●									139
	V3000-W								●	●	●							
● Lockout valve (OSHA compliant)	V3010-W								●	●	●							142
	V6010-W											●	●					
● Slow start valve	V3301-W								●	●	●							145
	V3321-W								●	●	●							
● Thin type pressure gauge	G401																	195
● Pressure gauge with safety mark	G40D/50D							●	●									196
● Pressure gauge with limit mark	G41D							●	●									197
● General purpose pressure gauge	D49D/50D							●	●									198
● Pressure gauge for panel mount	G53D							●	●									199
● Pressure gauge with switch	G52D								●									201

(Attachment)

Series	Model no.	Applicable model	Page
● T type bracket	B110-W	1000 Series	148
	B310-W	2000/3000 Series	
	B410-W	4000 Series	
	B810-W	6000/8000 Series	
● C type bracket	B120	1000 Series	148
	B220	2000 Series	
	B320	3000 Series	
	B420	4000 Series	
	B620	6000 Series	
	B820	8000 Series	
● L type bracket	B130	1000 Series	148
	B230	2000 Series	
	B330	3000 Series	
	B430	4000/6000 Series	
● Joiner	C1000-J100-W	1000 Series	148
	C4000-J400-W	2000/3000/4000 Series	
	C8000-J800-W	6000/8000 Series	
● Distributor	D101-W	1000 Series	149
	D401-W	2000/3000/4000 Series	
	D801-W	6000/8000 Series	
	D300-W	2000/3000/4000 Series	
● Piping adapter	A100-W	1000 Series	151
	A400-W	2000/3000/4000 Series	
	A800-W	6000/8000 Series	
● L type piping adapter	A101-W	1000 Series	152
	A401-W	2000/3000/4000 Series	
	A801-W	6000/8000 Series	

It's NEW CONCEPT

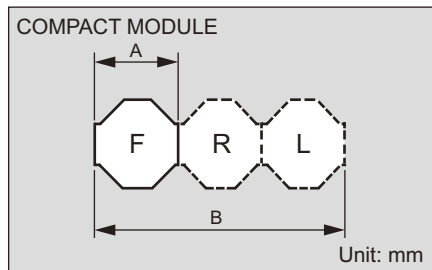
Pursuing high performance for all aspects,
functionality, operability, serviceability, and safety.

(Filter for compressed air, regulator, lubricator and other component)

FUNCTIONAL FEATURES

● Compact module

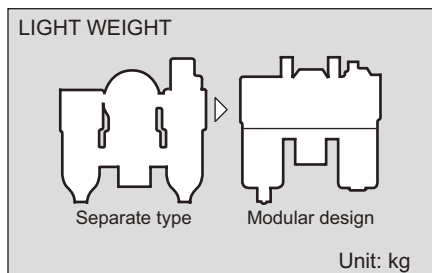
F.R.L. main dimensions (width and depth) are integrated into a compact module. Accurate assembly dimensions are obtained with simple calculation.



	C1000-W	C2500-W	C3000-W	C4000-W	C6500-W	C8000-W
A	40	63 50 63	63	80	90 90 100	100
B	40 x 3	63 x 2 + 50	63 x 3	80 x 3	90 x 2, 100	100 x 3

● Light weight (1/2 (CKD comparison))

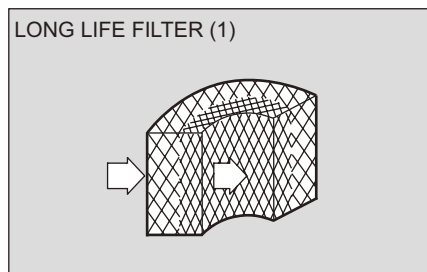
Hybrid material (aluminum die cast with resin cover) provides strength and cuts weight 50% over the conventional type. (C4000 comparison)



	C1000-W	C2500-W	C3000-W	C4000-W	C6500-W	C8000-W
Modular design	0.4	0.99	1.15	1.7	3.4	4.4
Conventional products	0.7	1.8	1.8	3.4	7.2	7.2

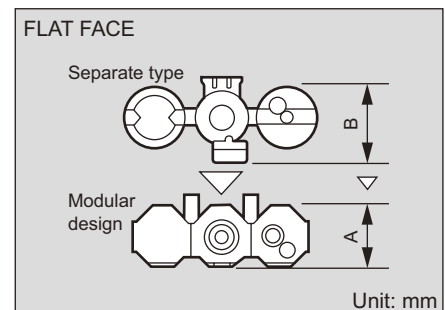
● Long-life element

This element incorporates CKD's original chemical fiber structure (patent pending), which has a rough surface and gradually becomes finer toward the inside. Clogging is greatly reduced and element life greatly extended. Rust does not form.



● Embedded pressure gauge for saving space

The conventional protruding pressure gauge wasted space on the front, and posed risks to users. Neat design and safety are realized by embedding the pressure gauge into the body.



	C1000-W	C2500-W	C3000-W	C4000-W	C6500-W	C8000-W
Modular design A	57	70.5	63	79	100	100
Conventional products B	74	109	109	124	131	131

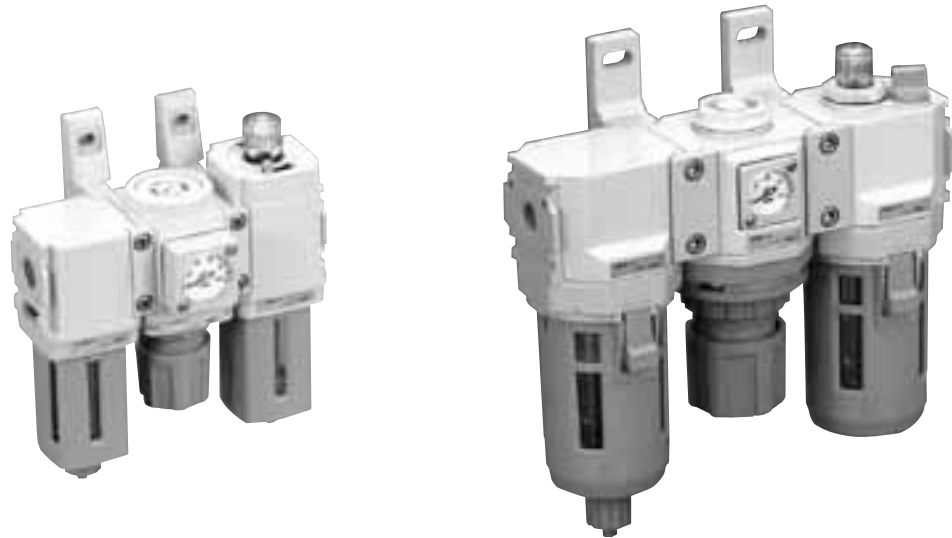
● Mechanism to prevent oil dripping during primary pressure drop
Oil dripping caused by reverse flow when pressure is released with the pressure release valve, etc., is suppressed.

● Corrosion resistant, safe bowl guard
A very safe and corrosion resistant plastic bowl guard is incorporated.

● Gauge plug

The gauge plug is sealed even without a pipe plug. (Refer to page 195 when using the screw-in type pressure gauge.)

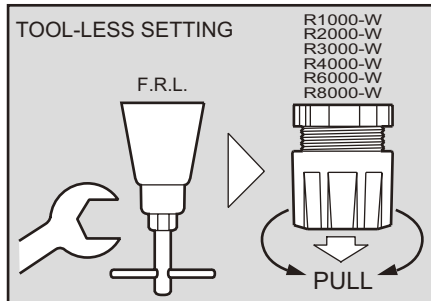
⚠ Always read safety precautions on pages 11 to 17 before starting use.



OPERATIVE FEATURES

● Adjust pressure without tools

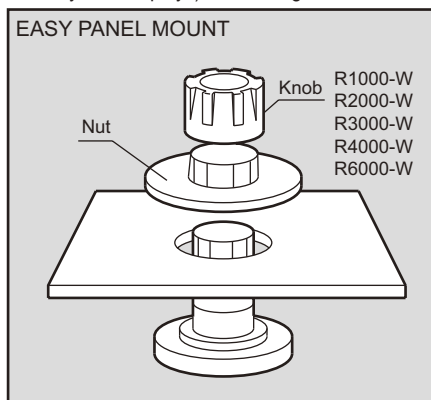
Pressure is adjusted with one hand. The knob is locked with a single push, and is easily operated when setting pressure.



● Easily installed on panels

When the panel mounting nut is loosened, the nut acts as a jack and enables the knob to be removed easily. Fix the nut to mount in the panel. The L-type bracket is also installed similarly to the nut.

(When the L-type bracket is used, the body is fixed securely without play.) * Excluding 8000-W series.

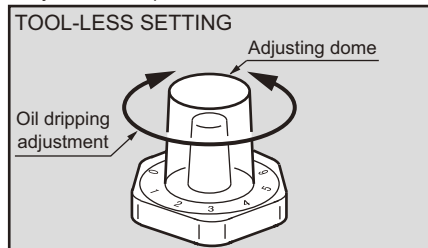


Note: Install the nut before installing the knob. (With the R2000-W, the nut is removed without removing the knob.)

● Oil drip adjustment knob with lock

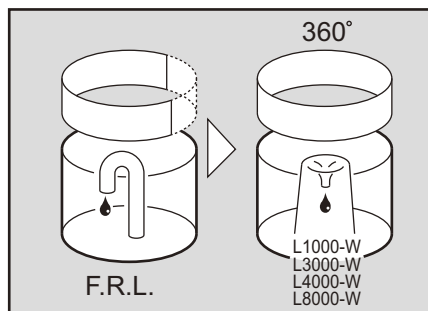
The oil drip is adjusted easily manually without using tools. A stopper in the opening functions as a lock, increasing safety. Numbers on the dial are used as a guide after drip is adjusted.

* Adjust the oil drip to 0.5 N·m or less.



● Double plastic structure

A double plastic structure is used so oil dripping is confirmed from 360°.



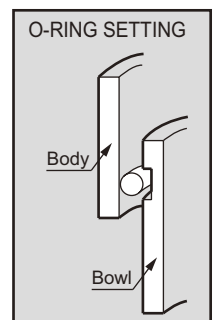
● One-touch integrated attachment

The integrated bowl and bowl guard are easily attached and removed by operating the latch. (The 1000-W Series has no latch)

* Confirm that pressure is not applied before attaching or removing the bowl or bowl guard.

● O ring drop prevention

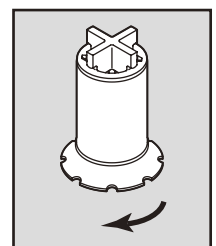
An O ring slot is provided on the bowl to prevent problems caused if the O ring falls off during bowl attachment and removal. The O ring does not fall off during maintenance, and a safe and accurate seal is attained.



● One-touch integrated filter element

The integrated element is removed by turning the baffle 45° to the left.

(Only 1000-W Series)



F.R.L. Combination

Option explanation


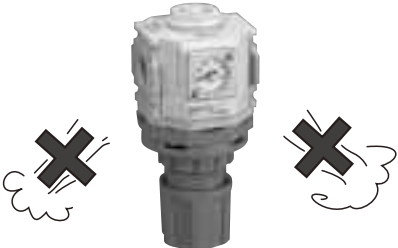

Combination lists of drainage and bowl material of filter (item model no. display (D))


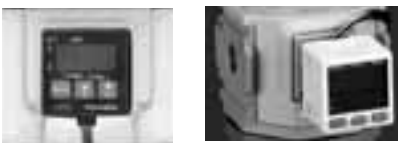
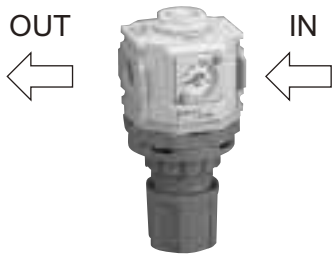
Applicable Series	Bowl material		Manual drain cock	Automatic drain with manual cock		Large automatic drain with manual cock	
				NO type	NC type	NO type	NC type
1000-W Series	Plastic bowl	Polycarbonate	○ (blank)	X	○ (symbol: F1)	X	X
		Nylon	○ (symbol: Z)	X	○ (symbol: F1Z)	X	X
	Metal bowl	Aluminum	X	X	X	X	X
2500-W Series 3000-W Series 4000-W Series 6000-W Series	Plastic bowl	Polycarbonate	○ (blank)	○ (symbol: F)	○ (symbol: F1)	X	X
		Nylon	○ (symbol: Z)	○ (symbol: FZ)	○ (symbol: F1Z)	X	X
8000-W Series	Metal bowl	Aluminum	○ (symbol: M/M1)	○ (symbol: FM/FM1)	○ (symbol: F1M/F1M1)	X	X
8000-W Series	Plastic bowl	Polycarbonate	○ (blank)	○ (symbol: F)	○ (symbol: F1)	○ (symbol: FF)	○ (symbol: FF1)
		Nylon	○ (symbol: Z)	○ (symbol: FZ)	○ (symbol: F1Z)	○ (symbol: FFZ)	○ (symbol: FF1Z)
	Metal bowl	Aluminum	○ (symbol: M/M1)	○ (symbol: FM/FM1)	○ (symbol: F1M/F1M1)	○ (symbol: FFM/FFM1)	○ (symbol: FF1M/FF1M1)
Features			-	In a nonpressurized state, such as at night, the valve opens and drainage is discharged automatically.	Air is not purged during initial pressurization.	Discharge performance is high, and drainage is automatically discharged when the unit is not pressurized.	Discharge performance is high, and air is not purged during initial pressurization.

Combination lists of drainage and bowl material of lubricator (item model no. display (D))

Applicable Series	Bowl material		Without manual cock		With manual cock	
			Without manual cock	With manual cock	Without manual cock	With manual cock
1000-W Series	Plastic bowl	Polycarbonate	○ (blank)	○ (symbol: C)		
		Nylon	○ (symbol: Z)	○ (symbol: CZ)		
	Metal bowl	Aluminum	X	X		
2500-W Series 3000-W Series 4000-W Series 6000-W Series 8000-W Series	Plastic bowl	Polycarbonate	○ (blank)	○ (symbol: C)		
		Nylon	○ (symbol: Z)	○ (symbol: CZ)		
	Metal bowl	Aluminum	○ (symbol: M)	○ (symbol: CM/CM1)		

Option symbol of pressure range, relief, pressure gauge, flow direction and explanation (item model no. display (D))

Option symbol: L  <ul style="list-style-type: none"> • Pressure display: 0 to 0.4MPa • Pressure range: 0 to 0.35MPa • Pressure gauge: G401-P04 	Option symbol: N  <ul style="list-style-type: none"> • Air is not relieved. 	Option symbol: T  <ul style="list-style-type: none"> • Type with no pressure gauge. • The Rc1/4 gauge port is sealed when the plug is assembled. • Refer to page 203 when assembling the pressure gauge.
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Option symbol: T8, T6  <ul style="list-style-type: none"> • Due to round pressure gauge attached, a pressure gauge is not included. • The pressure gauge mounting port is ventilated. • Refer to page 203 when assembling the pressure gauge. 	Option symbol: R1, R2 (note)  <ul style="list-style-type: none"> • Pressure switch with indicator PPD assembly • Digital pressure sensor PPX attachment (Refer to the "Pneumatic, Vacuum and Auxiliary Components" (No. CB-024SA) catalog for details.) 	Option symbol: X1  <ul style="list-style-type: none"> • The pressure gauge faces forward, with IN on the right side.
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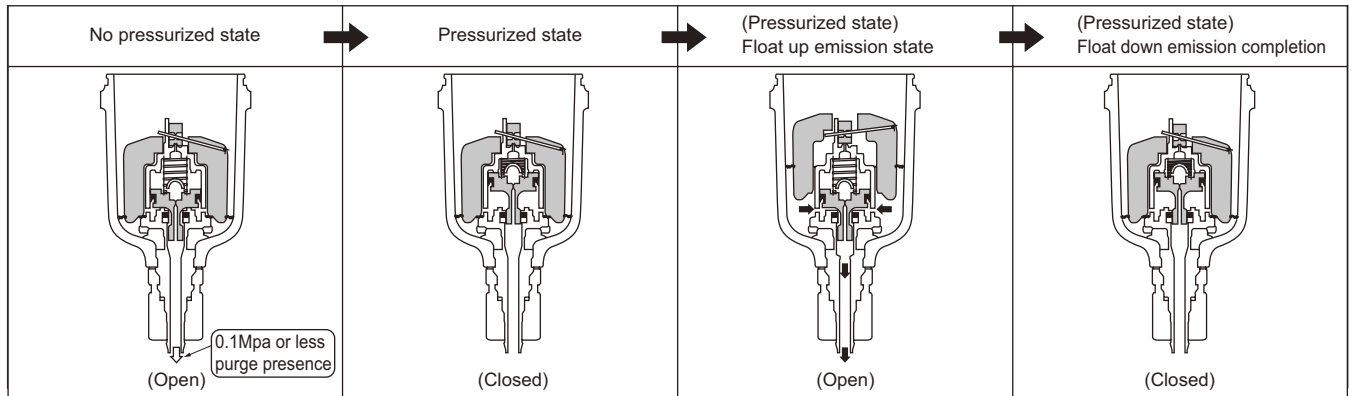
(Note) Option symbol "R1" is not used for the C*000-W Series or C*010-W Series.

F.R.L. Combination

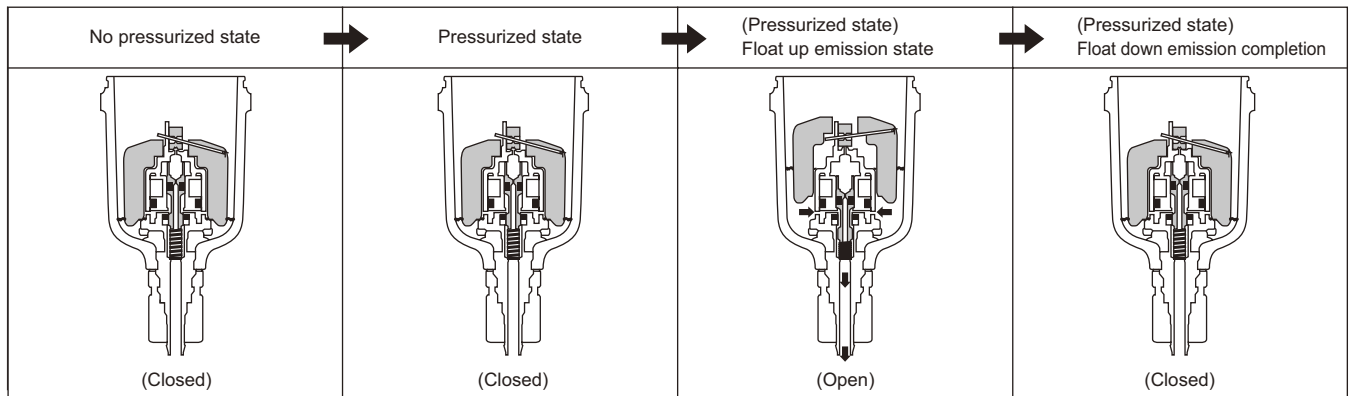
Operational explanation of float type automatic drain

Operational explanation of float type automatic drain

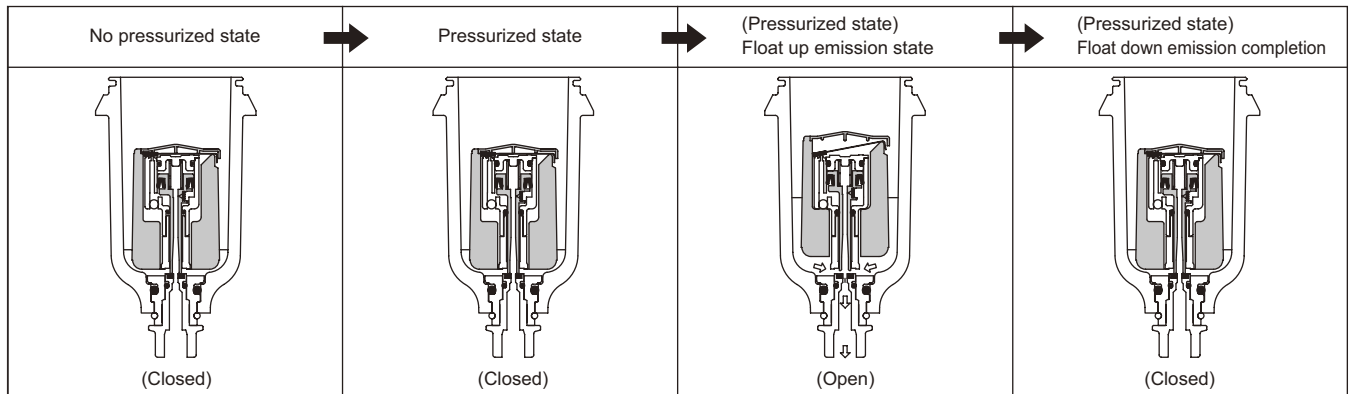
- NO type (F, FF)
3000-W/4000-W/6000-W/8000-W Series



- NC type (F1, FF1)
3000-W/4000-W/6000-W/8000-W Series



- NC type (F1)
1000-W Series



	Operation overview		Features	Cautions
	No pressurized (evening, etc.)	Pressurized		
NO type	Drainage discharge is opened and drainage is discharged naturally.	Drainage is discharged with air from the drainage discharge section temporarily until pressure becomes the minimum activation pressure or higher. After filling, the drainage discharge section is closed.	Drainage is discharged naturally in the nonpressurized state (nighttime, etc.), so user discharge is not required. In the pressurized state, once pressure is attained, drainage is automatically discharged when it accumulates at a set level.	As indicated in features, air and drainage are temporarily discharged until the pressure attains the minimum activation so pressure may not be sufficient with a compressor (0.75 kW or less) having a small discharge flow. Use the NC type in this case.
NC type	The drainage discharge section is closed.		This type is suitable for a compressor (0.75 kW or less) having a small discharge. There is no temporary air purging during pressurization. Once pressure is maintained, drainage is automatically discharged when it accumulates at a set level.	Drainage is not discharged in a nonpressurized state (nighttime, etc.), so user discharge is required in applications where large amounts of drainage are generated in a nonpressurized state (nighttime, etc.).



Pneumatic components (F.R.L. unit (modular design))

Safety precautions

Always read this section before starting use.

Refer to "Pneumatic, Vacuum and Auxiliary Components" (No. CB-024SA) for precautions on general pneumatic pressure components.

F.R.L. unit (modular design)

Design & Selection

1. Common

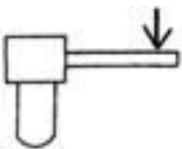
⚠ WARNING

- This product is for industrial use, and must not be used in components or circuits for medical equipment or components that involve human lives.
- Air filter, lubricator plastic bowl, lubricator' drip window, and pressure gauge lens
These parts are made of polycarbonate, and cannot be used in environments containing synthetic oil, organic solvents, chemicals, coolant, screw locking agent, leak detection solutions, or hot water, etc., or where these substances may come in contact with them.
Refer to page 17 for details on the bowl's chemical resistance.

■ Piping load torque

Check that the piping load or torque is not applied to the body or piping sections.

Series	1000-W	2000-W	3000-W	4000-W	6000-W	8000-W
Max. torque N·m	15	15	50	50	100	100

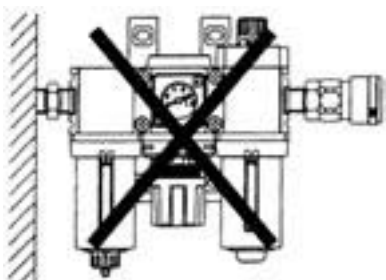


With the 1000-W Series, application of a torque of 30 N·m or more on piping could damage piping. Use within the specified torque, even when using the piping adapter.

Avoid piping as followings.

Piping with a single support should not be used due to excessive force resulting in damage.

With the 1000-W Series, application of a torque of 30 N·m or more on piping could damage piping. Use within the specified torque, even when using the piping adapter.



⚠ WARNING

- Drainage levels are high
Install the air dryer and drain separator before the air filter.
Use of hot humid air causes excessive drainage from the compressor and may shorten component life or cause corrosion.
- Dry air
Rubber parts for the regulator could deteriorate quickly, so use of a fluorine rubber valve assembly is recommended. Consult with CKD when required.
- For compressor circuit of water lubrication method
Take measures to prevent chlorine-based substances from entering the compressed air.
- Use the automatic drain under the working conditions below.
Failure to observe this could result in operation faults.
NO type automatic drain (exhaust without pressurized): For "F" and "FF"
 - Use a compressor with a capacity of 0.75 kW {90l/min[ANR]} or more.
 - Set the working pressure to 0.1 MPa or more. (Air is purged with initial drainage until pressure reaches 0.1 MPa.)
NC type automatic drain (no exhaust without pressurized): For "F1" and "FF1"
 - A compressor with a capacity of 0.75 kW or less is used.
 - Set the working pressure to 0.15 MPa or more.
For 1000-W Series NC automatic drain
 - Set the working flow to less than the maximum working flow.
 - In places with high vibration, such as where the compressor is installed, air could leak from the drain port when the float vibrates. Avoid this use.
 - Overflowing drainage causes operation faults.

F.R.L. unit (modular design)

2. Regulator, filter and regulator

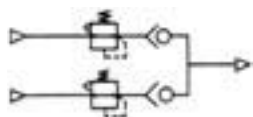
⚠ WARNING

- Install a safety device where an output pressure exceeding the regulator's set pressure value could result in damage or faulty operation of secondary side devices.
- The regulator cannot process residual pressure (remove secondary pressure) when primary pressure is released. Use a regulator with a check valve when residual pressure must be processed.

- In some cases, the regulator cannot be used for secondary side sealing circuits or balance circuits. Consult with CKD for these applications.

⚠ CAUTION

- Set secondary pressure of the regulator to 85% or less of the primary side, or else the pressure drop could increase.
- When using regulators in parallel as shown below, do not use the OUT side as a closed circuit. If a closed circuit is required, set a check valve at the regulator's OUT side.



3. Lubricator

⚠ WARNING

- Lubricator
Consult with CKD for using lubrication with an air motor or bearings. Also consult with CKD when using this unit at a high frequency such as in a press machine.

⚠ CAUTION

- If the working air rate is low for the lubricator, oil may not drip.
Check the minimum air rate required for dripping oil.

4. Pressure switch

⚠ CAUTION

- When using the compact pressure switch PPD or digital pressure sensor PPX, avoid using as a set with the lubricator. The switch is not a drip-proof structure, so operation could be disabled if the lubricating oil comes in contact with it.

5. Shut-off valve

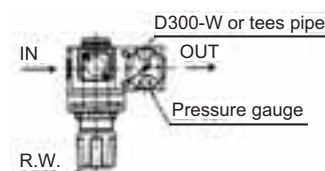
⚠ WARNING

- Cautions on shut-off valve
 - The EXH port is dedicated for installation of the silencer. Tighten with a torque of 3 N·m or less -- as far as is tightened manually.
Avoid piping that applies piping load or torque, etc., to the EXH port.
 - If exhaust is incomplete because of air quality, manually discharge air by operating the knob (turn and raise).

6. Pressure gauge

⚠ CAUTION

- When using this unit for a large flow, etc., install a pressure gauge as shown below so that secondary pressure is measured accurately.



F.R.L. unit (modular design)

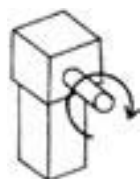
Installation & Adjustment

1. Common

⚠ CAUTION

- Avoid installing this product where it is subject to direct sunlight.
- Flush and wash pipes to be used.
Dirt or foreign materials in piping will lower product performance.
- Check that foreign materials do not enter when tightening pipes or joints.
When screwing in piping or joints, check that swarf from piping threads or sealing agent does not get inside. Dirt or foreign materials in piping will lower product performance.
- To use F.R.L. correctly
 1. Set the regulator pressure setting to increase. After setting pressure, lock the handle. Check primary pressure carefully before setting pressure.
 2. Check the arrow indicating the air inlet before connecting. A reverse connection could result in improper operation.
 3. Install the air filter and the lubricator case downward vertical. Emission defective and dripping of drain could not be checked.
 4. Use of the automatic drain where vibration is present could cause faults and malfunctions.
- Pipe automatic drain piping as follows:
Not doing so could cause malfunctions.
Use an inner diameter of 5.7 or more and piping of 5 m or less for the drainage section. Do not use vertical piping.
Pipe so that no lateral load acts on the bowl.
Fix the hexagon side of the cock before screwing the joint, etc., into the Rc1/4 female screw.
- Piping screw-in torque
Make sure that excessive torque is not applied on the body and piping when piping.

Series	1000-W	2000-W	3000-W	4000-W	6000-W	8000-W
Max. torque N·m	15	30	30	30	70	70



■ Drain piping

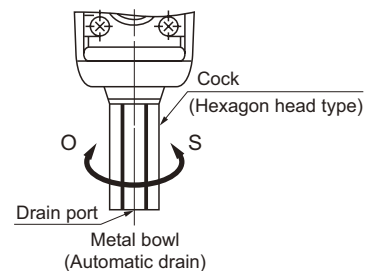
- The drain piping for the plastic bowl has a barbed nipple, and can be directly installed. However, confirm that the drain cock is closed before inserting the tube.

■ Tightening torque of drain cock

- Max. tightening torque of drain cock of a plastic bowl is as follows.
 - 1000 Series: 0.1N·m
 - Other: 0.5N·m

■ Drain piping of metal bowl with automatic drain

- Fix the cock's hexagonal face before screwing the joint, etc., into the drain port's female threads. When using the metal bowl with automatic drain, if the drain is piped with a tightening joint, manual operation is not possible.



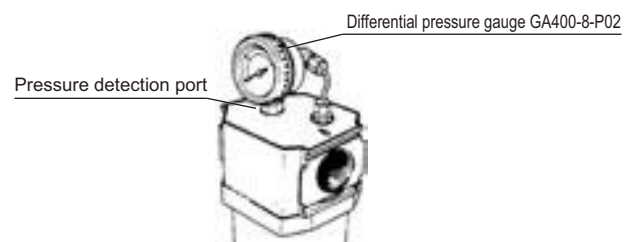
■ Drain with pressure detection port

For F6000-*-W-Q/M6000-*-W-Q/MX6000-*-W-Q/
F8000-*-W-Q/M8000-*-W-Q/
MX 8000-*-W-Q

A drain with a pressure detection port is an option for the F6000-W, M6000-W, MX6000-W, F8000-W, M8000-W, and MX8000-W.

The life of the filter element or oil mist filter mantle assembly is visually checked by assembling the differential pressure gauge GA400-8-P02 into the pressure detection port.

When selecting option Q and X1 simultaneously for F6000-W and M6000-W and mounting differential pressure gauge GA400, raise the gauge with piping material so that it does not interfere.



Check high- and low-pressure port positions for the differential pressure installation port, and install correctly.

F.R.L. unit (modular design)

2. Regulator, filter and regulator

⚠ CAUTION

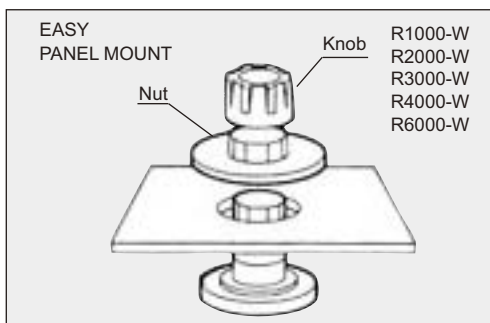
■ Regulator, filter and regulator

- Lightly tighten (0.6 N·m or less) mounting screws for embedded pressure gauge G401-W-OP, G401-W, and gauge plug.
- When installing the pressure gauge with a safety mark on the gauge plug, or when installing a general screw-in pressure gauge, tighten with a torque of 10 to 15 N·m or less.
- Do not move or swing the product holding the adjustment knob on the regulator.
- Check that pressure exceeding the pressure gauge's full scale is not applied because the pressure gauge could be damaged. Pay special attention when using the full-scale 0.2 or 0.4 MPa pressure gauge.)

■ Panel mount of regulator

When the panel mounting nut is loosened, the nut acts as a jack and enables the knob to be removed easily. Fix the nut to mount in the panel. The L-type bracket is also installed similarly to the nut. (When the L-type bracket is used, the body is fixed securely without play.)

* Excluding 8000-W Series.



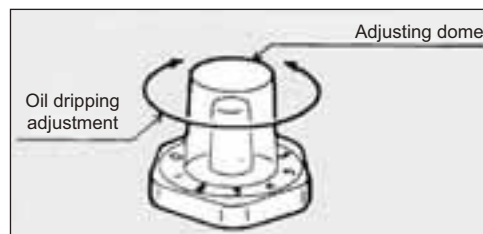
Note: Install the nut before installing the knob.
(With the R2000-W, the nut is removed without removing the knob.)

3. Lubricator

⚠ CAUTION

■ Adjustment of lubricator drop down

- Adjust the oil rate by turning the adjusting dome with bare hands. When closing the dome, tighten with a torque of 0.5 N·m or less. The numbers (scale) on the dial are a guide used after adjustment, and do not indicate the oil drip rate.

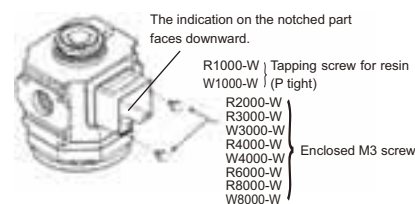


4. Pressure switch

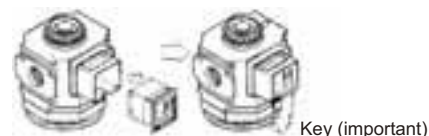
⚠ CAUTION

■ Pressure switch (PPD) installation method

- Separate the body from the base.
- Attach an O ring.
 - * Refer to outlines for direct installation (PPD-****-1F-1) (PPD-****-1F-2) on the left, and attach the O ring to the O ring groove with a clean finger.
- Install the base.
 - Install the base with the two enclosed screws (M3).
 - * Carefully install at the designated location in the designated direction while taking care not to dislocate the O ring.
 - * Do not tighten one screw completely at once, but instead alternately tighten the two screws so that they are balanced. (Tightening torque $0.5 \pm 0.1 \text{ N}\cdot\text{m}$)



- This completes installing the main unit.
 - Make sure that there is no dirt or foreign matter at the base, and then insert the body. Make sure that the body does not catch on the base.
 - Next, insert the two keys. While pressing the body exterior against the base, set the heads of the keys so that they face each other, then insert them so that they are completely stored in the recesses on the base.



Note) Install both keys. Check that both keys are installed before pressurizing.

Note) When changing the position or orientation of the PPD which has been installed once, install using the new keys, O rings and installing screws enclosed with the option kit.

F.R.L. unit (modular design)

Installation & Adjustment

5. Pressure gauge

⚠ CAUTION

■ Pressure gauge

Repeated and sudden increases and decreases in pressure and pressure pulsation must be avoided because it could adversely affect pressure gauge life. Either ease pressure fluctuation in the circuit or consult with CKD so that a pressure gauge with cushioning screw is prepared. Applying pressure exceeding the pressure range could damage the pressure gauge.

During Use & Maintenance

1. Common

⚠ WARNING

■ Regularly, once or more in six months, check the air filter and lubricator's plastic bowl for cracks, damage, and other deterioration.

Cracks, damage or other deterioration could result in breakage, so if found, replace with a new bowl or with a metal bowl.

■ Check the air filter, lubricator plastic bowl, and lubricator drip window periodically for contamination.

- If parts are heavily contaminated or if transparency has dropped, replace with a new bowl or drip window.
- Use a diluted neutral household detergent to wash parts, and then rinse well with clean water. Use of other agents could result in breakage.

■ Removing bowl of filter and lubricator

Before removing the bowl, the compressed air, discharge pressure in the bowl completely, and confirm that no residual pressure remains.

⚠ CAUTION

■ Check the oil drip rate once a day.

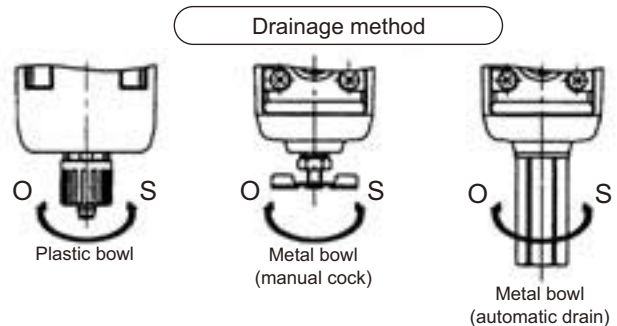
If the oil drip is faulty, problems could occur in the unit being lubricated.

■ Do not branch the air into lubricating air and oilless air with a distributor. The lubricator oil could reverse flow.

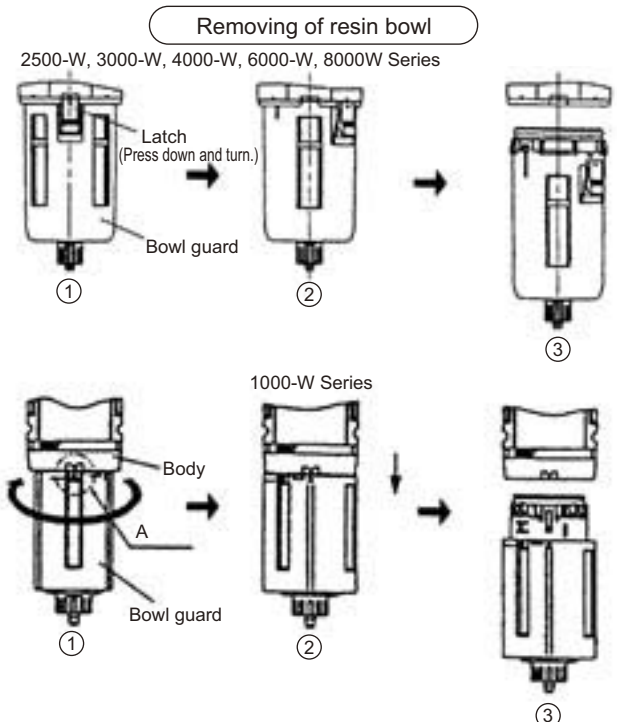
■ Performance could drop if the filter element is clogged. Regularly inspect and replace the element.

■ Do not disassemble or modify the product.

■ Read instructions and precautions enclosed with the product before starting use or maintenance.



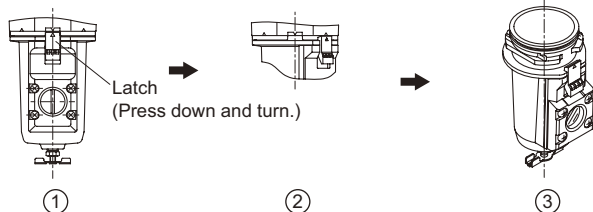
- Drainage is started when the cock is turned to the O side, and the discharge is stopped when the cock is turned in the S direction. Tighten indicate a degree by a man's hand to a S direction.
- When the automatic drain is provided, drainage is discharged automatically when it accumulates. Drainage is also discharged manually.



F.R.L. unit (modular design)

Removing of metal bowl

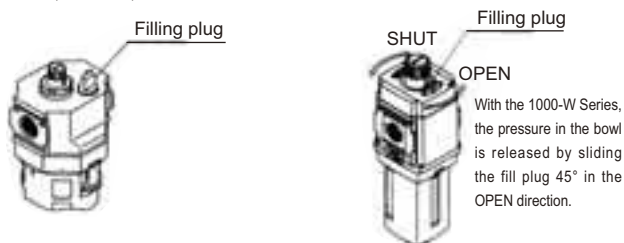
3000-W, 4000-W, 6000-W, 8000W Series



Removing filling plug

3000-W, 4000-W, 8000-W Series

1000-W Series

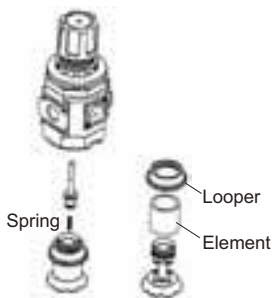


- Close the fill plug after lubricating.
- Do not remove the bowl without removing the fill plug while the bowl is pressurized. (L3000-W to L8000-W)
- With the 1000 Series, do not remove the bowl with the fill plug set shut while the bowl is pressurized. (L1000-W)

2. Filter and regulator

CAUTION

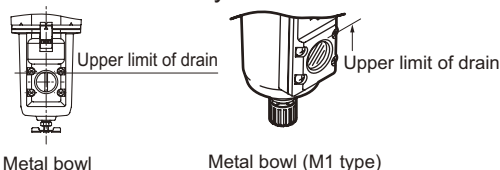
- W1000-W to W8000-W element
Inspect the valve assembly when it is removed during maintenance.
Do not lose springs, etc., during maintenance.



3. Filter

WARNING

- Drain so that air filter drainage does not accumulate beyond the maximum.
Components could malfunction if drainage flows into the secondary side.



- The resin bowl must not be filled more than the "drain upper limit" or "max. level" stamped on the bowl guard.

CAUTION

- Submicron 0.3 μ m element
This filter cannot be washed and reused. When the pressure drops to 0.07 MPa, replace the filter with a new one. (Excluding 1000 Series)
- Oil mist filter
The mantle (element) life ends after one year (6000 hours) or when pressure drops to 0.1 MPa -- excluding the X type. Replace the mantle when life is reached. (Do not touch the urethane foam layer when replacing the mantle.)

4. Regulator, filter and regulator

CAUTION

- Pull the pressure adjustment knob and release the lock before setting the regulator pressure. The regulator could be damaged if the pressure is set without unlock.

5. Lubricator

WARNING

- Use Class 1 turbine oil (nonadditive) ISO VG32 for the lubricator.
Other oils could cause breakage or improper operation.

- Removing filling plug of lubricator
To prevent the filling plug from popping out, loosen the filling plug by one turn, and then completely depressurize the bowl before removing the filling plug. Wipe away any dirt around the fill plug that could scatter.

CAUTION

- Periodically replenish oil in the lubricator bowl so that it does not drop below the lower limit.

- When lubricating the L1000-W, pressure in the bowl is released by turning the fill plug. Refer to the section on [During Use & Maintenance](#), above, for details on using the fill plug. (Lubrication is done while pipes are pressurized.)
Check that there is no pressure in the bowl, remove the bowl and bowl guard, and then directly lubricate to the bowl.
Refer to the previous page for details on removing the bowl.

- When lubricating the L3000-W to L8000-W, loosen the fill plug slightly to release pressure in the bowl, then remove the fill plug. Refer to the section on [During Use & Maintenance](#), above, for details on using the fill plug. (Removing the fill plug enables lubrication to be done while pipes are pressurized.)
Oil is supplied from the fill plug hole, and the bowl is directly lubricated by removing the bowl and bowl guard.
Refer to the previous page for details on removing the bowl. With the L8000-W, oil is supplied to the spacer by lubricating from the fill plug hole.

F.R.L. unit (modular design)

F.R.L. Component

Chemical resistance of plastic

⚠ WARNING

- The chemical resistance of plastic parts is shown below.
- Avoid using products in a compressed atmosphere containing chemicals, in the atmosphere, or where chemicals could contact parts.
- Use in this state could lead to bowl damage and accidents.
- Avoid using these chemicals or an atmosphere containing these chemicals.
- A metal bowl is used if these chemicals must be used.

Chemical resistance of plastic bowl and body

Use a metal bowl in an atmosphere containing chemicals listed below.
Check whether the testing solutions, sealing agents and adhesives contain the following chemicals.

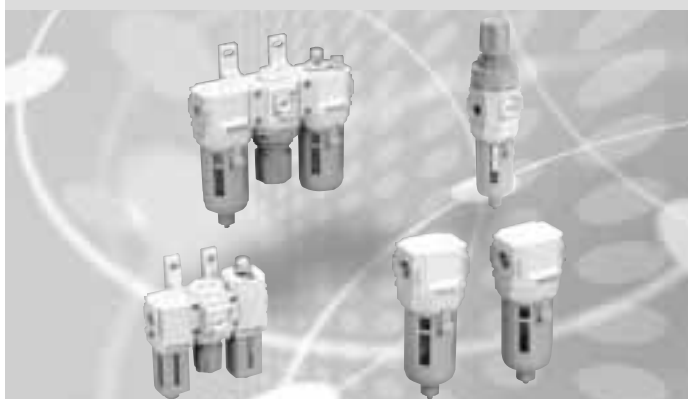
Types of chemicals	Category of chemicals	Main products of chemicals	General usage examples	Polycarbonate bowl	Nylon bowl	Nylon body
Inorganic chemicals	Acid	Hydrochloric acid, sulfuric acid, hydrofluoric acid, phosphoric acid, chromic acid, etc.	Acid washings of metals, acidic degreasing solutions, skin treatment solutions	X	X	X
	Alkaline	Alkalies such as caustic soda, caustic potash, lime, ammonium water, sodium carbonate	Alkaline degreasing liquid of metal The water-based coolant, leakage detection agent	X	○	○
	Inorganic salt	Sodium sulfate, nitrate of soda, potassium bichromate, sulfate of soda, etc.		X	○	○
Organic chemicals	Aromatic hydrocarbon	Benzene, toluene, xylene, ethyl benzene, styrene, etc.	Contained in paint thinner (benzene, toluene, xylene)	X	X	X
	Chlorine aliphatic hydrocarbon	Methyl chloride, ethylene chloride, methylene chloride, acetylene chloride, chloroform, trichlylene, perchloroethylene, carbon tetrachloride	Organic solvent-based washing solution for metals (Trichlylene, perchloroethylene, carbon tetrachloride)	X	○	○
	Chlorine aromatic hydrocarbon	Black K benzene, dichloro benzene, benzene hexachloride (B/H/C), etc.	Agricultural chemicals	X	○	○
	Petroleum components	Solvent naphtha, gasoline, kerosene		X	○	○
	Alcohol	Methyl alcohol, ethyl alcohol, cyclohexanol, benzyl alcohol	Used as freezing prevention agent The leakage detection agent	X	X	X
	Phenol	Carbolic acid, cresol, naphthol, etc.	Liquid disinfectant	X	X	X
	Ether	Methyl ether, methyl ethyl ether, ethyl ether	Additive of brake oil	X	○	○
	Ketone	Acetone, methyl ethyl ketone, cyclohexanone, acetophenone, etc.		X	X	X
	Carboxylic acid	Formic acid, acetic acid, butyl acid, acrylic acid, oxalic acid, phthalic acid, etc.	Dyes; oxalic acid for aluminum processing; phthalic acid for paint base and leak-detection agents	X	X	X
	Ester	Dimethyl phthalate (DMP), diethyl phthalate (DEP), dibutyl phthalate (DBP), dioctyl phthalate (DOP)	Use as plasticizer of attached agent composite resin of lubricant, synthetic oil and rust proof oil	X	○	○
	Oxyacid	Glycol acid, lactic acid, malic acid, citric acid, tartaric acid		X	X	X
	Nitro compound	Nitro methane, nitro ethane, nitro ethylene, nitro benzene, etc.		X	○	○
	Amine	Methylamine, diethylamine, ethylamine, aniline, acetoacetanilide, etc.	Additive of brake oil	X	X	X
Nitrile	Acetonitrile, acrylonitrile, benzonitrile, acetoisonitrile, etc.	Raw material for nitril rubber	X	○	○	

○: Use possible, X: Use not possible (Plastic will break.)

Modular design

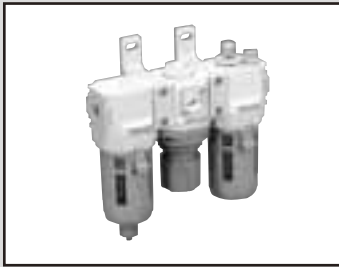
Standard white Series

■ Components for air preparation/pressure adjustment/F.R.L. unit



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F.R.L. combination standard white Series
C1000/C2500/C3000-W
C4000/C6500/C8000-W Series

Space-saving with integrated filter, regulator, and lubricator

Port size: 1/8 to 1



Specifications

Descriptions		C1000-W	C2500-W	C3000-W	C4000-W	C6500-W	C8000-W
Appearance							
Components	Air filter	F1000-W	F3000-W	F3000-W	F4000-W	F6000-W	F8000-W
	Regulator	R1000-W	R2000-W	R3000-W	R4000-W	R6000-W	R8000-W
	Lubricator	L1000-W	L3000-W	L3000-W	L4000-W	L8000-W	L8000-W
Working fluid		Compressed air					
Max. working pressure MPa		1.0					
Withstanding pressure MPa		1.5					
Ambient temperature range °C		5 to 60					
Filtration rating μm		5					
Set pressure range MPa		0.05 to 0.85 ^{Note 3}		0.05 to 0.85			
Minimum drip flow (Note 1) m ³ /min (ANR)		0.015	0.03	0.03	0.065	0.065	0.065
Relief		With relief mechanism					
Oil capacity cm ³		20	85	85	170	170	170 (MAX. 360)
Drain capacity cm ³		12	45	45	80	80	80 (Note 2)
Use oil		Turbine oil Class 1 ISO VG32 (spindle oil can not be used)					
Port size	Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg		0.40	1.01	1.15	1.79	3.64	4.5
Standard accessories		Pressure gauge, bracket, bowl guard					

Note 1: The minimum drip flow is that at which five drops of turbine oil drip per minute at the set pressure of 0.5 MPa.

Note 2: Drainage accumulates up to 170 cm³ only with the manual drain cock.

Note 3: The automatic drain's minimum operating pressure for □

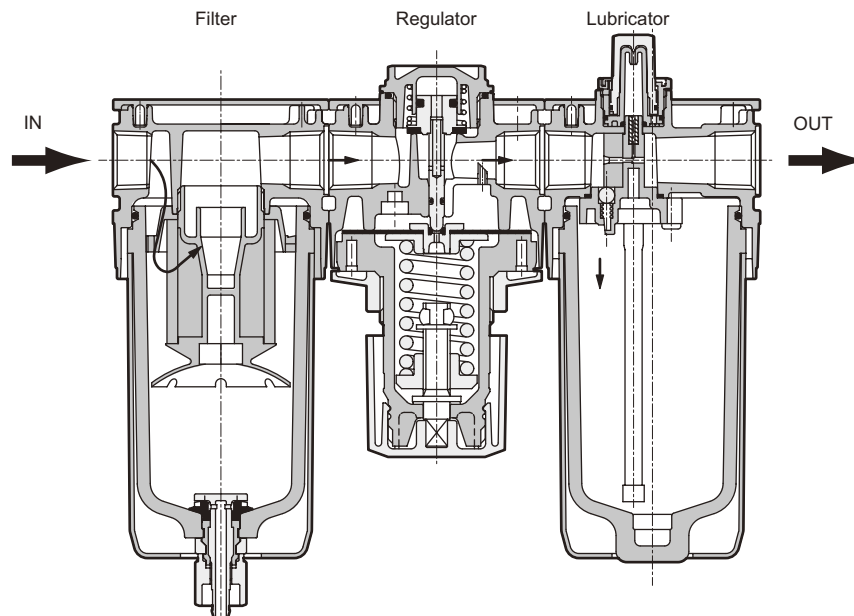
Note 4: The minimum operation pressure of the automatic drain is 0.15 MPa for the "F1" and "FF1" with an automatic drain.

Note 5: When using C □

Refer to the maximum working flow table (page 83) for F1000-W-F1 with an automatic drain for details on maximum working flow. Set the working flow to less than the maximum working flow.

Note 6: When element option "Y" is selected, refer to the maximum working flow table (page 83) for maximum flow. Set the working flow to less than the maximum working flow.

Internal structure



F.R.L. Combination

How to order

How to order

Refer to page 9 for the explanation of the option.



A Model no.
Note 2

B Port size

C Port thread type

D Option

E Assembly attachment

F Display unit

G Piping adapter set (attached)

H Attachment

I Pressure gauge option (attached)

A Model no.		Note 2									
C	1000	C	2500	C	3000	C	4000	C	6500	C	8000

Symbol	Descriptions											
B Port size												
6	1/8	●										
8	1/4	●	●	●	●							
10	3/8		●	●	●							
15	1/2				●							
20	3/4					●	●	●				
25	1								●	●	●	

C Port thread type		Note 1										
Blank	Rc thread	●	●	●	●	●	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●	●	●	●	●	●

D Option		Note 2											
Drainage	Blank	Filter with manual drain cock, lubricator without manual drain cock	●	●	●	●	●	●	●	●	●	●	●
	C	Lubricator with manual cock	●	●	●	●	●	●	●	●	●	●	●
	F	Filter/automatic drain with manual override (NO type: Exhaust without pressurized)											
	F1	Filter/automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●	●	●	●	●	●	●	●
	FF	Filter/large automatic drain with manual override (NO type: Exhaust without pressurized)											●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●	●	●	●	●	●	●	
	Z	Nylon bowl	●	●	●	●	●	●	●	●	●	●	
	M	Metal bowl											
Element	M1	Metal bowl with manual drain cock											
	Blank	5 m	●	●	●	●	●	●	●	●	●	●	
Differential pressure detection	Y	0.3 m (submicron) Note 4											
	Blank	Without differential pressure detection port	●	●	●	●	●	●	●	●	●	●	
Relief pressure	Q	With differential pressure detection port (Rc1/4)										●	
	Blank	0.05 to 0.85MPa	●	●	●	●	●	●	●	●	●	●	
Relief pressure	L	0.05 to 0.35MPa	●	●	●	●	●	●	●	●	●	●	
	Blank	With relief mechanism	●	●	●	●	●	●	●	●	●	●	
Pressure gauge	N	Nonrelief type	●	●	●	●	●	●	●	●	●	●	
	Blank	Standard pressure gauge (with G401-W)	●	●	●	●	●	●	●	●	●	●	
	T	Without pressure gauge (a pressure gauge port (Rc1/4) is assembled with sealed)											
Flow direction	T8	Pressure gauge attached (a pressure gauge port (Rc1/4) is assembled by open)	●	●	●	●	●	●	●	●	●	●	
	Blank	Standard flow (left → right)	●	●	●	●	●	●	●	●	●	●	
	X1	Reverse flow (right → left)	●	●	●	●	●	●	●	●	●	●	

E Assembly attachment		Pages 133 to 144, 149, 150											
Assembled	Blank	Without assembly attachment type	●	●	●	●	●	●	●	●	●	●	●
	U	Assembly attachment type Note 5	●	●	●	●	●	●	●	●	●	●	●
	D	Distributor (D101-W, D401-W, D801-W)	●	●	●	●	●	●	●	●	●	●	●
	S	Pressure switch (P1100-W, 4100-W, 8100-W)	●	●	●	●	●	●	●	●	●	●	●
	P	Pressure switch (P4000-W)											
Assembled	V	Shut-off valve (V1000-W, 3000-W)	●	●	●	●	●	●	●	●	●	●	●
	P	Pressure switch (P4000-W)											
	K	Lockout valve (V3010-W)	●	●	●	●	●	●	●	●	●	●	

F Display unit												
Blank	MPa display, Rc thread	●	●	●	●	●	●	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●	●	●	●	●	●	●

G Piping adapter set (attached)		Pages 133 to 144, 149, 150										
Blank	Not attached	●	●	●	●	●	●	●	●	●	●	●
A6*W	1/8 piping adapter set											
A8*W	1/4 piping adapter set	●	●	●	●	●	●	●	●	●	●	●
A10*W	3/8 piping adapter set	●	●	●	●	●	●	●	●	●	●	●
A15*W	1/2 piping adapter set											
A20*W	3/4 piping adapter set											
A25*W	1 piping adapter set											
A32*W	1 1/4 piping adapter set											

Adaptor screw type												
Blank	Rc thread	●	●	●	●	●	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●	●	●	●	●	●

H Attachment (attached)												
Blank	Not attached	●	●	●	●	●	●	●	●	●	●	●
PW	Pressure switch (P4000-W) + joiner set											
VW	Shut-off valve (V1000-W, V3000-W) + joiner set	●	●	●	●	●	●	●	●	●	●	●

I Pressure gauge option (attached)		Note 5 Page 194										
Blank	Not attached	●	●	●	●	●	●	●	●	●	●	●
G49P	G49D-8-P10 (L: G49D-8-P04)	●	●	●	●	●	●	●	●	●	●	●
G59P	G59D-8-P10 (L: G59D-8-P04)	●	●	●	●	●	●	●	●	●	●	●
G40P	G40D-8-P10 (L: G40D-8-P04)	●	●	●	●	●	●	●	●	●	●	●
G50P	G50D-8-P10 (L: G50D-8-P04)	●	●	●	●	●	●	●	●	●	●	●
G41P	G41D-8-P10 (L: G41D-8-P04)	●	●	●	●	●	●	●	●	●	●	●
G52P	G52D-8-P10 (L: G52D-8-P10)	●	●	●	●	●	●	●	●	●	●	●

Note on model no. selection

Note 1: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port (metal bowl automatic drain) are available, as are attachments P and V.

Note 2: Select options for each drainage discharge, bowl material, element, differential pressure detection, and regulator items.
When selecting options for several items, list options in order from the top.

Note 3: Refer to page 11 for the automatic drain use conditions.

Note 4: Refer to page 83 for maximum processing flow when option "Y" is selected.

Note 5: Mounting position for assembly attachments

Symbol	Attachment mounting position	Applicable model
D	F + (D) + R + L	C1000-W to C8000-W
S or P	F + R + (S, P) + L	C1000-W to C8000-W (Excluding 1000, 6000, 8000 series for "P")
V or K	F + R + L + (V, K)	C1000-W to C8000-W (Excluding 6000, 8000 series for "V", 1000 series for "K")

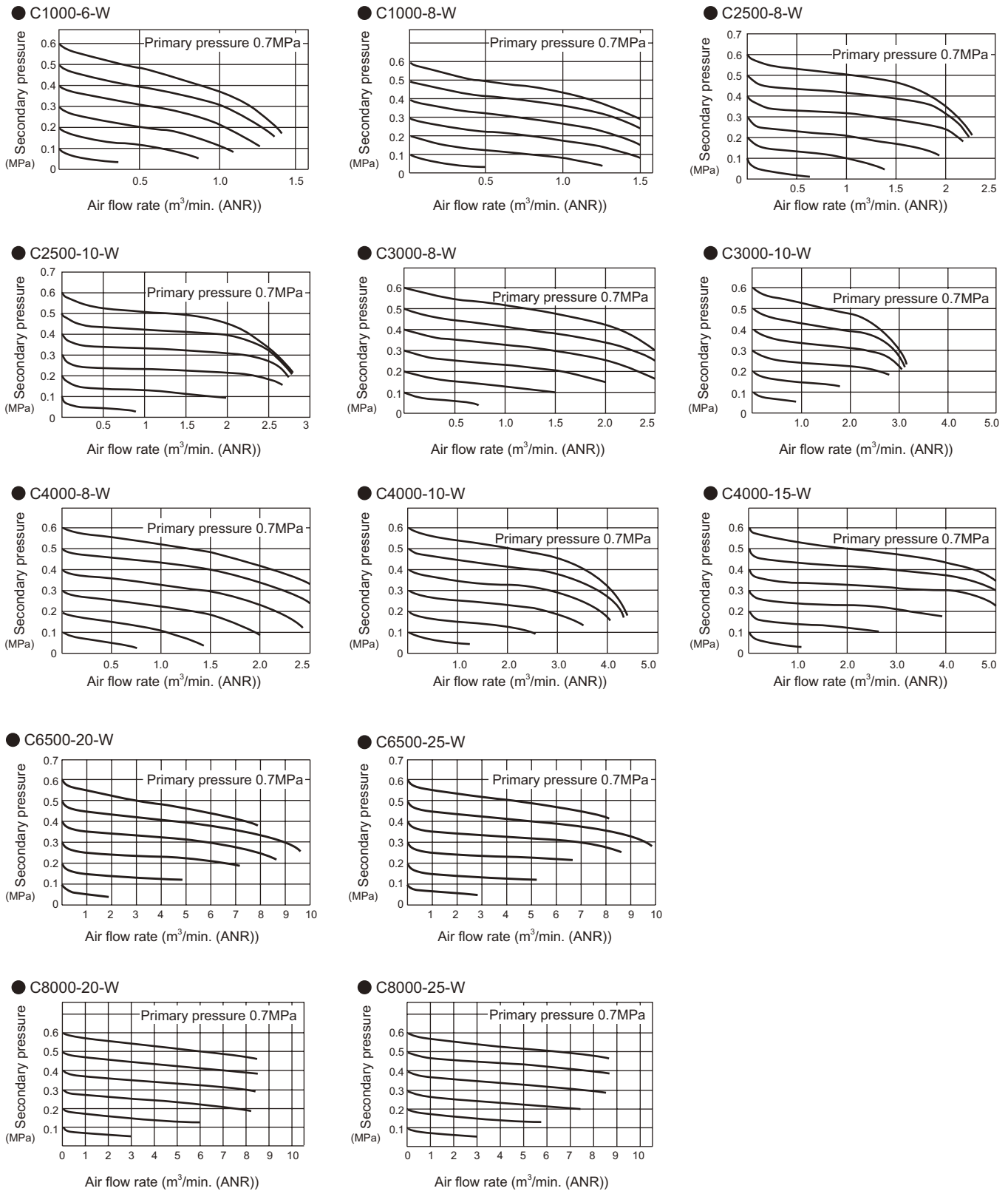
Note) Indicate "U" + "D", "S", "P", "V", and "K" when selecting an assembly attachment.
Use custom combinations specifications for any other combination.

Note 6: If NPT is selected for the C piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

Note 7: Piping adapter A400-20*-W is assembled on both ends of the C4000-20*-W.

F.R.L. Combination

Flow characteristics

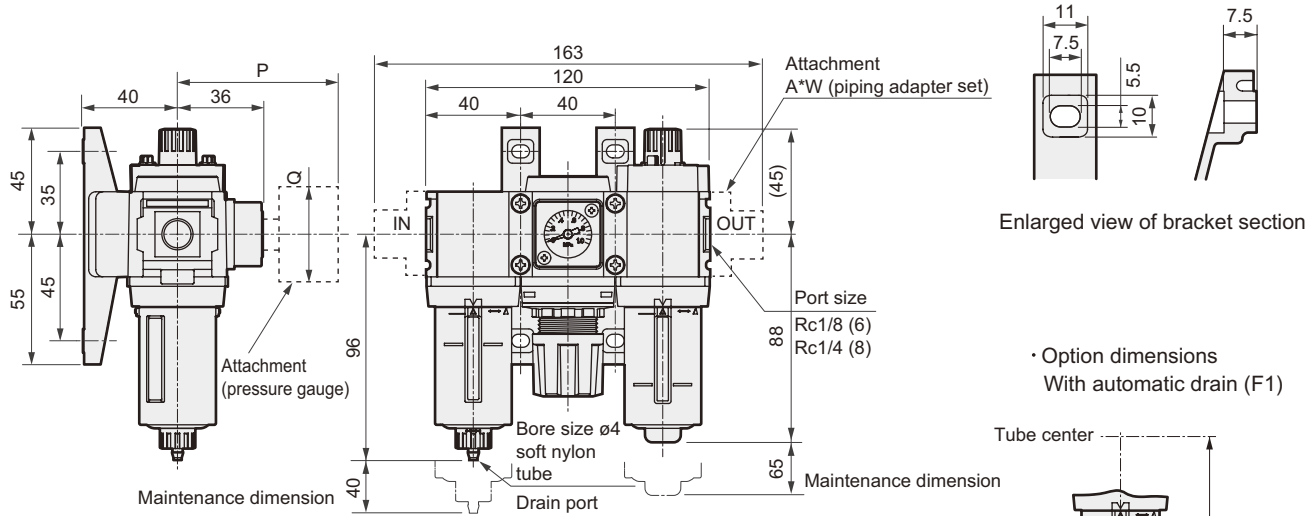


MEMO

F.R.L. Combination

Dimensions

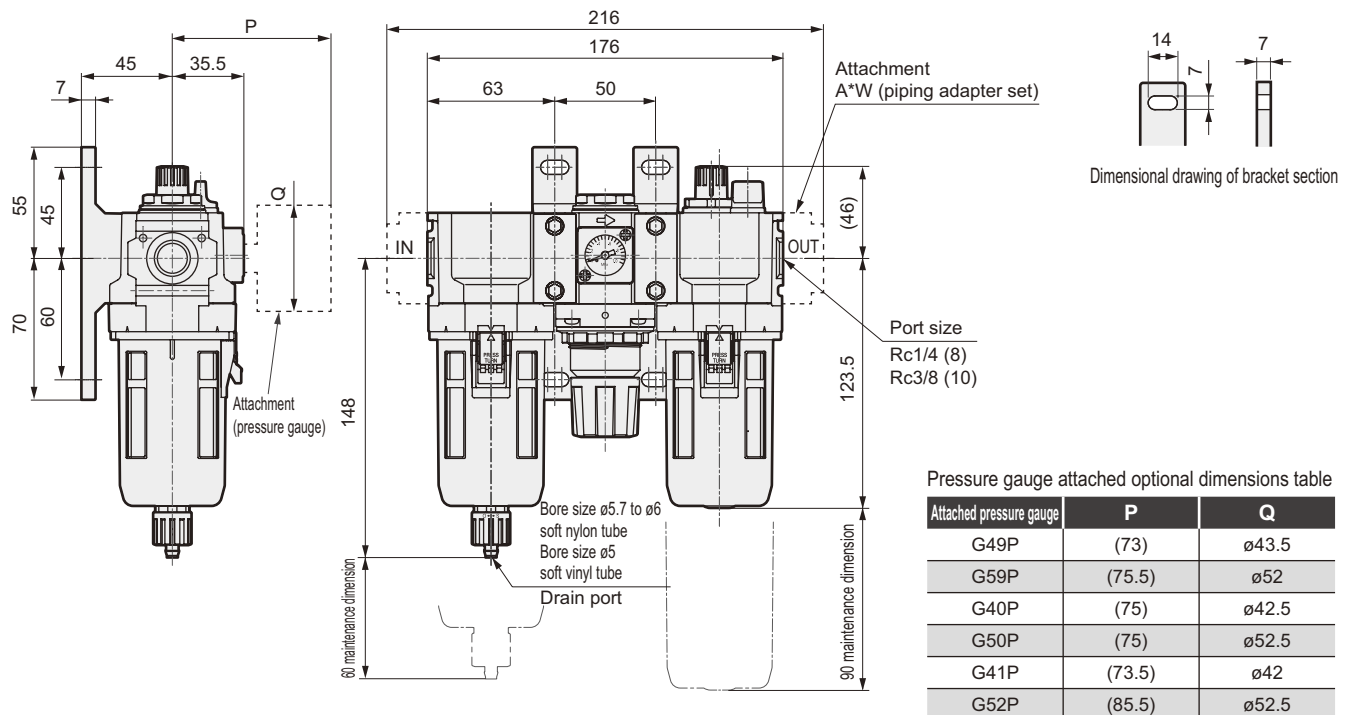
● C1000-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	P	Q
G49P	(73.5)	ø43.5
G59P	(76)	ø52
G40P	(75.5)	ø42.5
G50P	(75.5)	ø52.5
G41P	(74)	ø42
G52P	(86)	ø52.5

● C2500-W

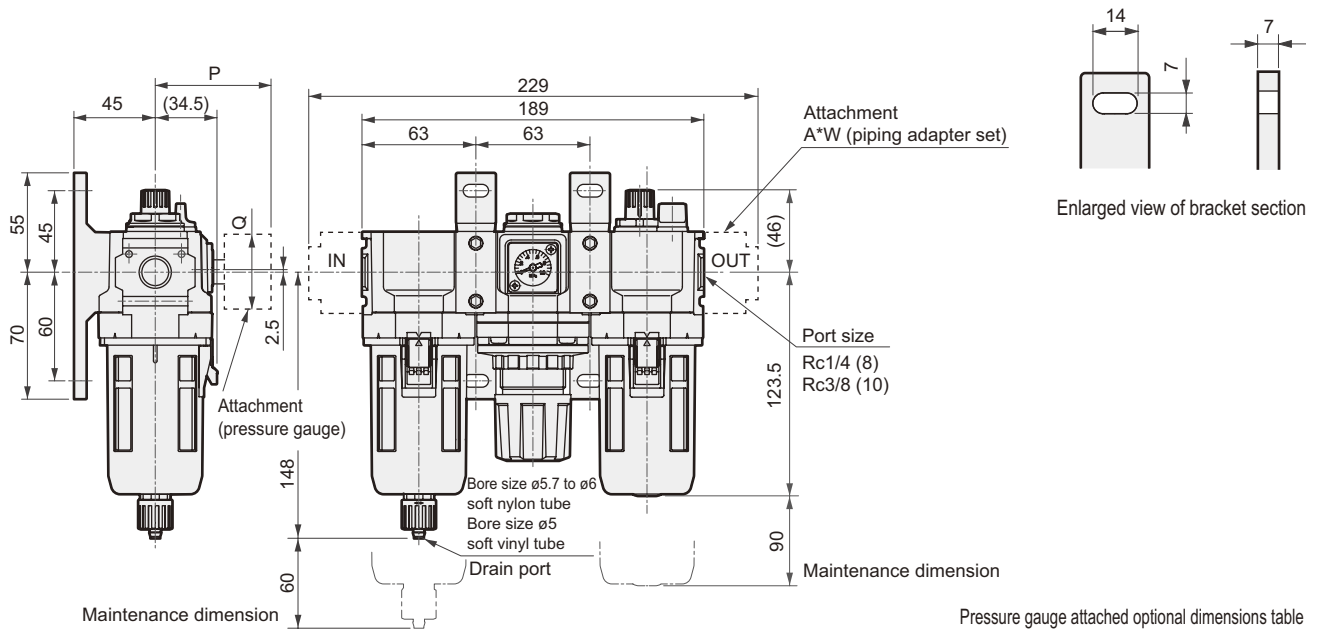


Pressure gauge attached optional dimensions table

Attached pressure gauge	P	Q
G49P	(73)	ø43.5
G59P	(75.5)	ø52
G40P	(75)	ø42.5
G50P	(75)	ø52.5
G41P	(73.5)	ø42
G52P	(85.5)	ø52.5

Dimensions

● C3000-W

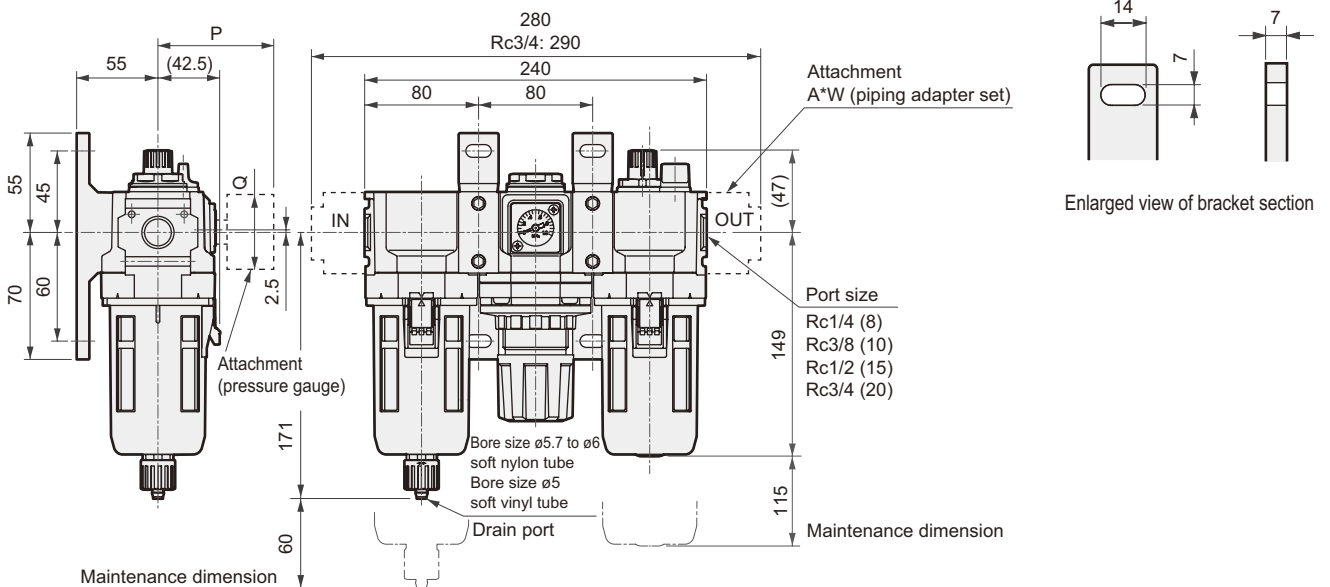


Pressure gauge attached optional dimensions table

Attached pressure gauge	P	Q
G49P	(69.5)	ø43.5
G59P	(72)	ø52
G40P	(71.5)	ø42.5
G50P	(71.5)	ø52.5
G41P	(70)	ø42
G52P	(82)	ø52.5

● Refer to page 87 for the dimensions of the metal bowl option filter and page 131 for the lubricator.

● C4000-W



Pressure gauge attached optional dimensions table

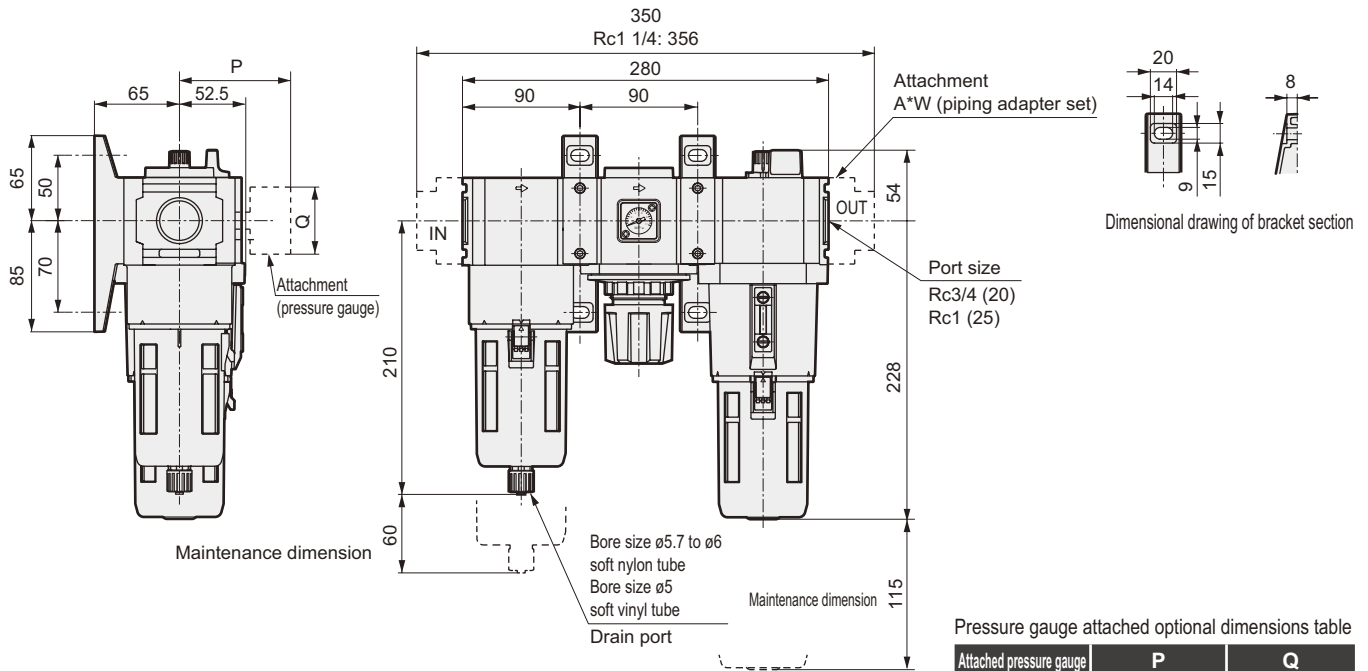
Attached pressure gauge	P	Q
G49P	(74.5)	ø43.5
G59P	(77)	ø52
G40P	(76.5)	ø42.5
G50P	(76.5)	ø52.5
G41P	(75)	ø42
G52P	(86)	ø52.5

● Refer to page 87 for the dimensions of the metal bowl option filter and page 131 for the lubricator.

F.R.L. Combination

Dimensions

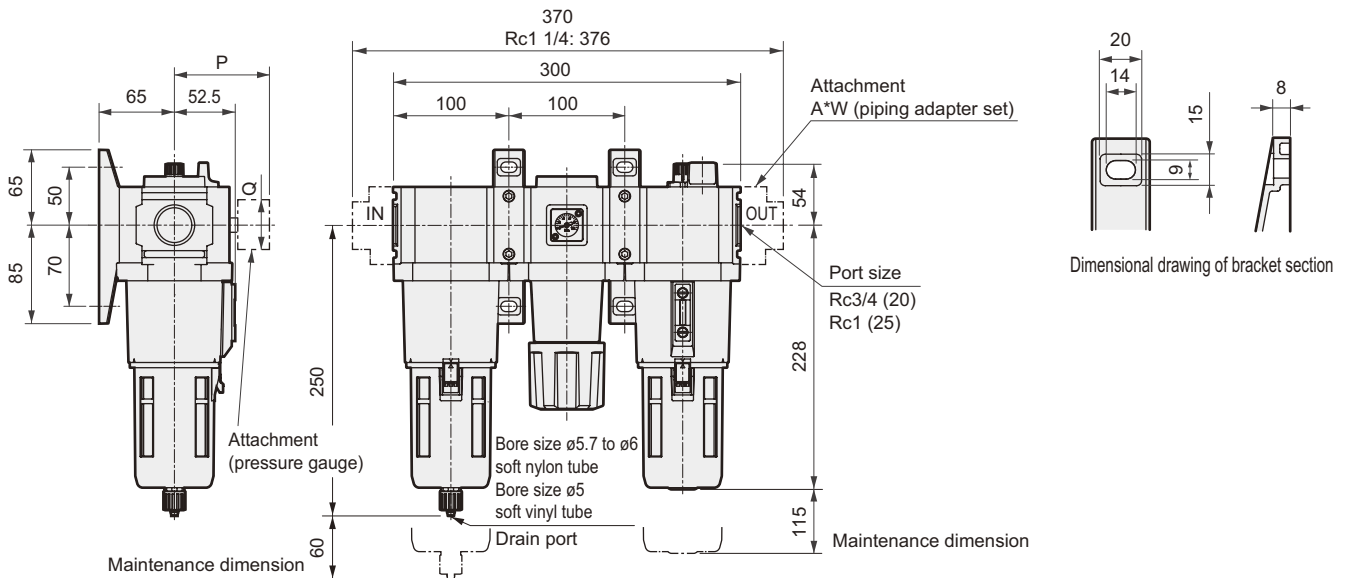
● C6500-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	P	Q
G49P	(79.5)	$\phi 43.5$
G59P	(82)	$\phi 52$
G40P	(81.5)	$\phi 42.5$
G50P	(81.5)	$\phi 52.5$
G41P	(80)	$\phi 42$
G52P	(93)	$\phi 52.5$

● C8000-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	P	Q
G49P	(84.5)	$\phi 43.5$
G59P	(87)	$\phi 52$
G40P	(86.5)	$\phi 42.5$
G50P	(86.5)	$\phi 52.5$
G41P	(85)	$\phi 42$
G52P	(98)	$\phi 52.5$

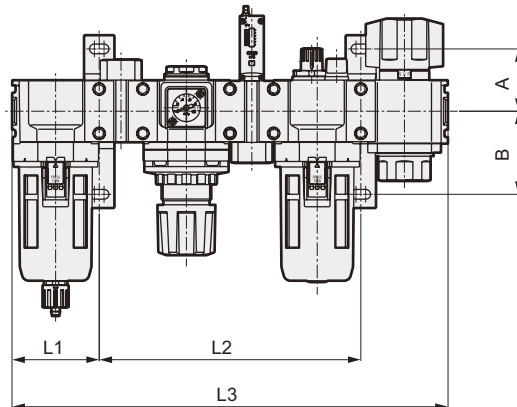
● Refer to page 87 for the dimensions of the metal bowl option filter and page 131 for the lubricator.

F.R.L. Combination

Option assembly dimensions

Option assembly dimensions

● C1000-W to C8000-W



Model no.	A	B
C1000-W	35	45
C2500-W	45	60
C3000-W		
C4000-W		
C6050-W	50	70
C8000-W		

Assembled option Model no.	D			S			P			V			K			DS			DP			DV			DK		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
C1000-W	40	68	148	40	68	148	-	-	-	40	80	160	-	-	-	40	96	176	-	-	-	40	108	188	-	-	-
C2500-W	63	81.5	207.5	63	81.5	207.5	63	130	256	63	113	239	63	113	239	63	113	239	63	161.5	287.5	63	144.5	270.5	63	144.5	270.5
C3000-W	63	94.5	220.5	63	94.5	220.5	63	143	269	63	126	252	63	126	252	63	126	252	63	174.5	300.5	63	157.5	283.5	63	157.5	283.5
C4000-W	80	111.5	271.5	80	111.5	271.5	80	160	320	80	160	303	80	160	303	80	143	303	80	191.5	351.5	80	191.5	334.5	80	191.5	334.5
C4000-20-W ^{Note 1}	100	111.5	311.5	100	111.5	311.5	100	160	360	100	160	343	100	160	343	100	143	343	100	191.5	391.5	100	191.5	374.5	100	191.5	374.5
C6500-W	90	140	330	90	140	330	-	-	-	-	-	-	90	190	370	90	190	380	-	-	-	-	-	-	90	240	420
C8000-W	100	150	350	100	150	350	-	-	-	-	-	-	100	200	390	100	200	400	-	-	-	-	-	-	100	250	440
Assembled option Model no.	DSV			DSK			DPV			DPK			SV			SK			PV			PK					
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3			
C1000-W	40	136	216	-	-	-	-	-	-	-	-	-	40	100	188	-	-	-	-	-	-	-	-	-			
C2500-W	63	176	302	63	176	302	63	224.5	350.5	63	224.5	350.5	63	144.5	270.5	63	144.5	270.5	63	193	319	63	193	319			
C3000-W	63	189	315	63	189	315	63	237.5	363.5	63	237.5	363.5	63	157.5	283.5	63	157.5	283.5	63	206	332	63	206	332			
C4000-W	80	223	366	80	223	366	80	271.5	414.5	80	271.5	414.5	80	191.5	334.5	80	191.5	334.5	80	240	383	80	240	383			
C4000-20-W ^{Note 1}	100	223	406	100	223	406	100	271.5	454.5	100	271.5	454.5	100	191.5	374.5	100	191.5	374.5	100	240	423	100	240	423			
C6500-W	-	-	-	90	290	470	-	-	-	-	-	-	-	-	-	90	240	420	-	-	-	-	-	-			
C8000-W	-	-	-	100	300	490	-	-	-	-	-	-	-	-	-	100	250	440	-	-	-	-	-	-			

L1: Dimensions from the IN edge to center of the T-type bracket mounting hole
 L2: Spacing dimensions of the mounting hole from the first T-type bracket to the second T-type bracket
 L3: Dimensions from the IN edge to the OUT edge

* Refer to the General Catalog for details on bracket mounting hole dimensions.
 Note 1. The piping adapter is assembled on the OUT side.
 Piping adapter A400-20-W is assembled on both ends of C4000-20-W.



W.L. combination standard white Series

C1010/C3010/C4010/C8010-W Series





Filter, regulator and lubricator integrated

Port size: 1/8 to 1

JIS symbol 



Specifications

Descriptions		C1010-W	C3010-W	C4010-W	C8010-W
Appearance					
Components	Filter and regulator	W1000-W	W3000-W	W4000-W	W8000-W
	Lubricator	L1000-W	L3000-W	L4000-W	L8000-W
Working fluid		Compressed air			
Max. working pressure MPa		1.0			
Withstanding pressure MPa		1.5			
Ambient temperature range °C		5 to 60			
Filtration rating μm		5			
Set pressure range MPa		0.05 to 0.85 (Note 3)	0.05 to 0.85		
Minimum drip flow (Note 1) m ³ /min (ANR)		0.015	0.03	0.065	0.065
Relief		With relief mechanism			
Oil capacity cm ³		20	85	170	170 (MAX. 360)
Drain capacity cm ³		12	45	80	80 (Note 2)
Use oil		Turbine oil Class 1 ISO VG32 (spindle oil can not be used)			
Port size Rc, NPT, G		1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg		0.31	0.97	1.45	3.57
Standard accessories		Pressure gauge, bracket, bowl guard			

Note 1: The minimum drip flow is that at which five drops of turbine oil drip per minute at the set pressure of 0.5 MPa.

Note 2: Drainage accumulates up to 170 cm³ only with the manual drain cock.

Note 3: The automatic drain's minimum operating pressure for "F" or "FF" with an automatic drain is 0.1 MPa. Initially generated drainage and air are purged until pressure reaches 0.1 MPa.

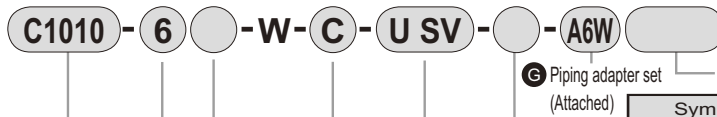
Note 4: The minimum operation pressure of the automatic drain is 0.15 MPa for the "F1" and "FF1" with an automatic drain.

Note 5: When using C□

Refer to the maximum working flow table (page 83) for F1000-W-F1 with an automatic drain for details on maximum working flow. Set the working flow to less than the maximum working flow.

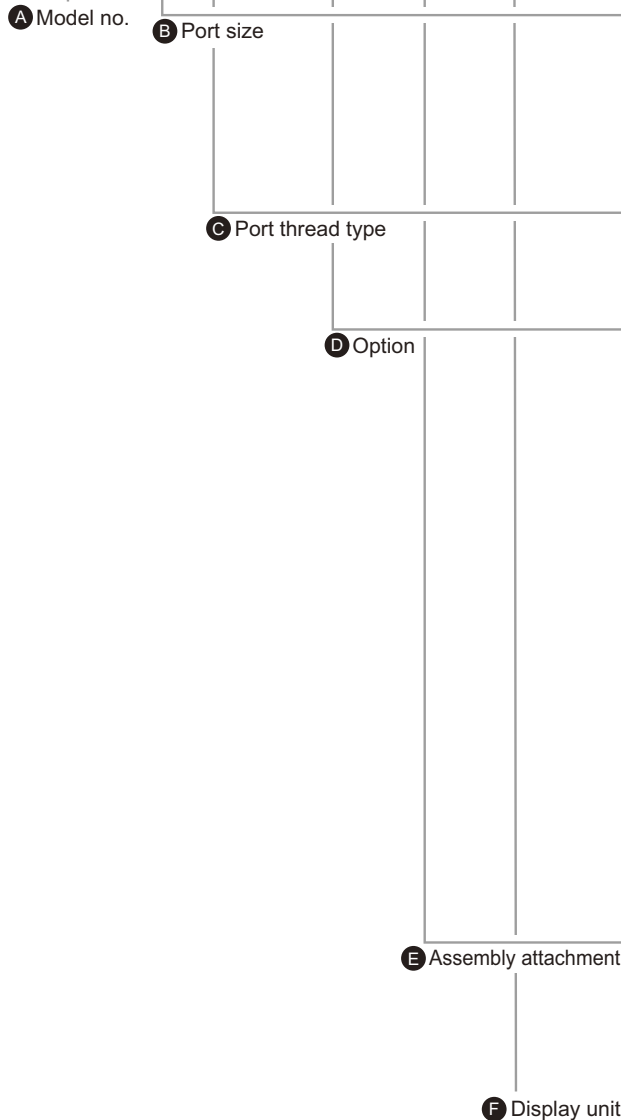
Note 6: When element option "Y" is selected, refer to the maximum working flow table (page 83) for maximum flow. Set the working flow to less than the maximum working flow.

How to order



* Refer to page 9 for explanation of an option.

A Model no.			
C	C	C	C
1	3	4	8
0	0	0	0
1	1	1	1
0	0	0	0



Symbol	Descriptions				
B Port size					
6	1/8	●			
8	1/4	●	●	●	
10	3/8		●	●	
15	1/2			●	
20	3/4			●	●
25	1				●

C Port thread type		Note 1			
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

D Option		Note 2				
Drainage	Blank	Filter with manual drain cock, lubricator without manual drain cock	●	●	●	●
	C	Lubricator with manual cock	●	●	●	●
	F	Filter/automatic drain with manual override (NO type: Exhaust without pressurized)		●	●	●
	F1	Filter/automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●
	FF	Filter/large automatic drain with manual override (NO type: Exhaust without pressurized)				●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl		●	●	●
Element	Blank	5 m	●	●	●	●
	Y	0.3 m (submicron) Note 4		●	●	●
Pressure range	Blank	0.05 to 0.85MPa	●	●	●	●
	L	0.05 to 0.35MPa	●	●	●	●
Relief	Blank	With relief mechanism	●	●	●	●
	N	Nonrelief type	●	●	●	●
Pressure gauge	Blank	With standard pressure gauge (G401-W)	●	●	●	●
	T	Without pressure gauge (a pressure gauge port (Rc1/4) is assembled with sealed)	●	●	●	●
	T8	Pressure gauge attached (a pressure gauge port (Rc1/4) is assembled by open)	●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●

E Assembly attachment		Pages 133 to 144, 149, 150				
Blank	Without assembly attachment type	●	●	●	●	
U	Assembly attachment type Note 5	●	●	●	●	
Assembled	S	Pressure switch (P1100-W, 4100-W, 8100-W)	●	●	●	●
	P	Pressure switch (P4000-W)		●	●	
	V	Shut-off valve (V1000-W, 3000-W)	●	●	●	
	K	Lockout valve (V3010-W)		●	●	

F Display unit					
Blank	MPa display, Rc thread	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●

G Piping adapter set (attached)		Pages 151 to 153			
Blank	Not attached	●	●	●	●
A6*W	1/8 piping adapter set	●			
A8*W	1/4 piping adapter set	●	●	●	
A10*W	3/8 piping adapter set	●	●	●	
A15*W	1/2 piping adapter set		●	●	
A20*W	3/4 piping adapter set			●	●
A25*W	1 piping adapter set				●
A32*W	1 1/4 piping adapter set				●

* Adaptor screw type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

H Pressure gauge option (attached)		Page 194			
Blank	Not attached	●	●	●	●
G49P	G49D-8-P10 (L: G49D-8-P04)	●	●	●	●
G59P	G59D-8-P10 (L: G59D-8-P04)	●	●	●	●
G40P	G40D-8-P10 (L: G40D-8-P04)	●	●	●	●
G50P	G50D-8-P10 (L: G50D-8-P04)	●	●	●	●
G41P	G41D-8-P10 (L: G41D-8-P04)	●	●	●	●
G52P	G52D-8-P10 (L: G52D-8-P10)	●	●	●	●

⚠ Note on model no. selection

Note 1: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port (metal bowl automatic drain) are available, as are attachments P and V.

Note 2: Select options per drainage, bowl material, element, and regulator sections. When selecting options for several items, list options in order from the top.

Note 3: Refer to page 11 for the automatic drain use conditions.

Note 4: Refer to page 83 for maximum processing flow when option "Y" is selected.

Note 5: Assembly attachment installation position

Symbol	Attachment installation position	Applicable model
S or P	W + (S, P) + L	C1010-W to C8010-W (Excluding 8000 series for "P")
V or K	W + L + (V, K)	C1010-W to C8010-W (Excluding 8000 series for "V", 1000 series for "K")

Note) Indicate "U" + "D", "S", "P", "V", and "K" when selecting an assembly attachment.

Use custom combinations specifications for any other combination.

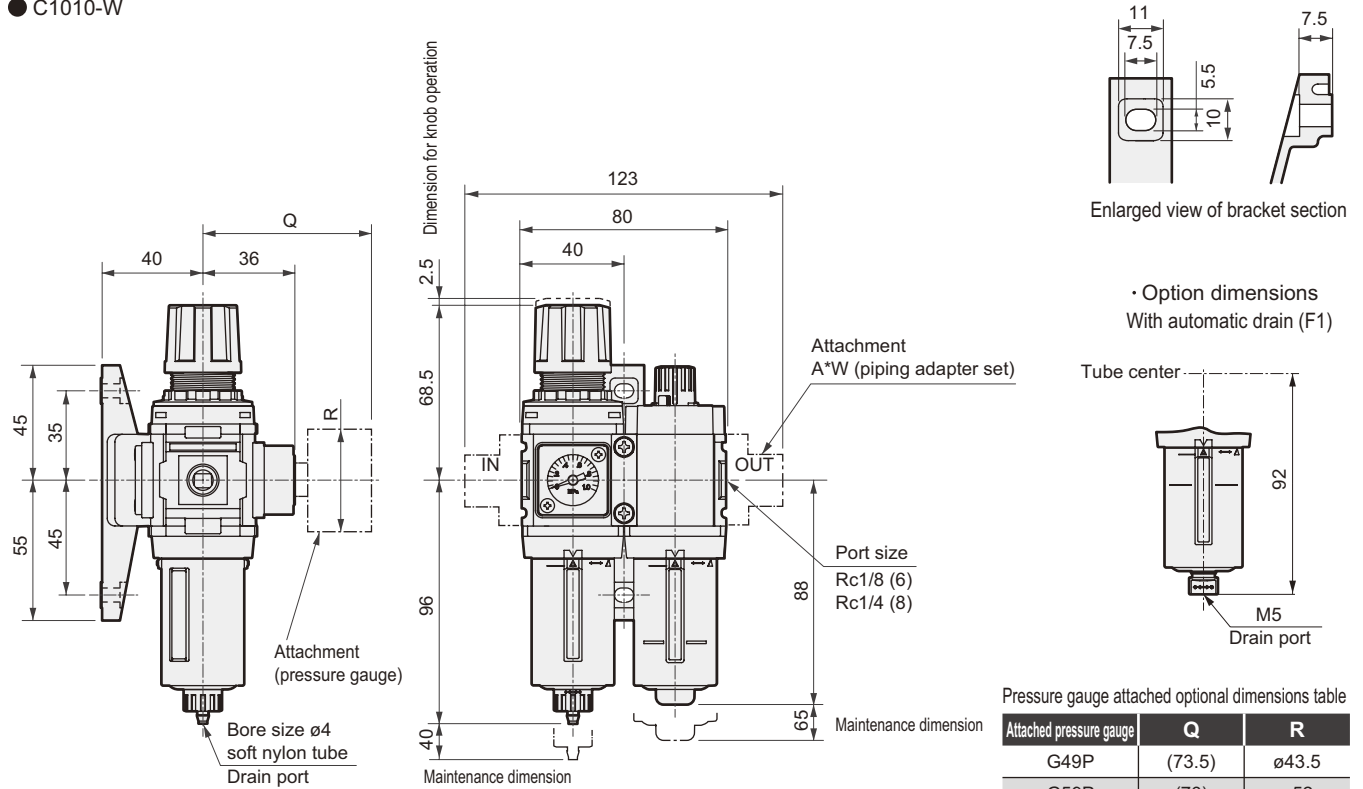
Note 6: If NPT is selected for the ⓐ piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

Note 7: Piping adapter A400-20*W is assembled on both ends of the C4010-20*W.

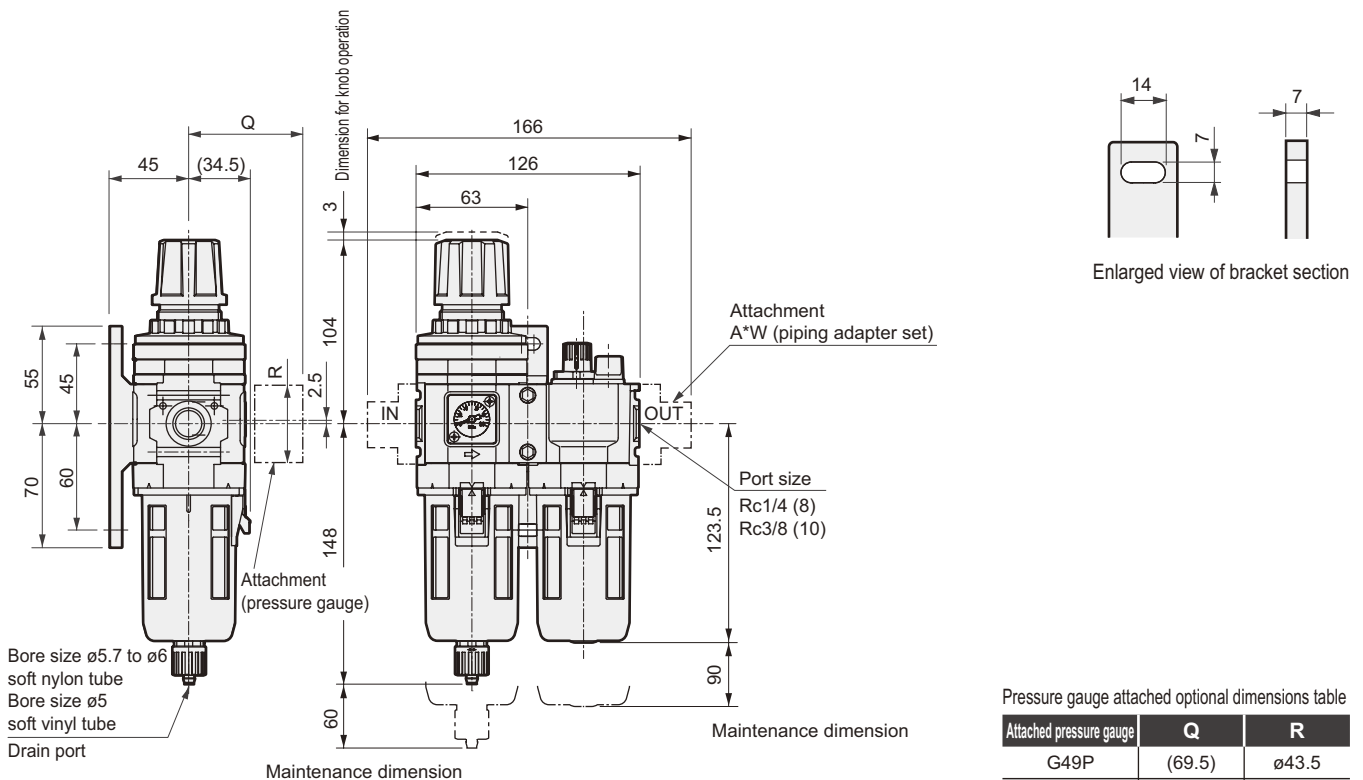
W.L Combination

Dimensions

● C1010-W

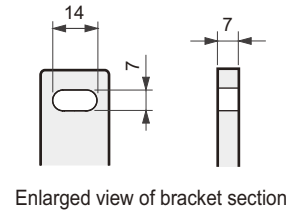
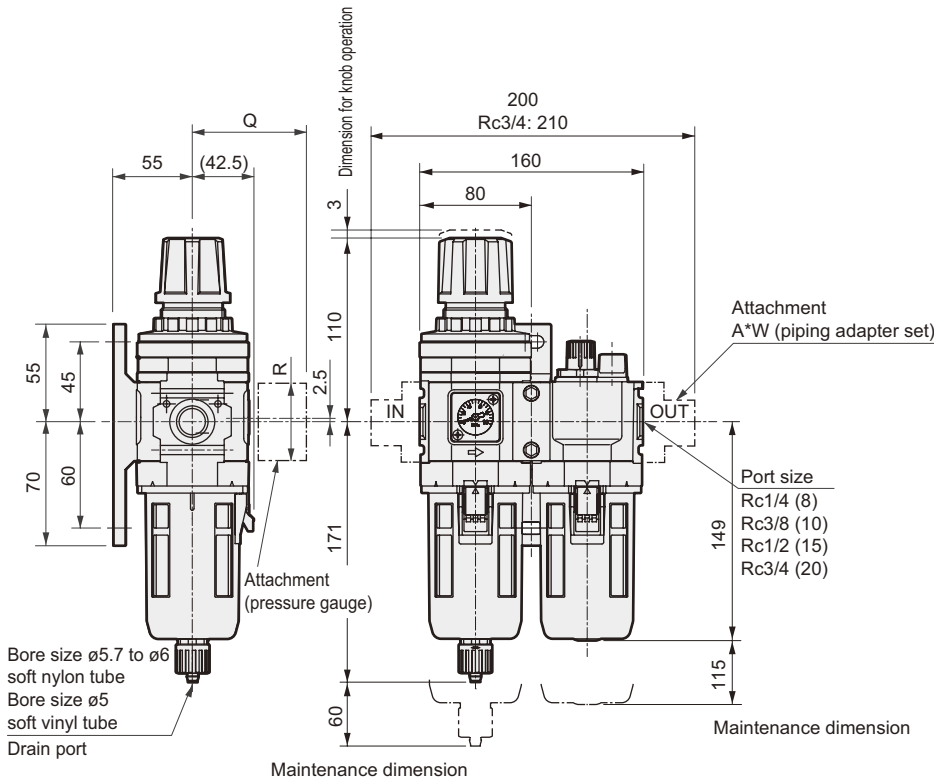


● C3010-W



● Refer to page 72 for the dimensions of the metal bowl option filter/regulator and page 131 for the lubricator.

● C4010-W

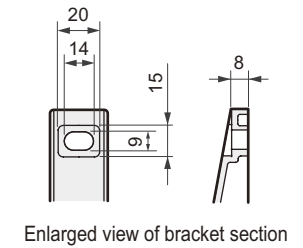
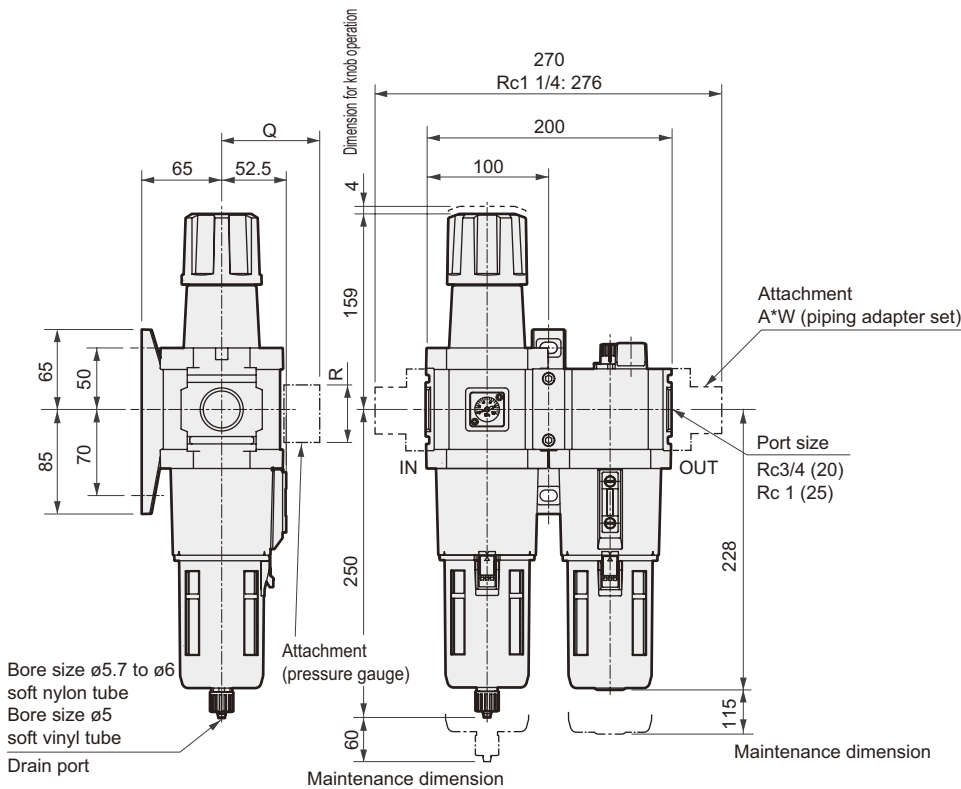


Pressure gauge attached optional dimensions table

Attached pressure gauge	Q	R
G49P	(74.5)	ø43.5
G59P	(77)	ø52
G40P	(76.5)	ø42.5
G50P	(76.5)	ø52.5
G41P	(75)	ø42
G52P	(86)	ø52.5

* Refer to page 72 for the dimensions of the metal bowl option filter/regulator and page 131 for the lubricator.

● C8010-W



Pressure gauge attached optional dimensions table

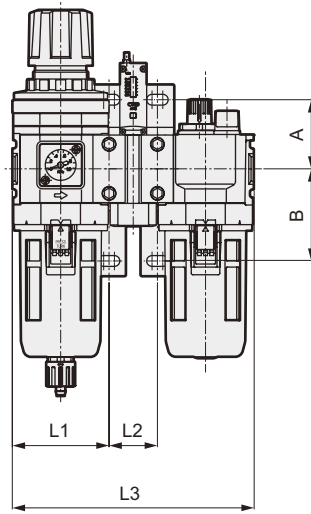
Attached pressure gauge	Q	R
G49P	(84.5)	ø43.5
G59P	(87)	ø52
G40P	(86.5)	ø42.5
G50P	(86.5)	ø52.5
G41P	(85)	ø42
G52P	(98)	ø52.5

● Refer to page 72 for the dimensions of the metal bowl option filter/regulator and page 131 for the lubricator.

W.L Combination

Option assembly dimensions

● C1010-W to C8010-W



Model no.	A	B
C1010-W	35	45
C3010-W	45	60
C4010-W		
C8010-W	50	70

Assembled option Model no.	S			P			V			K			SV			SK			PV			PK		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
C1010-W	40	28	108	-	-	-	40	40	120	-	-	-	40	68	148	-	-	-	-	-	-	-	-	-
C3010-W	63	31.5	157.5	63	80	206	63	63	189	63	63	189	63	94.5	220.5	63	94.5	220.5	63	143	269	63	143	269
C4010-W	80	31.5	191.5	80	80	240	80	80	223	80	80	223	80	111.5	271.5	80	111.5	271.5	80	160	303	80	160	303
C4010-20-W ^{Note 1}	100	31.5	231.5	100	80	280	100	80	263	100	80	263	100	111.5	294.5	100	111.5	294.5	100	160	343	100	160	343
C8010-W	100	50	250	-	-	-	-	-	-	100	100	290	-	-	-	100	150	340	-	-	-	-	-	-

L1: Dimensions from the IN edge to center of the T-type bracket mounting hole
 L2: Spacing dimensions of the mounting hole from the first T-type bracket to the second T-type bracket
 L3: Dimensions from the IN edge to the OUT edge

* Refer to the General Catalog for details on bracket mounting hole dimensions.

Note 1. The piping adapter is assembled on the OUT side.

Piping adapter A400-20-W is assembled on both ends of C4010-20-W.

MEMO



F.R.L. combination standard white Series
C1020/C2520/C3020-W
C4020/C6020/C8020-W Series

Filter and regulator integrated

Port size: 1/8 to 1

JIS symbol



Specifications

Descriptions		C1020-W	C2520-W	C3020-W	C4020-W	C6020-W	C8020-W
Appearance							
Components	Filter	F1000-W	F3000-W	F3000-W	F4000-W	F6000-W	F8000-W
	Regulator	R1000-W	R2000-W	R3000-W	R4000-W	R6000-W	R8000-W
Working fluid		Compressed air					
Max. working pressure MPa		1.0					
Withstanding pressure MPa		1.5					
Ambient temperature range °C		5 to 60					Note 6
Filtration rating μm		5					
Set pressure range MPa		0.05 to 0.85 ^{Note 2}	0.05 to 0.85				
Relief		With relief mechanism					
Drain capacity cm ³		12	45	45	80	80	80 (Note 1)
Port size Rc, NPT, G		1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg		0.28	0.65	0.79	1.25	2.07	2.93
Standard accessories		Pressure gauge, bracket, bowl guard					

Note 1: Drainage accumulates up to 170 cm³ only with the manual drain cock.

Note 2: When using

Refer to the maximum working flow table (page 83) for F1000-W-F1 with an automatic drain for details on maximum working flow. Set the working flow to less than the maximum working flow.

Note 3: The automatic drain's minimum operating pressure for "F" or "FF" with an automatic drain is 0.1 MPa. Air is purged with initial drainage until pressure reaches 0.1 MPa.

Note 4: The automatic drain's minimum operating pressure for "F1" or "FF1" with an automatic drain is 0.15 MPa.

Note 5: When element option "Y" is selected, refer to page 83 for maximum flow. Set the working flow to less than the maximum working flow.

Note 6: The working temperature range of the pressure switch with indicator PPD assembly "R1" is 5 to 50°C.

F.R Combination

How to order

How to order

C1020 - **6** - **W** - **L** - **U DSV** - **A6W** - **Blank**

A Model no.

B Port size

C Port thread type

D Option

E Assembly attachment

F Display unit

* Refer to page 9 for explanation of an option.

G Piping adapter set (attached) **H** Pressure gauge option (attached)

A Model no.					
C 1 0 2 0	C 2 5 2 0	C 3 0 2 0	C 4 0 2 0	C 6 0 2 0	C 8 0 2 0

Symbol		Descriptions	A Model no.					
B Port size			C 1 0 2 0	C 2 5 2 0	C 3 0 2 0	C 4 0 2 0	C 6 0 2 0	C 8 0 2 0
6		1/8	●					
8		1/4	●	●	●	●		
10		3/8		●	●	●		
15		1/2				●		
20		3/4				●	●	●
25		1				●	●	●
C Port thread type			Note 1					
Blank		Rc thread	●	●	●	●	●	●
N		NPT thread	●	●	●	●	●	●
G		G thread	●	●	●	●	●	●
D Option			Note 2					
Drainage	Blank	Filter with manual drain cock	●	●	●	●	●	●
	F	Filter/automatic drain with manual override (NO type: Exhaust without pressurized)		●	●	●	●	●
	F1	Filter/automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●	●	●
	FF	Filter/large automatic drain with manual override (NO type: Exhaust without pressurized)						●
Note 3	FF1	Filter/large automatic drain with manual override (NC type: No exhaust without pressurized)						●
	Blank	Polycarbonate bowl	●	●	●	●	●	●
	Z	Nylon bowl	●	●	●	●	●	●
	M	Metal bowl		●	●	●	●	●
Bowl material	M1	Metal bowl with manual drain cock		●	●	●	●	●
	Blank	5 m	●	●	●	●	●	●
Element	Y	0.3 m (submicron) Note 4	●	●	●	●	●	●
	Blank	Without differential pressure detection port	●	●	●	●	●	●
Differential pressure detection	Q	With differential pressure detection port (Rc1/4)					●	●
	Blank	0.05 to 0.85MPa	●	●	●	●	●	●
Pressure range	L	0.05 to 0.35MPa	●	●	●	●	●	●
	Blank	With relief mechanism	●	●	●	●	●	●
Relief	N	Nonrelief type	●	●	●	●	●	●
	Blank	With standard pressure gauge (G401-W)	●	●	●	●	●	●
Pressure gauge	T	Without pressure gauge (a pressure gauge port (Rc1/4) is assembled with sealed)	●	●	●	●	●	●
	T8	Pressure gauge attached (a pressure gauge port (Rc1/4) is assembled by open)	●	●	●	●	●	●
	T6 Note 6	Digital pressure sensor PPX attached option	●	●	●	●	●	●
	R1	Pressure switch with display PPD assembly	●	●	●	●	●	●
X1	IN/OUT reverse flow (right → left)	●	●	●	●	●	●	
E Assembly attachment			Pages 133 to 144, 149, 150					
Blank		Without assembly attachment type	●	●	●	●	●	●
U		Assembly attachment type Note 5	●	●	●	●	●	●
Assembled	D	Distributor (D101-W, D401-W, D801-W)	●	●	●	●	●	●
	S	Pressure switch (P1100-W, 4100-W, 8100-W)	●	●	●	●	●	●
	P	Pressure switch (P4000-W)		●	●	●	●	●
	V	Shut-off valve (V1000-W, 3000-W)	●	●	●	●	●	●
	K	Lockout valve (V3010-W)		●	●	●	●	●
F Display unit								
Blank		MPa display, Rc thread	●	●	●	●	●	●
J1		MPa display, NPT, G thread	●	●	●	●	●	●
G Piping adapter set (attached)			Pages 151 to 153					
Blank		Not attached	●	●	●	●	●	●
A6*W		1/8 piping adapter set	●	●	●	●	●	●
A8*W		1/4 piping adapter set	●	●	●	●	●	●
A10*W		3/8 piping adapter set	●	●	●	●	●	●
A15*W		1/2 piping adapter set		●	●	●	●	●
A20*W		3/4 piping adapter set				●	●	●
A25*W		1 piping adapter set				●	●	●
A32*W		1 1/4 piping adapter set				●	●	●
* Adaptor screw type								
Blank		Rc thread	●	●	●	●	●	●
N		NPT thread	●	●	●	●	●	●
G		G thread	●	●	●	●	●	●
H Pressure gauge option (attached)			Page 194					
Blank		Not attached	●	●	●	●	●	●
G49P		G49D-8-P10 (L: G49D-8-P04)	●	●	●	●	●	●
G59P		G59D-8-P10 (L: G59D-8-P04)	●	●	●	●	●	●
G40P		G40D-8-P10 (L: G40D-8-P04)	●	●	●	●	●	●
G50P		G50D-8-P10 (L: G50D-8-P04)	●	●	●	●	●	●
G41P		G41D-8-P10 (L: G41D-8-P04)	●	●	●	●	●	●
G52P		G52D-8-P10 (L: G52D-8-P10)	●	●	●	●	●	●
R2 Note 6		Digital pressure sensor: PPX-R10N-6M	●	●	●	●	●	●

Note on model no. selection

Note 1: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port (metal bowl automatic drain) are available, as are attachments P and V.

Note 2: Select options for each drainage, bowl material, element, differential pressure detection, and regulator items. When selecting options for several items, list options in order from the top.

Note 3: Refer to page 11 for the automatic drain use conditions.

Note 4: Refer to page 83 for maximum processing flow when option "Y" is selected.

Note 5: Assembly attachment installation position

Symbol	Attachment installation position	Applicable model
D	F + (D) + R	C1020-W to C8020-W
S or P	F + R + (S, P)	C1020-W to C8020-W (Excluding 1000, 6000, 8000 series for "P")
V or K	F + R + (V, K)	C1020-W to C8020-W (Excluding 6000, 8000 series for "V", 1000 series for "K")

Note) Indicate "U" + "D", "S", "P", "V", and "K" when selecting an assembly attachment.

Use custom combinations specifications for any other combination.

Note 6: When option "T6" is selected, only "blank" or "R2" is selected for the pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.

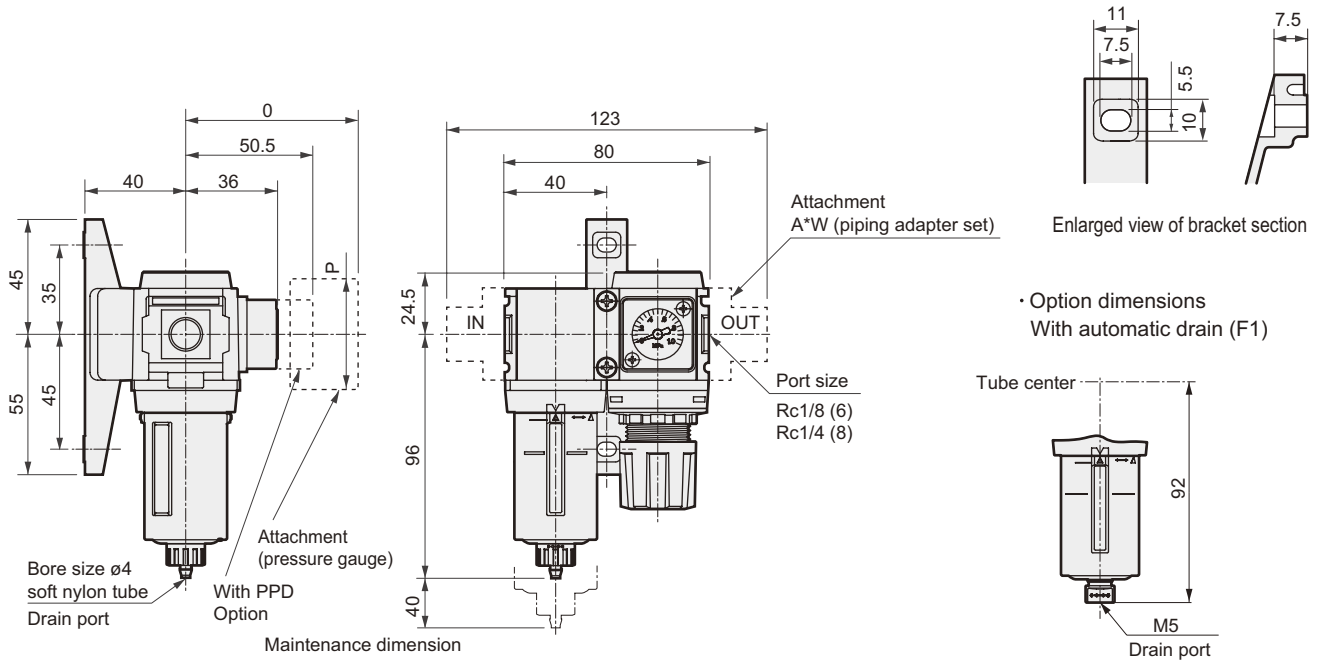
Note 7: If NPT is selected for the piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

Note 8: Piping adapter A400-20*-W is assembled on both ends of the C4020-20*-W.

F.R Combination

Dimensions

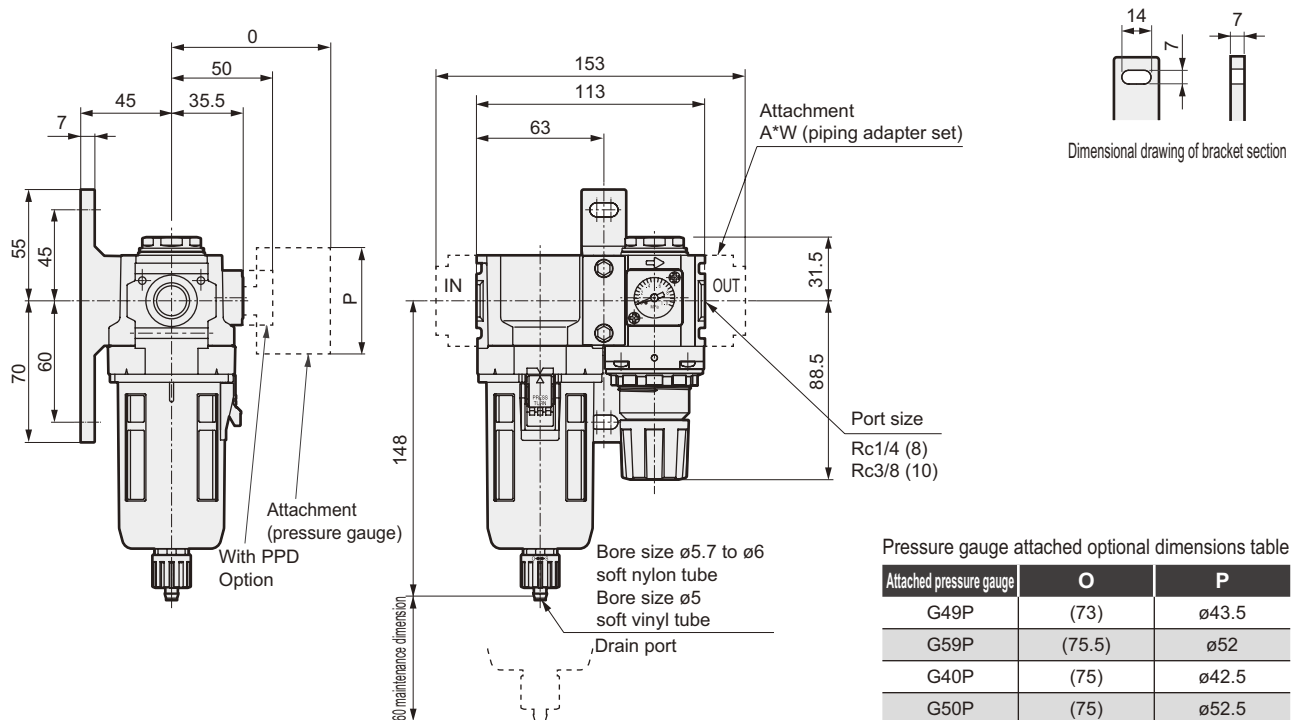
● C1020-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(73.5)	$\phi 43.5$
G59P	(76)	$\phi 52$
G40P	(75.5)	$\phi 42.5$
G50P	(75.5)	$\phi 52.5$
G41P	(74)	$\phi 42$
G52P	(86)	$\phi 52.5$
R2	(74)	*30

● C2520-W

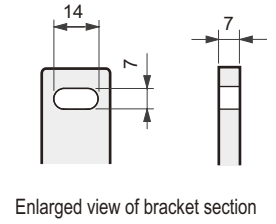
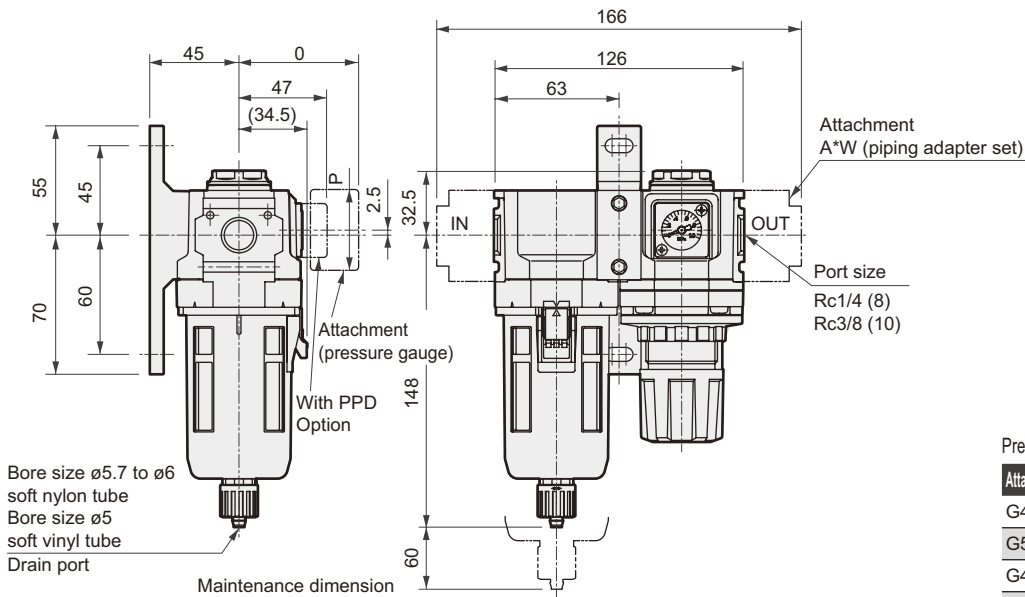


Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(73)	$\phi 43.5$
G59P	(75.5)	$\phi 52$
G40P	(75)	$\phi 42.5$
G50P	(75)	$\phi 52.5$
G41P	(73.5)	$\phi 42$
G52P	(85.5)	$\phi 52.5$
R2	(73)	*30

Dimensions

● C3020-W

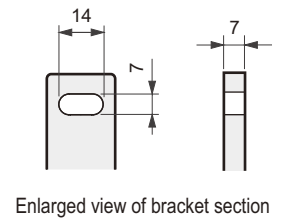
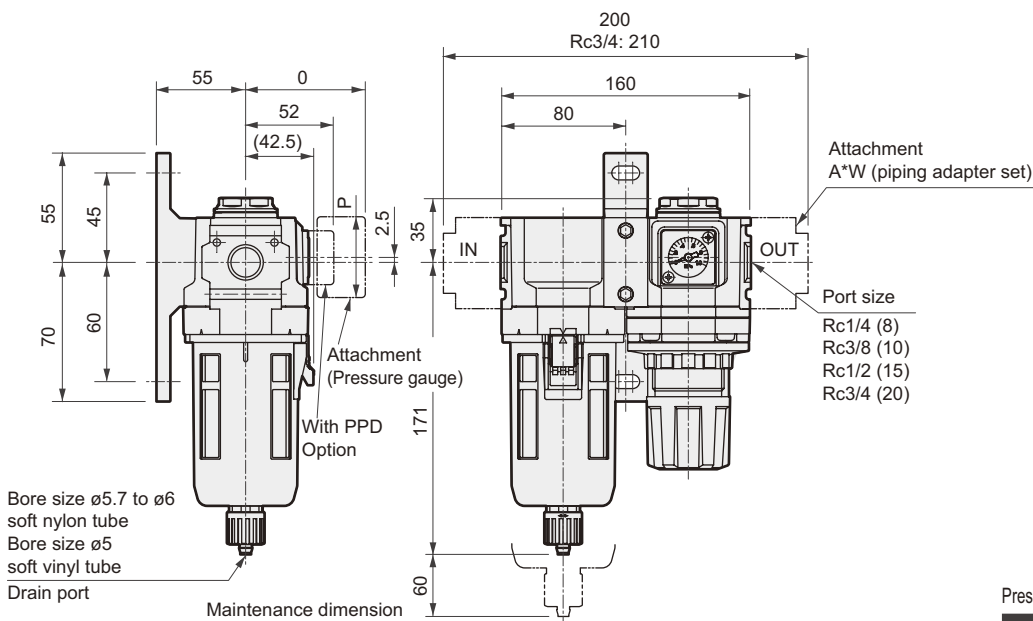


Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(69.5)	ø43.5
G59P	(72)	ø52
G40P	(71.5)	ø42.5
G50P	(71.5)	ø52.5
G41P	(70)	ø42
G52P	(82)	ø52.5
R2	(69.5)	*30

● Refer to page 87 for the metal bowl optional dimensions.

● C4020-W



Pressure gauge attached optional dimensions table

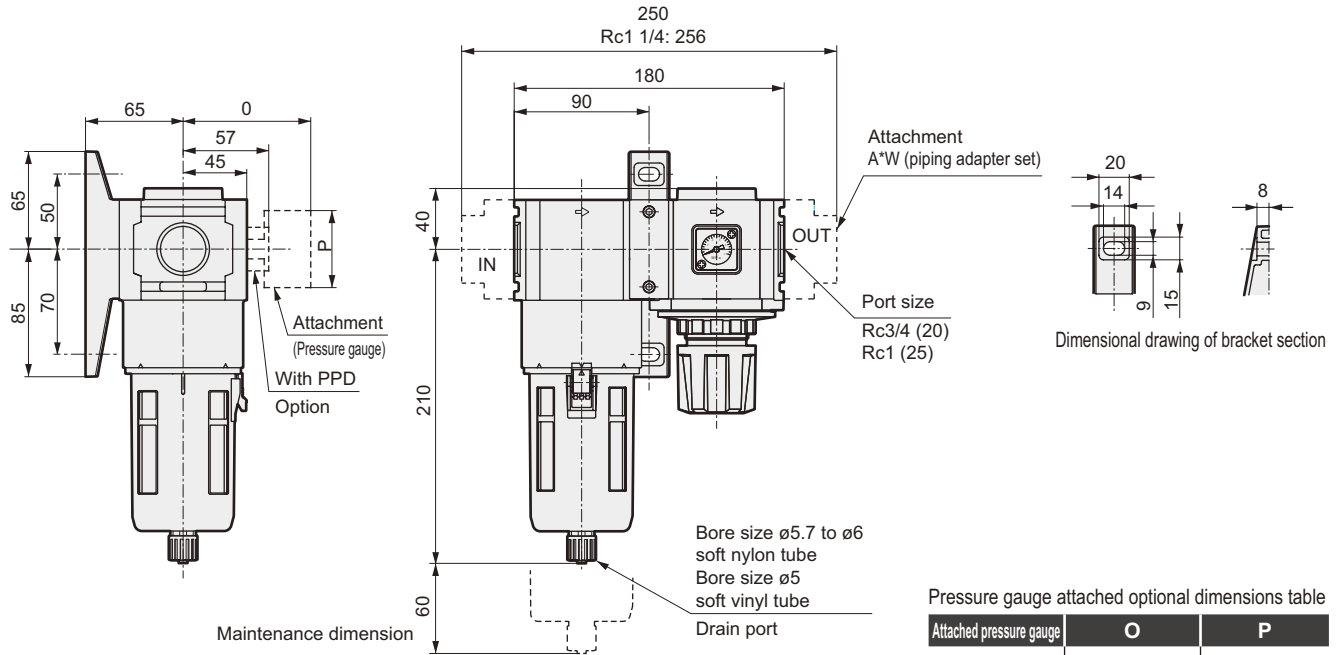
Attached pressure gauge	O	P
G49P	(74.5)	ø43.5
G59P	(77)	ø52
G40P	(76.5)	ø42.5
G50P	(76.5)	ø52.5
G41P	(75)	ø42
G52P	(86)	ø52.5
R2	(75)	*30

● Refer to page 87 for the metal bowl optional dimensions.

F.R Combination

Dimensions

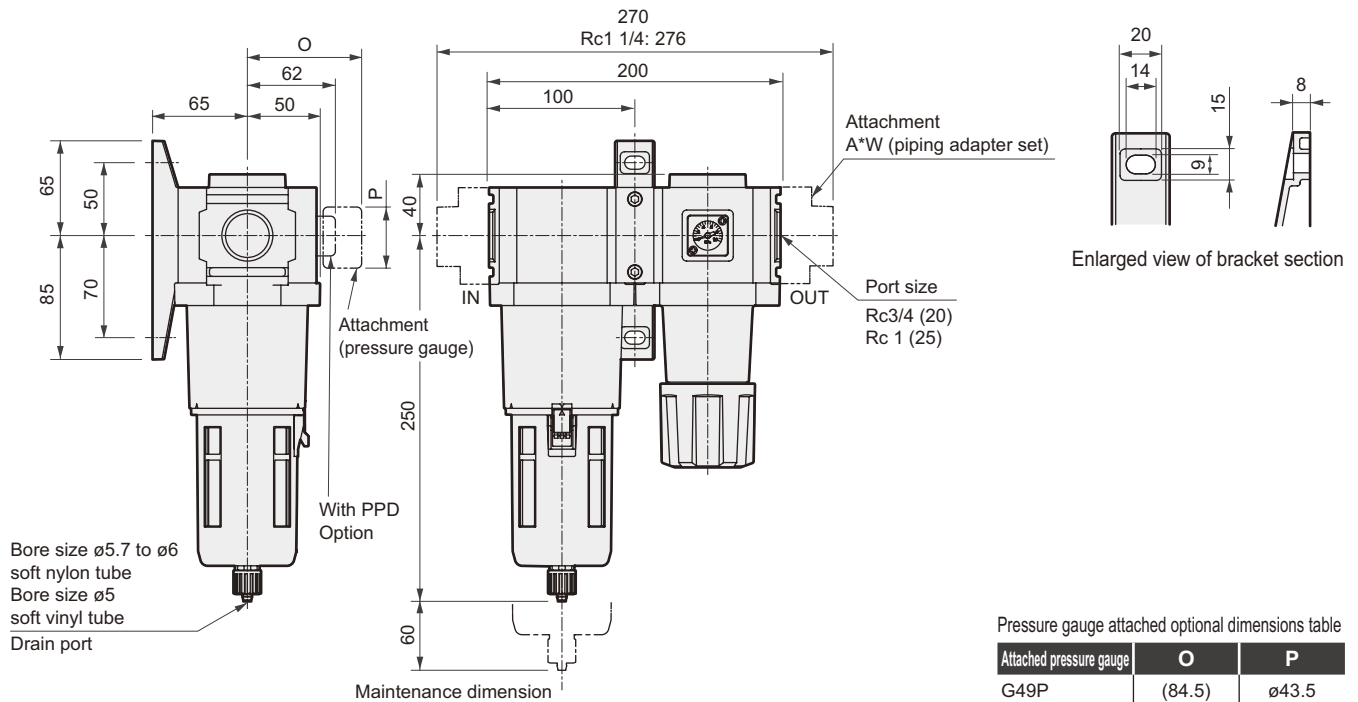
● C6020-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(79.5)	$\phi 43.5$
G59P	(82)	$\phi 52$
G40P	(81.5)	$\phi 42.5$
G50P	(81.5)	$\phi 52.5$
G42P	(80)	$\phi 42$
G52P	(93)	$\phi 52.5$
R2	(80)	*30

● C8020-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(84.5)	$\phi 43.5$
G59P	(87)	$\phi 52$
G40P	(86.5)	$\phi 42.5$
G50P	(86.5)	$\phi 52.5$
G41P	(85)	$\phi 42$
G52P	(98)	$\phi 52.5$
R2	(85)	*30

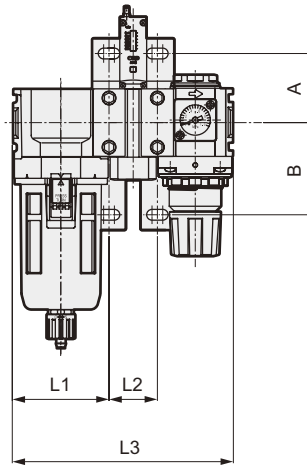
● Refer to page 87 for the metal bowl optional dimensions.

F.R Combination

Option assembly dimensions

Option assembly dimensions

● C1020-W to C8020-W



Model no.	A	B
C1020-W	35	45
C2520-W	45	60
C3020-W		
C4020-W	50	70
C6020-W		
C8020-W		

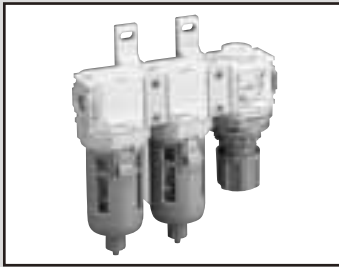
Assembled option Model no.	D			S (Note 1)			P			V			K			DS (Note 1)			DP			DV			DK		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
C1020-W	40	28	108	40	40	129.5	□	□	□	40	40	120	□	□	□	40	68	157.5	□	□	□	40	68	148	□	□	□
C2520-W	63	31.5	144.5	63	50	164.5	63	50	193	63	50	176	63	50	176	63	81.5	196	63	81.5	224.5	63	81.5	207.5	63	81.5	207.5
C3020-W	63	31.5	157.5	63	63	177.5	63	63	206	63	63	189	63	63	189	63	94.5	209	63	94.5	237.5	63	94.5	220.5	63	94.5	220.5
C4020-W	80	31.5	191.5	80	80	211.5	80	80	240	80	80	223	80	80	223	80	111.5	243	80	111.5	271.5	80	111.5	254.5	80	111.5	254.5
C4020-20-W ^{Note 1}	100	31.5	231.5	100	80	231.5	100	80	280	100	80	263	100	80	263	100	111.5	263	100	111.5	311.5	100	111.5	294.5	100	111.5	294.5
C6020-W	90	50	230	90	90	265	□	□	□	□	□	□	90	90	270	90	140	315	□	□	□	□	□	□	90	140	320
C8020-W	100	50	250	100	100	285	□	□	□	□	□	□	100	100	290	100	150	335	□	□	□	□	□	□	100	150	340
Assembled option Model no.	DSV			DSK			DPV			DPK			SV			SK			PV			PK					
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3			
C1020-W	40	96	176	□	□	□	□	□	□	□	□	□	40	68	148	□	□	□	□	□	□	□	□	□			
C2520-W	63	113	239	63	113	239	63	162	287.5	63	162	287.5	63	81.5	207.5	63	81.5	207.5	63	130	256	63	130	256			
C3020-W	63	126	252	63	126	252	63	175	300.5	63	175	300.5	63	94.5	220.5	63	94.5	220.5	63	143	269	63	143	269			
C4020-W	80	143	286	80	143	286	80	191.5	334.5	80	191.5	334.5	80	111.5	254.5	80	111.5	254.5	80	160	303	80	160	303			
C4020-20-W ^{Note 1}	100	143	326	100	143	326	100	191.5	374.5	100	191.5	374.5	100	111.5	294.5	100	111.5	294.5	100	160	343	100	160	343			
C6020-W	□	□	□	90	190	370	□	□	□	□	□	□	□	□	□	90	140	320	□	□	□	□	□	□			
C8020-W	□	□	□	100	200	390	□	□	□	□	□	□	□	□	□	100	150	340	□	□	□	□	□	□			

L1: Dimensions from the IN edge to center of the T-type bracket mounting hole
 L2: Spacing dimensions of the mounting hole from the first T-type bracket to the second T-type bracket
 L3: Dimensions from the IN edge to the OUT edge

* Refer to the General Catalog for details on bracket mounting hole dimensions.

Note 1. The piping adapter is assembled on the OUT side.

Piping adapter A400-20*-W is assembled on both ends of the C4020-20*-W.



F.M.R. combination standard white Series
C1030/C2530/C3030-W
C4030/C6030/C8030-W Series







Integrated filter, oil mist filter, and regulator

Port size: 1/8 to 1

JIS symbol 



Specifications

Descriptions		C1030-W	C2530-W	C3030-W	C4030-W	C6030-W	C8030-W
Appearance							
Components	Filter	F1000-W	F3000-W	F3000-W	F4000-W	F6000-W	F8000-W
	Oil mist filter	M1000-W	M3000-W	M3000-W	M4000-W	M6000-W	M8000-W
	Regulator	R1000-W	R2000-W	R3000-W	R4000-W	R6000-W	R8000-W
Working fluid		Compressed air					
Max. working pressure MPa		1.0					
Withstanding pressure MPa		1.5					
Ambient temperature range °C		5 to 60					Note 6
Set pressure range MPa		0.05 to 0.85 ^{Note 3}	0.05 to 0.85				
Relief		With relief mechanism					
Port size	Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg		0.40	1.02	1.10	1.86	3.19	4.45
Secondary oil concentration (Oil mist filter outlet side)		0.01mg/m ³ or less					
Maximum flow rate (Note 1) m ³ /min		0.15	0.36	0.36	0.825	1.27	2.6

Note 1: The maximum flow is for a primary pressure of 0.7 MPa. Refer to page 83 for the maximum flow of element option "Y".

Note 2: Refer to page 91 for details on other oil mist filters.

Note 3: When "F" with an automatic drain is selected, the supply air pressure is 0.15 MPa or more. Air filter and automatic drain are purged with initial drainage until pressure reaches 0.1 MPa.

Note 4: When "F1" with an automatic drain is selected, the filter, oil mist filter, and NC automatic drain are assembled, but the supply air pressure must be 0.15 MPa or more.

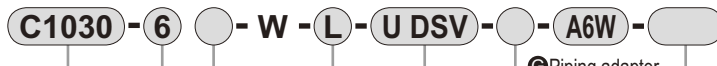
Note 5: When "F1" with an automatic drain is selected for the C1030-W series, the NC automatic drain is assembled for both the filter and oil mist filter. Minimum operation pressure is 0.2 MPa and maximum operation pressure is 0.7 MPa. Refer to the maximum processing flow table (page 93) for the M1000-W-F1 automatic drain for the maximum working flow.

Note 6: The working temperature range of the pressure switch with indicator PPD assembly "R1" is 5 to 50°C.

F.M.R Combination

How to order

How to order



Ⓐ Model no.

Ⓑ Port size

Ⓒ Port thread type

Ⓓ Option

Ⓔ Assembly attachment

Ⓕ Display unit

* Refer to page 9 for explanation of an option.

Ⓐ Model no.					
C 1 0 3 0	C 2 5 3 0	C 3 0 3 0	C 4 0 3 0	C 6 0 3 0	C 8 0 3 0

Symbol	Descriptions						
Ⓑ Port size							
6	1/8	●					
8	1/4	●	●				
10	3/8		●	●			
15	1/2			●			
20	3/4			●	●		
25	1				●	●	

Ⓒ Port thread type		Note 1					
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

Ⓓ Option		Note 2					
Drainage Note 3, Note 4	Blank	With manual drain cock	●	●	●	●	●
	F	Automatic drain with manual override (NO type: Exhaust without pressurized)		●	●	●	●
	F1	Automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●	●
	FF	Large automatic drain with manual override (NO type: Exhaust without pressurized)					●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●	●
	Z	Nylon bowl	●	●	●	●	●
	M	Metal bowl		●	●	●	●
	M1	Metal bowl with manual drain cock		●	●	●	●
Element	Blank	5 m	●	●	●	●	●
	Y	0.3 m (submicron) Note 5		●	●	●	●
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)					●
Pressure range	Blank	0.05 to 0.85MPa	●	●	●	●	●
	L	0.05 to 0.35MPa	●	●	●	●	●
Relief	Blank	With relief mechanism	●	●	●	●	●
	N	Nonrelief type	●	●	●	●	●
Pressure gauge	Blank	With standard pressure gauge (G401-W)	●	●	●	●	●
	T	Without pressure gauge (a pressure gauge port (Rc1/4) is assembled with sealed)	●	●	●	●	●
	T8	Pressure gauge attached (a pressure gauge port (Rc1/4) is assembled by open)	●	●	●	●	●
	T6 Note 7	Digital pressure sensor PPX attached option	●	●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●	●

⚠ Note on model no. selection

Note 1: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port (metal bowl automatic drain) are available, as are attachments P and V.

Note 2: Select options for each drainage, bowl material, element, differential pressure detection, and regulator items. When selecting options for several items, list options in order from the top.

Note 3: Refer to page 11 for the automatic drain use conditions.

Note 4: When option symbol "F" is selected, the NO automatic drain is enclosed for the air filter and the NC automatic drain for the oil mist filter.

For "FF" and "FF1", only the filter has a large discharge rate. The oil mist filter is a normal NC automatic drain.

Note 5: Refer to page 83 for maximum processing flow when option "Y" is selected.

Note 6: Mounting position for assembly attachments

Symbol	Attachment installation position	Applicable model
D	F + M + (D) + R	C1030-W to C8030-W
S or P	F + M + R + (S, P)	C1030-W to C8030-W (Excluding 1000, 6000, 8000 series for "P")
V or K	F + M + R + (V, K)	C1030-W to C4030-W (Excluding 6000, 8000 series for "V", 1000 series for "K")

Note) Indicate "U" + "D", "S", "P", "V", and "K" when selecting an assembly attachment.

Use custom combinations specifications for any other combination.

Note 7: When option "T6" is selected, only "blank" or "R2" is selected for the Ⓕ pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.

Note 8: If NPT is selected for the Ⓒ piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

Note 9: Piping adapter A400-20*-W is assembled on both ends of the C4030-20*-W.

Ⓔ Assembly attachment		Pages 133 to 144, 149, 150					
Blank	Without assembly attachment type	●	●	●	●	●	●
U	Assembly attachment type Note 5	●	●	●	●	●	●
Assembled	D	Distributor (D101-W, D401-W, D801-W)	●	●	●	●	●
	S	Pressure switch (P1100-W, 4100-W, 8100-W)	●	●	●	●	●
	P	Pressure switch (P4000-W)		●	●	●	
	V	Shut-off valve (V1000-W, 3000-W)	●	●	●	●	●
K	Lockout valve (V3010-W)		●	●	●		

Ⓕ Display unit							
Blank	MPa display, Rc thread	●	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●	●

Ⓖ Piping adapter set (attached)		Pages 151 to 153					
Blank	Not attached	●	●	●	●	●	●
A6*W	1/8 piping adapter set	●					
A8*W	1/4 piping adapter set	●	●	●			
A10*W	3/8 piping adapter set	●	●	●			
A15*W	1/2 piping adapter set		●	●	●		
A20*W	3/4 piping adapter set				●	●	●
A25*W	1 piping adapter set					●	●
A32*W	1 1/4 piping adapter set					●	●

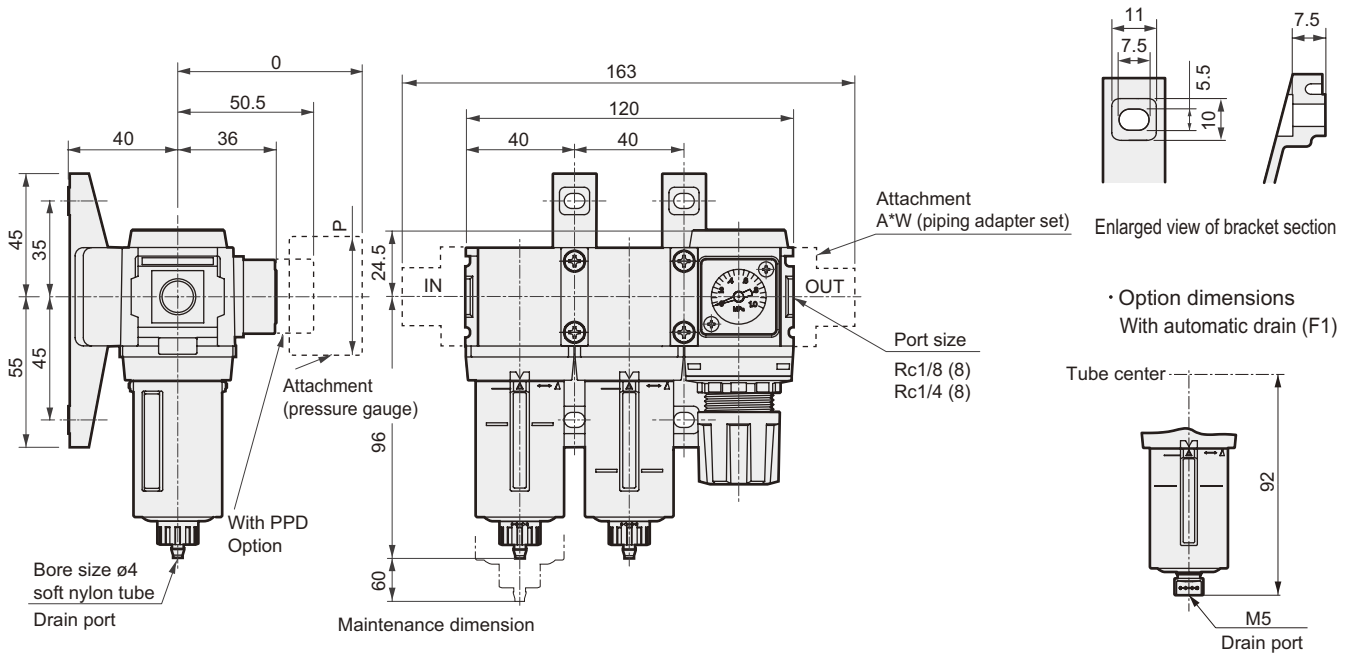
* Adaptor screw type							
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

Ⓗ Pressure gauge option (attached)		Page 194					
Blank	Not attached	●	●	●	●	●	●
G49P	G49D-8-P10 (L: G49D-8-P04)	●	●	●	●	●	●
G59P	G59D-8-P10 (L: G59D-8-P04)	●	●	●	●	●	●
G40P	G40D-8-P10 (L: G40D-8-P04)	●	●	●	●	●	●
G50P	G50D-8-P10 (L: G50D-8-P04)	●	●	●	●	●	●
G41P	G41D-8-P10 (L: G41D-8-P04)	●	●	●	●	●	●
G52P	G52D-8-P10 (L: G52D-8-P10)	●	●	●	●	●	●
R2 Note 7	Digital pressure sensor: PPX-R10N-6M	●	●	●	●	●	●

F.M.R Combination

Dimensions 

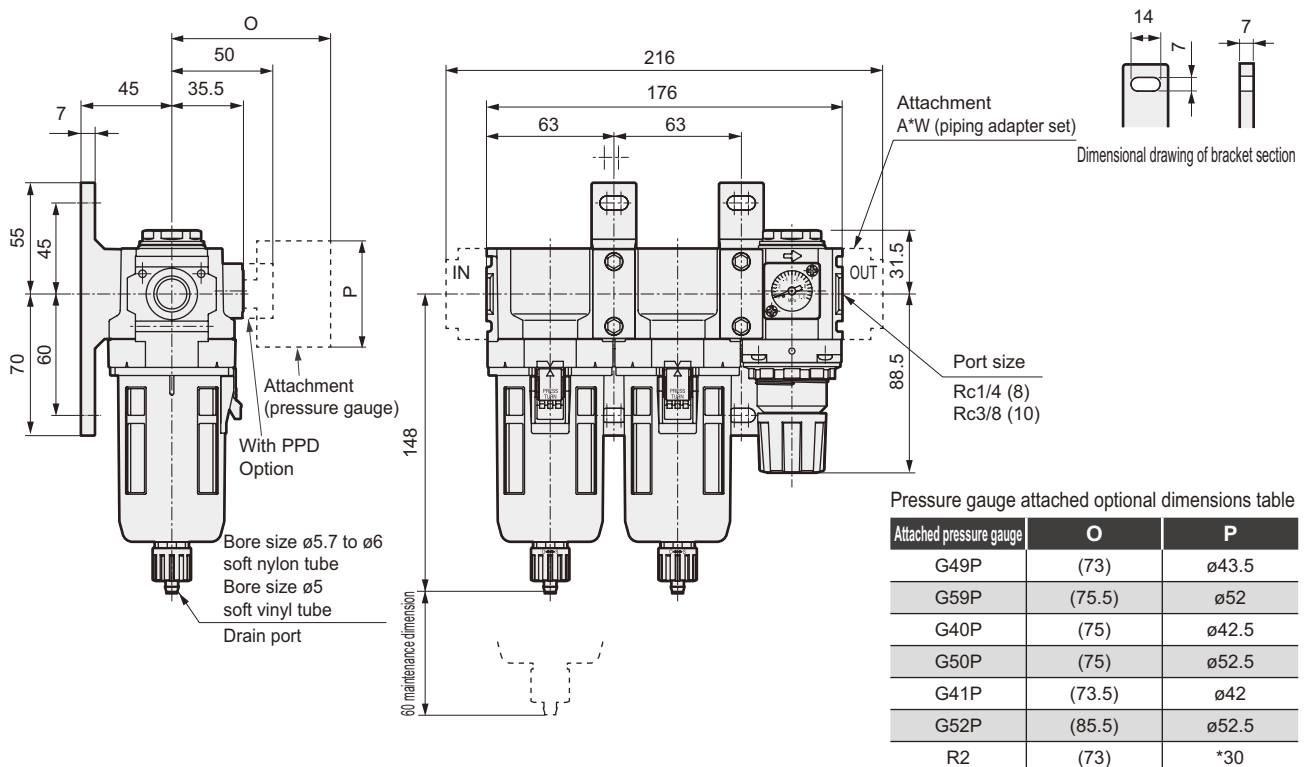
● C1030-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(73.5)	ø43.5
G59P	(76)	ø52
G40P	(75.5)	ø42.5
G50P	(75.5)	ø52.5
G41P	(74)	ø42
G52P	(86)	ø52.5
R2	(74)	*30

● C2530-W



Pressure gauge attached optional dimensions table

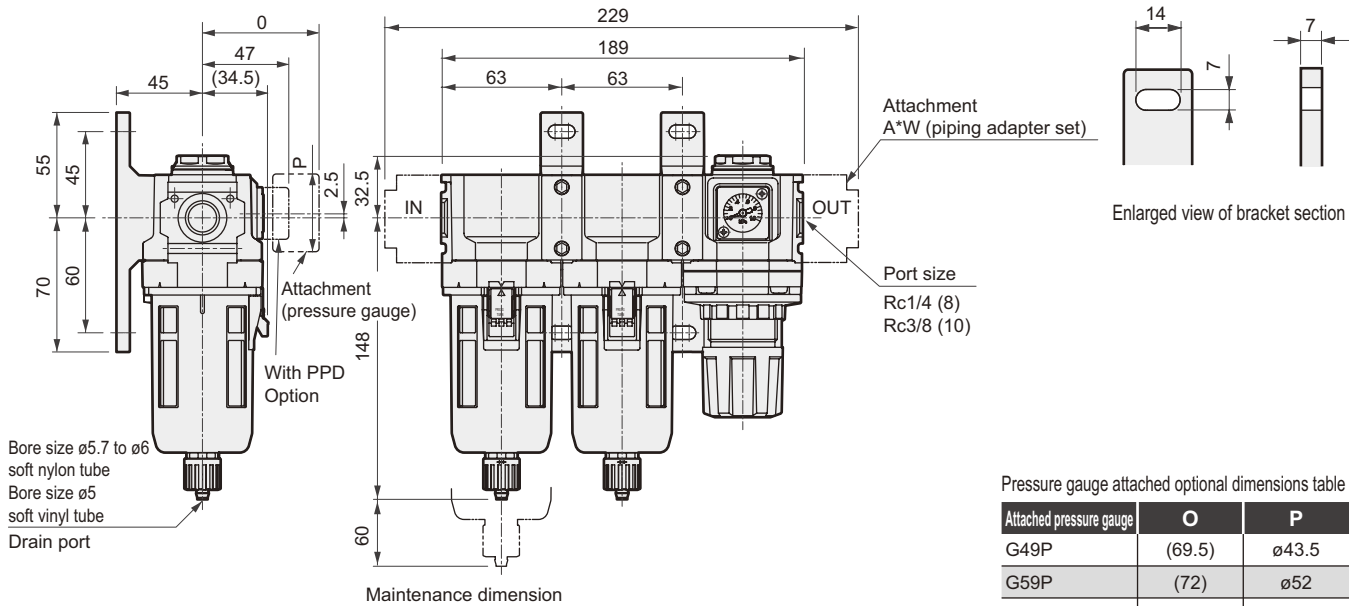
Attached pressure gauge	O	P
G49P	(73)	ø43.5
G59P	(75.5)	ø52
G40P	(75)	ø42.5
G50P	(75)	ø52.5
G41P	(73.5)	ø42
G52P	(85.5)	ø52.5
R2	(73)	*30

F.M.R Combination

Dimensions

Dimensions 

● C3030-W

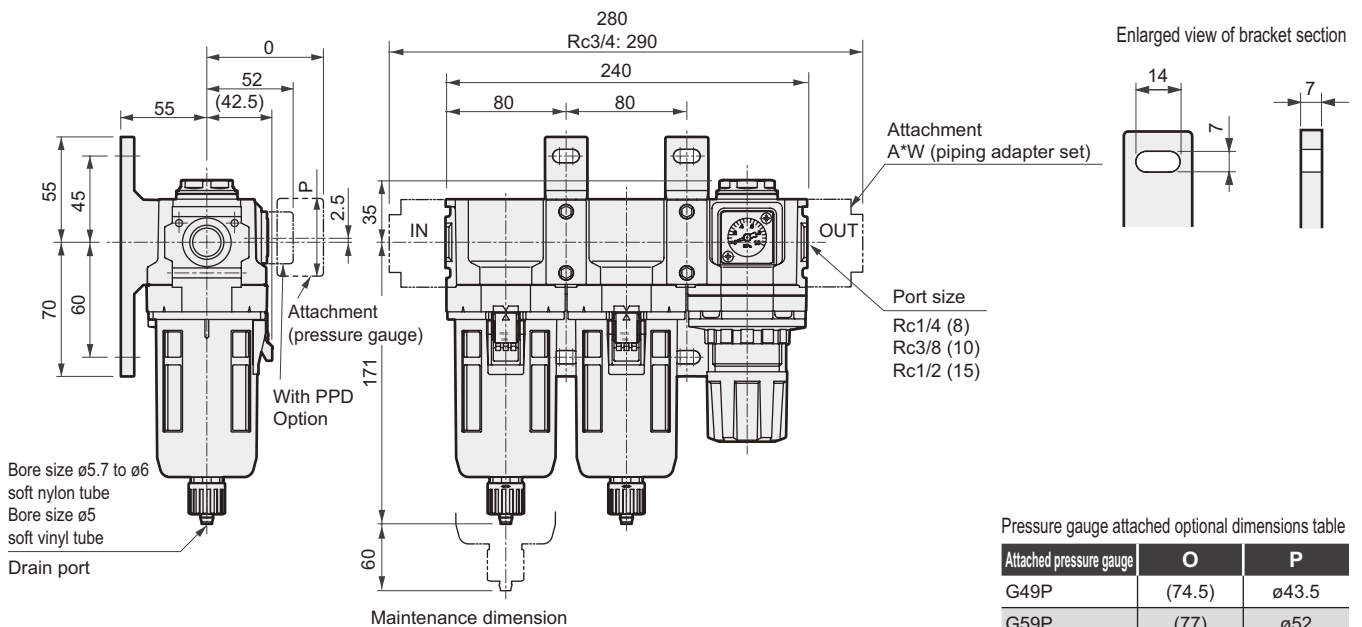


Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(69.5)	ø43.5
G59P	(72)	ø52
G40P	(71.5)	ø42.5
G50P	(71.5)	ø52.5
G41P	(70)	ø42
G52P	(82)	ø52.5
R2	(69.5)	*30

● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.

● C4030-W



Pressure gauge attached optional dimensions table

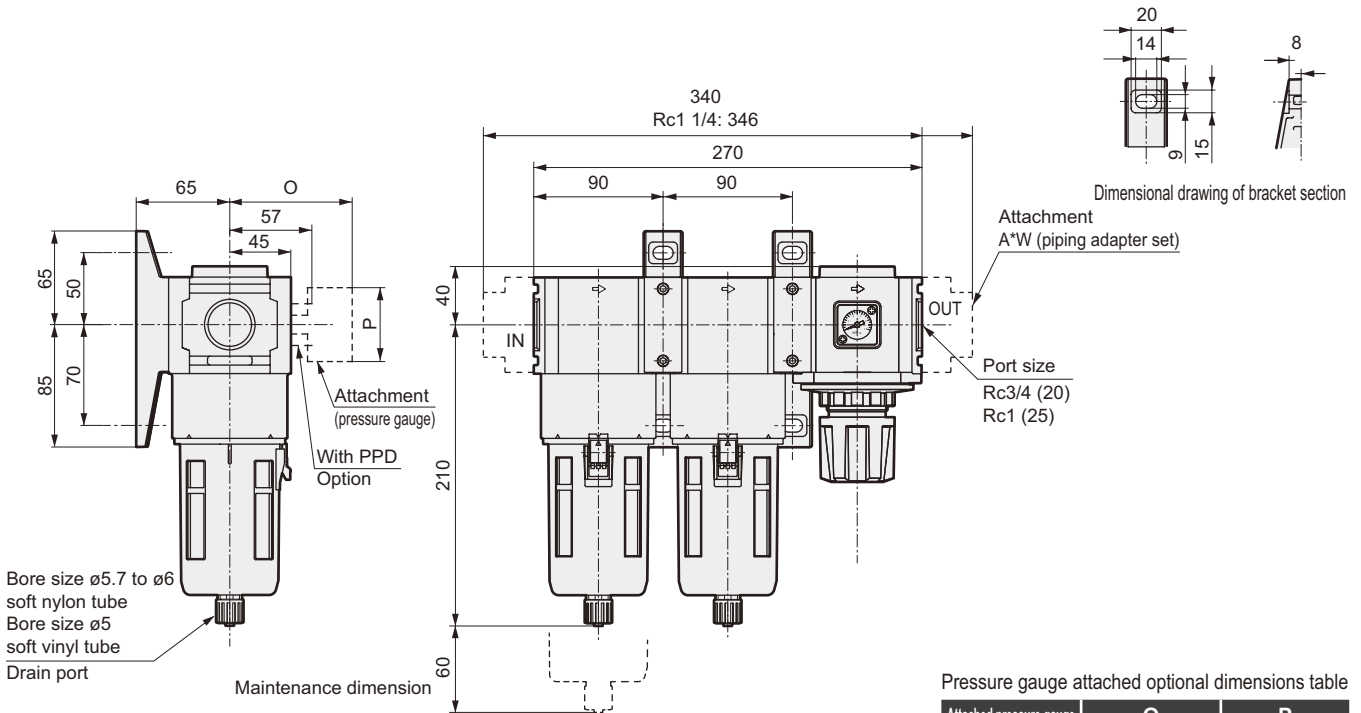
Attached pressure gauge	O	P
G49P	(74.5)	ø43.5
G59P	(77)	ø52
G40P	(76.5)	ø42.5
G50P	(76.5)	ø52.5
G41P	(75)	ø42
G52P	(86)	ø52.5
R2	(75)	*30

● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.

F.M.R Combination

Dimensions

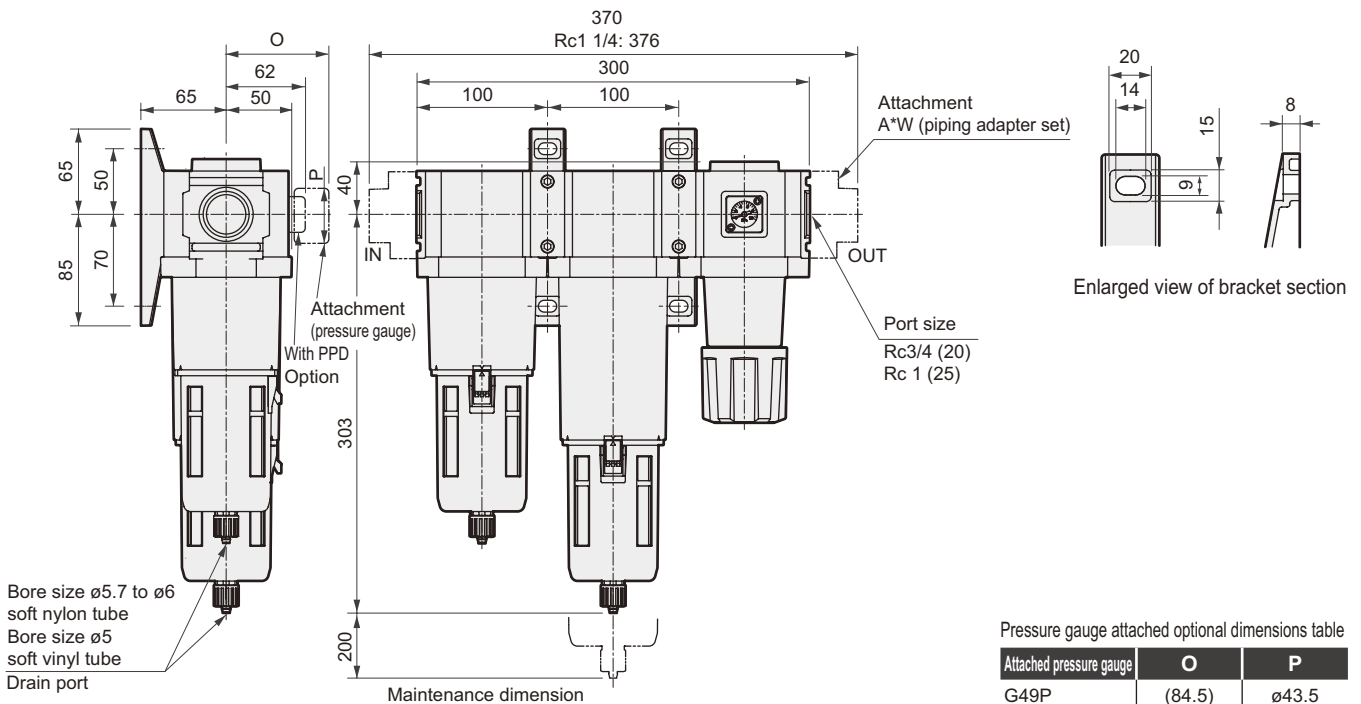
● C6030-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(79.5)	ø43.5
G59P	(82)	ø52
G40P	(81.5)	ø42.5
G50P	(81.5)	ø52.5
G42P	(80)	ø42
G52P	(93)	ø52.5
R2	(80)	*30

● C8030-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(84.5)	ø43.5
G59P	(87)	ø52
G40P	(86.5)	ø42.5
G50P	(86.5)	ø52.5
G41P	(85)	ø42
G52P	(98)	ø52.5
R2	(85)	*30

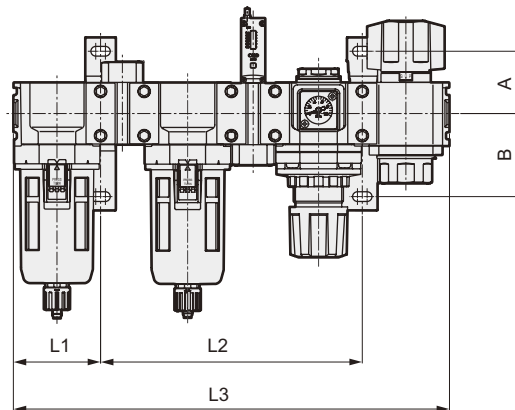
● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.

F.M.R Combination

Option assembly dimensions

Option assembly dimensions

● C1030-W to C8030-W



Model no.	A	B
C1030-W	35	45
C2530-W	45	60
C3030-W		
C4030-W		
C6030-W	50	70
C8030-W		

Assembled option Model no.	D			S (Note 1)			P			V			K			DS (Note 1)			DP			DV			DK		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
C1030-W	40	68	148	40	80	169.5	□	□	□	40	80	160	□	□	□	40	108	197.5	□	□	□	40	108	188	□	□	□
C2530-W	63	94.5	207.5	63	113	227.5	63	113	256	63	113	239	63	113	239	63	144.5	259	63	144.5	287.5	63	144.5	270.5	63	144.5	270.5
C3030-W	63	94.5	220.5	63	126	240.5	63	126	269	63	126	252	63	126	252	63	157.5	272	63	157.5	300.5	63	157.5	283.5	63	157.5	283.5
C4030-W	80	111.5	271.5	80	160	291.5	80	160	320	80	160	303	80	160	303	80	191.5	323	80	191.5	351.5	80	191.5	334.5	80	191.5	334.5
C4030-20-W Note 1	100	111.5	311.5	100	160	311.5	100	160	360	100	160	343	100	160	343	100	191.5	343	100	191.5	391.5	100	191.5	374.5	100	191.5	374.5
C6030-W	90	140	320	90	180	355	□	□	□	□	□	□	90	180	360	90	230	405	□	□	□	□	□	□	90	230	410
C8030-W	100	150	350	100	200	385	□	□	□	□	□	□	100	200	390	100	250	435	□	□	□	□	□	□	100	250	440
Assembled option Model no.	DSV			DSK			DPV			DPK			SV			SK			PV			PK					
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3			
C1030-W	40	136	216	□	□	□	□	□	□	□	□	□	40	108	188.0	□	□	□	□	□	□	□	□	□			
C2530-W	63	176	302	63	176	302	63	225	351	63	225	351	63	144.5	270.5	63	144.5	270.5	63	193	319	63	193	319			
C3030-W	63	189	315	63	189	315	63	238	364	63	238	364	63	157.5	283.5	63	157.5	283.5	63	206	332	63	206	332			
C4030-W	80	223	366	80	223	366	80	271.5	414.5	80	271.5	414.5	80	191.5	334.5	80	191.5	334.5	80	240	383	80	240	383			
C4030-20-W Note 1	100	223	406	100	223	406	100	271.5	454.5	100	271.5	454.5	100	191.5	374.5	100	191.5	374.5	100	240	423	100	240	423			
C6030-W	□	□	□	90	280	460	□	□	□	□	□	□	□	□	□	90	230	410	□	□	□	□	□	□			
C8030-W	□	□	□	100	300	490	□	□	□	□	□	□	□	□	□	100	250	440	□	□	□	□	□	□			

L1: Dimensions from the IN edge to center of the T-type bracket mounting hole
 L2: Spacing dimensions of the mounting hole from the first T-type bracket to the second T-type bracket
 L3: Dimensions from the IN edge to the OUT edge

* Refer to the General Catalog for details on bracket mounting hole dimensions.
 Note 1. The piping adapter is assembled on the OUT side.

Piping adapter A400-20*-W is assembled on both ends of the C4030-20*-W.

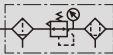


W.M. combination standard white Series

C1040/C3040/C4040/C8040-W Series

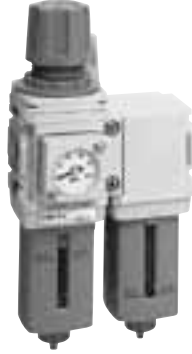



Filter, regulator and oil mist filter integrated

Port size: 1/8 to 1

JIS symbol 



Specifications

Descriptions		C1040-W	C3040-W	C4040-W	C8040-W
Appearance					
Components	Filter regulator	W1000-W	W3000-W	W4000-W	W8000-W
	Oil mist filter	M1000-W	M3000-W	M4000-W	M8000-W
Working fluid		Compressed air			
Max. working pressure MPa		1.0			
Withstanding pressure MPa		1.5			
Ambient temperature range °C		5 to 60			Note 6
Set pressure range MPa		0.1 to 0.85 ^{Note 3}	0.1 to 0.85		
Relief		With relief mechanism			
Port size Rc, NPT, G		1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg		0.31	0.97	1.52	3.52
Secondary oil concentration		0.01mg/m ³ or less			
Maximum flow rate (Note 1) m ³ /min		0.15	0.36	0.825	2.6

Note 1: Maximum flow rate is for the regulator setting pressure 0.7MPa. Refer to page 83 for the maximum flow of element option "Y".

Note 2: Refer to page 91 for details on other oil mist filters.

Note 3: When "F" with an automatic drain is selected, the supply air pressure is 0.2 MPa or more. The minimum of the setting pressure is 0.15MPa. Automatic drain supply air pressure of a filter/regulator is 0.1MPa. Initially generated drainage and air are purged until pressure reaches 0.1 MPa.

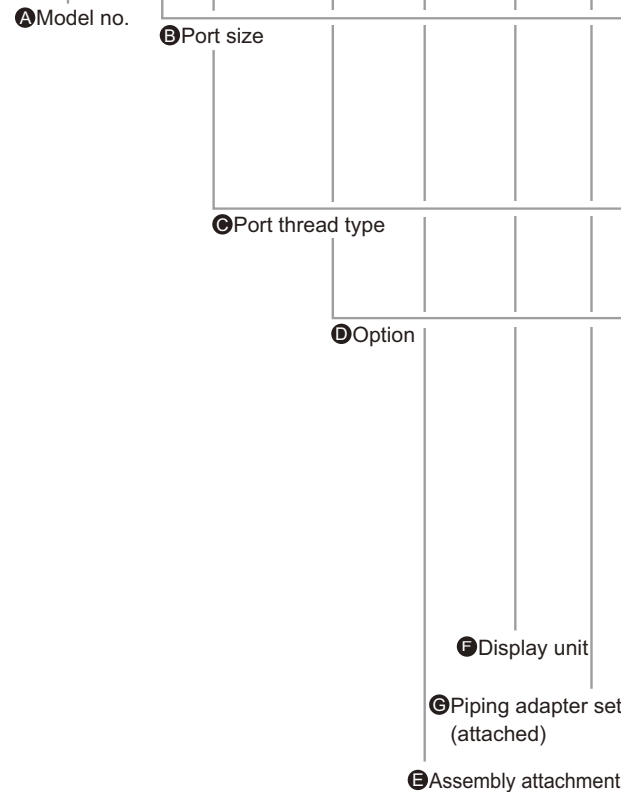
Note 4: When "F1" with an automatic drain is selected, the supply air pressure is 0.2 MPa or more. The minimum of the setting pressure is 0.15MPa.

Note 5: When "F1" with an automatic drain is selected for the C1040-W series, minimum operating pressure is 0.2 MPa and maximum operation pressure is 0.7 MPa. Refer to the maximum processing flow table (page 83) for the F1000-W-F1 automatic drain for the maximum working flow. Set the working flow to less than the maximum working flow.

Note 6: The working temperature range of the pressure switch with indicator PPD assembly "R1" is 5 to 50°C.

How to order

C1040 - **6** - **W** - **F1** - **U SV** - **A6W** - **H**



* Refer to page 9 for explanation of an option.

H Pressure gauge option (attached)

A Model no.			
C	C	C	C
1	3	4	8
0	0	0	0
4	4	4	0
0	0	0	0

Symbol	Descriptions				
B Port size					
6	1/8	●			
8	1/4	●	●	●	
10	3/8		●	●	
15	1/2			●	
20	3/4			●	●
25	1				●

C Port thread type		Note 1			
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

D Option		Note 2				
Drainage Note 3, Note 4	Blank	With manual drain cock	●	●	●	●
	F	Automatic drain with manual override (NO type: Exhaust without pressurized)		●	●	●
	F1	Automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●
	FF	Large automatic drain with manual override (NO type: Exhaust without pressurized)				●
	FF1	Large automatic drain with manual override (NC type: No exhaust without pressurized)				●

Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl		●	●	●
	M1	Metal bowl with manual drain cock		●	●	●

Element	Blank	5 m	●	●	●	●
	Y	0.3 m (submicron) Note 5	●	●	●	●
	Differential pressure detection	Blank	Without differential pressure detection port	●	●	●

Pressure range	Blank	0.05 to 0.85MPa	●	●	●	●
	L	0.05 to 0.35MPa	●	●	●	●
Relief	Blank	With relief mechanism	●	●	●	●
	N	Nonrelief type				

Pressure gauge	Blank	With standard pressure gauge (G401-W)	●	●	●	●
	T	Without pressure gauge (a pressure gauge port (Rc1/4) is assembled with sealed)	●	●	●	●
	T8	Pressure gauge attached (a pressure gauge port (Rc1/4) is assembled by open)	●	●	●	●
	T6 Note 7	Digital pressure sensor PPX attached option	●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●

E Assembly attachment		Pages 133 to 144, 149, 150				
Blank	Without assembly attachment type	●	●	●	●	
U	Assembly attachment type Note 6	●	●	●	●	
Assembled	S	Pressure switch (P1100-W, 4100-W, 8100-W)	●	●	●	●
	P	Pressure switch (P4000-W)		●	●	●
	V	Shut-off valve (V1000-W, 3000-W)	●	●	●	●
	K	Lockout valve (V3010-W)		●	●	●

F Display unit					
Blank	MPa display, Rc thread	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●

G Piping adapter set (attached)		Pages 151 to 153			
Blank	Not attached	●	●	●	●
A6*W	1/8 piping adapter set	●			
A8*W	1/4 piping adapter set	●	●	●	
A10*W	3/8 piping adapter set	●	●	●	
A15*W	1/2 piping adapter set		●	●	
A20*W	3/4 piping adapter set			●	●
A25*W	1 piping adapter set			●	●
A32*W	1 1/4 piping adapter set			●	●

* Adaptor screw type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

H Pressure gauge option (attached)		Page 194			
Blank	Not attached	●	●	●	●
G49P	G49D-8-P10 (L: G49D-8-P04)	●	●	●	●
G59P	G59D-8-P10 (L: G59D-8-P04)	●	●	●	●
G40P	G40D-8-P10 (L: G40D-8-P04)	●	●	●	●
G50P	G50D-8-P10 (L: G50D-8-P04)	●	●	●	●
G41P	G41D-8-P10 (L: G41D-8-P04)	●	●	●	●
G52P	G52D-8-P10 (L: G52D-8-P10)	●	●	●	●
R2 Note 7	Digital pressure sensor: PPX-R10N-6M	●	●	●	●

Note on model no. selection

Note 1: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port (metal bowl automatic drain) are available, as are attachments P and V.

Note 2: Select options for each drainage, bowl material, element, differential pressure detection, and regulator items. When selecting options for several items, list options in order from the top.

Note 3: Refer to page 11 for the automatic drain use conditions.

Note 4: When option symbol "F" is selected, the NO automatic drain is enclosed for the filter regulator and the NC automatic drain is enclosed for the oil mist filter.

When option symbol "F1" is selected, the NC automatic drain is enclosed for both the filter regulator and oil mist regulator. For both "FF" and "FF1," only the filter regulator has a high discharge rate, and the oil filter is the regulator NC automatic drainage.

Note 5: Refer to page 83 for maximum processing flow when option "Y" is selected.

Note 6: Mounting location for assembly attachments

Symbol	Attachment installation position	Applicable model
S or P	W + (S, P) + M	C1040-W to C8040-W (Excluding 8000 series for "P")
V or K	W + M + (V, K)	C1040-W to C8040-W (Excluding 8000 series for "V", 1000 series for "K")

Note) Indicate "U" + "D", "S", "P", "V", and "K" when selecting an assembly attachment.

Use custom combinations specifications for any other combination.

Note 7: When option "T6" is selected, only "blank" or "R2" is selected for the **H** pressure gauge (enclosed).

The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.

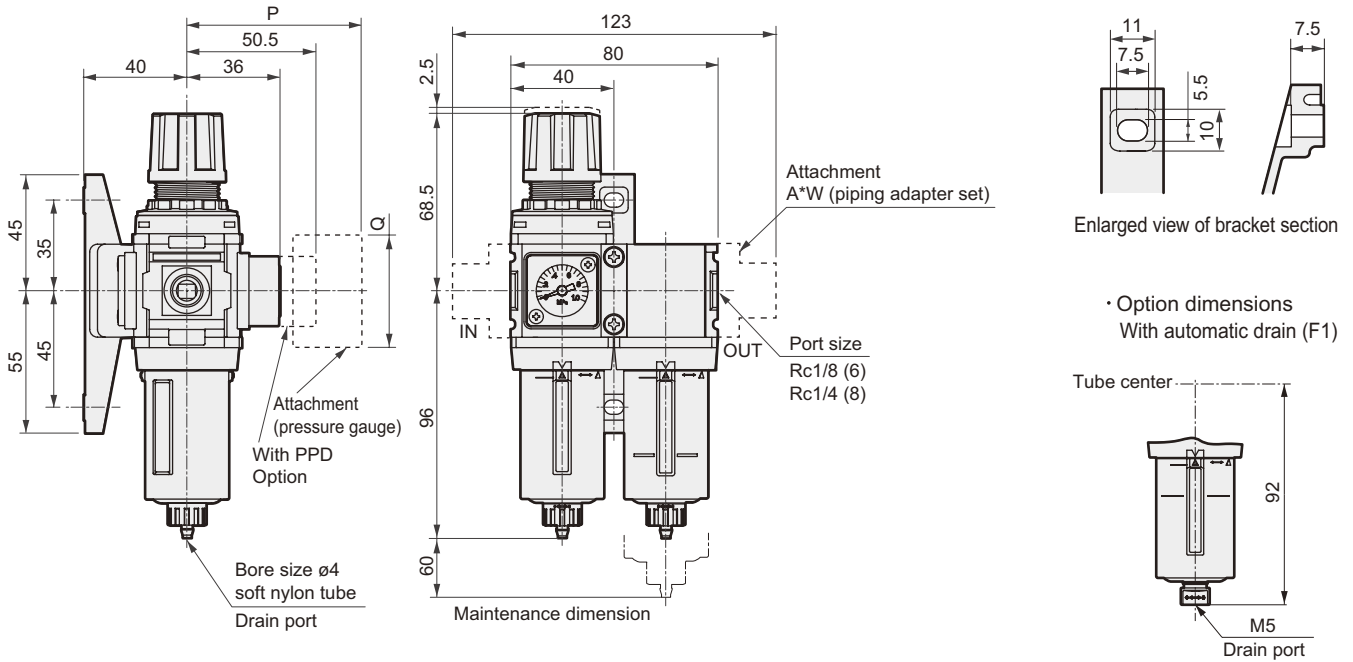
Note 8: If NPT is selected for the **C** piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

Note 9: Piping adapter A400-20*-W is assembled on both ends of the C4040-20*-W.

W.M Combination

Dimensions

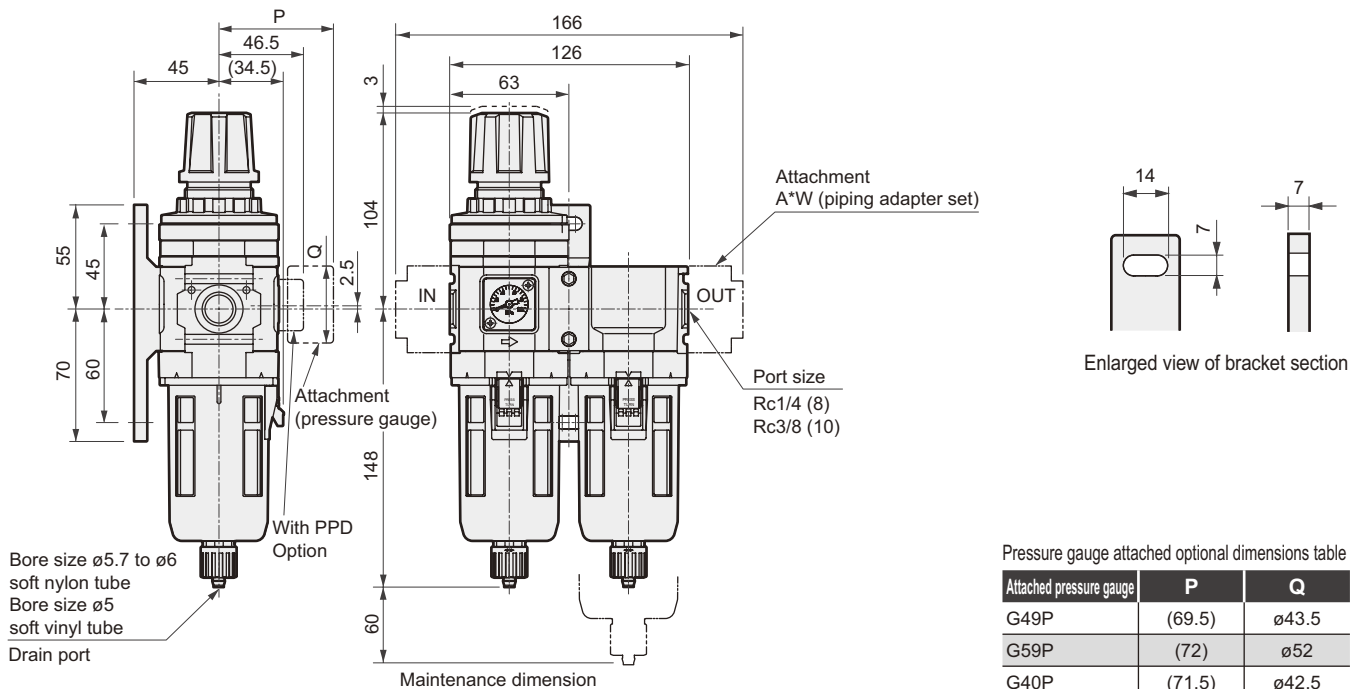
● C1040-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	P	Q
G49P	(73.5)	$\phi 43.5$
G59P	(76)	$\phi 52$
G40P	(75.5)	$\phi 42.5$
G50P	(75.5)	$\phi 52.5$
G41P	(74)	$\phi 42$
G52P	(86)	$\phi 52.5$
R2	(74)	*30

● C3040-W



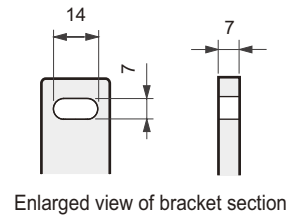
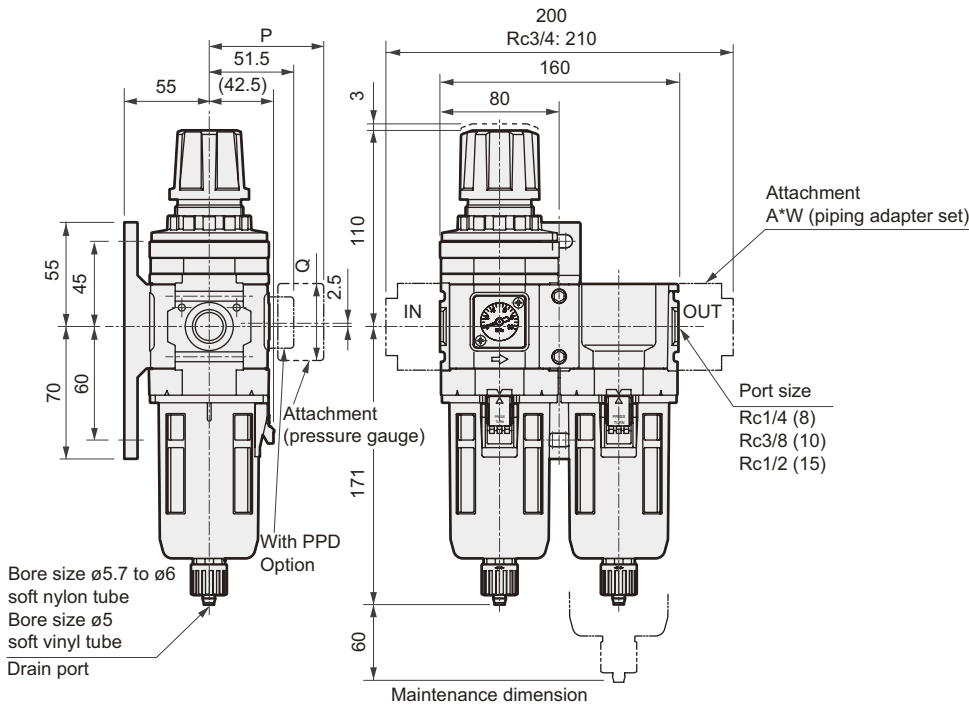
Pressure gauge attached optional dimensions table

Attached pressure gauge	P	Q
G49P	(69.5)	$\phi 43.5$
G59P	(72)	$\phi 52$
G40P	(71.5)	$\phi 42.5$
G50P	(71.5)	$\phi 52.5$
G41P	(70)	$\phi 42$
G52P	(82)	$\phi 52.5$
R2	(69.5)	*30

● Refer to page 72 for the dimensions of the metal bowl option filter/regulator and page 97 for the oil mist filter.

Dimensions

● C4040-W

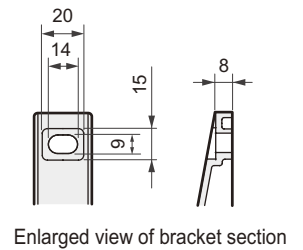
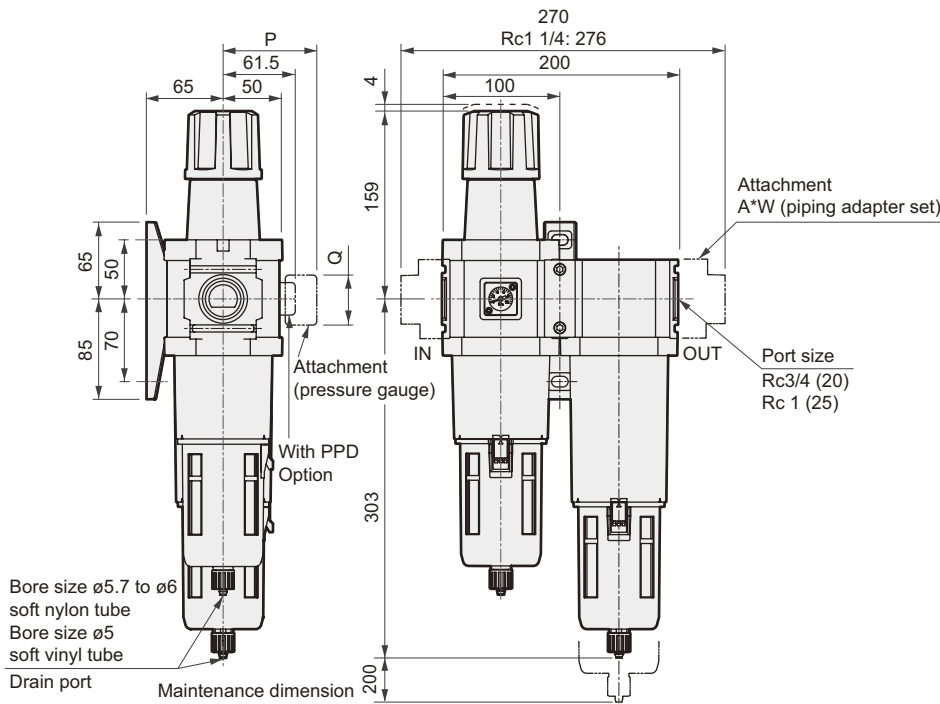


Pressure gauge attached optional dimensions table

Attached pressure gauge	P	Q
G49P	(74.5)	ø43.5
G59P	(77)	ø52
G40P	(76.5)	ø42.5
G50P	(76.5)	ø52.5
G41P	(75)	ø42
G52P	(86)	ø52.5
R2	(75)	*30

● Refer to page 72 for the dimensions of the metal bowl option filter/regulator and page 97 for the oil mist filter.

● C8040-W



Pressure gauge attached optional dimensions table

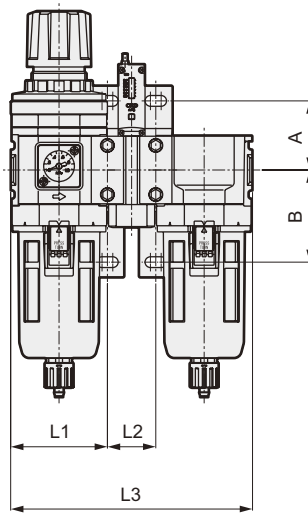
Attached pressure gauge	P	Q
G49P	(84.5)	ø43.5
G59P	(87)	ø52
G40P	(86.5)	ø42.5
G50P	(86.5)	ø52.5
G41P	(85)	ø42
G52P	(98)	ø52.5
R2	(85)	*30

● Refer to page 72 for the dimensions of the metal bowl option filter/regulator and page 97 for the oil mist filter.

W.M Combination

Option assembly dimensions

● C1040-W to C8040-W



Model no.	A	B
C1040-W	35	45
C3040-W	45	60
C4040-W		
C8040-W	50	70

Assembled option Model no.	S			P			V			K			SV			SK			PV			PK		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
C1040-W	40	28	108	□	□	□	40	40	120	□	□	□	40	68	148	□	□	□	□	□	□	□	□	□
C3040-W	63	31.5	157.5	63	80	206	63	63	189	63	63	189	63	94.5	220.5	63	94.5	220.5	63	143	269	63	143	269
C4040-W	80	31.5	191.5	80	80	240	80	80	223	80	80	223	80	111.5	254.5	80	111.5	254.5	80	160	320	80	160	320
C4040-20-W ^{Note 1}	100	31.5	231.5	100	80	280	100	100	263	100	100	263	100	111.5	294.5	100	111.5	294.5	100	160	343	100	160	343
C8040-W	100	50	250	□	□	□	□	□	□	100	100	290	□	□	□	100	150	340	□	□	□	□	□	□

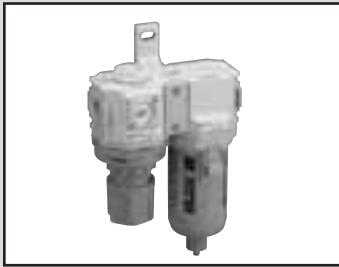
L1: Dimensions from the IN edge to center of the T-type bracket mounting hole
 L2: Spacing dimensions of the mounting hole from the first T-type bracket to the second T-type bracket
 L3: Dimensions from the IN edge to the OUT edge

* Refer to the General Catalog for details on bracket mounting hole dimensions.

Note 1. The piping adapter is assembled on the OUT side.

Piping adapter A400-20°-W is assembled on both ends of the C4040-20°-W.

MEMO




R.M. combination standard white Series

C1050/C2550/C3050 C4050/C6050/C8050-W Series







Regulator and oil mist filter integrated

Port size: 1/8 to 1

JIS symbol 



Specifications

Descriptions		C1050-W	C2550-W	C3050-W	C4050-W	C6050-W	C8050-W
Appearance							
Components	Regulator	R1000-W	R2000-W	R3000-W	R4000-W	R6000-W	R8000-W
	Oil mist filter	M1000-W	M3000-W	M3000-W	M4000-W	M6000-W	M8000-W
Working fluid		Compressed air					
Max. working pressure MPa		1.0					
Withstanding pressure MPa		1.5					
Ambient temperature range °C		5 to 60					
Set pressure range MPa		0.1 to 0.85 ^{Note 3}	0.1 to 0.85				
Relief		With relief mechanism					
Port size	Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg		0.29	0.66	0.82	1.32	2.12	3.12
Secondary oil concentration		0.01mg/m ³ or less					
Maximum flow rate (Note 1) m ³ /min		0.15	0.38	0.36	0.825	1.27	2.6

Note 1: Maximum flow rate is for the regulator setting pressure 0.7MPa.

Note 2: Refer to page 91 for details on other oil mist filters.

Note 3: The supply air pressure is 0.2 MPa or more with a minimum setting pressure of 0.15 MPa.

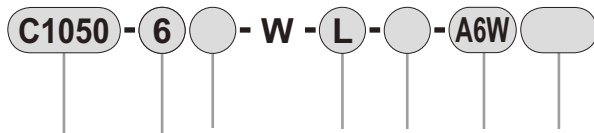
Note 4: When "F1" with an automatic drain is selected for the C1050-W Series, the minimum operation pressure is 0.2 MPa and the maximum operation pressure is 0.7 MPa. Refer to the maximum processing flow table (page 93) for the M1000-W-F1 automatic drain for the maximum working flow. The working flow must be less than the maximum working flow. Set the working flow to less than the maximum working flow.

Note 5: The working temperature range of the pressure switch with indicator PPD assembly "R1" is 5 to 50°C.

R.M Combination

How to order

How to order



A Model no. **B** Port size

C Port thread type

D Option

E Display unit

F Piping adapter set (attached)

G Pressure gauge option (attached)

* Refer to page 9 for explanation of an option.

A Model no.					
C 1 0 5 0	C 2 5 5 0	C 3 0 5 0	C 4 0 5 0	C 6 0 5 0	C 8 0 5 0

Symbol	Descriptions						
B Port size							
6	1/8	●					
8	1/4	●	●	●	●		
10	3/8		●	●	●		
15	1/2				●		
20	3/4				● ^{*6}	●	●
25	1					●	●

C Port thread type		Note 1					
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

D Option			Note 2					
Drainage	Blank	Filter with manual drain cock	●	●	●	●	●	●
	F1	Automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●	●	●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●	●	●
	Z	Nylon bowl	●	●	●	●	●	●
	M	Metal bowl		●	●	●	●	●
	M1	Metal bowl with manual drain cock		●	●	●	●	●
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)					●	●
Pressure range	Blank	0.05 to 0.85MPa	●	●	●	●	●	●
	L	0.05 to 0.35MPa	●	●	●	●	●	●
Relief	Blank	With relief mechanism	●	●	●	●	●	●
	N	Nonrelief type	●	●	●	●	●	●
Pressure gauge	Blank	With standard pressure gauge (G401-W)	●	●	●	●	●	●
	T	Without pressure gauge (a pressure gauge port (Rc1/4) is assembled with sealed)	●	●	●	●	●	●
	T8	Pressure gauge attached (a pressure gauge port (Rc1/4) is assembled by open)	●	●	●	●	●	●
	T6 Note 4	Digital pressure sensor PPX attached option	●	●	●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●	●	●

E Display unit							
Blank	MPa display, Rc thread	●	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●	●

F Piping adapter set (attached)		Pages 151 to 153					
Blank	Not attached	●	●	●	●	●	●
A6*W	1/8 piping adapter set	●					
A8*W	1/4 piping adapter set	●	●	●	●		
A10*W	3/8 piping adapter set	●	●	●	●		
A15*W	1/2 piping adapter set		●	●	●		
A20*W	3/4 piping adapter set				●	●	●
A25*W	1 piping adapter set					●	●
A32*W	1 1/4 piping adapter set					●	●

* Adaptor screw type							
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

G Pressure gauge option (attached)		Page 194					
Blank	Not attached	●	●	●	●	●	●
G49P	G49D-8-P10 (L: G49D-8-P04)	●	●	●	●	●	●
G59P	G59D-8-P10 (L: G59D-8-P04)	●	●	●	●	●	●
G40P	G40D-8-P10 (L: G40D-8-P04)	●	●	●	●	●	●
G50P	G50D-8-P10 (L: G50D-8-P04)	●	●	●	●	●	●
G41P	G41D-8-P10 (L: G41D-8-P04)	●	●	●	●	●	●
G52P	G52D-8-P10 (L: G52D-8-P10)	●	●	●	●	●	●
R2 Note 4	Digital pressure sensor: PPX-R10N-6M	●	●	●	●	●	●

⚠ Note on model no. selection

Note 1: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port (metal bowl automatic drain) are available.

Note 2: Select options for each drainage, bowl material, element, differential pressure detection, and regulator items. When selecting options for several items, list options in order from the top.

Note 3: Refer to page 11 for the automatic drain use conditions.

Note 4: When option "T6" is selected, only "blank" or "R2" is selected for **F** pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.

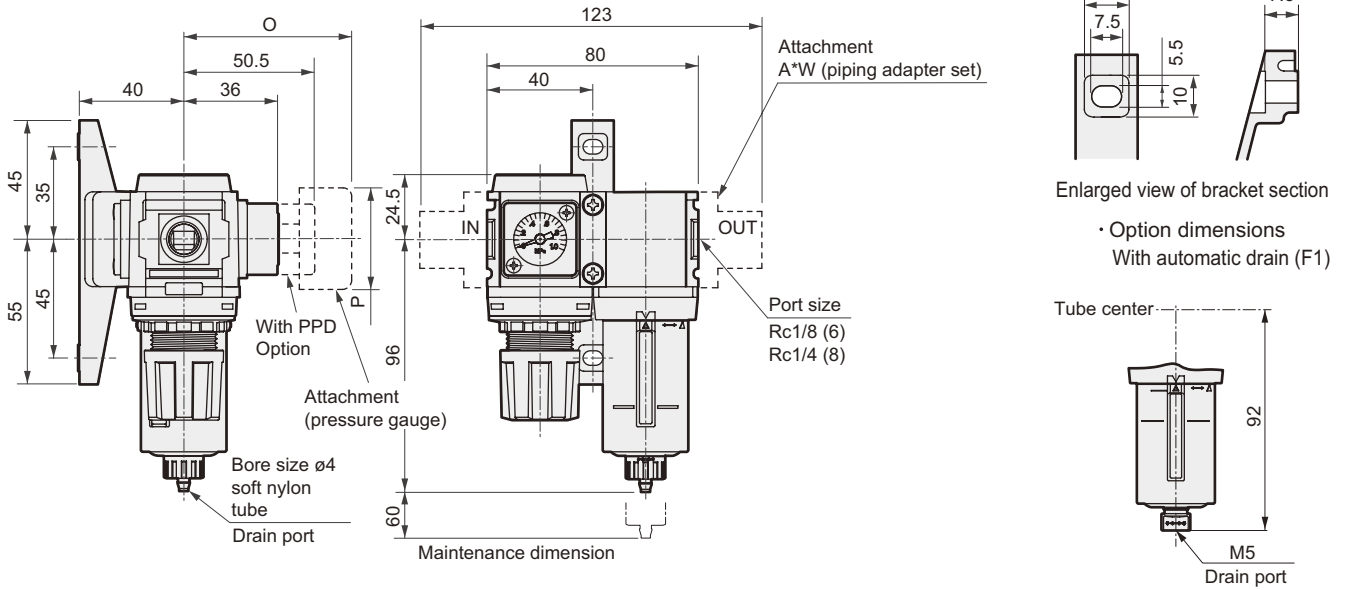
Note 5: If NPT is selected for the **C** piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

Note 6: Piping adapter A400-20*-W is assembled on both ends of the C4050-20*-W.

R.M Combination

Dimensions

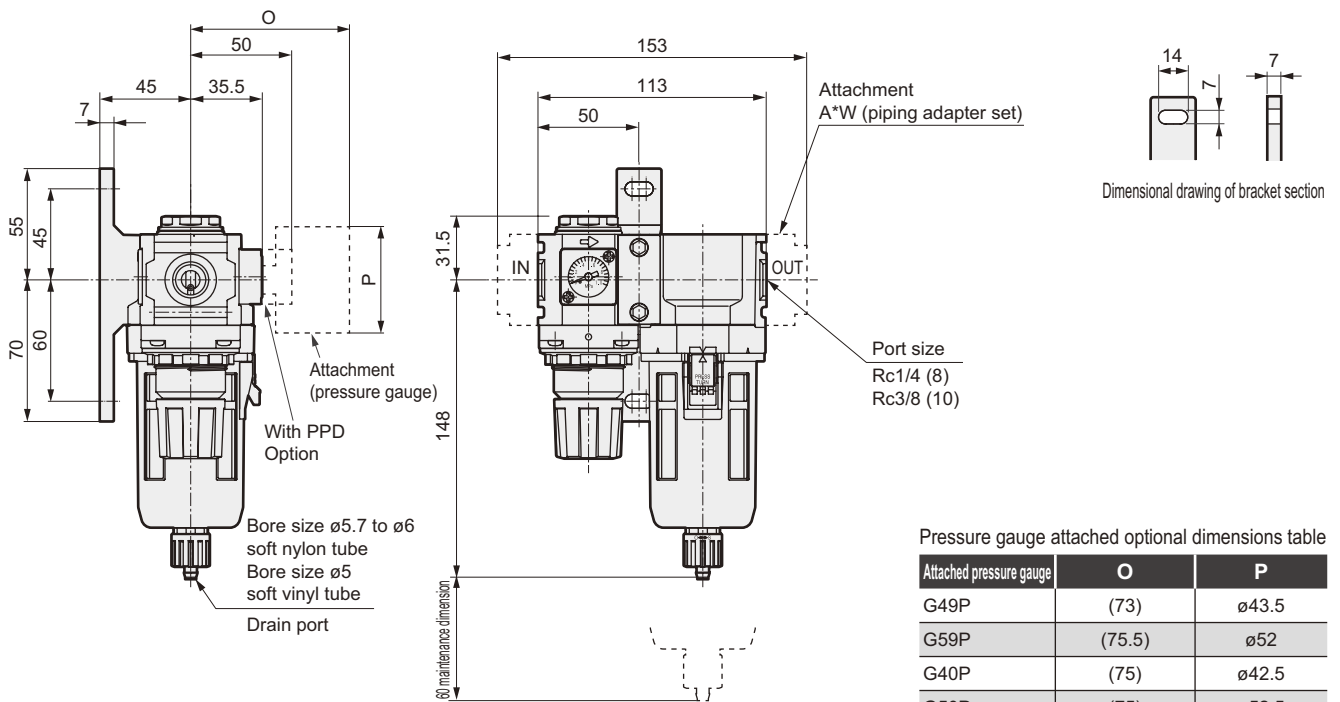
● C1050-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(73.5)	$\phi 43.5$
G59P	(76)	$\phi 52$
G40P	(75.5)	$\phi 42.5$
G50P	(75.5)	$\phi 52.5$
G41P	(74)	$\phi 42$
G52P	(86)	$\phi 52.5$
R2	(74)	*30

● C2550-W

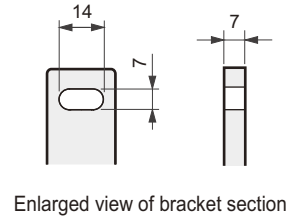
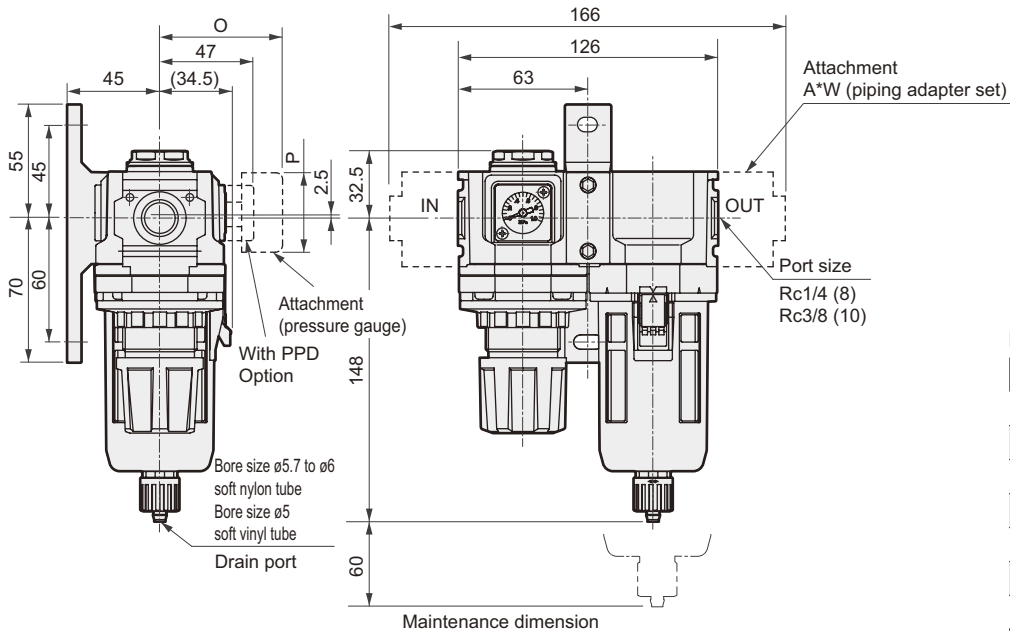


Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(73)	$\phi 43.5$
G59P	(75.5)	$\phi 52$
G40P	(75)	$\phi 42.5$
G50P	(75)	$\phi 52.5$
G41P	(73.5)	$\phi 42$
G52P	(85.5)	$\phi 52.5$
R2	(73)	*30

Dimensions

● C3050-W

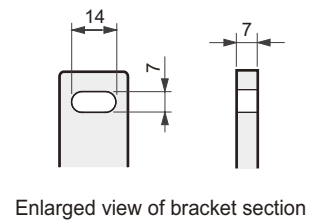
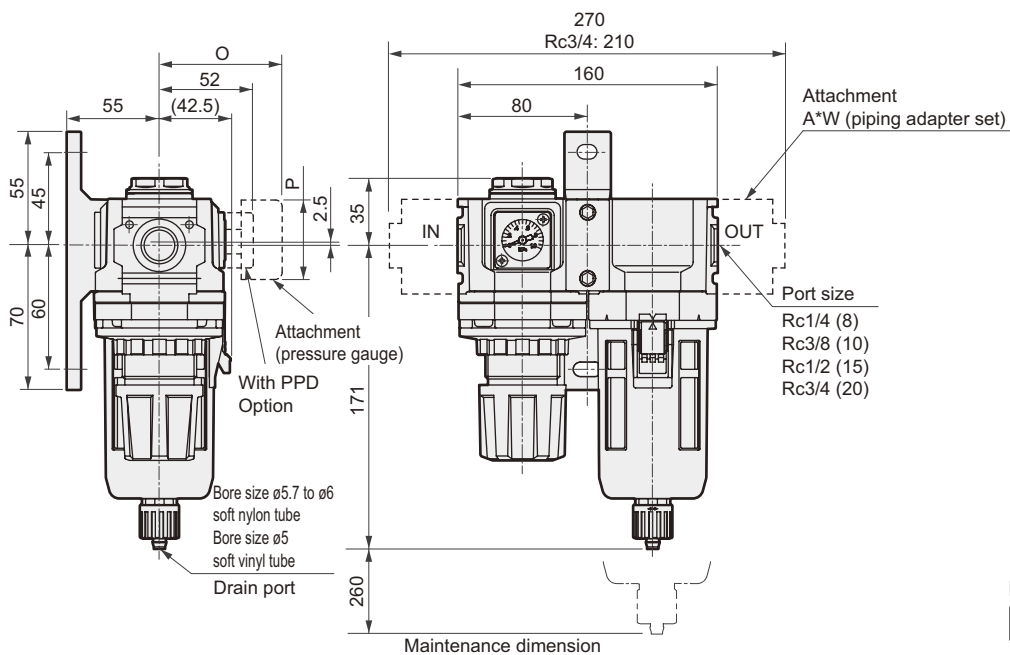


Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(69.5)	ø43.5
G59P	(72)	ø52
G40P	(71.5)	ø42.5
G50P	(71.5)	ø52.5
G41P	(70)	ø42
G52P	(82)	ø52.5
R2	(69.5)	*30

● Refer to page 87 for the metal bowl optional dimensions.

● C4050-W



Pressure gauge attached optional dimensions table

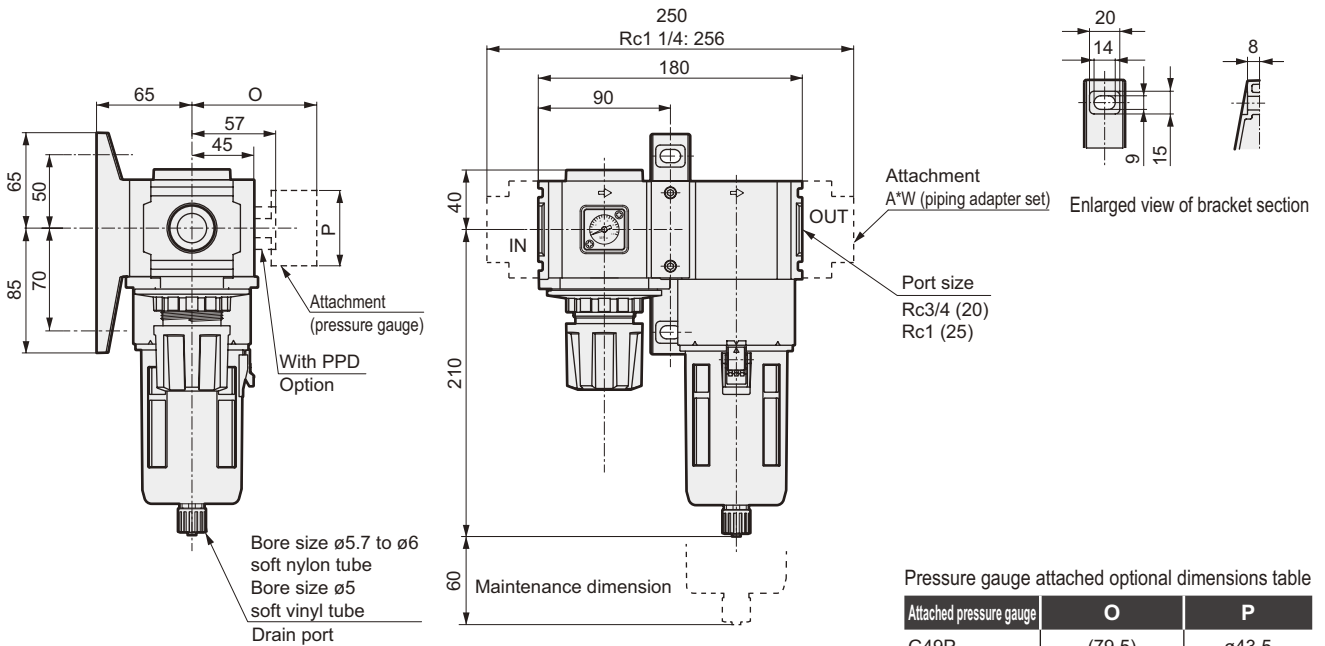
Attached pressure gauge	O	P
G49P	(74.5)	ø43.5
G59P	(77)	ø52
G40P	(76.5)	ø42.5
G50P	(76.5)	ø52.5
G41P	(75)	ø42
G52P	(86)	ø52.5
R2	(75)	*30

● Refer to page 87 for the metal bowl optional dimensions.

R.M Combination

Dimensions

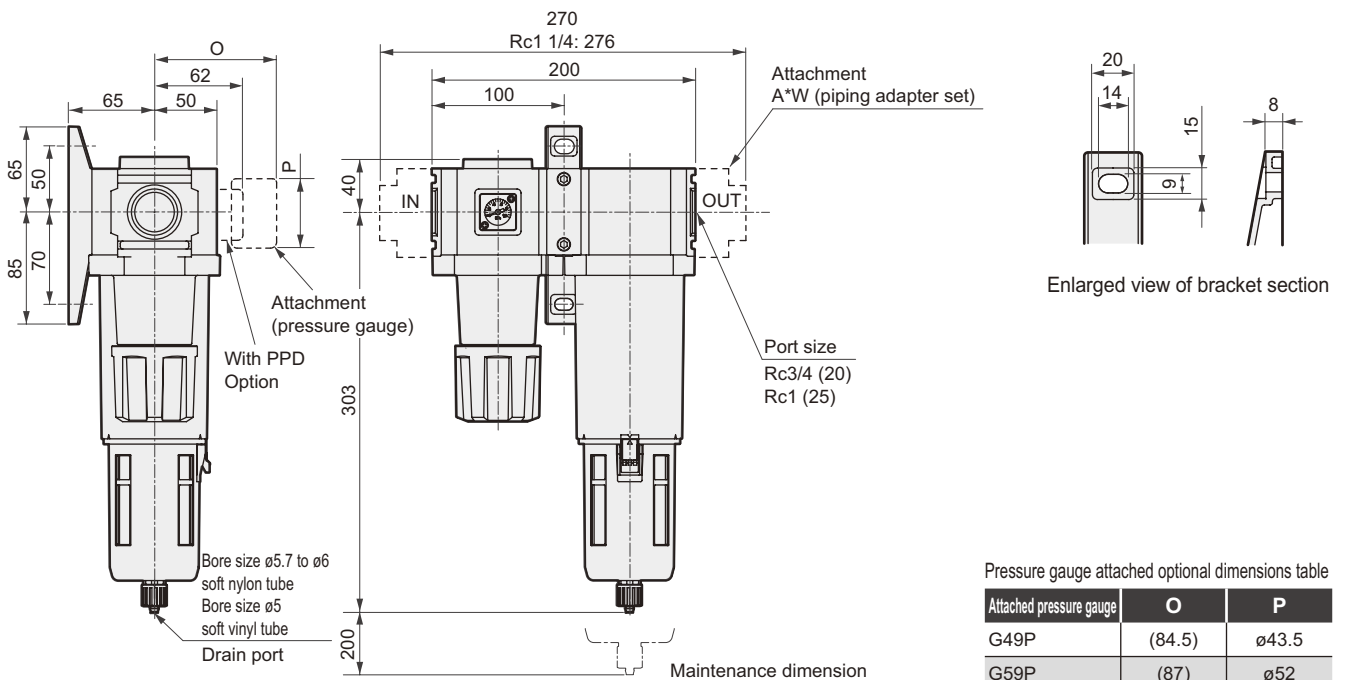
● C6050-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(79.5)	$\phi 43.5$
G59P	(82)	$\phi 52$
G40P	(81.5)	$\phi 42.5$
G50P	(81.5)	$\phi 52.5$
G42P	(80)	$\phi 42$
G52P	(93)	$\phi 52.5$
R2	(80)	*30

● C8050-W

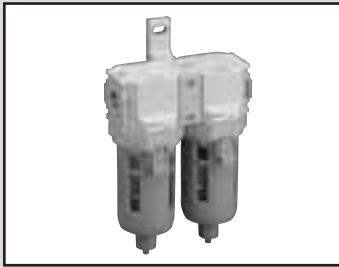


Pressure gauge attached optional dimensions table

Attached pressure gauge	O	P
G49P	(84.5)	$\phi 43.5$
G59P	(87)	$\phi 52$
G40P	(86.5)	$\phi 42.5$
G50P	(86.5)	$\phi 52.5$
G41P	(85)	$\phi 42$
G52P	(98)	$\phi 52.5$
R2	(85)	*30

● Refer to page 97 for the metal bowl optional dimensions.

MEMO




F.M. combination standard white Series

C1060/C3060/ C4060/C6060/C8060-W Series






Filter and oil mist filter integrated

Port size: 1/8 to 1

JIS symbol 



Specifications

Descriptions		C1060-W	C3060-W	C4060-W	C6060-W	C8060-W
Appearance						
Components	Filter	F1000-W	F3000-W	F4000-W	F6000-W	F8000-W
	Oil mist filter	M1000-W	M3000-W	M4000-W	M6000-W	M8000-W
Working fluid		Compressed air				
Max. working pressure MPa		1.0 Note 3, 4, 5				
Withstanding pressure MPa		1.5 Note 3				
Ambient temperature range °C		5 to 60				
Port size	Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight	kg	0.22	0.62	1.06	2.02	2.68
Secondary oil concentration		0.01mg/m ³ or less				
Maximum flow rate (Note 1)	m ³ /min	0.15 Note 3	0.36	0.825	1.27	2.6

Note 1: The maximum flow is for a primary pressure of 0.7 MPa.

Note 2: Refer to page 91 for details on other oil mist filters.

Note 3: When "F1" with an automatic drain is selected, the NC automatic drain is enclosed for both the filter and oil mist filter. The minimum operation pressure is 0.2 MPa, the maximum operation pressure is 0.7 MPa and the guaranteed pressure resistance is 1.05 MPa. Refer to the maximum processing flow table (page 93) for the M1000-W-F1 automatic drain for the maximum working flow. The working flow must be less than the maximum working flow.

Note 4: When "F" with an automatic drain is selected, the supply air pressure is 0.15 MPa or more. Air is purged with initial drainage until pressure reaches 0.1 MPa.

Note 5: When "F1" with an automatic drain is selected, the supply air pressure must be 0.15 MPa or more.

Note 6: When selecting the element option "Y", refer to page 83 for the maximum flow. The working flow must be less than the maximum working flow.

How to order

C1060 - **6** - **W** - **Z** - **A6W**

A Model no.

B Port size

C Port thread type

D Option

E Display unit

F Piping adapter set (attached)

* Refer to page 9 for explanation of an option.

A Model no.				
C	C	C	C	C
1	3	4	6	8
0	0	0	0	0
6	6	6	6	6
0	0	0	0	0

Symbol	Descriptions					
B Port size						
6	1/8	●				
8	1/4	●	●	●		
10	3/8		●	●		
15	1/2			●		
20	3/4			●	●	
25	1				●	
C Port thread type						
Note 1						
Blank	Rc thread	●	●	●	●	
N	NPT thread	●	●	●	●	
G	G thread	●	●	●	●	
D Option						
Note 2						
Drainage	Blank	With manual drain cock	●	●	●	
	F	Automatic drain with manual override (NO type: Exhaust without pressurized)		●	●	
	F1	Automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	
	FF	Large automatic drain with manual override (NO type: Exhaust without pressurized)			●	
	FF1	Large automatic drain with manual override (NC type: No exhaust without pressurized)			●	
Bowl material	Blank	Polycarbonate bowl	●	●	●	
	Z	Nylon bowl	●	●	●	
	M	Metal bowl		●	●	
	M1	Metal bowl with manual drain cock		●	●	
Element	Blank	5 m	●	●	●	
	Y	0.3 m (submicron) Note 5		●	●	
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	
	Q	With differential pressure detection port (Rc1/4)			●	
Flow direction	Blank	Standard flow (left → right)	●	●	●	
	X1	Reverse flow (right → left)	●	●	●	
E Display unit						
Blank	MPa display, Rc thread	●	●	●	●	
J1	MPa display, NPT, G thread	●	●	●	●	
F Piping adapter set (attached)						
Pages 151 to 153						
Blank	Not attached	●	●	●	●	
A6*W	1/8 piping adapter set	●				
A8*W	1/4 piping adapter set	●	●	●		
A10*W	3/8 piping adapter set	●	●	●		
A15*W	1/2 piping adapter set		●	●		
A20*W	3/4 piping adapter set				●	
A25*W	1 piping adapter set				●	
A32*W	1 1/4 piping adapter set				●	
* Adaptor screw type						
Blank	Rc thread	●	●	●	●	
N	NPT thread	●	●	●	●	
G	G thread	●	●	●	●	

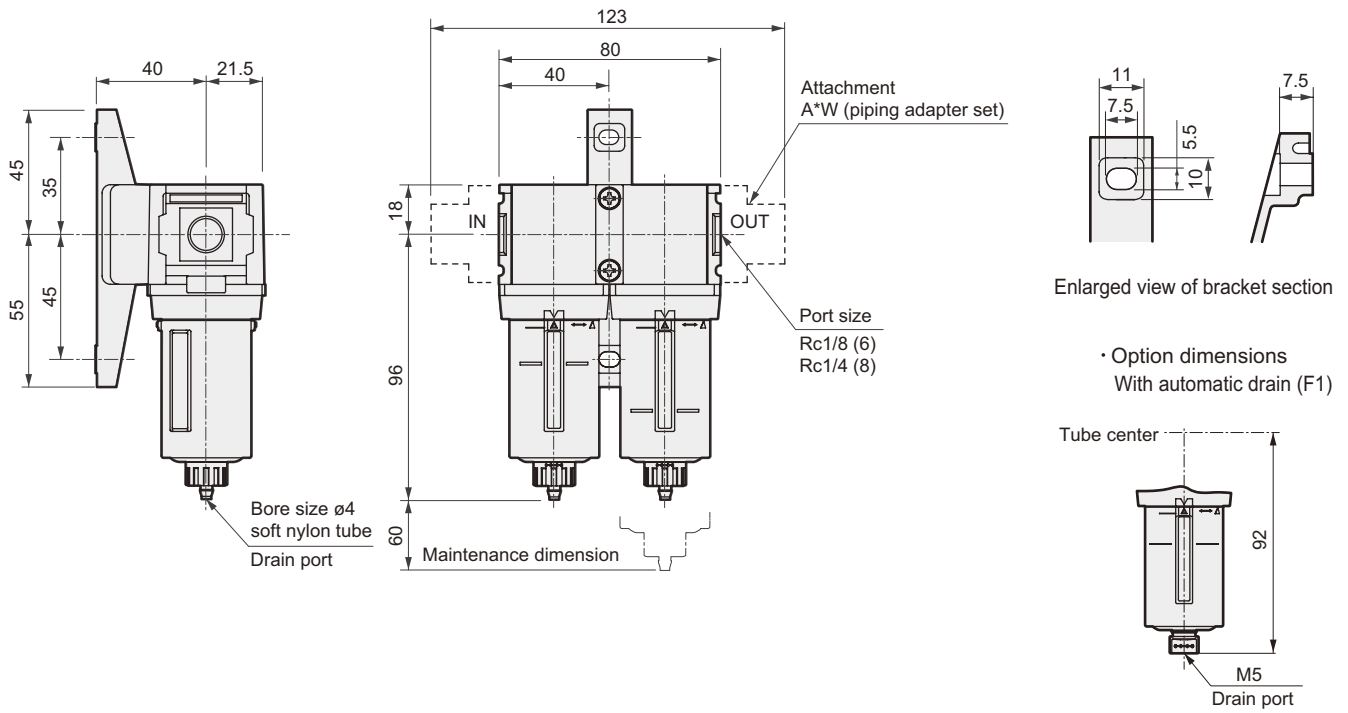
⚠ Note on model no. selection

- Note 1: When G threads or NPT threads are selected, the IN, OUT, and drain port (metal bowl automatic drain) are available.
- Note 2: Select options based on drainage, bowl material, element, and differential pressure detection. When selecting options for several items, list options in order from the top.
- Note 3: Refer to page 11 for the automatic drain use conditions.
- Note 4: When option symbol "F" is selected, the NO automatic drain is enclosed for the air filter and the NC automatic drain is enclosed for the automatic drain. When option symbol "F1" is selected, the NC automatic drain is enclosed for both the air filter and oil mist filter. For both "FF" and "FF1," only the filter regulator has a high discharge rate, and the oil mist filter is the regulator NC automatic drainage.
- Note 5: Refer to page 83 for maximum processing flow when option "Y" is selected.
- Note 6: Piping adapter A400-20*-W is assembled on both ends of the C4060-20*-W.

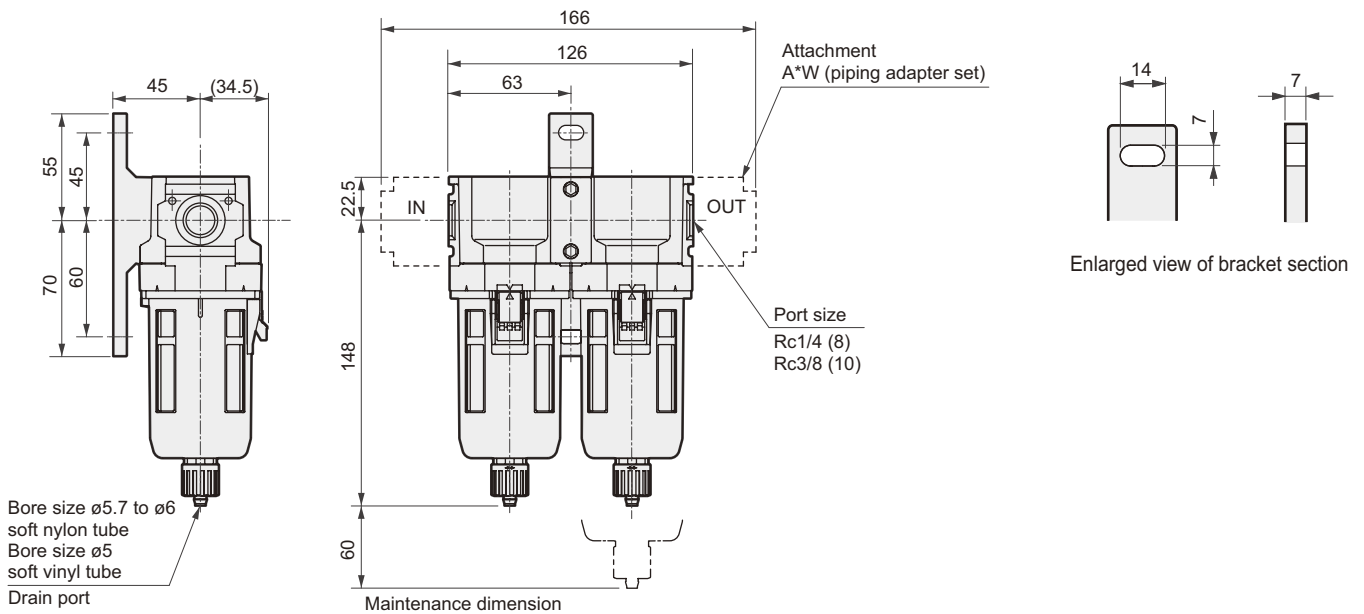
F.M Combination

Dimensions

● C1060-W



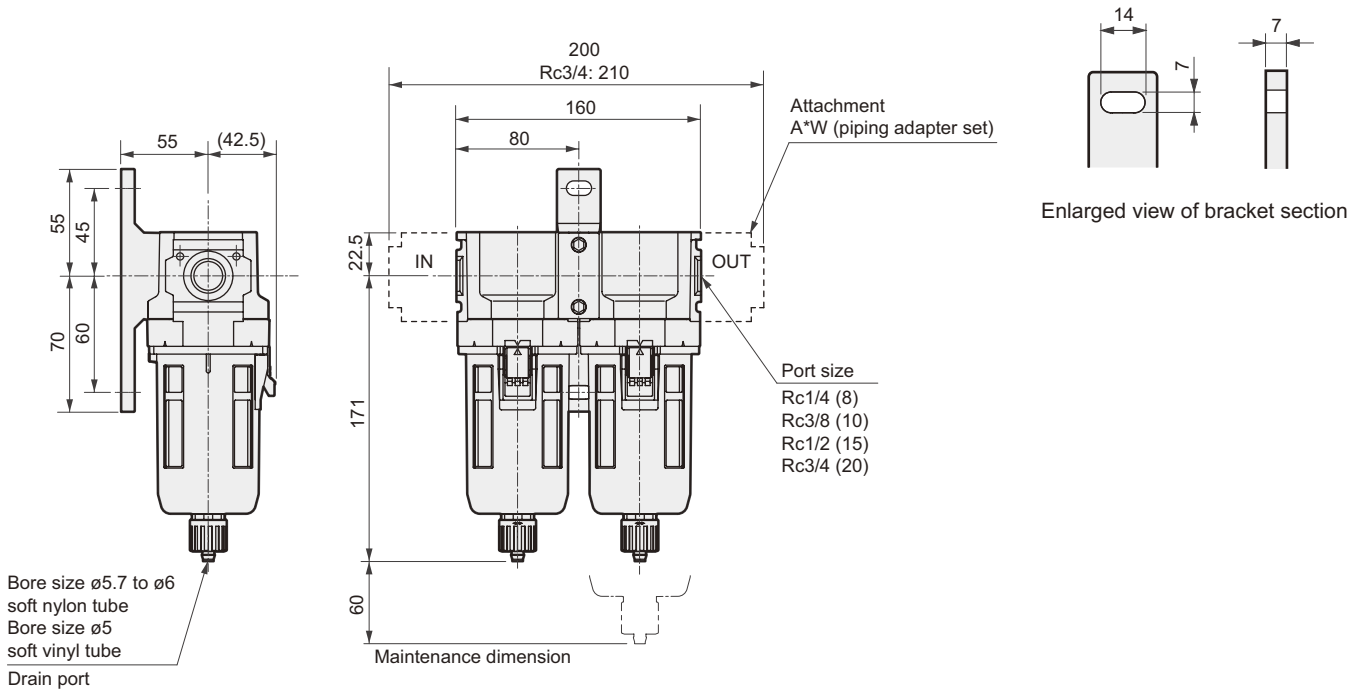
● C3060-W



● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.

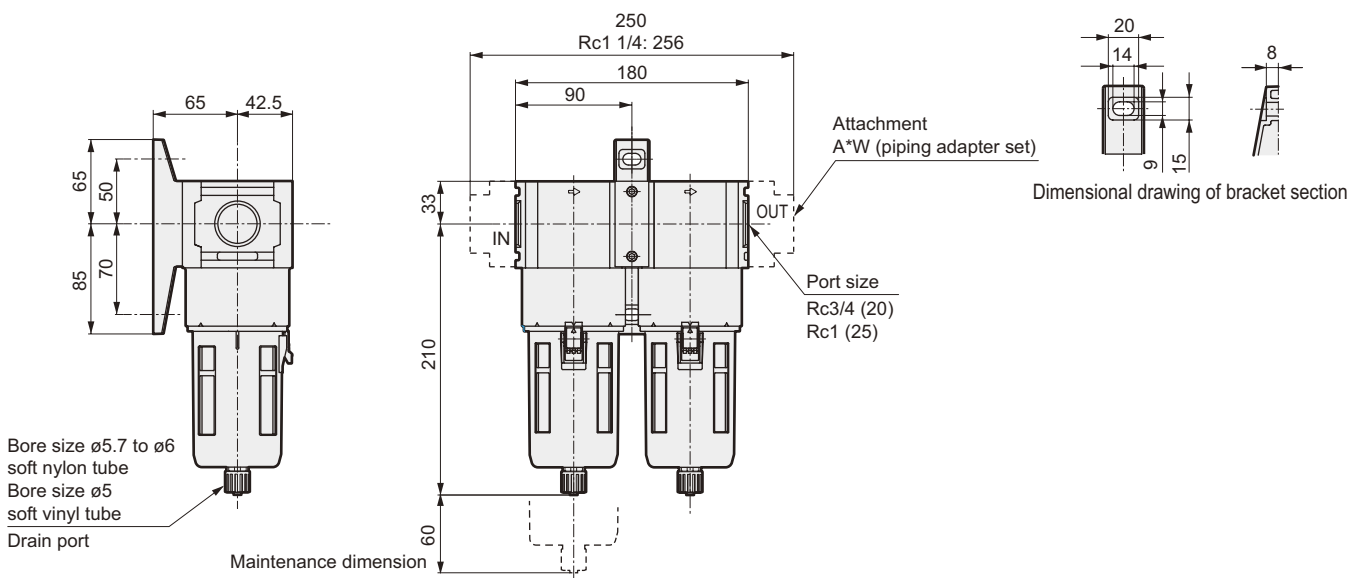
Dimensions

● C4060-W



● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.

● C6060-W

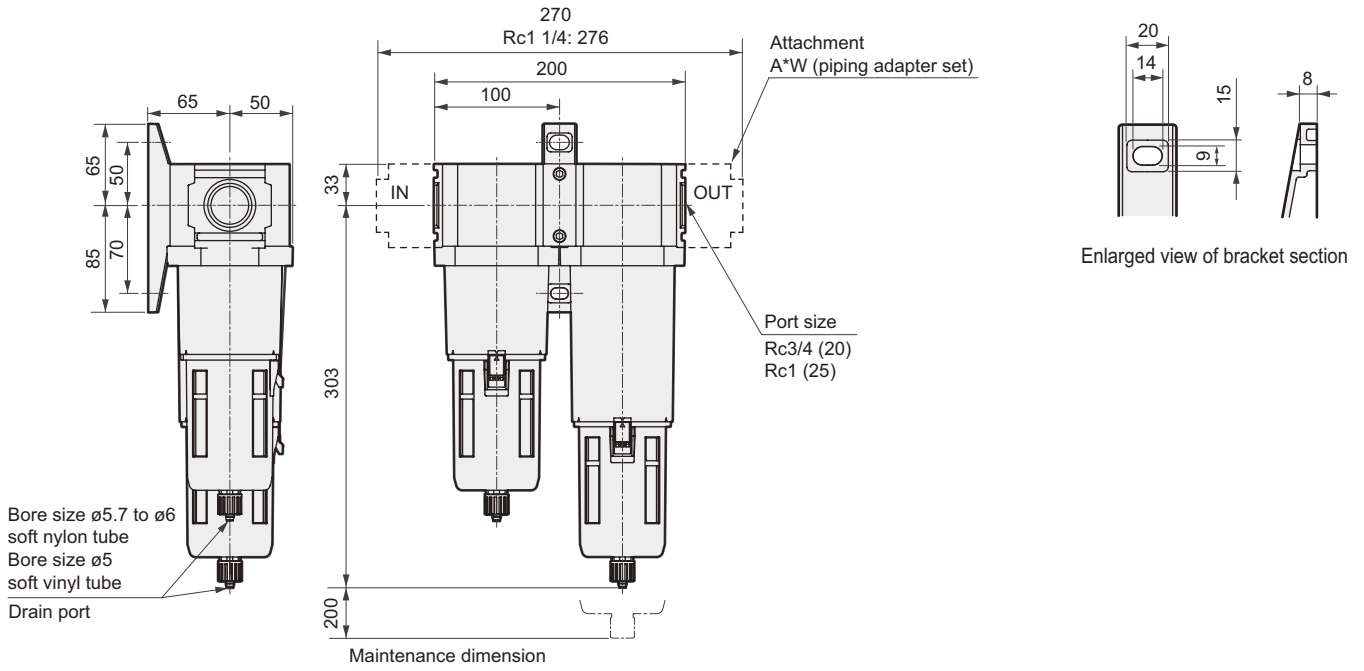


● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.

F.M Combination

Dimensions

● C8060-W



● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.

MEMO




F.F.M. combination standard white Series

C3070/C4070/C6070/C8070-W Series





Integrated filter (5 μm), filter (0.3 μm), and oil mist filter

Port size: 1/4 to 1

JIS symbol 



Specifications

Descriptions		C3070-W	C4070-W	C6070-W	C8070-W
Appearance					
	Filter (5μm)	F3000-W	F4000-W	F6000-W	F8000-W
	Filter (0.3μm)	F3000-W	F4000-W	F6000-W	F8000-W
	Oil mist filter	M3000-W	M4000-W	M6000-W	M8000-W
Working fluid		Compressed air			
Max. working pressure MPa		1.0 Note 3, 4			
Withstanding pressure MPa		1.5			
Ambient temperature range °C		5 to 60			
Port size Rc, NPT, G		1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg		0.96	1.61	3.09	4.01
Secondary oil concentration		0.01mg/m ³ or less			
Maximum flow rate (Note 1) m ³ /min		0.23	0.5	0.8	1.1

Note 1: The maximum flow is for a primary pressure of 0.7 MPa.

Note 2: Refer to page 91 for details on other oil mist filters.

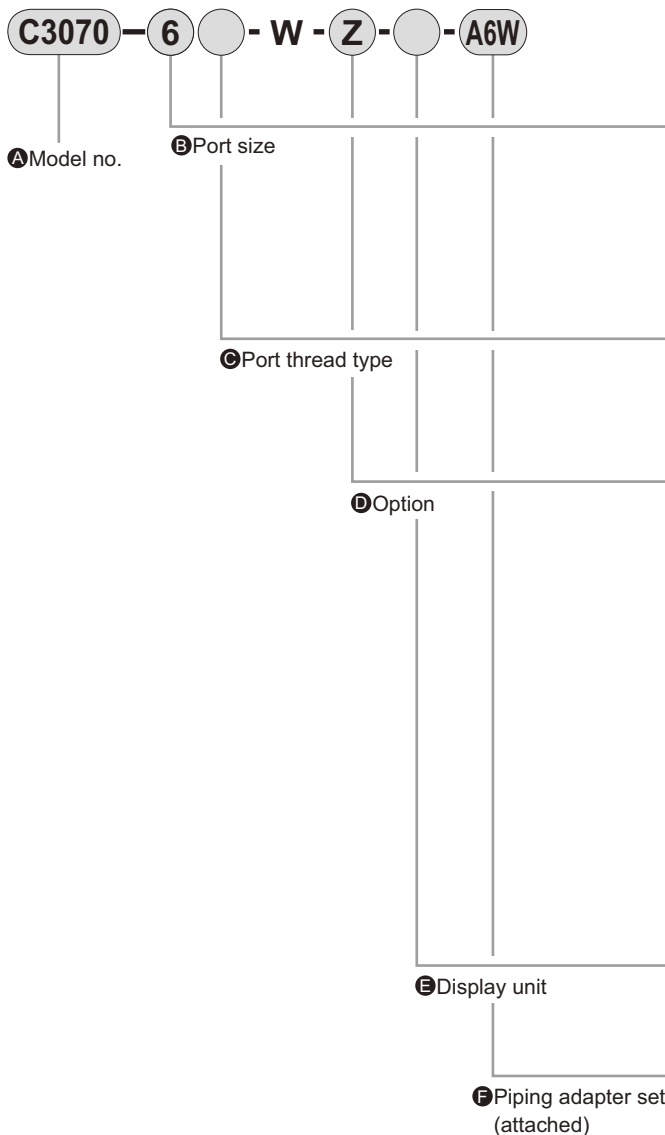
Note 3: When "F" with an automatic drain is selected, the supply air pressure is 0.15 MPa or more. Air is purged with initial drainage until pressure reaches 0.1 MPa.

Note 4: When "F1" with an automatic drain is selected, the supply air pressure is 0.15 MPa or more.

F.F.M Combination

How to order

How to order



* Refer to page 9 for explanation of an option.

A Model no.			
C	C	C	C
3	4	6	8
0	0	0	0
7	7	7	7
0	0	0	0

Symbol	Descriptions					
B Port size						
8	1/4	●	●			
10	3/8	●	●			
15	1/2		●			
20	3/4		●*5	●	●	
25	1			●	●	
C Port thread type Note 1						
Blank	Rc thread	●	●	●	●	
N	NPT thread	●	●	●	●	
G	G thread	●	●	●	●	
D Option Note 2						
Drainage <small>Note 3, Note 4</small>	Blank	With manual drain cock	●	●	●	●
	F	Automatic drain with manual override (NO type: Exhaust without pressurized)	●	●	●	●
	F1	Automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●
	FF	Large automatic drain with manual override (NO type: Exhaust without pressurized)				●
	FF1	Large automatic drain with manual override (NC type: No exhaust without pressurized)				●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl	●	●	●	●
	M1	Metal bowl with manual drain cock	●	●	●	●
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)			●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●
E Display unit						
Blank	MPa display, Rc thread	●	●	●	●	
J1	MPa display, NPT, G thread	●	●	●	●	
F Piping adapter set (attached) Pages 151 to 153						
Blank	Not attached	●	●	●	●	
A8*W	1/4 piping adapter set	●	●			
A10*W	3/8 piping adapter set	●	●			
A15*W	1/2 piping adapter set	●	●			
A20*W	3/4 piping adapter set		●	●	●	
A25*W	1 piping adapter set			●	●	
A32*W	1 1/4 piping adapter set			●	●	
* Adaptor screw type						
Blank	Rc thread	●	●	●	●	
N	NPT thread	●	●	●	●	
G	G thread	●	●	●	●	

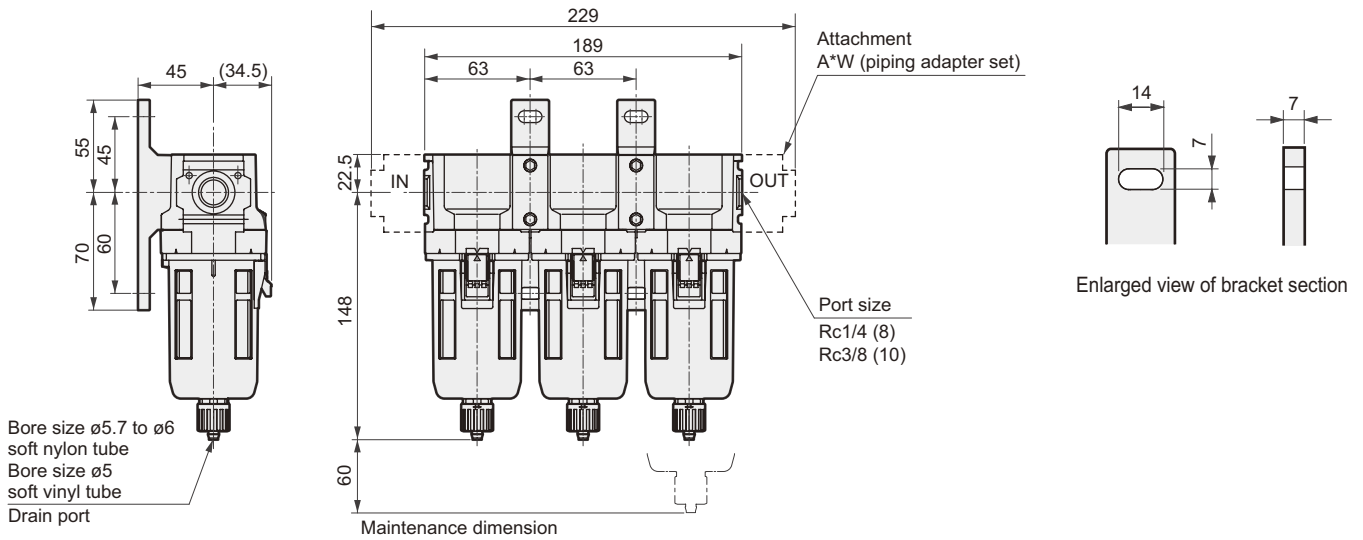
⚠ Note on model no. selection

- Note 1: When G threads or NPT threads are selected, the IN, OUT, and drain port (metal bowl automatic drain) are available.
- Note 2: Select options based on drainage, bowl material, element, and differential pressure detection. When selecting options for several items, list options in order from the top.
- Note 3: Refer to page 11 for the automatic drain use conditions.
- Note 4: When option symbol "F" is selected, the NO automatic drain is enclosed for the air filter and the NC automatic drain is enclosed for the automatic drain. When option symbol "F1" is selected, the NC automatic drain is enclosed for both the air filter and oil mist filter. For both "FF" and "FF1," only the filter regulator has a high discharge rate, and the oil mist filter is the regulator NC automatic drainage.
- Note 5: Piping adapter A400-20*-W is assembled on both ends of the C4070-20*-W.

F.F.M Combination

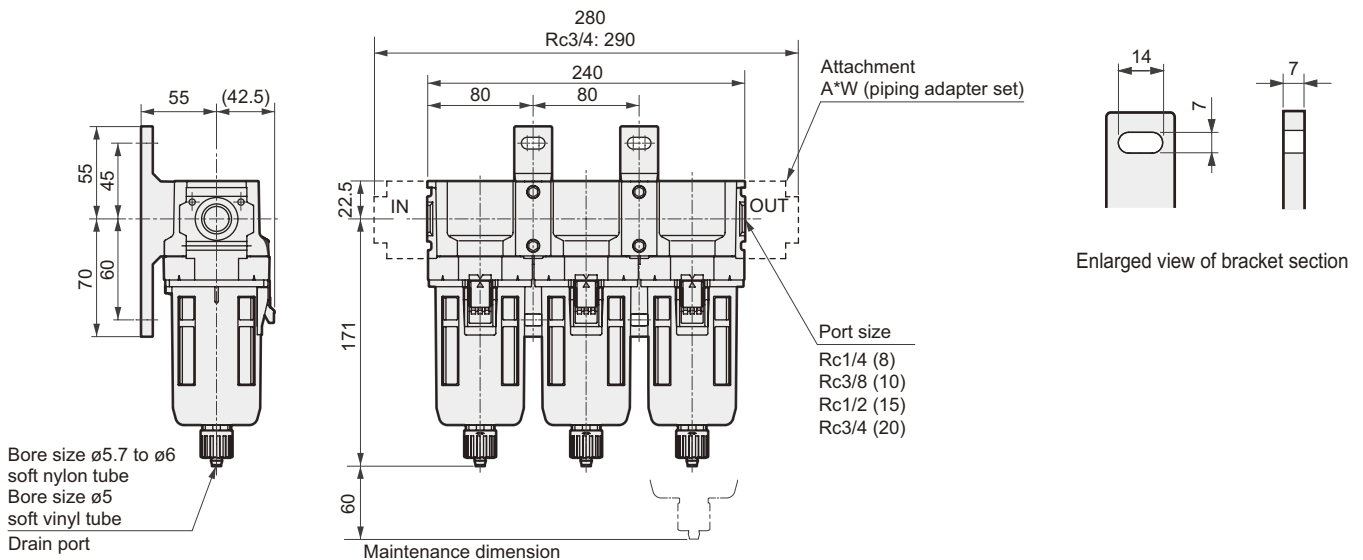
Dimensions

● C3070-W



● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.

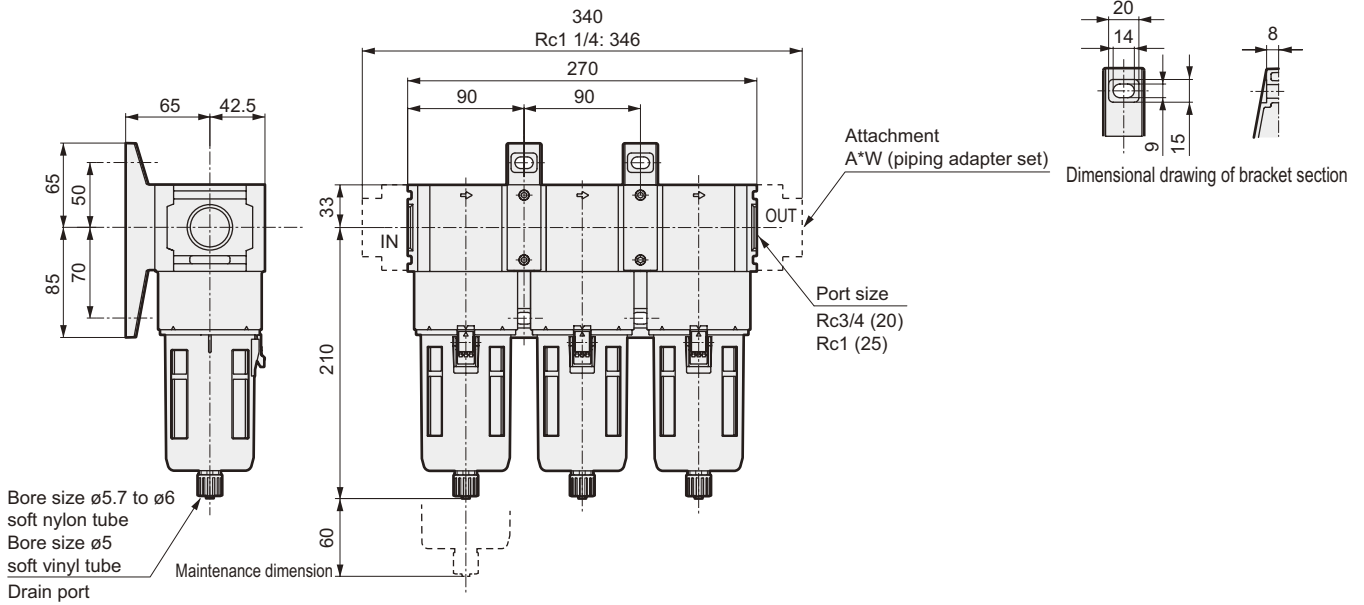
● C4070-W



● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.

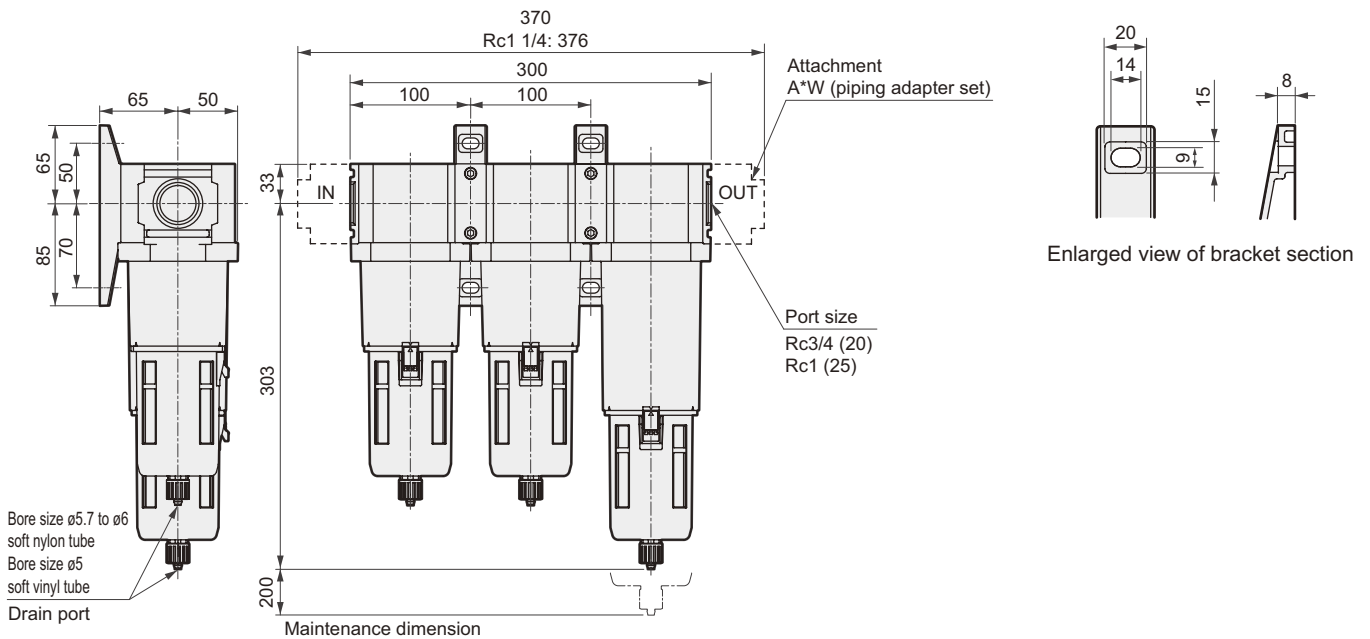
Dimensions

● C6070-W



● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.

● C8070-W



● Refer to page 87 for the dimensions of the metal bowl option filter and page 97 for the oil mist filter.



Filter/regulator standard white Series

W1000/W3000/W4000/W8000-W Series

New Series of 5 μm elements for dust removal, and 0.3 μm elements for tar removal.
Port size: 1/8 to 1

JIS symbol



Specifications

Descriptions	W1000-W	W3000-W	W4000-W	W8000-W
Appearance				
Working fluid	Compressed air			
Max. working pressure MPa	1.0 Note 2, 3, 4			
Withstanding pressure MPa	1.5, Note 2			
Ambient temperature range °C	5 to 60 Note 5			
Filtration rating μm	5	5 or 0.3		
Set pressure range MPa	0.05 to 0.85 Note 2	0.05 to 0.85		
Relief	With relief mechanism			
Drain capacity cm ³	12	45	80	80 (Note 1)
Port size Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg	0.175	0.6	0.9	2.0
Standard accessories	Pressure gauge, bowl guard			

Note 1: Drainage accumulates up to 170 cm³ only with the manual drain cock.

Note 2: When "F1" with an automatic drain is selected for the W1000-W series, minimum operating pressure is 0.2 MPa, maximum operation pressure is 0.7 MPa and the guaranteed pressure resistance is 1.05 MPa. Refer to the maximum processing flow table (page 83) for the F1000-W-F1 automatic drain for the maximum working flow. Set the working flow to less than the maximum working flow.

Note 3: Minimum operating pressure of automatic drain is 0.1MPa for "F" with automatic drain.

Air is purged with initial drainage until pressure reaches 0.1 MPa.

Note 4: The minimum operation pressure of the automatic drain is 0.15 MPa for the "F1" with an automatic drain.

Note 5: The working temperature range of the pressure switch with indicator PPD assembly "R1" is 5 to 50°C.

Ozone specifications

(Page 181)

W*000-.....-W-.....- P11

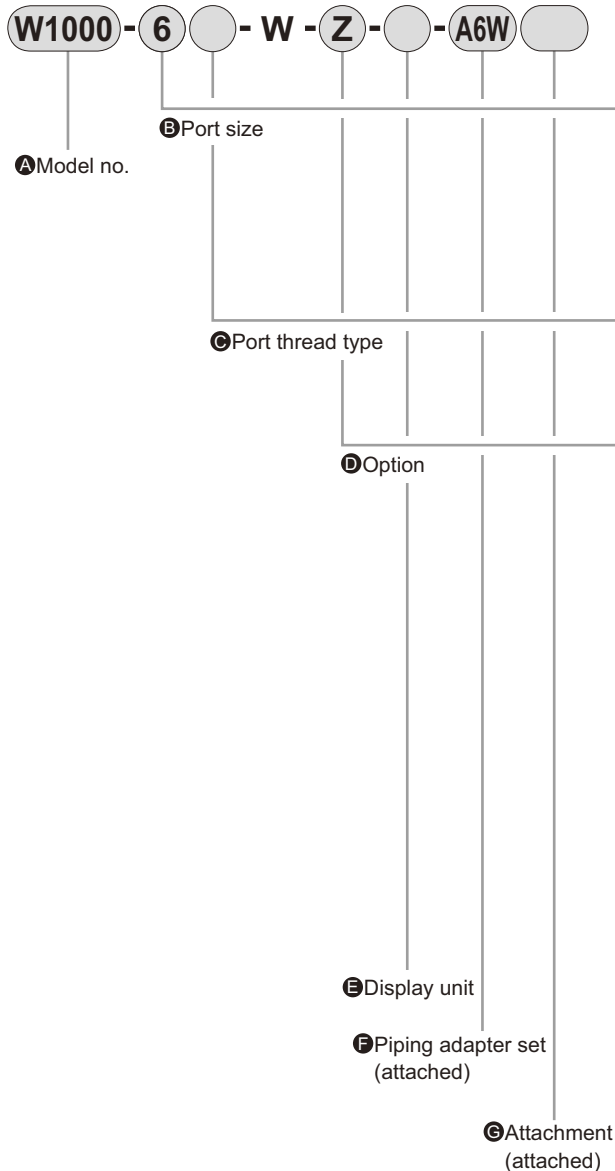
Clean room specifications

(Catalog No. CB-033SA)

● Dust generation preventing structure for use in cleanrooms

W*000-.....- P7*

How to order



* Refer to page 9 for explanation of an option.

A Model no.			
W	W	W	W
1	3	4	8
0	0	0	0
0	0	0	0
0	0	0	0

Symbol	Descriptions				
B Port size					
6	1/8	●			
8	1/4	●	●	●	
10	3/8		●	●	
15	1/2			●	
20	3/4				●
25	1				●

C Port thread type		Note 1			
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

D Option		Note 2					
Drainage	Blank	With manual drain cock	●	●	●	●	
	F	Automatic drain with manual override (NO type: Exhaust without pressurized)		●	●	●	
	F1	Automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●	
	FF	Large automatic drain with manual override (NO type: Exhaust without pressurized)				●	
Note 3	FF1	Large automatic drain with manual override (NC type: No exhaust without pressurized)				●	
	Bowl material	Blank	Polycarbonate bowl	●	●	●	●
		Z	Nylon bowl	●	●	●	●
		M	Metal bowl		●	●	●
M1		Metal bowl with manual drain cock		●	●	●	
Element	Blank	5µm	●	●	●	●	
	Y	0.3µm (submicron) Note 4		●	●	●	
Pressure range	Blank	0.05 to 0.85MPa	●	●	●	●	
	L	0.05 to 0.35MPa	●	●	●	●	
Relief	Blank	With relief mechanism	●	●	●	●	
	N	Nonrelief type	●	●	●	●	
Pressure gauge	Blank	With standard pressure gauge (G401-W)	●	●	●	●	
	T	Without pressure gauge (a pressure gauge port (Rc1/4) is assembled with sealed)	●	●	●	●	
	T8	Pressure gauge attached (a pressure gauge port (Rc1/4) is assembled by open)	●	●	●	●	
	T6	Digital pressure sensor PPX attached option	●	●	●	●	
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	
	X1	Reverse flow (right → left)	●	●	●	●	

E Display unit					
Blank	MPa display, Rc thread	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●

F Piping adapter set (attached)		Note 6 Pages 151 to 153			
Blank	Not attached	●	●	●	●
A6*W	1/8 piping adapter set	●			
A8*W	1/4 piping adapter set	●	●	●	
A10*W	3/8 piping adapter set	●	●	●	
A15*W	1/2 piping adapter set		●	●	
A20*W	3/4 piping adapter set			●	●
A25*W	1 piping adapter set				●
A32*W	1 1/4 piping adapter set				●

* Adaptor screw type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

G Attachment (attached)		Pages 148,194			
Blank	Not attached	●	●	●	●
BW	C type bracket	●	●	●	●
B3W Note 7	L type bracket	●	●	●	
G49P	G49D-8-P10 (L: G49D-8-P04)	●	●	●	●
G59P	G59D-8-P10 (L: G59D-8-P04)	●	●	●	●
G40P	G40D-8-P10 (L: G40D-8-P04)	●	●	●	●
G50P	G50D-8-P10 (L: G50D-8-P04)	●	●	●	●
G41P	G41D-8-P10 (L: G41D-8-P04)	●	●	●	●
G52P	G52D-8-P10 (L: G52D-8-P10)	●	●	●	●
R2 Note	Digital pressure sensor: PPX-R10N-6M	●	●	●	●

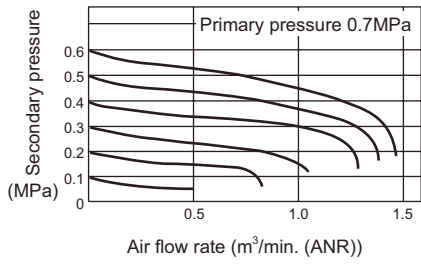
⚠ Note on model no. selection

- Note 1: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port (metal bowl automatic drain) are available.
- Note 2: Select options per drainage, bowl material, element, and regulator sections.
When selecting options for several items, list options in order from the top.
- Note 3: Refer to page 11 for the automatic drain use conditions.
- Note 4: Refer to page 83 for maximum processing flow when option "Y" is selected.
- Note 5: When option "T6" is selected, only "blank" or "R2" is selected for the **C** pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.
- Note 6: The piping adapter set and C bracket cannot be used together.
- Note 7: Refer to Section 2. Regulator, in "⚠ CAUTIONS for Installation and Adjustment" (page 14) for details on mounting the L-type bracket.
- Note 8: If NPT is selected for the **C** piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

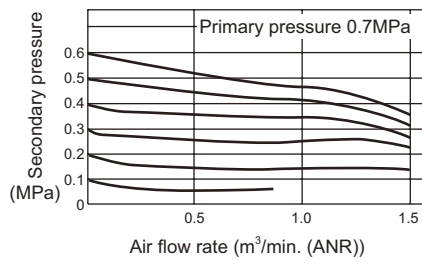
Filter/Regulator Series

Flow characteristics

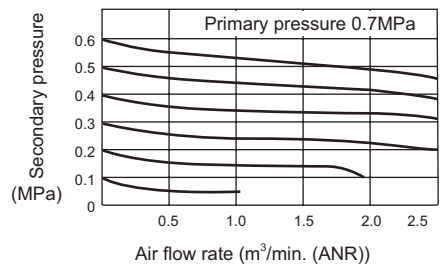
● W1000-6-W



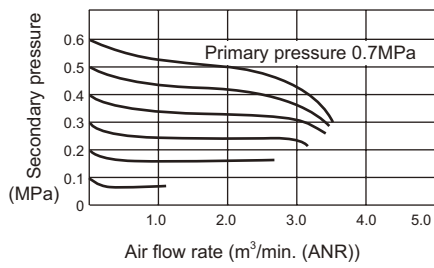
● W1000-8-W



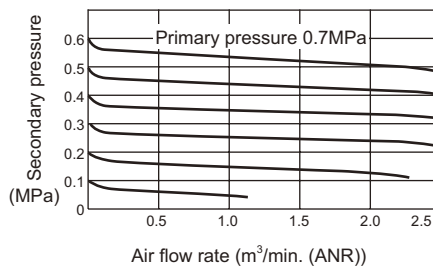
● W3000-8-W



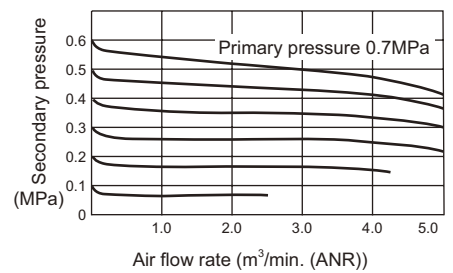
● W3000-10-W



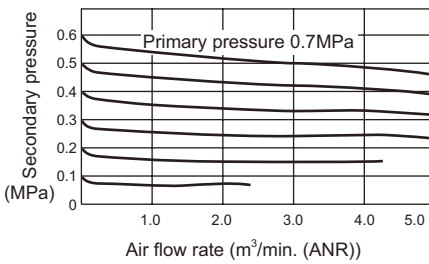
● W4000-8-W



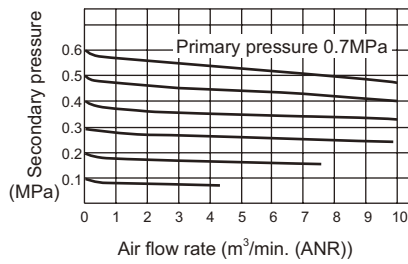
● W4000-10-W



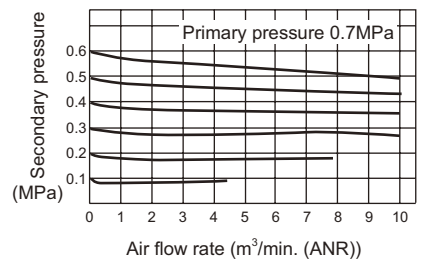
● W4000-15-W



● W8000-20-W

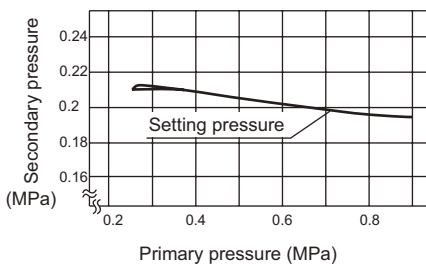


● W8000-25-W

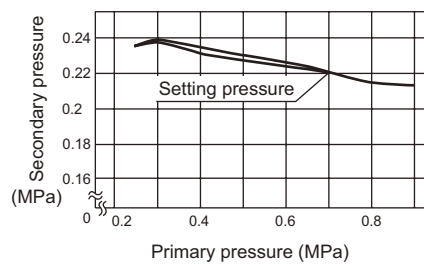


Pressure characteristics

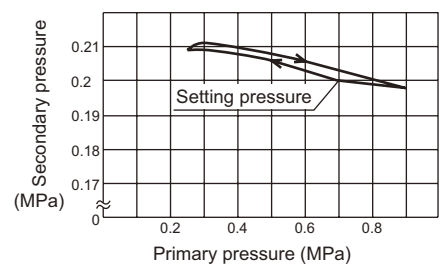
● W1000-W



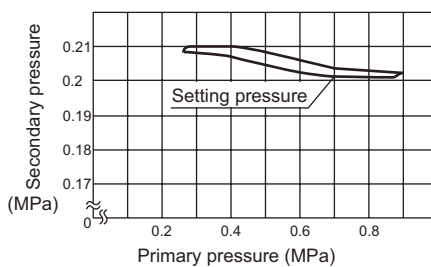
● W3000-W



● W4000-W



● W8000-W

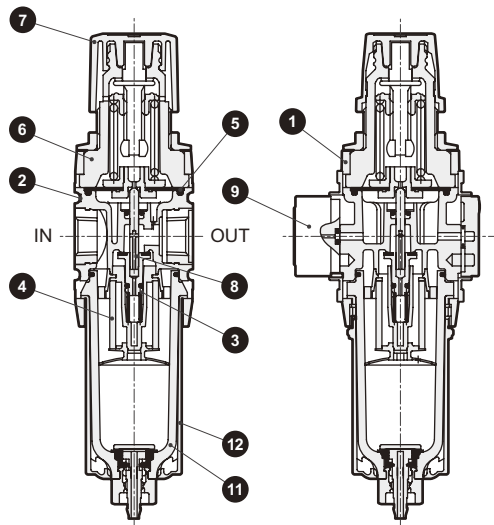


Filter/Regulator Series

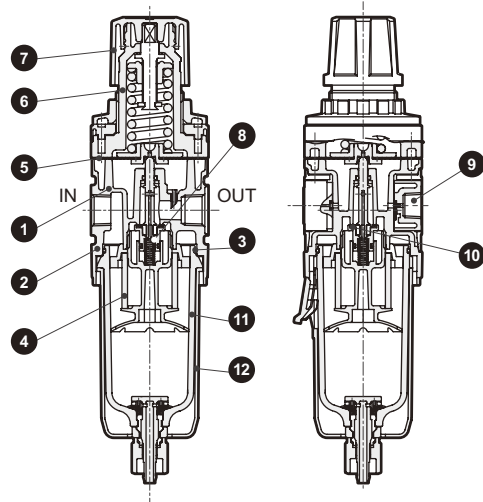
Internal structure and parts list

Internal structure and parts list

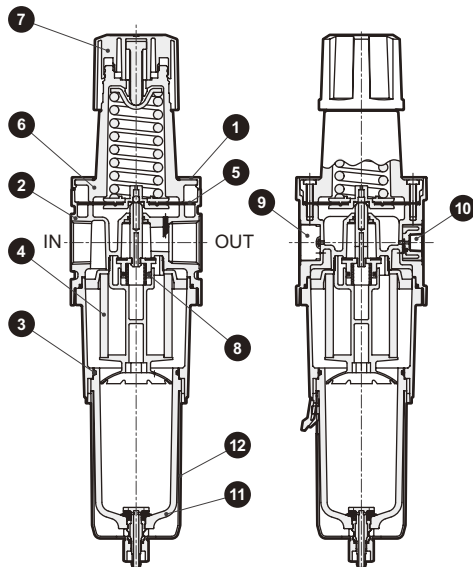
● W1000-W



● W3000-W/W4000-W



● W8100-W



No.	Part name	Material				
		W1000-W	W3000-W	W4000-W	W8000-W	
1	Plate cover	ABS resin				
2	Body	Polyamide resin, steel	Aluminum alloy die-casting			
3	O ring	Note 2	Special nitrile rubber			
4	Element	Note 1	Polyacetal resin polypropylene	Polypropylene		
5	Diaphragm assembly	Polyacetal resin polypropylene	Zinc alloy die-casting, nitrile rubber			
6	Guard	Polyamide resin	PBT resin	Aluminum alloy die-casting		
7	Knob	Polyacetal resin				
8	Valve assembly	Brass, hydrogen nitrile rubber (polyacetal resin: W3000-W, W4000-W only)				
9	Pressure gauge assembly	PBT resin, polyacetal resin, polycarbonate resin, nitril rubber, brass, steel				
10	Gauge plug assembly	-	Polyamide resin, nitrile rubber, steel			
	Blanking plug assembly	PBT resin, nitrile rubber, steel	-			
11	Bowl assembly	Polycarbonate resin, polyacetal resin, urethane rubber resin				
12	Bowl guard	Polyamide resin	Polyamide resin			

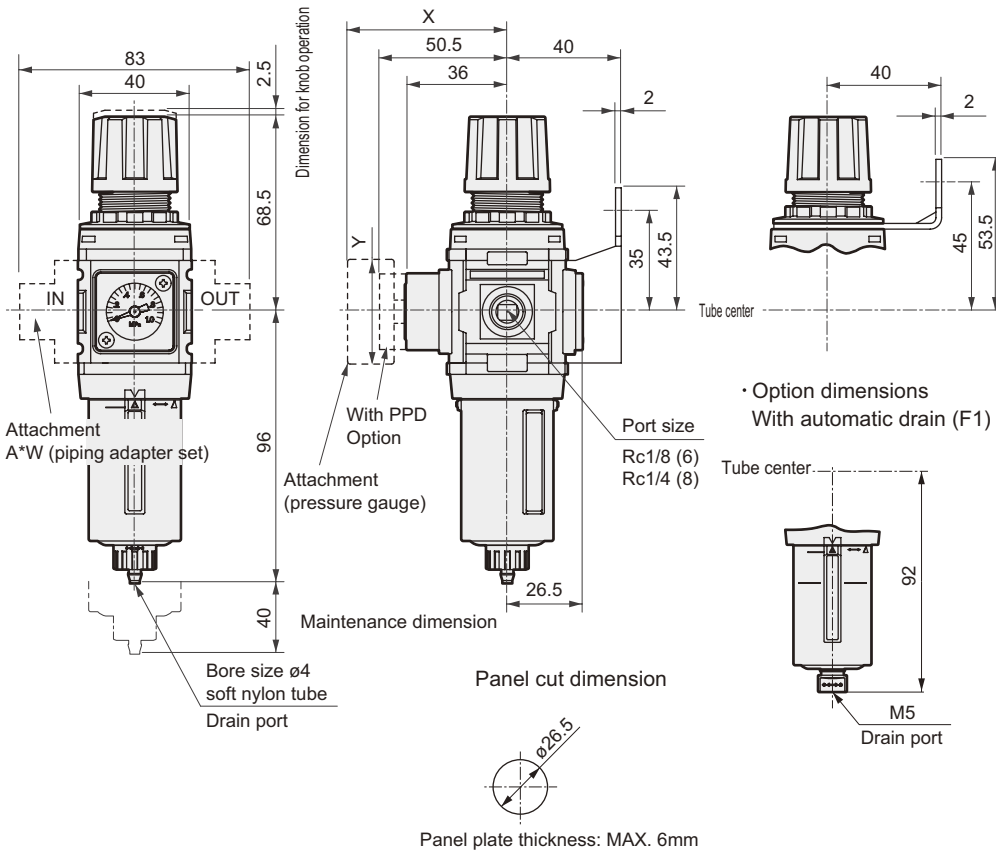
Note 1: W1000-W has an element assembly.

Note 2: The W1000-W O ring has a special shape.

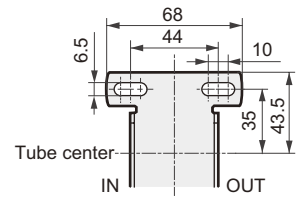
Filter/Regulator Series

Dimensions

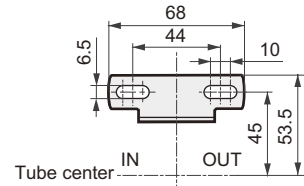
● W1000-W



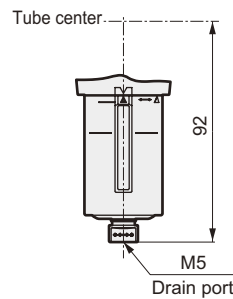
• Attachment
C type bracket (-BW)
Part model no.: B120



L type bracket (-B3W)
Part model no.: B130



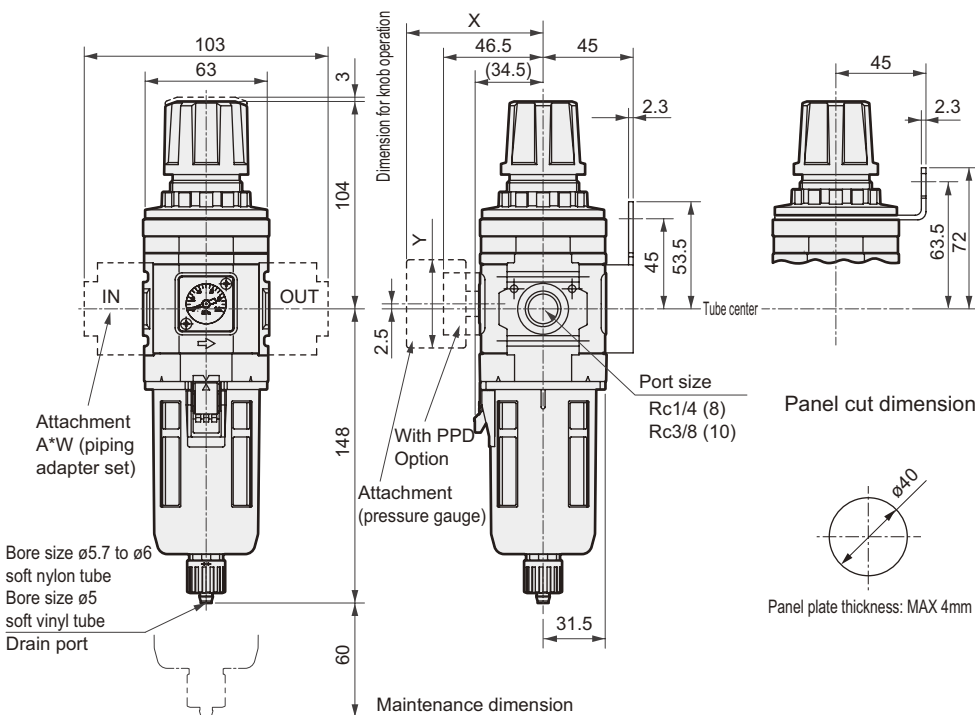
• Option dimensions
With automatic drain (F1)



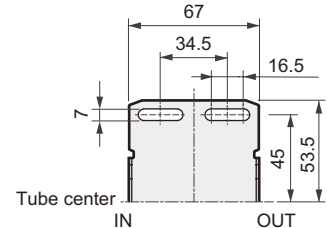
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(73.5)	ø43.5
G59P	(76)	ø52
G40P	(75.5)	ø42.5
G50P	(75.5)	ø52.5
G41P	(74)	ø42
G52P	(86)	ø52.5
R2	(74)	*30

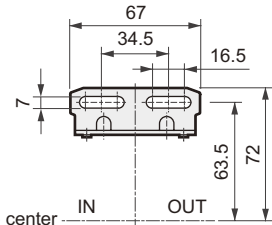
● W3000-W



• Attachment
C type bracket (-BW)
part model no.: B320



L type bracket (-B3W)
part model no.: B330



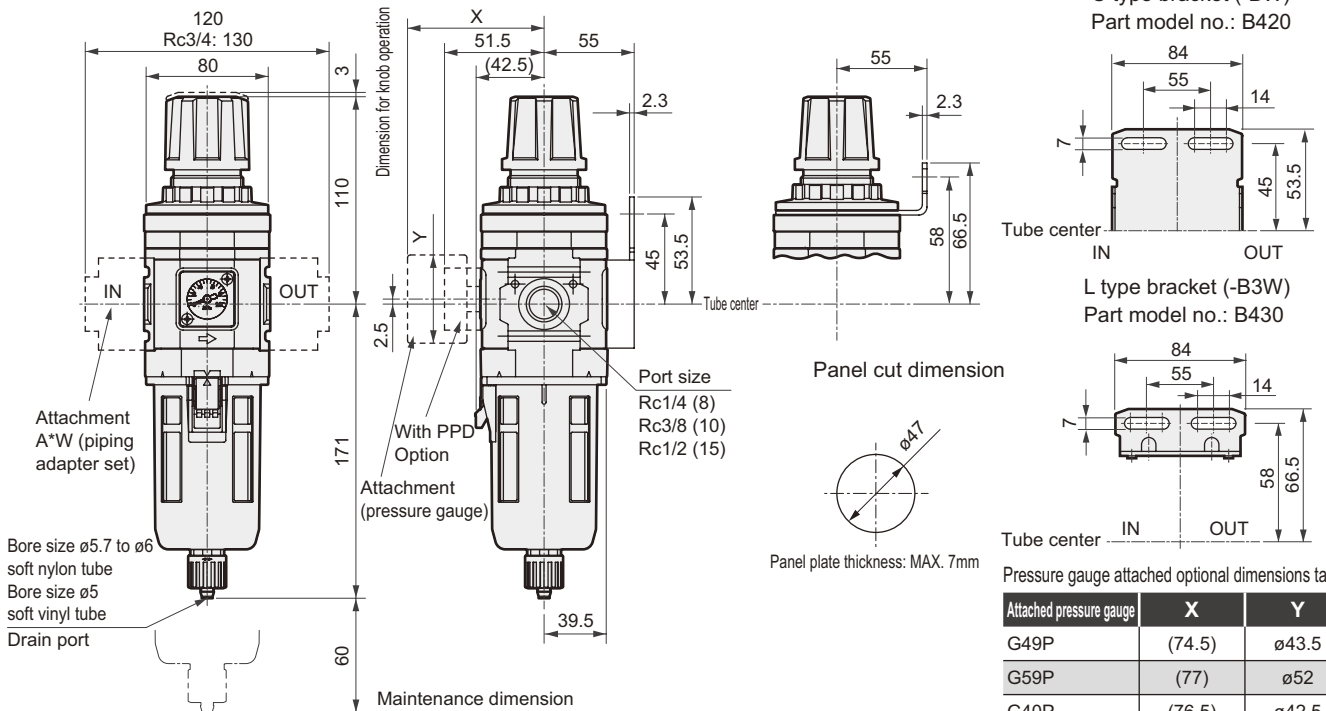
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(69.5)	ø43.5
G59P	(72)	ø52
G40P	(71.5)	ø42.5
G50P	(71.5)	ø52.5
G41P	(70)	ø42
G52P	(82)	ø52.5
R2	(69.5)	*30

● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

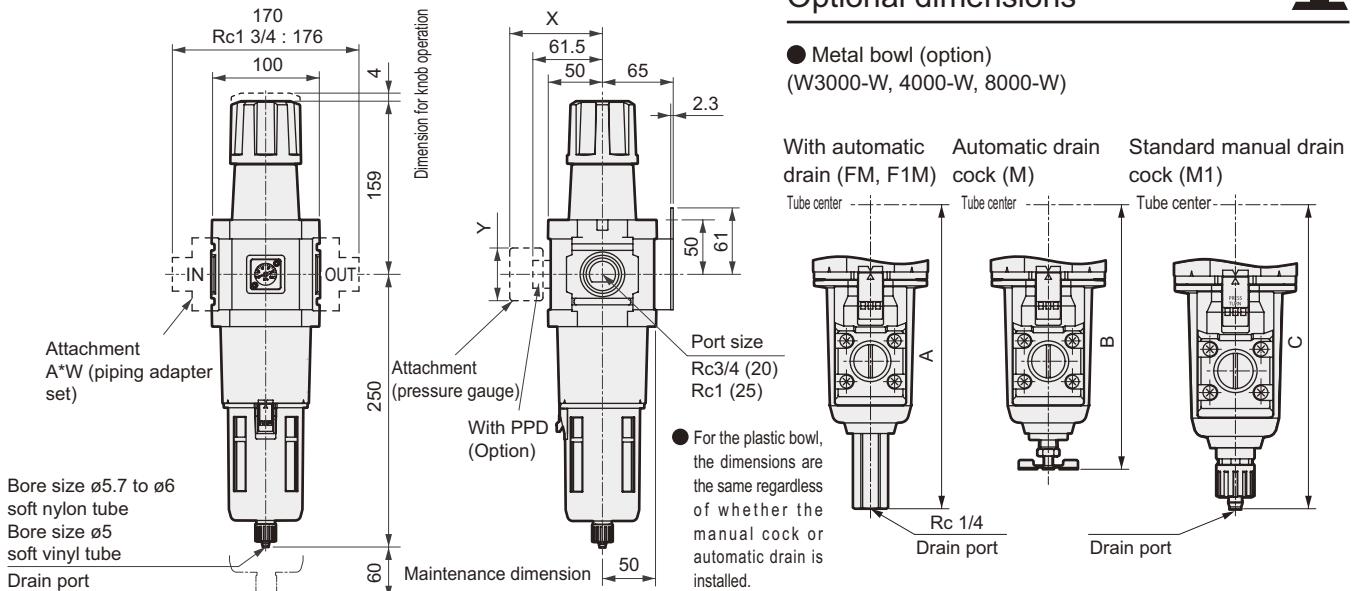
Dimensions

● W4000-W



● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

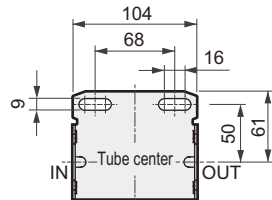
● W8000-W



Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(84.5)	$\phi 43.5$
G59P	(87)	$\phi 52$
G40P	(86.5)	$\phi 42.5$
G50P	(86.5)	$\phi 52.5$
G41P	(85)	$\phi 42$
G52P	(98)	$\phi 52.5$
R2	(85)	*30

Attachment
C type bracket (-BW)
Part model no.: B820



Dimensions table

Model no.	F1M	M	M1
	A	B	C
W3000-W	163.5	143.5	154
W4000-W	187	166.5	177
W8000-W	266	245.5	256



Reverse filter/regulator standard white Series

W1100/W3100/W4100/W8100-W Series

Introducing the 5 µm dust removing element and 0.3 µm tar removing element, with back flow function, to the lineup.

Port size: 1/8 to 1

JIS symbol



Specifications

Descriptions	W1100-W	W3100-W	W4100-W	W8100-W
Appearance				
Working fluid	Compressed air			
Max. working pressure MPa	1.0 Note 4, 5, 6			
Withstanding pressure MPa	1.5 Note 6			
Ambient temperature range °C	5 to 60 Note 7			
Filtration rating µm	5	5 or 0.3		
Set pressure range (Note 2) MPa	0.05 to 0.85 Note 4	0.05 to 0.85		
Relief	With relief mechanism			
Drain capacity cm ³	12	45	80	80 (Note 3)
Port size Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg	0.175	0.6	0.9	2.0
Standard accessories	Pressure gauge, bowl guard			

Note 1: Check that the primary pressure is at least 0.05 MPa or more than the secondary pressure.

Note 2: Refer to the set pressure range for the back pressure given on page 75 when selecting the model.

Note 3: Up to 170 m³ is stored only with the manual drain cock type.

Note 4: Min. operating pressure of automatic drain is 0.1MPa for "F" with automatic drain. Air is purged with initial drainage until pressure reaches 0.1 MPa.

Note 5: The minimum operation pressure of the automatic drain is 0.15 MPa for the "F1" with an automatic drain.

Note 6: When "F1" with an automatic drain is selected for the W1100 series, minimum operating pressure is 0.2 MPa, maximum operation pressure is 0.7 MPa and the guaranteed pressure resistance is 1.05 MPa. Refer to the maximum processing flow table (page 83) for the F1000-W-F1 automatic drain for the maximum working flow. Set the working flow to less than the maximum working flow.

Note 7: The working temperature range of the pressure switch with indicator PPD assembly "R1" is 5 to 50°C.

Ozone specifications

(Page 182)

W*100-.....-W-.....- **P11**

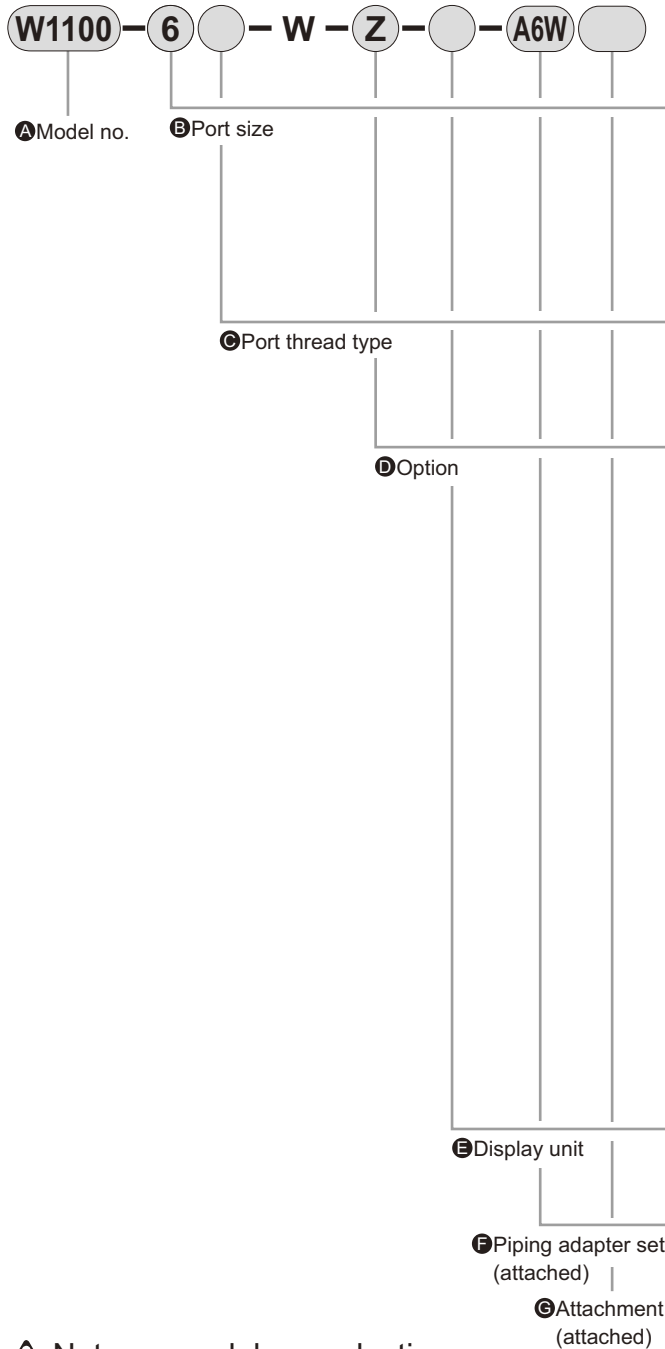
Clean room specifications

(Catalog No. CB-033SA)

● Dust generation preventing structure for use in cleanrooms

W*100-.....-.....- **P7***

How to order



* Refer to page 9 for explanation of an option.

A Model no.			
W	W	W	W
1	3	4	8
1	1	1	1
0	0	0	0
0	0	0	0

Symbol	Descriptions				
B Port size					
6	1/8	●			
8	1/4	●	●	●	
10	3/8		●	●	
15	1/2			●	
20	3/4				●
25	1				●

C Port thread type		Note 1			
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

D Option		Note 2, Note 3				
Drainage	Blank	With manual drain cock	●	●	●	●
	F	Automatic drain with manual override (NO type: Exhaust without pressurized)	●	●	●	●
	F1	Automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●
	FF	Large automatic drain with manual override (NO type: Exhaust without pressurized)				●
	FF1	Large automatic drain with manual override (NC type: No exhaust without pressurized)				●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl		●	●	●
	M1	Metal bowl with manual drain cock		●	●	●
Element	Blank	5µm	●	●	●	●
	Y	0.3µm (submicron) Note 5		●	●	●
Pressure range	Blank	0.05 to 0.85MPa	●	●	●	●
	L	0.05 to 0.35MPa	●	●	●	●
Relief	Blank	With relief mechanism	●	●	●	●
	N	Nonrelief type	●	●	●	●
Pressure gauge	Blank	With standard pressure gauge (G401-W)	●	●	●	●
	T	Without pressure gauge (a pressure gauge port (Rc1/4) is assembled with sealed)	●	●	●	●
	T8	Pressure gauge attached (a pressure gauge port (Rc1/4) is assembled by open)	●	●	●	●
	T6 Note 6	Digital pressure sensor PPX attached option	●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●

E Display unit					
Blank	MPa display, Rc thread	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●

F Piping adapter set (attached)		Note 7 Pages 151 to 153			
Blank	Not attached	●	●	●	●
A6*W	1/8 piping adapter set	●			
A8*W	1/4 piping adapter set	●	●	●	
A10*W	3/8 piping adapter set	●	●	●	
A15*W	1/2 piping adapter set		●	●	
A20*W	3/4 piping adapter set			●	●
A25*W	1 piping adapter set				●
A32*W	1 1/4 piping adapter set				●

* Adaptor screw type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

G Attachment (attached)		Pages 148, 194			
Blank	Not attached	●	●	●	●
BW	C type bracket	●	●	●	●
B3W Note 8	L type bracket	●	●	●	
G49P	G49D-8-P10 (L: G49D-8-P04)	●	●	●	●
G59P	G59D-8-P10 (L: G59D-8-P04)	●	●	●	●
G40P	G40D-8-P10 (L: G40D-8-P04)	●	●	●	●
G50P	G50D-8-P10 (L: G50D-8-P04)	●	●	●	●
G41P	G41D-8-P10 (L: G41D-8-P04)	●	●	●	●
G52P	G52D-8-P10 (L: G52D-8-P10)	●	●	●	●
R2 Note 6	Digital pressure sensor: PPX-R10N-6M	●	●	●	●

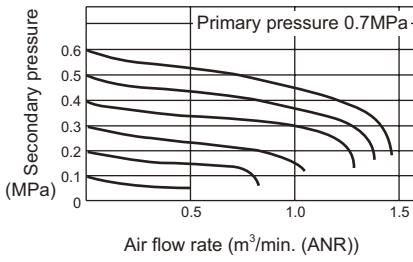
⚠ Note on model no. selection

- Note 1: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port (metal bowl automatic drain) are available.
- Note 2: Select options per drainage, bowl material, element, and regulator sections. When selecting options for several items, list options in order from the top.
- Note 3: **The check valve and pressure gauge positions cannot be changed. If the IN and OUT direction must be reversed, indicate "X1" at the end of the option field.**
- Note 4: Refer to page 11 for the automatic drain use conditions.
- Note 5: Refer to page 83 for maximum processing flow when option "Y" is selected.
- Note 6: When option "T6" is selected, only "blank" or "R2" is selected for the **G** pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.
- Note 7: The piping adapter set and C type bracket cannot be used together.
- Note 8: Refer to Section 2. Regulator, in "⚠ CAUTIONS for Installation and Adjustment" (page 14) for details on mounting the L-type bracket.
- Note 9: If NPT is selected for the **C** piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

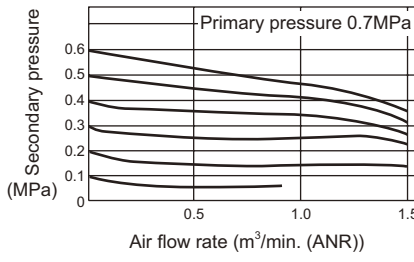
Filter/Regulator Series

Flow characteristics

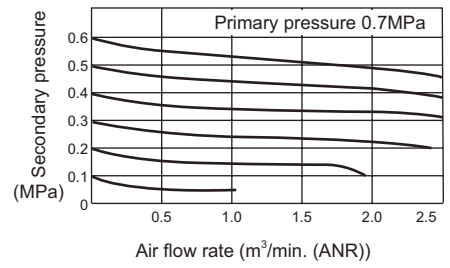
● W1100-6-W



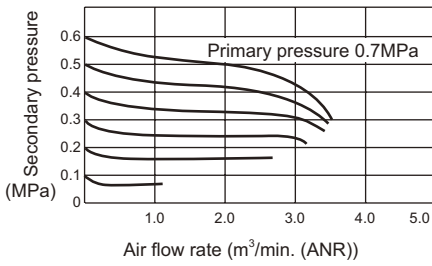
● W1100-8-W



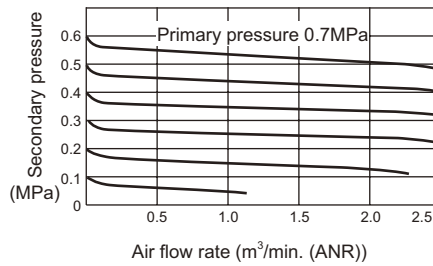
● W3100-8-W



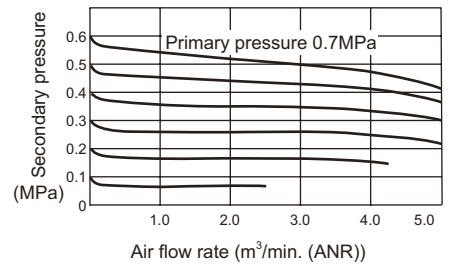
● W3100-10-W



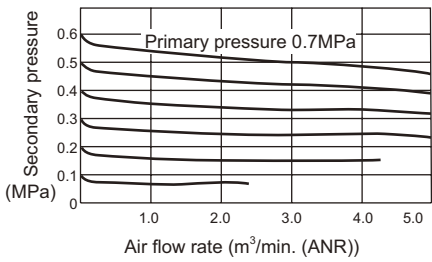
● W4100-8-W



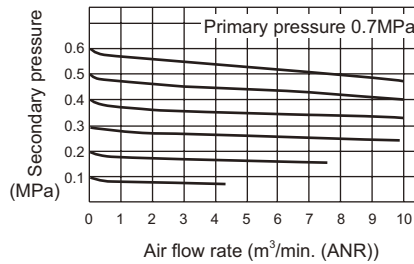
● W4100-10-W



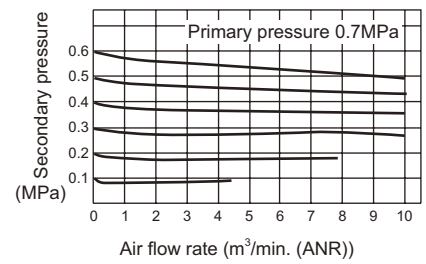
● W4100-15-W



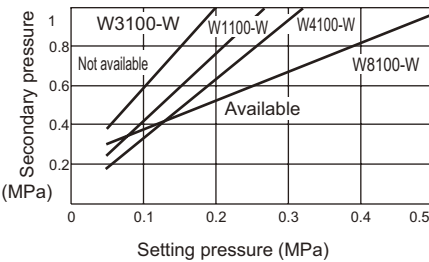
● W8100-20-W



● W8100-25-W



● Set pressure range for back pressure

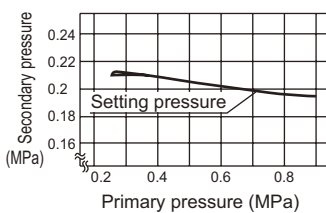


Note: The upper side of the graph is nonusable and the lower side usable.

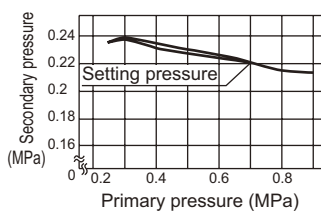
Example: If W4100-W is set to set pressure 0.2 MPa and the secondary back pressure is 0.6 MPa or more, the secondary pressure will not be released to the primary side.

Pressure characteristics

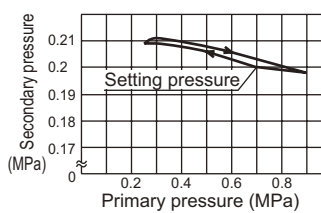
● W1100-W



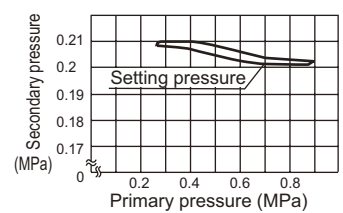
● W3100-W



● W4100-W

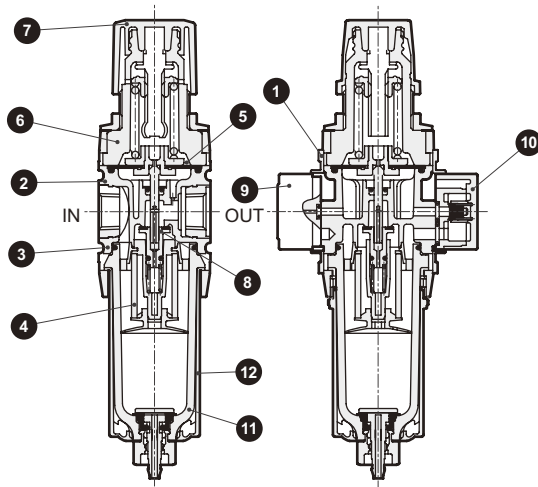


● W8100-W

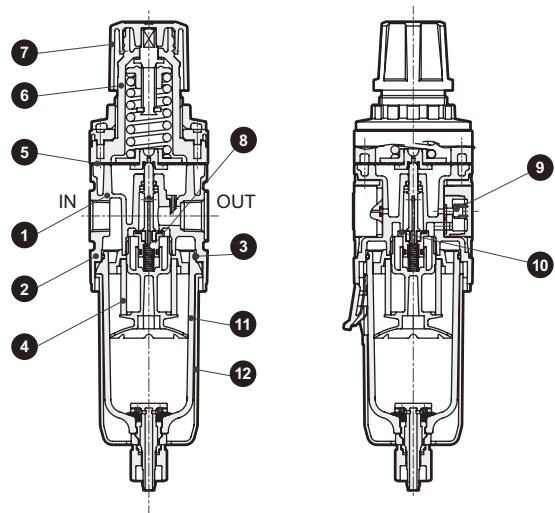


Internal structure and parts list

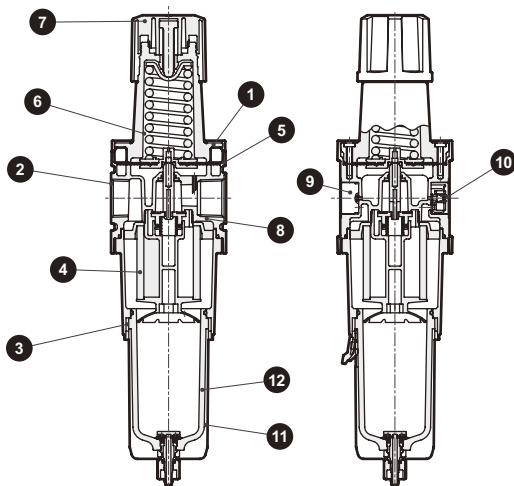
● W1100-W



● W3100-W/W4100-W



● W8100-W



No.	Part name	Material			
		W1100-W	W3100-W	W4100-W	W8100-W
1	Plate cover	ABS resin			
2	Body	Polyamide resin, steel	Aluminum alloy die-casting		
3	O ring Note 2	Special nitrile rubber			
4	Element Note 1	Polyacetal resin Polypropylene	Polypropylene		
5	Diaphragm assembly	Polyacetal resin Nitrile rubber	Zinc alloy die-casting, nitrile rubber		
6	Guard	Polyamide resin	PBT resin	Aluminum alloy die-casting	
7	Knob	Polyacetal resin			
8	Valve assembly	Brass, hydrogen nitrile rubber (polyacetal resin: W3100-W, 4100-W)			
9	Pressure gauge assembly	PBT resin, polyacetal resin, polycarbonate resin, nitril rubber, brass, steel			
10	Check valve total assemblies	PBT resin, nitrile rubber, stainless steel wire, steel			
11	Bowl assembly	Polycarbonate resin, polyacetal resin, urethane rubber resin			
12	Bowl guard	Polyamide resin	Polyamide resin, steel		

Note 1: W1100-W has an element assembly.

Note 2: The W1100-W O ring has a special shape.

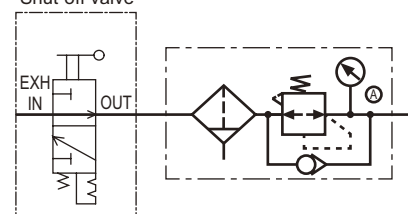
Note 3: Refer to page 79 for repair kits model no.

Functional explanation

When the primary pressure is introduced from the IN side, the check valve functions as a regular regulator because it closes with primary pressure and spring load. When primary pressure is released by a changeover valve such as a shut-off valve, the check valve opens with secondary pressure. Pressure in the diaphragm chamber is released and pressure drops. This causes the diaphragm to be pressed down by the pressure adjustment spring. The main valve (valve assembly) opens, and the air on the OUT side is discharged.

Note: Set back pressure A for when the primary pressure is released within the range in the graph for the regulator's set pressure. (Refer to page 75 for the graph)

● Circuit diagram Shut-off valve

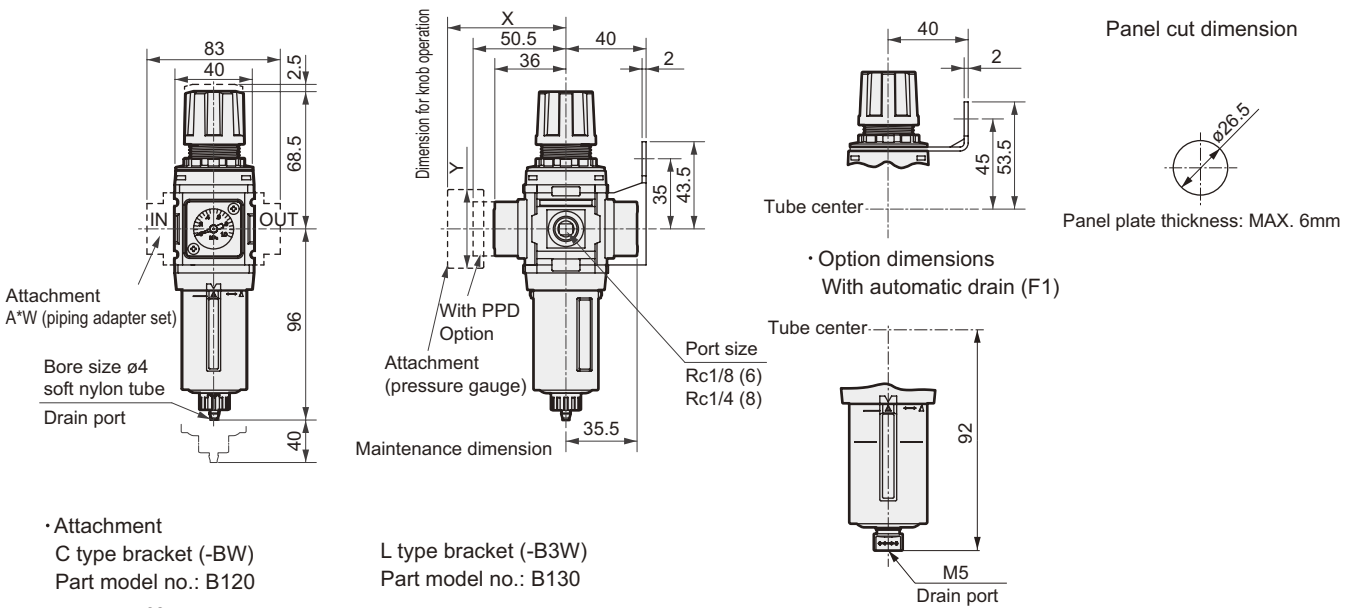


When using shut-off valve in front of reverse filter and regulator

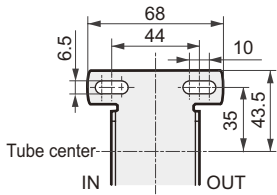
Filter/Regulator Series

Dimensions

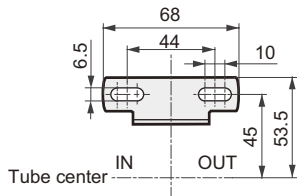
● W1100-W



• Attachment
C type bracket (-BW)
Part model no.: B120



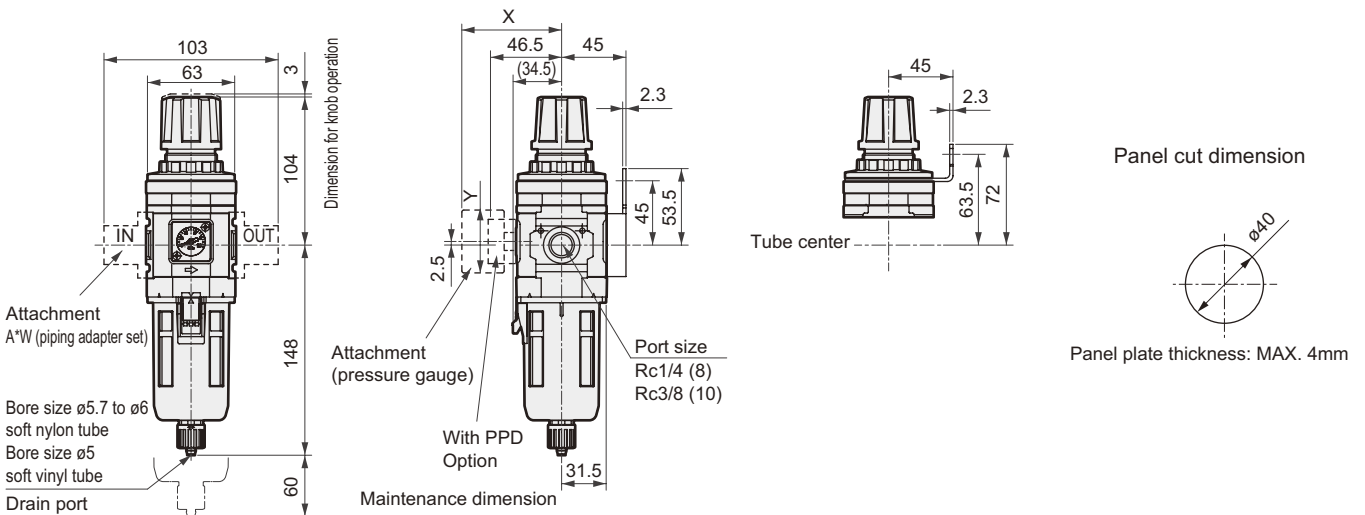
L type bracket (-B3W)
Part model no.: B130



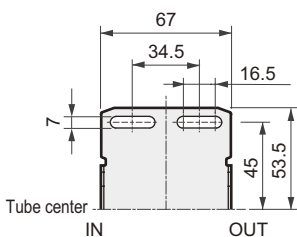
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(73.5)	ø43.5
G59P	(76)	ø52
G40P	(75.5)	ø42.5
G50P	(75.5)	ø52.5
G41P	(74)	ø42
G52P	(86)	ø52.5
R2	(74)	*30

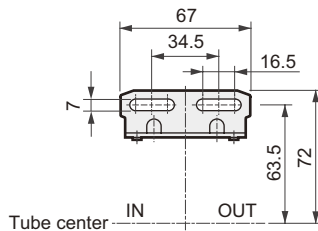
● W3100-W



• Attachment
C type bracket (-BW)
Part model no.: B320



L type bracket (-B3W)
Part model no.: B330



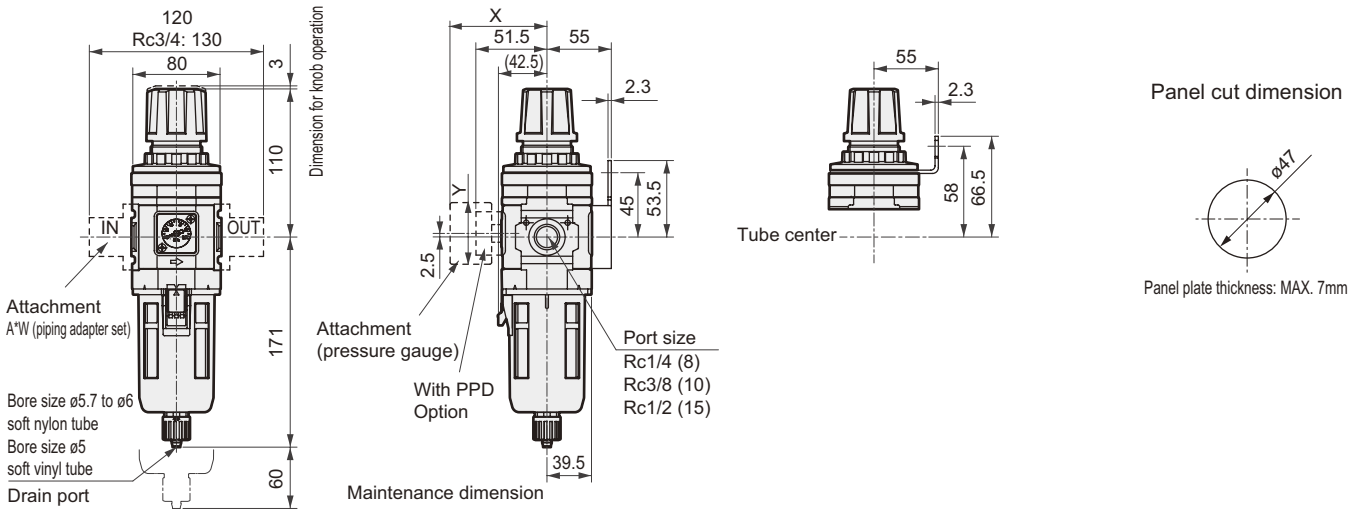
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(69.5)	ø43.5
G59P	(72)	ø52
G40P	(71.5)	ø42.5
G50P	(71.5)	ø52.5
G41P	(70)	ø42
G52P	(82)	ø52.5
R2	(69.5)	*30

● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

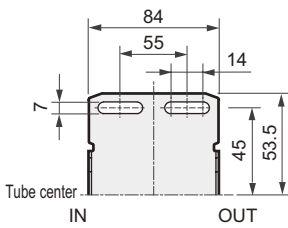
Dimensions

● W4100-W

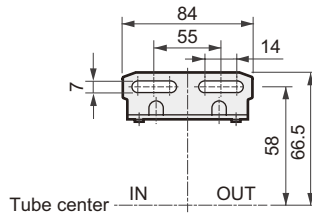


· Attachment

C type bracket (-BW)
Part model no.: B420



L type bracket (-B3W)
Part model no.: B430

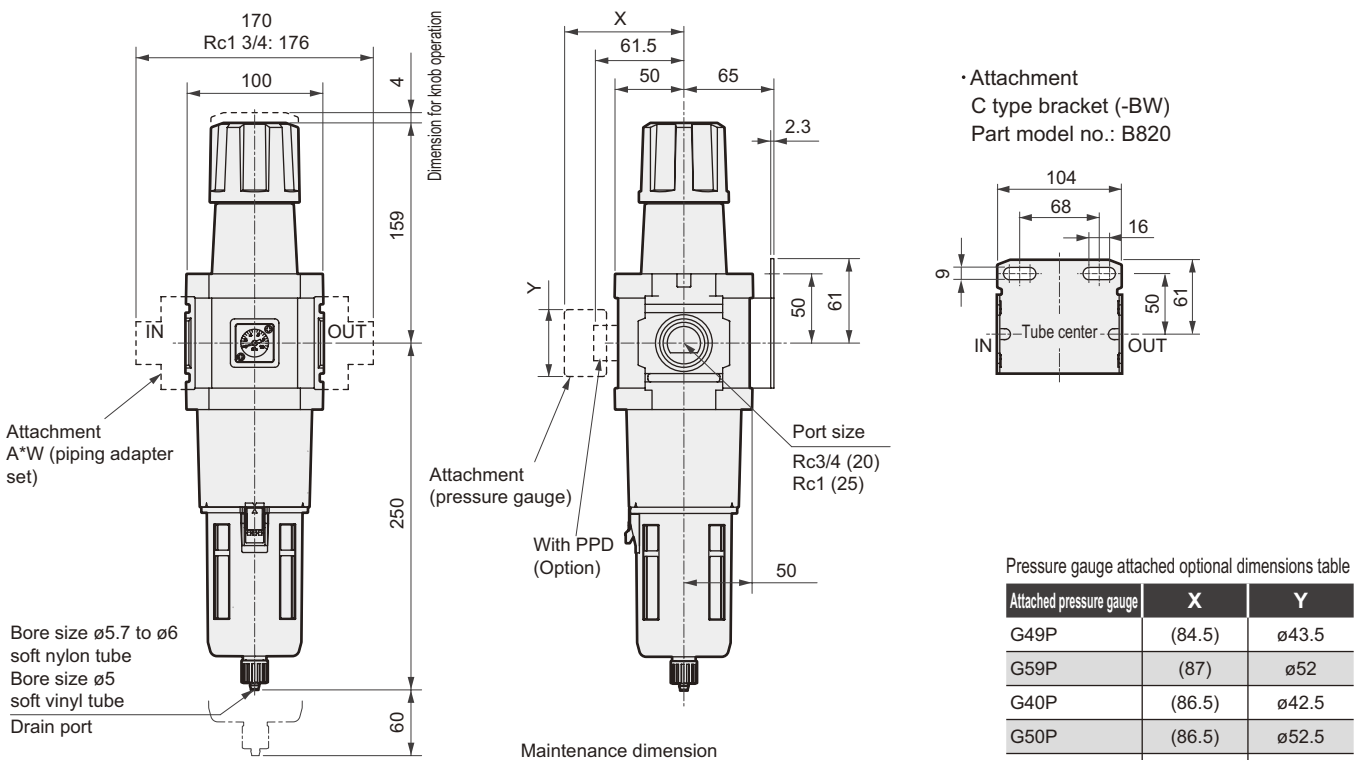


- For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

Pressure gauge attached optional dimensions table

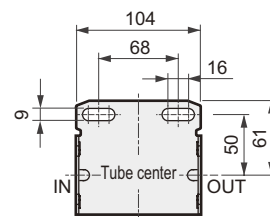
Attached pressure gauge	X	Y
G49P	(74.5)	$\phi 43.5$
G59P	(77)	$\phi 52$
G40P	(76.5)	$\phi 42.5$
G50P	(76.5)	$\phi 52.5$
G41P	(75)	$\phi 42$
G52P	(86)	$\phi 52.5$
R2	(75)	*30

● W8100-W



· Attachment

C type bracket (-BW)
Part model no.: B820



- For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

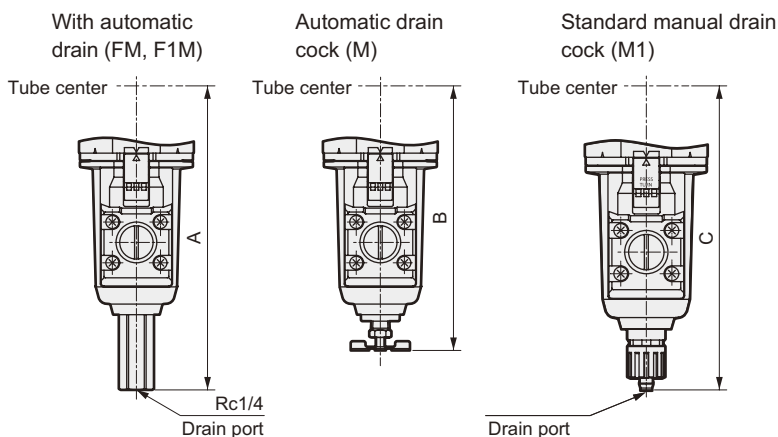
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(84.5)	$\phi 43.5$
G59P	(87)	$\phi 52$
G40P	(86.5)	$\phi 42.5$
G50P	(86.5)	$\phi 52.5$
G41P	(85)	$\phi 42$
G52P	(98)	$\phi 52.5$
R2	(85)	*30

Filter/Regulator Series

Optional dimensions

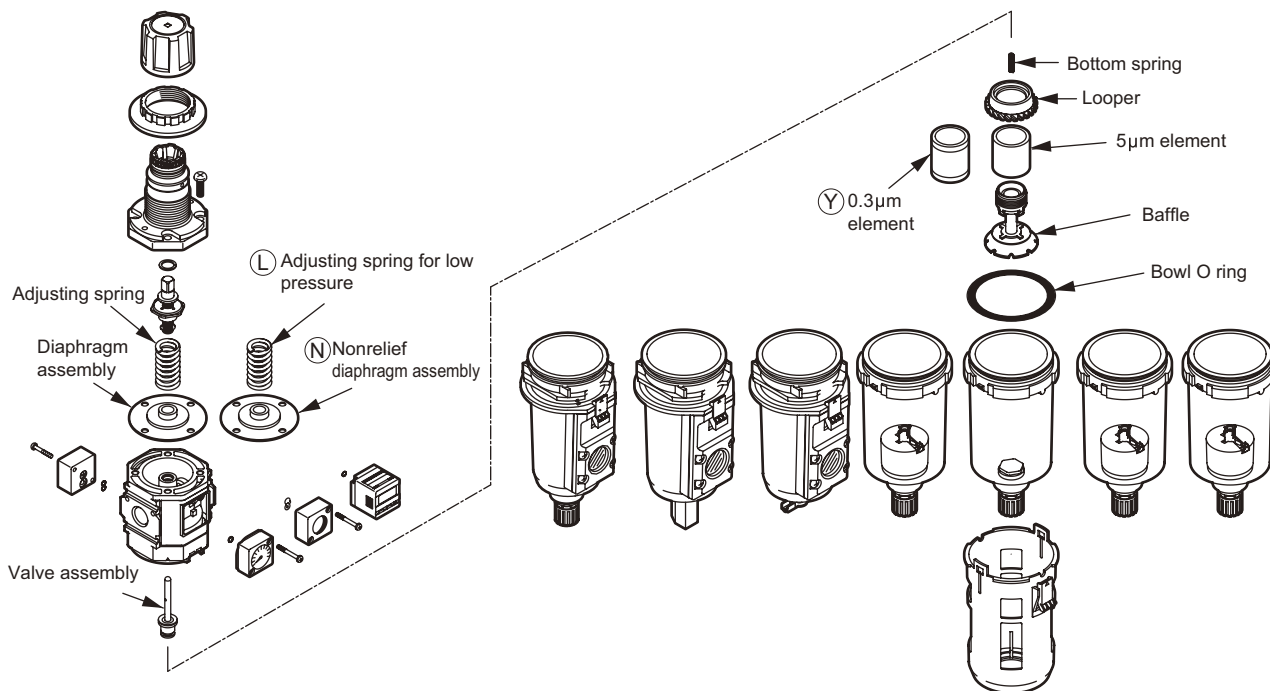
- Metal bowl W3100-W/W4100-W/W8100-W (option)



Dimensions table

Model no.	F1M	M	M1
	A	B	C
W3100-W	163.5	143.5	154
W4100-W	187	166.5	177
W8100-W	266	245.5	256

Option and parts diagram



Consumable parts kit (Set consisting of diaphragm assembly, valve assembly, bottom spring, louver, element, baffle, bowl O ring)

Repair kits model no.	Relief type diaphragm	Nonrelief type diaphragm	Relief type diaphragm	Nonrelief type diaphragm
Model	5µm element (blank)	5µm element (N)	0.3µm element (Y)	0.3µm element (NY)
W1000-W, W1100-W	W1000-KIT	W1000-KIT-N	-	-
W3000-W, W3100-W	W3000-KIT	W3000-KIT-N	W3000-KIT-Y	W3000-KIT-NY
W4000-W, W4100-W	W4000-KIT	W4000-KIT-N	W4000-KIT-Y	W4000-KIT-NY
W8000-W, W8100-W	W8000-KIT	W8000-KIT-N	W8000-KIT-Y	W8000-KIT-NY

Note: With the W1000-W and W1100-W, the element and baffle are assembly parts, and the louver is assembled onto the body. These parts are excluded from consumables.

Valve assembly (sets of valve assembly and bottom spring)

Model	Valve assembly model no.
W1000-W, W1100-W	W1000-VALVE-ASSY
W3000-W, W3100-W	W3000-VALVE-ASSY
W4000-W, W4100-W	W4000-VALVE-ASSY
W8000-W, W8100-W	W8000-VALVE-ASSY

* Re□

Refer to air filter options and parts table (pages 89 to 90) for details on the element, bowl assembly, and bowl guard.

MEMO



Air filter standard white Series F1000/F3000/F4000 F6000/F8000-W Series

Introducing the 5 μm element for dust removal and 0.3 μm element for tar removal
(Excluding F1000 Series) Port size: 1/8 to 1

JIS symbol



Specifications

Descriptions	F1000-W	F3000-W	F4000-W	F6000-W	F8000-W
Appearance					
Working fluid	Compressed air				
Max. working pressure MPa	1.0 Note 2, 3, 4				
Withstanding pressure MPa	1.5 Note 2				
Ambient temperature range °C	5 to 60				
Filtration rating μm	5	5 or 0.3			
Drain capacity cm ³	12	45	80	80	80 (Note 1)
Port size Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg	0.087	0.25	0.45	0.9	1.16
Standard accessories	Bowl guard				

Note 1: Up to 170 m³ is stored only with the manual drain cock type.

Note 2: When "F1" with an automatic drain is selected for the F1000-W series, minimum operating pressure is 0.2 MPa, maximum operation pressure is 0.7 MPa and the guaranteed pressure resistance is 1.05 MPa. Refer to the maximum processing flow table (page 83) for the F1000-W-F1 automatic drain for the maximum working flow. Set the working flow to less than the maximum working flow.

Note 3: Minimum operating pressure of automat□

Note 4: The minimum operation pressure of the automatic drain is 0.15 MPa for the "F1" with an automatic drain.

Clean room specifications

(Catalog No. CB-033SA)

- Dust generation preventing structure for use in cleanrooms

F*000- - **P7***

- Max. working flow with F1000-W-F1 automatic drain (m³/min. (ANR))

Primary pressure MPa	0.2	0.3	0.4	0.5	0.6	0.7
Port size						
6	0.185	0.250	0.310	0.375	0.435	0.500
8	0.225	0.300	0.375	0.450	0.525	0.600

How to order

F1000 - **6** - **W** - **Z** - **A6W**

Ⓐ Model no.

Ⓑ Port size

Ⓒ Port thread type

Ⓓ Option

Ⓔ Display unit

Ⓕ Piping adapter set (attached)

Ⓖ Bracket (attached)

* Refer to page 9 for explanation of an option.

Ⓐ Model no.				
F	F	F	F	F
1	3	4	6	8
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

Symbol	Descriptions					
Ⓑ Port size						
6	1/8	●				
8	1/4	●	●	●		
10	3/8		●	●		
15	1/2			●		
20	3/4				●	●
25	1				●	●
Ⓒ Port thread type						
Note 1						
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●
Ⓓ Option						
Note 2						
Drainage	Blank	With manual drain cock	●	●	●	●
	F	Automatic drain with manual override (NO type: Exhaust without pressurized)		●	●	●
	F1	Automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●
	FF	Large automatic drain with manual override (NO type: Exhaust without pressurized)				●
	FF1	Large automatic drain with manual override (NC type: No exhaust without pressurized)				●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl		●	●	●
	M1	Metal bowl with manual drain cock		●	●	●
Element	Blank	5µm	●	●	●	●
	Y	0.3µm (submicron)		●	●	●
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)				●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●
Ⓔ Display unit						
Blank	MPa display, Rc thread	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●
Ⓕ Piping adapter set (attached)						
Note 4 Pages 151 to 153						
Blank	Not attached	●	●	●	●	●
A6*W	1/8 piping adapter set	●				
A8*W	1/4 piping adapter set	●	●	●		
A10*W	3/8 piping adapter set	●	●	●		
A15*W	1/2 piping adapter set		●	●		
A20*W	3/4 piping adapter set			●	●	●
A25*W	1 piping adapter set				●	●
A32*W	1 1/4 piping adapter set				●	●
* Adaptor screw type						
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●
Ⓖ Bracket (attached)						
Page 148						
Blank	Not attached	●	●	●	●	●
BW	C type bracket	●	●	●	●	●

⚠ Note on model no. selection

Note 1: When G threads or NPT threads are selected, the IN, OUT, and drain port (metal bowl automatic drain) are available.

Note 2: Select options based on drainage, bowl material, element, and differential pressure detection. When selecting options for several items, list options in order from the top.

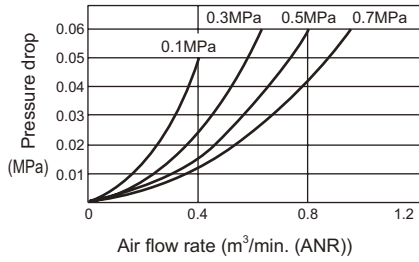
Note 3: Refer to page 11 for the automatic drain use conditions.

Note 4: The piping adapter set and C type bracket cannot be used together.

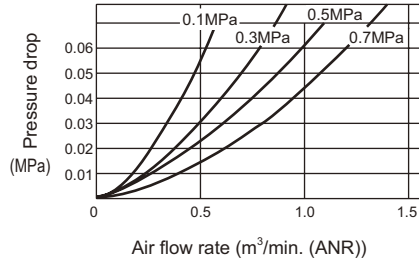
Air Filter Series

Flow characteristics

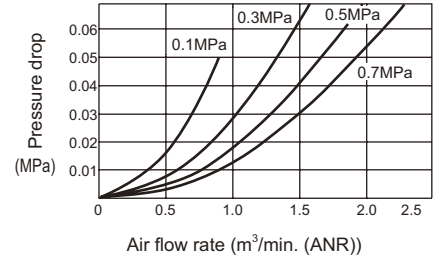
● F1000-6-W



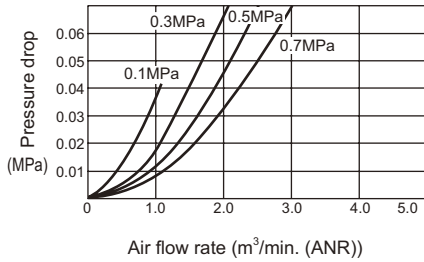
● F1000-8-W



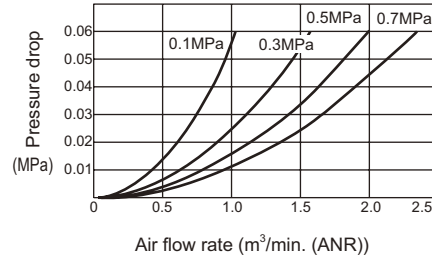
● F3000-8-W



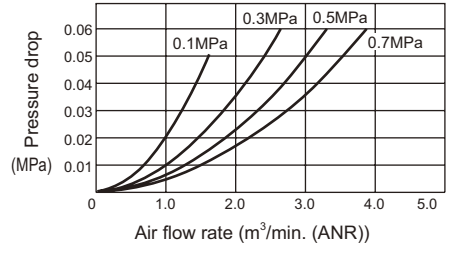
● F3000-10-W



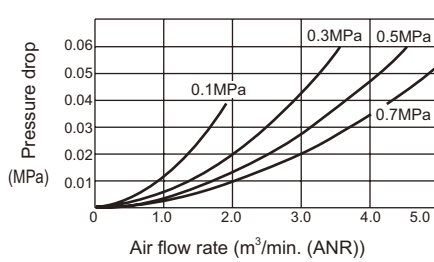
● F4000-8-W



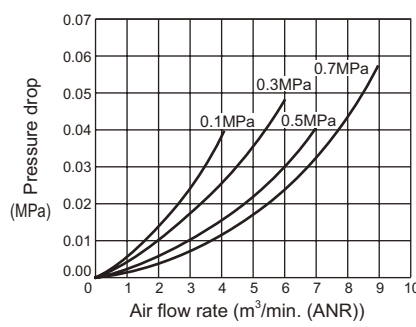
● F4000-10-W



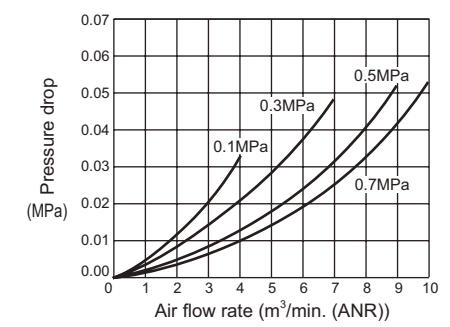
● F4000-15-W



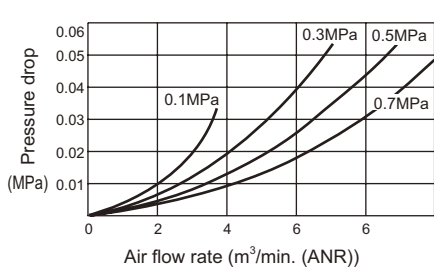
● F6000-20-W



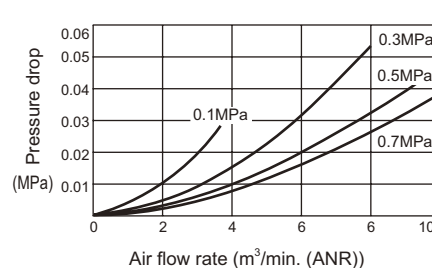
● F6000-25-W



● F8000-20-W

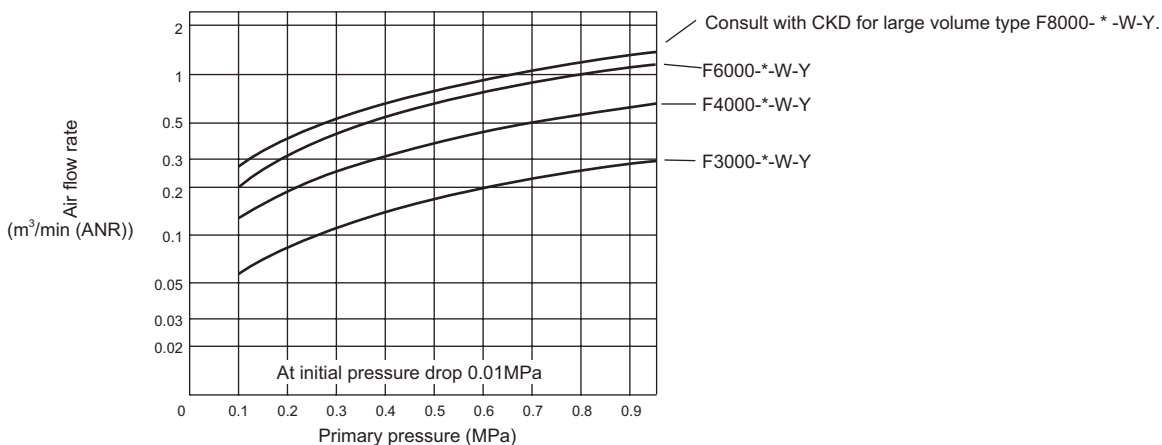


● F8000-25-W



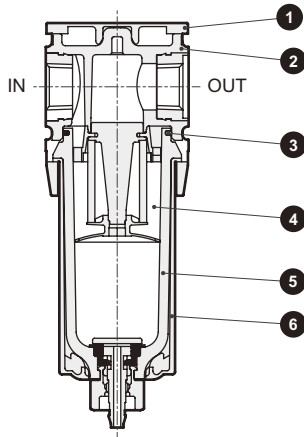
- F3000
- F4000
- F6000 *-W-Y (0.3μm element)
- F8000

(Maximum flow rate)

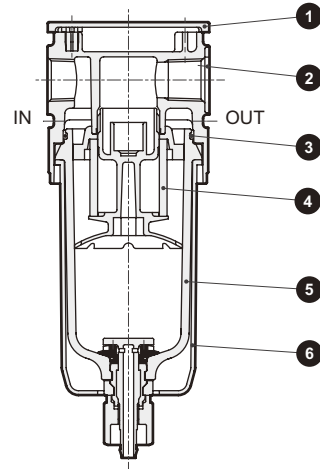


Internal structure and parts list

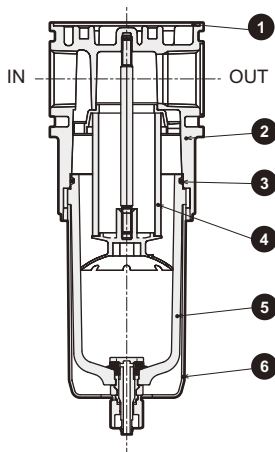
● F1000-W



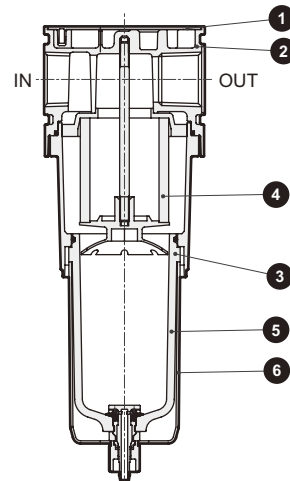
● F3000-W/F4000-W



● F6000-W



● F8000-W



No.	Part name	Material				
		F1000-W	F3000-W	F4000-W	F6000-W	F8000-W
1	Plate cover	ABS resin				
2	Body	Polyamide resin, steel	Aluminum alloy die-casting			
3	O ring <small>Note 1</small>	Special nitrile rubber				
4	Element (5 μ m) <small>Note 2</small>	Polyacetal resin polypropylene	Polypropylene			
	Element (0.3 μ m)	-				
5	Bowl assembly	Polycarbonate resin, polyacetal resin, urethane rubber resin				
6	Bowl guard	Polyamide resin	Polyamide resin, steel			

Note 1: The F1000-W O ring has a special shape.

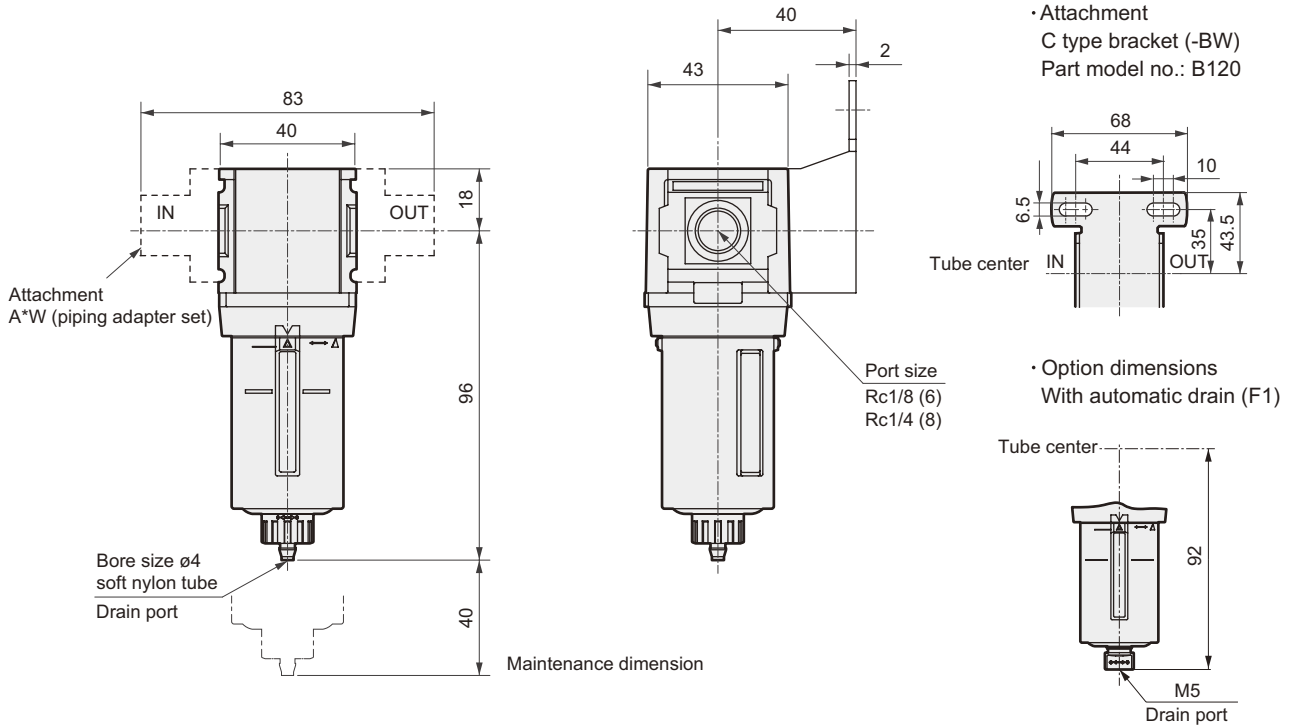
Note 2: F1000-W has an element assembly.

Note 3: Refer to page 89 for the repair kits.

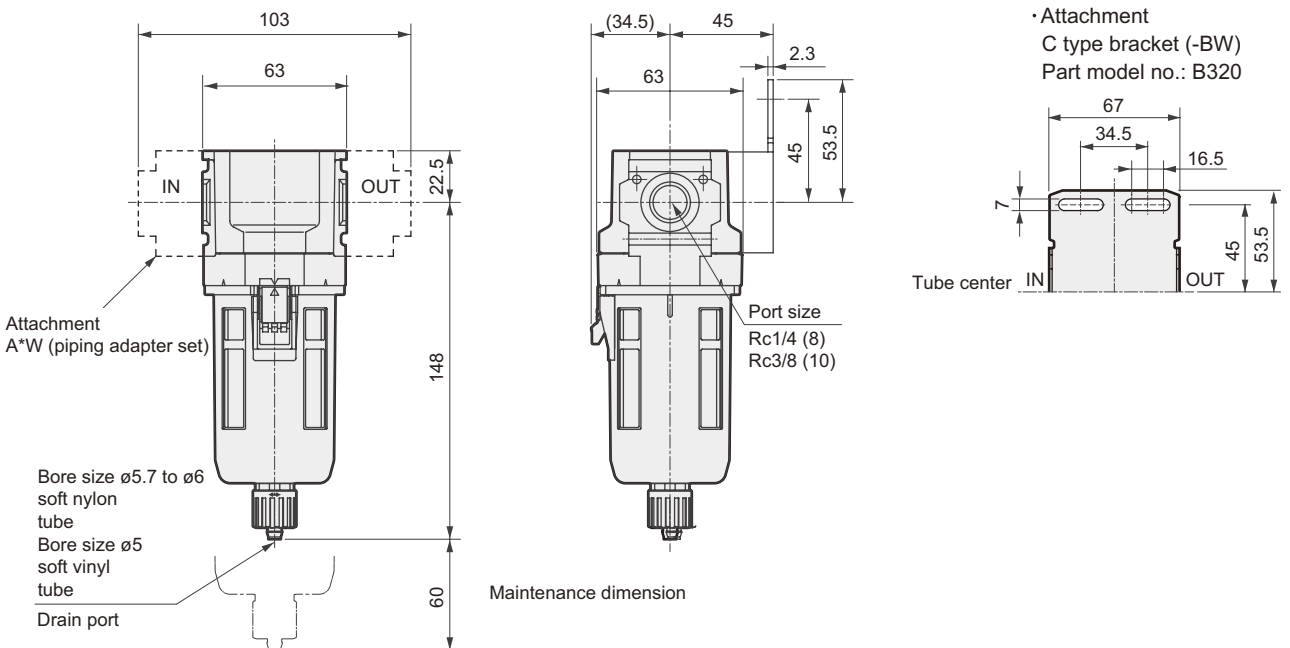
Air Filter Series

Dimensions

● F1000-W



● F3000-W

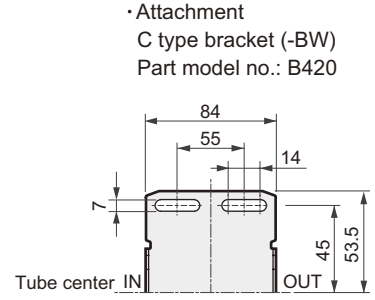
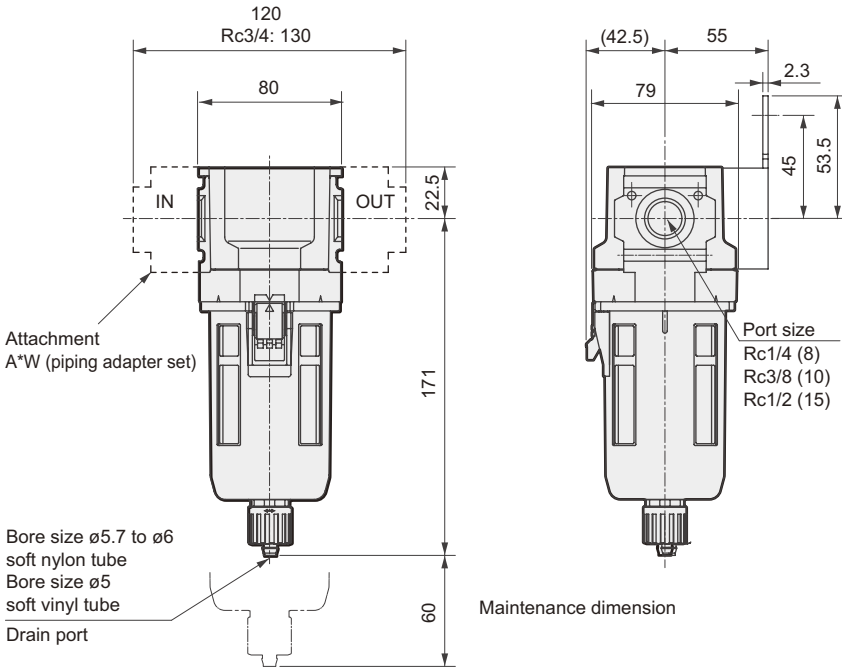


● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

Note: The C-type bracket and piping adapter set attachments cannot be used at the same time.

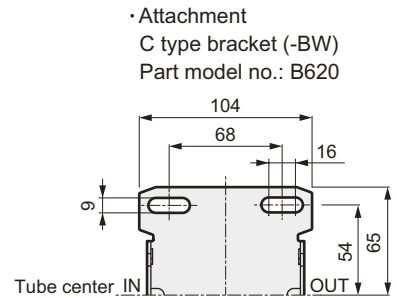
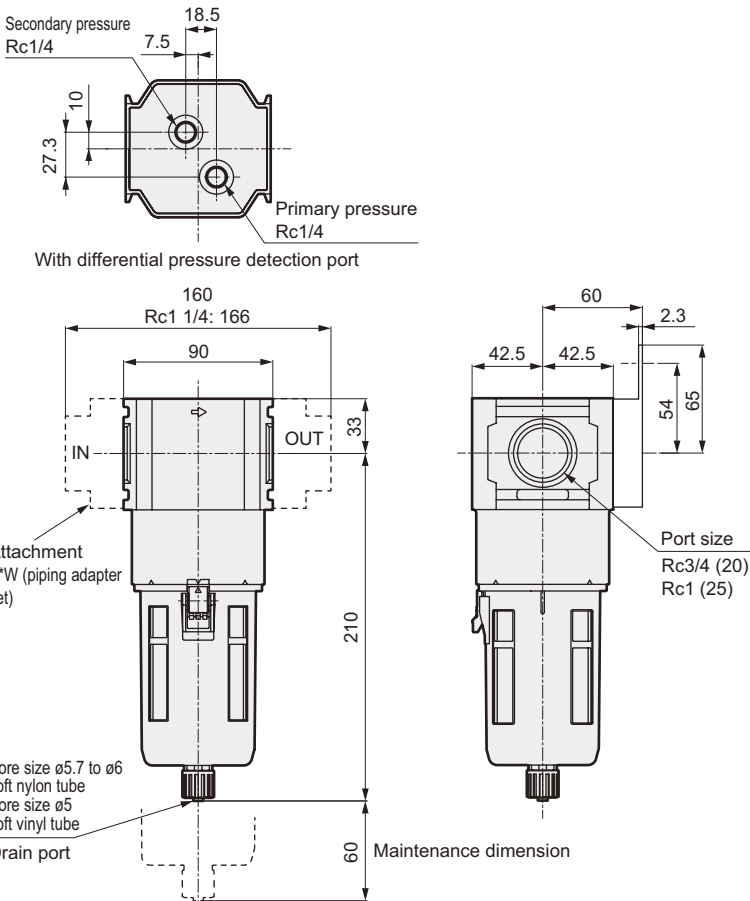
Dimensions

● F4000-W



● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

● F6000-W

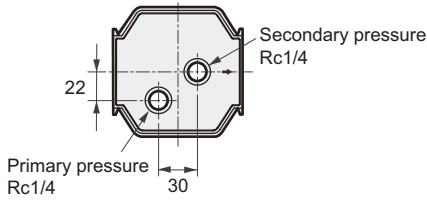


Air Filter Series

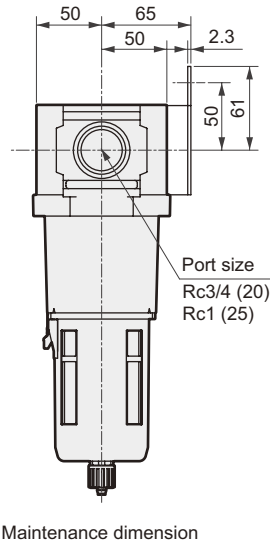
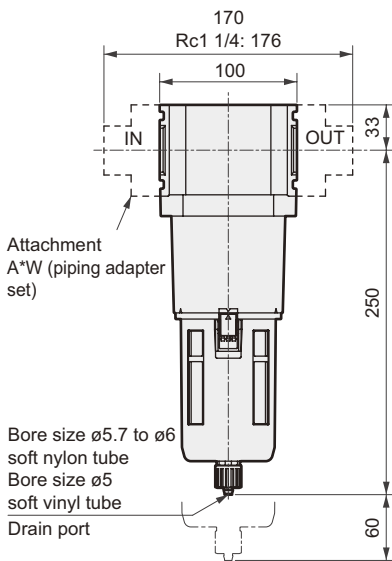
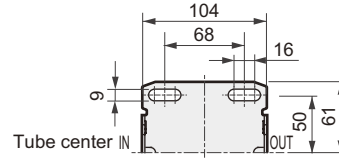
Dimensions

● F8000-W

With differential pressure detection port (Q)



• Attachment
C type bracket (-BW)
Part model no.: B820



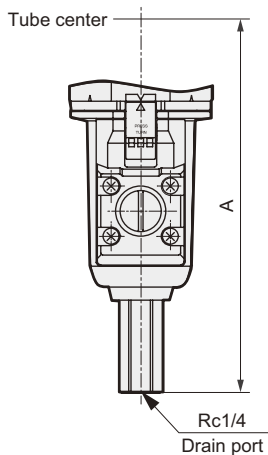
● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

Note: The C-type bracket and piping adapter set attachments cannot be used at the same time.

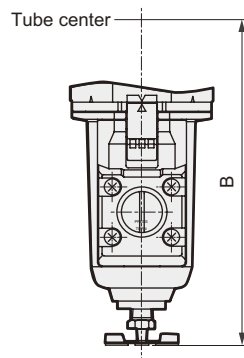
Optional dimensions

● Metal bowl F3000-W/F4000-W/F6000-W/F8000-W (option)

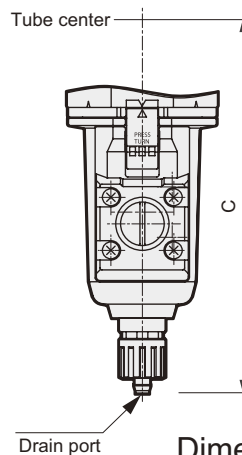
Metal manual cock
with automatic drain (F1M)



With petcock (M)



Standard manual drain
cock (M1)



Dimensions table

Model no.	F1M	M	M1
	A	B	C
F3000-W	164	143.5	154
F4000-W	187	166.5	177
F6000-W	226	205	216
F8000-W	266	245.5	256

MEMO

Air Filter Series

Optional parts drawing

Element

Element model no. Model	5µm element	0.3µm element (Y)
F1000-W	F1000-ELEMENT-ASSY	-
W1000-W, W1100-W	W1000-ELEMENT-ASSY	-
F3000-W, FM3000-W	F3000-ELEMENT	F3000-ELEMENT-Y
W3000-W, W3100-W	W3000-ELEMENT	W3000-ELEMENT-Y
F4000-W, FM4000-W	F4000-ELEMENT	F4000-ELEMENT-Y
W4000-W, W4100-W	W4000-ELEMENT	W4000-ELEMENT-Y
F6000-W, FM6000-W	F6000-ELEMENT	F6000-ELEMENT-Y
F8000-W, FM8000-W	F8000-ELEMENT	F8000-ELEMENT-Y
W8000-W, W8100-W	W8000-ELEMENT	W8000-ELEMENT-Y

Note: For the F1000-W and W1000-W, the baffle and element are assembly parts.

(M1)

Metal bowl assembly with manual drain cock

(FM1)

NO type automatic drain metal bowl assembly with manual drain cock

(F1M1)

NC type automatic drain metal bowl assembly with manual drain cock



* 8000 Series large drain

(FFM1)

NO type large automatic drain metal bowl assembly with manual drain cock

(FF1M1)

NC type large automatic drain metal bowl assembly with manual drain cock

(FM)

NO type automatic drain bowl assembly with metal manual cock

(F1M)

NC type automatic drain bowl assembly with metal manual cock



* 8000 Series large drain

(FFM)

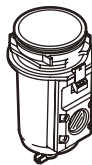
NO type large automatic drain bowl assembly with metal manual cock

(FF1M)

NC type large automatic drain bowl assembly with metal manual cock

(M)

Metal bowl assembly with cock



(F)

NO type automatic drain bowl assembly with manual cock

(F1)

NC type automatic drain bowl assembly with manual cock



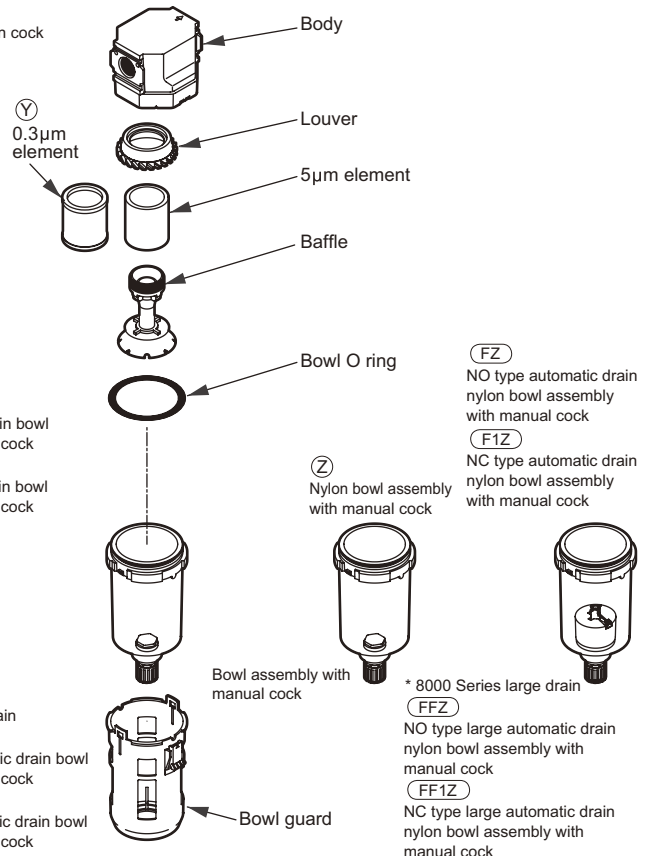
* 8000 Series large drain

(FF)

NO type large automatic drain bowl assembly with manual cock

(FF1)

NC type large automatic drain bowl assembly with manual cock



Repair kits

(Set consisting of louver, baffle, element, bowl O ring)

Repair kits model no. Model	5µm element	0.3µm element (Y)
F1000-W Note 1	F1000-KIT	-
F3000-W, FM3000-W	F3000-KIT	F3000-KIT-Y
F4000-W, FM4000-W	F4000-KIT	F4000-KIT-Y
F6000-W, FM6000-W	F6000-KIT	F6000-KIT-Y
F8000-W, FM8000-W Note 2	F8000-KIT	F8000-KIT-Y

Note 1: For the F1000-W, the baffle and element are assembly parts, so the set consists of the element assembly and bowl O ring.

Note 2: For the F8000-W, the set consists of the baffle, element, and bowl O ring.

Bowl guard

Bowl guard model no. Model	Polycarbonate bowl	Nylon bowl
F1000-W, W1000-W, W1100-W	F1000-W-BOWL-GUARD	F1000-W-BOWL-GUARD-Z
L1000-W	L1000-W-BOWL-GUARD	L1000-W-BOWL-GUARD-Z
M1000-W	M1000-W-BOWL-GUARD	M1000-W-BOWL-GUARD-Z
W3100-W, F3000-W, W3000-W, M3000-W	F3000-W-BOWL-GUARD	F3000-W-BOWL-GUARD-Z
L3000-W	L3000-W-BOWL-GUARD	L3000-W-BOWL-GUARD-Z
F4000-W, W4000-W, M4000-W, W4100-W, F6000-W, M6000-W, W8100-W, F8000-W, W8000-W, M8000-W	F4000-W-BOWL-GUARD	F4000-W-BOWL-GUARD-Z
L4000-W, L8000-W	L4000-W-BOWL-GUARD	L4000-W-BOWL-GUARD-Z
W8100-W, F8000-W, W8000-W-FF, FF1	DT4000-W-BOWL-GUARD	DT4000-W-BOWL-GUARD-Z

Note: The bowl guard for the 1000 Series F1 is sold as a set with the bowl assembly. The model is "F1000-W-BOWL-BOWL-GUARD-F1".

Bowl assembly (sets of bowl assembly, bowl O ring)

Bowl assembly model no. Model	PC bowl assembly with manual cock	PA bowl assembly with manual cock	Metal bowl assembly with manual cock	Metal bowl assembly with standard manual cock	NO type automatic drain PC bowl assembly with manual cock Note 1	NC type automatic drain PC bowl assembly with manual cock
F1000-W, W1000-W M1000-W, W1100-W	F1000-W-BOWL	F1000-W-BOWL-Z	-	-	-	F1000-W-BOWL-BOWL GUARD-F1 Note 3
F3000-W, M3000-W W3000-W, W3100-W	F3000-W-BOWL	F3000-W-BOWL-Z	F3000-W-BOWL-M	F3000-W-BOWL-M1	F3000-W-BOWL-F	M3000-W-BOWL-F1
FM3000-W, MM3000-W	-	-		-	-	-
F4000-W, F6000-W M4000-W, M6000-W F8000-W, M8000-W W4000-W, W4100-W W8000-W, W8100-W	F4000-W-BOWL	F4000-W-BOWL-Z	F4000-W-BOWL-M	F4000-W-BOWL-M1	F4000-W-BOWL-F	M4000-W-BOWL-F1
FM4000-W, FM6000-W FM8000-W, MM4000-W MM6000-W, MM8000-W	-	-		-	-	-

Bowl assembly model no. Model	NO type automatic drain PA bowl assembly with manual cock Note 1	NC type automatic drain PA bowl assembly with manual cock	NO type automatic drain metal bowl assembly with manual cock Note 1	NO type automatic drain metal bowl assembly with standard manual cock	NC type automatic drain metal bowl assembly with manual cock	NC type automatic drain metal bowl assembly with standard manual cock	NO type automatic drain bowl assembly for medium pressure Note 1	NC type automatic drain bowl assembly for medium pressure
F1000-W, W1000-W M1000-W, W1100-W	-	F1000-W-BOWL-BOWL GUARD-F1Z Note 3	-	-	-	-	-	-
F3000-W, M3000-W W3000-W, W3100-W	F3000-W-BOWL-FZ	M3000-W-BOWL-F1Z	F3000-W-BOWL-FM	F3000-W-BOWL-FM1	M3000-W-BOWL-F1M	M3000-W-BOWL-F1M1	-	-
FM3000-W, MM3000-W	-	-	-	-	-	-	FM3000-W-BOWL-F	MM3000-W-BOWL-F1
F4000-W, F6000-W M4000-W, M6000-W F8000-W, M8000-W W4000-W, W4100-W W8000-W, W8100-W	F4000-W-BOWL-FZ	M4000-W-BOWL-F1Z	F4000-W-BOWL-FM	F4000-W-BOWL-FM1	M4000-W-BOWL-F1M	M4000-W-BOWL-F1M1	-	-
FM4000-W, FM6000-W FM8000-W, MM4000-W MM6000-W, MM8000-W	-	-	-	-	-	-	FM4000-W-BOWL-F	MM4000-W-BOWL-F1
Bowl assembly model no. Model	NO type large automatic drain PC bowl assembly with manual cock	NC type large automatic drain PC bowl assembly with manual cock	NO type large automatic drain PA bowl assembly with manual cock	NC type large automatic drain PA bowl assembly with manual cock	NO type large automatic drain metal bowl assembly with metal manual drain cock	NC type large automatic drain metal bowl assembly with metal manual drain cock	NO type large automatic drain metal bowl assembly with standard manual drain cock	NC type large automatic drain metal bowl assembly with standard manual drain cock
F8000-W, W8000-W W8100-W	F8000-W-BOWL-FF	F8000-W-BOWL-FF1	F8000-W-BOWL-FFZ	F8000-W-BOWL-FF1Z	F8000-W-BOWL-FFM	F8000-W-BOWL-FF1M	F8000-W-BOWL-FFM1	F8000-W-BOWL-FF1M1

Note 1: The NO automatic drain cannot be selected for the oil mist filter M1000-W, M3000-W, M4000-W, M6000-W, or M-8000W, or for the medium pressure oil mist filter MM3000-W, MM4000-W, MM6000-W, or MM8000-W.

Note 2: The large automatic drain cannot be installed on the M8000-W.

Note 3: The bowl assembly for the 1000 Series F1 is sold as a set with the bowl guard.



Oil mist filter standard white Series
M1000/M3000/M4000
M6000/M8000-W Series

Ideal for circuits susceptible to oil, including measuring, and instrumentation circuits
 Port size: 1/8 to 1

JIS symbol



Specifications

Descriptions	M1000-W	M3000-W	M4000-W	M6000-W	M8000-W
Appearance					
Working fluid	Compressed air				
Working pressure range MPa	0.1 to 1.0 Note 7, 8				
Withstanding pressure MPa	1.5 Note 7				
Drain capacity cm ³	3	45	80	80	80
Port size Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg	0.096	0.28	0.52	0.95	1.35
Standard accessories	Bowl guard				

Mantle option name	Blank (M type)	S (S type)	X (X type)
Maximum flow rate Note 1 ℓ/min. (ANR)	M1000*-W 150 note 7	M1000*-W 150 note 7	M1000*-W 150
	M3000*-W 360	M3000*-W 450	M3000*-W 450
	M4000*-W 825	M4000*-W 1000	M4000*-W 1000
Primary side pressure 0.7MPa	M6000*-W 1270	M6000*-W 1400	M6000*-W 1400
Pressure drop 0.01MPa	M8000*-W 2600	M8000*-W 2900	M8000*-W 2900
Ambient temperature range °C	5~60		5~30
Filtration rating μm	0.01 (nominal)	0.3	Suction by activated charcoal Note 4
Secondary side oil concentration mg/m ³	0.01 or less Note 2, Note 3	0.5 or less Note 2	0.003 or less Note 5
Mantle (element) change	1 year (6000 hours) or pressure drop 0.1MPa		- Note 6

Note 1: Use within the maximum processing flow rate.

If the maximum processing flow is exceeded temporarily, or if the filter is installed at a place with high levels of pulsation, the mantle could be damaged or oil or drainage, etc., could splatter to the secondary side and result in faults at the terminal.

Note 2: The secondary oil density is the value when the primary oil density is 30 mg/m³ and inlet air temperature is 21°C.

Note 3: Install an oil mist filter (S type) as a prefilter on the primary side to prevent early clogging.

Note 4: Activated charcoal particles could flow to the secondary side, so install an air filter (F Series) or oil mist filter (M Series M type or S type) on the secondary side.

Note 5: When an oil mist filter (M Series M type) is installed on the primary side.

Note 6: The mantle (element) replacement period differs with the odor density in compressed air, and thus cannot be clearly indicated.

Consider the total period from initial installation to when the smell of oil is confirmed as the effective deodorizing period, and replace at the same time as the M type or control with usage time. (When the inlet temperature is 21°C, replace at the control time or 1,000 hours, whichever is sooner)

Keep the primary air temperature at 30°C or less. The deodorizing effect will drop if the temperature is high, so provide heat dissipation measures.

Note 7: With M1000-W-F1 automatic drain, minimum operating pressure is 0.2 MPa, maximum operation pressure is 0.7 MPa and the guaranteed pressure resistance is 1.05 MPa. Refer to the maximum processing flow graph (page 93) for the maximum working flow.

Note 8: Min. operating pressure is 0.15MPa for "F1" with automatic drain.

Clean room specifications (Catalog No. CB-033SA)

● Dust generation preventing structure for use in cleanrooms

M*000-..... - P7*

How to order



A Model no.

B Port size

C Port thread type

D Option

E Display unit

F Piping adapter set (attached)

G Bracket (attached)

* Refer to page 9 for explanation of an option.

A Model no.				
M	M	M	M	M
1	3	4	6	8
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

Symbol	Descriptions					
B Port size						
6	1/8	●				
8 Note 8	1/4	●	●	●		
10	3/8		●	●		
15	1/2			●		
20	3/4				●	●
25	1				●	●

C Port thread type		Note 1				
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●

D Option		Note 2					
Drainage <small>Note 3, Note 4</small>	Blank	With manual drain cock	●	●	●	●	●
	F1	Automatic drain with manual override (NC type; No exhaust without pressurized)	●	●	●	●	●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●	●
	Z	Nylon bowl	●	●	●	●	●
	M Note 6	Metal bowl		●	●	●	●
Mantle (element)	M1	Metal bowl with manual drain cock		●	●	●	●
	Blank	M type (nominal 0.01µm; remaining oil 0.01mg/m ³)	●	●	●	●	●
	S	S type (0.3µm; remaining oil 0.5mg/m ³)	●	●	●	●	●
Differential pressure detection	X Note 5	X type (deodorization; remaining oil 0.003mg/m ³)	●	●	●	●	●
	Blank	Without differential pressure detection port	●	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)				●	●
Differential pressure indicator	Blank	Without differential pressure indicator	●	●	●	●	●
	Q1 Note 5, Note 6	Differential pressure with indicator			●		
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●	●

E Display unit						
Blank	MPa display, Rc thread	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●

F Piping adapter set (attached)		Note 7 Pages 151 to 153				
Blank	Not attached	●	●	●	●	●
A6*W	1/8 piping adapter set	●				
A8*W	1/4 piping adapter set	●	●	●		
A10*W	3/8 piping adapter set	●	●	●		
A15*W	1/2 piping adapter set		●	●		
A20*W	3/4 piping adapter set			●	●	●
A25*W	1 piping adapter set				●	●
A32*W	1 1/4 piping adapter set				●	●

* Adaptor screw type						
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●

G Bracket (attached)		Page 148				
Blank	Not attached	●	●	●	●	●
BW	C type bracket	●	●	●	●	●

⚠ Note on model no. selection

Note 1: When G threads or NPT threads are selected, the IN, OUT, and drain port (metal bowl automatic drain) are available.

Note 2: Select options for each drainage, bowl material and differential pressure detection.

When selecting options for several items, list options in order from the top.

Note 3: Automatic drain of NO type can not be selected.

Note 4: Refer to page 11 for the automatic drain use conditions.

Note 5: Combination with option F1 or "Q1" with differential pressure indicator is not possible.

Note 6: "Q1" with differential pressure indicator cannot be selected for bowl material "M".

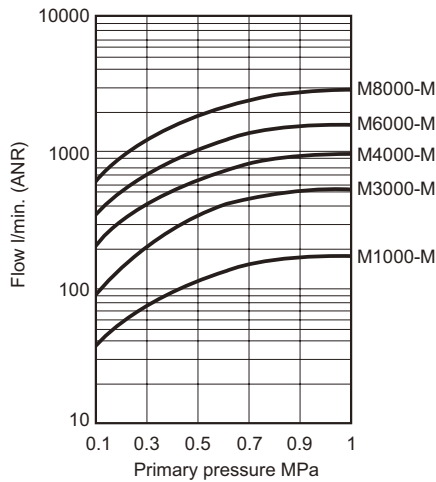
Note 7: The piping adapter set and C type bracket cannot be used together.

Note 8: "Q1" with differential pressure indicator cannot be selected for port size "8".

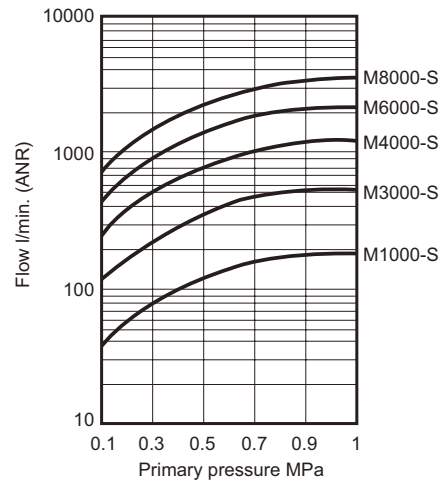
Oil Mist Filter Series

Flow characteristics (maximum flow rate)

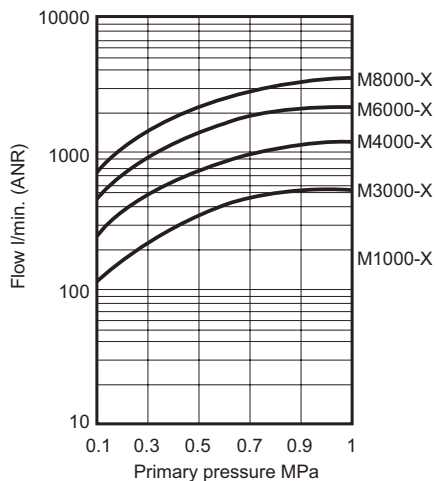
● M*000-W-M



● M*000-W-S

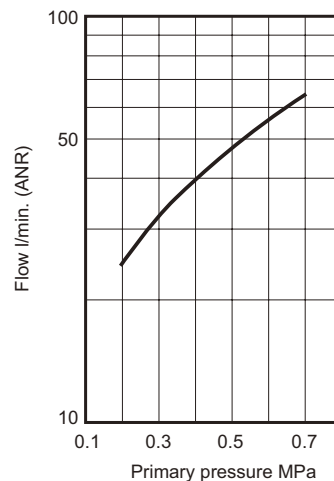


● M*000-W-X



● M1000-W-F1

With automatic drain (M type, S type)



Oil mist filter: Using optional mantle

Major recommended circuit
* S type



Applications

General industrial air

- Air tool
 - Air drill, air screw driver
 - air grinder
- Labor saving device and components
- Pneumatic jigs and tools
- Air chuck
- Air vice
- Precision part cleaning air blow

* M type



Oil free air

- Instrumentation
- Measurement
- Logic control
- Movable element, pure fluid element
- Luxury painting
- Precise industry

* X type



Deodorization air

- Food industry
- Pharmaceutical industry
- Agitation
- Transportation
- Dry
- Package
- Air for brewing

Option symbol and shape of mantle

Option symbol	Appearance
Blank (M type)	<p>End plate black Plastic form red</p>
S (S type)	<p>End plate green Plastic form red</p>
X (X type)	<p>End plate black Punching metal</p>

CAUTION: Changes for product upgrades may be made without prior notice.
When placing an order, confirm the option symbol for the part model given here.

Oil indicator

Use the oil indicator for measuring oil content density.

Oil indicator model no.
With needle valve 6509
Without needle valve 6510



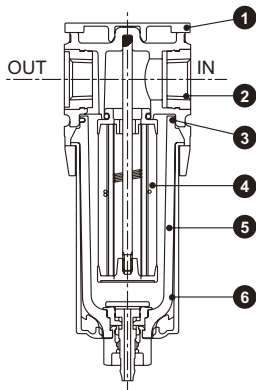
Note: Consult with CKD for details.

Oil Mist Filter Series

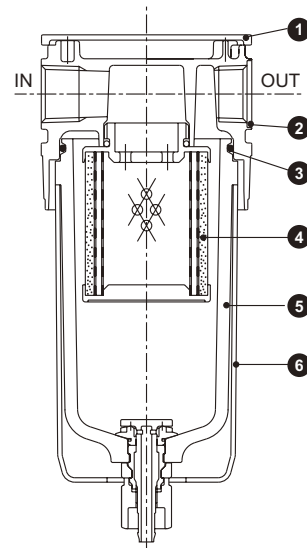
Internal structure and parts list

Internal structure and parts list

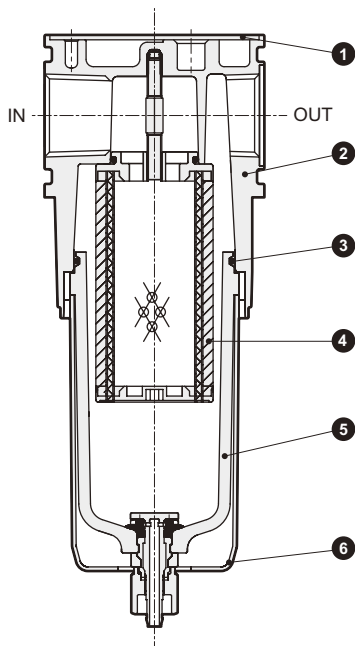
● M1000-W



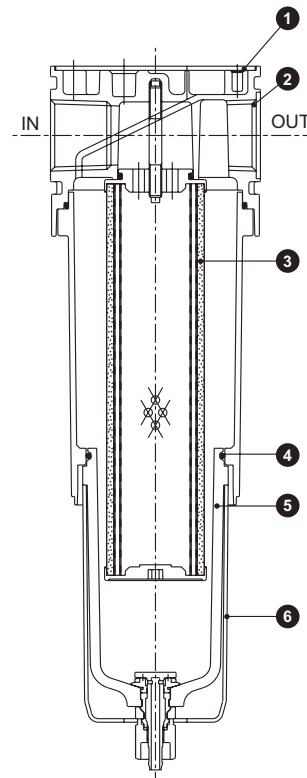
● M3000-W/M4000-W



● M6000-W



● M8000-W



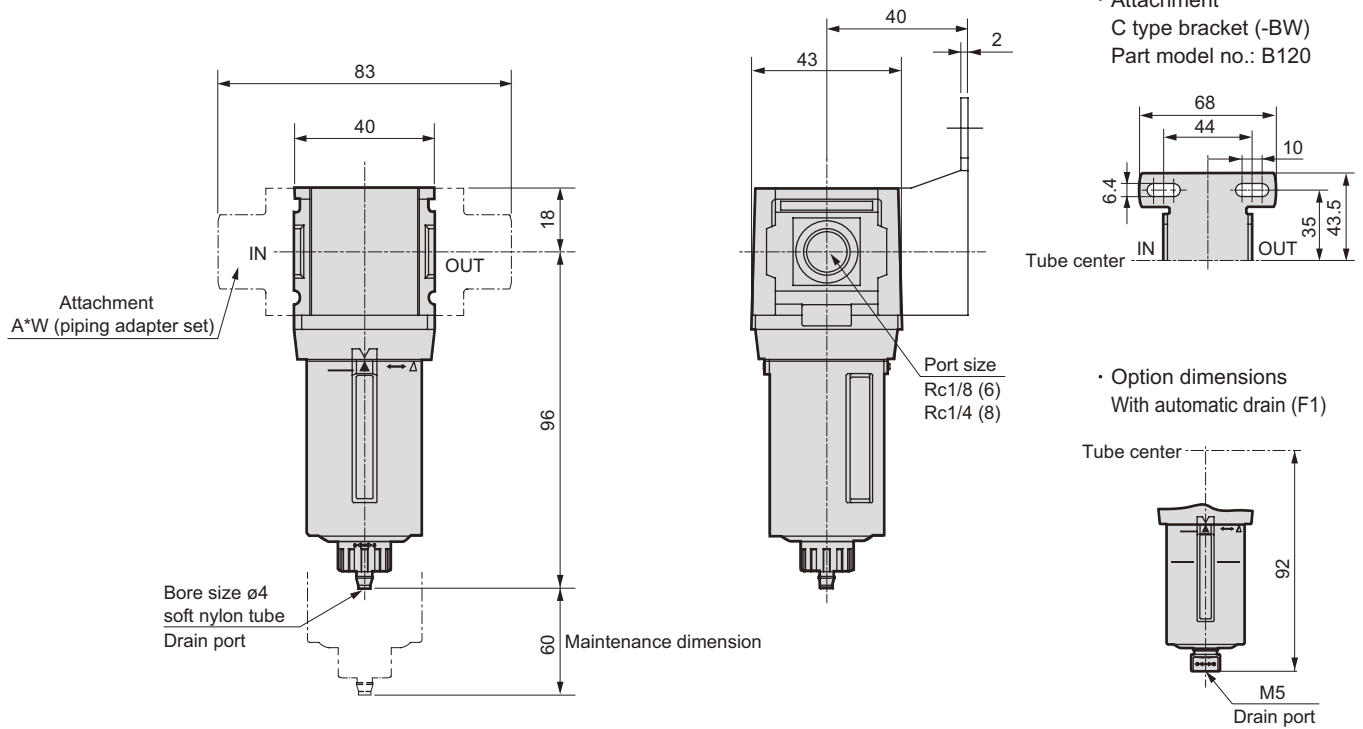
No.	Part name	Material				
		M1000-W	M3000-W	M4000-W	M6000-W	M8000-W
1	Plate cover	ABS resin				
2	Body	Polyamide resin	Aluminum alloy die-casting			
3	O ring Note 1	Special nitrile rubber				
4	Mantle assembly	-				
5	Bowl assembly	Polycarbonate resin, polyacetal resin, urethane rubber resin				
6	Bowl guard	Polyamide resin	Polyamide resin, steel			

Note 1: The M1000-W O ring has a special shape.

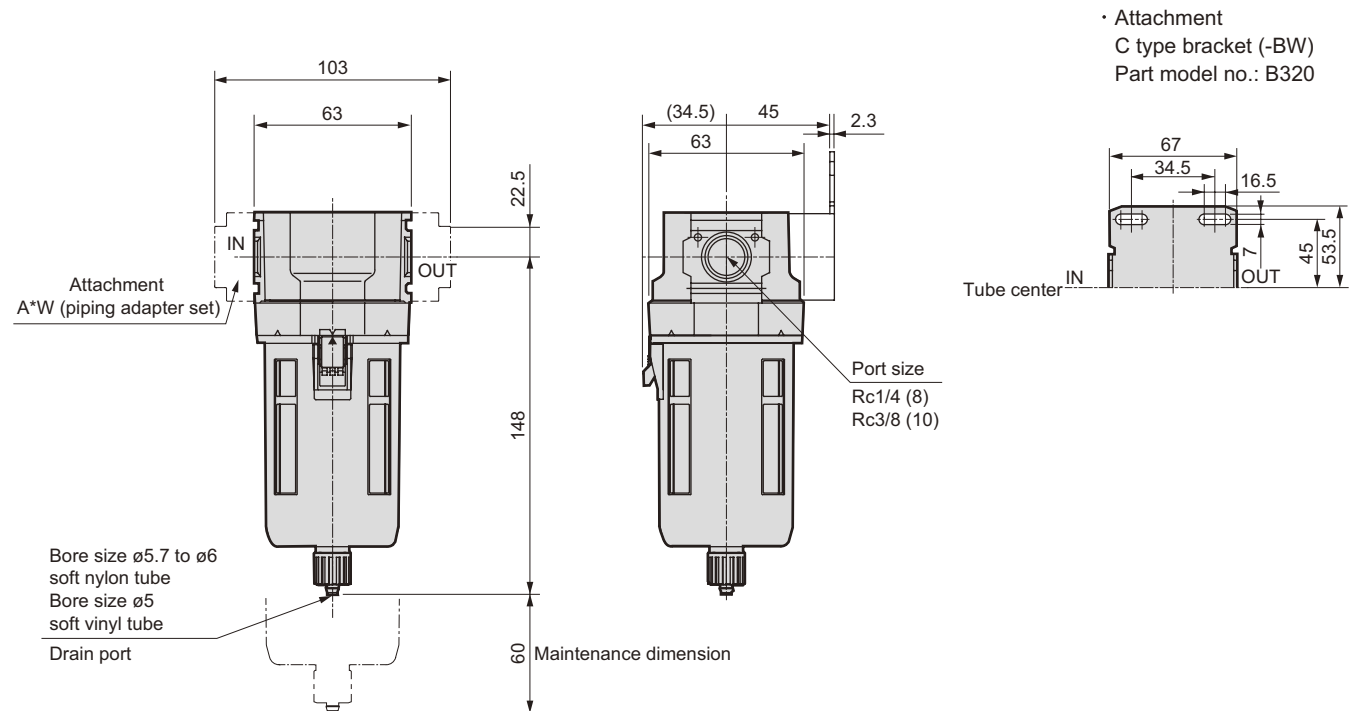
Oil Mist Filter Series

Dimensions

● M1000-W



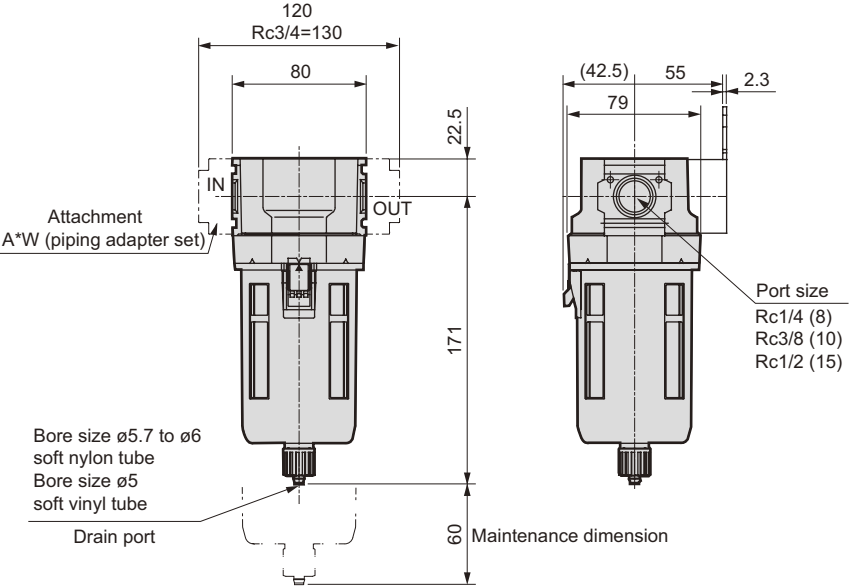
● M3000-W



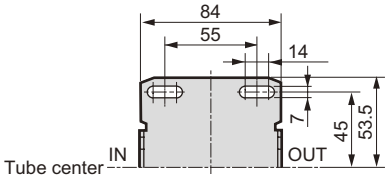
● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.
Note: The C-type bracket and piping adapter set attachments cannot be used at the same time.

Dimensions

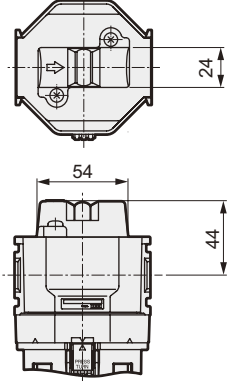
● M4000-W



• Attachment
C type bracket (-BW)
Part model no.: B420

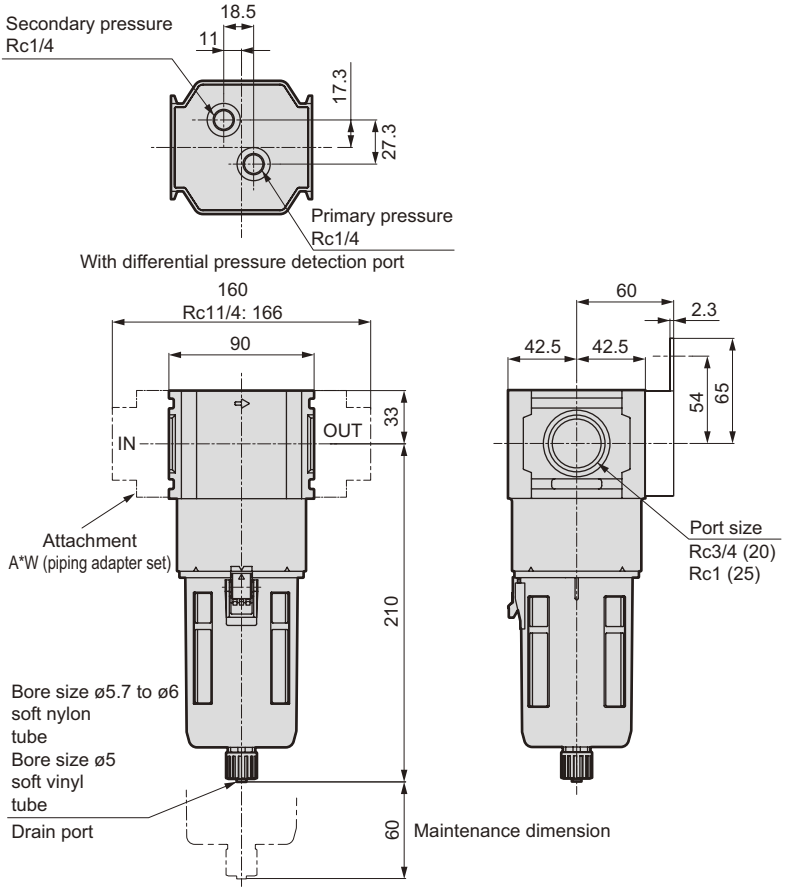


• Option dimensions
Differential pressure with indicator (Q1)

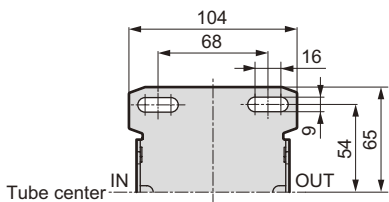


● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

● M6000-W



• Attachment
C type bracket (-BW)
Part model no.: B620

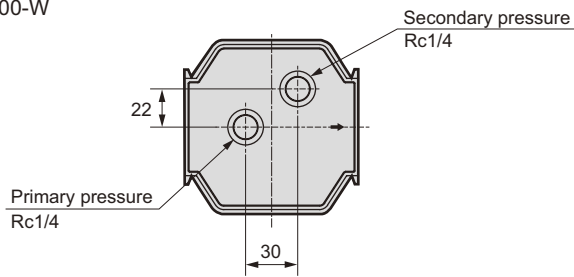


● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.
Note: The C-type bracket and piping adapter set attachments cannot be used at the same time.

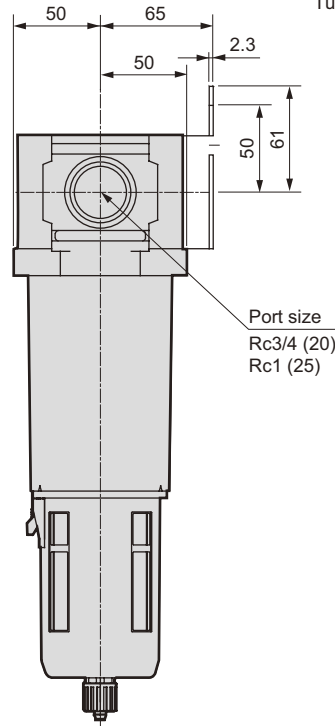
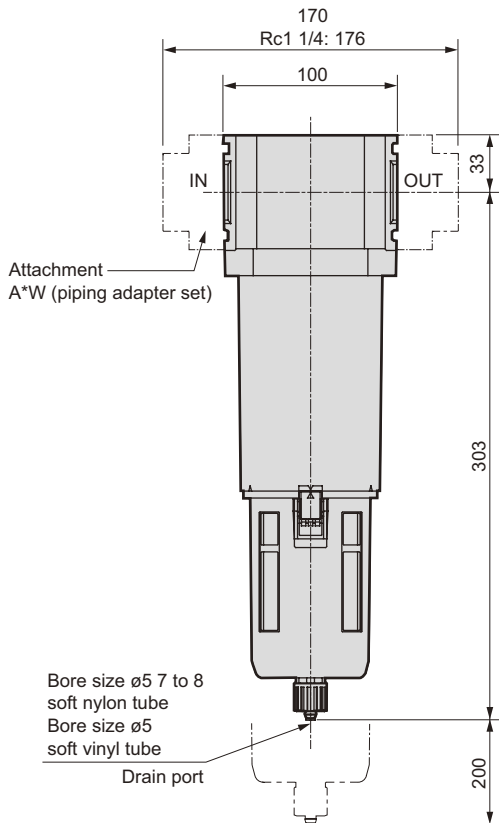
Oil Mist Filter Series

Dimensions

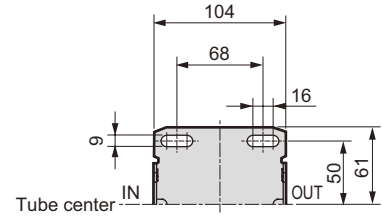
● M8000-W



Option
(With differential pressure detection port)



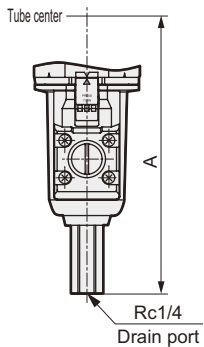
● Attachment
C type bracket (-BW)
Part model no.: B820



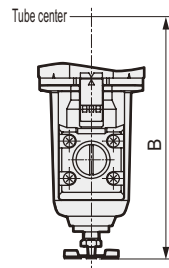
● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

● Metal bowl (option) (M3000-W, M4000-W, M6000-W, M8000-W)

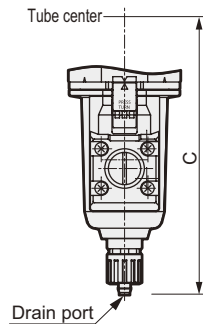
Metal manual cock
with automatic drain (F1M)



With petcock (M)



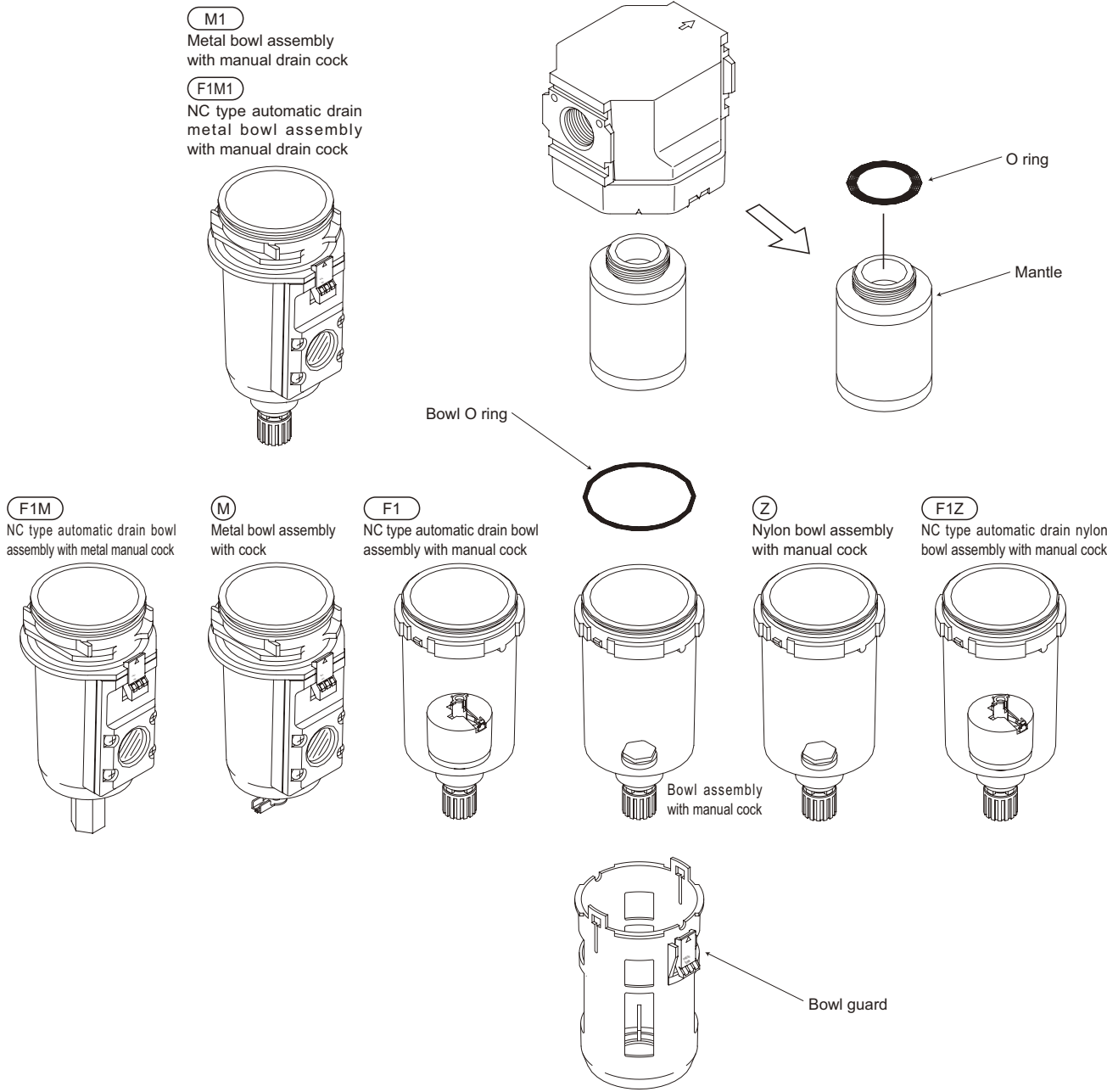
Standard manual drain cock
(M1)



Dimensions table

Model no.	F1M	M	M1
	A	B	C
M3000-W	164	143.5	154
M4000-W	187	166.5	177
M6000-W	226	205	216
M8000-W	319	298	309

Optional parts table - Oil mist filter



Repair kits model no. (Set consisting of O ring, mantle, bowl O ring)

Model	M type	S type	X type
M1000-W	M1000-KIT	M1000-KIT-S	M1000-KIT-X
M1000-W-F1	M1000-KIT-F1	M1000-KIT-F1S	-
M3000-W, MM3000-W	M3000-KIT	M3000-KIT-S	M3000-KIT-X
M4000-W, MM4000-W	M4000-KIT	M4000-KIT-S	M4000-KIT-X
M6000-W, MM6000-W	M6000-KIT	M6000-KIT-S	M6000-KIT-X
M8000-W, MM8000-W	M8000-KIT	M8000-KIT-S	M8000-KIT-X

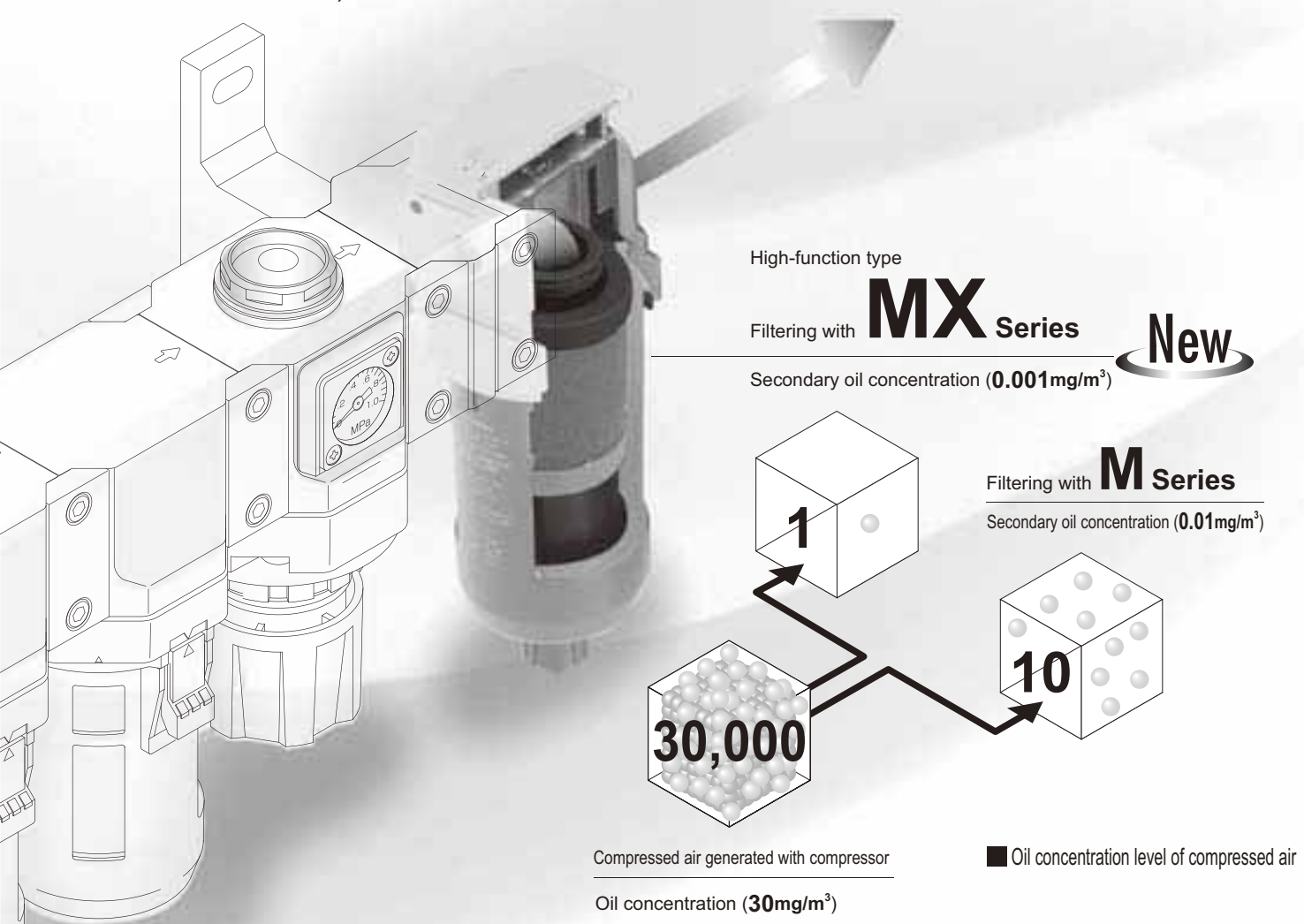
Repair kits model no. (Set consisting of O ring, mantle)

Model	M type	S type	X type
M1000-W	M1000-MANTLE-ASSY	M1000-MANTLE-ASSY-S	M1000-MANTLE-ASSY-X
M1000-W-F1	M1000-MANTLE-ASSY-F1	M1000-MANTLE-ASSY-F1S	-
M3000-W, MM3000-W	M3000-MANTLE-ASSY	M3000-MANTLE-ASSY-S	M3000-MANTLE-ASSY-X
M4000-W, MM4000-W	M4000-MANTLE-ASSY	M4000-MANTLE-ASSY-S	M4000-MANTLE-ASSY-X
M6000-W, MM6000-W	M6000-MANTLE-ASSY	M6000-MANTLE-ASSY-S	M6000-MANTLE-ASSY-X
M8000-W, MM8000-W	M8000-MANTLE-ASSY	M8000-MANTLE-ASSY-S	M8000-MANTLE-ASSY-X

* M1000-W, 3000-W, 4000-W, and 8000-W Series products released before May 1998 are compatible with M parts, so select M parts.
 * Refer to the air filter options and parts table for details on the bowl assembly and bowl guard.

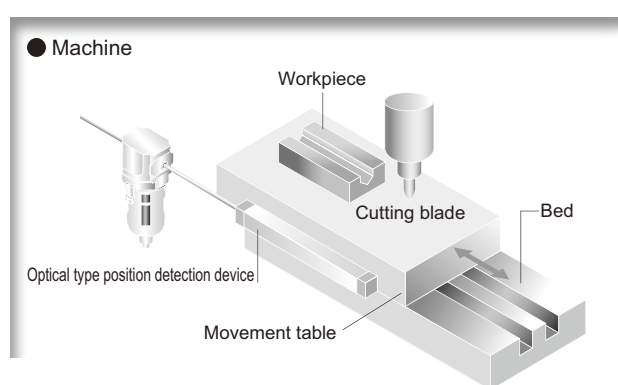
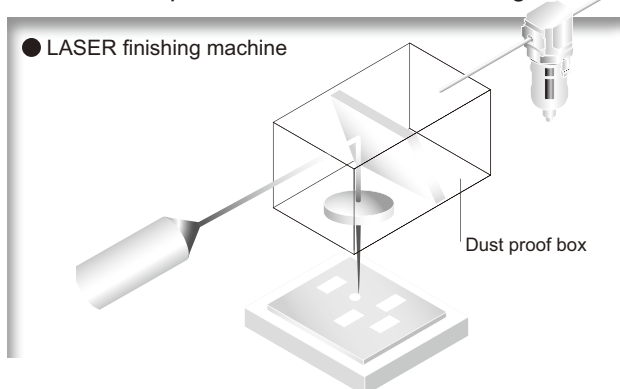
High-performance with x10 oil removal.

Highly efficient oil removing mantle removes oil up to a secondary oil concentration 0.001 mg/m³.
 MX Series high-performance oil mist filter with x10 (compared to oil mist filter M Series) oil removal.



Further expanding high-purity oilless air applications

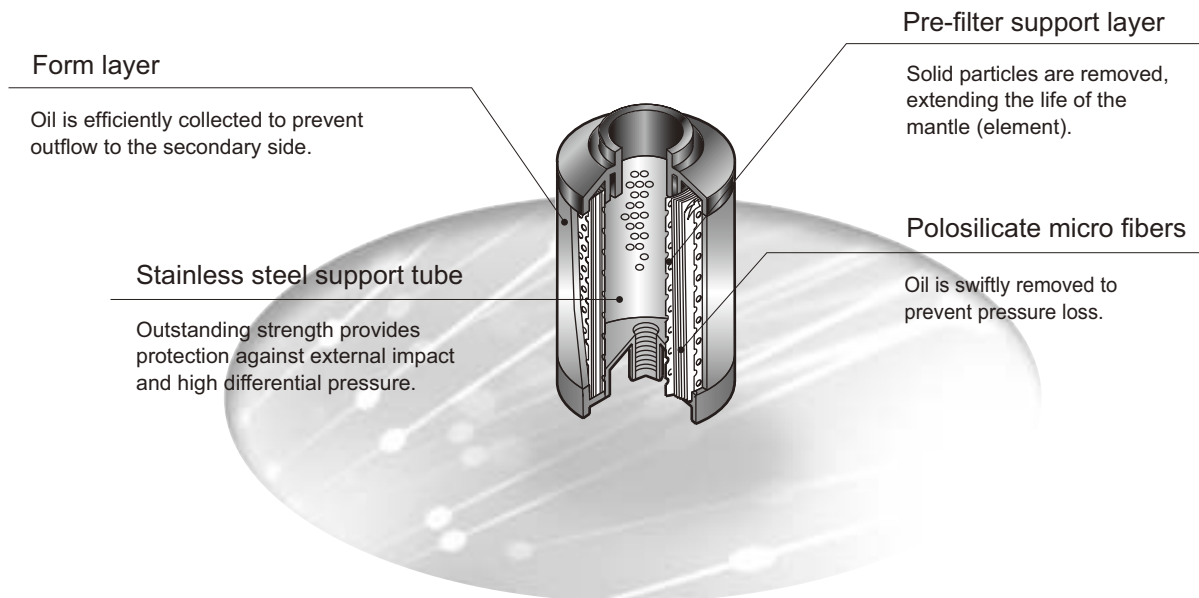
This series is ideal for applications requiring high-purity oilless air, including laser processing systems, optical positioning units, and foodstuff and pharmaceutical manufacturing lines.



High performance oil mist filter

MX Serie

■ Mantle structural explanation



Secondary side oil concentration 0.001mg/m³ or less

The highly efficient oil removing mantle removes oil up to the secondary oil concentration of 0.001 mg/m³ at 21°C. This series is compatible with the JIS Standards Oil Class 1.

High accuracy filtration

Impurities up to 0.01 μm are removed.

Long life, low pressure loss

The gap rate within the mantle (element) fibers is high at 94%, suppressing pressure loss and extending life.

Module connections

A system is configured with module connections in the same manner as the conventional filter F Series and oil mist filter M Series.

Diverse models

Five types: MX1000, 3000, 4000, 6000, and 8000 are used to match the flow.

Cleanroom-compatible

The P70 Series is used.
(3000, 4000, and 6000 Series are used.)

High performance oil mist filter MX Series variations

	Filtration rating μm	Secondary oil concentration mg/m ³ (21°C)	Treating flow rate ℓ/min.					Ambient temperature range °C	
			1000 Series	3000 Series	4000 Series	6000 Series	8000 Series		
MX Series	0.01	0.001 or less	75	180	370	670	1490	5 to 60	
M Series	M Type	0.01	0.01 or less	150	360	825	1270	2600	5 to 60
	S Type	0.3	0.5 or less	150	450	1000	1400	2900	5 to 60
	X Type	Activated charcoal suction	0.003 or less	150	450	1000	1400	2900	5 to 30

Read Safety Precautions to ensure correct, safe product use.




High performance oil mist filter standard white Series

MX1000/MX3000/MX4000 MX6000/MX8000-W Series

Secondary side oil concentration 0.001mg/m³






This is appropriate for optical device such as optical type positioning device, LASER finishing machine, etc.,

Port size: 1/8 to 1

JIS symbol 



Specifications

Descriptions	MX1000-W	MX3000-W	MX4000-W	MX6000-W	MX8000-W
Appearance					
Working fluid	Compressed air				
Working pressure range MPa	0.1 to 1.0 Note 4, Note 5				
Withstanding pressure MPa	1.5 Note 4				
Ambient temperature range °C	5 to 60				
Filtration rating μm	0.01 (nominal)				
Secondary oil concentration mg/m ³	0.001 or less Note 2, Note 3				
Maximum flow rate /min. (ANR) Note 1	75 Note 4	180	370	670	1480
Drain capacity cm ³	3	45	80	80	80
Port size Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg	0.096	0.28	0.52	0.95	1.35
Mantle (element) change	1 year (6000 hours) or pressure drop 0.1MPa				
Standard accessories	Bowl guard				

Note 1: Values for primary pressure 0.7 MPa and pressure drop 0.01 MPa. Use within the maximum flow rate.

If the maximum flow rate is exceeded temporarily, or if the filter is installed at a place with high levels of pulsation, s

Note 2: The secondary oil concentration is the value when the primary oil concentration is 30 mg/m³, the inlet air temperature is 21°C and before the oil is saturated.

Note 3: Install an oil mist filter (S type) as a prefilter on the primary side to prevent early clogging.

Note 4: When MX1000-W-F1 with an automatic drain is selected, the minimum operation pressure is 0.2 MPa, the maximum operation pressure is 0.7 MPa, and the guaranteed pressure resistance is 1.05 MPa. Refer to the maximum flow rate graph (next page) for maximum flow rate.

Note 5: Min. operating pressure is 0.15MPa for "F1" with automatic drain.

Clean room specifications (Catalog No. CB-033SA)

- Dust generation preventing structure for use in cleanrooms

MX*000-..... - P7*

Super Oil Mist Filter Series

How to order

How to order



* Refer to page 9 for explanation of an option.

A Model no.

M	M	M	M	M
X	X	X	X	X
1	3	4	6	8
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

A Model no.

B Port size

C Port thread type

D Option

E Display unit

F Piping adapter set (Attached)

G Bracket (attached)

Symbol	Descriptions					
B Port size						
6	1/8	●				
8	1/4	●	●	●		
10	3/8		●	●		
15	1/2			●		
20	3/4				●	●
25	1				●	●

C Port thread type		Note 1				
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●

D Option			Note 2				
Drainage	Blank	With manual drain cock	●	●	●	●	●
	F1 Note 3, Note 4	Automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●	●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●	●
	Z	Nylon bowl	●	●	●	●	●
	M	Metal bowl		●	●	●	●
	M1	Metal bowl with manual drain cock		●	●	●	●
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)				●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●	●

E Display unit						
Blank	MPa display, Rc thread	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●

F Piping adapter set (attached)		Note 5 Pages 151 to 153				
Blank	Not attached	●	●	●	●	●
A6*W	1/8 piping adapter set	●				
A8*W	1/4 piping adapter set	●	●	●		
A10*W	3/8 piping adapter set	●	●	●		
A15*W	1/2 piping adapter set		●	●		
A20*W	3/4 piping adapter set			●	●	●
A25*W	1 piping adapter set				●	●
A32*W	1 1/4 piping adapter set				●	●

* Adaptor screw type						
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●

G Bracket (attached)		Page 148				
Blank	Not attached	●	●	●	●	●
BW	C type bracket	●	●	●	●	●

⚠ Note on model no. selection

Note 1: When G threads or NPT threads are selected, the IN, OUT, and drain port (metal bowl automatic drain) are available.

Note 2: Select options for each drainage, bowl material and differential pressure detection.

When selecting options for several items, list options in order from the top.

Note 3: Automatic drain of NO type can not be selected.

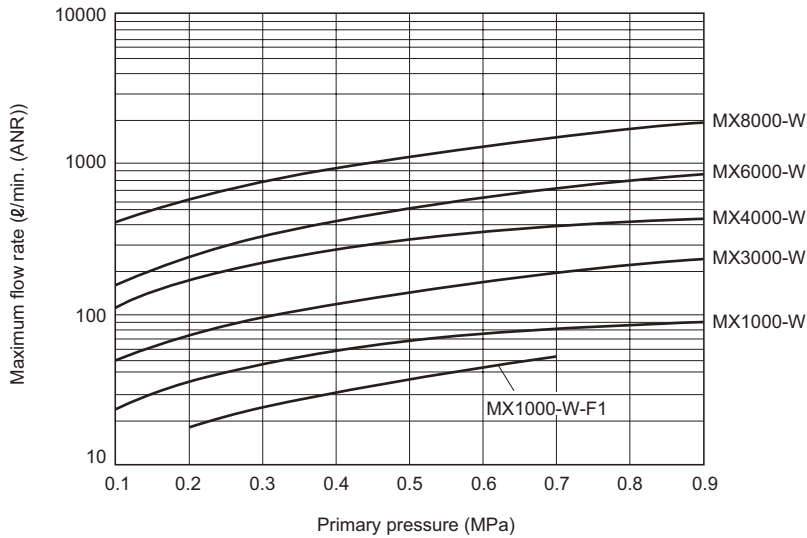
Note 4: Refer to page 11 for the automatic drain use conditions.

Note 5: The piping adapter set and C bracket cannot be used together.

Super Oil Mist Filter Series

Flow characteristics (maximum flow rate)

● MX*000-W



Oil mist filter: Using optional mantle

Major recommended circuit

Applications

* S type



General industrial air
(Secondary oil concentration
0.5mg/m³ or less)

- Air tool
Air drill, air screw driver
air grinder
- Labor saving device and components
- Pneumatic jigs and tools
- Air chuck
- Air vice
- Precision part cleaning air blow

* M type



Oil free air
(Secondary oil concentration
0.01mg/m³ or less)

- Instrumentation
- Measurement
- Logic control
- Movable element and pure fluid element
- Luxury painting
- Precise industry

* X type



Deodorization air
(Secondary oil concentration
0.003mg/m³ or less)

- Food industry
- Pharmaceutical industry
- Agitation
- Transportation
- Dry
- Package
- Air for brewing

* MX type



Super oilless air
(Secondary oil concentration
0.001mg/m³ or less)

- Optical type positioning device
- LASER finishing machine

Option symbol and shape of mantle

	Option symbol	Appearance
M*000-W	Blank (M type)	End plate black Plastic form red
	S (S type)	End plate green Plastic form red
	X (X type)	End plate black Punching metal
MX*000-W		black End plate green Plastic form red

CAUTION: Changes for product upgrades may be made without prior notice.

When placing an order, confirm the option symbol for the part model given here.

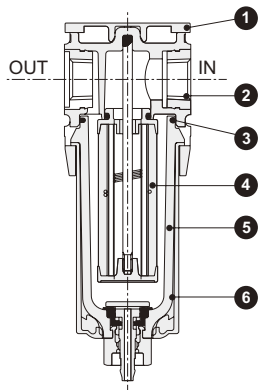
CAUTION The secondary oil concentration is the value when the primary oil concentration is 30 mg/m³, the inlet air temperature is 21°C and before the oil is saturated.

Super Oil Mist Filter Series

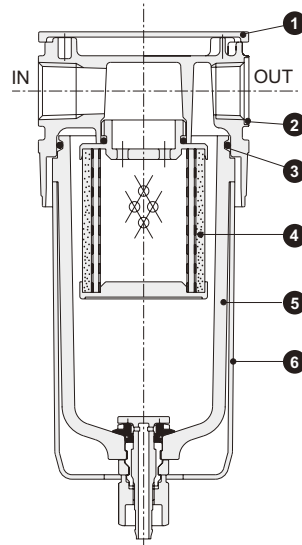
Internal structure and parts list

Internal structure and parts list

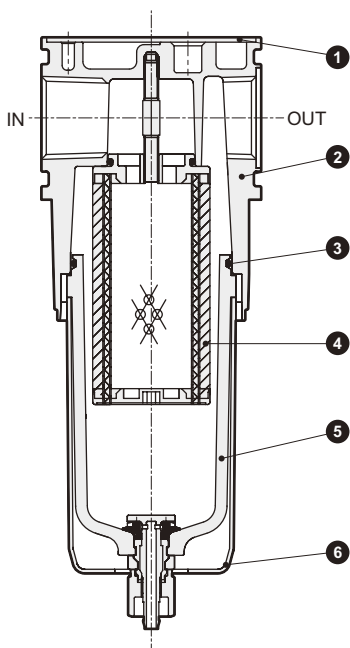
● MX1000-W



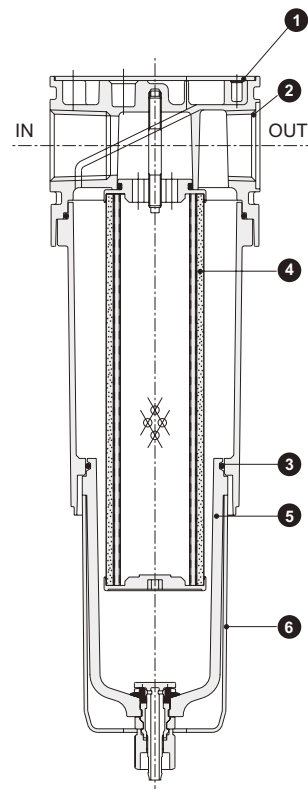
● MX3000-W/MX4000-W



● MX6000-W



● MX8000-W



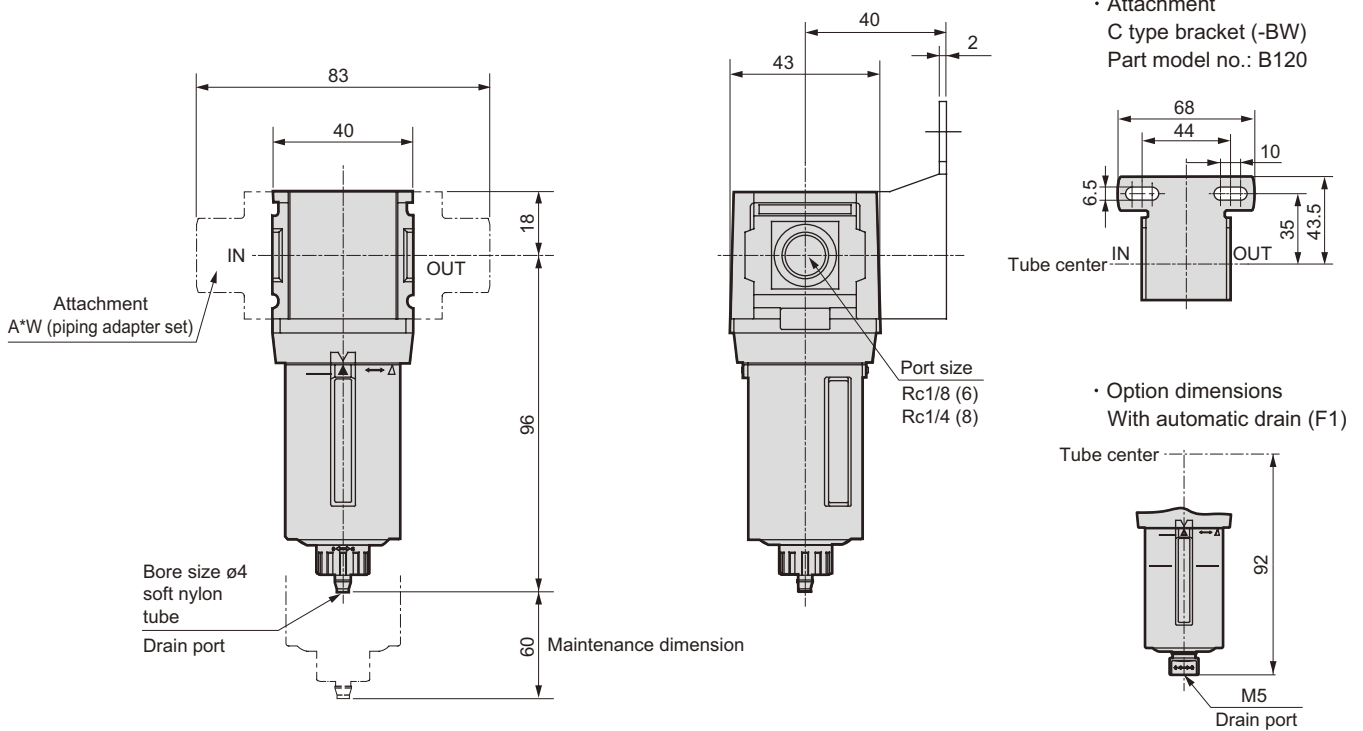
No.	Part name	Material				
		MX1000-W	MX3000-W	MX4000-W	MX6000-W	MX8000-W
1	Plate cover	ABS resin				
2	Body	Polyamide resin	Aluminum alloy die-casting			
3	O ring Note 1	Special nitrile rubber				
4	Mantle assembly	-				
5	Bowl assembly	Polycarbonate resin, polyacetal resin, urethane rubber resin				
6	Bowl guard	Polyamide resin	Polyamide resin, steel			

Note 1: The MX1000-W O ring has a special shape.

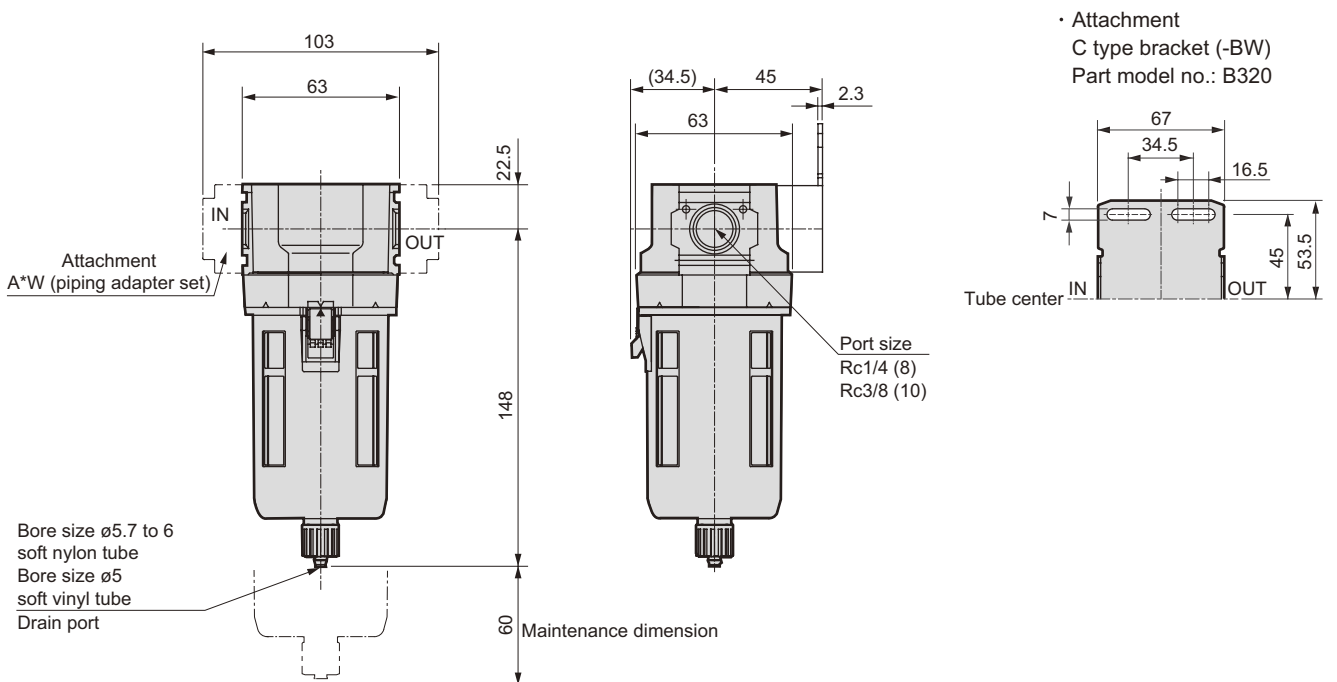
Super Oil Mist Filter Series

Dimensions

● MX1000-W



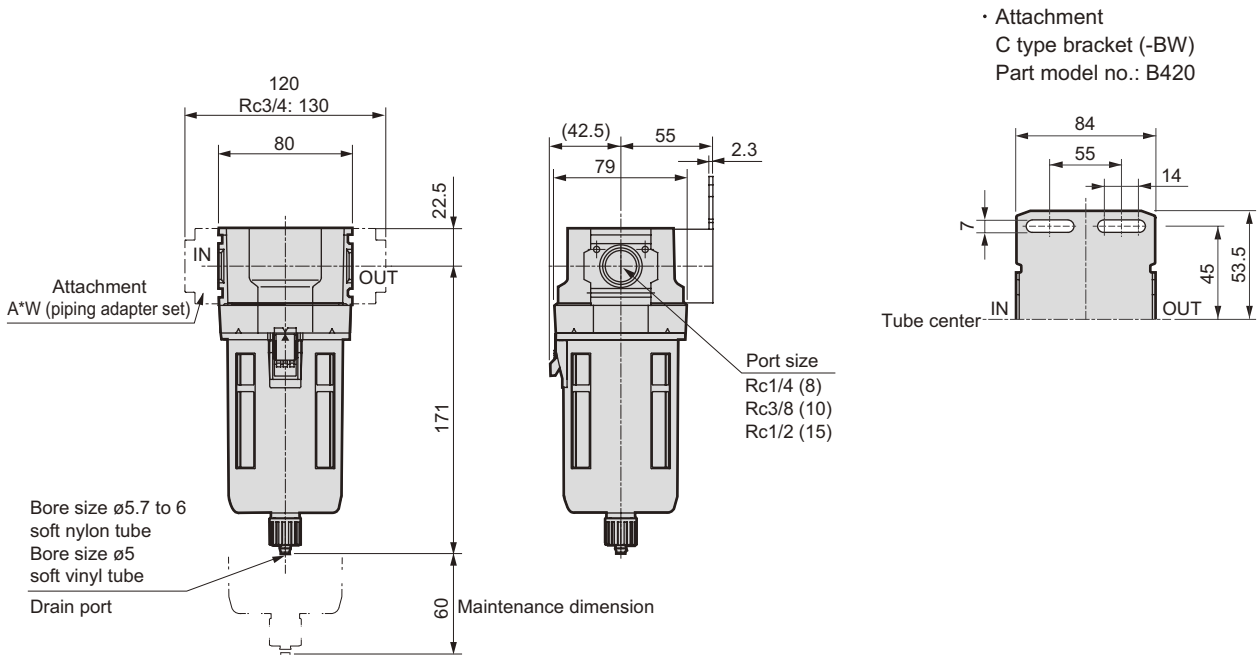
● MX3000-W



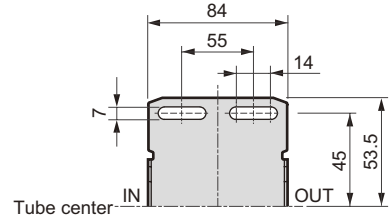
● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.
Note: The C-type bracket and piping adapter set attachments cannot be used at the same time.

Dimensions

● MX4000-W

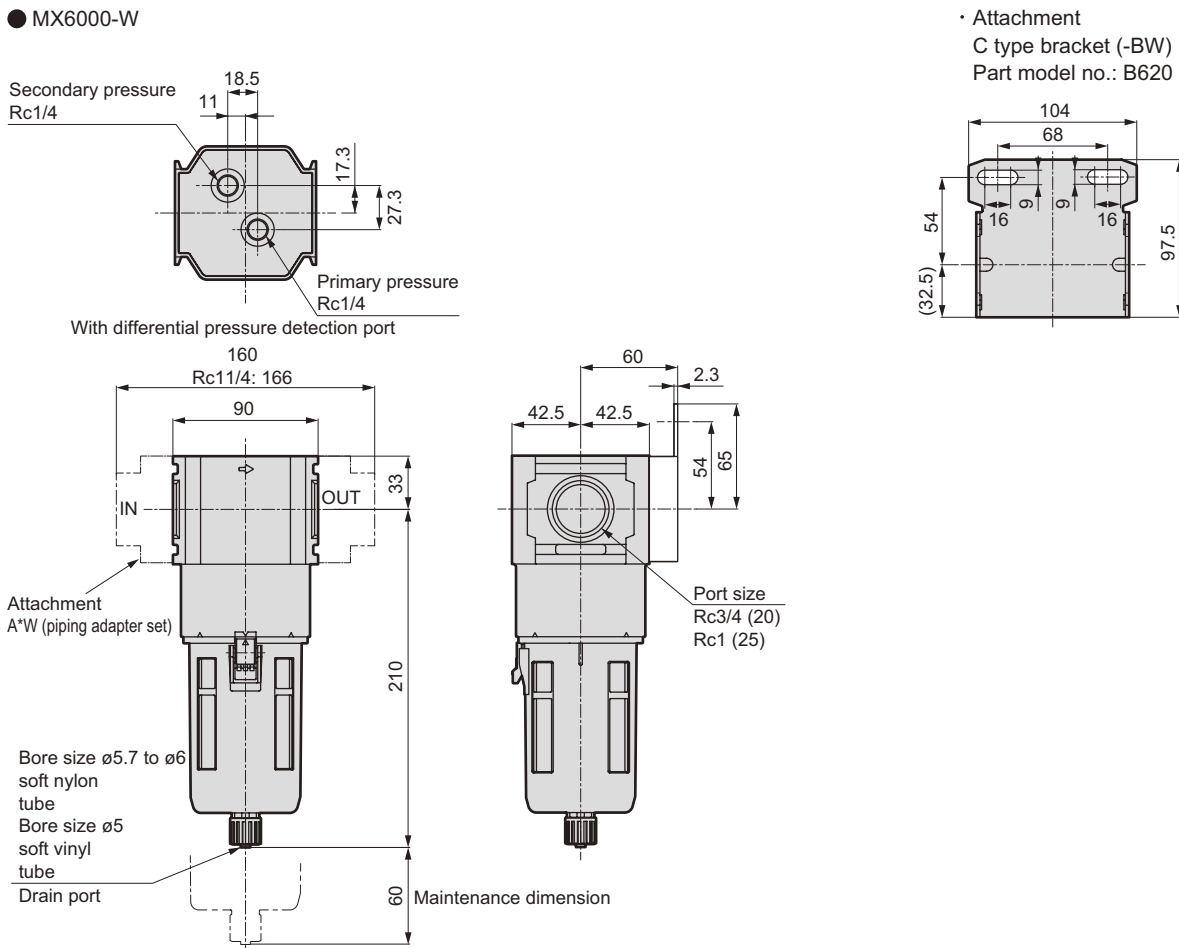


• Attachment
C type bracket (-BW)
Part model no.: B420

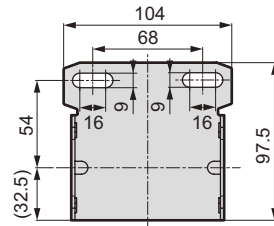


● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

● MX6000-W



• Attachment
C type bracket (-BW)
Part model no.: B620



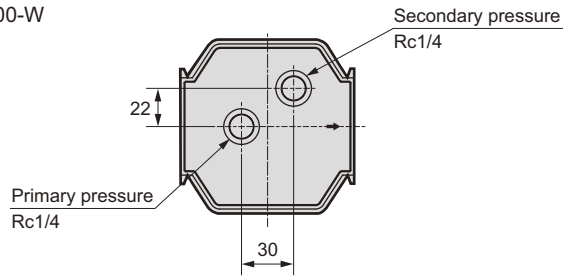
● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

Note: The C-type bracket and piping adapter set attachments cannot be used at the same time.

Super Oil Mist Filter Series

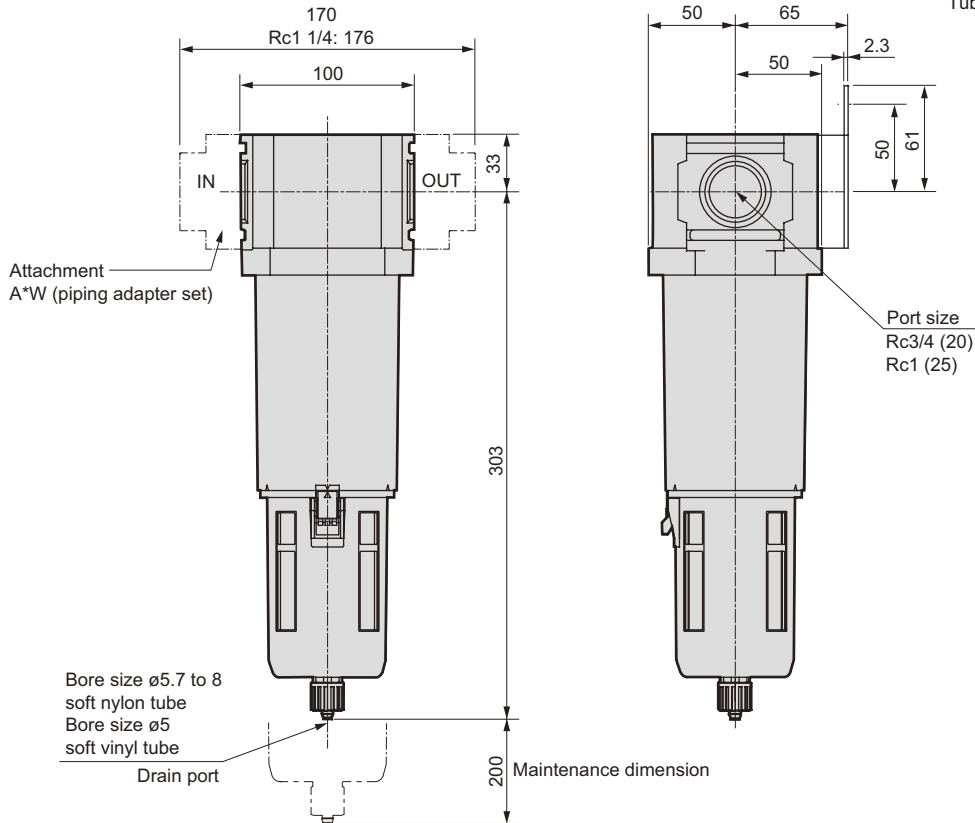
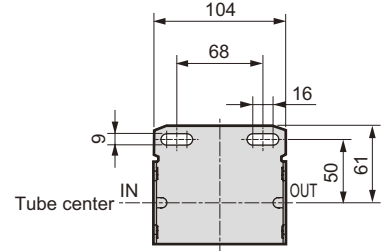
Dimensions

● MX8000-W



Option
(With differential pressure detection port)

• Attachment
C type bracket (-BW)
Part model no.: B820



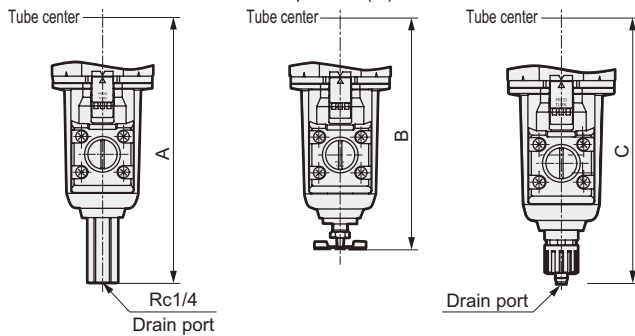
● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

● Metal bowl (option) (MX3000-W, MX4000-W, MX6000-W, MX8000-W)

Metal manual cock with automatic drain (F1M)

With petcock (M)

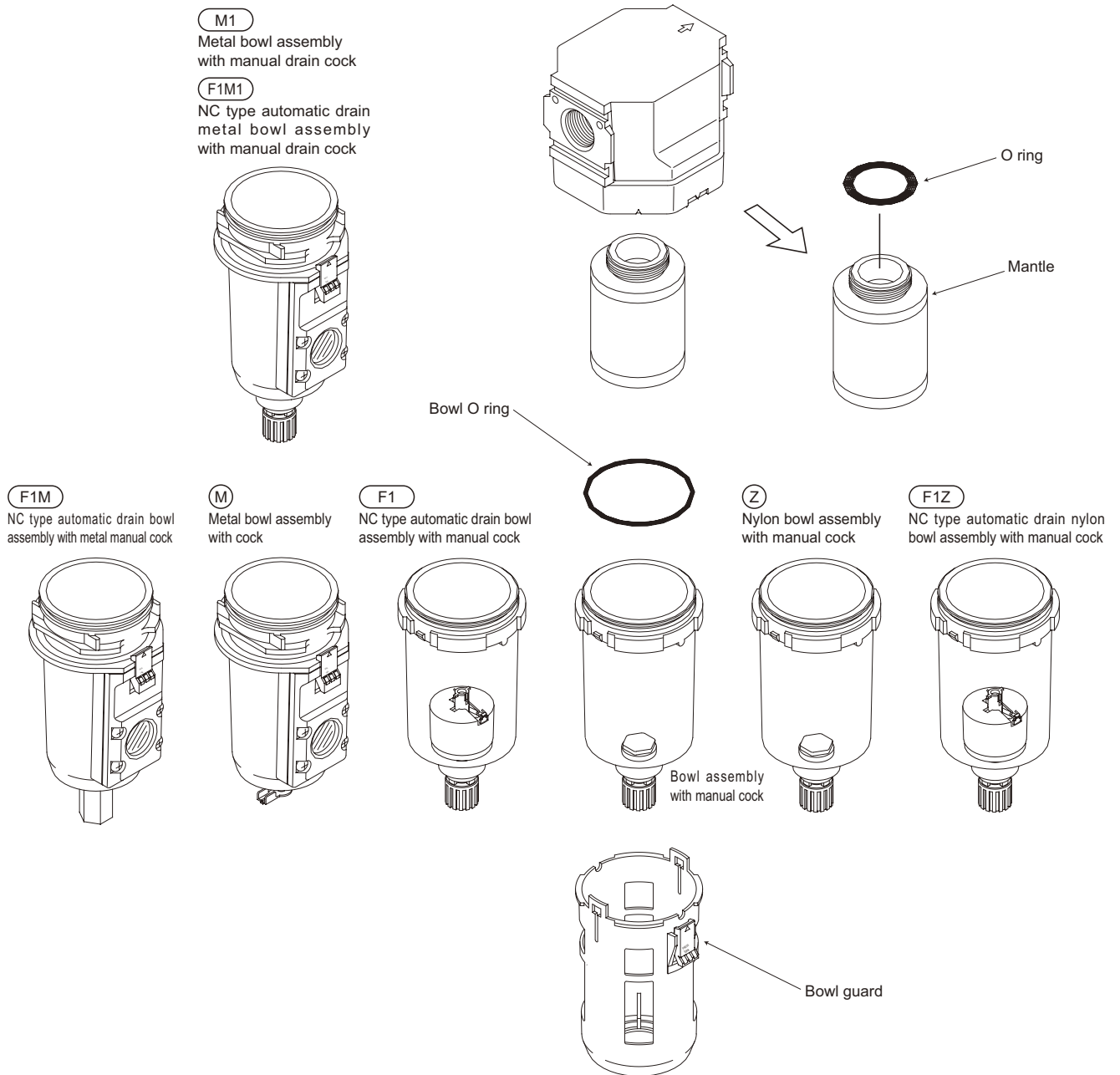
Standard manual drain cock (M1)



Dimensions table

Model no.	F1M	M	M1
	A	B	C
MX3000-W	164	143.5	154
MX4000-W	187	166.5	177
MX6000-W	226	205	216
MX8000-W	319	298	309

Optional parts table - Oil mist filter



Repair kits model no. (Set consisting of O ring, mantle, bowl O ring)

Model	
MX1000-W	MX1000-KIT
MX1000-W-F1	MX1000-KIT-F1
MX3000-W	MX3000-KIT
MX4000-W	MX4000-KIT
MX6000-W	MX6000-KIT
MX8000-W	MX8000-KIT

Repair kits model no. (Set consisting of O ring, mantle)

Model	
MX1000-W	MX1000-MANTLE-ASSY
MX1000-W-F1	MX1000-MANTLE-ASSY-F1
MX3000-W	MX3000-MANTLE-ASSY
MX4000-W	MX4000-MANTLE-ASSY
MX6000-W	MX6000-MANTLE-ASSY
MX8000-W	MX8000-MANTLE-ASSY

* Refer to the air filter options and parts table on pages 89 and 90 for the bowl assembly and bowl guard.

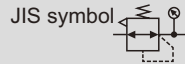


Regulator standard white Series

R1000/R2000/R3000 R4000/R6000/R8000-W Series

Compact, pressure gauge embedded.

Port size: 1/8 to 1



Specifications

Descriptions	R1000-W	R2000-W	R3000-W	R4000-W	R6000-W	R8000-W
Appearance						
Working fluid	Compressed air					
Max. working pressure MPa	1.0					
Withstanding pressure MPa	1.5					
Ambient temperature range °C	5 to 60					Note 1
Set pressure range MPa	0.05 to 0.85					
Relief	With relief mechanism					
Port size Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg	0.16	0.31	0.45	0.7	1.0	1.6
Standard accessories	Pressure gauge, nut for panel mount					Pressure gauge

Note 1: The working temperature range of the pressure switch with indicator PPD assembly "R1" is 5 to 50°C.

Ozone specifications

(Page 183)

R*000- ... -W ... - **P11**

Clean room specifications

(Catalog No. CB-033SA)

● Dust generation preventing structure for use in cleanrooms

R*000- - **P7***

How to order

* Refer to page 9 for explanation of an option.



A Model no.

B Port size

C Port thread type

D Option

E Display unit

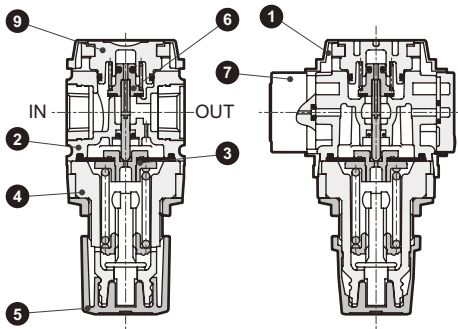
		A Model no.					
		R 1	R 2	R 3	R 4	R 6	R 8
F Piping adapter set (attached)		0	0	0	0	0	0
G Attachment (attached)		0	0	0	0	0	0
H Piping adapter set (attached)		0	0	0	0	0	0
Symbol	Descriptions						
B Port size							
6	1/8	●					
8	1/4	●	●	●	●		
10	3/8		●	●	●		
15	1/2				●		
20	3/4					●	●
25	1					●	●
C Port thread type		Note 1					
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●
D Option		Note 2					
Pressure range	Blank	0.05 to 0.85MPa		●	●	●	●
	L	0.05 to 0.35MPa		●	●	●	●
Relief	Blank	With relief mechanism		●	●	●	●
	N	Nonrelief type		●	●	●	●
Pressure gauge	Blank	With standard pressure gauge (G401-W)		●	●	●	●
	T	Without pressure gauge (a pressure gauge port (Rc1/4) is assembled with sealed)		●	●	●	●
	T8	Pressure gauge attached (a pressure gauge port (Rc1/4) is assembled by open.)		●	●	●	●
	T6 Note 3	Digital pressure sensor PPX attached option		●	●	●	●
Flow direction	Blank	Standard flow (left → right)		●	●	●	●
	X1	Reverse flow (right → left)		●	●	●	●
E Display unit							
Blank	MPa display, Rc thread	●	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●	●
F Piping adapter set (attached)		Note 4 Pages 151 to 153					
Blank	Not attached	●	●	●	●	●	●
A6*W	1/8 piping adapter set	●					
A8*W	1/4 piping adapter set	●	●	●	●		
A10*W	3/8 piping adapter set	●	●	●	●		
A15*W	1/2 piping adapter set		●	●	●		
A20*W	3/4 piping adapter set				●	●	●
A25*W	1 piping adapter set					●	●
A32*W	1 1/4 piping adapter set					●	●
* Adaptor screw type							
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●
G Attachment (attached)		Pages 148, 194					
Blank	Not attached	●	●	●	●	●	●
BW	C type bracket	●	●	●	●	●	●
B3W Note 5	L type bracket	●	●	●	●		
B4W	B type bracket		●				
G49P	G49D-8-P10 (L: G49D-8-P04)	●	●	●	●	●	●
G59P	G59D-8-P10 (L: G59D-8-P04)	●	●	●	●	●	●
G40P	G40D-8-P10 (L: G40D-8-P04)	●	●	●	●	●	●
G50P	G50D-8-P10 (L: G50D-8-P04)	●	●	●	●	●	●
G41P	G41D-8-P10 (L: G41D-8-P04)	●	●	●	●	●	●
G52P	G52D-8-P10 (L: G52D-8-P10)	●	●	●	●	●	●
R2 Note 3	Digital pressure sensor: PPX-R10N-6M	●	●	●	●	●	●

⚠ Note on model no. selection

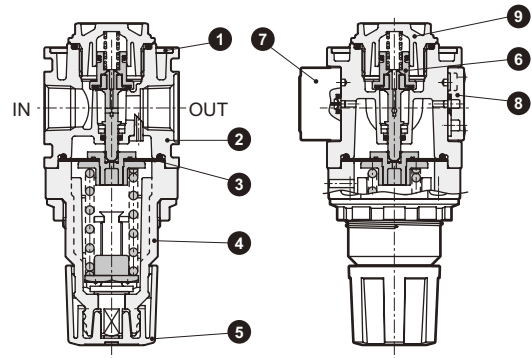
- Note 1: When G threads or NPT threads are selected, the IN, OUT, and gauge port are available.
- Note 2: When selecting options for several items, list options in order from the top.
- Note 3: When option "T6" is selected, only "blank" or "R2" is selected for the pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.
- Note 4: The piping adapter set and C type bracket cannot be used together.
- Note 5: Refer to Section 2. Regulator, in "CAUTIONS for Installation and Adjustment" (page 14) for details on mounting the L-type bracket.
- Note 6: If NPT is selected for the piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

Internal structure and parts list

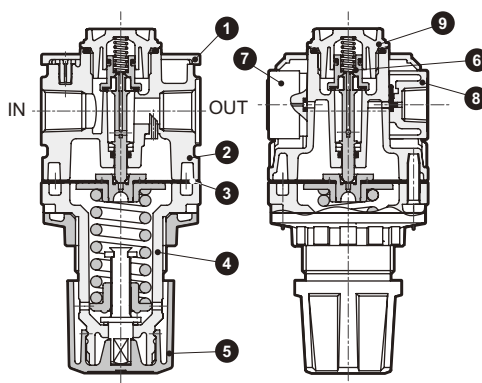
● R1000-W



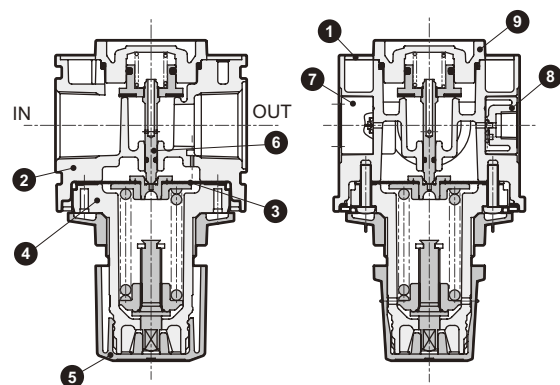
● R2000-W



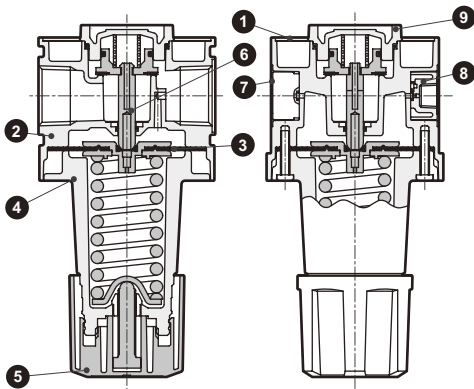
● R3000-W/R4000-W



● R6000-W



● R8000-W



No.	Part name	Material					
		R1000-W	R2000-W	R3000-W	R4000-W	R6000-W	R8000-W
1	Plate cover	ABS resin					
2	Body	Polyamide resin, steel	Aluminum alloy die-casting	Aluminum alloy die-casting			
3	Diaphragm assembly	Polyacetal resin nitrile rubber		Zinc alloy die-casting, nitrile rubber Note 3			
4	Guard	Polyamide resin	PBT resin				Aluminum alloy die-casting
5	Knob	Polyacetal resin					
6	Valve assembly	Brass, hydrogen nitrile rubber (polyacetal resin: R2000, R3000, 4000, 8000)					
7	Pressure gauge assembly	PBT resin, nitrile rubber, polyacetal resin, polycarbonate resin, brass, steel					
8	Gauge plug assembly	Polyamide resin, nitrile rubber, steel					
	Blanking plug assembly Note 1	PBT resin, nitrile rubber, copper		-		-	-
9	Bottom plug Note 4	Polyacetal resin			Aluminum alloy die-casting		

Note 1: A blank plug is enclosed with the R1000-W standard type.

Note 2: Refer to page 124 for repair parts.

Note 3: Aluminum is added for the R6000-W low-pressure type.

Note 4: The RM3000-W and RM4000-W Series material is die cast aluminum alloy.

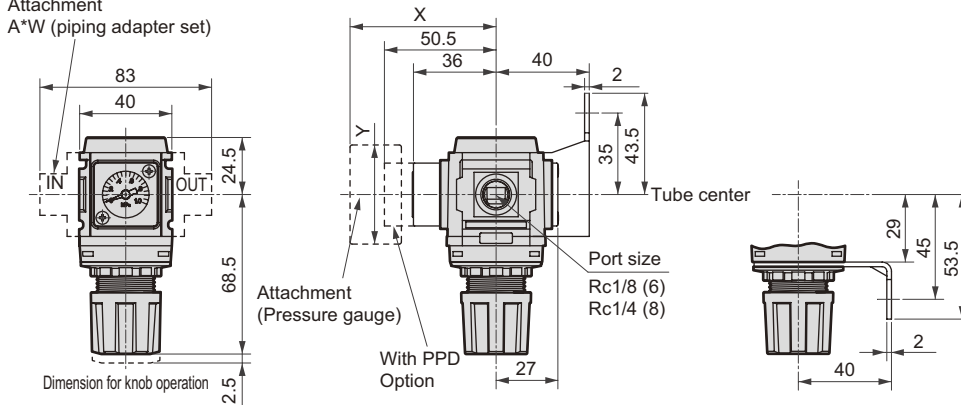
Regulator series

Dimensions

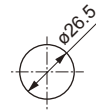


● R1000-W

Attachment
A*W (piping adapter set)



Panel cut dimension

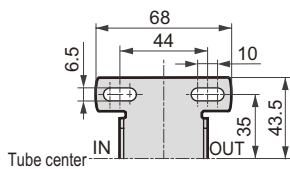


Panel plate thickness: MAX. 6mm

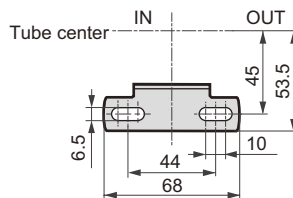
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(73.5)	ø43.5
G59P	(76)	ø52
G40P	(75.5)	ø42.5
G50P	(75.5)	ø52.5
G41P	(74)	ø42
G52P	(86)	ø52.5
R2	(74)	*30

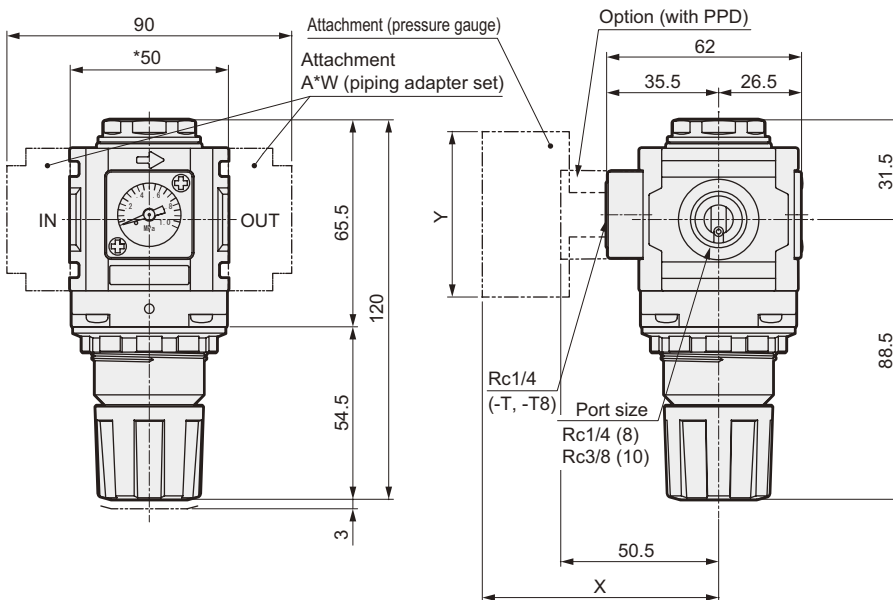
Attachment
C type bracket (-BW)
Part model no.: B120



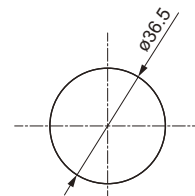
L type bracket (-B3W)
Part model no.: B130



● R2000-W



Panel cut dimension

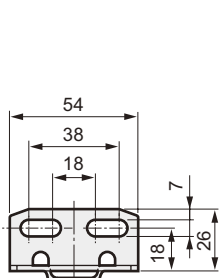


Panel plate thickness: MAX. 4mm

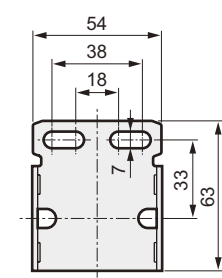
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(73)	ø43.5
G59P	(75.5)	ø52
G40P	(75)	ø42.5
G50P	(75)	ø52.5
G41P	(73.5)	ø42
G52P	(85.5)	ø52.5
R2	(73)	*30

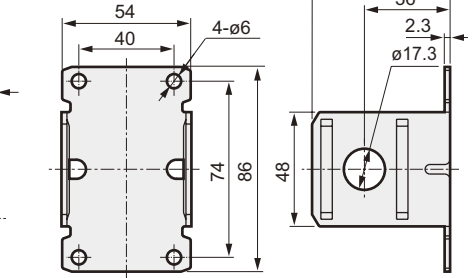
● L type bracket (-B3W)
Part model no.: B230



● C type bracket (-BW)
Part model no.: B220



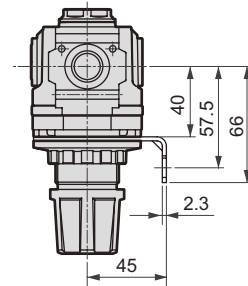
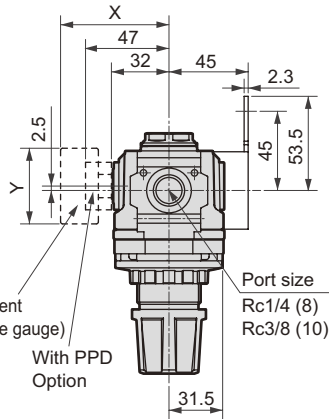
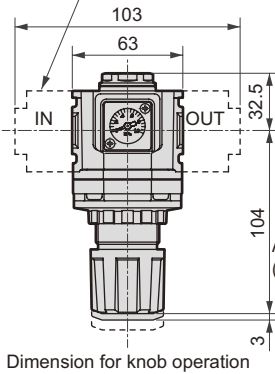
● B type bracket (-B4W)
Part model no.: B240



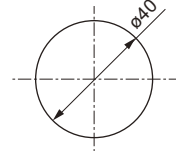
Dimensions

● R3000-W

Attachment
A*W (piping adapter set)

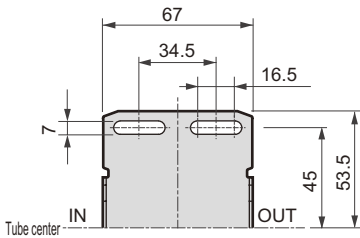


Panel cut dimension

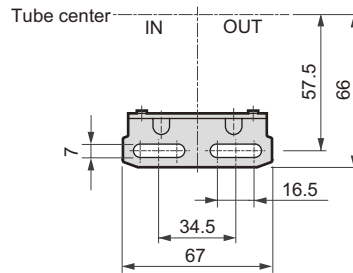


Panel plate thickness: MAX. 7mm

• Attachment (C type bracket)
C type bracket (-BW)
Part model no.: B320



L type bracket (-B3W)
Part model no.: B330

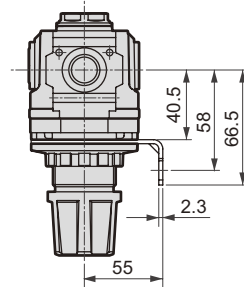
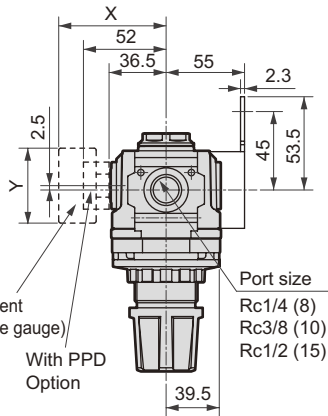
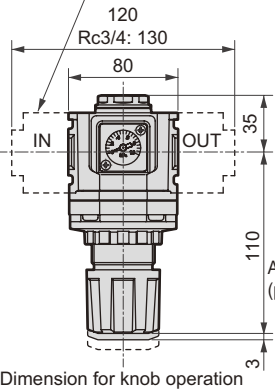


Pressure gauge attached optional dimensions table

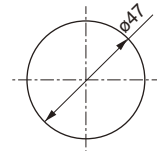
Attached pressure gauge	X	Y
G49P	(69.5)	ø43.5
G59P	(72)	ø52
G40P	(71.5)	ø42.5
G50P	(71.5)	ø52.5
G41P	(70)	ø42
G52P	(82)	ø52.5
R2	(69.5)	*30

● R4000-W

Attachment
A*W (piping adapter set)

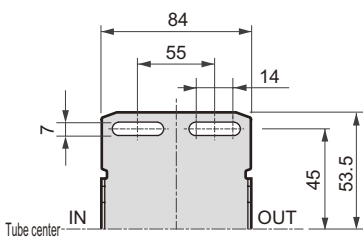


Panel cut dimension

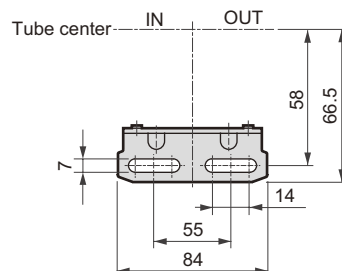


Panel plate thickness: MAX. 7mm

• Attachment
C type bracket (-BW)
Part model no.: B420



L type bracket (-B3W)
Part model no.: B430



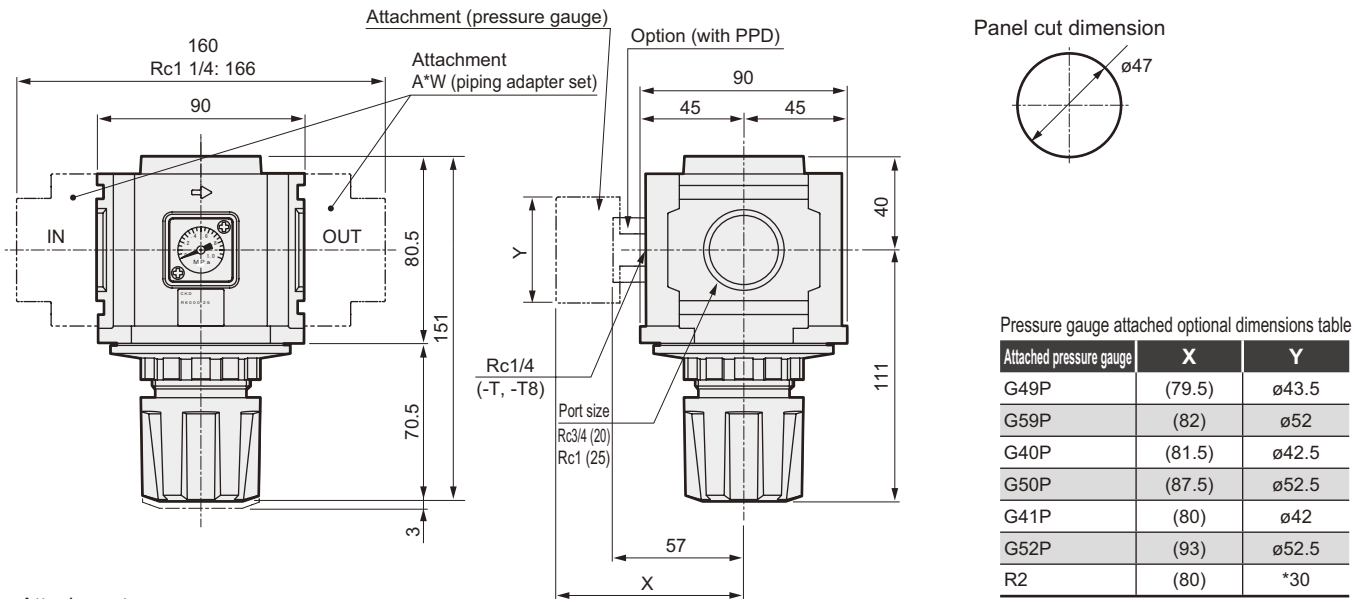
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(74.5)	ø43.5
G59P	(77)	ø52
G40P	(76.5)	ø42.5
G50P	(76.5)	ø52.5
G41P	(75)	ø42
G52P	(86)	ø52.5
R2	(75)	*30

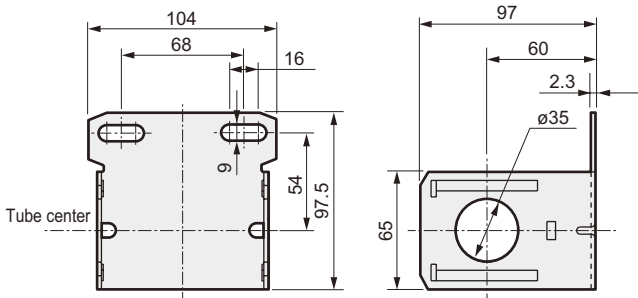
Regulator Series

Dimensions

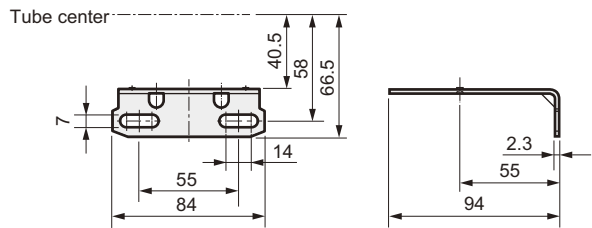
● R6000-W



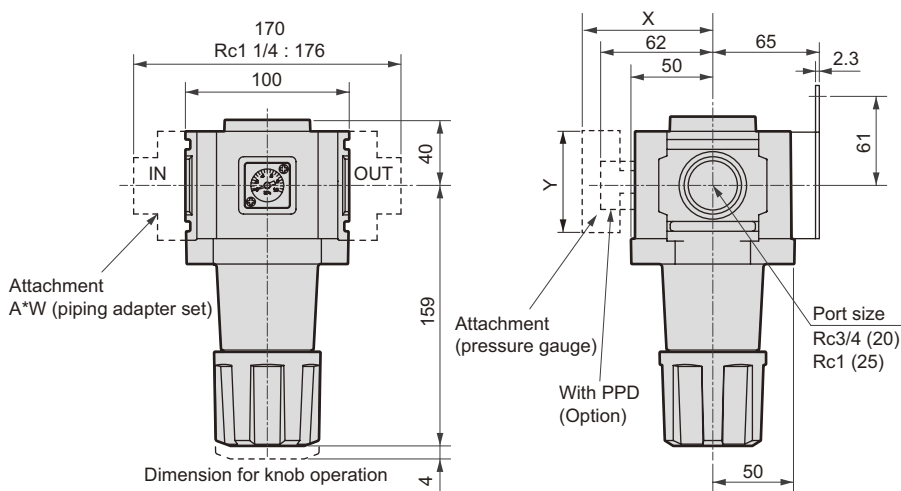
· Attachment
C type bracket (-BW)
Part model no.: B620



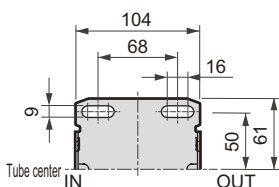
L type bracket (-B3W)
Part model no.: B430



● R8000-W



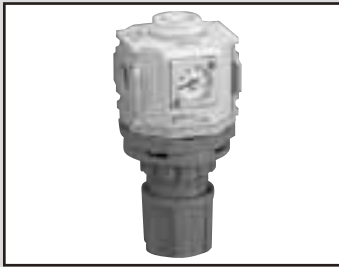
· Attachment
C type bracket (-BW)
Part model no.: B820



Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(84.5)	$\phi 43.5$
G59P	(87)	$\phi 52$
G40P	(86.5)	$\phi 42.5$
G50P	(86.5)	$\phi 52.5$
G41P	(85)	$\phi 42$
G52P	(98)	$\phi 52.5$
R2	(85)	*30

MEMO



Reverse regulator standard white Series

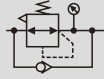
R1100/R2100/R3100

R4100/R6100/R8100-W Series

From secondary pressure to primary pressure with back flow function.

Port size: 1/8 to 1

JIS symbol



Specifications

Descriptions	R1100-W	R2100-W	R3100-W	R4100-W	R6100-W	R8100-W
Appearance						
Working fluid	Compressed air					
Max. working pressure MPa	1.0					
Withstanding pressure MPa	1.5					
Ambient temperature range °C	5 to 60					
Set pressure range (Note 2) MPa	0.05 to 0.85					
Relief	With relief mechanism					
Port size Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg	0.16	0.31	0.45	0.7	1.0	1.6
Standard accessories	Pressure gauge, nut for panel mount					Pressure gauge

Note 1: Check that the primary pressure is at least 0.05 MPa or more than the secondary pressure.

Note 2: Refer to the set pressure range for the back pressure given on page 119 when selecting the model.

Note 3: The working temperature range of the pressure switch with indicator PPD assembly "R1" is 5 to 50°C.

Ozone specifications

(Page 184)

R*100- ... W ... - P11

Clean room specifications

(Catalog No. CB-033SA)

● Dust generation preventing structure for use in cleanrooms

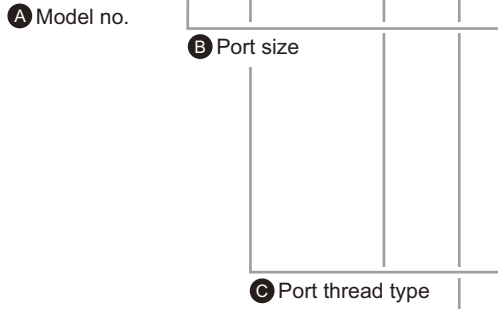
R*100- - P7*

How to order

* Refer to page 9 for explanation of an option.



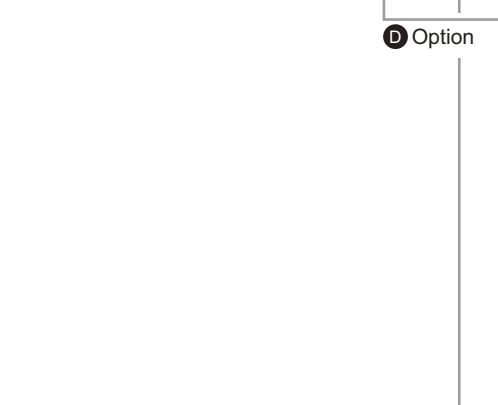
A Model no.					
R 1	R 2	R 3	R 4	R 6	R 8
1	1	1	1	1	1
0	0	0	0	0	0
0	0	0	0	0	0



Symbol	Descriptions	R 1	R 2	R 3	R 4	R 6	R 8
B Port size							
6	1/8	●					
8	1/4	●	●	●	●		
10	3/8		●	●	●		
15	1/2				●		
20	3/4					●	●
25	1					●	●



C Port thread type		Note 1					
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●



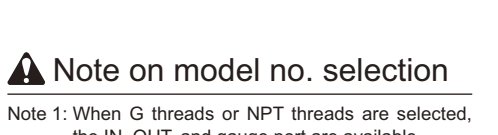
D Option		Note 2, Note 4						
Pressure range	Blank	0.05 to 0.85MPa	●	●	●	●	●	●
	L	0.05 to 0.35MPa	●	●	●	●	●	●
Relief	Blank	With relief mechanism	●	●	●	●	●	●
	N	Nonrelief type	●	●	●	●	●	●
Pressure gauge	Blank	With standard pressure gauge (G401-W)	●	●	●	●	●	●
	T	Without pressure gauge (a pressure gauge port (Rc1/4) is assembled with sealed)	●	●	●	●	●	●
	T8	Pressure gauge attached (a pressure gauge port (Rc1/4) is assembled by open.)	●	●	●	●	●	●
	T6 Note 3	Digital pressure sensor PPX attached option	●	●	●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●	●	●



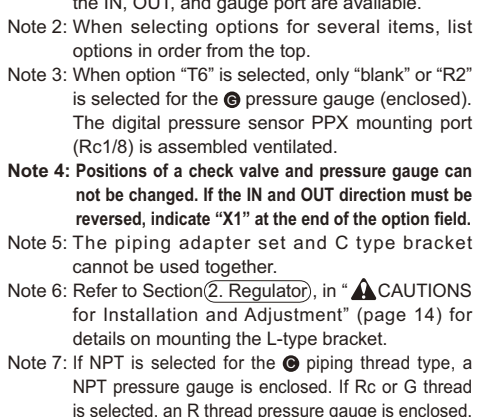
E Display unit							
Blank	MPa display, Rc thread	●	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●	●



F Piping adapter set (attached)		Note 5 Pages 151 to 153					
Blank	Not attached	●	●	●	●	●	●
A6*W	1/8 piping adapter set	●					
A8*W	1/4 piping adapter set	●	●	●	●		
A10*W	3/8 piping adapter set	●	●	●	●		
A15*W	1/2 piping adapter set		●	●	●		
A20*W	3/4 piping adapter set				●	●	●
A25*W	1 piping adapter set					●	●
A32*W	1 1/4 piping adapter set					●	●



* Adaptor screw type							
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●



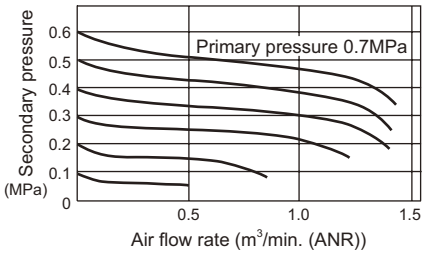
G Attachment (attached)		Pages 148, 194					
Blank	Not attached	●	●	●	●	●	●
BW	C type bracket	●	●	●	●	●	●
B3W Note 6	L type bracket	●	●	●	●		
B4W	B type bracket		●				
G49P	G49D-8-P10 (L: G49D-8-P04)	●	●	●	●	●	●
G59P	G59D-8-P10 (L: G59D-8-P04)	●	●	●	●	●	●
G40P	G40D-8-P10 (L: G40D-8-P04)	●	●	●	●	●	●
G50P	G50D-8-P10 (L: G50D-8-P04)	●	●	●	●	●	●
G41P	G41D-8-P10 (L: G41D-8-P04)	●	●	●	●	●	●
G52P	G52D-8-P10 (L: G52D-8-P10)	●	●	●	●	●	●
R2 Note 3	Digital pressure sensor: PPX-R10N-6M	●	●	●	●	●	●

- Note on model no. selection**
- Note 1: When G threads or NPT threads are selected, the IN, OUT, and gauge port are available.
- Note 2: When selecting options for several items, list options in order from the top.
- Note 3: When option "T6" is selected, only "blank" or "R2" is selected for the pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.
- Note 4: Positions of a check valve and pressure gauge can not be changed. If the IN and OUT direction must be reversed, indicate "X1" at the end of the option field.
- Note 5: The piping adapter set and C type bracket cannot be used together.
- Note 6: Refer to Section 2. Regulator, in "CAUTIONS for Installation and Adjustment" (page 14) for details on mounting the L-type bracket.
- Note 7: If NPT is selected for the piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

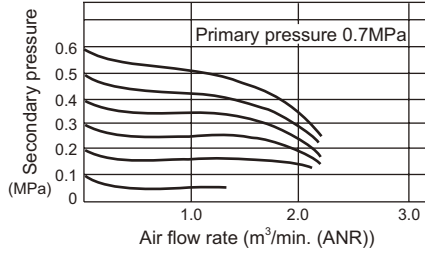
Regulator series

Flow characteristics

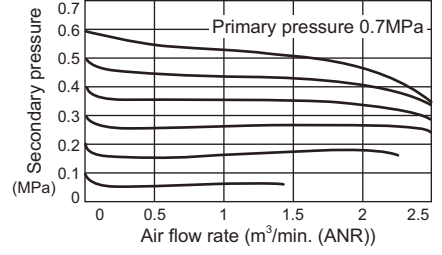
● R1100-6-W



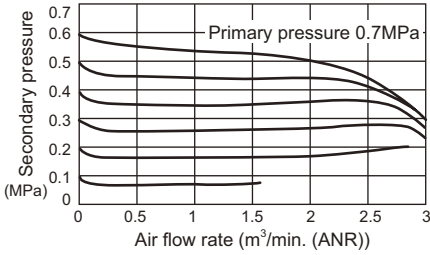
● R1100-8-W



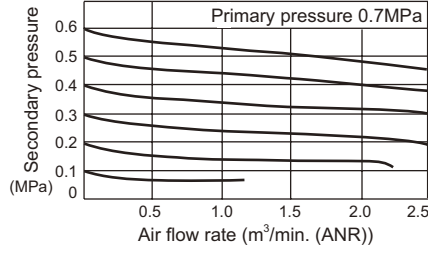
● R2100-8-W



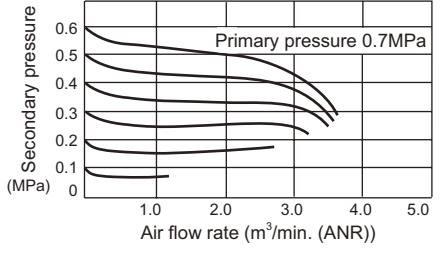
● R2100-10-W



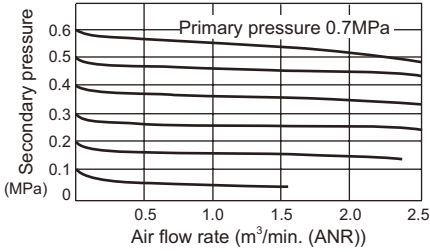
● R3100-8-W



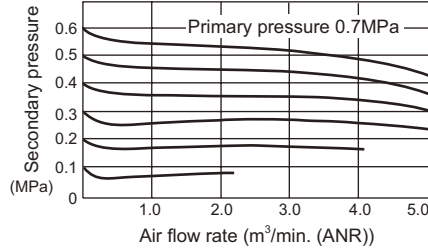
● R3100-10-W



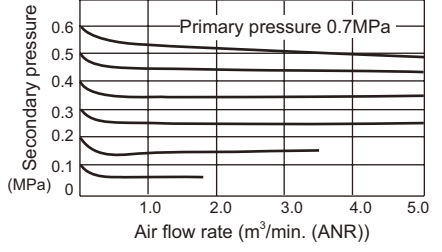
● R4100-8-W



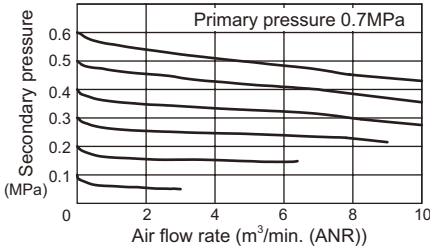
● R4100-10-W



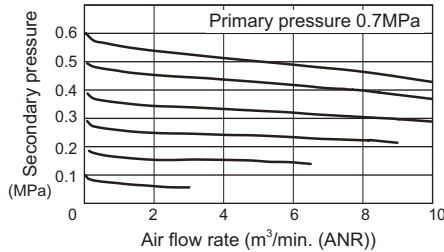
● R4100-15-W



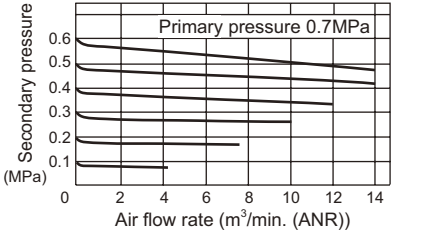
● R6100-20-W



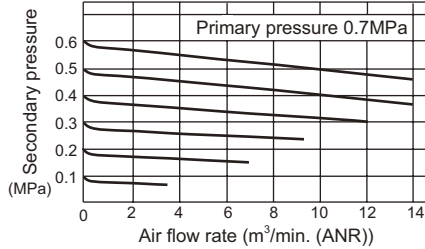
● R6100-25-W



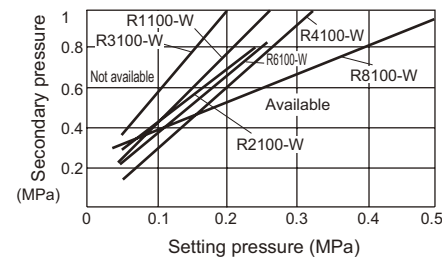
● R8100-20-W



● R8100-25-W



● Set pressure range for back pressure

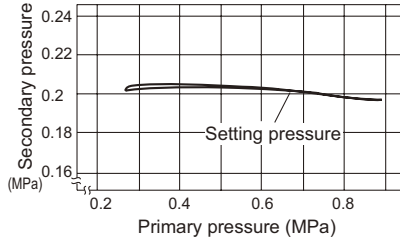


Note: The upper side of the graph is nonusable and the lower side usable.

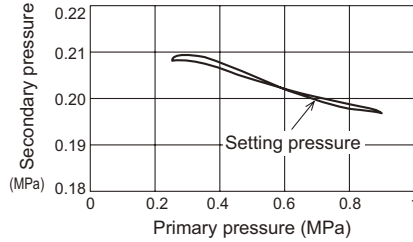
Example: If R4100-W is set to set pressure 0.2 MPa and the secondary back pressure is 0.6 MPa or more, the secondary pressure will not be released to the primary side.

Pressure characteristics

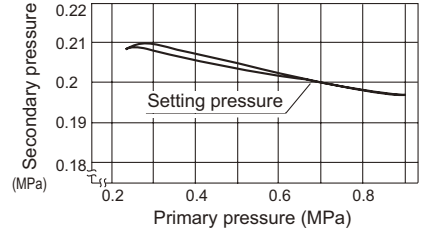
● R1100-W



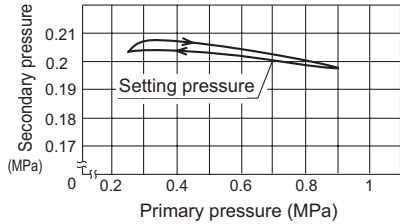
● R2100-W



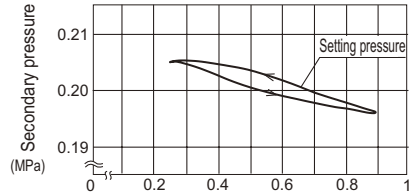
● R3100-W



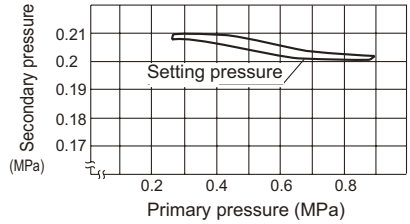
● R4100-W



● R6100-W

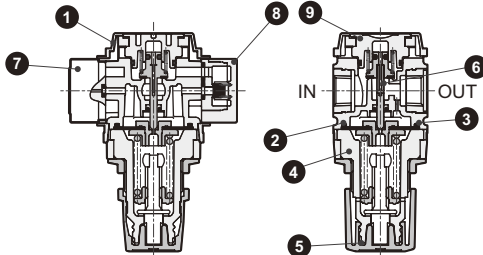


● R8100-W

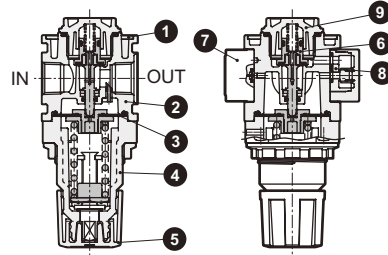


Internal structure and parts list

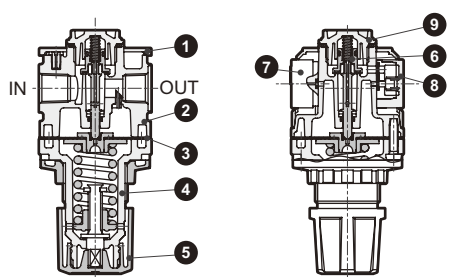
● R1100-W



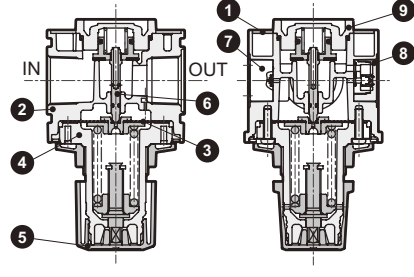
● R2100-W



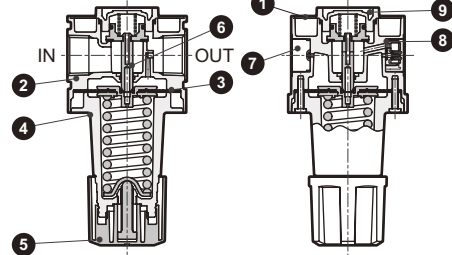
● R3100-W/R4100-W



● R6100-W



● R8100-W

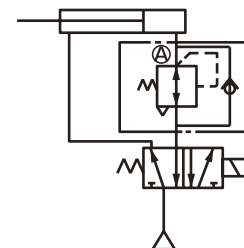


Functional explanation

When the primary pressure is introduced from the IN side, the check valve functions as a regular regulator because it closes with primary pressure and spring load. When primary pressure is released by a changeover valve such as a shut-off valve, the check valve opens with secondary pressure. Pressure in the diaphragm chamber is released and pressure drops. This causes the diaphragm to be pressed down by the pressure adjustment spring. The main valve (valve assembly) opens, and the air on the OUT side is discharged.

● Circuit diagram

When cylinder head end and rod end pressure differs.



Note: Set back pressure A for when the primary pressure is released within the range in the graph for the regulator's set pressure.

No.	Part name	Material					
		R1100-W	R2100-W	R3100-W	R4100-W	R6100-W	R8100-W
1	Plate cover	ABS resin					
2	Body	Polyamide resin, steel		Aluminum alloy die-casting			
3	Diaphragm assembly	Polyacetal resin nitrile rubber		Zinc alloy die-casting, nitrile rubber Note 2			
4	Guard	Polyamide resin		PBT resin			Aluminum alloy die-casting
5	Knob	Polyacetal resin					
6	Valve assembly	Brass, hydrogen nitrile rubber (polyacetal resin: R2100-W, R3100-W, 4100-W, 8100-W)					
7	Pressure gauge assembly	PBT resin, nitrile rubber, polyacetal resin, polycarbonate resin, brass, steel					
8	Check valve total assemblies	PBT resin, nitrile rubber, stainless steel wire, steel					
9	Bottom plug	Polyacetal resin				Aluminum alloy die-casting	

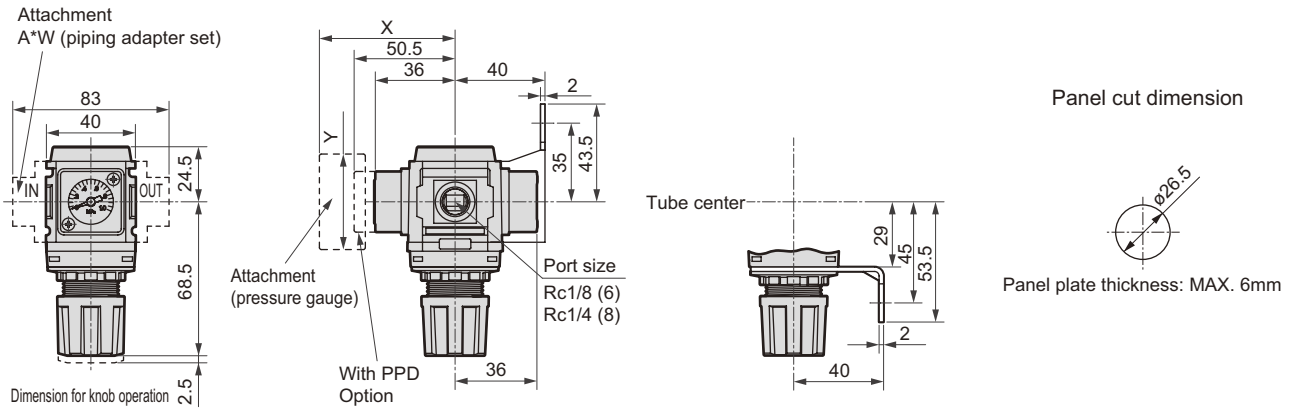
Note 1: Refer to page 124 for repair kits.

Note 2: Aluminum is added for the R6000-W low-pressure type.

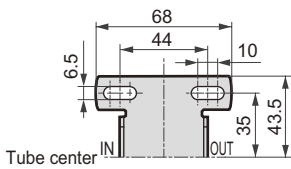
Regulator Series

Dimensions

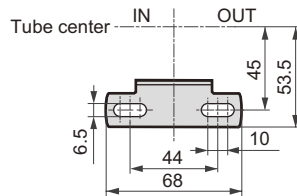
● R1100-W



• Attachment
C type bracket (-BW)
Part model no.: B120



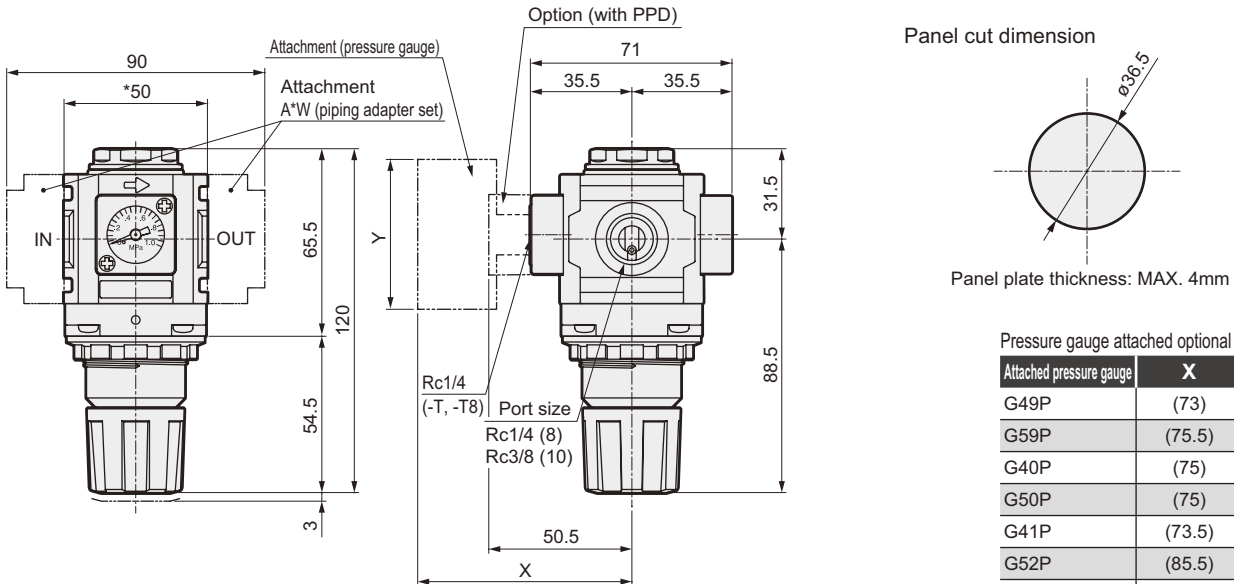
L type bracket (-B3W)
Part model no.: B130



Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(73.5)	ø43.5
G59P	(76)	ø52
G40P	(75.5)	ø42.5
G50P	(75.5)	ø52.5
G41P	(74)	ø42
G52P	(86)	ø52.5
R2	(74)	*30

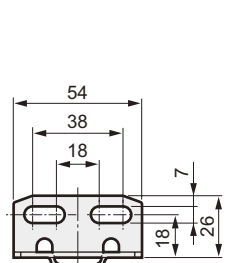
● R2100-W



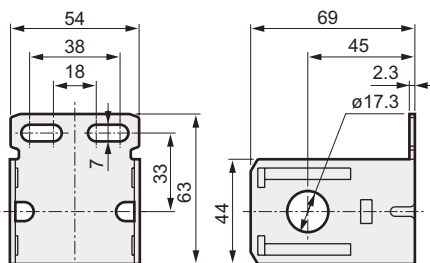
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(73)	ø43.5
G59P	(75.5)	ø52
G40P	(75)	ø42.5
G50P	(75)	ø52.5
G41P	(73.5)	ø42
G52P	(85.5)	ø52.5
R2	(73)	*30

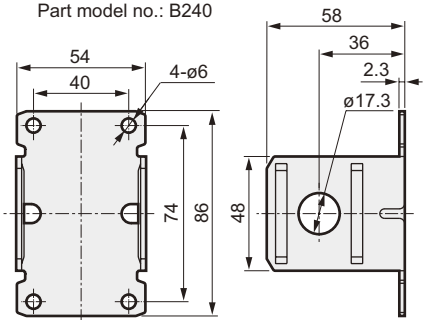
● L type bracket (-B3W)
Part model no.: B230



● C type bracket (-BW)
Part model no.: B220

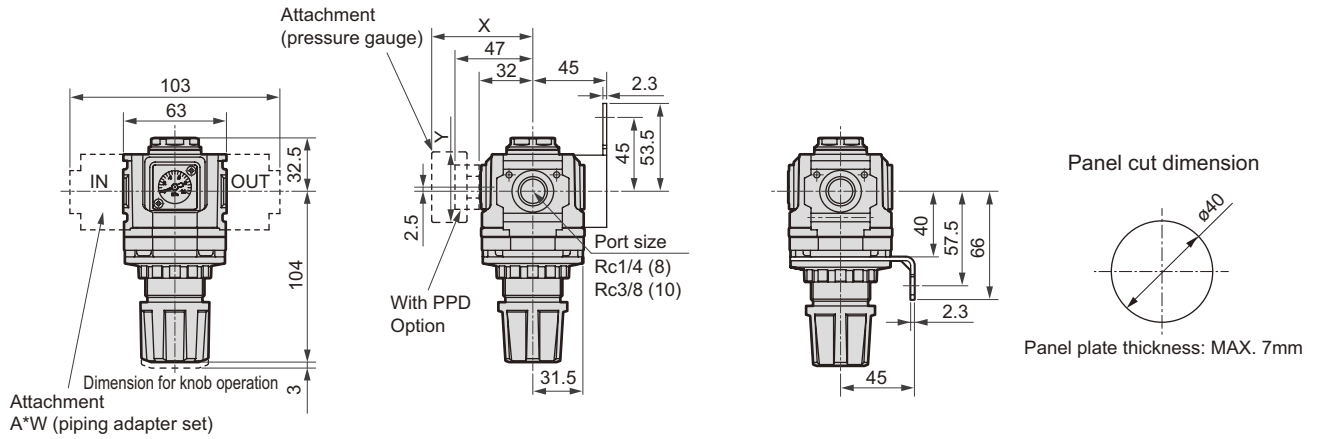


● B type bracket (-B4W)
Part model no.: B240



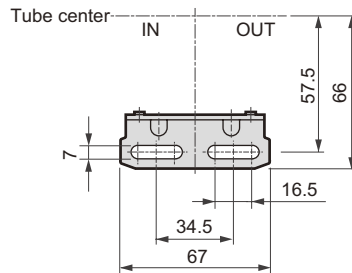
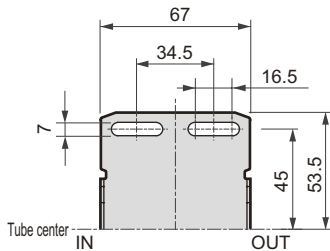
Dimensions

● R3100-W



· Attachment
C type bracket (-BW)
Part model no.: B320

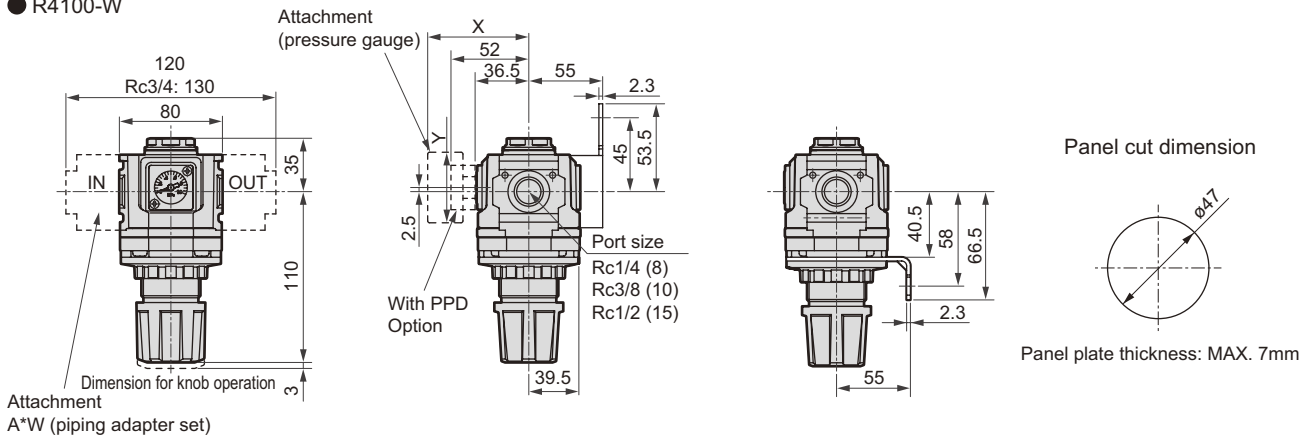
L type bracket (-B3W)
Part model no.: B330



Pressure gauge attached optional dimensions table

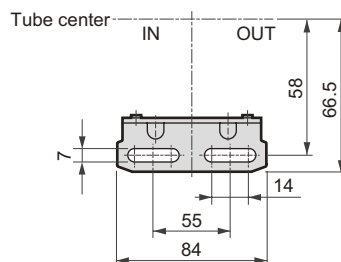
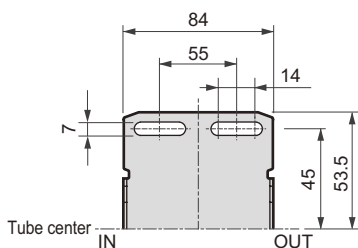
Attached pressure gauge	X	Y
G49P	(69.5)	$\phi 43.5$
G59P	(72)	$\phi 52$
G40P	(71.5)	$\phi 42.5$
G50P	(71.5)	$\phi 52.5$
G41P	(70)	$\phi 42$
G52P	(82)	$\phi 52.5$
R2	(69.5)	*30

● R4100-W



· Attachment
C type bracket (-BW)
Part model no.: B420

L type bracket (-B3W)
Part model no.: B430



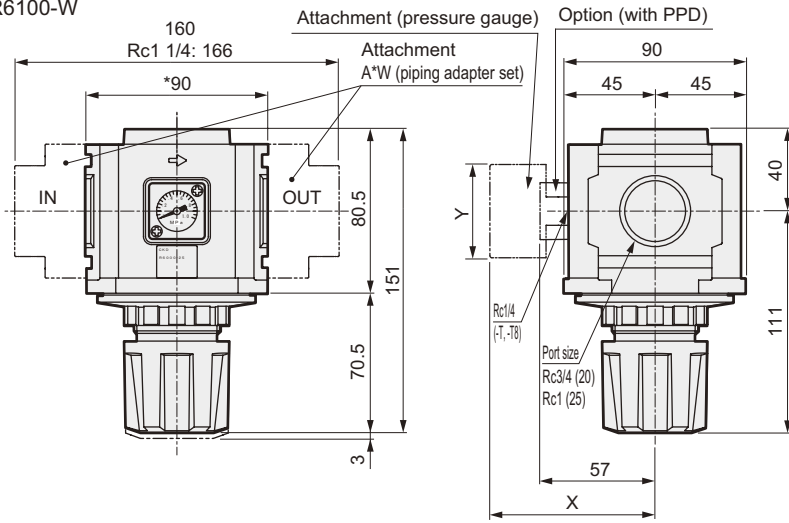
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(74.5)	$\phi 43.5$
G59P	(77)	$\phi 52$
G40P	(76.5)	$\phi 42.5$
G50P	(76.5)	$\phi 52.5$
G41P	(75)	$\phi 42$
G52P	(86)	$\phi 52.5$
R2	(75)	*30

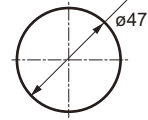
Regulator series

Dimensions

● R6100-W



Panel cut dimension

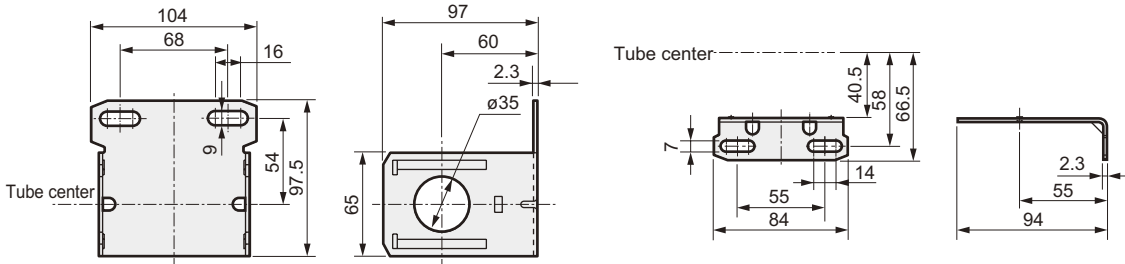


Pressure gauge optional dimensions table

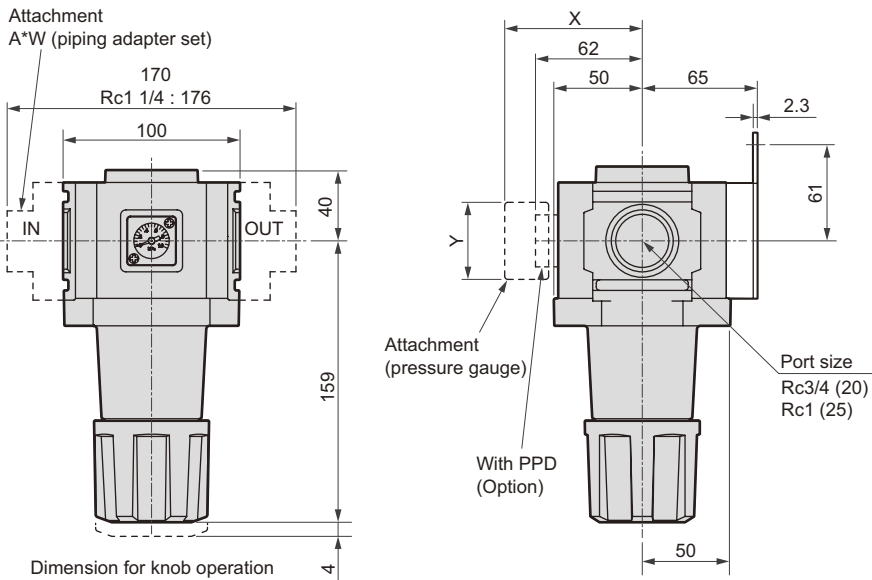
Attached pressure gauge	X	Y
G49P	(79.5)	ø43.5
G59P	(82)	ø52
G40P	(81.5)	ø42.5
G50P	(81.5)	ø52.5
G41P	(80)	ø42
G52P	(93)	ø52.5
R2	(80)	*30

Attachment
C type bracket (-BW)
Part model no.: B620

L type bracket (-B3W)
Part model no.: B430



● R8100-W

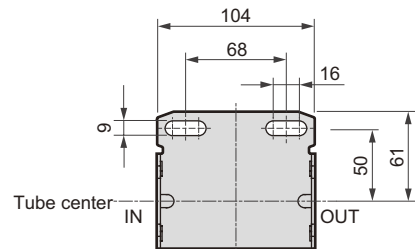


Dimension for knob operation

Attachment
C type bracket (-BW)
Part model no.: B820

Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(84.5)	ø43.5
G59P	(87)	ø52
G40P	(86.5)	ø42.5
G50P	(86.5)	ø52.5
G41P	(85)	ø42
G52P	(98)	ø52.5
R2	(85)	*30



Optional parts drawing

Repair kits (Set consisting of diaphragm assembly, valve assembly, bottom spring, bottom O ring)

Repair kits model no. Model	Relief type diaphragm	Nonrelief type diaphragm
R1000-W, R1100-W	R1000-KIT	R1000-KIT-N
R2000-W, R2100-W	R2000-W-KIT	R2000-W-KIT-N
R3000-W, R3100-W, RM3000-W	R3000-KIT	R3000-KIT-N
R4000-W, R4100-W, RM4000-W	R4000-KIT	R4000-KIT-N
R6000-W, R6100-W	R6000-KIT R6000-KIT-L (low pressure range)	R6000-KIT-N R6000-KIT-LN (low pressure range)
R8000-W, R8100-W	R8000-KIT	R8000-KIT-LN

Valve assembly (Set consisting of valve assembly, bottom spring, bottom O ring)

Model	Valve assembly model no.
R1000-W, R1100-W	R1000-VALVE-ASSY
R2000-W, R2100-W	R2000-W-VALVE-ASSY
R3000-W, R3100-W, RM3000-W	R3000-VALVE-ASSY
R4000-W, R4100-W, RM4000-W	R4000-VALVE-ASSY
R6000-W, R6100-W	R6000-VALVE-ASSY
R8000-W, R8100-W	R8000-VALVE-ASSY

* Refer to page 203 for the gauge plug assembly.

Check valve assembly for reverse regulator

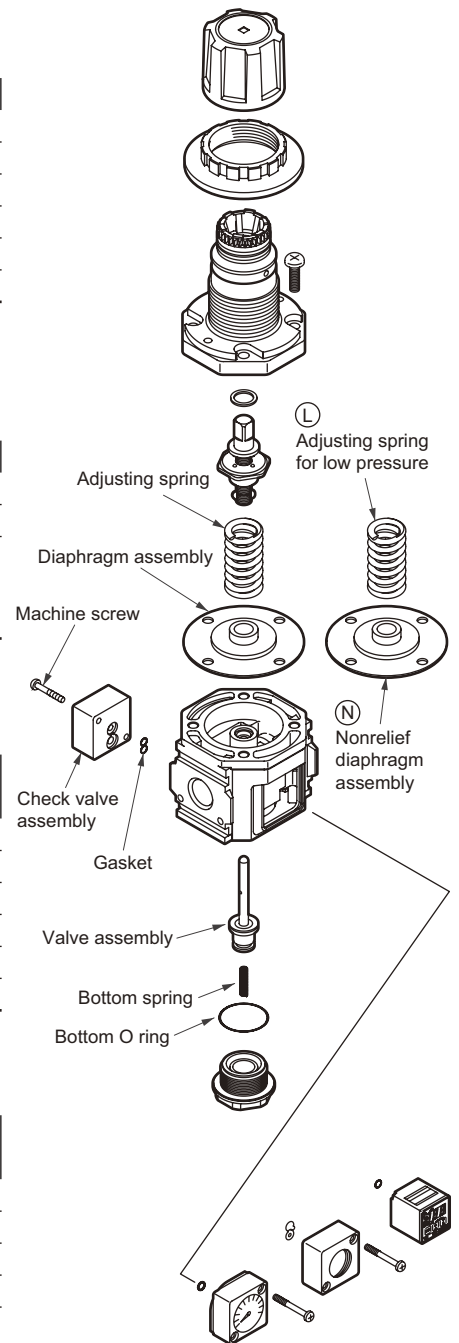
Model	Check valve assembly model no.
R1000-W, R1100-W	R1100-W-CHECK-VALVE-ASSY
R2100-W	R3100-W-CHECK-VALVE-ASSY
R3100-W, RM3000-W, W3100-W R4100-W, RM4000-W, W4100-W R6100-W, R8100-W W8100-W	R3100-W-CHECK-VALVE-ASSY

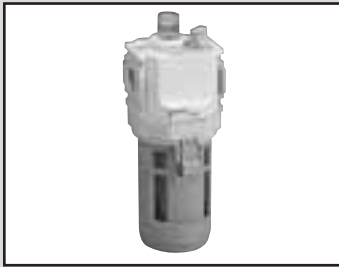
Adjusting spring

Adjusting spring model no. Model	Standard spring (0.05 to 0.85MPa)	Spring for low pressure (0.05 to 0.35MPa)
R1000-W, R1100-W W1000-W, W1100-W	R1000-SPRING	R1000-SPRING-L
R2000-W, R2100-W	R2000-W-SPRING	R2000-W-SPRING-L
R3000-W, R3100-W, RM3000-W W3000-W, W3100-W	R3000-SPRING	R3000-SPRING-L
R4000-W, R4100-W, RM4000-W W4000-W, W4100-W	R4000-SPRING	R4000-SPRING-L
R8000-W, R8100-W	R8000-SPRING	R8000-SPRING-L
W8000-W, W8100-W	W8000-SPRING	W8000-SPRING-L

Diaphragm assembly (only diaphragm assembly)

Diaphragm assembly model no. Model	Relief type diaphragm	Nonrelief type diaphragm
R1000-W, R1100-W W1000-W, W1100-W	R1000-DIAPHRAGM-ASSY	R1000-DIAPHRAGM-ASSY-N
R2000-W, R2100-W	R2000-DIAPHRAGM-ASSY	R2000-DIAPHRAGM-ASSY-N
R3000-W, R3100-W, RM3000-W W3000-W, W3100-W	R3000-DIAPHRAGM-ASSY	R3000-DIAPHRAGM-ASSY-N
R4000-W, R4100-W, RM4000-W W4000-W, W4100-W	R4000-DIAPHRAGM-ASSY	R4000-DIAPHRAGM-ASSY-N
R6000-W, R6100-W	R6000-DIAPHRAGM-ASSY R6000-DIAPHRAGM-ASSY-L (low pressure range)	R6000-DIAPHRAGM-ASSY-N R6000-DIAPHRAGM-ASSY-LN (low pressure range)
R8000-W, R8100-W	R8000-DIAPHRAGM-ASSY	R8000-DIAPHRAGM-ASSY-N
W8000-W, W8100-W	W8000-DIAPHRAGM-ASSY	W8000-DIAPHRAGM-ASSY-N





Lubricator standard white Series

L1000/L3000/L4000/L8000-W Series

Supply fine mist oil.

Port size: 1/8 to 1

JIS symbol



Specifications

Descriptions	L1000-W	L3000-W	L4000-W	L8000-W
Appearance				
Working fluid	Compressed air			
Max. working pressure MPa	1.0			
Withstanding pressure MPa	1.5			
Working temperature °C	5 to 60			
Minimum drip flow Note 1 m ³ /min. (ANR)	0.015	0.03	0.065	0.065
Oil capacity cm ³	20	85	170	170 (MAX360)
Use oil	Turbine oil Class 1 ISO VG32 (spindle oil can not be used)			
Port size Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg	0.1	0.28	0.45	1.4
Standard accessories	Bowl guard			

Note 1: The minimum drip flow is the rate at which five drops of turbine oil drip per minute at the primary pressure 0.5 MPa and inlet air temperature 20°C. (This cannot be used for dry fog.)

Float switch electric specifications

Descriptions	
Control point	1 point
Operation	Switch turns off when float rises (oil level detected), and turns on when float lowers (no oil level detected)
Max. use voltage	240 VAC, 200 VDC
Max. contact capacitance	50 VA or 50 W, whichever is smaller
Max. open and close current	0.5A
Withstanding pressure between contacts	400 VDC for one minute, leak current 1mA or less
Contact resistance	220mΩ or less (between terminal sections)
Insulation resistance	100MΩ and over (between terminal and cases, 500 VDC megger)
Withstand voltage	1500 VAC for one minute (between terminal and cases)
Electric service life	10 ⁶ time (200 VAC, 200mA and resistance load)

How to order

L1000 - **6** - **W** - **C** - **A6W** - **G**

* Refer to page 9 for explanation of an option.

A Model no.

B Port size

C Port thread type

D Option

E Display unit

F Piping adapter set (attached)

A Model no.			
L	L	L	L
1	3	4	8
0	0	0	0
0	0	0	0
0	0	0	0

G Bracket (attached)

Symbol	Descriptions					
B Port size						
6	1/8	●				
8	1/4	●	●	●		
10	3/8		●	●		
15	1/2			●		
20	3/4				●	
25	1				●	
C Port thread type						
Note 1						
Blank	Rc thread	●	●	●	●	
N	NPT thread	●	●	●	●	
G	G thread	●	●	●	●	
D Option						
Note 2						
Drainage	Blank	Without manual cock	●	●	●	●
	C	With manual cock	●	●	●	●
	LL	With float switch		●	●	●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl		●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●
E Display unit						
Blank	MPa display, Rc thread	●	●	●	●	
J1	MPa display, NPT, G thread	●	●	●	●	
F Piping adapter set (attached)						
Note 4 Pages 151 to 153						
Blank	Not attached	●	●	●	●	
A6*W	1/8 piping adapter set	●				
A8*W	1/4 piping adapter set	●	●	●		
A10*W	3/8 piping adapter set	●	●	●		
A15*W	1/2 piping adapter set		●	●		
A20*W	3/4 piping adapter set			●	●	
A25*W	1 piping adapter set				●	
A32*W	1 1/4 piping adapter set				●	
* Adaptor screw type						
Blank	Rc thred	●	●	●	●	
N	NPT thread	●	●	●	●	
G	G thread	●	●	●	●	
G Bracket (attached)						
Blank	Not attached	●	●	●	●	
BW	C type bracket	●	●	●	●	

⚠ Note on model no. selection

- Note 1: When G threads or NPT threads are selected, the IN and OUT are available.
- Note 2: When selecting options for several items, list options in order from the top.
- Note 3: The adjusting dome is made of polycarbonate for a nylon bowl or metal bowl. Consult with CKD if different material is required.
- Note 4: The piping adapter set and C type bracket cannot be used together.

Drainage and bowl material combination (Item D in How to Order)

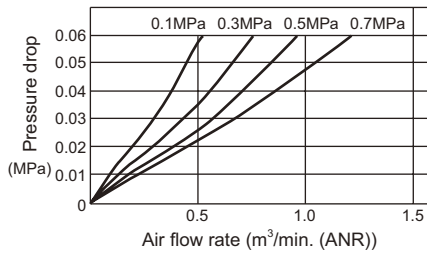
Option ● With float switch

3000/4000/8000 Series			
Shape			
Material	Plastic bowl		Metal bowl
	Polycarbonate	Nylon	Aluminum
Lubricator L*000-W	LL	LLZ	LLM

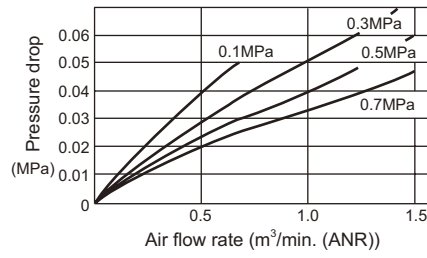
Lubricator Series

Flow characteristics

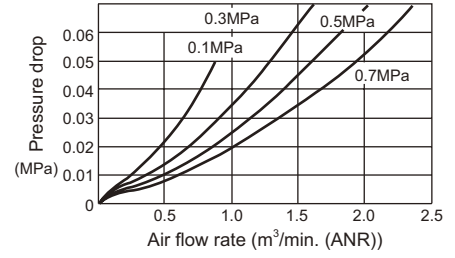
● L1000-6-W



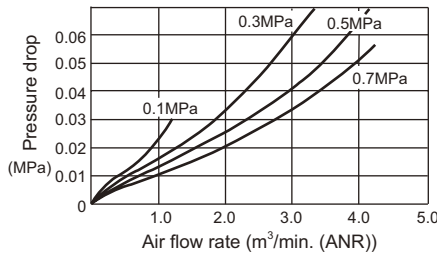
● L1000-8-W



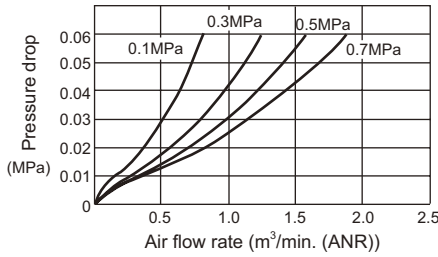
● L3000-8-W



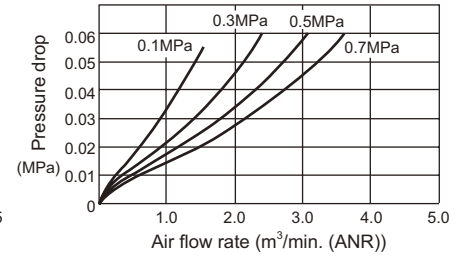
● L3000-10-W



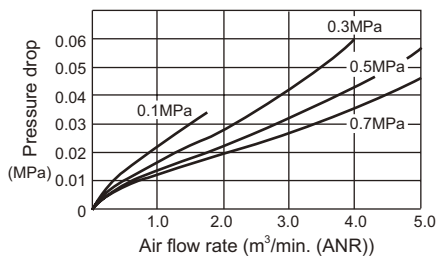
● L4000-8-W



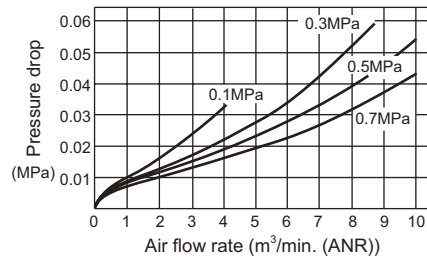
● L4000-10-W



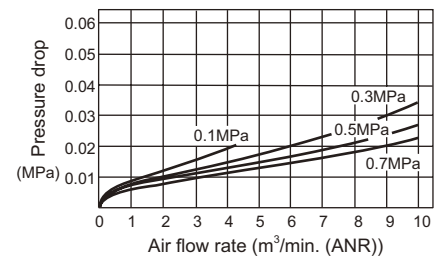
● L4000-15-W



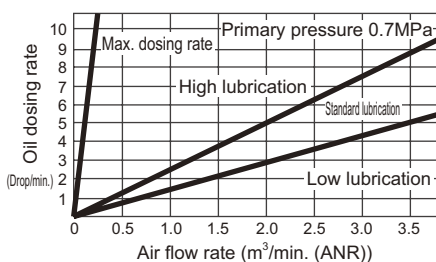
● L8000-20-W



● L8000-25-W

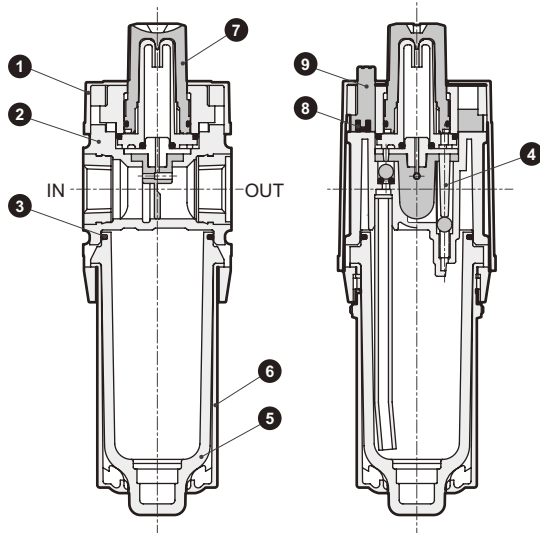


Oil dosing rate

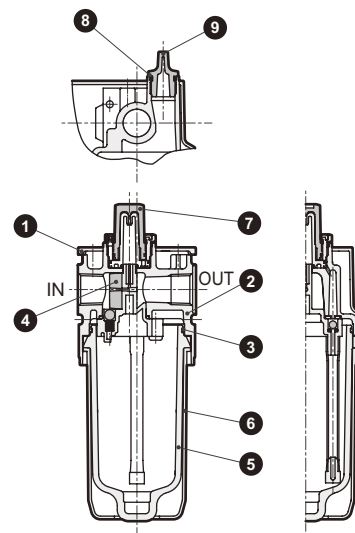


Internal structure and parts list

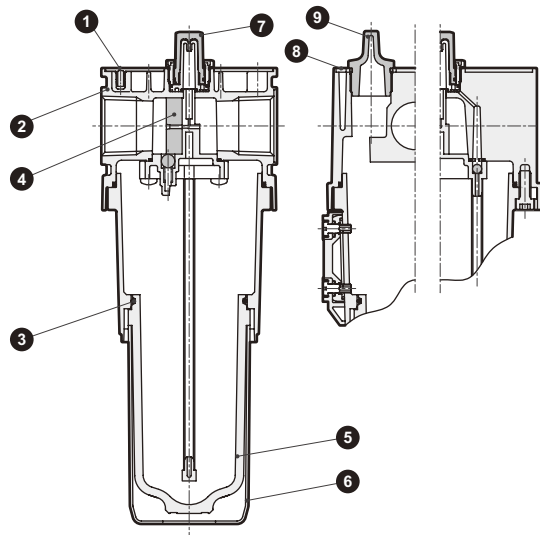
● L1000-W



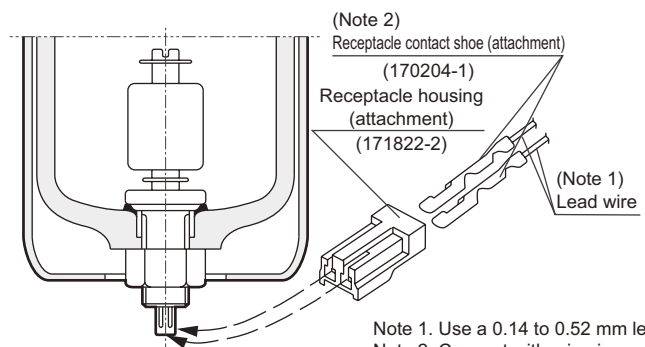
● L3000-W/L4000-W



● L8000-W



● Option float switch



Note 1. Use a 0.14 to 0.52 mm lead.
 Note 2: Connect with crimping or soldering.

A Japan AMP post header (part No. AMP171825-2) is used for the terminal.
 Use an AMP171822-2 (standard) or AMP172142-2 (rope file) for the connector.

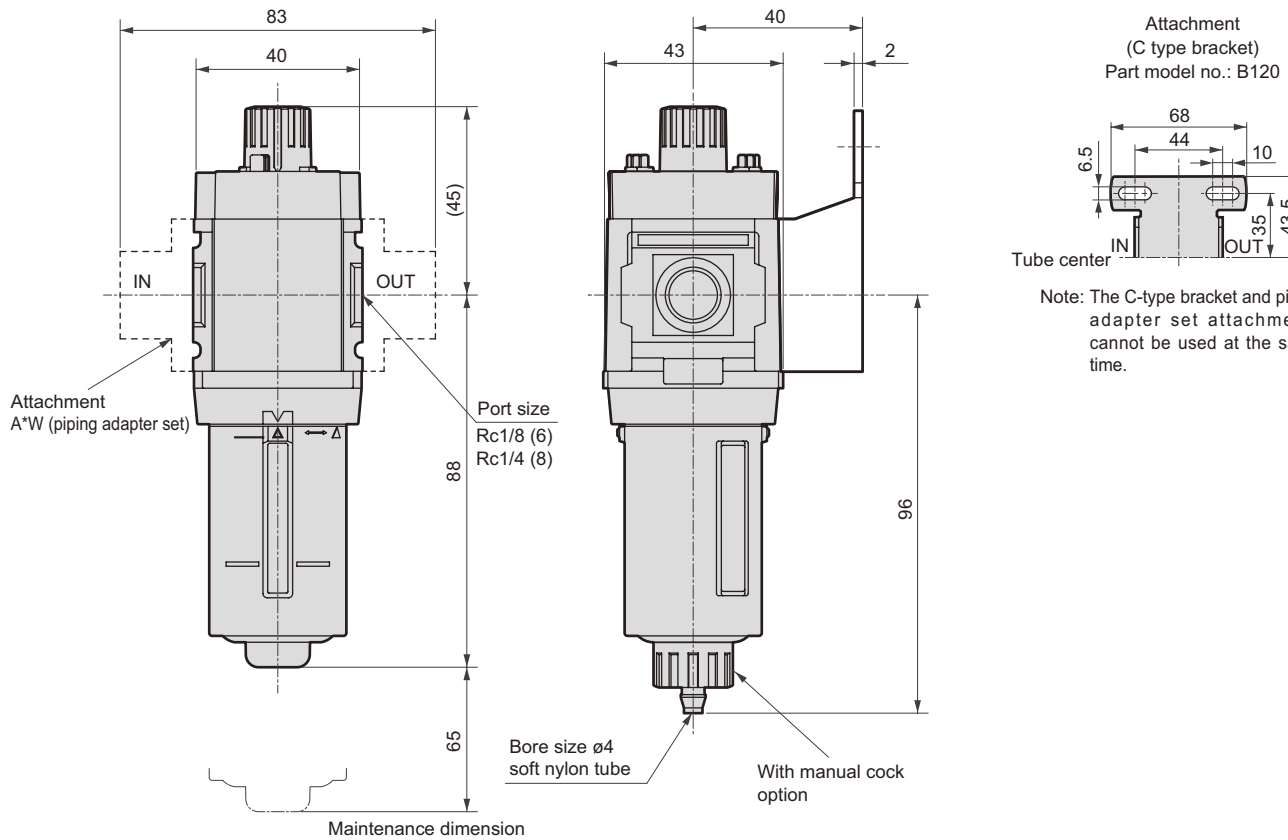
No.	Part name	Material			
		L1000-W	L3000-W	L4000-W	L8000-W
1	Plate cover	ABS resin			
2	Body	Polyamide resin, steel	Aluminum alloy die-casting		
3	O ring	Note 1	Special nitrile rubber		
4	Flow guide	Urethane rubber resin		Nitrile rubber	
5	Bowl	Polycarbonate resin			
6	Bowl guard	Polyamide resin	Polyamide resin, steel		
7	Adjusting dome	Transparent nylon			
8	O ring	Nitrile rubber			
9	Filling plug	Polyacetal resin			

Note 1: The L1000-W O ring has a special shape.

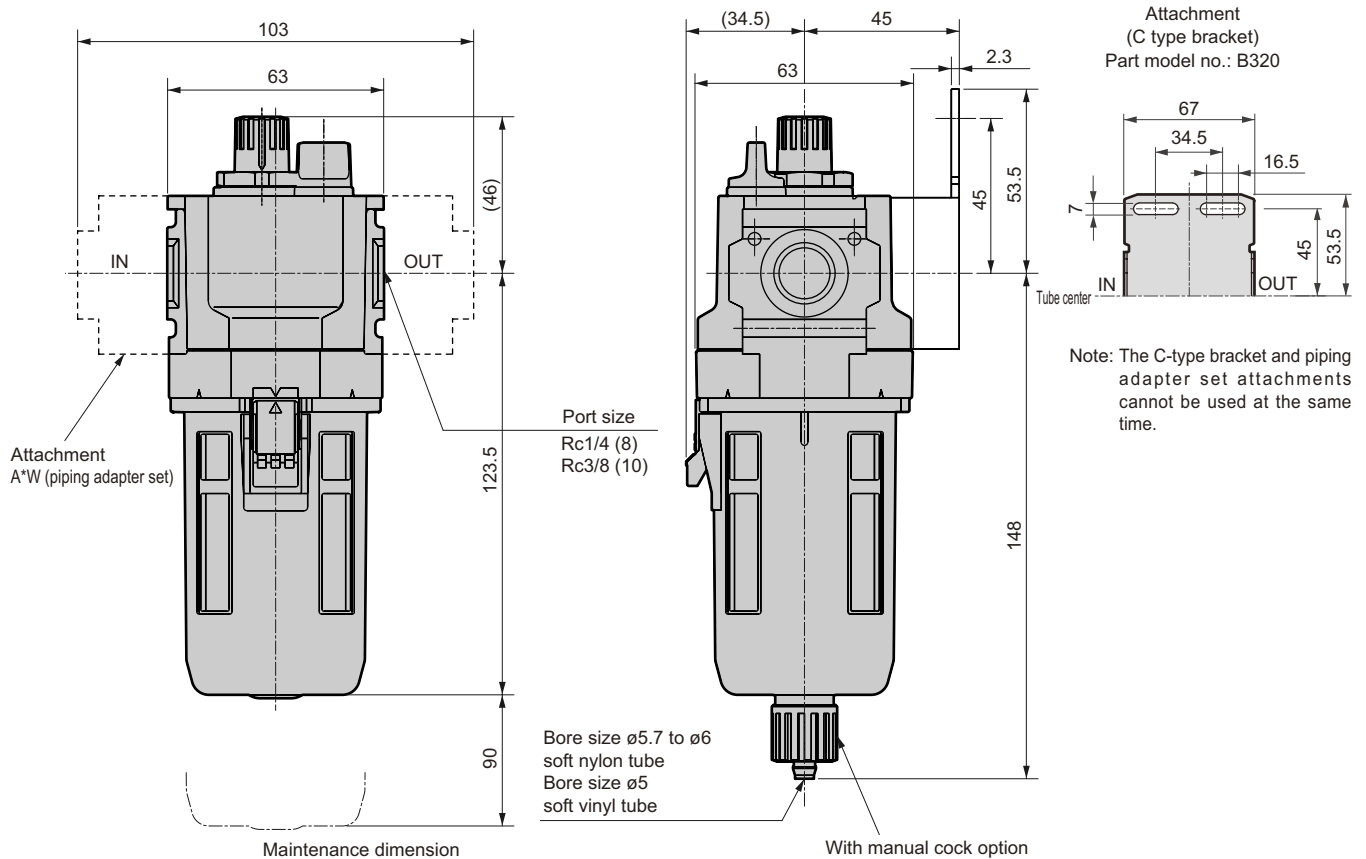
Lubricator Series

Dimensions

● L1000-W

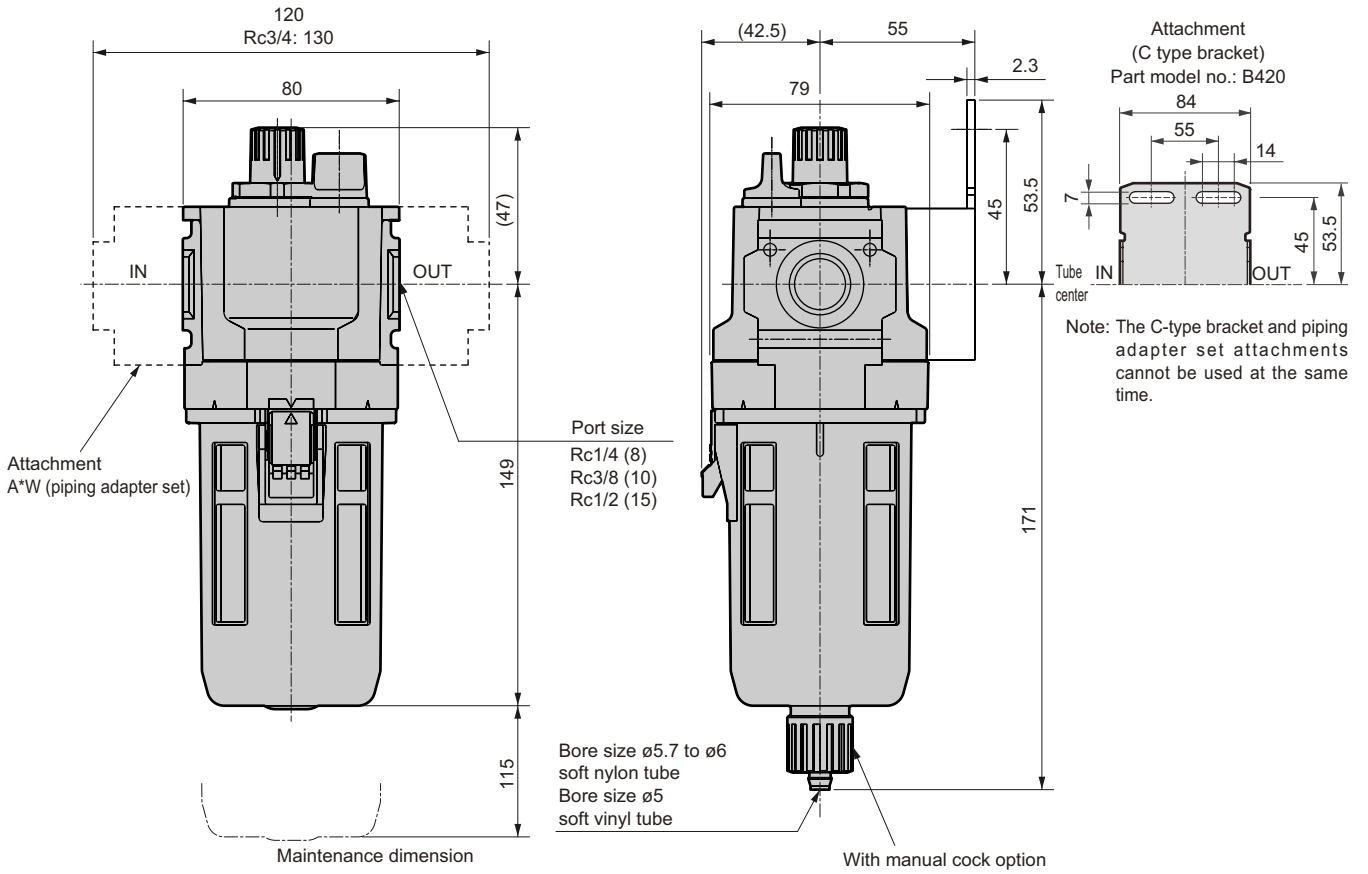


● L3000-W



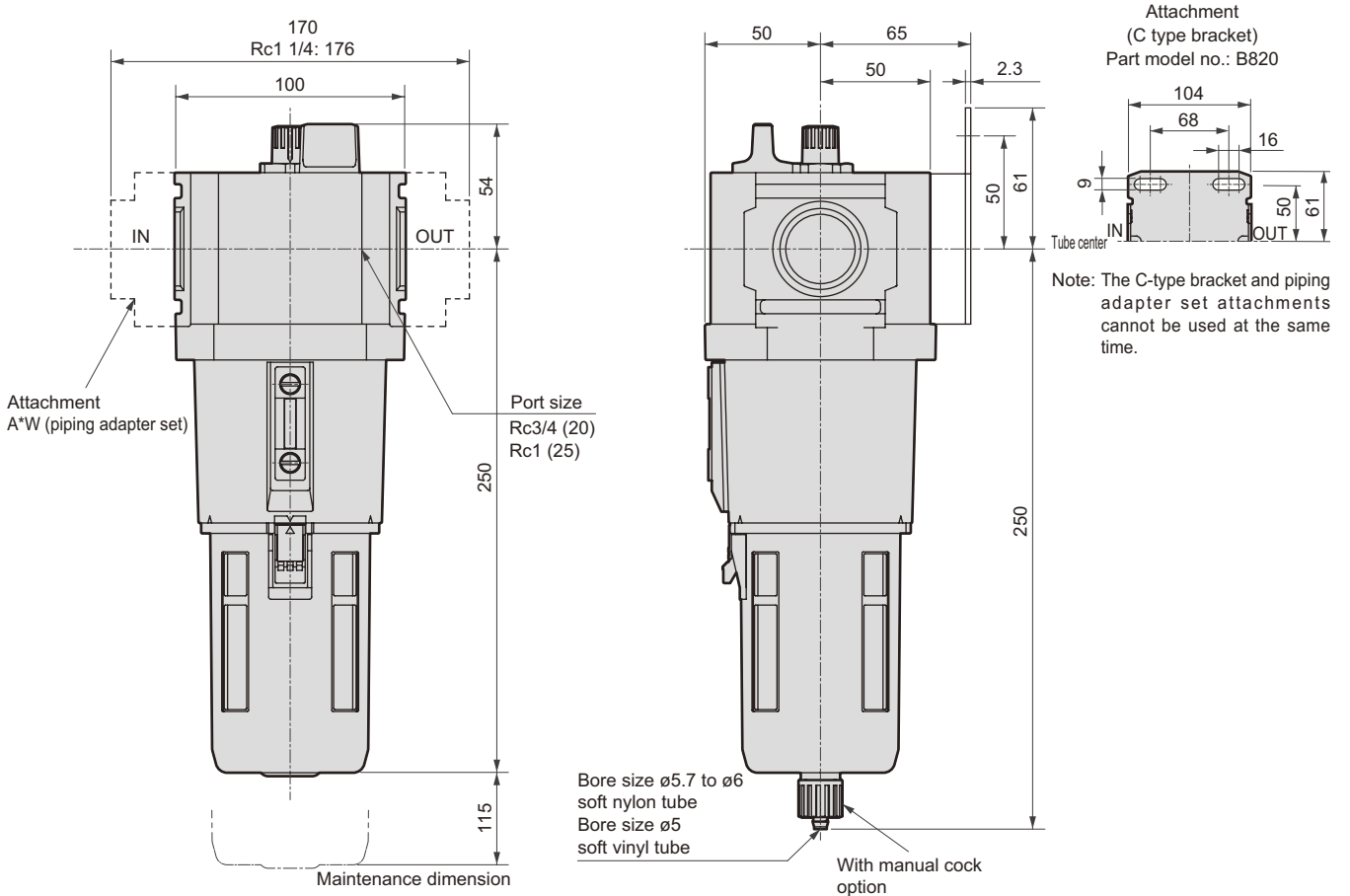
Dimensions

● L4000-W



Note: The C-type bracket and piping adapter set attachments cannot be used at the same time.

● L8000-W

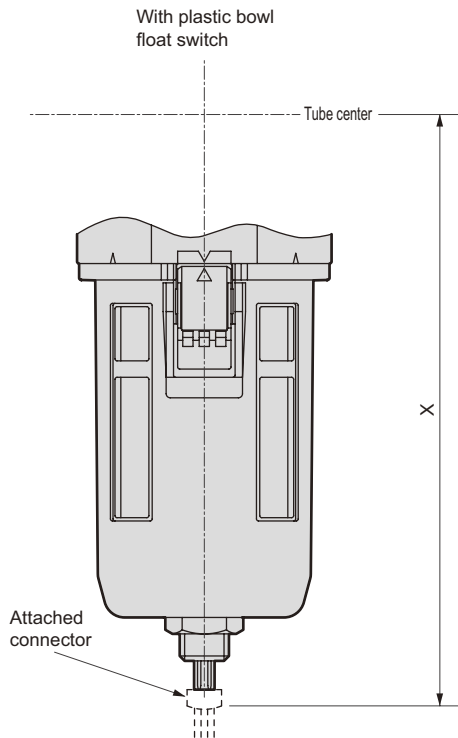


Lubricator Series

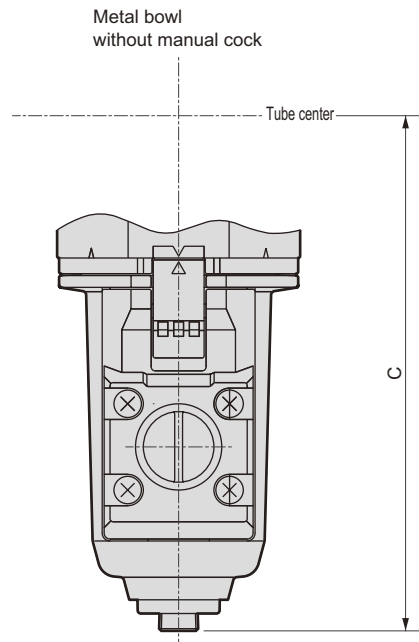
Optional dimensions 

Other options (L3000-W, 4000-W, 8000-W)

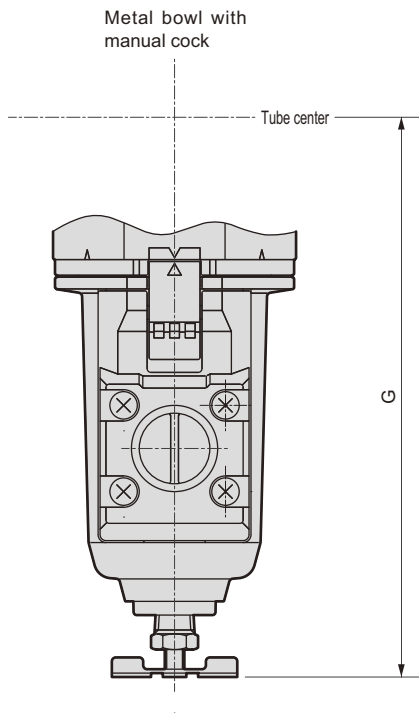
● Plastic bowl



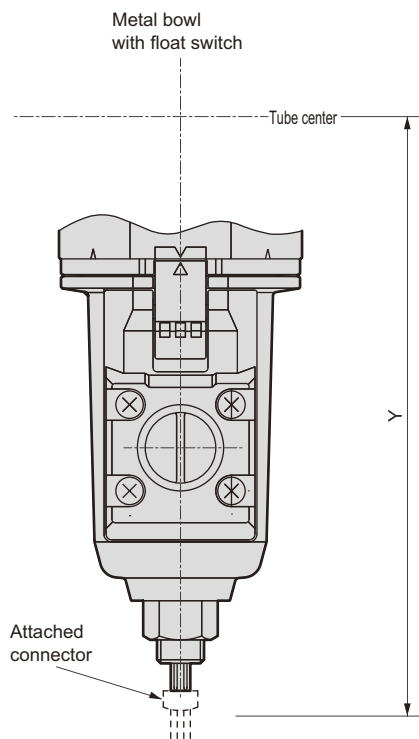
● Metal bowl without manual cock



● Metal bowl with manual cock

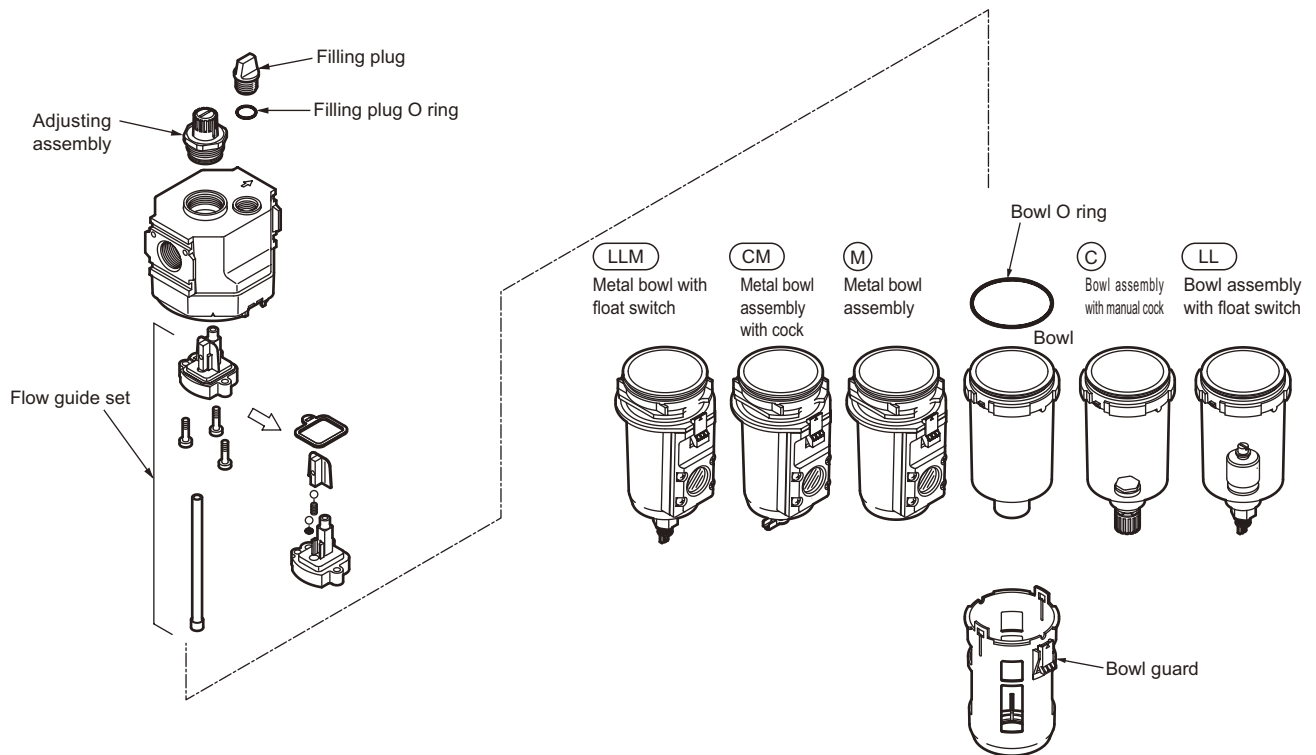


● Metal bowl with float switch



Model no.	C	G	X	Y
L3000-W	129	143.5	147	153.5
L4000-W	152	166.5	170	177
L8000-W	231.5	245.5	249	256

Optional dimensions



Consumable parts kit (Set consisting of fill plug O ring, adjustment assembly, flow guide set, bowl O ring)

Model no.	Repair kits model no. (for polycarbonate bowl)	Repair kits model no. (for nylon bowl and metal bowl)
L3000-W	L3000-W-KIT	L3000-W-KIT-Z
L4000-W	L4000-W-KIT	L4000-W-KIT-Z
L8000-W	L8000-W-KIT	L8000-W-KIT-Z

Bowl assembly (Set consisting of bowl assembly and bowl O ring)

Bowl assembly model no.	Polycarbonate bowl without cock (Blank)	Nylon bowl without cock (Z)	Metal bowl without cock (M)	Polycarbonate bowl with cock (C)	Nylon bowl with cock (CZ)	Metal bowl with cock (CM)	Polycarbonate bowl with float switch (LL)	Nylon bowl with float switch (LLZ)	Metal bowl with float switch (LLM)
L1000-W	L1000-BOWL	L1000-BOWL-Z	-	F1000-W-BOWL	F1000-W-BOWL-Z	-	-	-	-
L3000-W	L3000-BOWL	L3000-BOWL-Z	L3000-W-BOWL-M	F3000-W-BOWL	F3000-W-BOWL-Z	F3000-W-BOWL-M	L3000-BOWL-LL	L3000-BOWL-LLZ	L3000-W-BOWL-LLM
L4000-W, L8000-W	L4000-BOWL	L4000-BOWL-Z	L4000-W-BOWL-M	F4000-W-BOWL	F4000-W-BOWL-Z	F4000-W-BOWL-M	L4000-BOWL-LL	L4000-BOWL-LLZ	L4000-W-BOWL-LLM

* Refer to the air filter options and parts table for details on the bowl guard.

Adjusting assembly

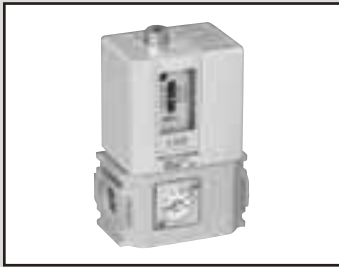
Model no.	Adjusting assembly model no. (for polycarbonate bowl)	Adjusting assembly model no. (for nylon bowl and metal bowl)
L3000-W, L4000-W, L8000-W	L3000-W-AJ-KIT	L3000-W-AJ-KIT-Z

Flow guide set

Model no.	Flow guide set model no.
L3000-W	L3000-FLOW-GUIDE
L4000-W	L4000-FLOW-GUIDE
L8000-W	L8000-FLOW-GUIDE

Filling plug set (Set consisting of filling plug, filling plug O ring)

Model no.	Filling plug set model no.
L3000-W, L4000-W	L3000-W-PLUG
L8000-W	L8000-W-PLUG



Mechanical pressure switch standard white Series

P4000-W Series

Wide pressure setting range covers 0.1 to 0.8 MPa.

● Port size: 1/4 to 1/2

JIS symbol



Specifications

Descriptions	P4000-8-W	P4000-10-W	P4000-15-W
Working fluid	Compressed air		
Max. working pressure MPa	1.0		
Withstanding pressure MPa	1.5		
Pressure adjusting range MPa	0.1 to 0.8		
Fluid temperature °C	5 to 60		
Port size Rc	1/4	3/8	1/2
Micro switch type	Z-15GD-B (OMRON)		
Contact configuration ab	1		
Hysteresis MPa	0.1 to 0.49, hysteresis within 0.049		
	0.5 to 0.8, hysteresis within 0.078		
Repeatability MPa	±0.02 of set pressure		
Allowable operation frequency cycle/min.	20		
Insulation resistance M	100 and over (with 500 VCD megger)		
Product weight kg	0.5		
Mounting attitude	Install adjusting screw vertically		

Micro switch rated

Load	No inductive load (A)				Inductive load (A)			
	Resistance load		Light load		Inductive load		Electric motor load	
Circuit	N.C	N.O	N.C	N.O	N.C	N.O	N.C	N.O
125 VAC	15	15	3.0	1.5	15	15	5.0	2.5
250 VAC	15	15	2.5	1.25	15	15	3.0	1.5
30 VDC	6.0	6.0	3.0	1.5	5.0	5.0	5.0	2.5

How to order

P4000 - 8 - W - 1N - BW

A Port size

B Option

C Attachment

Symbol	Descriptions
A Port size	
8	Rc1/4
10	Rc3/8
15	Rc1/2
B Option	
Blank	Without indicator light
1N	100 VAC /200V with indicator light
3N	24 VDC with indicator light
T	Without pressure gauge
C Attachment (attached) Note 1	
Blank	Not attached
A8W	Rc1/4 piping adapter set
A10W	Rc3/8 piping adapter set
A15W	Rc1/2 piping adapter set
A20W	Rc3/4 piping adapter set
BW	C type bracket

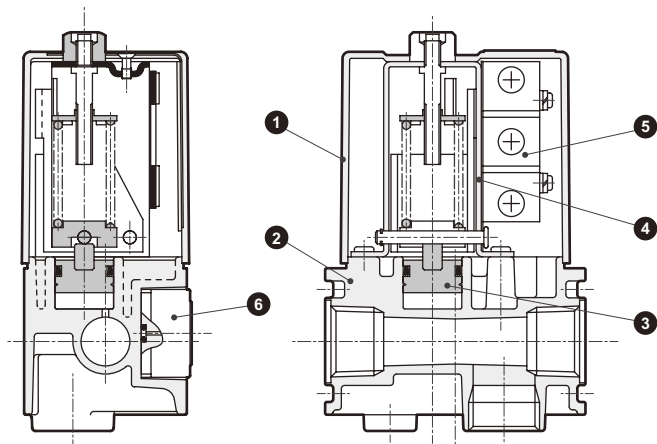
⚠ Note on model no. selection

Note 1: C type bracket and piping adapter set can not be used together.

Note 2: Due to modular design, a gasket is attached.



Internal structure and parts list



No.	Part name	Material	No.
1	Guard	Resin	-
2	Body	Aluminum alloy die-casting	-
3	Piston assembly	Polyacetal resin, nitrile rubber	-
4	Frame	Steel	-
5	Micro switch	-	Z-15GD-B (OMRON)
6	Pressure gauge assembly	PBT resin, brass	G401-W

* To wire, remove cover (1), and connect directly to the microswitch (5).
 * One gasket is enclosed.

⚠ Safety precautions

■ Design & Selection

⚠ CAUTION

1 Micro switch contact specifications

Closed circuit Maximum 30 A Open circuit Maximum 15 A
 Rush current should be measured beforehand.

■ Installation & Adjustment

⚠ CAUTION

1 When wiring, loosen cover mounting screws, remove the cover, then wire to the microswitch inside.

2 Wiring the sensor with lamp

- The lamp is connected to the microswitch's NC terminal and NO terminal. A fine current flows even when the load (relay, etc.) is not energized, so take care when selecting the load.
 100 VAC 1.5mA 200 VAC 2.0mA 24 VDC 4.5mA
- To turn the lamp on at a level higher than the set pressure and off at a level less than the set pressure, wire to the microswitch COM terminal and NC terminal.
 Attach the **Pressure Rise → Lamp ON plate** at a visible section on the cover.
- To turn the lamp on at a level less than the set pressure and off at a level higher than the set pressure, wire to the microswitch COM terminal and NO terminal.
 Attach the **Pressure Rise → Lamp OFF plate** at a visible section of the cover.
- If there is a large amount of drainage, pipe so that the pressure adjustment screw is facing upward.

3 Avoid using in hot places because the cover is made of resin.

4 Hold the body when piping or installing.

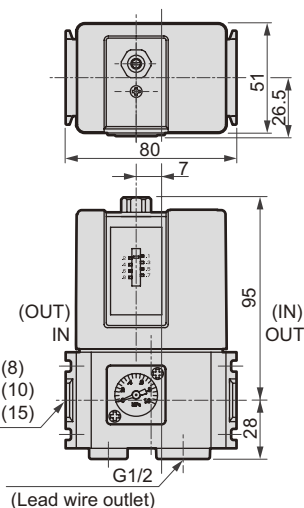
5 Use with air that has been passed through an air filter.

6 Use the pressure absorbing nipple (6556) to detect sudden changes in pressure such as when confirming air cylinder pressure.

7 Use the pressure absorbing nipple (6556) if pressure rise/lower pulsation is frequent. The product life could be shortened if the pressure absorbing nipple is not used.

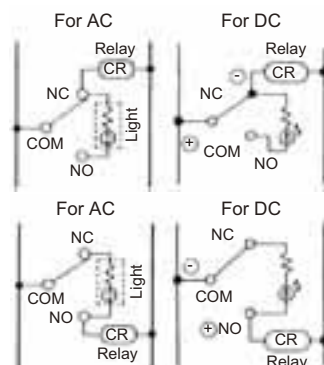
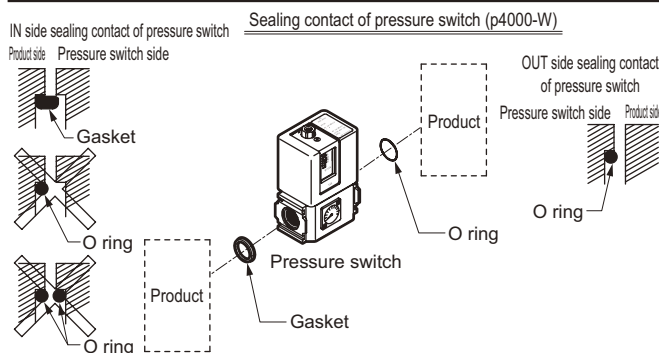
8 Loosen the nut on the top of the cover, and adjust the pressure with the adjustment screw. The set pressure will rise when the screw is turned to the plus (+) side and will drop when turned to the minus (-) side. (Working tools: Wrench 13 mm, flat-tip screwdriver) Fix with the nut after setting.

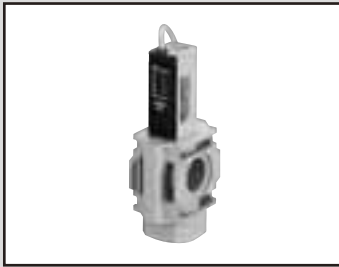
9 The scale plate is for reference. (Scale error within ± 0.05 MPa)



Reduction rate 0.24.
 (Photocopy at 141% four times to see actual dimensions.)

How to assemble





Compact reed switch type mechanical pressure switch standard white Series
P1100-W/P4100-W/P8100-W Series

• Compatible with module connection to SELEX F.R.L.



Specifications

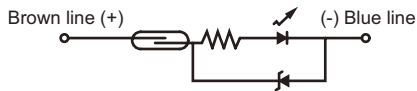
Descriptions	P*100-W
Working fluid	Compressed air
Max. working pressure MPa	1.0
Set pressure range MPa	0.1 to 0.6
Hysteresis MPa	0.08 or less
Repeatability MPa	±0.02 or less
Contact configuration	1a Note 1
Wiring	Lead wire (oil resistant vinyl cabtire code 2-conductor 0.2mm ²)
Ambient temperature / fluid temperature	5 to 60°C
Protective structure Note 2	IP20 or equivalent

Note 1: The contact turns on if air pressure exceeding the scale setting pressure is applied.

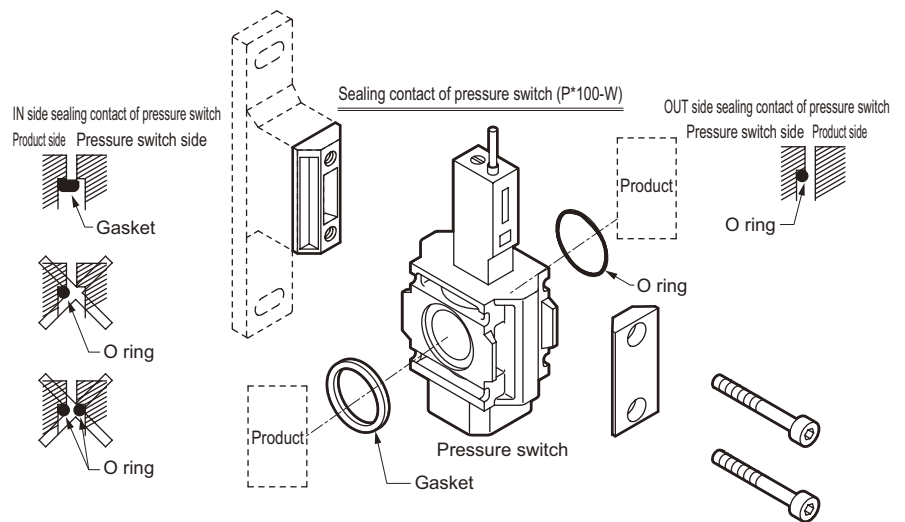
Note 2: The protective structure is IP 65 or equivalent if an optional joint is connected to the atmospheric pressure introduction port and extended with tubes to a place free of water. This port can not be used outdoors.

Electric component section specifications		
Load voltage	12/24 VDC	100 VAC
Load current	5 to 50mA	7 to 20mA
Internal voltage drop	3V or less	
Light	LED (ON lighting)	
Maximum shock resistance	294m/S ²	
Insulation resistance	20MΩ and over at 500 VDC megger	
Withstand voltage	No failure when 1000 VAC is applied for one minute	

Internal circuit diagram



How to assemble (P1100-W, P4100-W, P8100-W)



How to order (modular design)



A Series

B Port size

C Branch direction

D Attachment

E Lead wire length

F Option

Symbol	Descriptions			
A Series				
1100	1000-W Series modular design			
4100	2500-W, 3000-W, 4000-W modular design Series			
8100	6000-W, 8000-W modular design Series			
B Port size				
		1100	4100	8100
6	Rc1/8	●		
8	Rc1/4	●	●	
10	Rc3/8		●	
15	Rc1/2		●	
20	Rc3/4			●
25	Rc1			●
C Branch direction Note 1				
Blank	Note 2	L	R	
D Attachment				
		1100	4100	8100
Blank	Joiner set and gasket	●	●	●
B11W	T type bracket and gasket	●		
B31W	T type bracket and gasket		●	
B41W	T type bracket and gasket		●	
B81W	T type bracket and gasket			●
4W	Joint for atmospheric release port attached (M3 elbow)	●	●	●
E Lead wire length				
Blank	1m			
3	3m			
5	5m			
F Option				
Blank	None			
P6	Copper and PTFE free (custom order)			

⚠ Note on model no. selection

Note 1: This is used for intermediate connection of the module Series so the module connection section is not threaded.

Note 2: A masking plug matching the port size is enclosed.

Note 3: When piping the isolated P*100-W unit, use piping adapter A*00-W.

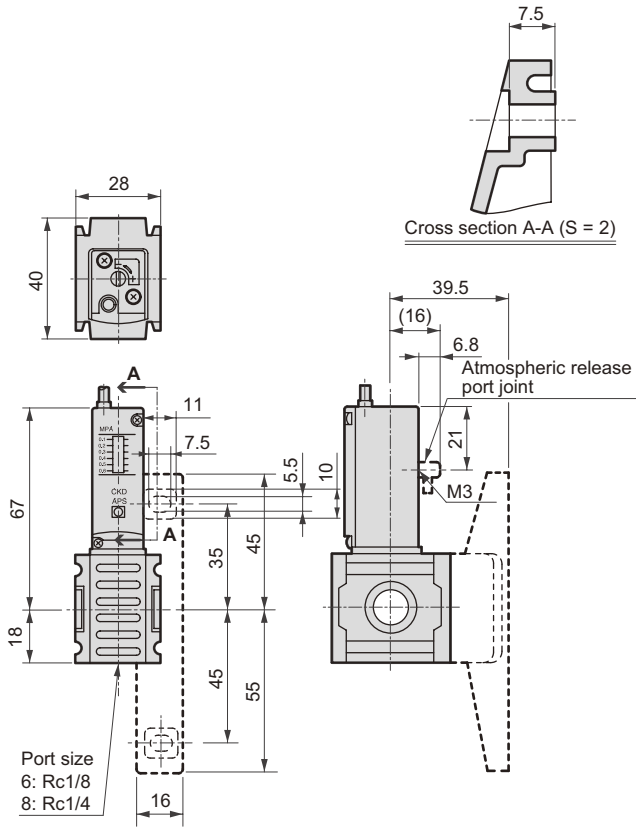
(The horizontal direction port does not have threads.)

P*100-W Series

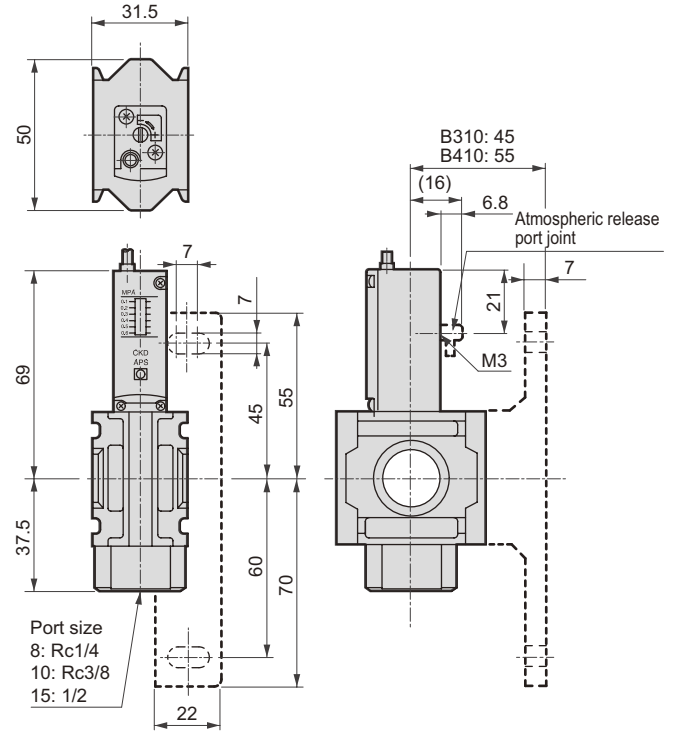
Dimensions 

● P1100-W

● P4100-W

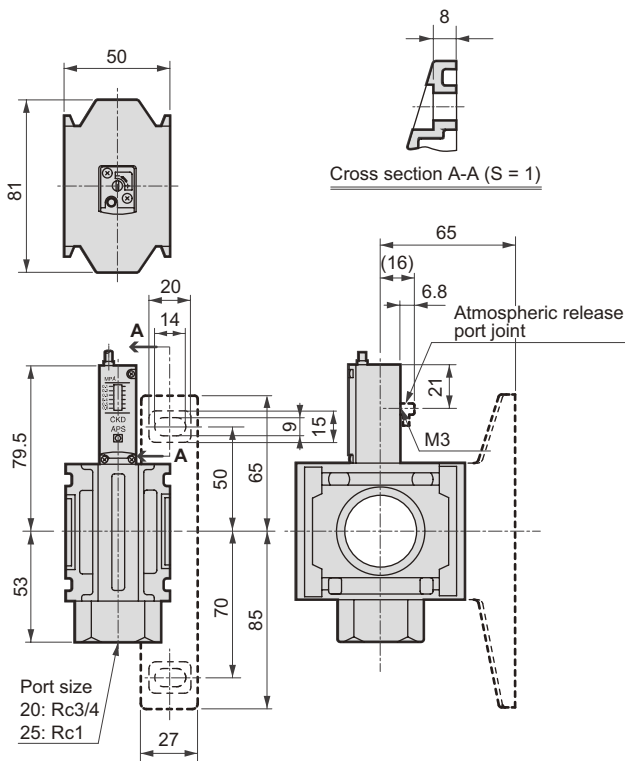


Weight 126g



Weight 190g

● P8100-W



Weight 467g

⚠ Safety precautions

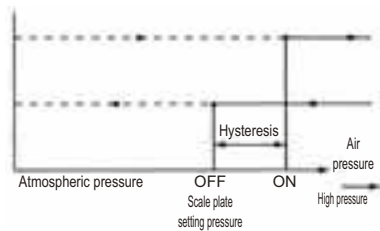
■ Installation & Adjustment

⚠ CAUTION


1 Setting pressure

- Pressure displayed on the scale plate is used as the reference. When setting pressure, refer to the separate pressure gauge.
- Pressure displayed on the scale plate is the value when the contact is off. To set the value when the contact is on, set the pressure displayed on the scale plate to a value smaller than that from which hysteresis has been subtracted. Refer to the chart diagram below. If not set, operation may not take place at the set value.
(Hysteresis refers to the pressure width from when the switch operates once with the set pressure to when the pressure drops and the switch turns off.)

Operation chart



2 Installation

- Do not drop or bump the panel when handling it.
 - Wire the lead so that the repeated bending strain and tensile strength are not applied to the wire. Failure to do so could lead to disconnection.
 - Do not use this sensor near a strong magnetic field or large current (large magnet or spot welder, etc.) because the sensor could malfunction.
 - The pressure switch is equivalent to IP-20, but the installation direction is limited to upward vertical. If water enters the introduction port for atmospheric pressure from below, pipe an M3 joint and extend with tubing to where water will not enter. Do not plug the atmospheric release port joint or else malfunctions could occur. This port can not be used outdoors.
- 
- P*100 Series
If there is drainage in pneumatic piping, install so that the pressure switch is higher than the drain.
 - Do not pressurize the atmospheric release port joint or blow it with compressed air. Product performance could drop or the product could be damaged.

3 Connection

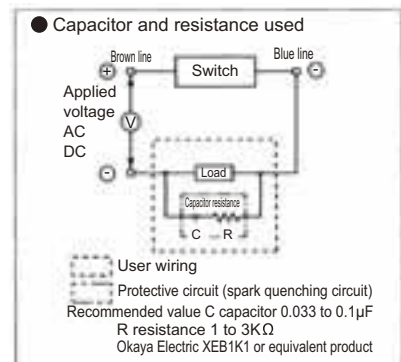
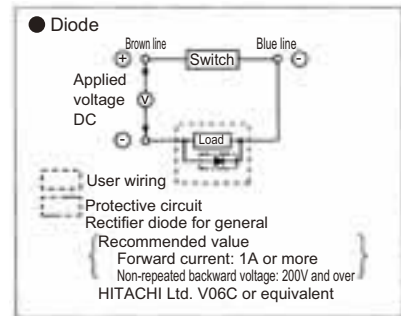
- Connecting the lead
 - (1) Do not connect the lead directly to the power supply. Connect the load serially. Failure to do so could result in lamp blowing or contact melting.
 - (2) When using for DC, connect the brown wire to the ⊕ side and the blue wire to the ⊖ side. The lamp will not light if wires are connected in reverse.
 - (3) When connected to the AC relay or PC input, if half wave rectification is done with these circuits, the switch lamp may not light. In this case, the lamp will light if the switch lead polarity is reversed.
- Contact capacity
Do not exceed the specified load voltage and load current range. Failure to observe this could result in problems such as lamp

blowing and contact melting.

The lamp may not light if the current is less than the rated current value.

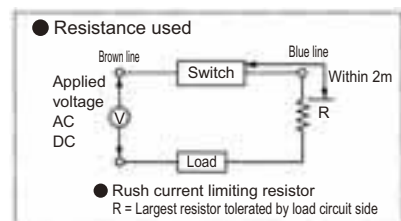
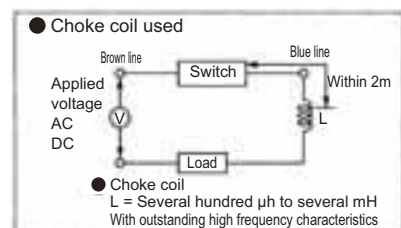
- Contact protection

- (1) When using this sensor with a conductive load such as a relay, provide the contact protection circuit shown at right. The contact could melt if this protection circuit is not provided.



- (2) If DC wiring exceeds 50 m or AC wiring exceeds 10 m, the wiring capacity will be attained. A rush current will occur, damaging the switch or shortening life.

Install a contact protection circuit if the wiring length is exceeded.





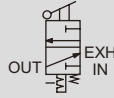
Shut-off valve standard white Series

V1000-W/V3000-W Series

One action exhaust operation. Prevent residual pressure accidents in pneumatic lines.

Port size: 1/8 to 1/2

JIS symbol

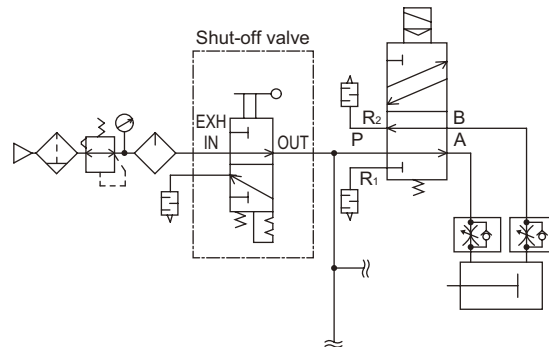


Specifications

Descriptions		V1000-W		V3000-W		
Appearance						
Descriptions		V1000-6-W	V1000-8-W	V3000-8-W	V3000-10-W	V3000-15-W
Working fluid		Compressed air				
Max. working pressure MPa		1.0				
Withstanding pressure MPa		1.5				
Fluid temperature °C		5 to 60				
Operation lever switchover angle		90°				
Operating force	Pushing force N	18		80		
	Torque N·m	0.5		2		
Valve section leakage cm ³ /min. (ANR)		10				
External leakage cm ³ /min. (ANR)		10				
Port size (Rc, NPT, G)	IN-OUT	1/8	1/4	1/4	3/8	1/2
	EXH	1/8		3/8		
Product weight kg		0.17		0.25		
Effective sectional area (mm ²)	IN/OUT	15	18	40	70	85
	OUT/EXH	5		40	50	50

Applications

Explanation: For safety, release compressed air in the pneumatic circuit from the lockout valve before repairing or adjusting the solenoid valve or air cylinder, etc.



How to order

● F.R.L1000 Series



● F.R.L3000, 4000 Series



A Model no.

B Port size

C Port thread type

D Option

E Display unit

F Attachment
Note 1

A Model no.	
V	V
1	3
0	0
0	0
0	0

Symbol	Descriptions		
B Port size			
6	Rc1/8	●	
8	Rc1/4	●	●
10	Rc3/8		●
15	Rc1/2		●
C Port thread type			
Blank	Rc thread	●	●
N	NPT thread	●	●
G	G thread	●	●
D Option			
Blank	Standard flow (left → right)	●	●
X1	IN/OUT reverse flow (right → left)	●	●
E Display unit			
Blank	MPa display, Rc thread	●	●
J1	MPa display, NPT, G thread	●	●
F Attachment (attached)			
Blank	Without attachment	●	●
A6*W	1/8 piping adapter set	●	
A8*W	1/4 piping adapter set	●	●
A10*W	3/8 piping adapter set	●	●
A15*W	1/2 piping adapter set		●
A20*W	3/4 piping adapter set		●
BW	C type bracket	●	●
S	Silencer	●	●
* Adaptor screw type			
Blank	Rc thread	●	●
N	NPT thread	●	●
G	G thread	●	●

⚠ Note on model no. selection

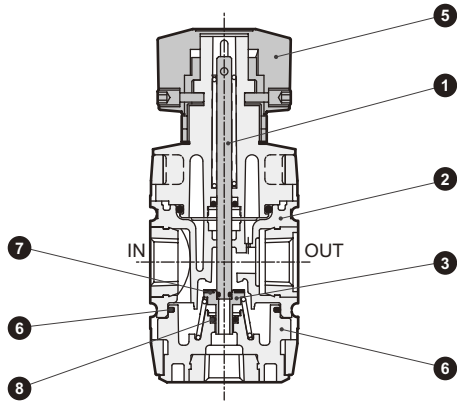
Note 1: Piping adapter set A*00-**-W is attached (refer to page 151).
The piping adapter set and C bracket cannot be used together.

⚠ Select the reverse regulator (R*100-W) or reverse filter regulator (W*100-W) when installing the V*000-W onto the primary side of the regulator or filter regulator.

V*000-W Series

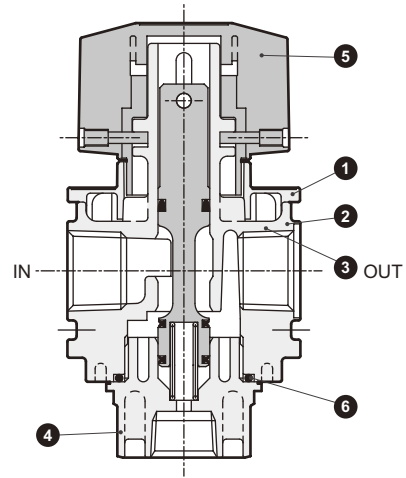
Internal structure and parts list

● V1000-W



No.	Part name	Material
1	Spool	Steel
2	Body assembly	Polyamide resin, steel
3	Valve element	Brass, nitrile rubber
4	Bottom plug	Polyamide resin, steel
5	Knob	Polyacetal resin
6	Packing seal	Nitrile rubber
7	O ring	Nitrile rubber
8	O ring	Nitrile rubber

● V3000-W



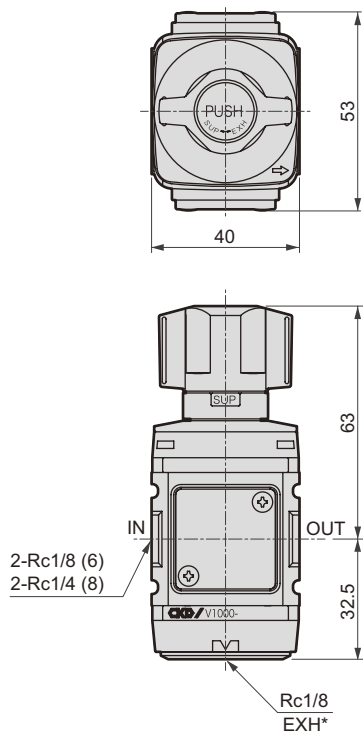
No.	Part name	Material
1	Plate cover	ABS resin
2	Body	Aluminum alloy die-casting
3	Spool assembly	Aluminum alloy urethane rubber resin
4	Bottom plug	PBT resin Note 1
5	Knob	Polyacetal resin
6	O ring	Nitrile rubber

Note 1: The metal bottom plug is used as a custom-order part.

Dimensions

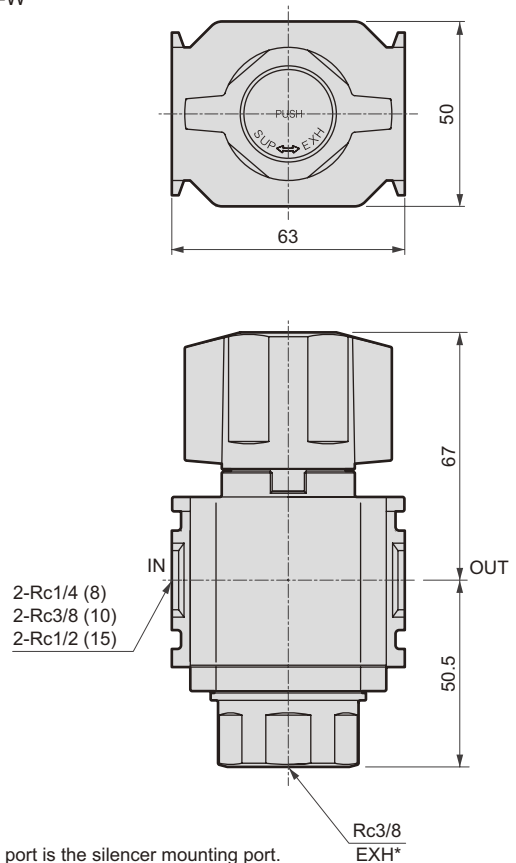


● V1000-W

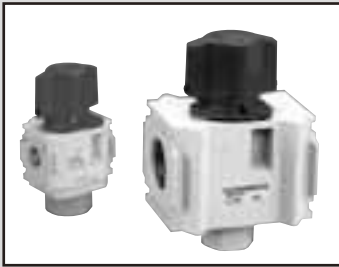


* The EXH port is the silencer mounting port.

● V3000-W



* The EXH port is the silencer mounting port.

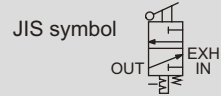


Lockout valve (OSHA compliant) standard white Series

V3010-W/V6010-W Series

Prevent residual pressure accidents in pneumatic lines.

Port size: 1/4 to 1



Specifications

Descriptions		V3010-8-W	V3010-10-W	V3010-15-W	V6010-20-W	V6010-25-W
Working fluid		Compressed air				
Max. working pressure MPa		1.0				
Withstanding pressure MPa		1.5				
Fluid temperature °C		5 to 60				
Operation lever switchover angle		90°				
Operating force	Pushing force N	80 or less				
	Torque N·m	2.5 or less				
Valve seat leakage cm ³ /min. (ANR)		10 or less				
External leakage cm ³ /min. (ANR)		10 or less				
Port size	IN-OUT	1/4	3/8	1/2	Rc 3/4	Rc1
	(Rc, NPT, G) EXH	3/8			Rc1/2	
Product weight kg		0.3			0.8	
Effective sectional area (mm ²)	IN → OUT	40	70	85	145	150
	OUT → EXH	40	50	50	105	110

OSHA: Occupational Safety and Health Administration

US Safety Standards related to worker safety are set.

<Lockout/Tagout Regulations>

When servicing or maintaining machinery, the air source shall be closed with a shut-off valve (lockout valve), and residual pressure shall be discharged. If a third party inadvertently operates the valve during such operation and compressed air is applied, the cylinder, etc., could move suddenly and injure personnel. This standard states that, "All valves used for such purposes shall have a key or a structure which can be locked with a key."

How to order

● F.R.L. 2000, 3000, 4000 Series



● F.R.L. 6000, 8000 Series



A Model no.

B Port size

C Port thread type

D Option

E Display unit

F Attachment
Note 1

⚠ Note on model no. selection

Note 1: The piping adapter set and C type bracket cannot be used together.

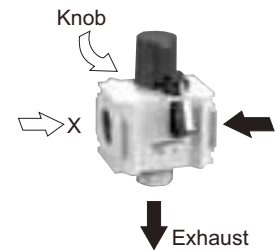
⚠ Select the reverse regulator (R*100-W) or reverse filter regulator (W*100-W) when installing the V*010-W onto the primary side of the regulator or filter regulator.

How to use

● Regular use



● During maintenance work, a lock is set where residual pressure is released.



A Model no.

V	V
3	6
0	0
1	1
0	0

Symbol	Descriptions		
B Port size			
8	1/4	●	
10	3/8	●	
15	1/2	●	
20	3/4		●
25	1		●

C Port thread type			
Blank	Rc thread	●	●
N	NPT thread	●	●
G	G thread	●	●

D Option			
Blank	None	●	●
X1	IN/OUT reverse flow (right → left)	●	●

E Display unit			
Blank	MPa display, Rc thread	●	●
J1	MPa display, NPT, G thread	●	●

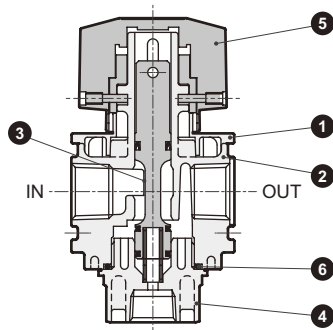
F Attachment (attached)			
Blank	Without attachment	●	●
A8W	1/4 piping adapter set	●	
A10W	3/8 piping adapter set	●	
A15W	1/2 piping adapter set	●	
A20W	3/4 piping adapter set	●	●
A25W	1 piping adapter set	●	●
A32W	1 1/4 piping adapter set		●
BW	C type bracket	●	●
S	Silencer	●	●

* Adaptor screw type			
Blank	Rc thread	●	●
N	NPT thread	●	●
G	G thread	●	●

V*010-W Series

Internal structure and parts list

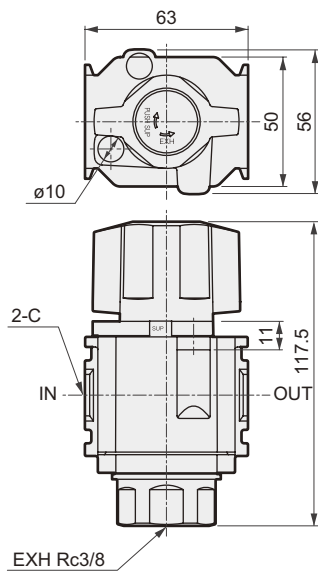
● V3010-W



No.	Part name	Material
1	Plate cover	ABS resin (Note 2)
2	Body	Aluminum alloy die-casting
3	Spool assembly	Aluminum alloy urethane rubber resin
4	Bottom plug	PBT resin (Note 1) (Note 2)
5	Knob	Aluminum alloy die-casting
6	O ring	Nitrile rubber

Note 1: The metal bottom plug is used as a custom-order part.
 Note 2: Flame resistance resin UL94 standards V-O or equivalent

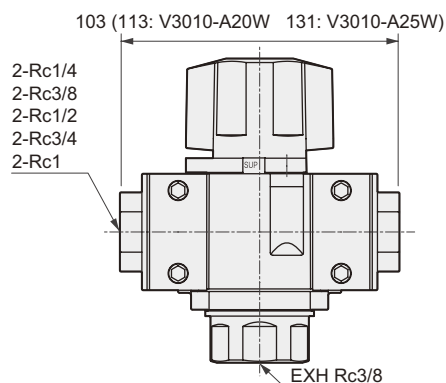
Dimensions (V3010-W)



* The EXH port is the silencer mounting port.

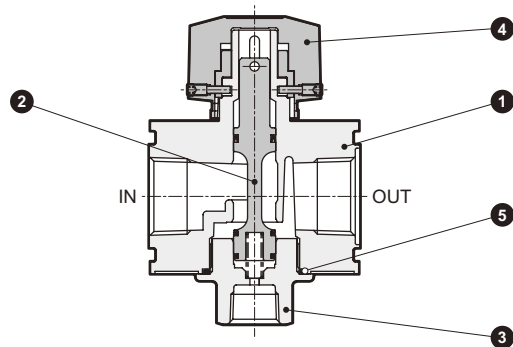
Descriptions	C
V3010-8-W	Rc1/4
V3010-10-W	Rc3/8
V3010-15-W	Rc1/2

● Adaptor attachment



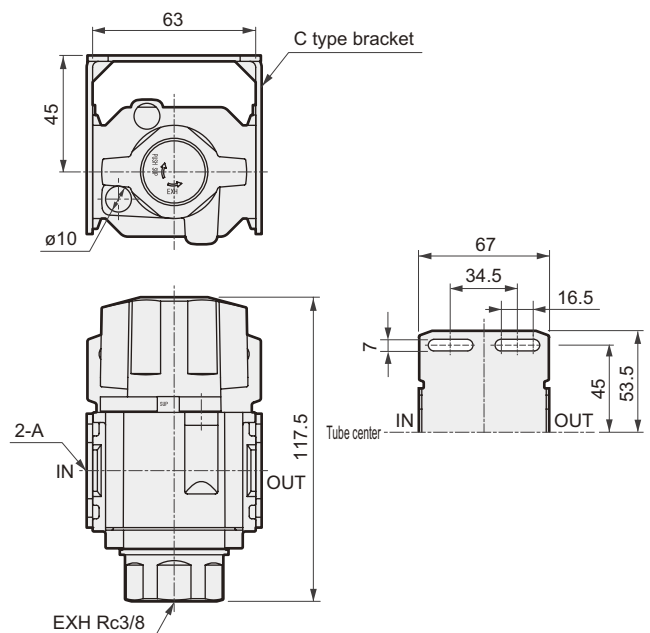
Piping adapter set is attached at shipment.

● V6010-W



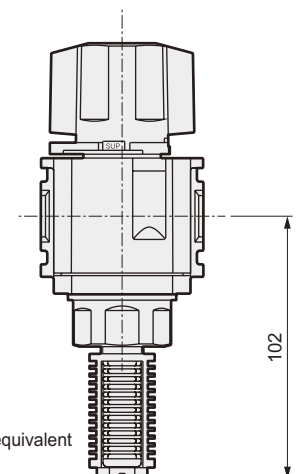
No.	Part name	Material
1	Body	Aluminum alloy die-casting
2	Spool assembly	Aluminum alloy, hydrogen nitrile rubber
3	Bottom plug	Aluminum alloy die-casting
4	Knob	Aluminum alloy die-casting
5	O ring	Nitrile rubber

● C type bracket (-BW) Part model no.: B320



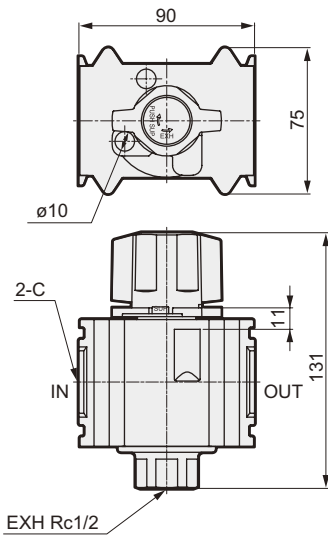
The C type bracket is attached at shipment.
 C type bracket and piping adapter set can not be used together.

● Silencer (-S) Part model no.: SLW-10A



The silencer is attached at shipment.
 The silencer is made of flame-resistant resin equivalent to UL94 Standard V-O, but the element is not.

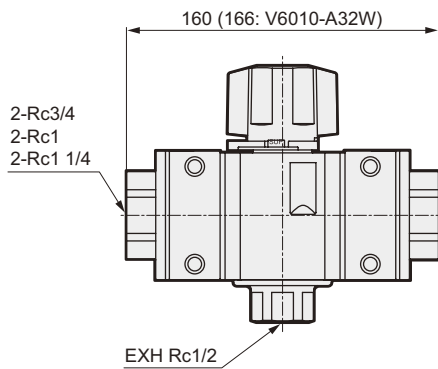
Dimensions (V6010-W)



* The EXH port is the silencer mounting port.

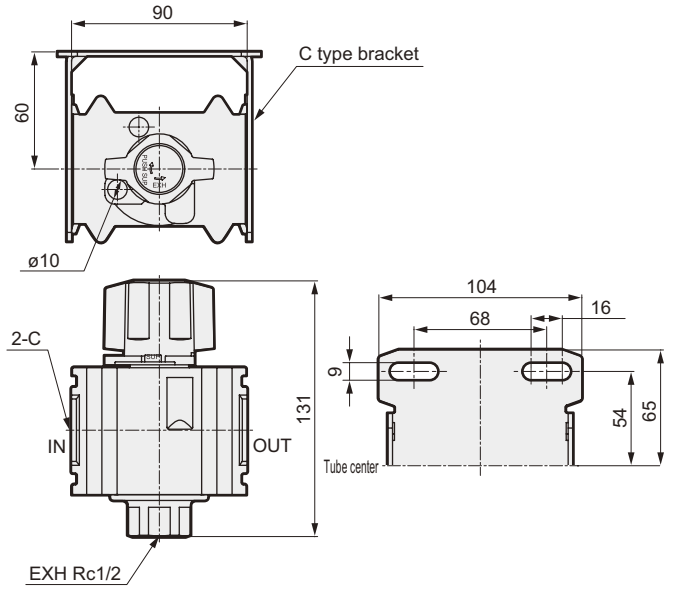
Descriptions	C
V6010-20-W	Rc3/4
V6010-25-W	Rc1

● Adaptor attachment



Piping adapter set is attached at shipment.

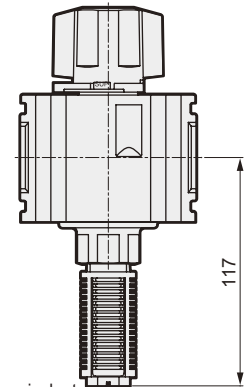
● C type bracket (-BW) Part model no.: B620



The C type bracket is attached at shipment.

C type bracket and piping adapter set can not be used together.

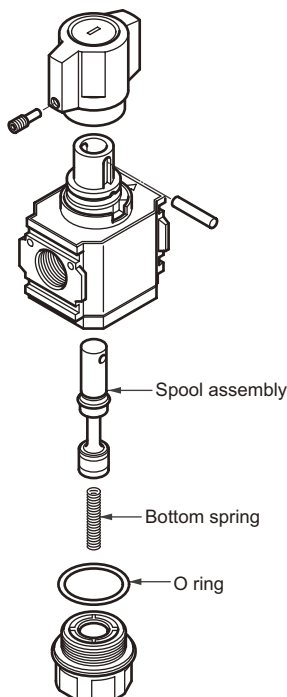
● Silencer (-S) Part model no.: SLW-15A



The silencer is attached at shipment.

The silencer is made of flame-resistant resin equivalent to UL94 Standard V-O, but the element is not.

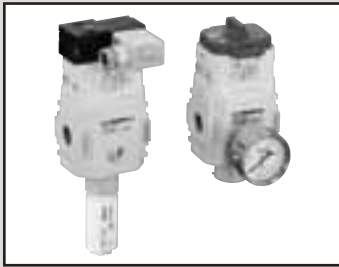
Shut-off valve (V3000-W, V3010-W) optional parts drawing



Spool assembly

(Sets of spool assembly and bottom spring)

Model	Spool assembly model no.
V3000, V3010	V3000-SPOOL



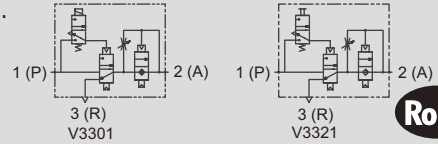
Slow start valve standard white Series

V3301-W/V3321-W Series

To maintain safety at starting and stopping.

● Port size: Rc1/4 to Rc1/2

JIS symbol



Specifications

Descriptions		V3301-W/V3321-W		
Operating method		Pilot operated soft spool valve		
Working fluid		Compressed air (excluding ultra dry compressed air) Note 1		
Working pressure range MPa		0.2 to 1.0		
Withstanding pressure MPa		1.5		
Ambient temperature range °C		5 to 60		
Port size	1 (P) / 2 (A) port	Rc1/4	Rc3/8	Rc1/2
	3 (R) port	Rc3/8		
	Gauge port	Rc1/4		
Effective sectional area mm ²	Low speed air supply	6		
	High speed air supply	40	64	76
	High speed exhaust	50	74	78
Response time		0.2sec. or less		
Lubrication		Oil-free Note 2		
Weight g		V3301-W: 635 V3321-W: 515		
Solenoid valve specifications		V3301-W		
Rated voltage V		100 AC (50/60Hz)	200 AC (50/60Hz)	24 DC
Starting current A		0.076/0.058	0.038/0.030	0.092
Holding current A		0.038/0.029	0.019/0.015	
Power consumption W		2.2/1.7	2.2/1.7	2.2
Temperature rises K		40 or less		
Voltage fluctuation range		±10%		
Insulation class		Class B		
Electric connection		Grommet lead wire, terminal box		

Note 1: Contact CKD when using ultra dry compressed air.

Note 2: Use the turbine oil Class 1 ISO VG32 if lubricated.

How to order

● Solenoid valve type **V3301** - **08** - **W** - **1** - **BW**
(White type)

● Manual **V3321** - **08** - **W** - **BW**

A Port size

B Manual override

C Electric connection

D Voltage

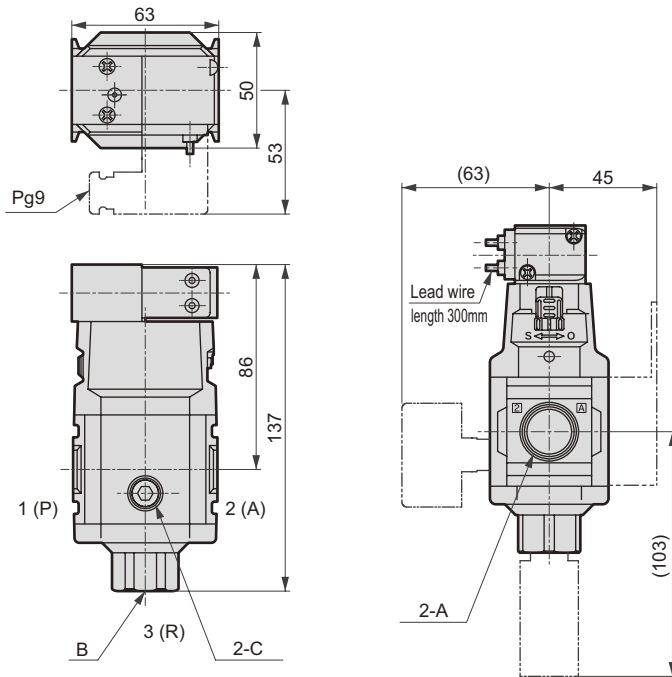
E Attachment (attached)

⚠ Select the reverse regulator (R*100-W) or reverse filter regulator (W*100-W) when installing the V3301-W or V3321-W onto the primary side of the regulator or filter regulator.

Symbol	Descriptions	
A Port size		
1 (P) / 2 (A) port		
08	Rc1/4	
10	Rc3/8	
15	Rc1/2	
B Manual override		
Blank	Non-locking	
M1	Locking	
C Electric connection		
Blank	Grommet lead wire	
S	Grommet lead wire with surge suppressor	
B	Terminal box	
LS	Terminal box with surge suppressor and indicator light	
D Voltage		
1	100 VAC 50/60Hz	Standard
2	200 VAC 50/60Hz	
3	24 VDC	Option
4	12 VDC	
5	110 VAC 50/60Hz	
6	220 VAC 50/60Hz	
E Attachment (attached)		
Blank	Without attachment	
BW	C type bracket	
G49P	Pressure gauge: G49D-8-P10	
S	Silencer	

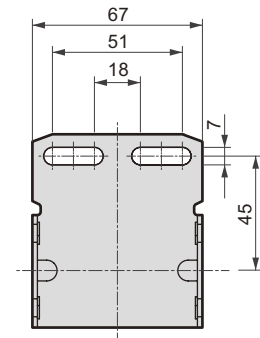
Dimensions

● V3301-W

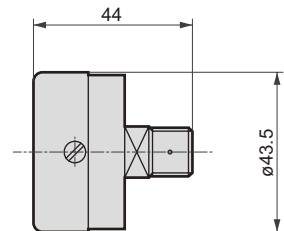


	A	B	C
V3301-08-W	Rc1/4	Rc3/8	Rc1/4
V3301-10-W	Rc3/8		
V3301-15-W	Rc1/2		

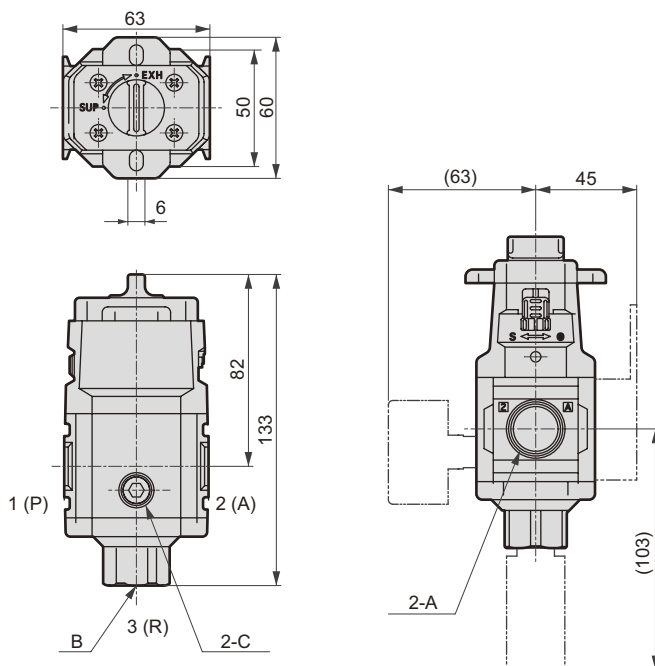
● Bracket: B320



● Pressure gauge: G49D-8-P10

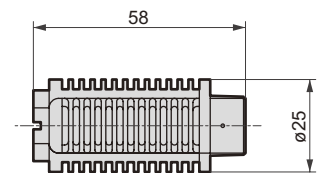


● V3321-W



	A	B	C
V3321-08-W	Rc1/4	Rc3/8	Rc1/4
V3321-10-W	Rc3/8		
V3321-15-W	Rc1/2		

● Silencer: SLW-10A

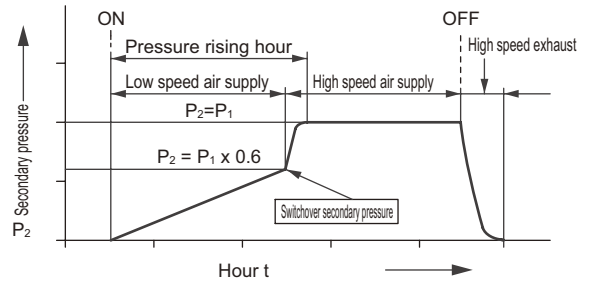


Operational explanation (refer to the operation characteristics)

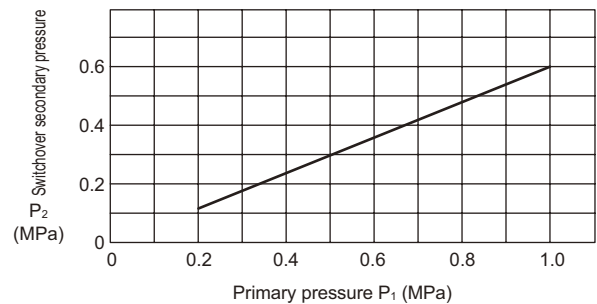
The slow start valve turns on when the solenoid valve is energized or the manual section is set to SUP. The valve turns off when the solenoid valve is deenergized or the manual section is set to EXH.

- (1) First, when the main unit is turned on, the low-speed supply path opens, and the compressed air starts to flow to the secondary side. The secondary pressure gradually starts to rise. The operable cylinders in the unit will start moving at a low speed and thus will not pop out.
- (2) Next, when the secondary pressure exceeds 60% of the primary pressure, the high-speed supply path opens. The secondary pressure suddenly rises to the same pressure as the primary pressure. (Fully open state)
- (3) When the main unit is turned off, high-speed exhaust will start, and the residual pressure in the device will be exhausted.

● Operation characteristics



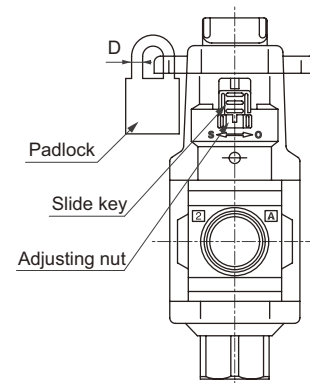
● Switchover secondary pressure



Adjustment method of slow start (refer to the side view)

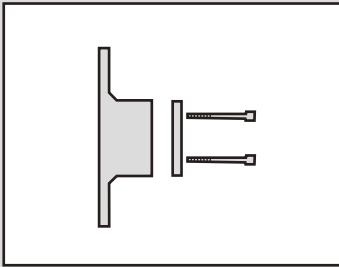
- (1) Press the slide key up and release the adjustment nut lock.
- (2) Turn the main unit on, and confirm the cylinder operation speed and secondary pressure rise time. Then turn the main unit off.
- (3) Turn the adjustment nut as explained below, and adjust the state.
 - Cylinder pops out → Turn to the S side
 - Low speed operation time is too long → Turn to the O side
 Repeat steps (2) and (3) as necessary, and adjust to the optimum state.
- (4) Align the adjustment nut keyway to the projection on the slide key.
- (5) Press down the slide key and lock the adjustment nut.
- (6) Confirm that the main unit is off.

● Side view



⚠ Safety precautions

- Note 1: This valve is dedicated for starting and stopping (including emergency stop) the device. As a rule, this valve should not be used for repeated cylinder operation or as a normal 3-way valve.
- Note 2: If the minimum operating pressure of the cylinder, which is to be kept from popping out, is less than 50% of the working pressure, popping out will not be prevented.
- Note 3: The manual override is locked with the manual valve type. Select a padlock with a D dimension of 3.8 to 5.8 mm.
- Note 4: Connect a silencer or exhaust filter, etc., to the exhaust port for safety and sound absorption.



Bracket standard white Series

B-W/B Series

Joiner standard white Series

J-W Series



Dimensions and applications

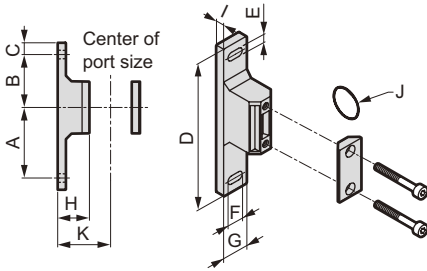
T type bracket set

● Model no.: B110-W/B310-W/B410-W/B810-W

● Example



Note: Select B410-W when using the 3000-W Series and 4000-W Series combined.



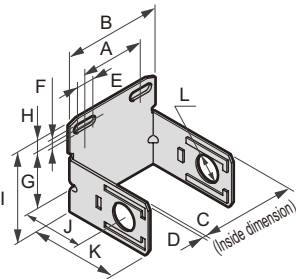
Model no.	Applicable model	A	B	C	D	E	F	G	H	I	J	K
B110-W	1000 Series	45	35	10	100	5.5	7.5	16	25	7.5	JASO-2013	40
B310-W	2000 Series	60	45	10	125	7	14	22	27	7	JISB2401-P21	45
	3000 Series											
B410-W	4000 Series	60	45	10	125	7	14	22	37	7	JISB2401-P21	55
B810-W	6000 Series	70	50	15	150	9	14	27	37	8	AS568-127	65
	8000 Series											

C type bracket

● Model no.: B120/B220/B320/B420/B620/B820

● Attachment: BW

● Example



Model no.	Applicable model	A	B	C	D	E	F	G	H	I	J	K	L
B120	1000 Series	44	68	40	t2.0	10	6.5	35	8.5	61.5	40	60	ø19.5
B220	2000 Series	28	54	50	t2.3	10	7	33	8	63	45	69	17.3
B320	3000 Series	34.5	67	63	t2.3	16.5	7	45	9	75.5	45	69	ø21.7
B420	4000 Series	55	84	80	t2.3	14.0	7	45	9	75.5	55	69	ø21.7
B620	6000 Series	68	104	90	t2.3	16	9	54	11	97.5	60	97	ø35
B820	8000 Series	68	104	100	t2.3	16	9	50	11	93.5	65	102	ø35

L type bracket

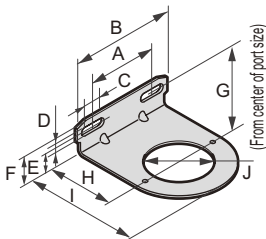
● Model no.: B130/B230/B330/B430/B630

● Attachment: B3W

The knob will be off if the mounting nut is loosened. L-type bracket, then fix with the mounting nut. Press the knob in manually after fixing.

Refer to page 14 for the details.

● Example



Model no.	Applicable model	A	B	C	D	E	F	G	H	I	J	Other
B130	1000 Series	44	68	10	6.5	16	24.5	45	40	59	ø26.5	
B230	2000 Series	28	54	10	7	18	26	52	45	69	38	
B330	3000 Series	34.5	67	16.5	7	17.5	26	58 (63.5)	45	76	ø40	Dimensions in () are for W3000/3100
B430	4000 Series	55	84	14	7	17.5	26	58	55	94	ø47	
B430	6000 Series	55	84	14	7	17.5	26	58	55	94	ø47	

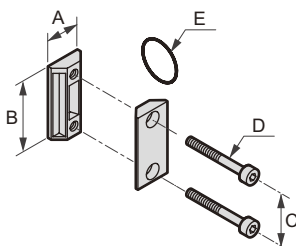
Joiner set

● Model no.: C1000-J100-W

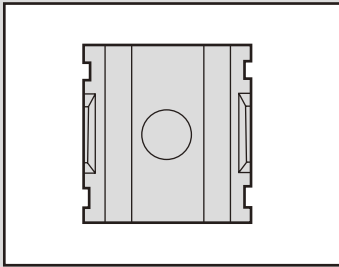
C4000-J400-W

C8000-J800-W

● Example



Model no.	Applicable model	A	B	C	D	E
C1000-J100-W	1000 Series	10	36	26	M3.5	JASO-2013
C4000-J400-W	2000 Series	21	44	32	M5	JIS B2401-P21
	3000 Series					
	4000 Series					
C8000-J800-W	6000 Series	26	65	50	M6	AS568-127
	8000 Series					

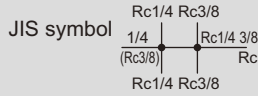


Distributor standard white Series

D101/D401/D801/D300-W Series

Applicable for pipe branching.

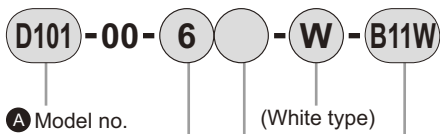
Port size: 1/8 to 1



Specifications

Descriptions	D101-00-W	D401-00-W	D801-00-W	D300-W
Working fluid	Compressed air			
Max. working pressure MPa	1.0			
Withstanding pressure MPa	1.5			
No. of branch port	1			4
Port size Rc, NPT, G	1/8, 1/4	1/4, 3/8, 1/2	3/4, 1	1/4, 3/8
Working temperature °C	5 to 60			
Product weight kg	0.045	0.13	0.35	0.26

How to order

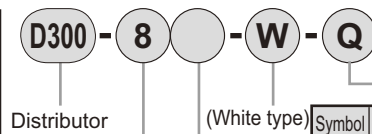


Symbol	Descriptions
A Model no.	
D101	1000 Series
D401	2000, 3000, 4000 Series
D801	6000, 8000 Series

B Port size				
		D101	D401	D801
6	1/8	●		
8	1/4	●	●	
10	3/8		●	
15	1/2		●	
20	3/4			●
25	1			●

C Port thread type	
Blank	Rc thread
N	NPT thread
G	G thread

D T type bracket				
Blank	None	●	●	●
B11W	1000 Series	●		
B31W	2000 3000 Series		●	
B41W	4000 Series		●	
B81W	6000 8000 Series			●



Symbol	Descriptions
A Port size	
8	1/4
10	3/8

B Port thread type	
Blank	Rc thread
N	NPT thread
G	G thread

C Option	
Blank	None
Q	Two each of the following are enclosed: 1/4 blank plug, 3/8 blank plug

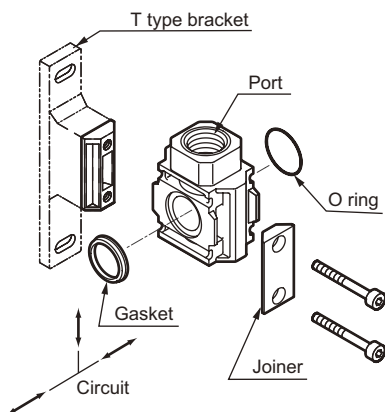
⚠ Note on model no. selection

- Note 1: The joiner set (joiner, bolt, O ring) and one gasket are enclosed as a standard.
- Note 2: Consult with CKD for 2 way branch.
- Note 3: D401-W can be connected to both 3000-W and 4000-W Series.

⚠ Note on model no. selection

- Note 1: When using with C3000-W, C4000-W, a joiner set C4000-J400-W, or T type bracket set B310-W or B410-W is required to connect.
- Note 2: Joiner set C4000-J400-W or T type bracket set should be ordered separately (Refer to 148 page)

Assembly method (D101-00-W, D401-00-W, D801-00-W)



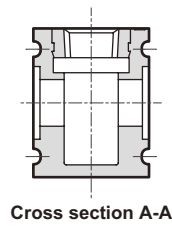
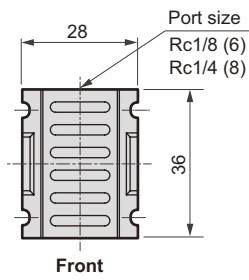
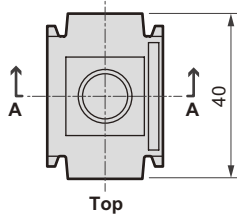
Note 1: When installing at the primary side, insert an O ring, while installing at the secondary side, insert a gasket.

Note 2: When inserting O ring and gasket to assemble, O ring and gasket must not be folded.

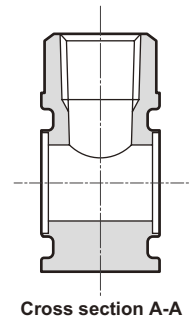
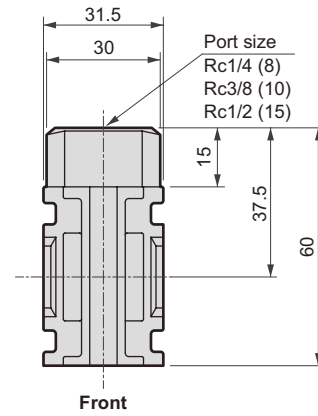
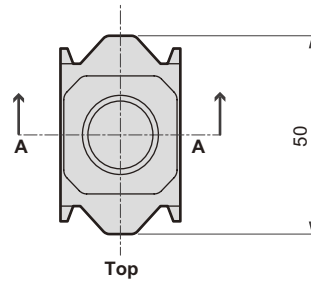
Applications (D101-00-W, D401-00-W or D801-00-W)



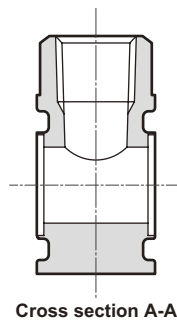
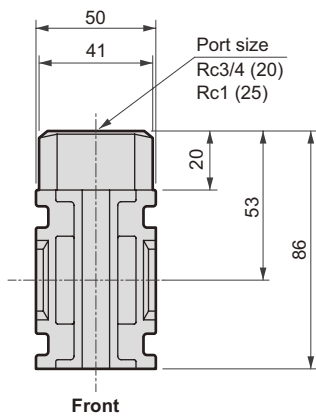
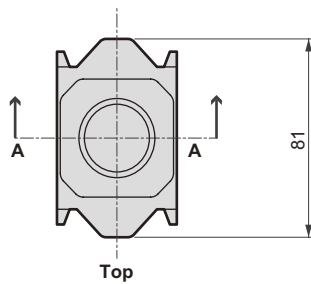
● D101-00-W



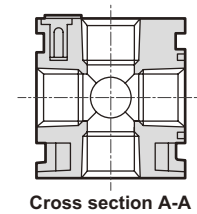
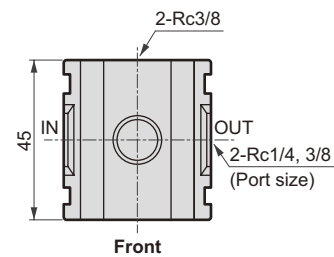
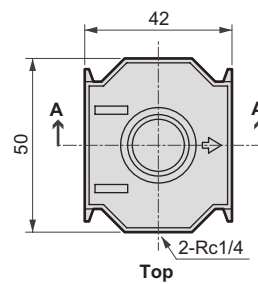
● D401-00-W

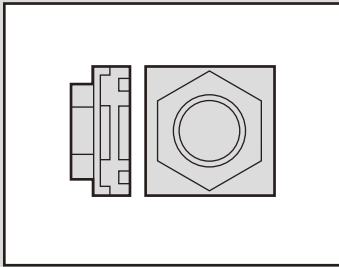


● D801-00-W



● D300-W





Piping adapter standard white Series

A100/A400/A800-W Series

Port size: 1/8 to 1

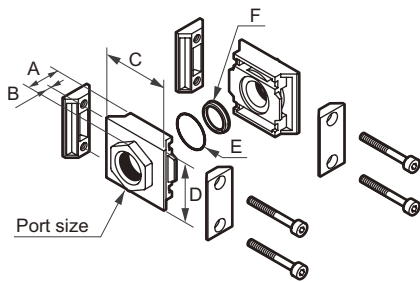


Dimensions and applications

Piping adapter set

- Model no.: A100-6/8/10-W
A400-8/10/15/20-W
A800-20/25/32-W

● Example



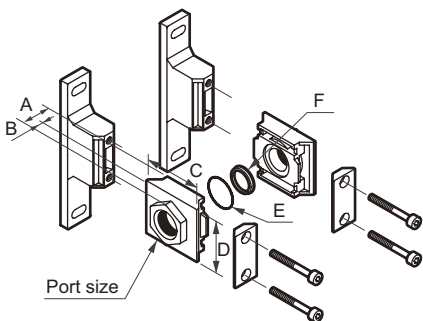
Model no.	Port size	Applicable model	A	B	C	D	E (O ring)	F (gasket)	Other
A100-6*-W	1/8	1000 Series	21.5	13.5	40	36	JASO-2013 1 pc.	1 pc.	-
A100-8*-W	1/4								
A100-10*-W	3/8								
A400-8*-W	1/4	2000 3000 Series 4000 Series	20 (25) {34}	6 (11) {20}	50	45	JISB2401 P21 1 pc.	1 pc.	Numbers in () is 3/4 Numbers in { } is when 1
A400-10*-W	3/8								
A400-15*-W	1/2								
A400-20*-W	3/4								
A400-25*-W	1								
A800-20*-W	3/4								
A800-25*-W	1								
A800-32*-W	1 1/4								

* Blank: Rc thread/N: NPT thread/G: G thread

Piping adaptor set

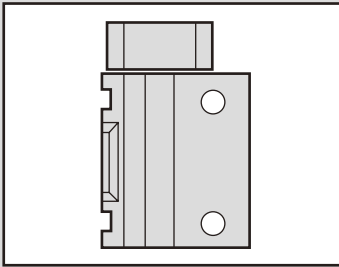
- Model no.: A100-6/8/10-W-B-11W
A400-8/10/15-W-B31W
A400-8/10/15/20-W-B41W
A800-20/25/32-W-B81W
(with T type bracket set)

● Example



Model no.	Port size	Applicable model	A	B	C	D	E (O ring)	F (gasket)	Other								
A100-6*-W-B11W	1/8	1000 Series	21.5	13.5	40	36	JASO-2013 1 pc.	1 pc.	-								
A100-8*-W-B11W	1/4																
A100-10*-W-B11W	3/8																
A400-8*-W-B31W	1/4	2000 3000 Series	20	6	50	45	JISB2401 P21 1 pc.	1 pc.									
A400-10*-W-B31W	3/8																
A400-15*-W-B31W	1/2																
A400-8*-W-B41W	1/4									4000 Series	20 (25) {34}	6 (11) {20}	50	45	JISB2401 P21 1 pc.	1 pc.	Numbers in () is 3/4 Numbers in { } is when 1
A400-10*-W-B41W	3/8																
A400-15*-W-B41W	1/2																
A400-20*-W-B41W	3/4																
A400-25*-W-B41W	1																
A800-20*-W-B81W	3/4	6000 8000 Series	35 (38)	15 (18)	81	66	AS568-127 1 pc.	1 pc.	Numbers in () is 1 1/4								
A800-25*-W-B81W	1																
A800-32*-W-B81W	1 1/4																

* Blank: Rc thread/N: NPT thread/G: G thread



L type piping adapter standard white Series

A101/A401/A801-W Series

Port size: 1/8 to 1

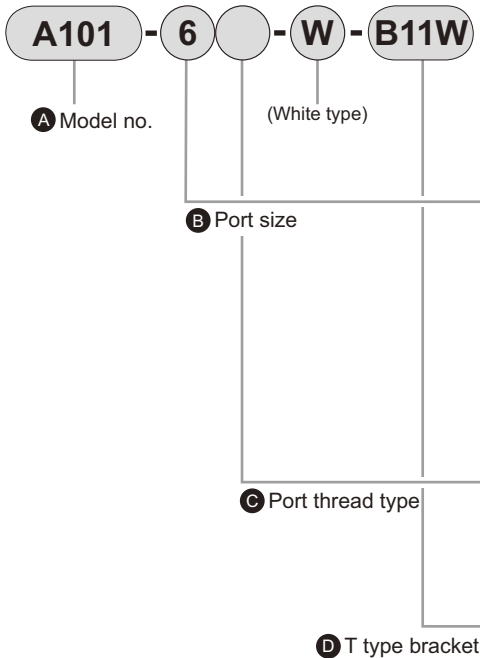


Specifications

Descriptions	A101-W	A401-W Note 1	A801-W
Working fluid	Compressed air		
Max. working pressure MPa	1.0		
Withstanding pressure MPa	1.5		
Port size Rc, NPT, G	1/8, 1/4	1/4, 3/8, 1/2	3/4, 1
Working temperature °C	5 to 60		
Product weight kg	0.045	0.13	0.4

Note 1: A401-W can be connected to both 3000-W and 4000-W Series.

How to order



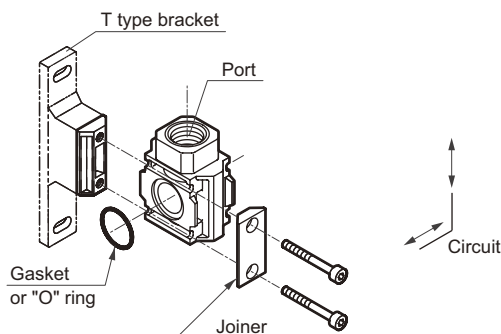
Symbol	Descriptions			
A Model no.				
A101	L type piping adapter			
A401	L type piping adapter			
A801	L type piping adapter			
B Port size				
		A101	A401	A801
6	1/8	●		
8	1/4	●	●	
10	3/8		●	
15	1/2		●	
20	3/4			●
25	1			●
C Port thread type				
Blank	Rc thread			
N	NPT thread			
G	G thread			
D T type bracket Note 1				
Blank	None	●	●	●
B11W	1000 Series	●		
B31W	2000 Series 3000 Series		●	
B41W	4000 Series		●	
B81W	6000 Series 8000 Series			●

- Applicable model
- A101-6/8-W
- 1000-W Series
- A401-8/10/15-W
- 2000/3000/4000-W Series
- A801-20/25-W
- 6000/8000-W Series

⚠ Note on model no. selection

Note 1: The joiner set (joiner, bolt, O ring) and one gasket are enclosed as a standard.

L type piping adapter



● Example



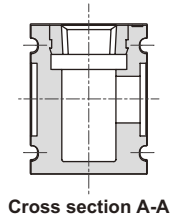
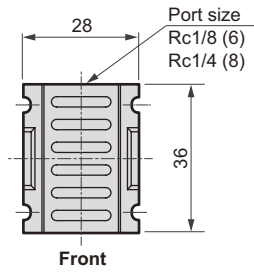
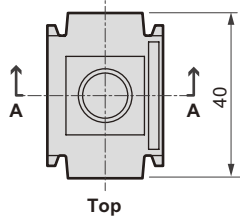
Note: Insert the O ring when mounting on the primary side for the air flow, and insert the gasket when mounting on the secondary side.

Note: Refer to the following page for the dimensions.

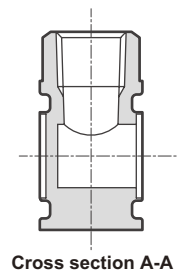
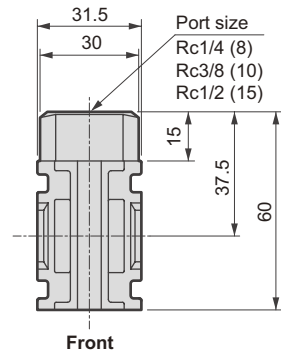
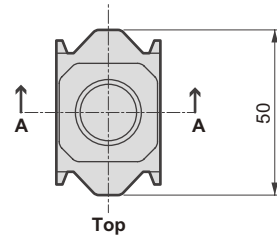
Piping adaptor

Dimensions 

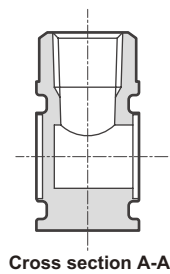
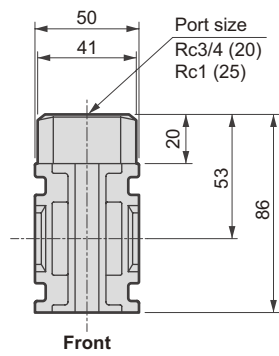
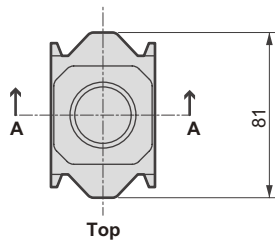
● A101-W



● A401-W



● A801-W



**F.R.L.
Modular design**

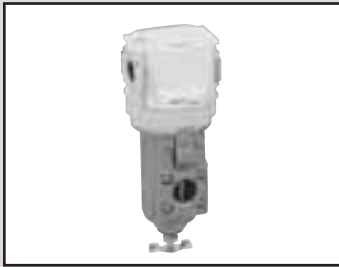
Medium pressure Series

■ Components for air preparation/pressure adjustment/F.R.L. unit



C O N T E N T S

Product introduction	1
Series variation	3 to 6
⚠ Safety precautions	11
Air filter	
● Air filter (FM*000-W)	155
● Oil mist filter (MM*000-W)	161
Bracket/joiner (B/J)	148
Distributor (D*01-00)	149
Piping adapter (A***)	151
Regulator	
● Regulator (RM*000-W)	167




Air filter medium pressure type standard white Series

FM3000-W/FM4000-W/FM6000-W/FM8000-W Series





F3000 to 8000 Series medium pressure specifications

Port size: 1/4 to 1

JIS symbol 



Specifications

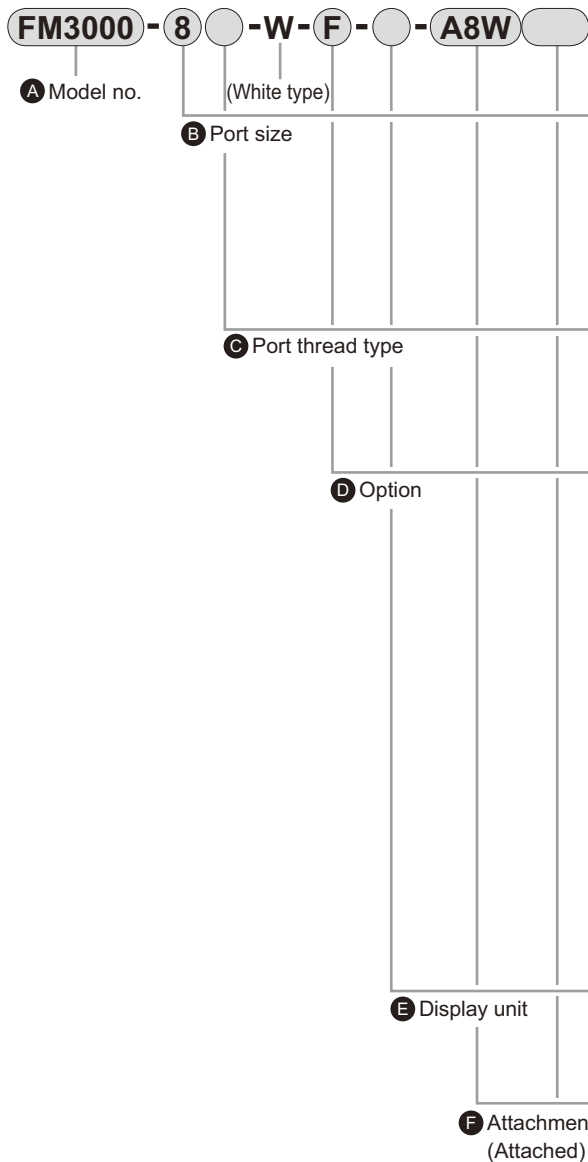
Model no.	FM3000-W	FM4000-W	FM6000-W	FM8000-W
Appearance				
Working fluid	Compressed air			
Max. working pressure MPa	1.6 (Note 2, 3)			
Withstanding pressure MPa	2.4			
Ambient temperature °C	-5 to 60 (no freezing)			
Fluid temperature °C	5 to 60			
Filtration rating μm	5 or 0.3			
Drain capacity cm ³	45	80	80	80 (Note 1)
Port size Rc, NPT, G	1/4, 3/8	1/4, 3/8, 1/2	3/4, 1	3/4, 1
Product weight kg	0.35	0.55	1.0	1.26

Note 1: Drainage accumulates up to 170 cm³ only with the manual drain cock.

Note 2: Minimum operating pressure of automatic drain is 0.1MPa for the "F" with the automatic drain. Air is purged with initial drainage until pressure reaches 0.1 MPa.

Note 3: The minimum operation pressure of the automatic drain is 0.15 MPa for the "F1" with an automatic drain.

How to order



* Refer to page 9 for explanation of an option.

A Model no.			
F	M	F	F
3	4	6	8
0	0	0	0
0	0	0	0

Symbol	Descriptions					
B Port size						
8	1/4	●	●			
10	3/8	●	●			
15	1/2		●			
20	3/4			●	●	
25	1			●	●	
C Port thread type Note 1						
Blank	Rc thread	●	●	●	●	
N	NPT thread	●	●	●	●	
G	G thread	●	●	●	●	
D Option Note 2						
Drainage <small>Note 3, Note 4</small>	Blank	With manual drain cock	●	●	●	●
	F	NO type automatic drain (exhaust without pressurized) drain port Rc1/8 <small>Max. working pressure 1.5 MPa, Max. working temperature 45°C</small>	●	●	●	●
	F1	NC type automatic drain (no exhaust without pressurized) drain port Rc1/8 <small>Max. working pressure 1.5 MPa, Max. working temperature 45°C</small>	●	●	●	●
Bowl material	Blank	Metal bowl	●	●	●	●
Element	Blank	5μm	●	●	●	●
	Y	0.3μm	●	●	●	●
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)			●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●
E Display unit						
Blank	MPa display, Rc thread	●	●	●	●	
J1	MPa display, NPT/G thread	●	●	●	●	
F Attachment (attached) Note 5 Pages 151 to 153						
Blank	Not attached	●	●	●	●	
A8*W	1/4 piping adapter set	●	●			
A10*W	3/8 piping adapter set	●	●			
A15*W	1/2 piping adapter set	●	●			
A20*W	3/4 piping adapter set		●	●	●	
A25*W	1 piping adapter set			●	●	
A32*W	1 1/4 piping adapter set			●	●	
* Adaptor screw type						
Blank	Rc thread	●	●	●	●	
N	NPT thread	●	●	●	●	
G	G thread	●	●	●	●	
G Bracket (attached) Page 148						
Blank	Not attached	●	●	●	●	
BW	C type bracket	●	●	●	●	

⚠ Note on model no. selection

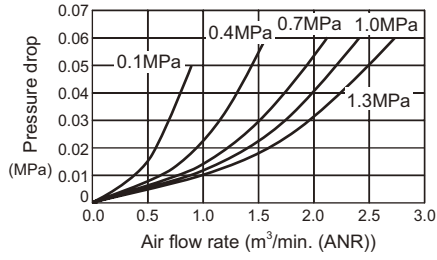
- Note 1: When G threads or NPT threads are selected, the IN, OUT, and drain port are available.
- Note 2: Select options based on drainage, bowl material, element, and differential pressure detection. When selecting options for several items, list options in order from the top.
- Note 3: Refer to page 11 for the automatic drain use conditions.
- Note 4: The large discharge automatic drain is provided only when "F" or "F1" is selected for FM8000-W drain discharge.
- Note 5: The piping adapter set and C bracket cannot be used together.

G Bracket (Attached)

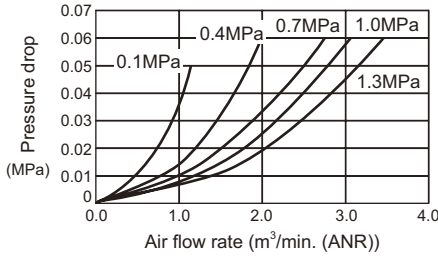
Air Filter Series

Flow characteristics

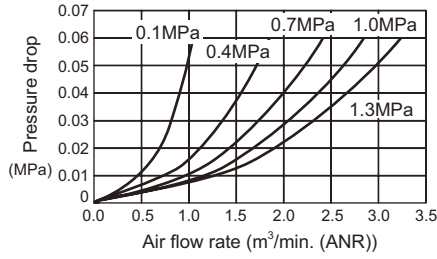
● FM3000-8-W



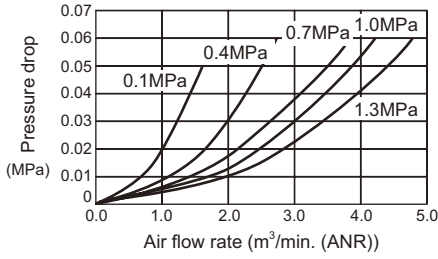
● FM3000-10-W



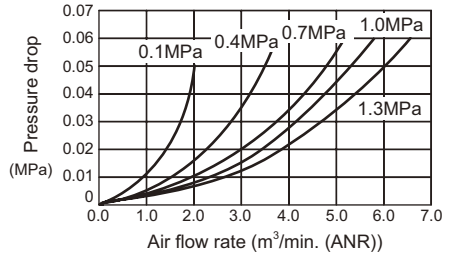
● FM4000-8-W



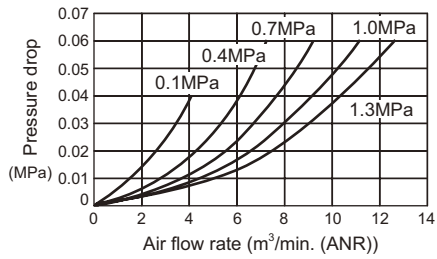
● FM4000-10-W



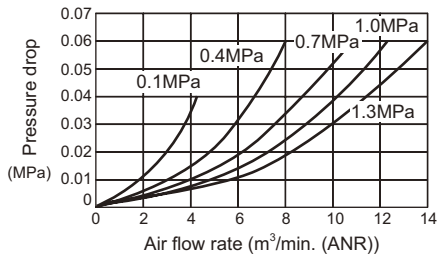
● FM4000-15-W



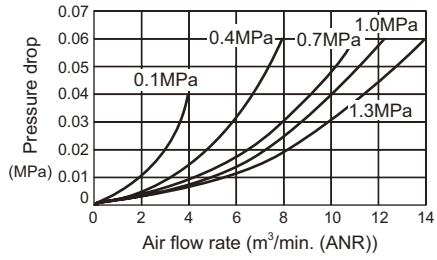
● FM6000-20-W



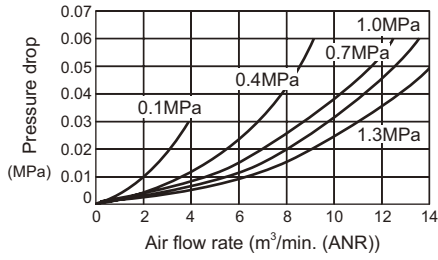
● FM6000-25-W



● FM8000-20-W

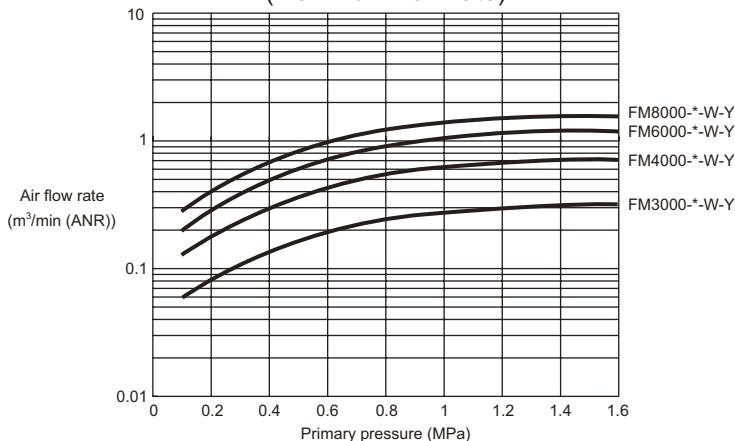


● FM8000-25-W



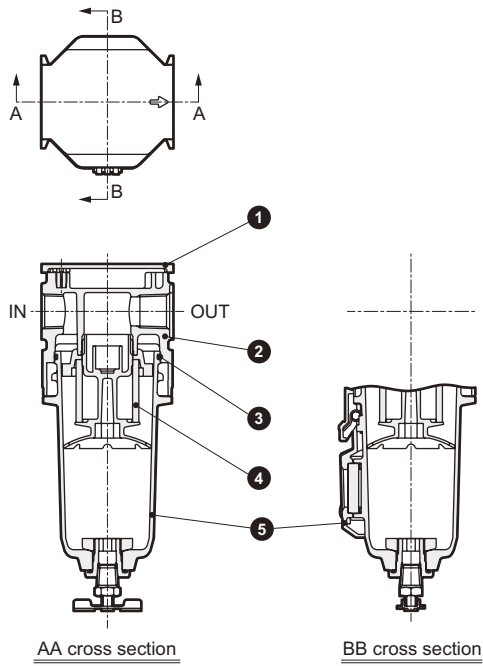
- FM3000
 - FM4000
 - FM6000
 - FM8000
- FM4000 *-W-Y (0.3µm element)

(Maximum flow rate)

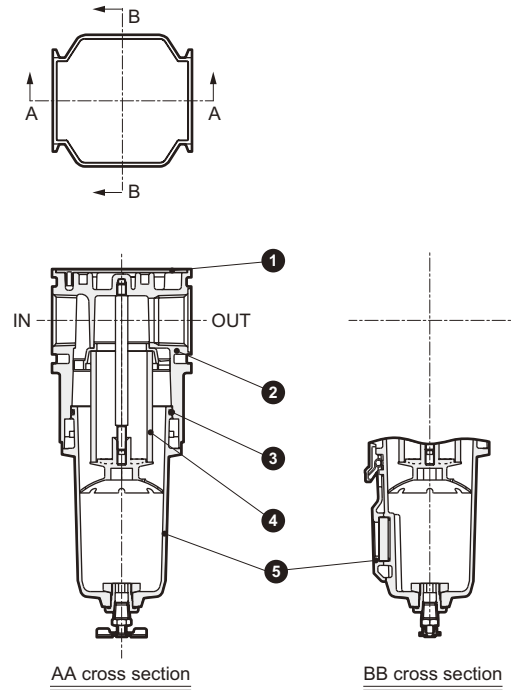


Internal structure and parts list

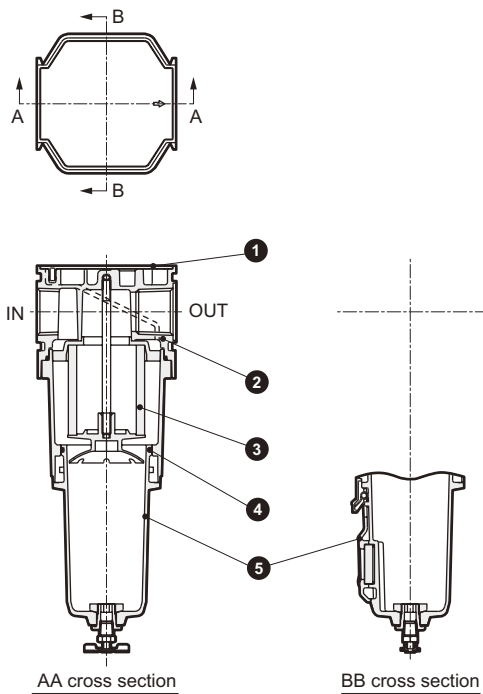
● FM3000-W/FM4000-W



● FM6000-W



● FM8000-W



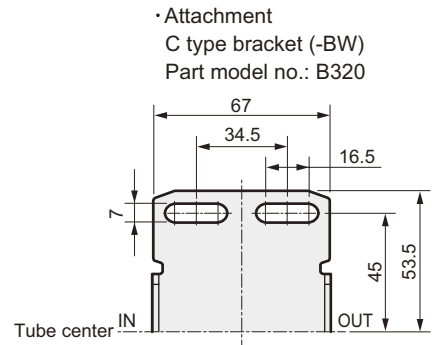
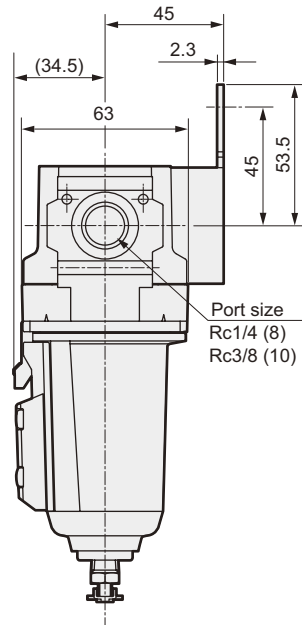
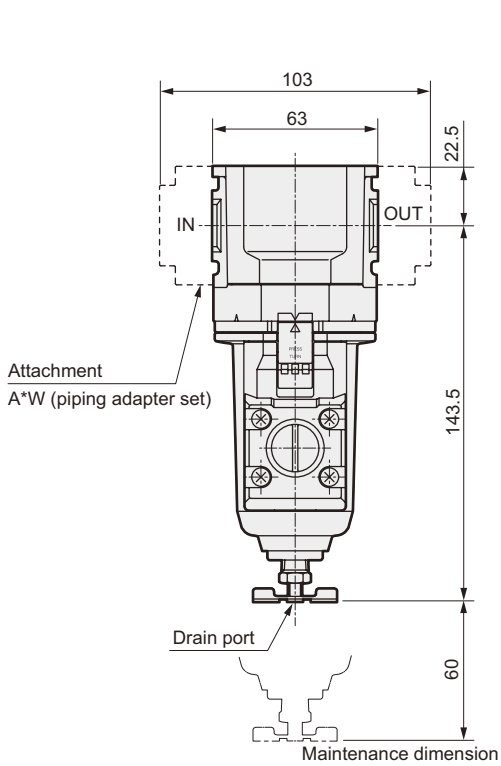
No.	Part name	Material
(1)	Plate cover	ABS resin
(2)	Body	Aluminum alloy die-casting
(3)	O ring	Special nitrile rubber
(4)	Element (5 μ m)	Polypropylene
(4)	Element (0.3 μ m)	-
(5)	Metal bowl assembly	Aluminum alloy die-casting, brass, glass, nitrile rubber, steel, stainless steel

Note 1: Refer to pages 89 and 90 for details on the consumable part element, consumable part kit, and bowl assembly.

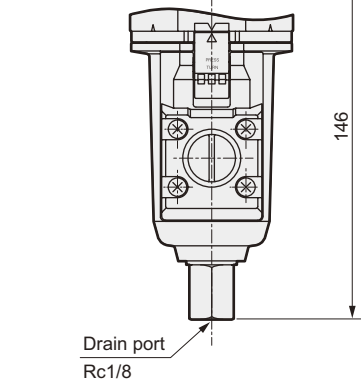
Air Filter Series

Dimensions

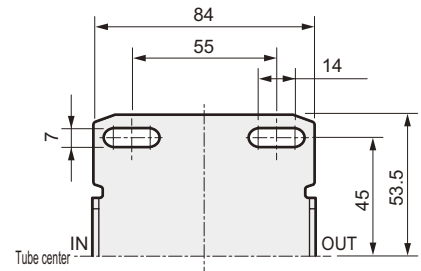
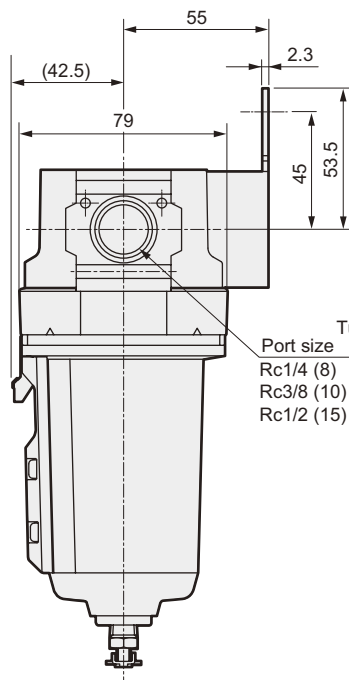
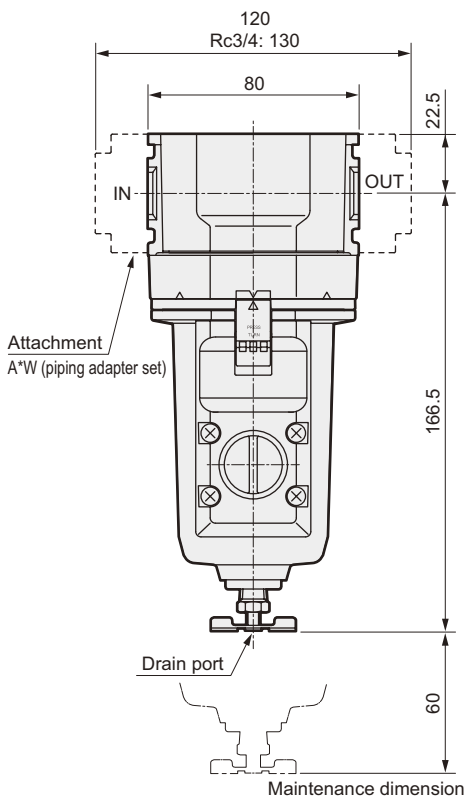
● FM3000-W



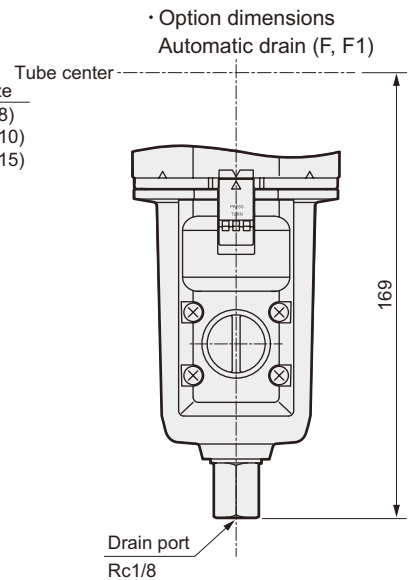
• Attachment
C type bracket (-BW)
Part model no.: B320



● FM4000-W



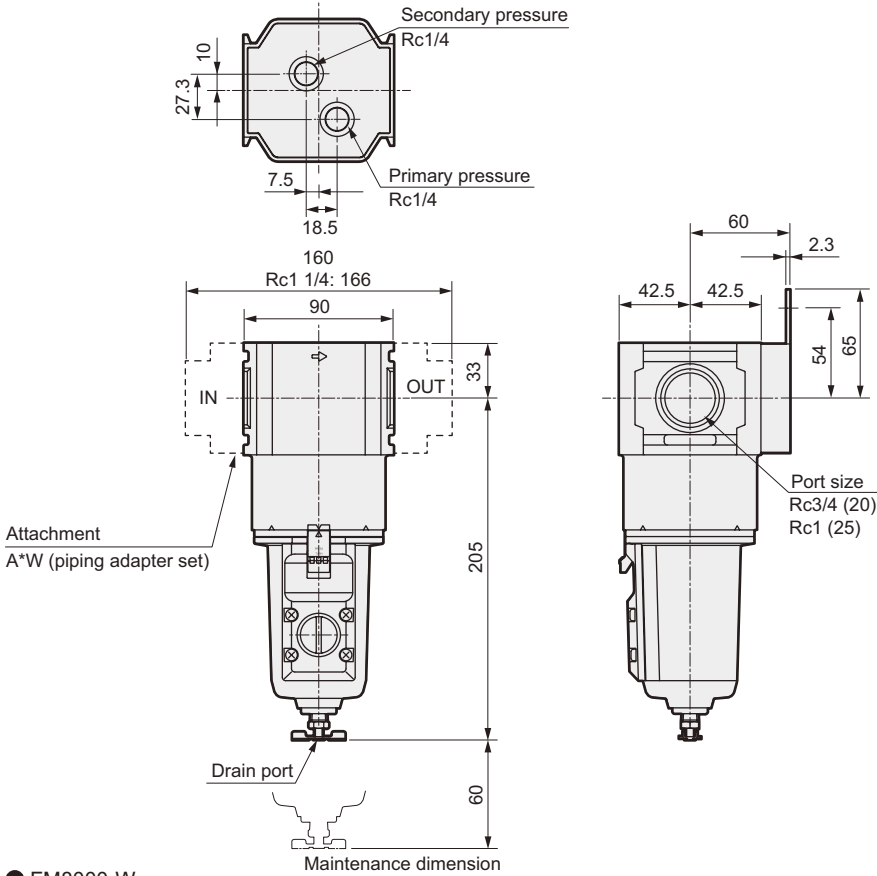
• Attachment
C type bracket (-BW)
Part model no.: B420



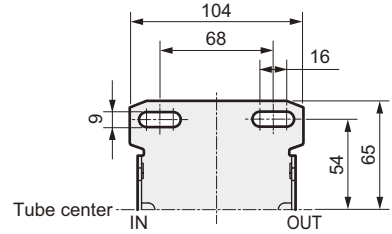
Dimensions

● FM6000-W

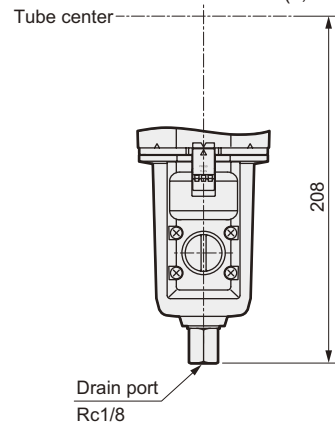
• Option dimensions
With differential pressure detection port (Q)



• Attachment
C type bracket (-BW)
Part model no.: B620

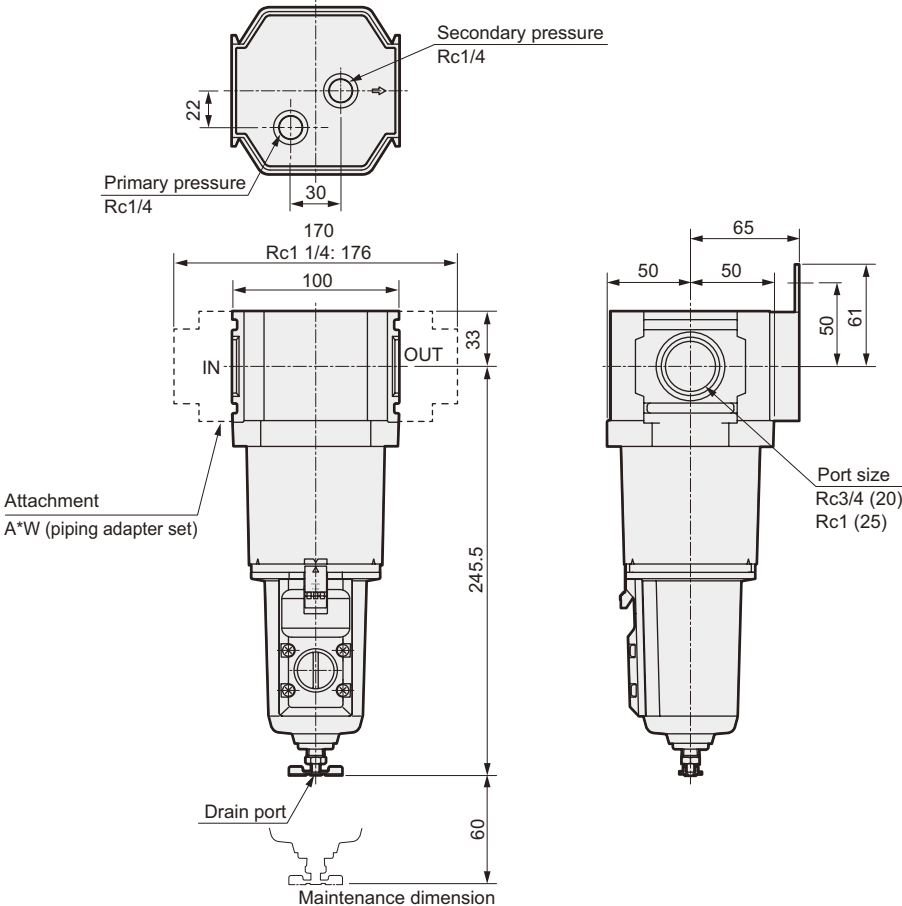


• Option dimensions
Automatic drain (F, F1)

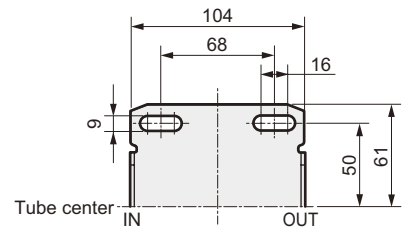


● FM8000-W

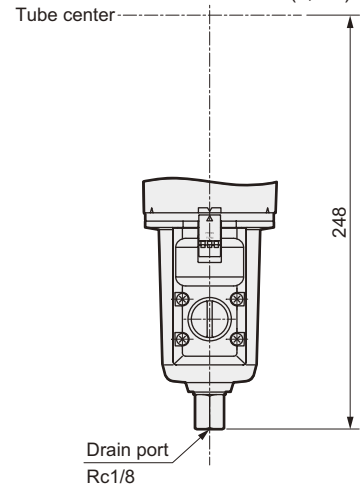
• Option dimensions
With differential pressure detection port (Q)

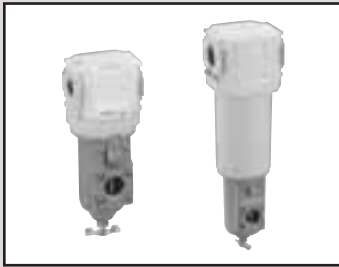


• Attachment
C type bracket (-BW)
Part model no.: B820



• Option dimensions
Automatic drain (F, F1)





Oil mist filter medium pressure type

MM3000-W/MM4000-W/MM6000-W/MM8000-W Series

M3000 to 8000 Series medium pressure specifications

Port size: 1/4 to 1

JIS symbol



Specifications

Model no.	MM3000-W	MM4000-W	MM6000-W	MM8000-W
Appearance				
Working fluid	Compressed air			
Max. working pressure MPa	0.1 to 1.6 Note 7			
Withstanding pressure MPa	2.4			
Drain capacity cm ³	45	80	80	804
Port size Rc, NPT, G	1/4, 3/8	1/4, 3/8, 1/2	3/4, 1	3/4, 1
Product weight kg	0.35	0.55	1.0	1.48

Mantle option name	Blank (M type)	S (S type)	X (X type)
Processing flow MM3000-*-W	490	610	610
ℓ/min (ANR) MM4000-*-W	1130	1370	1370
Primary pressure 1.4 MPa MM6000-*-W	1740	1920	1920
Pressure drop 0.01 MPa MM8000-*-W	3560	3980	3980
Ambient temperature °C	-5 to 60 (no freezing)		-5 to 30 (no freezing)
Fluid temperature °C	5 to 60		5 to 30
Filtration rating μm	0.01 (nominal)	0.3	Suction by activated charcoal Note 4
Secondary oil concentration mg/m ³	0.01 or less Note 2 · Note 3	0.5 or less Note 2	0.003 or less Note 2 · Note 5
Mantle (element) change	One year (6000 hours) or pressure drop 0.1MPa		- Note 6

Note 1: Use within the maximum flow rate.

If the maximum flow rate is exceeded temporarily, or if the filter is installed at a place with high levels of pulsation, the mantle could be damaged or oil or drainage, etc., could splatter to the secondary side and result in faults at the terminal.

Note 2: For primary oil concentration 30mg/m³, inlet air temperature 21°C.

Note 3: Install an oil mist filter (S type) as a prefilter on the primary side to prevent early clogging.

Note 4: Activated charcoal particles could flow to the secondary side, so install an air filter (F Series) or oil mist filter (M Series M type or S type) on the secondary side.

Note 5: When an oil mist filter (M Series M type) is installed on the primary side.

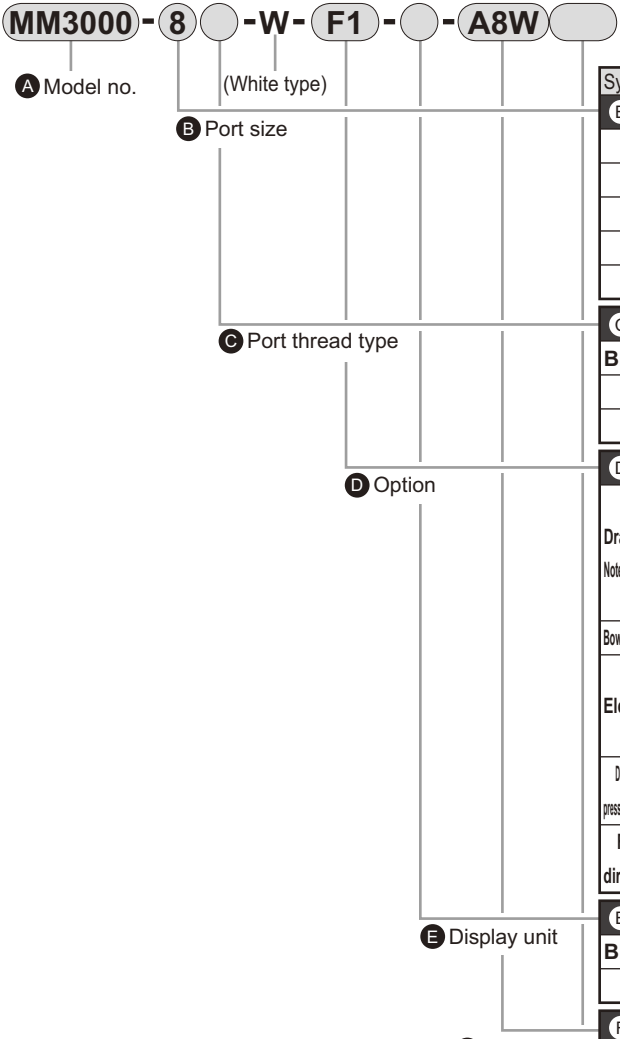
Note 6: The X type mantle (element) replacement period differs with odor density in compressed air and cannot be clearly indicated.

Consider the total period from initial installation to when the smell of oil is confirmed as the effective deodorizing period, and replace the mantle (element) regularly.

Keep the primary air temperature at 30°C or less. The deodorizing effect will drop if the temperature is high, so provide heat dissipating measures.

Note 7: The minimum operation pressure of the automatic drain is 0.15 MPa for the "F1" with an automatic drain.

How to order



* Refer to page 9 for explanation of an option.

A Model no.			
M	M	M	M
3	4	6	8
0	0	0	0
0	0	0	0

Symbol	Descriptions					
B Port size						
8	1/4	●	●			
10	3/8	●	●			
15	1/2		●			
20	3/4			●	●	
25	1			●	●	
C Port thread type Note 1						
Blank	Rc thread	●	●	●	●	
N	NPT thread	●	●	●	●	
G	G thread	●	●	●	●	
D Option Note 2						
Drainage <small>Note 3, Note 4</small>	Blank	With manual drain cock	●	●	●	●
	F1	NC type automatic drain (no exhaust without pressurized) drain port Rc1/8 <small>Max. working pressure 1.5 MPa, Max. working temperature 45°C</small>	●	●	●	●
Bowl material	Blank	Metal bowl	●	●	●	●
	Blank	M type (nominal 0.01µm; remaining oil 0.01mg/m ³)	●	●	●	●
	S	S type (0.3µm; remaining oil 0.5mg/m ³)	●	●	●	●
Element	X	X type (deodorization; remaining oil 0.003mg/m ³) <small>Note 5</small>	●	●	●	●
	Differential pressure detection	Blank	Without differential pressure detection port	●	●	●
Q		With differential pressure detection port (Rc1/4)			●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●
E Display unit						
Blank	MPa display, Rc thread		●	●	●	●
J1	MPa display, NPT/G thread		●	●	●	●
F Attachment (attached) Note 6 Pages 151 to 153						
Blank	Not attached		●	●	●	●
A8*W	1/4 piping adapter set		●	●		
A10*W	3/8 piping adapter set		●	●		
A15*W	1/2 piping adapter set		●	●		
A20*W	3/4 piping adapter set			●	●	●
A25*W	1 piping adapter set				●	●
A32*W	1 1/4 piping adapter set				●	●
* Adaptor screw type						
Blank	Rc thread		●	●	●	●
N	NPT thread		●	●	●	●
G	G thread		●	●	●	●
G Bracket (attached) Page 148						
Blank	Not attached		●	●	●	●
BW	C type bracket		●	●	●	●

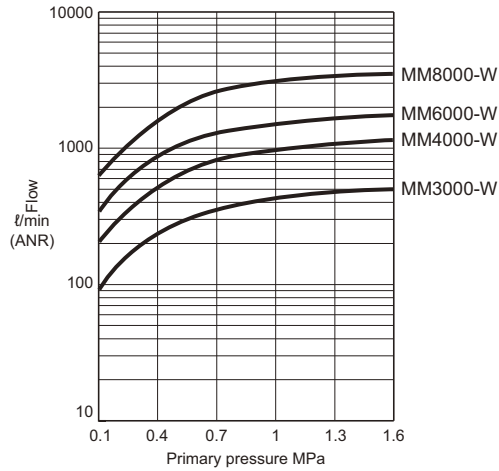
⚠ Note on model no. selection

- Note 1: When G threads or NPT threads are selected, the IN, OUT, and drain port are available.
- Note 2: Select options based on drainage, bowl material, element, and differential pressure detection. When selecting options for several items, list options in order from the top.
- Note 3: The NO automatic drain cannot be selected.
- Note 4: Refer to page 11 for the automatic drain use conditions.
- Note 5: Combination with option F1 is not possible.
- Note 6: The piping adapter set and C bracket cannot be used together.

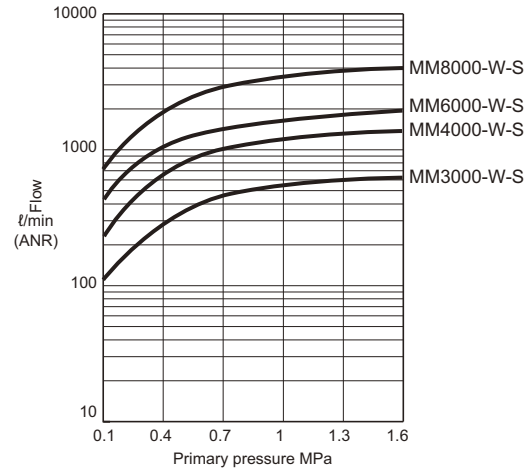
Oil Mist Filter Series

Flow characteristics (maximum flow rate)

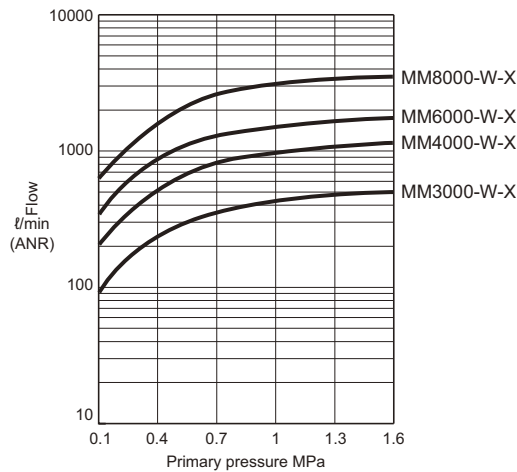
● MM*000-W



● MM*000-W-S



● MM*000-W-X



Oil mist filter: Using optional mantle

Major recommended circuit

* S type



Applications

- General industrial air
- Air tool
 - Air drill, air screw driver
 - air grinder
 - Labor saving device and components
 - Pneumatic jigs and tools
 - Air chuck
 - Air vice
 - Precision part cleaning air blow

* M type



Oil free air

- Instrumentation
- Measurement
- Logic control
 - Movable element, pure fluid element
- Luxury painting
- Precise industry

* X type



Deodorization air

- Food industry
- Pharmaceutical industry
- Agitation
- Transportation
- Dry
- Package
- Air for brewing

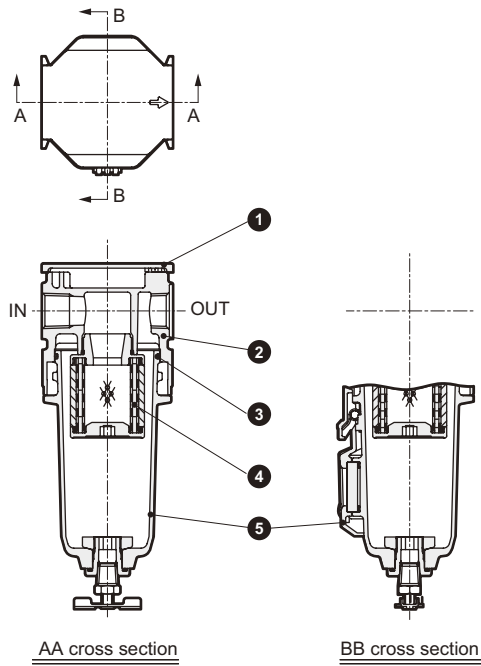
Option symbol and shape of mantle

Option symbol	Appearance
Blank (M type)	
S (S type)	
X (X type)	

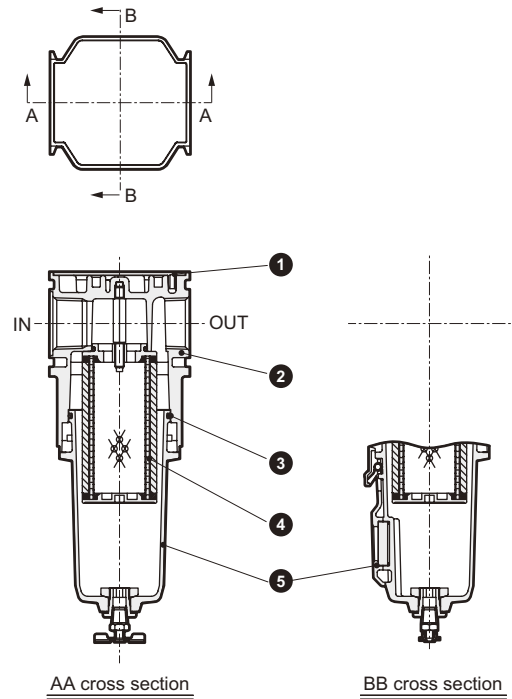
CAUTION: Changes for product upgrades may be made without prior notice. When placing an order, confirm the option symbol for the part model given here.

Internal structure and parts list

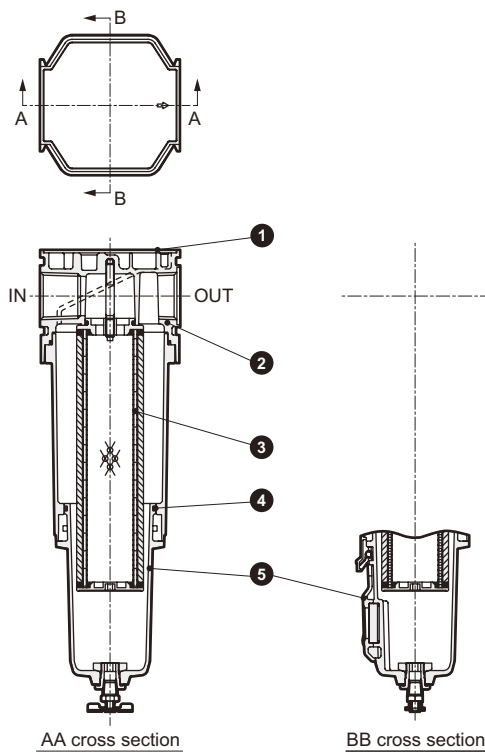
● MM3000-W/MM4000-W



● MM6000-W



● MM8000-W



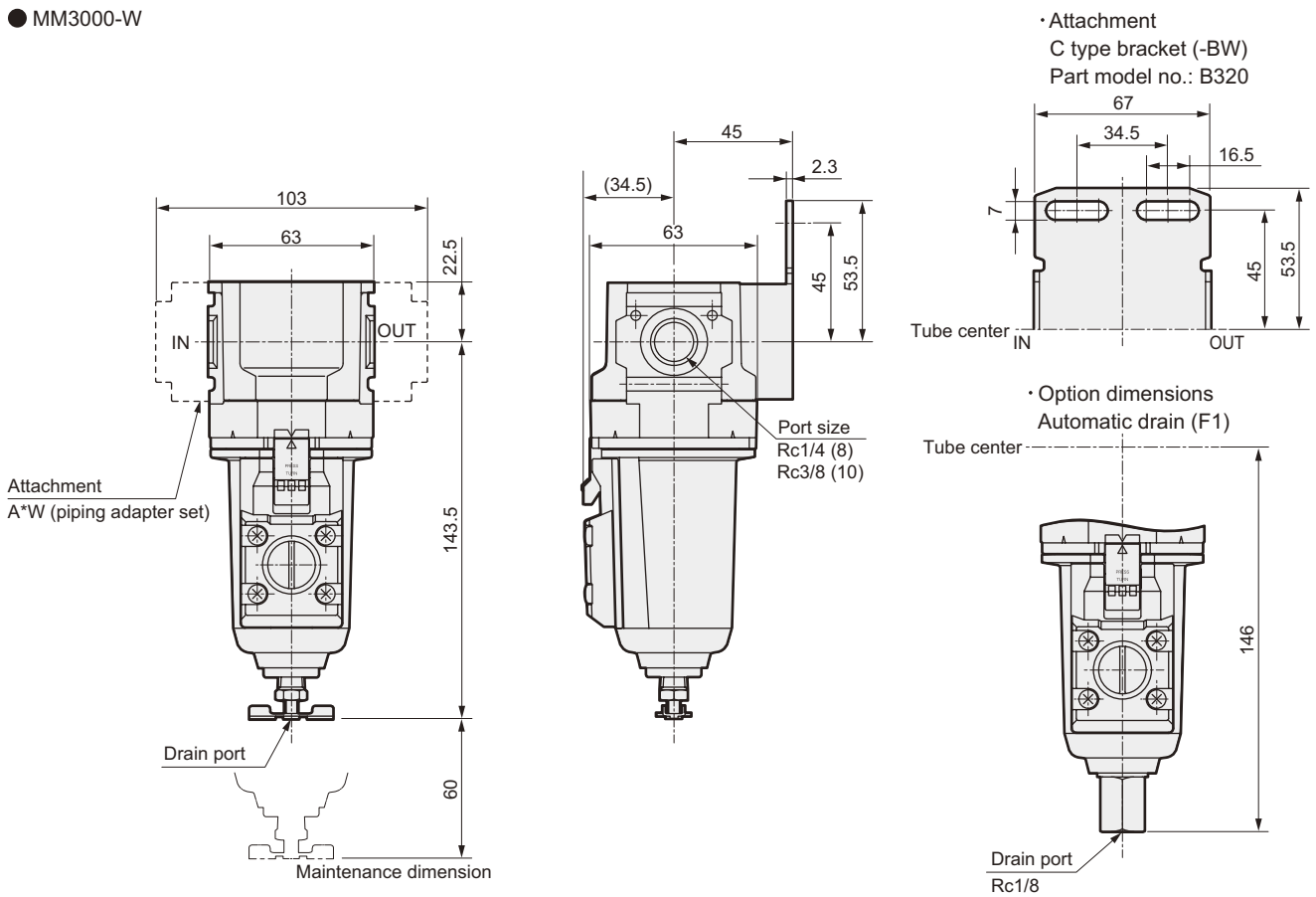
No.	Part name	Material
(1)	Plate cover	ABS resin
(2)	Body	Aluminum alloy die-casting
(3)	O ring	Special nitrile rubber
(4)	Mantle assembly	-
(5)	Metal bowl assembly	Aluminum alloy die-casting, brass, glass, nitrile rubber, steel, stainless steel

Note 1: The mantle of the repair parts and the repair kits are common with the M*000-W. Refer to repair parts on page 98.

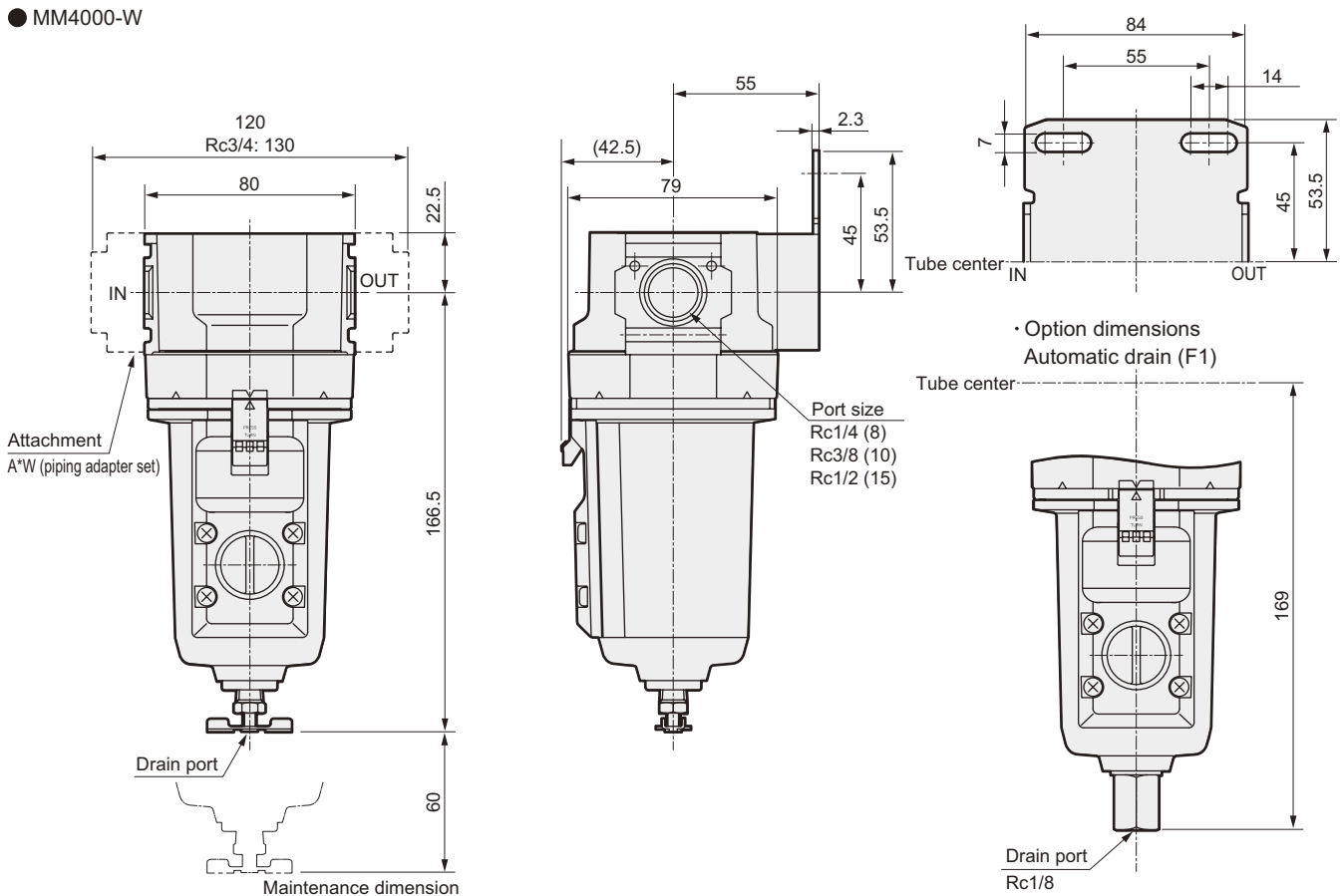
Oil Mist Filter Series

Dimensions

● MM3000-W



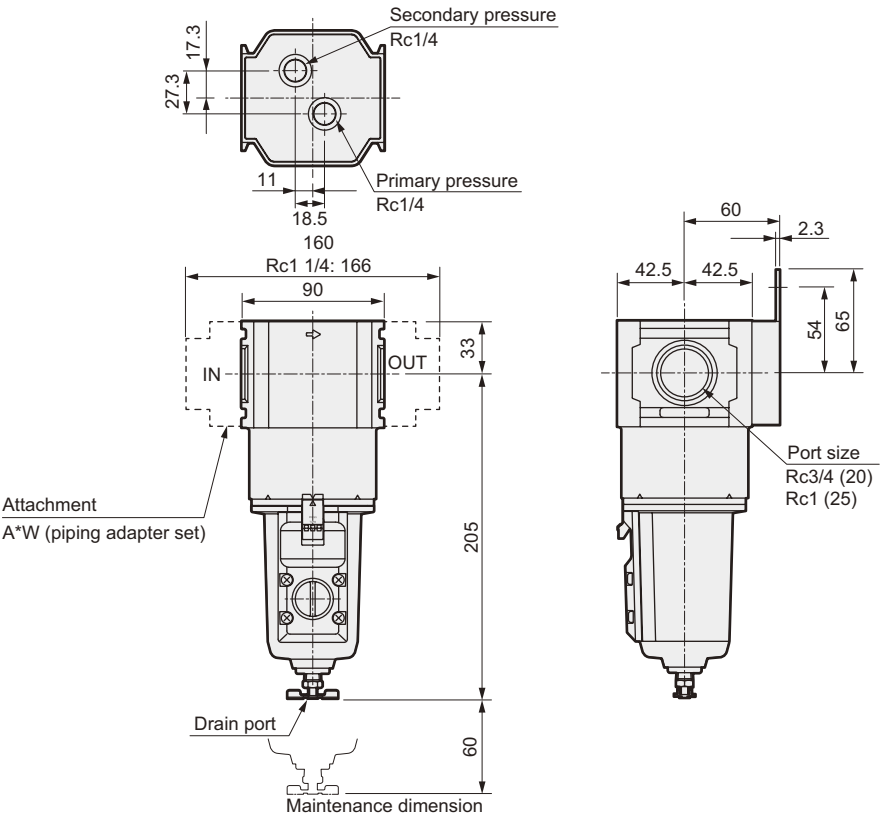
● MM4000-W



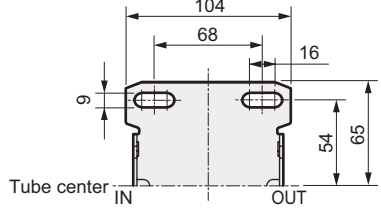
Dimensions

● MM6000-W

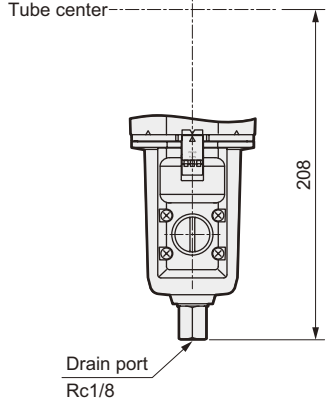
• Option dimensions
With differential pressure detection port (Q)



• Attachment
C type bracket (-BW)
Part model no.: B620

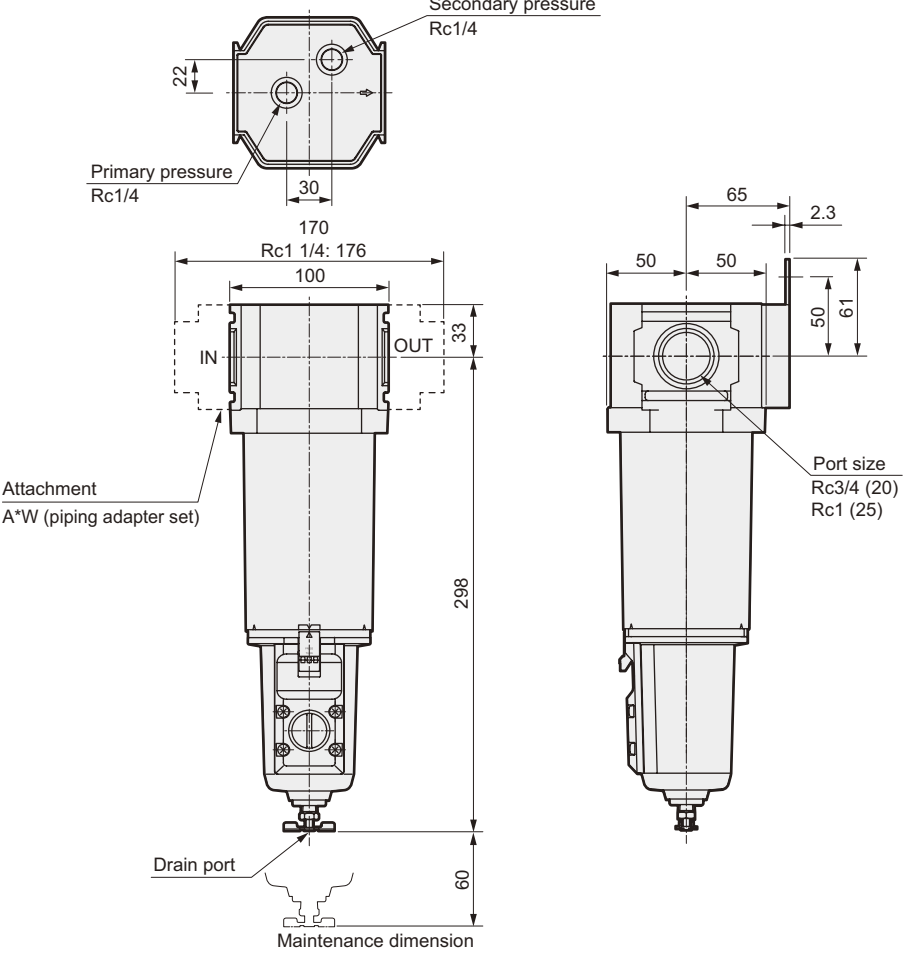


• Option dimensions
Automatic drain (F1)

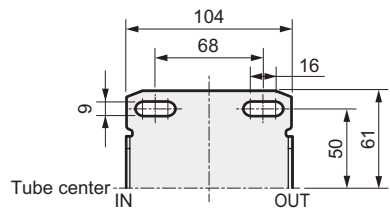


● MM8000-W

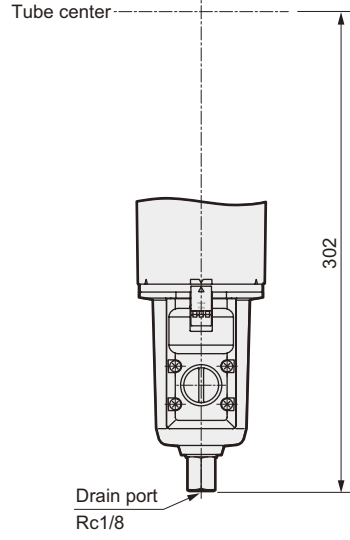
• Option dimensions
With differential pressure detection port (Q)



• Attachment
C type bracket (-BW)
Part model no.: B820



• Option dimensions
Automatic drain (F1)






Regulator medium pressure type

RM3000-W/RM4000-W Series

Medium pressure specifications of R3000-W/R4000-W Series

Port size: 1/4 to 1/2

JIS symbol 



Specifications

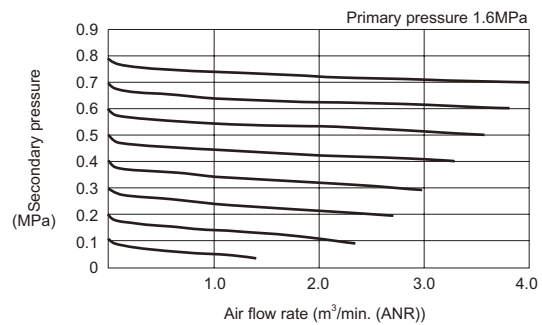
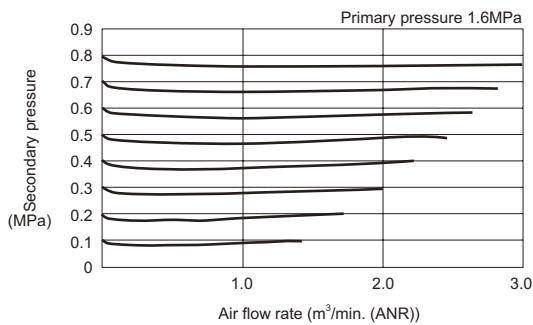
Descriptions	RM3000-W	RM4000-W
Working fluid	Compressed air	
Max. working pressure MPa	1.6	
Withstanding pressure MPa	2.4	
Ambient temperature range °C	-5 to 60 (no freezing) Note 1	
Set pressure range MPa	0.05 to 0.85	
Relief	With relief mechanism	
Port size Rc, NPT, G	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)
Product weight g	0.45	0.7
Standard accessories	Pressure gauge, nut for panel mount	

Note 1: The working temperature range of the pressure switch with indicator PPD assembly "R1" is 5 to 50°C.

Flow characteristics

● RM3000-10-W

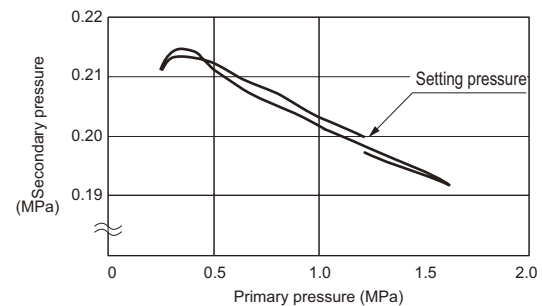
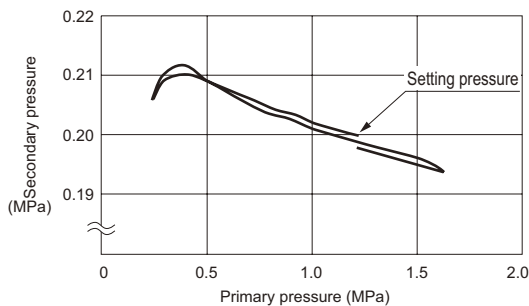
● RM4000-15-W



Pressure characteristics

● RM3000-W

● RM4000-W



How to order

RM3000 - 8 - W - N - A8W

A Model no.

(White type)

G Attachment (attached)

B Port size

C Port thread type

D Option

E Display unit

F Piping adapter set (Attached)

* Refer to page 9 for explanation of an option.

A Model no.	
R	R
M	M
3	4
0	0
0	0
0	0

Symbol	Descriptions			
B Port size				
8	1/4	●	●	
10	3/8	●	●	
15	1/2		●	
C Port thread type Note 1				
Blank	Rc thread	●	●	
N	NPT thread	●	●	
G	G thread	●	●	
D Option Note 2				
Relief	Blank	With relief mechanism	●	●
	N	Nonrelief type	●	●
Pressure gauge	Blank	With standard pressure gauge (G401)	●	●
	T Note 3	Without pressure gauge (a pressure gauge port Rc1/4 is assembled with sealed)	●	●
	T8	Pressure gauge attached (a pressure gauge port Rc1/4 is assembled by open)	●	●
Flow direction	R1	Pressure switch with display PPD assembly	●	●
	Blank	Standard flow (left → right)	●	●
X1	Reverse flow (right → left)	●	●	
E Display unit				
Blank	MPa display, Rc thread	●	●	
J1	MPa display, NPT/G thread	●	●	
F Piping adapter set (attached) Note 4 Pages 151 to 153				
Blank	Not attached	●	●	
A8*W	1/4 piping adapter set	●	●	
A10*W	3/8 piping adapter set	●	●	
A15*W	1/2 piping adapter set	●	●	
A20*W	3/4 piping adapter set		●	
* Adaptor screw type				
Blank	Rc thread	●	●	
N	NPT thread	●	●	
G	G thread	●	●	
G Attachment (attached) Note 5, Note 6 pages 148, 179				
Blank	Not attached	●	●	
BW	C type bracket	●	●	
B3W Note 8	L type bracket	●	●	
G49P	Pressure gauge: G49D-8-P10	●	●	
G59P	Pressure gauge: G59D-8-P10	●	●	
G40P	Pressure gauge: G40D-8-P10	●	●	
G50P	Pressure gauge: G50D-8-P10	●	●	
G41P	Pressure gauge: G41D-8-P10	●	●	

⚠ Note on model no. selection

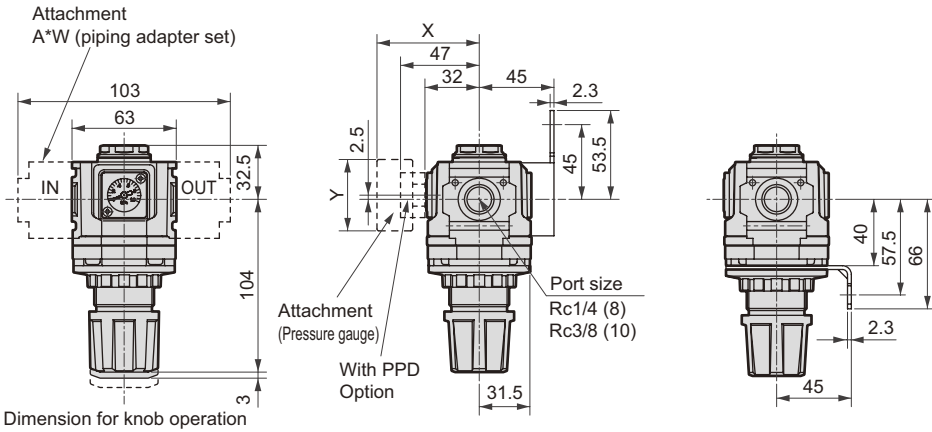
- Note 1: When G threads or NPT threads are selected, the IN, OUT, and gauge port are available.
- Note 2: When selecting options for several items, list options in order from the top.
- Note 3: When "T" is selected, the gauge plug is assembled instead of the pressure gauge.
- Note 4: Refer to Pneumatic, Vacuum, and Auxiliary Components (No. CB-024SA) for details on "R1."
- Note 5: Piping adapter set A*00-**-W (refer to related components on page 151) is enclosed.
- Note 6: Refer to related components for details on attachments. The piping adapter set and C bracket cannot be used together.
- Note 7: If NPT is selected for the C piping thread, an NPT pressure gauge is included. If an Rc or G thread is selected, an R thread pressure gauge is included.
- Note 8: Refer to Safety Precautions for the F.R.L. Unit for details on mounting the L-type bracket.

- The internal structure and parts list are common with the R*-000-W. Refer to page 112.
- Refer to page 124 for optional parts drawing.

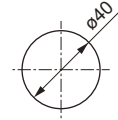
Regulator series

Dimensions

● RM3000-W



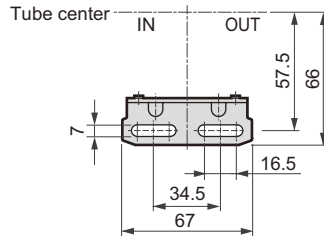
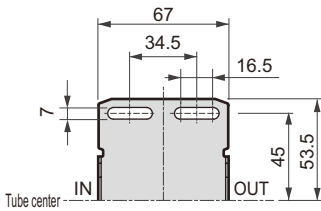
Panel cut dimension



Panel plate thickness: MAX. 7mm

· Attachment (C type bracket)
C type bracket (-BW)
Part model no.: B320

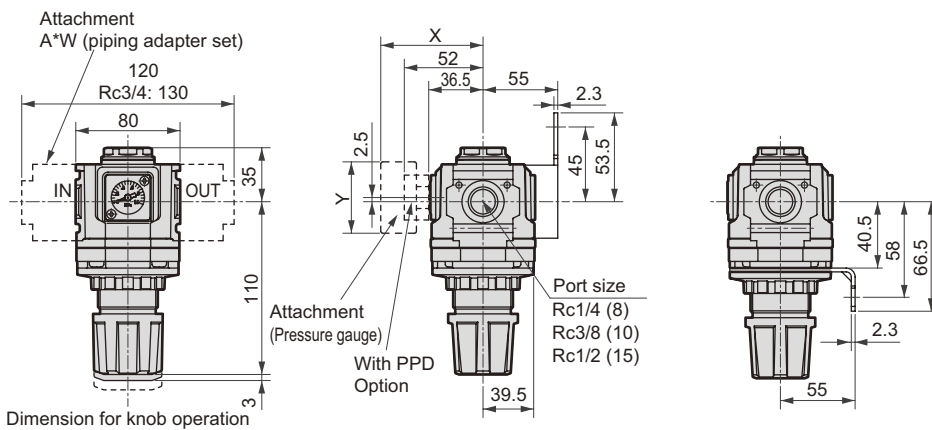
L type bracket (-B3W)
Part model no.: B330



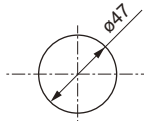
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(69.5)	ø43.5
G59P	(72)	ø52
G40P	(71.5)	ø42.5
G50P	(71.5)	ø52.5
G41P	(70)	ø42

● RM4000-W



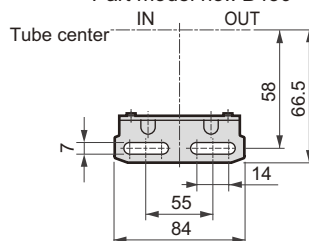
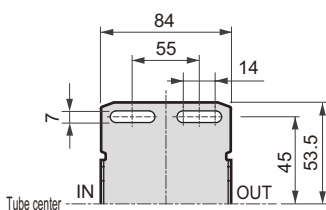
Panel cut dimension



Panel plate thickness: MAX. 7mm

· Attachment
C type bracket (-BW)
Part model no.: B420

L type bracket (-B3W)
Part model no.: B430



Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(74.5)	ø43.5
G59P	(77)	ø52
G40P	(76.5)	ø42.5
G50P	(76.5)	ø52.5
G41P	(75)	ø42

F.R.L. Modular design

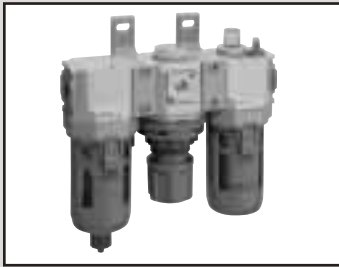
Copper and PTFE free Series

■ Components for air preparation/pressure adjustment/F.R.L. unit



C O N T E N T S

Product introduction	1
Series variation	3 to 6
⚠ Safety precautions	11
Combination	
● F.R.L combination (C*000-W-P6)	171
Filter and regulator	
● Filter and regulator (W*000-W-P6)	172
● Reverse filter/regulator (W*100-W-P6)	173
Air filter	
● Air filter (F*000-W)	174
● Oil mist filter (M*000-W)	175
Regulator	
● Regulator (R*000-W-P6)	176
● Reverse regulator (R*100-W-P6)	177
Lubricator	
● Lubricator (L*000-W)	178
Pressure gauge (G49D-P6/G59D-P6)	179
Bracket/joiner (B-W/J-W)	148
Distributor (D*01-00-W)	149
Piping adapter (A***-W)	151

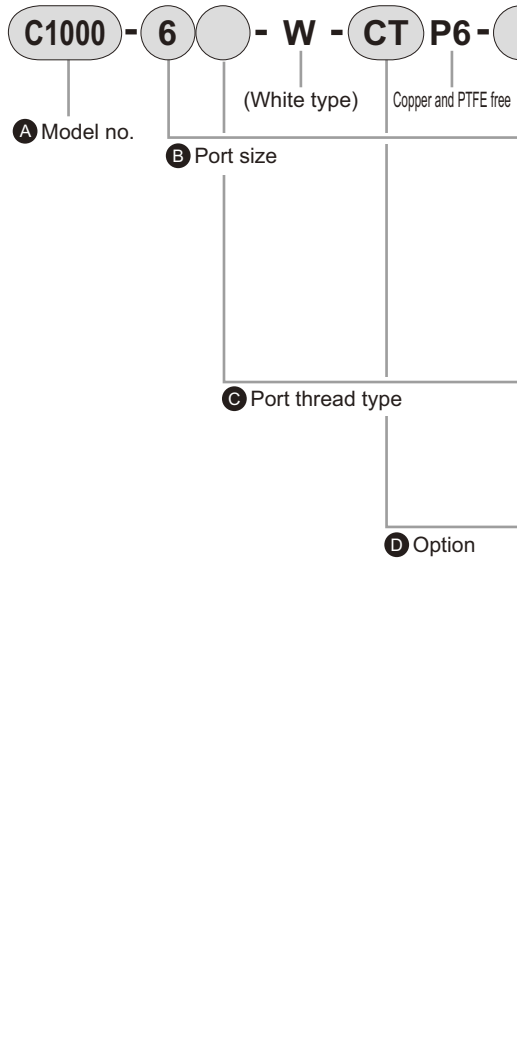


F.R.L. combination: copper and PTFE free
C1000/C2500/C3000
C4000/C6500/C8000 -W-P6 Series

Copper ion prevention treatment
 Port size: 1/8 to 1



How to order



* Refer to page 9 for explanation of an option.

A Model no.					
C	C	C	C	C	C
1	2	3	4	6	8
0	5	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

Symbol	Descriptions						
B Port size							
6	1/8	●					
8	1/4	●	●	●	●		
10	3/8		●	●	●		
15	1/2				●		
20	3/4					●	●
25	1					●	●

C Port thread type		Note 2					
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

D Option		Note 3					
Drainage	Blank	Filter with manual drain cock, lubricator without manual drain cock	●	●	●	●	●
	C	Lubricator with manual cock	●	●	●	●	●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●	●
	Z	Nylon bowl	●	●	●	●	●
Element	Blank	5μm	●	●	●	●	●
	Y	0.3μm (submicron)		●	●	●	●
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)				●	●
Regulator	T	Without pressure gauge, setting 0.05 to 0.85MPa, relief type	●	●	●	●	●
	LT	Without pressure gauge, setting 0.05 to 0.35MPa, relief type	●	●	●	●	●
	NT	Without pressure gauge, setting 0.05 to 0.85MPa, nonrelief type	●	●	●	●	●
	LNT	Without pressure gauge, setting 0.05 to 0.35MPa, nonrelief type	●	●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●	●

E Display unit							
Blank	MPa display, Rc thread	●	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●	●

F Piping adapter set (attached)		Pages 151 to 153					
Blank	Not attached	●	●	●	●	●	●
A6*W	1/8 piping adapter set	●					
A8*W	1/4 piping adapter set	●	●	●	●		
A10*W	3/8 piping adapter set	●	●	●	●		
A15*W	1/2 piping adapter set		●	●	●		
A20*W	3/4 piping adapter set				●	●	●
A25*W	1 piping adapter set					●	●
A32*W	1 1/4 piping adapter set					●	●

* Adaptor screw type							
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

G Shut-off valve (attached)		Page 139					
Blank	Not attached	●	●	●	●	●	●
VW	Shut-off valve (V3000-W) + joiner set		●	●	●		

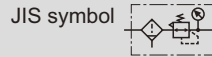
Note on model no. selection

- Note 1: Refer to pages 19 to 26 for details on specifications, dimensions, and flow characteristics.
- Note 2: G and NPT threads are available for IN, OUT, and gauge ports.
- Note 3: Select options for each drainage, bowl material, element, differential pressure detection, and regulator items. When selecting options for several items, list options in order from the top. Select one of the regulator options.
- Note 4: Combinations other than those above are used as custom combinations (Page 187).

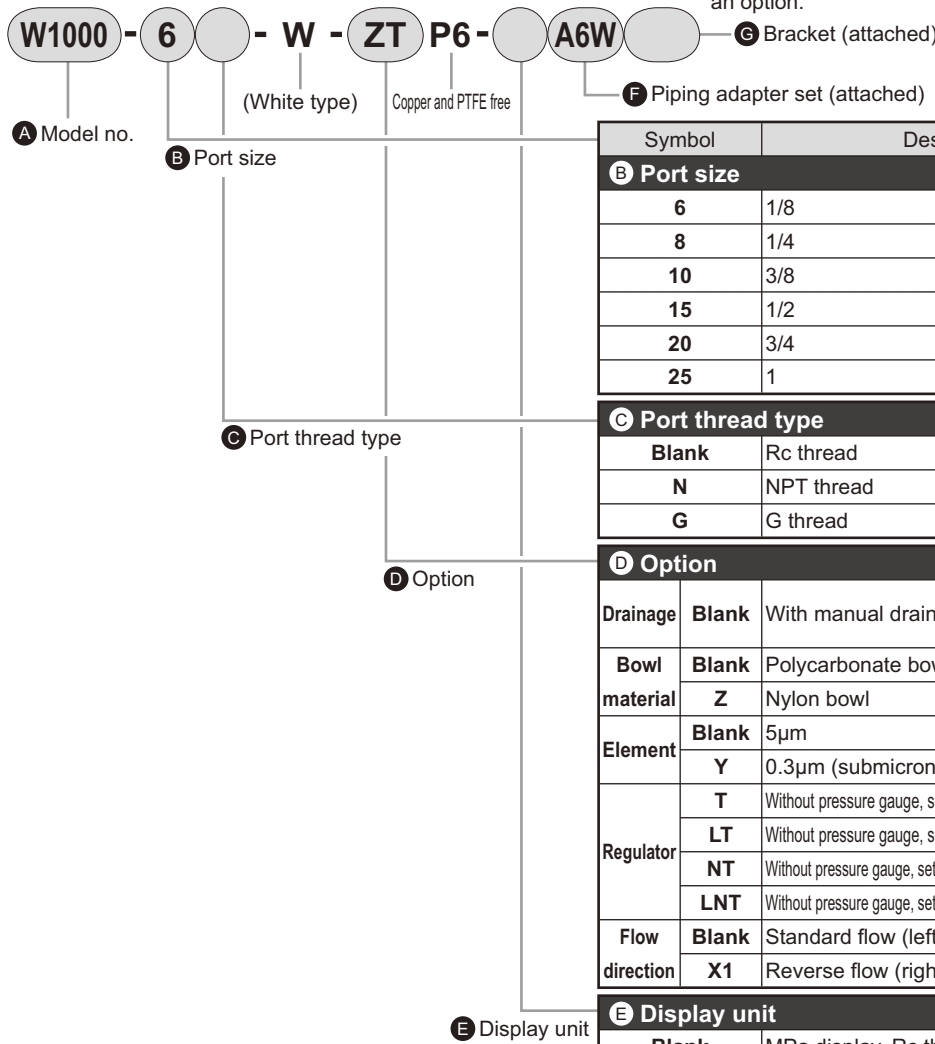


Filter and regulator: Copper and PTFE free
W1000/W3000
W4000/W8000 -W-P6 Series

Copper ion prevention treatment
 Port size: 1/8 to 1



How to order



A Model no.			
W	W	W	W
1	3	4	8
0	0	0	0
0	0	0	0
0	0	0	0

Symbol	Descriptions				
B Port size					
6	1/8	●			
8	1/4	●	●	●	
10	3/8		●	●	
15	1/2			●	
20	3/4				●
25	1				●

C Port thread type		Note 2			
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

D Option			Note 3			
Drainage	Blank	With manual drain cock	●	●	●	●
	Bowl material	Blank Polycarbonate bowl	●	●	●	●
Element	Z	Nylon bowl	●	●	●	●
	Blank	5μm	●	●	●	●
Regulator	Y	0.3μm (submicron)		●	●	●
	T	Without pressure gauge, setting 0.05 to 0.85MPa, relief type	●	●	●	●
	LT	Without pressure gauge, setting 0.05 to 0.35MPa, relief type	●	●	●	●
	NT	Without pressure gauge, setting 0.05 to 0.85MPa, nonrelief type	●	●	●	●
Flow direction	LNT	Without pressure gauge, setting 0.05 to 0.35MPa, nonrelief type	●	●	●	●
	Blank	Standard flow (left → right)	●	●	●	●
X1	Reverse flow (right → left)	●	●	●	●	

E Display unit					
Blank	MPa display, Rc thread	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●

F Piping adapter set (attached)		Note 4 Pages 151 to 153			
Blank	Not attached	●	●	●	●
A6*W	1/8 piping adapter set	●			
A8*W	1/4 piping adapter set	●	●	●	
A10*W	3/8 piping adapter set	●	●	●	
A15*W	1/2 piping adapter set		●	●	
A20*W	3/4 piping adapter set			●	●
A25*W	1 piping adapter set				●
A32*W	1 1/4 piping adapter set				●

* Adaptor screw type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

G Bracket (attached)		Page 148			
Blank	Not attached	●	●	●	●
BW	C type bracket	●	●	●	●
B3W	L type bracket	●	●	●	

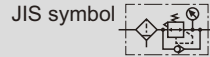
Note on model no. selection

- Note 1: Refer to pages 62 to 72 for details on specifications, dimensions, and flow characteristics.
- Note 2: G and NPT threads are available for IN, OUT, and gauge ports.
- Note 3: Select options per drainage, bowl material, element, and regulator sections. When selecting options for several items, list options in order from the top. Select one of the regulator options.
- Note 4: The piping adapter set and C type bracket cannot be used together.

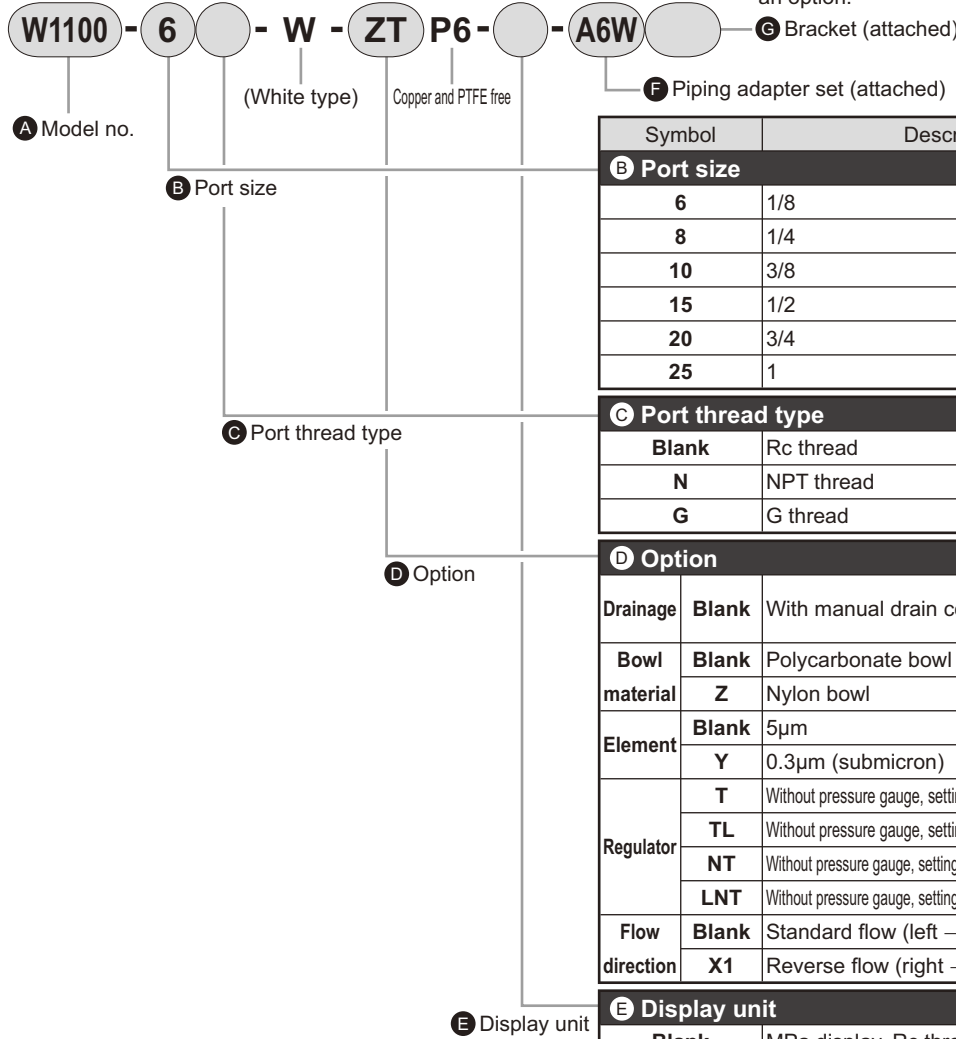


Reverse filter and regulator: Copper and PTFE free
W1100/W3100
W4100/W8100-W-P6 Series

Copper ion prevention treatment
 Port size: 1/8 to 1



How to order



* Refer to page 9 for explanation of an option.

		A Model no.			
		W1100	W3100	W4100	W8100
		1	1	1	1
		0	0	0	0
		0	0	0	0

Symbol	Descriptions				
B Port size					
6	1/8	●			
8	1/4	●	●	●	
10	3/8		●	●	
15	1/2			●	
20	3/4				●
25	1				●
C Port thread type Note 2					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●
D Option Note 3					
Drainage	Blank	With manual drain cock	●	●	●
Bowl material	Blank	Polycarbonate bowl	●	●	●
	Z	Nylon bowl	●	●	●
Element	Blank	5μm	●	●	●
	Y	0.3μm (submicron)		●	●
Regulator	T	Without pressure gauge, setting 0.05 to 0.85MPa, relief type	●	●	●
	TL	Without pressure gauge, setting 0.05 to 0.35MPa, relief type	●	●	●
	NT	Without pressure gauge, setting 0.05 to 0.85MPa, nonrelief type	●	●	●
	LNT	Without pressure gauge, setting 0.05 to 0.35MPa, nonrelief type	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●
	X1	Reverse flow (right → left)	●	●	●
E Display unit					
	Blank	MPa display, Rc thread	●	●	●
	J1	MPa display, NPT, G thread	●	●	●
F Piping adapter set (attached) Note 4 Pages 151 to 153					
	Blank	Not attached	●	●	●
	A6*W	1/8 piping adapter set	●		
	A8*W	1/4 piping adapter set	●	●	
	A10*W	3/8 piping adapter set	●	●	
	A15*W	1/2 piping adapter set		●	
	A20*W	3/4 piping adapter set			●
	A25*W	1 piping adapter set			●
	A32*W	1 1/4 piping adapter set			●
* Adaptor screw type					
	Blank	Rc thread	●	●	●
	N	NPT thread	●	●	●
	G	G thread	●	●	●
G Bracket (attached) Page 148					
	Blank	Not attached	●	●	●
	BW	C type bracket	●	●	●
	B3W	L type bracket	●	●	●

⚠ Note on model no. selection

- Note 1: Refer to pages 73 to 80 for details on specifications, dimensions, and flow characteristics.
- Note 2: G and NPT threads are available for IN, OUT, and gauge ports.
- Note 3: Select options per drainage, bowl material, element, and regulator sections. When selecting options for several items, list options in order from the top. Select one of the regulator options.
- Note 4: The piping adapter set and C type bracket cannot be used together.
- Note 5: Positions of a check valve and pressure gauge can not be changed. If the IN and OUT direction must be reversed, indicate "X1" at the end of the option field.



Air filter: Copper and PTFE free

F1000/F3000 F4000/F6000/F8000 -W Series

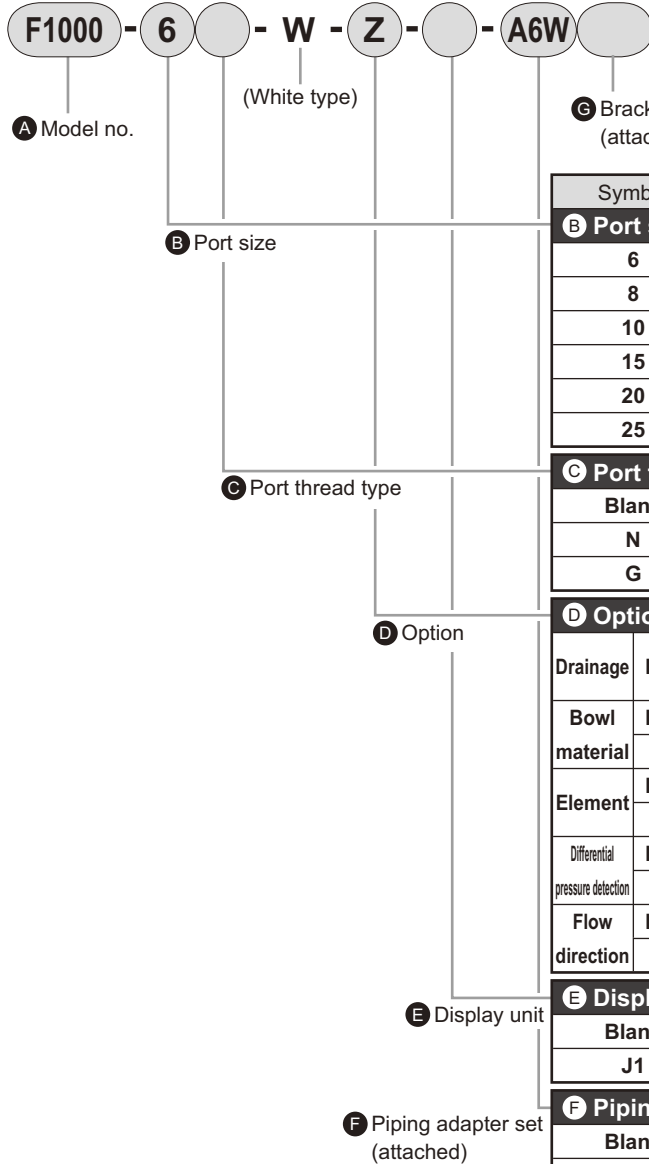
Standard PTFE-free specifications prevent copper ion generation.

Port size: 1/8 to 1

JIS symbol



How to order



* Refer to page 9 for explanation of an option.

A Model no.				
F	F	F	F	F
1	3	4	6	8
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

Symbol	Descriptions					
B Port size						
6	1/8	●				
8	1/4	●	●	●		
10	3/8		●	●		
15	1/2			●		
20	3/4				●	●
25	1				●	●
C Port thread type						
Note 2						
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●
D Option						
Note 3						
Drainage	Blank	With manual drain cock	●	●	●	●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
Element	Blank	5μm	●	●	●	●
	Y	0.3μm (submicron)		●	●	●
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)				●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●
E Display unit						
Blank	MPa display, Rc thread	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●
F Piping adapter set (attached)						
Note 4 Pages 151 to 153						
Blank	Not attached	●	●	●	●	●
A6*W	1/8 piping adapter set	●				
A8*W	1/4 piping adapter set	●	●	●		
A10*W	3/8 piping adapter set	●	●	●		
A15*W	1/2 piping adapter set		●	●		
A20*W	3/4 piping adapter set			●	●	●
A25*W	1 piping adapter set				●	●
A32*W	1 1/4 piping adapter set				●	●
* Adaptor screw type						
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●
G Bracket (attached)						
Page 148						
Blank	Not attached	●	●	●	●	●
BW	C type bracket	●	●	●	●	●

⚠ Note on model no. selection

Note 1: Refer to pages 81 to 90 for details on specifications, dimensions, and flow characteristics.

Note 2: When G threads or NPT threads are selected, the IN, OUT, and drain port (metal bowl automatic drain) are available.

Note 3: Select options for each drainage, bowl material and element. When selecting options for several items, list options in order from the top.

Note 4: The piping adapter set and C bracket cannot be used together.



Oil mist filter: Copper and PTFE free

M1000/M3000 M4000/M6000/M8000 -W Series

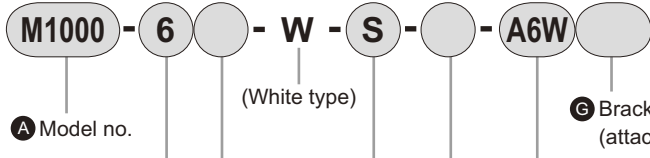
Standard PTFE-free specifications prevent copper ion generation.

Port size: 1/8 to 1

JIS symbol



How to order



* Refer to page 9 for explanation of an option.

A Model no.				
M	M	M	M	M
1	3	4	6	8
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

Symbol	Descriptions					
B Port size						
6	1/8	●				
8	1/4	●	●	●		
10	3/8		●	●		
15	1/2			●		
20	3/4				●	●
25	1				●	●
C Port thread type Note 2						
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●
D Option Note 3						
Drainage	Blank	With manual drain cock		●	●	●
Bowl material	Blank	Polycarbonate bowl		●	●	●
	Z	Nylon bowl		●	●	●
Differential pressure detection	Blank	Without differential pressure detection port		●	●	●
	Q	With differential pressure detection port (Rc1/4)				●
Flow direction	Blank	Standard flow (left → right)		●	●	●
	X1	Reverse flow (right → left)		●	●	●
E Display unit						
Blank	MPa display, Rc thread		●	●	●	●
J1	MPa display, NPT, G thread		●	●	●	●
F Piping adapter set (attached) Note 4 Pages 151 to 153						
Blank	Not attached		●	●	●	●
A6*W	1/8 piping adapter set		●			
A8*W	1/4 piping adapter set		●	●	●	
A10*W	3/8 piping adapter set		●	●	●	
A15*W	1/2 piping adapter set			●	●	
A20*W	3/4 piping adapter set				●	●
A25*W	1 piping adapter set					●
A32*W	1 1/4 piping adapter set					●
* Adaptor screw type						
Blank	Rc thread		●	●	●	●
N	NPT thread		●	●	●	●
G	G thread		●	●	●	●
G Bracket (attached) Page 148						
Blank	Not attached		●	●	●	●
BW	C type bracket		●	●	●	●

⚠ Note on model no. selection

Note 1: Refer to pages 91 to 98 for details on specifications, dimensions, and flow characteristics.

Note 2: When G threads or NPT threads are selected, the IN, OUT and drain port are available.

Note 3: Select options for each drainage, bowl material and differential pressure detection.

When selecting options for several items, list options in order from the top.

Note 4: The piping adapter set and C bracket cannot be used together.

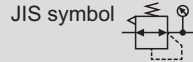


Regulator: Copper and PTFE free

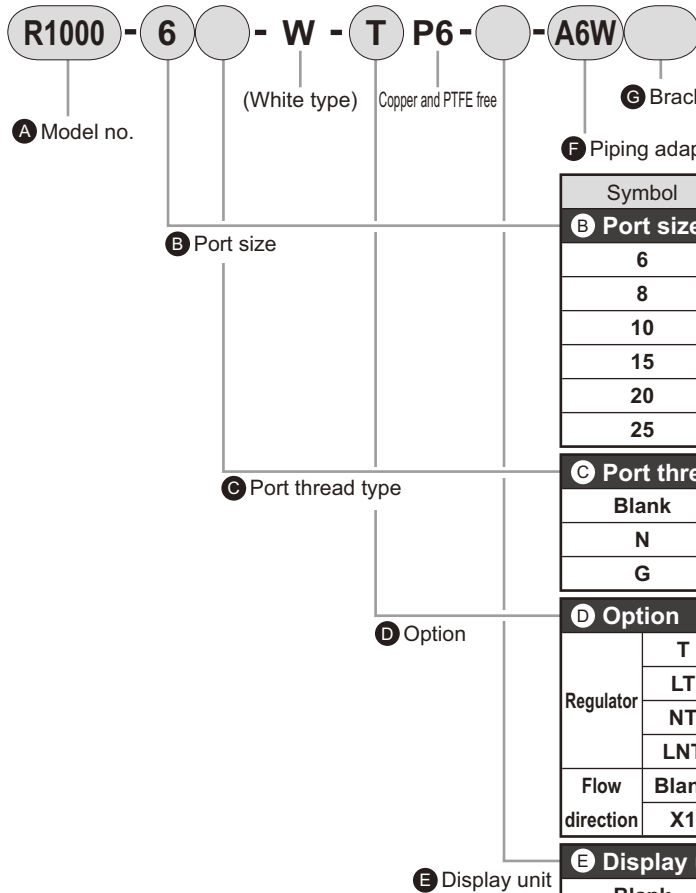
R1000/R2000/R3000 R4000/R6000/R8000 -W-P6 Series

Copper ion prevention treatment

Port size: 1/8 to 1



How to order



* Refer to page 9 for explanation of an option.

A Model no.					
R 1	R 2	R 3	R 4	R 6	R 8
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

Symbol	Descriptions						
B Port size							
6	1/8	●					
8	1/4	●	●	●	●		
10	3/8		●	●	●		
15	1/2				●		
20	3/4					●	●
25	1					●	●

C Port thread type		Note 2					
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

D Option		Note 3					
Regulator	T	Without pressure gauge, setting 0.05 to 0.85MPa, relief type	●	●	●	●	●
	LT	Without pressure gauge, setting 0.05 to 0.35MPa, relief type	●	●	●	●	●
	NT	Without pressure gauge, setting 0.05 to 0.85MPa, nonrelief type	●	●	●	●	●
	LNT	Without pressure gauge, setting 0.05 to 0.35MPa, nonrelief type	●	●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●	●

E Display unit							
Blank	MPa display, Rc thread	●	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●	●

F Piping adapter set (attached)		Note 4 Pages 151 to 153					
Blank	Not attached	●	●	●	●	●	●
A6*W	1/8 piping adapter set	●					
A8*W	1/4 piping adapter set	●	●	●	●		
A10*W	3/8 piping adapter set	●	●	●	●		
A15*W	1/2 piping adapter set		●	●	●		
A20*W	3/4 piping adapter set				●	●	●
A25*W	1 piping adapter set						●
A32*W	1 1/4 piping adapter set						●

* Adaptor screw type							
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

G Bracket (attached)		Page 148					
Blank	Not attached	●	●	●	●	●	●
BW	C type bracket	●	●	●	●	●	●
B3W	L type bracket	●	●	●	●	●	
B4W	B type bracket		●				

⚠ Note on model no. selection

Note 1: Refer to pages 109 to 116 for details on specifications, dimensions, and flow characteristics.

Note 2: When G threads or NPT threads are selected, the IN, OUT, and gauge port are available.

Note 3: Select any one of the option.

Note 4: The piping adapter set and C type bracket cannot be used together.



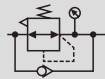
Reverse regulator: Copper and PTFE free

R1100/R2100/R3100 R4100/R6100/R8100 -W-P6 Series

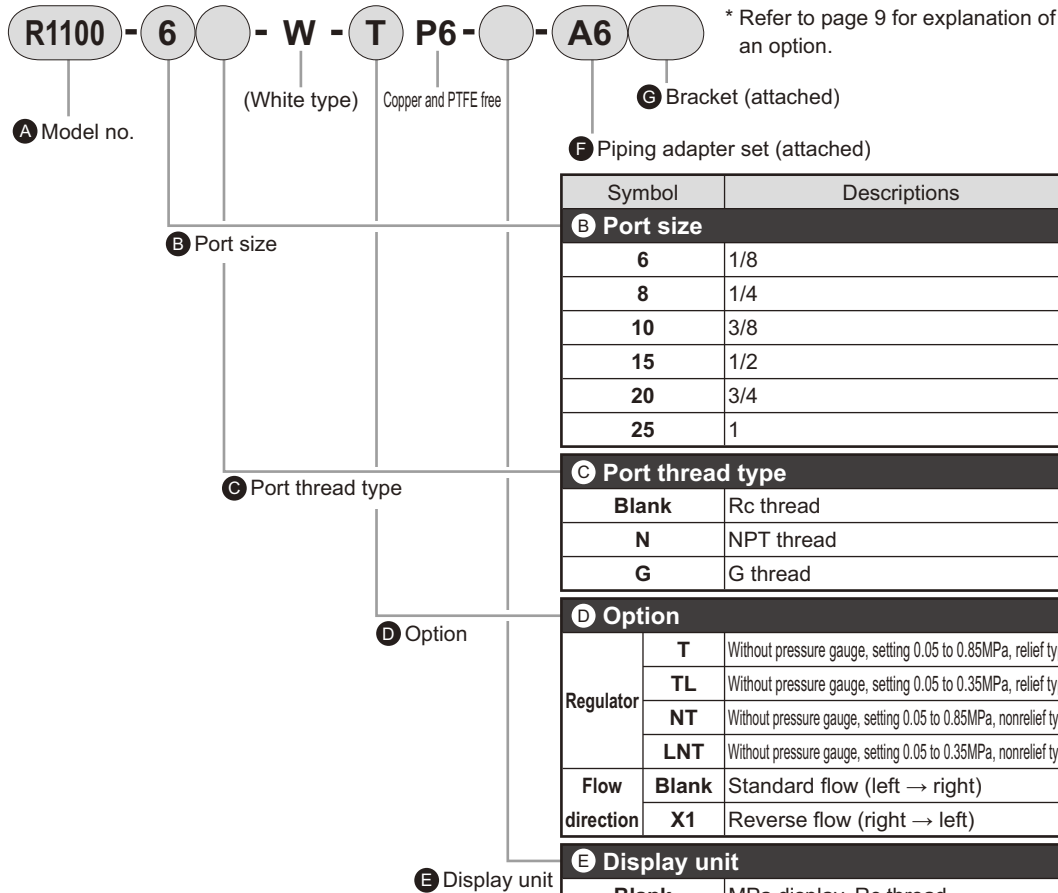
Copper ion prevention treatment

Port size: 1/8 to 1

JIS symbol



How to order



A Model no.					
R	R	R	R	R	R
1	2	3	4	6	8
0	0	0	0	0	0
0	0	0	0	0	0

Symbol	Descriptions						
B Port size							
6	1/8	●					
8	1/4	●	●	●	●		
10	3/8		●	●	●		
15	1/2				●		
20	3/4					●	●
25	1					●	●

C Port thread type		Note 2					
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

D Option		Note 3						
Regulator	T	Without pressure gauge, setting 0.05 to 0.85MPa, relief type	●	●	●	●	●	●
	TL	Without pressure gauge, setting 0.05 to 0.35MPa, relief type	●	●	●	●	●	●
	NT	Without pressure gauge, setting 0.05 to 0.85MPa, nonrelief type	●	●	●	●	●	●
	LNT	Without pressure gauge, setting 0.05 to 0.35MPa, nonrelief type	●	●	●	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●	●	●

E Display unit							
Blank	MPa display, Rc thread	●	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●	●

F Piping adapter set (attached)		Note 4 Pages 151 to 153					
Blank	Not attached	●	●	●	●	●	●
A6*W	1/8 piping adapter set	●					
A8*W	1/4 piping adapter set	●	●	●	●		
A10*W	3/8 piping adapter set	●	●	●	●		
A15*W	1/2 piping adapter set		●	●	●		
A20*W	3/4 piping adapter set				●	●	●
A25*W	1 piping adapter set						●
A32*W	1 1/4 piping adapter set						●

* Adaptor screw type							
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

G Bracket (attached)		Page 148					
Blank	Not attached	●	●	●	●	●	●
BW	C type bracket	●	●	●	●	●	●
B3W	L type bracket	●	●	●	●	●	
B4W	B type bracket		●				

⚠ Note on model no. selection

- Note 1: Refer to pages 117 to 124 for details on specifications, dimensions, and flow characteristics.
- Note 2: When G threads or NPT threads are selected, the IN, OUT, and gauge port are available.
- Note 3: Select any one of the options.
- Note 4: The piping adapter set and C type bracket cannot be used together.
- Note 5: Positions of a check valve and pressure gauge can not be changed. If the IN and OUT direction must be reversed, indicate "X1" at the end of the option field.



Lubricator: Copper and PTFE free

L1000/L3000 L4000/L8000 -W Series

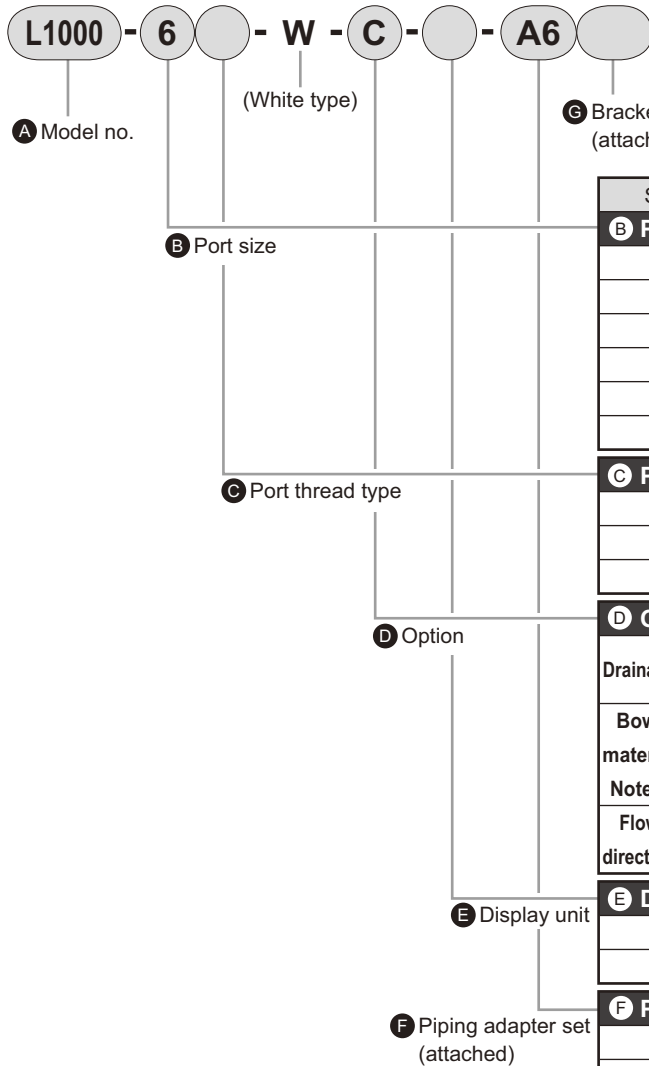
Standard PTFE-free specifications prevent copper ion generation.

Port size: 1/8 to 1

JIS symbol



How to order



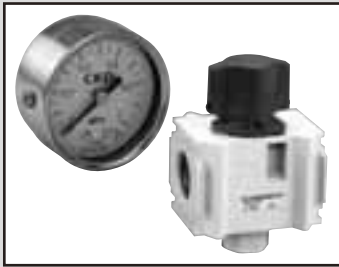
* Refer to page 9 for explanation of an option.

A Model no.			
L	L	L	L
1	3	4	8
0	0	0	0
0	0	0	0
0	0	0	0

Symbol	Descriptions				
B Port size					
6	1/8	●			
8	1/4	●	●	●	
10	3/8		●	●	
15	1/2			●	
20	3/4				●
25	1				●
C Port thread type Note 2					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●
D Option Note 3					
Drainage	Blank	Without manual cock	●	●	●
Bowl material	Blank	Polycarbonate bowl	●	●	●
	Z	Nylon bowl	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●
	X1	Reverse flow (right → left)	●	●	●
E Display unit					
Blank	MPa display, Rc thread	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●
F Piping adapter set (attached) Note 5 Pages 151 to 153					
Blank	Not attached	●	●	●	●
A6*W	1/8 piping adapter set	●			
A8*W	1/4 piping adapter set	●	●	●	
A10*W	3/8 piping adapter set	●	●	●	
A15*W	1/2 piping adapter set		●	●	
A20*W	3/4 piping adapter set			●	●
A25*W	1 piping adapter set			●	●
A32*W	1 1/4 piping adapter set				●
* Adaptor screw type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●
G Bracket (attached) Page 148					
Blank	Not attached	●	●	●	●
BW	C type bracket	●	●	●	●

Note on model no. selection

- Note 1: Refer to pages 125 to 132 for details on specifications, dimensions, and flow characteristics.
- Note 2: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port are available.
- Note 3: Select options for each drainage and bowl material. When selecting options for several items, list options in order from the top.
- Note 4: The adjustment dome is made of polycarbonate even if the nylon bowl or metal bowl is selected. Check with CKD if a different material is required.
- Note 5: The piping adapter set and C type bracket cannot be used together.



Other component: Copper and PTFE free

Pressure gauge

Shut-off valve

Exhaust cleaner

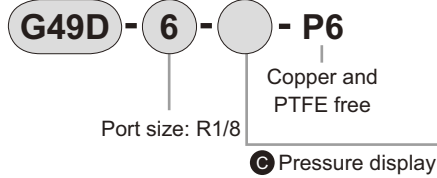
G49D-P6 V3000-W FA*31 Series

G59D-P6 V3010-W V6010-W

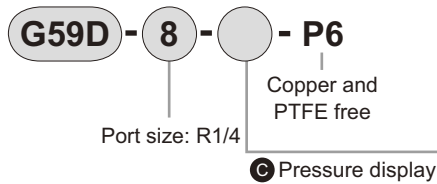


How to order

● Pressure gauge



Symbol	Descriptions
Ⓢ Pressure display (MPa) Note 1	
P02	0 to 0.2MPa
P04	0 to 0.4MPa
P10	0 to 1.0MPa



Symbol	Descriptions
Ⓢ Pressure display (MPa) Note 1	
P02	0 to 0.2MPa
P04	0 to 0.4MPa
P10	0 to 1.0MPa
P20	0 to 2.0MPa

⚠ Note on model no. selection

Note 1: Refer to page 198 for the dimensions.

Other component

● Shut-off valve

- V3000-W (page 139)
- V3010-W/V6010-W (page 142)

* The above devices are standard parts, and are used with PTFE-free specifications.

● Exhaust cleaner

- FA*31 (pneumatic, vacuum and auxiliary components No. CB-024SA)

F.R.L.
Modular design

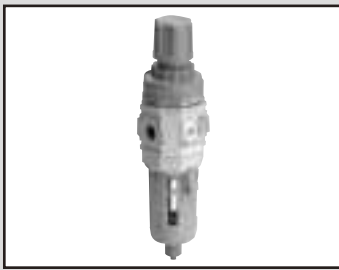
Ozone proof

■ Components for air preparation/pressure adjustment/F.R.L. unit



C O N T E N T S

Product introduction	1
Series variation	3 to 6
⚠ Safety precautions	11
<hr/>	
Filter and regulator	
● Filter/regulator (W*000-W-P11)	181
● Reverse filter/regulator (W*100-W-P11)	182
<hr/>	
Regulator	
● Regulator (R*000-W-P11)	183
● Reverse regulator (R*100-W-P11)	184



Filter regulator: Ozone proof

W1000/W3000 W4000/W8000-W-P11 Series

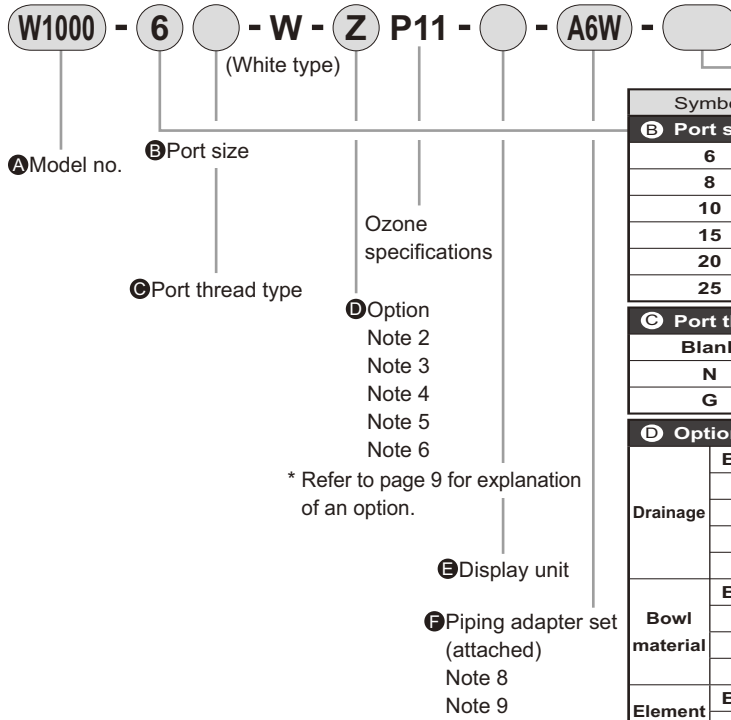
Fluorine rubber and hydrogenated nitrile rubber, etc., used for rubber part materials.

• Port size: Rc1/8 to Rc1

JIS symbol



How to order



A Model no.			
W	W	W	W
1	3	4	8
0	0	0	0
0	0	0	0

Symbol	Descriptions				
B Port size					
6	1/8	●			
8	1/4	●	●		
10	3/8		●	●	
15	1/2			●	
20	3/4				●
25	1				●

C Port thread type		Note 10			
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

D Option						
Drainage	Blank	With manual drain cock	●	●	●	●
	F	Automatic drain with manual override (NO type)		●	●	●
	F1	Automatic drain with manual override (NC type)		●	●	●
	FF	Large automatic drain with manual override (NO type)				●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl		●	●	●
Element	M1	Metal bowl with manual drain cock		●	●	●
	Blank	5μm	●	●	●	●
	Y	0.3μm (submicron)		●	●	●
Pressure range	Blank	0.05 to 0.85MPa	●	●	●	●
	L	0.05 to 0.35MPa	●	●	●	●
Relief	Blank	With relief mechanism	●	●	●	●
	N	Nonrelief type	●	●	●	●
Pressure gauge	Blank	With standard pressure gauge (G401)	●	●	●	●
	T	Without pressure gauge (a gauge port is assembled with sealed)	●	●	●	●
	T8	Option for pressure gauge attachment (gauge port assembled ventilated)	●	●	●	●
	T6 Note 7	Digital pressure sensor PPX attached option	●	●	●	●
	X1	IN/OUT reverse flow (right → left)	●	●	●	●

E Display unit					
Blank	MPa display, Rc thread	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●

F Piping adapter set (attached)		Note 11			
Blank	Without attachment	●	●	●	●
A6*W	1/8 piping adapter set	●			
A8*W	1/4 piping adapter set	●	●	●	
A10*W	3/8 piping adapter set	●	●	●	
A15*W	1/2 piping adapter set		●	●	
A20*W	3/4 piping adapter set			●	●
A25*W	1 piping adapter set				●
A32*W	1 1/4 piping adapter set				●

* Adaptor screw type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●

G Attachment (attached)		Note 12			
Blank	Without attachment	●	●	●	●
BW	C type bracket	●	●	●	●
B3W	L type bracket	●	●	●	
G49P	Pressure gauge: G49D-8-P10	●	●	●	●
G59P	Pressure gauge: G59D-8-P10	●	●	●	●
G40P	Pressure gauge: G40D-8-P10	●	●	●	●
G50P	Pressure gauge: G50D-8-P10	●	●	●	●
G41P	Pressure gauge: G41D-8-P10	●	●	●	●
R2 Note 7	Digital pressure sensor: PPX-R10N-6M	●	●	●	●

⚠ Note on model no. selection

- Note 1: Refer to pages 67 and 68 for the specifications and attachment.
- Note 2: Select options per drainage, bowl material, element, and regulator sections.
When selecting options for several items, list options in order from the top.
- Note 3: The low-pressure gauge (0 to 0.4 MPa) is used when "L" is selected for the pressure range option.
- Note 4: The automatic drain's minimum operating pressure for "F" with an automatic drain is 0.1 MPa.
Initially generated drainage and air are purged until pressure reaches 0.1 MPa.
- Note 5: The automatic drain's minimum operating pressure for "F1" with an automatic drain is 0.15 MPa.
- Note 6: When "T" is selected, the gauge plug is assembled instead of the pressure gauge.
- Note 7: When option "T6" is selected, only "blank" or "R2" is selected for the pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.
- Note 8: The piping adaptor set A*00-**-W is included.
- Note 9: The piping adapter set and C type bracket cannot be used together.
- Note 10: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port (metal bowl automatic drain) are available.
- Note 11: The adapter port size can be selected from Rc, NPT or G. Blank: Rc thread, N: NPT thread, G: G thread.
(example) A8G
- Note 12: If NPT is selected for the piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

Dimensions

Same as standard parts. Refer to pages 71, 72.



Reverse filter and regulator: Ozone proof

W1100/W3100 W4100/W8100-W-P11 Series

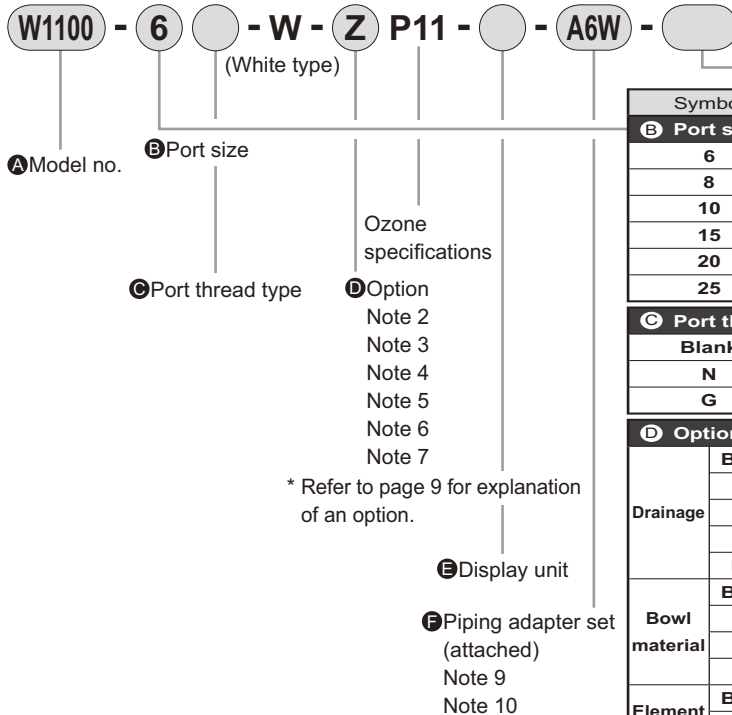
Fluorine rubber and hydrogenated nitrile rubber, etc., used for rubber part materials.

• Port size: Rc1/8 to Rc1

JIS symbol



How to order



⚠ Note on model no. selection

- Note 1: Refer to pages 73 and 74 for the specifications and attachment.
- Note 2: Select options per drainage, bowl material, element, and regulator sections. When selecting options for several items, list options in order from the top.
- Note 3: The low-pressure gauge (0 to 0.4 MPa) is used when "L" is selected for the pressure range option.
- Note 4: **Positions of a check valve and pressure gauge can not be changed. If the IN and OUT direction must be reversed, indicate "X1" at the end of the option field.**
- Note 5: The automatic drain's minimum operating pressure for "F" with an automatic drain is 0.1 MPa. Initially generated drainage and air are purged until pressure reaches 0.1 MPa.
- Note 6: The automatic drain's minimum operating pressure for "F1" with an automatic drain is 0.15 MPa.
- Note 7: When "T" is selected, the gauge plug is assembled instead of the pressure gauge.
- Note 8: When option "T6" is selected, only "blank" or "R2" is selected for the \odot pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.
- Note 9: The piping adaptor set A*00-**-W is included.
- Note 10: The piping adapter set and C type bracket cannot be used together.
- Note 11: When G threads or NPT threads are selected, the IN, OUT, gauge port, and drain port (metal bowl automatic drain) are available.
- Note 12: The adapter port size can be selected from Rc, NPT or G. Blank: Rc thread, N: NPT thread, G: G thread. (example) A8G
- Note 13: If NPT is selected for the \odot piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

Dimensions

Same as standard parts. Refer to pages 77, 78.

		A Model no.			
		W1100	W3100	W4100	W8100
Attachment (attached)		0	0	0	0
Symbol	Descriptions				
B Port size					
6	1/8	●			
8	1/4	●	●	●	
10	3/8		●	●	
15	1/2			●	
20	3/4				●
25	1				●
C Port thread type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●
D Option					
Drainage	Blank	With manual drain cock	●	●	●
	F	Automatic drain with manual override (NO type)		●	●
	F1	Automatic drain with manual override (NC type)		●	●
	FF	Large automatic drain with manual override (NO type)			●
	FF1	Large automatic drain with manual override (NC type)			●
Bowl material	Blank	Polycarbonate bowl	●	●	●
	Z	Nylon bowl	●	●	●
	M	Metal bowl		●	●
	M1	Metal bowl with manual drain cock		●	●
Element	Blank	5 μ m	●	●	●
	Y	0.3 μ m (submicron)		●	●
Pressure range	Blank	0.05 to 0.85MPa	●	●	●
	L	0.05 to 0.35MPa	●	●	●
Relief	Blank	With relief mechanism	●	●	●
	N	Nonrelief type	●	●	●
Pressure gauge	Blank	With standard pressure gauge (G401)	●	●	●
	T	Without pressure gauge (a gauge port is assembled with sealed)	●	●	●
	T8	Option for pressure gauge attachment (gauge port assembled ventilated)	●	●	●
	T6	Digital pressure sensor PPX attached option	●	●	●
	X1	IN/OUT reverse flow (right → left)	●	●	●
E Display unit					
Blank	MPa display, Rc thread	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●
F Piping adapter set (attached)					
Blank	Without attachment	●	●	●	●
A6*W	1/8 piping adapter set	●			
A8*W	1/4 piping adapter set	●	●	●	
A10*W	3/8 piping adapter set	●	●	●	
A15*W	1/2 piping adapter set		●	●	
A20*W	3/4 piping adapter set			●	●
A25*W	1 piping adapter set				●
A32*W	1 1/4 piping adapter set				●
* Adaptor screw type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●
G Attachment (attached)					
Blank	Without attachment	●	●	●	●
BW	C type bracket	●	●	●	●
B3W	L type bracket	●	●	●	
G49P	Pressure gauge: G49D-8-P10	●	●	●	●
G59P	Pressure gauge: G59D-8-P10	●	●	●	●
G40P	Pressure gauge: G40D-8-P10	●	●	●	●
G50P	Pressure gauge: G50D-8-P10	●	●	●	●
G41P	Pressure gauge: G41D-8-P10	●	●	●	●
R2 Note	Digital pressure sensor: PPX-R10N-6M	●	●	●	●

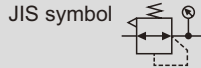


Regulator: Ozone proof

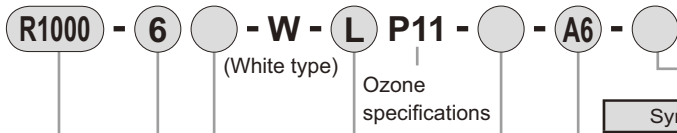
R1000/R2000/R3000 R4000/R6000/R8000-W-P11 Series

Fluorine rubber and hydrogenated nitrile rubber, etc., used for rubber part materials.

Port size: Rc1/8 to Rc1



How to order



- A** Model no.
- B** Port size
- C** Port thread type
- D** Option
Note 2
Note 3
Note 4
*Refer to page 9 for explanation of an option.
- E** Display unit
- F** Piping adapter set (attached)
Note 6
Note 7

A Model no.					
R	R	R	R	R	R
1	2	3	4	6	8
0	0	0	0	0	0
0	0	0	0	0	0

Symbol	Descriptions						
B Port size							
6	1/8	●					
8	1/4	●	●				
10	3/8		●	●	●		
15	1/2				●		
20	3/4					●	●
25	1					●	●

C Port thread type		Note 8					
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

D Option							
Pressure range	Blank	0.05 to 0.85MPa	●	●	●	●	●
	L	0.05 to 0.35MPa	●	●	●	●	●
Relief	Blank	With relief mechanism	●	●	●	●	●
	N	Nonrelief type	●	●	●	●	●
Pressure gauge	Blank	With standard pressure gauge (G401)	●	●	●	●	●
	T	Without pressure gauge (a gauge port is assembled with sealed)	●	●	●	●	●
	T8	Option for pressure gauge attachment (gauge port assembled ventilated)	●	●	●	●	●
	T6	Digital pressure sensor PPX attached option	●	●	●	●	●
X1	IN/OUT reverse flow (right → left)		●	●	●	●	●

E Display unit							
Blank	MPa display, Rc thread	●	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●	●

F Piping adapter set (attached)		Note 8					
Blank	Without attachment	●	●	●	●	●	●
A6*W	1/8 piping adapter set	●					
A8*W	1/4 piping adapter set	●	●	●	●		
A10*W	3/8 piping adapter set	●	●	●	●		
A15*W	1/2 piping adapter set		●	●	●		
A20*W	3/4 piping adapter set				●	●	●
A25*W	1 piping adapter set					●	●
A32*W	1 1/4 piping adapter set					●	●

* Adaptor screw type							
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●

G Attachment (attached)		Note 9					
Blank	Without attachment	●	●	●	●	●	●
BW	C type bracket	●	●	●	●	●	●
B3W	L type bracket	●	●	●	●	●	
B4W	B type bracket		●				
G49P	Pressure gauge: G49D-8-P10	●	●	●	●	●	●
G59P	Pressure gauge: G59D-8-P10	●	●	●	●	●	●
G40P	Pressure gauge: G40D-8-P10	●	●	●	●	●	●
G50P	Pressure gauge: G50D-8-P10	●	●	●	●	●	●
G41P	Pressure gauge: G41D-8-P10	●	●	●	●	●	●
R2 Note	Digital pressure sensor: PPX-R10N-6M	●	●	●	●	●	●

⚠ Note on model no. selection

- Note 1: Refer to pages 109 and 110 for the specifications and attachment.
- Note 2: When selecting options for several items, list options in order from the top.
- Note 3: The low-pressure gauge (0 to 0.4 MPa) is used when "L" is selected for the pressure range option.
- Note 4: When "T" is selected, the gauge plug is assembled instead of the pressure gauge.
The working temperature range is 5 to 50°C.
- Note 5: When option "T6" is selected, only "blank" or "R2" is selected for the pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.
- Note 6: The piping adaptor set A*00**-W is included.
- Note 7: The piping adapter set and C type bracket cannot be used together.
- Note 8: When G threads or NPT threads are selected, the IN, OUT, and gauge port are available.
- Note 9: The adapter port size can be selected from Rc, NPT or G.
Blank: Rc thread, N: NPT thread, G: G thread.
(example) A8G
- Note 10: If NPT is selected for the piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

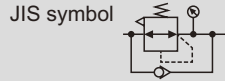
Dimensions

Same as standard parts. Refer to pages 113 to 115.

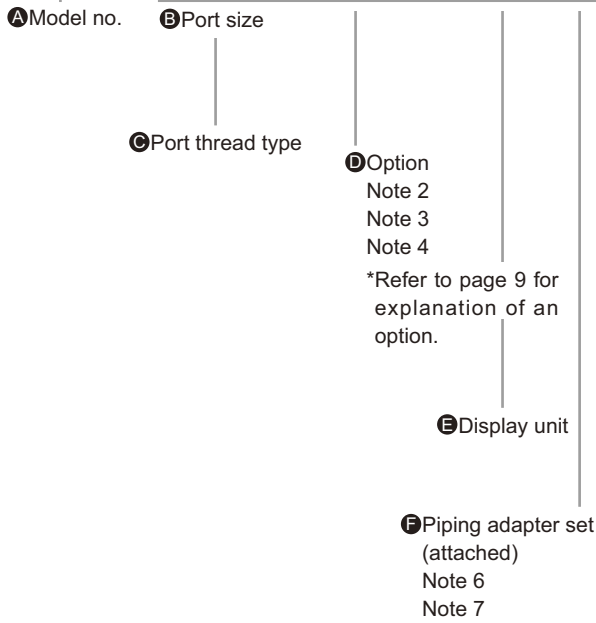
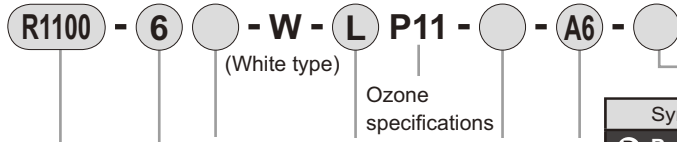


Reverse regulator: Ozone proof R1100/R2100/R3100 R4100/R6100/R8100-P11 Series

Fluorine rubber and hydrogenated nitrile rubber, etc., used for rubber part materials.
Port size: Rc1/8 to Rc1



How to order



A Model no.					
R	R	R	R	R	R
1	2	3	4	6	8
0	0	0	0	0	0
0	0	0	0	0	0

Symbol	Descriptions						
B Port size							
6	1/8	●					
8	1/4	●	●	●	●		
10	3/8		●	●	●		
15	1/2				●		
20	3/4					●	●
25	1					●	●
C Port thread type		Note 8					
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●
D Option							
Pressure range	Blank	0.05 to 0.85MPa	●	●	●	●	●
	L	0.05 to 0.35MPa	●	●	●	●	●
Relief	Blank	With relief mechanism	●	●	●	●	●
	N	Nonrelief type	●	●	●	●	●
Pressure gauge	Blank	With standard pressure gauge (G401)	●	●	●	●	●
	T	Without pressure gauge (a gauge port is assembled with sealed)	●	●	●	●	●
	T8	Option for pressure gauge attachment (gauge port assembled ventilated)	●	●	●	●	●
	T6	Digital pressure sensor PPX attached option	●	●	●	●	●
X1	IN/OUT reverse flow (right → left)	●	●	●	●	●	
E Display unit							
Blank	MPa display, Rc thread	●	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●	●
F Piping adapter set (attached)		Note 9					
Blank	Without attachment	●	●	●	●	●	●
A6*W	1/8 piping adapter set	●					
A8*W	1/4 piping adapter set	●	●	●	●		
A10*W	3/8 piping adapter set	●	●	●	●		
A15*W	1/2 piping adapter set		●	●	●		
A20*W	3/4 piping adapter set				●	●	●
A25*W	1 piping adapter set					●	●
A32*W	1 1/4 piping adapter set					●	●
* Adaptor screw type							
Blank	Rc thread	●	●	●	●	●	●
N	NPT thread	●	●	●	●	●	●
G	G thread	●	●	●	●	●	●
G Attachment (attached)		Note 10					
Blank	Without attachment	●	●	●	●	●	●
BW	C type bracket			●	●		
B3W	L type bracket			●	●		
B4W	B type bracket		●				
G49P	Pressure gauge: G49D-8-P10	●	●	●	●	●	●
G59P	Pressure gauge: G59D-8-P10	●	●	●	●	●	●
G40P	Pressure gauge: G40D-8-P10	●	●	●	●	●	●
G50P	Pressure gauge: G50D-8-P10	●	●	●	●	●	●
G41P	Pressure gauge: G41D-8-P10	●	●	●	●	●	●
R2 Note	Digital pressure sensor: PPX-R10N-6M	●	●	●	●	●	●

Note on model no. selection

- Note 1: Refer to pages 117 and 118 for the specifications and attachment.
- Note 2: When selecting options for several items, list options in order from the top.
- Note 3: The low-pressure gauge (0 to 0.4 MPa) is used when "L" is selected for the pressure range option.
- Note 4: Positions of a check valve and pressure gauge can not be changed. If the IN and OUT direction must be reversed, indicate "X1" at the end of the option field.
Note 4: When "T" is selected, the gauge plug is assembled instead of the pressure gauge.
- Note 5: When option "T6" is selected, only "blank" or "R2" is selected for the **●** pressure gauge (enclosed). The digital pressure sensor PPX mounting port (Rc1/8) is assembled ventilated.
- Note 6: The piping adaptor set A*00-**-W is included.
- Note 7: The piping adaptor set and C type bracket cannot be used together.
- Note 8: When G threads or NPT threads are selected, the IN, OUT, and gauge port are available.
- Note 9: The adapter port size can be selected from Rc, NPT or G. Blank: Rc thread, N: NPT thread, G: G thread. (example) A8G
- Note 10: If NPT is selected for the **●** piping thread type, a NPT pressure gauge is enclosed. If Rc or G thread is selected, an R thread pressure gauge is enclosed.

Dimensions

Same as standard parts. Refer to pages 121 to 123.

MEMO

MEMO

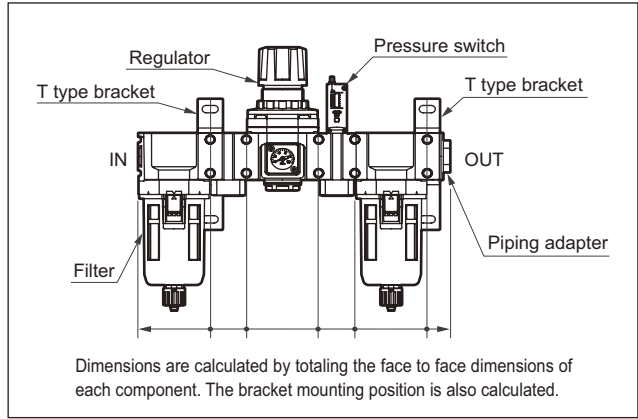
Custom combination specifications

Overview

Customized combinations are customer-oriented combinations that meet user needs for diverse combinations. Place orders by filling out the specifications below.

Preparing custom combination specifications

- See individual pages for component ordering and details, etc.
 - 3000 and 4000 Series combinations are used for products other than the pressure switch.
- In this case use the specifications of the C4000.



C3000 Series custom combination specifications

Contact _____ Quantity _____ Set _____
Slip No _____ Request date / /

Issue / / /
Your company name _____
Contact _____
Purchase order No _____

● Model no. **C3000-UN-** - Technical confirmation No

CKD Sales have the factory check indicated specifications, and indicate the number if OK.

Designate the direction of compressed air flow as seen from the front. Leave blank when selecting "blank".

Flow direction	
Blank	Left → right
X1	Right → left

One piping adapter is enclosed. A two-piece set is not used, so indicate required fields.

For products with an asterisk (*), indicate up/down. Indicate up or down for the regulator's knob direction, and the port up/down for other components. Indicate the installation position in order from the left as seen from the front.

Part name	Face to face dimensions	Model no.	Direction	Installation position				Field for Engineers
Piping adapter	20	A400-UN-10-W						
Air filter	63	F3000-8-W		○				
Filter and regulator	63	W3000-W						
		W3100-W						
Regulator*	63	R3000-8-W	Up		○			
		R3100-W						
Oil mist filter	63	M3000-8-W				○		
Lubricator	63	L3000-W						
Distributor*	31.5	D401-UN-00-8-W	Down	○				
Distributor	42	D300-W						
Pressure switch	31.5	P4100-UN-8-W				○		
		P4000-W						
Shut-off valve	63	V3000-W						
L type piping adapter*	31.5	A401-UN-W						
T type bracket set	* 1	B310-UN-W		○			○	
Joiner set		C4000-J400-UN-W		○	○	○		

Sample for completing form for above product.

Use this field when using products with different options and port sizes, etc.

CKD Sales have the factory check indicated specifications, and indicate the number if OK.

*1: The distance from the pipe center to the mounting surface is 45 mm.

Cautions

"UN" in the model indicates an isolated part without joiner set, etc.
"UN" may also be indicated for the T-type bracket set and joiner set. In this case, this is the model dedicated to custom combination.

Technical confirmation No. _____

Approval	Inspector	Contact

A confirmation mark is pressed by CKD.

Engineer Comment Field

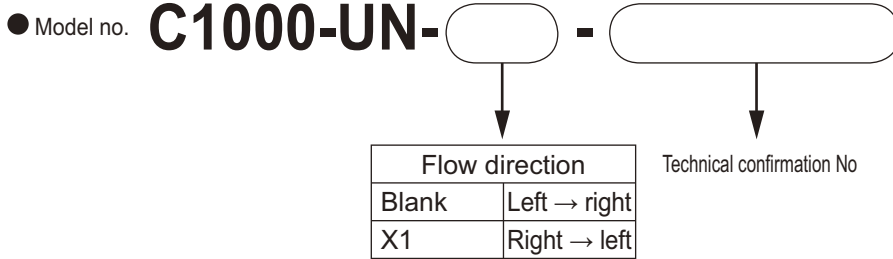
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C1000 Series custom combination specifications

Contact _____
Slip No _____

Quantity _____ Set _____
Request date / /

Issue / /
Your company name _____
Contact _____
Purchase order No _____



For products with an asterisk (*), indicate up/down.

Indicate up or down for the regulator's knob direction, and the port up/down for other components.

Indicate the installation position in order from the left as seen from the front.

Part name	Face to face dimensions	Model no.	Direction	Installation position								Field for Engineers	
Piping adapter	21.5	A100-UN- -W											
Air filter	40	F1000- -W											
Filter and regulator	40	W1000- -W											
		W1100- -W											
Regulator*	40	R1000- -W											
		R1100- -W											
Oil mist filter	40	M1000- -W											
Lubricator	40	L1000- -W											
Distributor*	28	D101-UN-00- -W											
Pressure switch	28	P1100-UN- -W											
Shut-off valve	40	V1000- -W											
L type piping adapter*	28	A101-UN- -W											
T type bracket set * 1		B110-UN-W											
Joiner set		C1000-J100-UN-W											

Cautions

“UN” in the model indicates an isolated part, which does not include a joiner set, etc.
“UN” may also be indicated for the T-type bracket set and joiner set. In this case, this is the model dedicated to custom combination.

When selecting the pressure switch P*100-UN-W for the combination end, select the piping adaptor A*00-UN-W on the end side. (The horizontal direction port does not have threads.)

*1: The distance from the pipe center to the mounting surface is 40 mm.

Technical confirmation No: _____

Approval	Inspector	Contact

Engineer Comment Field		

C2000 Series custom combination specifications

Contact _____
Slip No _____

Quantity _____ Set _____
Request date _____ / _____ / _____

Issue _____ / _____ / _____
Your company name _____
Contact _____
Purchase order No _____

● Model no. **C2500-UN-** -

Flow direction	
Blank	Left → right
X1	Right → left

Technical confirmation No

For products with an asterisk (*), indicate up/down.

Indicate up or down for the regulator's knob direction, and the port up/down for other components.

Indicate the installation position in order from the left as seen from the front.

Part name	Face to face dimensions	Model no.	Direction	Installation position								Field for Engineers	
Piping adapter	20	A400-UN- -W											
Air filter	63	F3000- -W											
Filter and regulator	63	W3000- -W											
		W3100- -W											
Regulator*	50	R2000- -W											
		R2100- -W											
Oil mist filter	63	M3000- -W											
Lubricator	63	L3000- -W											
Distributor*	31.5	D401-UN-00- -W											
Distributor	42	D300- -W											
Pressure switch	31.5	P4100-UN- -W											
	80	P4000- -W											
Shut-off valve	63	V3000- -W											
L type piping adapter*	31.5	A401-UN- -W											
T type bracket set * 1		B310-UN-W											
Joiner set		C4000-J400-UN-W											

Cautions

"UN" in the model indicates an isolated part, which does not include a joiner set, etc.

"UN" may also be indicated for the T-type bracket set and joiner set. In this case, this is the model dedicated to custom combination.

When selecting the pressure switch P*100-UN-W for the combination end, select the piping adaptor A*00-UN-W on the end side. (The horizontal direction port does not have threads.)

*1: The distance from the pipe center to the mounting surface is 45 mm.

Technical confirmation No: _____

Approval	Inspector	Contact

Engineer Comment Field		

C3000 Series custom combination specifications

Contact _____
Slip No _____

Quantity _____ Set _____
Request date _____ / _____ / _____

Issue _____ / _____ / _____
Your company name _____
Contact _____
Purchase order No _____

● Model no. **C3000-UN-** -

Flow direction	
Blank	Left → right
X1	Right → left

Technical confirmation No

For products with an asterisk (*), indicate up/down.

Indicate up or down for the regulator's knob direction, and the port up/down for other components.

Indicate the installation position in order from the left as seen from the front.

Part name	Face to face dimensions	Model no.	Direction	Installation position								Field for Engineers
Piping adapter	20	A400-UN- -W										
Air filter	63	F3000- -W										
Filter and regulator	63	W3000- -W										
		W3100- -W										
Regulator*	63	R3000- -W										
		R3100- -W										
Oil mist filter	63	M3000- -W										
Lubricator	63	L3000- -W										
Distributor*	31.5	D401-UN-00- -W										
Distributor	42	D300- -W										
Pressure switch	31.5	P4100-UN- -W										
	80	P4000- -W										
Shut-off valve	63	V3000- -W										
L type piping adapter*	31.5	A401-UN- -W										
T type bracket set * 1		B310-UN-W										
Joiner set		C4000-J400-UN-W										

Cautions

“UN” in the model indicates an isolated part, which does not include a joiner set, etc.

“UN” may also be indicated for the T-type bracket set and joiner set. In this case, this is the model dedicated to custom combination.

When selecting the pressure switch P*100-UN-W for the combination end, select the piping adaptor A*00-UN-W on the end side. (The horizontal direction port does not have threads.)

*1: The distance from the pipe center to the mounting surface is 45 mm.

Technical confirmation No: _____

Approval	Inspector	Contact

Engineer Comment Field		

C4000 Series custom combination specifications

Contact _____
Slip No _____

Quantity _____ Set _____
Request date ____/____/____

Issue ____/____/____
Your company name _____
Contact _____
Purchase order No _____

● Model no. **C4000-UN-** -

*1: The port size 8, 10 and 15, is 20 mm, and 20 is 25 mm.
*2: The distance from the pipe center to the mounting surface is 55 mm.

Flow direction	
Blank	Left → right
X1	Right → left

Technical confirmation No _____

For products with an asterisk (*), indicate up/down.

Indicate up or down for the regulator's knob direction, and the port up/down for other components.

Indicate the installation position in order from the left as seen from the front.

Part name	Face to face dimensions	Model no.	Direction	Installation position										Field for Engineers		
				1	2	3	4	5	6	7	8	9	10			
Piping adapter	* 1	A400-UN- -W														
Air filter	63	F3000- -W														
	80	F4000- -W														
Filter and regulator	63	W3000- -W														
		W3100- -W														
	80	W4000- -W														
		W4100- -W														
Regulator*	63	R3000- -W														
		R3100- -W														
	80	R4000- -W														
		R4100- -W														
Oil mist filter	63	M3000- -W														
	80	M4000- -W														
Lubricator	63	L3000- -W														
	80	L4000- -W														
Distributor*	31.5	D401-UN-00- -W														
Distributor	42	D300- -W														
Pressure switch	31.5	P4100-UN- -W														
	80	P4000- -W														
Shut-off valve	63	V3000- -W														
L type piping adapter*	31.5	A401-UN- -W														
T type bracket set * 2		B410-UN-W														
Joiner set		C4000-J400-UN-W														

Cautions

"UN" in the model indicates an isolated part, which does not include a joiner set, etc.
 "UN" may also be indicated for the T-type bracket set and joiner set. In this case, this is the model dedicated to custom combination.
 When selecting the pressure switch P*100-UN-W for the combination end, select the piping adaptor A*00-UN-W on the end side. (The horizontal direction port does not have threads.)

Technical confirmation No: _____

Approval	Inspector	Contact

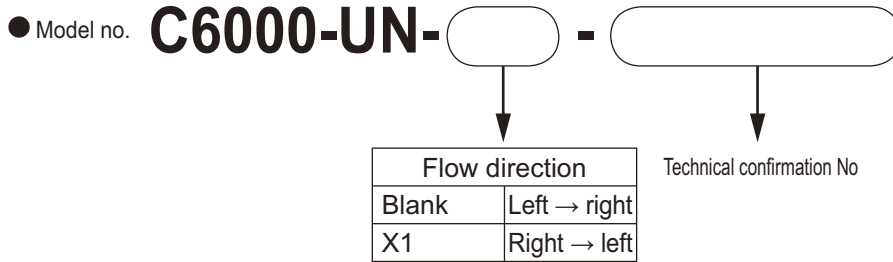
Engineer Comment Field		

C6000 series custom combination specifications

Contact _____
Slip No _____

Quantity _____ Set _____
Request date / /

Issue / / /
Your company name _____
Contact _____
Purchase order No _____



For products with an asterisk (*), indicate up/down.

Indicate up or down for the regulator's knob direction, and the port up/down for other components.

Indicate the installation position in order from the left as seen from the front.

Part name	Face to face dimensions	Model no.	Direction	Installation position								Field for Engineers	
Piping adapter	* 1	A800-UN- -W											
Air filter	90	F6000- -W											
	100	F8000- -W											
Filter and regulator	100	W8000- -W											
		W8100- -W											
Regulator*	90	R6000- -W											
		R6100- -W											
	100	R8000- -W											
		R8100- -W											
Oil mist filter	90	M6000- -W											
	100	M8000- -W											
Lubricator	100	L8000- -W											
Distributor*	50	D801-UN-00- -W											
Pressure switch	50	P8100-UN- -W											
L type piping adapter*	50	A801-UN- -W											
T type bracket set * 2		B810-UN-W											
Joiner set		C8000-J800-UN-W											

Cautions

“UN” in the model indicates an isolated part, which does not include a joiner set, etc.

“UN” may also be indicated for the T-type bracket set and joiner set. In this case, this is the model dedicated to custom combination.

When selecting the pressure switch P*100-UN-W for the combination end, select the piping adaptor A*00-UN-W on the end side. (The horizontal direction port does not have threads.)

* 1: The port size 20 and 25, is 35 mm, and 32 is 38 mm.

* 2: The distance from the pipe center to the mounting surface is 65 mm.

Technical confirmation No: _____

Approval	Inspector	Contact

Engineer Comment Field		

C8000 series custom combination specifications

Contact _____
Slip No _____

Quantity _____ Set _____
Request date _____ / _____ / _____

Issue _____ / _____ / _____
Your company name _____
Contact _____
Purchase order No _____

● Model no. **C8000-UN-** -

Flow direction	
Blank	Left → right
X1	Right → left

Technical confirmation No

*1: The port size 20 and 25, is 35 mm, and 32 is 38 mm.

*2: The distance from the pipe center to the mounting surface is 65 mm.

For products with an asterisk (*), indicate up/down.

Indicate up or down for the regulator's knob direction, and the port up/down for other components.

Indicate the installation position in order from the left as seen from the front.

Part name	Face-to-face dimensions	Model no.	Direction	Installation position								Field for Engineers	
				1	2	3	4	5	6	7	8		
Piping adapter	* 1	A800-UN- -W											
Air filter	100	F8000- -W											
Filter and regulator	100	W8000- -W											
		W8100- -W											
Regulator*	100	R8000- -W											
		R8100- -W											
Oil mist filter	100	M8000- -W											
Lubricator	100	L8000- -W											
Distributor*	50	D801-UN-00- -W											
Pressure switch	50	P8100-UN- -W											
L type piping adapter*	50	A801-UN- -W											
T type bracket set * 2		B810-UN-W											
Joiner set		C8000-J800-UN-W											

Cautions

"UN" in the model indicates an isolated part, which does not include a joiner set, etc.

"UN" may also be indicated for the T-type bracket set and joiner set. In this case, this is the model dedicated to custom combination.

When selecting the pressure switch P*100-UN-W for the combination end, select the piping adaptor A*00-UN-W on the end side. (The horizontal direction port does not have threads.)

Technical confirmation No: _____

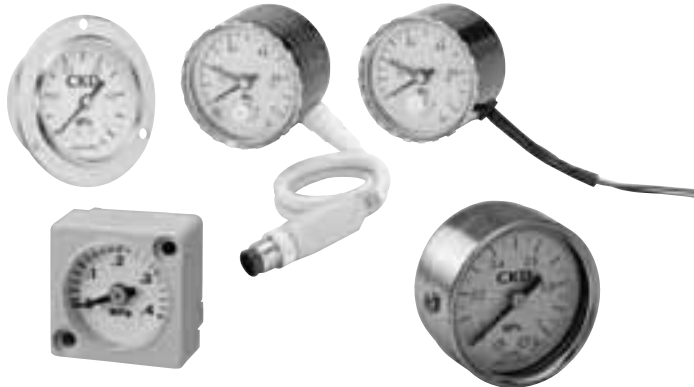
Approval	Inspector	Contact

Engineer Comment Field		

Pressure gauge/indicator

Related products

■ Components for air preparation/pressure adjustment/F.R.L. unit



C O N T E N T S

Pressure gauge

- Pressure gauge assembly (G401-W) 195
- With safety mark (G40D, G50D) 196
- With limit mark (G41D) 197
- General purpose (G49D, G59D) 198
- Pressure gauge for panel mount (G53D) 199
- Pressure gauge with switch (G52D) 201

Pressure switch

- Compact mechanical pressure switch (APS-W) 205

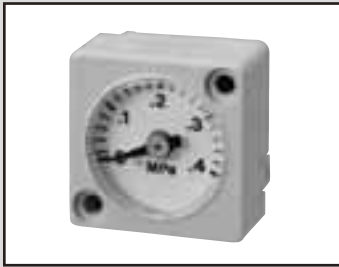
Drain discharger

- Automatic drain (DT3000-W, DT4000-W) 209

⚠ Handling the Pressure Gauge

Repeated and sudden increase and decrease in the pressure and pressure pulsation must be avoided because this could adversely affect the life of the pressure gauge. Either ease the pressure fluctuation in the circuit or check with CKD so that a pressure gauge with a cushioning screw is prepared.

- ⚠ Refer to the Pneumatic, Vacuum, and Auxiliary Components (No. CB-024SA) catalog for precautions for general pneumatic pressure components. ⚠ Refer to Safety Precautions in this catalog for detailed precautions for each series.



Thin type pressure gauge

G401-W Series

Thin, compact design ideal for incorporating devices.

Suitable for filter regulator, regulator, and pressure switch (P4000-W).

● Connection: O ring sealant, set screw

JIS symbol



Specifications

Descriptions		G401-W
Working fluid		Compressed air
Fluid temperature °C		5 to 60
Ambient temperature °C		5 to 60
Precision Grade		JIS3 grade or equivalent (±3%F/S) (at 5 to 35°C)
Shape		Square shaped, set screw
Display section diameter		ø26
Material	Housing	PBT resin
	Lens	Polycarbonate resin
Pressure range MPa		0 to 0.4
		0 to 1.0
Connection		O ring sealant, set screw
Weight g		11

How to order

G401 - **W** - **0P** - **P04**

(White Series)

Ⓐ Connection method

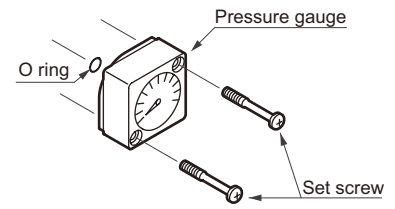
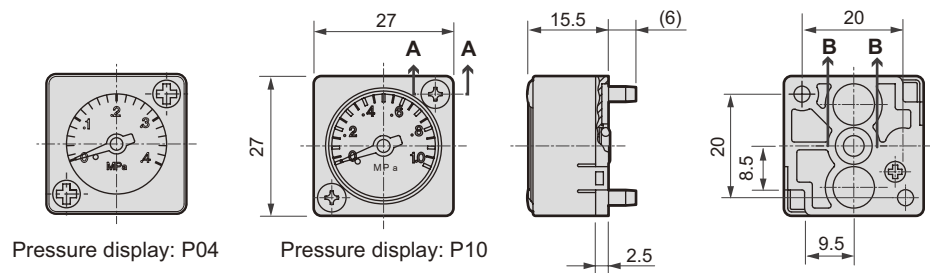
Ⓑ Pressure display

Symbol	Descriptions
Ⓐ Connection method	
Blank	Set screw for metal (nominal 3 tapping screw) (R3000, 4000, 8000 Series provided as standard) (R3100, 4100, 8100 Series)
OP	Set screw for resin (nominal 3 tapping screw) (R1000, W1000 Series provided as standard)
Ⓑ Pressure display (MPa)	
P04	0 to 0.4MPa
P10	0 to 1.0MPa

Dimensions and part material

● G401

● Pressure gauge assembly



* Tighten the mounting screw to 0.6 N·m or less.

Applications



Part name	Material
Bourdon tube	Phosphor bronze
Case	PBT resin
Lens	Polycarbonate resin

Cross section B-B

Cross section A-A



Pressure gauge with safety mark

G40D/G50D Series

Green and red zones simplify visual control.

● Port size: R1/8, R1/4

JIS symbol



Specifications

Descriptions	G40D, G50D	
	P10	P04
Working fluid	Compressed air	
Full scale MPa	1.0	0.4
Safety mark setting range MPa	0.15 to 1.0	0.06 to 0.4
Max. setting depth MPa	0.45	0.18
Ambient temperature °C	5 to 60	
Fluid temperature °C	5 to 60	
Port size R	1/8, 1/4	
Precision	JIS3 grade or equivalent ($\pm 3\%F \cdot S$) (at 5 to 35°C)	
Weight g	G40D: 85	G50D: 100

How to order

G40D - **8** - **P10**

A Model no.

B Port size

C Pressure display

Symbol	Descriptions
A Model no.	
G40D	Pressure gauge with safety mark
G50D	Pressure gauge with safety mark
B Port size	
6	R1/8
8	R1/4
C Pressure display	
P10	0 to 1.0MPa
P04	0 to 0.4MPa

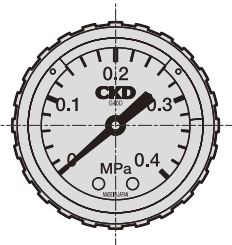
⚠ Note on model no. selection

* Designate R1/4 when mounting on Selex F.R.L. Series.

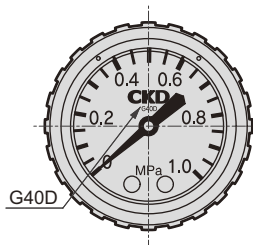
* Designate G40D-8 when selecting for Selex F.R.L. 1000 Series.

Dimensions and material

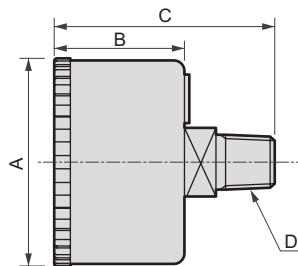
Adjustment method of pressure range



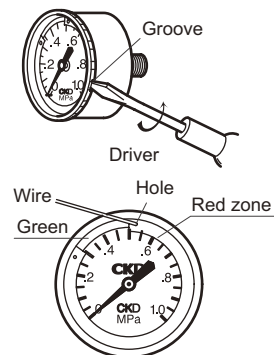
Pressure display: P04



Pressure display: P10



Opening the transparent case



Part name	Material
Bourdon tube, stock	Brass
Housing	Steel sheet + paint
Lens	Polyamide resin
Mark	PBT resin

Model no.	A	B	C	D
G40D-6	∅	26.5	44	R1/8
G40D-8	42.5		46	R1/4
G50D-6	∅	27.5	44	R1/8
G50D-8	52.5		46	R1/4

Open the transparent case, and move the red zone by inserting a thin wire into the hole at the red zone. After adjustment, assemble the transparent case, then pressurize air pressure.



Pressure gauge with limit mark

G41D Series

Visually control with green arrow.

● Port size: R1/8, R1/4

JIS symbol



Specifications

Descriptions		G41D
Working fluid		Compressed air
Fluid temperature °C		5 to 60
Ambient temperature °C		5 to 60
Precision Note 1 Grade		JIS3 grade or equivalent (±3%F/S) (at 5 to 35°C)
Shape		DT type (rear side screw/stock section 4 square)
Display section diameter		ø42
Material	Stock, Bourdon tube	Brass
	Housing	Stainless steel
	Lens	Polycarbonate resin
	Mark	Polyacetal resin
Pressure range MPa		0 to 0.2 0 to 0.4 0 to 1.0
Port size Note 1		R1/8, 1/4
Weight g		82

Note 1: The guaranteed display accuracy temperature is 20±15°C.

How to order

G41D - 6 - P04

A Model no.

B Port size

C Pressure display

Symbol	Descriptions
A Model no.	
G41D	Pressure gauge with limit mark
B Port size Note 1	
6	R1/8
8	R1/4
C Pressure display	
P02	0 to 0.2MPa
P04	0 to 0.4MPa
P10	0 to 1.0MPa

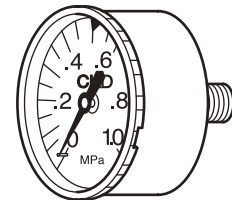
⚠ Note on model no. selection

Note 1: NPT and G threads are used as custom orders.

Adjustment method

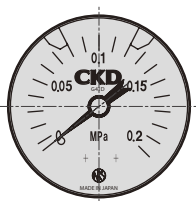
Remove the transparent case, and move the green arrow mark with a screwdriver, etc.

After adjustment, assemble the transparent case, then pressurize air pressure.

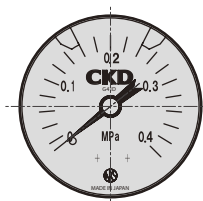


Remove the transparent cover by turning it counterclockwise and pulling it off.

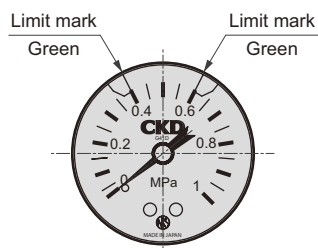
Dimensions



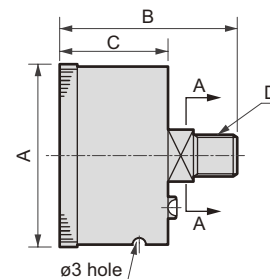
Pressure display: P02



Pressure display: P04



Pressure display: P10



Model no.	A	B	C	D	E
G41D-6	ø42	40.5	24.5	R1/8	12
G41D-8	ø42	44.5	24.5	R1/4	14



Cross section A-A



General purpose pressure gauge

G49D/G59D Series

● Port size: R1/8, R1/4

JIS symbol



Specifications

Descriptions		G49D	G59D
Working fluid		Compressed air	
Fluid temperature °C		5 to 60	
Ambient temperature °C		5 to 60	
Precision Note 1		JIS3 grade or equivalent (±3%F/S) (at 5 to 35°C)	
Shape		DT type (rear side screw, stock section 4 square)	
Display section diameter		ø42	ø52
Material	Stock, Bourdon tube	Brass Note 2	
	Housing	Steel sheet + chrome plating	
	Lens	Glass	
Pressure range MPa		0 to 0.2 0 to 0.4 0 to 1.0 0 to 2.0	
Port size R		1/8, 1/4	
Weight g		86	115

Clean room specifications (Catalog No. CB-033SA)

● Dust generation preventing structure for use in cleanrooms

G49D-..... - P9*

G59D-..... - P9*

Copper and PTFE free (Page 179)

G49D-..... - P6

G59D-..... - P6

Note 1: The guaranteed display accuracy temperature is 20±15°C.

Note 2: The material of the Bourdon's tube is phosphor bronze only for pressure indication "P20."

How to order

G49D - 6 - P02

A Model no.

B Port size

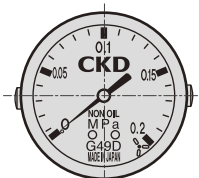
C Pressure display

Symbol	Descriptions
A Model no.	
G49D	
G59D	
B Port size Note 2	
6	R1/8
8	R1/4
C Pressure display (MPa) Note 1	
P02	0 to 0.2
P04	0 to 0.4
P10	0 to 1.0
P20	0 to 2.0

⚠ Note on model no. selection

Note 1: Consult with CKD for indications other than MPa.
Note 2: NPT thread is treated as custom order.

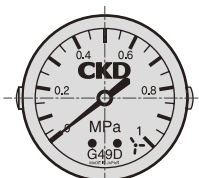
Dimensions



Pressure display: P02



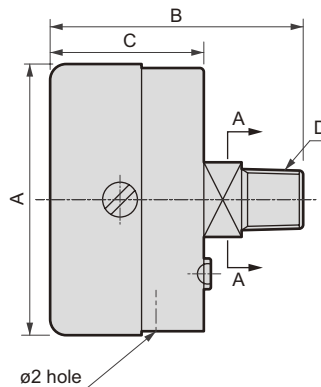
Pressure display: P04



Pressure display: P10



Pressure display: P20



Cross section A-A

Model no.	A	B	C	D	E
G49D-6	ø43.5	40.5	24.5	R1/8	12
G49D-8	ø43.5	44	24.5	R1/4	14
G59D-6	ø52	44.5	28	R1/8	12
G59D-8	ø52	46.5	28	R1/4	14
G49D-6-P6	ø42.8	43.5	27.5	R1/8	12
G59D-8-P6	ø51.8	52.5	30	R1/4	14



Pressure gauge for panel mount

G53D Series

JIS symbol



Features

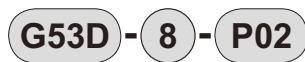
- An embedded panel mount has been added to the conventional pressure gauge
- M5 female threads are used at the connection port as standard

Specifications

Model no.		G53D
Working fluid		Compressed air
Fluid temperature	°C	5 to 60
Ambient temperature	°C	-5 to 60 (no freezing)
Precision	Note 1	JIS 3 grade or equivalent ($\pm 3\%F/S$)
Shape		DT type (rear side screw, stock section 4 square)
Display section diameter		$\phi 52$
Material	Stock, Bourdon tube	Brass
	Housing	Steel sheet + chrome plating
	Lens	Glass
Pressure range	MPa	0 to 0.2 0 to 0.4 0 to 1.0
Port size	R	1/8 (M5 female thread), 1/4 (M5 female thread)
Weight	g	100

Note 1: Display precision proof temperature is $20 \pm 15^\circ\text{C}$.

How to order



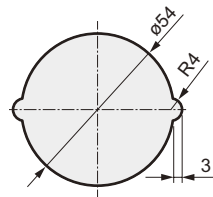
Symbol	Descriptions
A	Port size Note 1
6	1/8 (M5 female thread)
8	1/4 (M5 female thread)
B	Pressure display MPa Note 2
P02	0 to 0.2
P04	0 to 0.4
P10	0 to 1.0

⚠ Note on model no. selection

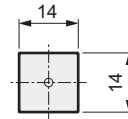
Note 1: Consult with CKD for the NPT thread.

Note 2: Consult with CKD for indications other than MPa.

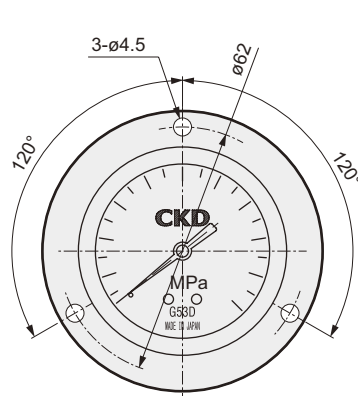
Dimensions



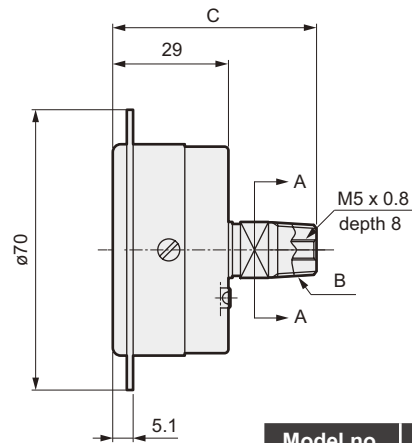
Panel cut dimension



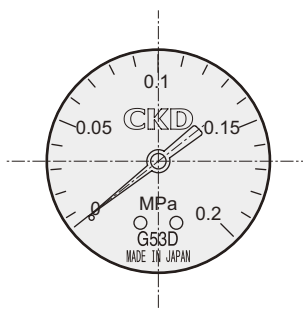
Cross section A-A



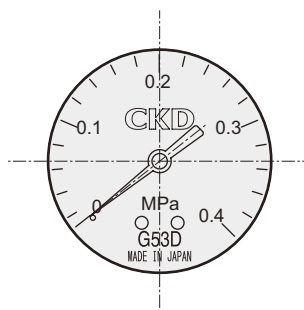
Scale display



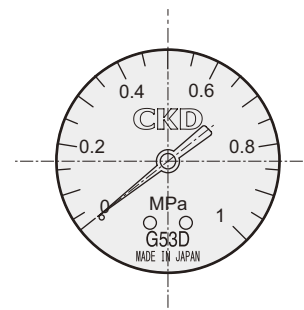
Model no.	B	C
G53D-6	Rc1/8	48
G53D-8	Rc1/4	51



Pressure display: P02



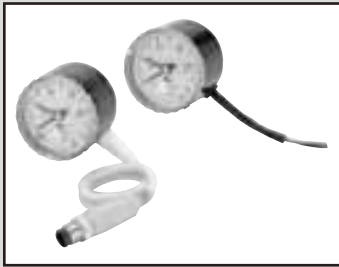
Pressure display: P04



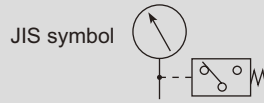
Pressure display: P10

⚠ Safety precautions

- Check that no impact or vibration is applied directly to the product.
- Repeated and sudden increase and decrease in pressure and pressure pulsation must be avoided because it could adversely affect the life of the pressure gauge.
Ease the pressure fluctuation in the circuit.



Pressure gauge with switch G52D Series



Features

- Introducing a pressure switch function to the analog pressure gauge
- Nonpolar connector used as option
- Activation confirmation lamp as option

Specifications

Descriptions		Pressure gauge
Working fluid		Compressed air
Fluid temperature	°C	5 to 60
Ambient temperature		-5 to 60 (no freezing)
Precision	Note 1	JIS 3 grade or equivalent ($\pm 3\%$ F/S)
Shape		DT type (rear side screw, stock section 6 square)
Material	Stock	Brass
	Bourdon tube	Phosphor bronze
	Housing	Steel sheet + chrome plating
	Lens	Polycarbonate resin
	Setting needle	ABS resin (green)
Pressure range	Note 2	0 to 1.0MPa
Port size	R	1/4
Weight	g	150

Note 1: Display precision proof temperature is 20±15°C.

Note 2: Do not apply pressure exceeding the maximum indication pressure, or operation could fail.

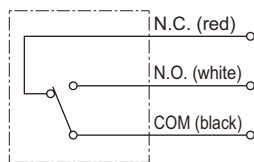
Descriptions		Pressure switch
Pressure switch setting range		0.1 to 0.8MPa
Hysteresis		0.07MPa
Contact configuration		Without lamp: 1ab (normal open, normal close) With lamp: 1a (normal open)
Setting needle error		±0.05MPa
Lead wire length		300mm
Electric connection		Without light: lead wire 3 pcs. With indicator light: M12 connector (4 pins)
Indicator light		LED (load current: 8 to 30mA)

Rated of micro switch

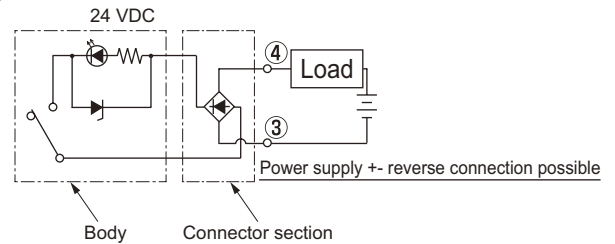
Load	Resistance load	
Rated voltage	30 VDC	125 VAC
Use current range	0.1 to 1A	0.1 to 1A

Electric wiring diagram

○ Without light



○ With light



How to order

G52D - 8 - P10 - 3N

Model no.

B Port size

C Pressure display

D Option

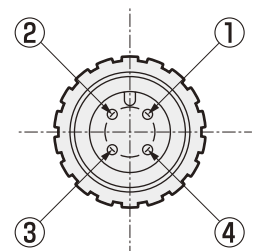
Symbol	Descriptions
B Port size	Note 1
8	R1/4
C Pressure display MPa	Note 2
P10	0 to 1.0
D Option	
Blank	Without light
3N	LED (24 VDC) not polarized

Note on model no. selection

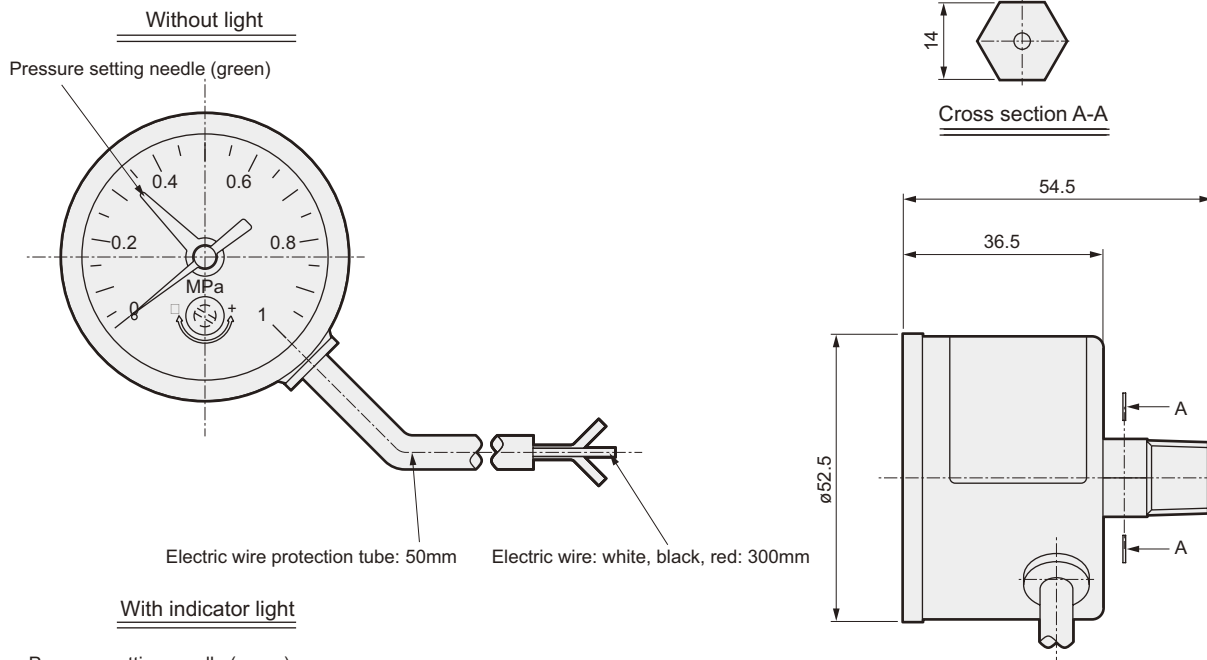
Note 1: Consult with CKD for the NPT thread.

Note 2: Check with CKD for indications other than MPa.

Terminal array of male connector



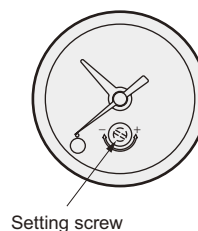
Dimensions



Setting needle setting method

○ Pass a flat-tip screwdriver (tip width 2.9 mm) through the rubber cap on the lens, and turn the setting screw to set the setting needle to the required pressure.

- * Turn the setting screw
 - Minus (-) side (clockwise)
 - setting pressure decrease
 - Plus (+) side (counterclockwise)
 - setting pressure increase



• The lamp turns on when higher than the set pressure, and turns off when less than the set pressure.

Lead wire with 4 pin connector

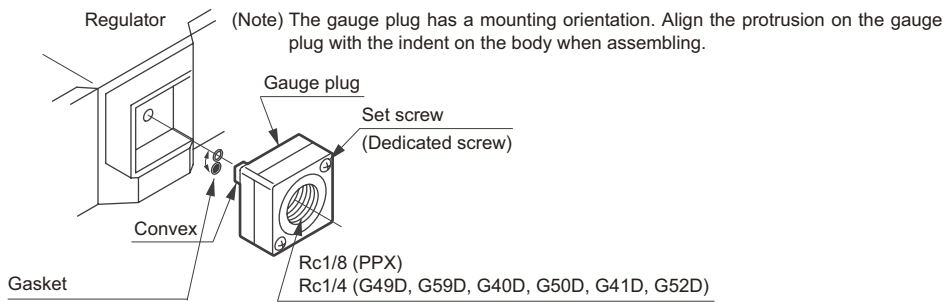
⚠ Safety precautions

- Check that no impact or vibration is applied directly to the product.
- Repeated and sudden increase and decrease in pressure and pressure pulsation must be avoided because it could adversely affect the life of the pressure gauge. Ease the pressure fluctuation in the circuit.
- The pressure switch setting value is indicated with the green setting indicator. Set the pressure switch value so that the setting indicator turn □
- Set the setting with a difference of 0.1 MPa or more from the working pressure (including pressure drop). Malfunctions could result if the difference is small. Refer to the drawings above for details on setting the setting needle. When using the pressure switch in the normal open state, the switch may not turn on when the pressure drops unless a pressure, to which the set indication error (± 0.05 MPa), hysteresis (0.07 MPa), and indicated accuracy ($\pm 3\%$ F/S) have been added, has been applied.
- Add the pressure gauge's indication accuracy to the maximum value of the setting indicator and indicator's error (set indicator error).
- When the DC lamp is used, the internal voltage drop is to be 4 V or less and load current 8 to 30 mA at 24 VDC.
- Wire the lead so that the repeated bending strain and tensile strength are not applied to the wire. Failure to do so could lead to disconnection or malfunction.

Pressure gauge Series

Gauge plug assembly (assembly of gauge plug, gasket, set screw)

Use when mounting the pressure gauge.



If the gasket is turned 180° as shown in the drawing, regulator pressure flows to the pressure gauge.

- * Tighten the pressure gauge to 10 to 15 N·m or less.
- * Use this when detecting external pressure.
- * Check with CKD when NPT or G threads are required.

Gauge plug assembly model no.	Applicable model	Applicable pressure gauge
R1000-W-G-PLUG	1000-W Series	G49D, G59D, G40D, G50D, G41D, G52D
R1000-W-T6-PLUG		PPX
R3000-W-G-PLUG	2000-W, 3000-W, 4000-W,	G49D, G59D, G40D, G50D, G41D, G52D
R3000-W-T6-PLUG	6000-W, 8000-W Series	PPX

MEMO



Compact mechanical pressure switch

APS-W Series

• General purpose discrete specifications (APS)

JIS symbol



Specifications

Descriptions	APS-W
Working fluid	Compressed air
Max. working pressure MPa	1.0
Set pressure range MPa	0.1 to 0.6
Hysteresis MPa	0.08 or less
Repeatability MPa	±0.02 or less
Contact configuration	1a Note 1
Wiring	Lead wire (oil resistant vinyl cabtire code 2-conductor 0.2mm ²)
Ambient temperature / fluid temperature	5 to 60°C
Protective structure Note 2	IP65 or equivalent

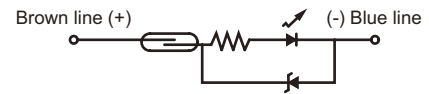
Note 1: The contact turns on if air pressure exceeding the scale setting pressure is applied.

Note 2: Note that an installation attitude must be vertical. When water entrains into the atmospheric release port from bottom, connect an option joint, and extend the tube until water does not entrain. This port can not be used outdoors.

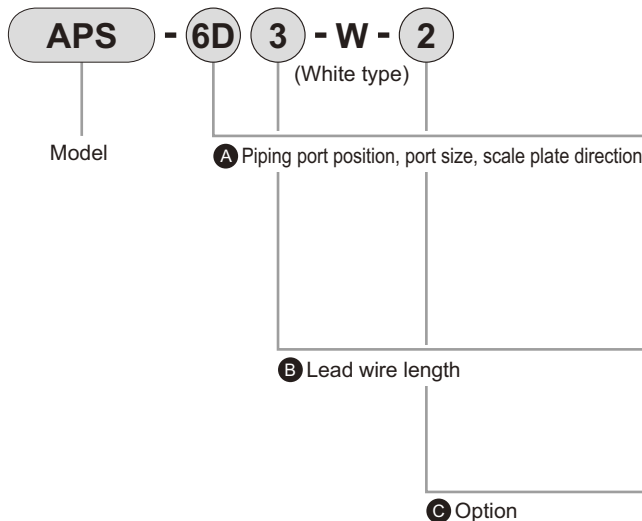
Electric component section specifications

Load voltage	12/24 VDC	100 VAC
Load current	5 to 50mA	7 to 20mA
Internal voltage drop	3V or less	
Light	LED (ON lighting)	
Maximum shock resistance	294m/S ²	
Insulation resistance	20MΩ and over at 500 VDC megger	
Withstand voltage	No failure when 1000 VAC is applied for one minute	

Internal circuit diagram



How to order

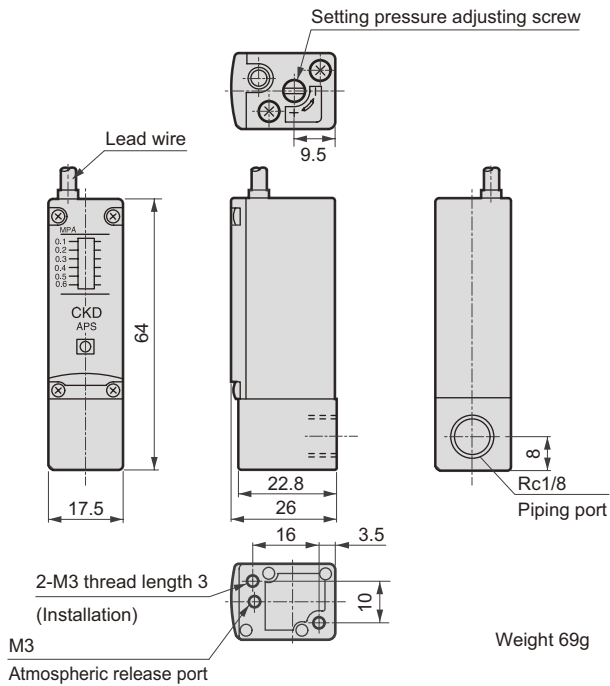


Symbol	Descriptions
A Piping port position, port size, scale plate direction	
6B	Rear side Rc1/8, height Note 1
6D	Bottom Rc1/8, height
6F	Rear side flange, height
6L	Both sides plane Rc1/8, height Note 1
6Y	Rear side flange, width
B Lead wire length	
Blank	1m
3	3m
5	5m
C Option	
Blank	None
1	Only DIN rail bracket attached (6D)
2	Only nipple attached (6D)
4	Atmospheric release port joint (elbow for M3) attached

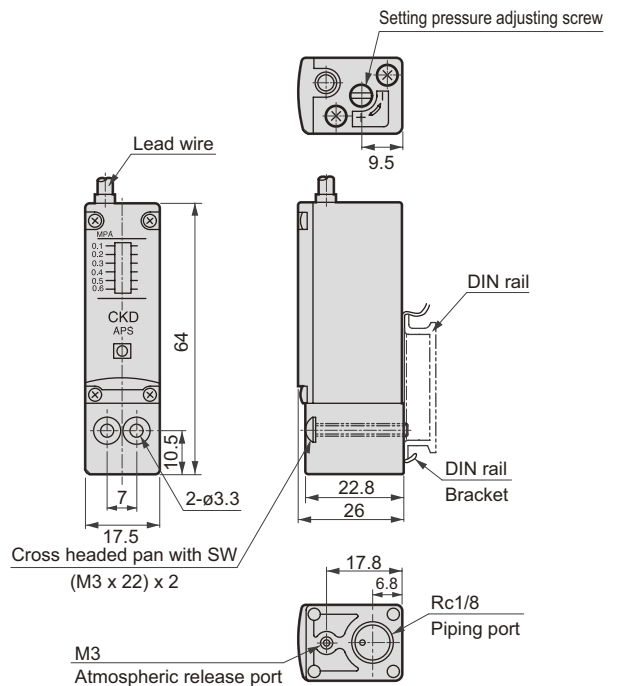
Note 1: When installing on the bottom, be careful not to block the release atmospheric release port.

Dimensions

● APS-6B-W

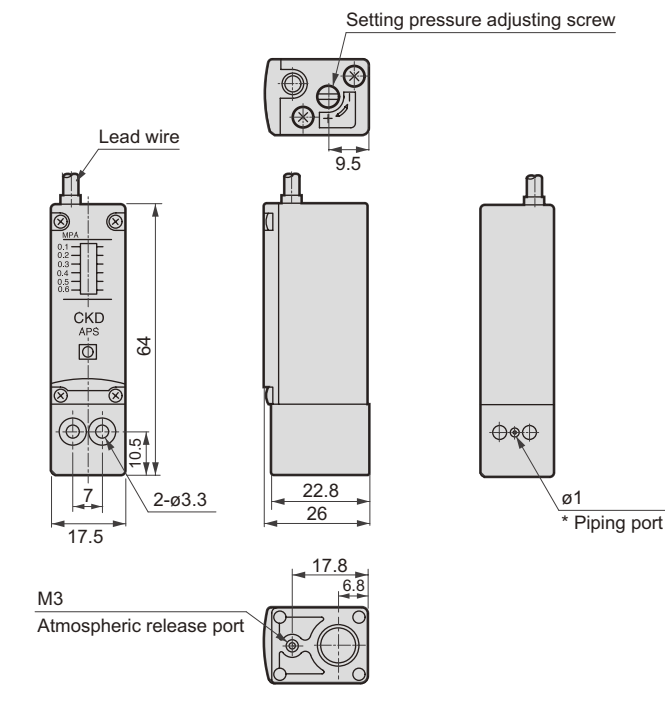


● APS-6D-W

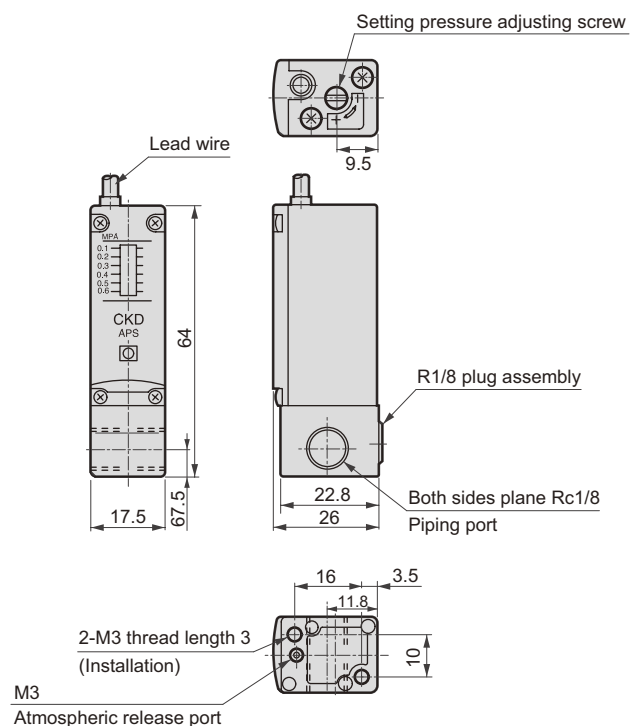


Note: When installing on the bottom, be careful not to block the atmospheric release port.

● APS-6F-W



● APS-6L-W



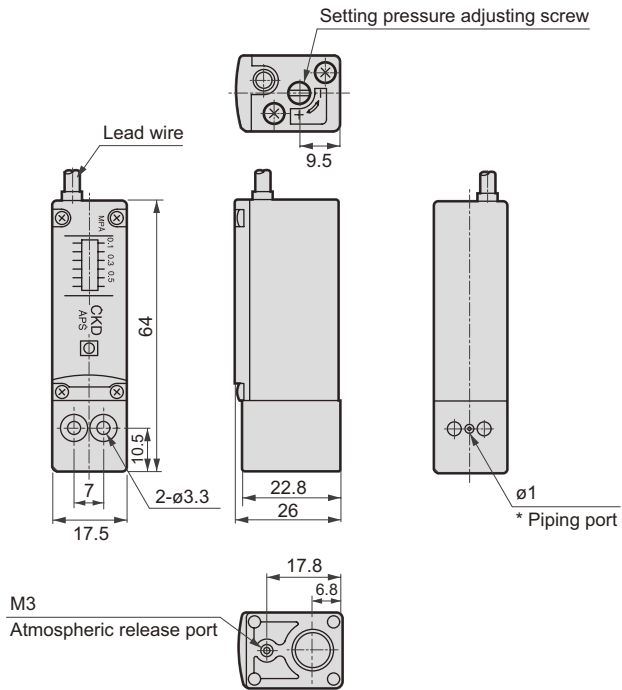
* CAUTION: The I.D. of the sealing O ring is 1.2.
Drill a 1 or less pressure outlet hole on the mounting face.

Note: When installing on the bottom, be careful not to block the atmospheric release port.

APS-W Series

Dimensions

● APS-6Y-W



* CAUTION: The inner diameter of the sealing O ring is 1.2.
Drill a 1 or less pressure outlet hole on the mounting face.

MEMO



Automatic drain

DT3000-W/DT4000-W Series

Lightweight, compact automatic drain discharger.

Applicable compressor: 0.75kW to 75kW

JIS symbol



Specifications

Descriptions	DT3000-W	DT4000-W	DT3010-W	DT4010-W
Type	Normally open (Note 1)		Normally closed	
Working fluid	Drain in compressed air (water or oil)			
Withstanding pressure MPa	1.5			
Working pressure range MPa	0.1 to 1		0.15 to 1	
Ambient temperature range °C	5 to 60			
Port size Rc, NPT, G	3/8, 1/2			
Drain port	Barbed nipple (soft nylon tube bore size $\phi 5.7$ to $\phi 6$ can be installed directly)			
Product weight kg	0.3	0.45	0.3	0.45

Note 1: If the working compressor is less than 0.75 kW (discharge flow 0.09 m³/min), select the normal close type.

How to order

DT3000 - **10** - **W** - **Z** - **BW**
(White type)

A Model no.

B Port size

C Port thread type

D Option

E Attachment
 Note 2

Symbol	Descriptions	
A Model no.		
DT3000	Normally open automatic drain	
DT3010	Normally closed automatic drain	
DT4000	Normally open automatic drain	
DT4010	Normally closed automatic drain	
B Port size		
10	3/8	
15	1/2	
C Port thread type		
Blank	Rc thread	
N	NPT thread	
G	G thread	
D Option		
Petcock attached	Blank	Polycarbonate bowl
	Z	Nylon bowl
	M Note 1	Metal bowl (with gauge) drain port Rc1/8
	M2 Note 1	Metal bowl (with gauge) drain port Rc1/4
	Blank	Pipe plug assembly
C Note 1	Petcock attached (without pipe plug)	
E Attachment		
Blank	Not attached	
BW	C type bracket	

⚠ Note on model no. selection

Note 1: The petcock is included.

Note 2: C type bracket model no. DT3000-W B320

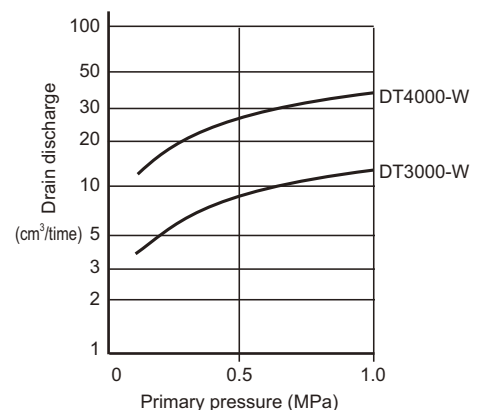
DT4000-W B420

Note 3: A masking plug matching the port size is enclosed.

Bowl types and shapes

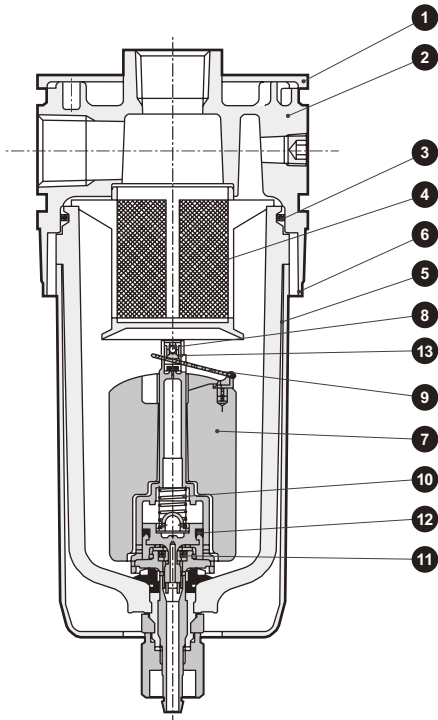
Type		Normally open (Open at no pressure) DT3000-W/DT4000-W	Normally closed (Closed at no pressure) DT3010-W/DT4010-W
DT3000-W DT4000-W	Plastic	<ul style="list-style-type: none"> With manual cock 	<ul style="list-style-type: none"> With manual cock
	Metal	<ul style="list-style-type: none"> Without manual cock (M, M2) <p>Rc1/8 (M) Rc1/4 (M2)</p>	<ul style="list-style-type: none"> Without manual cock (M, M2) <p>Rc1/8 (M) Rc1/4 (M2)</p>

Automatic drain performance diagram



Internal structure and parts list

- Normally open (open at no pressure)
DT3000-W/DT4000-W

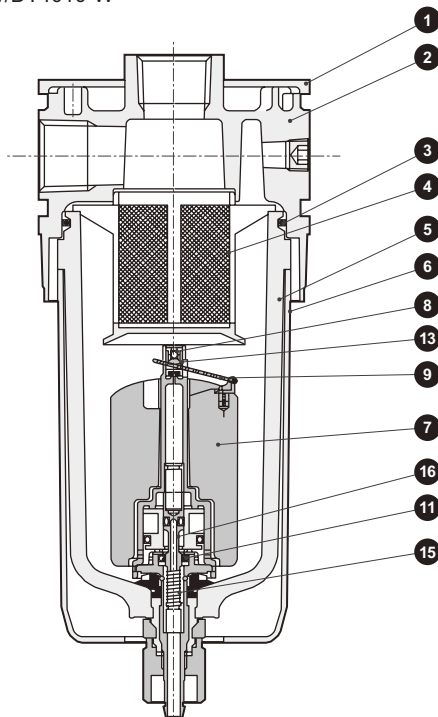


When pressure is not applied in the bowl, valve 12 is pressed down by spring 10, and is separated from stem packing 11. When a pressure of 0.1 MPa or more is applied to the bowl, pressure on valve 12 increases to more than the force of spring 10, valve 12 is pressed up and is sealed by the stem packing 11.

When drainage accumulates in the bowl, float 7 rises, and orifice spring 13 is pressed up by float level arm 9.

Orifice seat assembly 8 opens with a snap action by orifice spring 13, and compressed air is led into the upper chamber of valve 12 to pressurize it. When valve 12 is pressed downward and separated from the stem packing 11, drainage is released into the atmosphere. Once released, the float drops and orifice seat assembly 8 is closed by float level arm 9, and the compressed air pressurizing the upper chamber of valve 12 is released into the atmosphere through valve 12 orifice. The pressure applied to valve 12 from the bottom exceeds the force of spring 10, causing valve 12 to rise and be sealed by stem packing 11.

- Normally closed (closed at no pressure)
DT3010-W/DT4010-W



When pressure is not applied to the bowl, valve 16 is pressed up by spring 15 and sealed by stem packing 11.

When a pressure of 0.15 MPa or more is applied to the bowl and drainage accumulates, float 7 rises and orifice spring 13 is pressed up by float level arm 9.

Orifice seat assembly 8 opens with snap action by orifice spring 13, and compressed air is led into the upper chamber of valve 16 to pressurize it. When valve 16 is pressed downward and separated from stem packing 11, drainage is released into the atmosphere.

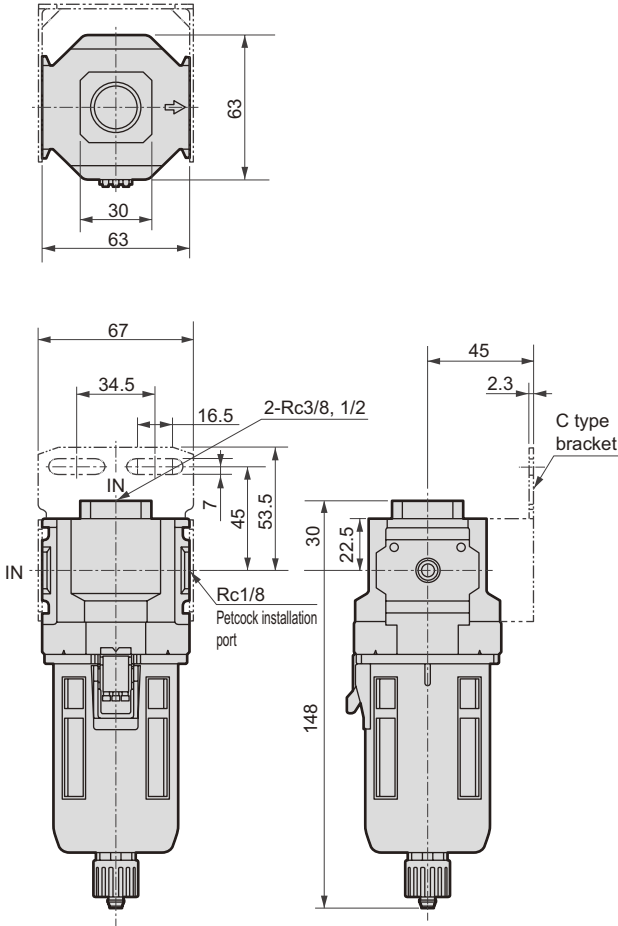
Once released, float 7 lowers and orifice seat assembly 8 is closed by float level arm 9, and the compressed air pressurizing the upper chamber of valve 16 is released into the atmosphere through the valve 16 orifice. Valve 16 is pressed up by the force of spring 15 from below, and is sealed by stem packing 11.

No.	Part name	Material	Model no.			
			DT3000-W	DT3010-W	DT4000-W	DT4010-W
1	Plate cover	ABS resin	-	-	-	-
2	Body	Aluminum alloy die-casting	-	-	-	-
3	O ring	Special nitrile rubber	F3000-ORING	F3000-ORING	F4000-ORING	F4000-ORING
4	Screen	Polyacetal resin, polyester	DT3000-SCREEN	DT3000-SCREEN	DT4000-SCREEN	DT4000-SCREEN
5	Bowl assembly (including O ring)	-	DT3000-W-BOWL	DT3010-W-BOWL	DT4000-W-BOWL	DT4010-W-BOWL
6	Bowl guard	Polyamide resin, steel	DT3000-W-BOWL-GUARD	DT3000-W-BOWL-GUARD	DT4000-W-BOWL-GUARD	DT4000-W-BOWL-GUARD

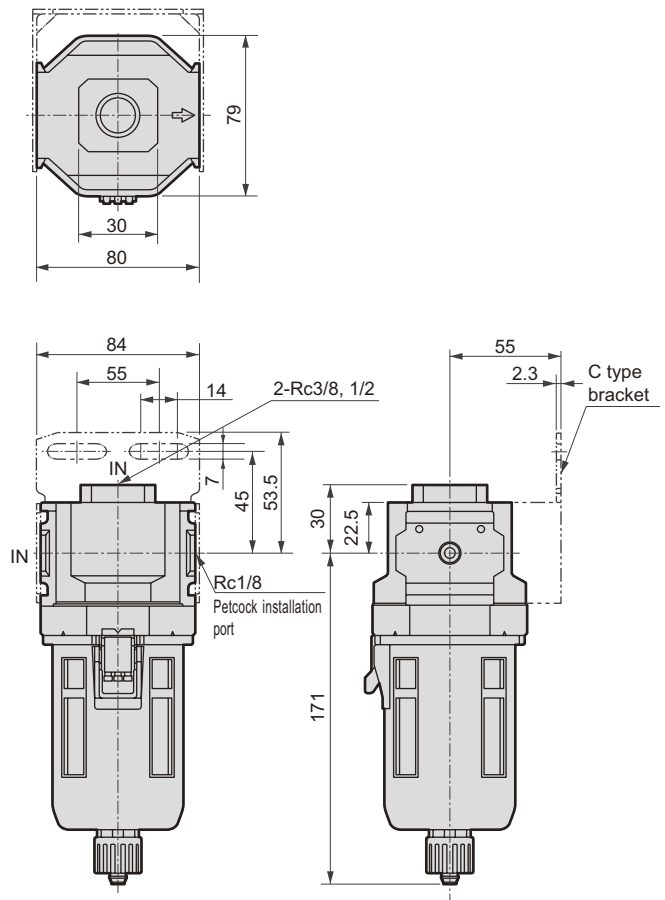
DT3000-W/DT4000-W Series

Dimensions

● DT3000-W/DT3010-W



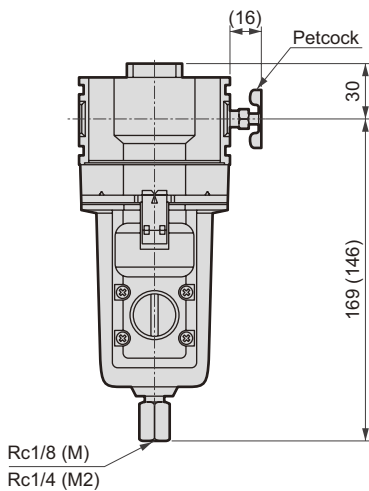
● DT4000-W/DT4010-W



Note: A 5.7 to 6 bore size soft nylon tube is directly connected to the drainage discharge port.
 Note: Provide a space of 60 mm or more under the bowl for maintenance.

Metal bowl specifications

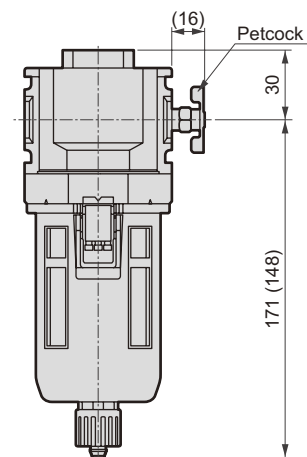
● Option (M, M2)



Note: The dimensions in () indicates DT3000-W.

Petcock specifications

● Option (C)



Note: The dimensions in () indicates DT3000-W.

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