



Reverse regulator standard white Series

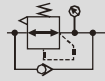
R1100/R2100/R3100

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					Note 3
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.

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
1	1	1	1	1	1
0	0	0	0	0	0
0	0	0	0	0	0

F Piping adapter set (attached)

G Attachment (attached)

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.

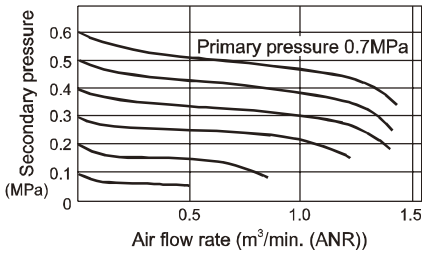
Note 6: Refer to Section 2. Regulator, in "⚠ CAUTIONS for Installation and Adjustment" (page 14) for details on mounting the L-type bracket.

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.

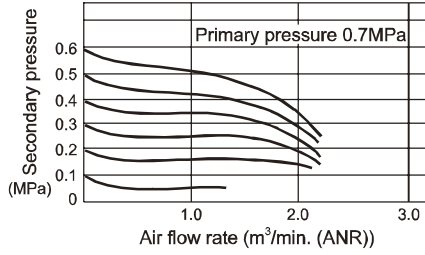
Regulator series

Flow characteristics

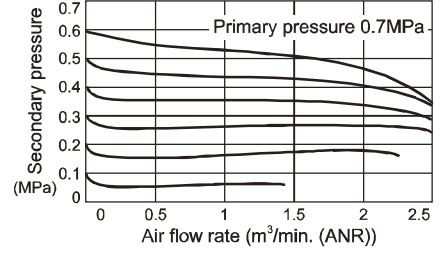
● R1100-6-W



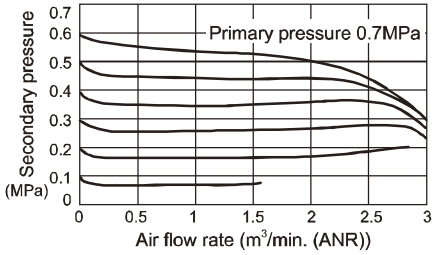
● R1100-8-W



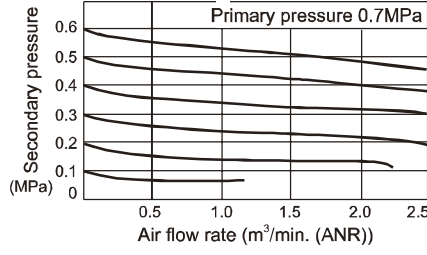
● R2100-8-W



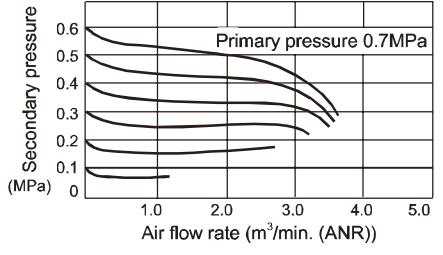
● R2100-10-W



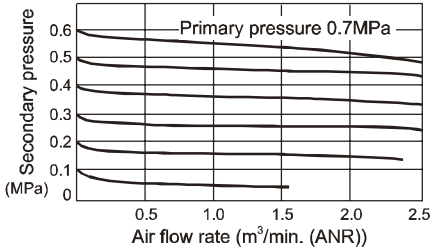
● R3100-8-W



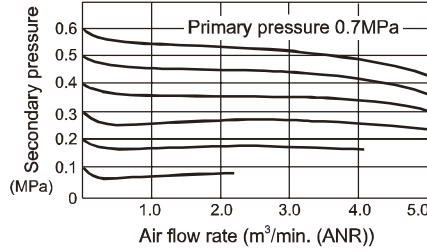
● R3100-10-W



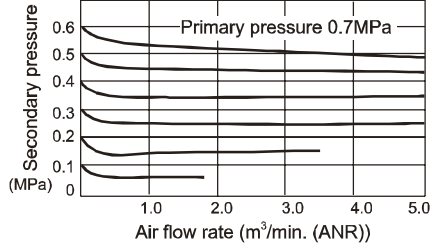
● R4100-8-W



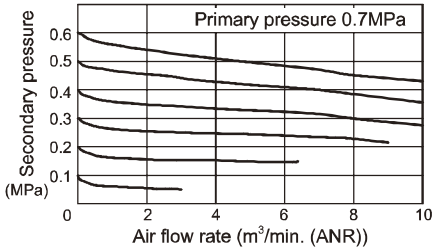
● R4100-10-W



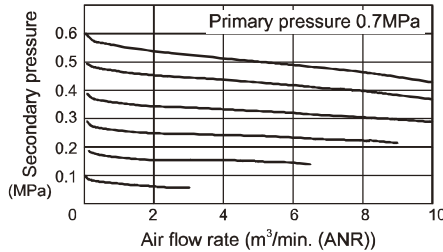
● R4100-15-W



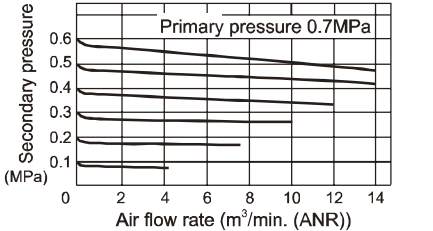
● R6100-20-W



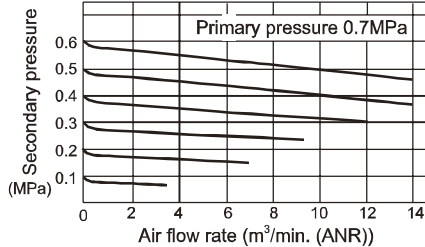
● R6100-25-W



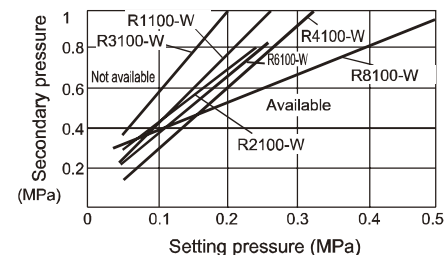
● R8100-20-W



● R8100-25-W



● Set pressure range for back pressure

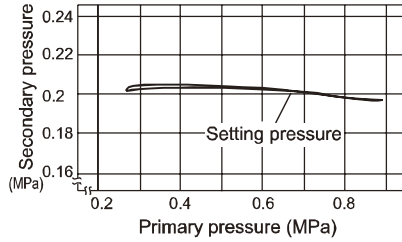


Note: The upper side of the graph is nonusable and the lower side usable.

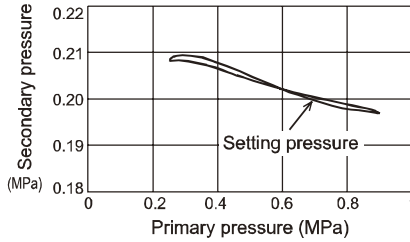
Example: If R4100-W is set to set pressure 0.2 MPa and the secondary back pressure is 0.6 MPa or more, the secondary pressure will not be released to the primary side.

Pressure characteristics

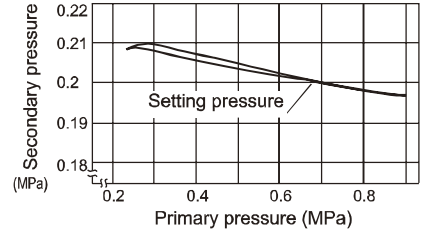
● R1100-W



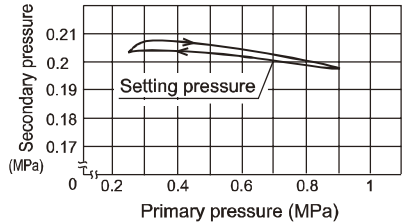
● R2100-W



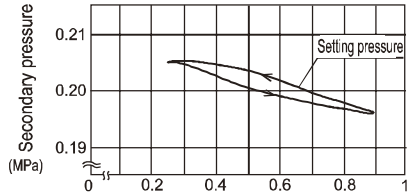
● R3100-W



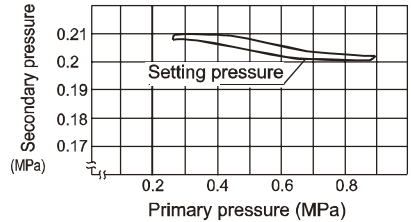
● R4100-W



● R6100-W

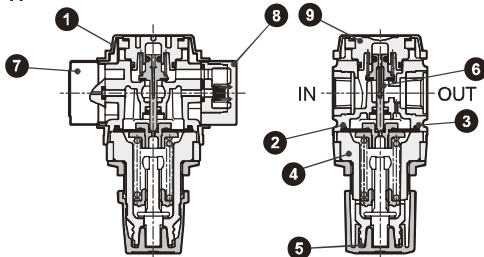


● R8100-W

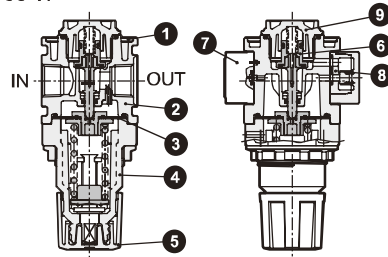


Internal structure and parts list

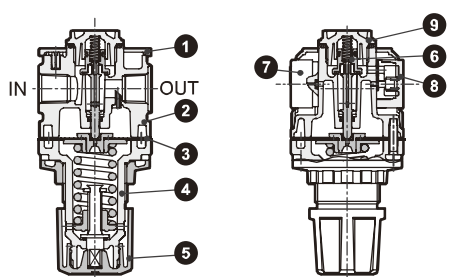
● R1100-W



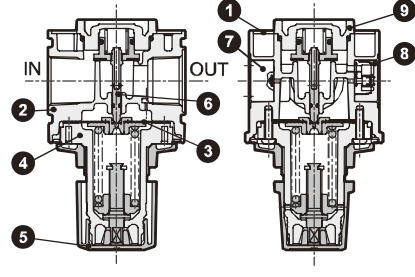
● R2100-W



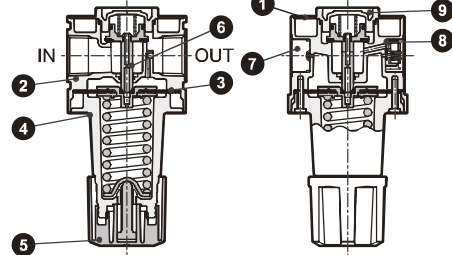
● R3100-W/R4100-W



● R6100-W



● R8100-W

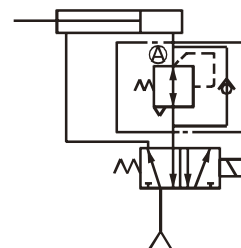


Functional explanation

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
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.

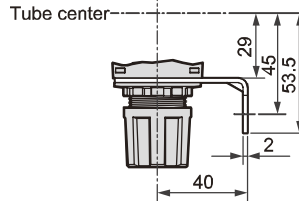
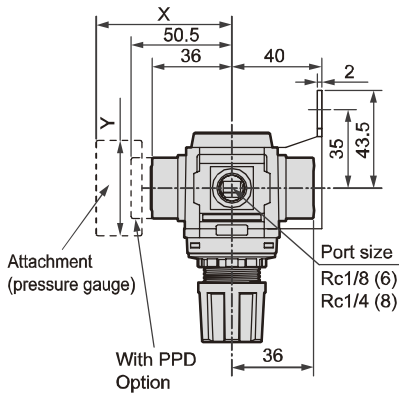
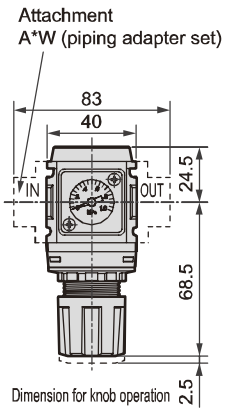
Note 2: Aluminum is added for the R6000-W low-pressure type.

Regulator series

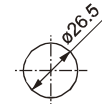
Dimensions



● R1100-W

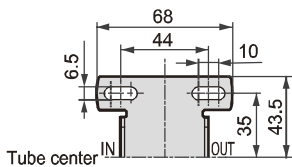


Panel cut dimension

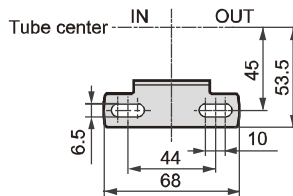


Panel plate thickness: MAX. 6mm

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



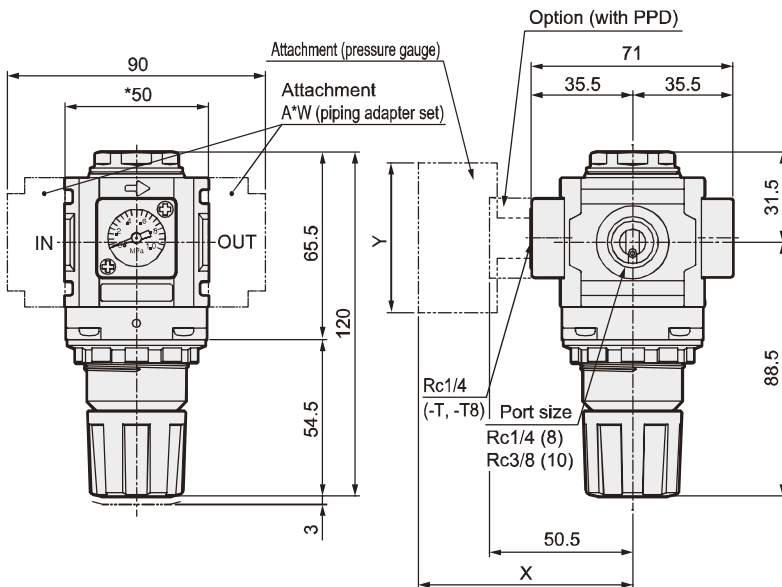
L type bracket (-B3W)
Part model no.: B130



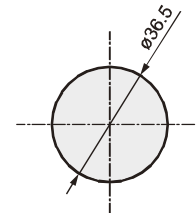
Pressure gauge attached optional dimensions table

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



Panel cut dimension

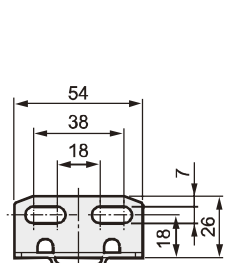


Panel plate thickness: MAX. 4mm

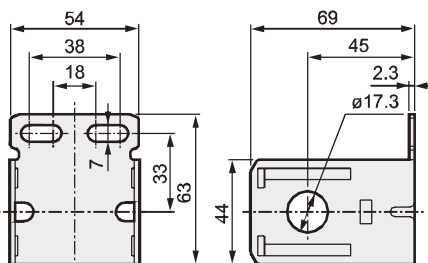
Pressure gauge attached optional dimensions table

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

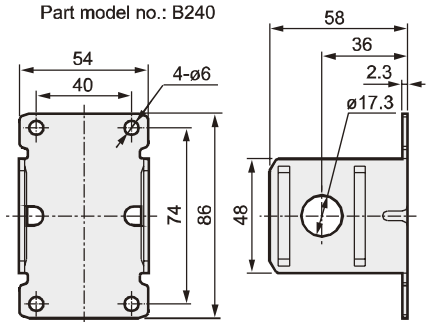
● L type bracket (-B3W)
Part model no.: B230



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

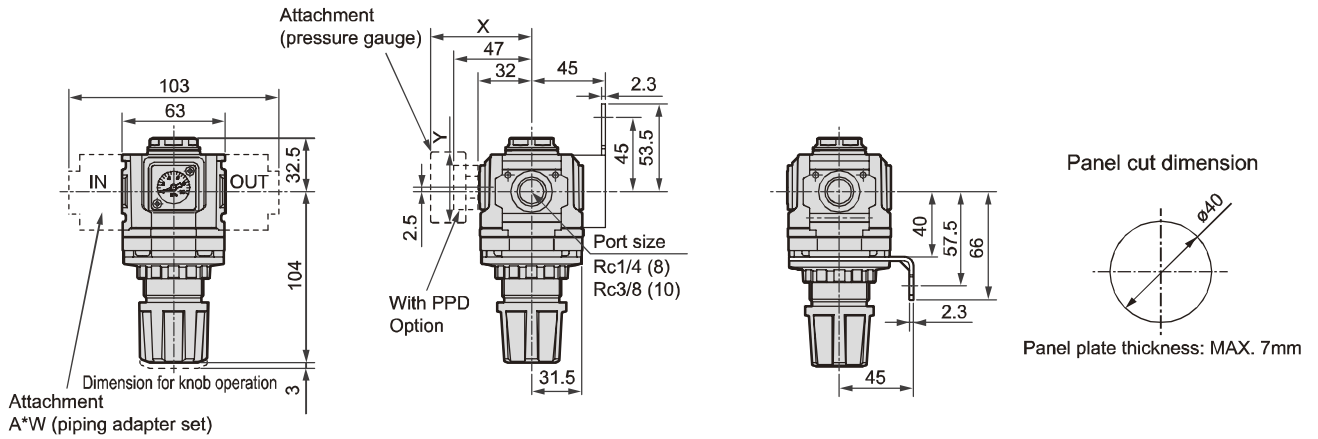


● B type bracket (-B4W)
Part model no.: B240



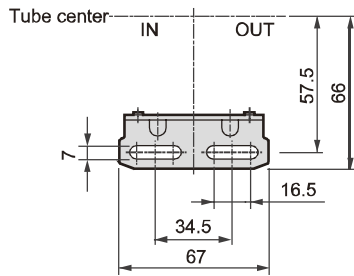
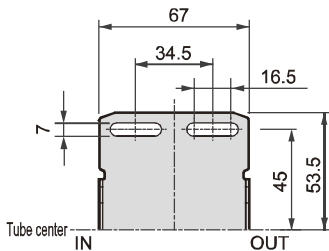
Dimensions

● R3100-W



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

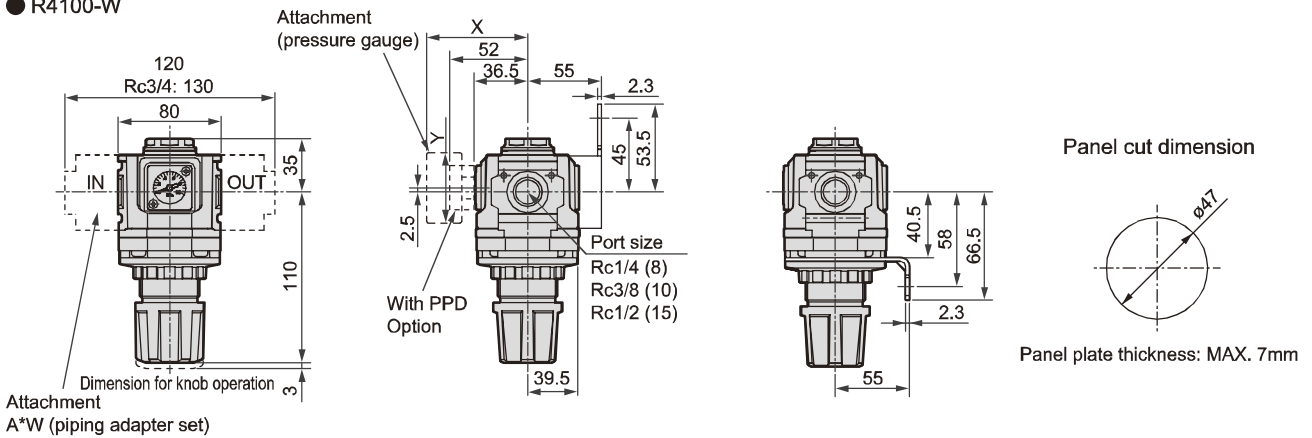
L type bracket (-B3W)
Part model no.: B330



Pressure gauge attached optional dimensions table

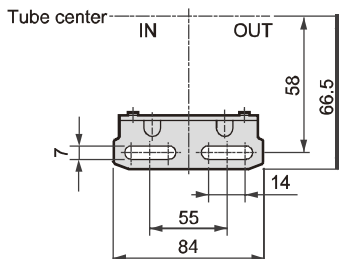
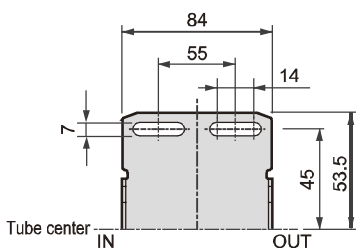
Attached pressure gauge	X	Y
G49P	(69.5)	ø43.5
G59P	(72)	ø52
G40P	(71.5)	ø42.5
G50P	(71.5)	ø52.5
G41P	(70)	ø42
G52P	(82)	ø52.5
R2	(69.5)	*30

● R4100-W



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

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



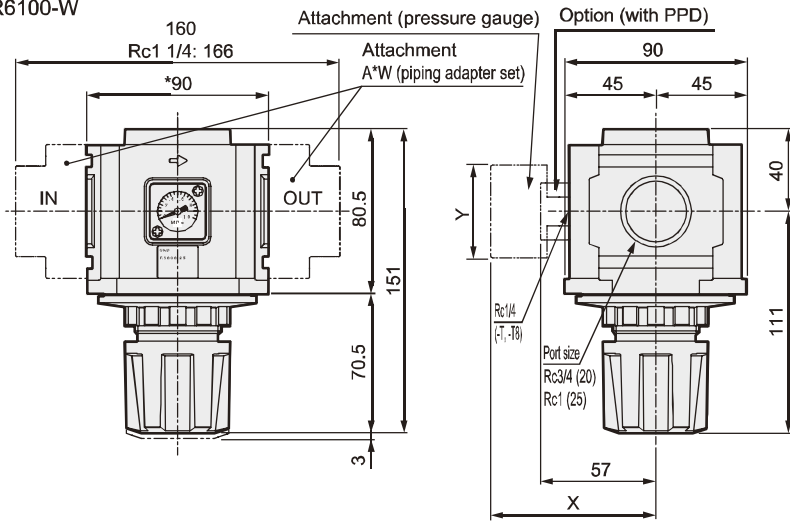
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(74.5)	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

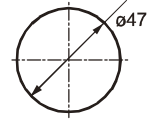
Regulator series

Dimensions

● R6100-W



Panel cut dimension

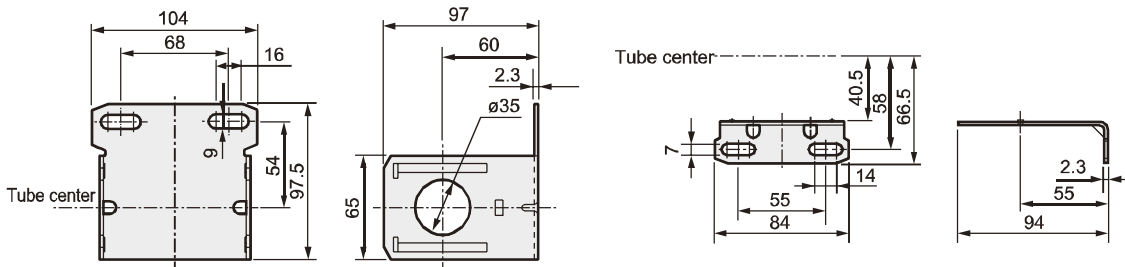


Pressure gauge optional dimensions table

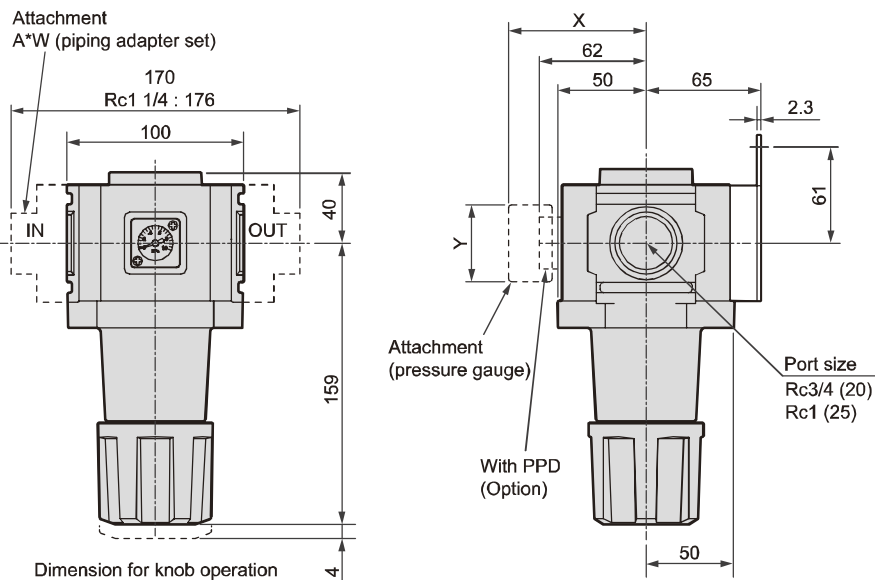
Attached pressure gauge	X	Y
G49P	(79.5)	ø43.5
G59P	(82)	ø52
G40P	(81.5)	ø42.5
G50P	(81.5)	ø52.5
G41P	(80)	ø42
G52P	(93)	ø52.5
R2	(80)	*30

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

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



● R8100-W

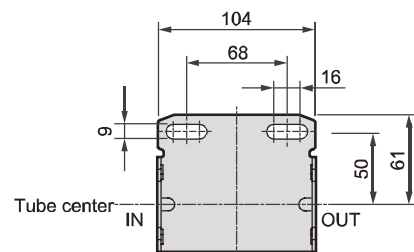


Dimension for knob operation

• 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

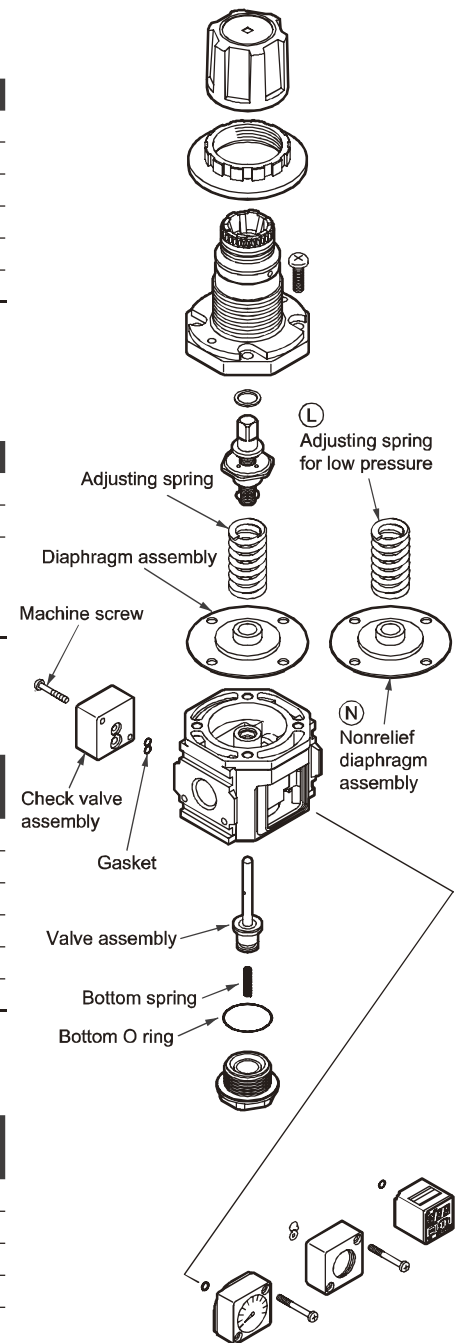
Model	Check valve assembly model no.
R1000-W, R1100-W	R1100-W-CHECK-VALVE-ASSY
R2100-W	R3100-W-CHECK-VALVE-ASSY
R3100-W, RM3000-W, W3100-W R4100-W, RM4000-W, W4100-W R6100-W, R8100-W W8100-W	R3100-W-CHECK-VALVE-ASSY

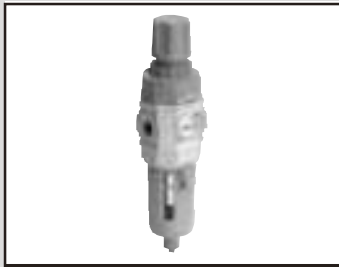
Adjusting spring

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





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**

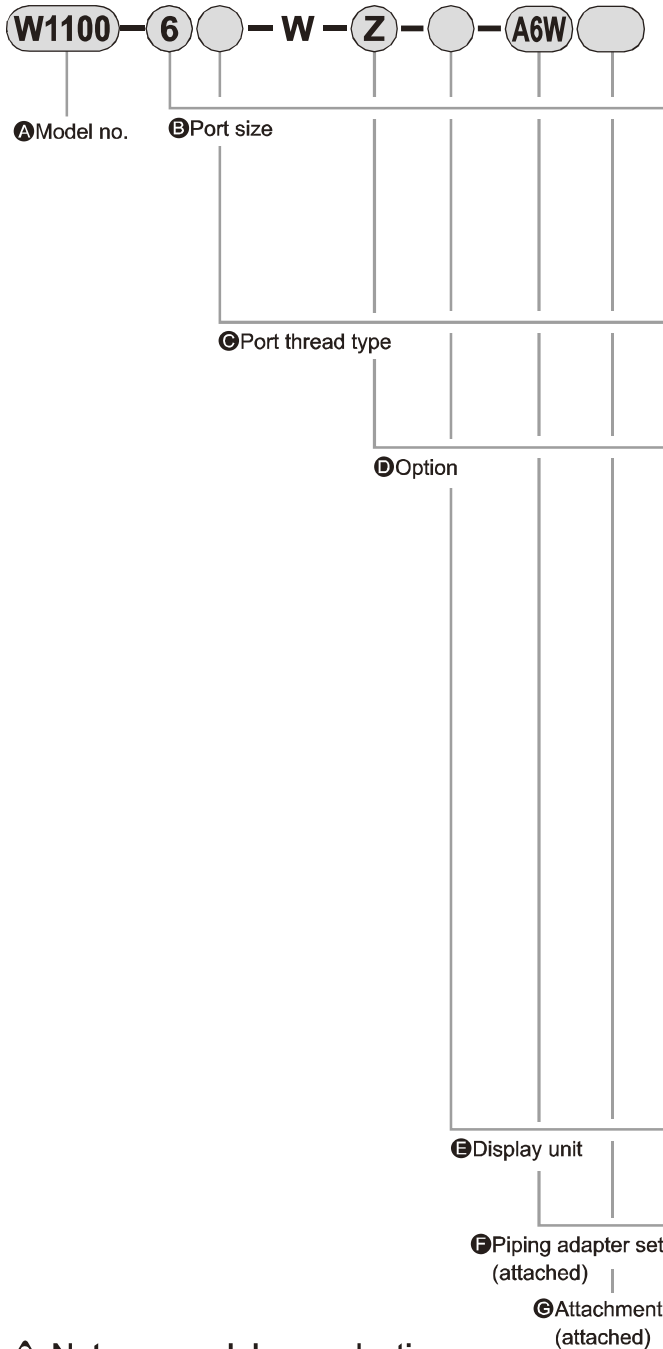
Clean room specifications

(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)				●
Note 4	FF1	Large automatic drain with manual override (NC type: No exhaust without pressurized)				●
	Blank	Polycarbonate bowl	●	●	●	●
Bowl material	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	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 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	●	●	●	●

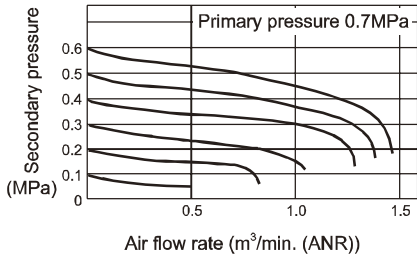
⚠ Note on model no. selection

- 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 **C** 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.

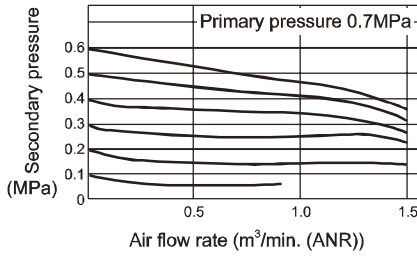
Filter/Regulator Series

Flow characteristics

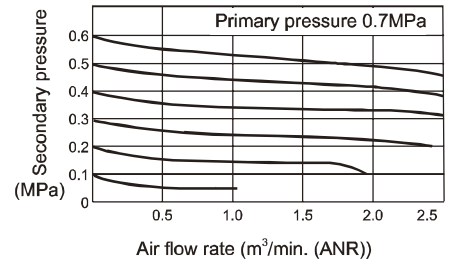
● W1100-6-W



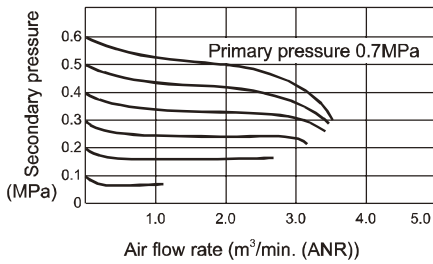
● W1100-8-W



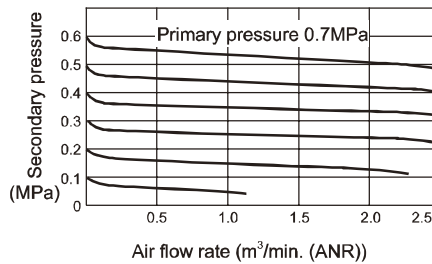
● W3100-8-W



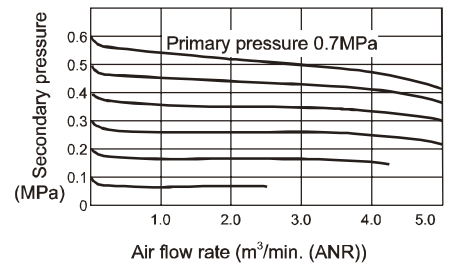
● W3100-10-W



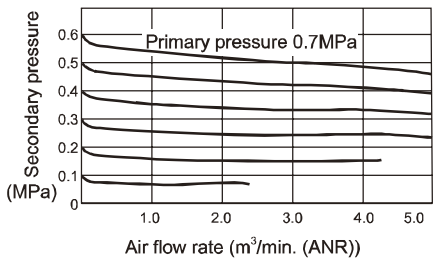
● W4100-8-W



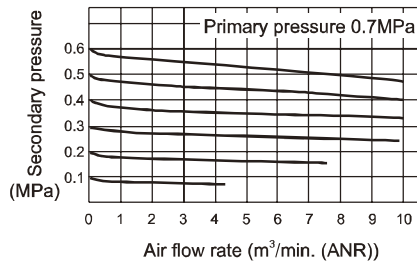
● W4100-10-W



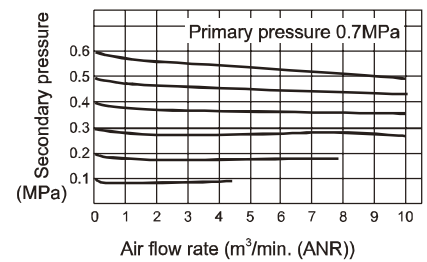
● W4100-15-W



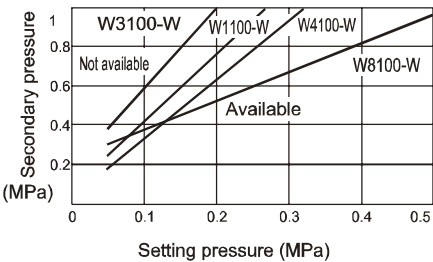
● W8100-20-W



● W8100-25-W



● Set pressure range for back pressure

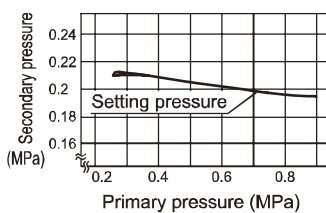


Note: The upper side of the graph is nonusable and the lower side usable.

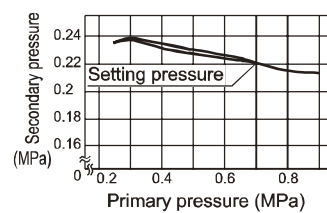
Example: If W4100-W is set to set pressure 0.2 MPa and the secondary back pressure is 0.6 MPa or more, the secondary pressure will not be released to the primary side.

Pressure characteristics

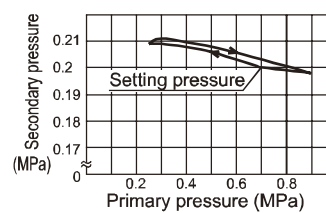
● W1100-W



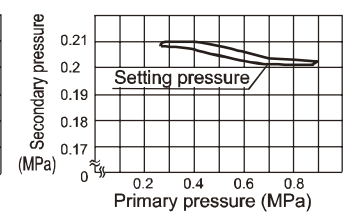
● W3100-W



● W4100-W

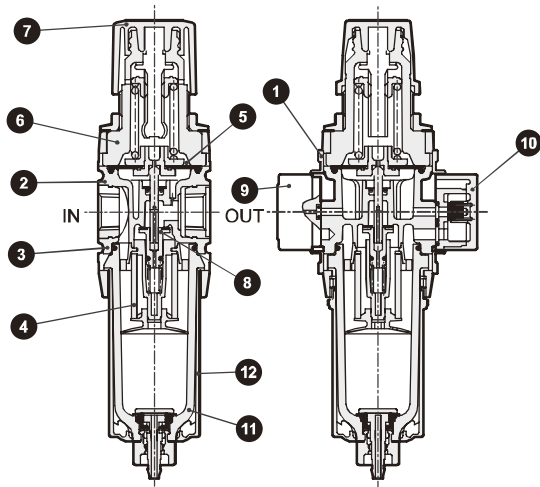


● W8100-W

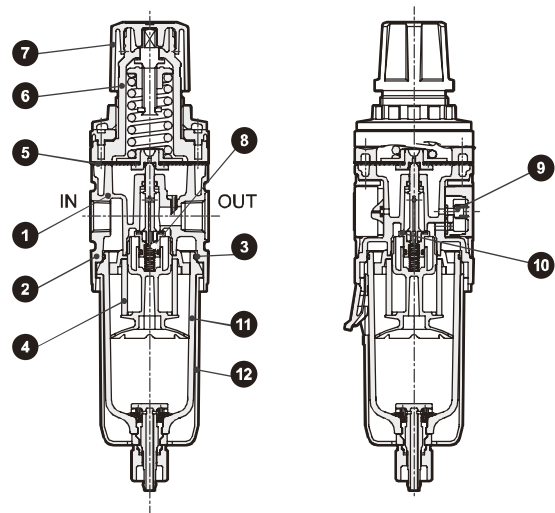


Internal structure and parts list

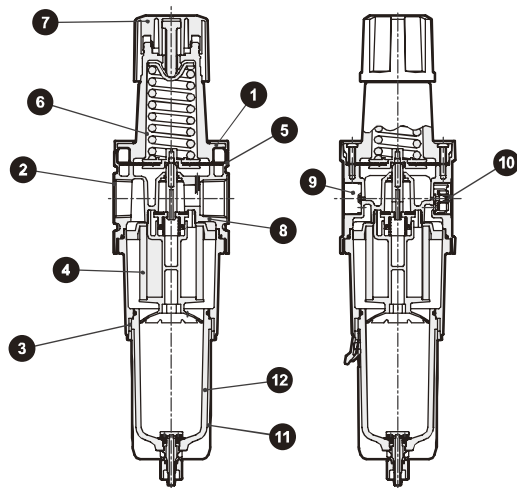
● W1100-W



● 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.

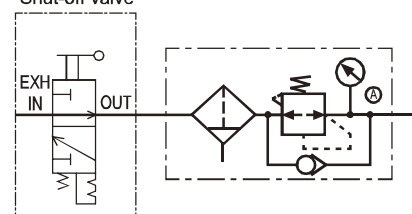
Note 3: Refer to page 79 for repair kits model no.

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

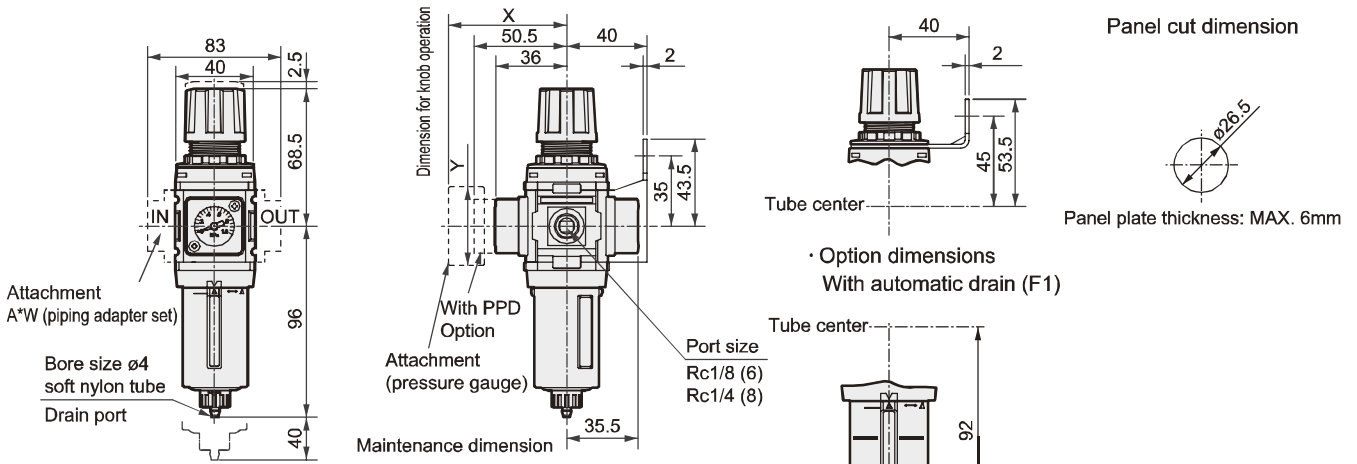


When using shut-off valve in front of reverse filter and regulator

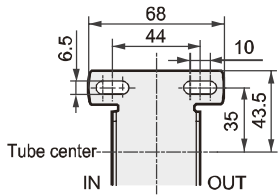
Filter/Regulator Series

Dimensions

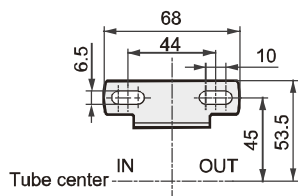
● W1100-W



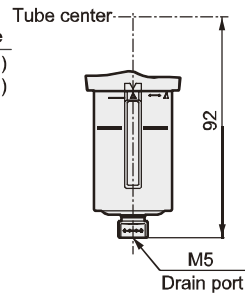
• Attachment
C type bracket (-BW)
Part model no.: B120



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



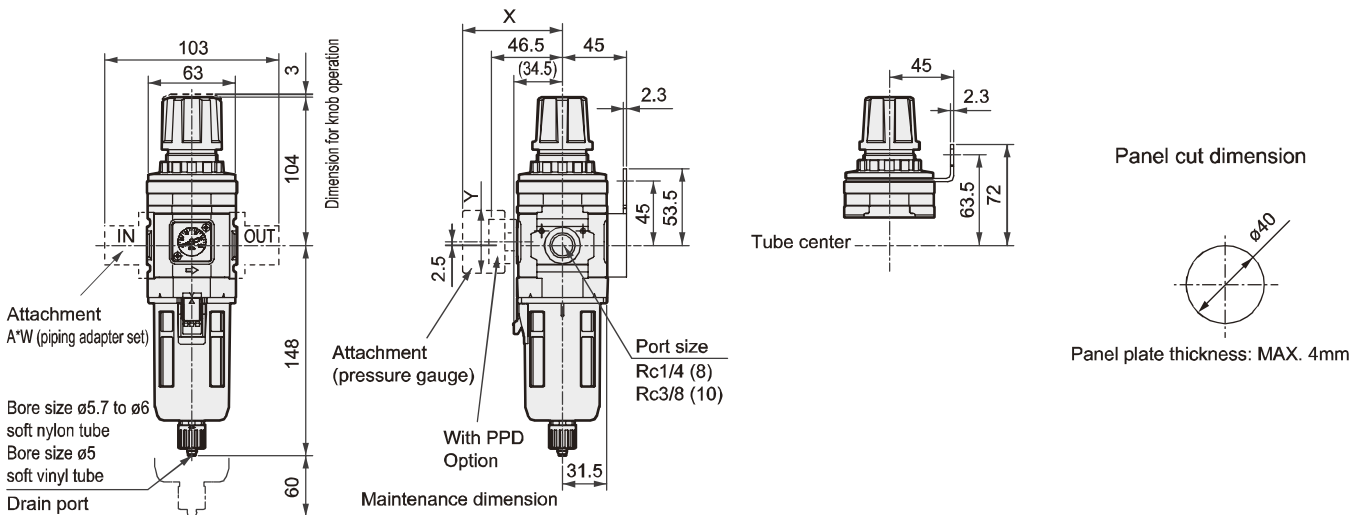
• Option dimensions
With automatic drain (F1)



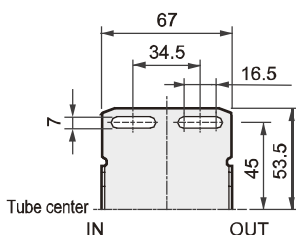
Pressure gauge attached optional dimensions table

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

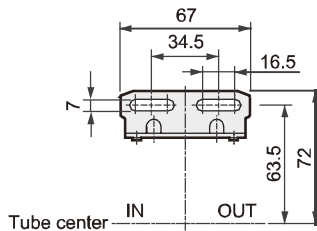
● W3100-W



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



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



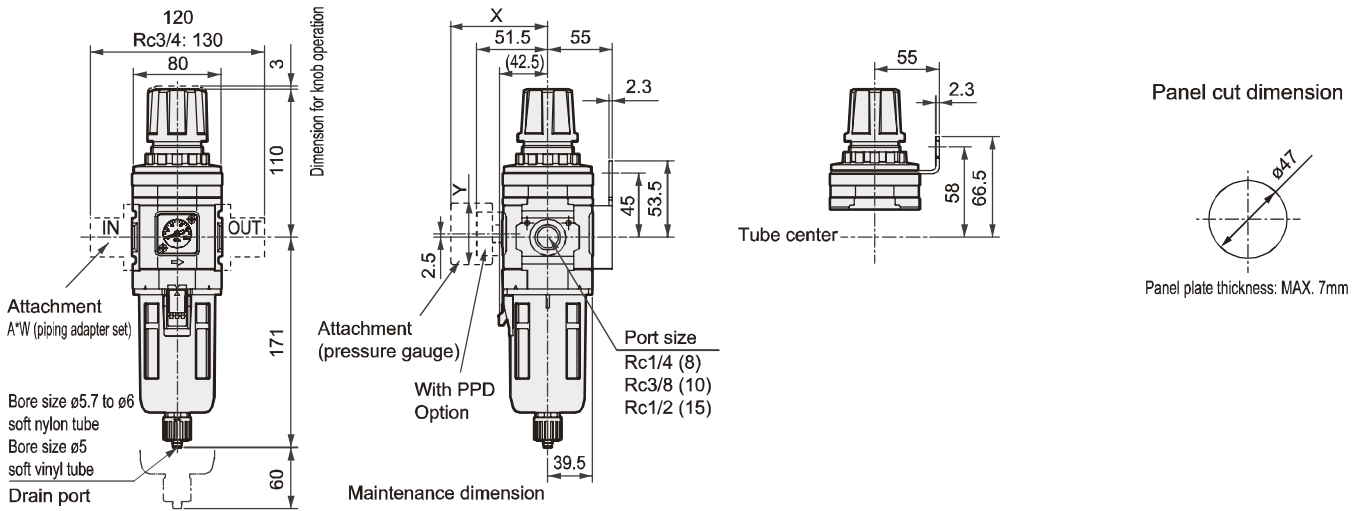
Pressure gauge attached optional dimensions table

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

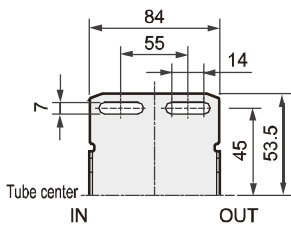
● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

Dimensions

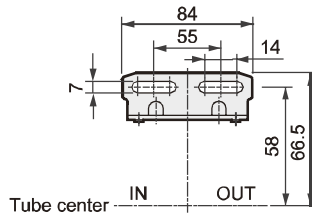
● W4100-W



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



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

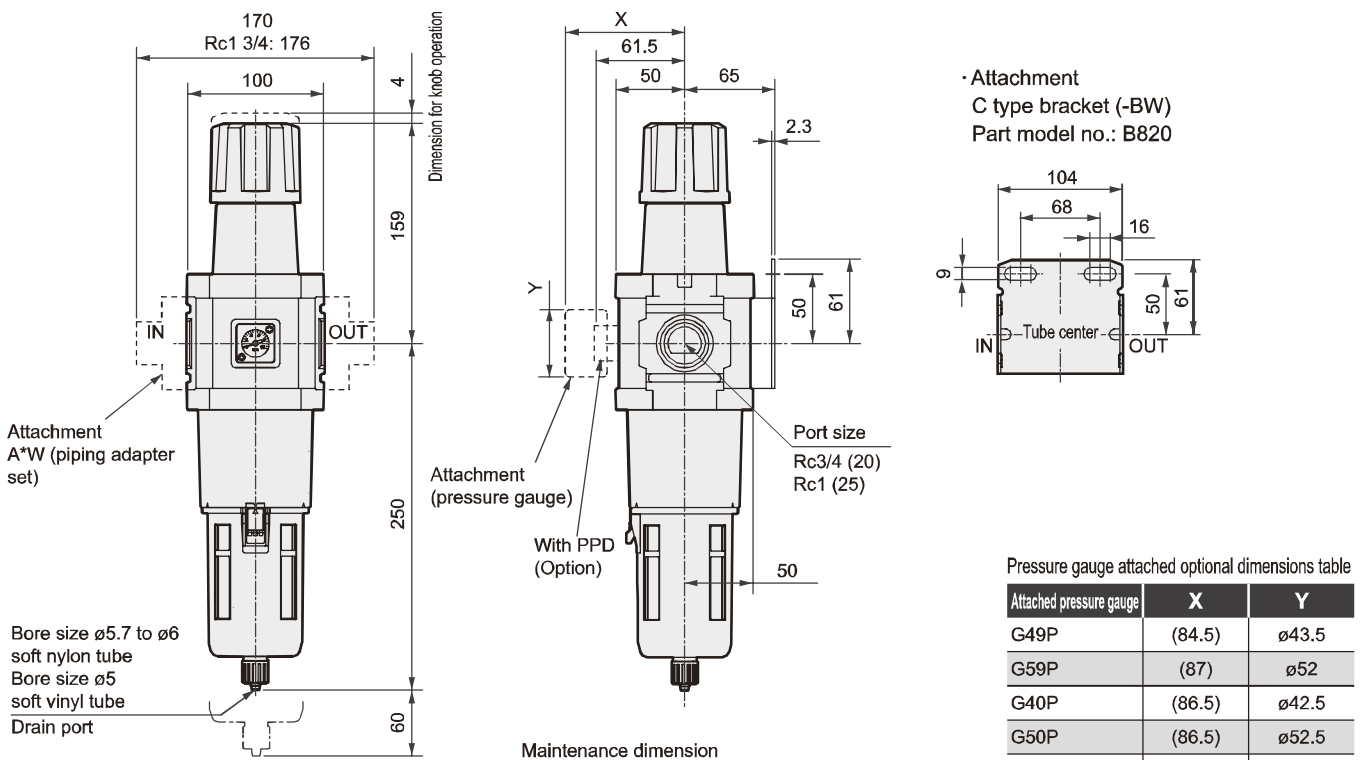


● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

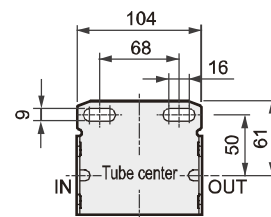
Pressure gauge attached optional dimensions table

Attached pressure gauge	X	Y
G49P	(74.5)	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

● W8100-W



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



Pressure gauge attached optional dimensions table

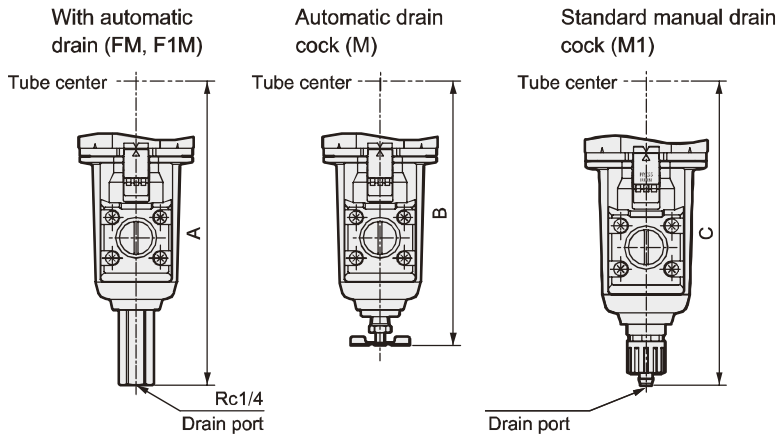
Attached pressure gauge	X	Y
G49P	(84.5)	ø43.5
G59P	(87)	ø52
G40P	(86.5)	ø42.5
G50P	(86.5)	ø52.5
G41P	(85)	ø42
G52P	(98)	ø52.5
R2	(85)	*30

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

Filter/Regulator Series

Optional dimensions

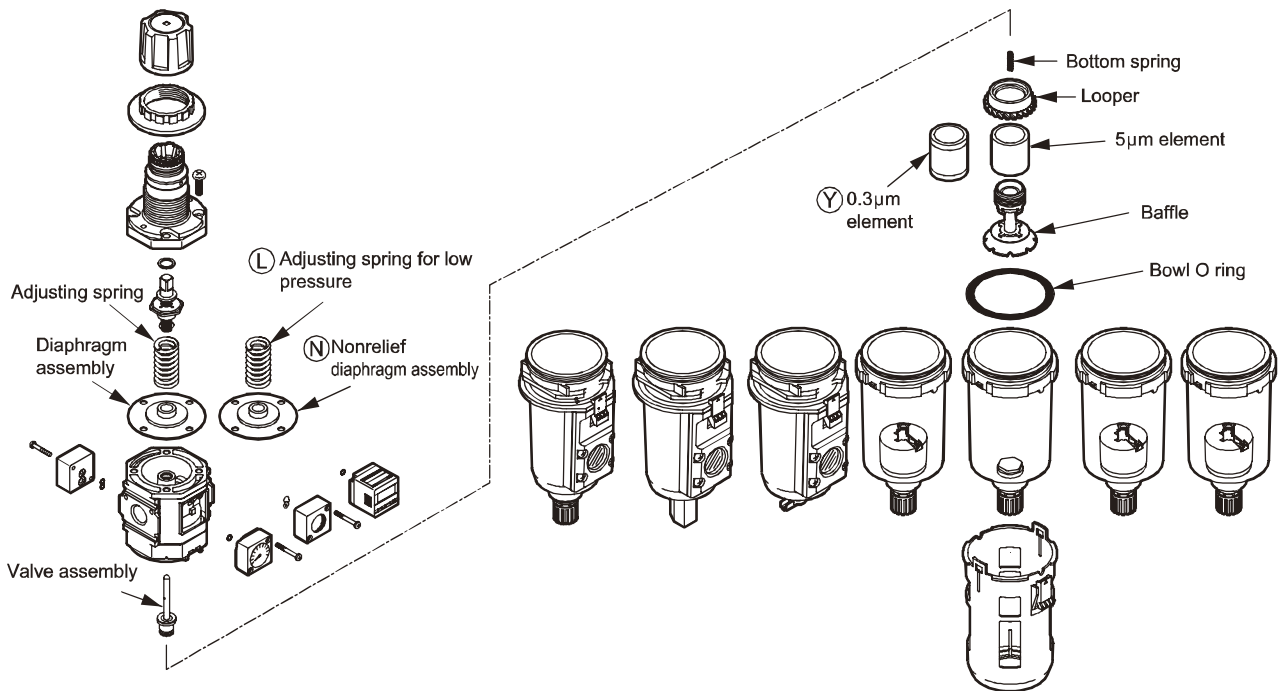
- Metal bowl W3100-W/W4100-W/W8100-W (option)



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

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