

SCPD3
SCM
SSD2
MDC2
SMG
LCM
LCR
LCG
LCX
STM
STG
STR2
MRL2
GRC
Cylinder switch
MN3E
MN4E
4GA/B
M4GA/B
MN4GA/B
F.R (module unit)
Clean F.R
Precision R
Press gauge
Diff. press gauge
Electro-pneumatic R
Speed controller
Auxiliary valve
Fitting/tube
Clean air unit
Pressure sensor
Flow rate sensor
Valve for air blow
Ending



Filter/regulator

W2000/W3000/W4000 Series

JIS symbol



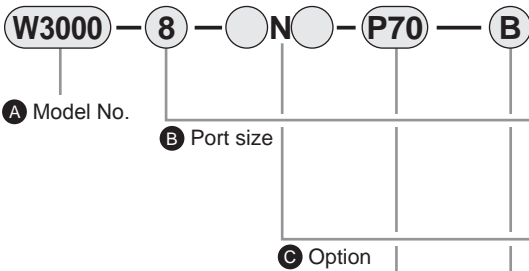
Structure and material restriction

	Structure	Material restriction			Model No.
P7 Series	Exhaust treatment				— P70
	Exhaust treatment	Copper-based materials prohibited	Silicon-based materials prohibited	Halogen-based materials prohibited (fluorine, chlorine, bromine)	— P74 Custom order product

Specifications

Descriptions		W2000	W3000	W4000
Working fluid		Compressed air		
Max. working pressure	MPa	1.0		
Proof pressure	MPa	1.5		
Ambient temperature/fluid temperature °C		5 to 50		
Filtration rating	μm	5	5 or 0.3	
Set pressure	MPa	0.05 to 0.85		
Pressure relief		Nonrelief		
Weight	kg	0.40	0.64	0.99

How to order



⚠ Precautions for model No. selection

- *1: Attachment for options made of brass. All others are attachments for options not made of copper-based materials.
- *2: Select options per drainage, bowl material, and element sections.
When selecting options for several items, list options in order from the top. Be sure to select "N" non-pressure relief.
- *3: If "L" is selected for pressure range, a low pressure gauge (0 to 0.4 MPa) is used.
- *4: For "T", "T8", "T6", a gauge plug is assembled instead of a pressure gauge. The gauge port for "T", "T8" is Rc1/4 and T6 is Rc1/8.
- *5: One pipe plug is attached for options "C6" and "M6".
- *6: Piping adaptor set A*00-*P70 (page 804) is attached.
- *7: Refer to pages 804 to 806 for adaptor, 858 for pressure gauge.
- *8: The piping adaptor set and C bracket cannot be used at the same time.
Refer to page 761 for max. processing flow when option "Y" is selected.
- *9: When option "T6" is selected, the attachment "GX59", "GY59" has a different thread size, so it cannot be selected together.

D Clean room specifications

E Other attachments

A Model No.

W2000
W3000
W4000

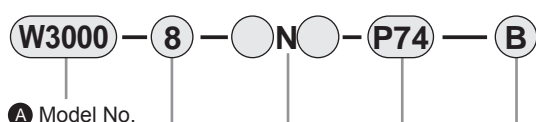
Code	Content			
B Port size				
8	Rc1/4	●	●	●
10	Rc3/8	●	●	●
15	Rc1/2			●

C Option		*2	*3	*4	*5			
Bowl	Blank	PC bowl: without drain discharge				●	●	●
	C6	PC bowl: drain discharge Rc1/8				●	●	●
	M6	Metal bowl: drain discharge Rc1/8				●	●	●
Element	Blank	5 μm				●	●	●
	Y	0.3 μm (submicron)					●	●
Pressure range	Blank	0.05 to 0.85 MPa				●	●	●
	L	0.05 to 0.35 MPa				●	●	●
Pressure relief	N	Nonrelief				●	●	●
Pressure gauge *9	Blank	With standard pressure gauge (G401) *1				●	●	●
	T	Without pressure gauge (gauge port (Rc1/4) is assembled with sealed)				●	●	●
	T8	For attaching pressure gauge (gauge port (Rc1/4) is assembled with ventilated)				●	●	●
	T6	For attaching pressure gauge (gauge port (Rc1/8) is assembled with ventilated)				●	●	●
Flow direction	Blank	Standard flow (left → right)				●	●	●
	X1	Reverse flow (right → left)				●	●	●

D Clean room specifications				
	Structure			
P70	Exhaust treatment			● ● ●

E Other attachments *6 *7				
Blank	Without attachment			● ● ●
A8	Rc1/4 piping adaptor set			● ● ●
A10	Rc3/8 piping adaptor set			● ● ●
A15	Rc1/2 piping adaptor set			● ● ●
A20	Rc3/4 piping adaptor set			● ● ●
B	C bracket			● ● ●
B3	L bracket			● ● ●
E1	Fitting (pressure relief port) *1			● ● ●
GX59	G59D-8-P10-P70 (L: G59D-8-P04-P70) *1			● ● ●
GY59	G59D-8-P10-P94 (L: G59D-8-P04-P94)			● ● ●

How to order (custom order product)



B Port size

C Option

D Clean room specifications

E Other attachments

⚠ Precautions for model No. selection

- *1: Select options per drainage, bowl material, and element sections. When selecting options for several items, list options in order from the top. Be sure to select "N" non-pressure relief.
- *2: If "L" is selected for pressure range, a low pressure gauge (0 to 0.4 MPa) is used.
- *3: For "T", "T8", "T6", a gauge plug is assembled instead of a pressure gauge. The gauge port for "T", "T8" is Rc1/4 and T6 is Rc1/8.
- *4: One pipe plug is attached for options "C6" and "M6".
- *5: Piping adaptor set A*00-*P70 (page 804) is attached.
- *6: Refer to pages 804 to 806 for adaptor, 858 for pressure gauge. The piping adaptor set and C bracket cannot be used at the same time.
- *7: Refer to page 781 for max. processing flow when option "Y" is selected.
- *8: For the fittings, copper-based materials are used.
- *9: When option "T6" is selected, the attachment "GY59" has a different thread size, so it cannot be selected together.

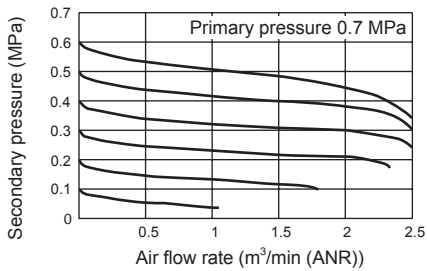
Code		Content		
B Port size				
8		Rc1/4	●	●
10		Rc3/8	●	●
15		Rc1/2		●
C Option		*1	*2	*3
Bowl	Blank	PC bowl: without drain discharge	●	●
	C6	PC bowl: drain discharge Rc1/8	●	●
	M6	Metal bowl: drain discharge Rc1/8	●	●
Element	Blank	5 μm	●	●
	Y	0.3 μm (submicron)		●
Pressure range	Blank	0.05 to 0.85 MPa	●	●
	L	0.05 to 0.35 MPa	●	●
Pressure relief	N	Nonrelief	●	●
Pressure gauge *9	T	Without pressure gauge (gauge port (Rc1/4) is assembled with sealed)	●	●
	T8	For attaching pressure gauge (gauge port (Rc1/4) is assembled with ventilated)	●	●
	T6	For attaching pressure gauge (gauge port (Rc1/8) is assembled with ventilated)	●	●
Flow direction	Blank	Standard flow (left → right)	●	●
	X1	Reverse flow (right → left)	●	●
D Clean room specifications				
P74	Structure	Material restriction		
	Exhaust treatment	Copper-based/silicon-based/halogen-based materials (fluorine, chlorine, bromine) are prohibited	●	●
E Other attachments		*5	*6	
Blank	Without attachment	●	●	●
A8	Rc1/4 piping adaptor set	●	●	●
A10	Rc3/8 piping adaptor set	●	●	●
A15	Rc1/2 piping adaptor set	●	●	●
A20	Rc3/4 piping adaptor set			●
B	C bracket	●	●	●
B3	L bracket	●	●	●
E1	Fitting (pressure relief port) *8	●	●	●
GY59	G59D-8-P10-P94 (L: G59D-8-P04-P94)	●	●	●

SCPD3
SCM
SSD2
MDC2
SMG
LCM
LCR
LCG
LCX
STM
STG
STR2
MRL2
GRC
Cylinder Switch
MN3E
MN4E
4GA/B
M4GA/B
MN4GA/B
F.R.(module unit)
Clean F.R
Precision R
Press.gauge
Dif. press.gauge
Electro-pneumatic R
Speed controller
Auxiliary valve
Fitting/tube
Clean air unit
Pressure sensor
Flow rate sensor
Valve for air blow
Ending

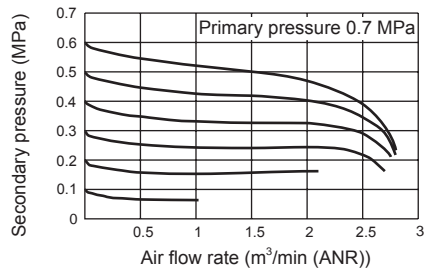
Filter/Regulator Series

Flow characteristics

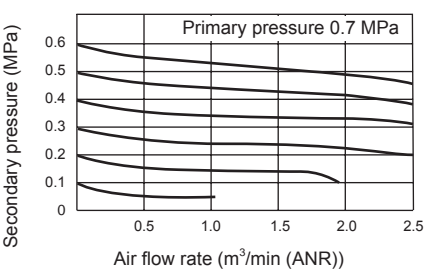
● W2000-8



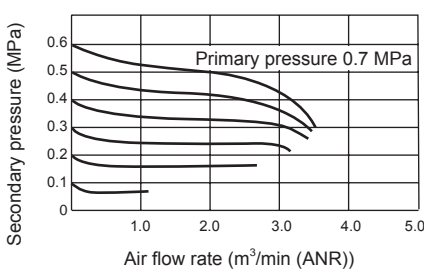
● W2000-10



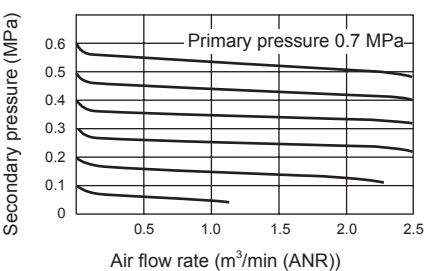
● W3000-8



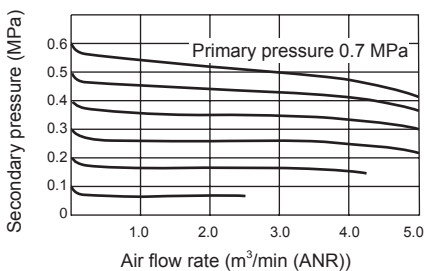
● W3000-10



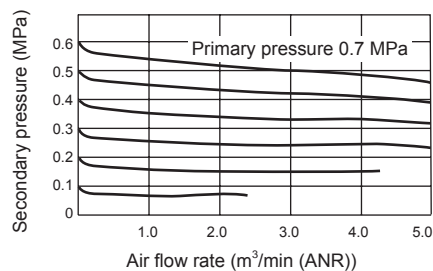
● W4000-8



● W4000-10

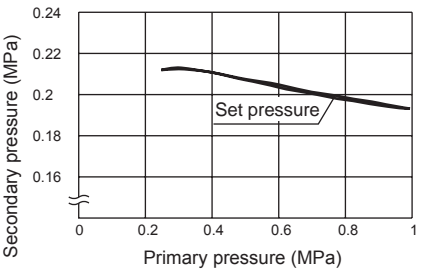


● W4000-15

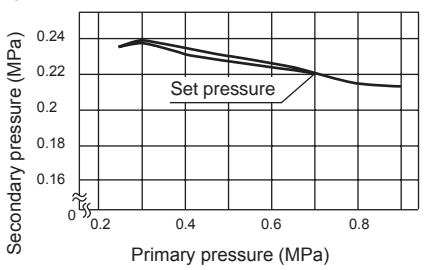


Pressure characteristics

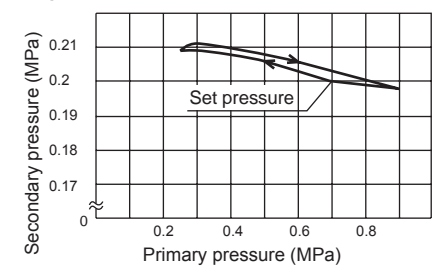
● W2000



● W3000

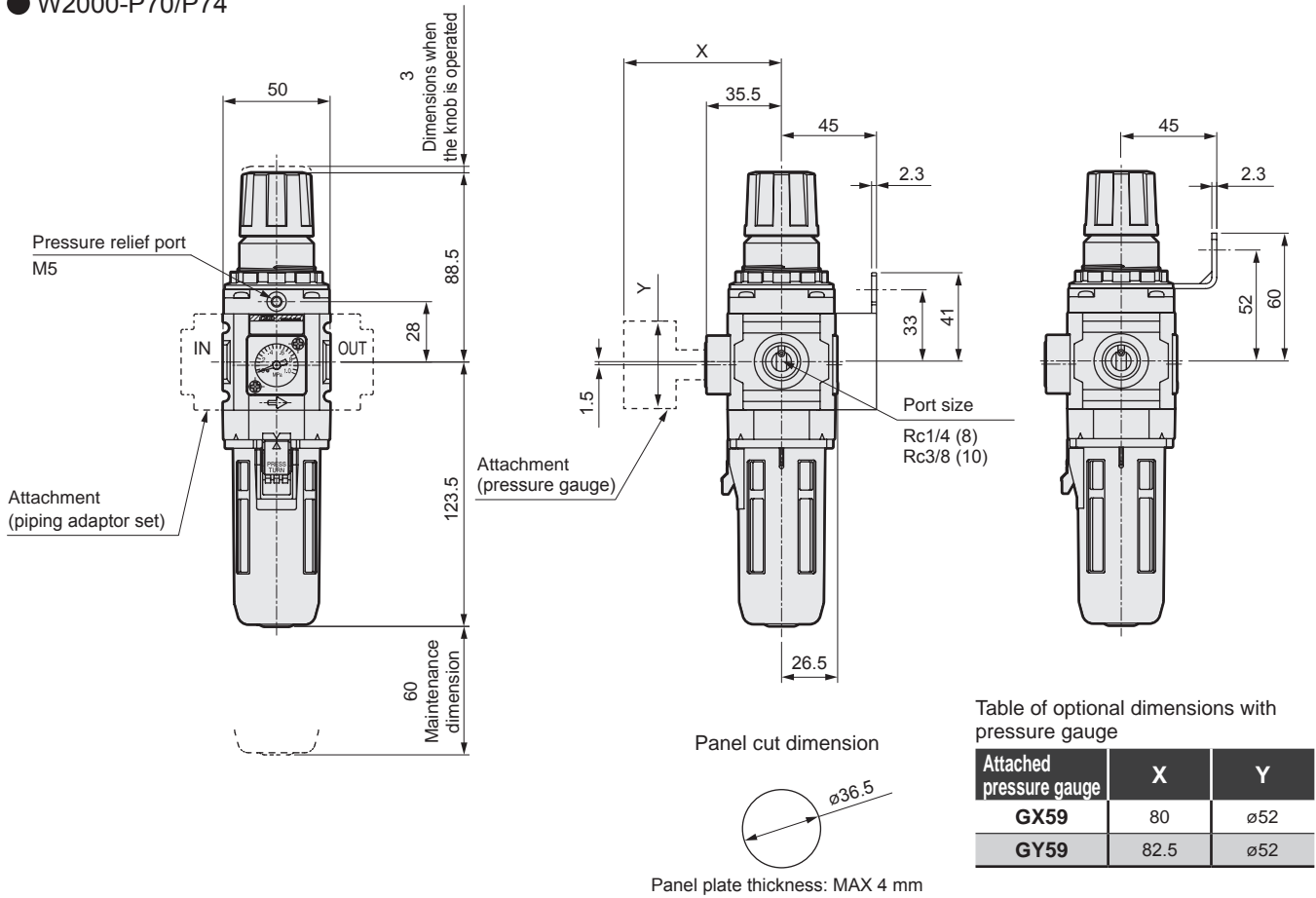


● W4000



Dimensions

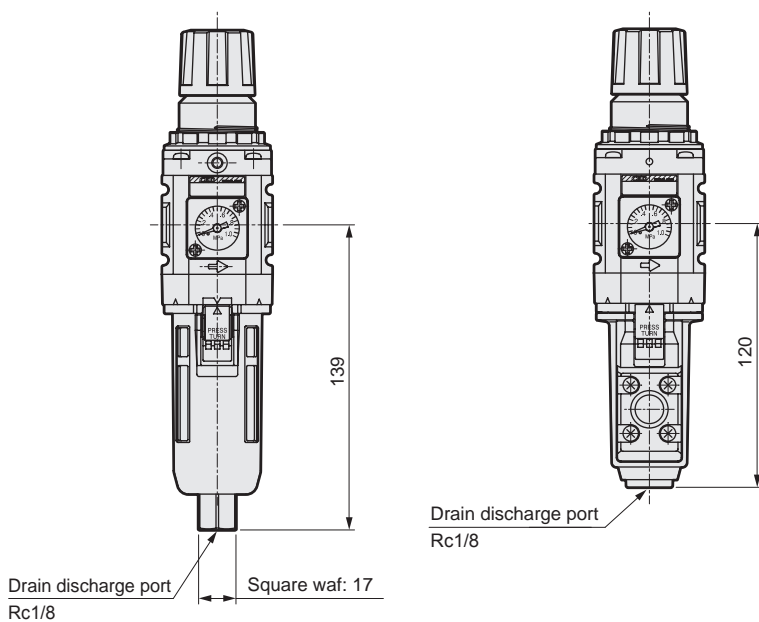
● W2000-P70/P74



[Optional dimensions]

● PC bowl drain discharge: Rc1/8 (C6)

● Metal bowl (M6)



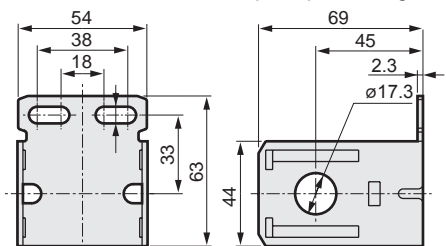
Note: Mount with fixing on square waf, when pipe for drain discharge.

[Bracket dimensions]

● C bracket

Part model No.: B220-P70

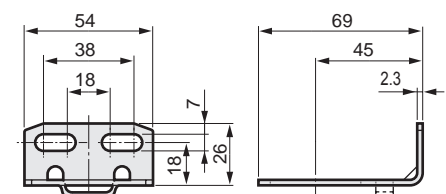
• Material: steel, nickel plate processing



● L bracket

Part model No.: B230-P70

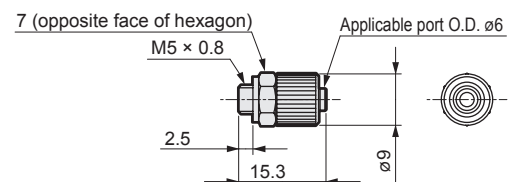
• Material: steel, nickel plate processing



● Fitting

Part model No.: R4000-E1-P70

• Material: brass, nickel plate processing



Filter/Regulator Series

Dimensions

● W3000-P70/P74

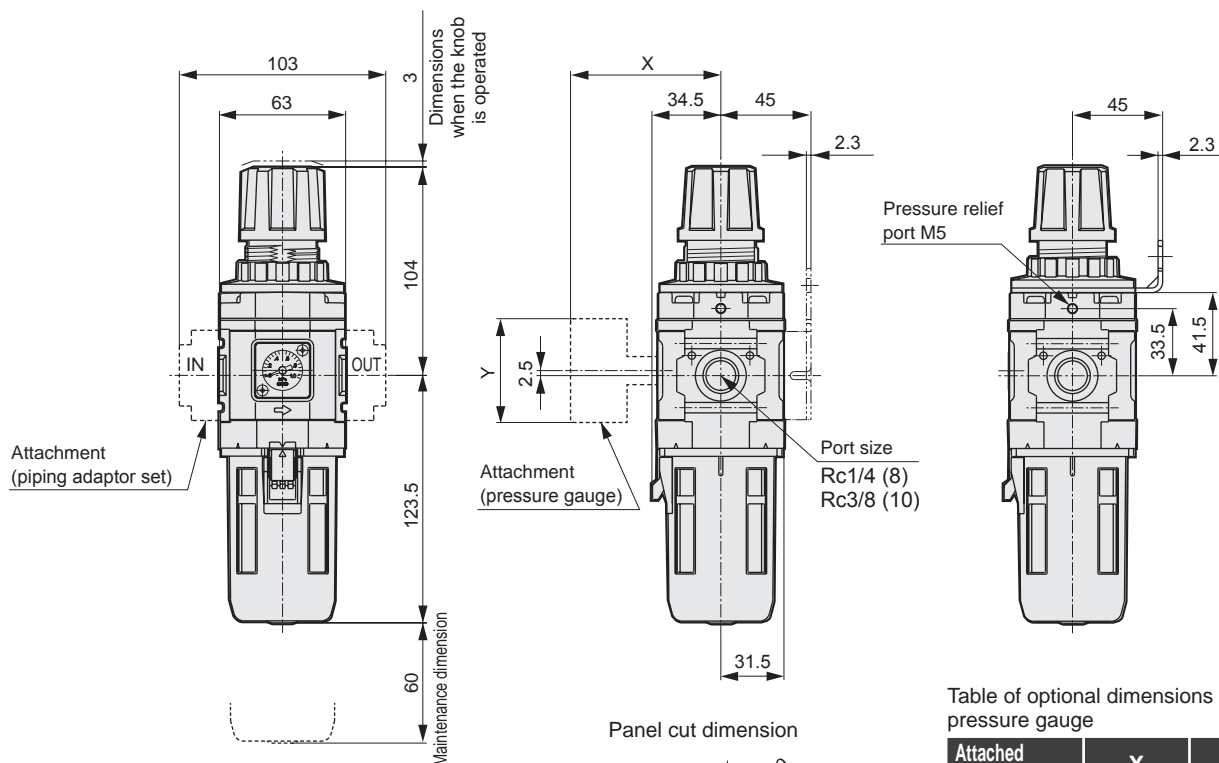


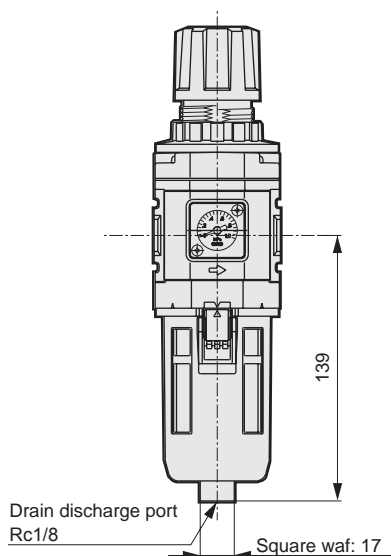
Table of optional dimensions with pressure gauge

Attached pressure gauge	X	Y
GX59	76.5	ø52
GY59	79	ø52

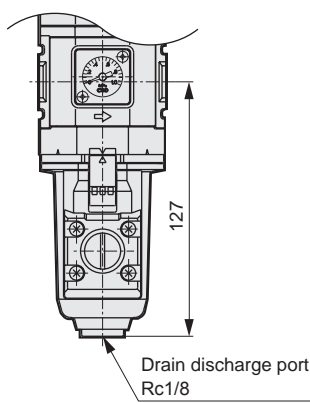
[Optional dimensions]

● PC bowl drain discharge: Rc1/8 (C6)

● Metal bowl (M6)



Note: Mount with fixing on square waf, when pipe for drain discharge.

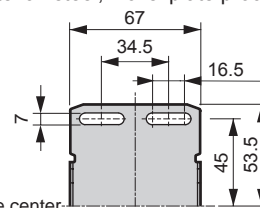


[Bracket dimensions]

● C bracket

Part model No.: B320-P70

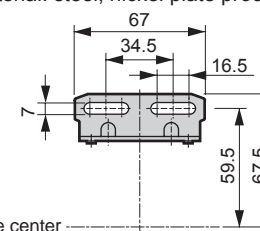
• Material: steel, nickel plate processing



● L bracket

Part model No.: B330-P70

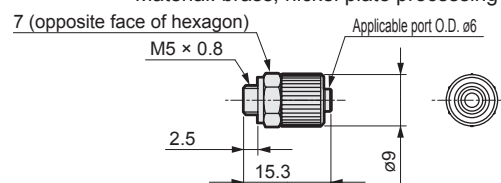
• Material: steel, nickel plate processing



● Fitting

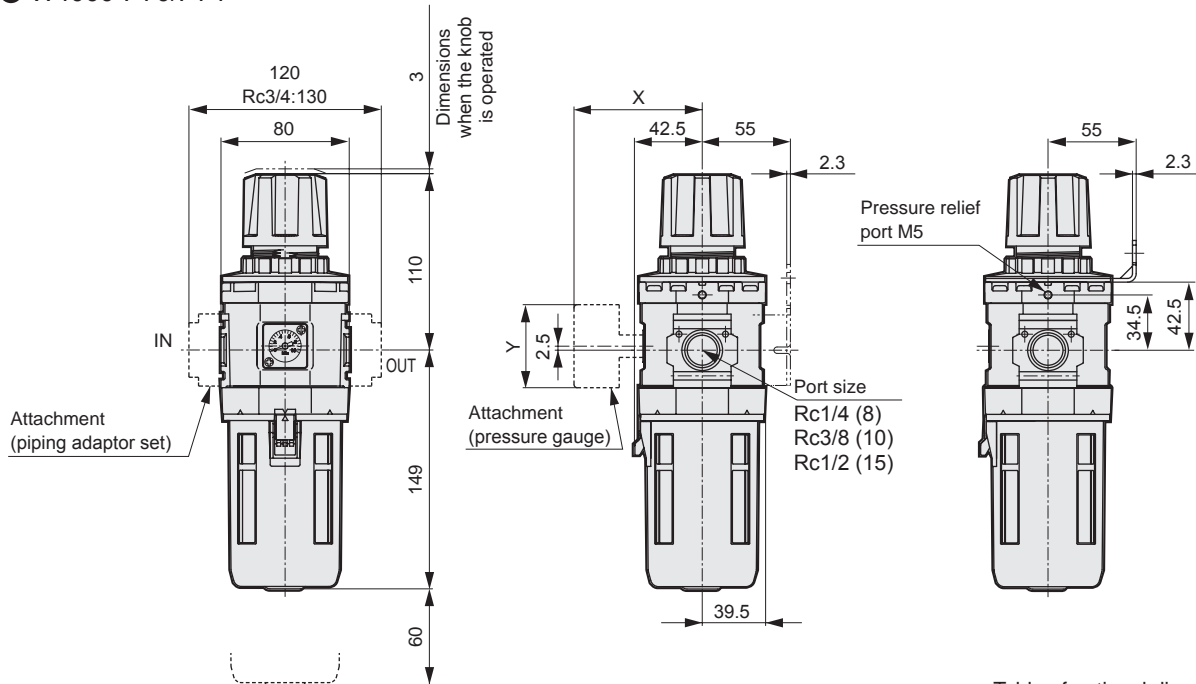
Part model No.: R4000-E1-P70

• Material: brass, nickel plate processing

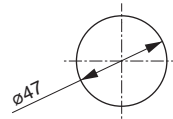


Dimensions

● W4000-P70/P74



Panel cut dimension



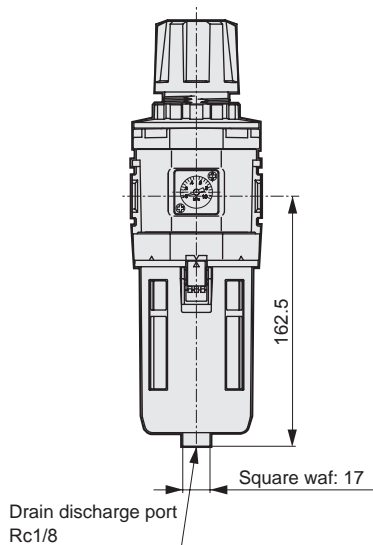
Panel plate thickness: MAX 4 mm

Table of optional dimensions with pressure gauge

Attached pressure gauge	X	Y
GX59	81.5	ø52
GY59	84	ø52

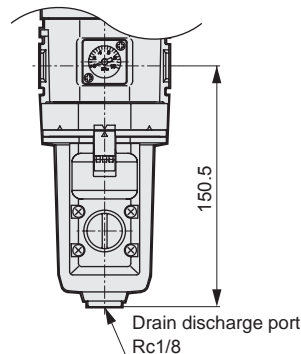
[Optional dimensions]

● PC bowl drain discharge: Rc1/8 (C6)



Note: Mount with fixing on square waf, when pipe for drain discharge.

● Metal bowl (M6)

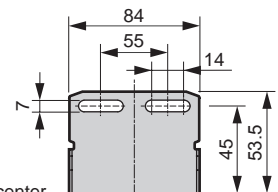


[Bracket dimensions]

● C bracket

Part model No.: B420-P70

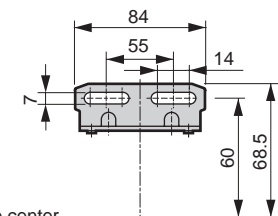
· Material: steel, nickel plate processing



● L bracket

Part model No.: B430-P70

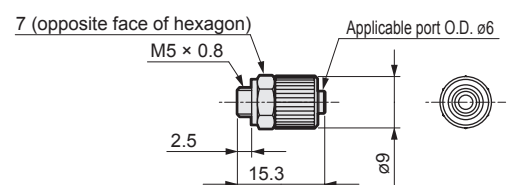
· Material: steel, nickel plate processing



● Fitting

Part model No.: R4000-E1-P70

· Material: brass, nickel plate processing



SCPD3
SCM
SSD2
MDC2
SMG
LCM
LCR
LCG
LCX
STM
STG
STR2
MRL2
GRC
Cylinder switch
MN3E
MN4E
4GA/B
M4GA/B
MN4GA/B
F.R (module unit)
Clean F.R
Precision R
Press gauge
Diff. press gauge
Electro-pneumatic R
Speed controller
Auxiliary valve
Fitting/tube
Clean air unit
Pressure sensor
Flow rate sensor
Valve for air blow
Ending



Reverse filter/regulator

W2100/W3100/W4100 Series

JIS symbol



Structure and material restriction

	Structure	Material restriction			Model No.
P7 Series	Exhaust treatment				— P70
	Exhaust treatment	Copper-based materials prohibited	Silicon-based materials prohibited	Halogen-based materials prohibited (fluorine, chlorine, bromine)	— P74 Custom order product

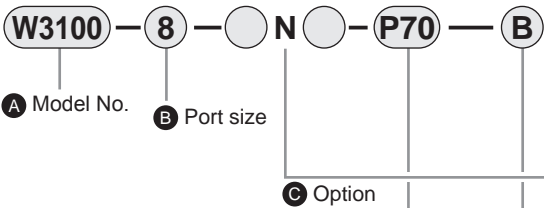
Specifications

Descriptions		W2100	W3100	W4100
Working fluid		Compressed air		
Max. working pressure	MPa	1.0		
Proof pressure	MPa	1.5		
Ambient temperature/fluid temperature °C		5 to 50		
Filtration rating	μm	5	5 or 0.3	
Set pressure	MPa	0.05 to 0.85		
Pressure relief		Nonrelief		
Weight	kg	0.40	0.64	0.99

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

Note 2: Refer to the set pressure range for the back pressure given on page 776 when selecting the model.

How to order



⚠ Precautions for model No. selection

- *1: Attachment for options made of brass. All others are attachments for options not made of copper-based materials.
- *2: Select options per drainage, bowl material, and element sections. When selecting options for several items, list options in order from the top. Be sure to select "N" non-pressure relief.
- *3: If "L" is selected for pressure range, a low pressure gauge (0 to 0.4 MPa) is used.
- *4: **Positions of a check valve and pressure gauge cannot be changed. If the IN and OUT direction must be reversed, indicate "X1" at the end of the option field.**
- *5: For "T", "T8", "T6", a gauge plug is assembled instead of a pressure gauge. The gauge port for "T", "T8" is Rc1/4 and T6 is Rc1/8.
- *6: One pipe plug is attached for options "C6" and "M6".
- *7: Piping adaptor set A*00~P70 (page 804) is attached.
- *8: Refer to pages 804 to 806 for adaptor, 858 for pressure gauge. The piping adaptor set and C bracket cannot be used at the same time.
- *9: Refer to page 761 for max. processing flow when option "Y" is selected.
- *10: When option "T6" is selected, the attachment "GX59", "GY59" has a different thread size, so it cannot be selected together.

D Clean room specifications

E Other attachments

A Model No.			
	W2100	W3100	W4100

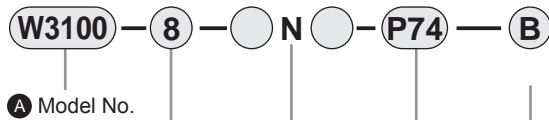
Code	Content			
B Port size				
8	Rc1/4	●	●	●
10	Rc3/8	●	●	●
15	Rc1/2			●

C Option *2 *3 *4 *5							
Bowl	Blank	PC bowl: without drain discharge			●	●	●
	C6	PC bowl: drain discharge Rc1/8			●	●	●
	M6	Metal bowl: drain discharge Rc1/8			●	●	●
Element	Blank	5 μm			●	●	●
	Y	0.3 μm (submicron)				●	●
Pressure range	Blank	0.05 to 0.85 MPa			●	●	●
	L	0.05 to 0.35 MPa			●	●	●
Pressure relief	N	Nonrelief			●	●	●
Pressure gauge *10	Blank	With standard pressure gauge (G401) *1			●	●	●
	T	Without pressure gauge (gauge port (Rc1/4) is assembled with sealed)			●	●	●
	T8	For attaching pressure gauge (gauge port (Rc1/4) is assembled with ventilated)			●	●	●
	T6	For attaching pressure gauge (gauge port (Rc1/8) is assembled with ventilated)			●	●	●
Flow direction	Blank	Standard flow (left → right)			●	●	●
	X1	Reverse flow (right → left)			●	●	●

D Clean room specifications				
	Structure			
P70	Exhaust treatment	●		●

E Other attachments *7 *8						
Blank	Without attachment	●	●	●		
A8	Rc1/4 piping adaptor set	●	●	●		
A10	Rc3/8 piping adaptor set	●	●	●		
A15	Rc1/2 piping adaptor set	●	●	●		
A20	Rc3/4 piping adaptor set			●		
B	C bracket	●	●	●		
B3	L bracket	●	●	●		
E1	Fitting (pressure relief port) *1	●	●	●		
GX59	G59D-8-P10-P70 (L: G59D-8-P04-P70) *1	●	●	●		
GY59	G59D-8-P10-P94 (L: G59D-8-P04-P94)	●	●	●		

How to order (custom order product)



B Port size

C Option

D Clean room specifications

E Other attachments

⚠ Precautions for model No. selection

- *1: Select options per drainage, bowl material, and element sections. When selecting options for several items, list options in order from the top. Be sure to select "N" non-pressure relief.
- *2: If "L" is selected for pressure range, a low pressure gauge (0 to 0.4 MPa) is used.
- *3: **Positions of a check valve and pressure gauge cannot be changed. If the IN and OUT direction must be reversed, indicate "X1" at the end of the option field.**
- *4: For "T", "T8", "T6", a gauge plug is assembled instead of a pressure gauge. The gauge port for "T", "T8" is Rc1/4 and T6 is Rc1/8.
- *5: One pipe plug is attached for options "C6" and "M6".
- *6: Piping adaptor set A*00~*P70 (page 804) is attached.
- *7: Refer to pages 804 to 806 for adaptor, 858 for pressure gauge. The piping adaptor set and C bracket cannot be used at the same time.
- *8: Refer to page 781 for max. processing flow when option "Y" is selected.
- *9: For the fittings, copper-based materials are used.
- *10: When option "T6" is selected, the attachment "GY59" has a different thread size, so it cannot be selected together.

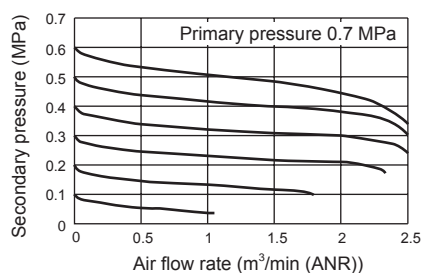
		A Model No.				
		W2100	W3100	W4100		
Code	Content					
B Port size						
8	Rc1/4		●	●	●	
10	Rc3/8		●	●	●	
15	Rc1/2				●	
C Option *1 *2 *3 *4 *5						
Bowl	Blank	PC bowl: without drain discharge		●	●	●
	C6	PC bowl: drain discharge Rc1/8		●	●	●
	M6	Metal bowl: drain discharge Rc1/8		●	●	●
Element	Blank	5 μm		●	●	●
	Y	0.3 μm (submicron)			●	●
Pressure range	Blank	0.05 to 0.85 MPa		●	●	●
	L	0.05 to 0.35 MPa		●	●	●
Pressure relief	N	Nonrelief		●	●	●
Pressure gauge *10	T	Without pressure gauge (gauge port (Rc1/4) is assembled with sealed)		●	●	●
	T8	For attaching pressure gauge (gauge port (Rc1/4) is assembled with ventilated)		●	●	●
	T6	For attaching pressure gauge (gauge port (Rc1/8) is assembled with ventilated)		●	●	●
Flow direction	Blank	Standard flow (left → right)		●	●	●
	X1	Reverse flow (right → left)		●	●	●
D Clean room specifications						
	Structure	Material restriction				
P74	Exhaust treatment	Copper-based/silicon-based/halogen-based materials (fluorine, chlorine, bromine) are prohibited		●	●	●
E Other attachments *6 *7						
	Blank	Without attachment		●	●	●
	A8	Rc1/4 piping adaptor set		●	●	●
	A10	Rc3/8 piping adaptor set		●	●	●
	A15	Rc1/2 piping adaptor set		●	●	●
	A20	Rc3/4 piping adaptor set				●
	B	C bracket		●	●	●
	B3	L bracket		●	●	●
	E1	Fitting (pressure relief port) *9		●	●	●
	GY59	G59D-8-P10-P94 (L: G59D-8-P04-P94)		●	●	●

SCPD3
SCM
SSD2
MDC2
SMG
LCM
LCR
LCG
LCX
STM
STG
STR2
MRL2
GRC
Cylinder Switch
MN3E
MN4E
4GA/B
M4GA/B
MN4GA/B
F.R.(module unit)
Clean F.R
Precision R
Press.gauge
Diff. press.gauge
Electro-pneumatic R
Speed controller
Auxiliary valve
Fitting/tube
Clean air unit
Pressure sensor
Flow rate sensor
Valve for air blow
Ending

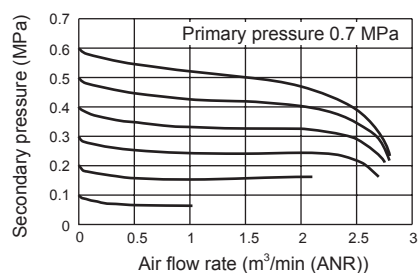
Filter/Regulator Series

Flow characteristics

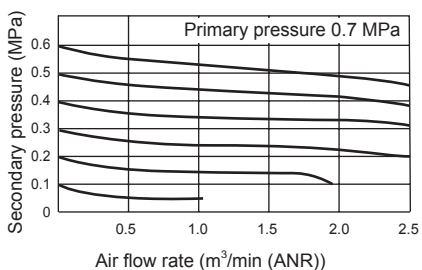
● W2100-8



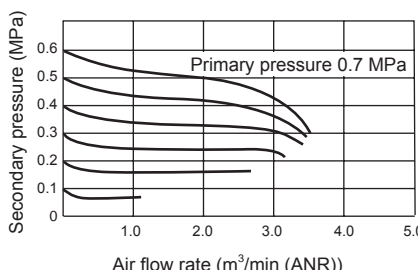
● W2100-10



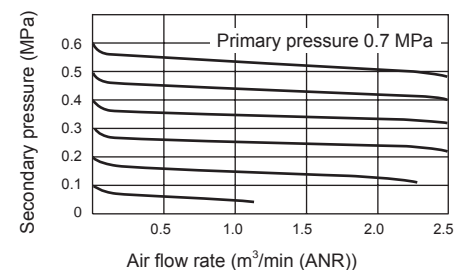
● W3100-8



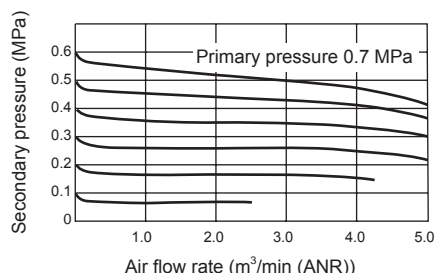
● W3100-10



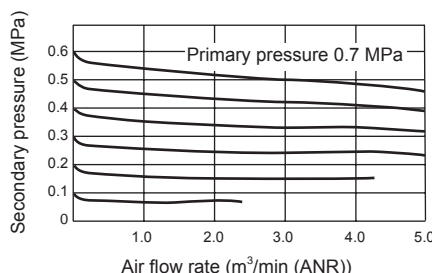
● W4100-8



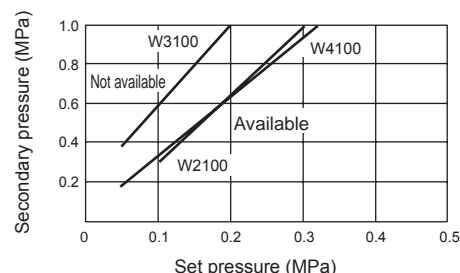
● W4100-10



● W4100-15



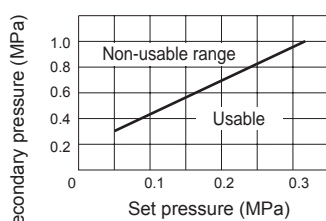
● Set pressure to back pressure



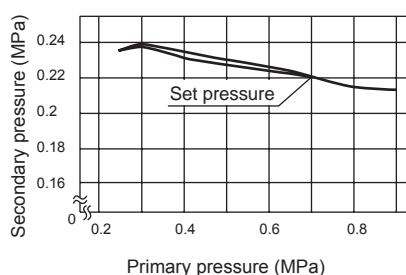
Note: The upper face of the graph is not usable and the lower side is usable.
Example: If W4100 is set to the set pressure 0.2 MPa and the secondary back pressure is 0.6 MPa and over, the secondary pressure will not be released to the primary side.

Pressure characteristics

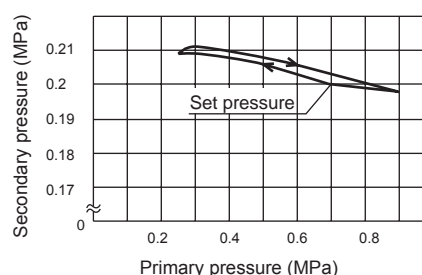
● W2100



● W3100



● W4100

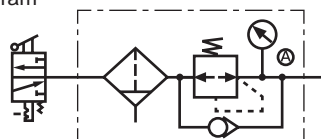


Functional explanation

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 switching 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: For the regulator's set pressure, set the back pressure A when the primary pressure is released within the range shown in the graph "Set pressure range for back pressure". (Refer to the graph above)

● Circuit diagram



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

SCPD3
SCM
SSD2
MDC2
SMG
LCM
LCR
LCG
LCX
STM
STG
STR2
MRL2
GRC
Cylinder Switch
MN3E MN4E
4GA/B
M4GA/B
MN4GA/B
F.R.(module unit)
Clean F.R
Precision R
Press gauge Diff. press gauge
Electro-pneumatic R
Speed controller
Auxiliary valve
Fitting/tube
Clean air unit
Pressure sensor
Flow rate sensor
Valve for air blow
Ending

Filter/Regulator Series

Dimensions

● W3100-P70/P74

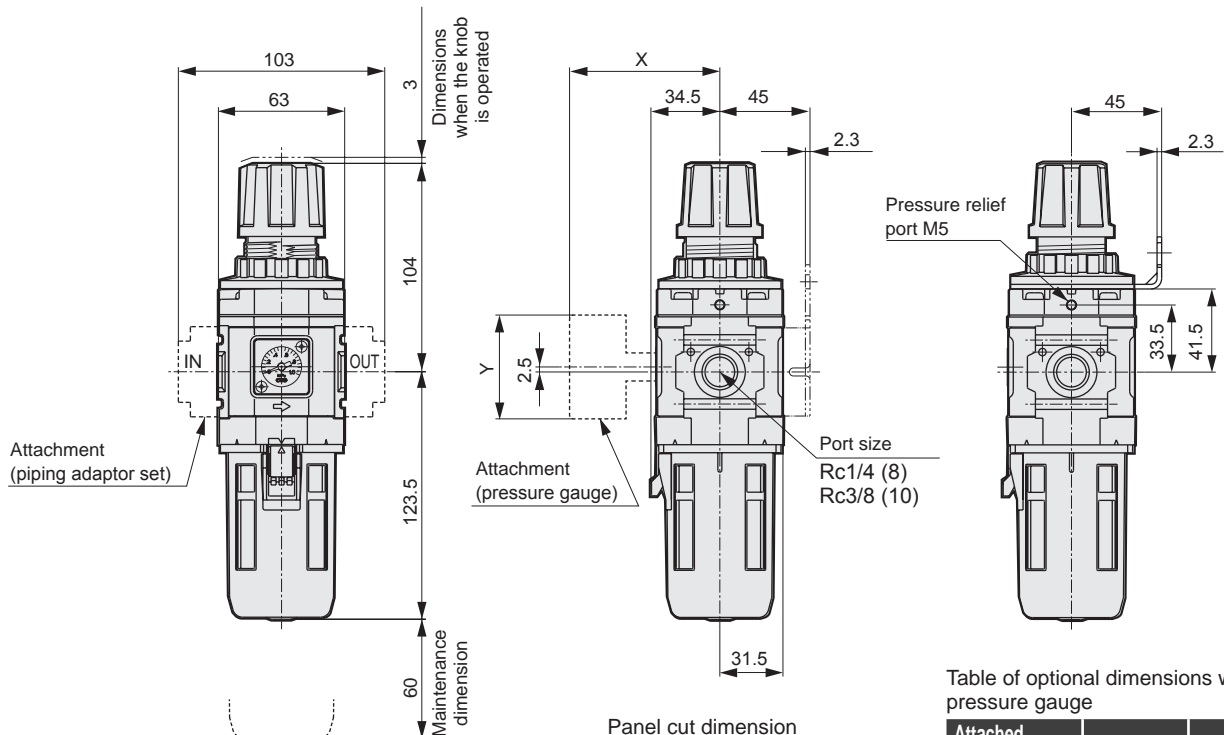
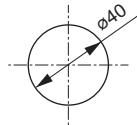


Table of optional dimensions with pressure gauge

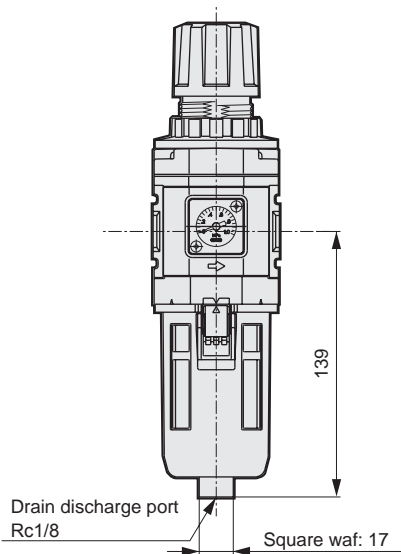
Attached pressure gauge	X	Y
GX59	76.5	ø52
GY59	79	ø52



Panel plate thickness: MAX 6mm

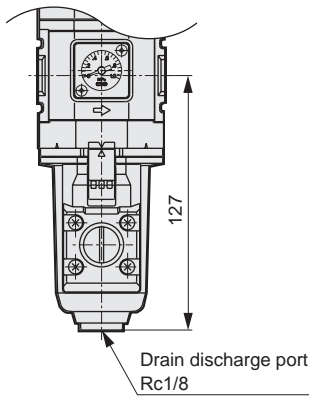
[Optional dimensions]

● PC bowl drain discharge: Rc1/8 (C6)



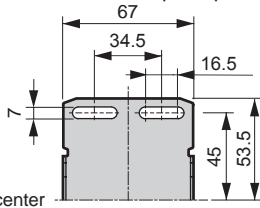
Note: Mount with fixing on square waf, when pipe for drain discharge.

● Metal bowl (M6)

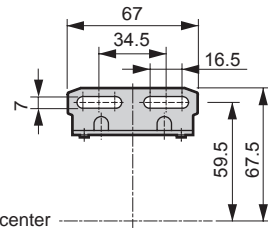


[Bracket dimensions]

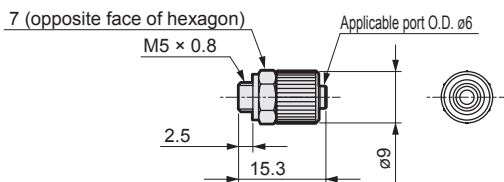
- C bracket
Part model No.: B320-P70
• Material: steel, nickel plate processing



- L bracket
Part model No.: B330-P70
• Material: steel, nickel plate processing

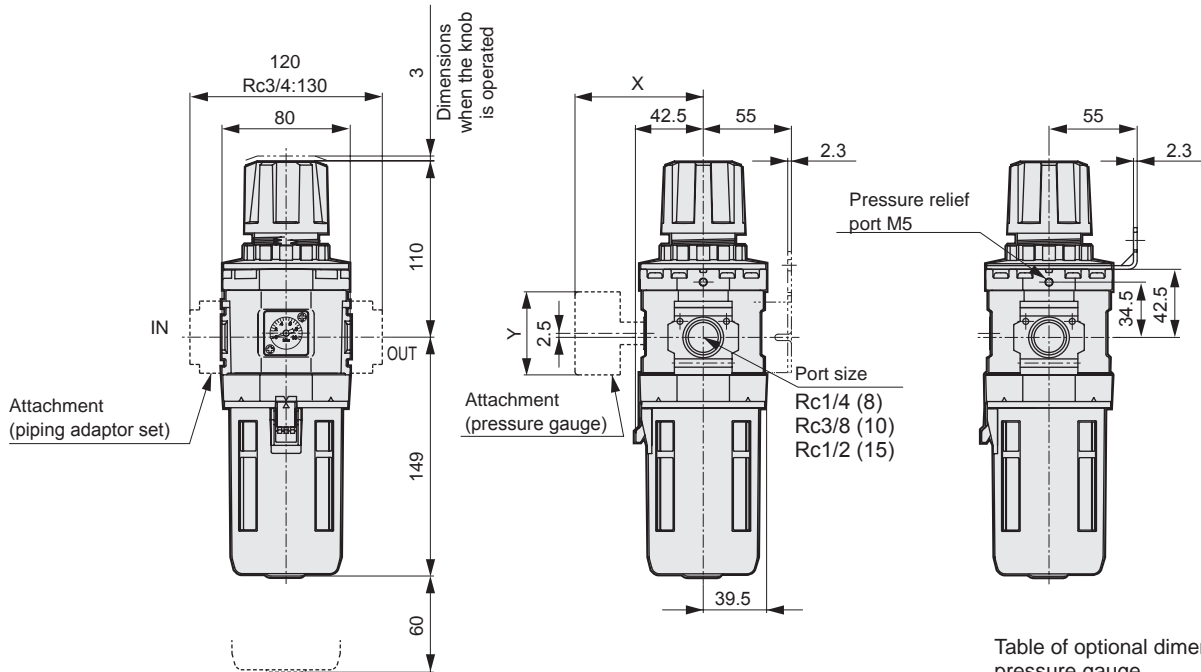


- Fitting
Part model No.: R4000-E1-P70
• Material: brass, nickel plate processing

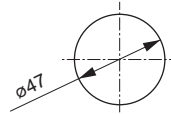


Dimensions

● W4100-P70/P74



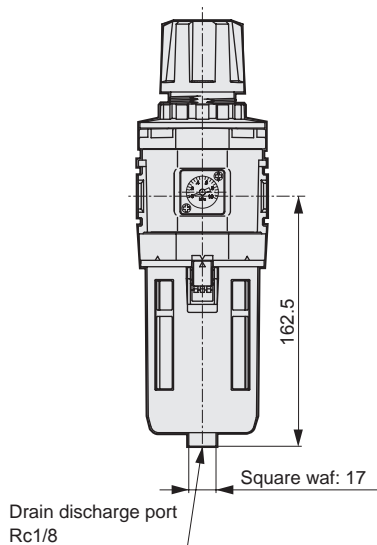
Panel cut dimension



Panel plate thickness: MAX 4 mm

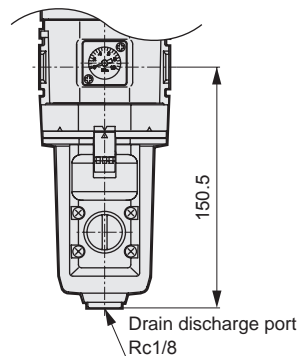
[Optional dimensions]

● PC bowl drain discharge: Rc1/8 (C6)



Note: Mount with fixing on square waf, when pipe for drain discharge.

● Metal bowl (M6)

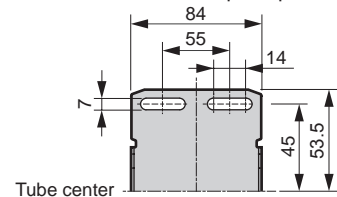


[Bracket dimensions]

● C bracket

Part model No.: B420-P70

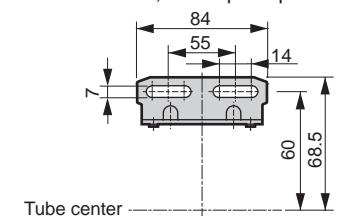
· Material: steel, nickel plate processing



● L bracket

Part model No.: B430-P70

· Material: steel, nickel plate processing



● Fitting

Part model No.: R4000-E1-P70

· Material: brass, nickel plate processing

