



Lubricator standard white Series

L1000/L3000/L4000/L8000-W Series

Supplies fine oil mist.

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 adaptor)	1/4, 3/8 (1/2 uses an adaptor)	1/4, 3/8, 1/2 (3/4 uses an adaptor)	3/4, 1 (1 1/4 uses an adaptor)
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. applicable voltage	240VAC, 200VDC
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 and 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 (caused by 200 VAC, 200mA or resistance load)

How to order

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

*Refer to page 274 for the explanation of the option.

A Model no.

B Port size

C Port thread type

D Option

E Display unit

F Piping adaptor set (attached)

G Bracket (attached)

⚠ Note on model no. selection

Note 1: When G threads or NPT threads are selected, the IN and OUT are the target.

Note 2: When selecting options for several items, list options in order from the top.

Note 3: The adjusting dome's material will change to polyacetal resin when the nylon bowl or metal bowl is selected.

Note 4: When selecting option "M1", select the drain discharge option "C".

Note 5: The C-type bracket and piping adaptor set attachments cannot be used at the same time.

Note 6: The joiner set is enclosed with the piping adaptor set.

Drainage and bowl material combination

(Item "D" in How to order)

Option ● With float switch

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

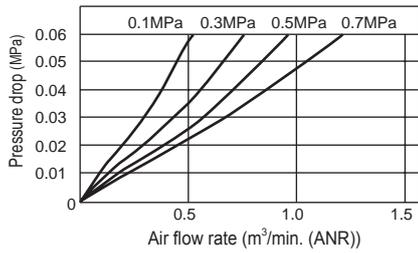
		A Model no.			
		L1000	L3000	L4000	L8000
B Port size					
Symbol	Descriptions				
6	1/8	●			
8	1/4	●	●	●	
10	3/8		●	●	
15	1/2			●	
20	3/4				●
25	1				●
C Port thread type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●
D Option					
Drainage	Blank	Without manual cock	●	●	●
	C	With manual cock	●	●	●
	LL	With float switch		●	●
Bowl material	Blank	Polycarbonate bowl	●	●	●
	Z	Nylon bowl	●	●	●
	M	Metal bowl		●	●
Note 3	M1	Metal bowl with manual drain cock Note 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 adaptor set (attached)		Note 5, Note 6 page 428			
Blank	Not attached	●	●	●	●
A6*W	Rc1/8 piping adaptor set	●			
A8*W	Rc1/4 piping adaptor set	●	●	●	
A10*W	Rc3/8 piping adaptor set	●	●	●	
A15*W	Rc1/2 piping adaptor set		●	●	
A20*W	Rc3/4 piping adaptor set			●	●
A25*W	Rc1 piping adaptor set				●
A32*W	Rc1 1/4 piping adaptor set				●
*Adaptor screw type					
Blank	Rc thread	●	●	●	●
N	NPT thread	●	●	●	●
G	G thread	●	●	●	●
G Bracket (attached)					
Blank	Not attached	●	●	●	●
BW	C type bracket	●	●	●	●

Refrigerating type dryer
Desiccant type dryer
High polymer membrane type dryer
Air filter
Auto, drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact cont. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)
Ending

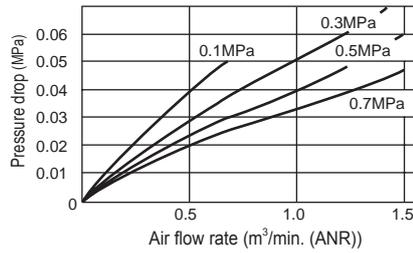
Standard series
F.R.L. unit

Flow characteristic

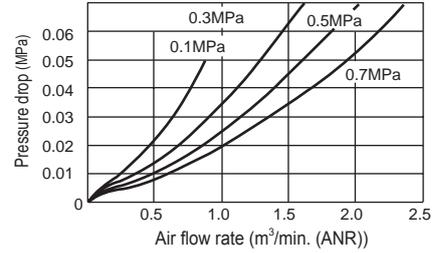
● L1000-6-W



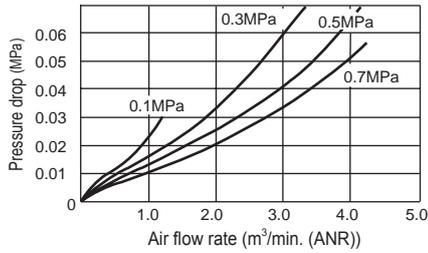
● L1000-8-W



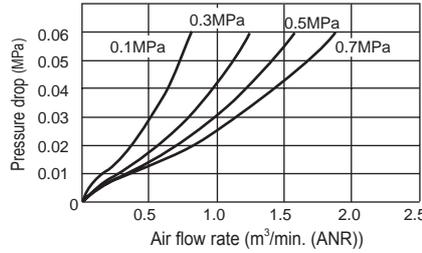
● L3000-8-W



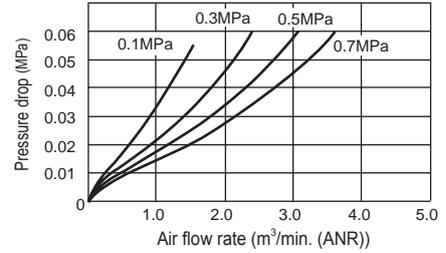
● L3000-10-W



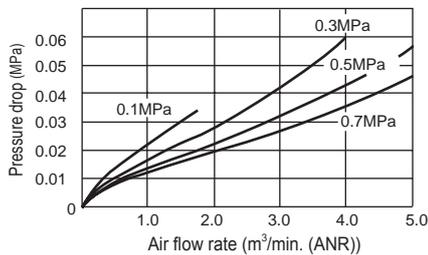
● L4000-8-W



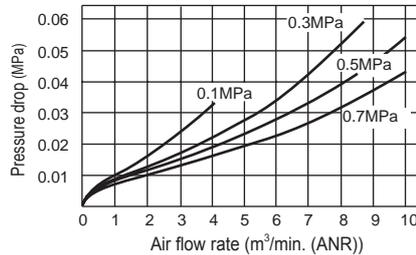
● L4000-10-W



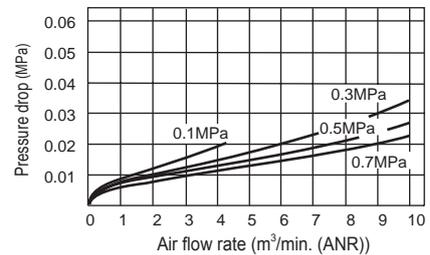
● L4000-15-W



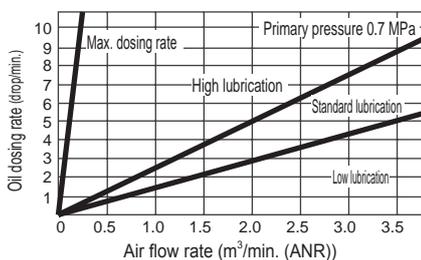
● L8000-20-W



● L8000-25-W

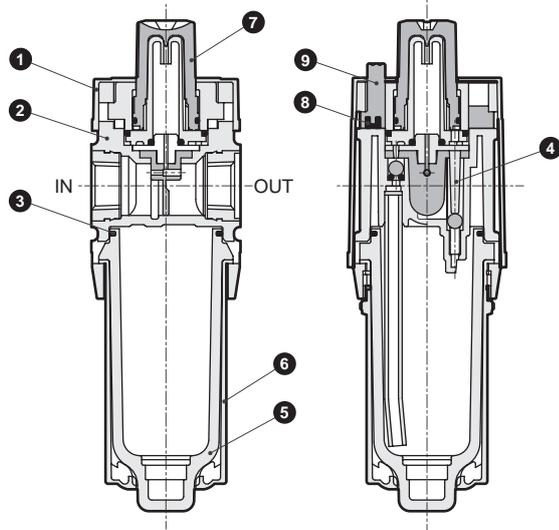


Oil dosing rate

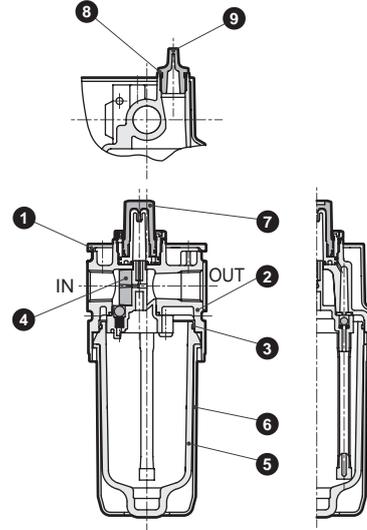


Internal structure and parts list

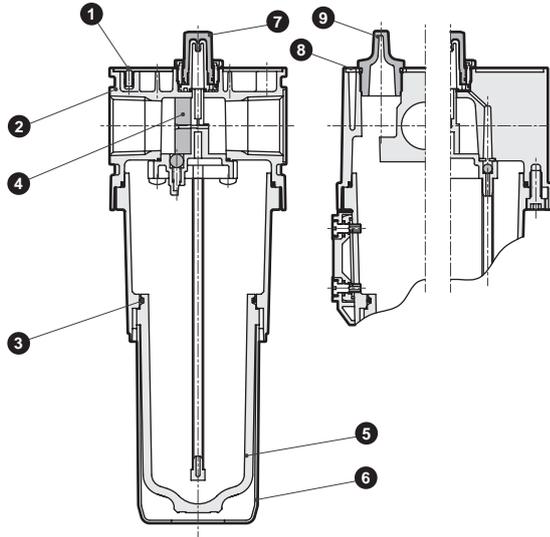
● L1000-W



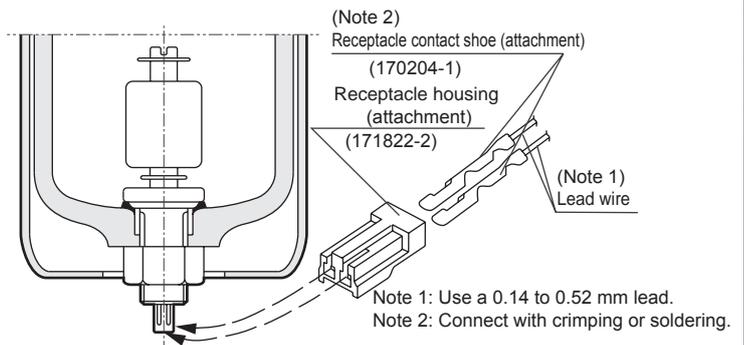
● L3000-W / L4000-W



● L8000-W



● Option float switch



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.	Parts 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	Polycarbonate resin			
8	O-ring	Nitrile rubber			
9	Filling plug	Polyacetal resin			

Note 1: O-ring of L1000-W is special shaped.

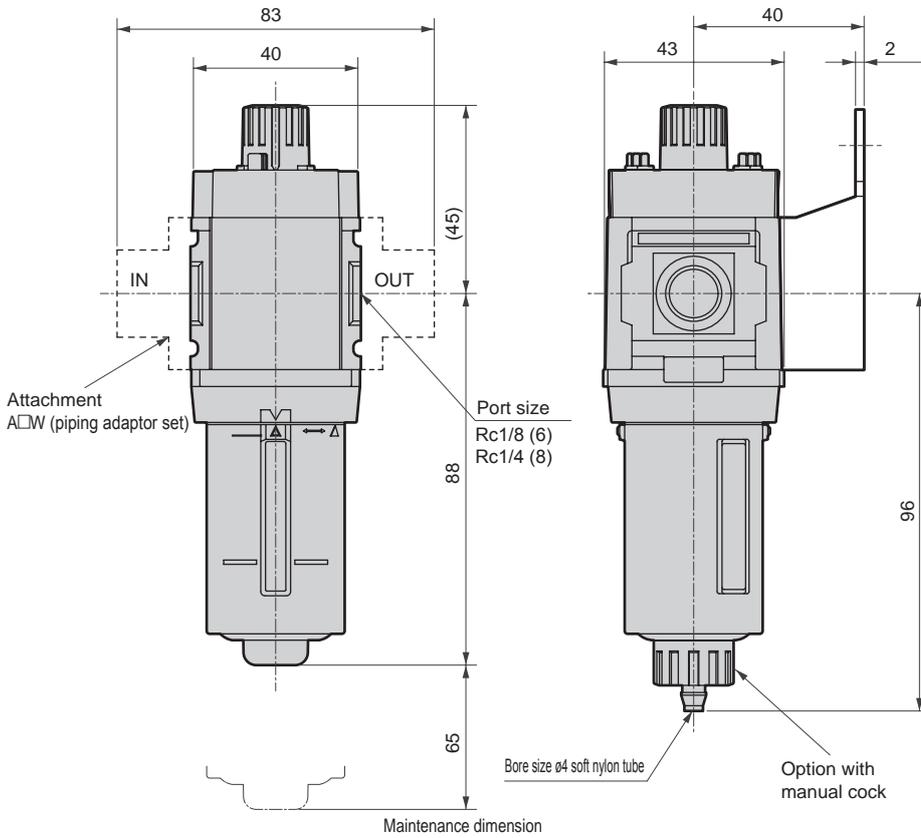
Refrigerating type dryer
Desiccant type dryer
High polymer membrane type dryer
Air filter
Auto, drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact cont. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)
Ending
Standard series
F.R.L. unit

Lubricator Series

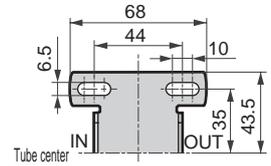
Dimensions



● L1000-W

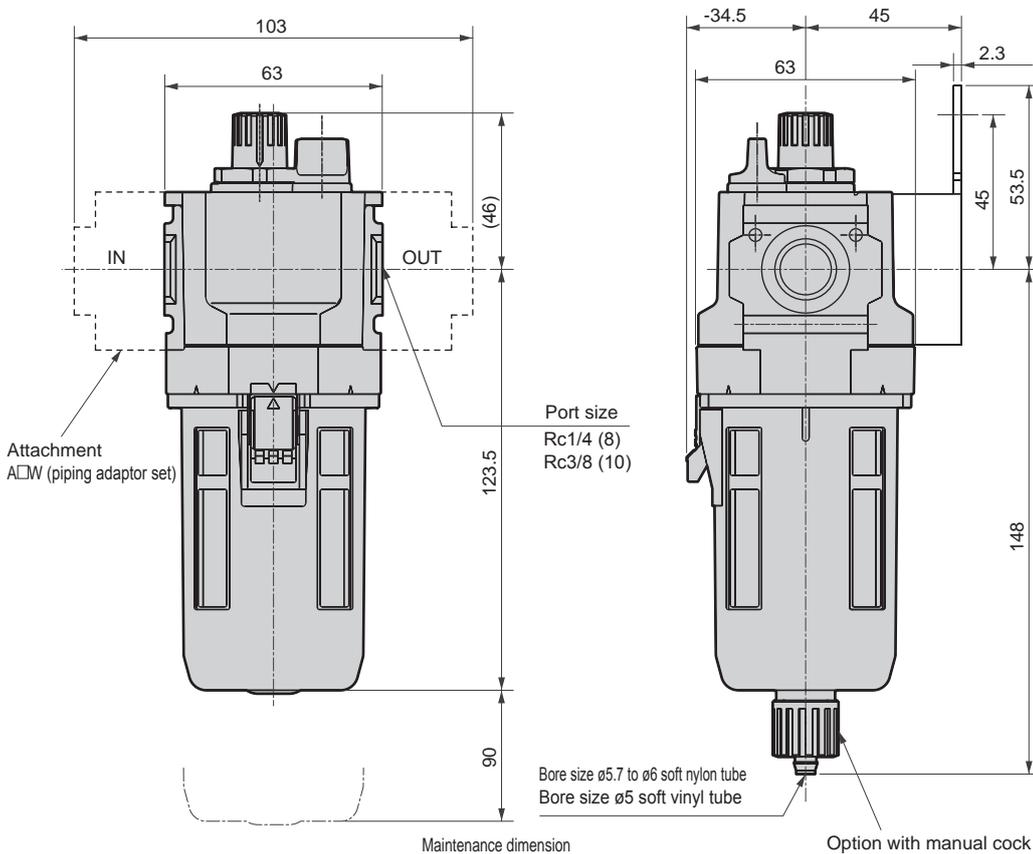


Attachment
(C type bracket)
Part model no.: B120

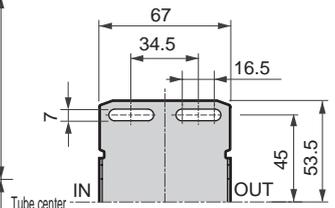


Note: The C-type bracket and piping adaptor set attachments cannot be used at the same time.

● L3000-W



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

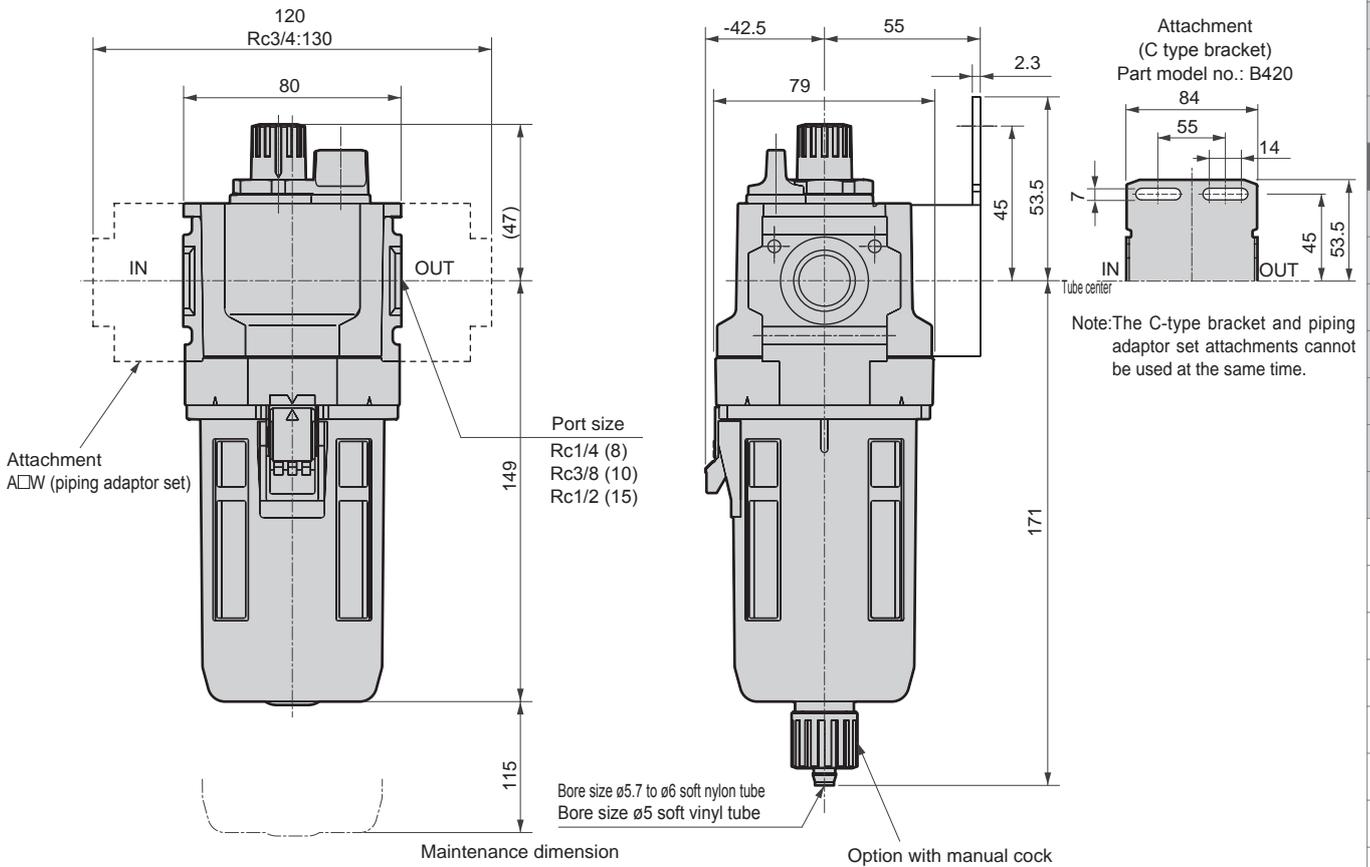


Note: The C-type bracket and piping adaptor set attachments cannot be used at the same time.

Dimensions

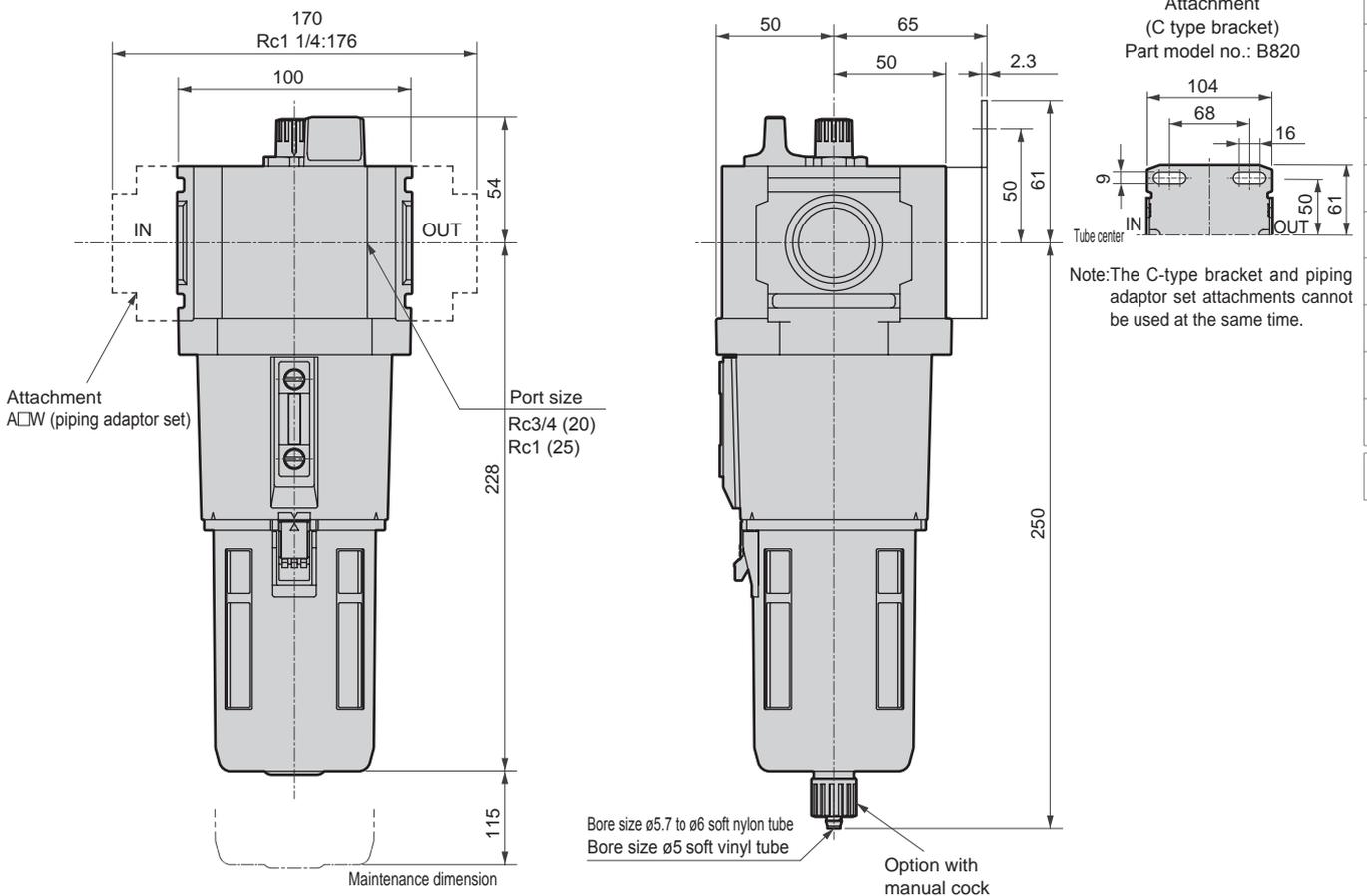


● L4000-W



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

● L8000-W



Refrigerating type dryer
Desiccant type dryer
High polymer membrane type dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact cont. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)
Ending

Standard series
F.R.L. unit

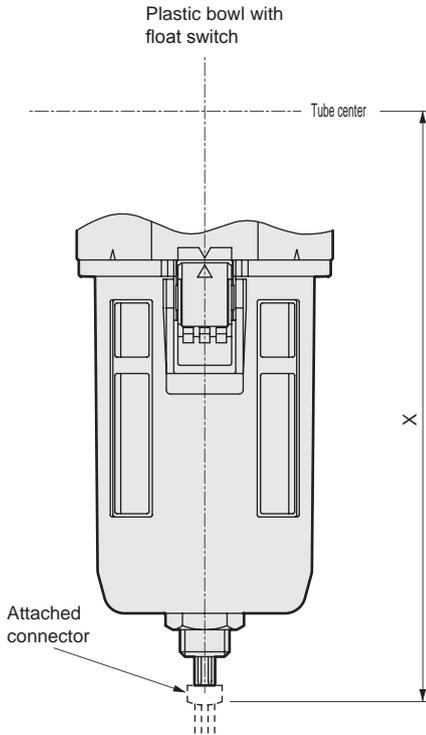
Lubricator Series

Optional dimensions

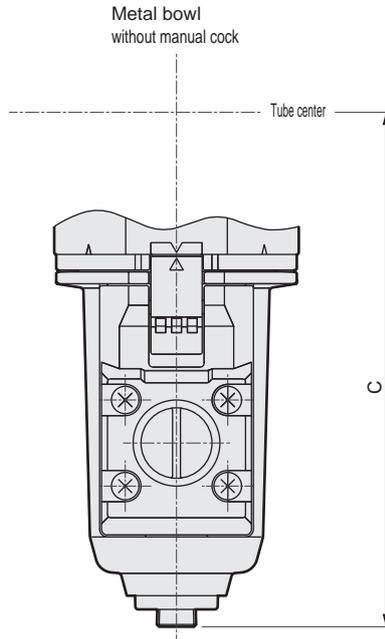


Other options (L3000-W, 4000-W, 8000-W)

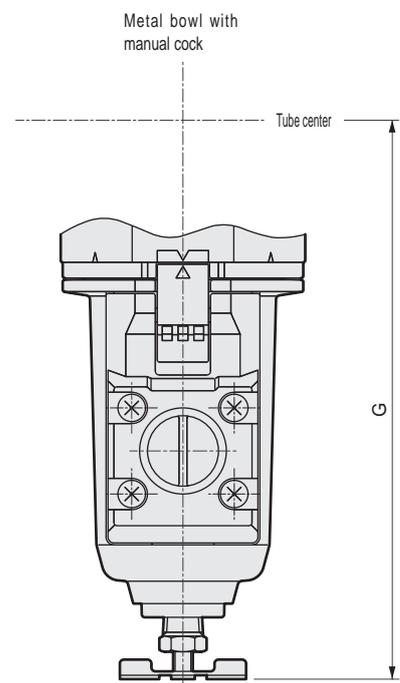
● Plastic bowl (blank)



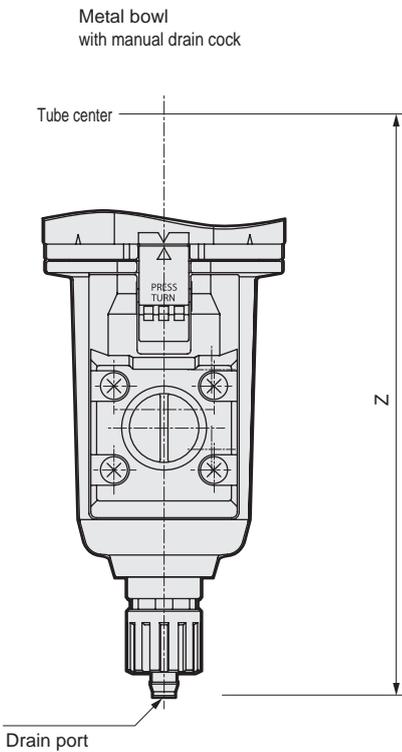
● Metal bowl without manual cock (M)



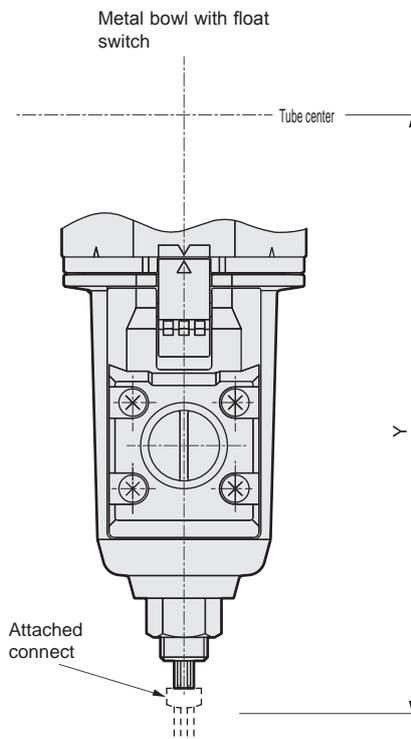
● Metal bowl with manual cock (CM)



● Metal bowl with manual cock (CM1)



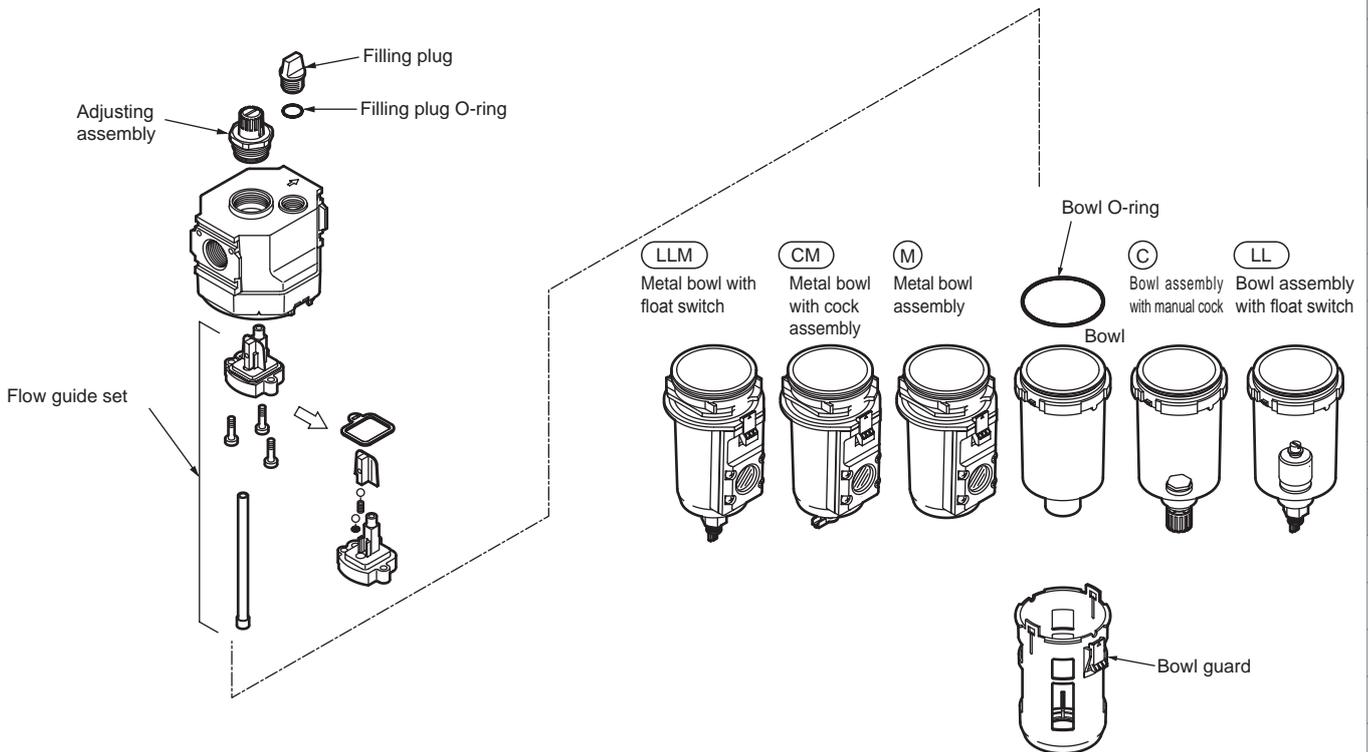
● Metal bowl with float switch (LLM)



Model no.	C	G	X	Y	Z
L3000-W	129	143.5	147	153.5	154
L4000-W	152	166.5	170	177	177
L8000-W	231.5	245.5	249	256	256

- Refrigerating type dryer
- Desiccant type dryer
- High polymer membrane type dryer
- Air filter
- Auto. drain / others
- F.R.L. (Module unit)
- F.R.L. (Separate)
- Compact F.R.
- Precise regulator
- F.R.L. (Related products)
- Clean F.R.
- Electro pneumatic regulator
- Air booster
- Speed control valve
- Silencer
- Check valve / others
- Joint / tube
- Vacuum filter
- Vacuum regulator
- Suction plate
- Magnetic spring buffer
- Mechanical pressure SW
- Electronic pressure SW
- Contact / close contact cont. SW
- Air sensor
- Pressure SW for coolant
- Small flow sensor
- Small flow controller
- Flow sensor for air
- Flow sensor for water
- Total air system
- Total air system (Gamma)
- Ending

Optional dimensions



Repair kits (Set 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, 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 of bowl assembly and bowl O ring)

Bowl assembly Model no.	Polycarbonate bowl w/o cock (Blank)	Nylon bowl without cock (Z)	Metal bowl without cock (M)	Polycarbonate bowl w/ cock (C)	Nylon bowl with cock (CZ)	Metal bowl with cock (CM)	Polycarbonate bowl w/ 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, 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 of filling plug and filling plug O-ring)

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

- Refrigerating type dryer
- Desiccant type dryer
- High polymer membrane type dryer
- Air filter
- Auto. drain / others
- F.R.L. (Module unit)**
- F.R.L. (Separate)
- Compact F.R.
- Precise regulator
- F.R.L. (Related products)
- Clean F.R.
- Electro pneumatic regulator
- Air booster
- Speed control valve
- Silencer
- Check valve / others
- Joint / tube
- Vacuum filter
- Vacuum regulator
- Suction plate
- Magnetic spring buffer
- Mechanical pressure SW
- Electronic pressure SW
- Contact / close contact cont. SW
- Air sensor
- Pressure SW for coolant
- Small flow sensor
- Small flow controller
- Flow sensor for air
- Flow sensor for water
- Total air system
- Total air system (Gamma)
- Ending

Standard series
F.R.L. unit