



Lubricator Standard White Series

L1000/L3000/L4000/L8000-W Series

Supplies fine oil mist.

● Port size: 1/8 to 1

JIS symbol



Specifications

Item	L1000-W	L3000-W	L4000-W	L8000-W
Appearance				
Working fluid	Compressed air			
Max. working pressure MPa	1.0 (≈150 psi, 10 bar)			
Proof pressure MPa	1.5 (≈220 psi, 15 bar)			
Ambient / fluid temperatures °C	5 (41°F) to 60 (140°F)			
Min. drip flow rate *1 m ³ /min(ANR)	0.015	0.03	0.065	0.065
Oil storage capacity cm ³	20	85	170	170(MAX360)
Oil used	Turbine oil Class 1 ISO VG32 (spindle oil cannot 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)
Weight kg	0.1	0.28	0.45	1.4
Standard accessories	Bowl guard			

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

Float switch electric specification

Item	
Number of control points	1 points
Actuation	Switch turns OFF when float rises (oil level detected), and turns ON when float lowers (no oil level detected)
Max. working voltage	240 VAC, 200 VDC
Max. open and close capacity	50 VA or 50 W, whichever is smaller
Max. open and close current	0.5 A
Resistance voltage between contacts	400 VDC for one minute and leak current 1 mA or less
Contact resistance	220 mΩ or less (between terminal sections)
Insulation resistance	100 MΩ and over (between terminal section and case, 500 VDC megger)
Withstand voltage	1500 VAC for one minute (between terminal section and case)
Electrical life	10 ⁶ times (at 200 VAC, 200 mA, depending on resistance load)

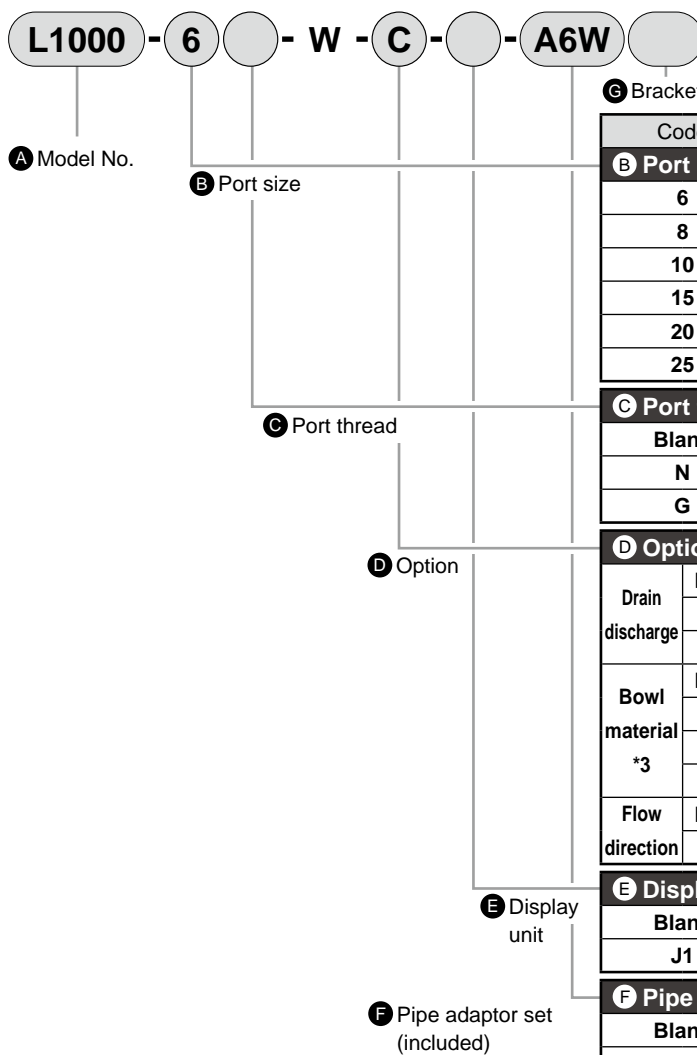
Option weight

* Add to the weight of the standard accessories.

Unit: kg

Code	Drain discharge		Bowl material		Pipe adaptor set							Bracket
	C	LL	M	M1	A6*W	A8*W	A10*W	A15*W	A20*W	A25*W	A32*W	BW
L1000	0				0.09	0.09	0.09					0.1
L3000	0	0.05	0.1	0.1		0.16	0.16	0.16				0.17
L4000	0	0.05	0.1	0.1		0.16	0.16	0.16	0.16			0.21
L8000	0	0.05	0.1	0.1					0.53	0.53	0.53	0.36

How to order



* Refer to page 30 for the explanation of the option.

A Model No.

	L1000	L3000	L4000	L8000
B Port size				
C Port thread				
D Option				
E Display unit				
F Pipe adaptor set (included)				

Code		Description	L1000	L3000	L4000	L8000
B Port size						
6	1/8		●			
8	1/4		●	●	●	
10	3/8			●	●	
15	1/2				●	
20	3/4					●
25	1					●
C Port thread *1						
Blank	Rc thread		●	●	●	●
N	NPT thread		●	●	●	●
G	G thread		●	●	●	●
D Option *2						
Drain discharge	Blank	Without manual cock	●	●	●	●
	C	With manual cock	●	●	●	●
	LL	With float switch		●	●	●
Bowl material *3	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl		●	●	●
	M1	Metal bowl with manual drain cock *4		●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●
E Display unit						
Blank	MPa display (Rc thread), psi display (NPT thread), bar display (G thread)		●	●	●	●
J1	MPa display (NPT, G thread)		●	●	●	●
F Pipe adaptor set (included) *5, *6 Page 350						
Blank	Not included		●	●	●	●
A6*W	1/8 pipe adaptor set		●			
A8*W	1/4 pipe adaptor set		●	●	●	
A10*W	3/8 pipe adaptor set		●	●	●	
A15*W	1/2 pipe adaptor set			●	●	
A20*W	3/4 pipe adaptor set				●	●
A25*W	1 pipe adaptor set					●
A32*W	1 1/4 pipe adaptor set					●
* Adaptor thread						
Blank	RC thread		●	●	●	●
N	NPT thread		●	●	●	●
G	G thread		●	●	●	●
G Bracket (included)						
Blank	Not included		●	●	●	●
BW	C type bracket		●	●	●	●

⚠ Precautions for model No. selection

- *1: G and NPT threads are available for IN and OUT.
- *2: When selecting options for several items, list options in order from the top.
- *3: The adjusting dome material will change to nylon resin when the nylon bowl or metal bowl is selected.
- *4: When selecting option "M1", select the drain discharge option "C".
- *5: The pipe adaptor set and C type bracket cannot be used together.
- *6: The joiner set is enclosed with the pipe adaptor set.

Drainage and bowl material combination (Item ④ in How to order) Option D With float switch

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

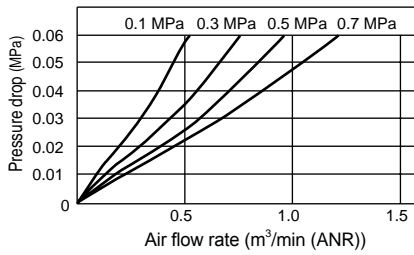
- F.R.L.
- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/ PTFE FRL
- Outdrs FRL
- Adapter Joiner Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRISens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

Lubricator Series

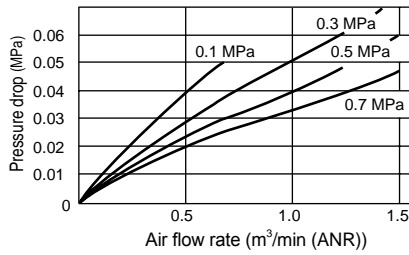
F.R.L. Flow characteristics

- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filt
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/PTFE FRL
- Outdrs FRL
- Adapter Joiner
- Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneur
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRiSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

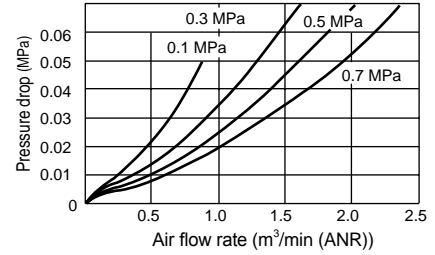
● L1000-6-W



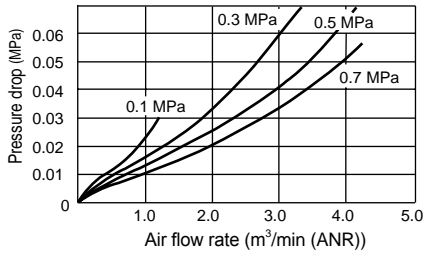
● L1000-8-W



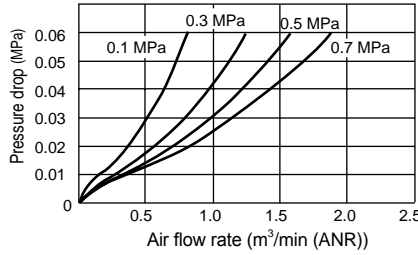
● L3000-8-W



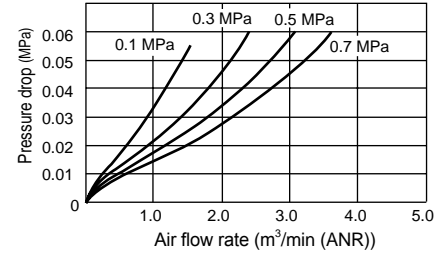
● L3000-10-W



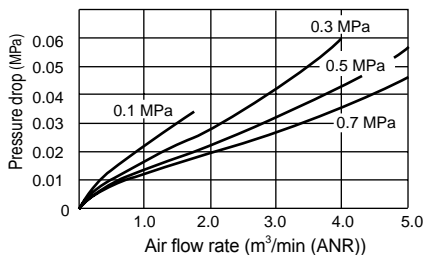
● L4000-8-W



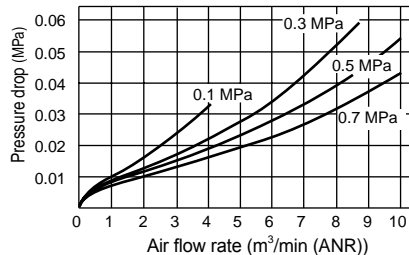
● L4000-10-W



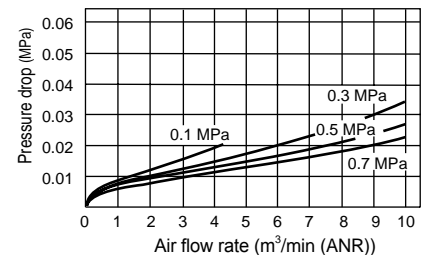
● L4000-15-W



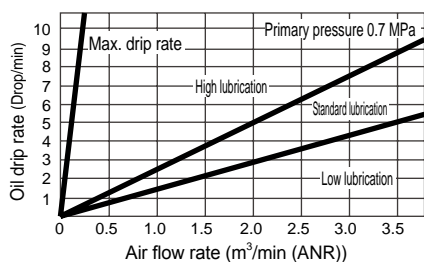
● L8000-20-W



● L8000-25-W

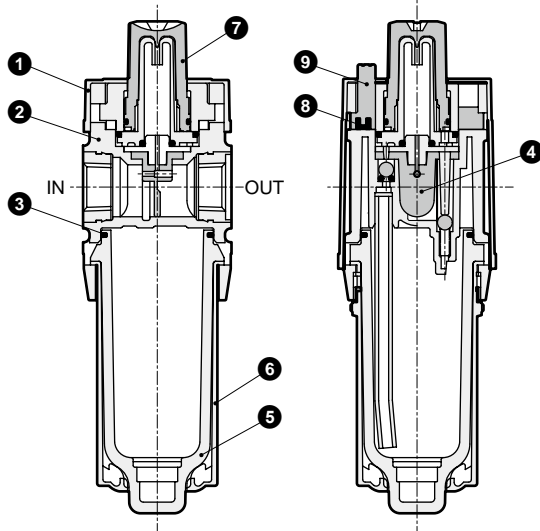


Oil drip rate

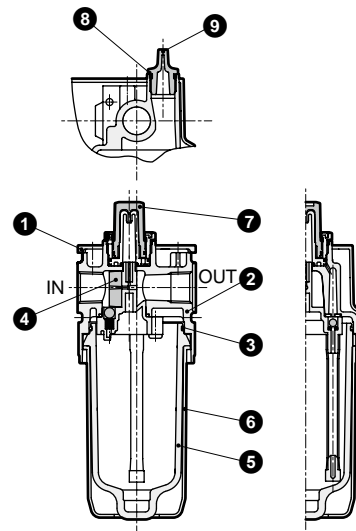


Internal structure and parts list

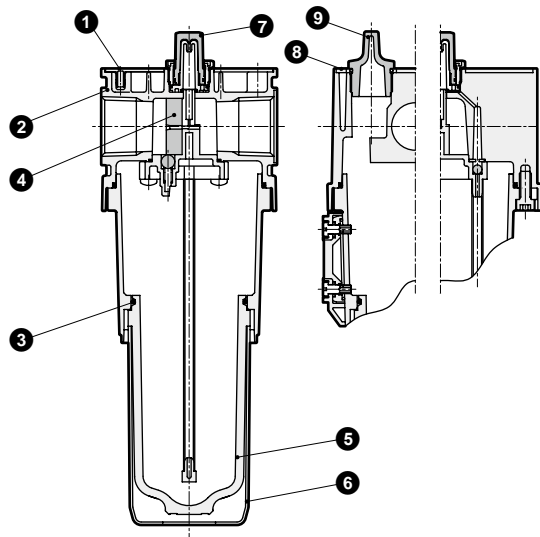
● L1000-W



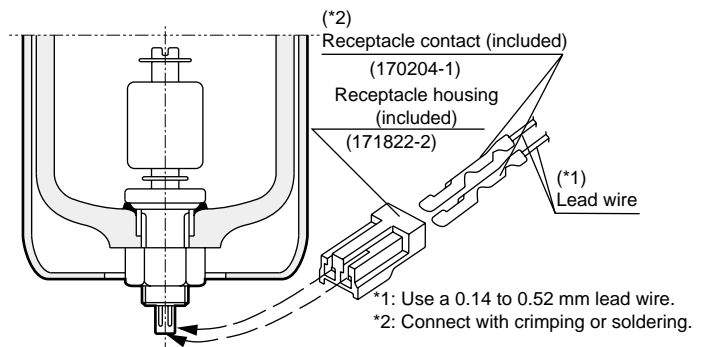
● L3000-W/L4000-W



● L8000-W



● Option float switch



A TE Connectivity Ltd. post header (part No. 171825-2) is used for the terminal. Use an 171822-2 (standard) or 172142-2 (rope file) for the connector.

Note: The degree of protection of terminal sections is equivalent to IP40. Protect the product appropriately if it is exposed to water, salt, dust, and cutting chips. Contact CKD if the degree of protection is required.

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	*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			

*1: The O-ring of the L1000-W has a special shape.

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- F.R.
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- R (Reg)
- L (Lub)**
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- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/ PTFE FRL
- Outdrs FRL
- Adapter Joiner
- Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PresCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

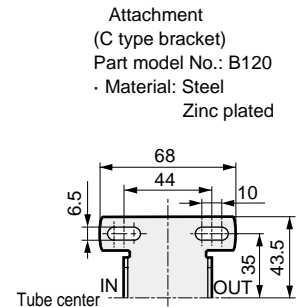
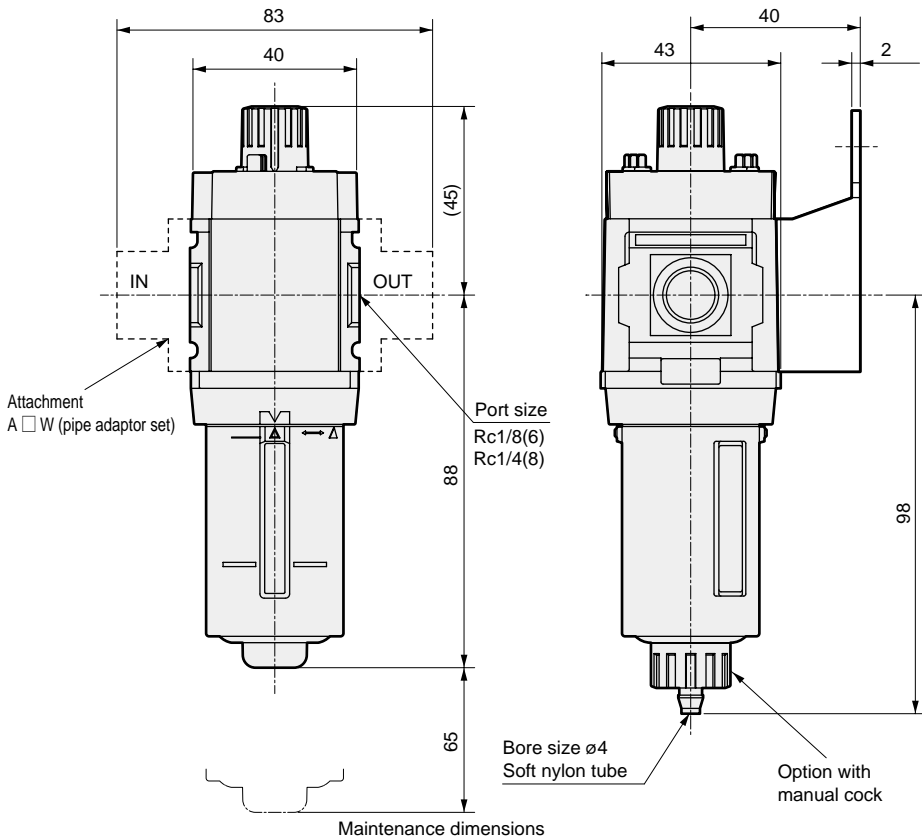
Lubricator Series



F.R.L. Dimensions

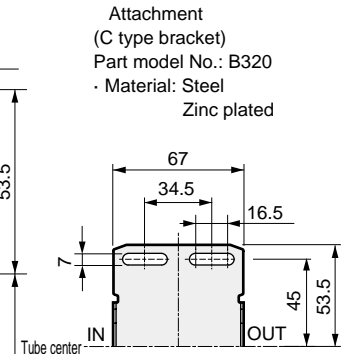
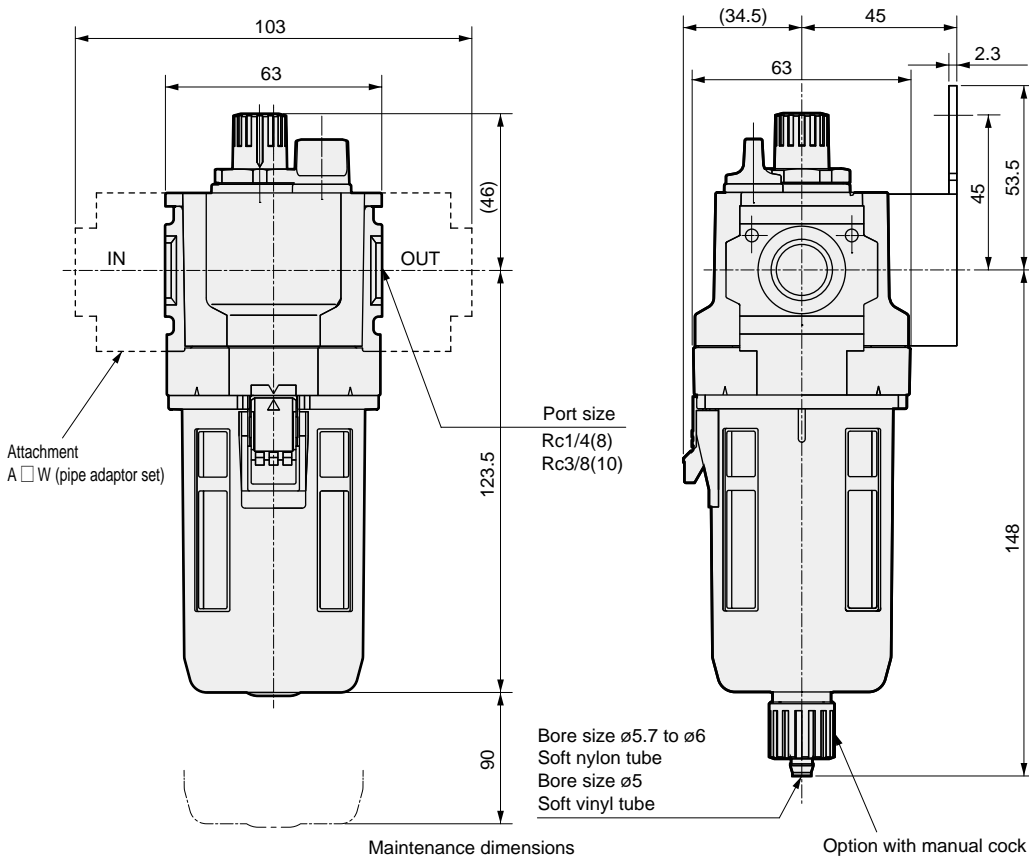
F.R. ● L1000-W

- F (Filtr)
- R (Reg)
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- Mech Press SW
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- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-Prohr
- Med Press FR
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- Outdrs FRL
- Adapter Joiner
- Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneur
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesiccDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending



Note: The C type bracket and pipe adaptor set attachments cannot be used together.

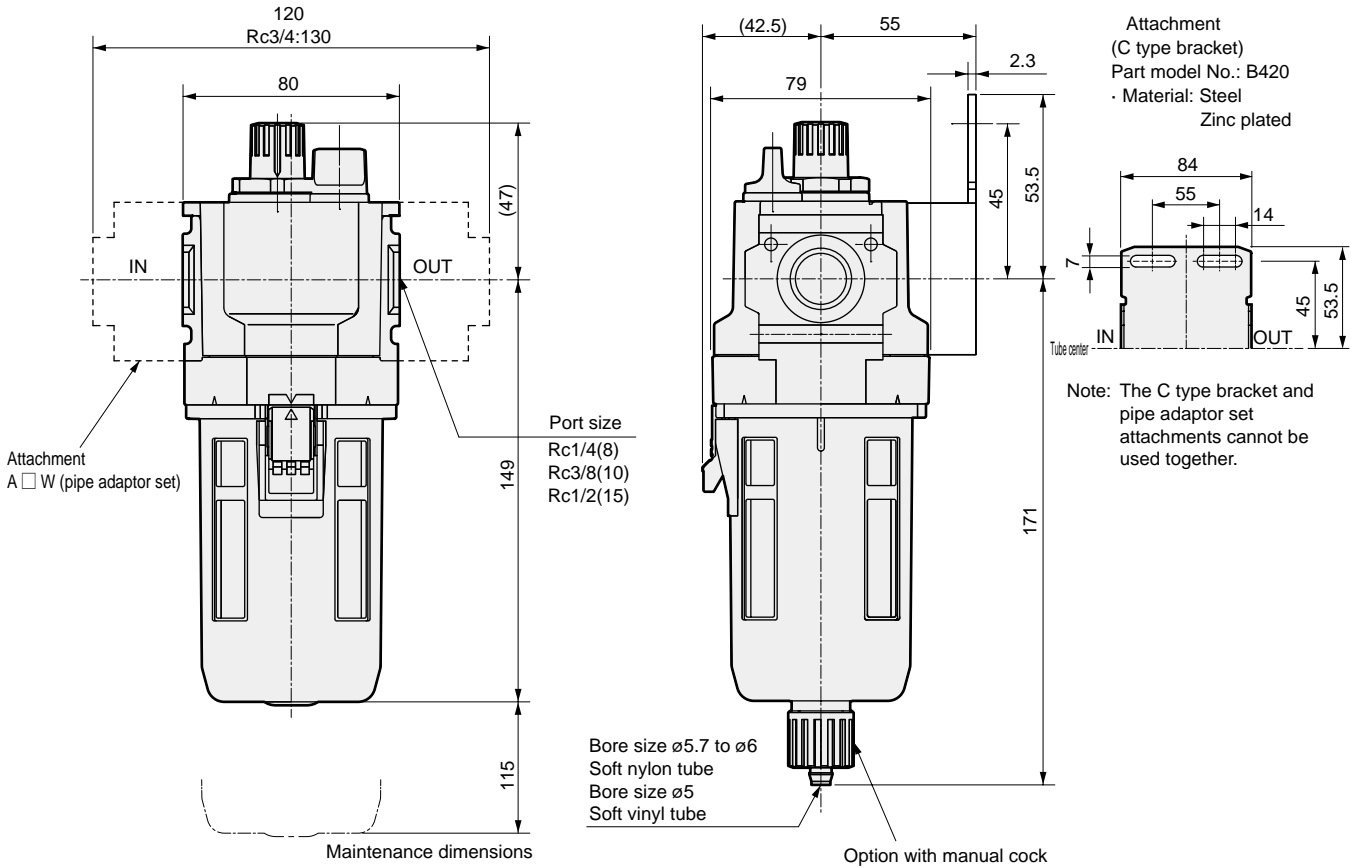
● L3000-W



Note: The C type bracket and pipe adaptor set attachments cannot be used together.

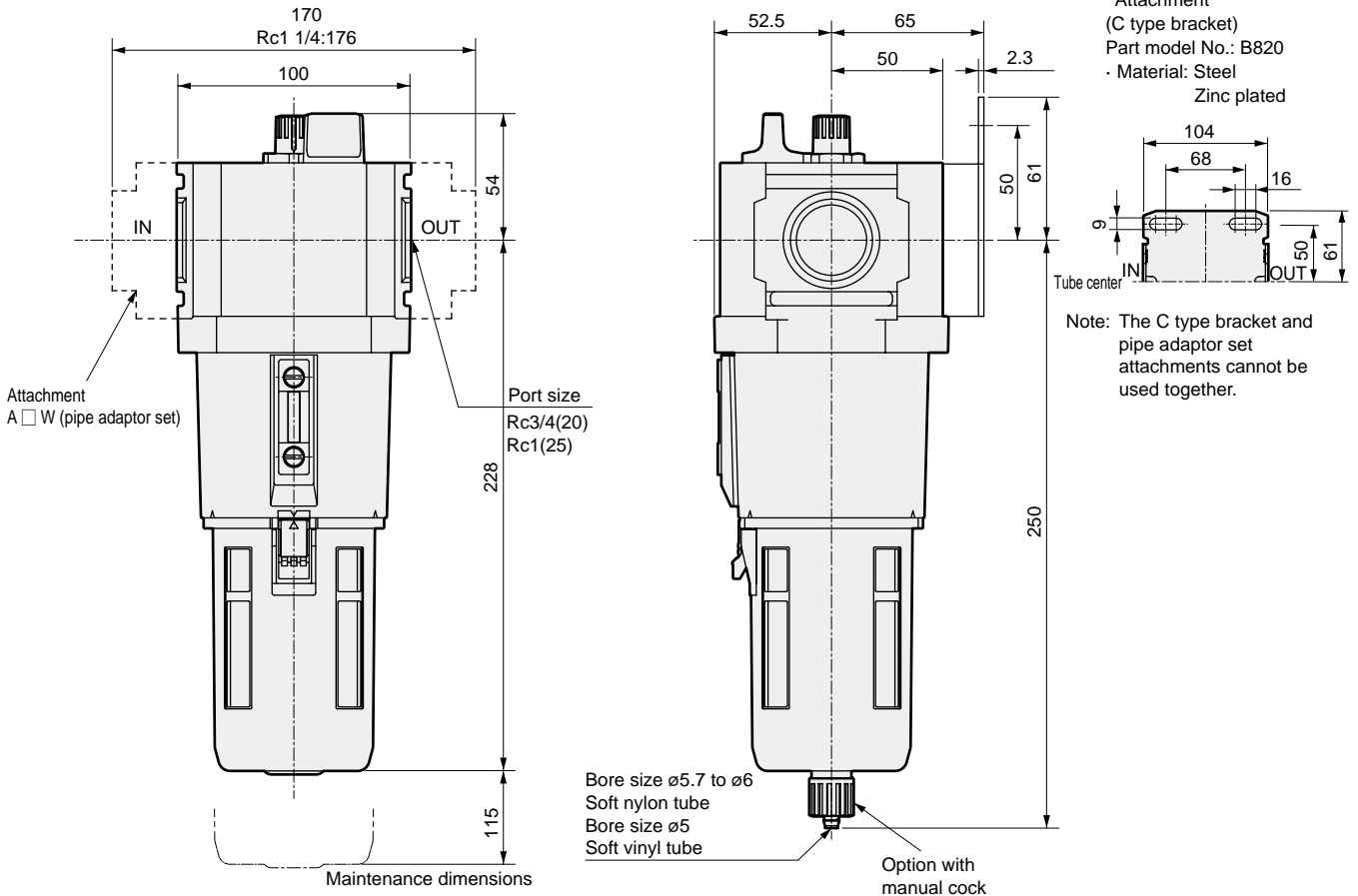
Dimensions

● L4000-W



Note: The C type bracket and pipe adaptor set attachments cannot be used together.

● L8000-W



F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac-remove Filtr
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRISens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr Dischrg etc
Ending

Lubricator Series



F.R.L. Optional dimensions

F.R. Other options [L3000-W, 4000-W, 8000-W]

F (Filtr)

R (Reg)

L (Lub)

Drain

Separ

Mech

Press SW

Res press

exh valve

SlowStart

Anti-bac/Bac-

remove Filtr

Film

Resist FR

Oil-ProhR

Med

Press FR

No Cu/

PTFE FRL

Outdrs FRL

Adapter

Joiner

Press

Gauge

CompFRL

LgFRL

PrecsR

VacF/R

Clean FR

ElecPneuR

AirBoost

Speed Ctrl

Silncr

CheckV/

other

Fit/Tube

Nozzle

Air Unit

PrecsCompn

Electro

Press SW

ContactSW

AirSens

PresSW

Cool

Air Flo

Sens/Ctrl

WaterRtSens

TotAirSys

(Total Air)

TotAirSys

(Gamma)

Gas

generator

RefrDry

DesicDry

HiPolymDry

MainFiltr

Dischrg

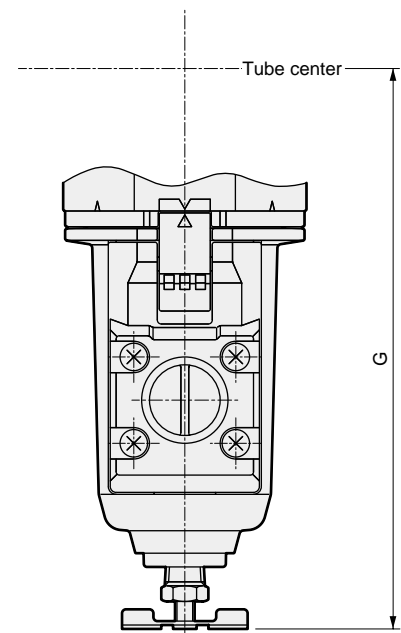
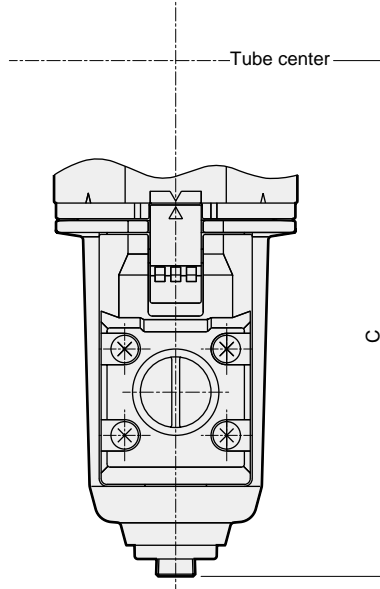
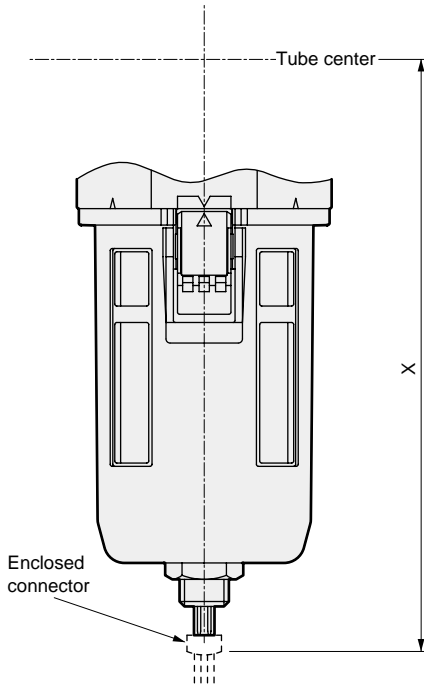
etc

Ending

- Plastic bowl (LL)
With float switch

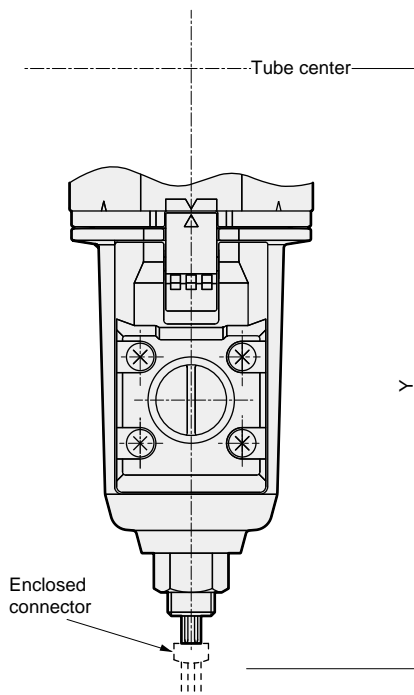
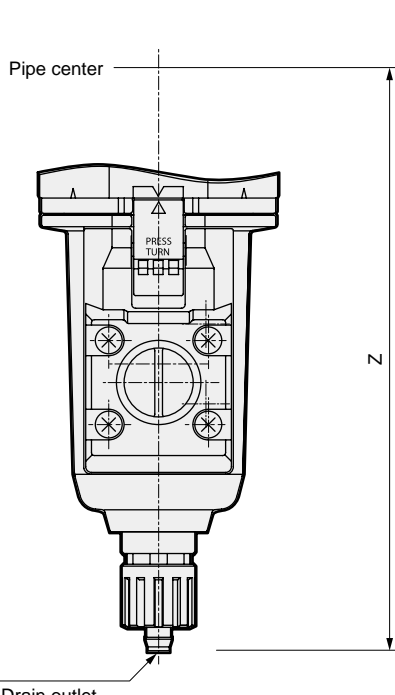
- Metal bowl without manual drain cock (M)

- Manual cock (CM)



- Manual resin cock (CM1)

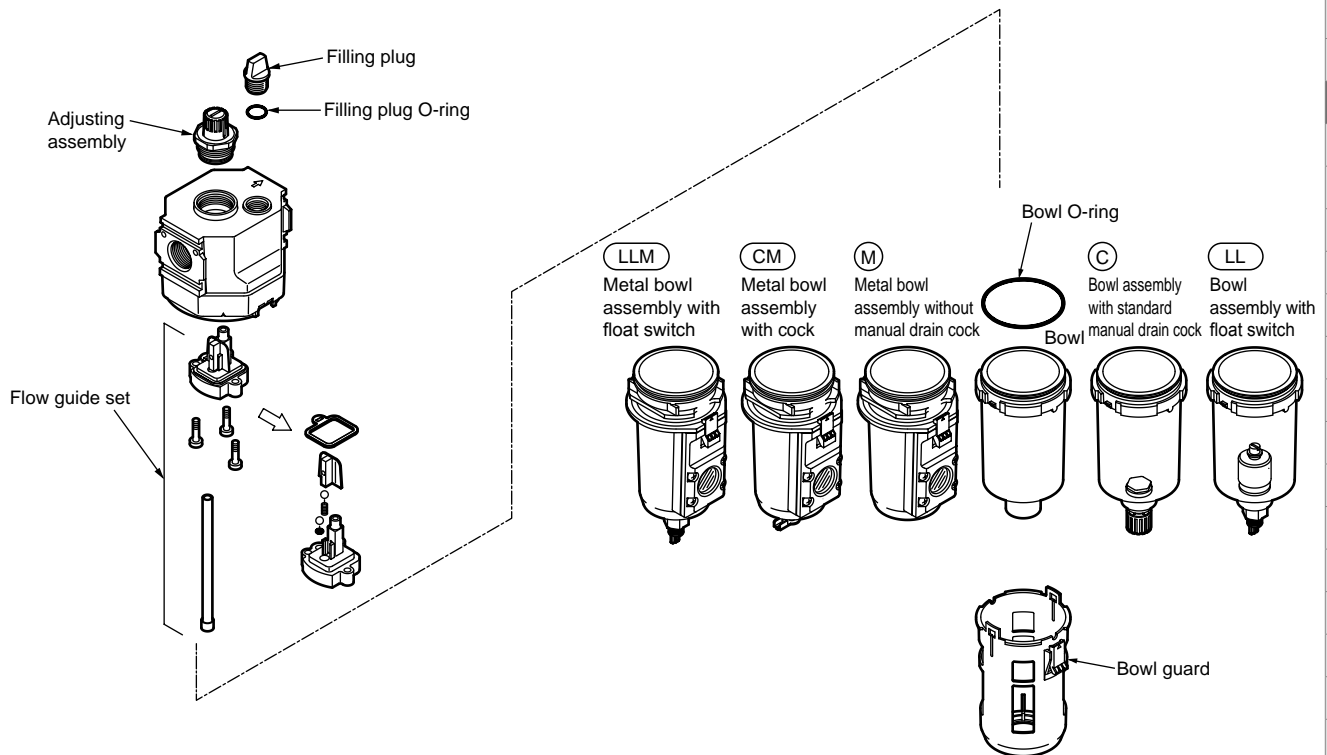
- Metal bowl with float switch (LLM)



● Material of the metal bowl is aluminum die-casting.

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

Optional dimensions



Repair parts kit (set of filling plug O-ring, adjusting assembly, flow guide set, bowl O-ring)

Model No.	Repair parts kits model No. (for polycarbonate bowl)	Repair parts 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 assy model No.	Polycarbonate bowl without manual drain cock (blank)	Nylon bowl without manual drain cock (Z)	Metal bowl without manual drain cock (M)	Polycarbonate bowl with standard manual drain cock (C)	Nylon bowl with standard manual drain 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, 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, filling plug O-ring)

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

- F.R.L.
- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/ PTFE FRL
- Outdrrs FRL
- Adapter Joiner Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PresCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending