

A3019/3000E/3002E/3003E/3004E/3005E Series

Lubricator / Econo-mist type

Supplying fine oil mist (oil fog)

● Port size: Rc 1/8 to Rc2

JIS symbol



Specifications

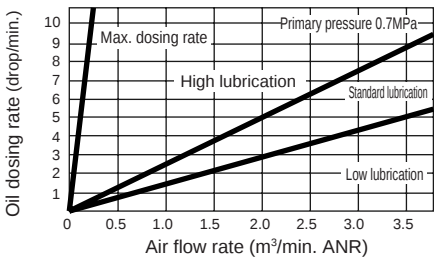
Descriptions		A3019-1C/2C	3000E-2C/3C	3000E-2C/3C-J	3002E-2C/3C/4C/6C	3003E-6C/8C	3004E-10C/12C	3005E-16C
Appearance								
Working fluid		Compressed air						
Max. working pressure	MPa	1.0						
Withstanding pressure	MPa	1.5						
Fluid temperature (ambient temperature) °C		5 to 65						
Use oil		Turbine oil Class 1 ISO VG32 (spindle oil can not be used)						
Oil capacity	cm³	25	65	135	300	660	660	660
Port size	Rc	1/8, 1/4	1/4, 3/8	1/4, 3/8	1/4, 3/8, 1/2, 3/4	3/4, 1	1 1/4, 1 1/2	2
Product weight	kg	0.2	0.6	0.6	1.1	2.4	3.5	4.5
Bowl guard		Custom order	Provided as standard					
Min. dosing flow rate	ℓ/min. ANR	20	30	30	30 (2/3C), 60 (4/6/8C)	200	200	200

Note 1: Minimum dosing flow rate applies when 5 drops of oil per min. is dosed where the primary pressure is 0.5MPa.

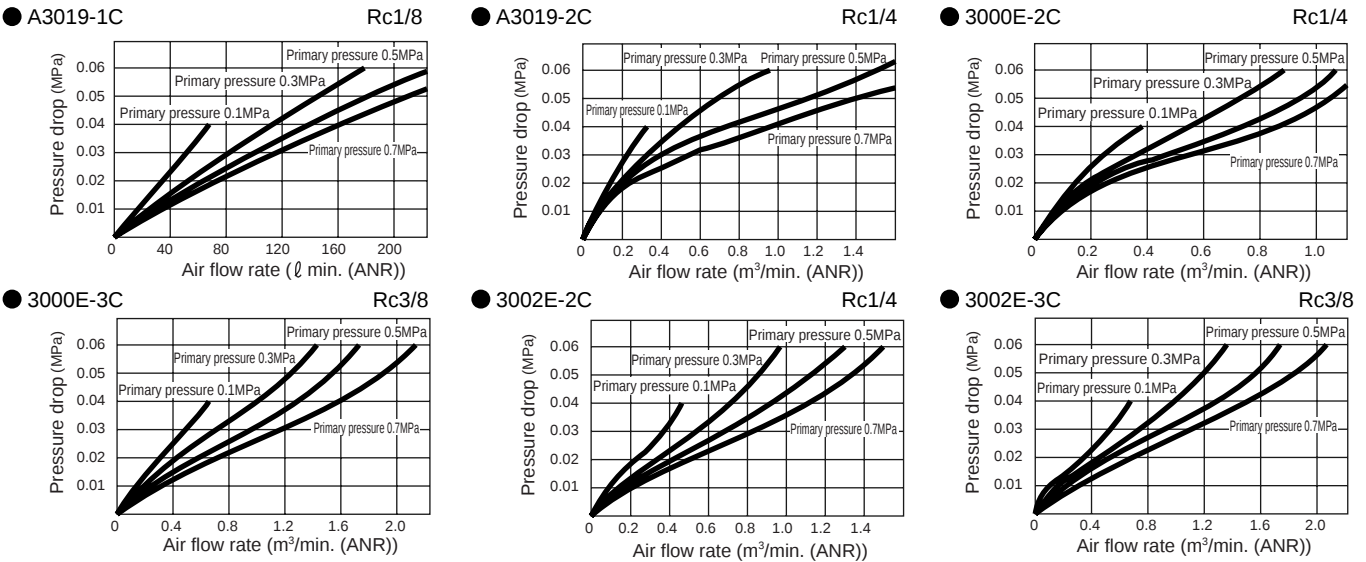
Copper and PTFE free (page 607)

A3019- - P6

Oil dosing rate



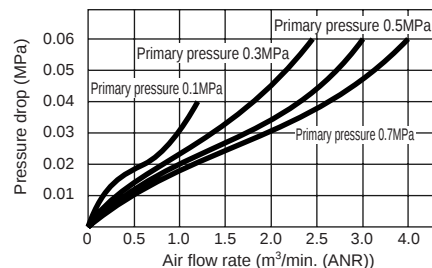
Flow characteristic



Flow characteristic

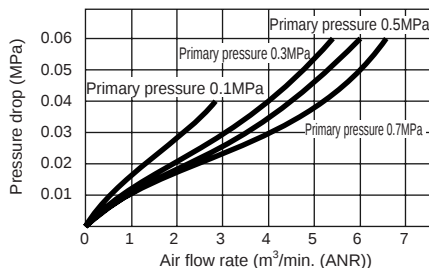
● 3002E-4C/6C

Rc1/2, 3/4



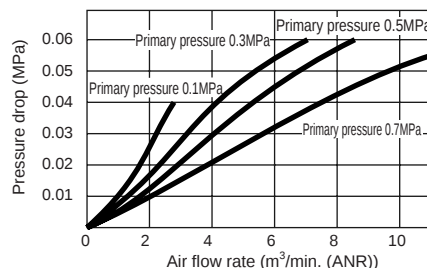
● 3003E-6C

Rc3/4



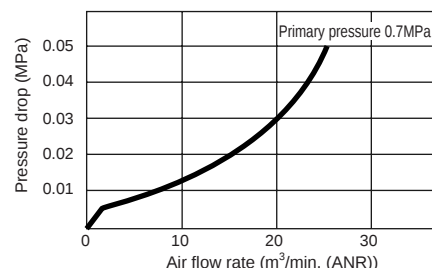
● 3003E-8C

Rc1



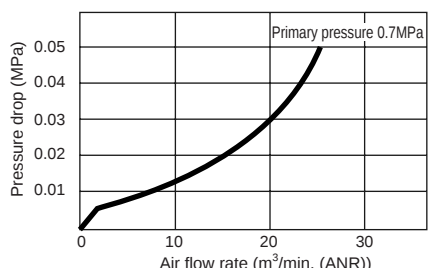
● 3004E-10C

Rc1 1/4



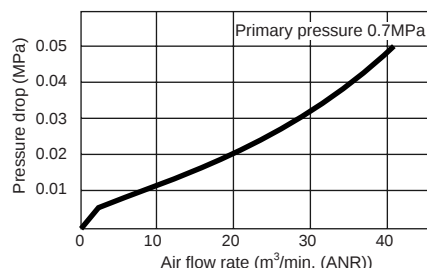
● 3004E-12C

Rc1 1/2



● 3005E-16C

Rc2



How to order

A3019 — **1C** — **ZB**

A Model no.

B Port size
Note 1

C Option
Note 2
Note 3
Note 4
Note 5

<Example of model number>

A3019-1C-ZB

Model: Lubricator econo-mist type

A Model No.: Miniature type

B Port size: Rc1/8

C Option: Nylon bowl,
wall bracket attached

⚠ Note on model no. selection

Note 1: If NPT thread is required, do not indicate nominal size C. (E.g.) A3019-1

Note 2: Quart bowl for 2 ℓ to 20 ℓ is a custom order. This can not be combined with bracket.

Note 3: Refer to page 608 and 609 for attached "B" bracket, Note 4: Consult with CKD when using the air motor with a uniform flow and little fluctuation in differential pressure.

Note 5: The side dome is polycarbonate even for nylon or metal bowls. Consult with CKD if a different material is required.

Note 6: Refer to page 607 for specifications of A3019 copper and PTFE free.

A Model no.

Miniature	Compact	Compact	Standard	Large	Large bore size	Large bore size
A3019	3000E	3000E - J	3002E	3003E	3004E	3005E

Symbol Descriptions

B Port size

Symbol	Descriptions	●	●	●	●	●	●
1C	Rc1/8	●					
2C	Rc1/4	●	●	●	●		
3C	Rc3/8		●	●	●		
4C	Rc1/2			●	●		
6C	Rc3/4				●		
8C	Rc1				●		
10C	Rc1 1/4					●	
12C	Rc1 1/2					●	
16C	Rc2						●

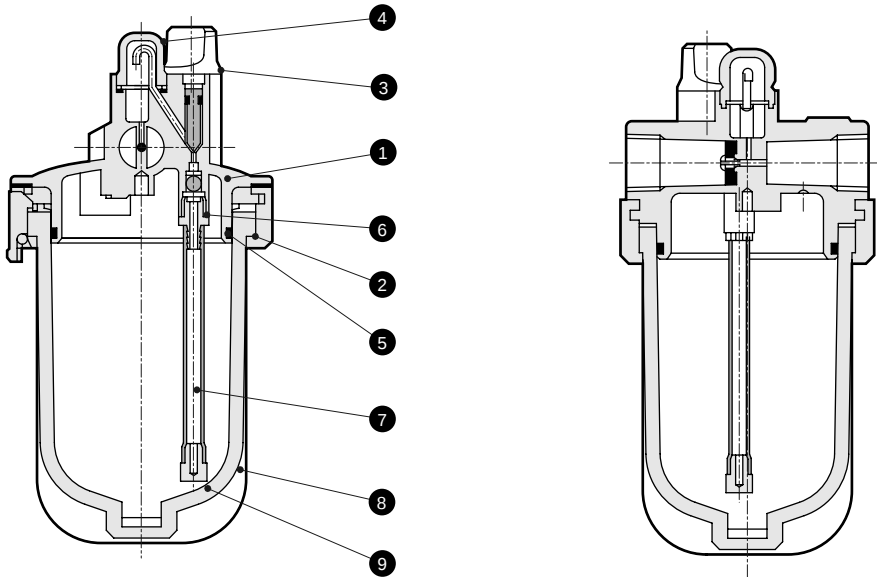
C Option

Drainage	Blank	Blank bowl	●	●	●	●	●	●
	C	Manual cock (M/MG: petcock)	Tire valve	●	●	●	●	●
Bowl	J	Jumbo bowl			Provided			
Bowl material	Blank	Polycarbonate	●	●	●	●	●	●
	Z	Nylon bowl	●	●	●	●	●	●
	M	Metal bowl	●	●	●	●	●	●
	MG	Metal bowl with gauge		●	●	●	●	●
	MG2	Metal bowl for 2 ℓ			●	●	●	●
Attachment	MG8	Metal bowl for 8 ℓ			●	●	●	●
	MG20	Metal bowl for 20 ℓ			●	●	●	●
	Blank	Not attached	●	●	●	●	●	●
	B	Wall bracket	●	●	●	●		

Refrigerating type dryer
Desiccant type dryer
High polymer membrane 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 conf. 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
Lubricator / econo-mist type
F.R.L. unit

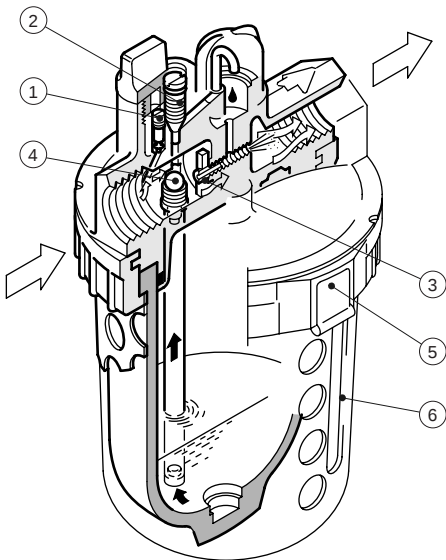
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High polymer membrane dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
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Precise regulator
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Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)
Ending

Internal structure and parts list



No.	Part name	Material					
		A3019	3000E	3002E	3003E	3004E	3005E
1	Body	Zinc alloy die-casting					
2	Clamp ring	-	Zinc alloy die-casting				
3	Filling plug	-	Polyacetal resin			Brass	
4	Sight dome	Transparent nylon					
5	O ring	Special nitrile rubber					
6	Adaptor	-	Brass				
7	Siphon tube assembly	Polyamide resin, polypropylene					
8	Bowl guard	-	Steel				
9	Bowl	Polycarbonate resin					

Functional explanation

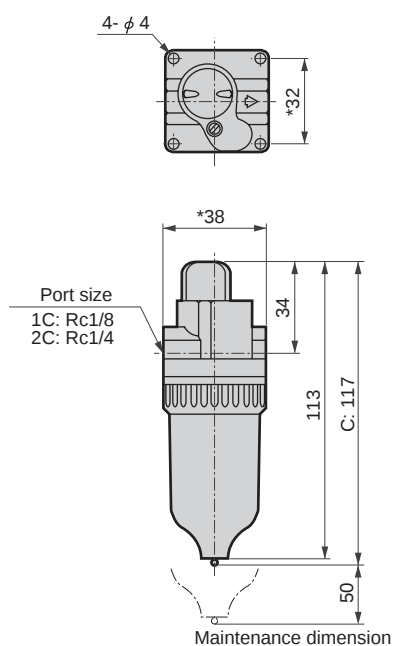


- (1) Pressure valve: Compressed air is supplied in a bowl. If filling plug is loosened, the pressure valve is closed to allow re-filling lubricant without stopping the pneumatic circuit.
- * Caution: Loosen the filling plug at first, and remove the plug after the pressure in the bowl is released. The refill the lubricant.
- (2) Oil rate adjusting needle: Adjust oil rate supplying to compressed air. Needle with the special shape is used to adjust oil rate accurately. One drop of oil is approx. 0.02cm³.
- (3) Flow guide: Constant proportion of compressed air vs. oil rate is maintained in both large and small flow rate to supply oil fog to pneumatic components.
- (4) Check valve: Lubricant in a bowl flows in drip tube passing though siphon tube. Check valve inside prevents oil from flowing backward.
- (5) Clamp ring: Push-in type clamp ring is used to achieve easy bowl washing and lubrication from bowl.
- (6) Bowl guard: Lubricant volume can be checked through the oval hole. This achieved easy maintenance. If the bowl could be broken, chips of bowl are prevented from flying over.

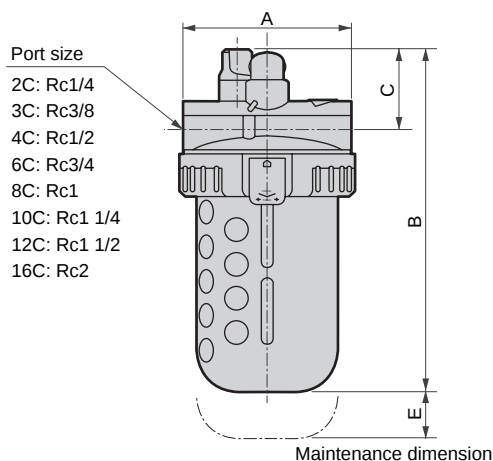
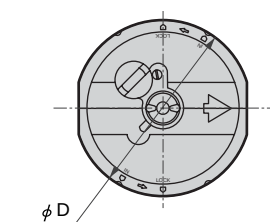
Dimensions



● A3019



- 3000E
- 3002E
- 3003E
- 3004E
- 3005E



Model no.		3000E	3000E-J	3002E (6C)	3003E	3004E	3005E
B	A	67	67	92	118	140	140
	Blank	131	185	187 (190)	259	291	314
	C	156	205	218 (217)	289	322	339
	M/MG	147	177	185 (188)	261	294	310
	CM/CMG	160	189.5	198.5 (201.5)	275	308	324.5
C		42.5	42.5	44.5	50	58	67
D		73	73	95	118	114	127
E		50	80	110	200	200	200

Note: Refer to pages 608 to 609 for dimensions of bracket.

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