


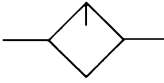
# Modular Type Lubricator *AL Series*

Lubricator AL Series	Model	Port size	Options
 <p data-bbox="140 891 276 925">p. 88 to 93</p>	AL20-D	1/8, 1/4	Bracket
	AL30-D	1/4, 3/8	
	AL40-D	1/4, 3/8, 1/2	
	AL40-06-D	3/4	
	AL50-D	3/4, 1	
	AL60-D	1	

# Lubricator

# AL20-D to AL60-D

Symbol



AL30-D

## How to Order

AL **30** - **03** **B** - **03** - **D**

① ② ③ ④ ⑤

· Option/Semi-standard: Select one each for a to d.  
 · Option/Semi-standard symbol:  
 When more than one specification is required, indicate in alphanumeric order.  
 Example) AL30-03B-3RW-D

	Symbol	Description	①						
			Body size						
			20	30	40	50	60		
②	Pipe thread type	Nil	Rc	●	●	●	●	●	
		N	NPT	●	●	●	●	●	
		F	G	●	●	●	●	●	
+									
③	Port size	01	1/8	●	—	—	—	—	
		02	1/4	●	●	●	—	—	
		03	3/8	—	●	●	—	—	
		04	1/2	—	—	●	—	—	
		06	3/4	—	—	●	●	—	
		10	1	—	—	—	●	●	
+									
④	Option (Mounting)	Nil	Without mounting option	●	●	●	●	●	
		B*1	With bracket	●	●	●	●	●	
+									
⑤	a	Bowl*2	Nil	Polycarbonate bowl	●	●	●	●	●
			2	Metal bowl	●	●	●	●	●
			6	Nylon bowl	●	●	●	●	●
			8	Metal bowl with level gauge	—	●	●	●	●
			C	With bowl guard	●	—*3	—*3	—*3	—*3
			6C	With bowl guard (Nylon bowl)	●	—*4	—*4	—*4	—*4
	+								
	b	Lubricant exhaust port	Nil	Without drain cock	●	●	●	●	●
			3	With drain cock	●	●	●	●	●
			3W*5	Drain cock with barb fitting	—	●	●	●	●
	+								
	c	Flow direction	Nil	Flow direction: Left to right	●	●	●	●	●
R			Flow direction: Right to left	●	●	●	●	●	
+									
d	Unit	Nil	Unit on product label: MPa, °C	●	●	●	●	●	
		Z*6	Unit on product label: psi, °F	○*7	○*7	○*7	○*7	○*7	

\*1 Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of the bracket and 2 mounting screws.

\*2 Refer to chemical data on page 93 for chemical resistance of the bowl.

\*3 A bowl guard is provided as standard equipment (polycarbonate).

\*4 A bowl guard is provided as standard equipment (nylon).

\*5 The combination of metal bowl 2 and 8 is not available.

\*6 For the pipe thread type: NPT

This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

\*7 ○: For the pipe thread type: NPT only

AC

AF + AR + AL

AW + AL

AF + AR

AF + AR

AF + AFM + AR

AW + AFM

Attachments

AF

AFM / AFD

AR

AL

AW

# AL20-D to AL60-D Series

## Standard Specifications

Model	AL20-D	AL30-D	AL40-D	AL40-06-D	AL50-D	AL60-D
Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1	1
Fluid	Air					
Ambient and fluid temperatures	-5 to 60°C (No freezing)					
Proof pressure	1.5 MPa					
Max. operating pressure	1.0 MPa					
Min. dripping flow rate*1	15 L/min (ANR)	Port size 1/4: 30 L/min (ANR) Port size 3/8: 40 L/min (ANR)	Port size 1/4: 30 L/min (ANR) Port size 3/8: 40 L/min (ANR) Port size 1/2: 50 L/min (ANR)	50 L/min (ANR)	190 L/min (ANR)	220 L/min (ANR)
Oil capacity	25 cm <sup>3</sup>	55 cm <sup>3</sup>	135 cm <sup>3</sup>			
Recommended lubricant	Class 1 turbine oil (ISO VG32)					
Bowl material	Polycarbonate					
Bowl guard	Semi-standard (Steel)		Standard (Polycarbonate)			
Weight	0.10 kg	0.18 kg	0.37 kg	0.41 kg	0.92 kg	0.99 kg

\*1 The flow rate is 5 drops or greater/min under the following conditions: Inlet pressure of 0.5 MPa; Class 1 turbine oil (ISO VG32); Temperature at 20°C; Oil adjustment valve fully open. For a circuit that repeatedly turns ON and OFF on the outlet side, make the adjustment so that the average air consumption per minute becomes the minimum dripping flow rate or more.

## Bowl Assembly/Part Nos.

Bowl material	Lubricant exhaust port	Other	Model					
			AL20-D	AL30-D	AL40-D	AL40-06-D	AL50-D	AL60-D
Polycarbonate	Without drain cock	—	C2SL-D	—	—			
		With bowl guard	C2SL-C-D	C3SL-D	C4SL-D			
	With drain cock	—	C2SL-3-D	—	—			
		With bowl guard	C2SL-3C-D	C3SL-3-D	C4SL-3-D			
Drain cock with barb fitting	With bowl guard	—	C3SL-3W-D	C4SL-3W-D				
Nylon	Without drain cock	—	C2SL-6-A	—	—			
		With bowl guard	C2SL-6C-A	C3SL-6-D	C4SL-6-D			
	With drain cock	—	C2SL-36-A	—	—			
		With bowl guard	C2SL-36C-A	C3SL-36-D	C4SL-36-D			
Drain cock with barb fitting	With bowl guard	—	C3SL-36W-D	C4SL-36W-D				
Metal	Without drain cock	—	C2SL-2-A	C3SL-2-A	C4SL-2-A			
		With level gauge	—	C3LL-8-A	C4LL-8-A			
	With drain cock	—	C2SL-23-A	C3SL-23-A	C4SL-23-A			
		With level gauge	—	C3LL-38-A	C4LL-38-A			

\*1 The bowl assembly comes with a bowl seal. Please contact SMC separately for psi and °F unit display specifications.

## Option/Part Nos.

Optional specifications	Model					
	AL20-D	AL30-D	AL40-D	AL40-06-D	AL50-D	AL60-D
Bracket assembly*1	AF24P-070AS	AF34P-070AS	AF44P-070AS	AF49P-070AS	AF54P-070AS	

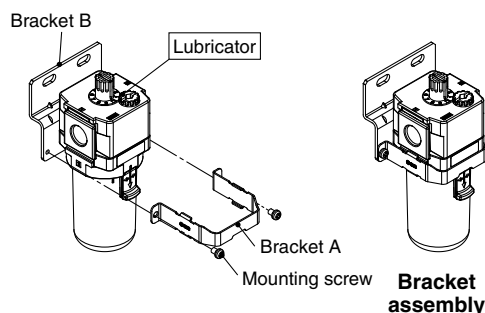
\*1 The assembly consists of a bracket A/B and 2 mounting screws.

## Replacement Parts

Description	Part no.					
	AL20-D	AL30-D	AL40-D	AL40-06-D	AL50-D	AL60-D
Sight dome assembly	AL20P-080AS					
Lubrication plug assembly	AL24P-060AS	AL34P-060AS	AL44P-060AS			
Damper retainer assembly	AL20P-030AS	AL30P-030AS	AL40P-030AS	AL54P-030AS	AL60P-030AS	
Damper assembly	AL20P-040S	AL30P-040S	AL44P-040S	AL60P-040AS		
Bowl seal	C2SFP-260S	C32FP-260S	C42FP-260S			
Bowl assembly*1, *2	Refer to "Bowl Assembly/Part Nos."					

\*1 The bowl assembly comes with a bowl seal.

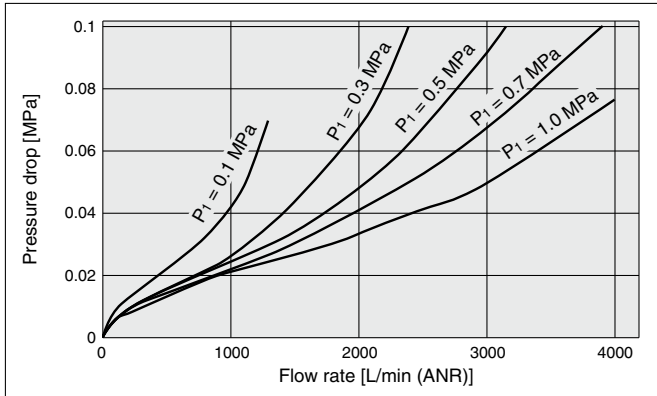
\*2 Please contact SMC separately for psi and °F unit display specifications.



## Flow Rate Characteristics (Representative values)

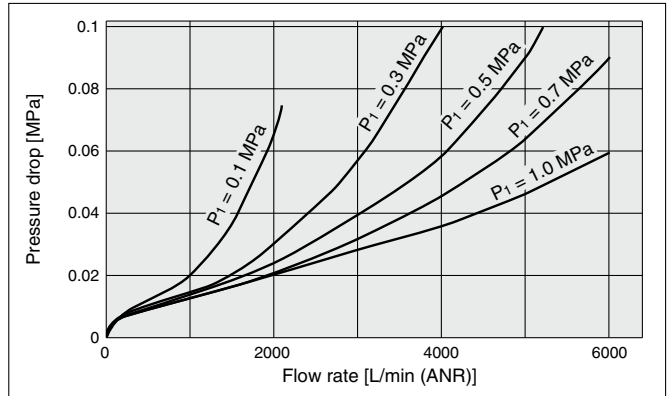
**AL20-D**

Rc1/4



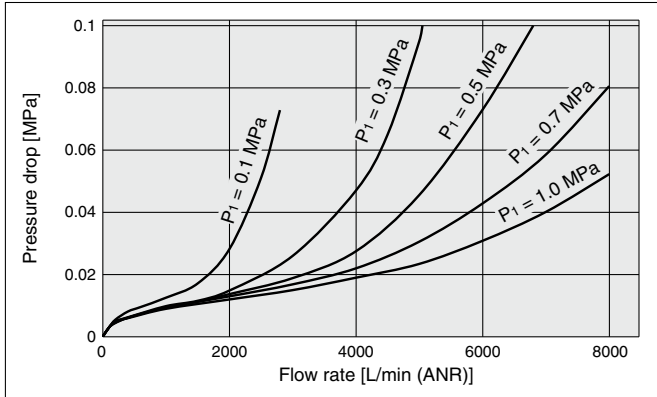
**AL30-D**

Rc3/8



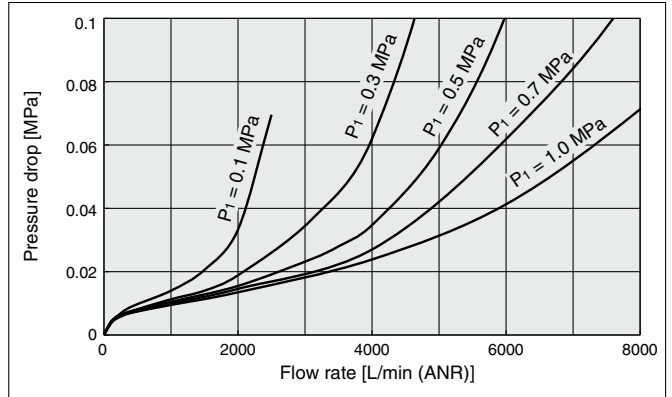
**AL40-D**

Rc1/2



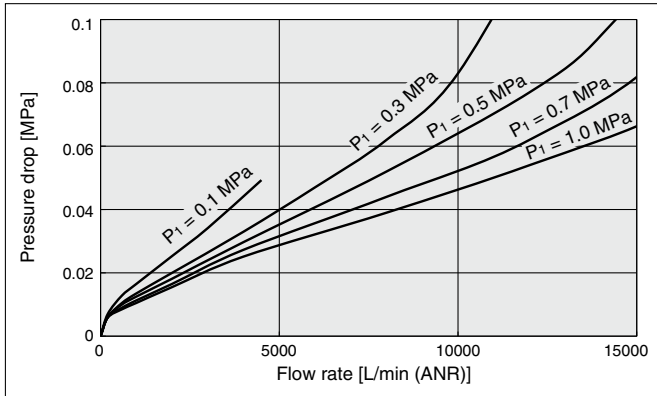
**AL40-06-D**

Rc3/4



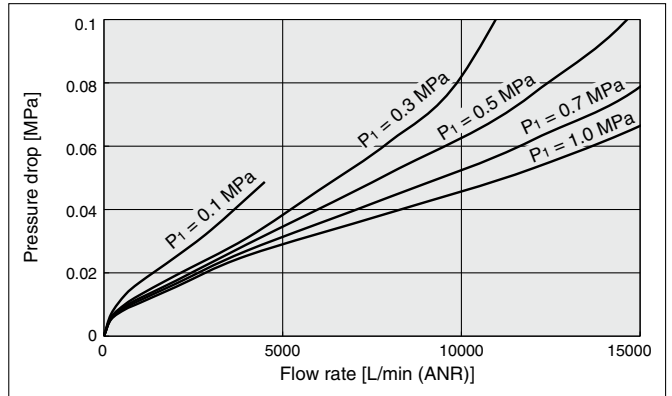
**AL50-D**

Rc1



**AL60-D**

Rc1

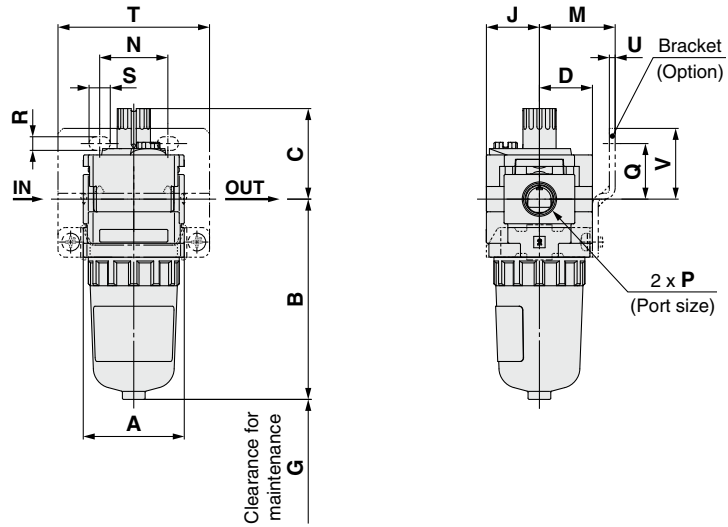


- AC
- AF + AR + AL
- AW + AL
- AF + AR
- AF + AFM + AR
- AW + AFM
- Attachments
- AF
- AFM / AFD
- AR
- AL
- AW

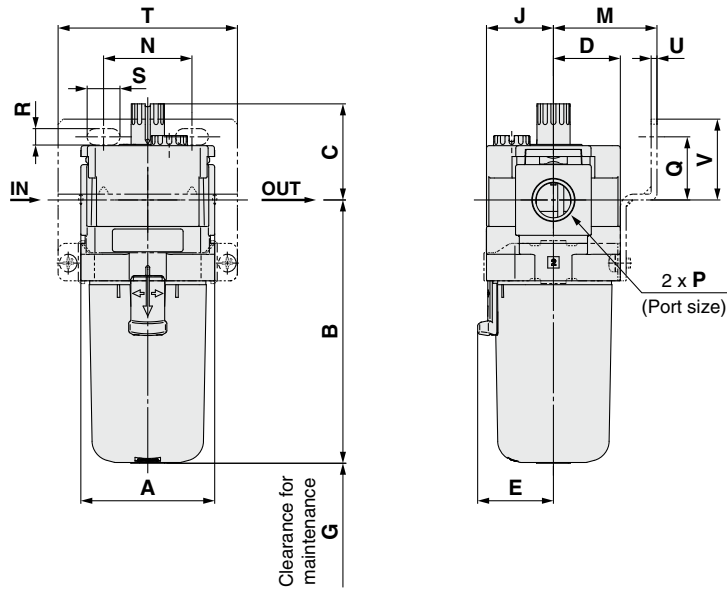
# AL20-D to AL60-D Series

## Dimensions

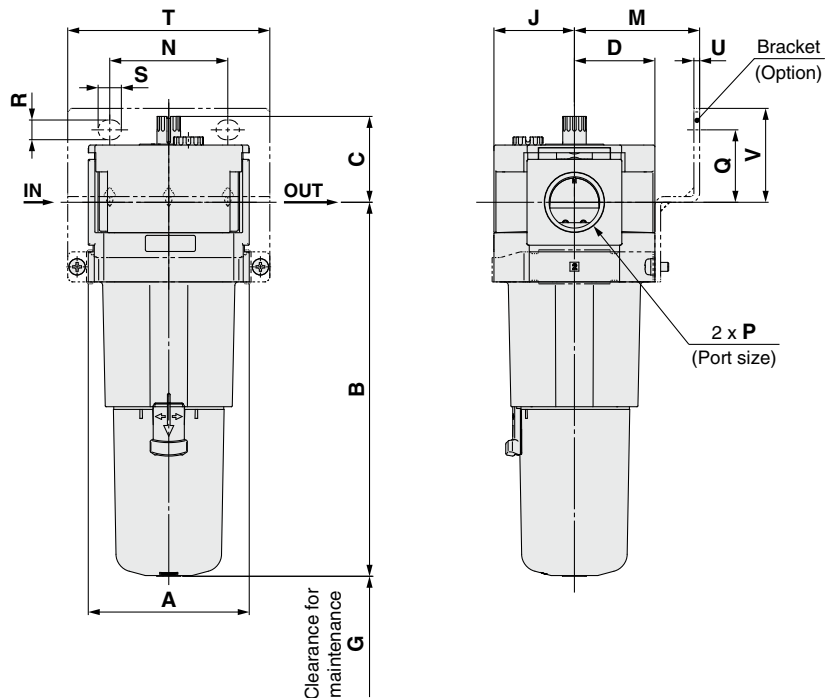
### AL20-D



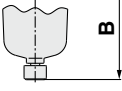

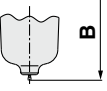
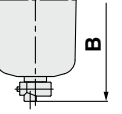
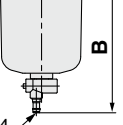

### AL30-D to AL40-06-D



### AL50-D to AL60-D



# Lubricator *AL20-D to AL60-D Series*

Applicable model	Semi-standard					
	PC/PA bowl		Metal bowl		Metal bowl with level gauge	
	With drain cock	Drain cock with barb fitting	Without drain cock	With drain cock	Without drain cock	With drain cock
<b>AL20-D</b>		/			/	/
<b>AL30-D to AL60-D</b>			 Barb fitting applicable tubing: T0604			

Model	Standard specifications								Optional specifications							
									Bracket mount							
	P	A	B	C	D	E	G	J	M	N	Q	R	S	T	U	V
<b>AL20-D</b>	1/8, 1/4	40	79.3	35.9	21	—	60	21	30	27	22	5.4	8.4	60	2.3	28
<b>AL30-D</b>	1/4, 3/8	53	104.3	38.1	26.5	30	80	26.5	41	35	25	6.5	13	71	2.3	32
<b>AL40-D</b>	1/4, 3/8, 1/2	70	136.1	44	35.5	38.4	110	35.5	50	52	30	8.5	12.5	88	2.3	39
<b>AL40-06-D</b>	3/4	75	138.1	44	35.5	38.4	110	35.5	50	52	34	8.5	12.5	88	2.3	43
<b>AL50-D</b>	3/4, 1	90	209.1	48	45	—	110	45	70	66	40.5	11	13	113	3.2	52.5
<b>AL60-D</b>	1	95	223.1	48	45	—	110	45	70	66	40.5	11	13	113	3.2	52.5

Model	Semi-standard specifications					
	PC/PA bowl		Metal bowl		Metal bowl with level gauge	
	With drain cock	With barb fitting	Without drain cock	With drain cock	Without drain cock	With drain cock
	B	B	B	B	B	B
<b>AL20-D</b>	87.6	—	84.5	87.4	—	—
<b>AL30-D</b>	115.4	123.9	104.3	117.8	124.3	137.8
<b>AL40-D</b>	147.1	155.6	136	149.5	156.1	169.5
<b>AL40-06-D</b>	149.1	157.6	138	151.5	158.1	171.5
<b>AL50-D</b>	220.1	228.6	209	222.5	229	242.5
<b>AL60-D</b>	234.1	242.6	223	236.5	243	256.5

- AC
- AF + AR + AL
- AF + AR
- AW + AL
- AF + AR
- AF + AFM + AR
- AW + AFM
- Attachments
- AF
- AFM / AFD
- AR
- AL
- AW