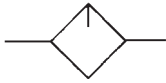


# Lubricator

# AL20-A to AL40-A

JIS Symbol



AL20-A

AL40-A

## How to Order

AL **30** - **03** **B** - **A**

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-R-A

|   |                   | Symbol                   | Description             | 1                        |                                                                  |                          |                          |                          |
|---|-------------------|--------------------------|-------------------------|--------------------------|------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
|   |                   |                          |                         | Body size                |                                                                  |                          |                          |                          |
|   |                   |                          |                         | 20                       | 30                                                               | 40                       |                          |                          |
| 2 | 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                     | —                        | —                                                                | ●                        |                          |                          |
|   |                   |                          | +                       |                          |                                                                  |                          |                          |                          |
| 4 | Option (Mounting) | Nil                      | Without mounting option | ●                        | ●                                                                | ●                        |                          |                          |
|   |                   | B <small>Note 1)</small> | With bracket            | ●                        | ●                                                                | ●                        |                          |                          |
|   |                   |                          | +                       |                          |                                                                  |                          |                          |                          |
| 5 | Semi-standard     | a                        | Bowl                    | Nil                      | Polycarbonate bowl                                               | ●                        | ●                        | ●                        |
|   |                   |                          |                         | C                        | With bowl guard                                                  | ●                        | — <small>Note 2)</small> | — <small>Note 2)</small> |
|   |                   |                          |                         |                          | +                                                                |                          |                          |                          |
|   |                   | b                        | Lubricant exhaust port  | Nil                      | Without drain cock                                               | ●                        | ●                        | ●                        |
|   |                   |                          |                         | 3                        | With drain cock                                                  | ●                        | ●                        | ●                        |
|   |                   |                          |                         | 3W                       | Drain cock with barb fitting (for ø6 x ø4 nylon tube)            | —                        | ●                        | ●                        |
|   |                   |                          |                         |                          | +                                                                |                          |                          |                          |
|   |                   | c                        | Flow direction          | Nil                      | Flow direction: Left to right                                    | ●                        | ●                        | ●                        |
|   |                   |                          |                         | R                        | Flow direction: Right to left                                    | ●                        | ●                        | ●                        |
|   |                   |                          |                         |                          | +                                                                |                          |                          |                          |
|   |                   | d                        | Pressure unit           | Nil                      | Name plate and caution plate for bowl in imperial units: MPa     | ●                        | ●                        | ●                        |
|   |                   |                          |                         | Z <small>Note 3)</small> | Name plate and caution plate for bowl in imperial units: psi, °F | ○ <small>Note 4)</small> | ○ <small>Note 4)</small> | ○ <small>Note 4)</small> |

Note 1) Option B is not assembled and supplied loose at the time of shipment.

Note 2) Standard material (polycarbonate)

Note 3) For thread type: NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.)

Note 4) ○: For thread type: NPT only

## Standard Specifications

| Model                                                        | AL20-A                         | AL30-A                   | AL40-A                        | AL40-06-A |
|--------------------------------------------------------------|--------------------------------|--------------------------|-------------------------------|-----------|
| Port size                                                    | 1/8, 1/4                       | 1/4, 3/8                 | 1/4, 3/8, 1/2                 | 3/4       |
| Fluid                                                        | Air                            |                          |                               |           |
| Proof pressure                                               | 1.5 MPa                        |                          |                               |           |
| Maximum operating pressure                                   | 1.0 MPa                        |                          |                               |           |
| Ambient and fluid temperature                                | – 5 to 60°C (with no freezing) |                          |                               |           |
| Minimum dripping flow rate<br>[L/min (ANR)] <sup>Note)</sup> | 15                             | 1/4: 30<br>3/8: 40       | 1/4: 30<br>3/8: 40<br>1/2: 50 | 50        |
| Oil capacity (cm <sup>3</sup> )                              | 25                             | 55                       | 135                           |           |
| Recommended lubricant                                        | Class 1 turbine oil (ISO VG32) |                          |                               |           |
| Bowl material                                                | Polycarbonate                  |                          |                               |           |
| Bowl guard                                                   | Semi-standard (Steel)          | Standard (Polycarbonate) |                               |           |
| Weight (kg)                                                  | 0.10                           | 0.20                     | 0.38                          | 0.43      |

Note) • 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 opened.

• Use air consumption flow rate for minimum dripping flow rate.

## Option/Part No.

| Optional specifications           | Model       |             |             |             |
|-----------------------------------|-------------|-------------|-------------|-------------|
|                                   | AL20-A      | AL30-A      | AL40-A      | AL40-06-A   |
| Bracket assembly <sup>Note)</sup> | AF22P-050AS | AF32P-050AS | AF42P-050AS | AF42P-070AS |

Note) Assembly of a bracket and 2 mounting screws.

## Semi-standard/Bowl Assembly Part No.

| Semi-standard specifications |                 |                   |                 | Model     |           |           |           |
|------------------------------|-----------------|-------------------|-----------------|-----------|-----------|-----------|-----------|
| Bowl material                | With drain cock | With barb fitting | With bowl guard | AL20-A    | AL30-A    | AL40-A    | AL40-06-A |
| Polycarbonate                | ●               | —                 | —               | C2SL-3-A  | C3SL-3-A  | C4SL-3-A  |           |
|                              | —               | —                 | ●               | C2SL-C-A  | —         | —         |           |
|                              | ●               | —                 | ●               | C2SL-3C-A | —         | —         |           |
|                              | ●               | ●                 | —               | —         | C3SL-3W-A | C4SL-3W-A |           |

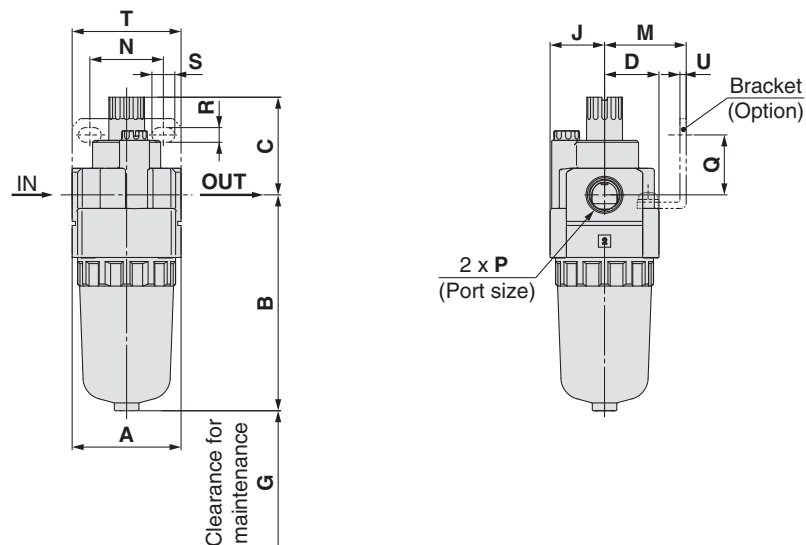
Note) • The bowl assembly includes the bowl O-ring.

• Please consult with SMC separately for psi and °F unit display specifications.

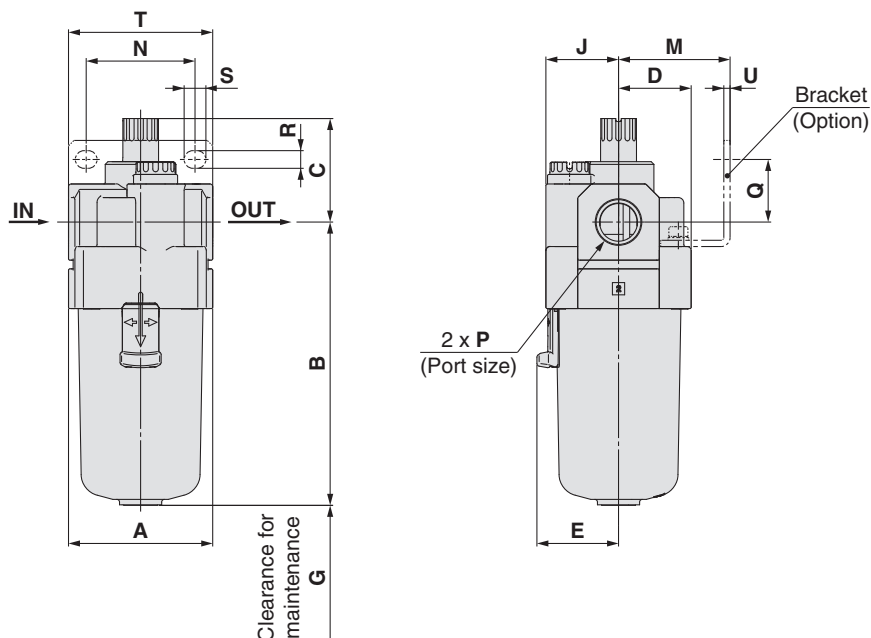
# Series AL20-A to AL40-A

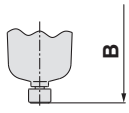
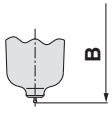
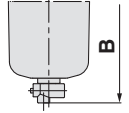
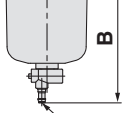
## Dimensions

### AL20-A



### AL30-A, AL40-A



| Applicable model                      | AL20-A                                                                              |                                                                                     | AL30-A to AL40-A                                                                      |                                                                                                                                      |
|---------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Optional/Semi-standard specifications | With drain cock                                                                     | Metal bowl with drain cock                                                          | With drain cock                                                                       | Drain cock with barb fitting                                                                                                         |
| Dimensions                            |  |  |  | <br>Barb fitting<br>Applicable<br>tubing: T0604 |

| Model     | Standard specifications |    |       |      |      |      |     |      | Optional specifications |    |    |     |      |    |     |
|-----------|-------------------------|----|-------|------|------|------|-----|------|-------------------------|----|----|-----|------|----|-----|
|           | P                       | A  | B     | C    | D    | E    | G   | J    | M                       | N  | Q  | R   | S    | T  | U   |
| AL20-A    | 1/8, 1/4                | 40 | 79.3  | 35.9 | 20   | —    | 60  | 20   | 30                      | 27 | 22 | 5.4 | 8.4  | 40 | 2.3 |
| AL30-A    | 1/4, 3/8                | 53 | 104.1 | 38.1 | 26.7 | 30   | 80  | 26.7 | 41                      | 40 | 23 | 6.5 | 8    | 53 | 2.3 |
| AL40-A    | 1/4, 3/8, 1/2           | 70 | 136.1 | 39.8 | 35.5 | 38.4 | 110 | 35.5 | 50                      | 54 | 26 | 8.5 | 10.5 | 70 | 2.3 |
| AL40-06-A | 3/4                     | 75 | 138.1 | 37.8 | 35.5 | 38.4 | 110 | 35.5 | 50                      | 54 | 25 | 8.5 | 10.5 | 70 | 2.3 |

| Model     | Semi-standard specifications |                   |
|-----------|------------------------------|-------------------|
|           | With drain cock              | With barb fitting |
| AL20-A    | B                            | B                 |
| AL20-A    | 87.7                         | —                 |
| AL30-A    | 115.1                        | 123.6             |
| AL40-A    | 147.1                        | 155.6             |
| AL40-06-A | 149.1                        | 157.6             |