

# Air Operated Threaded Type LVA Series



## How to Order Valve (Single Type)

For N.C.

Body class: 2

LVA 2 0 - 01 [ ] - A [ ] - V - Z

Port size,  
Pilot port thread type

| Symbol | Thread type |
|--------|-------------|
| Nil    | Rc          |
| N      | NPT         |
| F      | G           |

For N.O.

Body class: 2

LVA 2 1 - 01 [ ] - A [ ] - V

Pilot port  
thread size 1/8

| Symbol | Body class | Orifice dia. |
|--------|------------|--------------|
| 2      | 2          | ø4           |

Body class

| Symbol | Valve type |
|--------|------------|
| 0      | N.C.       |
| 1      | N.O.       |

Valve type

Specifications

| Symbol | Specification        |
|--------|----------------------|
| Nil    | None                 |
| V      | Vacuum specification |

\*: Applicable to only material symbols A, B, C, F and N. Vacuum specification is not available for LVA1□.

Body class:  
1, 3, 4, 5, 6

LVA 3 0 - 02 [ ] - A [ ] - V

Option

| Symbol | Option                             |
|--------|------------------------------------|
| Nil    | None                               |
| 1      | With flow rate adjustment          |
| 2      | With bypass                        |
| 3      | With flow rate adjustment & bypass |
| 4      | With indicator                     |

\*: Refer to Variations for option combinations. Options cannot be combined.

Body class

| Symbol | Body class | Orifice dia. |
|--------|------------|--------------|
| 1      | 1          | ø2           |
| 3      | 3          | ø8           |
| 4      | 4          | ø12          |
| 5      | 5          | ø20          |
| 6      | 6          | ø22          |

Valve type

| Symbol | Valve type |
|--------|------------|
| 0      | N.C.       |
| 1      | N.O.       |

\*: Refer to Variations for valve type combinations.

Material

| Symbol | Body            | Actuator section<br>End plate | Diaphragm | Applicable option |   |   |   | Note   |
|--------|-----------------|-------------------------------|-----------|-------------------|---|---|---|--|
|        |                 |                               |           | 1                 | 2 | 3 | 4 |  |
| A      | Stainless steel | PPS                           | PTFE      | ●                 | — | — | ● | —  |
| B      | PPS             | PPS                           | PTFE      | ●                 | — | — | ● | Except LVA60                                       |
| C      | PFA             | PPS                           | PTFE      | ●                 | ● | ● | ● | —  |
| D      | Stainless steel | PPS                           | NBR       | ●                 | — | — | ● | Except LVA20-Z, LVA60                              |
| E      | Stainless steel | PPS                           | EPDM      | ●                 | — | — | ● | Except LVA20-Z, LVA60                              |
| F      | PFA             | PVDF                          | PTFE      | —                 | — | — | — | Hydrofluoric acid compatible (Only LVA40, 50 type) |
| G      | PPS             | PPS                           | NBR       | ●                 | — | — | ● | Except LVA20-Z, LVA60                              |
| H      | PPS             | PPS                           | EPDM      | ●                 | — | — | ● | Except LVA20-Z, LVA60                              |
| N      | PFA             | PPS                           | PTFE      | ●                 | ● | ● | ● | Ammonium hydroxide compatible                      |

| Symbol | Port size | Body class |
|--------|-----------|------------|
| 01     | 1/8       | 1          |
| 02     | 1/4       | 1          |
| 01     | 1/8       | 2          |
| 02     | 1/4       | 2          |
| 03     | 3/8       | 3          |
| 04     | 1/2       | 4          |
| 06     | 1/2       | 5          |
| 10     | 3/4       | 5          |
| 10     | 1         | 6          |

Port size

Thread type

| Symbol | Body class | Port thread type | Pilot port thread type |
|--------|------------|------------------|------------------------|
| Nil    | 1, 2       | Rc               | M5                     |
|        | 3, 4, 5, 6 | Rc               | Rc1/8                  |
| N      | 1, 2       | NPT              | M5                     |
|        | 3, 4, 5, 6 | NPT              | NPT1/8                 |
| F      | 1, 2       | G                | M5                     |
|        | 3, 4, 5, 6 | G                | G1/8                   |

## Variations

| Type                               | Symbol | Model | Orifice diameter    |     |       |     |       |     |       |     |       |     |       |   |
|------------------------------------|--------|-------|---------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|---|
|                                    |        |       | LVA10               |     | LVA20 |     | LVA30 |     | LVA40 |     | LVA50 |     | LVA60 |   |
|                                    |        |       | ø2                  |     | ø4    |     | ø8    |     | ø12   |     | ø20   |     | ø22   |   |
|                                    |        |       | 1/8                 | 1/4 | 1/8   | 1/4 | 1/4   | 3/8 | 3/8   | 1/2 | 1/2   | 3/4 | 1     |   |
|                                    |        |       | Stainless steel 316 | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○ |
|                                    |        |       | PPS                 | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○ |
|                                    |        |       | PFA                 | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○ |
| Basic                              |        | N.C.  | ○                   | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○ |
|                                    |        | N.O.  | —                   | —   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○ |
| With flow rate adjustment          |        | N.C.  | —                   | —   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○ |
| With bypass                        |        | N.C.  | —                   | —   | —     | —   | ○     | —   | ○     | —   | ○     | —   | —     | ○ |
| With flow rate adjustment & bypass |        | N.C.  | —                   | —   | —     | —   | ○     | —   | ○     | —   | ○     | —   | —     | ○ |
| With indicator                     |        | N.C.  | —                   | —   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○   | ○     | ○ |

\*1: Refer to Material for the applicable optional body materials.

SMC validation products have been validated based on ISO 13849-2: 2012 Annex A & B.

