

# 2/3 Port Mechanical Valve

## Series VM200

Large flow capacity.  
A variety of actuator types.



### Specifications

|                               |                                                                 |
|-------------------------------|-----------------------------------------------------------------|
| Fluid                         | Air/Inert gas                                                   |
| Operating pressure            | 0 to 1.0 MPa                                                    |
| Ambient and fluid temperature | -5 to 60°C (No freezing)                                        |
| Effective area                | 19 mm <sup>2</sup>                                              |
| Lubrication                   | Not required (Use turbine oil Class 1 ISO VG32, if lubricated.) |
| Port size                     | 1/4                                                             |
| Weight (Basic)                | 111 g                                                           |

### Model

| No. of ports         |                             | 2 port       | 3 port       | Actuator part no. | Application                             |
|----------------------|-----------------------------|--------------|--------------|-------------------|-----------------------------------------|
| Mechanical operation | Actuator                    |              |              |                   |                                         |
|                      | Basic                       | VM220-02-00  | VM230-02-00  | —                 | —                                       |
|                      | Roller lever                | VM220-02-01  | VM230-02-01  | VM-01A            | Polyacetal roller                       |
|                      |                             | VM220-02-01S | VM230-02-01S | VM-01AS           | Hard steel roller                       |
|                      | One way roller lever        | VM220-02-02  | VM230-02-02  | VM-02A            | Polyacetal roller                       |
|                      |                             | VM220-02-02S | VM230-02-02S | VM-02AS           | Hard steel roller                       |
|                      | Straight plunger            | VM220-02-05  | VM230-02-05  | VM-05A            | —                                       |
|                      | Roller plunger              | VM220-02-06  | VM230-02-06  | VM-06A            | Polyacetal roller                       |
|                      |                             | VM220-02-06S | VM230-02-06S | VM-06AS           | Hard steel roller                       |
|                      | Cross roller plunger        | VM220-02-07  | VM230-02-07  | VM-07A            | Polyacetal roller                       |
|                      |                             | VM220-02-07S | VM230-02-07S | VM-07AS           | Hard steel roller                       |
| Manual operation     | Toggle lever                | VM220-02-08  | VM230-02-08  | VM-08A            | —                                       |
|                      | Push button (Mushroom)      | VM220-02-30R | VM230-02-30R | VM-30AR           | Red                                     |
|                      |                             | VM220-02-30B | VM230-02-30B | VM-30AB           | Black                                   |
|                      |                             | VM220-02-30G | VM230-02-30G | VM-30AG           | Green                                   |
|                      |                             | VM220-02-30Y | VM230-02-30Y | VM-30AY           | Yellow                                  |
|                      | Push button (Extended)      | VM220-02-32R | VM230-02-32R | VM-32AR           | Red                                     |
|                      |                             | VM220-02-32B | VM230-02-32B | VM-32AB           | Black                                   |
|                      |                             | VM220-02-32G | VM230-02-32G | VM-32AG           | Green                                   |
|                      |                             | VM220-02-32Y | VM230-02-32Y | VM-32AY           | Yellow                                  |
|                      | Push button (Flush)         | VM220-02-33  | VM230-02-33  | VM-33A            | With a set of red, black, green, yellow |
|                      | Twist selector (2 position) | VM220-02-34R | VM230-02-34R | VM-34AR           | Red                                     |
|                      |                             | VM220-02-34B | VM230-02-34B | VM-34AB           | Black                                   |
|                      |                             | VM220-02-34G | VM230-02-34G | VM-34AG           | Green                                   |
|                      |                             | VM220-02-34Y | VM230-02-34Y | VM-34AY           | Yellow                                  |
|                      | Key selector (2 position)   | VM220-02-36  | VM230-02-36  | VM-36A            | —                                       |
|                      | Twist selector (3 position) | VM230-02-35R | VM250-02-35R | —                 | Red                                     |
|                      |                             | VM230-02-35B | VM250-02-35B | —                 | Black                                   |
|                      |                             | VM230-02-35G | VM250-02-35G | —                 | Green                                   |
|                      |                             | VM230-02-35Y | VM250-02-35Y | —                 | Yellow                                  |
|                      |                             | (3 port)     | (5 port)     | —                 | —                                       |
|                      | Foot pedal                  | VM220-02-40  | VM230-02-40  | —                 | —                                       |



Note 1) Actuator replacement is available for all types except twist selector (3 position) and foot pedal.

Note 2) For push button (mushroom), push button (extended), push button (flush) and a single unit of fastening ring, refer to pages 5-6-6 to 5-6-7. The other parts are not replaceable.

Note 3) The handle of the selector (2 position and 3 position) cannot be removed or replaced alone.

How to Order

VM2

3

0

02

01

S

Number of ports

|   |        |
|---|--------|
| 2 | 2 port |
| 3 | 3 port |

Port size

|     |         |
|-----|---------|
| 02  | Rc 1/4  |
| N02 | NPT 1/4 |
| F02 | G 1/4   |

Actuator type

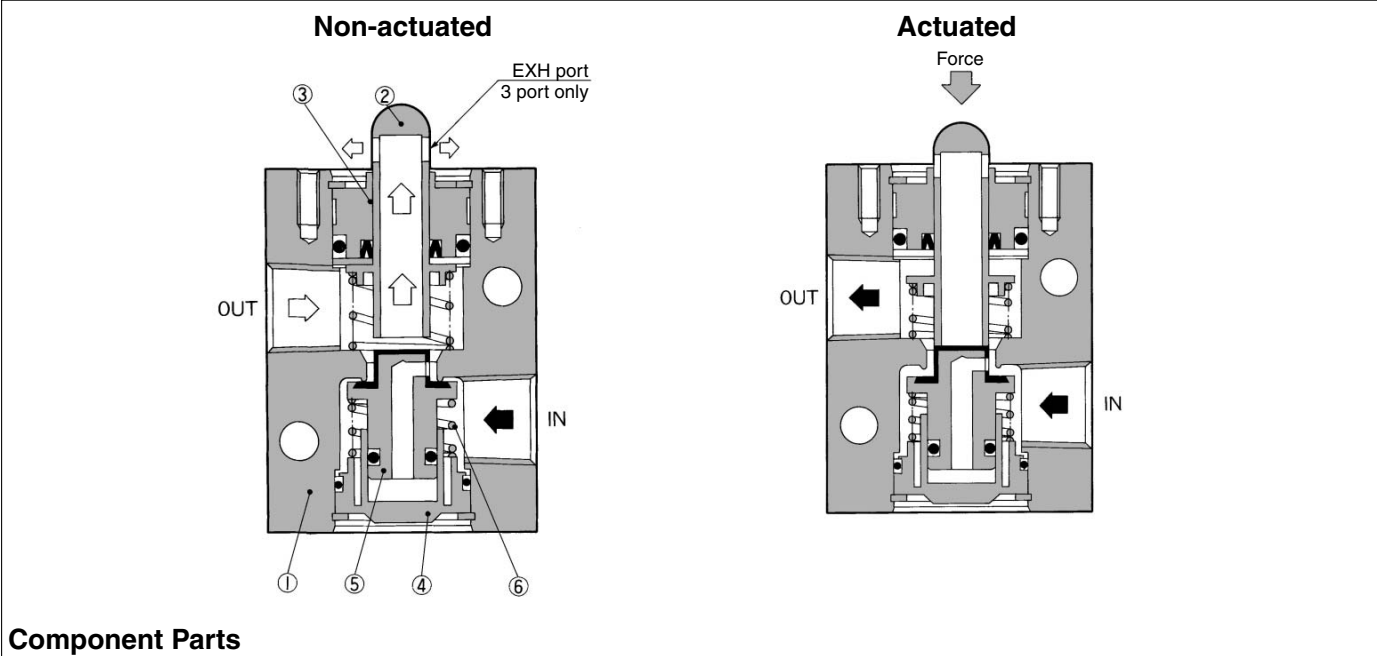
|    |                             |
|----|-----------------------------|
| 00 | Basic                       |
| 01 | Roller lever                |
| 02 | One way roller lever        |
| 05 | Straight plunger            |
| 06 | Roller plunger              |
| 07 | Cross roller plunger        |
| 08 | Toggle lever                |
| 30 | Push button (Mushroom)      |
| 32 | Push button (Extended)      |
| 33 | Push button (Flush)         |
| 34 | Twist selector (2 position) |
| 36 | Key selector (2 position)   |
| 35 | Twist selector (3 position) |
| 40 | Foot pedal                  |

Suffix for actuator

|   |                   |
|---|-------------------|
| S | Hard steel roller |
| R | Red               |
| B | Black             |
| G | Green             |
| Y | Yellow            |

Color of push button selector

Construction



Component Parts

| No. | Description      | Material | Note            |
|-----|------------------|----------|-----------------|
| ①   | Valve            | ADC      | Metallic plated |
| ②   | Plunger          | POM      |                 |
| ③   | Plunger retainer | PBT      |                 |

| No. | Description | Material   | Note |
|-----|-------------|------------|------|
| ④   | Cover       | POM        |      |
| ⑤   | Valve       | Brass, NBR |      |
| ⑥   | Spring      | Steel      |      |