

## 3/2 MECHANICAL VALVE 1/4 PORT SERIES VM200

- ✓ 3/2 normally closed valve (& 5/3 twist selector)
- ✓ Variety of different actuators
- ✓ Cv 1.0 high flow



### TECHNICAL SPECIFICATIONS

|                               |                           |
|-------------------------------|---------------------------|
| Fluid                         | Air                       |
| Operation pressure            | 0 ~ 9.9 Bar               |
| Fluid temperature             | 5 ~ 60°C                  |
| Effective orifice (Cv factor) | 19mm <sup>2</sup> (1.0)   |
| Recommended lubricant         | Turbine oil #1 (ISO VG32) |
| Port size                     | 1/4"                      |

### How To ORDER VM200 VALVE

VM2 0 — 02 —

#### VALVE TYPE

- 3 .....3/2
- 5 .....5/3 (Actuator 35 only)

#### ACTUATOR

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

#### PUSH BUTTON COLOUR

- R .....Red
- G .....Green
- B .....Black

### How To ORDER VM200 ACTUATOR ONLY

..... PART No. APPLICATION

#### MECHANICAL OPERATION

- Basic.....
- Roller lever ..... VM-01A .....Polyacetal roller
- Roller lever ..... VM-01AS .....Hardened Steel Roller
- One way trip..... VM-02A .....Polyacetal roller
- One way trip..... VM-02AS .....Hardened Steel Roller
- Straight plunger ..... VM-05A .....Polyacetal roller
- Roller plunger ..... VM-06A .....Polyacetal roller
- Roller plunger ..... VM-06AS .....Hardened Steel Roller
- Cross roller plunger ..... VM-07A .....Polyacetal roller
- Cross roller plunger ..... VM-07AS .....Hardened Steel Roller

#### MANUAL OPERATION

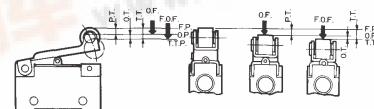
- Toggle ..... VM-08A .....All colours
- Push Button-Mushroom ... VM-30AR ...Red
- Push Button-Mushroom ... VM-30AB ...Black
- Push Button-Mushroom ... VM-30AG ...Green
- Push button-Extended ..... VM-32AR ...Red
- Push button-Extended ..... VM-32AB ...Black
- Push button-Extended ..... VM-32AG ...Green
- Push button-Flush ..... VM-33A .....All colours
- Twist selector ..... VM-34AR ...Red
- Twist selector ..... VM-34AB ...Black
- Twist selector ..... VM-34AG ...Green
- Key selector ..... VM-36A .....All colours
- 5/3 twist selector.....Red
- 5/3 twist selector.....Black
- 5/3 twist selector.....Green
- Foot pedal .....



SAFETY

If these valves are used for guarding or safety interlock systems, installation and application should be as per BS5304: 1988. Careful note should be taken of the operating principles and design of different ranges of mechanical valves when specifying valves for safety related systems.

### KEY TO DIMENSIONAL TABLES

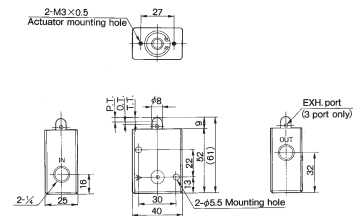


- F.O.F. (Full Operating Force) ...Required force to total travel position
- P.T. (Pre Travel) .....From free position to initial valve opening position
- O.T. (Over Travel) .....From initial valve opening position to total travel position
- T.T. (Total Travel) .....From free position to total travel position

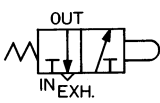
### STOCKED PRODUCTS

FOR A LIST OF STOCKED PRODUCTS,  
PLEASE SEE THE CURRENT SMC PRICE LIST

DIMENSIONS  
VM200 BASIC VALVE



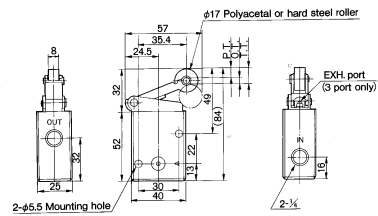
SYMBOLS  
VM200 BASIC VALVE



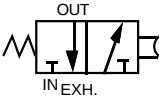
|        |     |
|--------|-----|
| F.O.F* | 52N |
| P.T.   | 3mm |
| O.T.   | 2mm |
| T.T.   | 5mm |

\*5 Bar supply

DIMENSIONS  
VM200 ROLLER LEVER



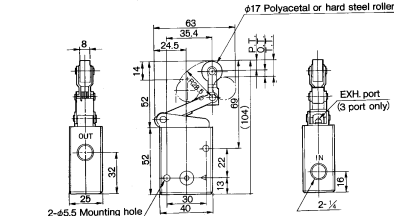
SYMBOLS  
VM200 ROLLER LEVER



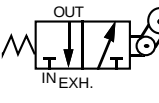
|        |       |
|--------|-------|
| F.O.F* | 24N   |
| P.T.   | 6.5mm |
| O.T.   | 4.5mm |
| T.T.   | 11mm  |

\*5 Bar supply

DIMENSIONS  
VM200 ONE WAY TRIP



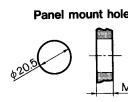
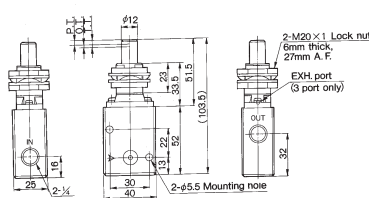
SYMBOLS  
VM200 ONE WAY TRIP



|        |      |
|--------|------|
| F.O.F* | 22N  |
| P.T.   | 7mm  |
| O.T.   | 5mm  |
| T.T.   | 12mm |

\*5 Bar supply

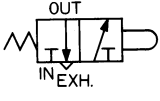
DIMENSIONS  
VM200 STRAIGHT PLUNGER



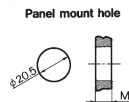
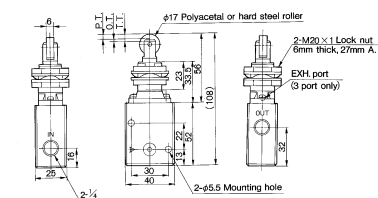
|        |       |
|--------|-------|
| F.O.F* | 56N   |
| P.T.   | 3.5mm |
| O.T.   | 2mm   |
| T.T.   | 5.5mm |

\*5 Bar supply

SYMBOLS  
VM200 STRAIGHT PLUNGER



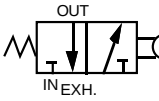
DIMENSIONS  
VM200 ROLLER PLUNGER



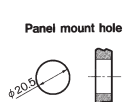
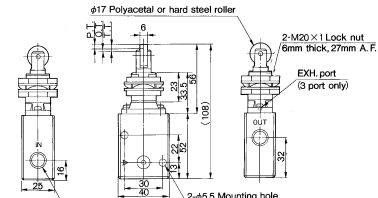
|        |       |
|--------|-------|
| F.O.F* | 56N   |
| P.T.   | 3.5mm |
| O.T.   | 2mm   |
| T.T.   | 5.5mm |

\*5 Bar supply

SYMBOLS  
VM200 ROLLER PLUNGER



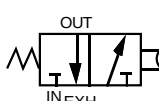
DIMENSIONS  
VM200 CROSS ROLLER PLUNGER



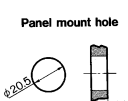
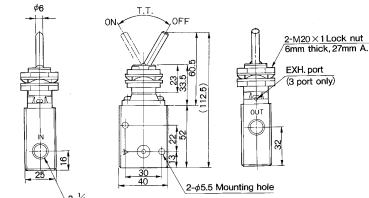
|        |       |
|--------|-------|
| F.O.F* | 56N   |
| P.T.   | 3.5mm |
| O.T.   | 2mm   |
| T.T.   | 5.5mm |

\*5 Bar supply

SYMBOLS  
VM200 CROSS ROLLER PLUNGER



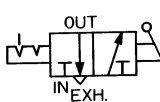
DIMENSIONS  
VM200 TOGGLE LEVER



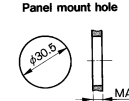
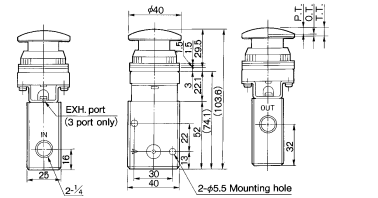
|        |     |
|--------|-----|
| F.O.F* | 52N |
| T.T.   | 5mm |

\*5 Bar supply

SYMBOLS  
VM200 TOGGLE LEVER



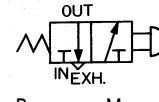
DIMENSIONS  
VM200 PUSH BUTTON-MUSHROOM



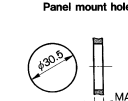
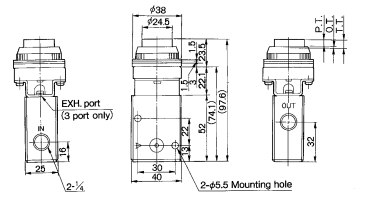
|        |       |
|--------|-------|
| F.O.F* | 52N   |
| P.T.   | 4.9mm |
| O.T.   | 1.6mm |
| T.T.   | 6.5mm |

\*5 Bar supply

SYMBOLS  
VM200 PUSH BUTTON-MUSHROOM



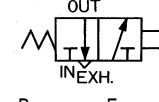
DIMENSIONS  
VM200 PUSH BUTTON-EXTENDED



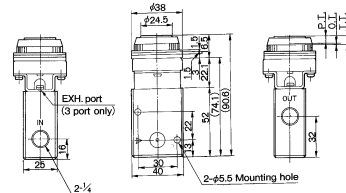
|        |       |
|--------|-------|
| F.O.F* | 52N   |
| P.T.   | 4.9mm |
| O.T.   | 1.6mm |
| T.T.   | 6.5mm |

\*5 Bar supply

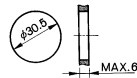
SYMBOLS  
VM200 PUSH BUTTON-EXTENDED



## DIMENSIONS VM200 PUSH BUTTON-FLUSH



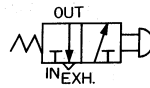
Panel mount hole



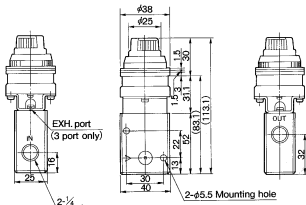
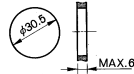
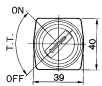
|        |       |
|--------|-------|
| F.O.F* | 52N   |
| P.T.   | 4.9mm |
| O.T.   | 1.6mm |
| T.T.   | 6.5mm |

\*5 Bar supply

## SYMBOLS VM200 PUSH BUTTON-FLUSH



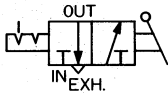
## DIMENSIONS VM200 TWIST SELECTOR - 2 POSITION



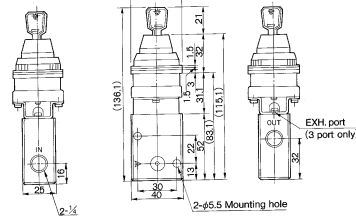
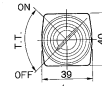
|        |     |
|--------|-----|
| F.O.F* | 32N |
| T.T.   | 90° |

\*5 Bar supply

## SYMBOLS VM200 TWIST SELECTOR - 2 POSITION



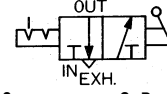
## DIMENSIONS VM200 KEY SELECTOR - 2 POSITION



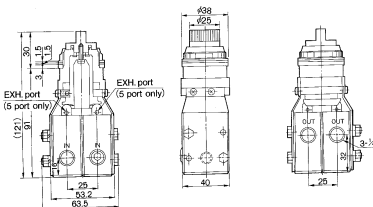
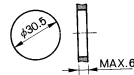
|        |     |
|--------|-----|
| F.O.F* | 32N |
| T.T.   | 90° |

\*5 Bar supply

## SYMBOLS VM200 KEY SELECTOR - 2 POSITION



## DIMENSIONS VM200 TWIST SELECTOR - 3 POSITION



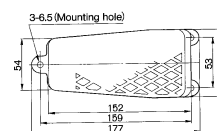
|        |     |
|--------|-----|
| F.O.F* | 40N |
| T.T.   | 45° |

\*5 Bar supply

## SYMBOLS VM200 TWIST SELECTOR - 3 POSITION



## DIMENSIONS VM200 FOOT PEDAL



|        |      |
|--------|------|
| F.O.F* | 65N  |
| T.T.   | 1.2° |

\*5 Bar supply

## SYMBOLS VM200 FOOT PEDAL

