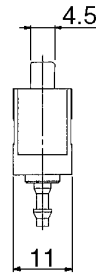
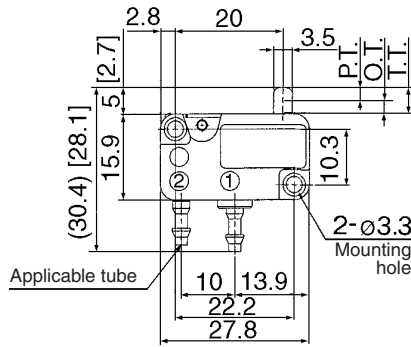


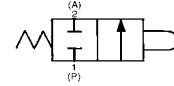
Series VM1000/Bottom Ported

Basic

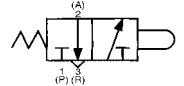
VM1010-4N-00
VM1010-4NU-00
VM1110-4N-00
VM1110-4NU-00



JIS Symbol/2 port



3 port

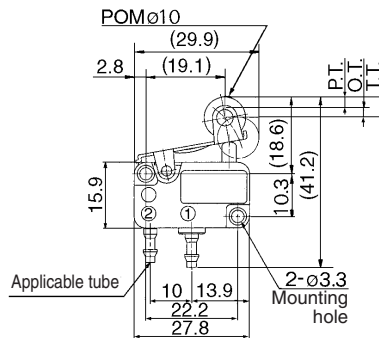


* 0.5 MPa supply

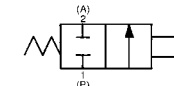
| | | Applicable tubing | |
|---------------|--------|-------------------|-----------------------|
| | | T0425 | TU0425, T0403, TS0425 |
| Bottom ported | 3 port | VM1010-4N-00 | VM1010-4NU-00 |
| | 2 port | VM1110-4N-00 | VM1110-4NU-00 |
| F.O.F. * | | 6 N | |
| P.T. | | 2.5 mm | |
| O.T. | | 2.3 mm [0.5 mm] | |
| T.T. | | 4.8 mm [2.5 mm] | |

Roller lever

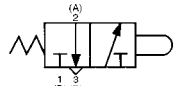
VM1010-4N-01
VM1010-4NU-01
VM1110-4N-01
VM1110-4NU-01



JIS Symbol/2 port



3 port

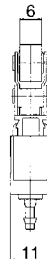
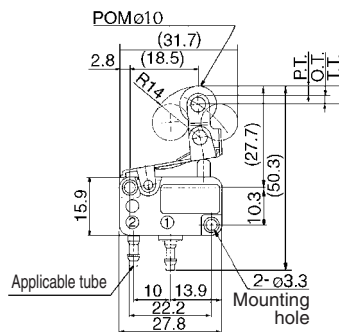


* 0.5 MPa supply

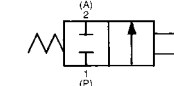
| | | Applicable tubing | |
|---------------|--------|-------------------|-----------------------|
| | | T0425 | TU0425, T0403, TS0425 |
| Bottom ported | 3 port | VM1010-4N-01 | VM1010-4NU-01 |
| | 2 port | VM1110-4N-01 | VM1110-4NU-01 |
| F.O.F. * | | 6 N | |
| P.T. | | 2.5 mm | |
| O.T. | | 2.0 mm | |
| T.T. | | 4.5 mm | |

One way roller lever

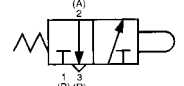
VM1010-4N-02
VM1010-4NU-02
VM1110-4N-02
VM1110-4NU-02



JIS Symbol/2 port



3 port

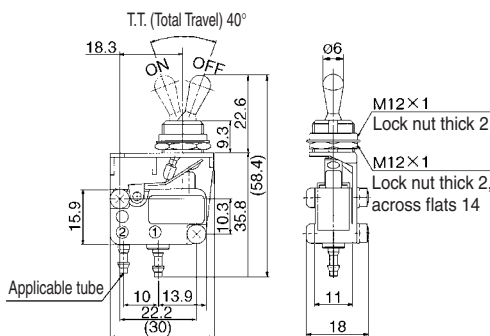


* 0.5 MPa supply

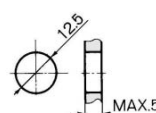
| | | Applicable tubing | |
|---------------|--------|-------------------|-----------------------|
| | | T0425 | TU0425, T0403, TS0425 |
| Bottom ported | 3 port | VM1010-4N-02 | VM1010-4NU-02 |
| | 2 port | VM1110-4N-02 | VM1110-4NU-02 |
| F.O.F. * | | 6 N | |
| P.T. | | 2.5 mm | |
| O.T. | | 2.0 mm | |
| T.T. | | 4.5 mm | |

Toggle lever

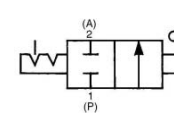
VM1010-4N-08
VM1010-4NU-08
VM1110-4N-08
VM1110-4NU-08



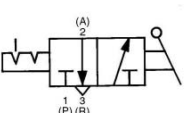
Panel mounting hole



JIS Symbol/2 port



3 port

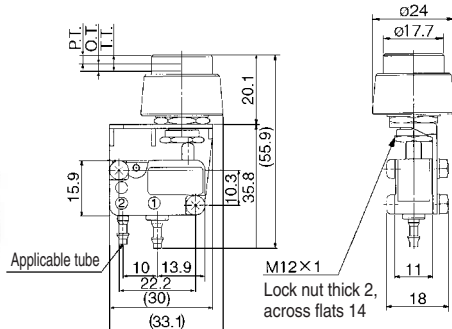


* 0.5 MPa supply

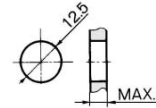
| | | Applicable tubing | |
|---------------|--------|-------------------|-----------------------|
| | | T0425 | TU0425, T0403, TS0425 |
| Bottom ported | 3 port | VM1010-4N-08 | VM1010-4NU-08 |
| | 2 port | VM1110-4N-08 | VM1110-4NU-08 |
| F.O.F. * | | 4 N | |
| T.T. | | 40° | |

Push button

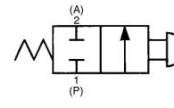
VM1010-4N-32
VM1010-4NU-32
VM1110-4N-32
VM1110-4NU-32



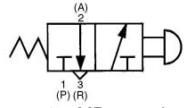
Panel mounting hole



JIS Symbol/2 port



3 port



* 0.5 MPa supply

| | | Applicable tubing | |
|---------------|--------|-------------------|-----------------------|
| | | T0425 | TU0425, T0403, TS0425 |
| Bottom ported | 3 port | VM1010-4N-32 | VM1010-4NU-32 |
| | 2 port | VM1110-4N-32 | VM1110-4NU-32 |
| F.O.F. * | | 6 N | |
| P.T. | | 2.5 mm | |
| O.T. | | 2.0 mm | |
| T.T. | | 4.5 mm | |

2/3 Port Mechanical Valve

Series VM100

Compact size.
Piping options:
Side piping, Bottom piping
A variety of actuator types.



Specifications

| Piping | Side ported | Bottom ported |
|-------------------------------|---|---------------|
| Fluid | Air/Inert gas | |
| Operating pressure | -100 kPa to 1.0 MPa | |
| Ambient and fluid temperature | -5 to 60°C (No freezing) | |
| Effective area | 2.5 mm ² | |
| Lubrication | Not required (Use turbine oil Class 1 ISO VG32, if lubricated.) | |
| Port size | 1/8 | M5 x 0.8 |
| Weight (Basic) | 95 g | 110 g |

Model

| | Side ported | | Bottom ported | | Actuator part no. | Application | |
|----------------------|-----------------------------|--------------|---------------|--------------|-------------------|-------------------|---|
| | 2 port | 3 port | 2 port | 3 port | | | |
| Mechanical operation | Basic | VM120-01-00 | VM130-01-00 | VM122-M5-00 | VM132-M5-00 | — | |
| | | VM121-01-00 | VM131-01-00 | VM123-M5-00 | VM133-M5-00 | — | |
| | Roller lever | VM121-01-01 | VM131-01-01 | VM123-M5-01 | VM133-M5-01 | — | Polyacetal roller |
| | | VM121-01-01S | VM131-01-01S | VM123-M5-01S | VM133-M5-01S | — | Hard steel roller |
| | One way roller lever | VM121-01-02 | VM131-01-02 | VM123-M5-02 | VM133-M5-02 | — | Polyacetal roller |
| | | VM121-01-02S | VM131-01-02S | VM123-M5-02S | VM133-M5-02S | — | Hard steel roller |
| | Straight plunger | VM120-01-05 | VM130-01-05 | VM122-M5-05 | VM132-M5-05 | VM-05B | — |
| | Roller plunger | VM120-01-06 | VM130-01-06 | VM122-M5-06 | VM132-M5-06 | VM-06B | Polyacetal roller |
| | | VM120-01-06S | VM130-01-06S | VM122-M5-06S | VM132-M5-06S | VM-06BS | Hard steel roller |
| | Cross roller plunger | VM120-01-07 | VM130-01-07 | VM122-M5-07 | VM132-M5-07 | VM-07B | Polyacetal roller |
| VM120-01-07S | | VM130-01-07S | VM122-M5-07S | VM132-M5-07S | VM-07BS | Hard steel roller | |
| Manual operation | Toggle lever | VM120-01-08 | VM130-01-08 | VM122-M5-08 | VM132-M5-08 | VM-08B | — |
| | Push button (Mushroom) | VM120-01-30R | VM130-01-30R | VM122-M5-30R | VM132-M5-30R | VM-30AR | Red |
| | | VM120-01-30B | VM130-01-30B | VM122-M5-30B | VM132-M5-30B | VM-30AB | Black |
| | | VM120-01-30G | VM130-01-30G | VM122-M5-30G | VM132-M5-30G | VM-30AG | Green |
| | | VM120-01-30Y | VM130-01-30Y | VM122-M5-30Y | VM132-M5-30Y | VM-30AY | Yellow |
| | Push button (Extended) | VM120-01-32R | VM130-01-32R | VM122-M5-32R | VM132-M5-32R | VM-32AR | Red |
| | | VM120-01-32B | VM130-01-32B | VM122-M5-32B | VM132-M5-32B | VM-32AB | Black |
| | | VM120-01-32G | VM130-01-32G | VM122-M5-32G | VM132-M5-32G | VM-32AG | Green |
| | Push button (Flush) | VM120-01-32Y | VM130-01-32Y | VM122-M5-32Y | VM132-M5-32Y | VM-32AY | Yellow |
| | | VM120-01-33 | VM130-01-33 | VM122-M5-33 | VM132-M5-33 | VM-33A | With a set of red, black, green, yellow |
| | Twist selector (2 position) | VM120-01-34R | VM130-01-34R | VM122-M5-34R | VM132-M5-34R | VM-34AR | Red |
| | | VM120-01-34B | VM130-01-34B | VM122-M5-34B | VM132-M5-34B | VM-34AB | Black |
| | | VM120-01-34G | VM130-01-34G | VM122-M5-34G | VM132-M5-34G | VM-34AG | Green |
| | | VM120-01-34Y | VM130-01-34Y | VM122-M5-34Y | VM132-M5-34Y | VM-34AY | Yellow |
| | Key selector (2 position) | VM120-01-36 | VM130-01-36 | VM122-M5-36 | VM132-M5-36 | VM-36A | — |
| | Twist selector (3 position) | VM131-01-35R | VM151-01-35R | VM133-M5-35R | VM153-M5-35R | — | Red |
| | | VM131-01-35B | VM151-01-35B | VM133-M5-35B | VM153-M5-35B | — | Black |
| | | VM131-01-35G | VM151-01-35G | VM133-M5-35G | VM153-M5-35G | — | Green |
| | | VM131-01-35Y | VM151-01-35Y | VM133-M5-35Y | VM153-M5-35Y | — | Yellow |
| (3 port) | | (5 port) | (3 port) | (5 port) | — | — | |



Note 1) Actuator replacement is available for all types except for roller lever, one way roller lever, and 3 position selector.

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

VM1 3 1 01 01 S

Port size

| | |
|-----|--------------------------|
| 01 | Rc 1/8 |
| M5 | M5 x 0.8 (Female thread) |
| N01 | NPT 1/8 |
| F01 | G 1/8 |

Piping direction and the length of push rod

| | 0 | 1 | 2 | 3 |
|---------|-------------|-------|---------------|-------|
| Length | Long | Short | Long | Short |
| Porting | Side ported | | Bottom ported | |

Number of ports

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

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) |

Suffix for actuator

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

Color of push button selector

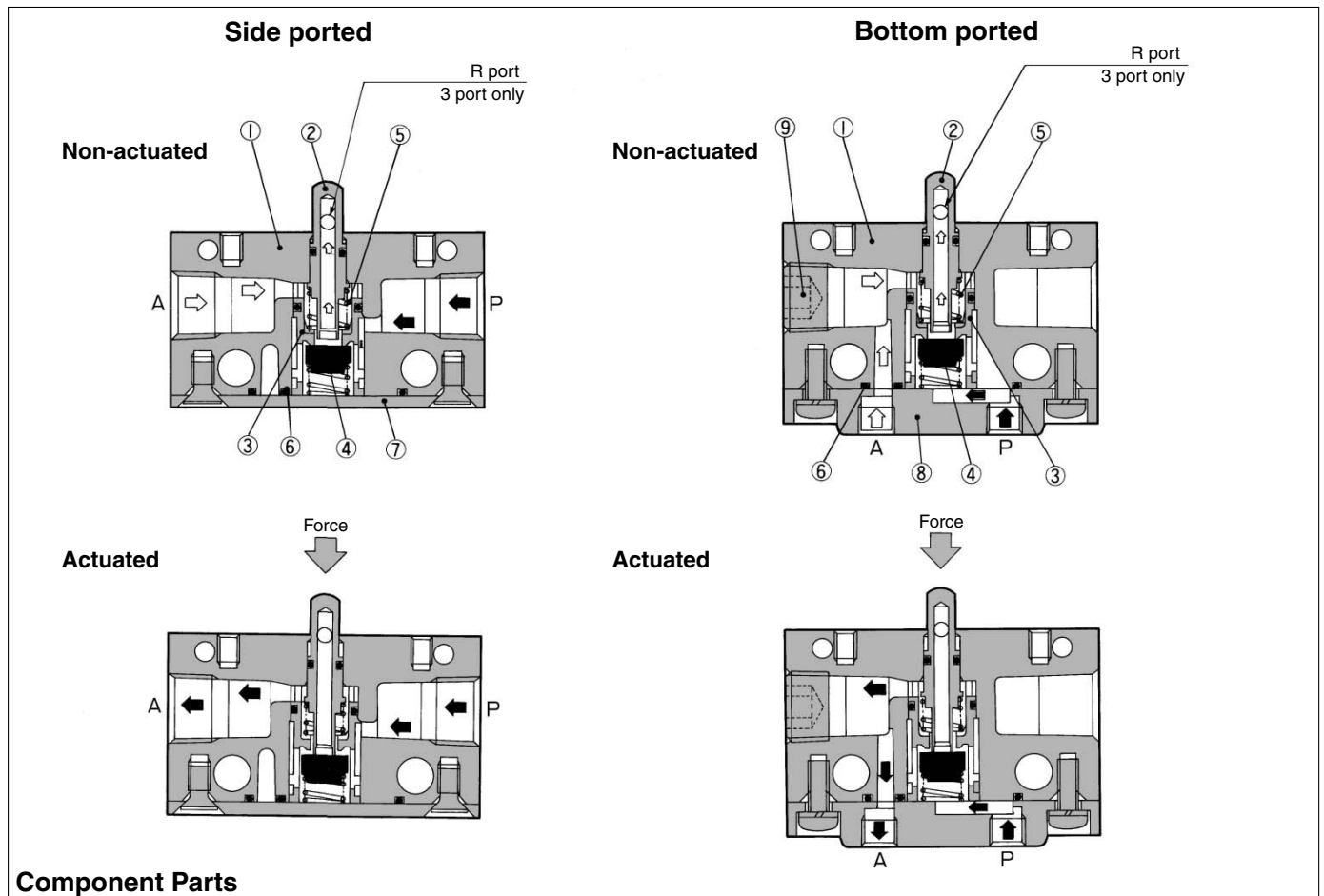
Suffix for indicator light

| | |
|---|--|
| Z | With miniature indicator light (Bottom piping type only) |
|---|--|

| Actuator | Height of rod push | Side ported | | Bottom ported | |
|-----------------------------|--------------------|-------------|-------|---------------|-------|
| | | Long | Short | Long | Short |
| Basic | 00 | ○ | ○ | ○ | ○ |
| Roller lever | 01 | x | ○ | x | ○ |
| One way roller lever | 02 | x | ○ | x | ○ |
| Straight plunger | 05 | ○ | x | ○ | x |
| Roller plunger | 06 | ○ | x | ○ | x |
| Cross roller plunger | 07 | ○ | x | ○ | x |
| Toggle lever | 08 | ○ | x | ○ | x |
| Push button (Mushroom) | 30 | ○ | x | ○ | x |
| Push button (Extended) | 32 | ○ | x | ○ | x |
| Push button (Flush) | 33 | ○ | x | ○ | x |
| Twist selector (2 position) | 34 | ○ | x | ○ | x |
| Key selector (2 position) | 36 | ○ | x | ○ | x |
| Twist selector (3 position) | 35 | x | ○ | x | ○ |

Combination possible: ○, Combination impossible: x

Construction



Component Parts

| No. | Description | Material | Note |
|-----|-------------|-----------------|-----------------|
| ① | Valve | ZDC | Metallic plated |
| ② | Plunger | POM | |
| ③ | Valve sheet | POM | |
| ④ | Valve | NBR | |
| ⑤ | Spring | Stainless steel | |

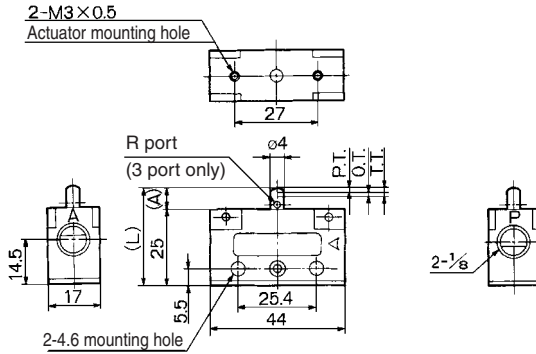
| No. | Description | Material | Note |
|-----|--------------------------|--------------|-----------------|
| ⑥ | Gasket | NBR | |
| ⑦ | Cover | Rolled steel | |
| ⑧ | Sub-plate | ZDC | Metallic plated |
| ⑨ | Hexagon socket head plug | Rolled steel | |

Series VM100

Series VM100/Side Ported

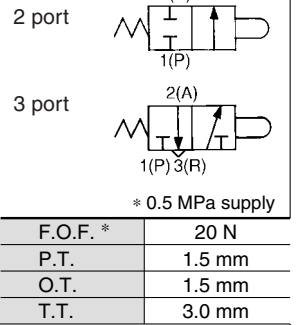
Basic

VM120-01-00
VM130-01-00
VM121-01-00
VM131-01-00



| Model | L | A |
|----------------------------|------|-----|
| VM120-01-00 VM130-01-00 | 32.5 | 7.5 |
| VM121-01-00 VM131-01-00 | 28.5 | 3.5 |

JIS Symbol

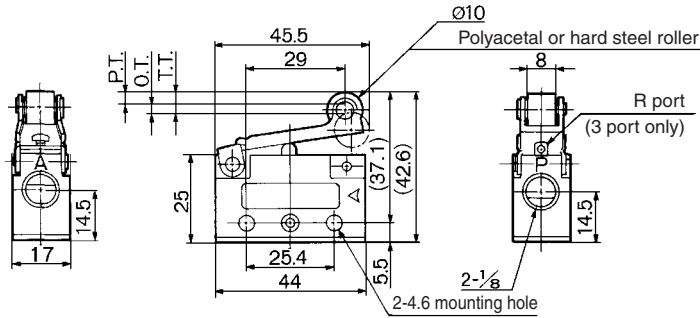


* 0.5 MPa supply

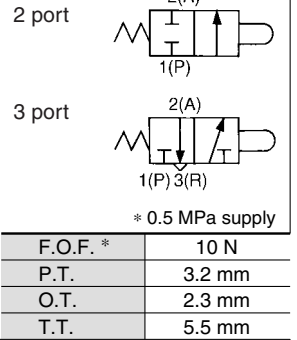
| | |
|----------|--------|
| F.O.F. * | 20 N |
| P.T. | 1.5 mm |
| O.T. | 1.5 mm |
| T.T. | 3.0 mm |

Roller lever

VM121-01-01
VM131-01-01
VM121-01-01S
VM131-01-01S



JIS Symbol

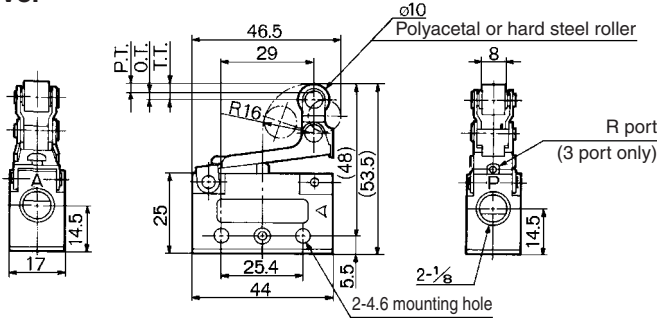


* 0.5 MPa supply

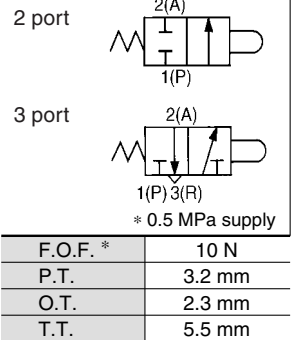
| | |
|----------|--------|
| F.O.F. * | 10 N |
| P.T. | 3.2 mm |
| O.T. | 2.3 mm |
| T.T. | 5.5 mm |

One way roller lever

VM121-01-02
VM131-01-02
VM121-01-02S
VM131-01-02S



JIS Symbol

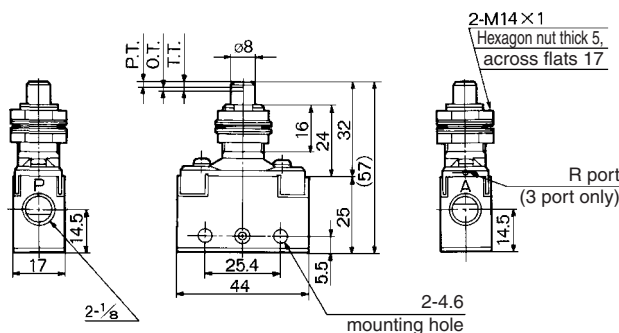


* 0.5 MPa supply

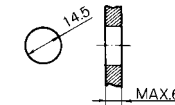
| | |
|----------|--------|
| F.O.F. * | 10 N |
| P.T. | 3.2 mm |
| O.T. | 2.3 mm |
| T.T. | 5.5 mm |

Straight plunger

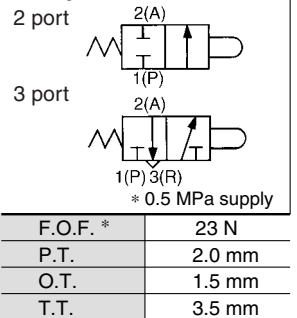
VM120-01-05
VM130-01-05



Panel mounting hole



JIS Symbol

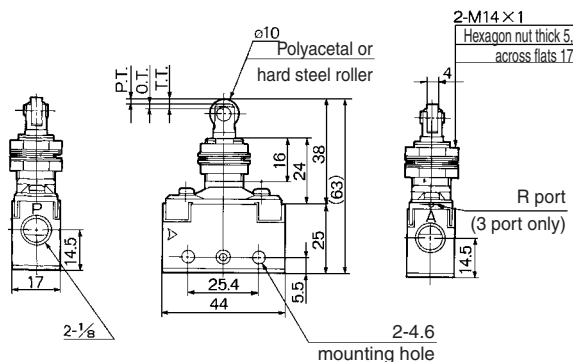


* 0.5 MPa supply

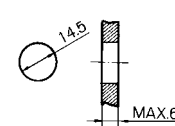
| | |
|----------|--------|
| F.O.F. * | 23 N |
| P.T. | 2.0 mm |
| O.T. | 1.5 mm |
| T.T. | 3.5 mm |

Roller plunger

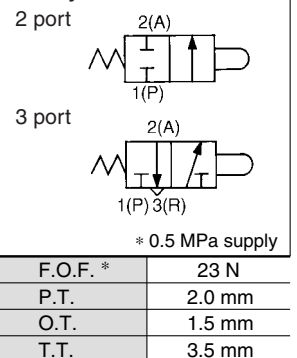
VM120-01-06
VM130-01-06
VM120-01-06S
VM130-01-06S



Panel mounting hole



JIS Symbol



* 0.5 MPa supply

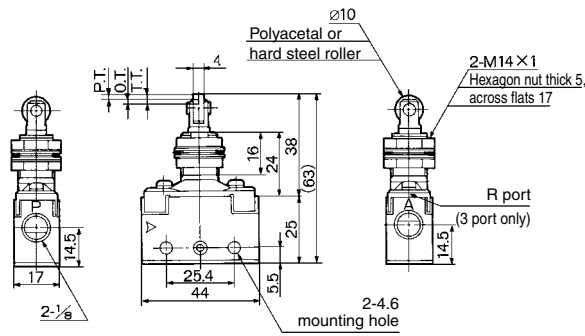
| | |
|----------|--------|
| F.O.F. * | 23 N |
| P.T. | 2.0 mm |
| O.T. | 1.5 mm |
| T.T. | 3.5 mm |

2/3 Port Mechanical Valve Series VM100

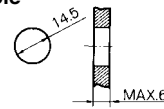
Series VM100/Side Ported

Cross roller plunger

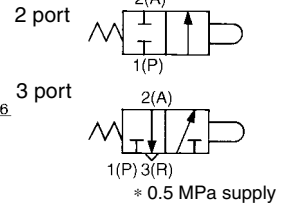
VM120-01-07
VM130-01-07
VM120-01-07S
VM130-01-07S



Panel mounting hole



JIS Symbol



| | |
|----------|--------|
| F.O.F. * | 23 N |
| P.T. | 2 mm |
| O.T. | 1.5 mm |
| T.T. | 3.5 mm |

□A

□A

□A

VM

VR

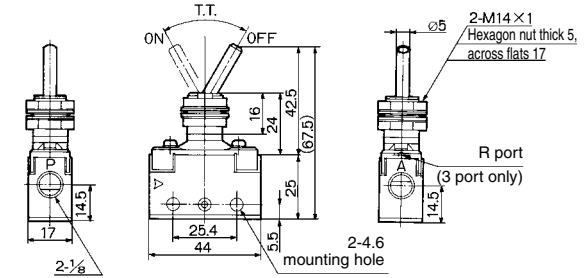
VH

VH

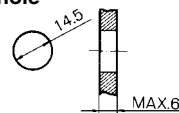
VHS

Toggle lever

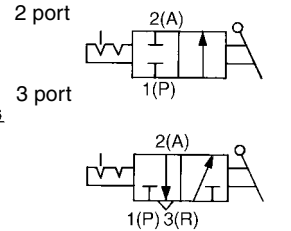
VM120-01-08
VM130-01-08



Panel mounting hole



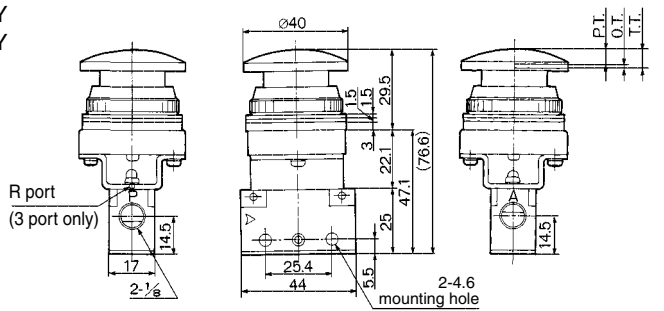
JIS Symbol



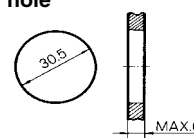
| | |
|----------|------|
| F.O.F. * | 10 N |
| T.T. | 60° |

Push button (Mushroom)

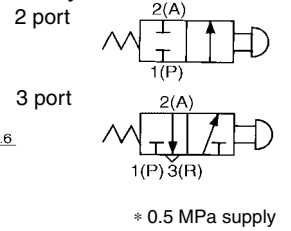
VM120-01-30R/B/G/Y
VM130-01-30R/B/G/Y



Panel mounting hole



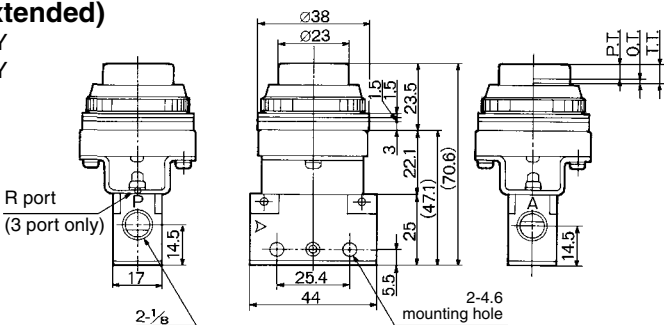
JIS Symbol



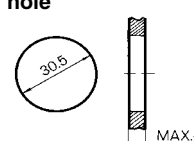
| | |
|----------|--------|
| F.O.F. * | 21 N |
| P.T. | 4.9 mm |
| O.T. | 1.6 mm |
| T.T. | 6.5 mm |

Push button (Extended)

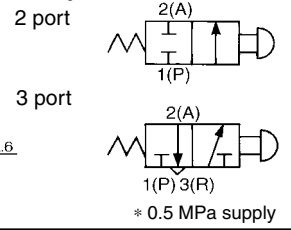
VM120-01-32R/B/G/Y
VM130-01-32R/B/G/Y



Panel mounting hole



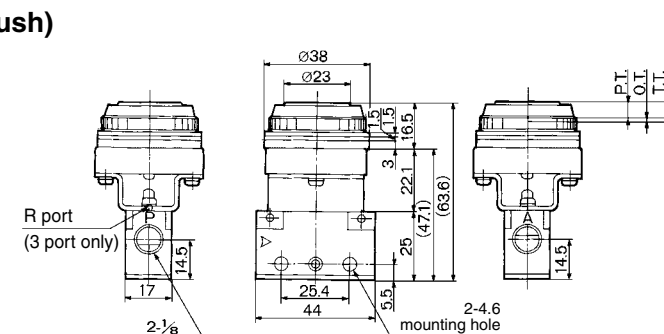
JIS Symbol



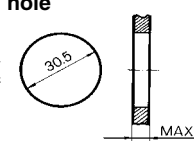
| | |
|----------|--------|
| F.O.F. * | 21 N |
| P.T. | 4.9 mm |
| O.T. | 1.6 mm |
| T.T. | 6.5 mm |

Push button (Flush)

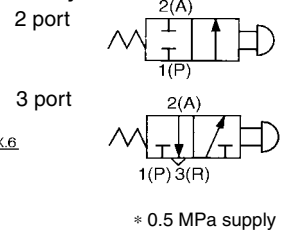
VM120-01-33
VM130-01-33



Panel mounting hole



JIS Symbol



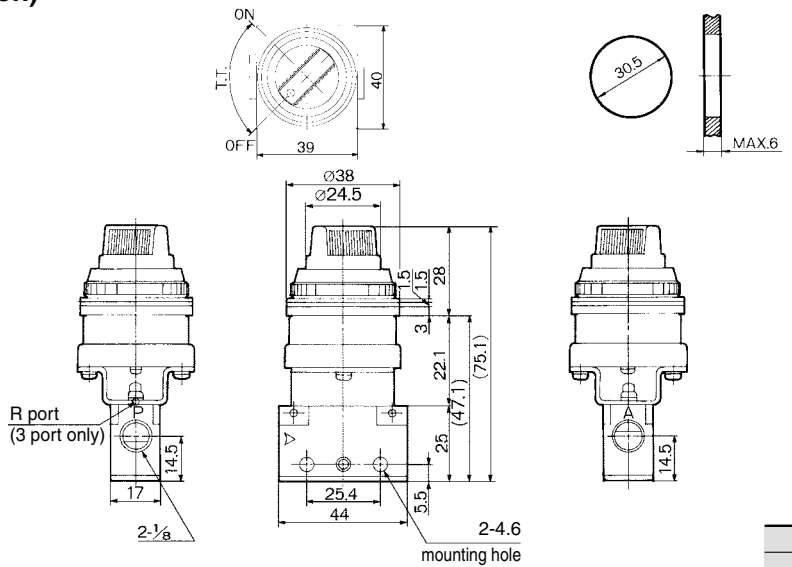
| | |
|----------|--------|
| F.O.F. * | 21 N |
| P.T. | 4.9 mm |
| O.T. | 1.6 mm |
| T.T. | 6.5 mm |

Series VM100

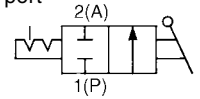
Series VM100/Side Ported

Twist selector (2 position)

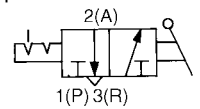
VM120-01-34R/B/G/Y
VM130-01-34R/B/G/Y



JIS Symbol
2 port



3 port

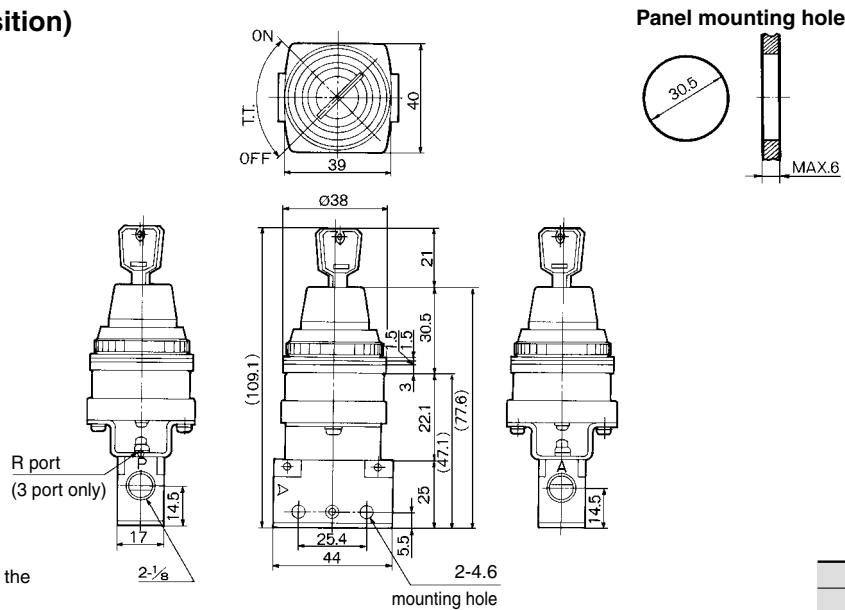


* 0.5 MPa supply

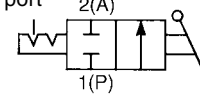
| | |
|---------|------|
| F.O.F.* | 15 N |
| T.T. | 90° |

Key selector (2 position)

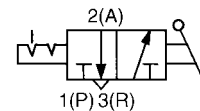
VM120-01-36
VM130-01-36



JIS Symbol
2 port



3 port



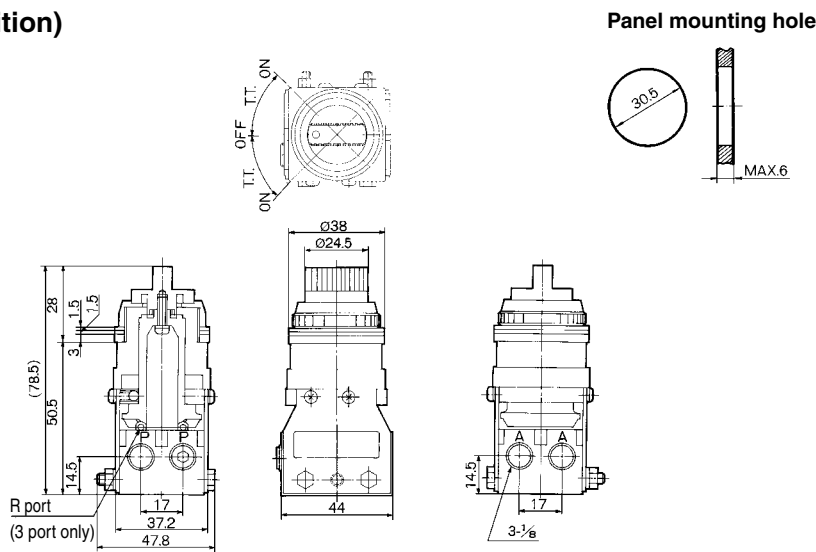
* 0.5 MPa supply

| | |
|---------|------|
| F.O.F.* | 15 N |
| T.T. | 90° |

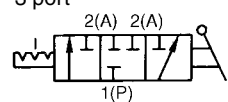
Key can be removed at the "on" and "off" positions.

Twist selector (3 position)

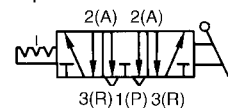
VM131-01-35R/B/G/Y
VM151-01-35R/B/G/Y



JIS Symbol
3 port



5 port



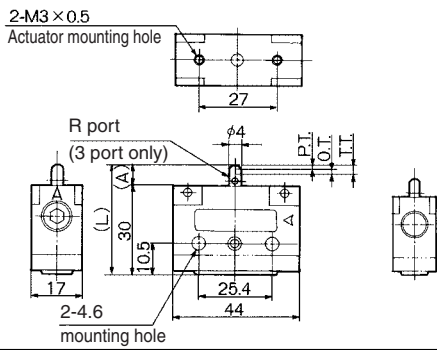
* 0.5 MPa supply

| | |
|---------|------|
| F.O.F.* | 15 N |
| T.T. | 45° |

Series VM100/Bottom Ported

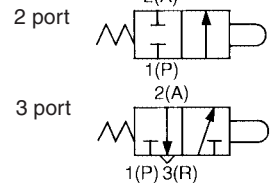
Basic

VM122-M5-00
VM132-M5-00
VM123-M5-00
VM133-M5-00



| Model | L | A |
|----------------------------|------|-----|
| VM122-M5-00 VM132-M5-00 | 37.5 | 7.5 |
| VM123-M5-00 VM133-M5-00 | 33.5 | 3.5 |

JIS Symbol

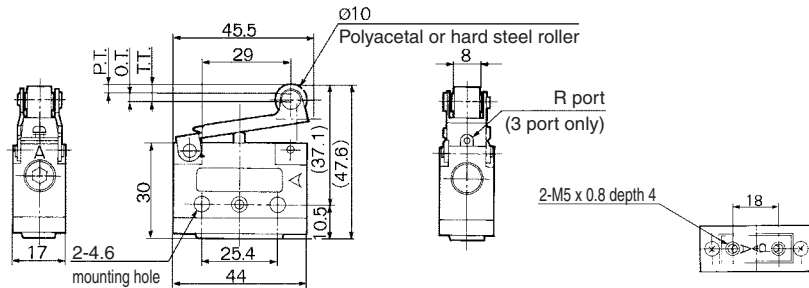


* 0.5 MPa supply

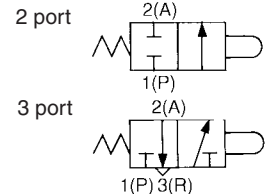
| | |
|---------|--------|
| F.O.F.* | 20 N |
| P.T. | 1.5 mm |
| O.T. | 1.5 mm |
| T.T. | 3.0 mm |

Roller lever

VM123-M5-01
VM133-M5-01
VM123-M5-01S
VM133-M5-01S



JIS Symbol

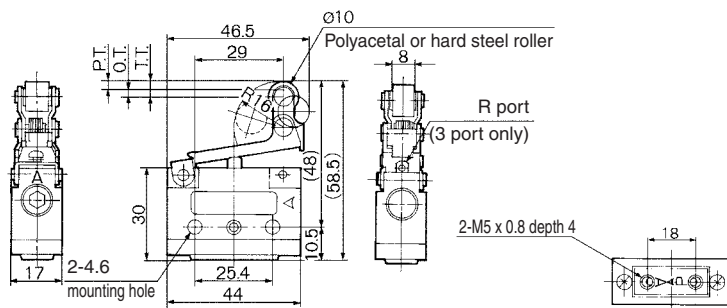


* 0.5 MPa supply

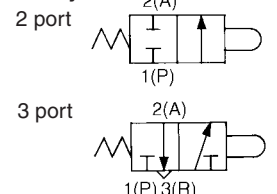
| | |
|---------|--------|
| F.O.F.* | 10 N |
| P.T. | 3.2 mm |
| O.T. | 2.3 mm |
| T.T. | 5.5 mm |

One way roller lever

VM123-M5-02
VM133-M5-02
VM123-M5-02S
VM133-M5-02S



JIS Symbol

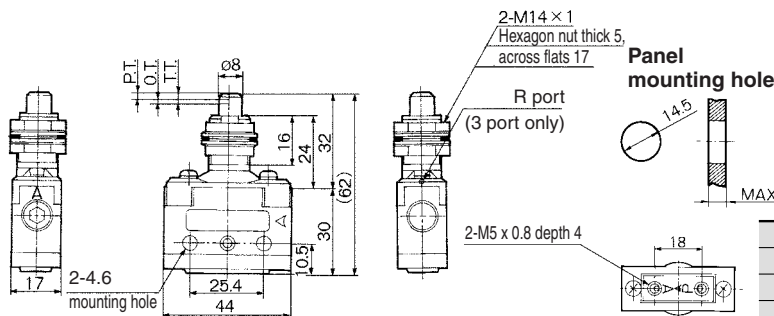


* 0.5 MPa supply

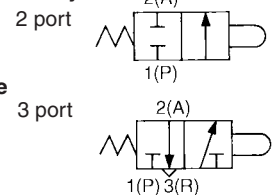
| | |
|---------|--------|
| F.O.F.* | 10 N |
| P.T. | 3.2 mm |
| O.T. | 2.3 mm |
| T.T. | 5.5 mm |

Straight plunger

VM122-M5-05
VM132-M5-05



JIS Symbol

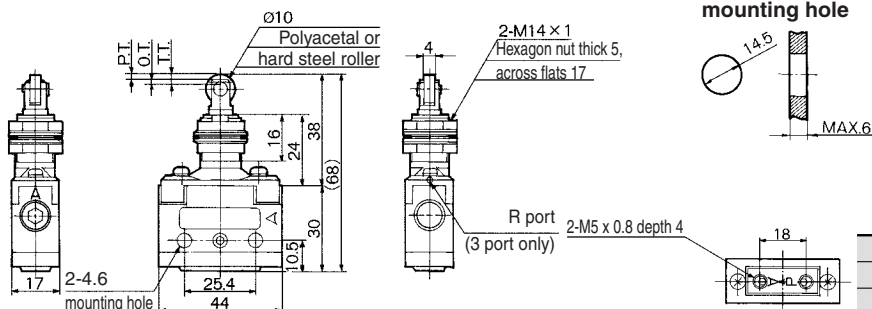


* 0.5 MPa supply

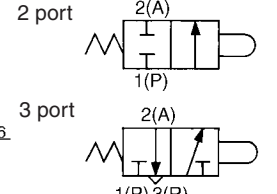
| | |
|---------|--------|
| F.O.F.* | 23 N |
| P.T. | 2.0 mm |
| O.T. | 1.5 mm |
| T.T. | 3.5 mm |

Roller plunger

VM122-M5-06
VM132-M5-06
VM122-M5-06S
VM132-M5-06S



JIS Symbol



* 0.5 MPa supply

| | |
|---------|--------|
| F.O.F.* | 23 N |
| P.T. | 2.0 mm |
| O.T. | 1.5 mm |
| T.T. | 3.5 mm |

□A

V□A

□A

V□A

VM

VR

VH

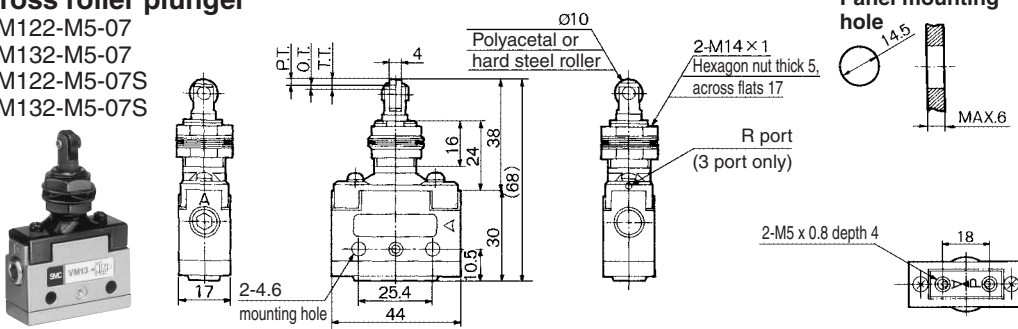
VHS

Series VM100

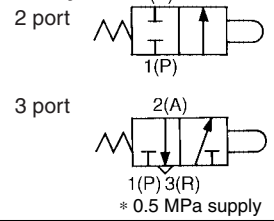
Series VM100/Bottom Ported

Cross roller plunger

VM122-M5-07
VM132-M5-07
VM122-M5-07S
VM132-M5-07S



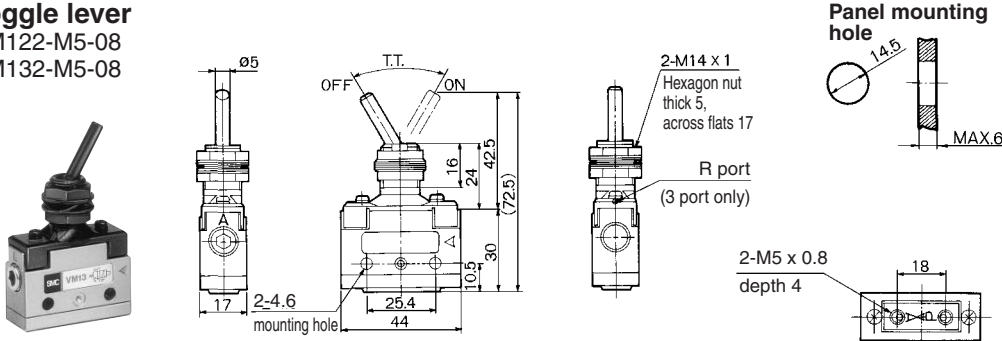
JIS Symbol



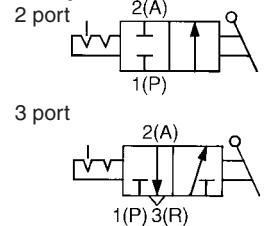
| | |
|----------|--------|
| F.O.F. * | 23 N |
| P.T. | 2 mm |
| O.T. | 1.5 mm |
| T.T. | 3.5 mm |

Toggle lever

VM122-M5-08
VM132-M5-08



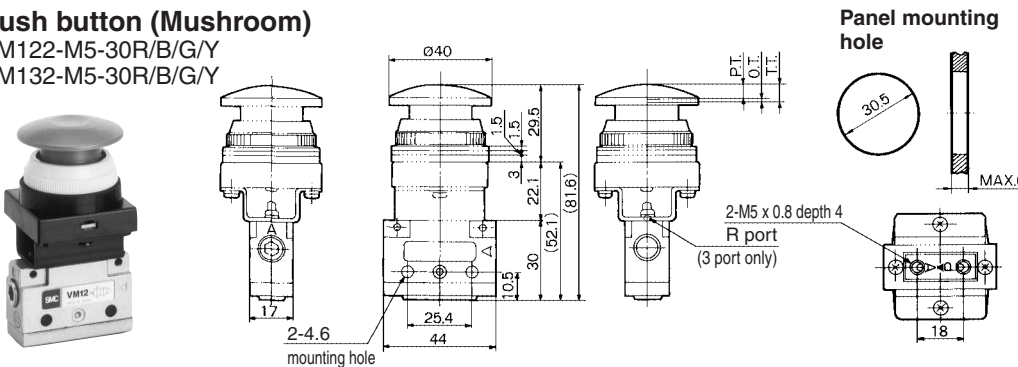
JIS Symbol



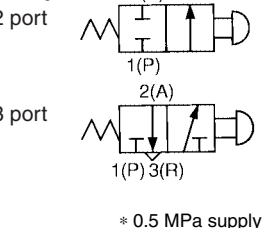
| | |
|----------|------|
| F.O.F. * | 10 N |
| P.T. | 60° |

Push button (Mushroom)

VM122-M5-30R/B/G/Y
VM132-M5-30R/B/G/Y



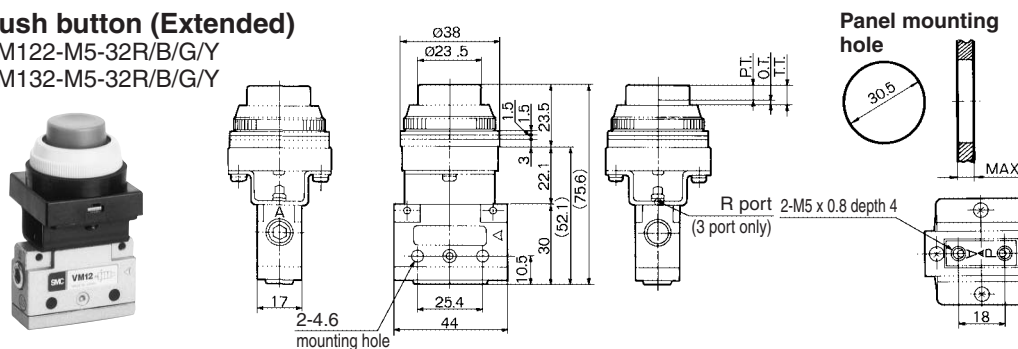
JIS Symbol



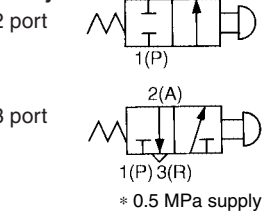
| | |
|----------|--------|
| F.O.F. * | 21 N |
| P.T. | 4.9 mm |
| O.T. | 1.6 mm |
| T.T. | 6.5 mm |

Push button (Extended)

VM122-M5-32R/B/G/Y
VM132-M5-32R/B/G/Y



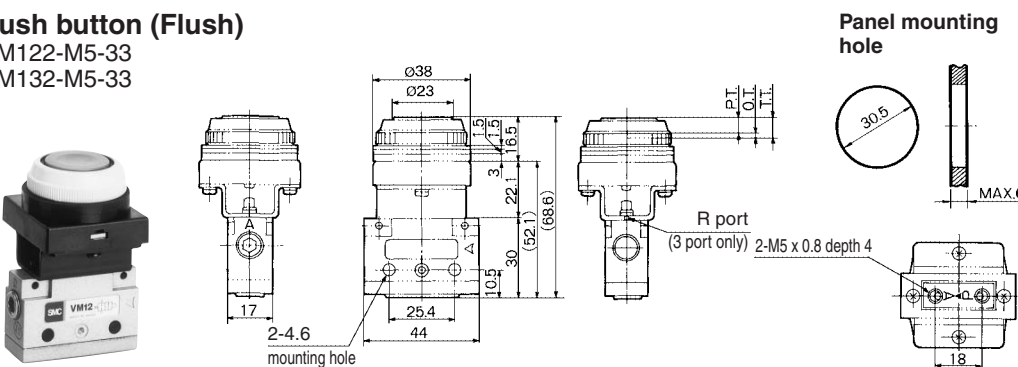
JIS Symbol



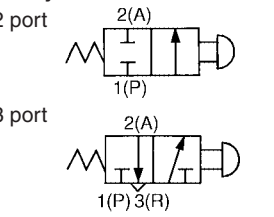
| | |
|----------|--------|
| F.O.F. * | 21 N |
| P.T. | 4.9 mm |
| O.T. | 1.6 mm |
| T.T. | 6.5 mm |

Push button (Flush)

VM122-M5-33
VM132-M5-33



JIS Symbol

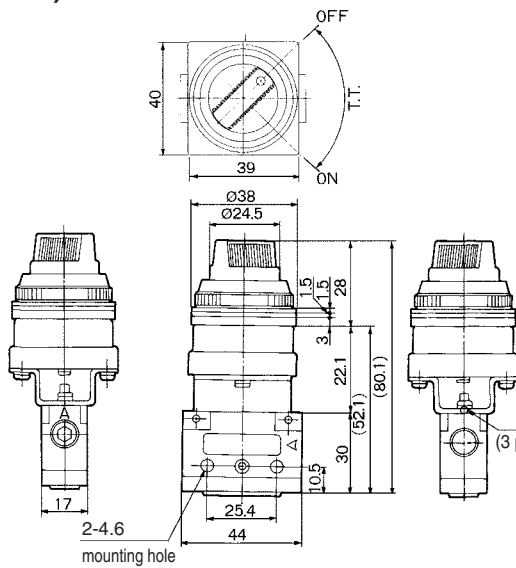


| | |
|----------|--------|
| F.O.F. * | 21 N |
| P.T. | 4.9 mm |
| O.T. | 1.6 mm |
| T.T. | 6.5 mm |

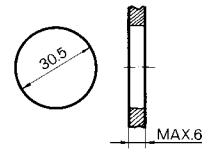
Series VM100/Bottom Ported

Twist selector (2 position)

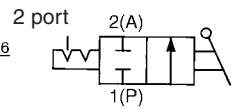
VM122-M5-34R/B/G/Y
VM132-M5-34R/B/G/Y



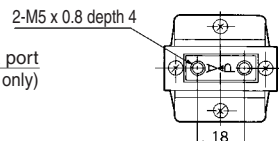
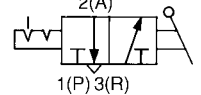
Panel mounting hole



JIS Symbol



3 port

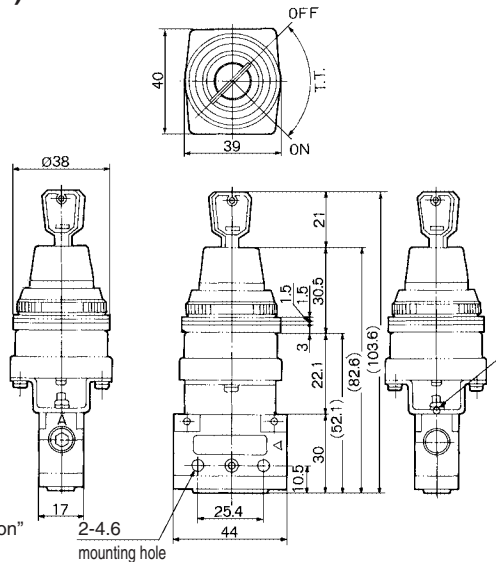


* 0.5 MPa supply

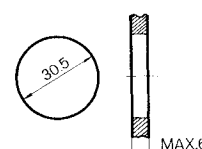
| | |
|----------|------|
| F.O.F. * | 15 N |
| T.T. | 90° |

Key selector (2 position)

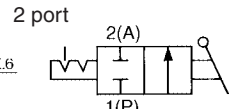
VM122-M5-36
VM132-M5-36



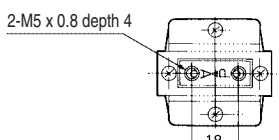
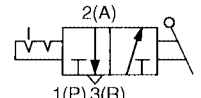
Panel mounting hole



JIS Symbol



3 port



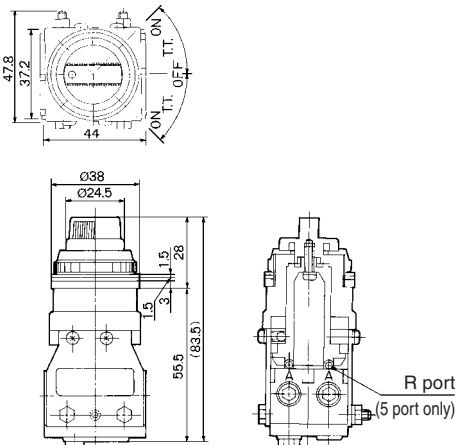
* 0.5 MPa supply

| | |
|----------|------|
| F.O.F. * | 15 N |
| T.T. | 90° |

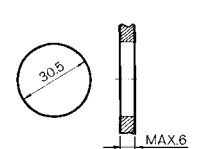
Key can be removed at the "on" and "off" positions.

Twist selector (3 position)

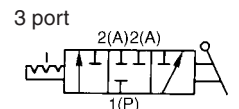
VM133-M5-35R/B/G/Y
VM153-M5-35R/B/G/Y



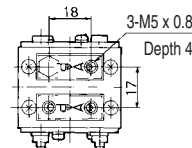
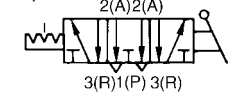
Panel mounting hole



JIS Symbol



5 port



* 0.5 MPa supply

| | |
|----------|------|
| F.O.F. * | 20 N |
| T.T. | 45° |

□A

V□A

S□A

V□A

VM

VR

VH

VHS