

# 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

Actuator	No. of ports	2 port	3 port	Actuator part no.	Application
Mechanical operation	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
	Push button (Flush)	VM220-02-33	VM230-02-33	VM-33A	With a set of red, black, green, yellow
		VM220-02-34R	VM230-02-34R	VM-34AR	Red
	Twist selector (2 position)	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
		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	
Foot pedal	(3 port)	(5 port)	—	—	
	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.

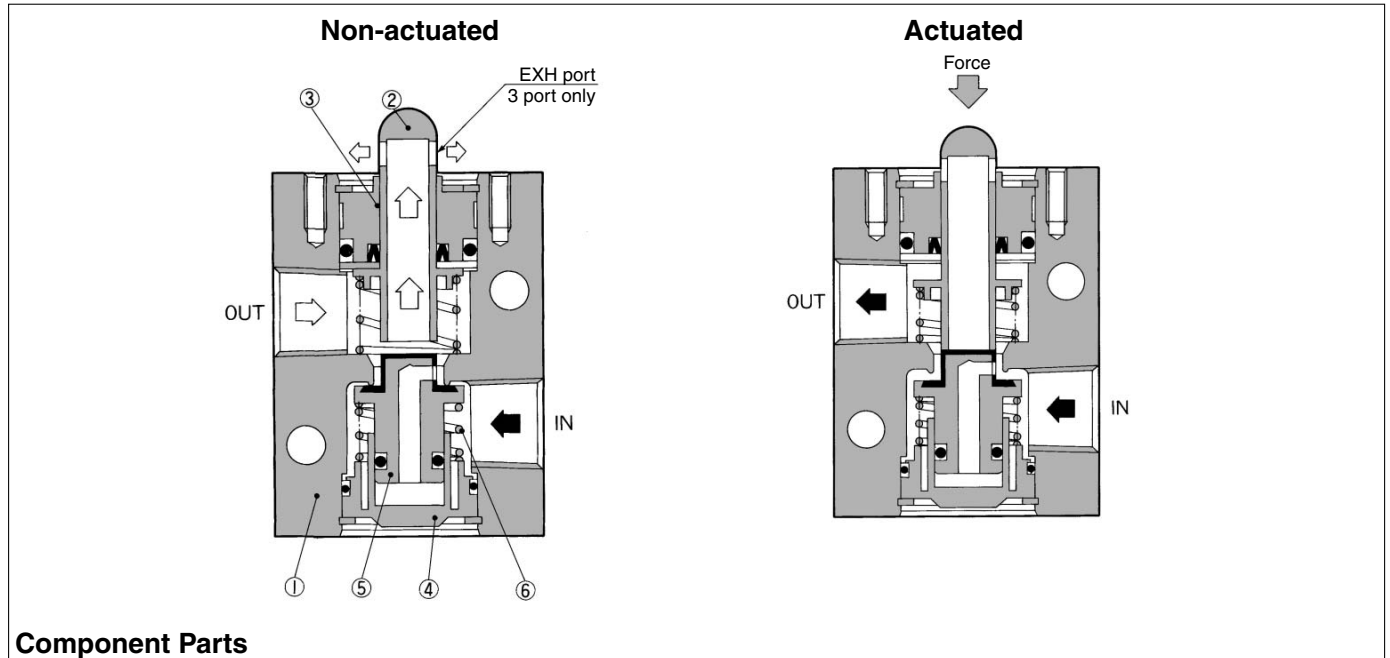
## How to Order

VM2 **3** 0 - **02** - **01** **S**

Number of ports		Port size		Actuator type		Suffix for actuator	
2	2 port	02	Rc 1/4	00	Basic	S	Hard steel roller
3	3 port	N02	NPT 1/4	01	Roller lever	R	Red
		F02	G 1/4	02	One way roller lever	B	Black
				05	Straight plunger	G	Green
				06	Roller plunger	Y	Yellow
				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		

- A
- A
- A
- A
- VM
- VR
- VH
- VHS

### Construction



### Component Parts

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

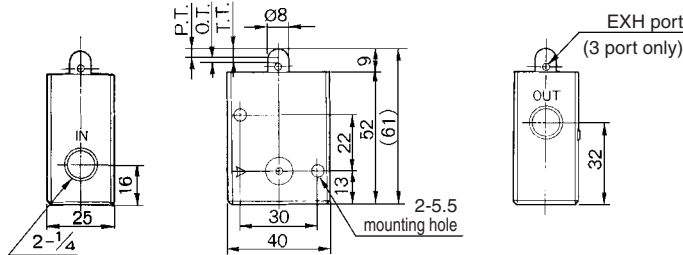
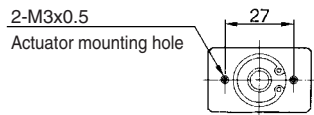
No.	Description	Material	Note
④	Cover	POM	
⑤	Valve	Brass, NBR	
⑥	Spring	Steel	

# Series VM200

## Series VM200

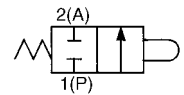
### Basic

VM220-02-00  
VM230-02-00

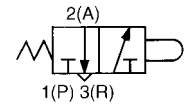


### JIS Symbol

2 port



3 port

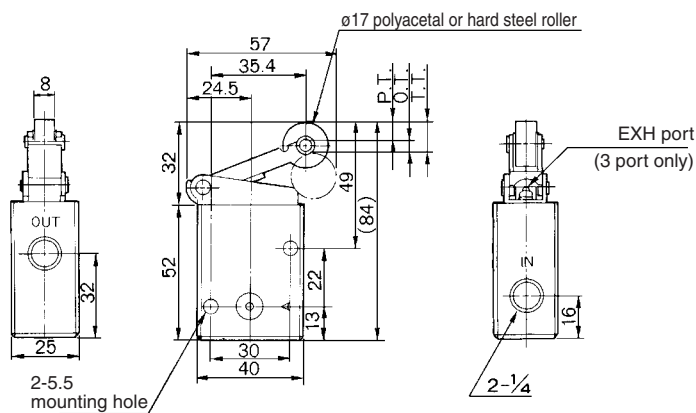


\* 0.5 MPa supply

F.O.F. *	52 N
P.T.	3.0 mm
O.T.	2.0 mm
T.T.	5.0 mm

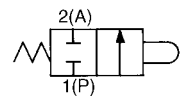
### Roller lever

VM220-02-01  
VM230-02-01  
VM220-02-01S  
VM230-02-01S

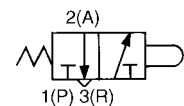


### JIS Symbol

2 port



3 port

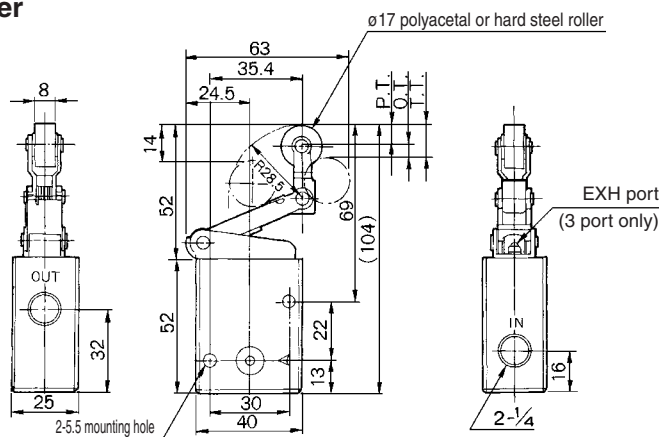


\* 0.5 MPa supply

F.O.F. *	24 N
P.T.	6.5 mm
O.T.	4.5 mm
T.T.	11.0 mm

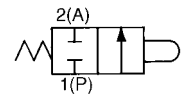
### One way roller lever

VM220-02-02  
VM230-02-02  
VM220-02-02S  
VM230-02-02S

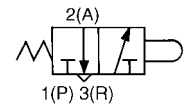


### JIS Symbol

2 port



3 port

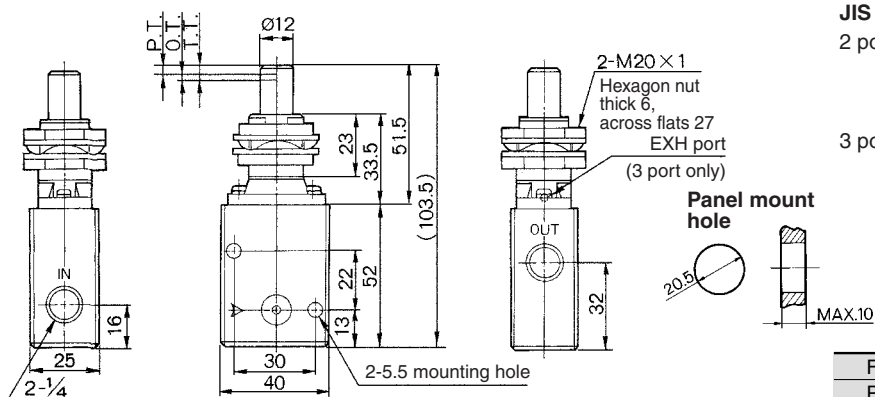


\* 0.5 MPa supply

F.O.F. *	22 N
P.T.	7.0 mm
O.T.	5.0 mm
T.T.	12.0 mm

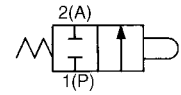
### Straight plunger

VM220-02-05  
VM230-02-05

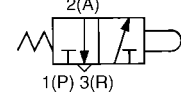


### JIS Symbol

2 port



3 port



\* 0.5 MPa supply

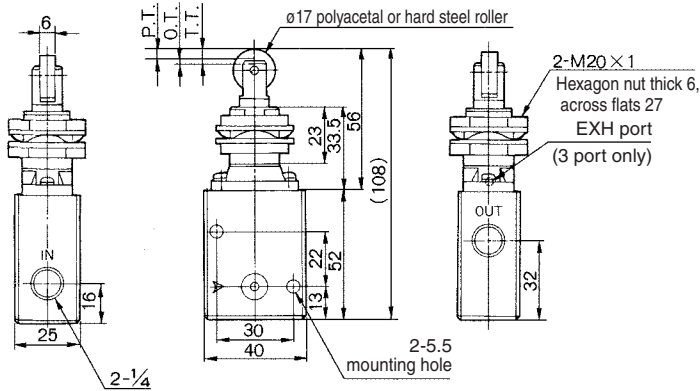
F.O.F. *	56 N
P.T.	3.5 mm
O.T.	2.0 mm
T.T.	5.5 mm

# 2/3 Port Mechanical Valve Series VM200

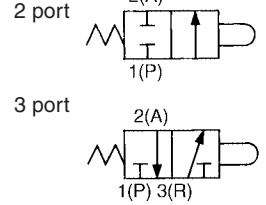
## Series VM200

### Roller plunger

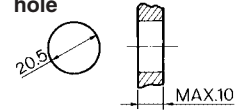
VM220-02-06  
VM230-02-06  
VM220-02-06S  
VM230-02-06S



### JIS Symbol



### Panel mounting hole

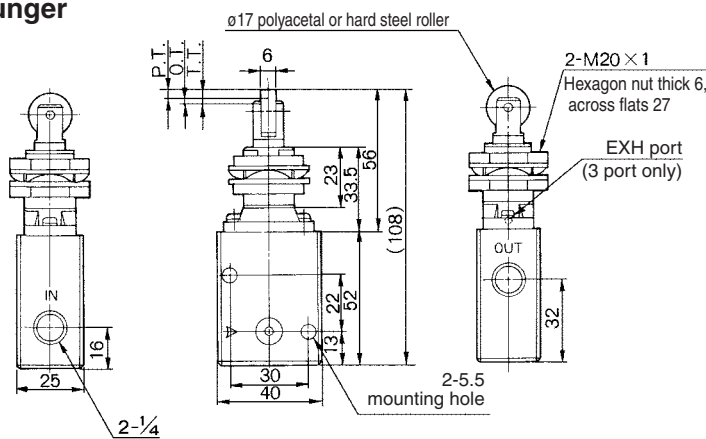


\* 0.5 MPa supply

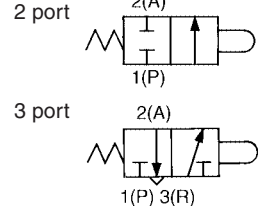
F.O.F. *	56 N
P.T.	3.5 mm
O.T.	2.0 mm
T.T.	5.5 mm

### Cross roller plunger

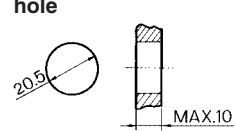
VM220-02-07  
VM230-02-07  
VM220-02-07S  
VM230-02-07S



### JIS Symbol



### Panel mounting hole

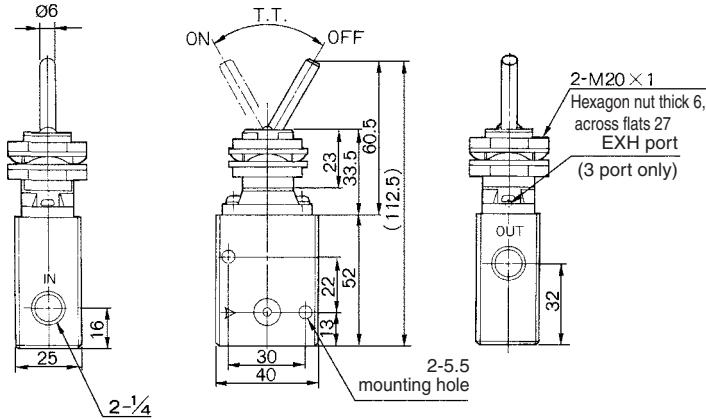


\* 0.5 MPa supply

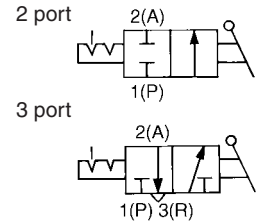
F.O.F. *	56 N
P.T.	3.5 mm
O.T.	2.0 mm
T.T.	5.5 mm

### Toggle lever

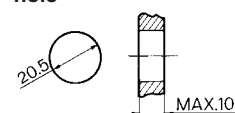
VM220-02-08  
VM230-02-08



### JIS Symbol



### Panel mounting hole

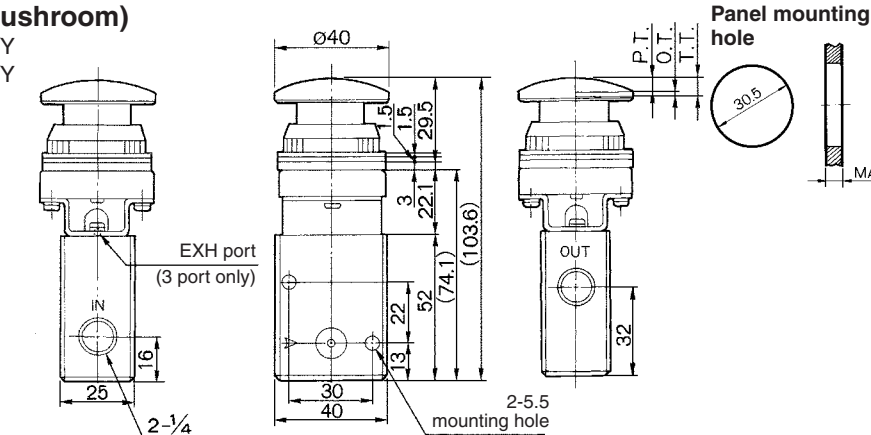


\* 0.5 MPa supply

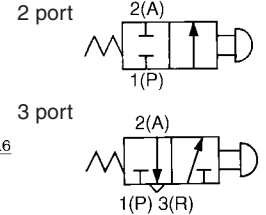
F.O.F. *	12 N
T.T.	60°

### Push button (Mushroom)

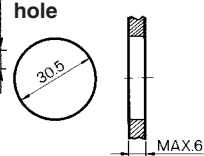
VM220-02-30R/B/G/Y  
VM230-02-30R/B/G/Y



### JIS Symbol



### Panel mounting hole



\* 0.5 MPa supply

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

□A

□A

□A

□A

VM

VR

VH

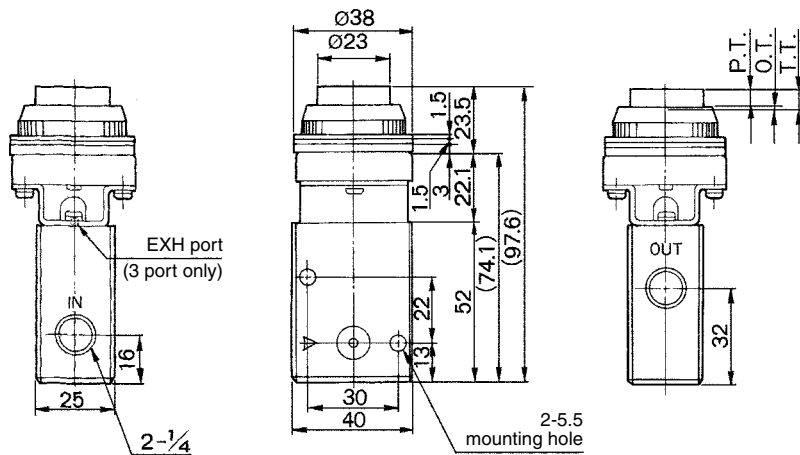
VHS

# Series VM200

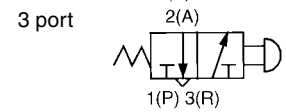
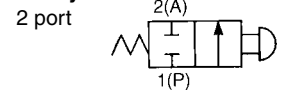
## Series VM200

### Push button (Extended)

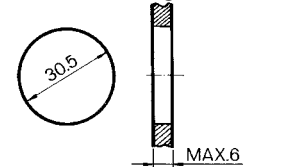
VM220-02-32R/B/G/Y  
VM230-02-32R/B/G/Y



### JIS Symbol



### Panel mounting hole

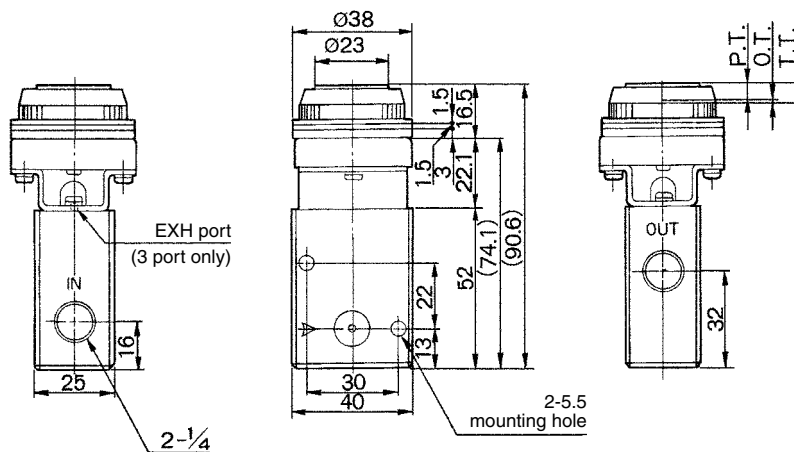


\* 0.5 MPa supply

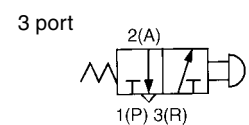
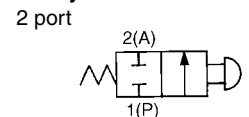
F.O.F. *	52 N
P.T.	4.9 mm
O.T.	1.6 mm
T.T.	6.5 mm

### Push button (Flush)

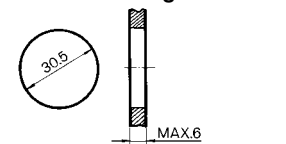
VM220-02-33  
VM230-02-33



### JIS Symbol



### Panel mounting hole

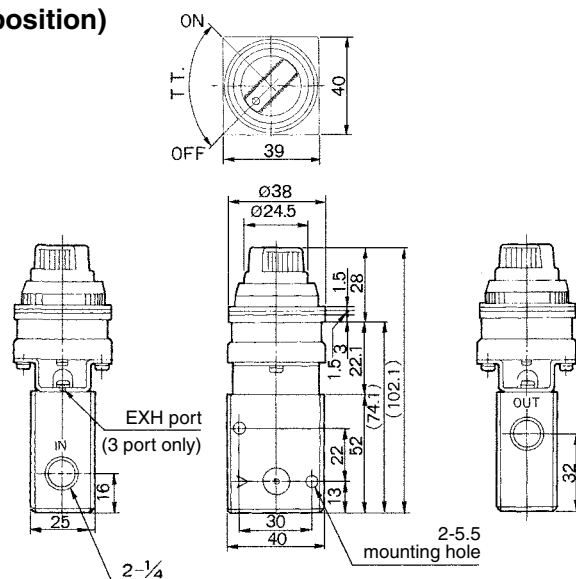


\* 0.5 MPa supply

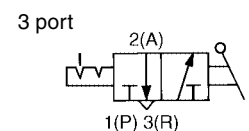
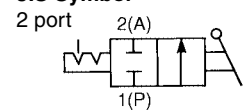
F.O.F. *	52 N
P.T.	4.9 mm
O.T.	1.6 mm
T.T.	6.5 mm

### Twist selector (2 position)

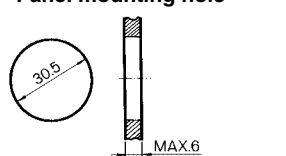
VM220-02-34R/B/G/Y  
VM230-02-34R/B/G/Y



### JIS Symbol



### Panel mounting hole



\* 0.5 MPa supply

F.O.F. *	32 N
T.T.	90°

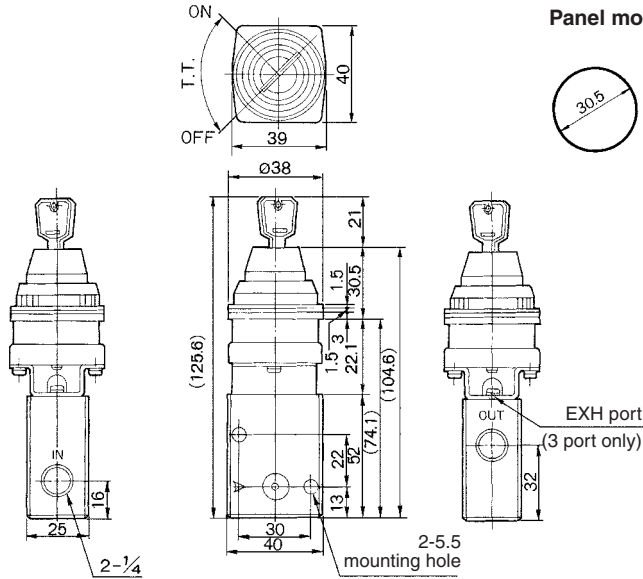
## Series VM200

### Key selector (2 position)

VM220-02-36  
VM230-02-36

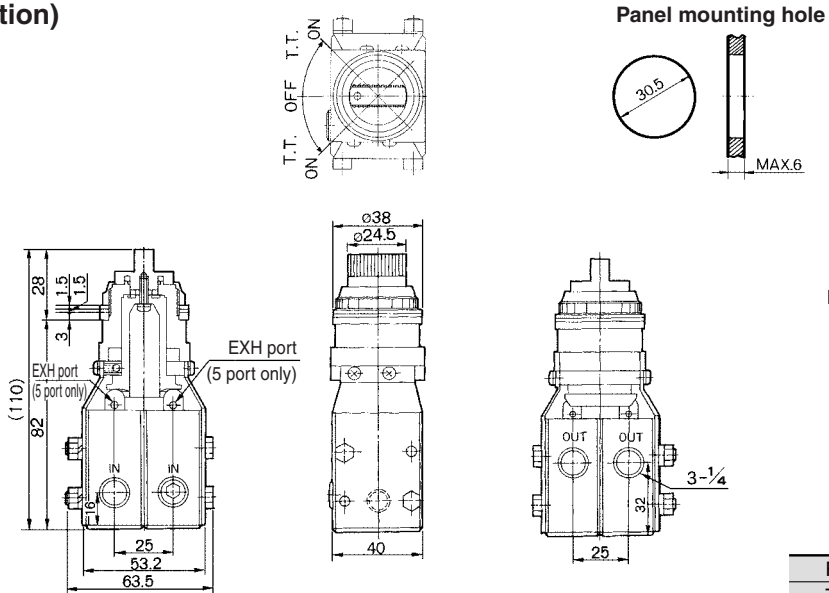


Key can be removed at the "on" and "off" positions.



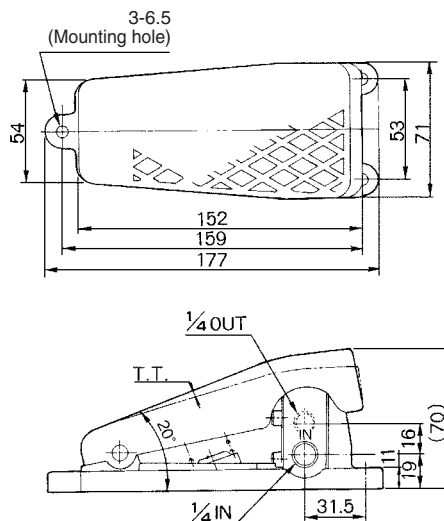
### Twist selector (3 position)

VM230-02-35R/B/G/Y  
VM250-02-35R/B/G/Y

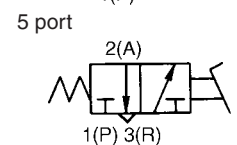
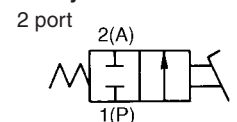


### Foot pedal

VM220-02-40  
VM230-02-40



### JIS Symbol



\* 0.5 MPa supply

F.O.F.*	65 N
T.T.	1.2°

□A

□A

□A

□A

VM

VR

VH

VHS