

# 5 Port Mechanical Valve

## Series *VZM500*

RoHS

**Compact design,  
large flow capacity 10.8 mm<sup>2</sup>  
High cycle rate,  
long life/300 c.p.m. or less  
Piping possible to any EXH  
port.**

Proper countermeasures can be taken for applications in which the noise of the exhaust could cause problems to the surroundings.

**Pilot type is selectable.  
(Internal pilot and external pilot)**

**Foot bracket and manifold mounting possible.**



PAT.PEND.

### Specifications

<b>Fluid</b>	Air/Inert gas
<b>Operating pressure</b>	0.15 to 0.7 MPa <sup>(1)</sup>
<b>Ambient and fluid temperature</b>	-5 to 60°C (No freezing)
<b>Effective area</b>	10.8 mm <sup>2</sup>
<b>Maximum frequency (Mechanical operation type)</b>	300 c.p.m. or less
<b>Lubrication</b>	Not required (Use turbine oil Class 1 ISO VG32, if lubricated.)
<b>Port size</b>	Main valve/1/8 Pilot valve (EXH)/M5 x 0.8
<b>Option</b>	Foot bracket <sup>(2)</sup>
<b>Mass (Basic)</b>	110 g



\* Please contact SMC for manifold mounting style.

Note 1) External pilot type Main valve: 0 to 0.7 MPa  
Pilot valve: 0.15 to 0.7 MPa

Note 2) The standard body can not be retrofitted with a foot bracket.

### Model

	Actuator	Model	Actuator part no.	Application
Mechanical operation	Basic	VZM550-01-00	—	—
	Roller lever	VZM550-01-01	VM-01C	Polyacetal roller
		VZM550-01-01S	VM-01CS	Hard steel roller
	One way roller lever	VZM550-01-02	VM-02C	Polyacetal roller
		VZM550-01-02S	VM-02CS	Hard steel roller
	Straight plunger	VZM550-01-05	VM-05C	—
Roller plunger	VZM550-01-06	VM-06C	Polyacetal roller	
	VZM550-01-06S	VM-06CS	Hard steel roller	
Manual operation	Toggle lever	VZM550-01-08	VM-08C	—
	Push button (Mushroom)	VZM550-01-30R	VM-30CR	Red
		VZM550-01-30B	VM-30CB	Black
		VZM550-01-30G	VM-30CG	Green
		VZM550-01-30Y	VM-30CY	Yellow
	Push button (Extended)	VZM550-01-32R	VM-32CR	Red
		VZM550-01-32B	VM-32CB	Black
		VZM550-01-32G	VM-32CG	Green
		VZM550-01-32Y	VM-32CY	Yellow
	Push button (Flush)	VZM550-01-33	VM-33C	With a set of red, black, green, yellow
	Twist selector (2 position)	VZM550-01-34R	VM-34CR	Red
		VZM550-01-34B	VM-34CB	Black
		VZM550-01-34G	VM-34CG	Green
		VZM550-01-34Y	VM-34CY	Yellow
	Key selector (2 position)	VZM550-01-36	VM-36C	—
Push-pull	VZM550-01-37	—	Black	



Note 1) Actuator replacement is available for all types. (Except push-pull)

Note 2) For push button (mushroom), push button (extended), push button (flush) and a single unit of fastening ring, refer to pages 1887 and 1888. The other parts are not replaceable.

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

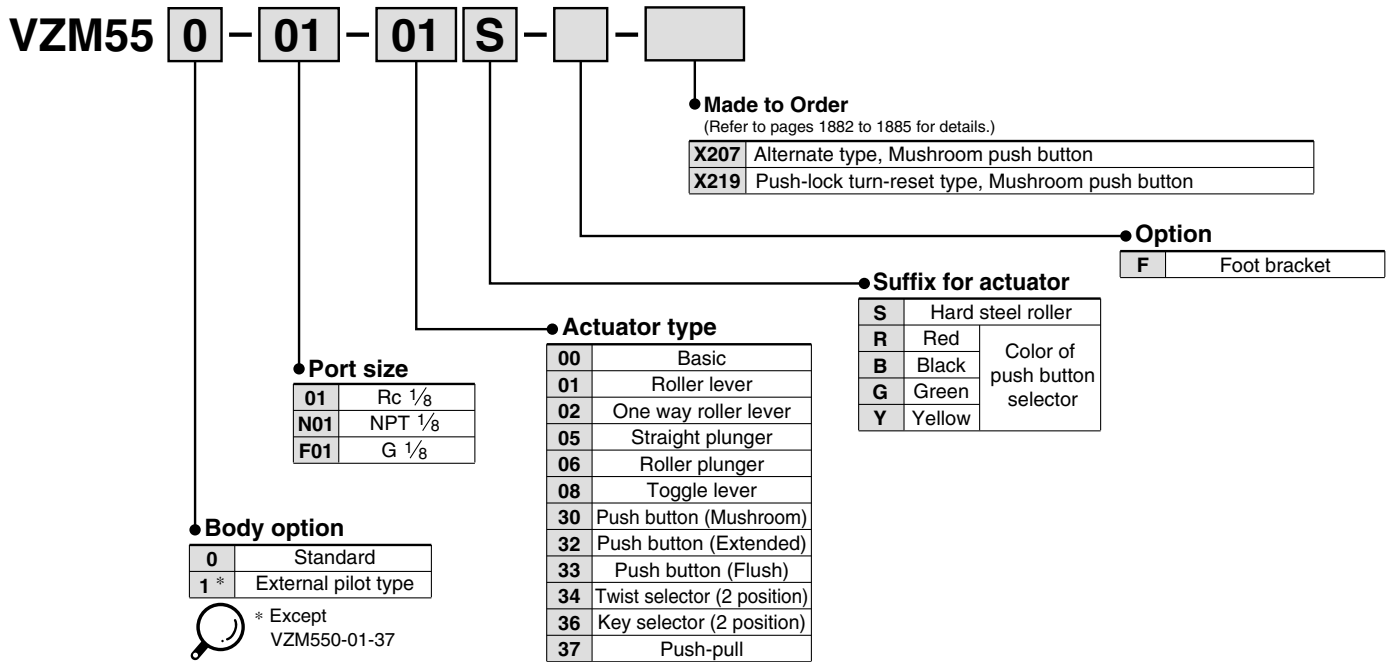
VM□

VMG

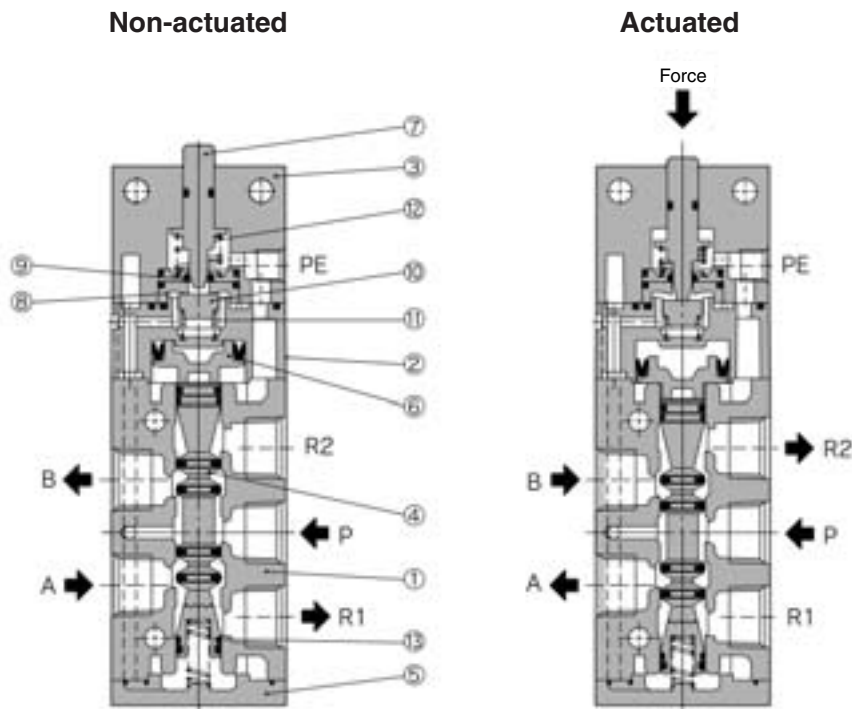
VR□

VH□

## How to Order



## Construction



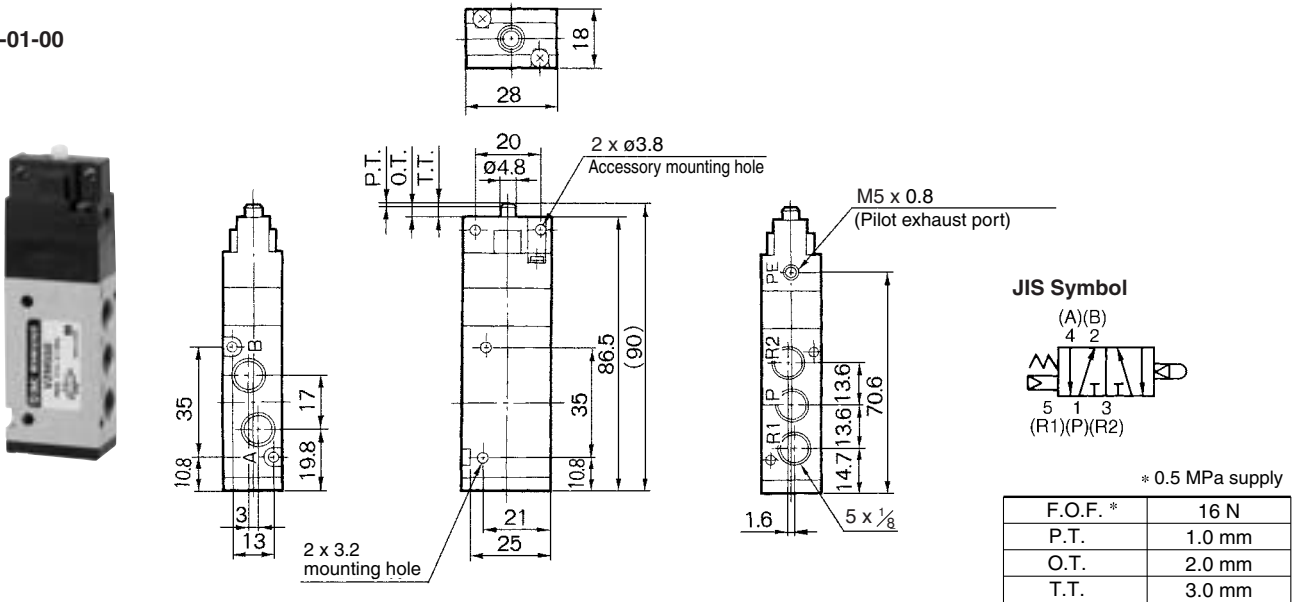
## Component Parts

No.	Description	Material	Note
1	Body	ADC	Platinum silver
2	Pilot body	PBT	ZDC only for external pilot type
3	Head cover	ZDC	Black zinc chromated
4	Spool valve assembly		
5	End cover	ZDC	Matt-black
6	Piston	POM	
7	Plunger	POM	

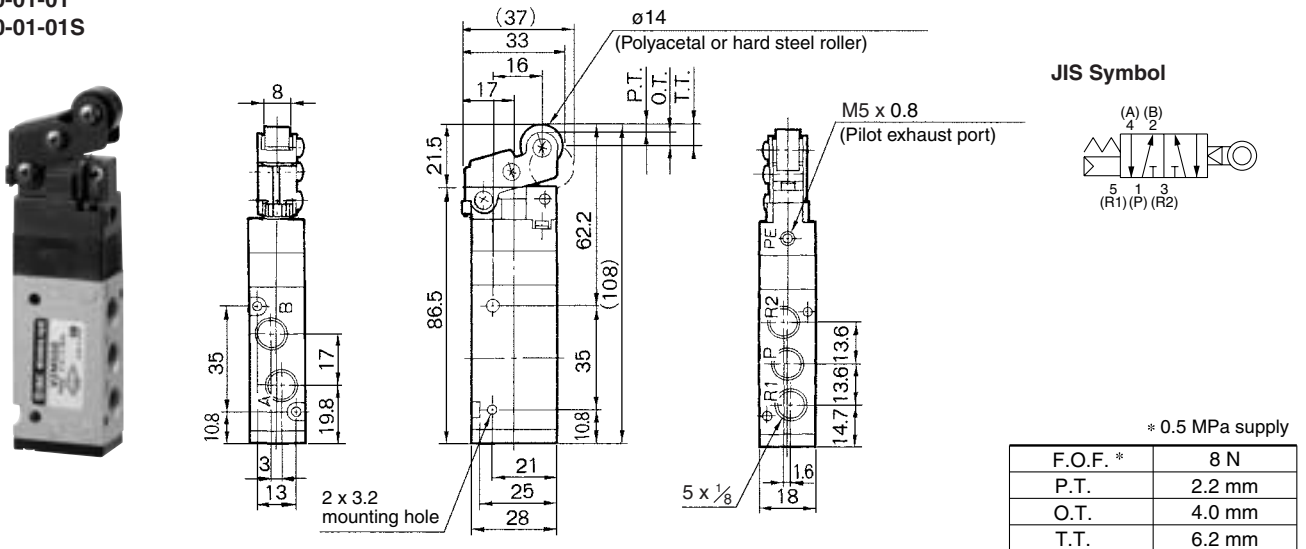
No.	Description	Material	Note
8	Valve seat (A)	POM	
9	Valve seat (B)	POM	
10	Valve assembly	NBR	
11	Valve spring	Stainless steel	
12	Return spring	Stainless steel	
13	Spool spring	Stainless steel	

## Series VZM500

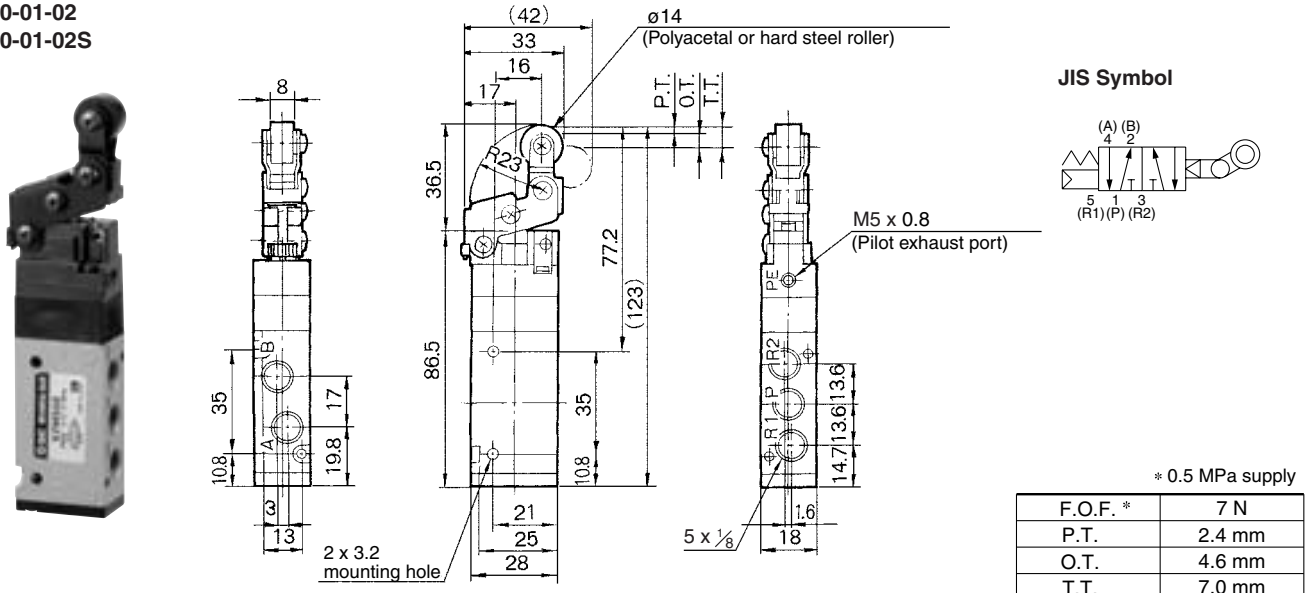
### Basic VZM550-01-00



### Roller lever VZM550-01-01 VZM550-01-01S



### One way roller lever VZM550-01-02 VZM550-01-02S



VM□

VMG

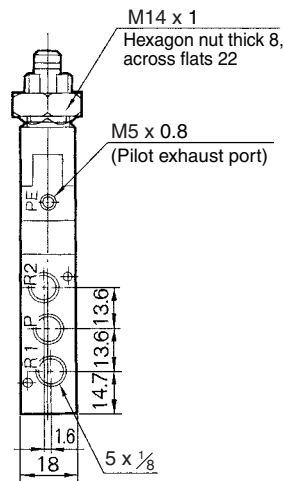
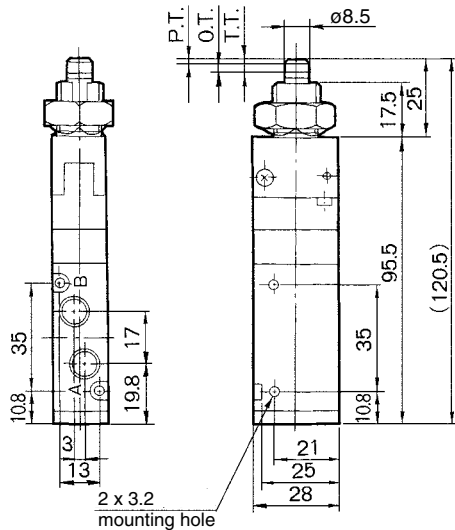
VR□

VH□

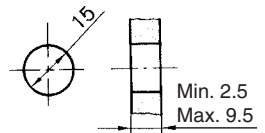
# Series VZM500

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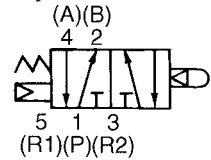
### Straight plunger VZM550-01-05



#### Panel mounting hole



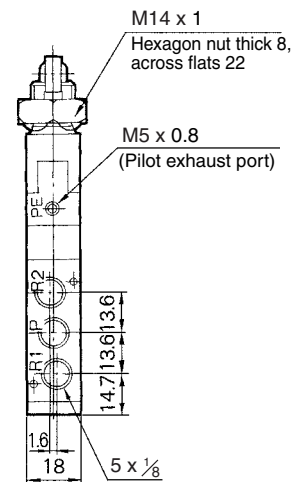
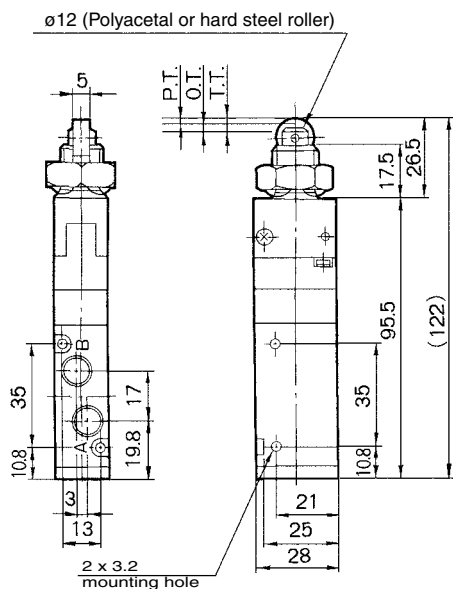
#### JIS Symbol



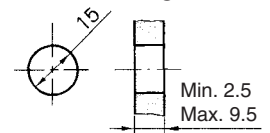
\* 0.5 MPa supply

F.O.F. *	18 N
P.T.	1.5 mm
O.T.	2.0 mm
T.T.	3.5 mm

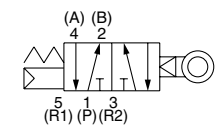
### Roller plunger VZM550-01-06 VZM550-01-06S



#### Panel mounting hole



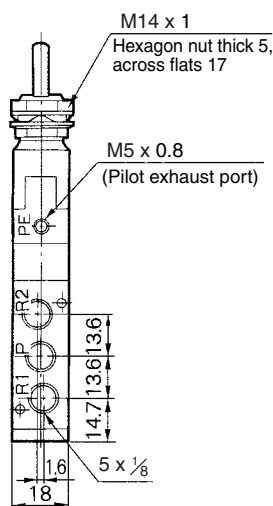
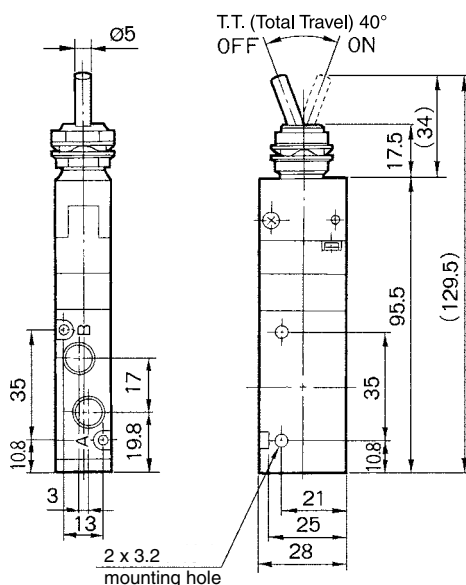
#### JIS Symbol



\* 0.5 MPa supply

F.O.F. *	18 N
P.T.	1.5 mm
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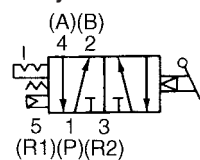
### Toggle lever VZM550-01-08



#### Panel mounting hole



#### JIS Symbol



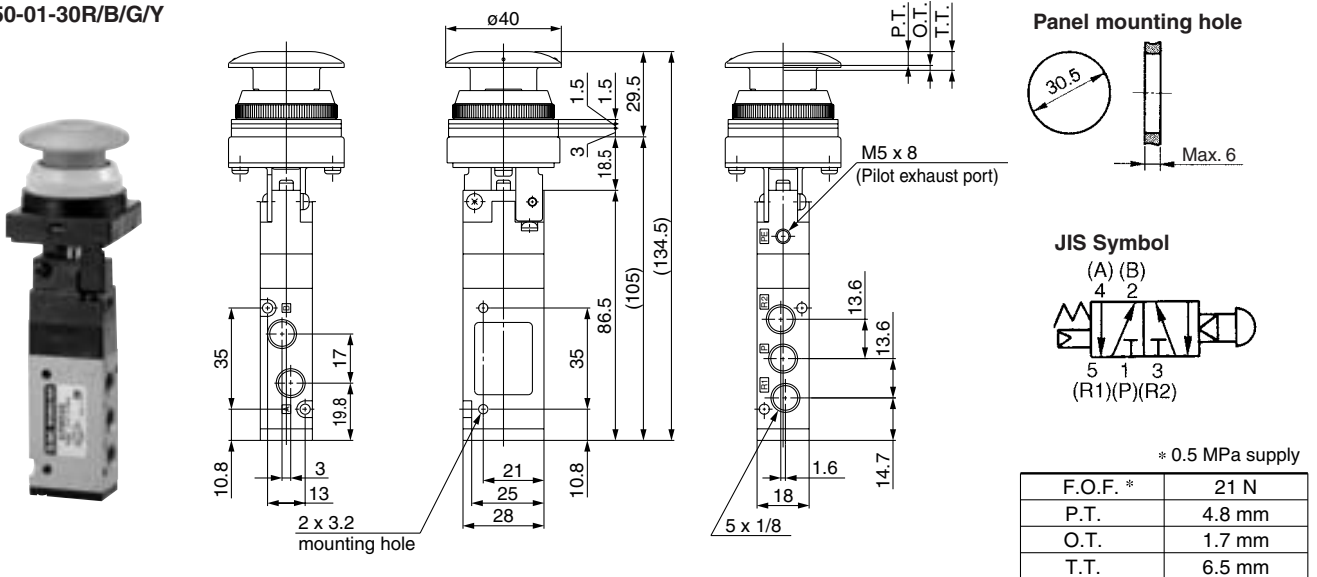
\* 0.5 MPa supply

F.O.F. *	15 N
T.T.	40°

## Series VZM500

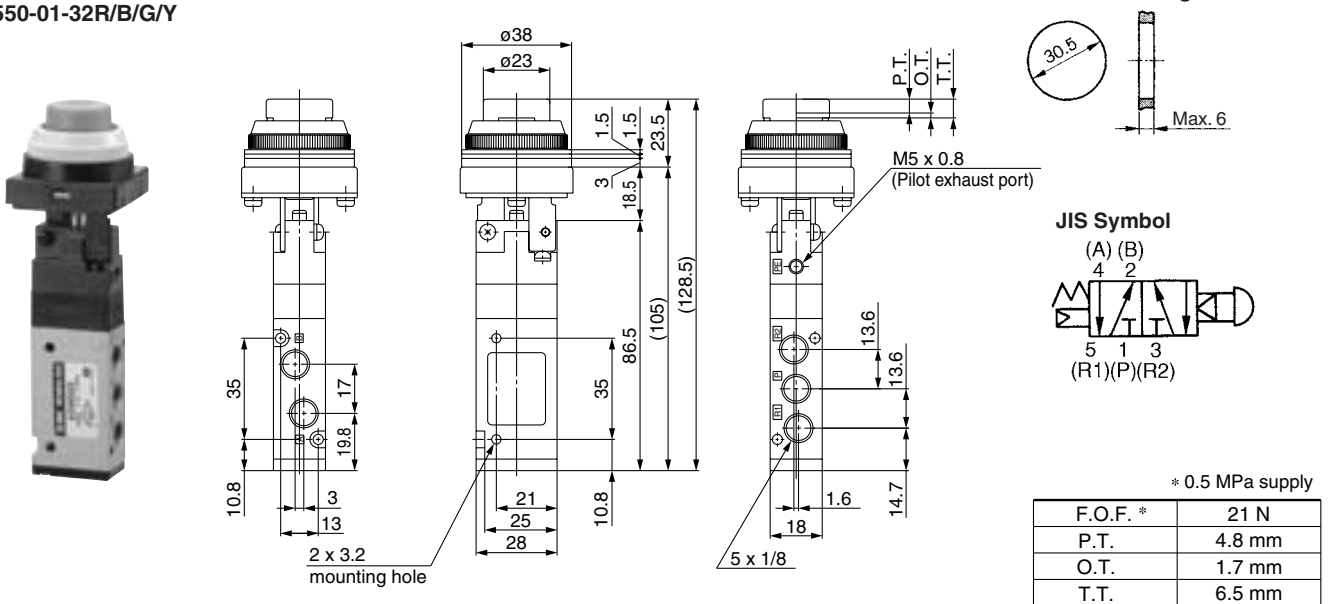
### Push button (Mushroom)

VZM550-01-30R/B/G/Y



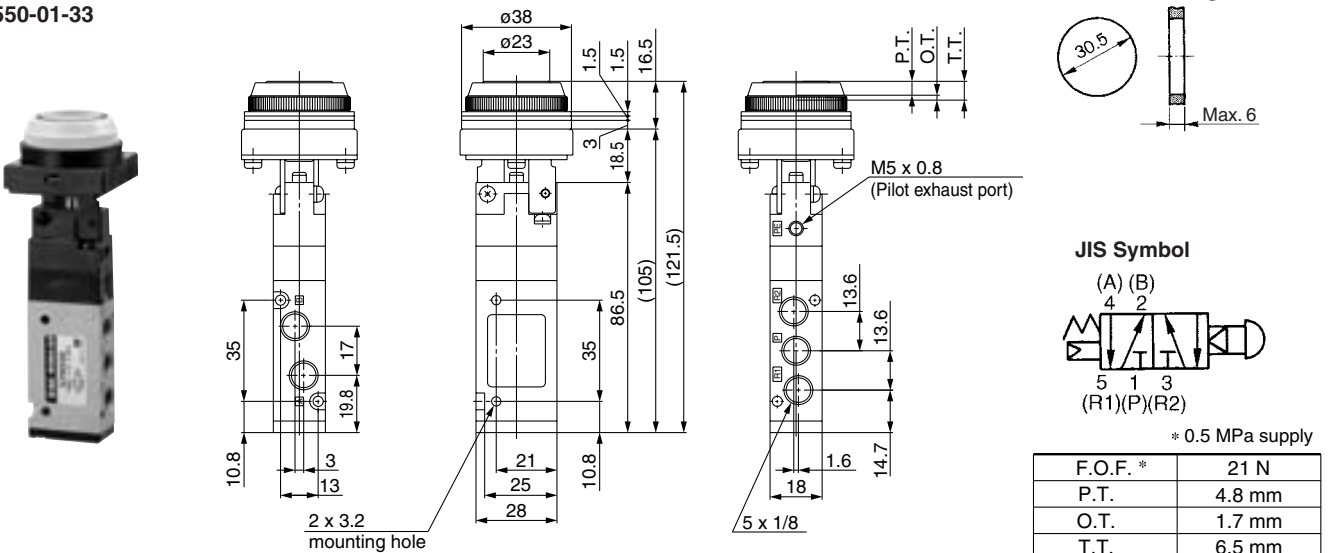
### Push button (Extended)

VZM550-01-32R/B/G/Y



### Push button (Flush)

VZM550-01-33



VM□

VMG

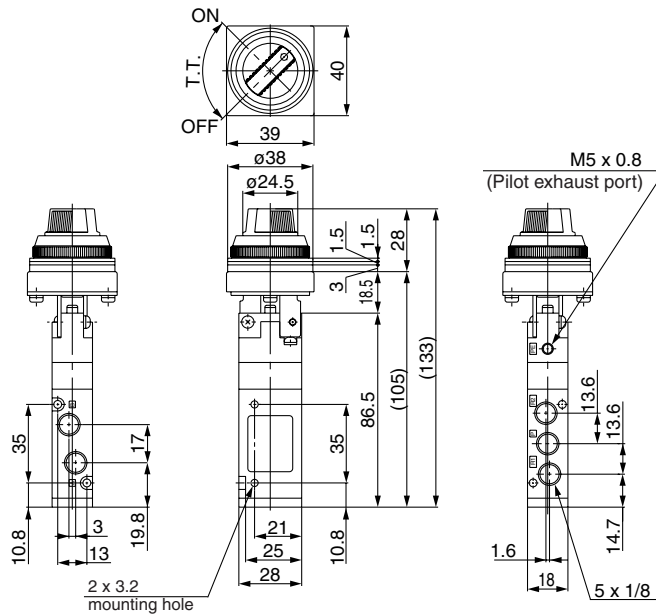
VR□

VH□

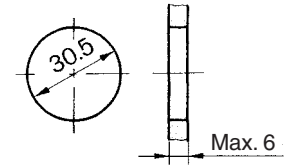
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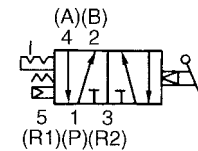
### Selector (2 position) VZM550-01-34R/B/G/Y



#### Panel mounting hole



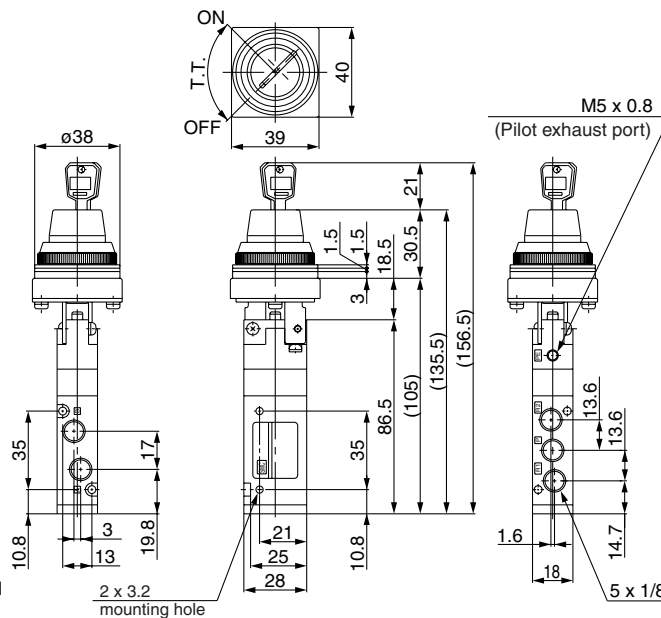
#### JIS Symbol



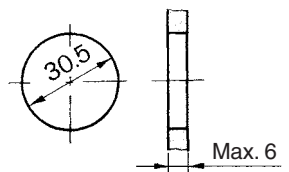
\* 0.5 MPa supply

F.O.F. *	23 N
T.T.	90°

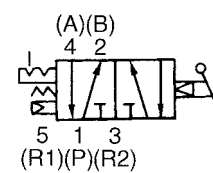
### Key selector (2 position) VZM550-01-36



#### Panel mounting hole



#### JIS Symbol



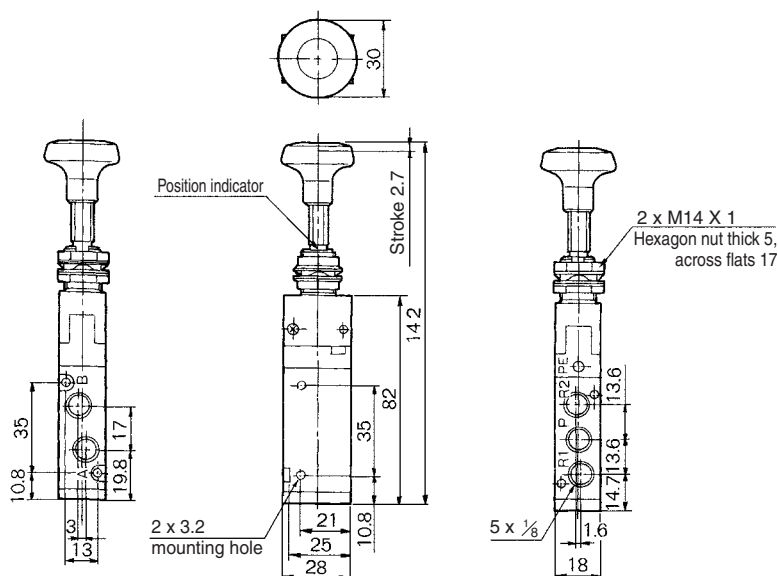
\* 0.5 MPa supply

F.O.F. *	26 N
T.T.	90°

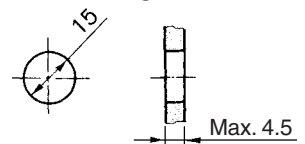


Key can be removed at the "on" and "off" positions.

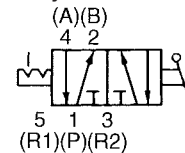
### Push pull VZM550-01-37



#### Panel mounting hole

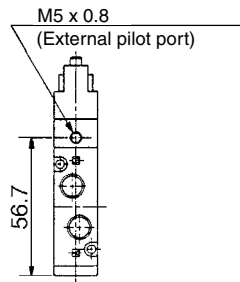


#### JIS Symbol

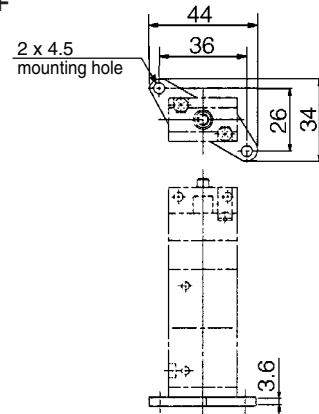


F.O.F.	20 N
T.T.	2.7 mm

## External pilot type VZM551 type



## With foot bracket VZM55□-01-□□-F



VM□

VMG

VR□

VH□