

# 5 Port Mechanical Valve Metal Seal

# Series **VZM400**

**Compact design,  
large flow capacity 9.9 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.**



## Specifications

Fluid	Air/Inert gas
Operating pressure	0.15 to 1.0 MPa <sup>(1)</sup>
Ambient and fluid temperature	-5 to 60°C (No freezing)
Effective area	9.9 mm <sup>2</sup>
Maximum frequency (Mechanical operation type)	300 c.p.m. or less
Lubrication	Not required (Use turbine oil class 1 ISO VG32, if lubricated.)
Port size	Main valve/1/8
	Pilot valve (EXH)/M5 x 0.8
Option	Foot bracket <sup>(2)</sup>
Mass (Basic)	120 g



\* Please contact SMC for manifold mounting style.

Note 1) External pilot type Main valve: 0 to 1.0 MPa  
Pilot valve: 0.15 to 1.0 MPa

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

## Model

	Actuator	Model	Actuator part no.	Application
Mechanical operation	Basic	VZM450-01-00	—	—
	Roller lever	VZM450-01-01	VM-01C	Polyacetal roller
		VZM450-01-01S	VM-01CS	Hard steel roller
	One way roller lever	VZM450-01-02	VM-02C	Polyacetal roller
		VZM450-01-02S	VM-02CS	Hard steel roller
	Straight plunger	VZM450-01-05	VM-05C	—
Roller plunger	VZM450-01-06	VM-06C	Polyacetal roller	
	VZM450-01-06S	VM-06CS	Hard steel roller	
Manual operation	Toggle lever	VZM450-01-08	VM-08C	—
	Push button (Mushroom)	VZM450-01-30R	VM-30CR	Red
		VZM450-01-30B	VM-30CB	Black
		VZM450-01-30G	VM-30CG	Green
		VZM450-01-30Y	VM-30CY	Yellow
	Push button (Extended)	VZM450-01-32R	VM-32CR	Red
		VZM450-01-32B	VM-32CB	Black
		VZM450-01-32G	VM-32CG	Green
		VZM450-01-32Y	VM-32CY	Yellow
	Push button (Flush)	VZM450-01-33	VM-33C	With a set of red, black, green, yellow
	Twist selector (2 position)	VZM450-01-34R	VM-34CR	Red
		VZM450-01-34B	VM-34CB	Black
		VZM450-01-34G	VM-34CG	Green
VZM450-01-34Y		VM-34CY	Yellow	
Key selector (2 position)	VZM450-01-36	VM-36C	—	



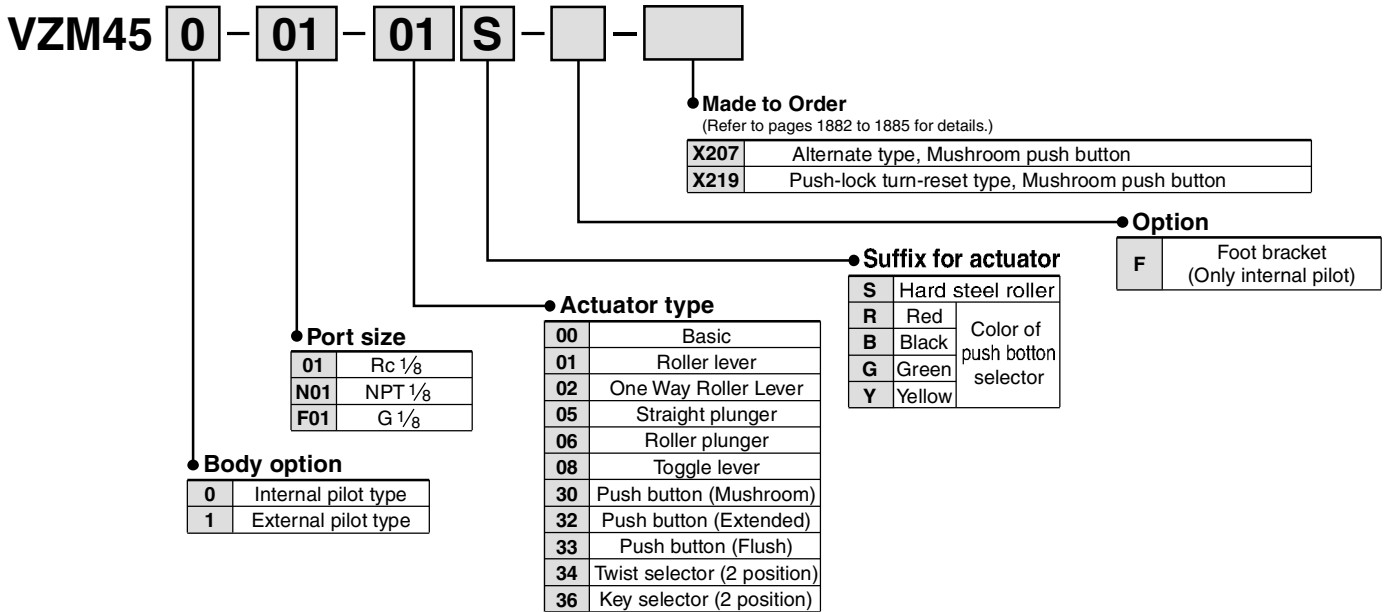
Note 1) Actuator replacement is available for all types.

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.

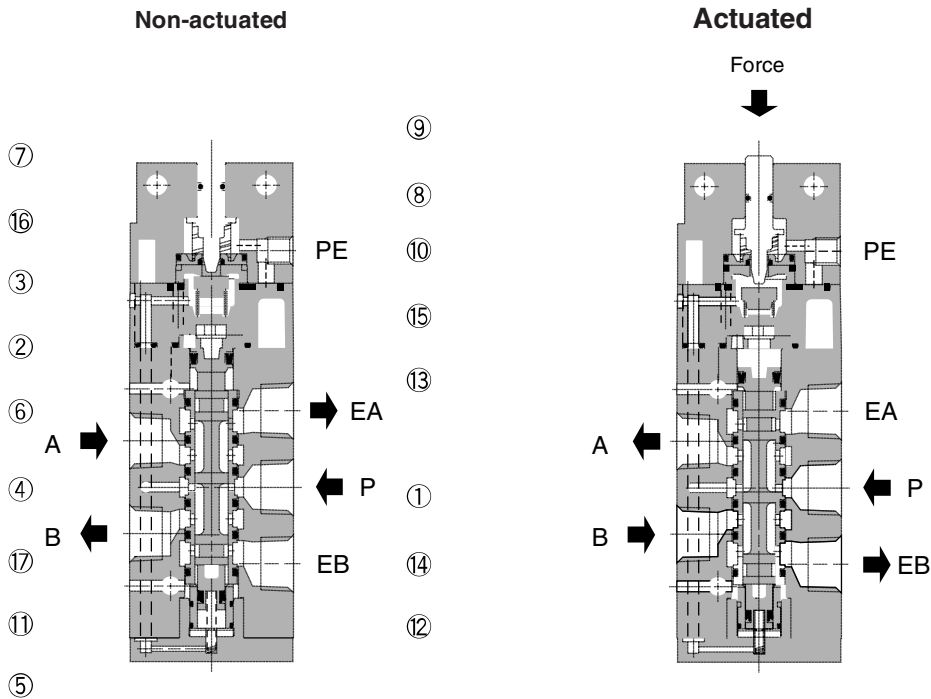
Note 3) The handle of the selector (2 position) cannot be removed or replaced alone.

# Series VZM400

## How to Order



## Construction



### Component Parts

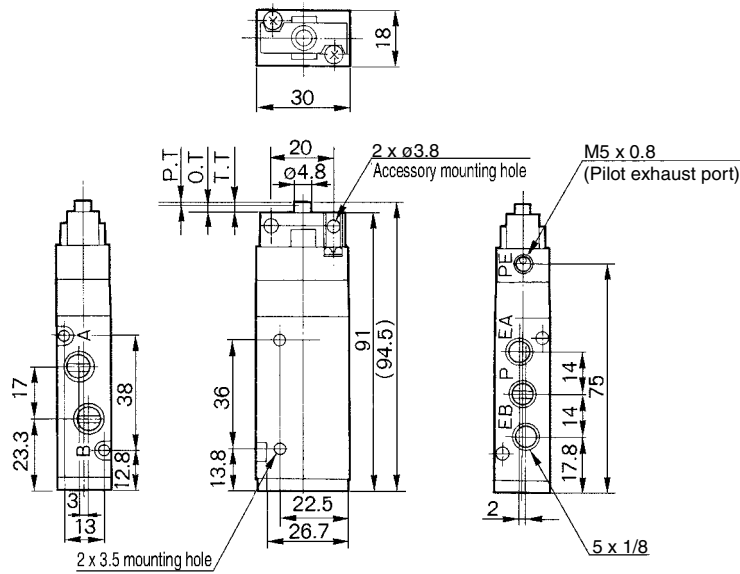
No.	Description	Material	Note
1	Body	ADC	Platinum silver
2	Pilot body	PBT	ZDC only for external pilot type
3	Head cover	ZDC	Black zinc chromated
4	Spool/sleeve	Stainless steel	
5	End cover	POM	
6	Piston A	POM	
7	Plunger	POM	
8	Valve seat (A)	POM	
9	Valve seat (B)	POM	

No.	Description	Material	Note
10	Valve	NBR	
11	Piston guide B	Aluminum alloy	
12	Return spring	Stainless steel	
13	Cushion	Rubber	
14	Cushion	Rubber	
15	Valve spring	Stainless steel	
16	Return spring	Stainless steel	
17	Piston B	POM	

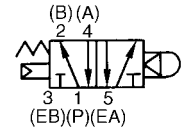
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## Series VZM400

### Basic / VZM450-01-00



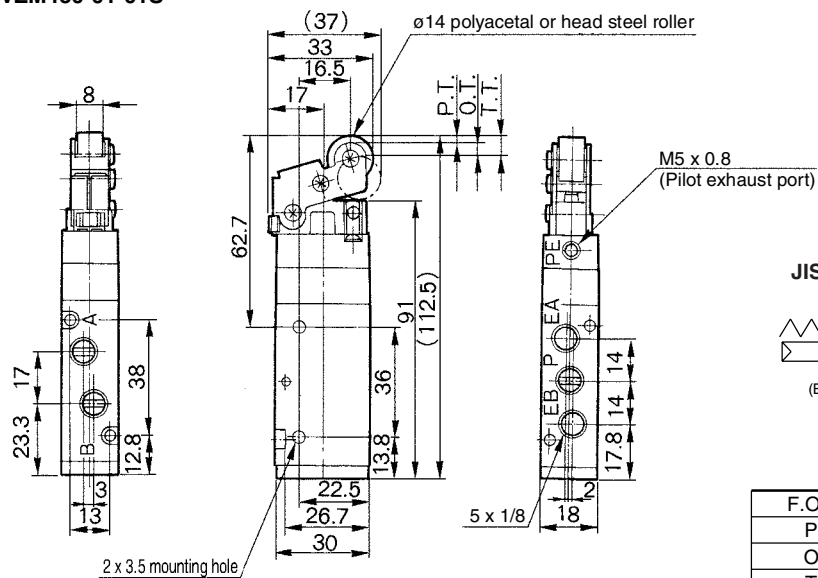
#### JIS Symbol



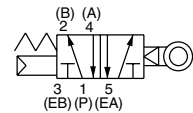
\* 0.5 MPa supply

F.O.F. *	16 N
P.T.	1.0 mm
O.T.	2.0 mm
T.T.	3.0 mm

### Roller lever / VZM450-01-01 · VZM450-01-01S



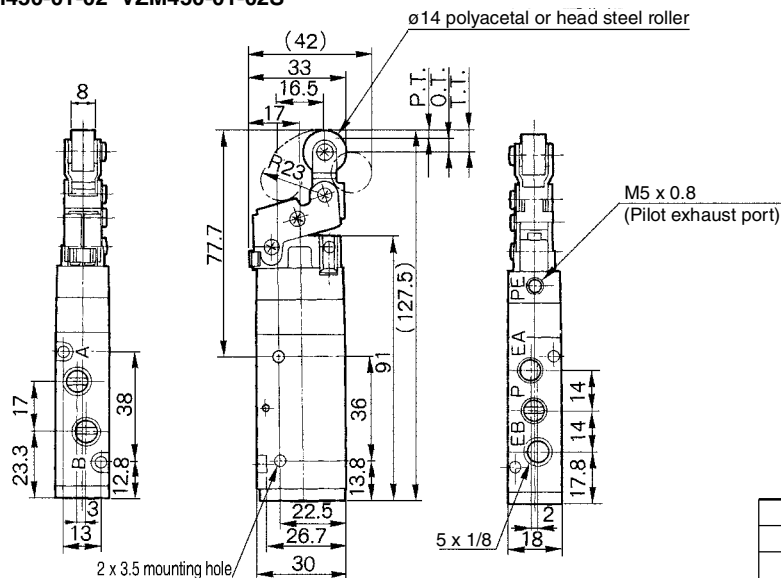
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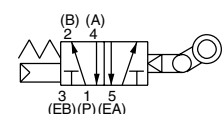
\* 0.5 MPa supply

F.O.F. *	8 N
P.T.	2.2 mm
O.T.	4.0 mm
T.T.	6.2 mm

### One way roller lever / VZM450-01-02 · VZM450-01-02S



#### JIS Symbol



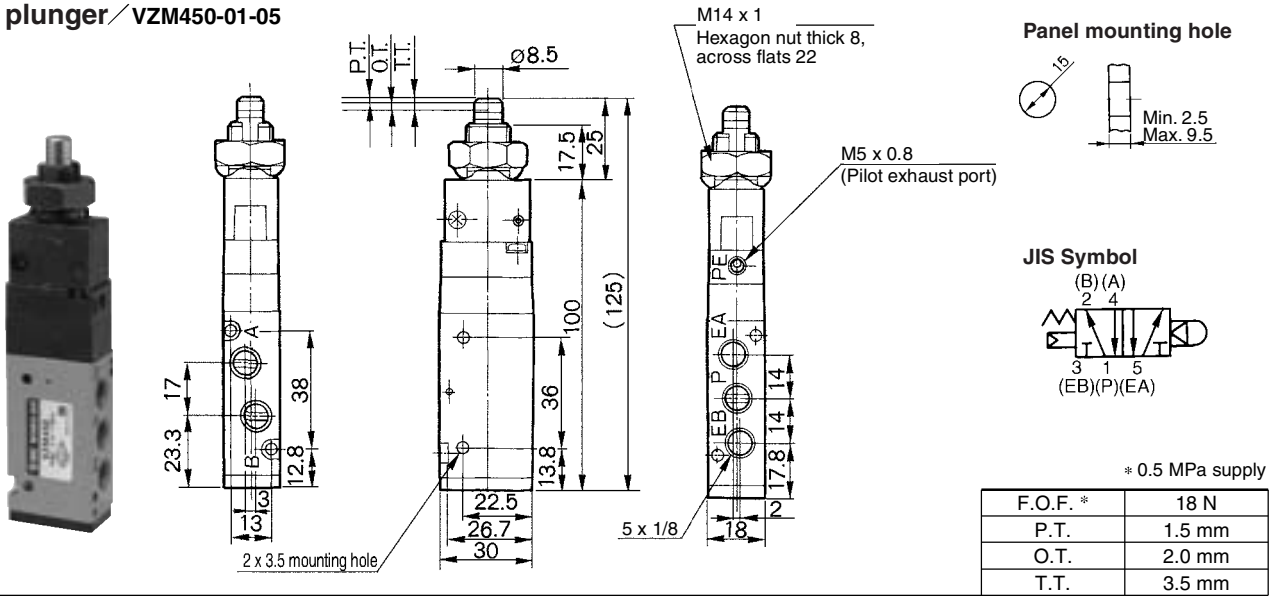
\* 0.5 MPa supply

F.O.F. *	7 N
P.T.	2.4 mm
O.T.	4.6 mm
T.T.	7.0 mm

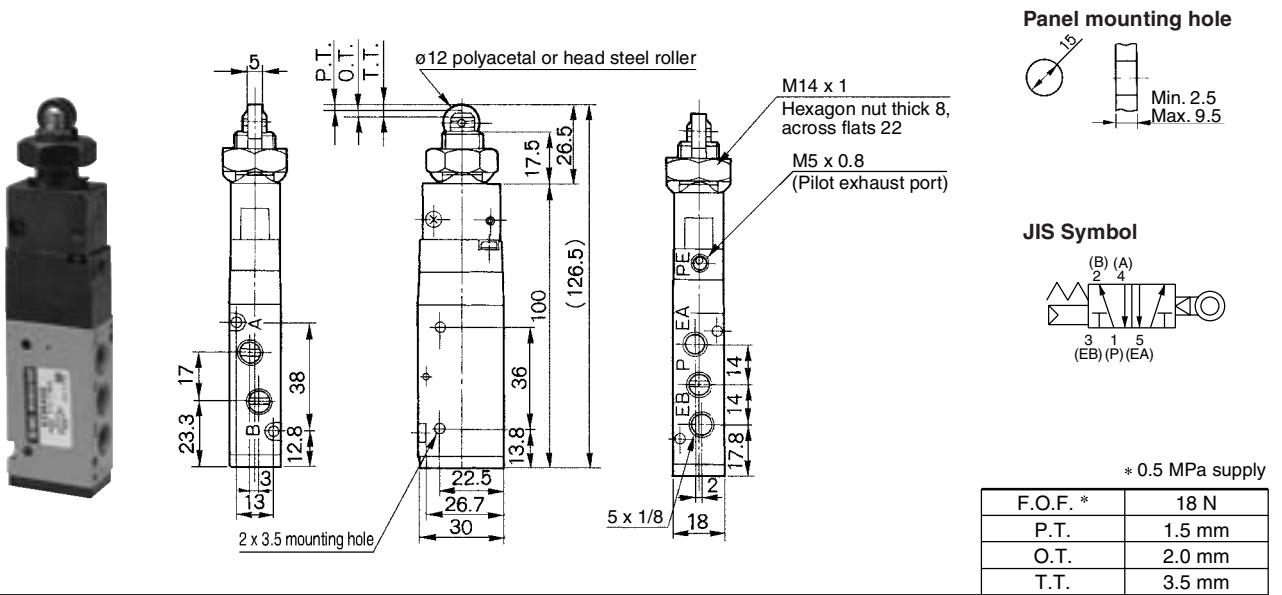
# Series VZM400

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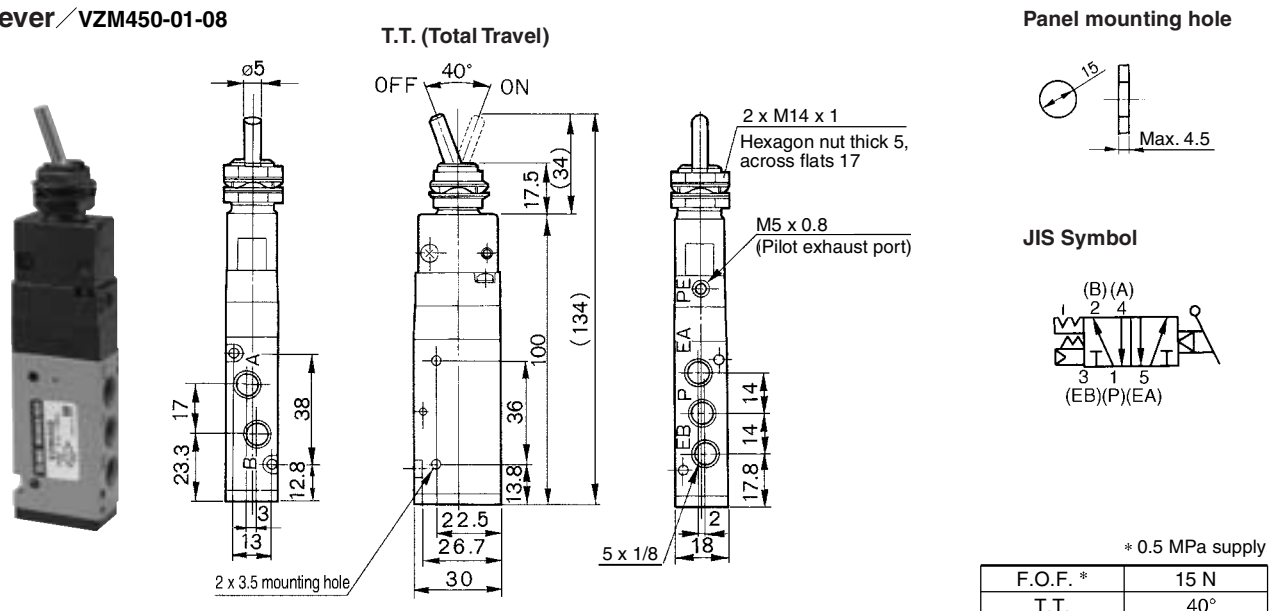
### Straight plunger / VZM450-01-05



### Roller plunger / VZM450-01-06 · VZM450-01-06S



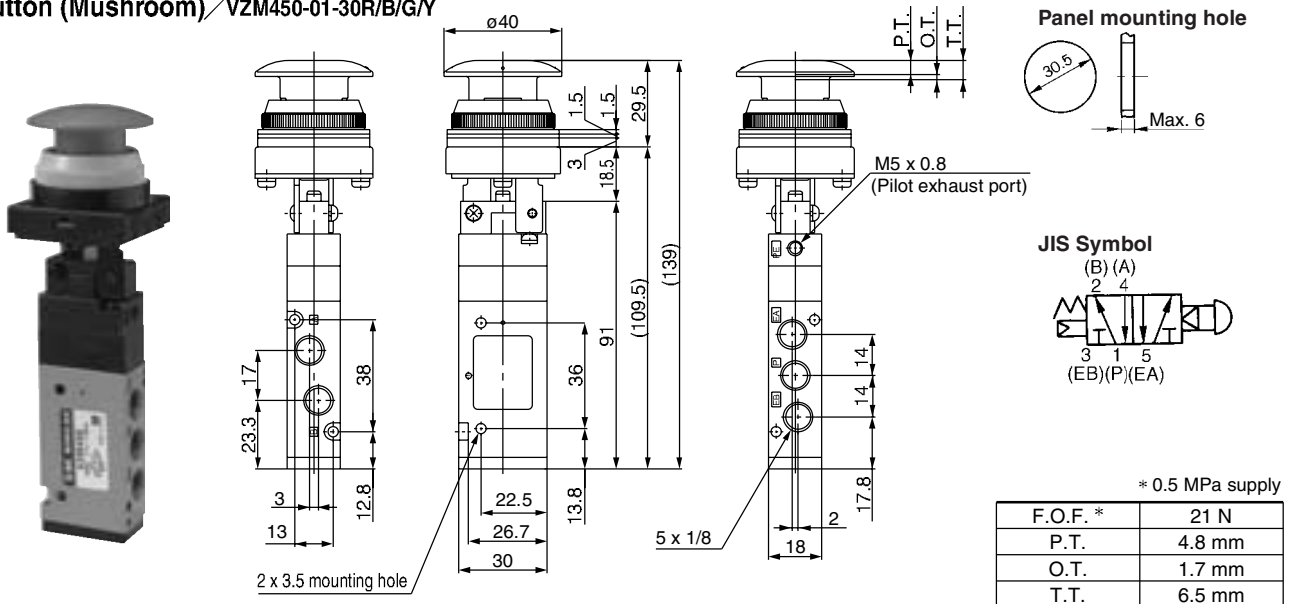
### Toggle lever / VZM450-01-08



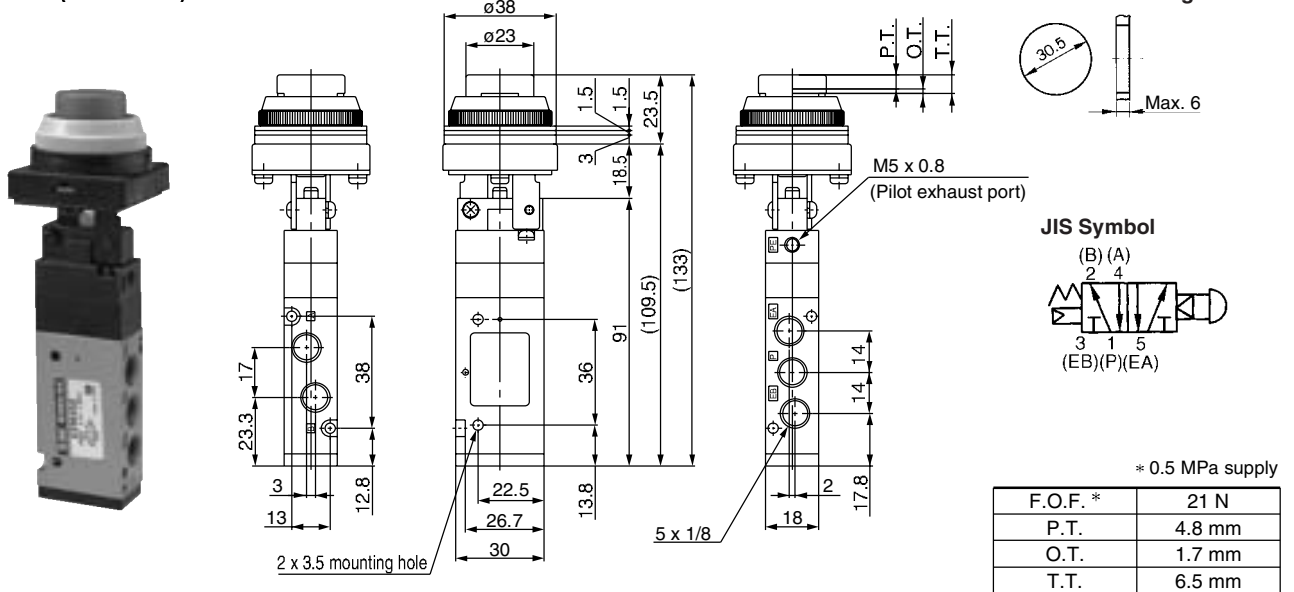
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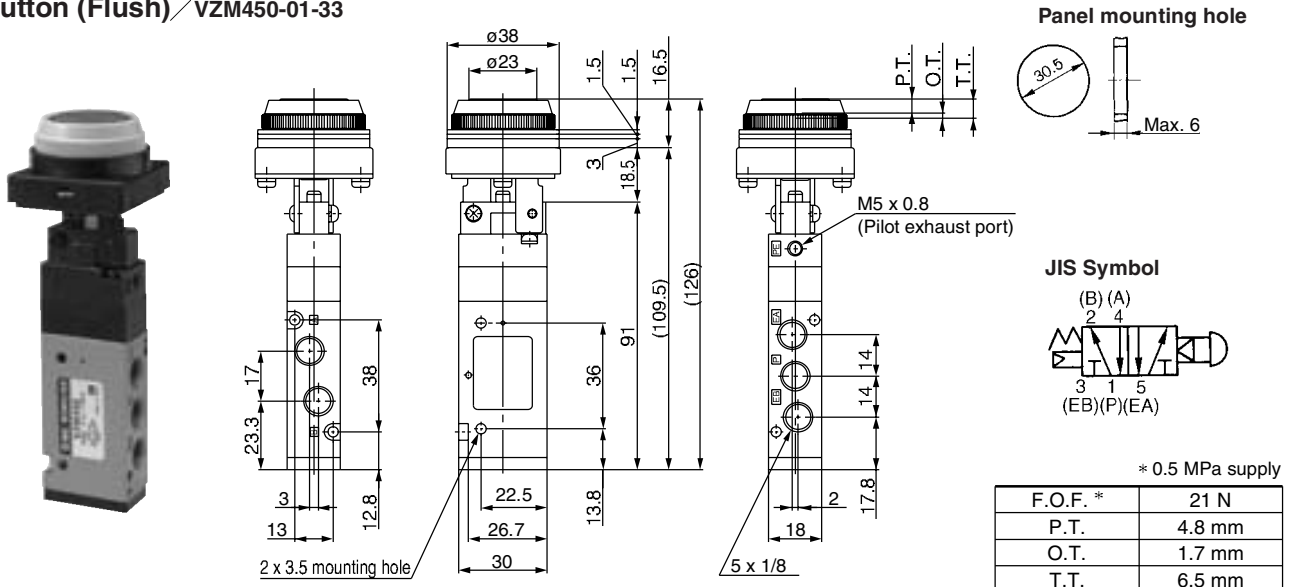
### Push button (Mushroom) / VZM450-01-30R/B/G/Y



### Push button (Extended) / VZM450-01-32R/B/G/Y



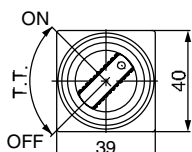
### Push button (Flush) / VZM450-01-33



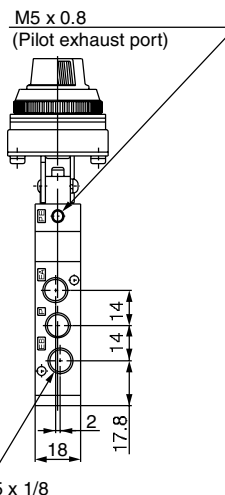
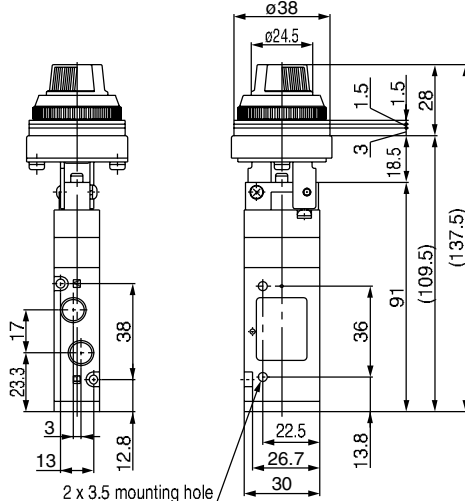
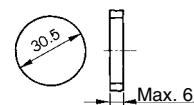
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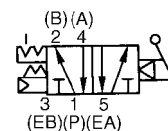
Twist selector (2 position) / VZM450-01-34R/B/G/Y



Panel mounting hole



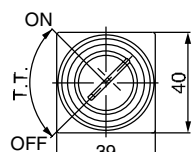
JIS Symbol



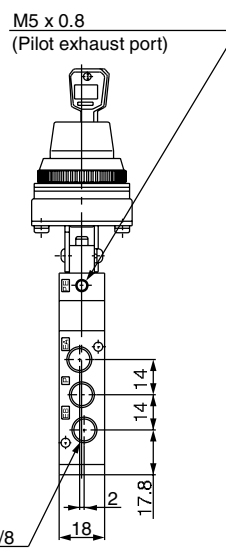
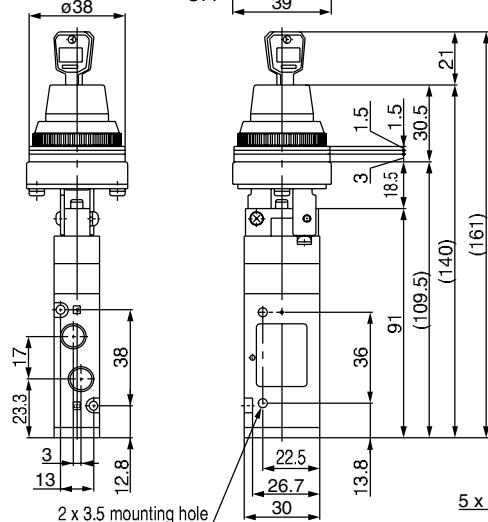
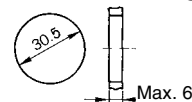
\* 0.5 MPa supply

F.O.F. *	23 N
T.T.	90°

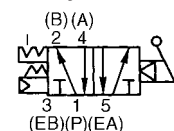
Key selector (2 position) / VZM450-01-36



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.

External pilot type  
VZM451 type

With foot bracket  
VZM450-01-□□-F

