

# 5 Port Mechanical Valve Rubber Seal

## Series *VFM300*

**Compact design,  
large flow capacity 18 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.

**External pilot model  
available. (Option)**

**Foot bracket and manifold  
mounting possible.**



### Specifications

Fluid	Air/Inert gas
Operating pressure	0.15 to 0.9 MPa <sup>(1)</sup>
Ambient and fluid temperature	-5 to 60°C (No freezing)
Effective area	18 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/SUP, CYL port 1/4, EXH port 1/8 Pilot valve (EXH)/M5 x 0.8
Option	Foot bracket <sup>(2)</sup>
Weight (Basic)	260 g

\* Please contact SMC for manifold mounting style.  
 Note 1) External pilot type Main valve: 0 to 0.9 MPa  
 Pilot valve: 0.15 to 0.9 MPa  
 Note 2) The standard body can not be retrofitted with a foot bracket.

### Model

	Actuator	Model	Actuator part no.	Application	
Mechanical operation	Basic	<b>VFM350-02-00</b>	—	—	
	Roller lever	<b>VFM350-02-01</b>	VM-01C	Polyacetal roller	
		<b>VFM350-02-01S</b>	VM-01CS	Hard steel roller	
	One way roller lever	<b>VFM350-02-02</b>	VM-02C	Polyacetal roller	
		<b>VFM350-02-02S</b>	VM-02CS	Hard steel roller	
	Straight plunger	<b>VFM350-02-05</b>	VM-05D	—	
Manual operation	Roller plunger	<b>VFM350-02-06</b>	VM-06D	Polyacetal roller	
		<b>VFM350-02-06S</b>	VM-06DS	Hard steel roller	
	Toggle lever	<b>VFM350-02-08</b>	VM-08D	—	
	Push button (Mushroom)		<b>VFM350-02-30R</b>	VM-30CR	Red
			<b>VFM350-02-30B</b>	VM-30CB	Black
			<b>VFM350-02-30G</b>	VM-30CG	Green
			<b>VFM350-02-30Y</b>	VM-30CY	Yellow
	Push button (Extended)		<b>VFM350-02-32R</b>	VM-32CR	Red
			<b>VFM350-02-32B</b>	VM-32CB	Black
			<b>VFM350-02-32G</b>	VM-32CG	Green
		<b>VFM350-02-32Y</b>	VM-32CY	Yellow	
	Push button (Flush)	<b>VFM350-02-33</b>	VM-33C	With a set of red, black, green, yellow	
	Twist selector (2 position)		<b>VFM350-02-34R</b>	VM-34CR	Red
			<b>VFM350-02-34B</b>	VM-34CB	Black
		<b>VFM350-02-34G</b>	VM-34CG	Green	
		<b>VFM350-02-34Y</b>	VM-34CY	Yellow	
Key selector (2 position)	<b>VFM350-02-36</b>	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 5-6-6 to 5-6-7. The other parts are not replaceable.  
 Note 3) The handle of the selector (2 position) cannot be removed or replaced alone.

### How to Order

VFM35 0 02 01 S

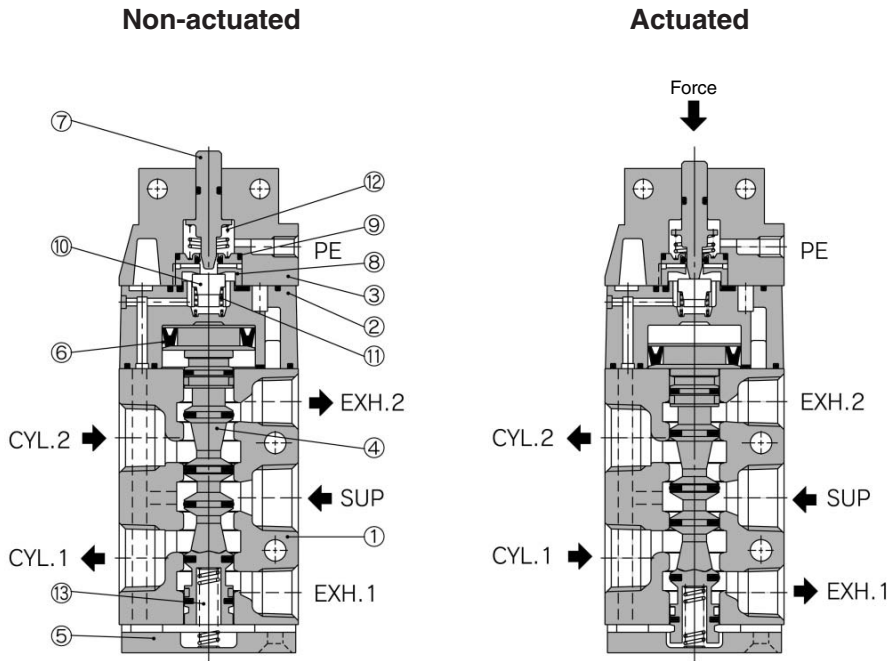
<b>Port size</b>	<b>Actuator type</b>	<b>Suffix for actuator</b>	<b>Option</b>
02 Rc 1/4	00 Basic	S Hard steel roller	F Foot bracket (Only internal pilot)
N02 NPT 1/4	01 Roller lever	R Red	
F02 G 1/4	02 One way roller lever	B Black	
	05 Straight plunger	G Green	
	06 Roller plunger	Y Yellow	
	08 Toggle lever		
	30 Push button (Mushroom)		
	32 Push button (Extended)		
	33 Push button (Flush)		
	34 Twist selector (2 position)		
	36 Key selector (2 position)		

**Body option**

0	Internal pilot type
1	External pilot type

**Color of push button selector**

### Construction



### Component Parts

No.	Description	Material	Note
①	Body	ADC	Metallic plated
②	Pilot body	PBT	Metallic plated
③	Head cover	ZDC	Black zinc chromated
④	Spool valve assembly		
⑤	End cover	ADC	Metallic plated
⑥	Piston	POM	
⑦	Plunger	POM	

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

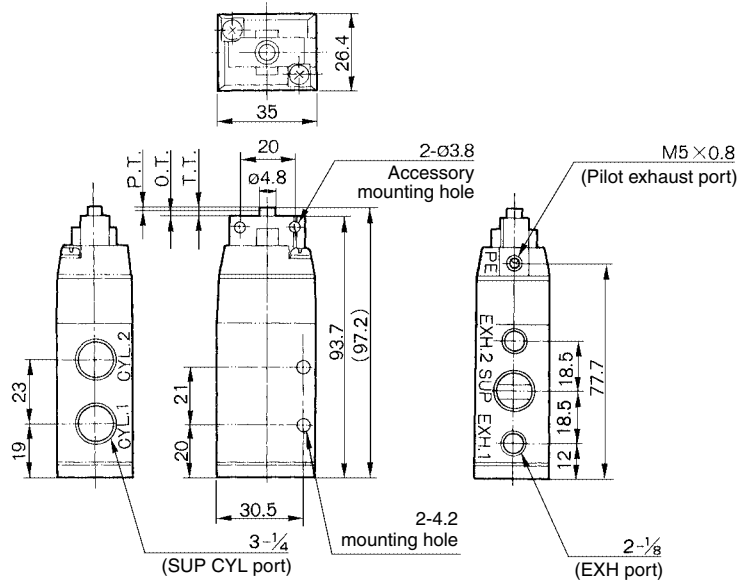
- S□A
- V□A
- S□A
- V□A
- VM
- VR
- VH
- VHS

# Series VFM300

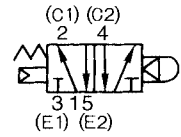
## Series VFM300

### Basic

VFM350-02-00



### JIS Symbol

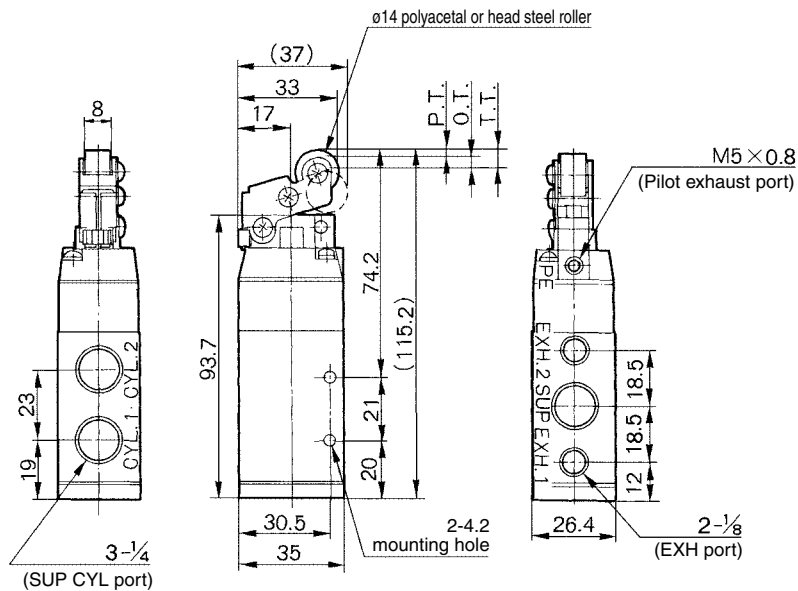


\* 0.5 MPa supply

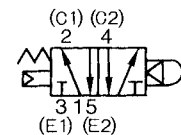
F.O.F. *	16 N
P.T.	1.0 mm
O.T.	2.0 mm
T.T.	3.0 mm

### Roller lever

VFM350-02-01  
VFM350-02-01S



### JIS Symbol

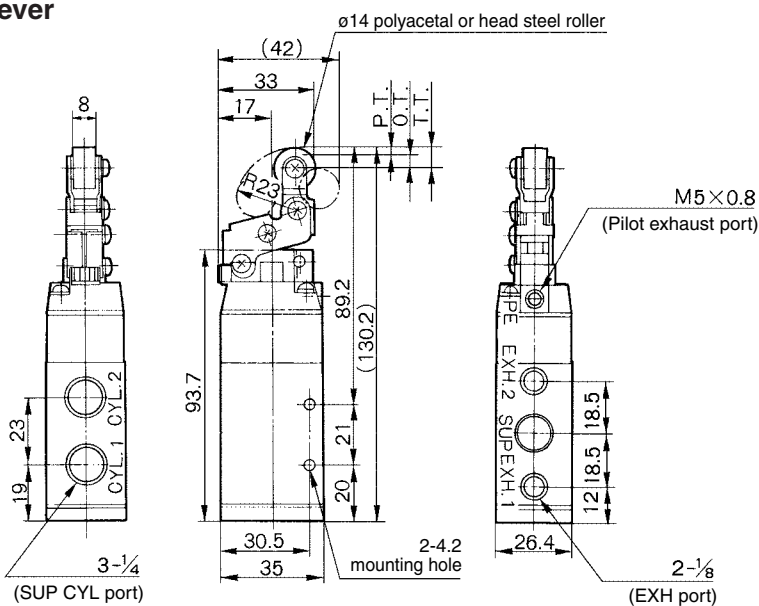


\* 0.5 MPa supply

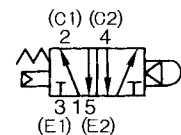
F.O.F. *	8 N
P.T.	2.2 mm
O.T.	4.0 mm
T.T.	6.2 mm

### One way roller lever

VFM350-02-02  
VFM350-02-02S



### JIS Symbol



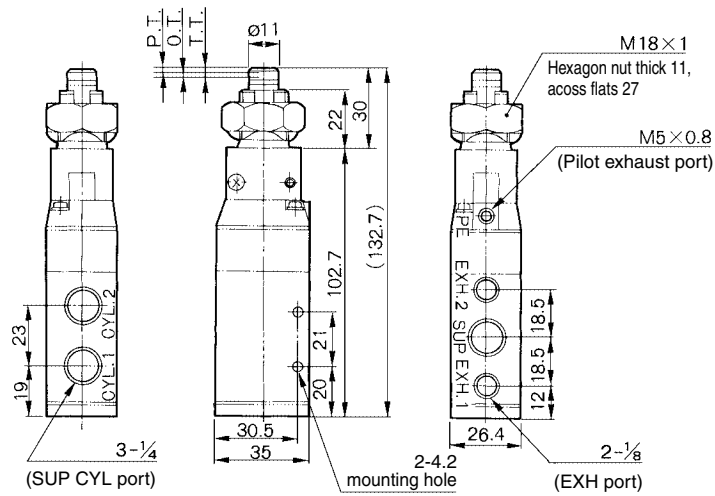
\* 0.5 MPa supply

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

# 5 Port Mechanical Valve Rubber Seal Series VFM300

## Series VFM300

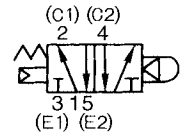
### Straight plunger VFM350-02-05



#### Panel mounting hole



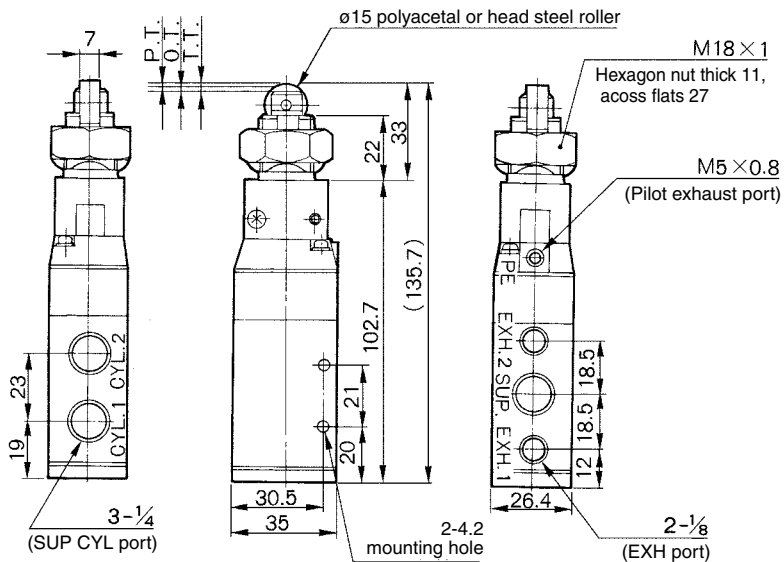
#### JIS symbol



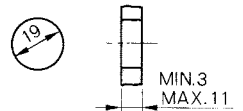
\* 0.5 MPa supply

F.O.F. *	20 N
P.T.	1.5 mm
O.T.	2.0 mm
T.T.	3.5 mm

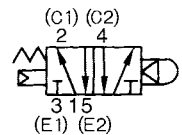
### Roller plunger VFM350-02-06 VFM350-02-06S



#### Panel mounting hole



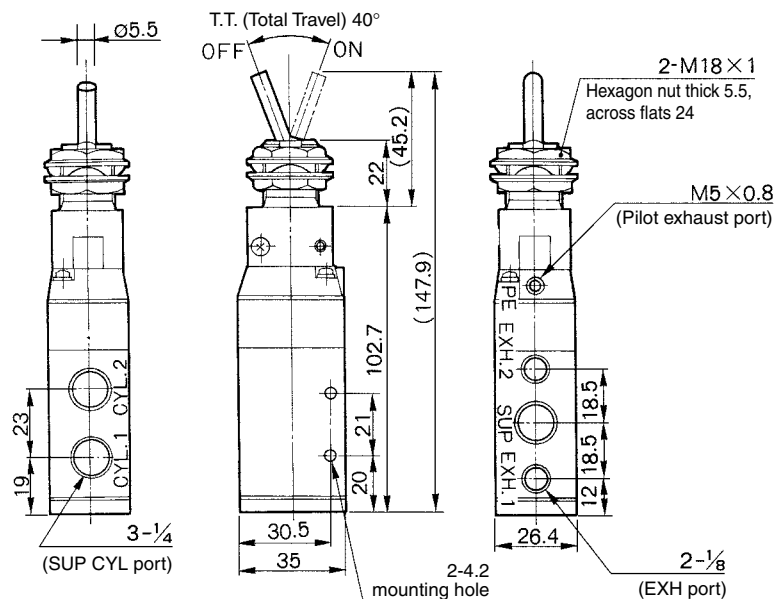
#### JIS symbol



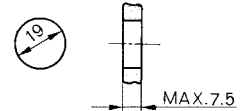
\* 0.5 MPa supply

F.O.F. *	20 N
P.T.	1.5 mm
O.T.	2.0 mm
T.T.	3.5 mm

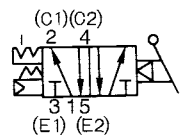
### Toggle lever VFM350-02-08



#### Panel mounting hole



#### JIS Symbol



\* 0.5 MPa supply

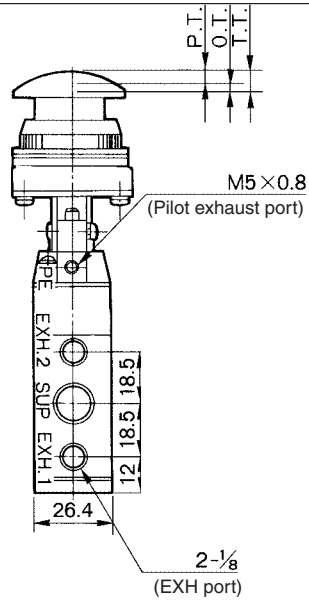
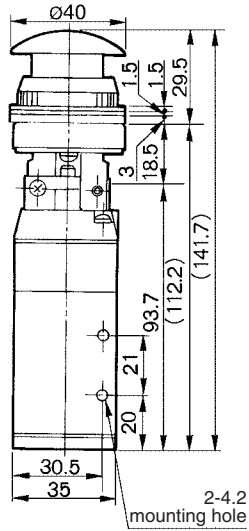
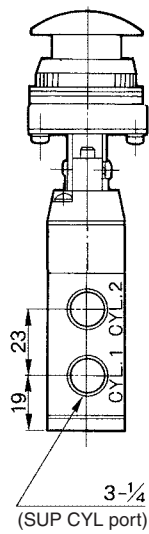
F.O.F. *	15 N
T.T.	40°

# Series VFM300

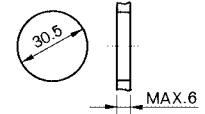
## Series VFM300

### Push button (Mushroom)

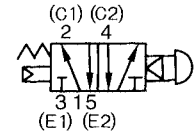
VFM350-02-30R/B/G/Y



#### Panel mounting hole



#### JIS Symbol

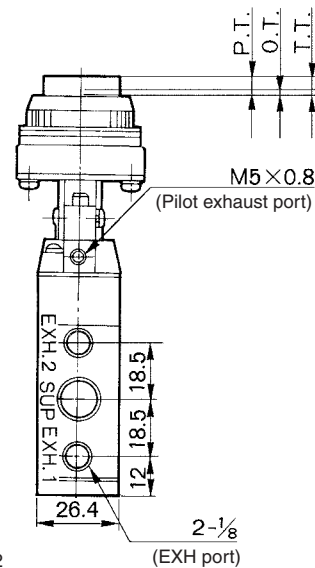
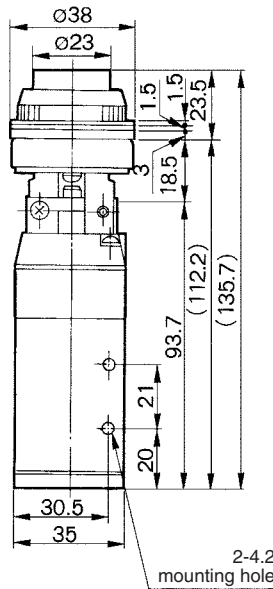
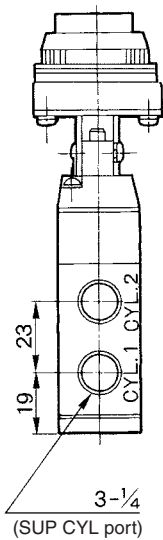


\* 0.5 MPa supply

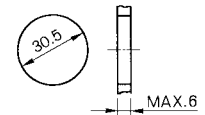
F.O.F. *	21 N
P.T.	4.8 mm
O.T.	1.7 mm
T.T.	6.5 mm

### Push button (Extended)

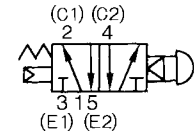
VFM350-02-32R/B/G/Y



#### Panel mounting hole



#### JIS Symbol

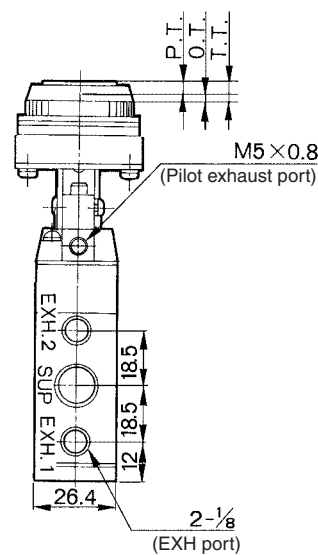
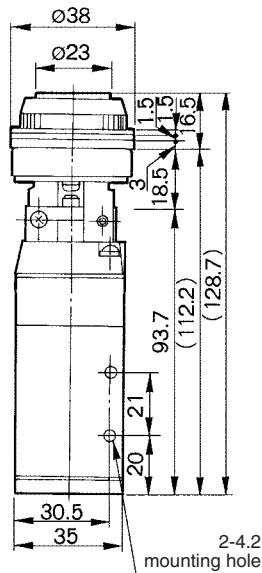
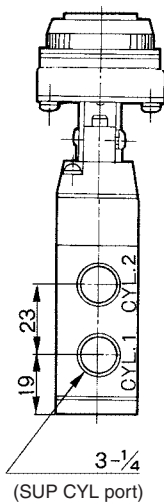


\* 0.5 MPa supply

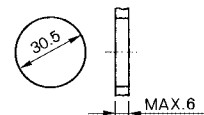
F.O.F. *	21 N
P.T.	4.8 mm
O.T.	1.7 mm
T.T.	6.5 mm

### Push button (Flush)

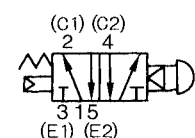
VFM350-02-33



#### Panel mounting hole



#### JIS Symbol



\* 0.5 MPa supply

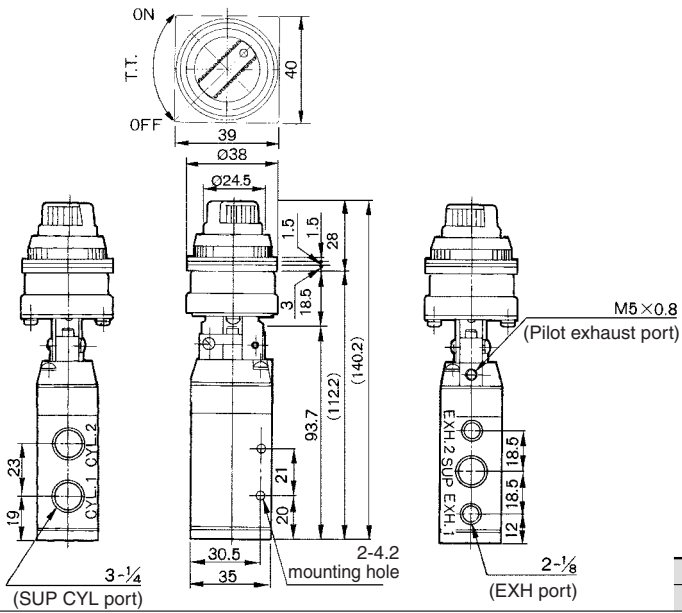
F.O.F. *	21 N
P.T.	4.8 mm
O.T.	1.7 mm
T.T.	6.5 mm

# 5 Port Mechanical Valve Rubber Seal Series VFM300

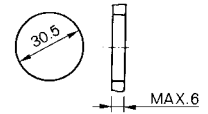
## Series VFM300

### Twist selector (2 position)

VFM350-02-34R/B/G/Y



Panel mounting hole



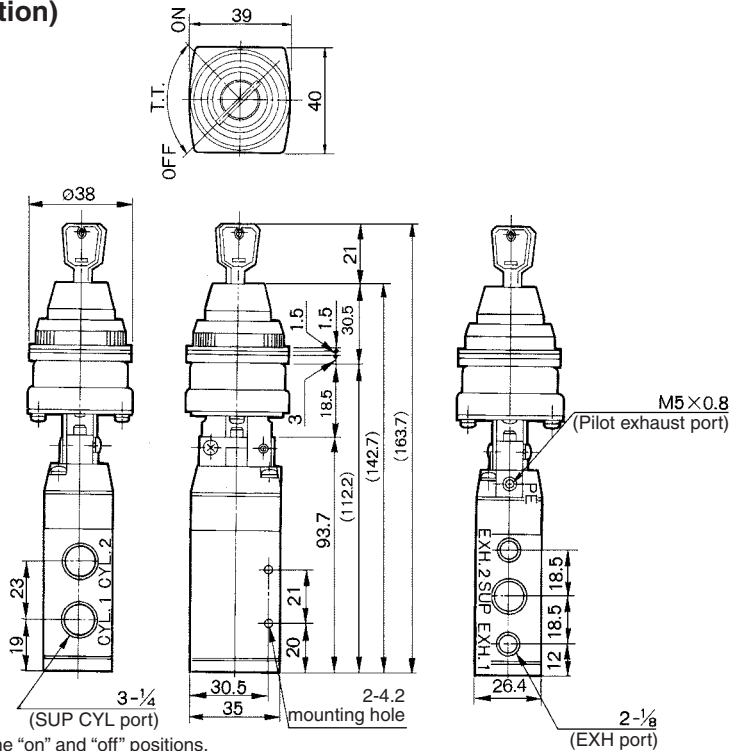
JIS Symbol



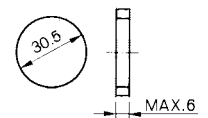
* 0.5 MPa supply	
F.O.F. *	23 N
T.T.	90°

### Key selector (2 position)

VFM350-02-36



Panel mounting hole



JIS Symbol



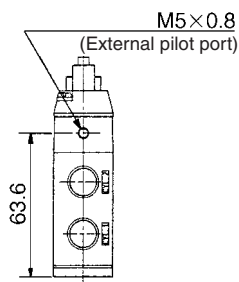
* 0.5 MPa supply	
F.O.F. *	26 N
T.T.	90°



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

### External pilot type

VFM351 type



### With foot bracket

VFM350-02-□□-F

