

# 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	VFM350-02-00	—	—
	Roller lever	VFM350-02-01	VM-01C	Polyacetal roller
		VFM350-02-01S	VM-01CS	Hard steel roller
	One way roller lever	VFM350-02-02	VM-02C	Polyacetal roller
		VFM350-02-02S	VM-02CS	Hard steel roller
	Straight plunger	VFM350-02-05	VM-05D	—
Roller plunger	VFM350-02-06	VM-06D	Polyacetal roller	
	VFM350-02-06S	VM-06DS	Hard steel roller	
Manual operation	Toggle lever	VFM350-02-08	VM-08D	—
	Push button (Mushroom)	VFM350-02-30R	VM-30CR	Red
		VFM350-02-30B	VM-30CB	Black
		VFM350-02-30G	VM-30CG	Green
		VFM350-02-30Y	VM-30CY	Yellow
	Push button (Extended)	VFM350-02-32R	VM-32CR	Red
		VFM350-02-32B	VM-32CB	Black
		VFM350-02-32G	VM-32CG	Green
		VFM350-02-32Y	VM-32CY	Yellow
	Push button (Flush)	VFM350-02-33	VM-33C	With a set of red, black, green, yellow
	Twist selector (2 position)	VFM350-02-34R	VM-34CR	Red
		VFM350-02-34B	VM-34CB	Black
		VFM350-02-34G	VM-34CG	Green
VFM350-02-34Y		VM-34CY	Yellow	
Key selector (2 position)	VFM350-02-36	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 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.

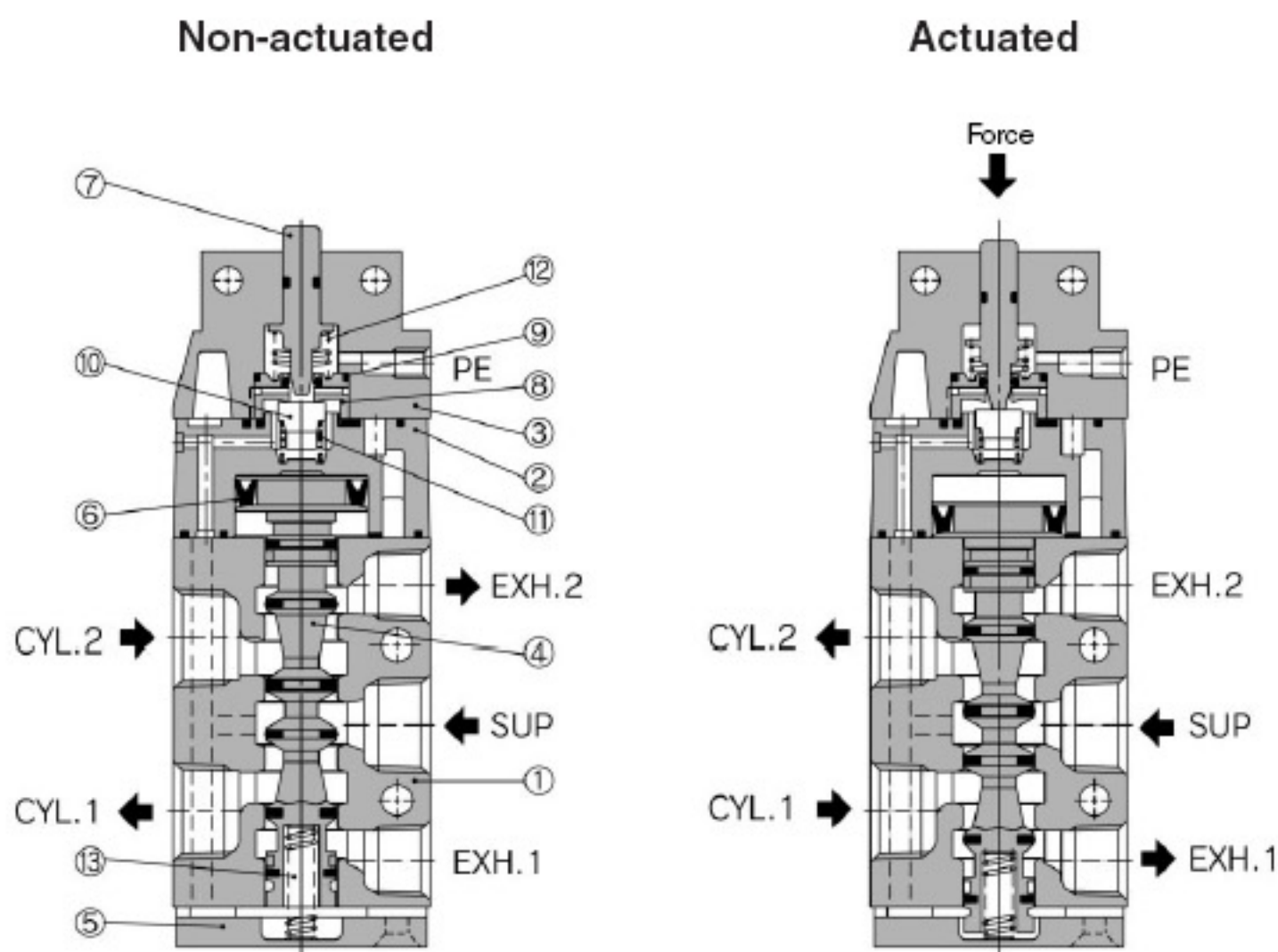
# 5 Port Mechanical Valve Rubber Seal Series VFM300

## How to Order

VFM35 0 02 01 S

• Port size		• Actuator type		• Suffix for actuator		• Option	
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	Color of push button selector	
F02	G 1/4	02	One way roller lever	B	Black		
		05	Straight plunger	G	Green		
		06	Roller plunger	Y	Yellow		
		08	Toggle lever				
• Body option		30	Push button (Mushroom)				
0	Internal pilot type	32	Push button (Extended)				
1	External pilot type	33	Push button (Flush)				
		34	Twist selector (2 position)				
		36	Key selector (2 position)				

## 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

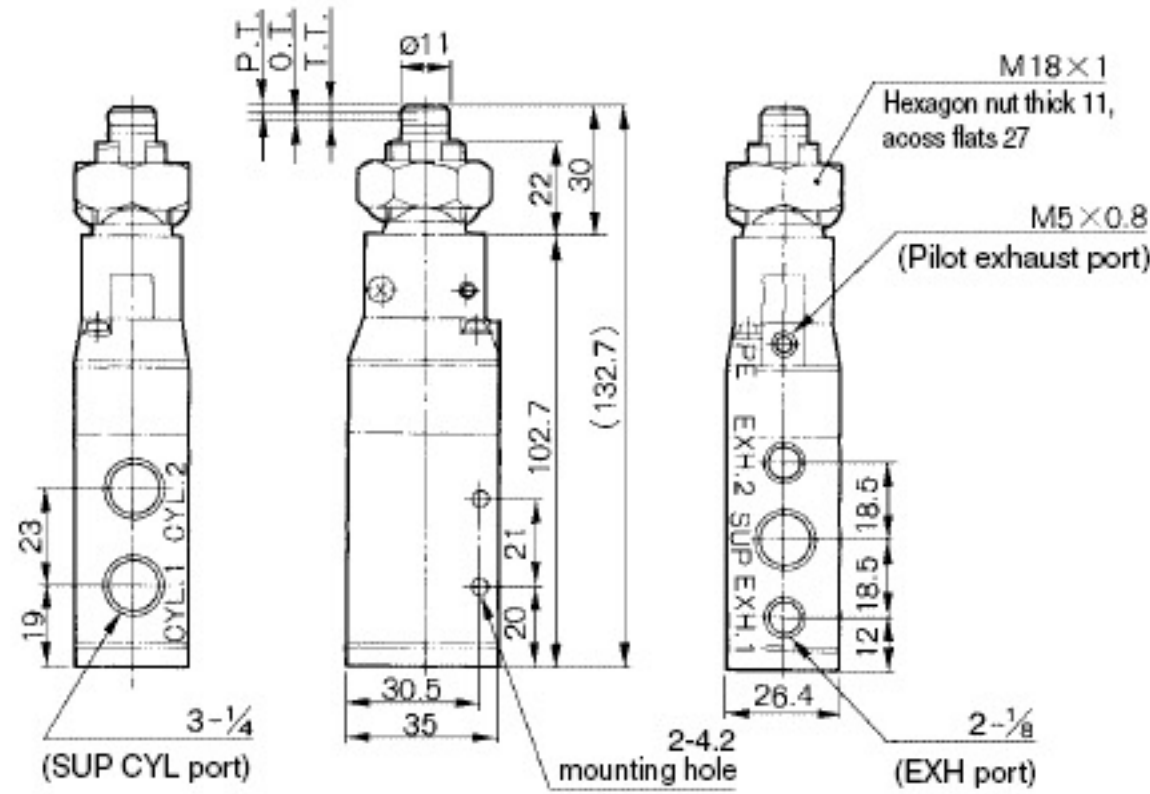
VH

VHS

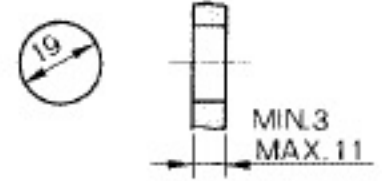
# 5 Port Mechanical Valve Rubber Seal Series VFM300

## Series VFM300

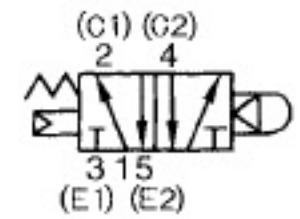
### Straight plunger VFM350-02-05



#### Panel mounting hole



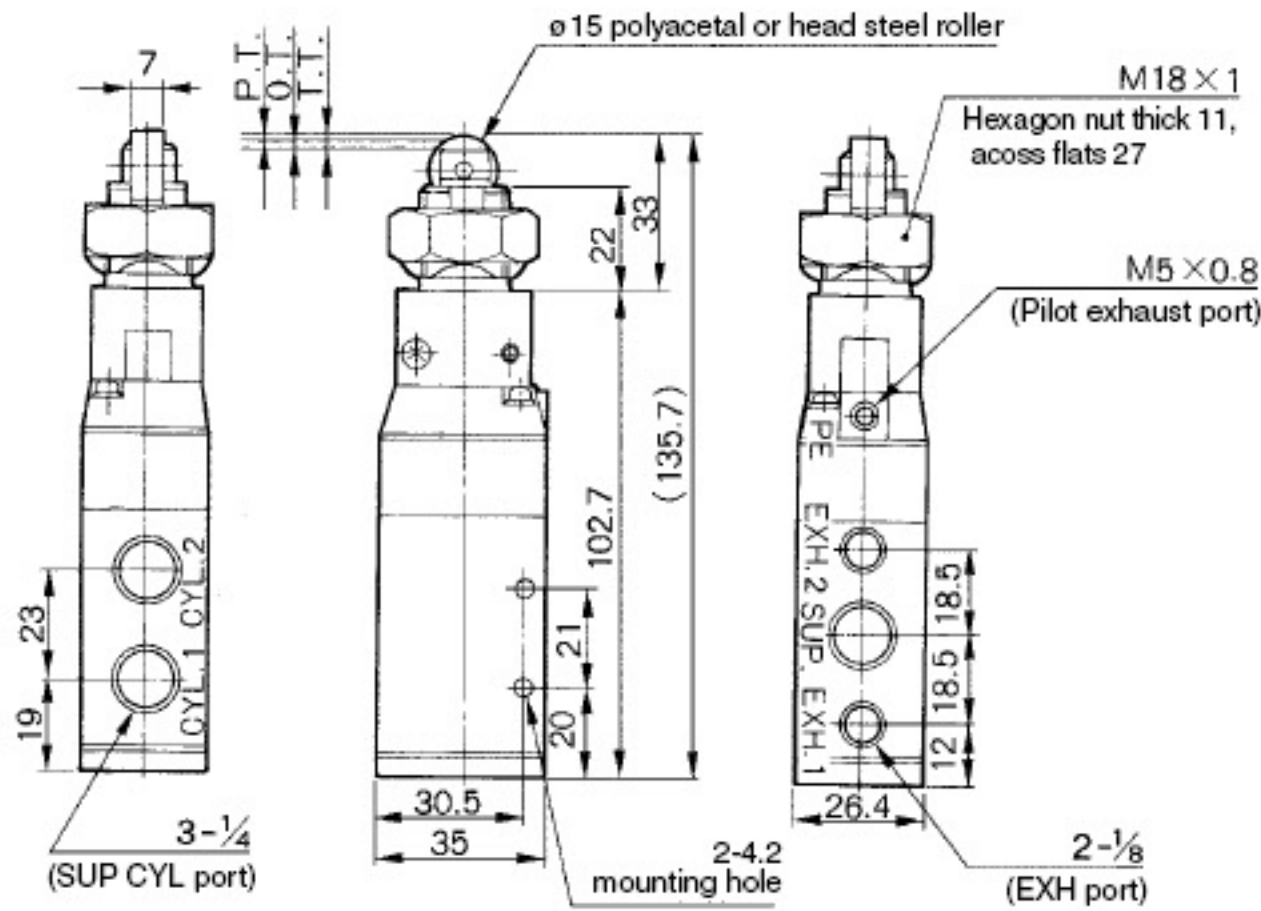
#### JIS symbol



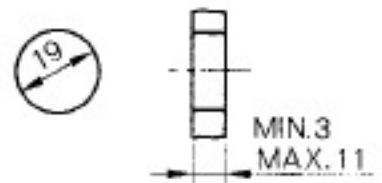
\* 0.5 MPa supply

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

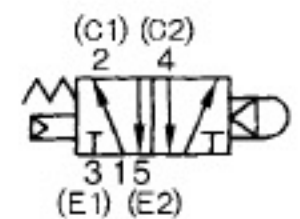
### Roller plunger VFM350-02-06 VFM350-02-06S



#### Panel mounting hole



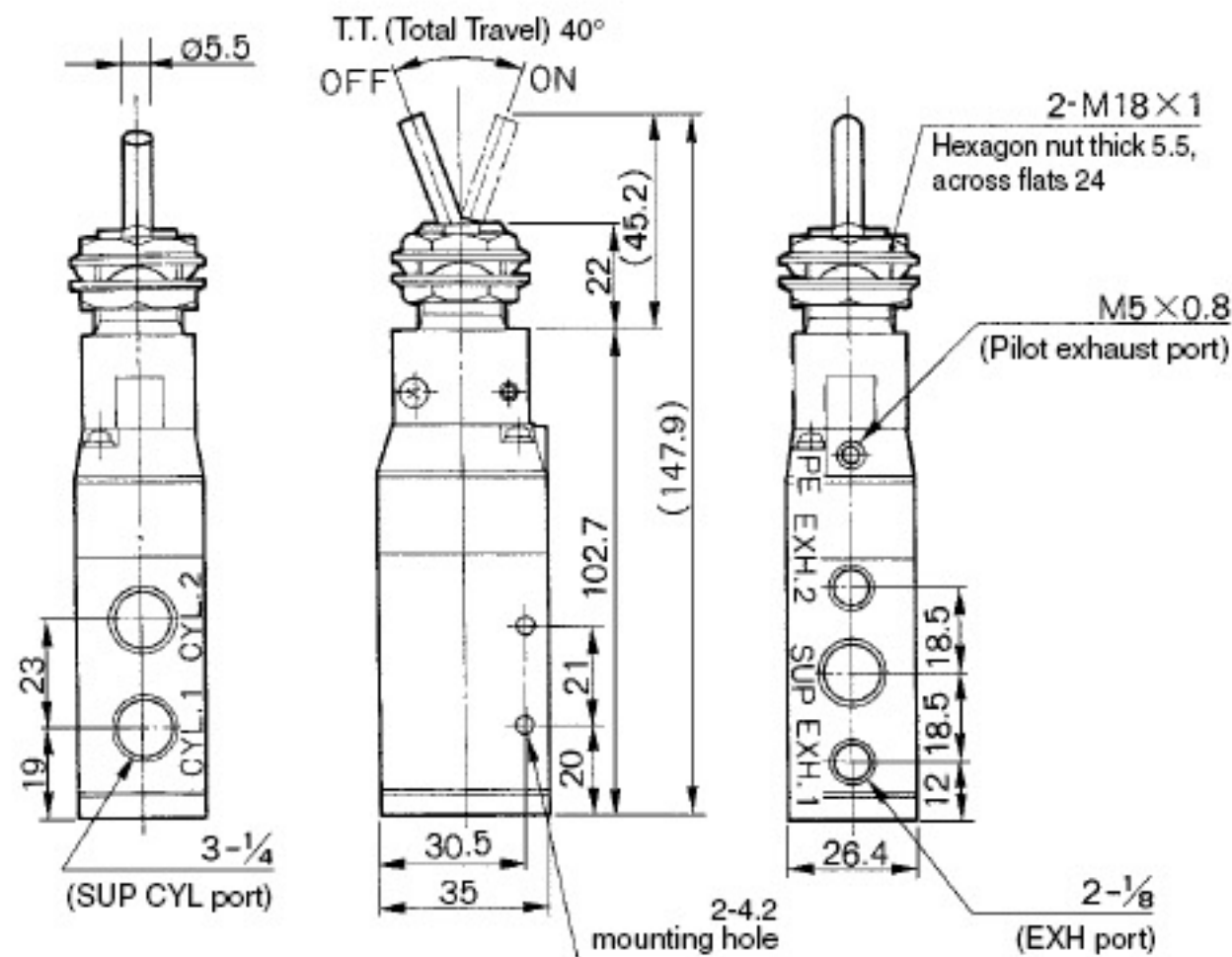
#### JIS symbol



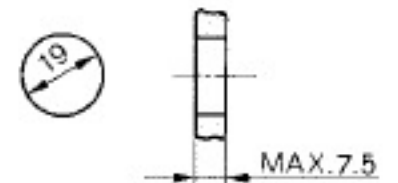
\* 0.5 MPa supply

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

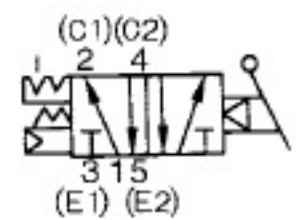
### Toggle lever VFM350-02-08



#### Panel mounting hole



#### JIS Symbol



\* 0.5 MPa supply

F.O.F. *	15 N
T.T.	40°

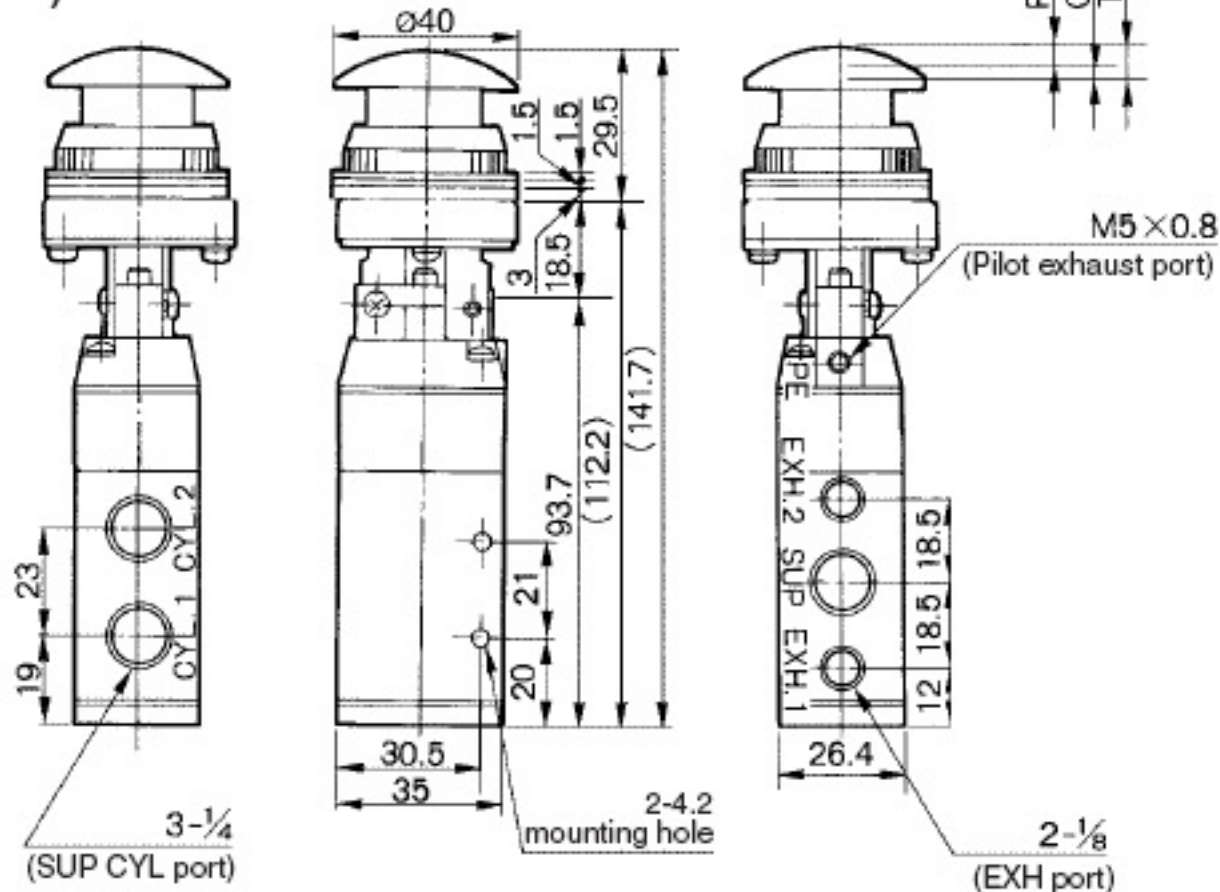
- A
- A
- A
- A
- VM
- VR
- VH
- VHS

# Series VFM300

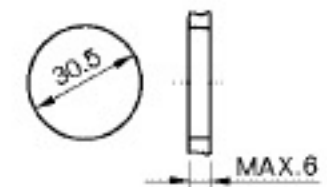
## Series VFM300

### Push button (Mushroom)

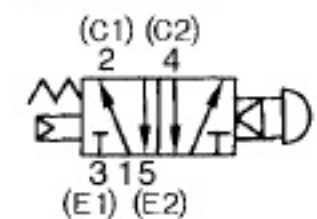
VFM350-02-30R/B/G/Y



#### Panel mounting hole



#### JIS Symbol

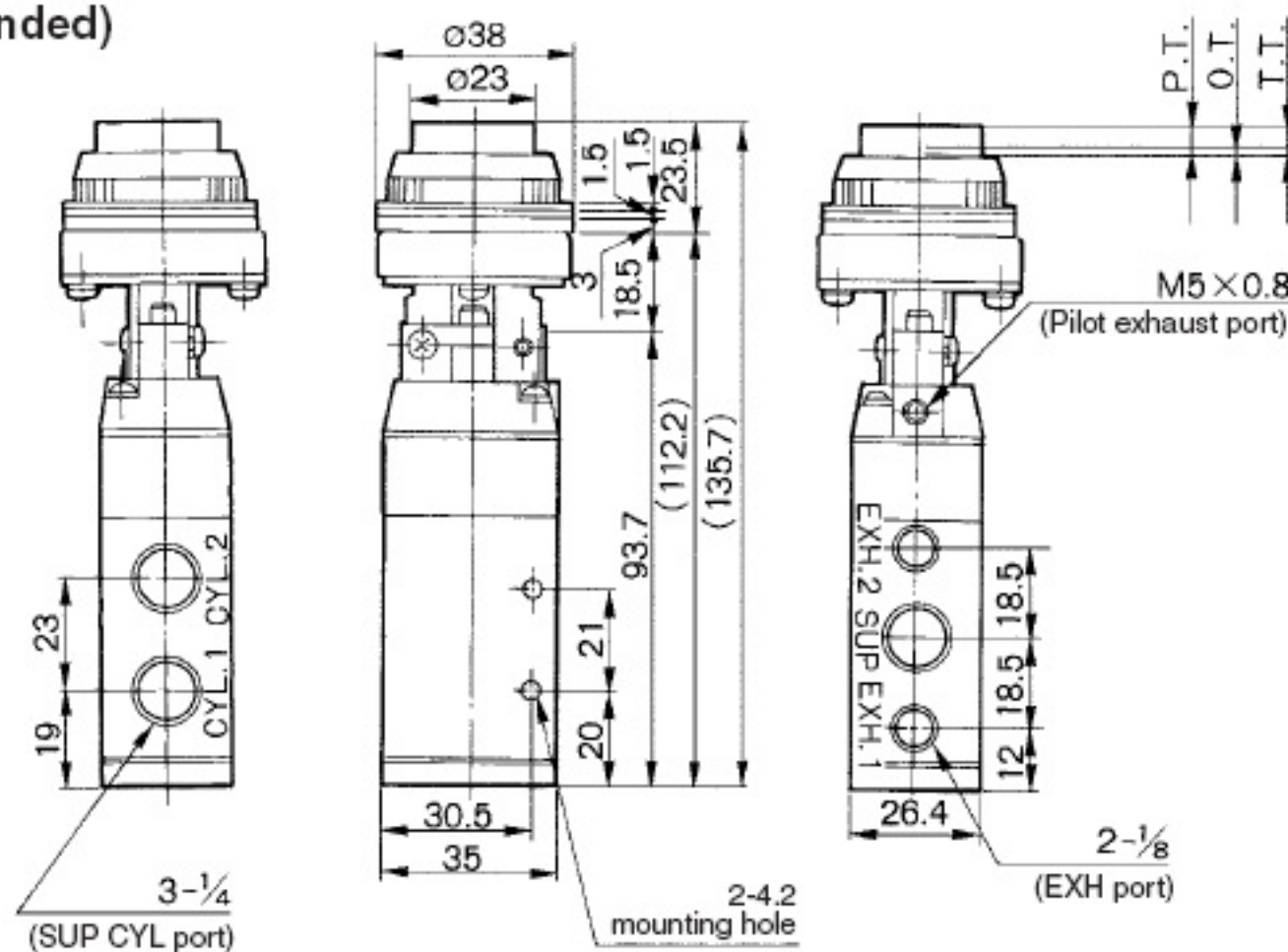


\* 0.5 MPa supply

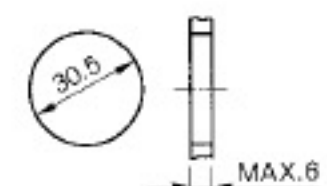
F.O.F. *	21 N
P.T.	4.8 mm
O.T.	1.7 mm
T.T.	6.5 mm

### Push button (Extended)

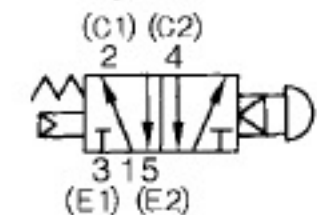
VFM350-02-32R/B/G/Y



#### Panel mounting hole



#### JIS Symbol

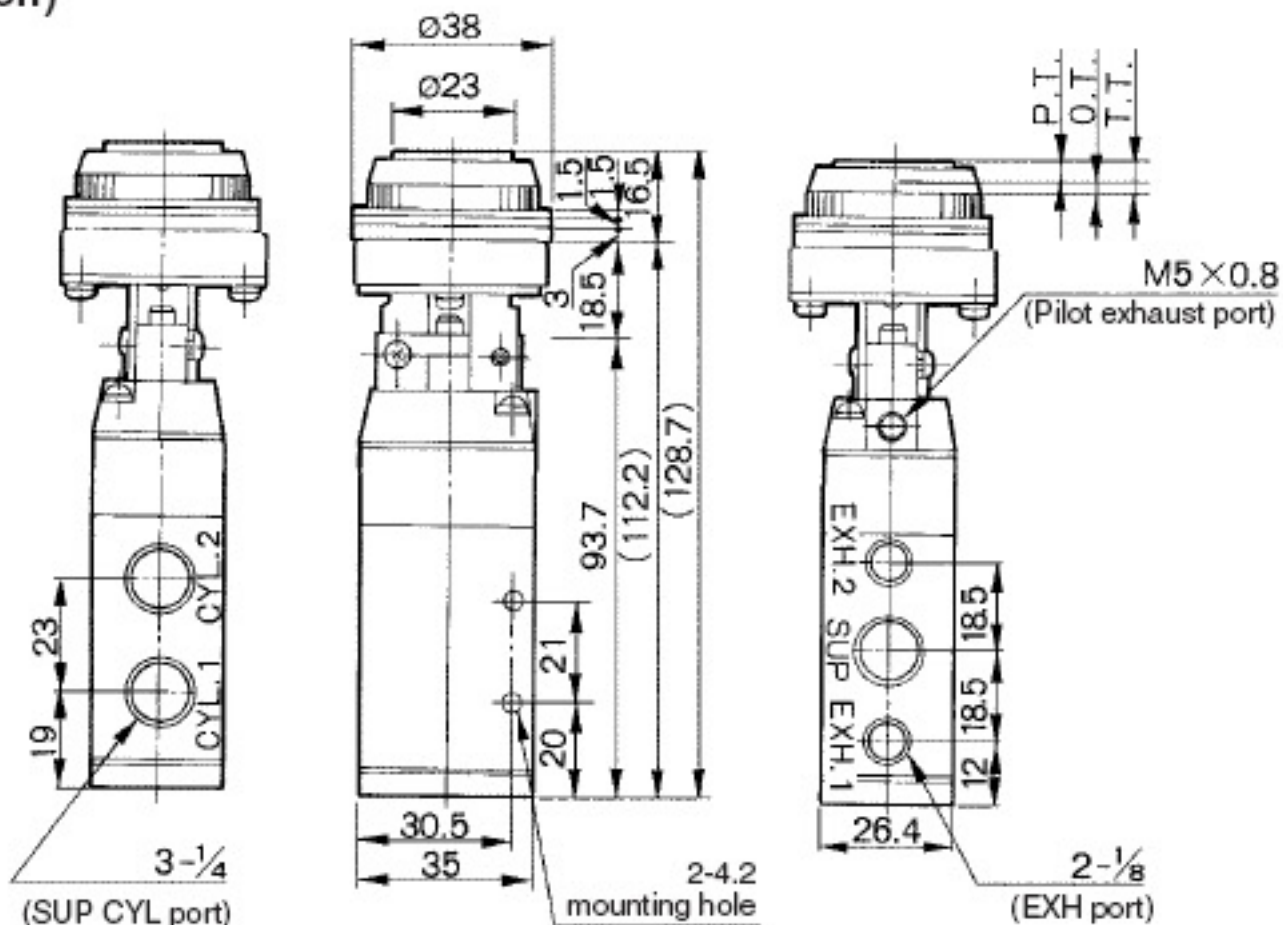


\* 0.5 MPa supply

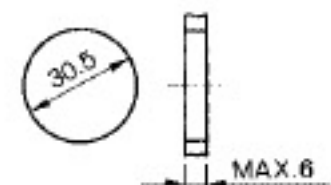
F.O.F. *	21 N
P.T.	4.8 mm
O.T.	1.7 mm
T.T.	6.5 mm

### Push button (Flush)

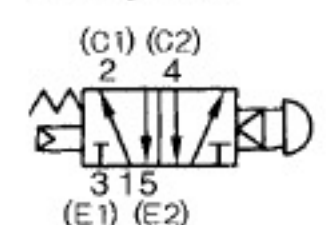
VFM350-02-33



#### Panel mounting hole



#### JIS Symbol



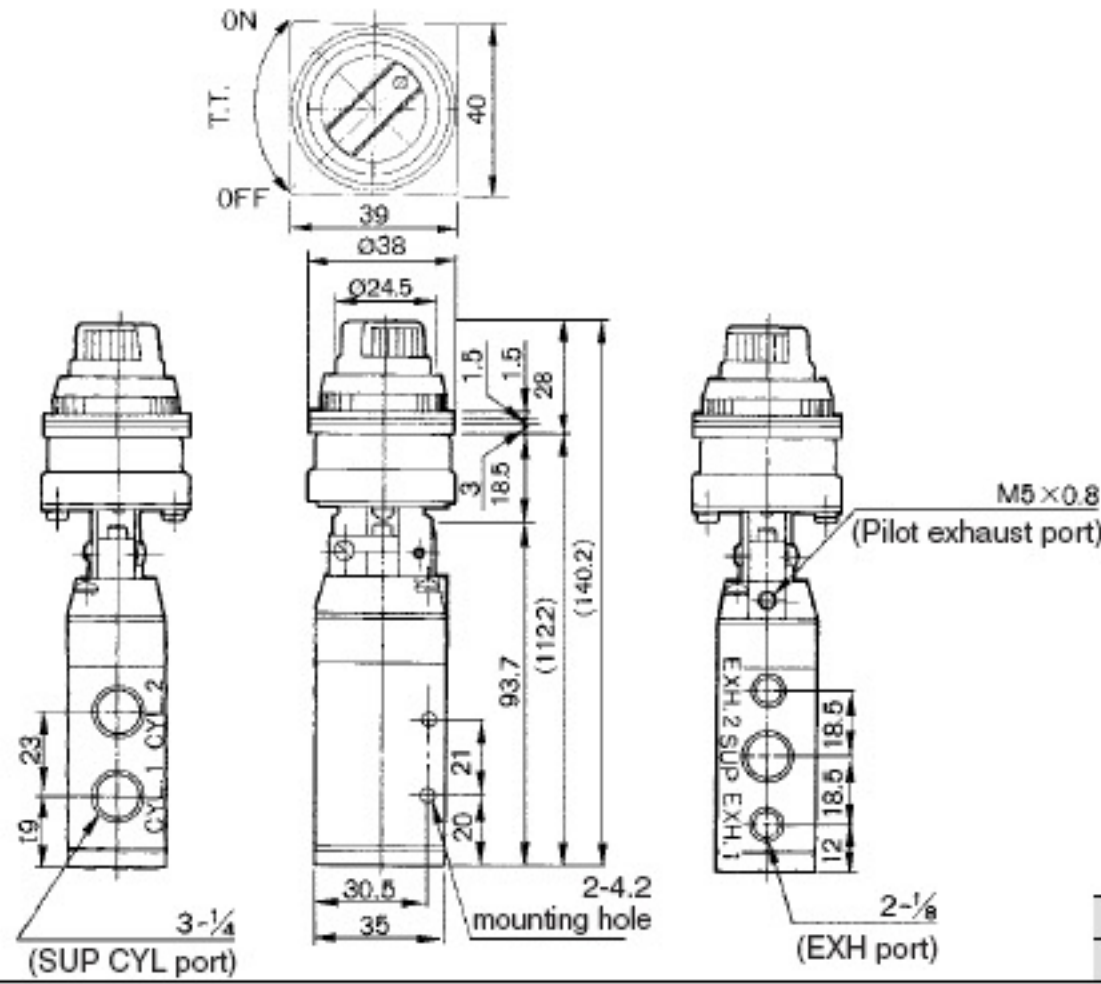
\* 0.5 MPa supply

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

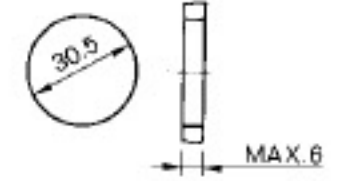
# 5 Port Mechanical Valve Rubber Seal Series VFM300

## Series VFM300

### Twist selector (2 position) VFM350-02-34R/B/G/Y



Panel mounting hole

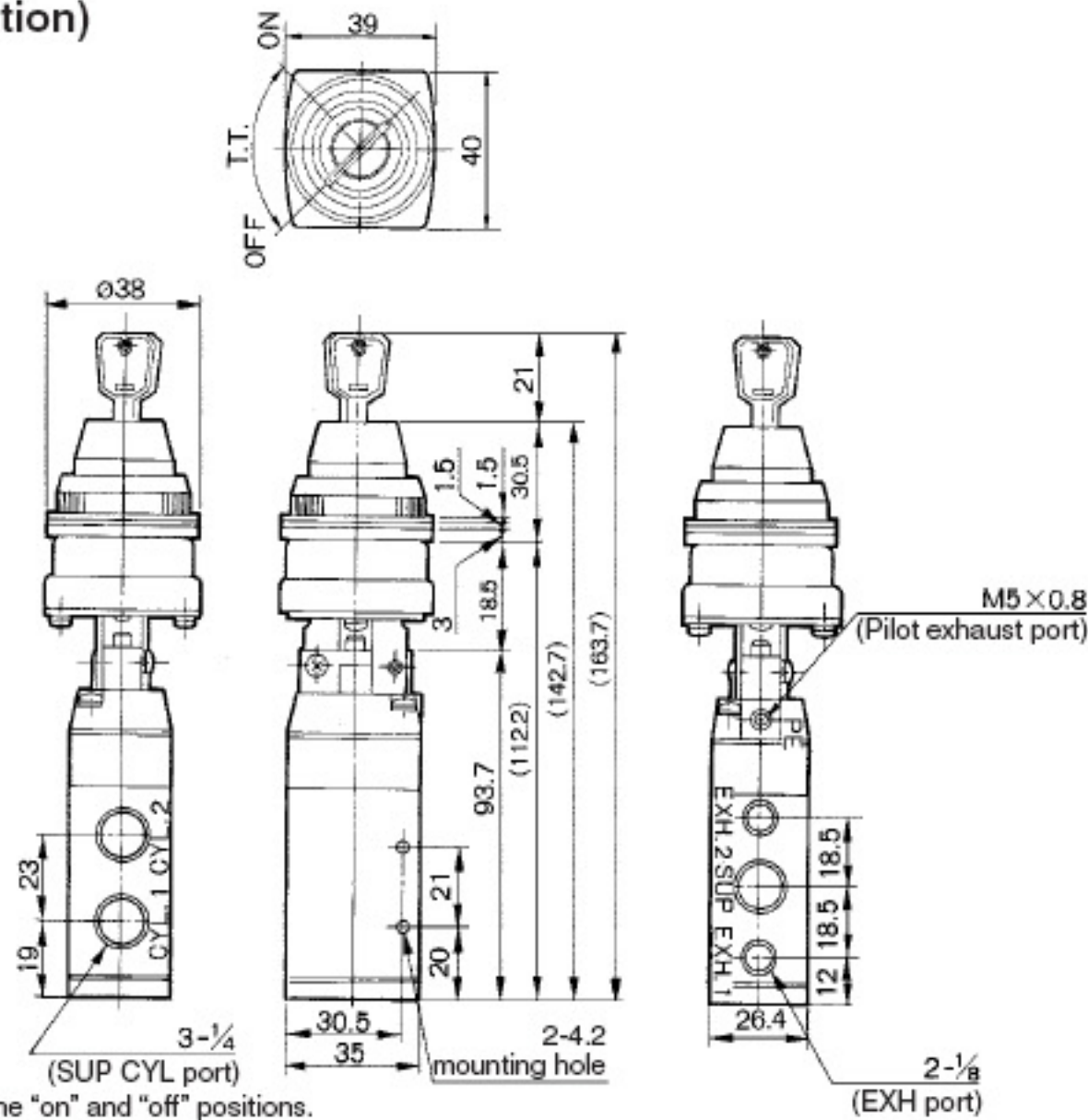


JIS Symbol

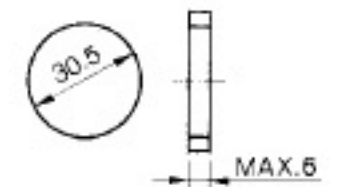


* 0.5 MPa supply	
F.O.F. *	23 N
T.T.	90°

### Key selector (2 position) VFM350-02-36



Panel mounting hole



JIS Symbol

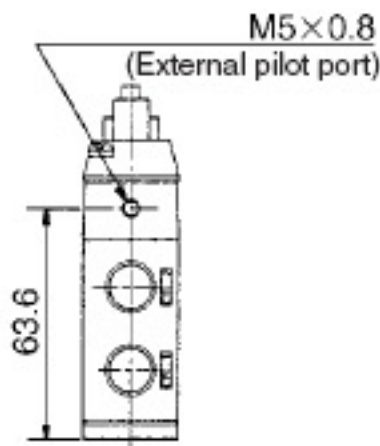


* 0.5 MPa supply	
F.O.F. *	26 N
T.T.	90°

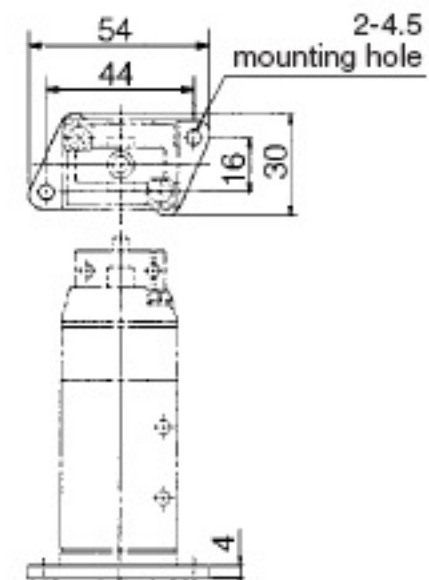


Key can be removed at the "on" and "off" positions.

### External pilot type VFM351 type



### With foot bracket VFM350-02-□□-F



□A

□A

□A

□A

VM

VR

VH

VHS