

5 Port Mechanical Valve Metal Seal

Series VFM200

**Compact design,
large flow capacity 18 mm²
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	0.1 to 1.0 MPa ⁽¹⁾
Ambient and fluid temperature	-5 to 60°C(No freezing)
Effective area	18 mm ²
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 Rc 1/4
	Pilot valve (EXH)/M5 x 0.8
Option	Foot bracket ⁽²⁾
Mass (Basic)	300g



* Please contact SMC for manifold mounting style.

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

Pilot valve: 0.1 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	VFM250-02-00	—	—
	Roller lever	VFM250-02-01	VM-01C	Polyacetal roller
		VFM250-02-01S	VM-01CS	Hard steel roller
	One way roller lever	VFM250-02-02	VM-02C	Polyacetal roller
		VFM250-02-02S	VM-02CS	Hard steel roller
	Straight plunger	VFM250-02-05	VM-05D	—
Roller plunger	VFM250-02-06	VM-06D	Polyacetal roller	
	VFM250-02-06S	VM-06DS	Hard steel roller	
Manual operation	Toggle lever	VFM250-02-08	VM-08D	—
	Push button (Mushroom)	VFM250-02-30R	VM-30CR	Red
		VFM250-02-30B	VM-30CB	Black
		VFM250-02-30G	VM-30CG	Green
		VFM250-02-30Y	VM-30CY	Yellow
	Push button (Extended)	VFM250-02-32R	VM-32CR	Red
		VFM250-02-32B	VM-32CB	Black
		VFM250-02-32G	VM-32CG	Green
		VFM250-02-32Y	VM-32CY	Yellow
	Push button (Flush)	VFM250-02-33	VM-33C	With a set of red, black, green, yellow
	Twist selector (2 position)	VFM250-02-34R	VM-34CR	Red
		VFM250-02-34B	VM-34CB	Black
		VFM250-02-34G	VM-34CG	Green
		VFM250-02-34Y	VM-34CY	Yellow
Key selector (2 position)	VFM250-02-36	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 1887 and 1888. The other parts are not replaceable.

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

How to Order

VFM25 **0** - **02** - **01** **S** - [] - []

● **Made to Order**
(Refer to pages 1882 to 1885 for details.)

X207	Alternate type, Mushroom push button
X219	Push-lock turn-reset type, Mushroom push button

● **Option**

F	Foot bracket (Only internal pilot)
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● **Suffix for actuator**

S	Hard steel roller	Color of push button selector
R	Red	
B	Black	
G	Green	
Y	Yellow	

● **Actuator type**

00	Basic
01	Roller lever
02	One way roller lever
05	Straight plunger
06	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)

● **Port size**

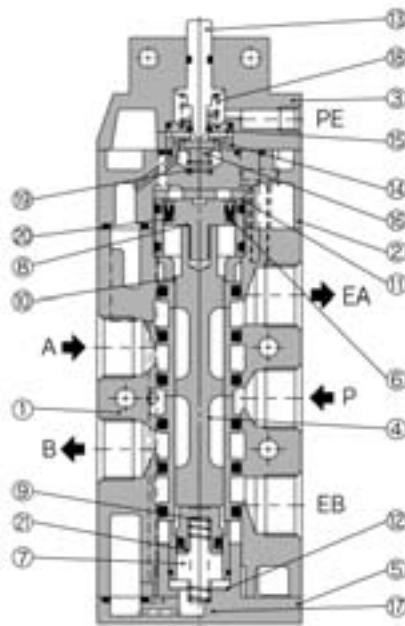
02	Rc 1/4
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● **Body option**

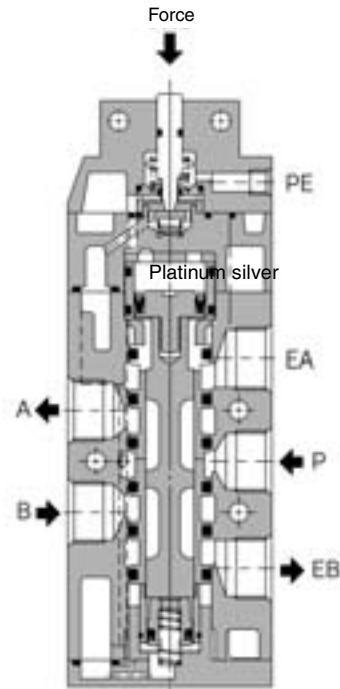
0	Internal pilot type
1	External pilot type

Construction

Non-actuated



Actuated



Component Parts

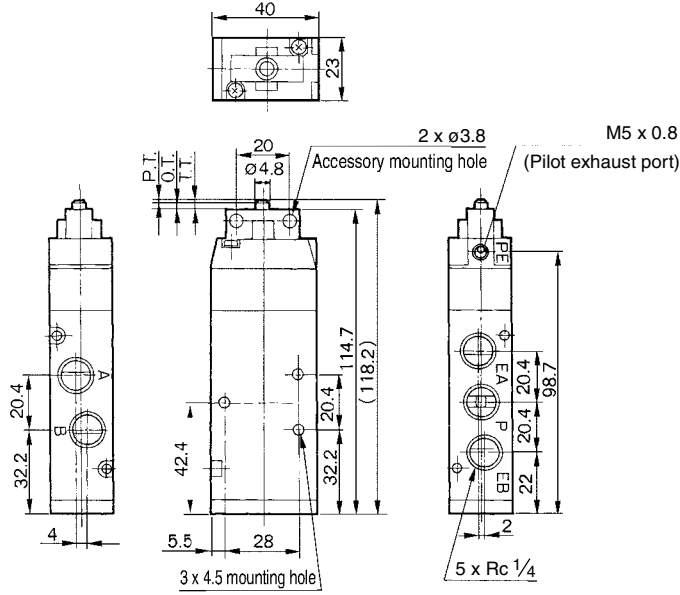
No.	Description	Material	Note
1	Body	ADC	Platinum silver
2	Pilot body	ZDC	Platinum silver
3	Head cover	ZDC	Black zinc chromated
4	Spool/sleeve	Stainless steel	
5	End cover	POM	
6	Piston guide	Brass	
7	Piston guide for end cover	Brass	
8	Piston	POM	
9	Piston for end cover	POM	
10	Guide bushing	POM	
11	Cushion	Urethane rubber	

No.	Description	Material	Note
12	Cushion for end cover	Urethane rubber	
13	Plunger	POM	
14	Valve seat (A)	POM	
15	Valve seat (B)	POM	
16	Valve	NBR	
17	Return spring	Stainless steel	
18	Return spring	Stainless steel	
19	Valve spring	Stainless steel	
20	Mini Y packing	NBR	
21	Mini Y packing	NBR	

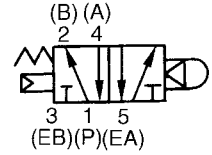
Series VFM200

Series VFM200

Basic VFM250-02-00



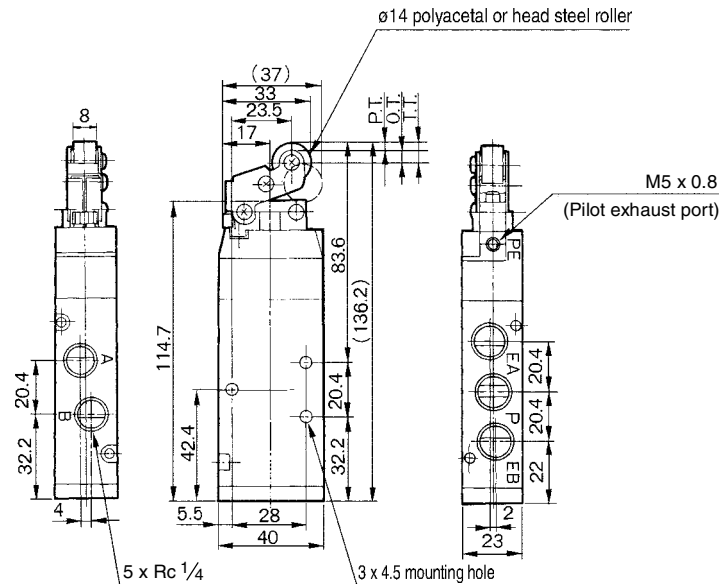
JIS Symbol



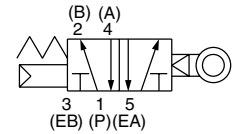
* 0.5 MPa supply

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

Roller lever VFM250-02-01 VFM250-02-01S



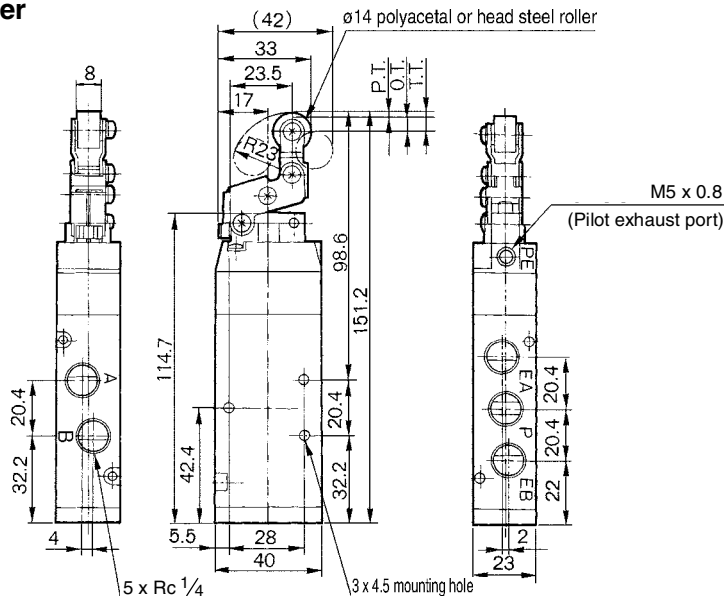
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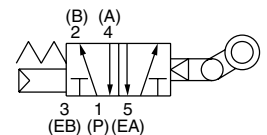
* 0.5 MPa supply

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

One way roller lever VFM250-02-02 VFM250-02-02S



JIS Symbol



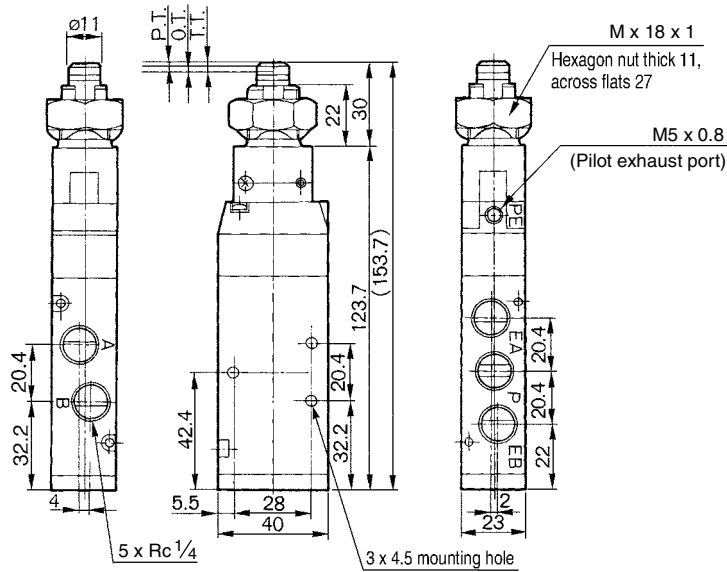
* 0.5 MPa supply

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

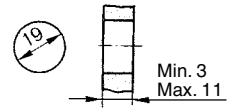
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Series VFM200

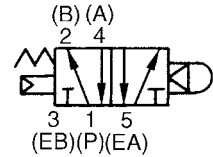
Straight plunger VFM250-02-05



Panel mounting hole



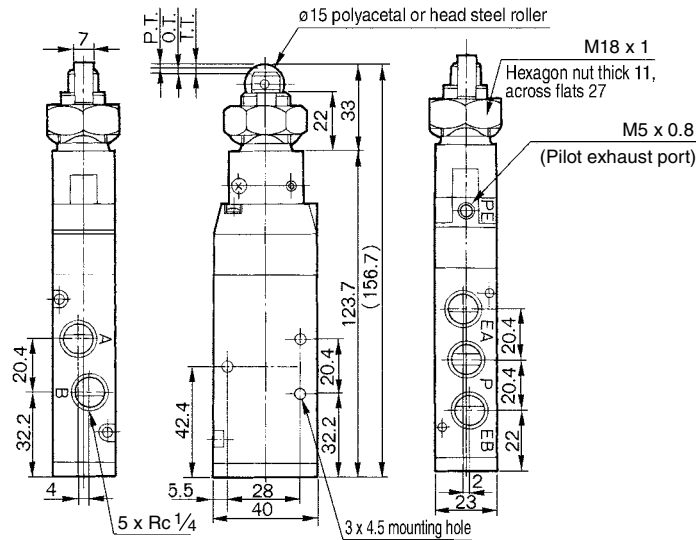
JIS Symbol



* 0.5 MPa supply

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

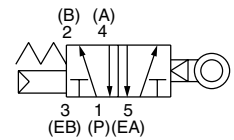
Roller plunger VFM250-02-06 VFM250-02-06S



Panel mounting hole



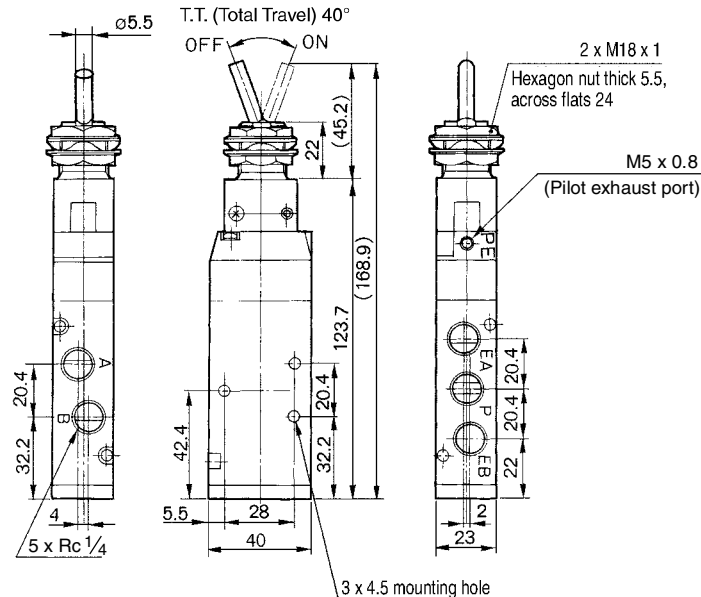
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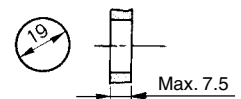
* 0.5 MPa supply

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

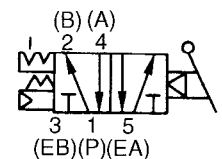
Toggle lever VFM250-02-08



Panel mounting hole



JIS symbol



* 0.5 MPa supply

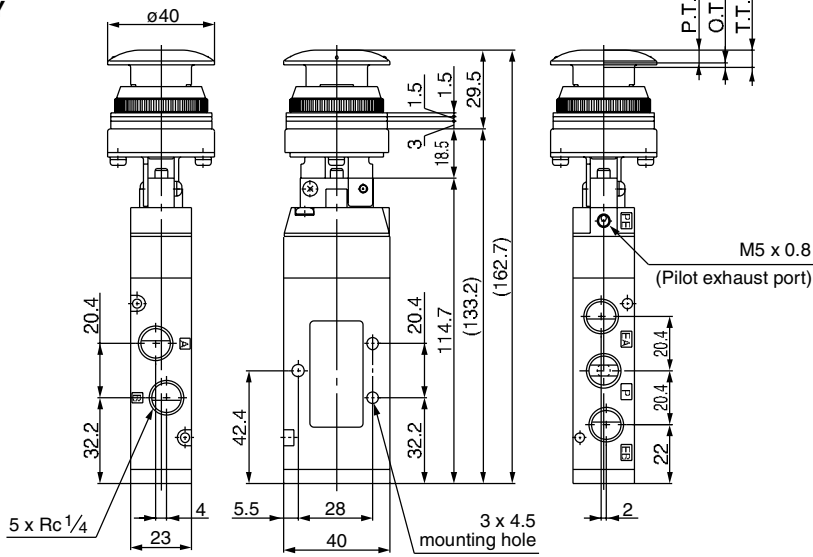
F.O.F. *	15 N
T.T.	40°

Series VFM200

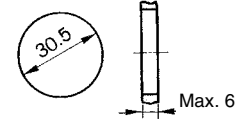
Series VFM200

Push button (Mushroom)

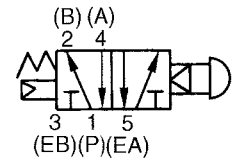
VFM250-02-30R/B/G/Y



Panel mounting hole



JIS Symbol

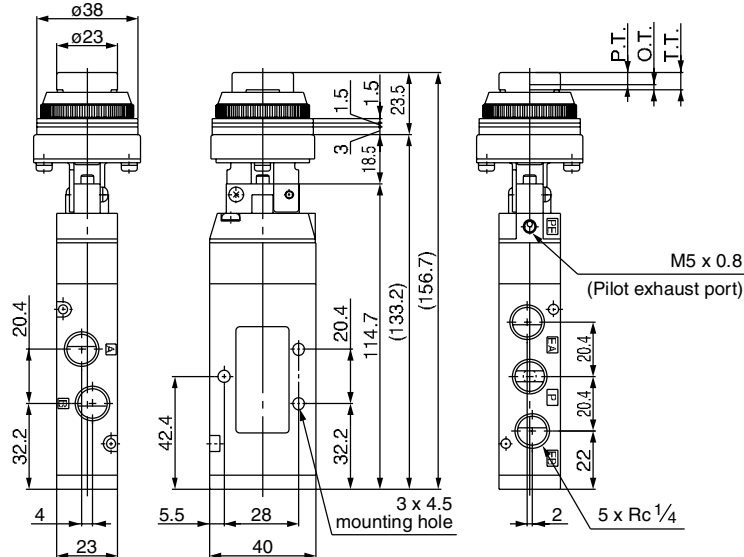


* 0.5 MPa supply

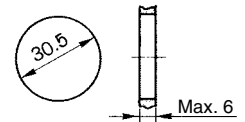
F.O.F. *	21 N
P.T.	4.8 mm
O.T.	1.7 mm
T.T.	6.5 mm

Push button (Extended)

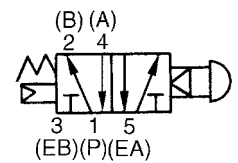
VFM250-02-32R/B/G/Y



Panel mounting hole



JIS Symbol

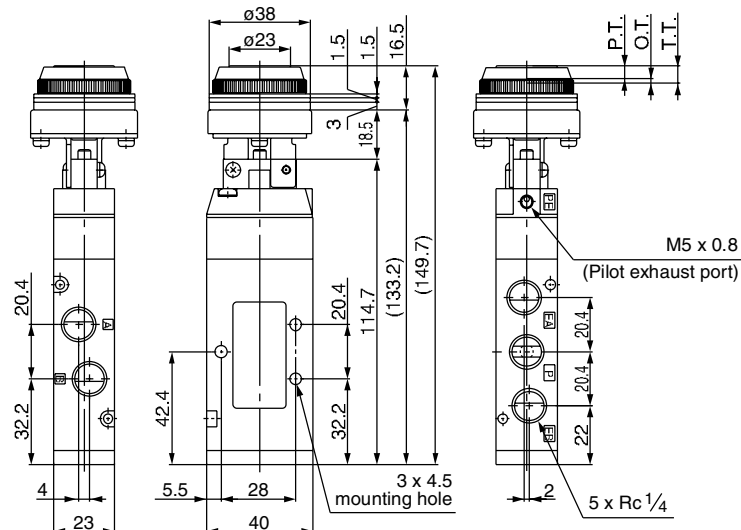


* 0.5 MPa supply

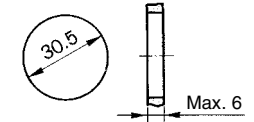
F.O.F. *	21 N
P.T.	4.8 mm
O.T.	1.7 mm
T.T.	6.5 mm

Push button (Flush)

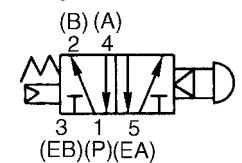
VFM250-02-33



Panel mounting hole



JIS Symbol



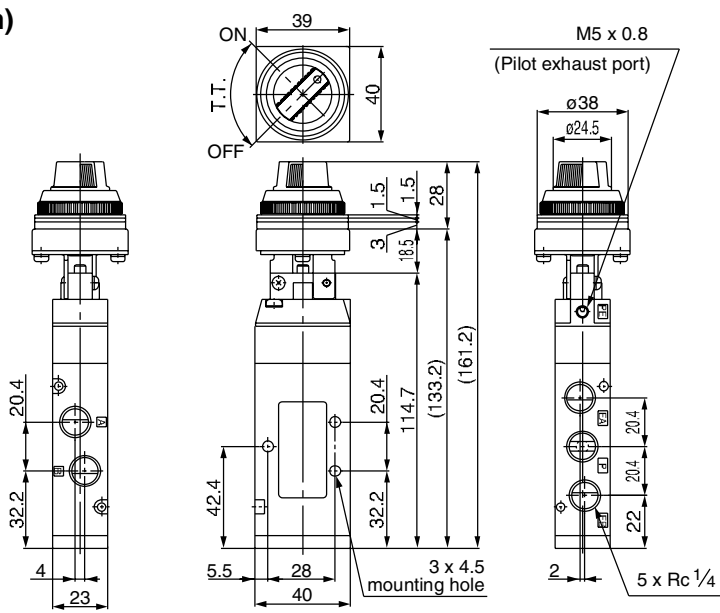
* 0.5 MPa supply

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

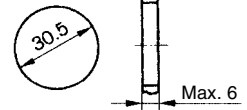
5 Port Mechanical Valve Metal Seal **Series VFM200**

Series VFM200

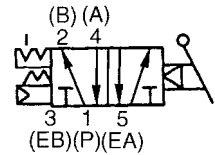
Twist selector (2 position) VFM250-02-34R/B/G/Y



Panel mounting hole



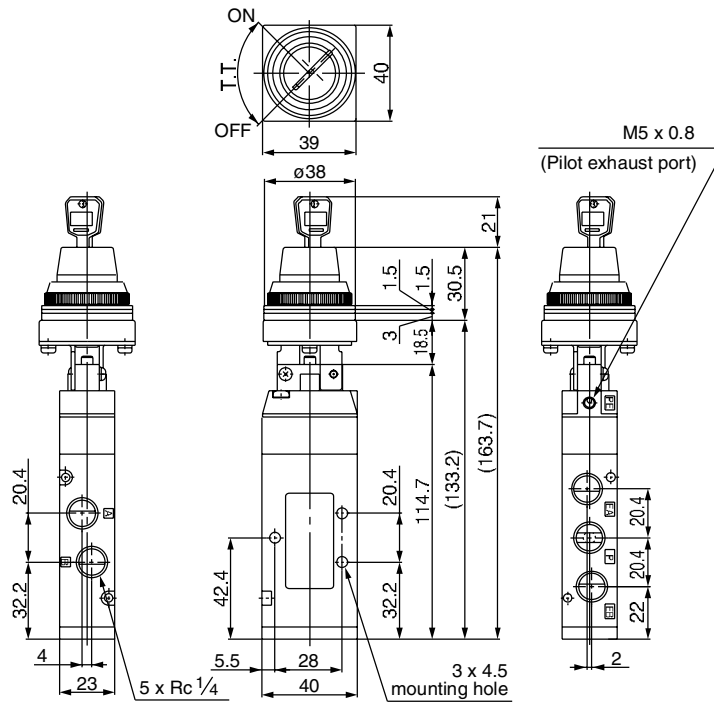
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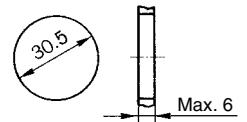
* 0.5 MPa supply

F.O.F. *	23 N
T.T.	90°

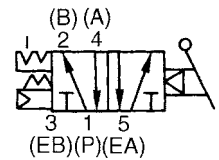
Key selector (2 position) VFM250-02-36



Panel mounting hole



JIS Symbol



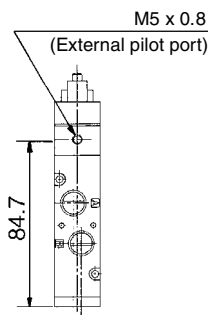
* 0.5 MPa supply

F.O.F. *	26 N
T.T.	90°



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

External pilot type VFM251 type



With foot bracket VFM250-02-□□-F

