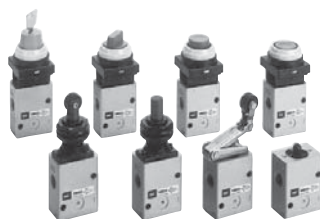


2/3 Port Mechanical Valve Series VM200



Large flow capacity.
A variety of actuator types.



Specifications

Fluid	Air/Inert gas			
Operating pressure	0 to 1.0 MPa			
Ambient and fluid temperature	-5 to 60°C (No freezing)			
Flow characteristics	C[dm ³ /(s·bar)]	b	Cv	
	1(IN)→2(OUT)	3.7	0.4	0.87
	2(OUT)→3(R)	3.2	0.1	0.69
Lubrication	Not required (Use turbine oil Class 1 ISO VG32, if lubricated.)			
Port size	1/4			

Model

Actuator	No. of ports		Actuator part no.	Application	Weight (g)	
	2 port	3 port				
Mechanical operation	Basic	VM220-02-00	VM230-02-00	—	110	
	Roller lever	VM220-02-01	VM230-02-01	VM-01A	Polycetal roller	160
		VM220-02-01S	VM230-02-01S	VM-01AS	Hard steel roller	170
	One way roller lever	VM220-02-02	VM230-02-02	VM-02A	Polycetal roller	170
		VM220-02-02S	VM230-02-02S	VM-02AS	Hard steel roller	180
	Straight plunger	VM220-02-05	VM230-02-05	VM-05A	—	240
	Roller plunger	VM220-02-06	VM230-02-06	VM-06A	Polycetal roller	230
		VM220-02-06S	VM230-02-06S	VM-06AS	Hard steel roller	240
	Cross roller plunger	VM220-02-07	VM230-02-07	VM-07A	Polycetal roller	230
		VM220-02-07S	VM230-02-07S	VM-07AS	Hard steel roller	240
Manual operation	Toggle lever	VM220-02-08	VM230-02-08	VM-08A	—	220
	Push button (Mushroom)	VM220-02-30R	VM230-02-30R	VM-30AR	Red	169
		VM220-02-30B	VM230-02-30B	VM-30AB	Black	
		VM220-02-30G	VM230-02-30G	VM-30AG	Green	
		VM220-02-30Y	VM230-02-30Y	VM-30AY	Yellow	
	Push button (Extended)	VM220-02-32R	VM230-02-32R	VM-32AR	Red	163
		VM220-02-32B	VM230-02-32B	VM-32AB	Black	
		VM220-02-32G	VM230-02-32G	VM-32AG	Green	
	Push button (Flush)	VM220-02-32Y	VM230-02-32Y	VM-32AY	Yellow	168
	Twist selector (2 position)	VM220-02-34R	VM230-02-34R	VM-34AR	Red	
		VM220-02-34B	VM230-02-34B	VM-34AB	Black	
		VM220-02-34G	VM230-02-34G	VM-34AG	Green	
		VM220-02-34Y	VM230-02-34Y	VM-34AY	Yellow	
	Key selector (2 position)	VM220-02-36	VM230-02-36	VM-36A	—	189
		(3 port)	(5 port)	—	—	
	Twist selector (3 position)	VM230-02-35R	VM250-02-35R	—	Red	451
VM230-02-35B		VM250-02-35B	—	Black		
VM230-02-35G		VM250-02-35G	—	Green		
VM230-02-35Y		VM250-02-35Y	—	Yellow		
Foot pedal	VM220-02-40	VM230-02-40	—	—	450	

Note 1) Actuator replacement is available for all types except twist selector (3 position) and foot pedal.
 Note 2) For push button (mushroom), push button (extended), push button (flush) and a single unit of fastening ring, refer to pages 2347 and 2348. The other parts are not replaceable.
 Note 3) The handle of the selector (2 position and 3 position) cannot be removed or replaced alone.

How to Order

VM2 **3** 0 - **02** - **01** **S** -

• **Made to Order**
(Refer to pages 2342 to 2345 for details.)

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

• **Port size**

02	Rc 1/4
N02	NPT 1/4
F02	G 1/4

• **Number of ports**

2	2 port
3	3 port

• **Actuator type**

00	Basic
01	Roller lever
02	One way roller lever
05	Straight plunger
06	Roller plunger
07	Cross roller plunger
08	Toggle lever
30	Push button (Mushroom)
32	Push button (Extended)
33	Push button (Flush) <small>(Note 1)</small>
34	Twist selector (2 position)
36	Key selector (2 position)
35	Twist selector (3 position)
40	Foot pedal

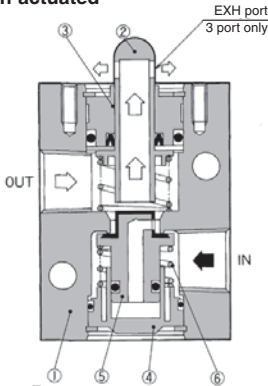
• **Suffix for actuator**

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

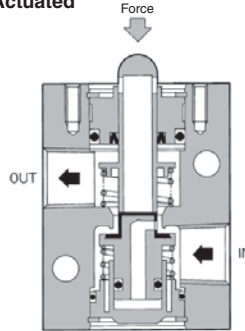
Note 1) When selecting the flush type, it is not necessary to select the suffix for the actuator.

Construction

Non-actuated



Actuated



Component Parts

No.	Description	Material	Note
1	Valve	ADC	Platinum silver
2	Plunger	POM	
3	Plunger retainer	PBT	

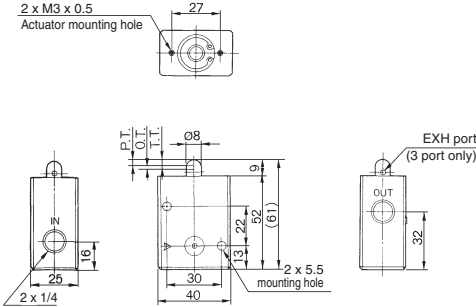
No.	Description	Material	Note
4	Cover	POM	
5	Valve	Brass, NBR	
6	Spring	Steel	

- VM**
- VMG**
- VR**
- VR51**
- VHK**
- VH**
- VHS**
- VHS**

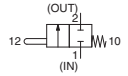
Series VM200

Series VM200

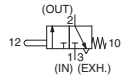
Basic
VM220-02-00
VM230-02-00



Symbol
2 port



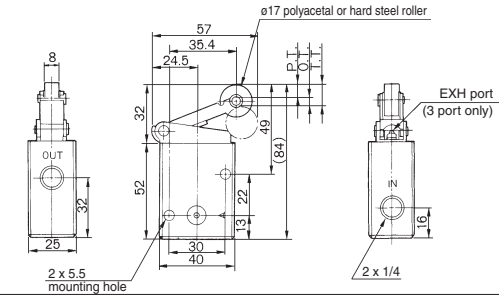
3 port



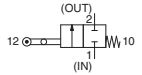
* 0.5 MPa supply

F.O.F. *	52 N
P.T.	3.0 mm
O.T.	2.0 mm
T.T.	5.0 mm

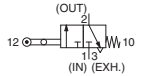
Roller lever
VM220-02-01
VM230-02-01
VM220-02-01S
VM230-02-01S



Symbol
2 port



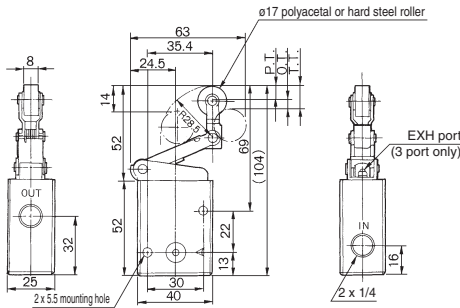
3 port



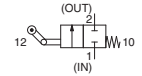
* 0.5 MPa supply

F.O.F. *	24 N
P.T.	6.5 mm
O.T.	4.5 mm
T.T.	11.0 mm

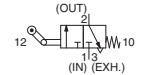
One way roller lever
VM220-02-02
VM230-02-02
VM220-02-02S
VM230-02-02S



Symbol
2 port



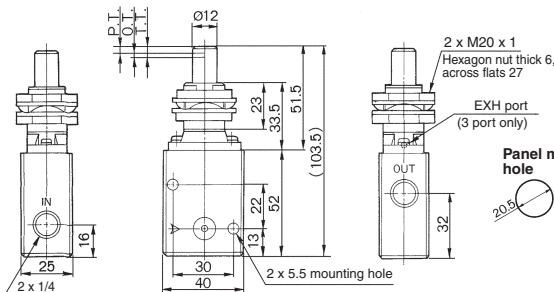
3 port



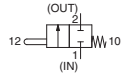
* 0.5 MPa supply

F.O.F. *	22 N
P.T.	7.0 mm
O.T.	5.0 mm
T.T.	12.0 mm

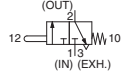
Straight plunger
VM220-02-05
VM230-02-05



Symbol
2 port



3 port

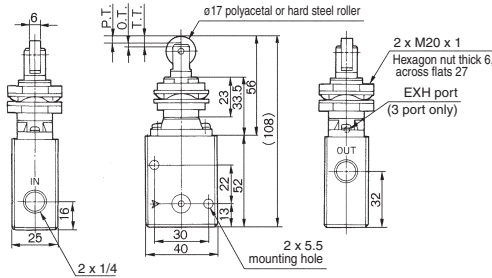


* 0.5 MPa supply

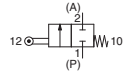
F.O.F. *	56 N
P.T.	3.5 mm
O.T.	2.0 mm
T.T.	5.5 mm

Series VM200

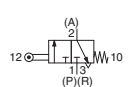
Roller plunger
 VM220-02-06
 VM220-02-06
 VM220-02-06S
 VM230-02-06S



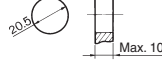
Symbol
 2 port



3 port



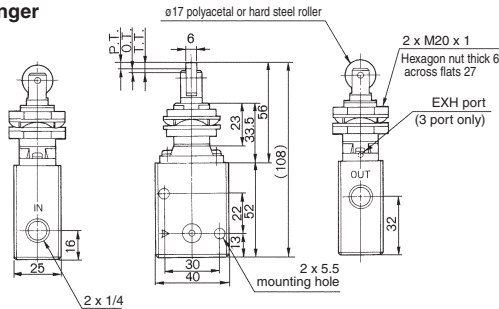
Panel mounting hole



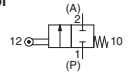
* 0.5 MPa supply

F.O.F. *	56 N
P.T.	3.5 mm
O.T.	2.0 mm
T.T.	5.5 mm

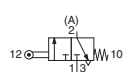
Cross roller plunger
 VM220-02-07
 VM230-02-07
 VM220-02-07S
 VM230-02-07S



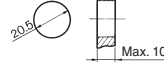
Symbol
 2 port



3 port



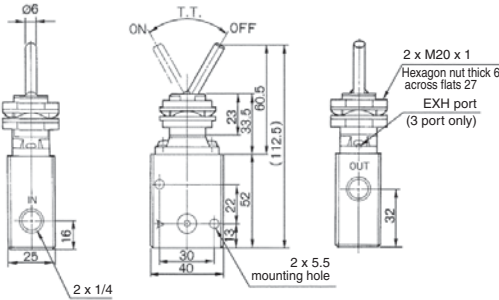
Panel mounting hole



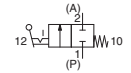
* 0.5 MPa supply

F.O.F. *	56 N
P.T.	3.5 mm
O.T.	2.0 mm
T.T.	5.5 mm

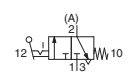
Toggle lever
 VM220-02-08
 VM230-02-08



Symbol
 2 port



3 port



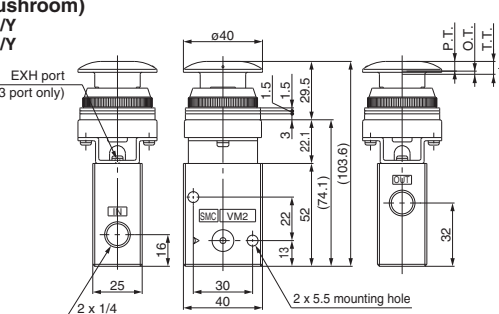
Panel mounting hole



* 0.5 MPa supply

F.O.F. *	12 N
T.T.	60°

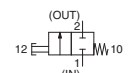
Push button (Mushroom)
 VM220-02-30R/B/G/Y
 VM230-02-30R/B/G/Y



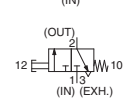
Panel mounting hole



Symbol
 2 port



3 port



* 0.5 MPa supply

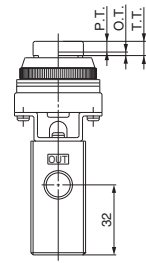
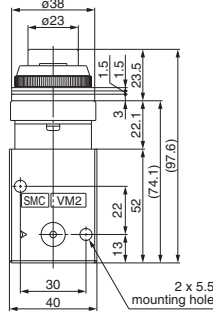
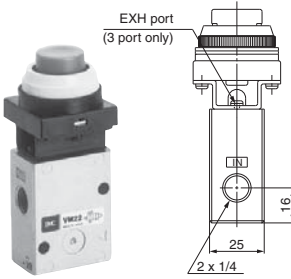
F.O.F. *	52 N
P.T.	4.9 mm
O.T.	1.6 mm
T.T.	6.5 mm

- VM**
- VMG**
- VR**
- VR51**
- VHK**
- VH**
- VHS**
- VHS**

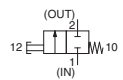
Series VM200

Series VM200

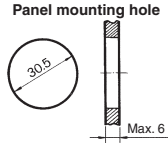
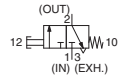
Push button (Extended) VM220-02-32R/B/G/Y VM230-02-32R/B/G/Y



Symbol
2 port



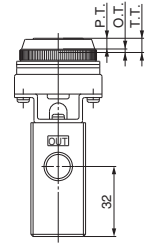
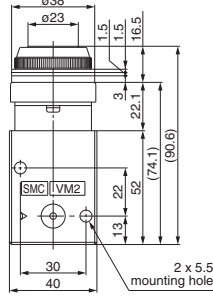
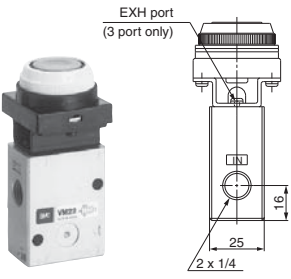
3 port



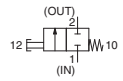
* 0.5 MPa supply

F.O.F. ^①	52 N
P.T.	4.9 mm
O.T.	1.6 mm
T.T.	6.5 mm

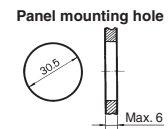
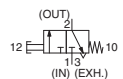
Push button (Flush) VM220-02-33 VM230-02-33



Symbol
2 port



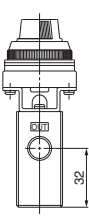
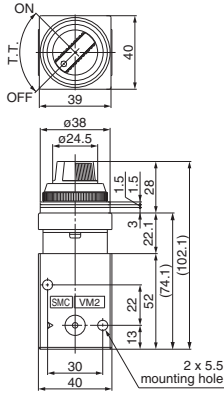
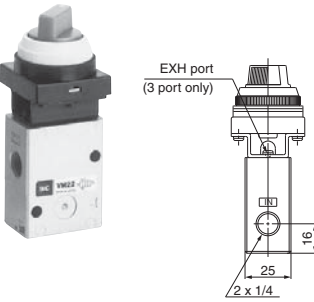
3 port



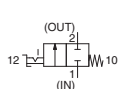
* 0.5 MPa supply

F.O.F. ^①	52 N
P.T.	4.9 mm
O.T.	1.6 mm
T.T.	6.5 mm

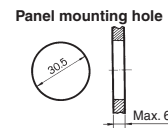
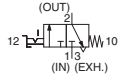
Twist selector (2 position) VM220-02-34R/B/G/Y VM230-02-34R/B/G/Y



Symbol
2 port



3 port



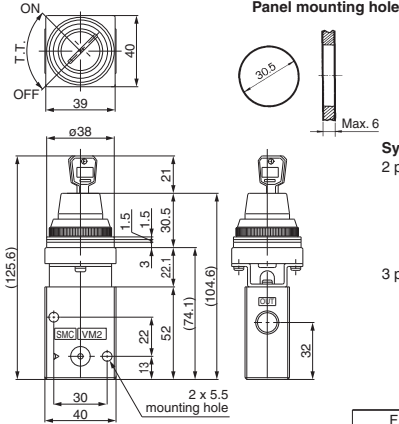
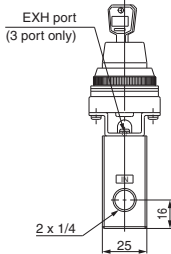
* 0.5 MPa supply

F.O.F. ^①	32 N
T.T.	90°

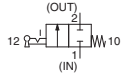
Series VM200

Key selector (2 position)

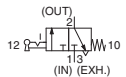
VM220-02-36
VM230-02-36



Symbol
2 port



3 port



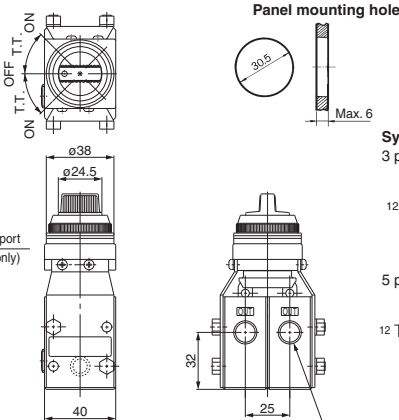
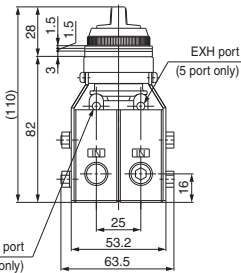
* 0.5 MPa supply

F.O.F. *	32 N
T.T.	90°

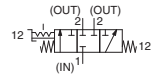
Key can be removed at the "on" and "off" positions.

Twist selector (3 position)

VM230-02-35R/B/G/Y
VM250-02-35R/B/G/Y



Symbol
3 port



5 port

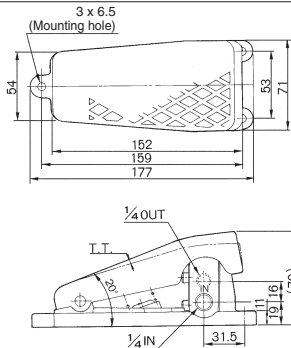


* 0.5 MPa supply

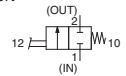
F.O.F. *	40 N
T.T.	45°

Foot pedal

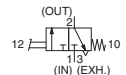
VM220-02-40
VM230-02-40



Symbol
2 port



3 port



* 0.5 MPa supply

F.O.F. *	65 N
T.T.	1.2°

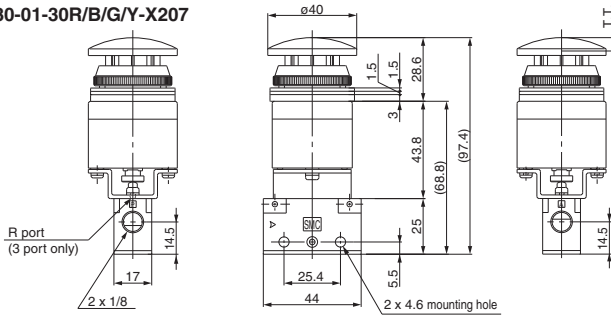


Alternate Type, Mushroom Push Button

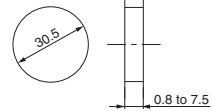
X207

Alternate type: When pushing the push button, the valve actuates and will hold its position even after the button is released. Pushing the button again will return the button and valve to their previous position.

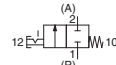
VM120-01-30R/B/G/Y-X207
VM130-01-30R/B/G/Y-X207



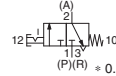
Panel mounting hole



Symbol
2 port

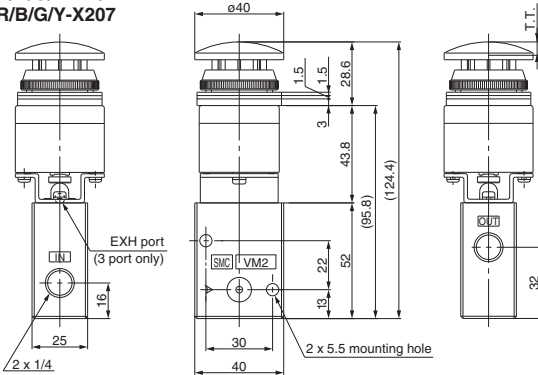


3 port

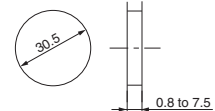


F.O.F.*	21 N
T.T.	6.7 mm

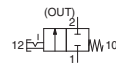
VM220-02-30R/B/G/Y-X207
VM230-02-30R/B/G/Y-X207



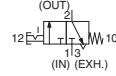
Panel mounting hole



Symbol
2 port

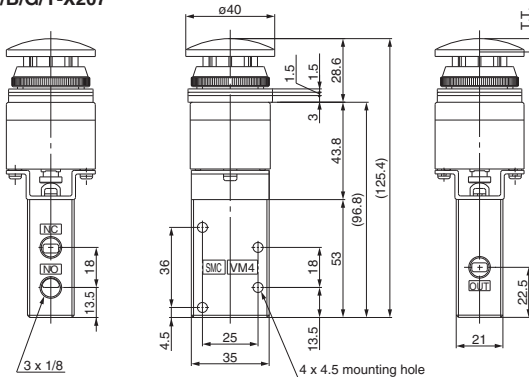


3 port

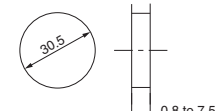


F.O.F.*	52 N
T.T.	6.7 mm

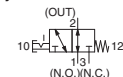
VM430-01-30R/B/G/Y-X207



Panel mounting hole



Symbol



* 0.5 MPa supply

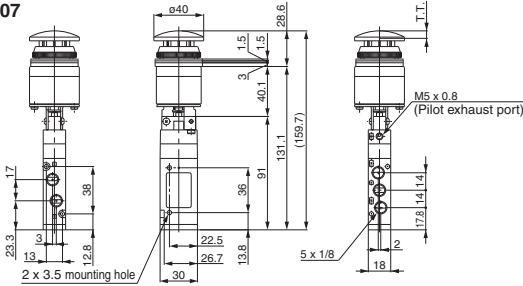
F.O.F.*	26 N
T.T.	6.7 mm



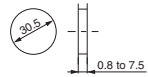
Alternate Type, Mushroom Push Button

X207

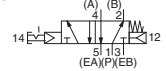
VZM450-01-30R/B/G/Y-X207



Panel mounting hole



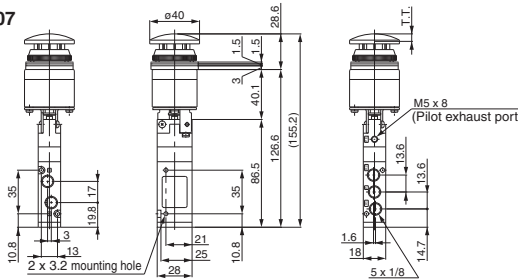
Symbol



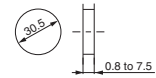
* 0.5 MPa supply

F.O.F.*	16 N
T.T.	6.7 mm

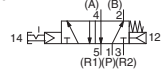
VZM550-01-30R/B/G/Y-X207



Panel mounting hole



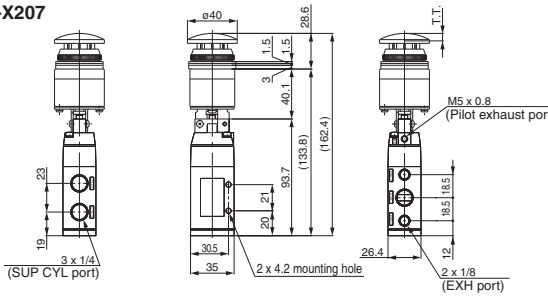
Symbol



* 0.5 MPa supply

F.O.F.*	21 N
T.T.	6.7 mm

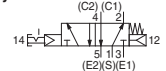
VFM350-02-30R/B/G/Y-X207



Panel mounting hole



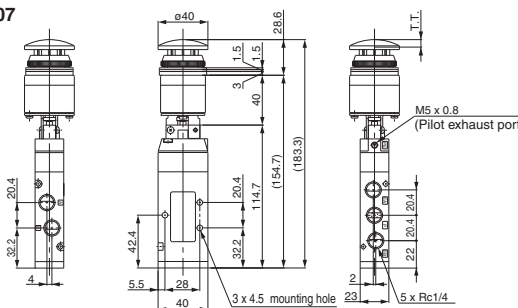
Symbol



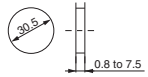
* 0.5 MPa supply

F.O.F.*	21 N
T.T.	6.7 mm

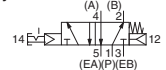
VFM250-02-30R/B/G/Y-X207



Panel mounting hole



Symbol



* 0.5 MPa supply

F.O.F.*	21 N
T.T.	6.7 mm

- VM
- VMG
- VR
- VR51
- VHK
- VH
- VHS
- VHS

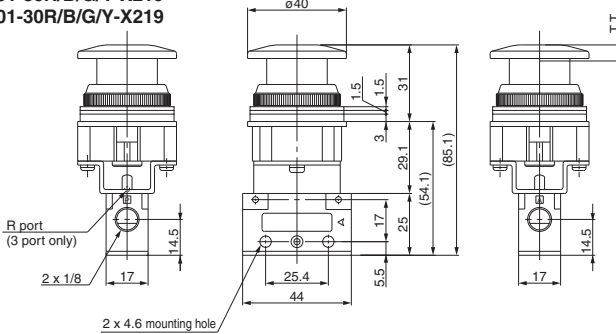


Push-lock Turn-reset Type, Mushroom Push Button

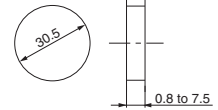
X219

Push-lock turn-reset type: When pressing the push button, it is locked in this status. Turning the button clockwise will reset it.

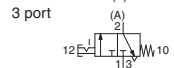
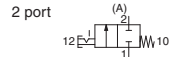
VM120-01-30R/B/G/Y-X219
VM130-01-30R/B/G/Y-X219



Panel mounting hole



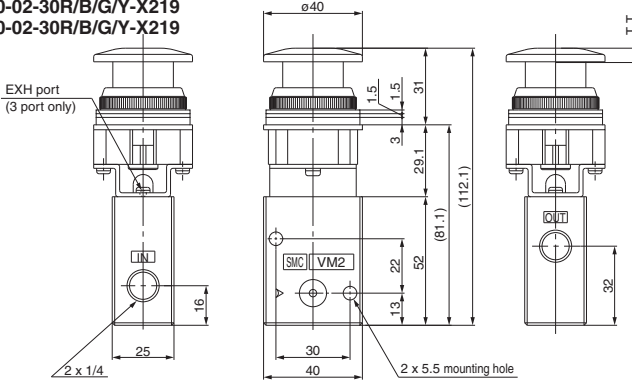
Symbol



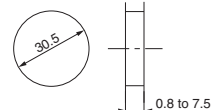
* 0.5 MPa supply

F.O.F. *	52 N
T.T.	5.8 mm

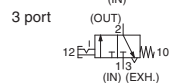
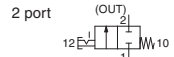
VM220-02-30R/B/G/Y-X219
VM230-02-30R/B/G/Y-X219



Panel mounting hole



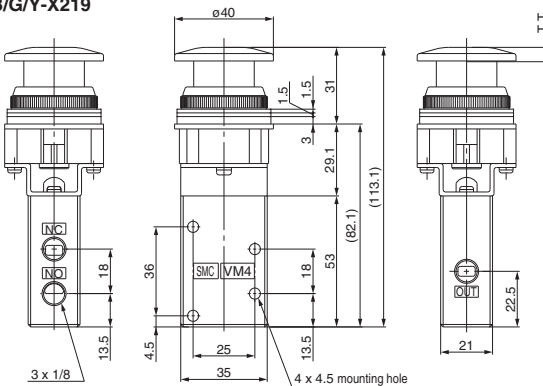
Symbol



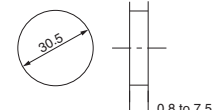
* 0.5 MPa supply

F.O.F. *	52 N
T.T.	5.8 mm

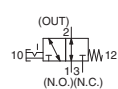
VM430-01-30R/B/G/Y-X219



Panel mounting hole



Symbol



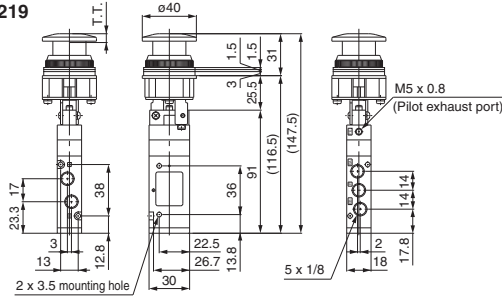
* 0.5 MPa supply

F.O.F. *	26 N
T.T.	5.8 mm

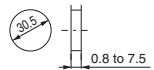
Push-lock Turn-reset Type, Mushroom Push Button

X219

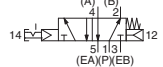
VZM450-01-30R/B/G/Y-X219



Panel mounting hole



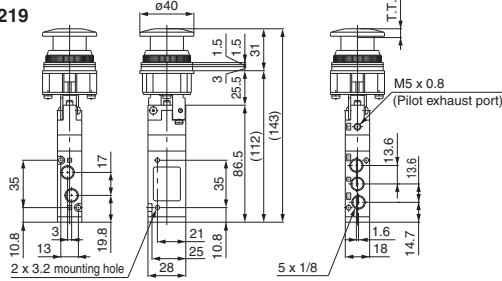
Symbol



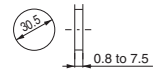
* 0.5 MPa supply

F.O.F.*	21 N
T.T.	5.8 mm

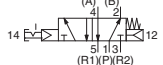
VZM550-01-30R/B/G/Y-X219



Panel mounting hole



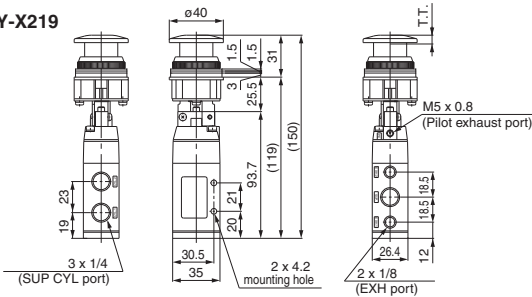
Symbol



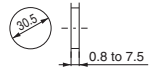
* 0.5 MPa supply

F.O.F.*	21 N
T.T.	5.8 mm

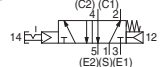
VFM350-02-30R/B/G/Y-X219



Panel mounting hole



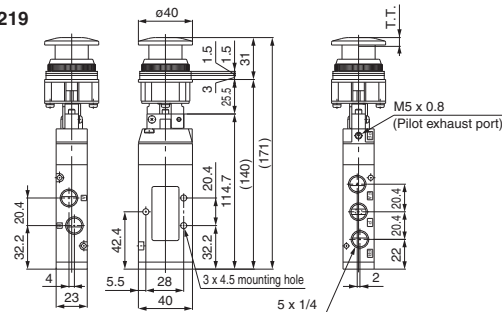
Symbol



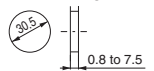
* 0.5 MPa supply

F.O.F.*	21 N
T.T.	5.8 mm

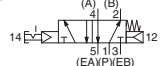
VFM250-02-30R/B/G/Y-X219



Panel mounting hole



Symbol



* 0.5 MPa supply

F.O.F.*	21 N
T.T.	5.8 mm

VM

VMG

VR

VR51

VHK

VH

VHS

VHS