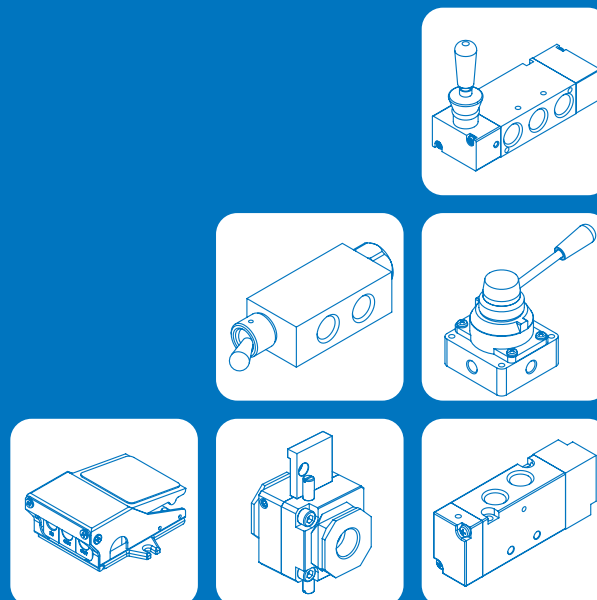
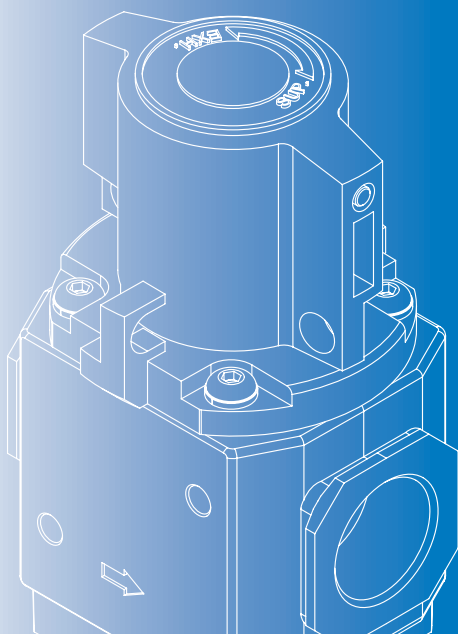


PILOT & MECHANICAL VALVE



	PILOT VALVE	
MVAA	MVAA-150	3-2
	MVAA-180	3-4
	MVAA-220	3-7
	MVAA-260	3-11
	MVAA-300	3-14
	MVAA-460	3-18
	MECHANICAL VALVE	
MVMA	MVMA-260	3-22
	MVMA-300	3-23
	Push button type	3-24
MVMB	MVMB-220-3*	3-25
	MVMB-220-4*	3-28
	MVMB-250-2*, 3*	3-31
	MVMB-300-4*	3-34
MVMC	MVMC-210	3-37
EPA	.....	3-40
	HAND VALVE	
MVHF-*P	MVHF-2P/3P-NC	3-42
	MVHF-3P-NO	3-42
MVHF-*V	MVHF-3V	3-43
	MVHF-5V	3-43
MVHF-5P	.....	3-44
	MINIATURE PILOT ACTUATOR	
MVHF-AP*	MVHF-AP3 / MVHF-AP6A....	3-44

	MOUNTING BRACKET	
MVHF-LB	.....	3-45
	VALVE ACTUATORS MANUAL PUSH BUTTON	
MVHF-PB	MVHF-PB2 / MVHF-PB5.....	3-45
	HAND VALVE	
MVHA	MVHA-2*, 3*	3-46
	MVHA-4*	3-47
	MVHA-31*	3-48
	MVHA-41*	3-49
	Manual / Mech. Operator	3-51
	HAND LEVER VALVE	
MVHB	MVHB-220	3-52
	MVHB-260	3-53
	MVHB-300	3-55
	MVHB-500	3-57
	MVHD-220	3-59
MVHD	.....	3-60
MVHC	.....	3-63
MVHS	.....	3-63
	SHUTOFF VALVE	
MVHR	.....	3-64
	FOOT PEDAL VALVE	
MVFA	.....	3-67

MVAA-150 series

PILOT VALVE



Technical data



Caution for safety
(Read before installing)



Specification

Model	4A1	4A2
Bore No.	M5	
Port size	M5×0.8	
No. of port	5	
Medium	Air	
Operating pressure range	0.15~0.8 MPa	0~0.8 MPa
Proof pressure	1 MPa	
Effective orifice	3.8 mm ²	
Pilot pressure range	(0.45×P*+0.1)~0.8 MPa	
Ambient temperature	-5~+60°C (No freezing)	
Weight	47 g	58 g

* P: Operating pressure.

Order example of valve

MVAA – 150 – 4A2

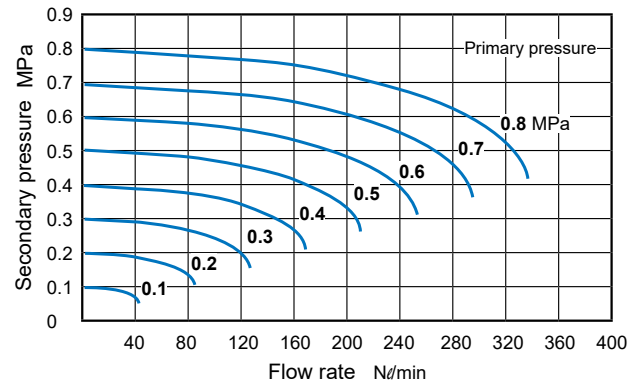
MODEL

BODY WIDTH

4: 4way (5 port)

A1: Single pilot
A2: Double pilot

Flow features



Order example of manifold

MVSC1 – 150 – 5B3 – G

MODEL

MANIFOLD

5B: 5 port
(for body ported type)

MANIFOLD NUMBER

1~31

PORT THREAD

Blank: Rc thread
G: G thread
NPT: NPT thread

* Use the same manifold with MVSC1.

* Starting from 11 stations, manifolds are made to order.

* Use the same blocking plate with MVSC1.

Order example of blocking plate

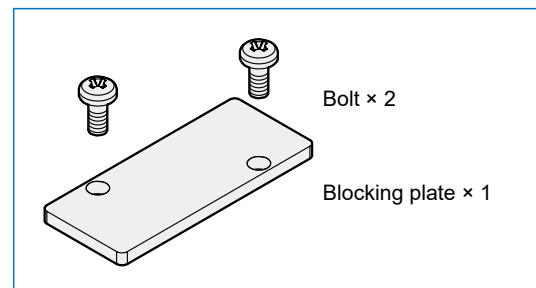
MVSC1 – 150 – 5P

MODEL

BLOCKING PLATE

5P: for 5 port

Blocking plate parts



MVAA-150 Dimensions

PILOT VALVE



Solenoid Valve

Process Valve

Pilot & Mechanical Valve

Air Treatment Unit

Pressure Switch

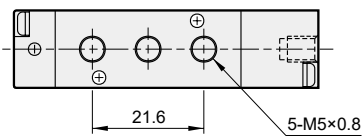
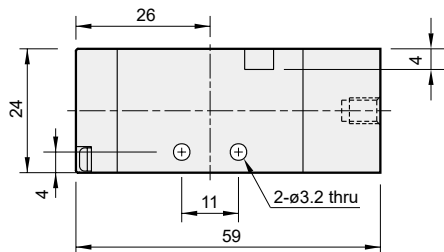
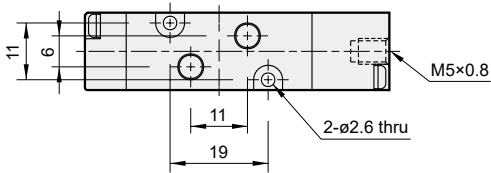
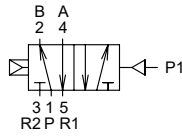
Compressed Air Dryer

Auxiliary Equipment

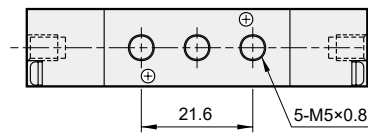
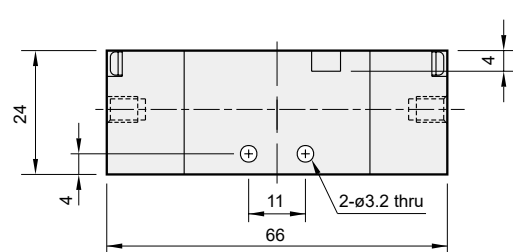
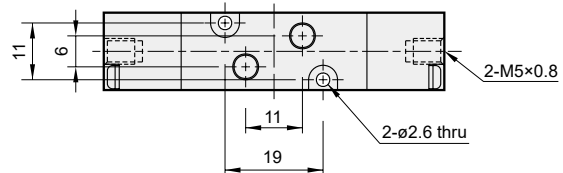
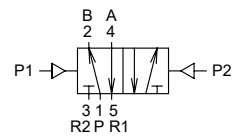
PISCO®

PLC Control System

MVAA-150-4A1



MVAA-150-4A2

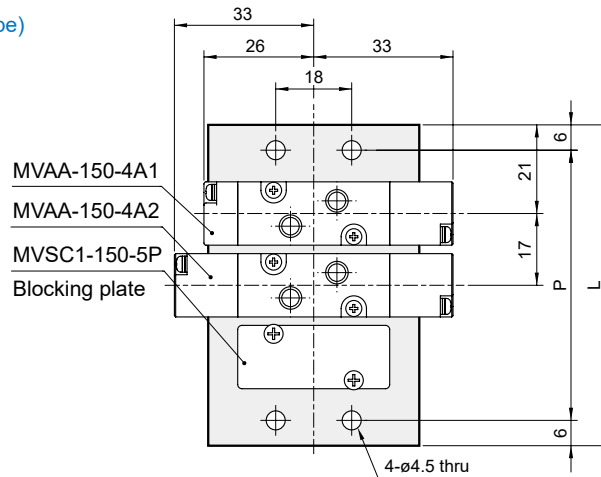


Manifold of pilot valve

MVSC1-150-5B*

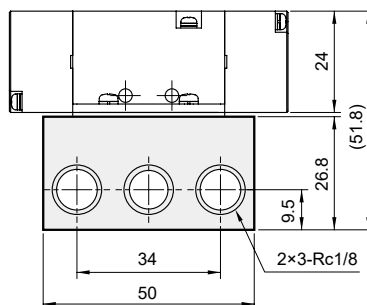
* Use the same manifold with MVSC1.

5 port (for body ported type)



No. of stations	P	L
1	30	42
2	47	59
3	64	76
4	81	93
5	98	110
6	115	127
7	132	144
8	149	161
9	166	178
10	183	195

P: (No. of stations-1)×17+30
L: (No. of stations-1)×17+42



MVAA-180 series

PILOT VALVE



Technical data



Caution for safety
(Read before installing)



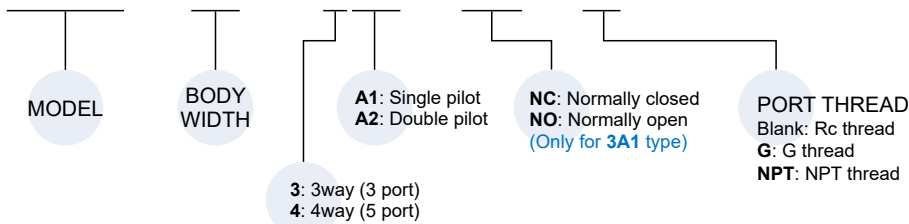
Specification

Model	3A1	3A2	4A1	4A2
Bore No.	6A			
Port size	1/8			
No. of port	3		5	
Medium	Air			
Operating pressure range (MPa)	0.15~0.8	0~0.8	0.15~0.8	0~0.8
Proof pressure	1 MPa			
Effective orifice	12 mm ²			
Pilot pressure range	(0.45×P*+0.1)~0.8 MPa			
Ambient temperature	-5~+60°C (No freezing)			
Weight	61 g	74 g	71 g	84 g

* P: Operating pressure.

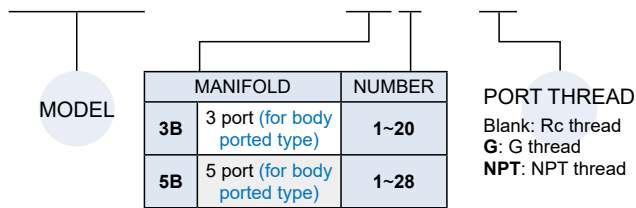
Order example of valve

MVAA – 180 – 4A2 – NC – G



Order example of manifold

MVSC1 – 180 – 3B3 – G



* Use the same manifold with MVSC1.

* Starting from 11 stations, manifolds are made to order.

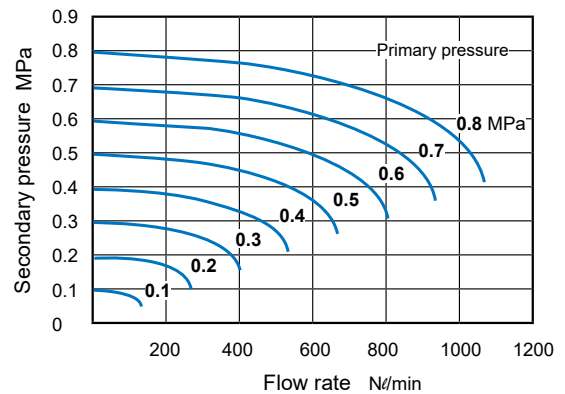
* Use the same blocking plate with MVSC1.

Order example of blocking plate

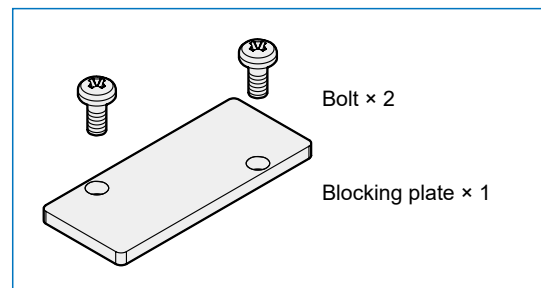
MVSC1 – 180 – 5P



Flow features



Blocking plate parts

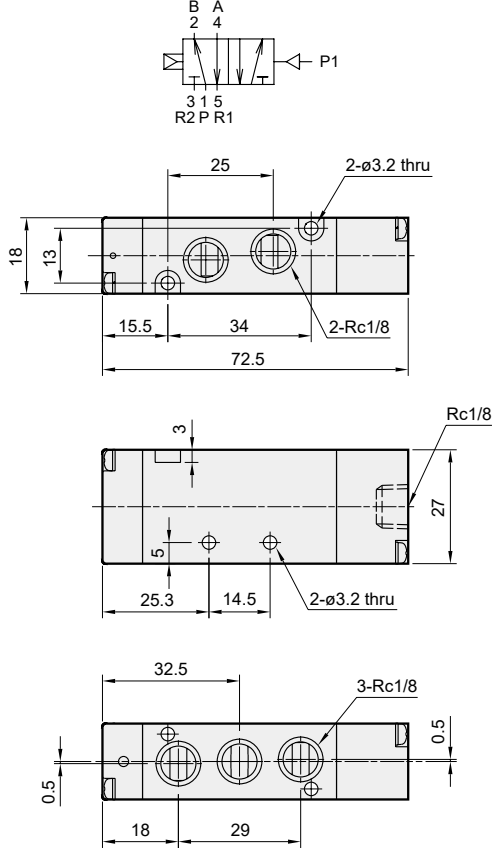


MVAA-180 Dimensions

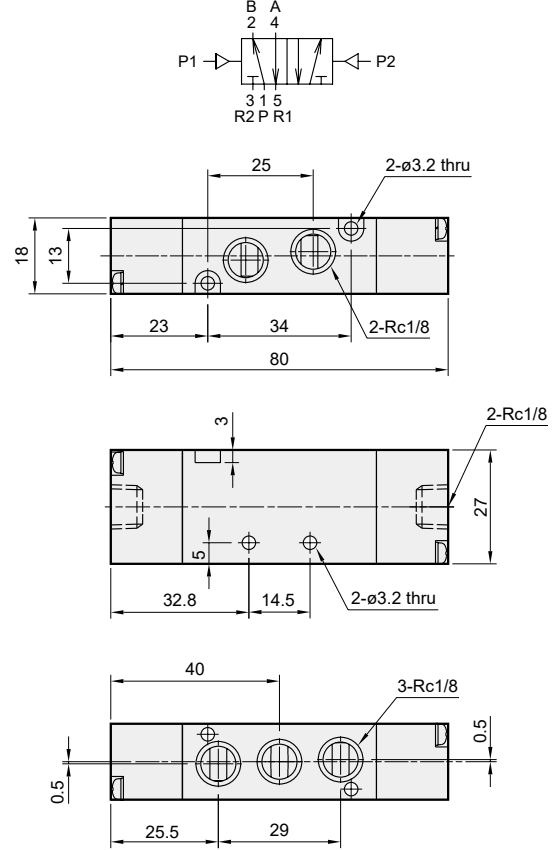
PILOT VALVE



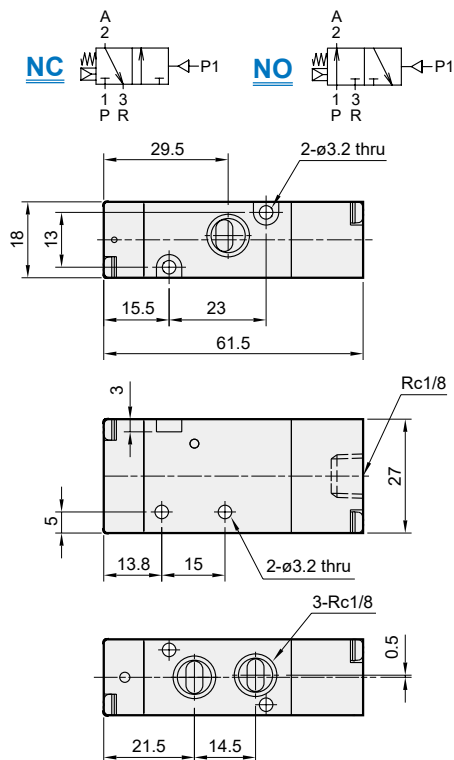
MVAA-180-4A1



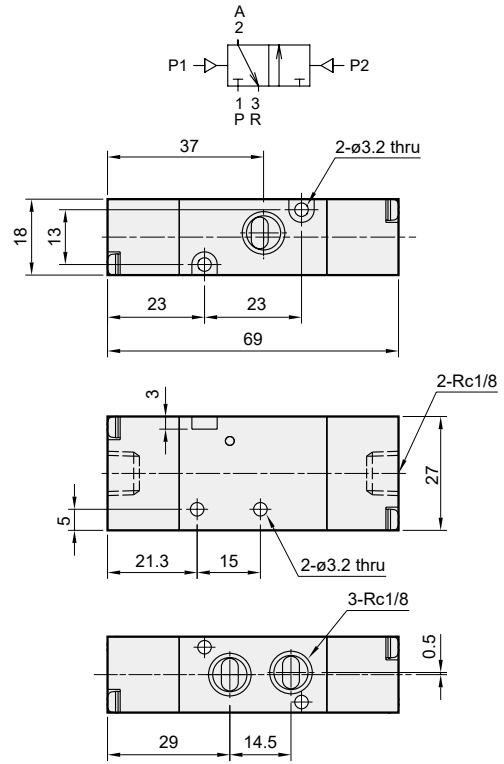
MVAA-180-4A2



MVAA-180-3A1-NC/NO



MVAA-180-3A2



MVAA-180 Manifold

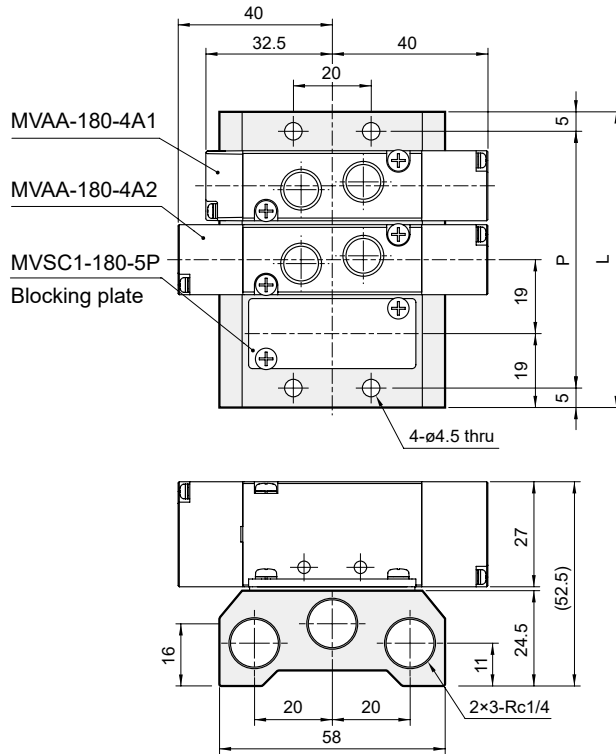
PILOT VALVE



MVSC1-180-5B*

* Use the same manifold with MVSC1.

5 port (for body ported type)



No. of stations	P	L
1	28	38
2	47	57
3	66	76
4	85	95
5	104	114
6	123	133
7	142	152
8	161	171
9	180	190
10	199	209

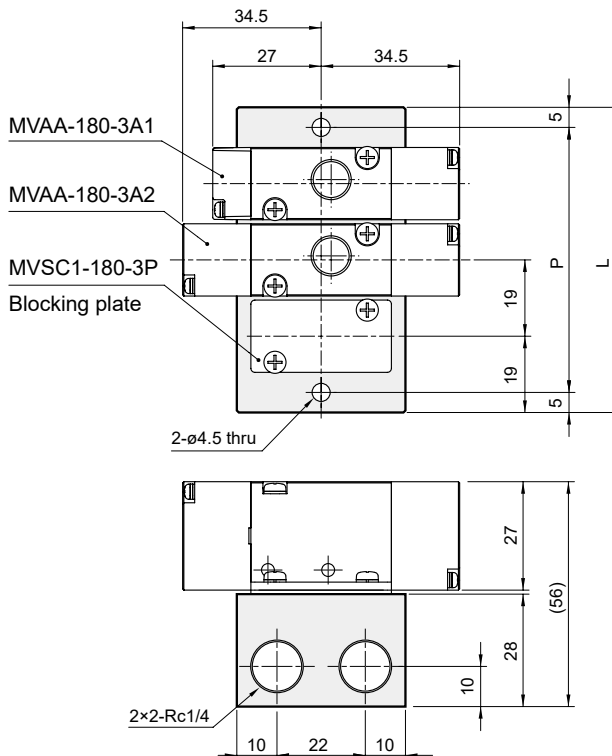
P: (No. of stations-1)×19+28

L: (No. of stations-1)×19+38

MVSC1-180-3B*

* Use the same manifold with MVSC1.

3 port (for body ported type)



No. of stations	P	L
1	28	38
2	47	57
3	66	76
4	85	95
5	104	114
6	123	133
7	142	152
8	161	171
9	180	190
10	199	209

P: (No. of stations-1)×19+28

L: (No. of stations-1)×19+38

MVAA-220 series

PILOT VALVE



Technical data



Caution for safety
(Read before installing)



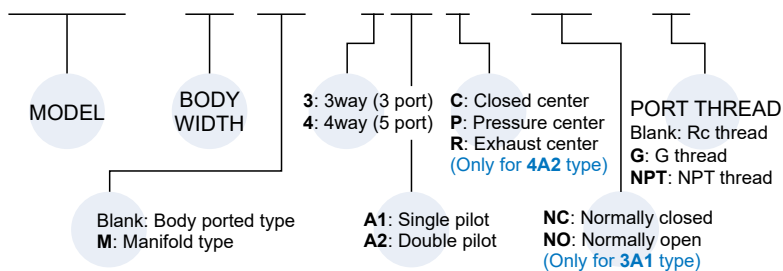
Specification

Model	3A1	3A2	4A1	4A2	4A2C.PR
Bore No.	8A				
Port size	1/4				
No. of port	3		5		
Medium	Air				
Operating pressure range	0~0.8 MPa				
Proof pressure	1 MPa				
Effective orifice	18 mm ²				
Pilot pressure range	(0.3×P*+0.1)~0.8 MPa				
Ambient temperature	-5~+60°C (No freezing)				
Weight	122 g	134 g	106 g	134 g	179 g

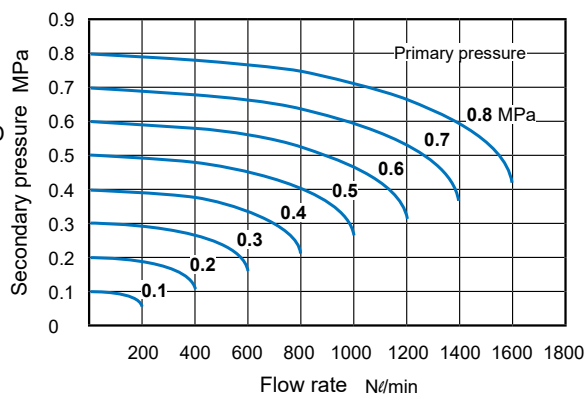
* P: Operating pressure.

Order example of valve

MVAA - 220M - 4A2C - NC - G

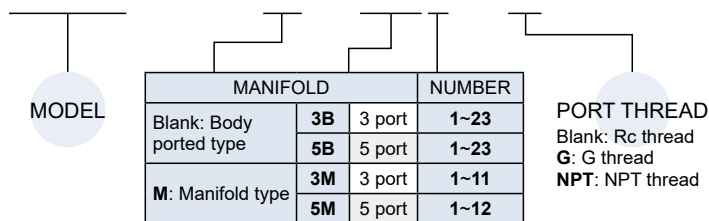


Flow features



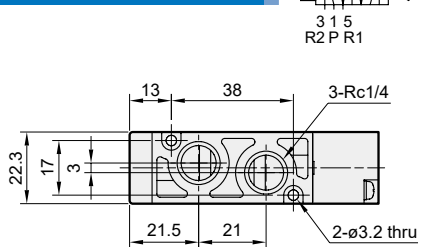
Order example of manifold

MVSC - 220M - 5M3 - G



* Use the same manifold with MVSC.
* Starting from 11 stations, manifolds are made to order.

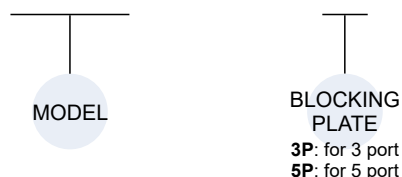
MVAA-220-4A1



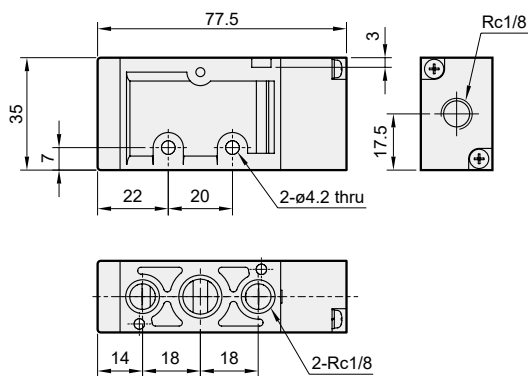
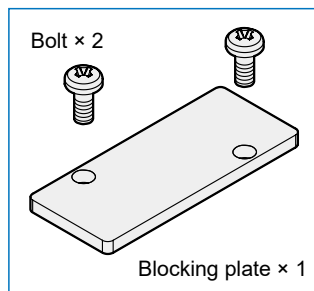
* Use the same blocking plate with MVSC.

Order example of blocking plate

MVSC - 220 - 5P



Blocking plate parts

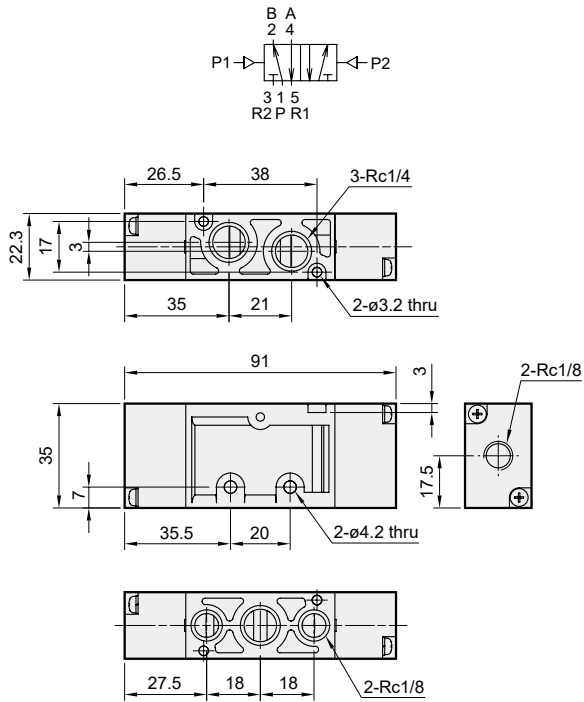


MVAA-220 Dimensions

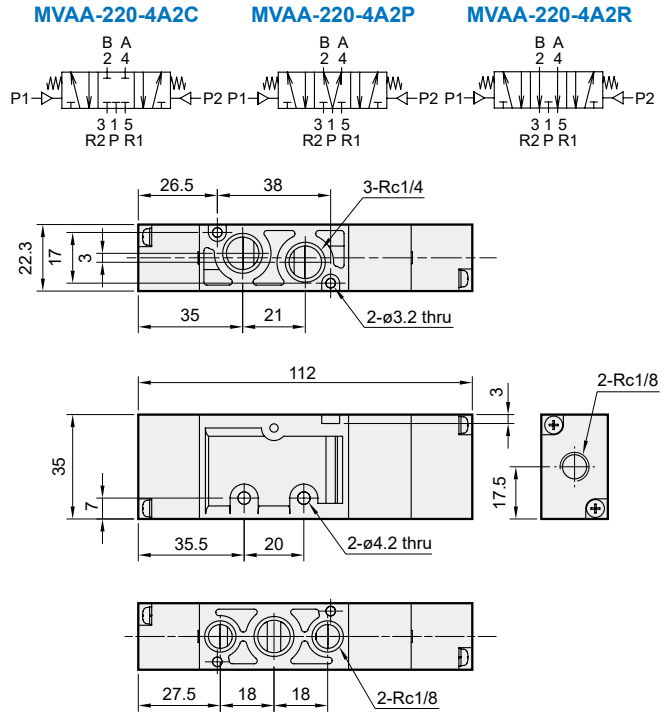
PILOT VALVE



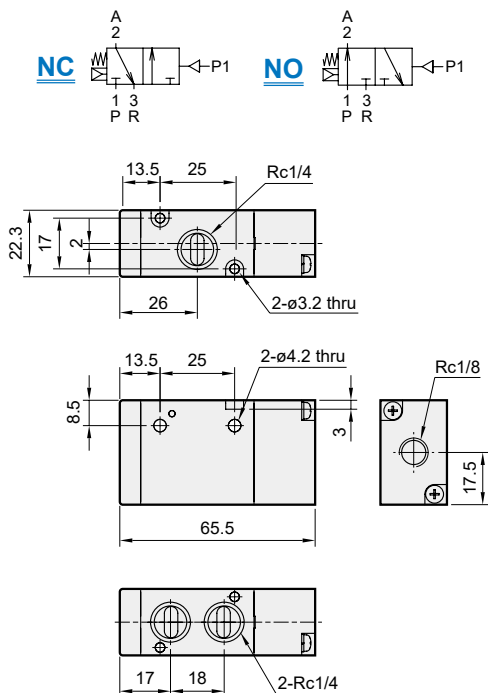
MVAA-220-4A2



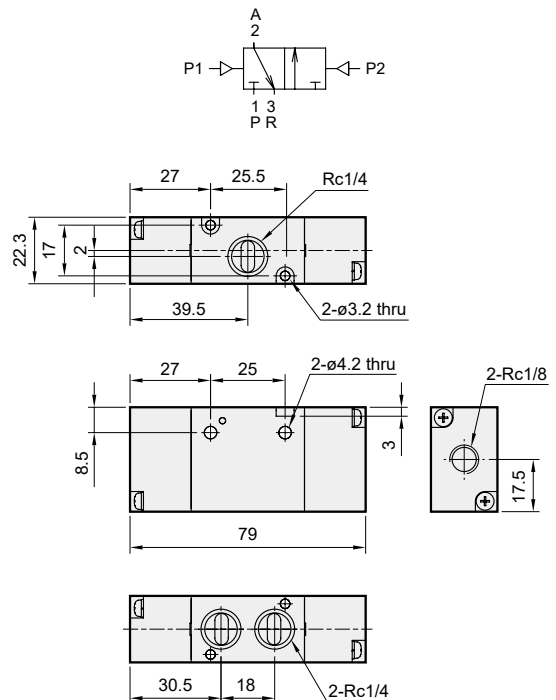
MVAA-220-4A2C.P.R



MVAA-220-3A1-NC/NO



MVAA-220-3A2



MVAA-220 Manifold

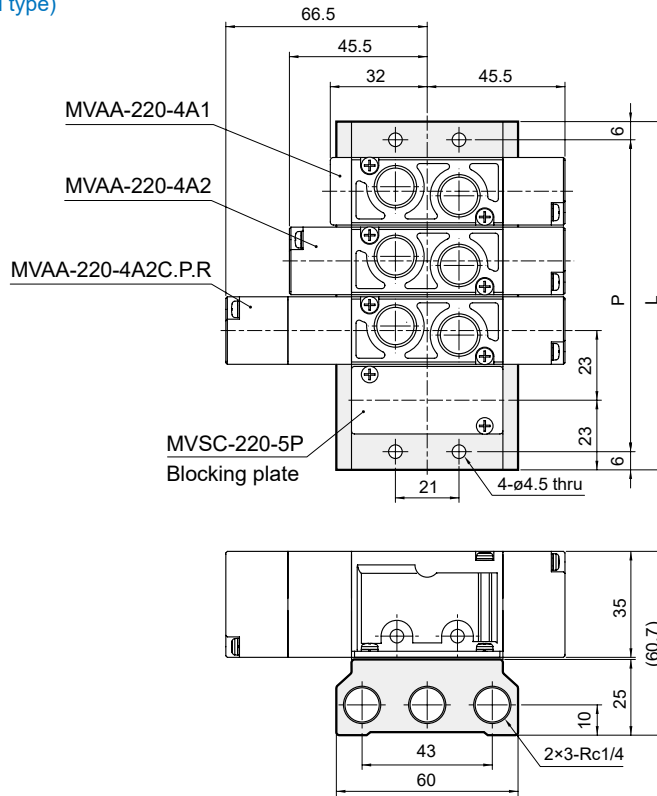
PILOT VALVE



MVSC-220-5B*

* Use the same manifold with MVSC.

5 port (for body ported type)



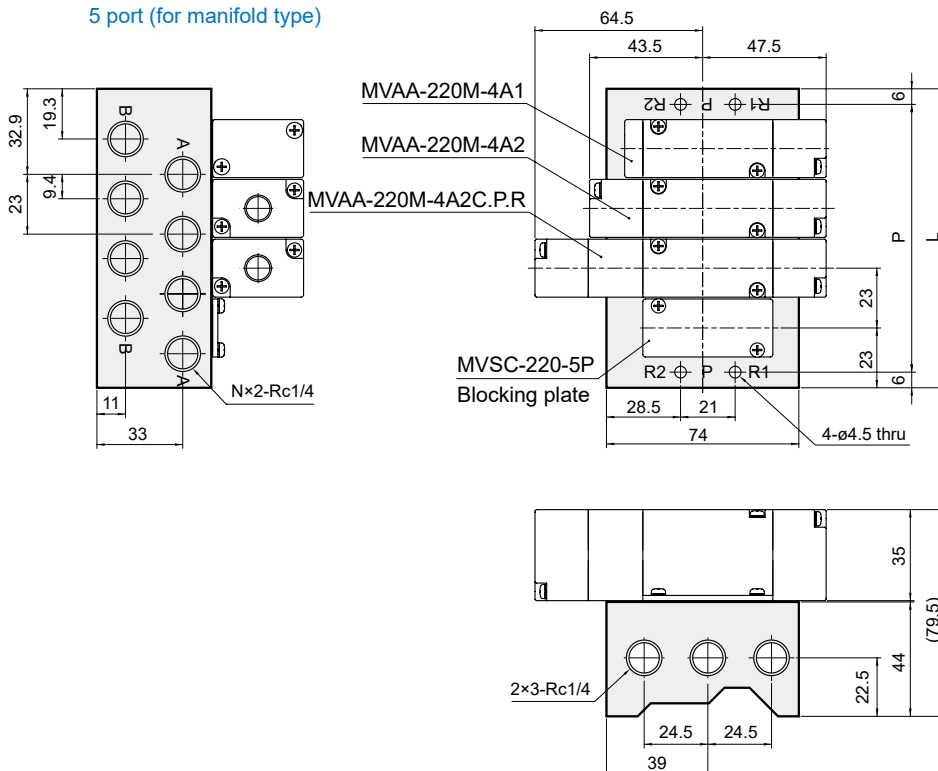
No. of stations	P	L
1	34	46
2	57	69
3	80	92
4	103	115
5	126	138
6	149	161
7	172	184
8	195	207
9	218	230
10	241	253

P: (No. of stations-1)×23+34
L: (No. of stations-1)×23+46

MVSC-220-5M*

* Use the same manifold with MVSC.

5 port (for manifold type)



No. of stations (N)	P	L
1	34	46
2	57	69
3	80	92
4	103	115
5	126	138
6	149	161
7	172	184
8	195	207
9	218	230
10	241	253

P: (No. of stations-1)×23+34
L: (No. of stations-1)×23+46

MVAA-220 Manifold

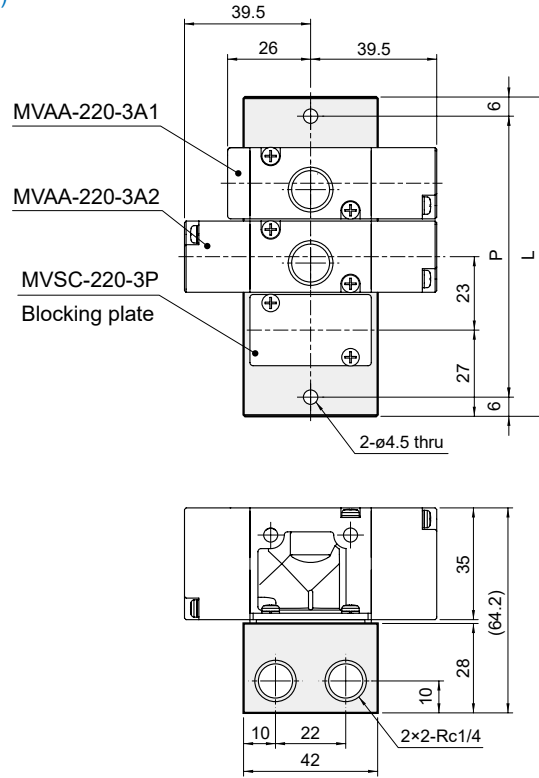
PILOT VALVE



MVSC-220-3B*

* Use the same manifold with MVSC.

3 port (for body ported type)



No. of stations	P	L
1	42	54
2	65	77
3	88	100
4	111	123
5	134	146
6	157	169
7	180	192
8	203	215
9	226	238
10	249	261

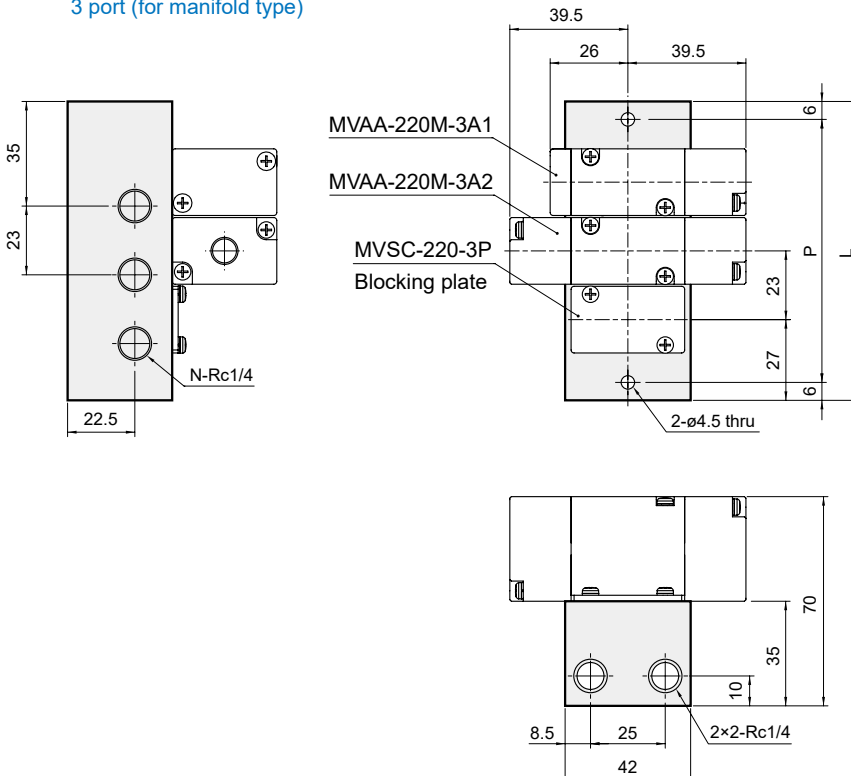
P: (No.of stations-1)×23+42

L: (No.of stations-1)×23+54

MVSC-220-3M*

* Use the same manifold with MVSC.

3 port (for manifold type)



No. of stations (N)	P	L
1	42	54
2	65	77
3	88	100
4	111	123
5	134	146
6	157	169
7	180	192
8	203	215
9	226	238
10	249	261

P: (No.of stations-1)×23+42

L: (No.of stations-1)×23+54

MVAA-260 series

PILOT VALVE



Technical data



Caution for safety
(Read before installing)



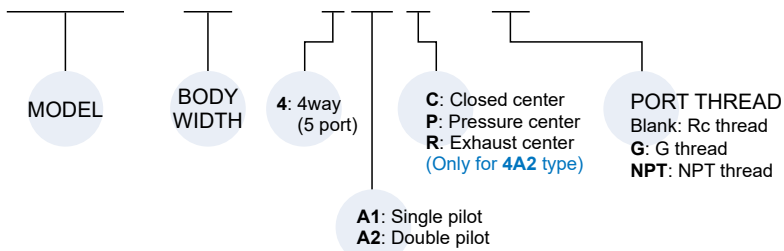
Specification

Model	4A1	4A2	4A2C.P.R
Bore No.	8A		
Port size	1/4		
No. of port	5		
Medium	Air		
Operating pressure range	0~0.8 MPa		
Proof pressure	1 MPa		
Effective orifice	18 mm ²		
Pilot pressure range	(0.3×P*+0.1)~0.8 MPa		
Ambient temperature	-5~+60°C (No freezing)		
Weight	153 g	163 g	219 g

* P: Operating pressure.

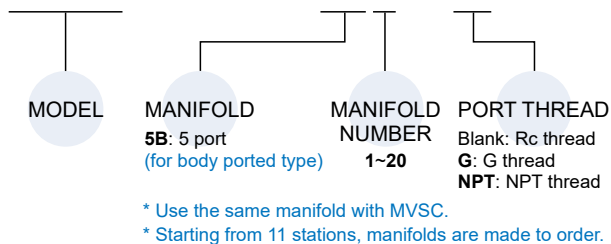
Order example of valve

MVAA – 260 – 4A2C – G



Order example of manifold

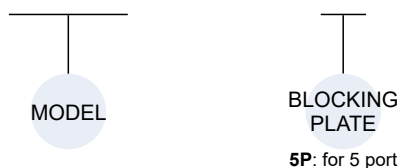
MVSC – 260 – 5B3 – G



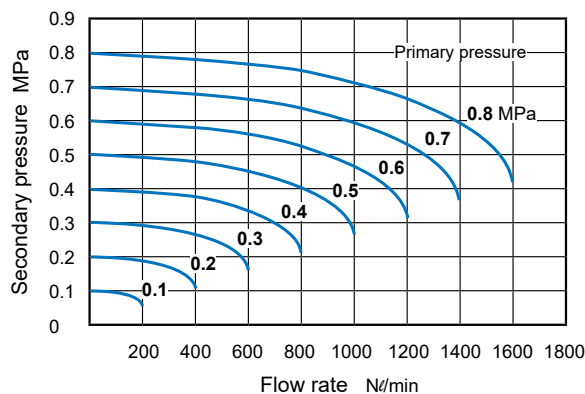
* Use the same blocking plate with MVSC.

Order example of blocking plate

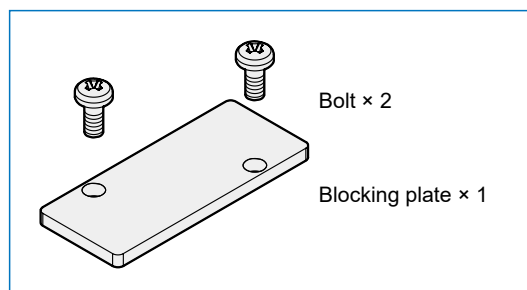
MVSC – 260 – 5P



Flow features



Blocking plate parts

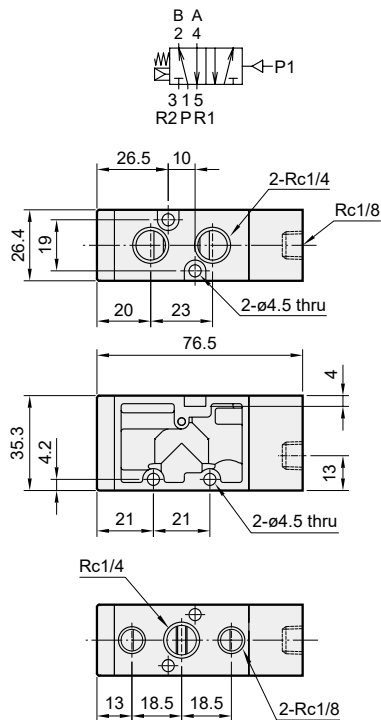


MVAA-260 Dimensions

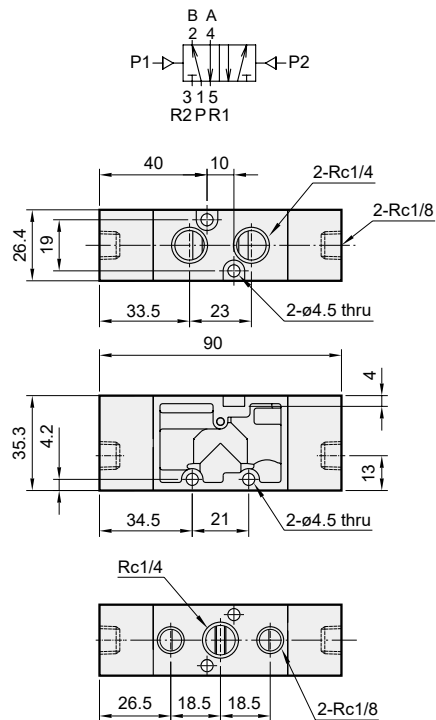
PILOT VALVE



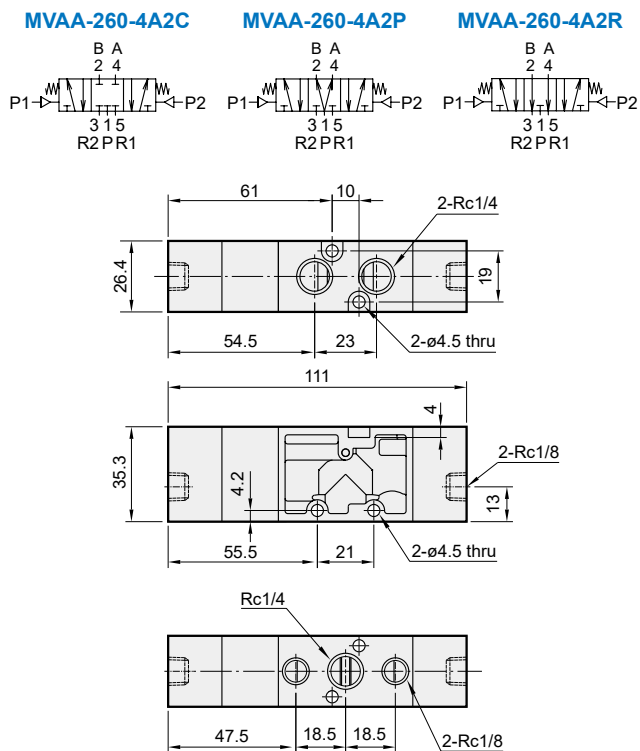
MVAA-260-4A1



MVAA-260-4A2



MVAA-260-4A2C.PR



MVAA-260 Manifold

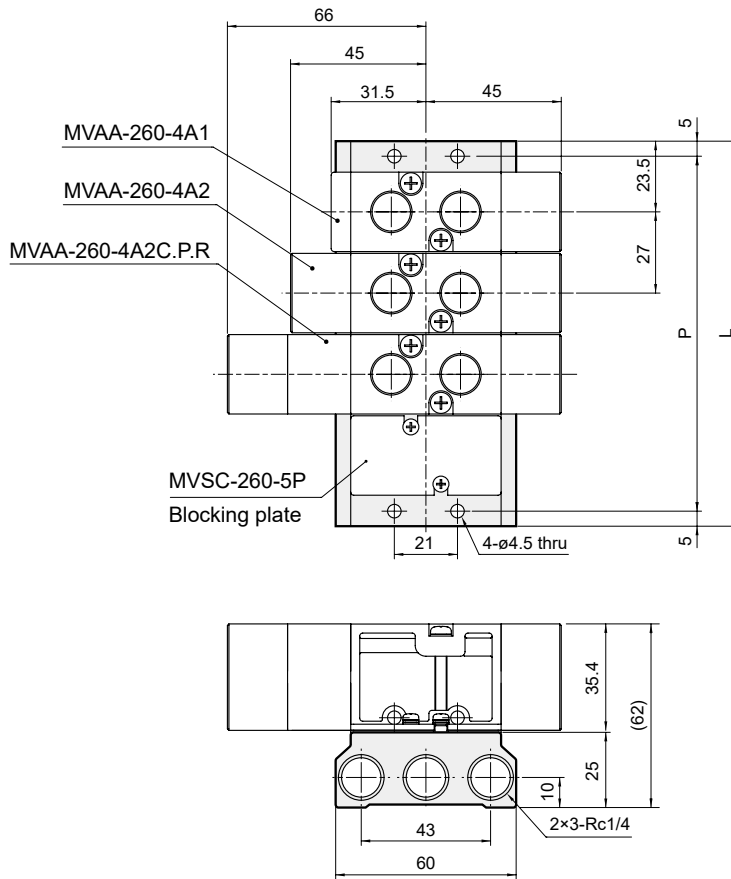
PILOT VALVE



MVSC-260-5B*

* Use the same manifold with MVSC.

5 port (for body ported type)



No. of stations	P	L
1	37	47
2	64	74
3	91	101
4	118	128
5	145	155
6	172	182
7	199	209
8	226	236
9	253	263
10	280	290

P: (No.of stations-1)×27+37

L: (No.of stations-1)×27+47

MVAA-300 series

PILOT VALVE



Technical data



Caution for safety
(Read before installing)



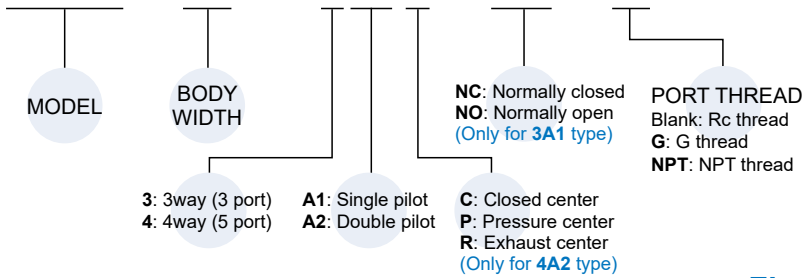
Specification

Model	3A1	3A2	4A1	4A2	4A2C.PR
Bore No.	10A				
Port size	3/8				
No. of port	3		5		
Medium	Air				
Operating pressure range	0~0.8 MPa				
Proof pressure	1 MPa				
Effective orifice	35 mm ²				
Pilot pressure range	(0.34×P*+0.1)~0.8 MPa				
Ambient temperature	-5~+60°C (No freezing)				
Weight	295 g	324 g	236 g	301 g	385 g

* P: Operating pressure.

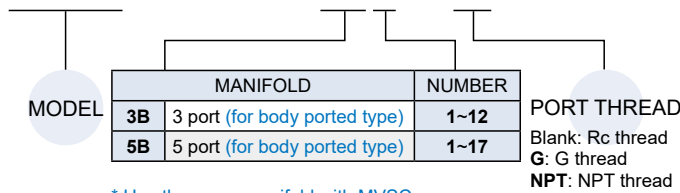
Order example of valve

MVAA – 300 – 4A2C – NC – G



Order example of manifold

MVSC – 300 – 5B3 – G



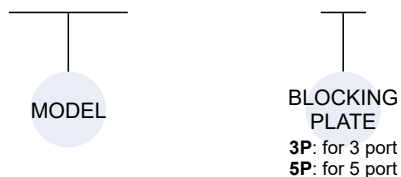
* Use the same manifold with MVSC.

* Starting from 11 stations, manifolds are made to order.

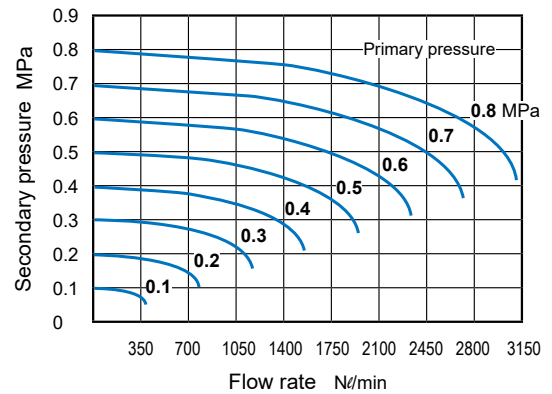
* Use the same blocking plate with MVSC.

Order example of blocking plate

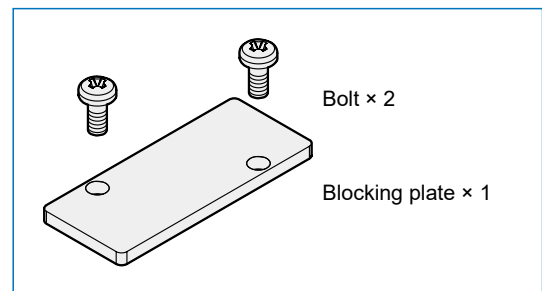
MVSC – 300 – 5P



Flow features



Blocking plate parts



MVAA-300 Dimensions

PILOT VALVE



Solenoid Valve

Process Valve

Pilot & Mechanical Valve

Air Treatment Unit

Pressure Switch

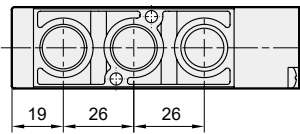
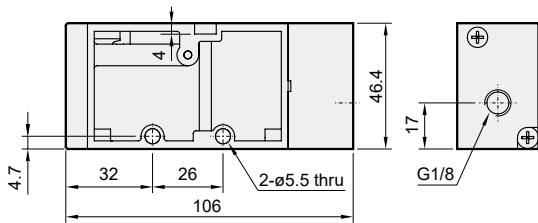
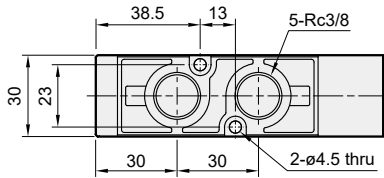
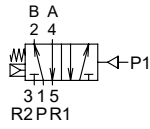
Compressed Air Dryer

Auxiliary Equipment

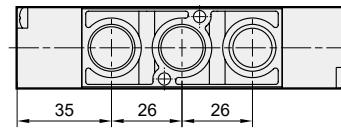
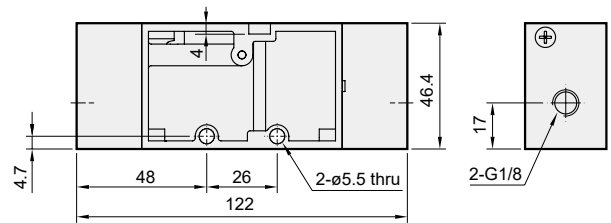
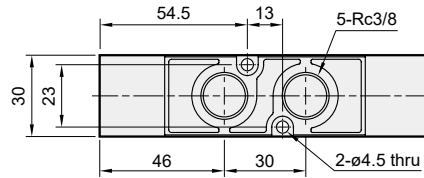
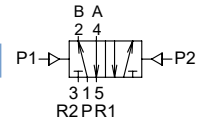
PISCO®

PLC Control System

MVAA-300-4A1



MVAA-300-4A2

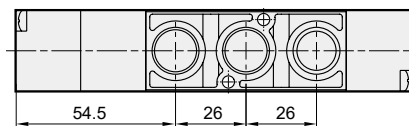
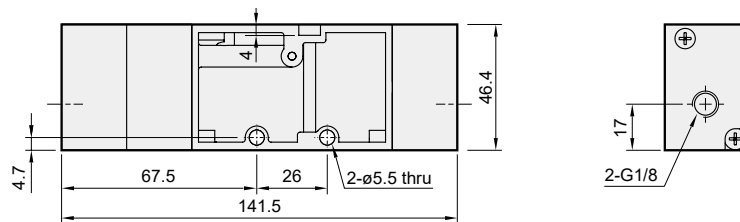
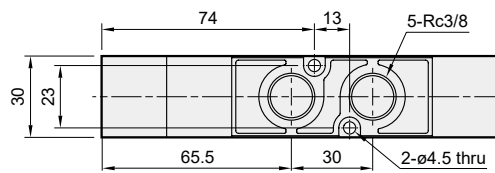
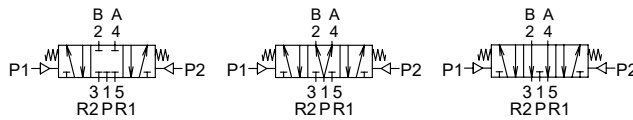


MVAA-300-4A2C.P.R

MVAA-300-4A2C

MVAA-300-4A2P

MVAA-300-4A2R

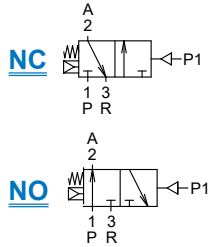
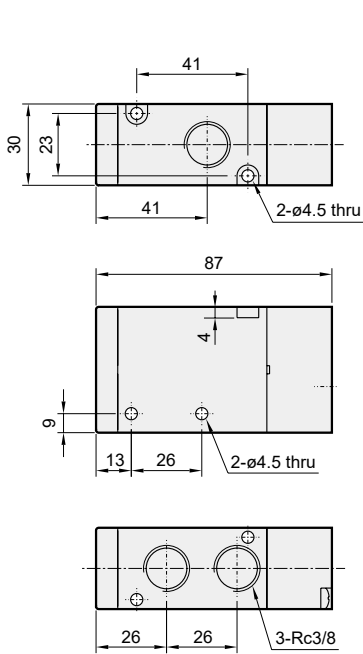


MVAA-300 Dimensions

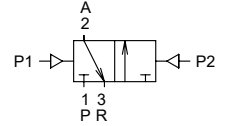
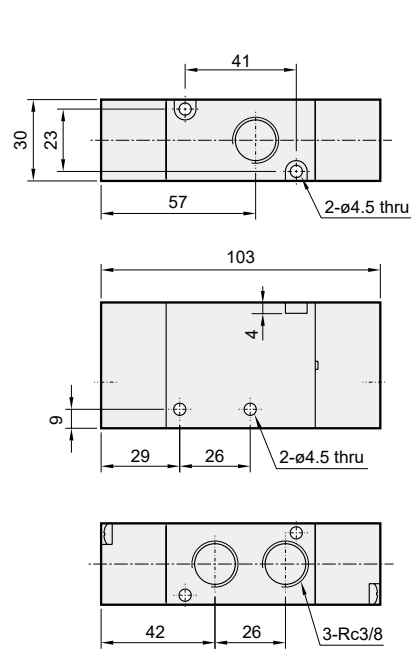
PILOT VALVE



MVAA-300-3A1-NC/NO



MVAA-300-3A2

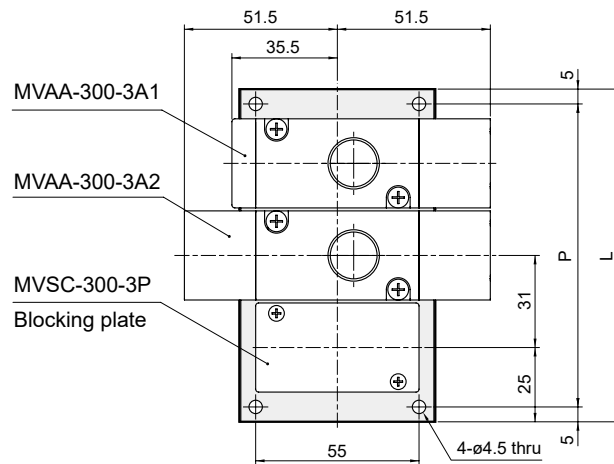


Manifold of pilot valve

MVSC-300-3B*

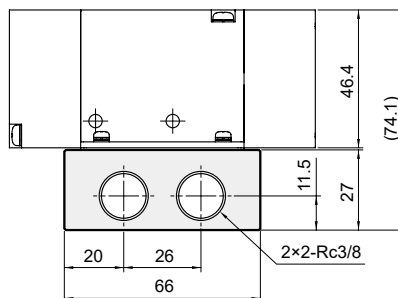
* Use the same manifold with MVSC.

3 port (for body ported type)



No. of stations	P	L
1	40	50
2	71	81
3	102	112
4	133	143
5	164	174
6	195	205
7	226	236
8	257	267
9	288	298
10	319	329

P: (No. of stations-1)×31+40
L: (No. of stations-1)×31+50



MVAA-300 Manifold

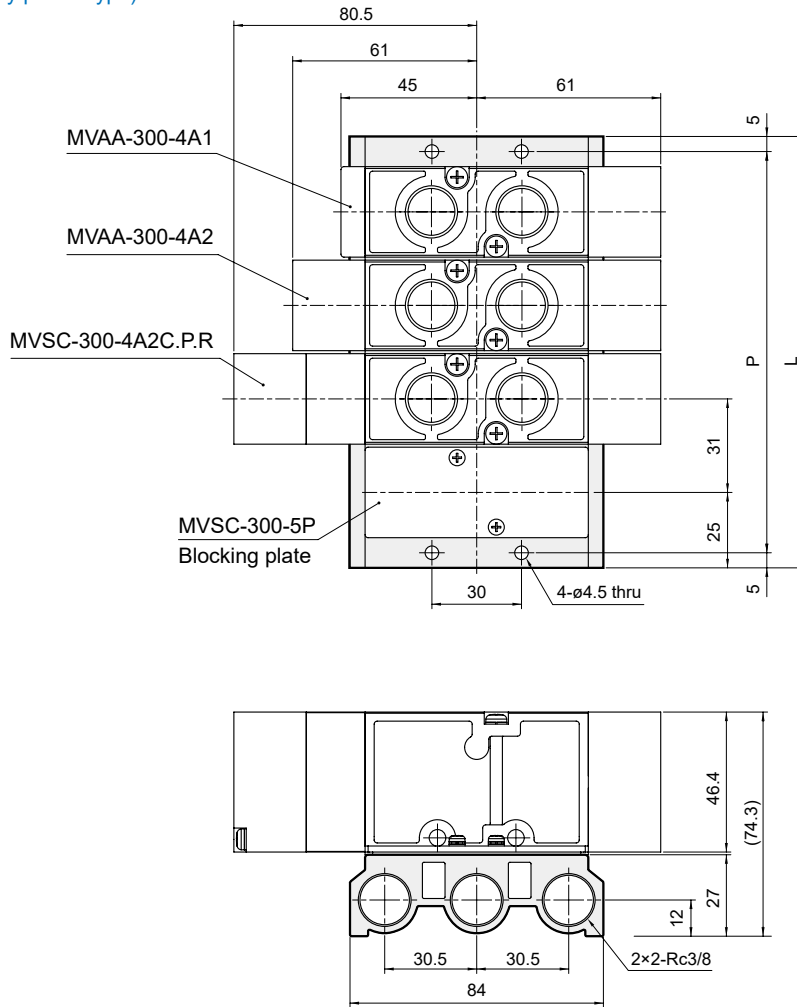
PILOT VALVE



MVSC-300-5B*

* Use the same manifold with MVSC.

5 port (for body ported type)



No. of stations	P	L
1	40	50
2	71	81
3	102	112
4	133	143
5	164	174
6	195	205
7	226	236
8	257	267
9	288	298
10	319	329

P: (No. of stations-1)×31+40

L: (No. of stations-1)×31+50

MVAA-460 series

PILOT VALVE



Technical data



Caution for safety
(Read before installing)



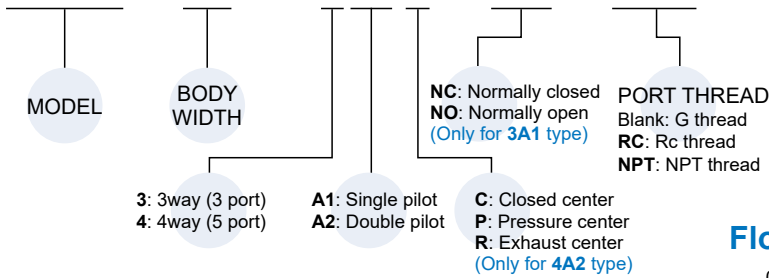
Specification

Model	3A1	3A2	4A1	4A2	4A2C.PR
Bore No.	15A				
Port size	1/2				
No. of port	3		5		
Medium	Air				
Operating pressure range	0~0.8 MPa				
Proof pressure	1 MPa				
Effective orifice	50 mm ²				
Pilot pressure range	(0.34×P*+0.1)~0.8 MPa				
Ambient temperature	-5~+60°C (No freezing)				
Weight	300 g	326 g	275 g	338 g	410 g

* P: Operating pressure.

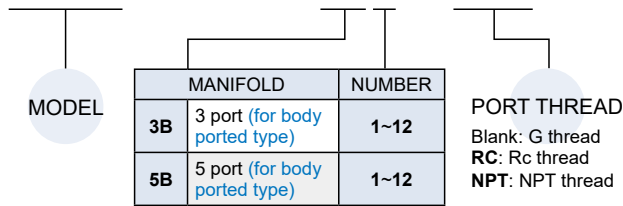
Order example of valve

MVAA – 460 – 4A2C – NC – NPT



Order example of manifold

MVSC – 460 – 5B3 – NPT



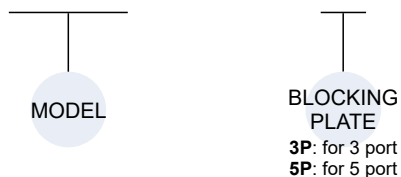
* Use the same manifold with MVSC.

* Starting from 11 stations, manifolds are made to order.

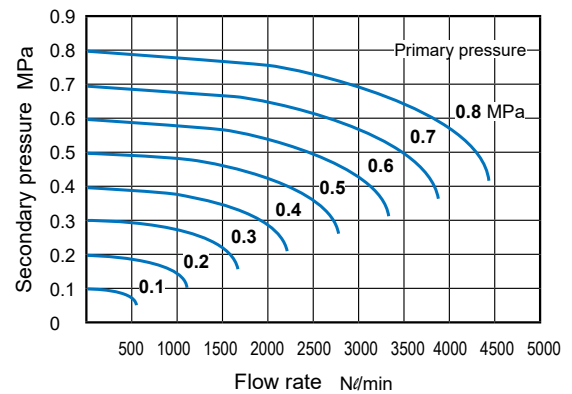
* Use the same blocking plate with MVSC.

Order example of blocking plate

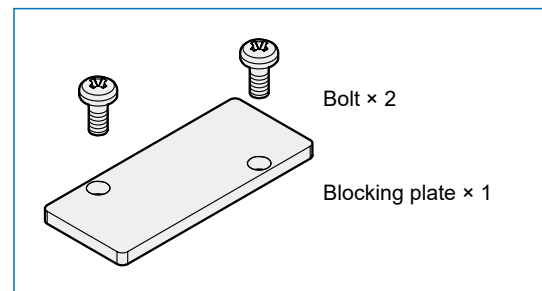
MVSC – 460 – 5P



Flow features



Blocking plate parts

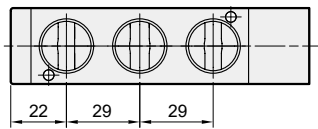
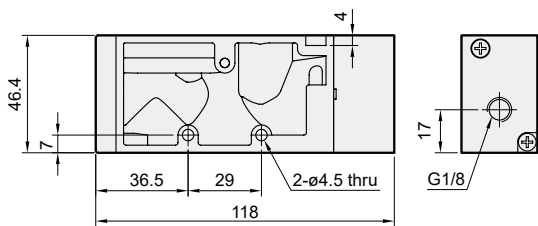
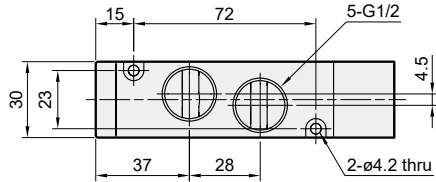
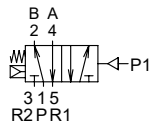


MVAA-460 Dimensions

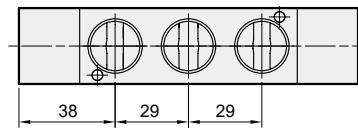
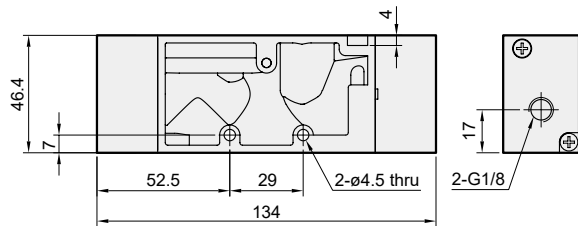
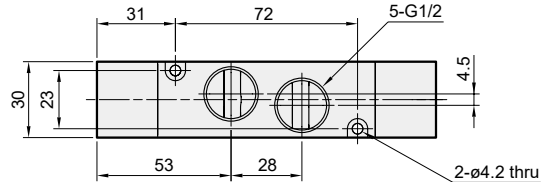
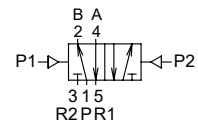
PILOT VALVE



MVAA-460-4A1



MVAA-460-4A2

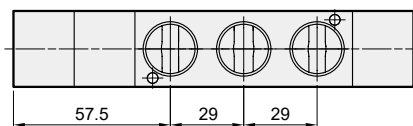
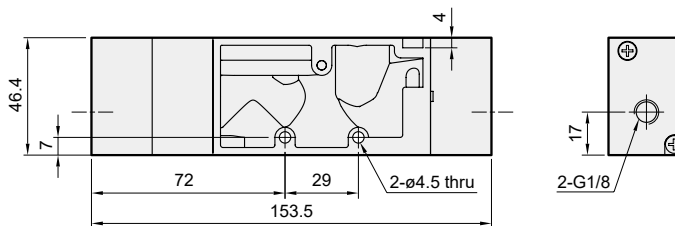
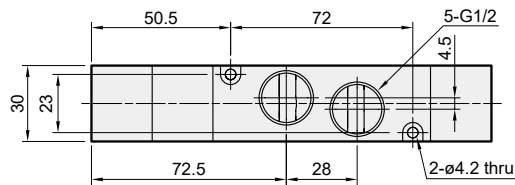
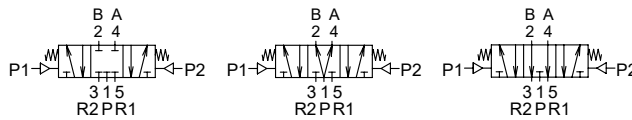


MVAA-460-4A2C.PR

MVAA-460-4A2C

MVAA-460-4A2P

MVAA-460-4A2R

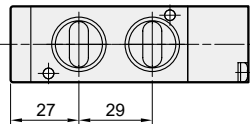
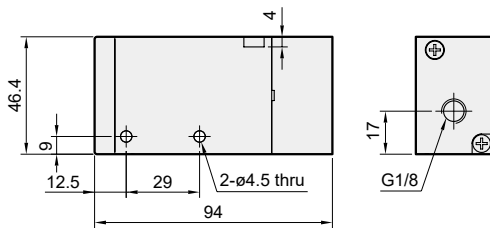
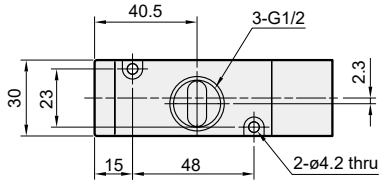
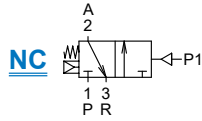


MVAA-460 Dimensions

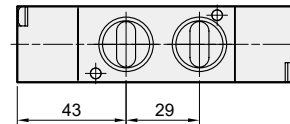
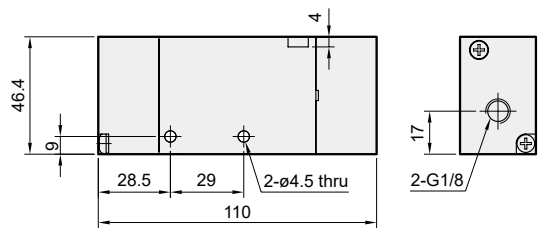
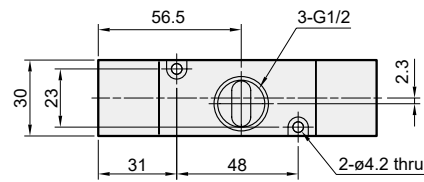
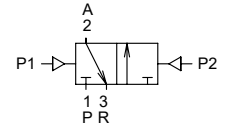
PILOT VALVE



MVAA-460-3A1-NC/NO



MVAA-460-3A2

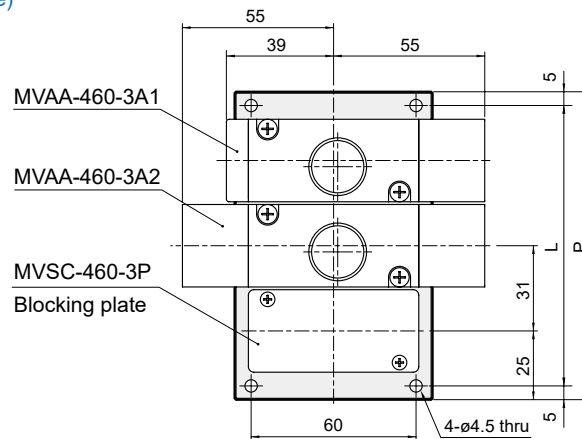


Manifold of pilot valve

MVSC-460-3B*

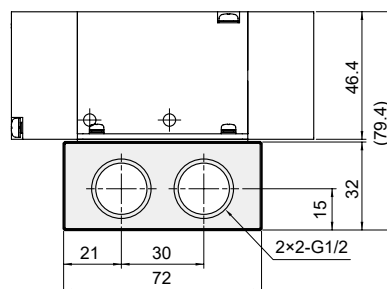
* Use the same manifold with MVSC.

3 port (for body ported type)



No. of stations	P	L
1	40	50
2	71	81
3	102	112
4	133	143
5	164	174
6	195	205
7	226	236
8	257	267
9	288	298
10	319	329

P: (No. of stations-1)×31+40
L: (No. of stations-1)×31+50



MVAA-460 Manifold

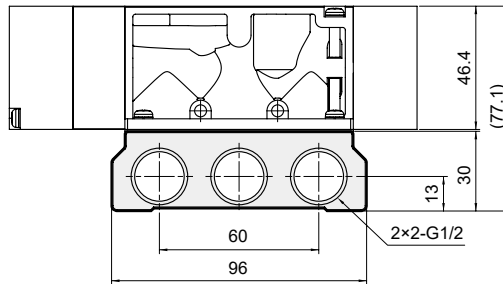
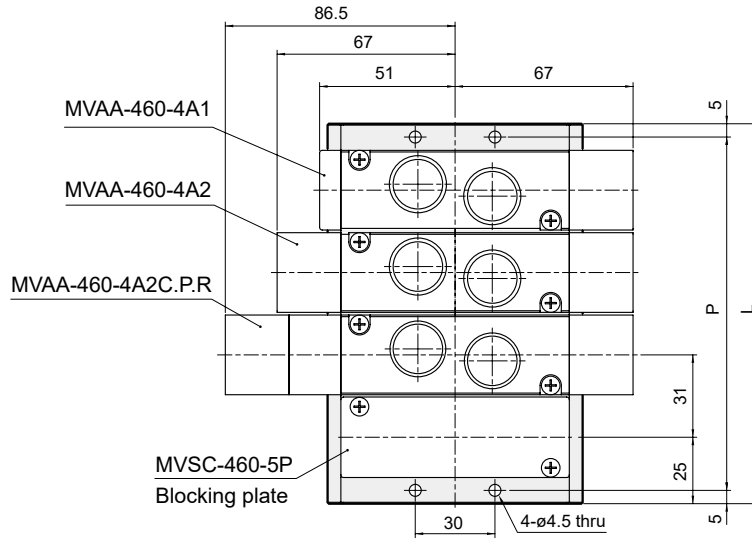
PILOT VALVE



MVSC-460-5B*

* Use the same manifold with MVSC.

5 port (for body ported type)



No. of stations	P	L
1	40	50
2	71	81
3	102	112
4	133	143
5	164	174
6	195	205
7	226	236
8	257	267
9	288	298
10	319	329

P: (No. of stations-1)×31+40
L: (No. of stations-1)×31+50

MVMA-260 series

MECHANICAL VALVE



Technical data



Caution for safety
(Read before installing)



Specification

Model	MVMA-260-4R1
Bore No.	8A
Port size	1/4
No. of port	5
Medium	Air
Operating pressure range	0~0.8 MPa
Proof pressure	1 MPa
Effective orifice	18 mm ²
Ambient temperature	-5~+60°C (No freezing)
Weight	178 g

Order example

MVMA - 260 - 4R1 - G

MODEL

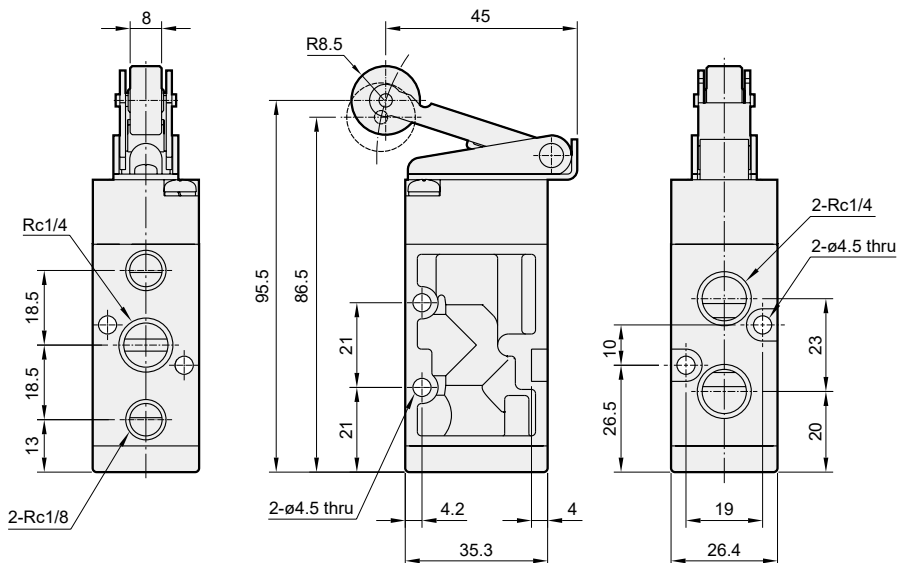
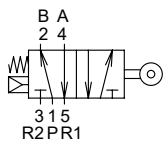
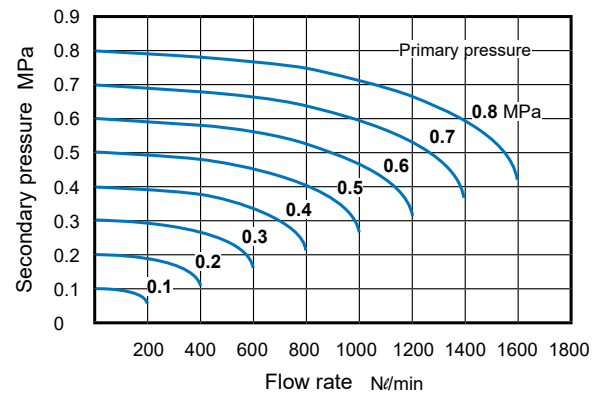
BODY WIDTH

ROLLER LEVER

PORT THREAD
Blank: Rc thread
G: G thread
NPT: NPT thread

4: 4way (5 port)

Flow features



MVMA-300 series

MECHANICAL VALVE



Technical data



Caution for safety
(Read before installing)



Specification

Model	MVMA-300-4R1
Bore No.	10A
Port size	3/8
No. of port	5
Medium	Air
Operating pressure range	0~0.8 MPa
Proof pressure	1 MPa
Effective orifice	35 mm ²
Ambient temperature	-5~+60°C (No freezing)
Weight	260 g

Order example

MVMA - 300 - 4R1 - G

MODEL

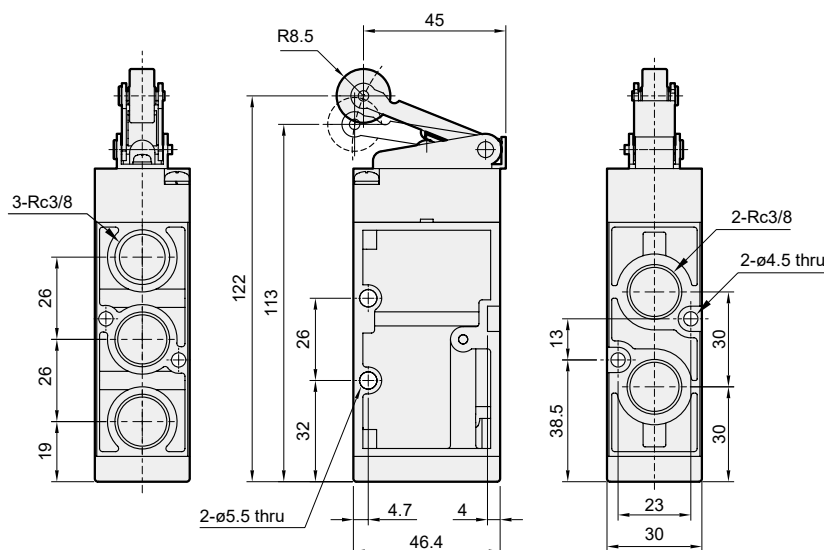
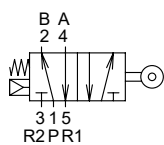
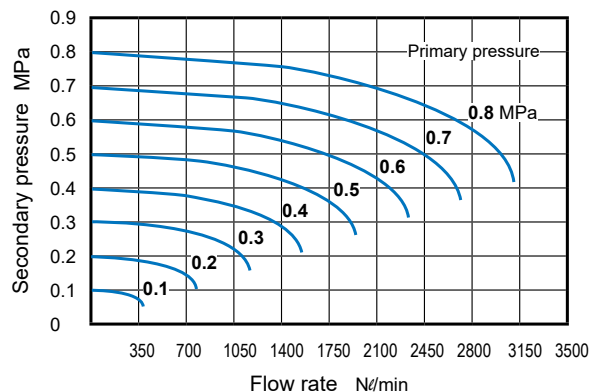
BODY WIDTH

4: 4way (5 port)

ROLLER LEVER

PORT THREAD
Blank: Rc thread
G: G thread
NPT: NPT thread

Flow features



MVMB / MVMC Push button type

MECHANICAL VALVE



mindman

EB-22

Latching palm button

LB-22

Extended twist button

TB-22

Twist button

PB-22

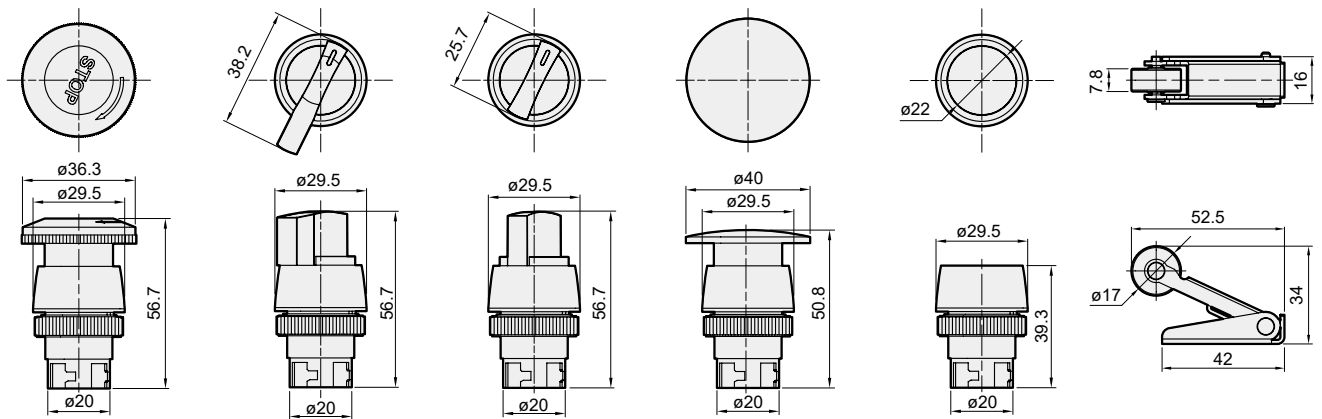
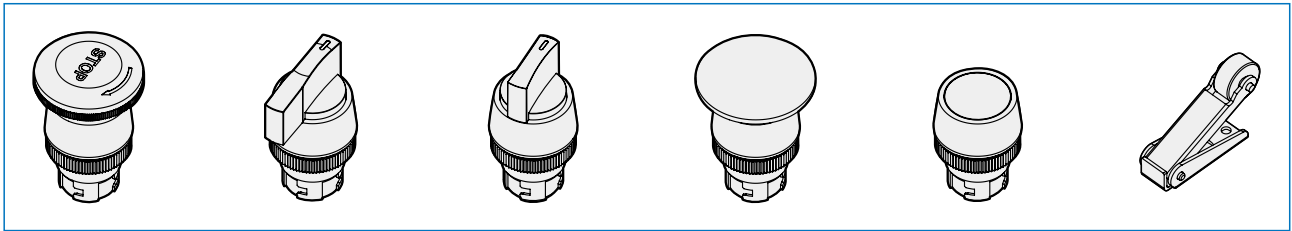
Mushroom palm button

PP-22

Push button

R1

Roller lever



EB-25/30

Latching palm button

LB-25/30

Extended twist button

TB-25/30

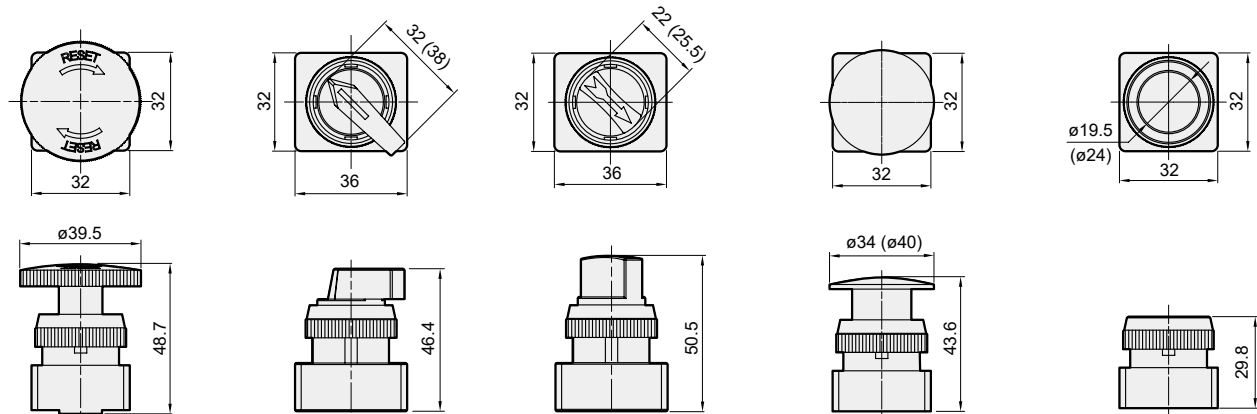
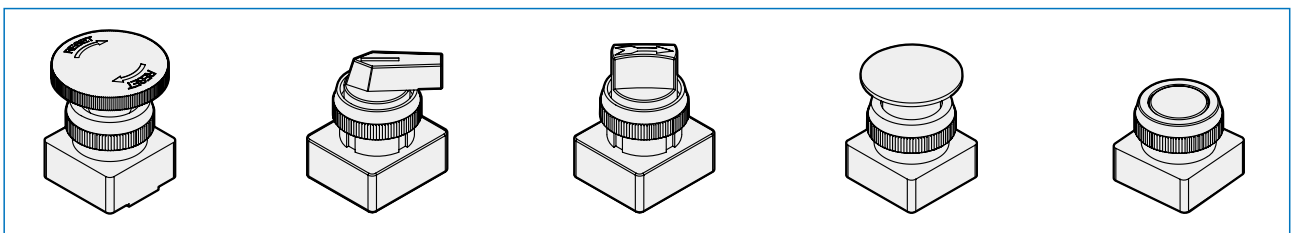
Twist button

PB-25/30

Mushroom palm button

PP-25/30

Push button



() : Dimension for button size $\phi 30$.

MVMB-220-3** series

MECHANICAL VALVE



Button type




Technical data



Caution for safety
(Read before installing)



Actuator-holder



- Type $\phi 22$, the body and actuator-holder in (Fig. 2).
- Type $\phi 22$ can set or release button by simply switching actuator-holder.
- Type $\phi 25$, $\phi 30$ fix bracket in (Fig. 1).
- Type $\phi 25$, $\phi 30$ Actuator set or released by screwdriver.
- If choosing type 3B1-22, it needs an extra order of Actuator-holder when a button is needed.

(Fig. 2)

Specification

Model	MVMB-220-3**
Bore No.	8A
Port size	1/4
No. of port	3
No. of position	2
Medium	Air
Operating pressure range	0.15~0.8 MPa
Proof pressure	1 MPa
Effective orifice	18 mm ²
Ambient temperature	-5~+60°C (No freezing)
Weight	210 g

Order example

MVMB — 220 — 3EB — 25R — G

MODEL

BODY WIDTH

3: 3way (3 port)

BUTTON SIZE

22: $\phi 22$
25: $\phi 25$
30: $\phi 30$

PORT THREAD

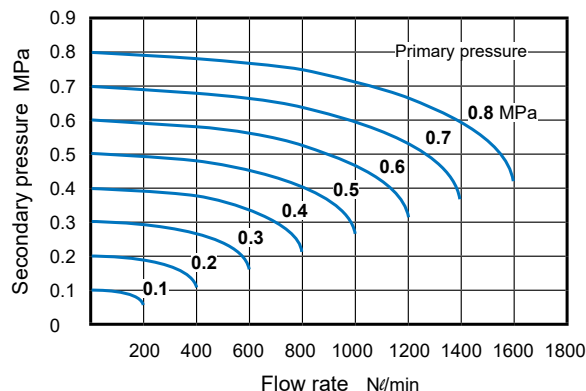
Blank: Rc thread
G: G thread
NPT: NPT thread

B1: Body (without button)
EB: Latching palm button
LB: Extended twist button
TB: Twist button
PB: Mushroom palm button
PP: Push button

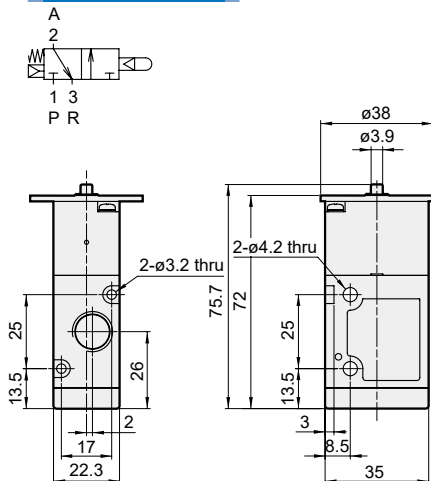
BUTTON COLOR

Color	Type
—	B1 type
G: Green	EB type (Green color only for $\phi 25$, $\phi 30$)
R: Red	LB type
B: Black	TB type
B: Black	PB type
G: Green	PP type
R: Red	

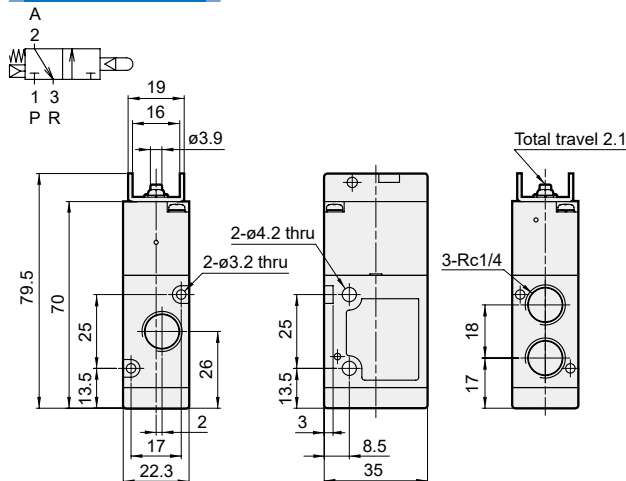
Flow features



3B1-22



3B1-25/30

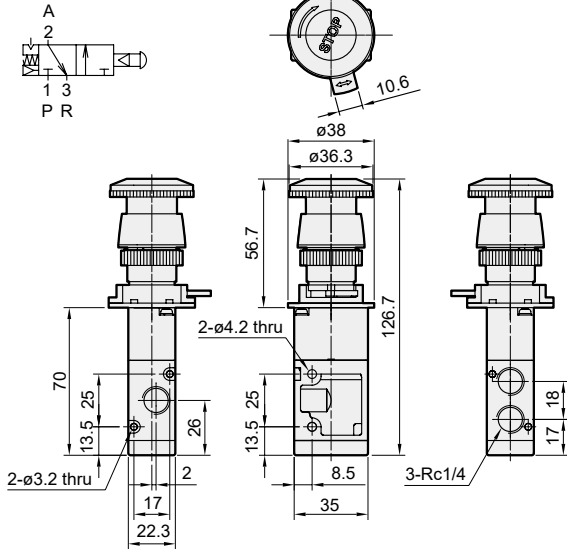


MVMB-220-3** Dimensions

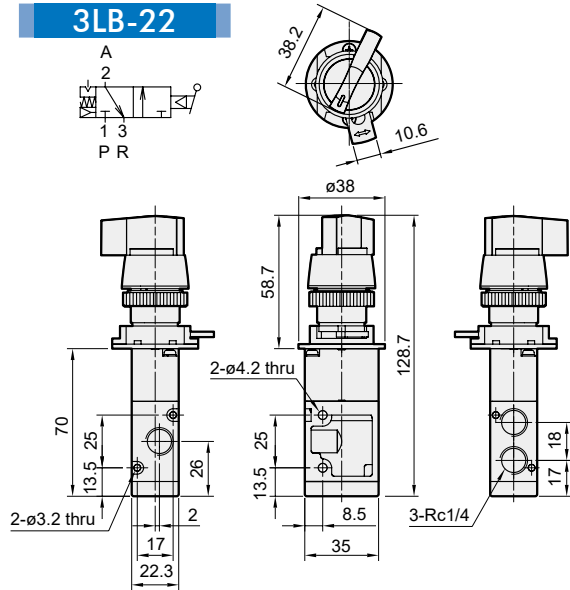
MECHANICAL VALVE



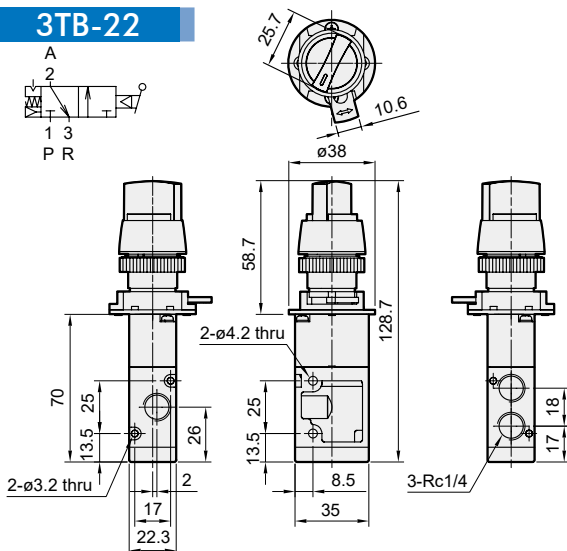
3EB-22



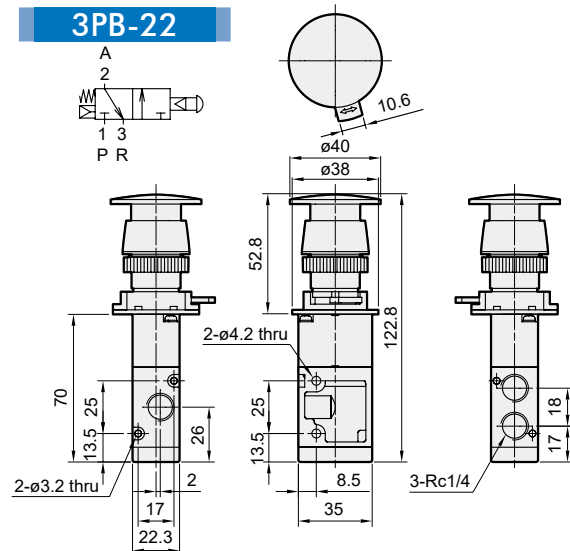
3LB-22



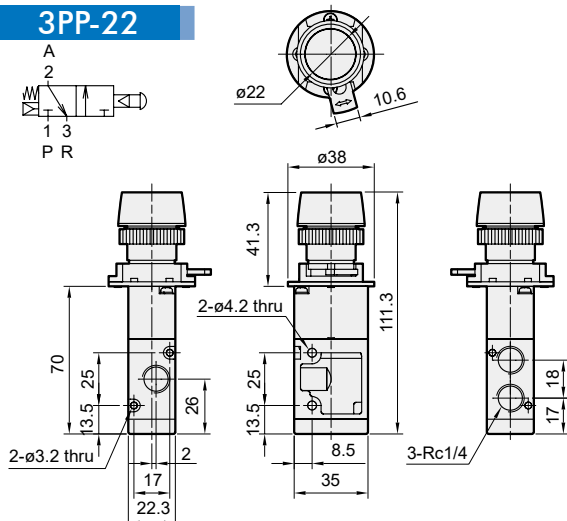
3TB-22



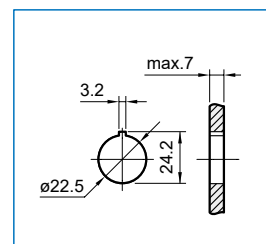
3PB-22



3PP-22



Panel mounting hole



MVMB-220-3** Dimensions

MECHANICAL VALVE



Solenoid Valve

Process Valve

Pilot & Mechanical Valve

Air Treatment Unit

Pressure Switch

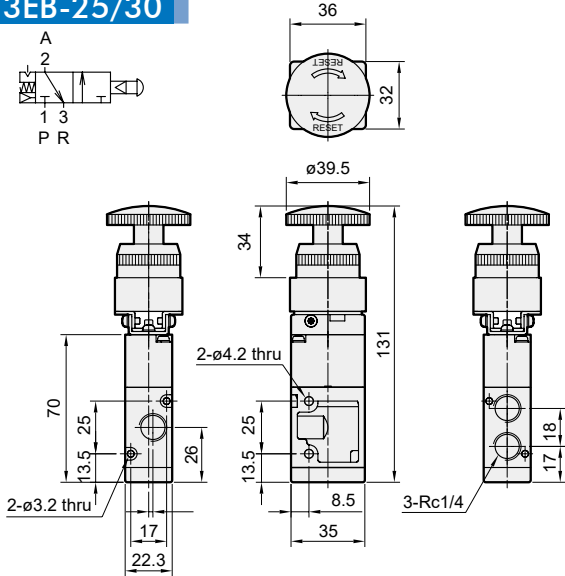
Compressed Air Dryer

Auxiliary Equipment

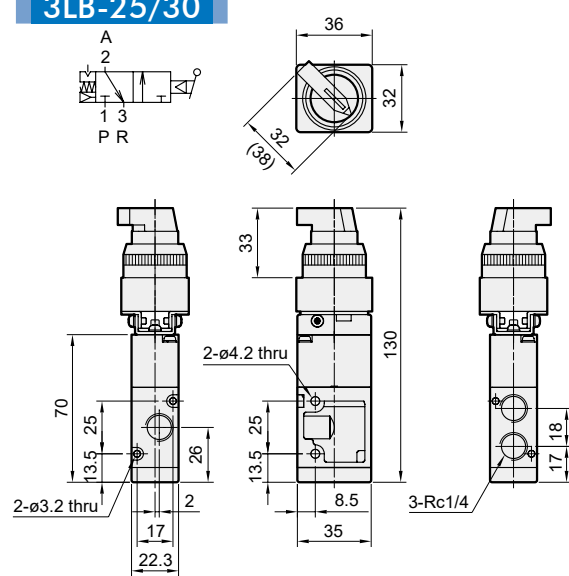
PISCO®

PLC Control System

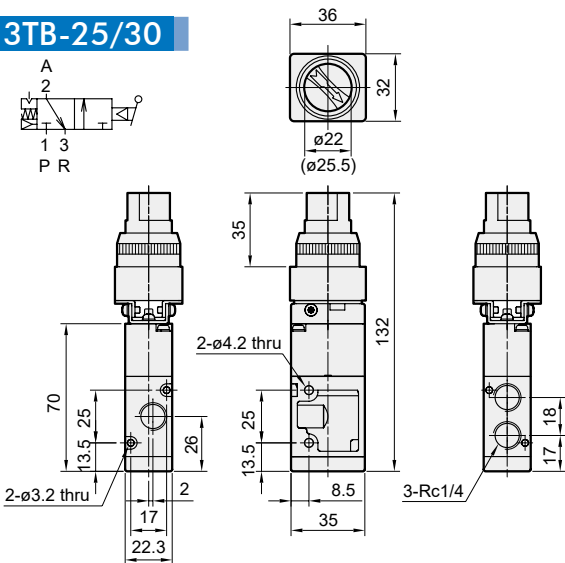
3EB-25/30



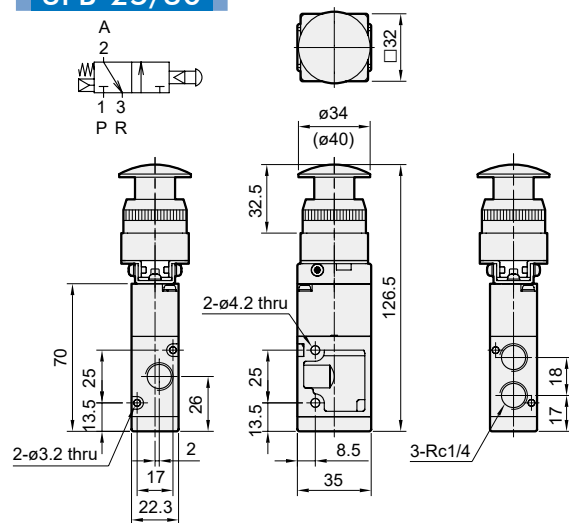
3LB-25/30



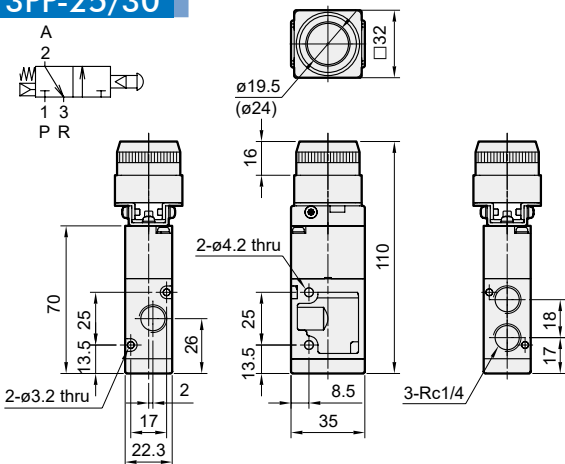
3TB-25/30



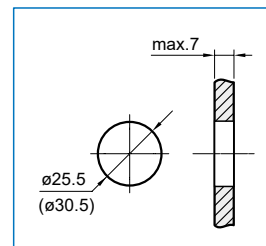
3PB-25/30



3PP-25/30



Panel mounting hole



(): Dimension for button size $\phi 30$.

MVMB-220-4** series

MECHANICAL VALVE



Button type



Technical data



Caution for safety
(Read before installing)



(Fig. 1)

Actuator-holder

(Fig. 2)



- Type $\phi 22$, the body and actuator-holder in (Fig. 2).
- Type $\phi 22$ can set or release button by simply switching actuator-holder.
- Type $\phi 25$, $\phi 30$ fix bracket in (Fig. 1).
- Type $\phi 25$, $\phi 30$ Actuator set or released by screwdriver.
- If choosing type 4B1-22, it needs an extra order of Actuator-holder when a button is needed.

Specification

Model	MVMB-220-4**
Bore No.	8A
Port size	1/4
No. of port	5
No. of position	2
Medium	Air
Operating pressure range	0.15~0.8 MPa
Proof pressure	1 MPa
Effective orifice	18 mm ²
Ambient temperature	-5~+60°C (No freezing)
Weight	180 g

Order example

MVMB - 220 - 4EB - 25R - G

MODEL

BODY WIDTH

4: 4way (5 port)

BUTTON SIZE

22: $\phi 22$
25: $\phi 25$
30: $\phi 30$

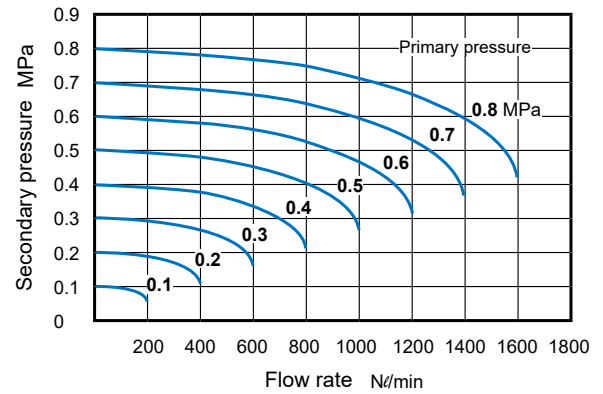
PORT THREAD
Blank: Rc thread
G: G thread
NPT: NPT thread

B1: Body (without button)
EB: Latching palm button
LB: Extended twist button
TB: Twist button
PB: Mushroom palm button
PP: Push button

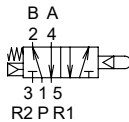
BUTTON COLOR

Color	Type
—	B1 type
G: Green	EB type (Green color only for $\phi 25$, $\phi 30$)
R: Red	LB type TB type
B: Black	PB type PP type
B: Black	
G: Green	
R: Red	

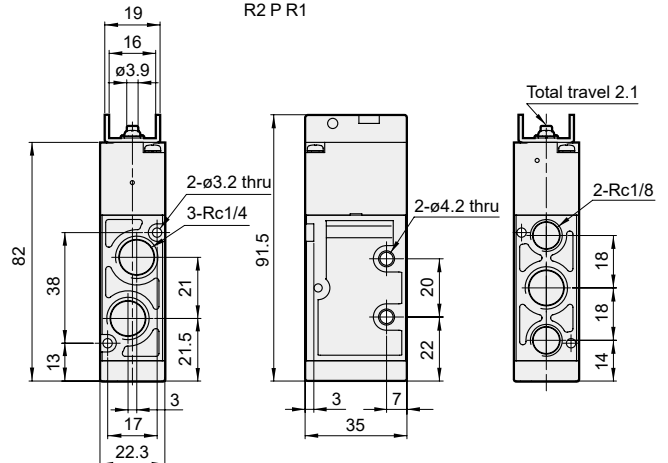
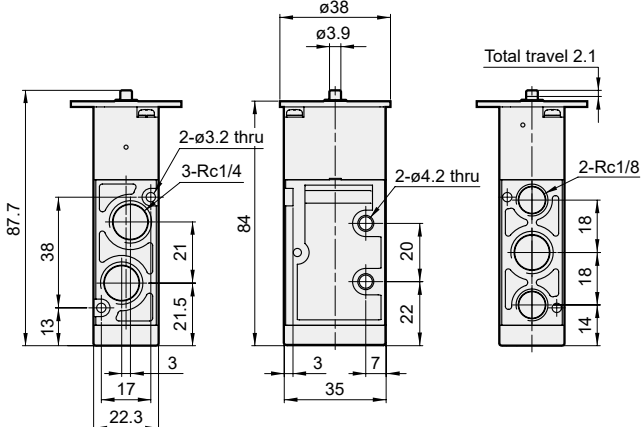
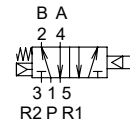
Flow features



4B1-22



4B1-25/30



MVMB-220-4** Dimensions

MECHANICAL VALVE



Solenoid Valve

Process Valve

Pilot & Mechanical Valve

Air Treatment Unit

Pressure Switch

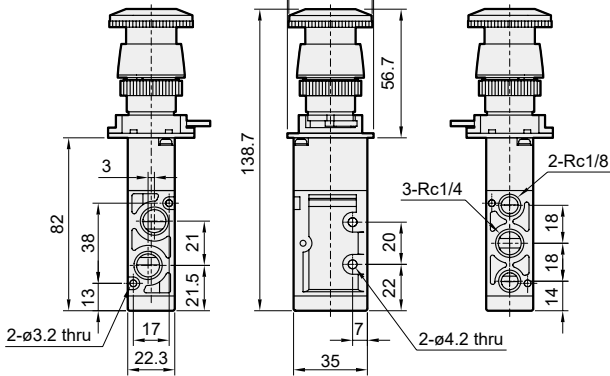
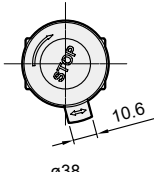
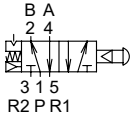
Compressed Air Dryer

Auxiliary Equipment

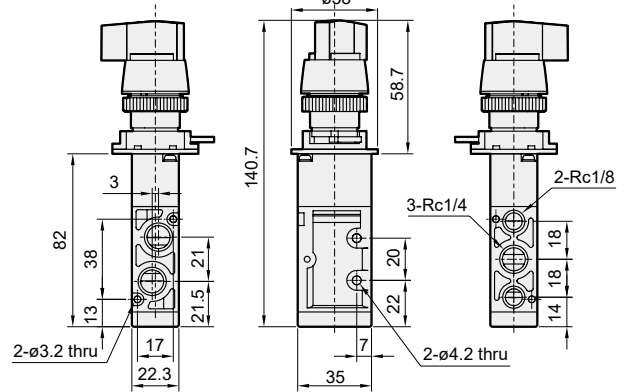
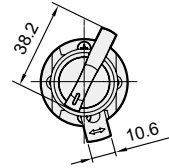
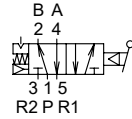
PISCO®

PLC Control System

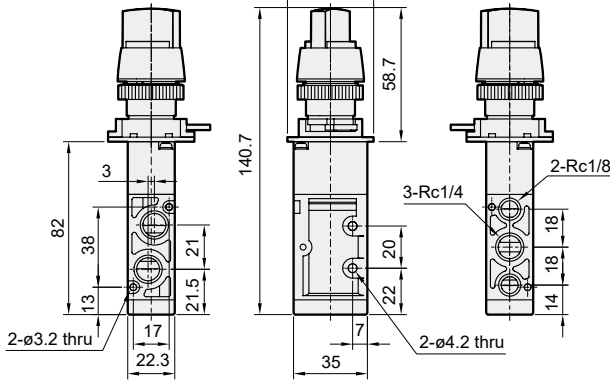
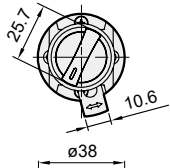
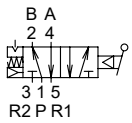
4EB-22



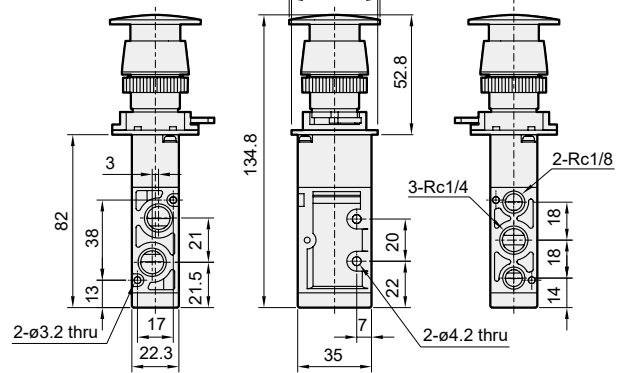
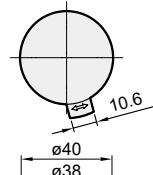
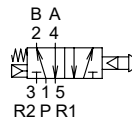
4LB-22



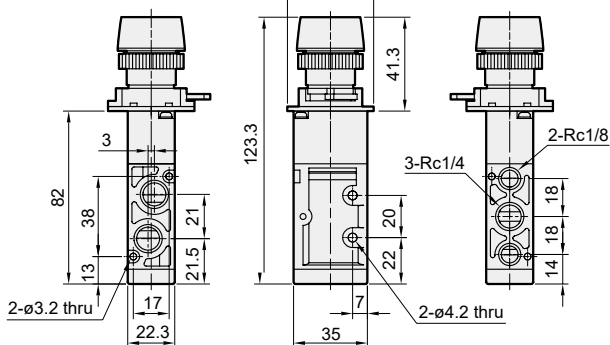
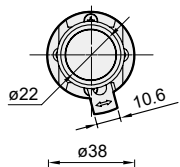
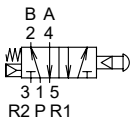
4TB-22



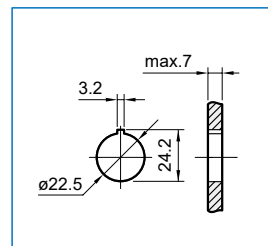
4PB-22



4PP-22



Panel mounting hole

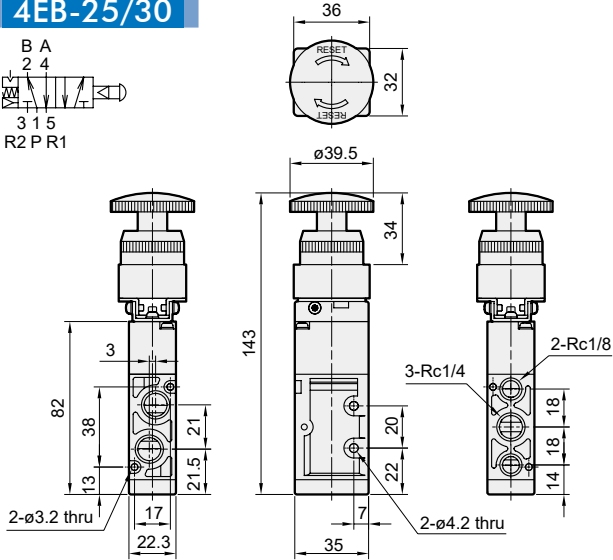
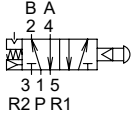


MVMB-220-4** Dimensions

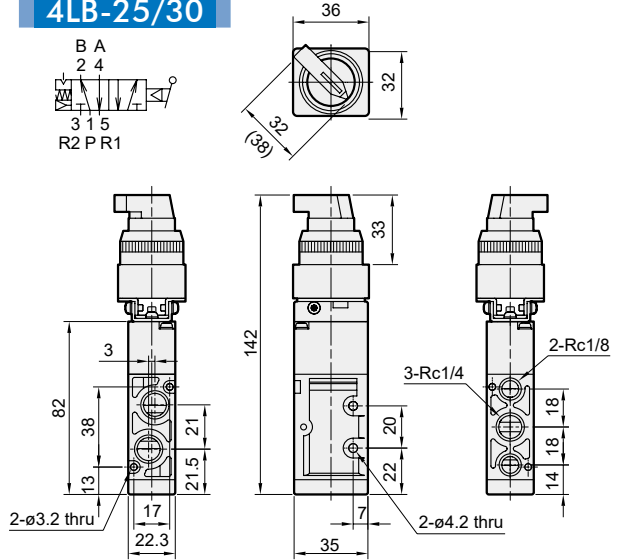
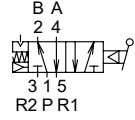
MECHANICAL VALVE



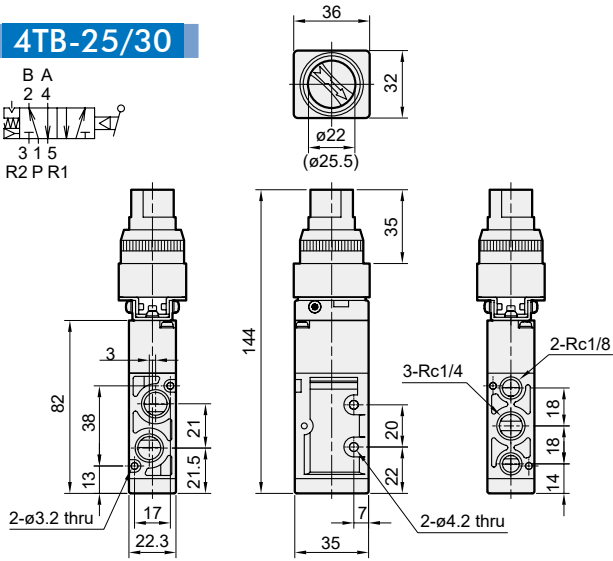
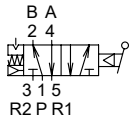
4EB-25/30



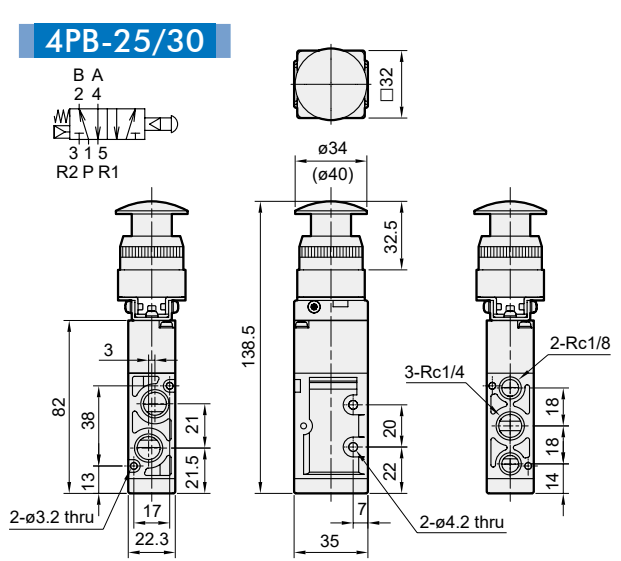
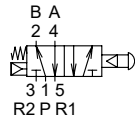
4LB-25/30



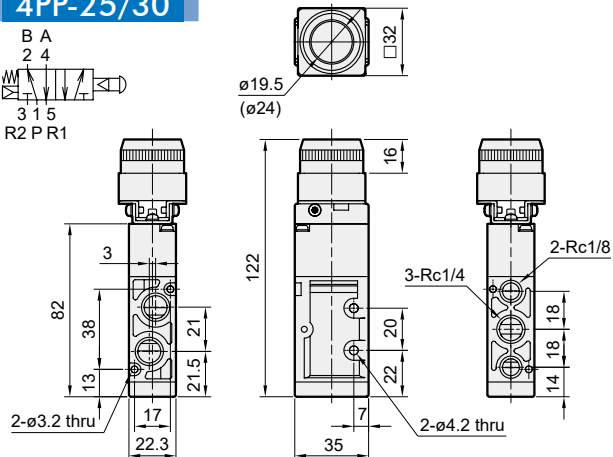
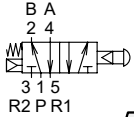
4TB-25/30



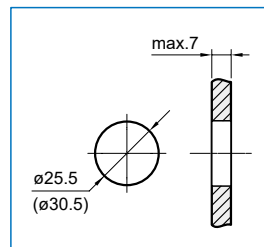
4PB-25/30



4PP-25/30



Panel mounting hole



() : Dimension for button size ø30.

MVMB-250 series

MECHANICAL VALVE



Button type



Technical data



Caution for safety
(Read before installing)



(Fig. 1)

Actuator-holder (Fig. 2)



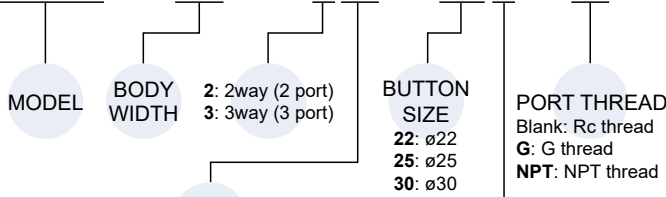
- Type $\phi 22$, the body and actuator-holder in (Fig. 2).
- Type $\phi 22$ can set or release button by simply switching actuator-holder.
- Type $\phi 25$, $\phi 30$ fix bracket in (Fig. 1).
- Type $\phi 25$, $\phi 30$ Actuator set or released by screwdriver.
- If choosing type 2B1-22 and 3B1-22, it needs an extra order of Actuator-holder when a button is needed.

Specification

Model	MVMB-250
Bore No.	8A
Port size	1/4
No. of port	2 or 3
No. of position	2
Medium	Air
Operating pressure range	0~1 MPa
Proof pressure	1 MPa
Effective orifice	18 mm ²
Ambient temperature	-5~+60°C (No freezing)
Weight	193 g

Order example

MVMB - 250 - 3PB - 25B - G

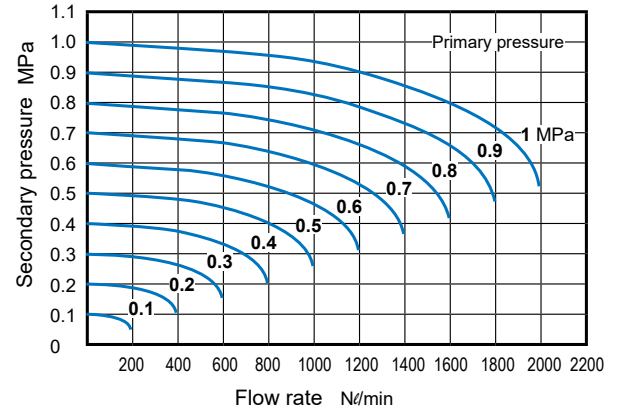


- B1:** Body (without button)
R1: Roller lever
EB: Latching palm button
LB: Extended twist button
TB: Twist button
PB: Mushroom palm button
PP: Push button

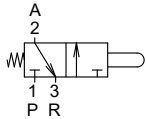
BUTTON COLOR

Color	Type
—	B1 type R1 type
G: Green	EB type (Green color only for $\phi 25$, $\phi 30$)
R: Red	LB type TB type
B: Black	PB type PP type
G: Green	
R: Red	

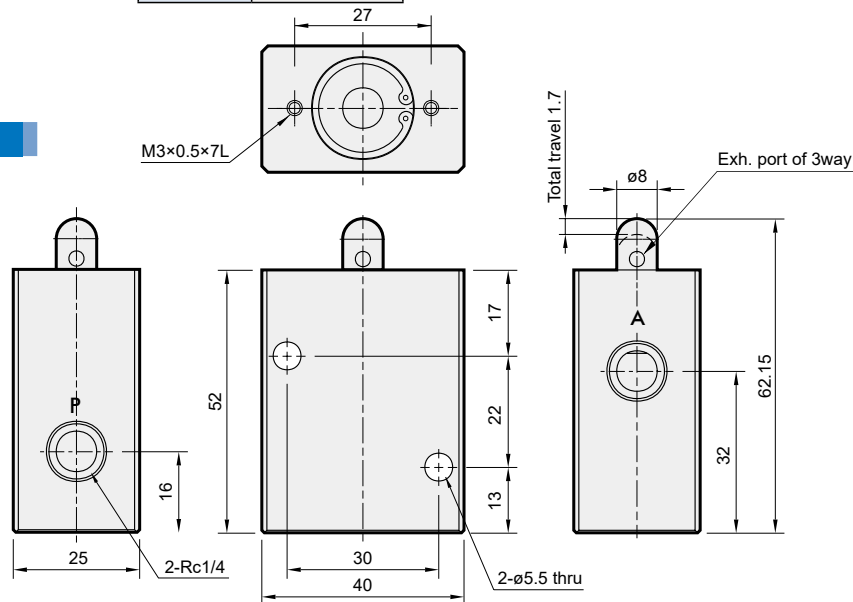
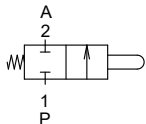
Flow features



MVMB-250-3B1



MVMB-250-2B1



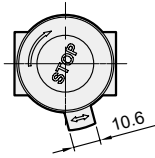
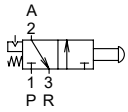
MVMB-250 Dimensions



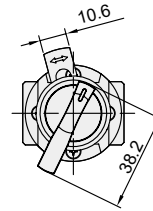
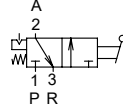
MECHANICAL VALVE

mindman

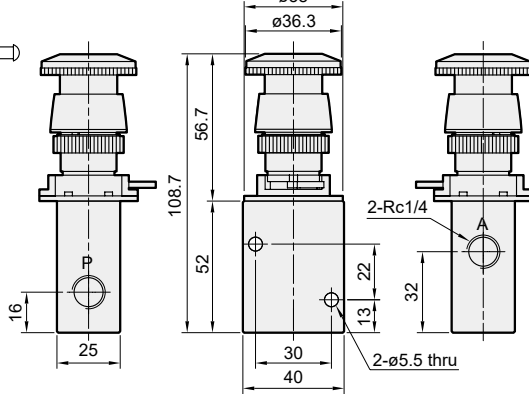
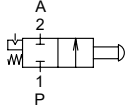
3EB-22



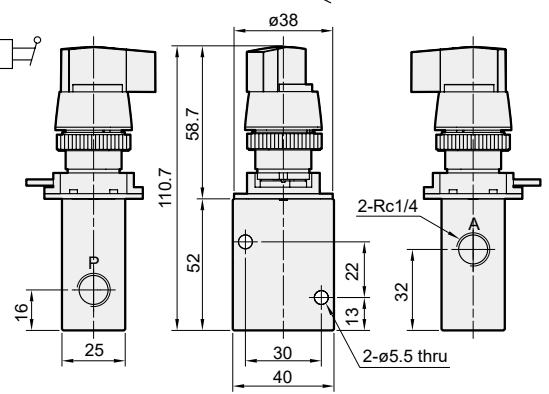
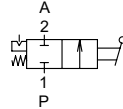
3LB-22



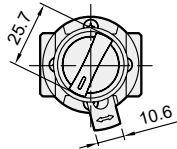
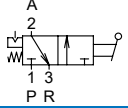
2EB-22



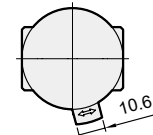
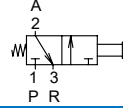
2LB-22



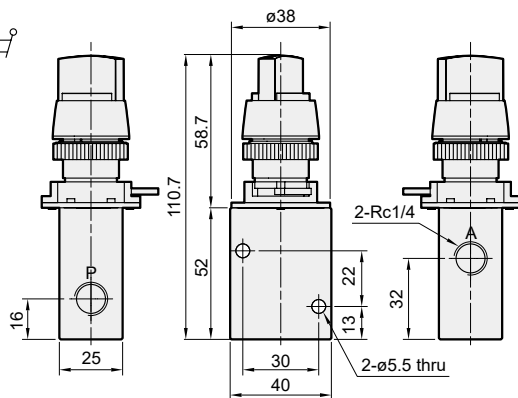
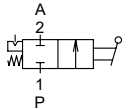
3TB-22



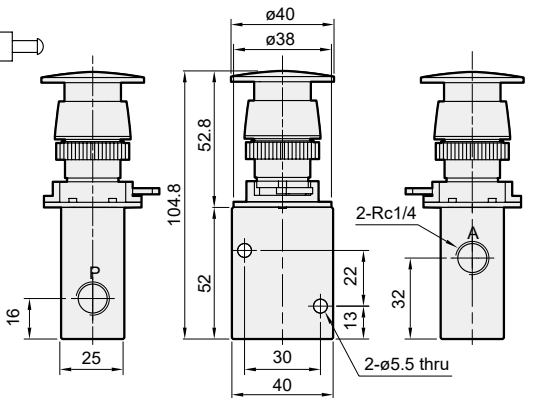
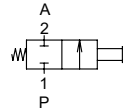
3PB-22



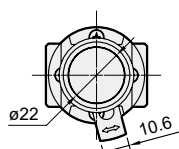
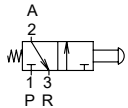
2TB-22



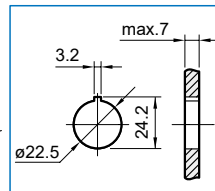
2PB-22



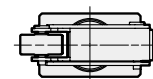
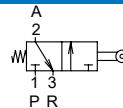
3PP-22



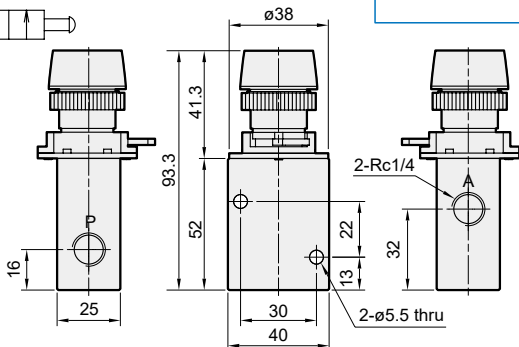
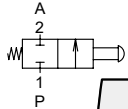
Panel mounting hole



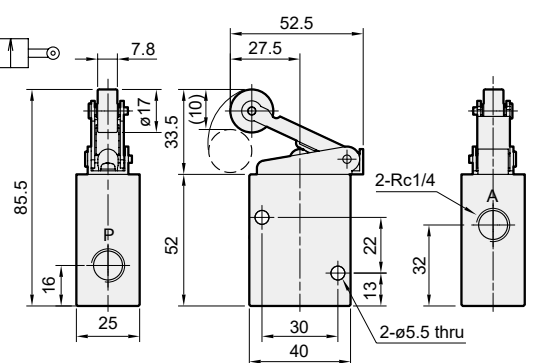
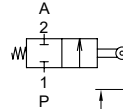
3R1



2PP-22



2R1



MVMB-250 Dimensions

MECHANICAL VALVE



Solenoid Valve

Process Valve

Pilot & Mechanical Valve

Air Treatment Unit

Pressure Switch

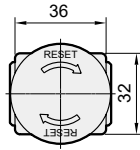
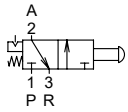
Compressed Air Dryer

Auxiliary Equipment

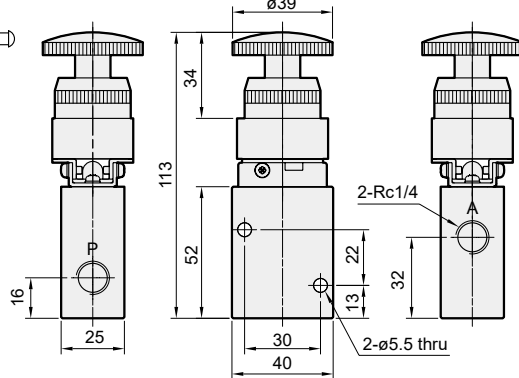
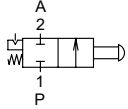
PISCO®

PLC Control System

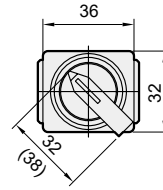
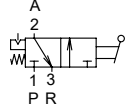
3EB-25/30



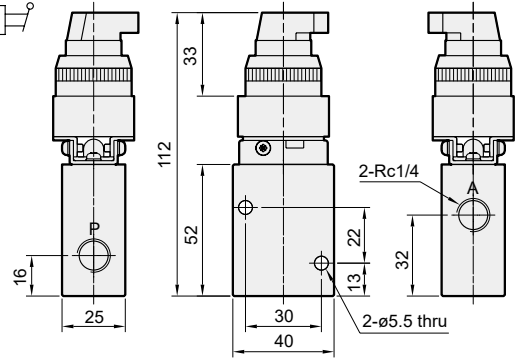
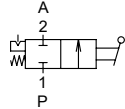
2EB-25/30



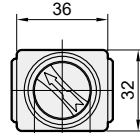
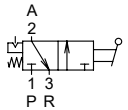
3LB-25/30



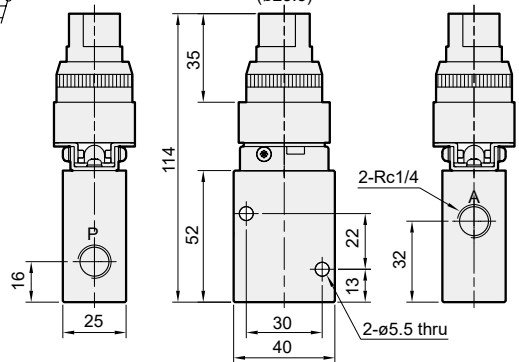
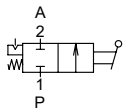
2LB-25/30



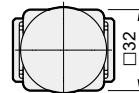
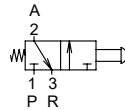
3TB-25/30



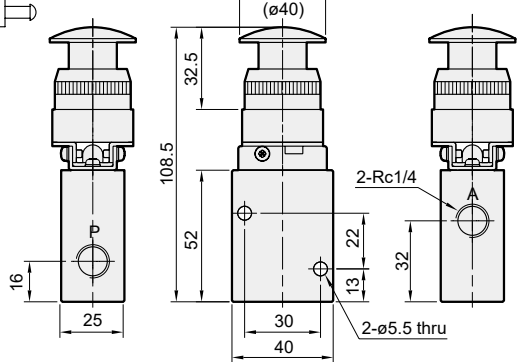
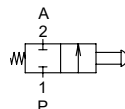
2TB-25/30



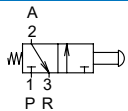
3PB-25/30



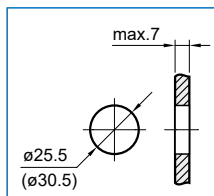
2PB-25/30



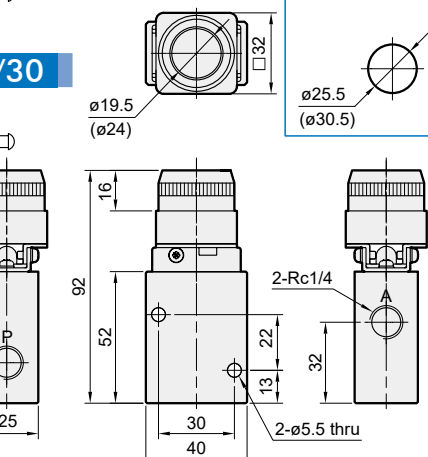
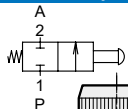
3PP-25/30



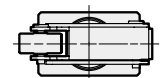
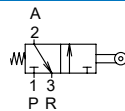
Panel mounting hole



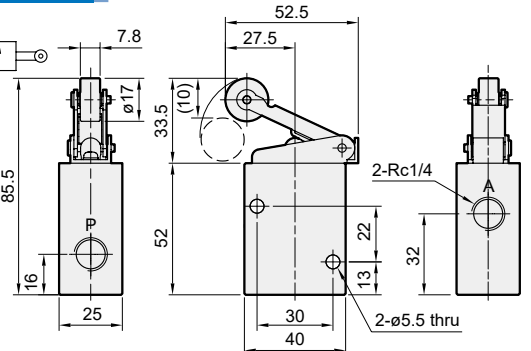
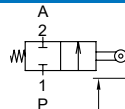
2PP-25/30



3R1



2R1



(): Dimension for button size ø30.

MVMB-300-4** series

MECHANICAL VALVE



Button type



Technical data



Caution for safety
(Read before installing)



(Fig. 1)

Actuator-holder



(Fig. 2)

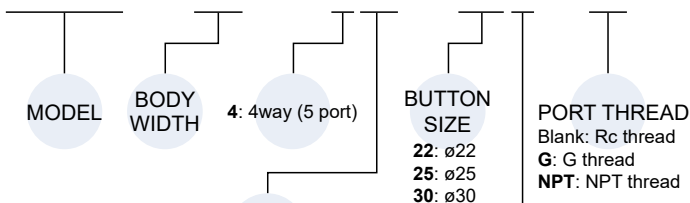
- Type $\phi 22$, the body and actuator-holder in (Fig. 2).
- Type $\phi 22$ can set or release button by simply switching actuator-holder.
- Type $\phi 25$, $\phi 30$ fix bracket in (Fig. 1).
- Type $\phi 25$, $\phi 30$ Actuator set or released by screwdriver.
- If choosing type 4B1-22, it needs an extra order of Actuator-holder when a button is needed.

Specification

Model	MVMB-300-4**
Bore No.	10A
Port size	3/8
No. of port	5
No. of position	2
Medium	Air
Operating pressure range	0.15~0.8 MPa
Proof pressure	1 MPa
Effective orifice	30 mm ²
Ambient temperature	-5~+60°C (No freezing)
Weight	315 g

Order example

MVMB - 300 - 4EB - 25R - G

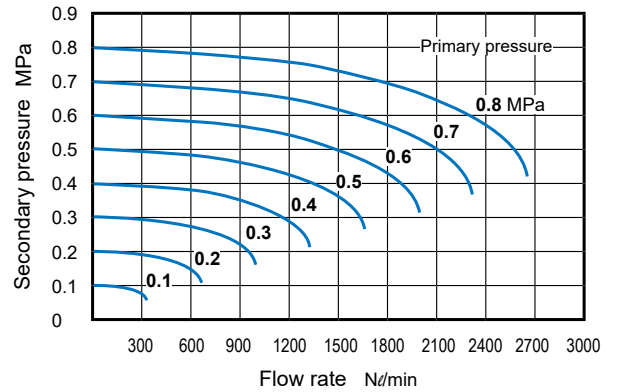


- B1: Body (without button)
EB: Latching palm button
LB: Extended twist button
TB: Twist button
PB: Mushroom palm button
PP: Push button

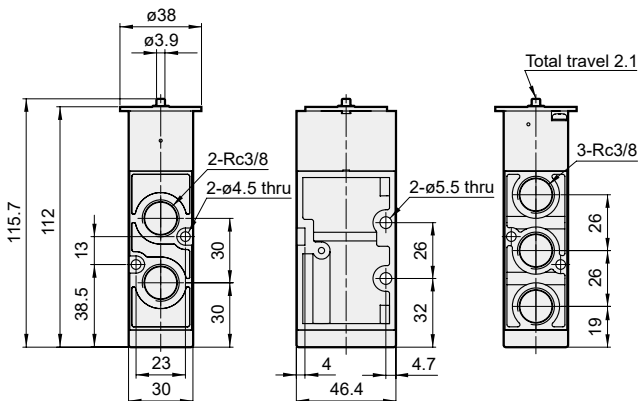
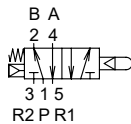
BUTTON COLOR

Color	Type
—	B1 type
G: Green	EB type (Green color only for $\phi 25$, $\phi 30$)
R: Red	LB type TB type
B: Black	PB type PP type
G: Green	
R: Red	

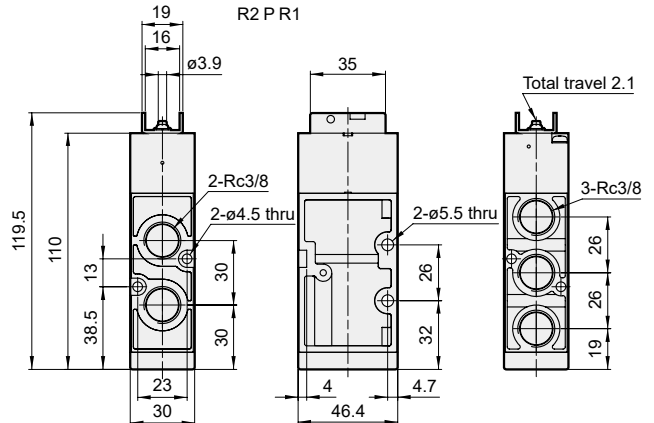
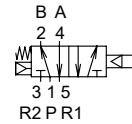
Flow features



4B1-22



4B1-25/30



MVMB-300-4** Dimensions

MECHANICAL VALVE



Solenoid Valve

Process Valve

Pilot & Mechanical Valve

Air Treatment Unit

Pressure Switch

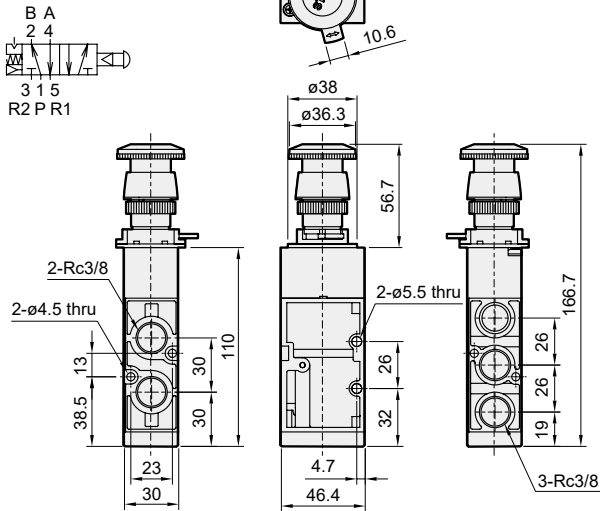
Compressed Air Dryer

Auxiliary Equipment

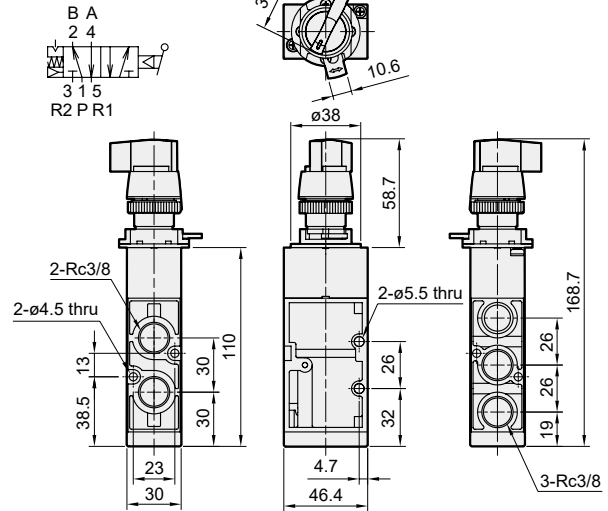
PISCO®

PLC Control System

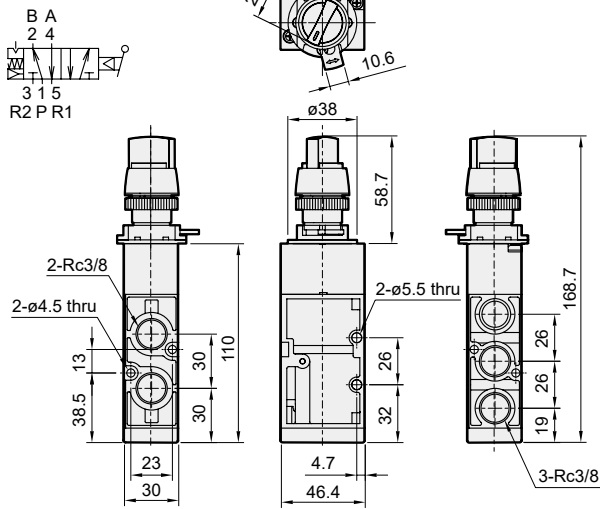
4EB-22



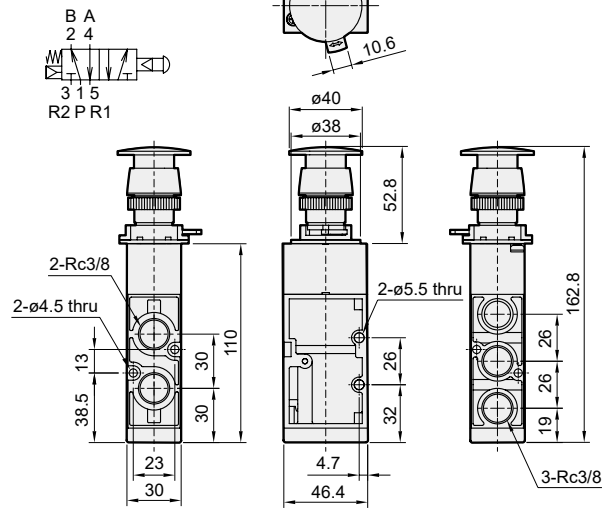
4LB-22



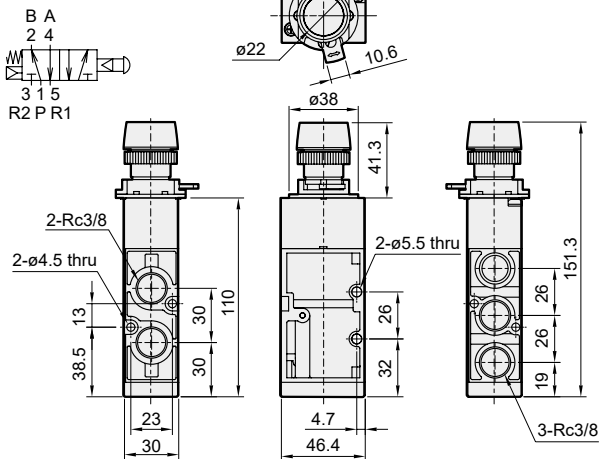
4TB-22



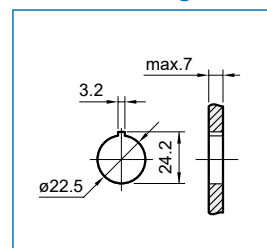
4PB-22



4PP-22



Panel mounting hole

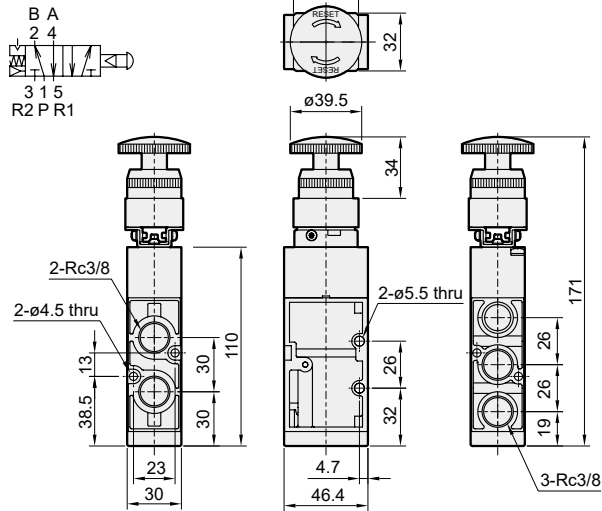


MVMB-300-4** Dimensions

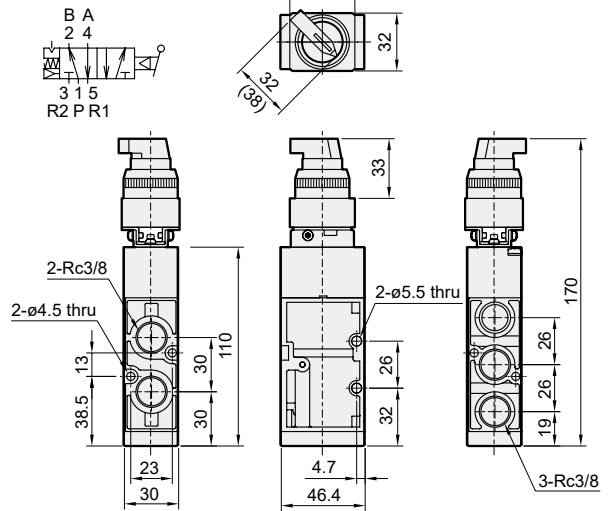
MECHANICAL VALVE



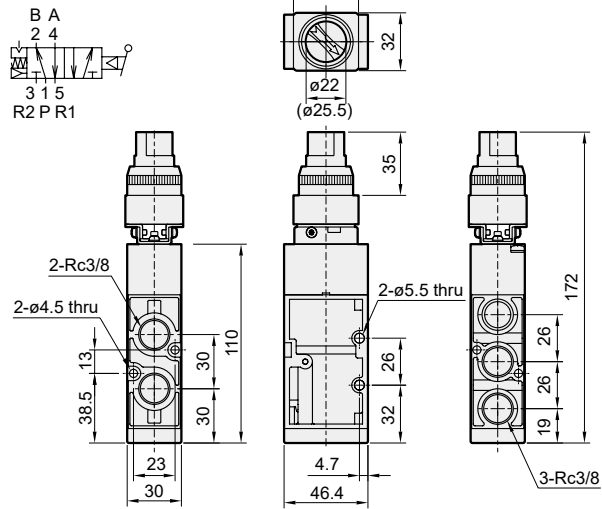
4EB-25/30



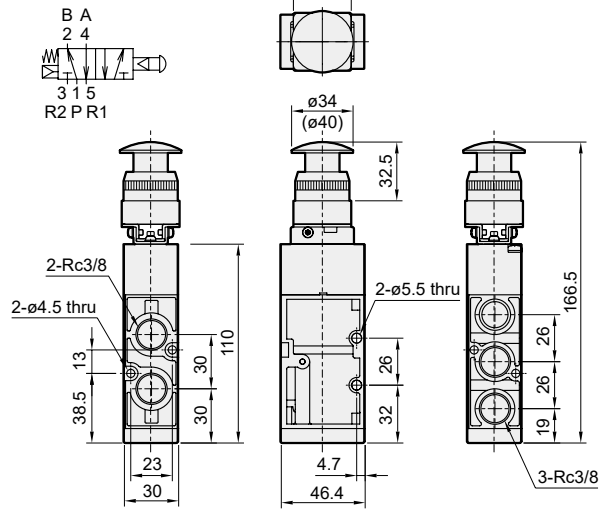
4LB-25/30



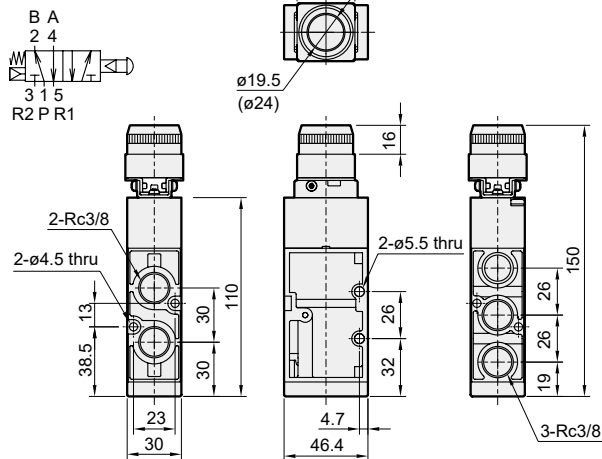
4TB-25/30



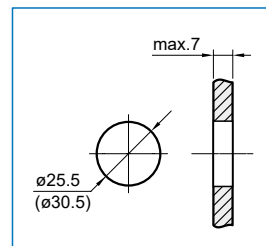
4PB-25/30



4PP-25/30



Panel mounting hole



(): Dimension for button size $\phi 30$.

MVMC-210 series

MECHANICAL VALVE



Button type



Technical data



Caution for safety
(Read before installing)



(Fig. 1)

Actuator-holder



(Fig. 2)

- Type $\phi 22$, the body and actuator-holder in (Fig. 2).
- Type $\phi 22$ can set or release button by simply switching actuator-holder.
- Type $\phi 25$, $\phi 30$ fix bracket in (Fig. 1).
- Type $\phi 25$, $\phi 30$ Actuator set or released by screwdriver.
- If choosing type 3B1-22, it needs an extra order of Actuator-holder when a button is needed.

Specification

Model	MVMC-210	
Bore No.	6A	8A
Port size	1/8	1/4
No. of port	3	
No. of position	2	
Medium	Air	
Operating pressure range	0~1 MPa	
Proof pressure	1 MPa	
Effective orifice	19 mm ²	
Ambient temperature	-5~+60°C (No freezing)	
Weight	155 g	

Order example

MVMC - 210 - 6A - 3EB - 25R - G

MODEL

BODY WIDTH

BORE SIZE
6A: 1/8
8A: 1/4

3: 3way
(3 port)

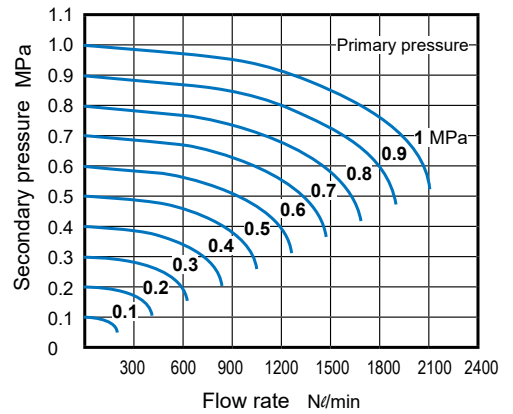
BUTTON SIZE
22: $\phi 22$
25: $\phi 25$
30: $\phi 30$

PORT THREAD
Blank: Rc thread
G: G thread
NPT: NPT thread

- BUTTON COLOR
- B1: Body (without button)
 - R1: Roller lever
 - EB: Latching palm button
 - LB: Extended twist button
 - TB: Twist button
 - PB: Mushroom palm button
 - PP: Push button

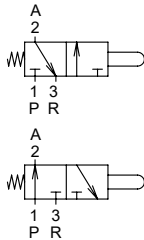
Color	Type
-	B1 type R1 type
G: Green	EB type (Green color only for $\phi 25$, $\phi 30$)
R: Red	LB type TB type
B: Black	PB type PP type

Flow features

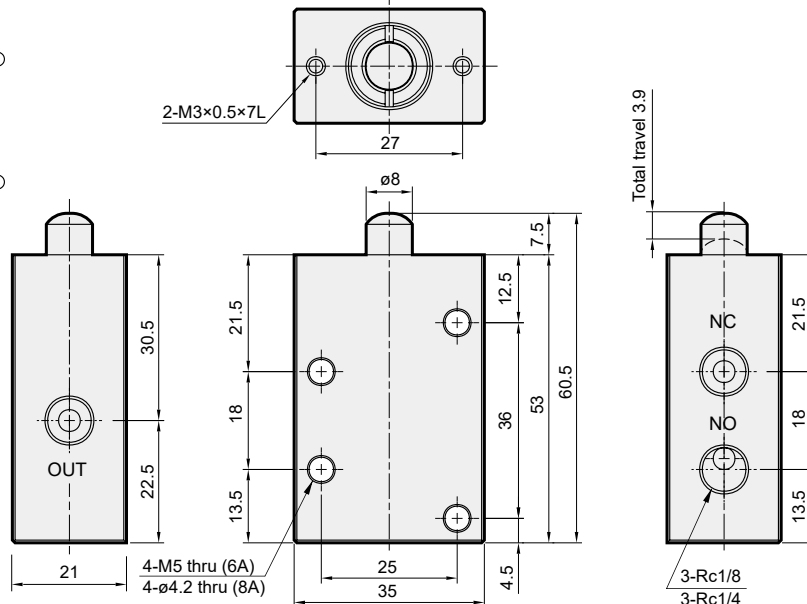


MVMC-210-3B1

NC



NO

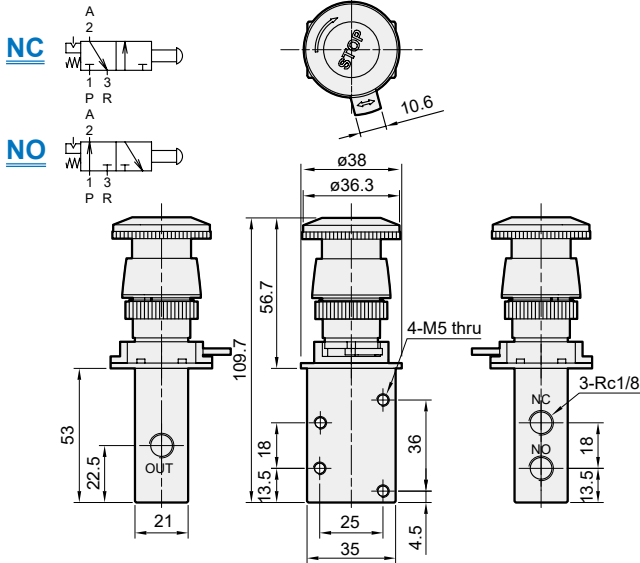


MVMC-210 Dimensions

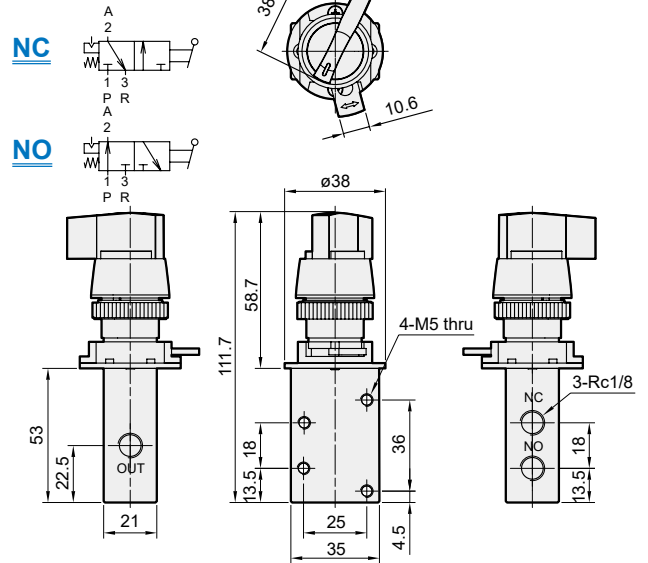
MECHANICAL VALVE



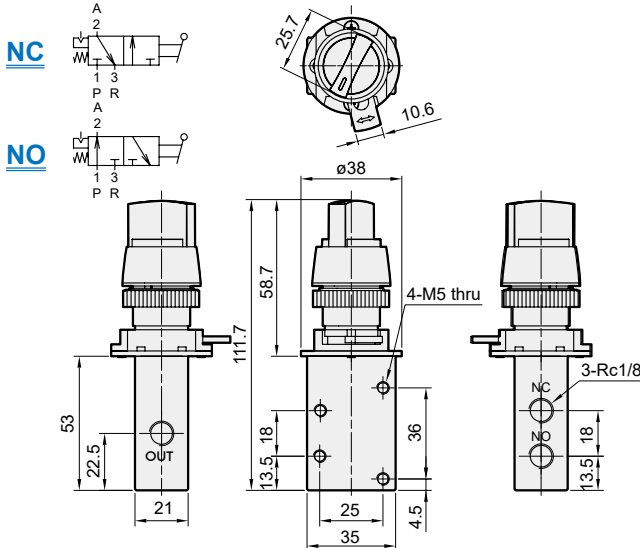
3EB-22



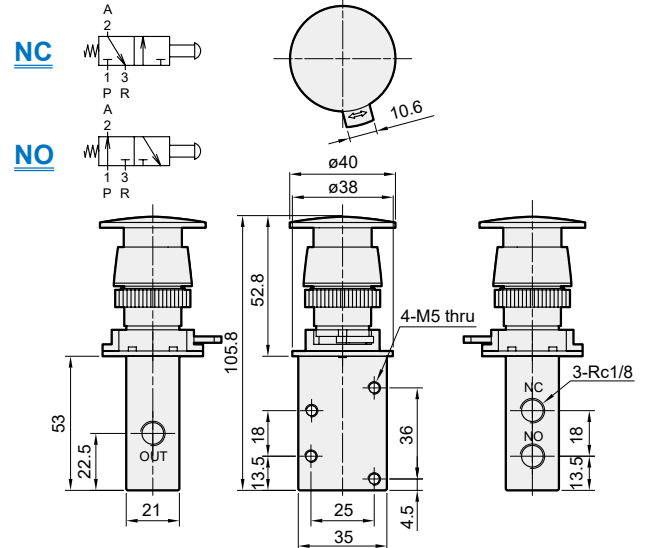
3LB-22



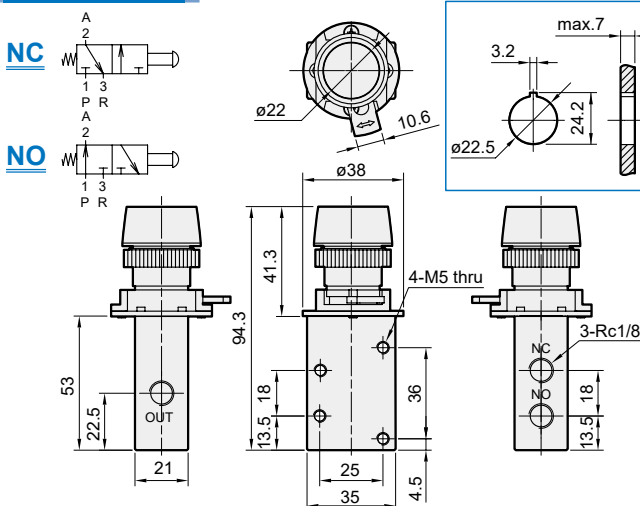
3TB-22



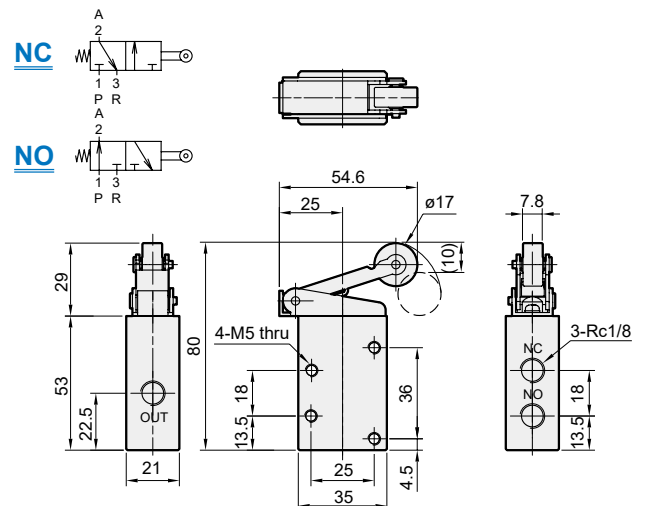
3PB-22



3PP-22



3R1

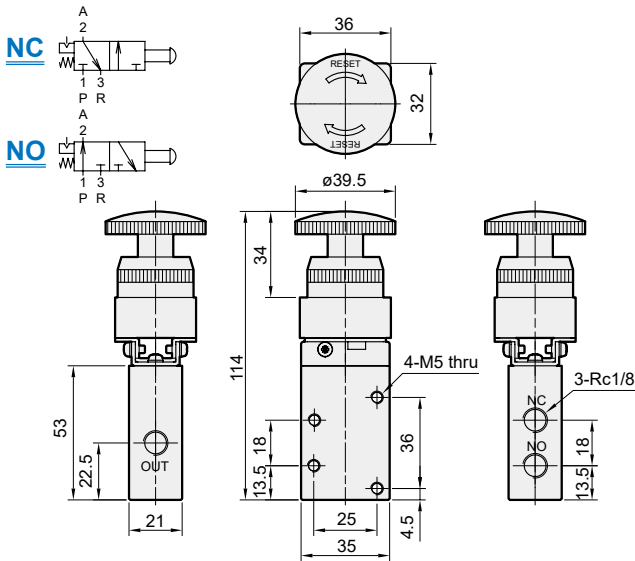


MVMC-210 Dimensions

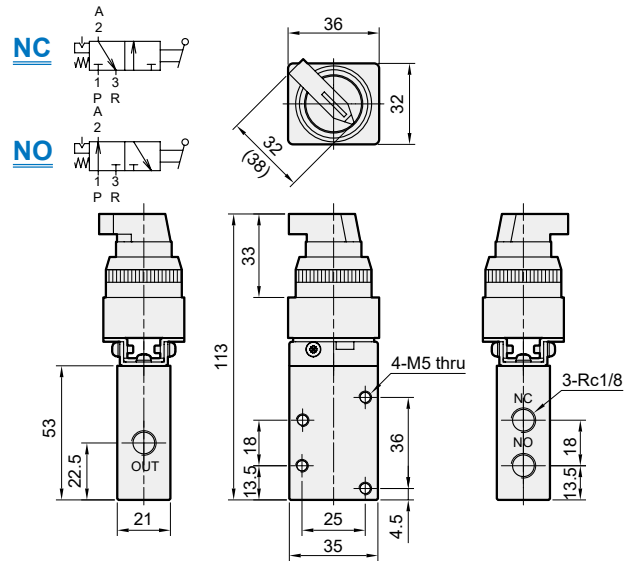
MECHANICAL VALVE



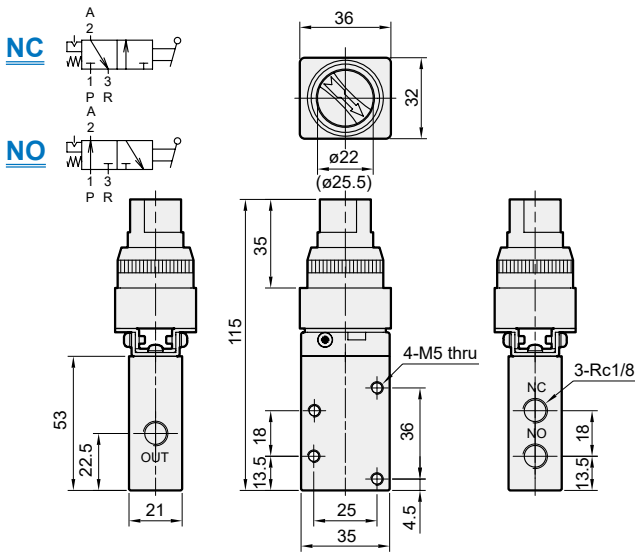
3EB-25/30



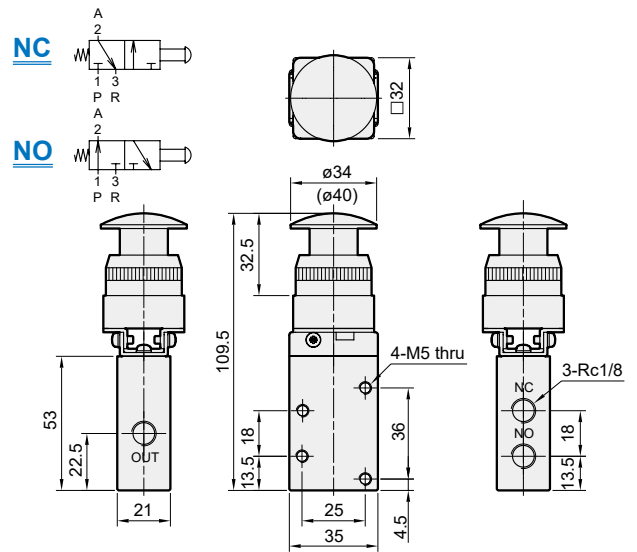
3LB-25/30



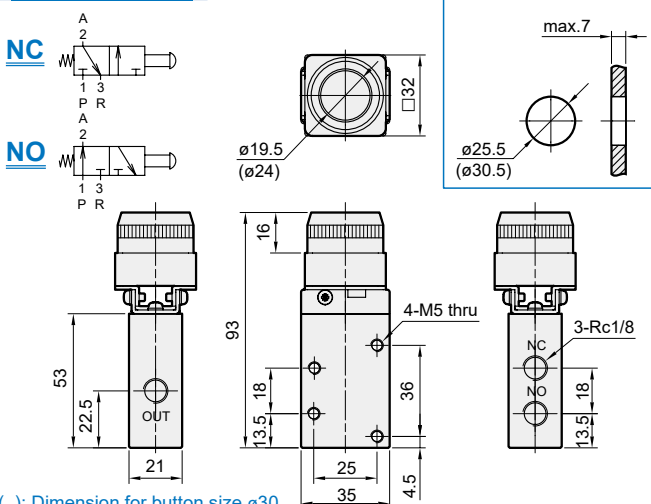
3TB-25/30



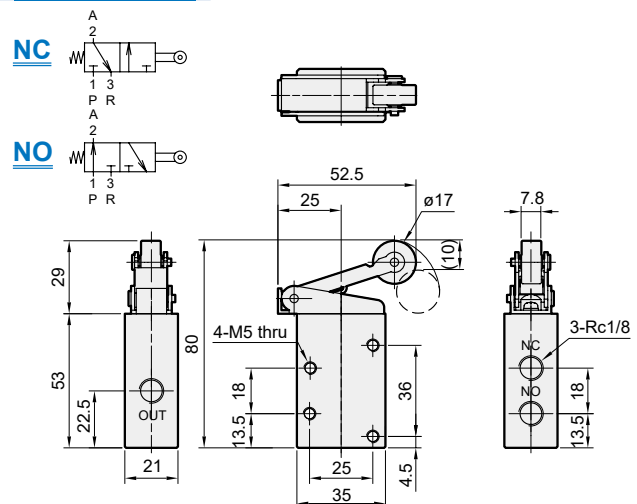
3PB-25/30



3PP-25/30



3R1



(): Dimension for button size $\phi 30$.



Specification

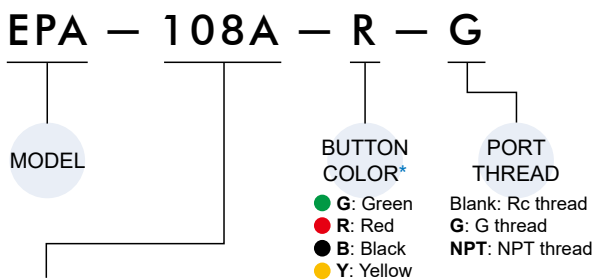
Model	EPA
No. of port	3
Port size	1/8
Medium	Air
Operating pressure range	0~0.9 MPa
Ambient temperature	-5~+60°C (No freezing)

Weight

Unit: g

EPA-100	EPA-100A	EPA-101	EPA-101A
43	68	70	68
EPA-102	EPA-103	EPA-104	EPA-105
104	67	71	68
EPA-105L	EPA-106	EPA-107	EPA-108
104	61	54	100
EPA-108A	EPA-108L	EPA-109	
100	100	100	


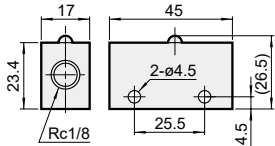

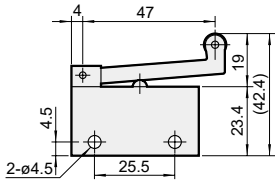

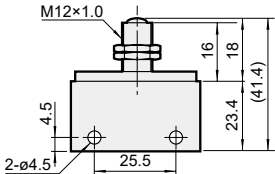

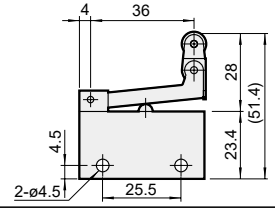

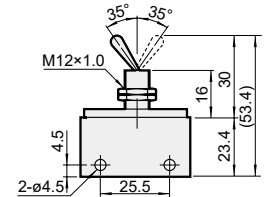

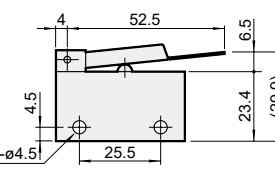

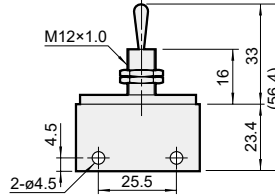

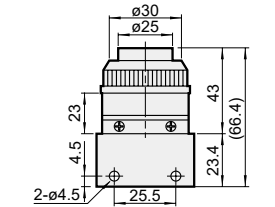

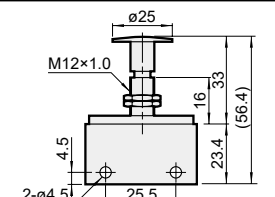

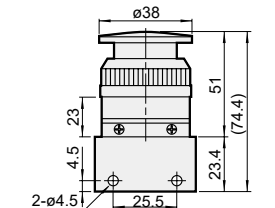

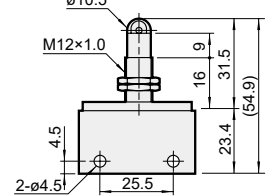

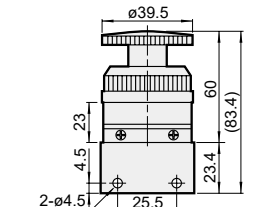

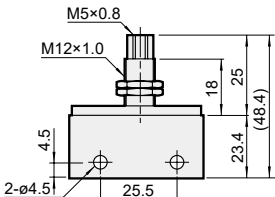

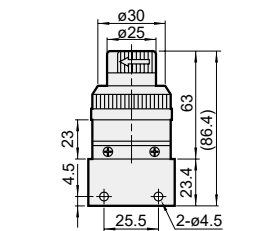

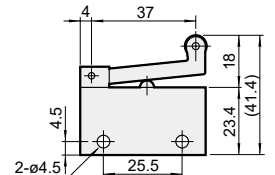
Order example



Switch type

* Only for 102, 108, 109 type.

Code	Blank	A	L
100	Pin plunger	Ball actuator	-
101	Retained toggle	Toggle	-
102	Palm button ● ● ● ●	-	-
103	Roller plunger	-	-
104	Pilot	-	-
105	Roller lever (Short)	-	Roller lever (Long)
106	One way lever	-	-
107	Plain lever	-	-
108	Push button ● ● ● ●	Palm actuator ● ● ● ●	Palm latching actuator ● ● ●
109	Selector ● ● ●	-	-

Model	Fig	Dimensions	Model	Fig	Dimensions
Pin plunger EPA-100			Roller lever EPA-105L		
Ball actuator EPA-100A			One way lever EPA-106		
Retained toggle EPA-101			Plain lever EPA-107		
Toggle EPA-101A			Push button EPA-108-□		
Palm button EPA-102-□			Palm actuator EPA-108A-□		
Roller plunger EPA-103			Palm latching actuator EPA-108L-□		
Pilot EPA-104			Selector EPA-109-□		
Roller lever EPA-105					

* □: Button color

MVHF-2P/3P-NC

HAND VALVE

MVHF-3P-NO

HAND VALVE



Accessories



Pilot actuator



Accessories



Pilot actuator



Specification

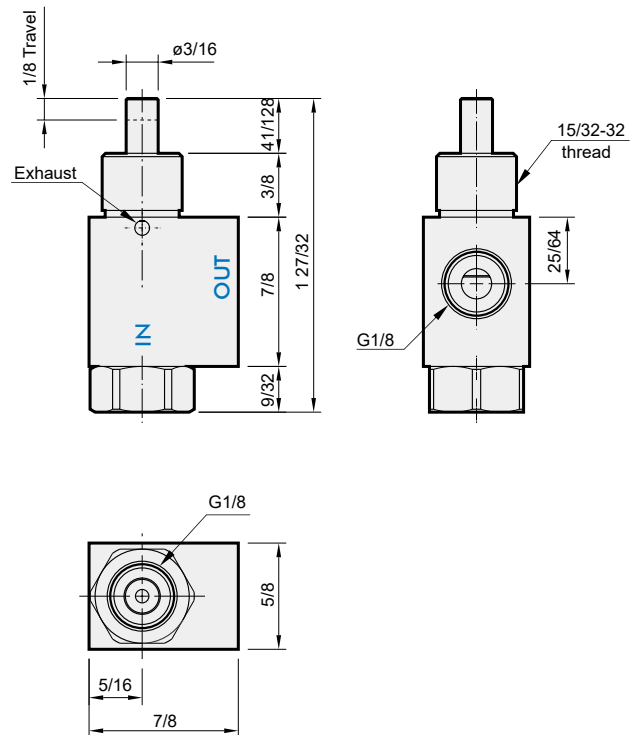
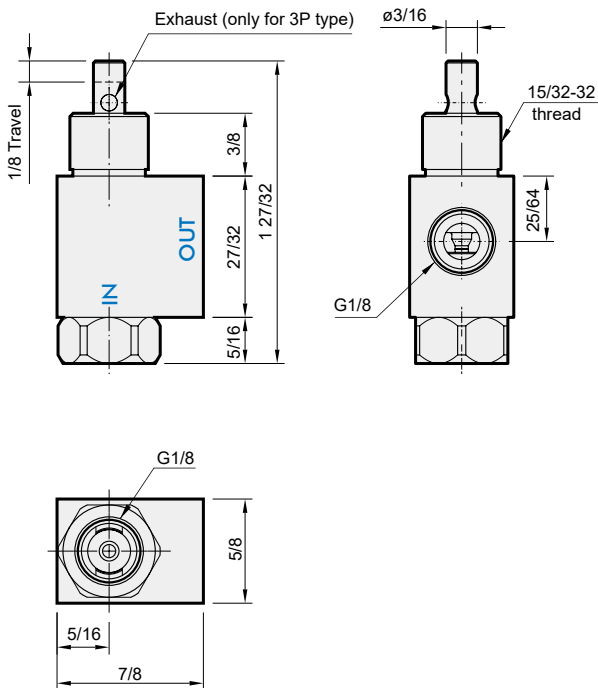
Type	Normally CLOSED 3-way poppet
Medium	Air
Stem travel	1/8"
Input pressure	150 psig max.
Effective orifice	7.2 mm ²
Force for full stem travel	38 oz. nominal
Temperature range	32°F~230°F
Ports	Input: G1/8 *, Output: G1/8 *
Exhaust	Hole to atmosphere
Mounting	15/32-32 male thread nuts and lock washers furnished
Weight	65 g

* Port thread NPT. are also available.

Specification

Type	Normally OPEN 3-way poppet
Medium	Air
Stem travel	1/8"
Input pressure	150 psig max.
Effective orifice	5.7 mm ²
Force for full stem travel	38 oz. nominal
Temperature range	32°F~230°F
Ports	Input: G1/8 *, Output: G1/8 *
Exhaust	Hole to atmosphere
Mounting	15/32-32 male thread nuts and lock washers furnished
Weight	69 g

* Port thread NPT. are also available.



MVHF-5P

HAND VALVE

MVHF-AP*

MINIATURE PILOT ACTUATOR
3/8" BORE



mindman



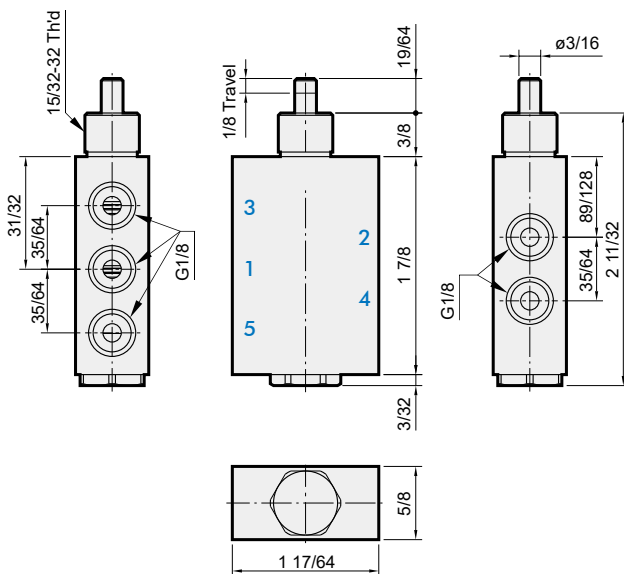
Accessories



Specification

Model	MVHF-5P
Type	4-way spool valve plunger actuated spring return fully ported
Medium	Air, water, oil
Stem travel	1/8"
Input pressure	150 psig max.
Effective orifice	8.6 mm ²
Force for full stem travel	4 1/2 lb nominal
Temperature range	32°F~230°F
Ports	Input: G1/8 * Output: G1/8 * Exhaust: G1/8 *
Mounting	15/32-32 male thread nuts and lock washers furnished
Weight	171 g

* Port thread NPT. are also available.



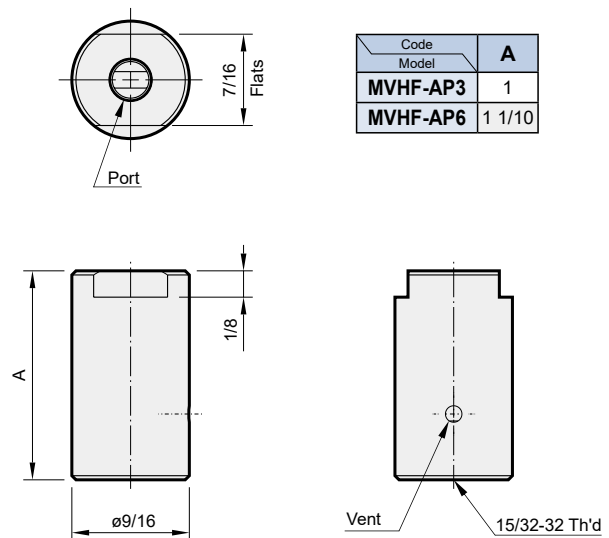
Specification

Model	MVHF-AP3, MVHF-AP6A
Type	Single action, spring return miniature air pilot actuator.
Input pressure	150 psig max
Construction	Body: aluminum alloy
	Springs: stainless steel
	Seals: buna N rubber
	Piston: aluminum
Temperature range	32°F~230°F
Force factor	.1
Ports	MVHF-AP3 → 10-32
	MVHF-AP6A → G1/8 *
Mounting	15/32-32 female thread to mount to miniature valves and components
Weight	22 g

Minimum pressure required MPa (PSIG)

MVHF-3P-NC	0.21 (30)	MVHF-3P-NO	0.21 (30)
MVHF-5P	0.29 (41)		

* Port thread NPT. are also available.



Code	A
MVHF-AP3	1
MVHF-AP6	1 1/10

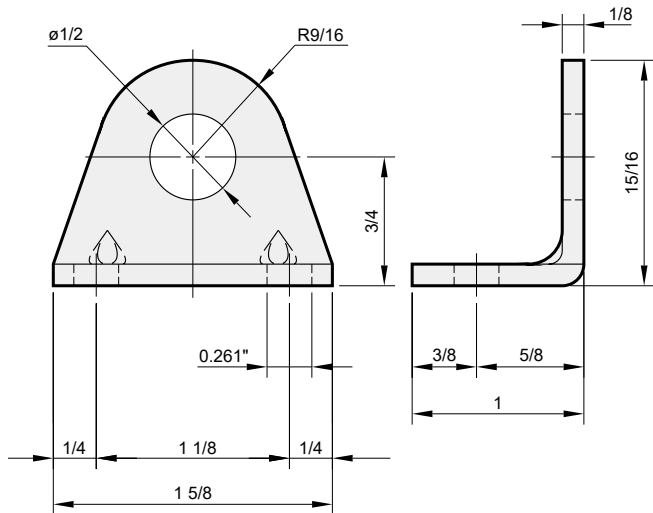
MVHF-LB

MOUNTING BRACKET



Specification

Model	MVHF-LB
Type	90° angle, heavy duty mounting bracket for clippard miniature valves.
Mounting	1/2" diameter hole for valve, two (2) 0.261" diameter holes for attaching bracket.
Construction	Stamped from 1/8" thick steel, zinc plated.
Weight	40 g



MVHF-PB*

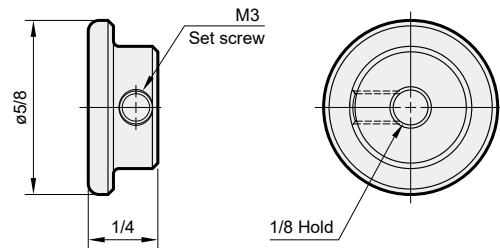
VALVE ACTUATORS MANUAL PUSH BUTTON



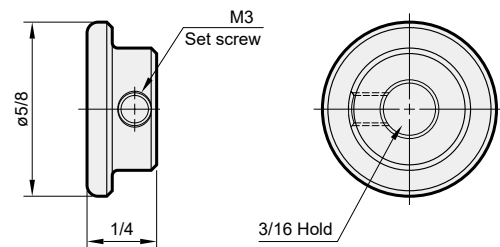
Specification

Model	MVHF-PB2	MVHF-PB5
Type	Round, aluminum products prevents over travel of valve stem by providing a positive stop.	
Use	Mounts directly on valve stem for manual operation of valve. Prevents over travel of valve stem by providing a positive stop.	
Mounting	1/8" dia. mounting hole fits valve stems, locks in place by set screw. (Allen wrench furnished)	
Note	Individually packaged or bulk quantities available.	
Weight	7 g	6 g

MVHF-PB2



MVHF-PB5



MVHA-2* / 3* series

HAND VALVE



TAC operator
(For P type)



Specification

Model	MVHA-2*, 3*
Bore No.	M5
Port size	M5×0.8
No. of port	2 or 3
No. of position	2
Medium	Air
Operating pressure range	0~0.9 MPa
Effective orifice	1.8 mm ²
Ambient temperature	-5~+60°C (No freezing)
Weight	30 g

Order example

MVHA – 2V

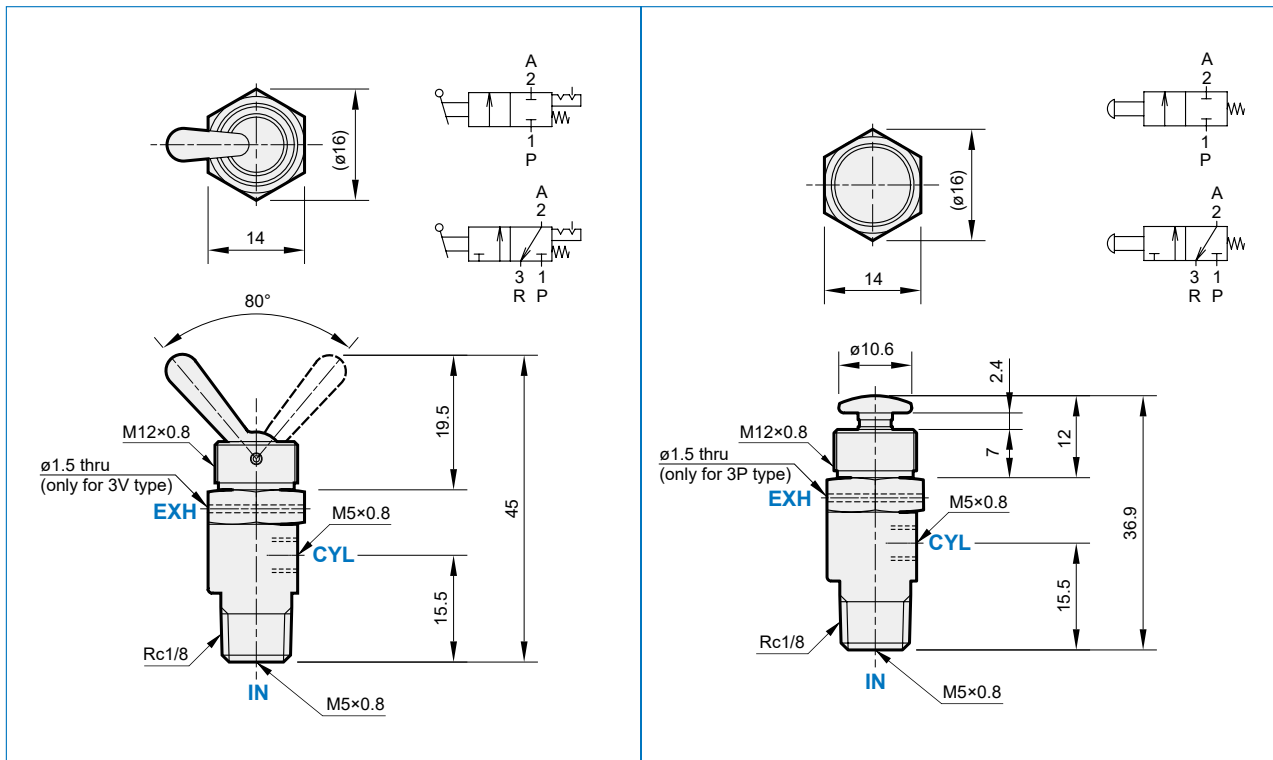
MODEL

2: 2way (2 port)
3: 3way (3 port)

V: V toggle
P: Push button

MVHA-2V/3V

MVHA-2P/3P



MVHA-4* series

HAND



TAC operator
(For P* type)

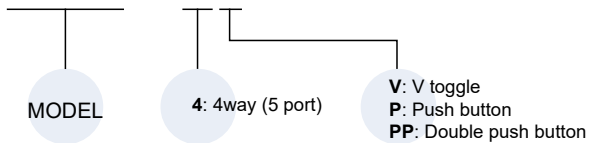


Specification

Model	MVHA-4V	MVHA-4P	MVHA-4PP
Bore No.	M5		
Port size	M5×0.8		
No. of port	5		
No. of position	2		
Medium	Air		
Operating pressure range	0~0.9 MPa		
Effective orifice	1.9 mm ²		
Ambient temperature	-5~+60°C (No freezing)		
Weight	62 g	61 g	66 g

Order example

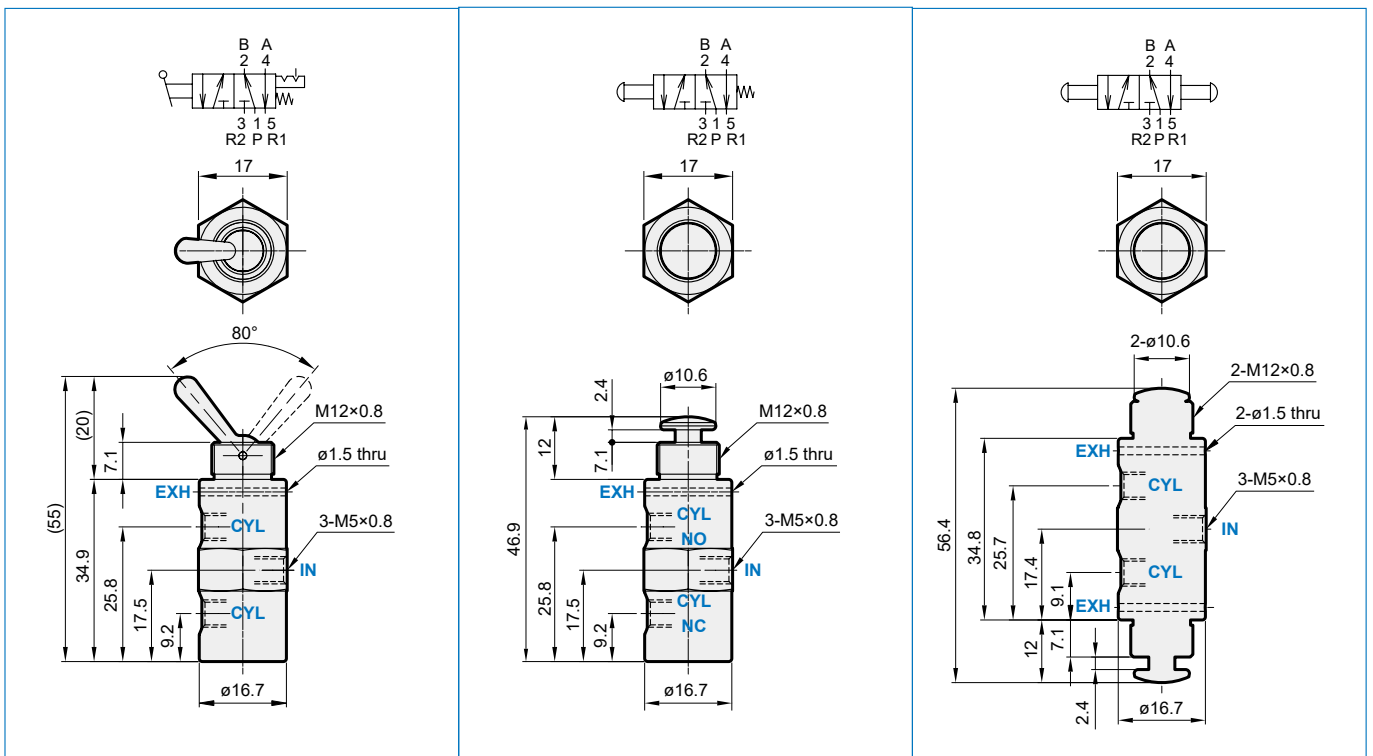
MVHA - 4V



MVHA-4V

MVHA-4P

MVHA-4PP



MVHA-41* series

HAND VALVE



TAC operator
(For P* type)



Specification

Model	MVHA-41V	MVHA-41P	MVHA-41PP
Bore No.	6A		
Port size	1/8		
No. of port	5		
No. of position	2		
Medium	Air		
Operating pressure range	0~0.9 MPa		
Effective orifice	5.5 mm ²		
Ambient temperature	-5~+60°C (No freezing)		
Weight	64 g	58 g	76 g

Order example

MVHA - 41V - G

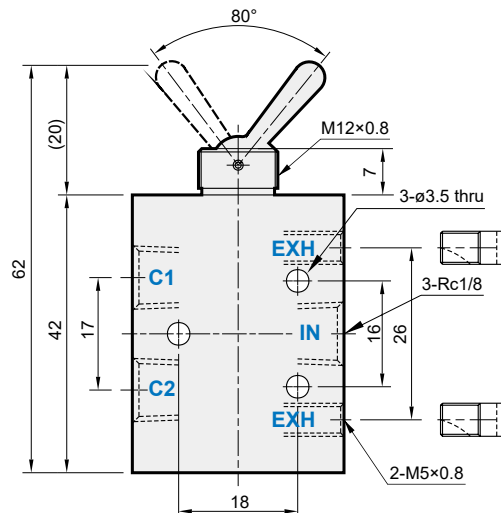
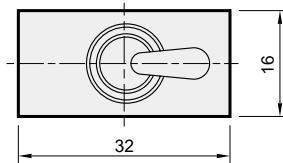
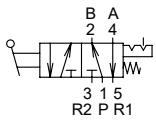
MODEL

4: 4way (5 port)

V: V toggle
P: Push button
PP: Double push button

PORT THREAD
Blank: Rc thread
G: G thread
NPT: NPT thread

MVHA-41V

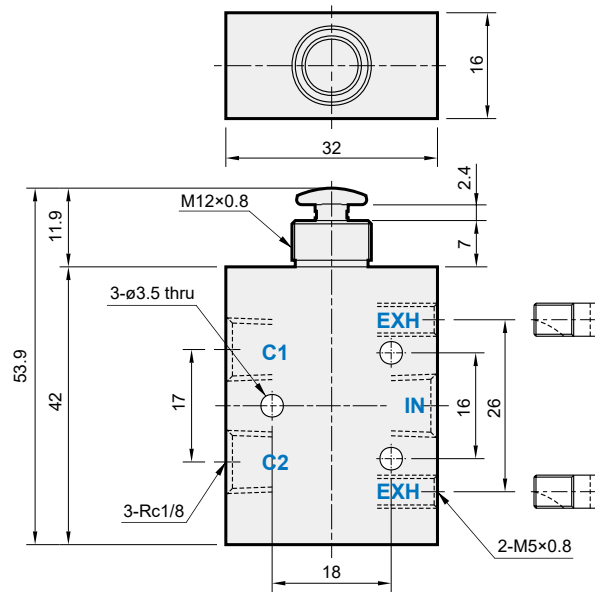
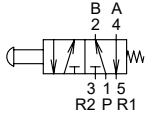


MVHA-41* Dimensions

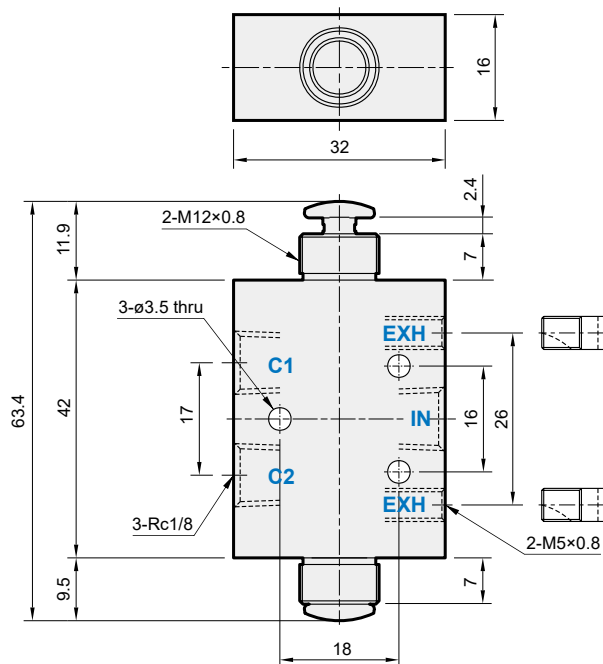
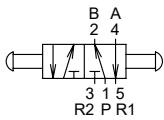
HAND VALVE



MVHA-41P



MVHA-41PP



Order example

MVHA – 34T

MODEL

Model	34T	34C	34CW	34B	34A
Shape					
Weight	20 g	15 g	15 g	15 g	28 g

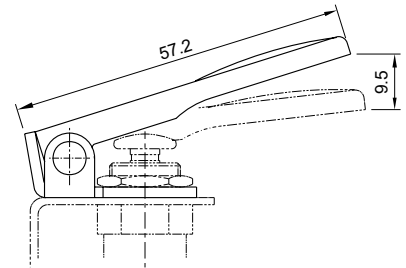
34T

Fingertip operator



The 34T Operator may be used with any TAC series push-button valve to provide easier actuation.

Material
Level : Nickel-plated steel



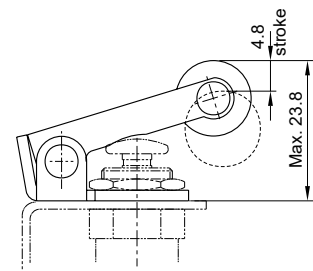
34C

Cam operator



The 34C Operator Cam-stroke is two times by the valve's push-stroke. Adjustment of roller height is made through the use of a mounting bracket and Locknuts.

Material
Level : Nickel-plated steel
Roller : POM



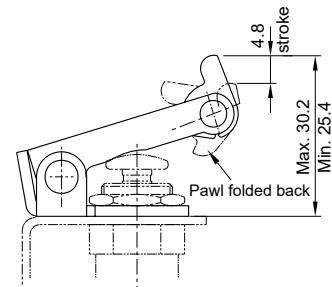
34CW

One-way cam operator



The 34CW Operator actuates valves when the pawl is contacted from lever side. The pawl then folds out of the way in the opposite direction.

Material
Level : Nickel-plated steel
Pawl : POM



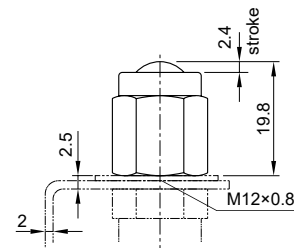
34B

Ball operator



The 34B Operator threads onto the collar of push-button valves. The mounting bracket thickness plus the washer thickness properly spaces the operator to prevent prestroking of button.

Material
Body : Nickel-plated brass
Ball : Chrome steel



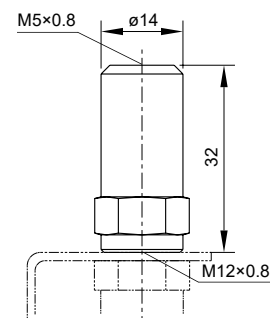
34A

Air pilot operator



The 34A Operator threads directly onto the collar of push-button valves. The air pressure applied to the pilot port drives piston to actuates the valve's push-button.

Material
Body : Nickel-plated brass



MVHB-220 series

HAND LEVER VALVE



mindman



Technical data



Caution for safety
(Read before installing)



Specification

Model	MVHB-220-4TV MVHB-220-4TV-SP	MVHB-220-4TV* MVHB-220-4TV*-SP
Bore No. (Port size)	8A (1/4)	
No. of port	5	
No. of position	2	3
Medium	Air	
Operating pressure range	0~0.8 MPa	
Effective orifice	18 mm ²	16 mm ²
Ambient temperature	-5~+60°C (No freezing)	
Weight	193 g	234 g

Order example

MVHB - 220 - 4TVC - SP - M - □ - G

MODEL

BODY WIDTH

4: 4way (5 port)

VALVE TYPE

Blank: 5/2
C: Closed center (5/3)
P: Pressure center(5/3)
R: Exhaust center (5/3)

SPRING RETURN

*1,2
DUST COVER MATERIAL
Blank: NBR
E: EPDM

Blank: Standard type
M: Panel mounting

PORT THREAD

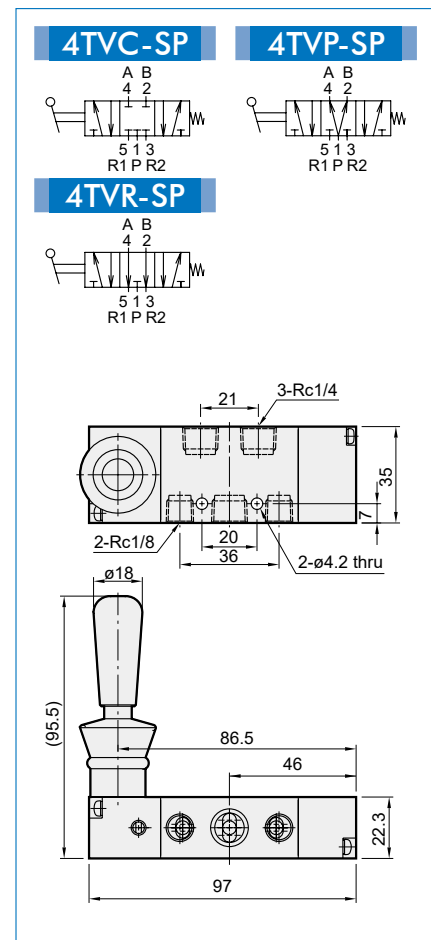
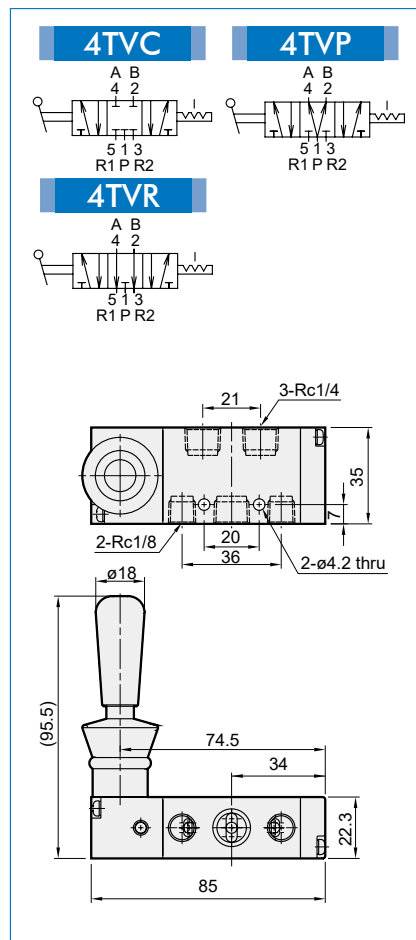
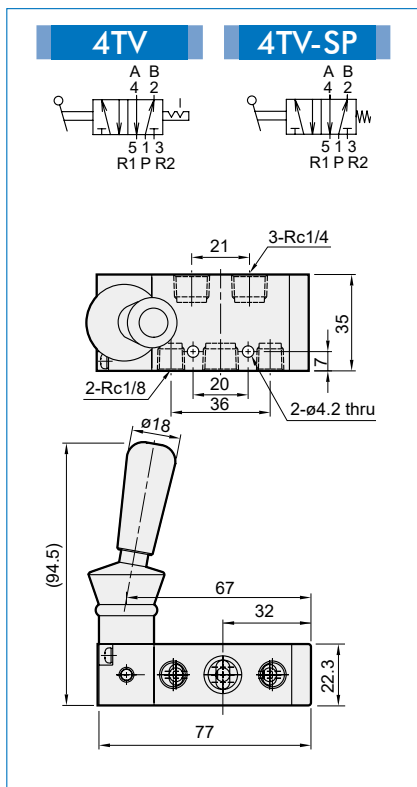
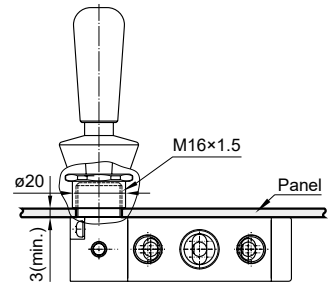
Blank: Rc thread
G: G thread
NPT: NPT thread

*1. NBR: Good oil resistance and abrasion resistance, not suitable for using in polar solvents.

EPDM: Excellent water resistance and chemical resistance, not suitable for using oil place.

*2. Suitability of material

Panel mounting style



MVHB-260 series

HAND LEVER VALVE



Technical data



Caution for safety
(Read before installing)



Specification

Model	MVHB-260(V)-4TV	MVHB-260(V)-4TV*
	MVHB-260(V)-4TV-SP	MVHB-260(V)-4TV*-SP
Bore No.	8A	
Port size	1/4	
No. of port	5	
No. of position	2	3
Medium	Air	
Operating pressure range	0~0.8 MPa	
Effective orifice	18 mm ²	
Ambient temperature	-5~+60°C (No freezing)	
Weight	219 g	278 g

Order example

MVHB - 260V - 4TVC - SP - □ - G

MODEL

BODY WIDTH

4: 4way (5 port)

VALVE TYPE

Blank: 5/2
C: Closed center (5/3)
P: Pressure center(5/3)
R: Exhaust center (5/3)

SPRING RETURN

DUST COVER MATERIAL

Blank: NBR
E: EPDM

PORT THREAD

Blank: Rc thread
G: G thread
NPT: NPT thread

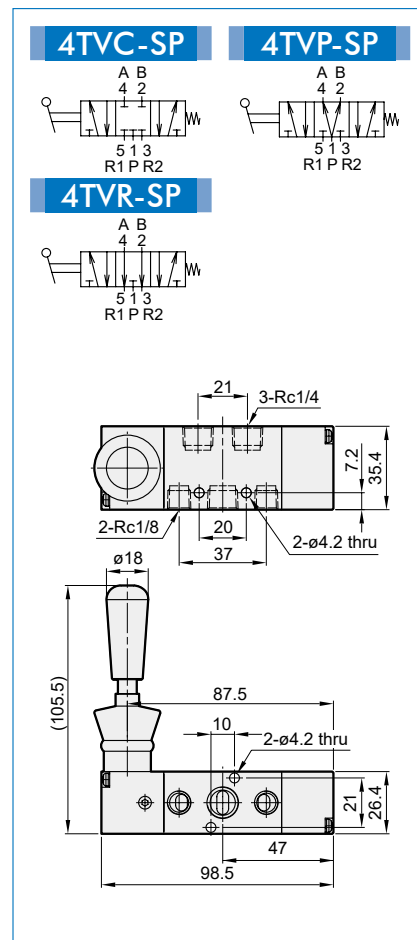
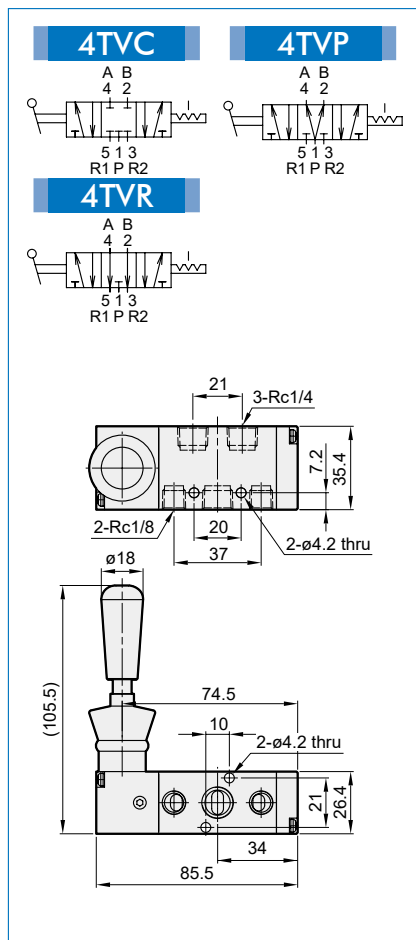
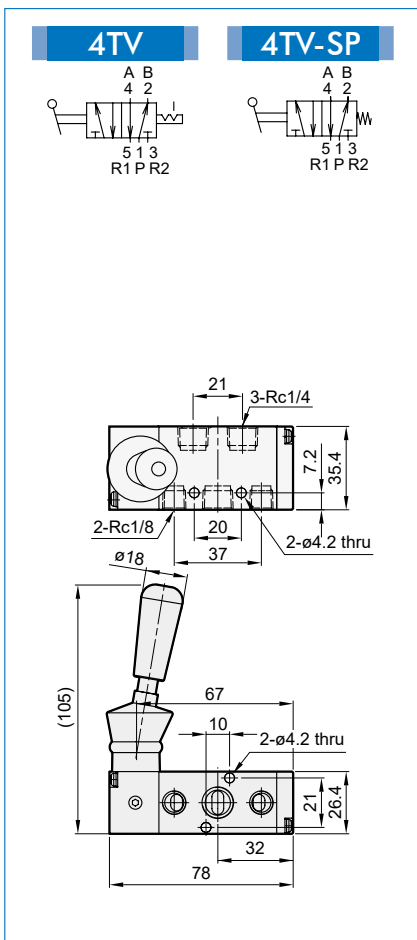
*1. NBR: Good oil resistance and abrasion resistance, not suitable for using in polar solvents.

EPDM: Excellent water resistance and chemical resistance, not suitable for using oil place.

*2. Suitability of material

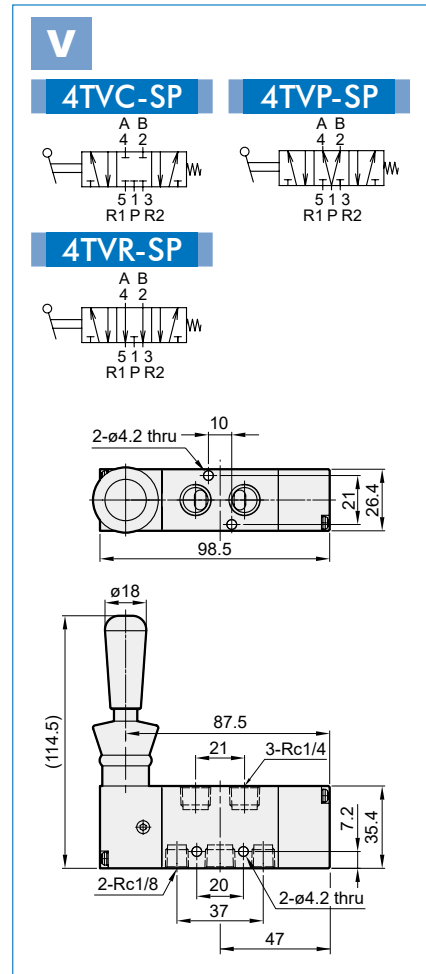
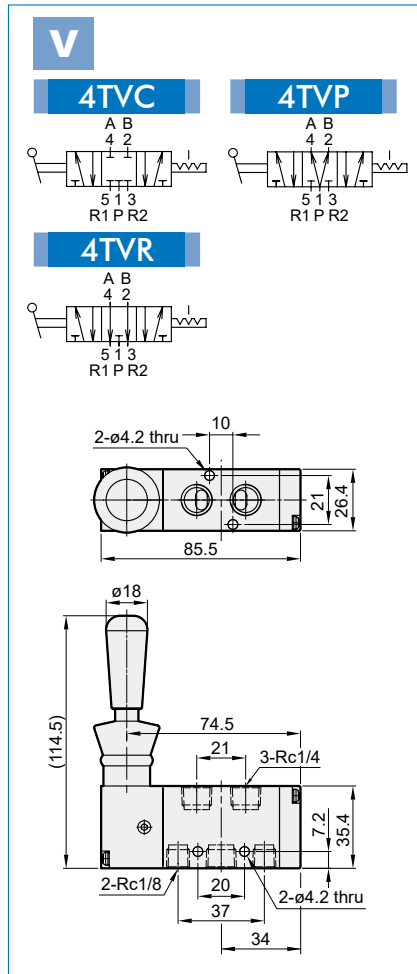
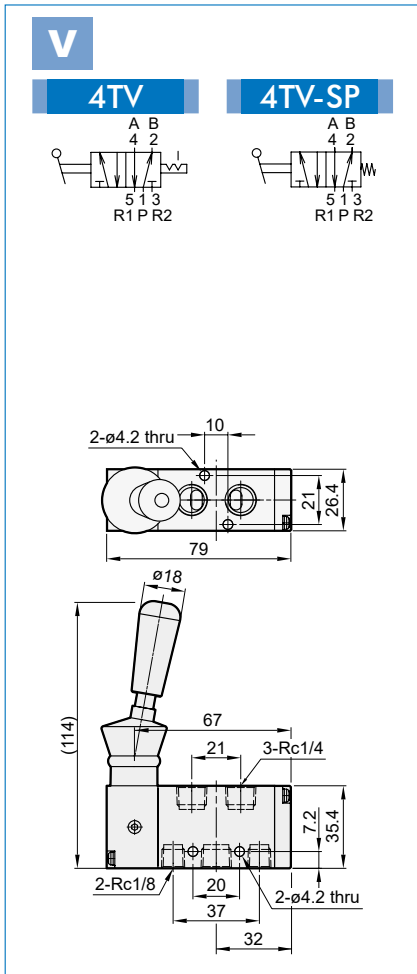
Blank: Standard type
V: Vertical type

* Vertical type can be used with MVSE-260 manifold



MVHB-260 Dimensions – Vertical type

HAND LEVER VALVE



MVHB-300 series

HAND LEVER VALVE



Technical data



Caution for safety
(Read before installing)

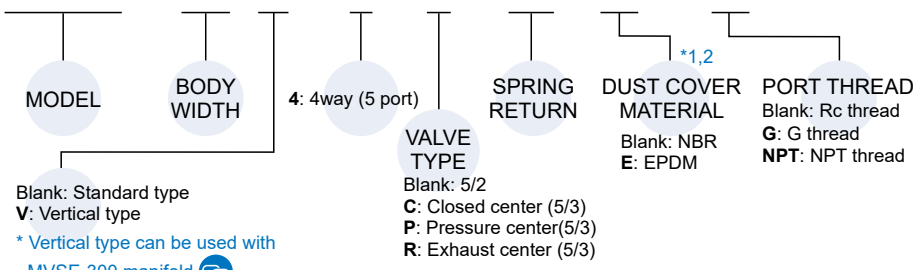


Specification

Model	MVHB-300(V)-4TV MVHB-300(V)-4TV-SP	MVHB-300(V)-4TV* MVHB-300(V)-4TV*-SP
Bore No.	10A	
Port size	3/8	
No. of port	5	
No. of position	2	3
Medium	Air	
Operating pressure range	0~1.2 MPa	
Effective orifice	34 mm ²	
Ambient temperature	-5~+60°C (No freezing)	
Weight	438 g	487 g

Order example

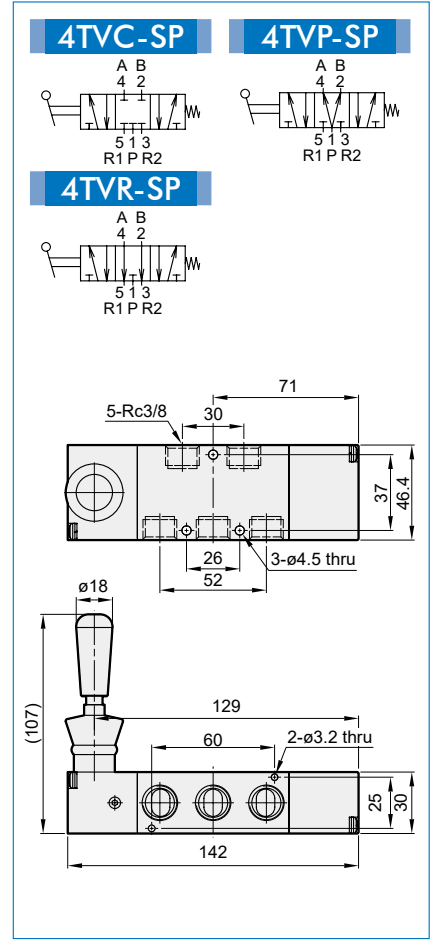
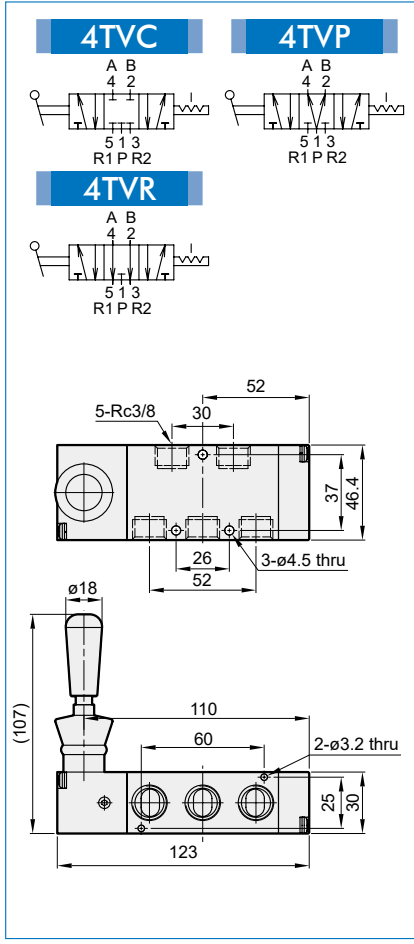
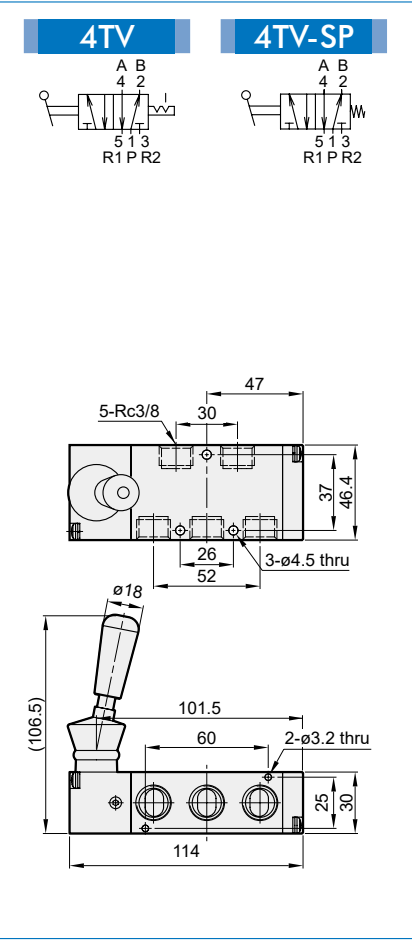
MVHB - 300V - 4TVC - SP - □ - G



*1. NBR: Good oil resistance and abrasion resistance, not suitable for using in polar solvents.
EPDM: Excellent water resistance and chemical resistance, not suitable for using oil place.

*2. Suitability of material

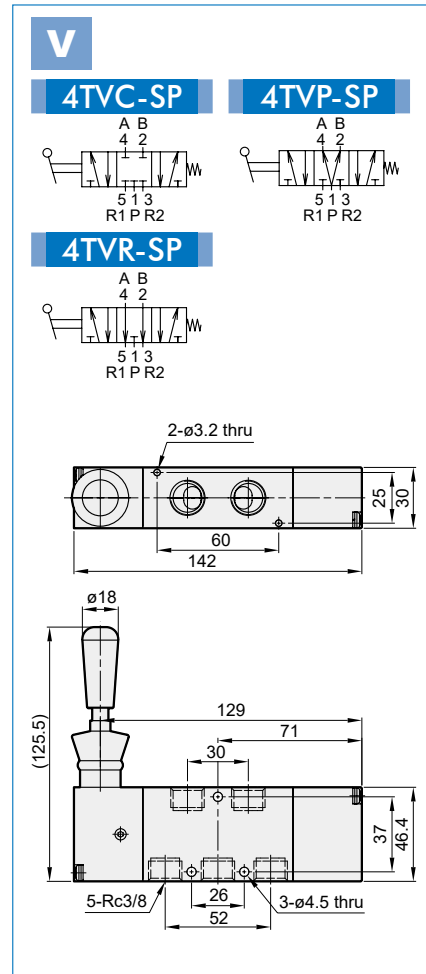
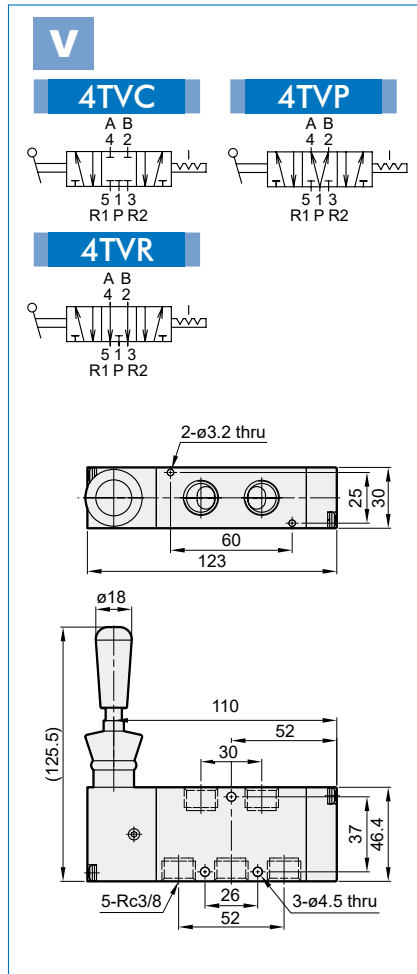
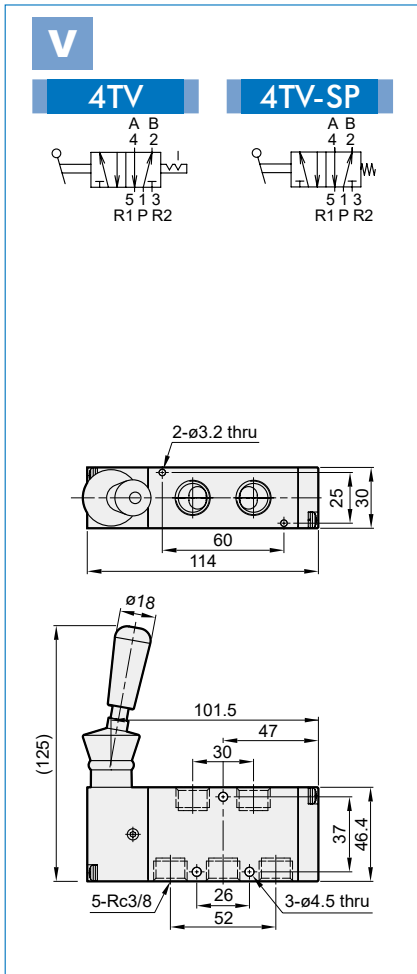
Blank: Standard type
V: Vertical type
* Vertical type can be used with MVSE-300 manifold



Solenoid Valve
Process Valve
Pilot & Mechanical Valve
Air Treatment Unit
Pressure Switch
Compressed Air Dryer
Auxiliary Equipment
PISCO
PLC Control System

MVHB-300 Dimensions – Vertical type

HAND LEVER VALVE



MVHB-500 series

HAND LEVER VALVE



Technical data



Caution for safety
(Read before installing)



Specification

Model	MVHB-500(V)-4TV	MVHB-500(V)-4TV*
	MVHB-500(V)-4TV-SP	MVHB-500(V)-4TV*-SP
Bore No.	15A	
Port size	1/2	
No. of port	5	
No. of position	2	3
Medium	Air	
Operating pressure range	0~1.2 MPa	
Effective orifice	41 mm ²	
Ambient temperature	-5~+60°C (No freezing)	
Weight	519 g	560 g

Order example

MVHB - 500V - 4TVC - SP - □ - G

MODEL

BODY WIDTH

4: 4way (5 port)

VALVE TYPE

Blank: 5/2
C: Closed center (5/3)
P: Pressure center(5/3)
R: Exhaust center (5/3)

SPRING RETURN

DUST COVER MATERIAL

Blank: NBR
E: EPDM

PORT THREAD

Blank: Rc thread
G: G thread
NPT: NPT thread

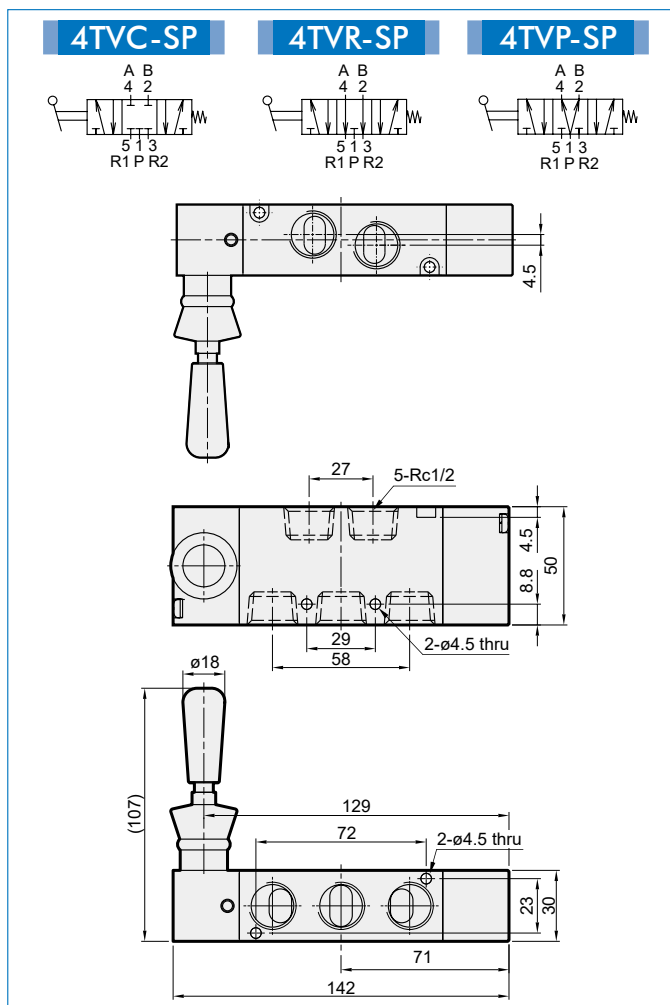
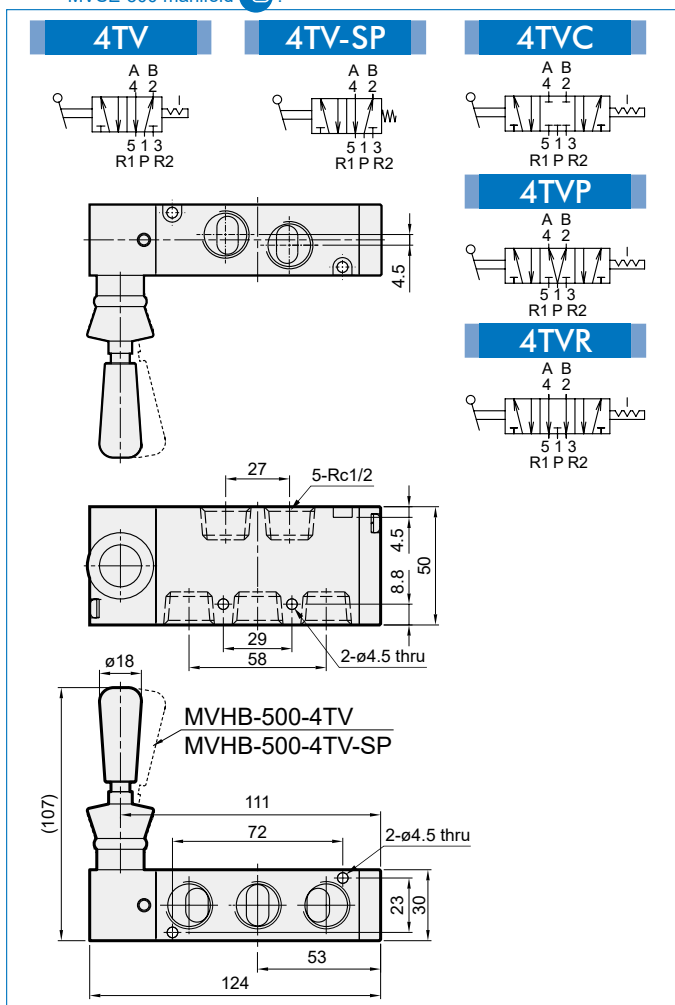
*1. NBR: Good oil resistance and abrasion resistance, not suitable for using in polar solvents.

EPDM: Excellent water resistance and chemical resistance, not suitable for using oil place.

*2. Suitability of material

Blank: Standard type
V: Vertical type

* Vertical type can be used with MVSE-500 manifold



MVHB-500 Dimensions – Vertical type

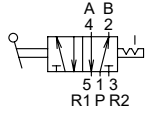


HAND LEVER VALVE

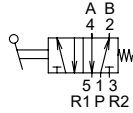
mindman

V

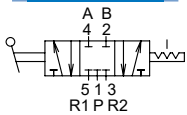
4TV



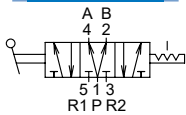
4TV-SP



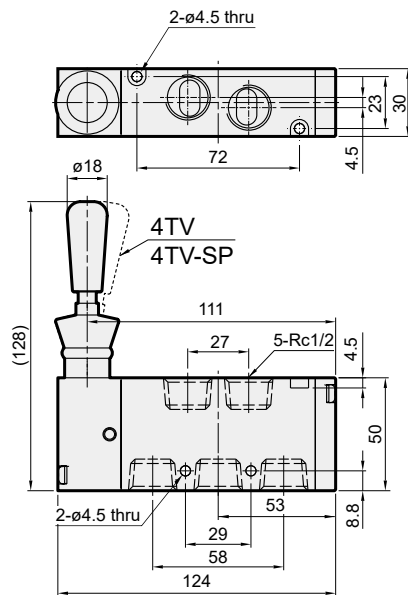
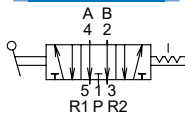
4TVC



4TVP

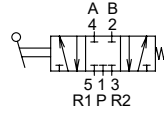


4TVR

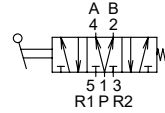


V

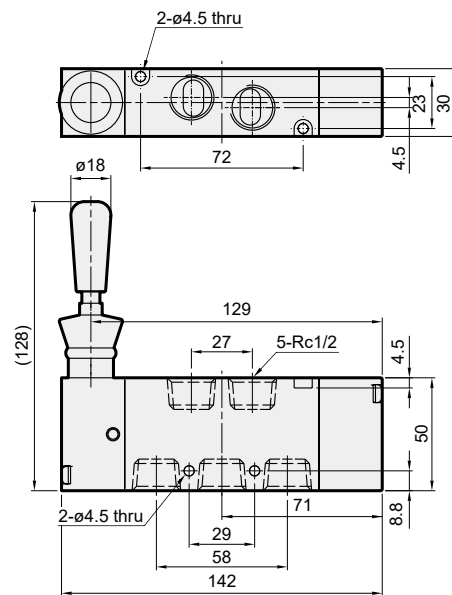
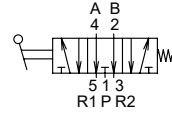
4TVC-SP



4TVP-SP



4TVR-SP



MVHD-220 series

HAND LEVER VALVE



Technical data



Caution for safety
(Read before installing)



Specification

Model	MVHD-220-3P	MVHD-220-4P
Bore No.	8A	6A, 8A
Port size	1/4	1/8, 1/4
No. of port	3	5
No. of position	2	
Medium	Air	
Operating pressure range	0~0.8 MPa	
Effective orifice	18 mm ²	
Ambient temperature	-5~+50°C (No freezing)	
Weight	151 g	170 g

Order example

MVHD - 220 - 4P - NC - □ - SP - G

MODEL

BODY WIDTH

3: 3way (3 port)
4: 4way (5 port)

ACTUATOR TYPE

P: Push-pull

NC: Normally closed
NO: Normally open
(Only for 3P)

BORE SIZE

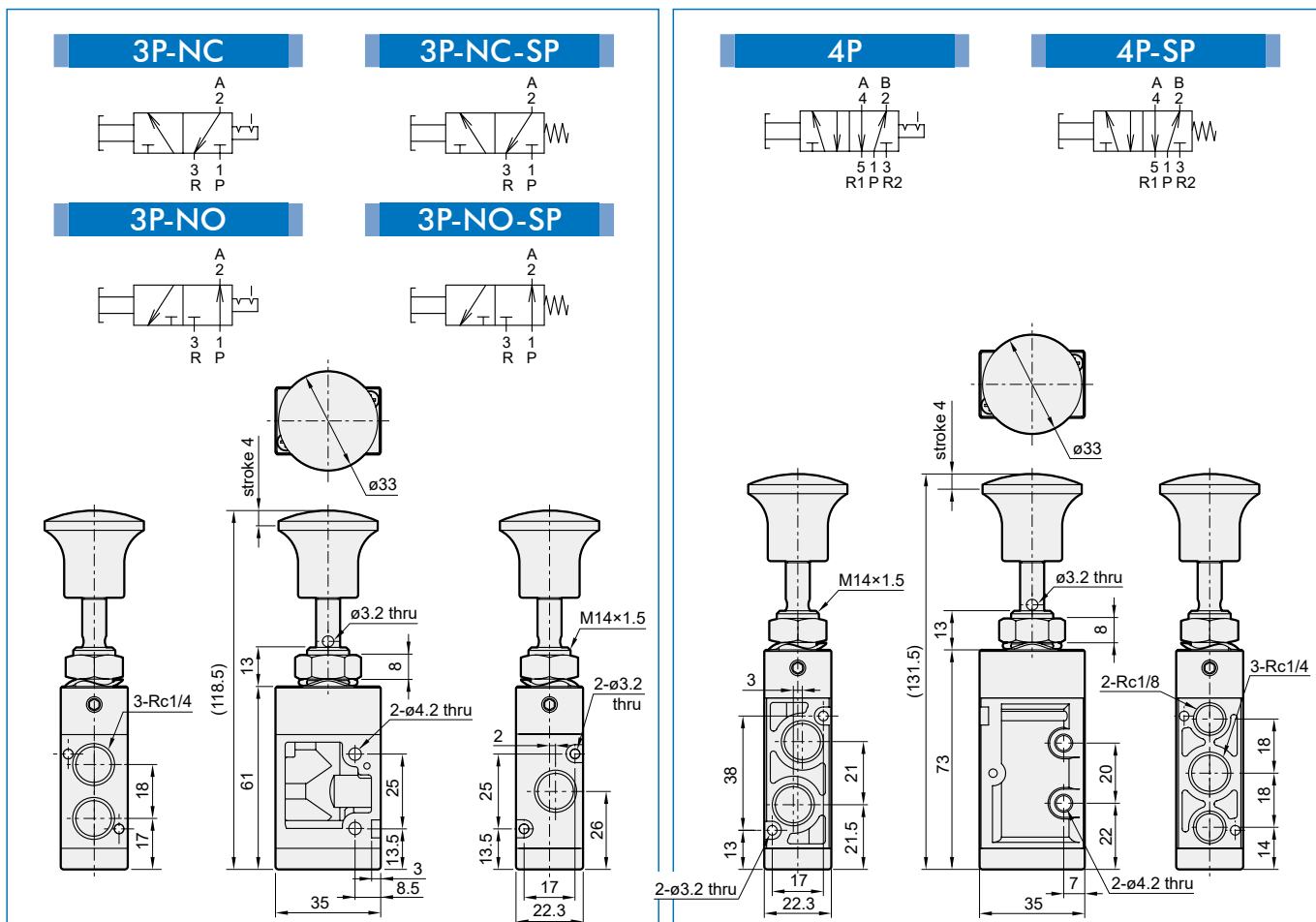
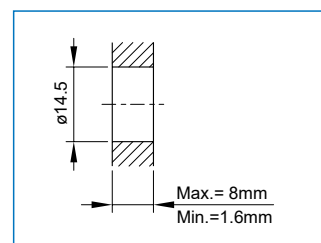
Blank: 1/4
6A: 1/8 (Only for 4P)

SPRING RETURN

PORT THREAD

Blank: Rc thread
G: G thread
NPT: NPT thread

Panel mounting hole



MVHC series

ROTARY HAND LEVER VALVE



mindman



Technical data



Caution for safety
(Read before installing)



Specification

Model	MVHC-2**		MVHC-3**			MVHC-4**		
Bore No.	6A	8A	8A	10A	15A	10A	15A	20A
No. of port	4							
Medium	Air							
Operating pressure range	0.05~1 MPa							
Effective orifice (mm ²)	7	26	29	33	59	64	71	
Ambient temperature	-5~+60°C (No freezing)							
Option	Mounting nut							
Weight	280 g		420 g			1100 g		

Bore size	6A	8A	10A	15A	20A
Model	Rc1/8	Rc1/4	Rc3/8	Rc1/2	Rc3/4
MVHC-2**					
MVHC-3**					
MVHC-4**					

Order example

MVHC - 200 - 4H - 8A - □ - G

MODEL

BODY SIZE

2
3
4

4: 4way
(4 port)

TYPE (*)

PORT POSITION

0: Side
2: Bottom (Only for 3,4 body size type)

BORE SIZE

6A: 1/8
8A: 1/4
10A: 3/8
15A: 1/2
20A: 3/4

PORT THREAD

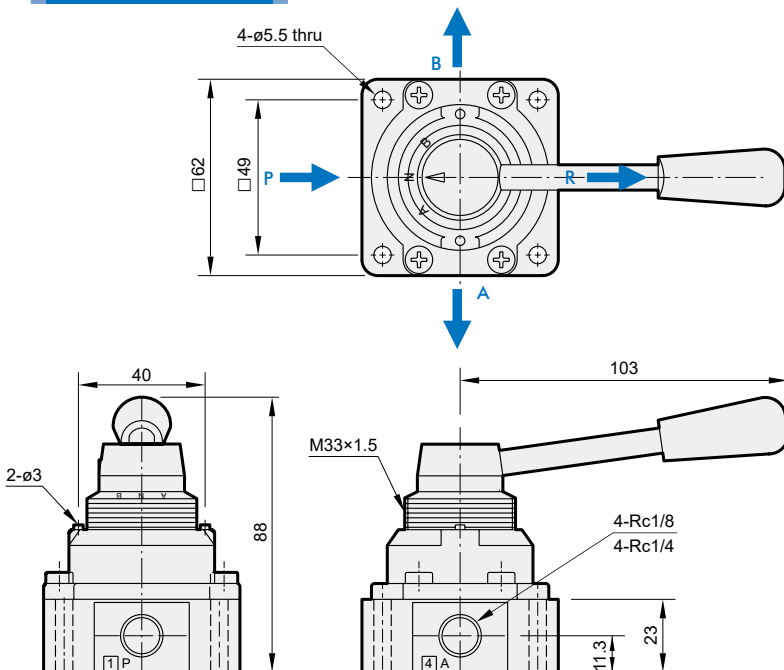
Blank: Rc thread
G: G thread
NPT: NPT thread

Blank: Without
M: Mounting nut

* TYPE

Code	Symbol	Description
0		3 Position Close center
1		3 Position Exhaust center
2		2 Position

MVHC-20*

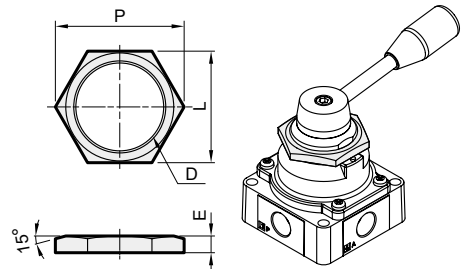


Order example of mounting nut

MVHC - 200 - M

BODY SIZE

200
300
400



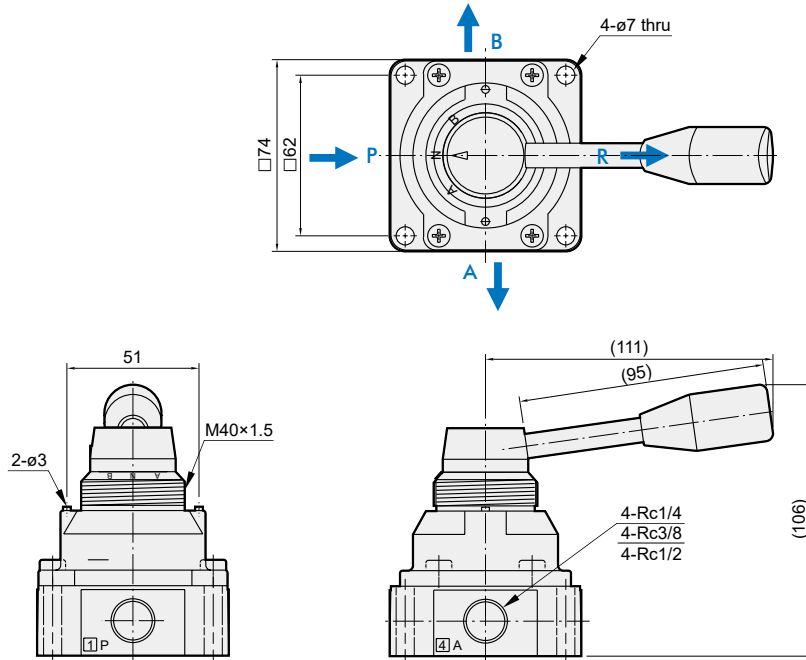
Model	D	E	L	P	Weight
MVHC-200-M	M33×1.5	6	41	46	26.5 g
MVHC-300-M	M40×1.5	6	50	57	41 g
MVHC-400-M	M50×1.5	8	55	63	40 g

MVHC Dimensions

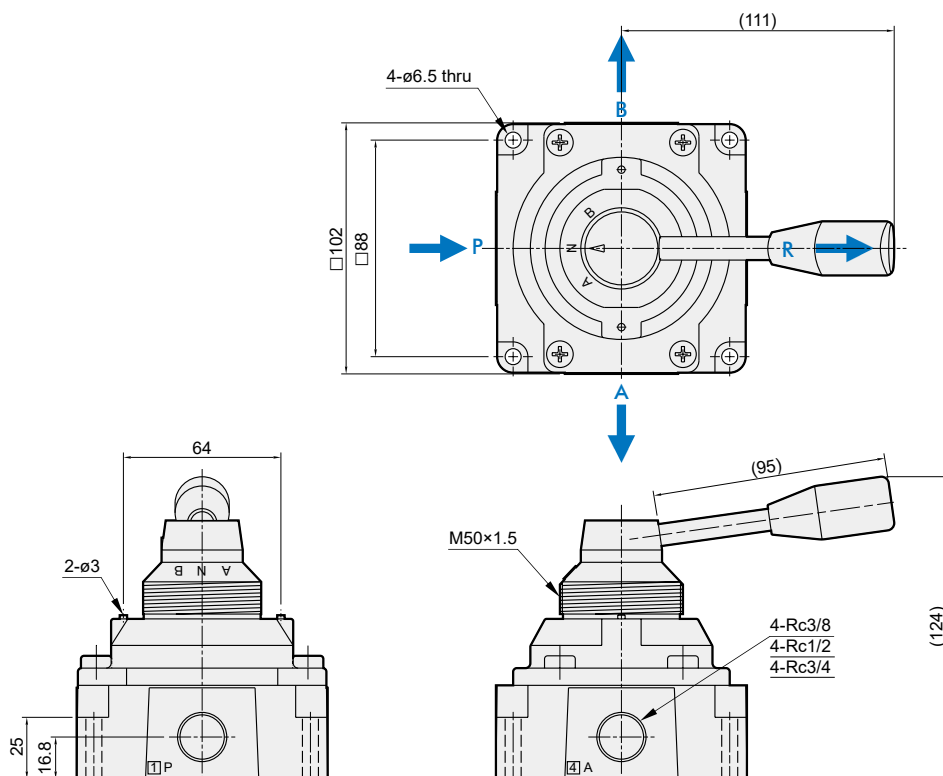
ROTARY HAND LEVER VALVE



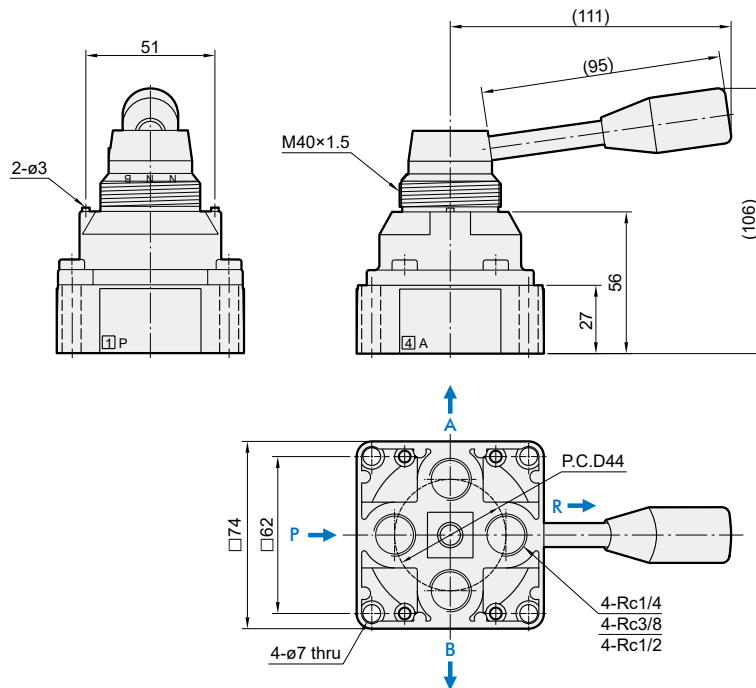
MVHC-30*



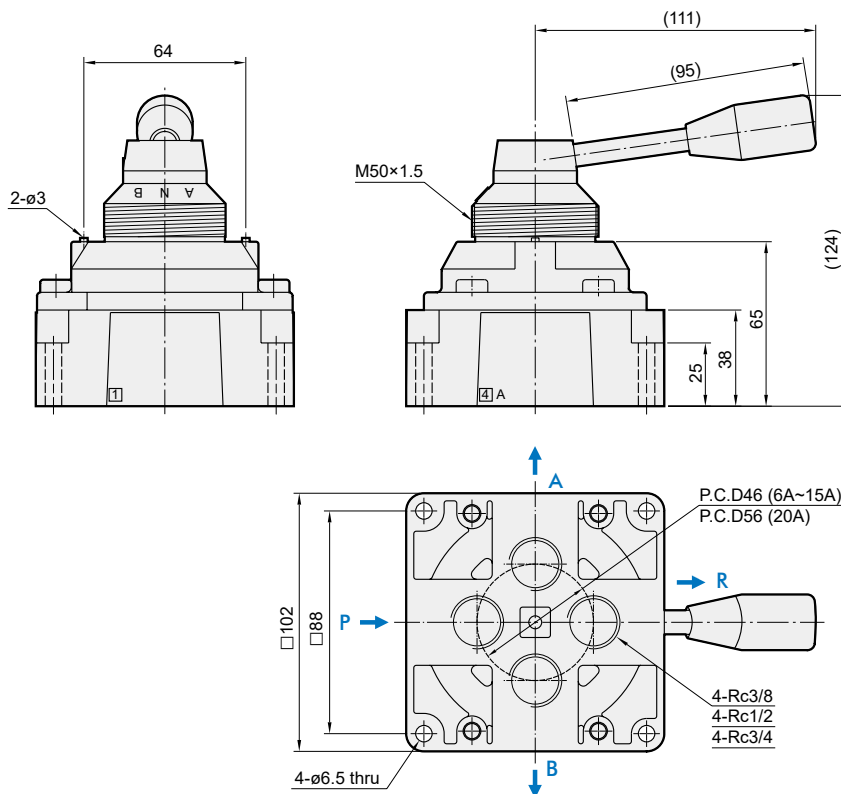
MVHC-40*



MVHC-32*



MVHC-42*



MVHS series

HAND SLIDE VALVE



Technical data



Caution for safety
(Read before installing)



Specification

Model	MVHS				
Bore No.	8A	10A	15A	20A	
Port size	1/4	3/8	1/2	3/4	
Medium	Air				
Operating pressure range	0.05~1 MPa				
Effective orifice (mm ²)	P→A	30.4	32.3	63.5	85.4
	A→R	34.1	36.8	71.7	90.7
Ambient temperature	-5~+60°C (No freezing)				
Weight	40 g	54 g	132 g	148 g	

Order example

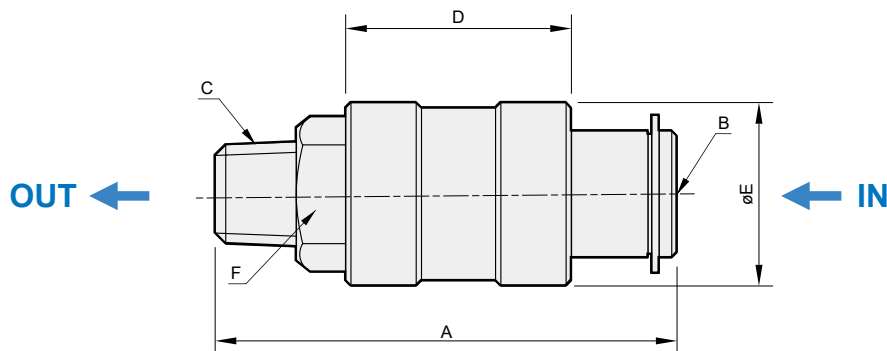
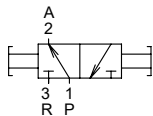
MVHS — 8A — G

MODEL

8A: 1/4
10A: 3/8
15A: 1/2
20A: 3/4

PORT THREAD
Blank: Rc thread
G: G thread
NPT: NPT thread

MVHS-*A



Code Model	A	B	C	D	E	F
MVHS-8A	58	Rc1/4	R1/4	32	25.5	∅19
MVHS-10A	57	Rc3/8	R3/8	32	31.5	∅22
MVHS-15A	91	Rc1/2	R1/2	49	38.5	∅27
MVHS-20A	91	Rc3/4	R3/4	49	42	∅35

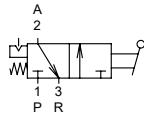


Technical data

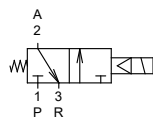


(Lock is not attached)

Symbol



Symbol



Specification – Manual type

Model	MVHR-302 / 400		
Bore No.	8A	10A	15A
Port size	1/4	3/8	Rc1/2
No. of port	3		
No. of position	2		
Medium	Air		
Operating pressure range	0.1~1 MPa		
Proof pressure	1.5 MPa		
Effective orifice (mm ²)	IN→OUT	56	66
	OUT→EXH	45	58
Ambient temperature	-5~+60°C (No freezing)		
Weight	304g / 311g		

Specification – Solenoid type

Model	MVHR-302S / 400S		
Bore No.	8A	10A	15A
Port size	1/4	3/8	Rc1/2
No. of port	3		
No. of position	2		
Medium	Air		
Operating pressure range	0.15~1 MPa		
Proof pressure	1.5 MPa		
Effective orifice (mm ²)	IN→OUT	56	66
	OUT→EXH	45	58
Ambient temperature	-5~+60°C (No freezing)		
Voltage	AC110V, 220V (50/60)Hz, DC24V		
Power consumption	Standard	AC=4.8/4.4VA, 6/4.9VA, DC=2W	
	Power saving	DC=Start: 2W (*) Power saving: 0.5W	
Available voltage range	±10%		
Insulation class	F class		
Weight	378g / 385g		

Order example

MVHR – 302 □ – 3H – 8A – 1 □ – DC24 – □ – B – G

MODEL

CONTROL MODEL
Blank: Manual type
S: Solenoid type

PORT SIZE

8A: 1/4
10A: 3/8
15A: 1/2

FLOW DIRECTION

Blank: Left to right
R: Right to left

VOLTAGE

*Only for solenoid type
AC220V(50/60)Hz
AC110V(50/60)Hz
DC24V

BRACKET

Blank: Without
B: With bracket

PORT THREAD

Blank: Rc thread
G: G thread
NPT: NPT thread

MODEL for F.R.L

302: for MA**302 series
400: for MA**401, 403 series

3H: 3way(3port)
(Residual pressure release)

Apply to MVHR-400
1: Silver (For air unit 401 series)
3: Cool gray (For air unit 401-W, 403 series)

ELECTRIC CONNECTION *Only for solenoid type

Standard	
Blank	DIN terminal
L	DIN terminal with LED indicator
E	Explosion protection (Table 1)(Black coil)
Power saving (for DC24V)	
KL	DIN terminal with LED indicator

Order example of bracket

MVHR – 302 – B

BRACKET

* 302 and 400 use the same bracket.

* Power saving covert time 100ms.

Table 1

Property for explosion-proof type

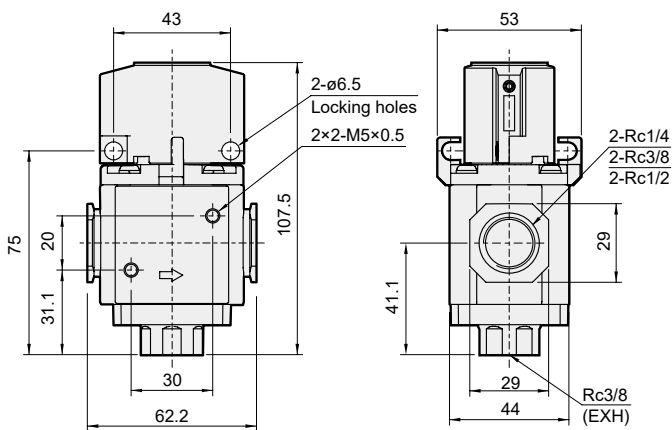
Anti-explosion class	Ex mb IIC T4 Gb
Voltage	AC110V / 220V(50/60)Hz, DC24V
Power consumption	AC110V=4.5VA, AC220V=4.8VA, DC=5W
Available voltage range	±10%
Insulation class	F class
Wire length	3 m

⚠ Precautions

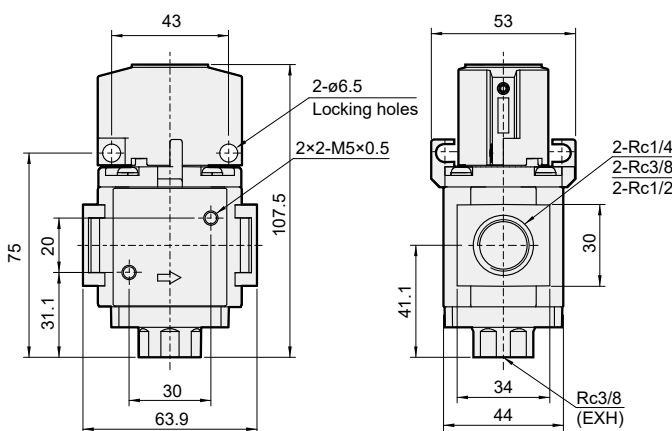
Please note during trial operation and maintenance.

- ① When the A port is open to the atmosphere, do not switch the valve to prevent leakage and malfunction of the seal ring due to fluid flow.
- ② Dust entering the valve body will cause malfunction or damage to the seal.
- ③ Please install a filter and oil mist separator on the inlet side (With a filtration of 5 micron or lower).
- ④ Be sure of cleaning the cutting fluid and foreign material in the pipe before connection to avoid malfunction.
- ⑤ The internal grease may flow out on the outlet side, so it is not recommended to use it in a completely oil-free environment in pipe.
- ⑥ When operating the knob, switch quickly and accurately to avoid malfunction.
- ⑦ When activating the shut-off valve (residual pressure release), make sure that the pressure difference between port A and port P is not less than 0.3 MPa to avoid malfunction.

MVHR-302

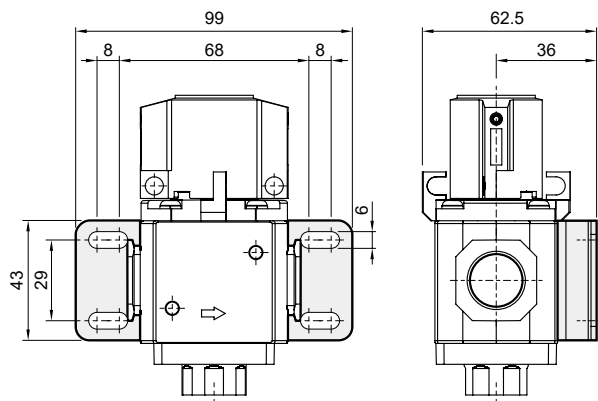


MVHR-400



MVHR-*-B

Bracket

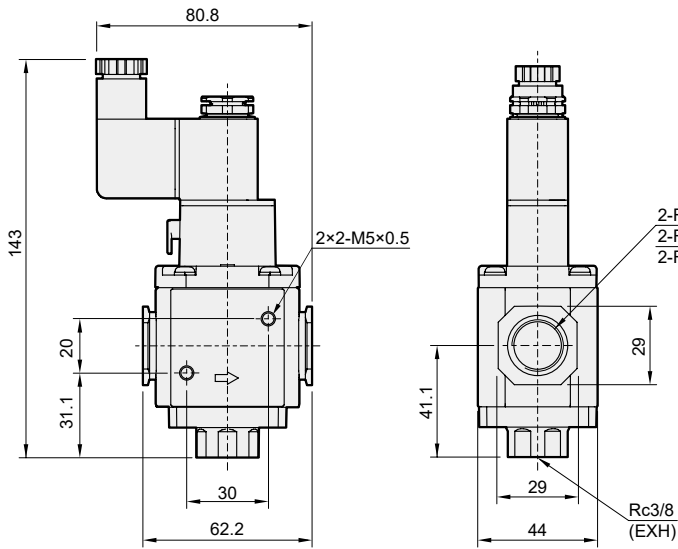


MVHR Dimensions – Solenoid type

ON-OFF VALVE

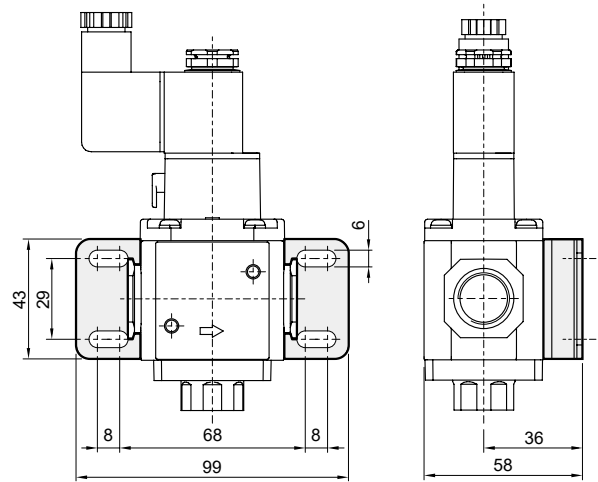


MVHR-302S

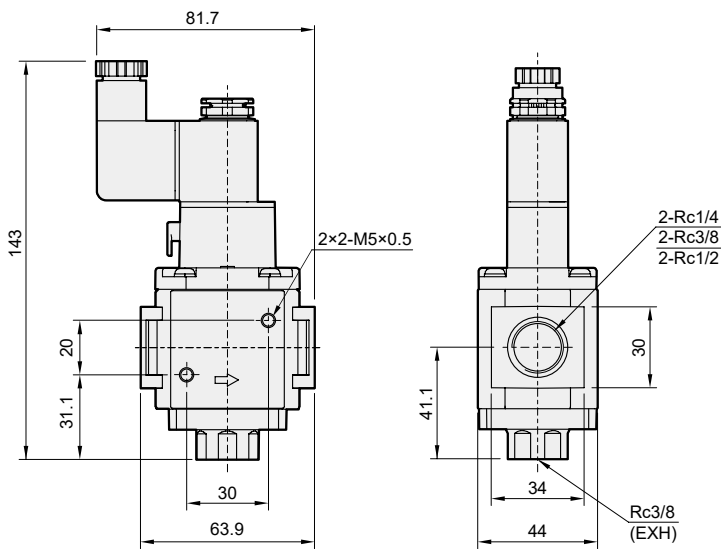


MVHR-*S-*-B

Bracket



MVHR-400S



MVFA series

FOOT PEDAL VALVE



Technical data



Caution for safety
(Read before installing)



P: With protection



Specification

Model	MVFA-230	MVFA-231	MVFA-240
Bore No.	8A		
Port size	1/4		
No. of port	3	4	
No. of position	2		
Medium	Air		
Operating pressure range	0.2~0.7 MPa		
Proof pressure	1 MPa		
Effective orifice	8 mm ²		
Ambient temperature	-5~+60°C (No freezing)		
Weight (with protection)	684 (1426) g	739 (1481) g	774 (1516) g

Order example

MVFA - 230 - 8A - PL - G

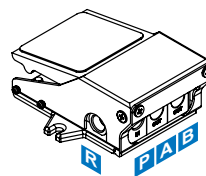
MODEL

230: 3/2 NC
231: 3/2 NO
240: 4/2

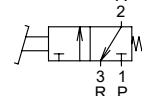
8A: 1/4

P: With protection
L: With lock

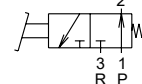
PORT THREAD
Blank: Rc thread
G: G thread
NPT: NPT thread



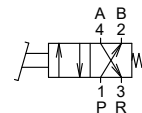
MVFA-230
N.C.



MVFA-231
N.O.



MVFA-240

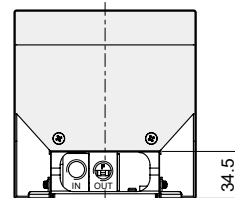
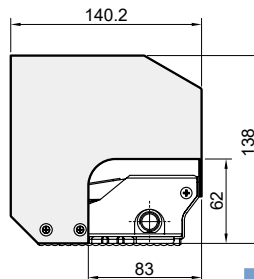
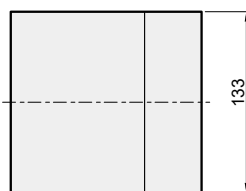
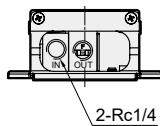
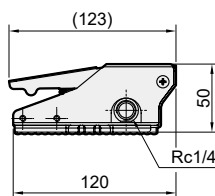
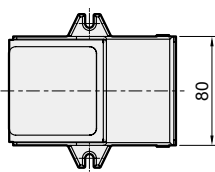


MVFA-230-8A-(L)

MVFA-231-8A-(L)

MVFA-230-8A-P(L)

MVFA-231-8A-P(L)



MVFA-240-8A-(L)

MVFA-240-8A-P(L)

