

# Control valve(3/2 5/3 way)



## CM3 Series



### Specification

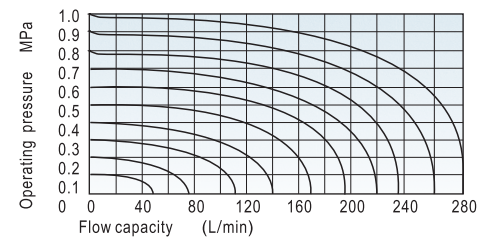
Model	CM3□-05	CM3□-06	CM3□-08
Operating	External control		
Fluid	Air (to be filtered by 40 μm filter element)		
Pressure range	0~1.0MPa(0~114psi)(0~10.0bar)		
Proof pressure	1.5MPa(215psi)(15.0bar)		
Temperature	-20~70 °C		
Valve type <sup>①</sup>	3 port 2 position		
Orifice size	2.0mm <sup>2</sup>	2.5 mm <sup>2</sup>	15.0mm <sup>2</sup>
Lubrication	0.11	0.14	0.84
Port size <sup>②</sup>	M5x0.8	1/8"	1/4"
Material body	Aluminum alloy		



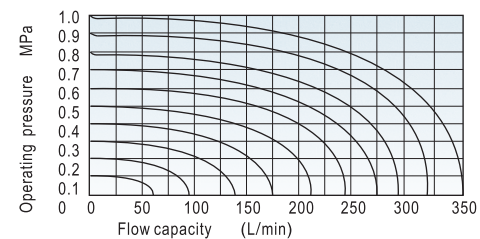
① HD series are 5/3 way. ② PT thread, NPT thread and G thread are available.

### Flow chart

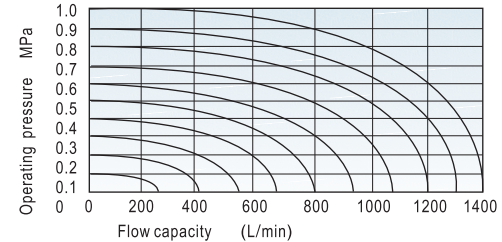
Model: CM3B-05



Model: CM3B-06



Model: CM3B-08



### Symbol



### Product feature

1. The external force required by changing the direction of the series of CM3B, CM3V, CM3L and CM3R is provided by external mechanism, which can be used for position test or limit switch.
2. The series of CM3PF, CM3PM, CM3PMS, CM3PMX, CM3PL, CM3PP, CM3HS, CM3HD and CM3Y are operated manually, owning control joints with several structure forms and suitable for application under different conditions.
3. Shut-off structure has good tightness and is sensitive in direction changing and lubricant is not necessary.
4. Multi-mounting makes it convenient to install and apply.
5. The control joints of series of CM3L, CM3V, CM3R and CM3Y are made of metal which has long service life and more reliable and steady performance.
6. CM3PMS, CM3PMX Series have metallic guard, it can protect the push cup, to avoid misact due to outside force touching the push cup. So they can be used more reliably.

### Ordering code

**CM3 PP 06 B P**

<p><b>Valve's type</b></p> <p>CM3: CM type 3/2 5/3 way</p> <p><b>Model</b></p> <ul style="list-style-type: none"> <li>B: Basic type</li> <li>R: Roller type</li> <li>L: Roller with free return type</li> <li>V: Vertical type</li> <li>Y: Lever typer</li> <li>PL: Latching type</li> <li>PP: Protruding type</li> <li>PF: Flat type</li> <li>PM: Mushroom type</li> <li>PMS: Mushroom type(with guard)</li> <li>PMX: Big mushroom type(with guard)</li> <li>HS: Selector type</li> <li>HD: Double-selector type</li> </ul>	<p><b>Thread type</b></p> <table border="1"> <tr> <th>Port size</th> <th>Thread type</th> </tr> <tr> <td>M5</td> <td>Not code</td> </tr> <tr> <td>1/8"</td> <td>P: PT</td> </tr> <tr> <td>1/4"</td> <td>T: NPT</td> </tr> <tr> <td></td> <td>G: G</td> </tr> </table> <p><b>Button color</b></p> <table border="1"> <tr> <th>Model</th> <th>Button color</th> </tr> <tr> <td>B,R,L,V,Y</td> <td>R: Red</td> </tr> <tr> <td>PL</td> <td>R: Red</td> </tr> <tr> <td>PP,PF,PM</td> <td>R: Red</td> </tr> <tr> <td>PMS,PMX</td> <td>G: Green</td> </tr> <tr> <td>HS,HD</td> <td>B: Black</td> </tr> <tr> <td></td> <td>Y: Yellow</td> </tr> </table> <p><b>Port size</b></p> <ul style="list-style-type: none"> <li>05: M5</li> <li>06: 1/8"</li> <li>08: 1/4"</li> </ul>	Port size	Thread type	M5	Not code	1/8"	P: PT	1/4"	T: NPT		G: G	Model	Button color	B,R,L,V,Y	R: Red	PL	R: Red	PP,PF,PM	R: Red	PMS,PMX	G: Green	HS,HD	B: Black		Y: Yellow
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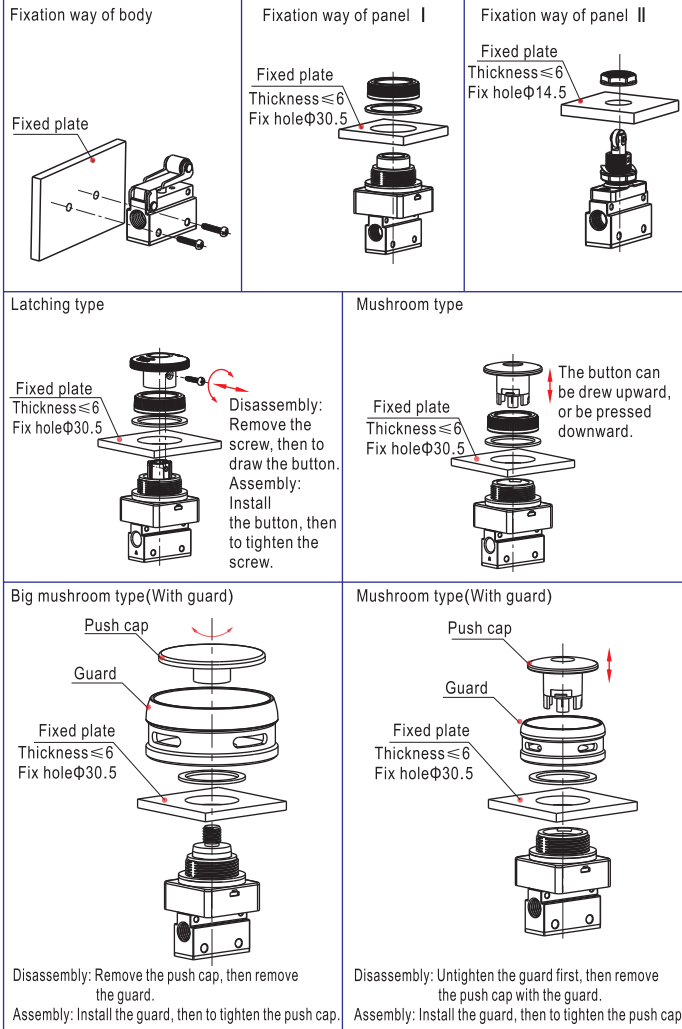
# Control valve ( 3/2 5/3 way )



## CM3 Series

### Installation and operation

1. Mounting way: by body, by panel I, by panel II, latching type, mushroom type. Please refer to the following picture:

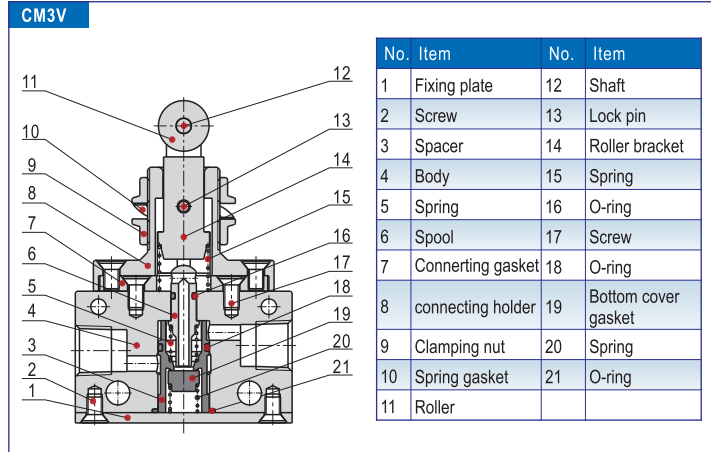


- The control set is made of engineering plastic which only allows manual operation and switching valves through metal impact is forbidden.
- The series of CM3B, CM3L, CM3V, CM3R, CM3PM, CM3PMS, CM3PMX, CM3PF, CM3PP get the function of automatic restoration. The hand valves of CM3Y, CM3HS, CM3HD, CM3PL are in type of manual restoration. CM3PL will be restored by turning the revolve button after being pressed into orientation.
- Pay attention to the reversing stroke. The reversing stroke can not surpass its stroke stipulated in stroke control table when the direction-change of the valve is forced by any external forces, otherwise it will cause the damage of the valve.

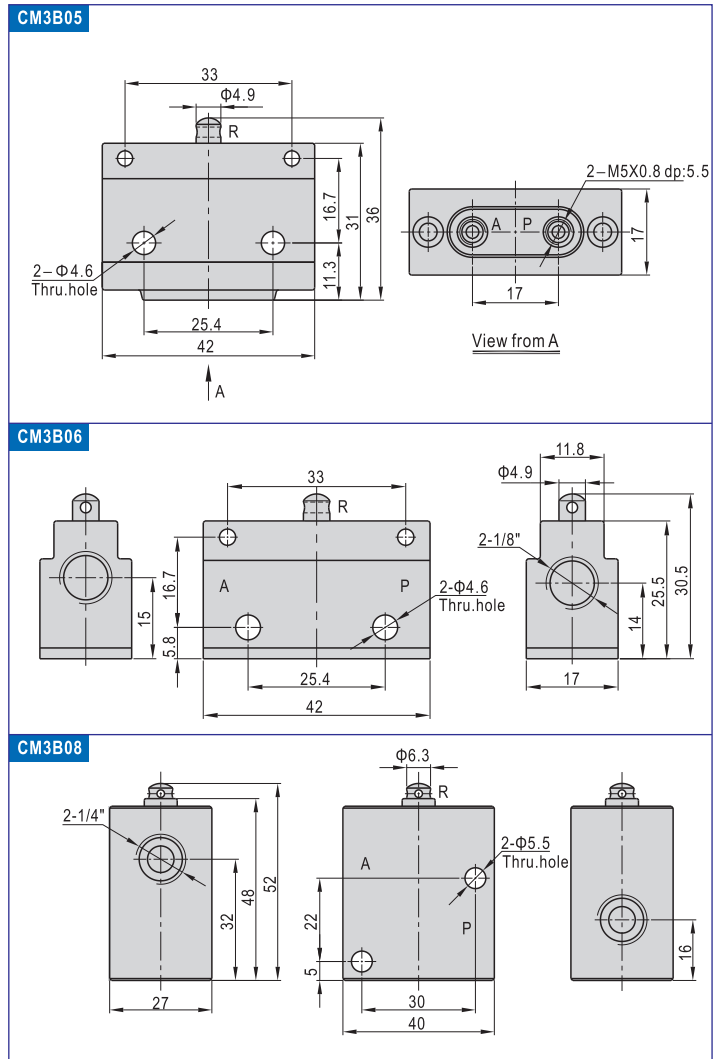
Type	Spool stroke	Button (Roller/Handle) stroke	Type	Spool stroke	Button (Roller/Handle) stroke
CM3B05(06)	1.5~3.0	-	CM3B08	2.4~4.0	-
CM3R05(06)	1.5~2.5	3.0~4.8	CM3R08	2.4~3.2	6.8~9.0
CM3L05(06)	1.5~2.3	3.0~4.8	CM3L08	2.4~3.2	7.2~9.7
CM3V05(06)	1.5~3.0	2.7~4.2	CM3V08	2.4~4.0	2.6~4.2
CM3Y05(06)	1.5~2.5	3.0~4.8	CM3Y08	2.4~3.2	6.8~9.0
CM3PL05(06)	1.5~2.5	4.0~5.0	CM3PL08	2.4~3.5	4.0~5.0
CM3PP05(06)	1.5~3.0	4.0~5.5	CM3PP08	2.4~4.0	4.0~5.5
CM3PF05(06)	1.5~3.0	4.0~5.5	CM3PF08	2.4~4.0	4.0~5.5
CM3HS05(06)	1.5~3.0	4.0~5.5	CM3HS08	2.4~4.0	4.0~5.5
CM3HD05(06)	1.5~3.0	4.0~5.5	CM3HD08	2.4~4.0	4.0~5.5
CM3PM05(06)	1.5~3.0	4.0~5.5	CM3PM08	2.4~4.0	4.0~5.5
CM3PMS05(06)	1.5~3.0	4.0~5.5	CM3PMX08	2.4~4.0	4.0~5.5
CM3PMX05(06)	1.5~3.0	4.0~5.5	CM3PMX08	2.4~4.0	4.0~5.5

- The CM3L can only switch the valve in single direction(impact from left to right). The impact from the other direction (from right to left) is invalid.
- Control joint combination can be ordered individually. Please refer to external specification.

### Inner structure



### Dimension (Basic type)



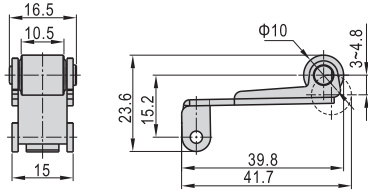
# Control valve ( 3/2 5/3 way )



## CM3 Series

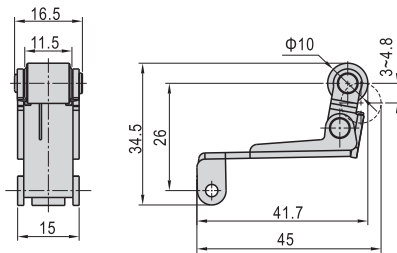
### Control set dimension

#### CM3R06-P1



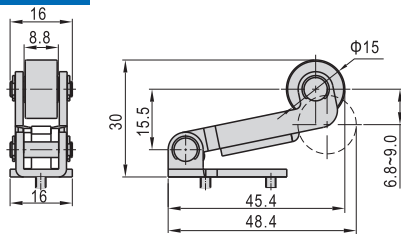
Note: CM3R06 control joint, which used in CM3R05 and CM3R06, can not be ordered individually. It should be matched with basic type.

#### CM3L06-P1



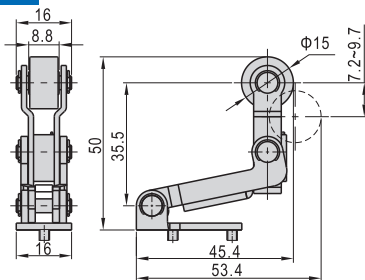
Note: CM3L06 control joint, which used in CM3L05 and CM3L06, can not be ordered individually. It should be matched with basic type.

#### CM3R08-P1



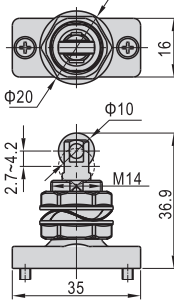
Ordering code	CM3R08-P1
Type	CM3R08 roller type control set
Applicable products	CM3R08

#### CM3L08-P1



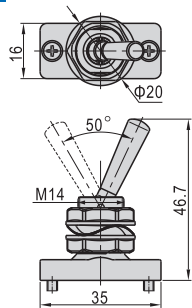
Ordering code	CM3L08-P1
Type	CM3L08 roller type control set
Applicable products	CM3L08

#### CM3V06-P1



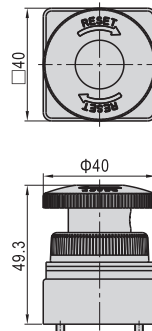
Ordering code	CM3V06-P1
Type	CM3V vertical type control set
Applicable products	CM3V05 CM3V06 CM3V08

#### CM3Y06-P1



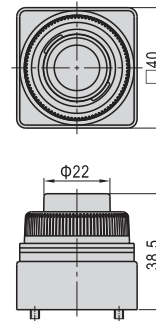
Ordering code	CM3Y06-P1
Type	CM3Y lever type control set
Applicable products	CM3Y05 CM3Y06 CM3Y08

#### CM3PL06-P2



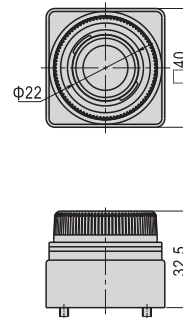
Ordering code	CM3PL06-P2
Type	CM3PL latching type control set(red)
Applicable products	CM3PL05 CM3PL06 CM3PL08

#### CM3PP06-P1



Ordering code	CM3PP06-P1
Type	CM3PP protruding type control set(green)
Applicable products	CM3PP05 CM3PP06 CM3PP08
Ordering code	CM3PP06-P2
Type	CM3PP protruding type control set(red)
Applicable products	CM3PP05 CM3PP06 CM3PP08
Ordering code	CM3PP06-P3
Type	CM3PP protruding type control set(black)
Applicable products	CM3PP05 CM3PP06 CM3PP08
Ordering code	CM3PP06-P4
Type	CM3PP protruding type control set(yellow)
Applicable products	CM3PP05 CM3PP06 CM3PP08

#### CM3PF06-P1



Ordering code	CM3PF06-P1
Type	CM3PF flat type control set(green)
Applicable products	CM3PF05 CM3PF06 CM3PF08
Ordering code	CM3PF06-P2
Type	CM3PF flat type control set(red)
Applicable products	CM3PF05 CM3PF06 CM3PF08
Ordering code	CM3PF06-P3
Type	CM3PF flat type control set(black)
Applicable products	CM3PF05 CM3PF06 CM3PF08
Ordering code	CM3PF06-P4
Type	CM3PF flat type control set(yellow)
Applicable products	CM3PF05 CM3PF06 CM3PF08



CM3



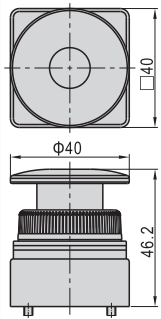
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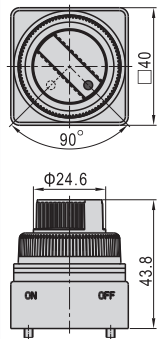


### CM3PM06-P



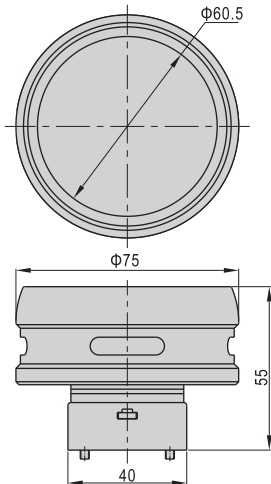
Ordering code	CM3PM06-P1
Type	CM3PM mushroom type control set(green)
Applicable products	CM3PM05 CM3PM06 CM3PM08
Ordering code	CM3PM06-P2
Type	CM3PM mushroom type control set(red)
Applicable products	CM3PM05 CM3PM06 CM3PM08
Ordering code	CM3PM06-P3
Type	CM3PM mushroom type control set(black)
Applicable products	CM3PM05 CM3PM06 CM3PM08
Ordering code	CM3PM06-P4
Type	CM3PM mushroom type control set(yellow)
Applicable products	CM3PM05 CM3PM06 CM3PM08

### CM3HS06-P



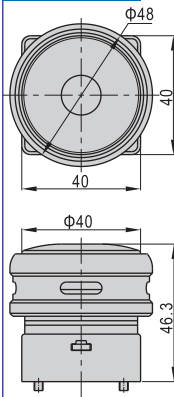
Ordering code	CM3HS06-P1
Type	CM3HS selector type control set(green)
Applicable products	CM3HS05 CM3HS06 CM3HS08
Ordering code	CM3HS06-P2
Type	CM3HS selector type control set(red)
Applicable products	CM3HS05 CM3HS06 CM3HS08
Ordering code	CM3HS06-P3
Type	CM3HS selector type control set(black)
Applicable products	CM3HS05 CM3HS06 CM3HS08
Ordering code	CM3HS06-P4
Type	CM3HS selector type control set(yellow)
Applicable products	CM3HS05 CM3HS06 CM3HS08

### CM3PMX06-P



Ordering code	CM3PMX06-P1
Type	CM3PMX big mushroom type control set(green with guard)
Applicable products	CM3PMX05 CM3PMX06 CM3PMX08
Ordering code	CM3PMX06-P2
Type	CM3PMX big mushroom type control set(red with guard)
Applicable products	CM3PMX05 CM3PMX06 CM3PMX08
Ordering code	CM3PMX06-P3
Type	CM3PMX big mushroom type control set(black with guard)
Applicable products	CM3PMX05 CM3PMX06 CM3PMX08
Ordering code	CM3PMX06-P4
Type	CM3PMX big mushroom type control set(yellow with guard)
Applicable products	CM3PMX05 CM3PMX06 CM3PMX08

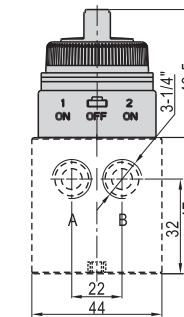
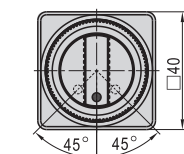
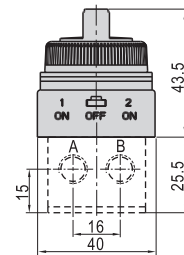
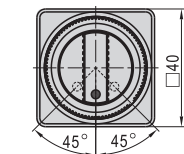
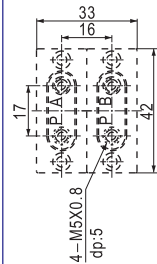
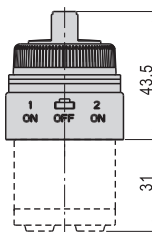
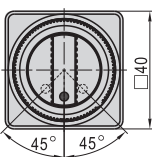
### CM3PMS06-P



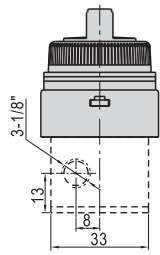
Ordering code	CM3PMS06-P1
Type	CM3PMS mushroom type control set(green with guard)
Applicable products	CM3PMS05 CM3PMS06 CM3PMS08
Ordering code	CM3PMS06-P2
Type	CM3PMS mushroom type control set(red with guard)
Applicable products	CM3PMS05 CM3PMS06 CM3PMS08
Ordering code	CM3PMS06-P3
Type	CM3PMS mushroom type control set(black with guard)
Applicable products	CM3PMS05 CM3PMS06 CM3PMS08
Ordering code	CM3PMS06-P4
Type	CM3PMS mushroom type control set(yellow with guard)
Applicable products	CM3PMS05 CM3PMS06 CM3PMS08

### CM3HD06-P

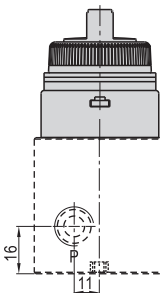
#### CM3HD05 type



#### CM3HD06 type



#### CM3HD08 type



Ordering code	CM3HD06-P1
Type	CM3HD double-selector type control set(green)
Applicable products	CM3HD05 CM3HD06 CM3HD08
Ordering code	CM3HD06-P2
Type	CM3HD double-selector type control set(red)
Applicable products	CM3HD05 CM3HD06 CM3HD08
Ordering code	CM3HD06-P3
Type	CM3HD double-selector type control set(black)
Applicable products	CM3HD05 CM3HD06 CM3HD08
Ordering code	CM3HD06-P4
Type	CM3HD double-selector type control set(yellow)
Applicable products	CM3HD05 CM3HD06 CM3HD08

Note: CM3HD control joint can be ordered individually, but should be matched with the body of CM3HD.

