

## Directional control valves with hand lever type WMM

Sizes 6 10 16 25 up to 35MPa up to 450 L/min



### Features:

- Direct actuated directional spool valve with hand lever
- With spring return or detent, optional
- For subplate mounting



### Functional description, section

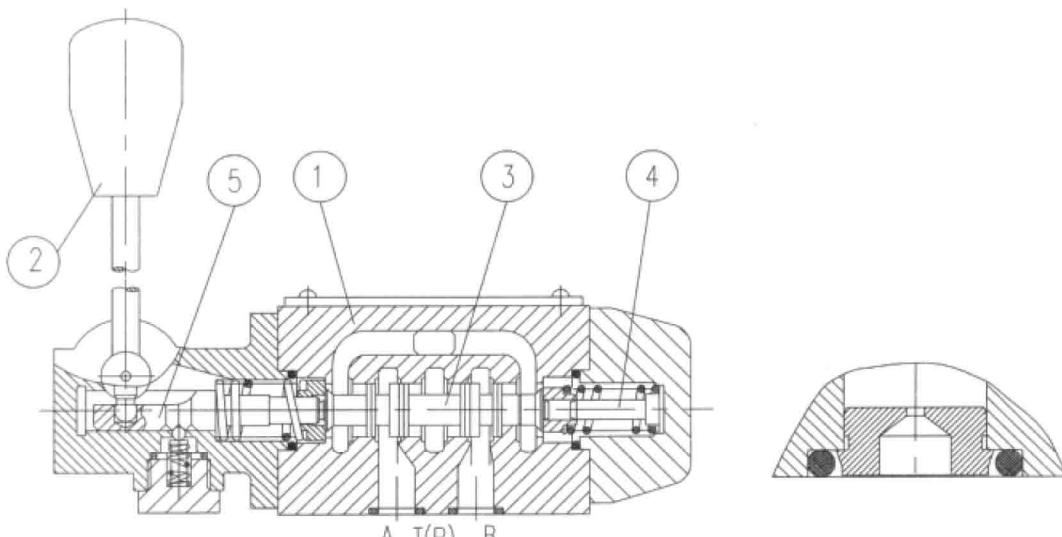
The type WMM valves are hand lever actuated directional spool valves. They control the start, stop and direction of a flow.

The directional valves basically comprise of a housing (1), hand lever(2), control spool (3), as well as one or two return springs (4). In the unoperated condition the control spool (3) is the neutral or its initial position by the return springs(4). The control spool(3) is actuated via the hand lever (2), this acts via a joint and the pin(5) directly onto the control spool (3). The spool is thereby moved out of its rest position into its required switched position. After the hand lever (2) has been returned to the switched position zero, the spool (3) is returned to the neutral position via the return springs (4).

Type H-4WMM.../F... (with detent)

These valves are either 2 or 3 position directional control valves which are fitted with a detent (6), which operates in all of the switched positions.

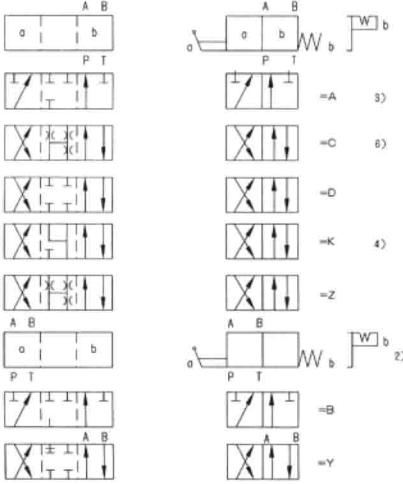
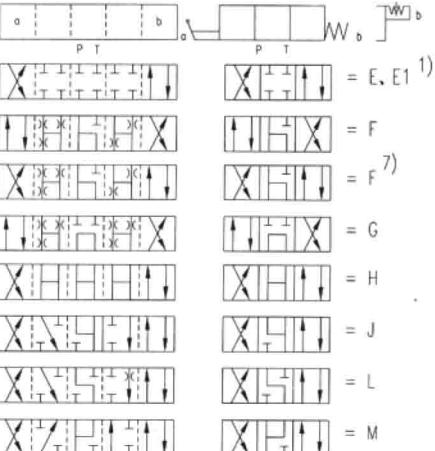
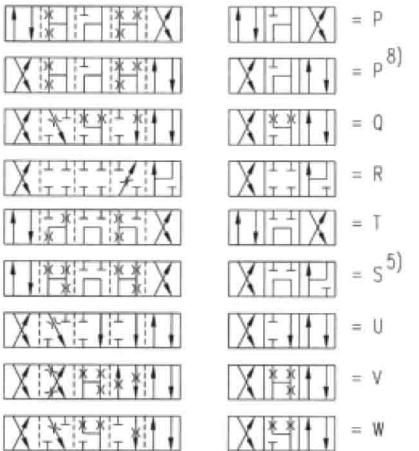
Required surface finish  
of mating piece



Type 4WMM6

Cartridge throttle

## Ordering details

H-	WM		/		*
35MPa(Only Size16. 25)					Further details in clear text
3 Service ports =3 4 Service ports =4					No code = Mineral oil V = Phosphate ester
Size 6 =6 Size 10 =10 Size 16 =16 Size 25 =25					Only for Size 6 and 10 Without throttle insert No code = Throttle Φ 0.8mm B08 = Throttle Φ 1.0mm B10 = Throttle Φ 1.2mm B12 = Note: Size 16 25 without throttle
					No code = Without detent F = With detent
				50=	Series50 ( 50 to 59: unchanged installation and connection dimensions )
				10=	Series10 ( 10 to 19: unchanged installation and connection dimensions ) (For Size 10)
					

Example: Spool E on the side "a".

Order example: ...EA...

Spool E on the side "b".

Order example: ...EB...

Spool E1: P A/B preview port (only for Size 6)

For Size 10, Spool B, Y hand lever on side B.

Spool A and B only for Size 6 and 10.

Spool K only for Size 16 and 25.

Spool S only for Size 16.

For Size 16 and 25, spool C is the same as spool H.

For Size 16 and 25, spool D is the same as spool E.

Only for Size 16 and 25

Only for Size 16 and 25

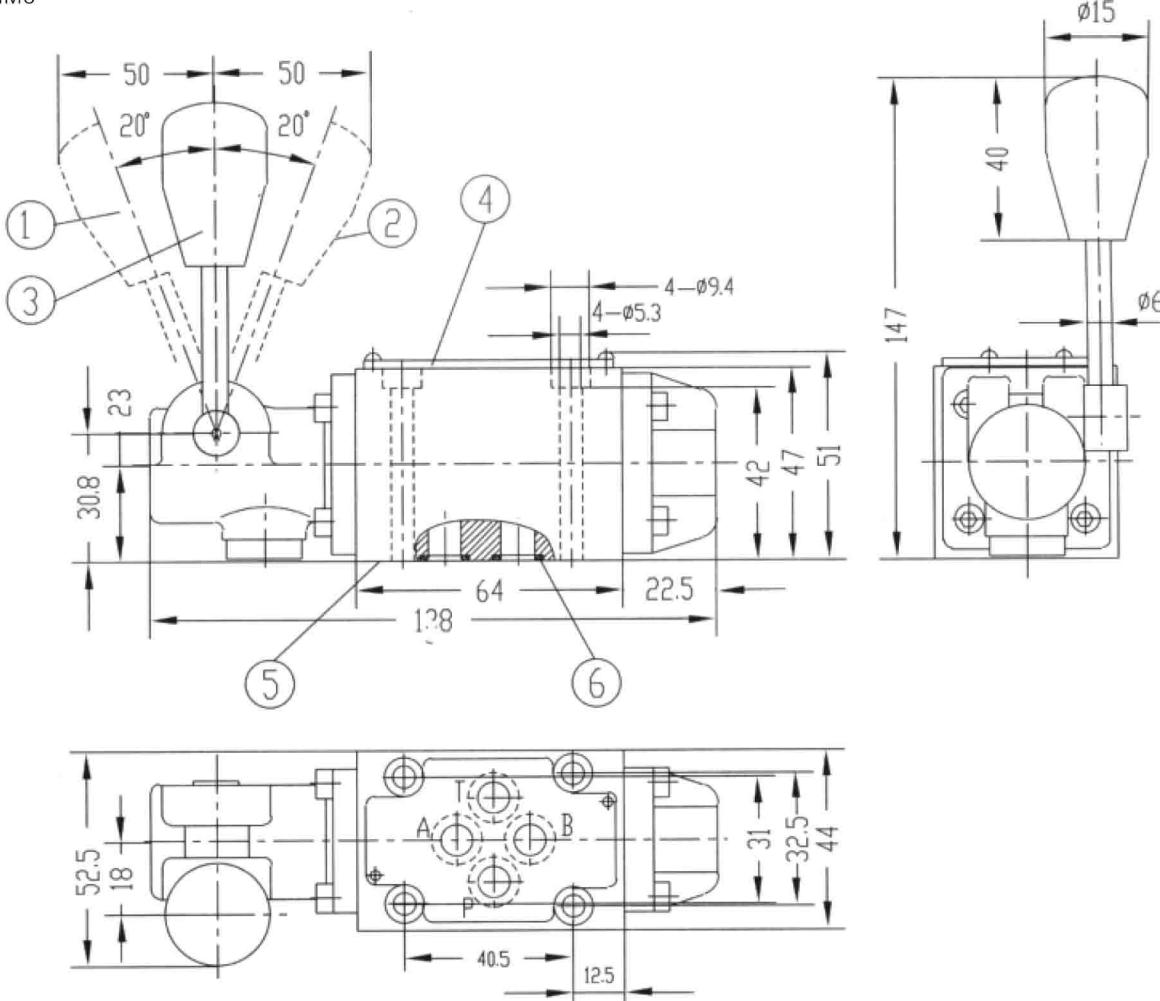
## Technical data

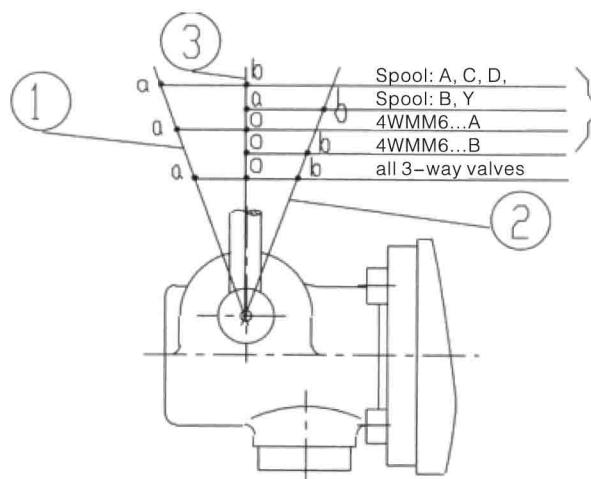
Size		6	10	16	25	
Working pressure	Port A, B, P (MPa)	to 31.5		to 35		
	Port T (MPa)	to 16	to 15	to 25	to 25	
	Max.fluid(L/min)	to 60	to 100	to 300	to 450	
Flow cross section (control position O)		for symbol Q, 6% of nominal cross section for symbol W, 3% of nominal cross section			for symbol Q, V, 16% of nominal cross section for symbol W, 3% of nominal cross section	
Pressure fluid						Mineral oil or Phosphate ester
Oil temperature range (°C)		-30~+ 80				
Viscosity range (mm <sup>2</sup> /s)		2.8~+ 500				
Weight Kg		approx 1.4	approx 3.3	approx 8	approx 17	
Control power of push lever (N)		without return pressure approx 20 without return pressure approx 30	With detent approx 16 to 23 Without detent approx 20 to 27	approx 75	approx 120	

## Unit dimensions

Dimensions in mm

Type WMM6



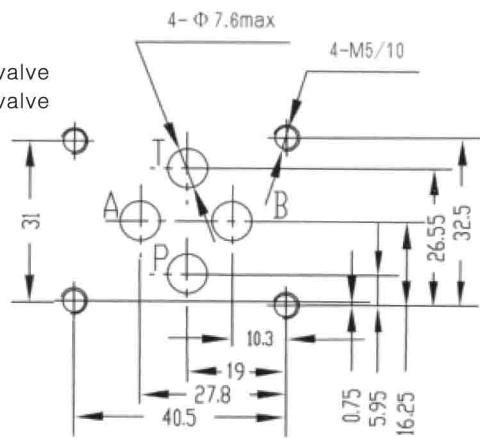


switch position

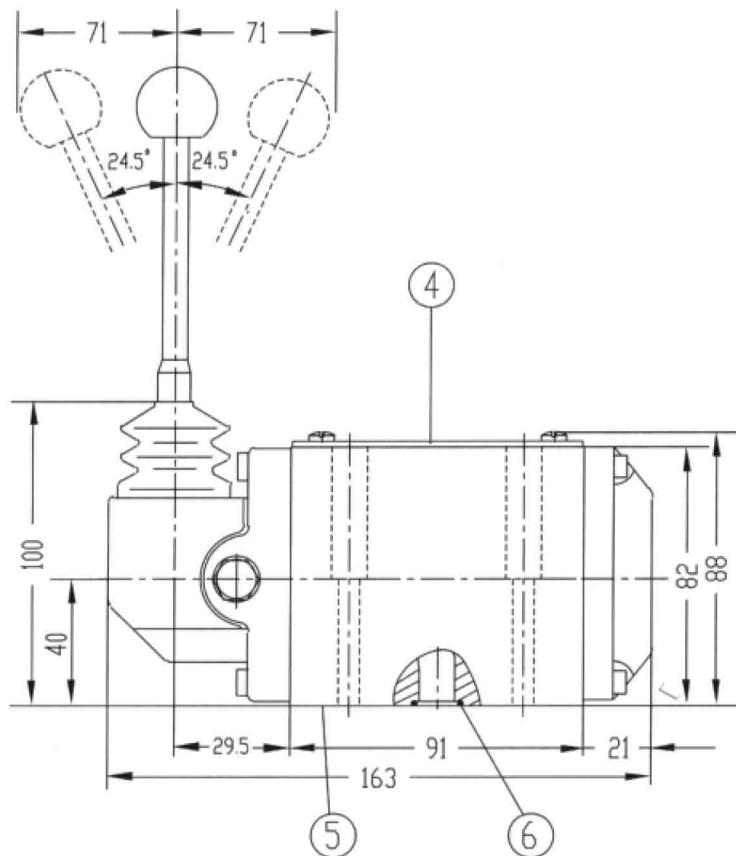
Subplate  
G341/01 (G1/4"); G341/02 (M14X1.5)  
G342/01 (G378"); G342/02 (M18X1.5)  
G502/01 (G1/2"); G502/02 (M22X1.5)

- 1.Switch position a
- 2.Switch position b
- 3.Switch position o, a, b (a and b on 2-position valve)
- 4.Name plate
- 5.Connection surface
- 6.O-ring 9.25X1.78 (for ports A, B, P and T)

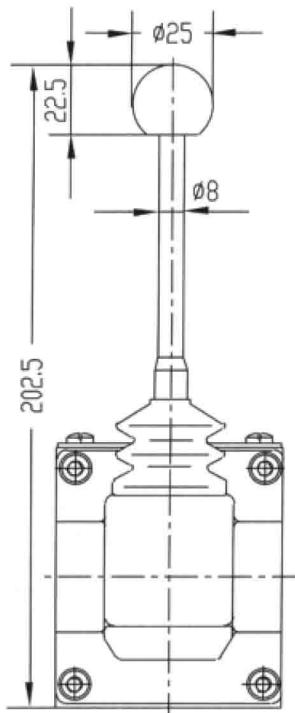
Unit dimensions of ports

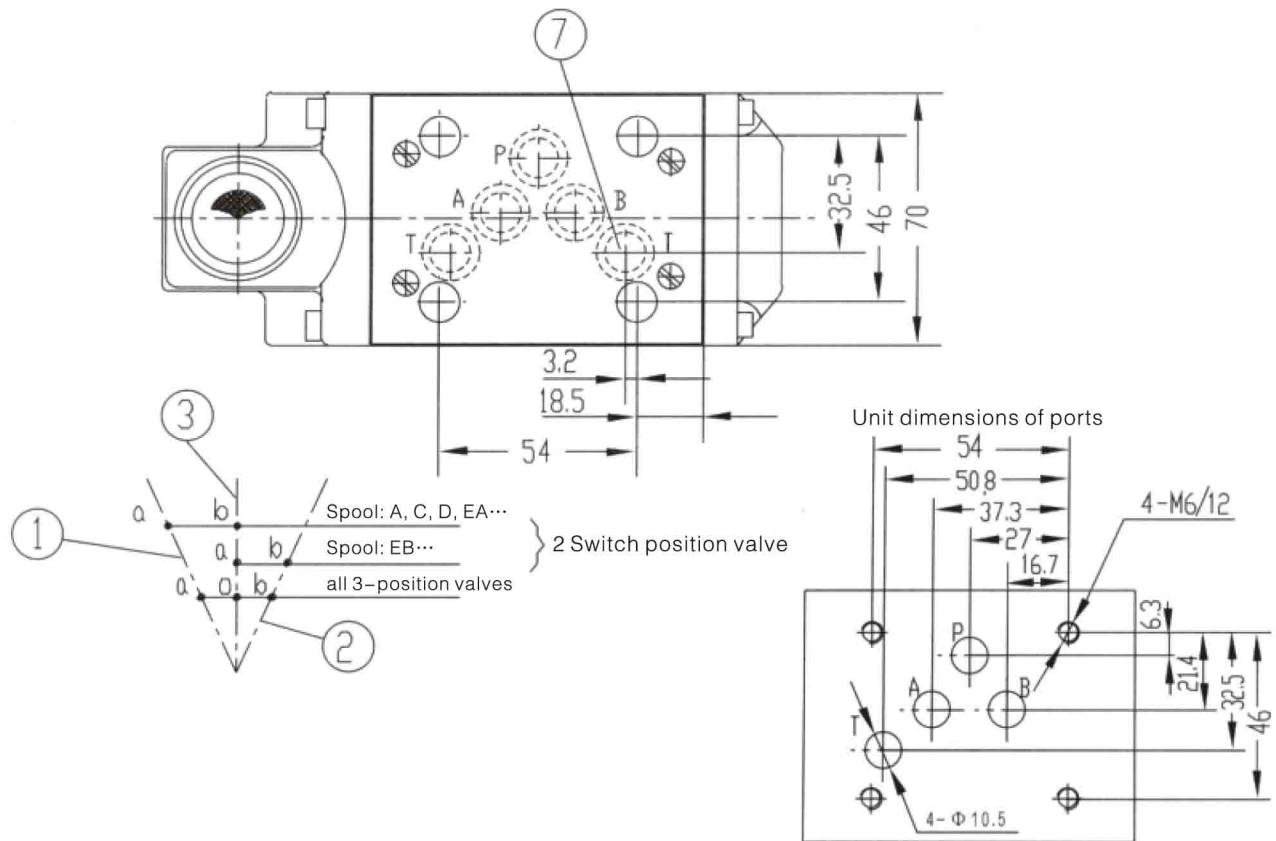


Type WMM10(with detent)



2-way valve, the hand lever of spool B,  
Y on side port B



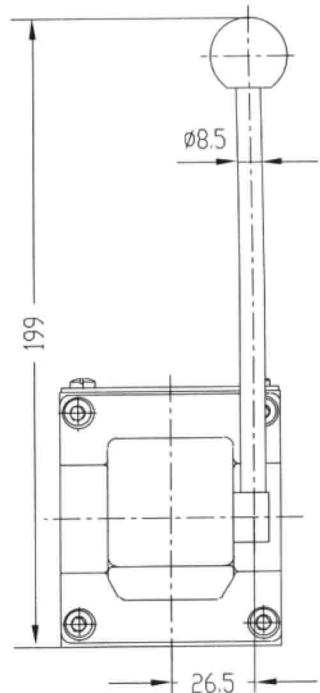
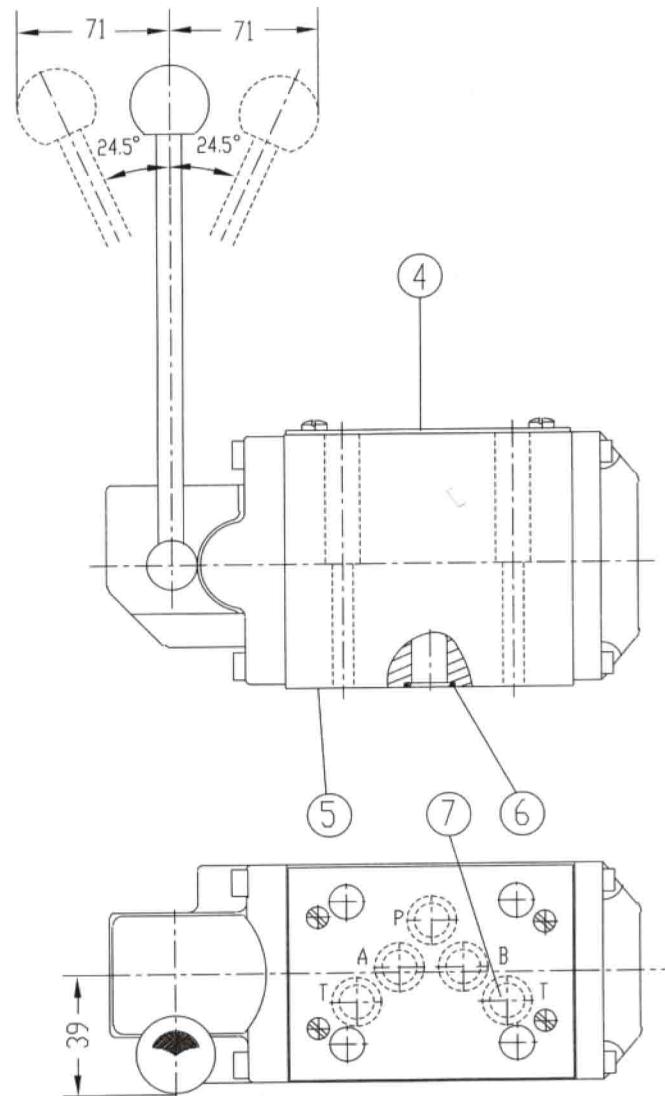


Subplate  
G66/01 (G3/8"); G66/02 (M18X1.5)  
G67/01 (G1/2"); G67/02 (M22X1.5)  
G534/01 (G3/4"); G534/02 (M27X2)

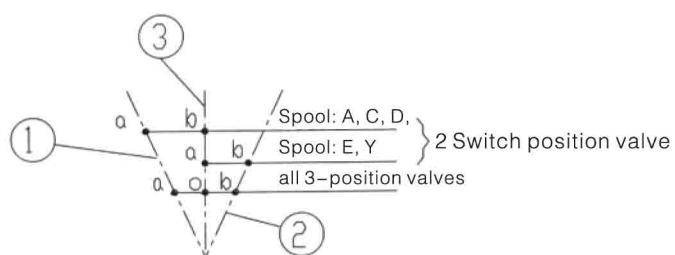
- 1.Switch position a
- 2.Switch position b
- 3.Switch position o, a, b  
(a and b on 2-position valve)
- 4.Name plate
- 5.Connection surface
- 6.O-ring12X2 (for ports A, B, P and T)
- 7.When using control piece, may regarded as assistant return port

Type WMM10(with detent)

The other Unit dimensions  
see "with detent"

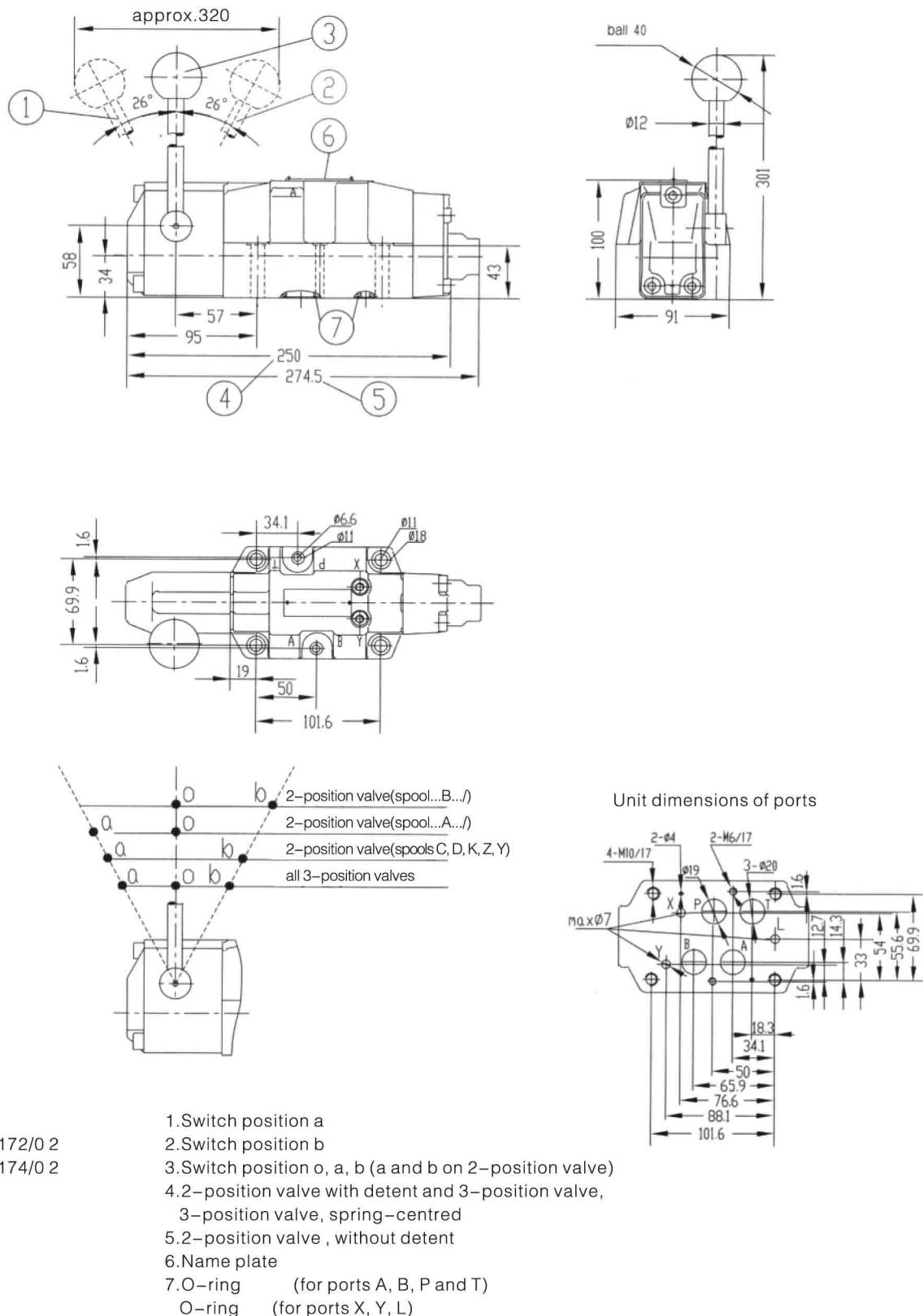


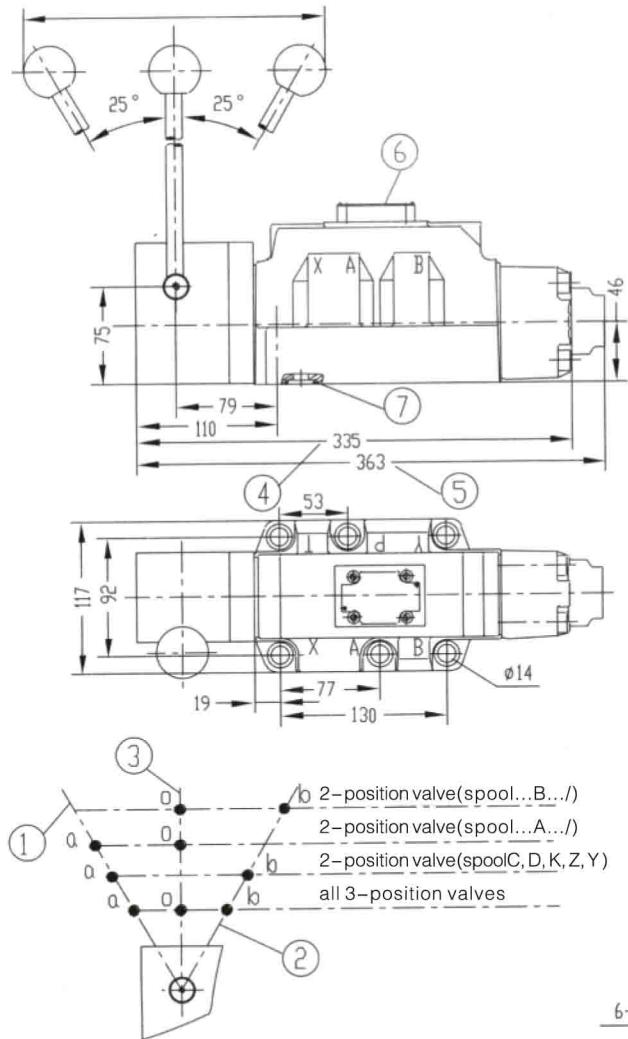
2-way valve, the hand lever  
of spool B, Y on side port B



- 1.Switch position a
- 2.Switch position b
- 3.Switch position o, a, b  
(a and b on 2-position valve)
- 4.Name plate
- 5.Connection surface
- 6.O-ring (for ports A, B, P and T)
- 7.When using control piece, may regarded  
as assistant return port

Type WMM16





Unit dimensions of ports

Subplate

G151/01 (G1"); G151/02 (M33X2)  
G154/01 (G1 1/4"); G154/02 (M42X2)  
G156/01 (G1 1/2"); G156/02 (M48X2)

1. Switch position a

2. Switch position b

3. Switch position o (a and b on 2-position valve)

4. 2-position valve with detent and 3-position valve, 3-position valve, spring-centred

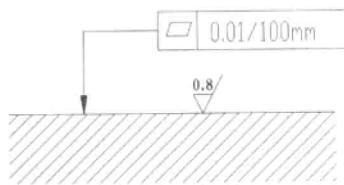
5. 2-position valve, without detent

6. Name plate

7. O-ring (for ports A, B, P and T)

O-ring (for ports X, Y, L)

Required surface finish  
of mating piece



Unit dimensions of ports

