

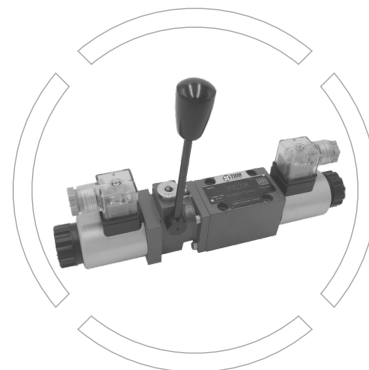
WEMM

Solenoid Operated Directional Valve with Emergency Handle

Size 6 to 10

Maximum working pressure 350 bar

Maximum working flow rate 120 L/min



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Features

- The opening, closing and direction of the flow controlled by the solenoid and manual
- Wet-pin solenoid with detachable coil
- The solenoid can rotate 90 °
- Subplate mounting



Function description, sectional drawing

The WEMM directional valve is a directional spool valve operated by solenoid and control handle. It controls the opening, closing and flow direction of liquid flow.

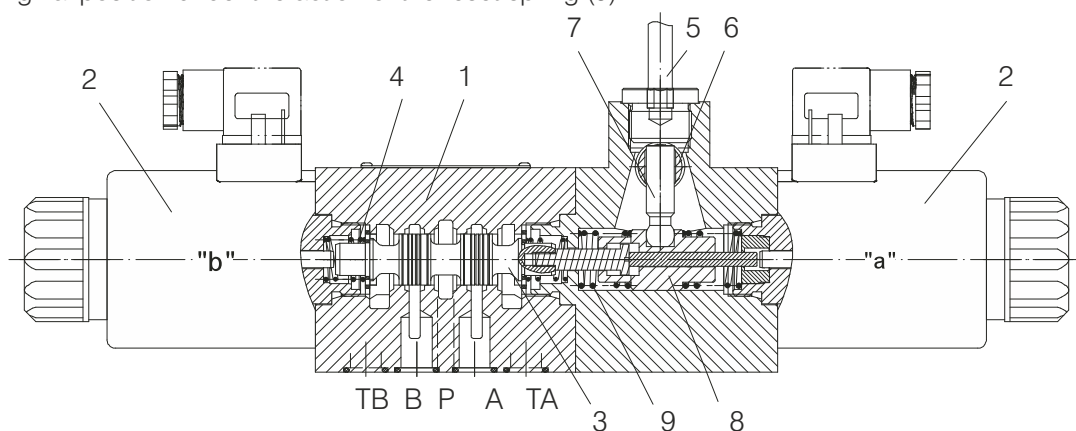
It is mainly composed of valve body (1), one or two solenoids (2), valve spool (3), reset spring (4) and manual control device.

Solenoid operation:

When the solenoid is de-energized, the valve spool (3) is held in the middle or original position by means of the reset spring (4). The force of the solenoid (2) acts on the valve spool (3) to push it from the stationary position to the terminal position. In this way, the pressure oil flows from P to A and B to T, or from P to B and A to T. After the solenoid (2) is de-energized, the reset spring (4) pushes the valve spool (3) back to its original position.

Auxiliary handle operation:

When the solenoid is not energized, the valve spool (3) can be moved by operating the auxiliary handle. Turn the auxiliary handle (5) to the right so that the operating force acts on the valve spool (3) through the spindle (6), the ball valve core (7) and the guide sleeve (8) to move it to the left. When the auxiliary handle (5) returns to the zero position, the valve spool (3) returns to the original position under the action of the reset spring (9).



Model 4WEMM10E...3XT/

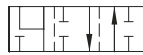
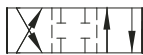
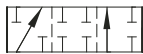
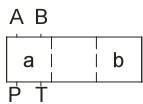
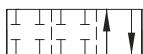
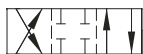
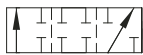
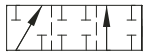
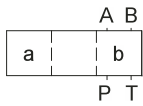
Ordering Code

WEMM									
J / C									
*									
3 way	=3								sealing material
4 way	=4								No code= NBR seals
with auxiliary handle									V= FKM seals
solenoid spool valve	=WEMM								(consult for other seals)
size 6	=6								No code= without plug-in throttle
size 10	=10								B08= throttle hole diameter 0.8mm
symbols									B10= throttle hole diameter 1.0mm
size 6									B12= throttle hole diameter 1.2mm
design serial number	=6X								Z4= standard plug
size 10									Z5L= large right angle plug with light
design serial number	=3X								FS2= deutsch waterproof plug
THM									No code= no manual emergency operation
									N9= with hidden manual emergency operation
wet-pin solenoid with detachable coil									
12V DC									
24V DC									
28V DC									
220V AC, 50HZ or 60HZ									
solenoid with rectifier for AC voltage 220V									

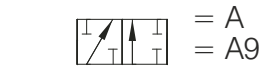
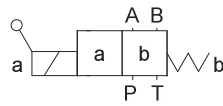


Functional symbols

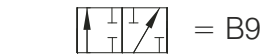
Transition function



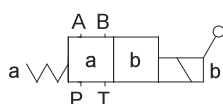
Spool valve function



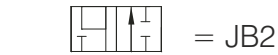
(The T port serves as drain port)



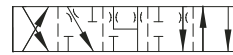
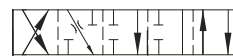
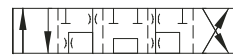
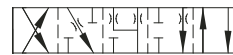
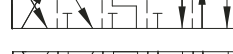
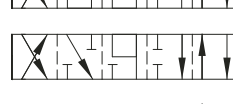
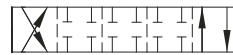
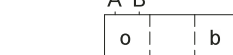
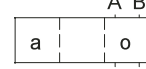
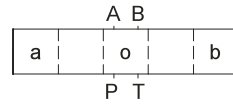
(The T port serves as drain port)



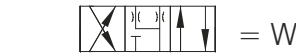
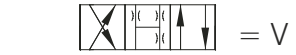
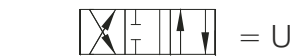
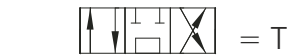
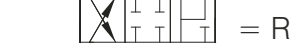
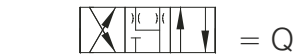
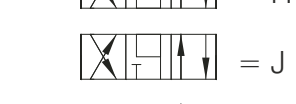
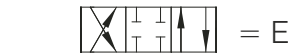
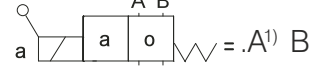
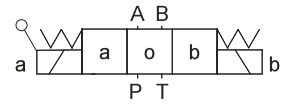
(The T port serves as drain port)



Transition function



Spool valve function



1) For example: .

The function symbol EA means

the coil on side A

Note: Functions A9 and B9 are only used

as pilot valves



Technical Parameters

Hydraulic			Size 6	Size 10
Flow Max.		l/min	up to 80(=); up to 60(~)	up to 120
Operating pressure max	Ports A, B, P	Bar	350	315
	Ports T	Bar	up to 210 (=); up to 160 (~) ^③	
Pressure Fluid: ①Suitable for NBR and FKM seals; ②only suitable for FKM seals			Mineral oil (HL, HLP) to DIN 51524 ^① fast bio-degradable pressure fluids to VDMA 24568; HETG (rape seed oil) ^① HEPG (Polyglycol); HEES (Synthetic ester); ^② other fluids on request	
Pressure fluid temperature range	NBR Seals	°C	-30+80	
	FKM Seals	°C	-20+80	
Viscosity range			2.8 to 500	
Degree of fluid contamination			Maximum permissible degree of contamination of fluid is to NAS 1638 class 9 We therefore recommend a filter minimum retention rat of $\beta_{10} \geq 25$	

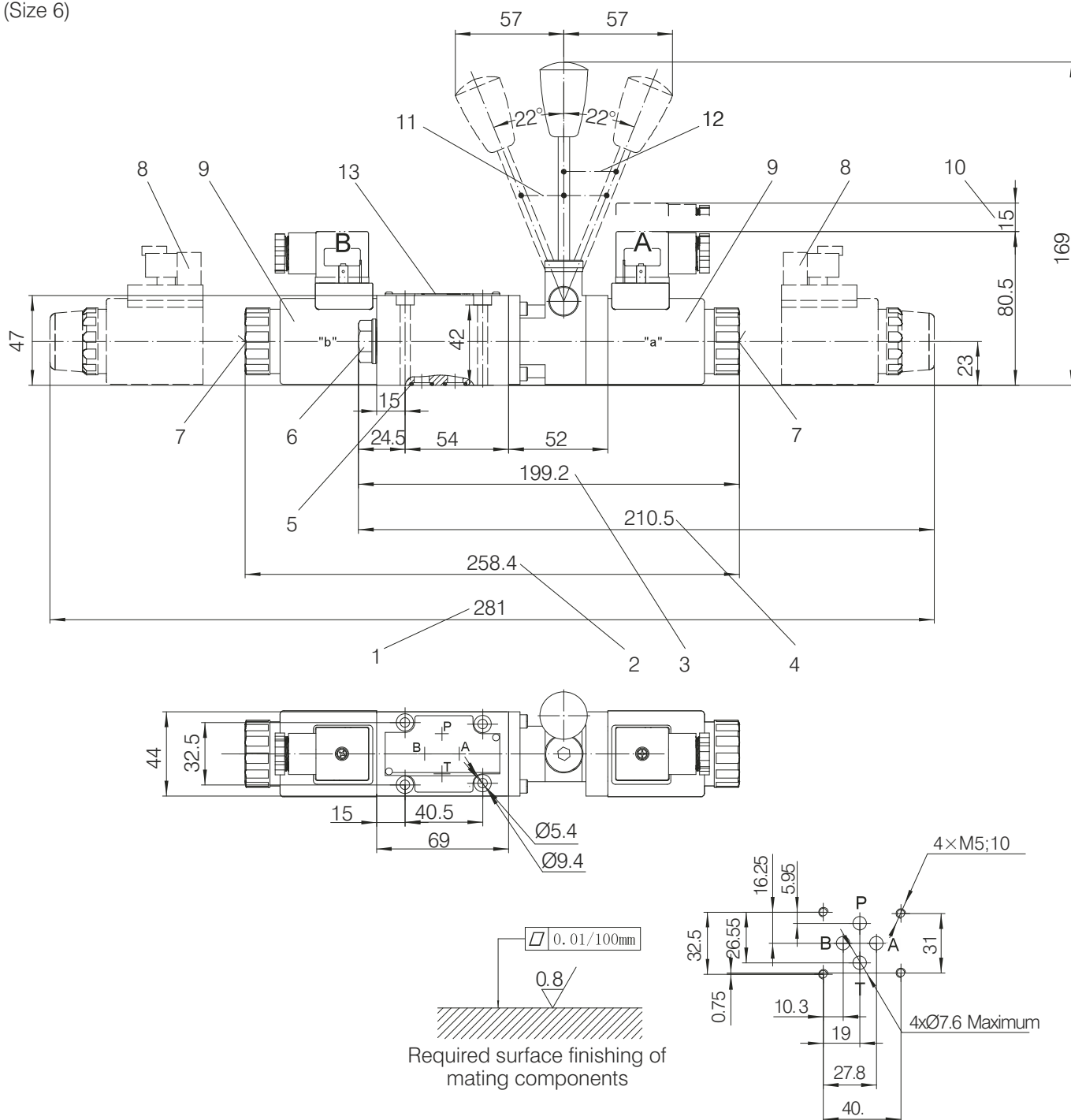
Electrical			Size 6		Size 10	
			DC	AC 50/60 Hz	DC	AC 50/60 Hz
Voltage available	V		12, 24, 48	110, 120, 220, 240	12, 24, 48	110, 120, 220, 240
Voltage tolerance (normal voltage)	%		±10	±10	±10	±10
Power consumption	W		32	-	<40	50
Holding current	A		-	-	-	0.9
In-rush current	A		-	<2	-	<2
Shifting time to ISO 6403	On	ms	25 to 45	10 to 20	40 to 60	15 to 25
	Off	ms	10 to 25	15 to 40	20 to 30	20 to 30
Shifting frequency	Sw/h		up to 15000	up to 7200	up to 15000	up to 7200
Insulation to DIN 40 050			IP65	IP65	IP65	IP65
Coil temperature	°C		up to +155	up to +180	up to +155	up to +180



Unit Dimensions

(Dimensions in mm)

Valve with DC or AC rectified solenoid
(Size 6)



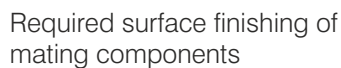
- 1 Size of 3-position valve (waterproof type)
- 2 Size of 3-position valve
- 3 Size of 2-position valve
- 4 Size of 2-position valve (waterproof type)
- 5 O-ring 9.25x1.78 (for oil ports P, A, B, T)
- 6 Plug for 2-position valve
- 7 Hidden emergency button
- 8 Deutsch plug
- 9 Solenoids
- 10 Space required to remove plug
- 11 Switching position for 3-position valve
- 12 Switching position for 2-position valve

Valve fixing screw
M5x50-10.9 grade GB/T70.1-2000
Tightening torque MA=7.8Nm

It must be ordered separately
if connection subplate is needed.
Subplate model:
G341/01 (G1/4") ; G341/02 (M14x1.5)
G342/01 (G3/8") ; G342/02 (M18x1.5)
G502/01 (G1/2") ; G502/02 (M22x1.5)

(Dimensions in mm)

(Size 6)



- 1 Size of 3-position valve
- 2 Size of 2-position valve
- 3 Hidden emergency button
- 4 Solenoids
- 5 Name plate
- 6 Space required to remove plug
- 7 Switching position for 3-position valve
- 8 Switching position for 2-position valve
- 9 O-ring 9.25x1.78 (for oil ports P, A, B, T)
- 10 Plug for 2-position valve

Valve fixing screw
M5x50-10.9 grade GB/T70.1-2000
Tightening torque $M_A=7.8\text{Nm}$

It must be ordered separately
if connection subplate is needed.

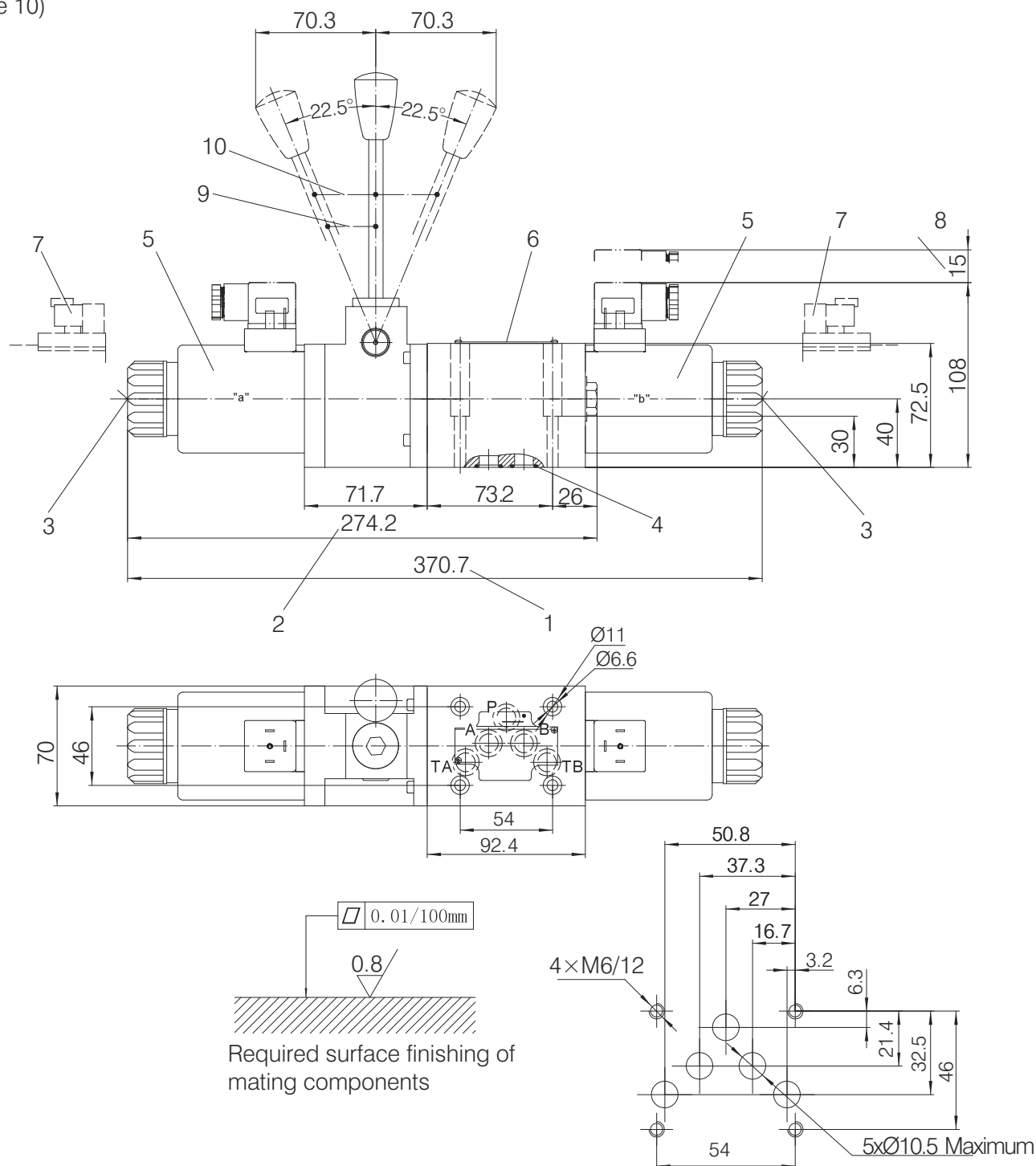
G341/01 (G1/4") ; G341/02 (M14x1.5)
G342/01 (G3/8") ; G342/02 (M18x1.5)
G502/01 (G1/2") ; G502/02 (M22x1.5)



Unit Dimensions

(Dimensions in mm)

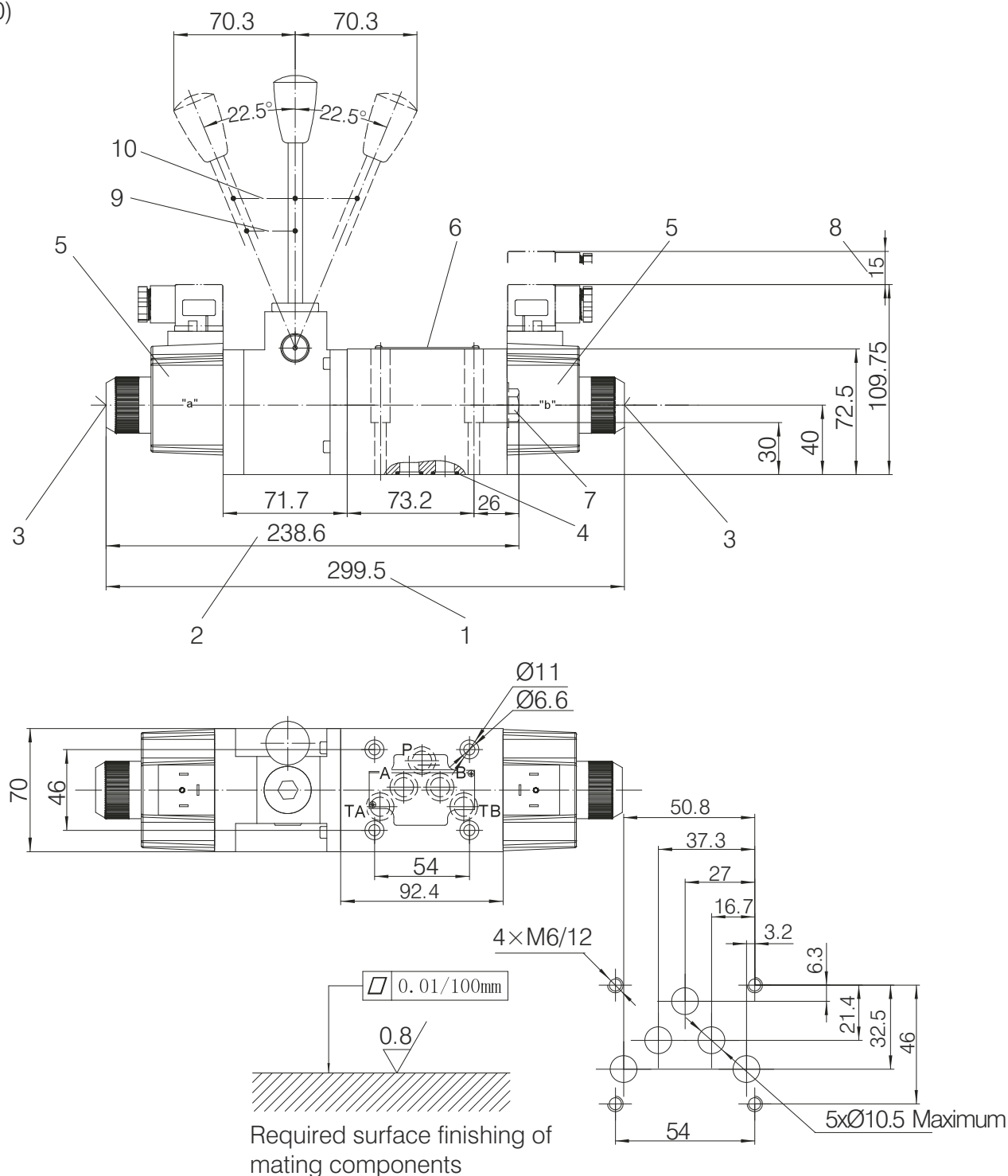
Valve with DC or AC rectified solenoid
(Size 10)



- 1 Size of 3-position valve
- 2 Size of 2-position valve
- 3 Hidden emergency button
- 4 O-ring 12x2 (for oil ports P, A, B, T)
- 5 Solenoids
- 6 Name plate
- 7 Deutsch plug
- 8 Space required to remove plug
- 9 Switching position for 2-position valve
- 10 Switching position for 3-position valve

Valve fixing screw
M6x40-10.9 grade GB/T70.1-2000
Tightening torque MA=13.7Nm
It must be ordered separately
if connection subplate is needed.
Subplate model:
G66/01 (G3/8") ; G66/02 (M18x1.5)
G67/01 (G1/2") ; G67/02 (M22x1.5)
G534/01 (G3/4") ; G534/02 (M27x2)

Valve with AC solenoid
(Size 10)



- 1 Size of 3-position valve
- 2 Size of 2-position valve
- 3 Hidden emergency button
- 4 O-ring 12x2 (for oil ports P, A, B, T)
- 5 Solenoids
- 6 Name plate
- 7 Deutsch plug
- 8 Space required to remove plug
- 9 Switching position for 2-position valve
- 10 Switching position for 3-position valve

Valve fixing screw
M6x40-10.9 grade GB/T70.1-2000
Tightening torque MA=13.7Nm
It must be ordered separately
if connection subplate is needed.
Subplate model:
G66/01 (G3/8") ; G66/02 (M18x1.5)
G67/01 (G1/2") ; G67/02 (M22x1.5)
G534/01 (G3/4") ; G534/02 (M27x2)

Revision 2025W11

