

Solenoid Directional Valve with Spool Position Monitoring

Model: WE/(26)...(QMBG24)



01

- ◆ Size 6 to 10
- ◆ Maximum working pressure 350 bar
- ◆ Maximum working flow 120 L/min

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Features

- The opening, closing and direction of flow controlled by solenoid
- Position monitoring by high voltage proximity switch
- Short response time, high induction frequency, good repeatability
- Accurately detect the spool switching position
- Non-contact induction to avoid wear and increase the service life

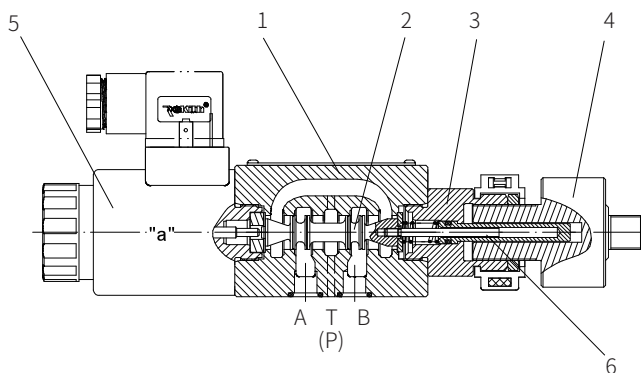
Function description, sectional drawing

The valve is composed of valve body (1), valve spool (2), transition joint (or transition cover) (3), sensor (4), solenoid (5), and sensing rod (or transition spool) (6).

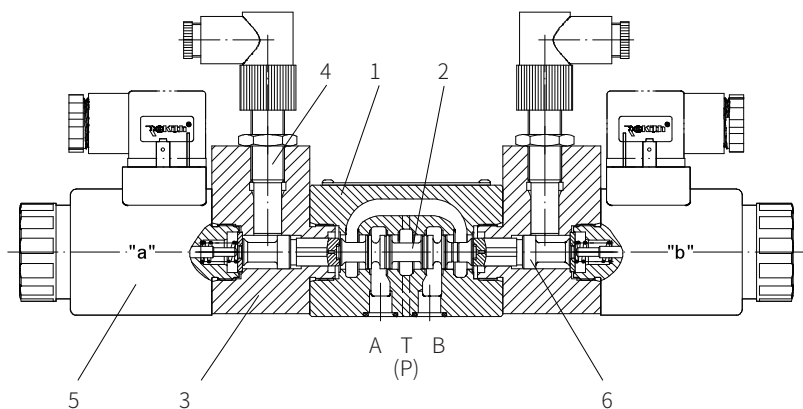
The valve spool is moved from the rest position to the required working position to realize the switching process by energizing or de-energizing solenoid. The fluid flows from P to A and B to T, or from P to B and A to T.

During the switching process, the signal is received through the proximity switch to feedback timely to the system whether the switching is in place and protect the system.

01



Model 4WE6D62J/CG24N9K4QMBG24



Model 4WE6E6XJ/26CG24N9Z5LG24WD

Models and specifications

Model WE.../...QMBG24

5	4	WE		D		J	C	G24			QMBG24	
Only for the 5-cavity design of specification 10												sealing material
4-way valve		=4										No code= NBR seals
solenoid spool valve		=WE										V= FKM seals (consult for other seals)
size 6												QMBG24= monitored spool position "b"
size 10												
functional symbols												
size 6 design serial number												Z4= standard plug
size 10 design serial number												Z5L= large right angle lamp plug
Rekith												No code= no manual emergency operation
wet-pin solenoid with detachable coil												N9= with manual emergency operation
												G24= 24V DC

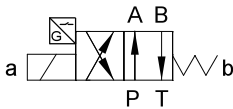
Models and specifications

Model WE.../26...

	WE		-	J	26	C									
3-way valve	=3														high voltage proximity switch
4-way valve	=4														G24ZO= straight
solenoid spool valve	=WE														connector without cable
size 6	=6														G24WO= angled
size 10	=10														connector without cable
functional symbols															G24ZD= straight
size 6 design serial number				=6X											connector with cable
size 10 design serial number				=3X											G24WD= angled
Rekith				=J											connector with cable
with position monitoring															G24ZOL= straight lamp
wet-pin solenoid with detachable coil						=C									connector without cable
24V DC															G24WOL= angled lamp
AC 220V-50Hz or 60Hz															connector without cable
220V AC with rectifier															G24ZDL= straight lamp
															connector with cable
															G24WDL= angled lamp
															connector with cable
															sealing material
															No code= NBR seals
															V= FKM seals
															(consult for other seals)
															Z4= standard plug
															Z5L= large right angle lamp plug
															No code= no manual emergency operation
															N9= with manual emergency operation

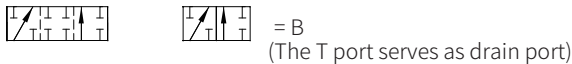
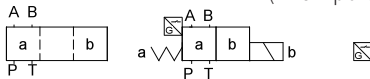
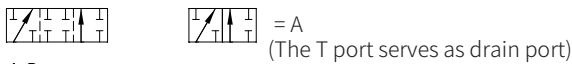
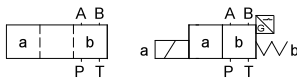
Functional symbols

Functional symbols of WE6 (10)D.../...QMBG24



Functional symbols of WE6 (10)D.../26...

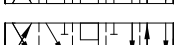
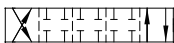
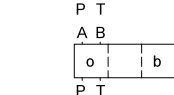
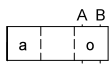
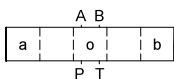
Transition function Spool valve function



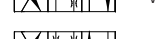
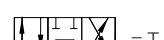
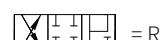
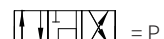
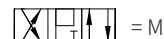
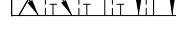
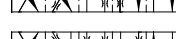
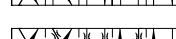
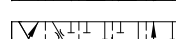
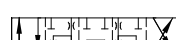
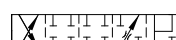
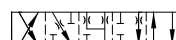
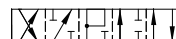
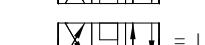
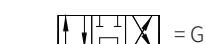
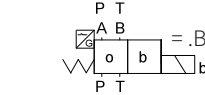
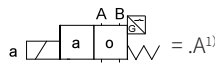
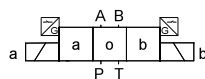
1) For example:

the function symbol A means the
solenoid on side A

Transition function



Spool valve function



Technical parameters

Working pressure	Port A,B,P	Mpa	to 35
	Port T	Mpa	to 16(AC), to 21(DC)
Medium	Mineral hydraulic oil or phosphate hydraulic oil		
Viscosity range	mm ² /s	2.5 to 500	
Temperature range	°C	-30 to +80	

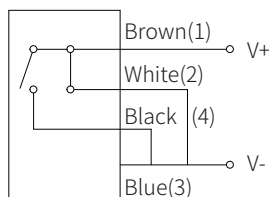
Note: When the working pressure exceeds the allowable pressure, port T must be used as drain port for symbols A and B.

Note: For characteristic curves and limits, see the catalogue of WE solenoid directional valve .

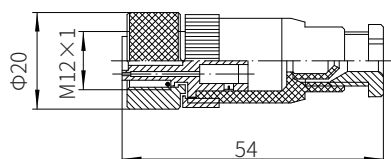
Electrical connection

Electrical connection of high voltage proximity switch: achieved by connecting plug with connection thread M12×1

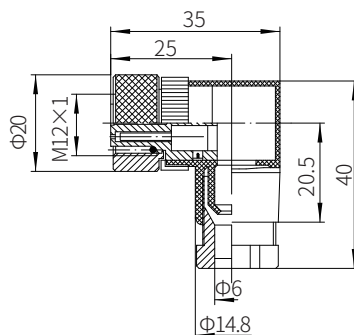
Connection voltage	24V±25%(DC)
Peak voltage	≤10%
Load capacity	Max. 200mA
Sensing frequency	600Hz



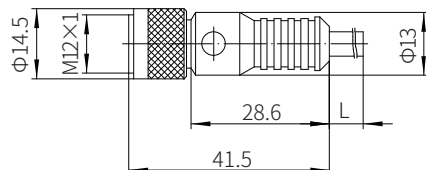
Right angle connector



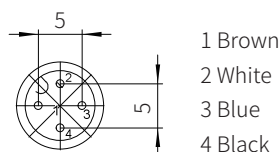
Angled connector



Cable connector (M12x1) (cable length 2m)



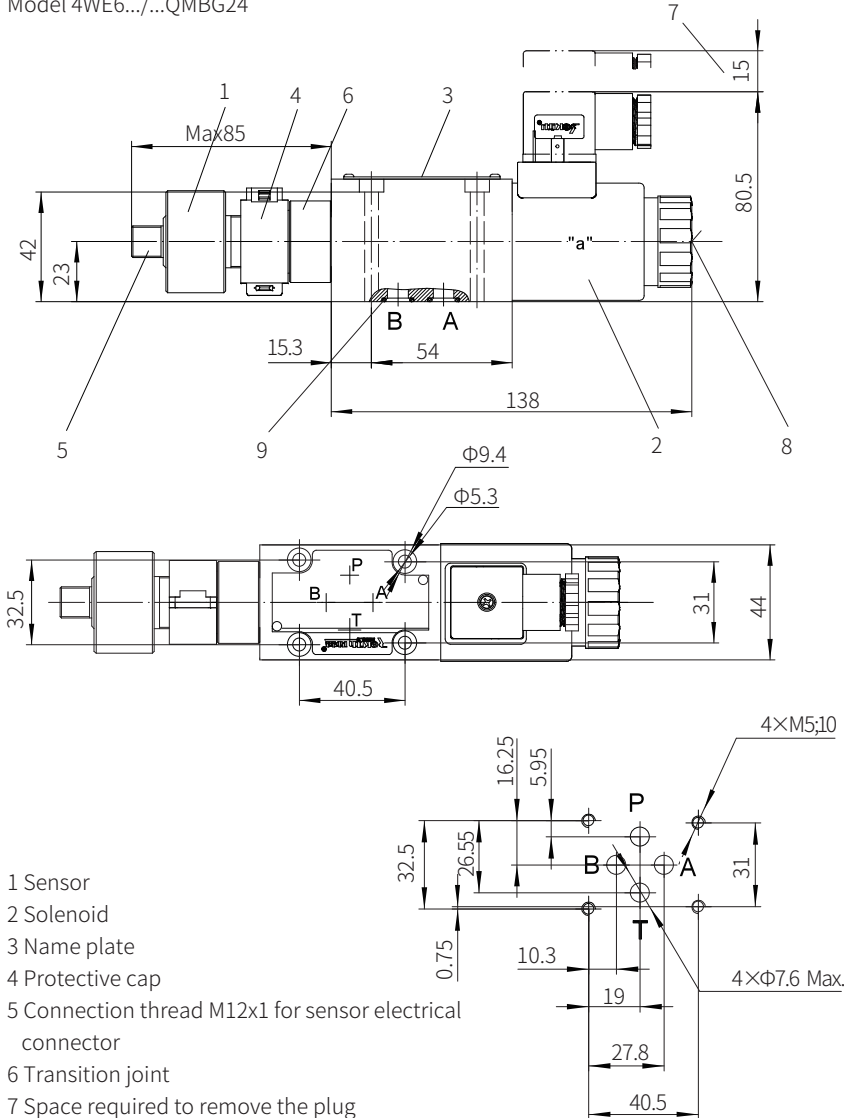
Pin position
from side of pin



Component size

Size unit: mm

Model 4WE6.../...QMBG24



- 1 Sensor
- 2 Solenoid
- 3 Name plate
- 4 Protective cap
- 5 Connection thread M12x1 for sensor electrical connector
- 6 Transition joint
- 7 Space required to remove the plug
- 8 Hidden manual emergency operation
- 9 O ring 9.25x1.78 (for oil ports P, A, B and T)

Valve fixing screw

M5×50-10.9 grade GB/T70.1-2000

Tightening torque $M_A=7.8\text{Nm}$

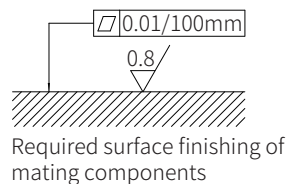
It must be ordered separately
if connection subplate is needed.

Subplate model:

G341/01 (G1/4"); G341/02 (M14x1.5)

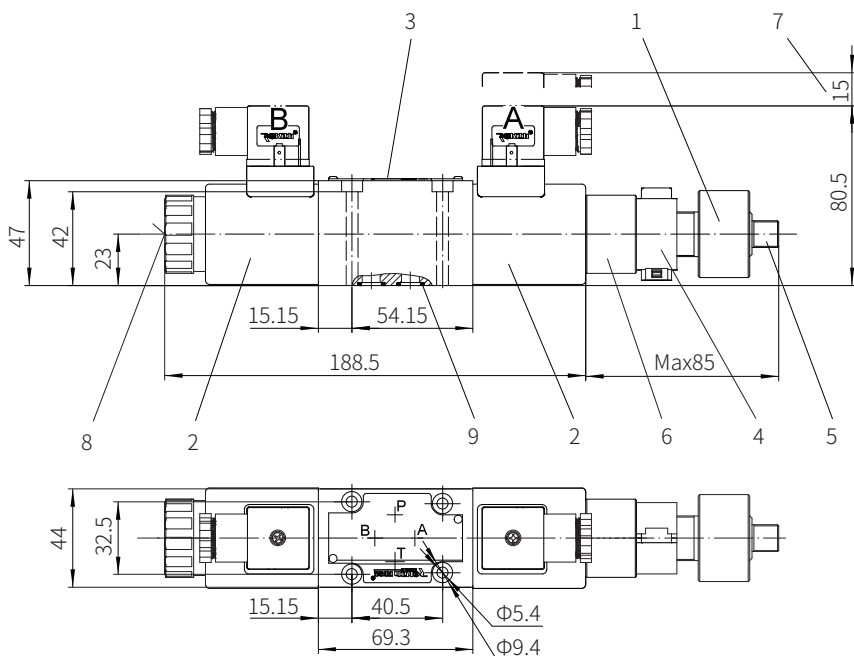
G342/01 (G3/8"); G342/02 (M18x1.5)

G502/01 (G1/2"); G502/02 (M22x1.5)



Component size
Size unit: mm

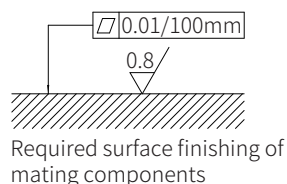
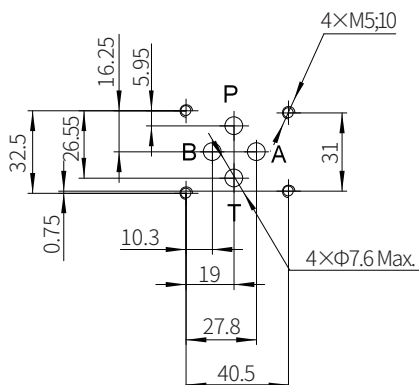
Model 4WE6.../...QMBG24



- 1 Sensor
 - 2 Solenoid
 - 3 Name plate
 - 4 Protective cap
 - 5 Connection thread M12x1 for sensor electrical connector
 - 6 Transition joint
 - 7 Space required to remove the plug
 - 8 Hidden manual emergency operation
 - 9 O ring 9.25x1.78 (for oil ports P, A, B and T)
- Valve fixing screw
 M5×50-10.9 grade GB/T70.1-2000
 Tightening torque $M_A=7.8\text{Nm}$

It must be ordered separately
 if connection subplate is needed.
 Subplate model:

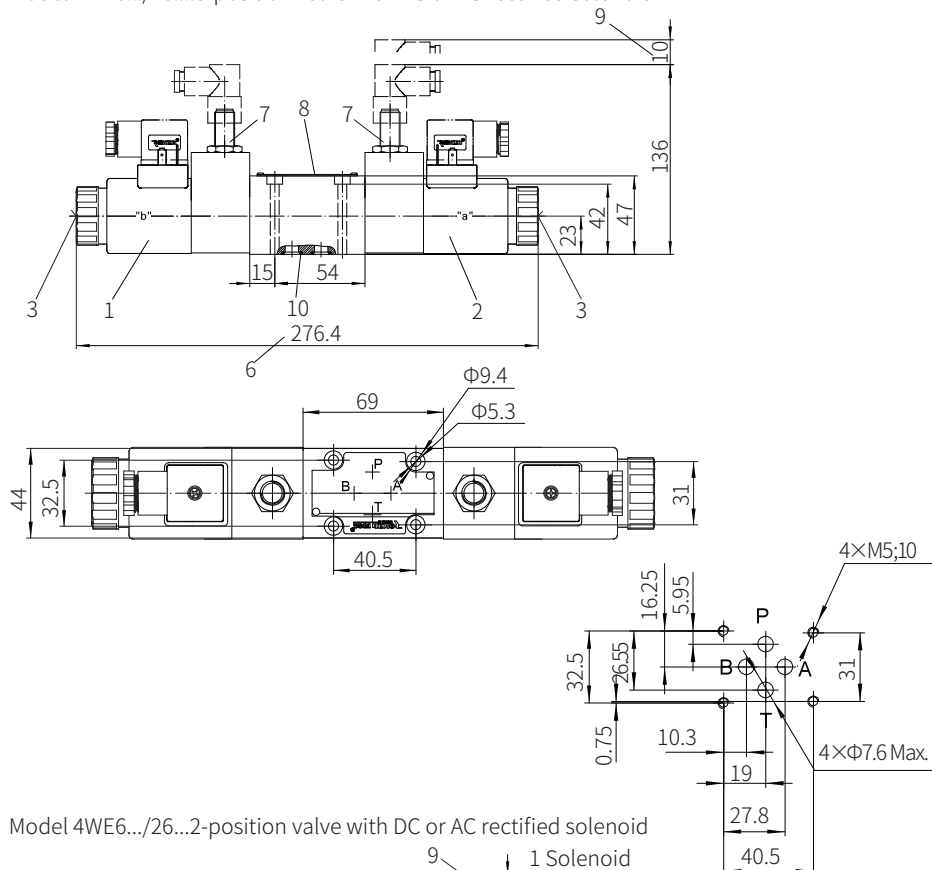
G341/01 (G1/4"); G341/02 (M14x1.5)
 G342/01 (G3/8"); G342/02 (M18x1.5)
 G502/01 (G1/2"); G502/02 (M22x1.5)



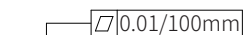
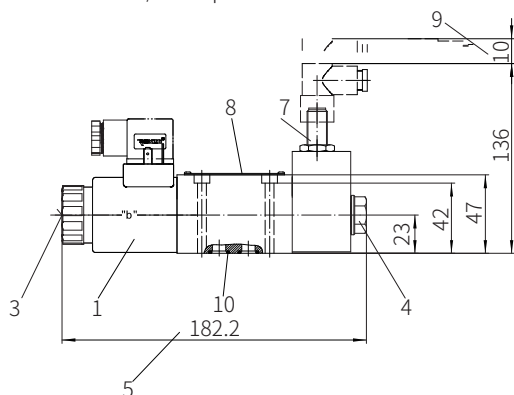
Component size

Size unit: mm

Model 4WE6.../26...3-position valve with DC or AC rectified solenoid



Model 4WE6.../26...2-position valve with DC or AC rectified solenoid

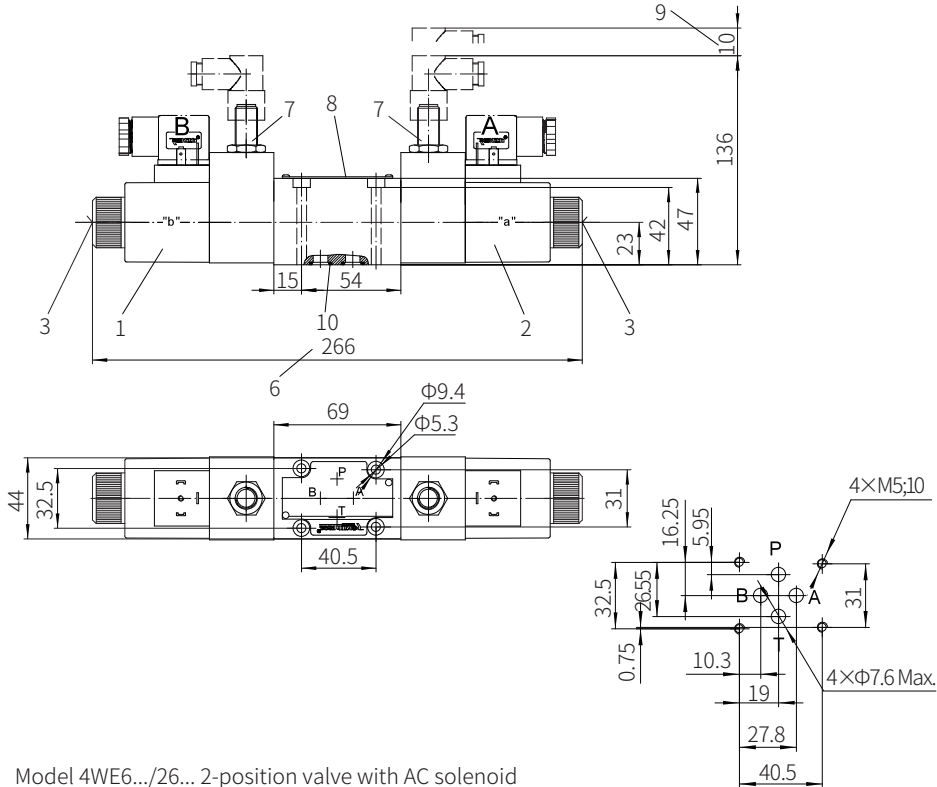


Required surface finishing of
mating components

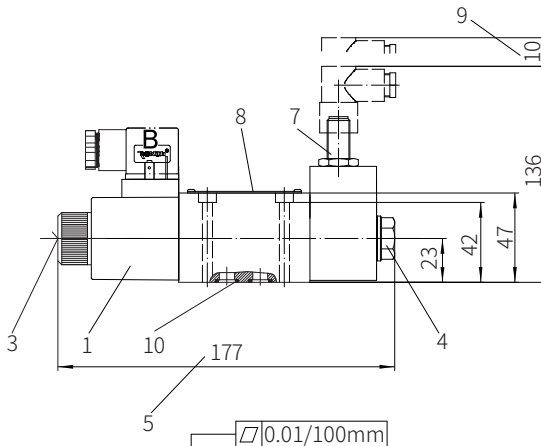
- 1 Solenoid
 - 2 Solenoid
 - 3 Hidden manual emergency operation
 - 4 Plug for 2-position valve
 - 5 Size for 2-position valve
 - 6 Size for 3-position valve
 - 7 High voltage proximity switch
 - 8 Name plate
 - 9 Space required to remove the connector
 - 10 O ring 9.25x1.78 (for oil ports P, A, B, T)
- Valve fixing screw
M5 × 50-10.9 grade GB/T70.1-2000
Tightening torque $M_A = 7.8 \text{ Nm}$
- It must be ordered separately
if connection subplate is needed.
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)

Component size
Size unit: mm

Model 4WE6.../26...3-position valve with AC solenoid



Model 4WE6.../26... 2-position valve with AC solenoid



- 1 Solenoid
- 2 Solenoid
- 3 Hidden manual emergency operation
- 4 Plug for 2-position valve
- 5 Size for 2-position valve
- 6 Size for 3-position valve
- 7 High voltage proximity switch
- 8 Name plate
- 9 Space required to remove the connector
- 10 O ring 9.25x1.78 (for oil ports P, A, B, T)

Valve fixing screw

M5×50-10.9 grade GB/T70.1-2000

 Tightening torque $M_A = 7.8\text{Nm}$

 It must be ordered separately
 if connection subplate is needed.

Subplate model:

G341/01 (G1/4"); G341/02(M14x1.5)

G342/01 (G3/8"); G342/02(M18x1.5)

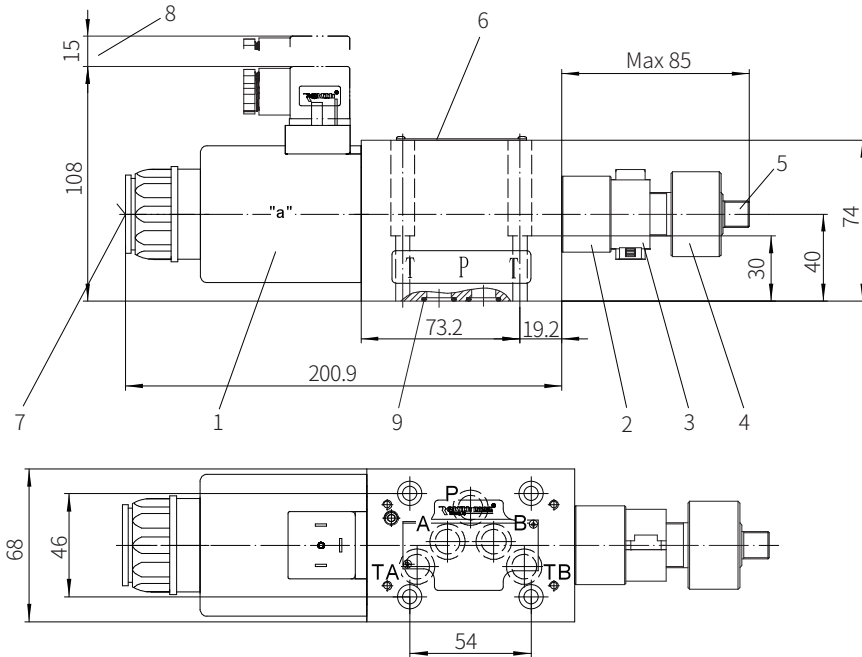
G502/01 (G1/2"); G502/02(M22x1.5)

 Required surface finishing of
 mating components

Component size

Size unit: mm

Model 4WE10D.../...QMBG24



- 1 Solenoid
- 2 Transition joint
- 3 Protective cap
- 4 Sensor
- 5 Connection thread M12x1 for sensor electrical connector
- 6 Name plate
- 7 Hidden manual emergency operation
- 8 Space required to remove the plug
- 9 O ring 10X2 (for oil ports P, A, B and T)

Valve fixing screw

M6×40-10.9 grade GB/T70.1-2000

Tightening torque $M_A=13.7\text{Nm}$

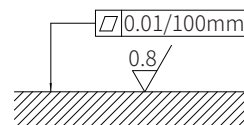
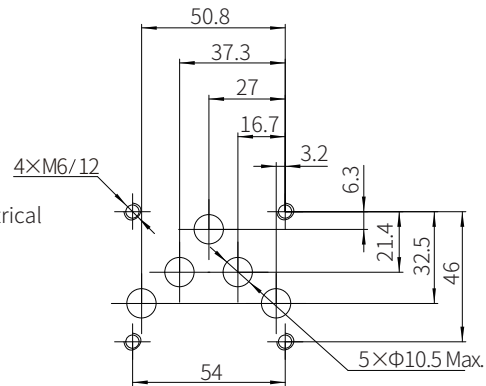
It must be ordered separately
if connection subplate is needed.

Subplate model:

G66/01(G3/8"); G66/02(M18x1.5)

G67/01(G1/2"); G67/02(M22x1.5)

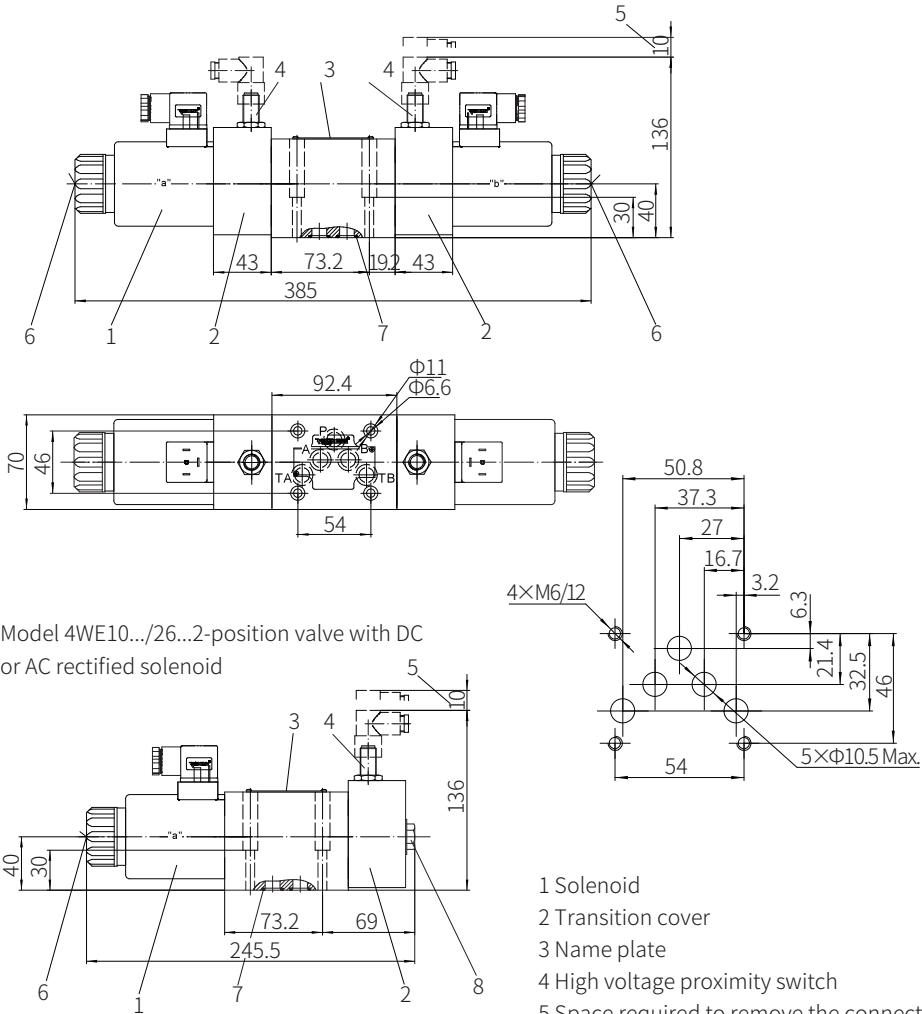
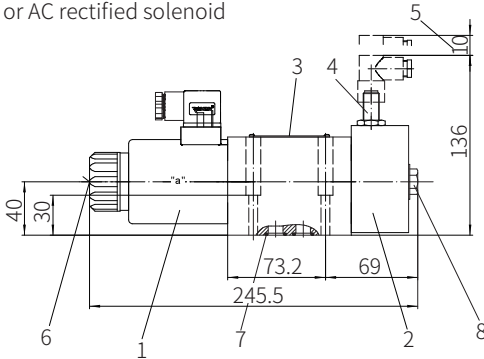
G534/01 (G3/4"); G534/02(M27x2)



Required surface finishing of
mating components

Component size
Size unit: mm

Model 4WE10.../26...3-position valve with DC or AC rectified solenoid


 Model 4WE10.../26...2-position valve with DC
 or AC rectified solenoid


- 1 Solenoid
- 2 Transition cover
- 3 Name plate
- 4 High voltage proximity switch
- 5 Space required to remove the connector
- 6 Hidden manual emergency operation
- 7 O ring 10X2 (for oil ports P, A, B and T)
- 8 Plug for 2-position valve

Valve fixing screw

M6×40-10.9 grade GB/T70.1-2000

 Tightening torque $M_A=13.7\text{Nm}$

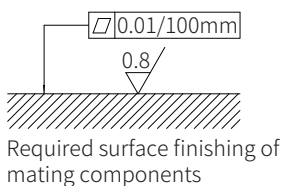
 It must be ordered separately
 if connection subplate is needed.

Subplate model:

G66/01(G3/8"); G66/02(M18x1.5)

G67/01(G1/2"); G67/02(M22x1.5)

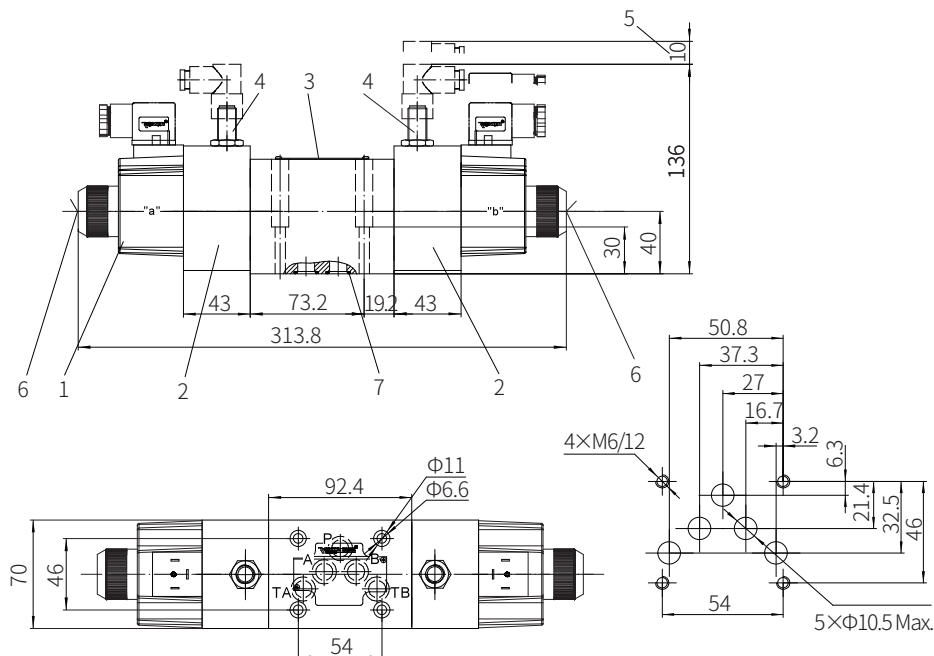
G534/01 (G3/4"); G534/02(M27x2)



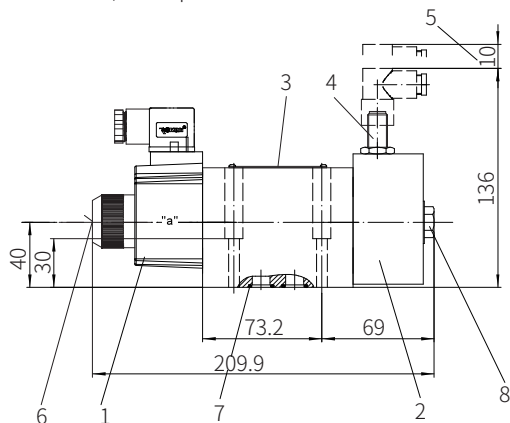
Component size

Size unit: mm

Model 4WE10.../26...3-position valve with AC solenoid



Model 4WE10.../26...2-position valve with AC solenoid



- 1 Solenoid
- 2 Transition cover
- 3 Name plate
- 4 High voltage proximity switch
- 5 Space required to remove the connector
- 6 Hidden manual emergency operation
- 7 O ring 10X2 (for oil ports P, A, B and T)
- 8 Plug for 2-position valve

Valve fixing screw

M6×40-10.9 grade GB/T70.1-2000

Tightening torque $M_A=13.7\text{Nm}$

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)

