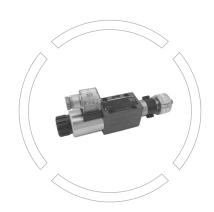


# WE(26)...(QMBG24) Series

Solenoid Directional Valve with Spool Position Monitoring Sizes: NG6 & NG10 Maximum Working pressure up to 350 Bar



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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

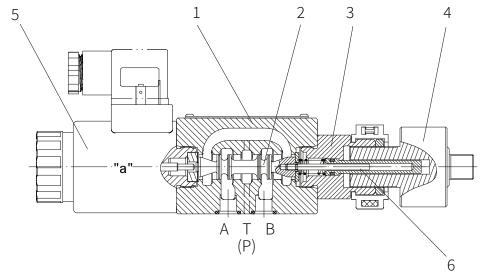


# Function description, sectional drawing

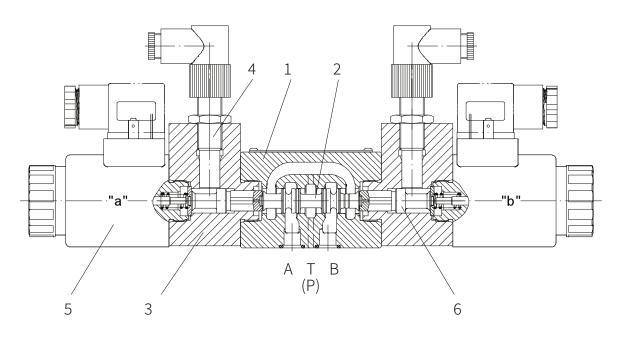
The valve is composed of valve body (1), valve spool (2), transition joint (or transition cover) (3), sensor (4), solenoid (5), and sensing rod (or transition spool) (6).

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.



Model 4WE6D62T/CG24N9K4QMBG24

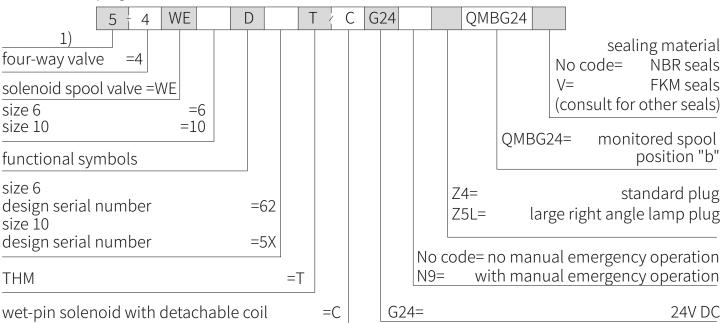


Model 4WE6E6XT/26CG24N9Z5LG24WD



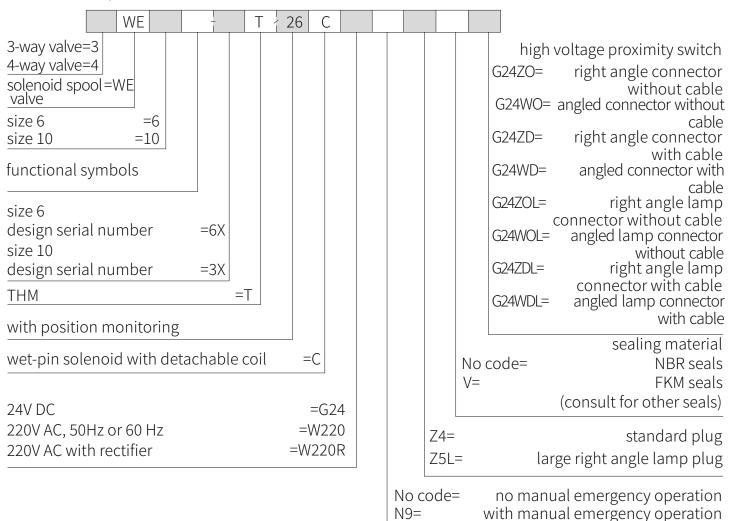
# **Ordering Code**

# Model WE../..QMBG24



1) Only for size 10 with 5-chamber

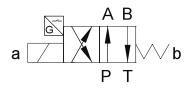
#### Model WE../26...





# **Functional symbols**

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

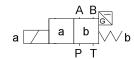


Functional symbols of WE6 (10)D.../26...

Transition function

Spool valve function







$$\begin{bmatrix} \bot \\ \top \end{bmatrix} \begin{bmatrix} \bot \\ \top \end{bmatrix} = A$$



(The T port serves as drain port)





$$\begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix} = B$$

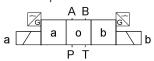
(The T port serves as drain port)

Transition function

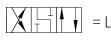
Spool valve function

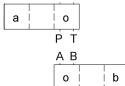
1) For example: the function symbol A means the solenoid on side A

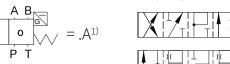




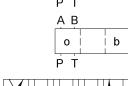








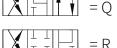




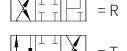




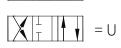








$$= G \qquad \boxed{\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \end{array}} \\ \end{array}} = G$$





# **Technical parameters**

Working	Port A, B, P	to 35
pressure	Port T	to 16 (AC), to 21 (DC)
Medium		Mineral hydraulic oil or phosphate hydraulic oil
Viscosity range mm²/s 2.5 to 500		
Temperature	range °C	-30 to +80

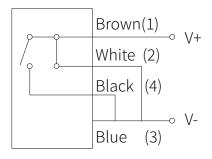
Note: When the working pressure exceeds the allowable pressure, port T must be used as drain port for symbols A and B.

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

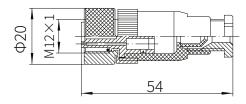
#### **Electrical connection**

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

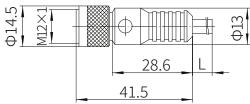
Connection voltage	24V±25%(DC)
Peak voltage	≤10%
Output voltage	Max. 200mA
Sensing frequency	600Hz



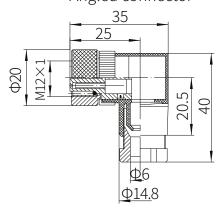
Right angle connector



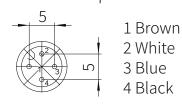
Cable connector (M12x1) (cable length 2m)



Angled connector

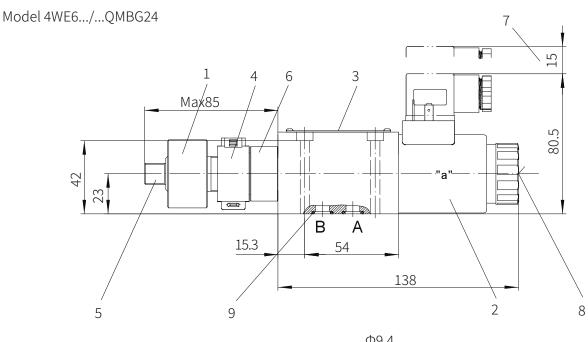


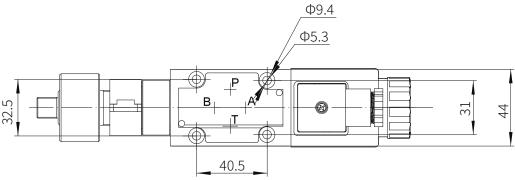
Pin position from side of pin





# (Dimensions in mm)





- 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

M5x50-10.9 grade GB/T70.1-2000

Tightening torque M₂=7.8Nm

It must be ordered separately

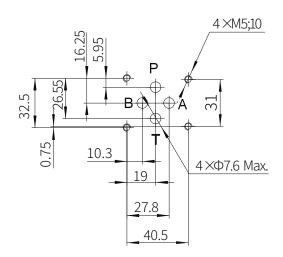
if connection subplate is needed.

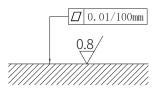
Subplate model:

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

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

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



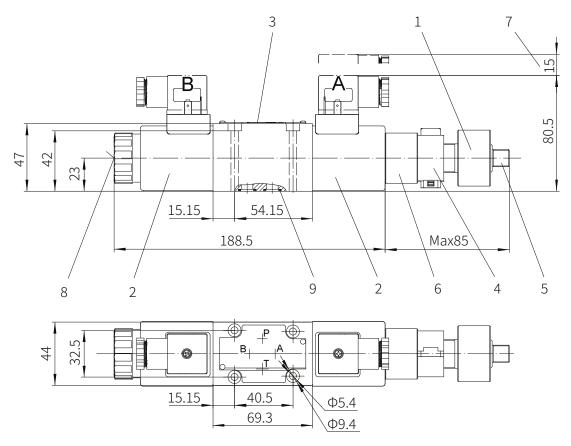


Required surface finishing of mating components



(Dimensions in 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

M5x50-10.9 grade GB/T70.1-2000

Tightening torque M₄=7.8Nm

It must be ordered separately

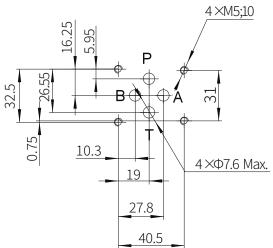
if connection subplate is needed.

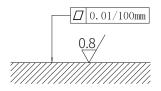
Subplate model:

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

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

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



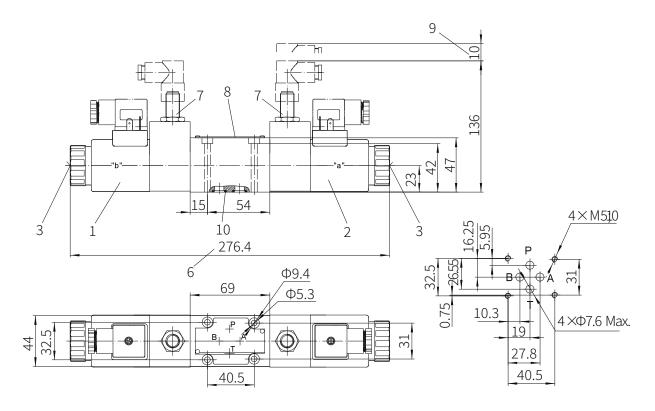


Required surface finishing of mating components

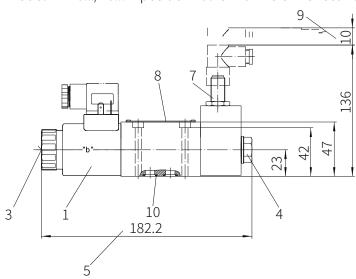


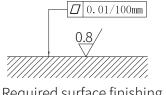
# (Dimensions in mm)

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

M5x50-10.9 grade GB/T70.1-2000

Tightening torque M₄=7.8Nm

It must be ordered separately

if connection subplate is needed.

Subplate model:

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

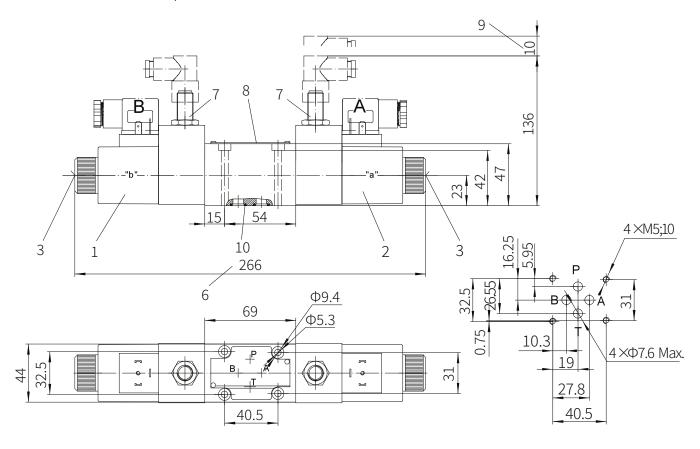
G342/01 (G3/8"); G342/02(M18x1.5)

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

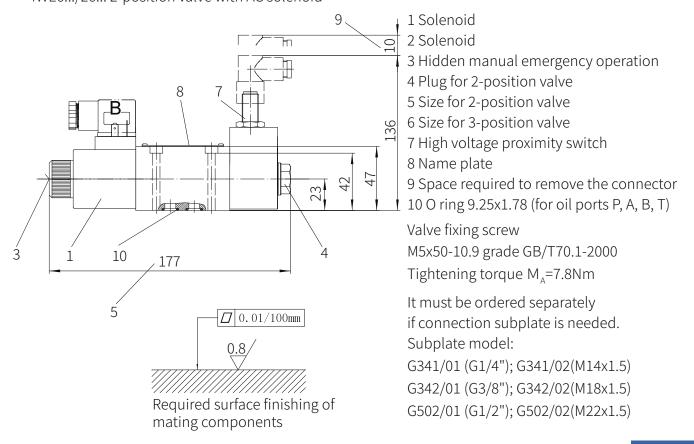


# (Dimensions in mm)

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



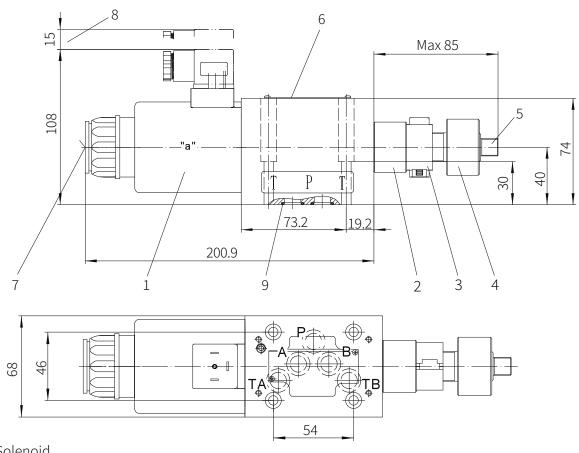
4WE6.../26... 2-position valve with AC solenoid





(Dimensions in mm)

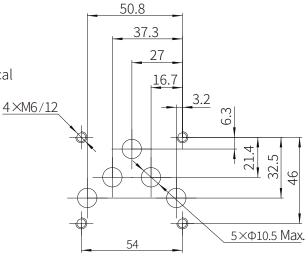
Model 4WE10D.../...QMBG24

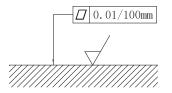


- 1 Solenoid
- 2 Transition joint
- 3 Protective cap
- 4 Sensor
- 5 Connection thread M12x1 for sensor electrical connector
- 6 Name plate
- 7 Hidden manual emergency operation
- 8 Space required to remove the plug
- 9 O ring 10X2 (for oil ports P, A, B and T)

Valve fixing screw M6x40-10.9 grade GB/T70.1-2000 Tightening torque M₄=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)



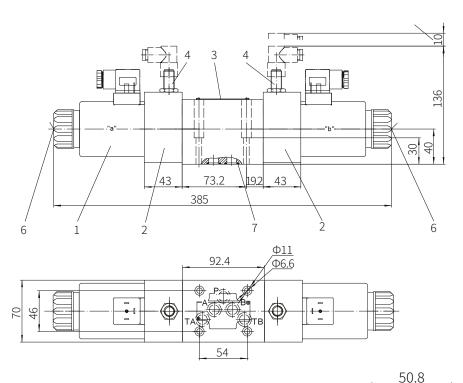


Required surface finishing of mating components

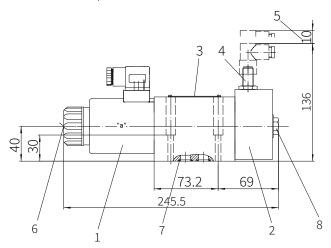


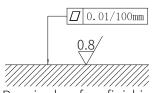
# (Dimensions in mm)

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



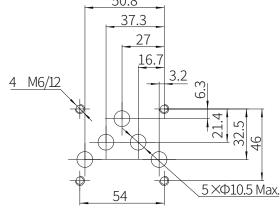
4WE10.../26... 2-position valve with DC or AC rectified solenoid





Required surface finishing of mating components

Valve fixing screw M6x40-10.9 grade GB/T70.1-2000 Tightening torque M<sub>A</sub>=13.7Nm



- 1 Solenoid
- 2 Transition cover
- x3 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

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

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

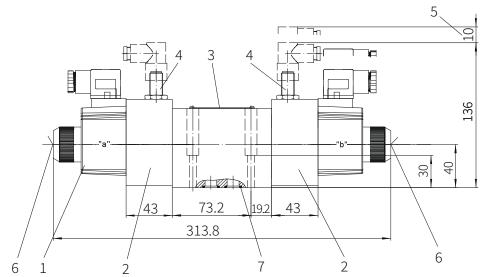
G67/01(G1/2"); G67/02(M22x1.5)

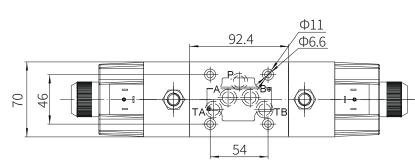
G534/01 (G3/4"); G534/02(M27x2)



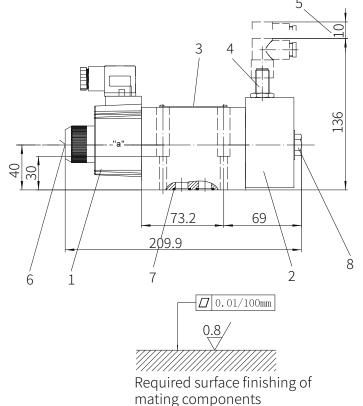
# (Dimensions in mm)

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





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

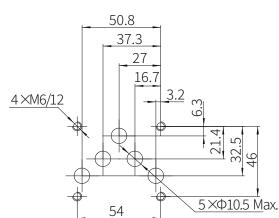


- 1 Solenoid
- 2 Transition cover
- 3 Name plate
- 4 High voltage proximity switch
- 5 Space required to remove the connector
- 6 Hidden manual emergency operation
- 7 O ring 10X2 (for oil ports P, A, B and T)
- 8 Plug for 2-position valve

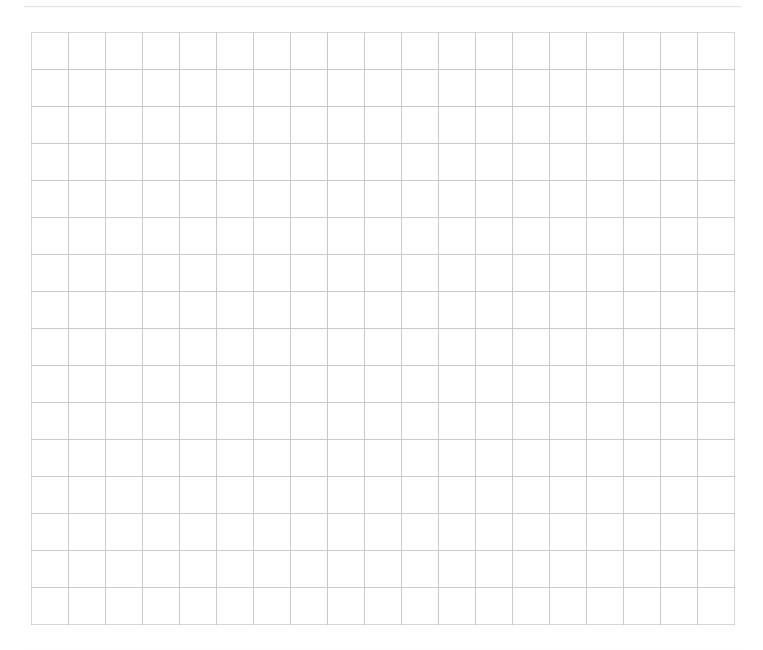
Valve fixing screw M6x40-10.9 grade GB/T70.1-2000 Tightening torque M<sub>A</sub>=13.7Nm

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)







The specified data is for product description purposes only and may not be deemed to be guaranteed unless expressly confirmed in the contract.



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