Solenoid Operated Directional Valve with Emergency Handle

Model: 4WEMM6(10).../...





- ◆ Size 6 to 1.0
- 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.

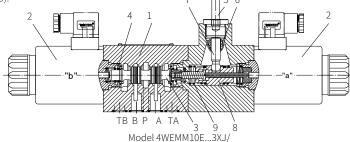
It is mainly composed of valve body (1), one or two solenoids (2), valve spool (3), reset spring (4) and manual control device.

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. 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.

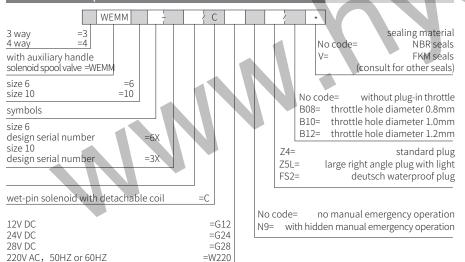
Auxiliary handle operation:

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).



Models and specifications

solenoid with rectifier for AC voltage 220V



=W220R

Technical parameters

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

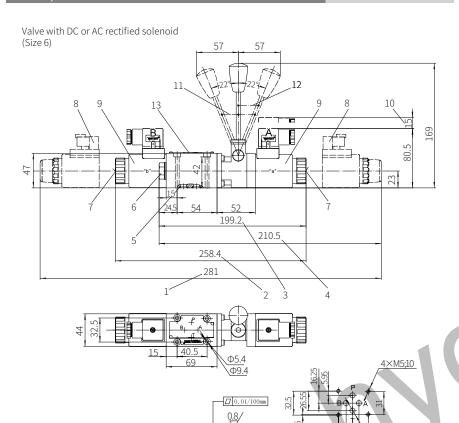
Note: For symbols A and B, port T must be used as drain port if the working pressure exceeds the allowable pressure.

For the characteristic curve and operating limit, please refer to the catalogue of WE solenoid directional valve.

Functional symbols

Transition function	n Spool valve function	Transition function	Spool valve function
A B a i b P T	a A B b b b	A B a o b	a A B b b b
	= A = A9 (The T port serves as drain p	oort) P T	a a o = .A1)
	$\begin{bmatrix} T_1 \\ T_2 \end{bmatrix} = B9$ (The T port serves as drain p	A B	A B B B B B B B B B B B B B B B B B B B
	X = C	X : : : : : : :	$\begin{bmatrix} 1 & 1 \\ T & T \end{bmatrix} = E$
	= D		=F
	T T = DE		=G
A B		$X \mapsto \mapsto \downarrow$	= H
alb	a A B b b		X = J
	TT = B		
	(The T port serves as drain p	oort)	M = M
XH H	= Y		=P
	$\exists \exists $		X
			$X \mid T \mid T \mid T = R$
1) For example: . The function symbol	EA means		T = T
the coil on side A			T T T T T T
Note: Functions A9 a as pilot valves	nd B9 are only used		
			T

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Required surface finishing of

mating components

- 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

27.8 40.5

Tightening torque M_a=7.8Nm

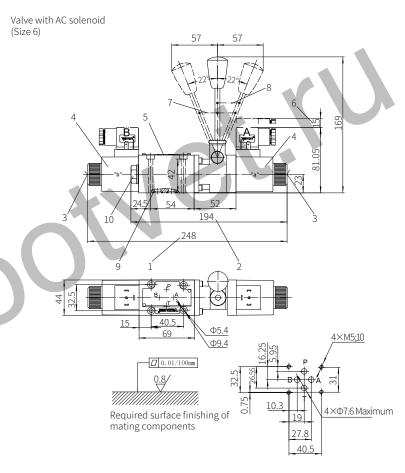
It must be ordered separately if connection subplate is needed.

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)



- 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 M₄=7.8Nm

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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)

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4×Φ7.6 Maximum

Valve with DC or AC rectified solenoid (Size 10) /5 4 8 71.7 73.2 274.2 370.7. 54 92.4 □ 0.01/100mm 4×M6/12

- 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

Required surface finishing of mating components

M6x40-10.9 grade GB/T70.1-2000

5×Φ10.5 Maximum

Tightening torque M_A=13.7Nm

It must be ordered separately

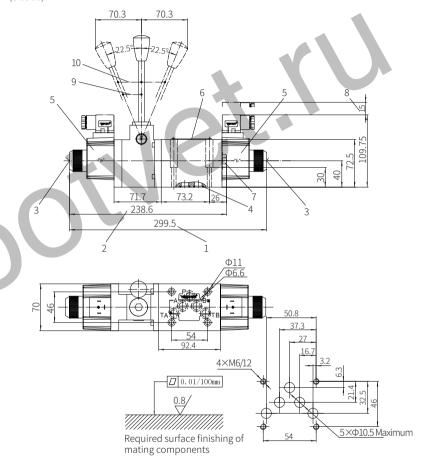
if connection subplate is needed. Subplate model:

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 M_a=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)

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