

Isolating valve

Model: Z4WE6...3X



- ◆ Size 6
- ◆ Maximum working pressure 315 bar
- ◆ Maximum working flow 40 L/min

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Features

- Directional spool valve operated by solenoid
- Control the opening and closing of the oil
- The manual emergency operation controls the movement of the control spool when solenoid de-energized

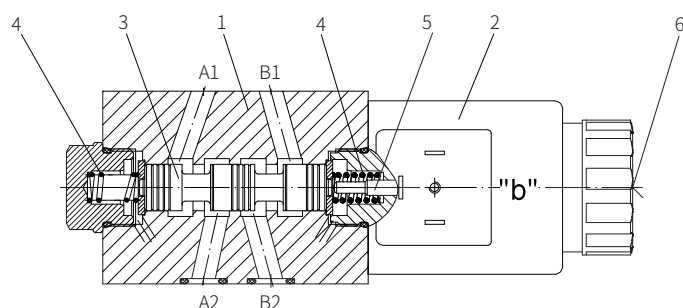
Function description, sectional drawing

The Z4WE6 isolating valve is solenoid operated directional spool valve. It controls the opening and closing of the oil.

The valve is composed of valve body (1), one or two solenoids (2), control spool (3) and 2 reset springs (4). In the de-energized condition, the control spool(3) is held in the neutral or initial position by reset spring (4), the control spool (3) is controlled via wet-pin solenoid (2). To ensure proper function, the pressure chamber of the solenoid must be filled with oil.

The force of the solenoid (2) via push rod (5) acts on control spool (3) and pushes it from the stationary position to the required position. Then port A1, A2, B1 and B2 can be either connected or disconnected. The port P and T always flow freely.

When the solenoid (2) is de-energized, the control spool (3) is returned to the neutral position via reset spring (4). The manual emergency operation controls the movement of the control spool when solenoid de-energized.



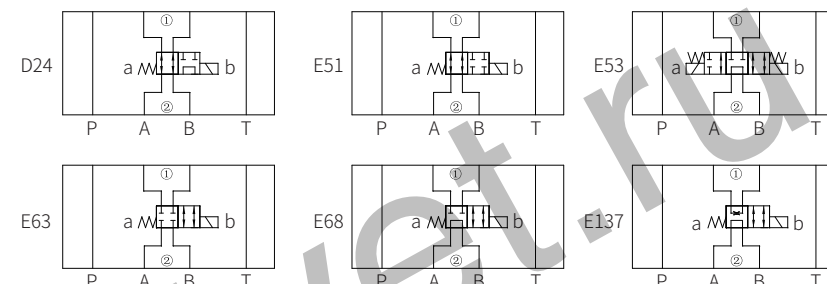
Model: Z4WE6...XJ/

Models and specifications

Z4WE	6	-	3X	/	C				*
isolating valve									more information in text
size 6	=6								sealing material
									No code= NBR seals
									V= FKM seals
symbols e.g.: D24, E63...									(consult for other seals)
30 to 39 series			=3X						Z4= standard plug
(30 to 39 series installation and connection size unchanged)									(not for rectified type)
									Z5L= large right angle lamp plug
wet-pin solenoid									N9= with hidden manual emergency operation
									G24= 24V DC
Note: If AC voltage used, it is recommended to use the rectified AC voltage									W220R= 220VAC with rectifier
									W110R= 110VAC with rectifier
									other voltages see technical parameters

Functional symbols

(①= Valve side, ②= Subplate side)



Technical parameters

Installation position	Optional	
Environment temperature range	°C	-30 to + 50 (NBR seal) -20 to + 50 (FKM seal)
Weight	Valve with one solenoid kg	1.5
	Valve with two solenoids kg	2.0
Maximum working pressure	Oil port A, B, P bar	315
	Oil port T bar	210 (DC) , 160 (AC)
Maximum flow	L/min	40
Working medium	Mineral oil - for NBR seals or FKM seals Phosphonolipid - for FKM seals	
Working medium temperature range	°C	-30 to + 80 (NBR seal) -20 to + 80 (FKM seal)
Viscosity range	mm²/s	2.8 to 500
Cleanliness of oil	The maximum allowable pollution level of oil is ISO4406 Class 20 / 18 / 15	

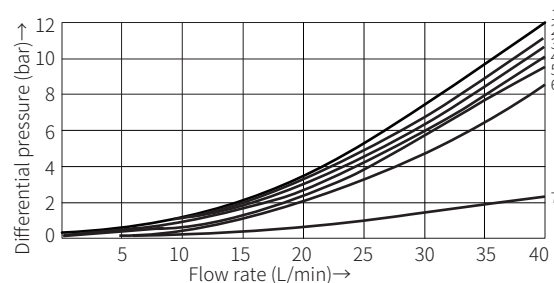
Electrical parameters

Voltage type	DC		AC 50/60Hz
Voltage available	V	12, 24, 96, 110, 205, 220	110, 220, 230
Allowable voltage tolerance	%	+10 to -15	
Power consumption(DC)	W	30	-
Holding power(AC)	VA	-	50
Impact power(AC)	VA	-	220
Power rate	continuous		
Switching time to on	ms	20 to 45	10 to 20
ISO 6403 off	ms	10 to 25	15 to 40
Switching frequency	times/h	to 15000	to 7200
Protection grade to DIN 40050	IP 65		

Note:

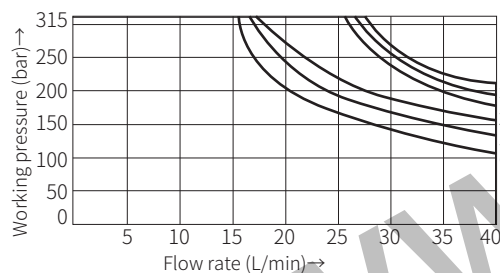
When electrical connection, the protective conductor (PE) must be connected properly as rules.

Characteristic curve

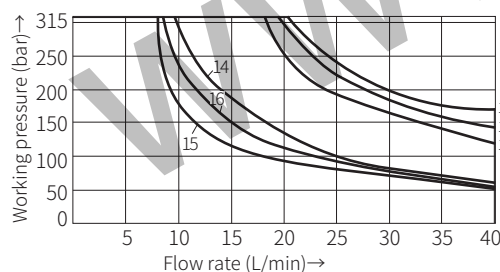


	A2 to A1	A1 to A2	B2 to B1	B1 to B2	A2 to B2	B2 to A2	T2 to T2	P2 to P1
D24	4	1	2	4	3	2	7	7
E51	3	1	1	3	-	-	7	7
E53	2	2	2	2	5	2	7	7
E63	2	5	5	3	-	-	7	7
E68	4	4	6	5	4	5	7	7
E137	1	4	3	2	5	6	7	7

Characteristic limit



1 E63 1 E51
2 E68 2 E137
3 E53 3 D24
(Measured when using HLP46,
 $\vartheta_{oil}=40^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and 24VDC)



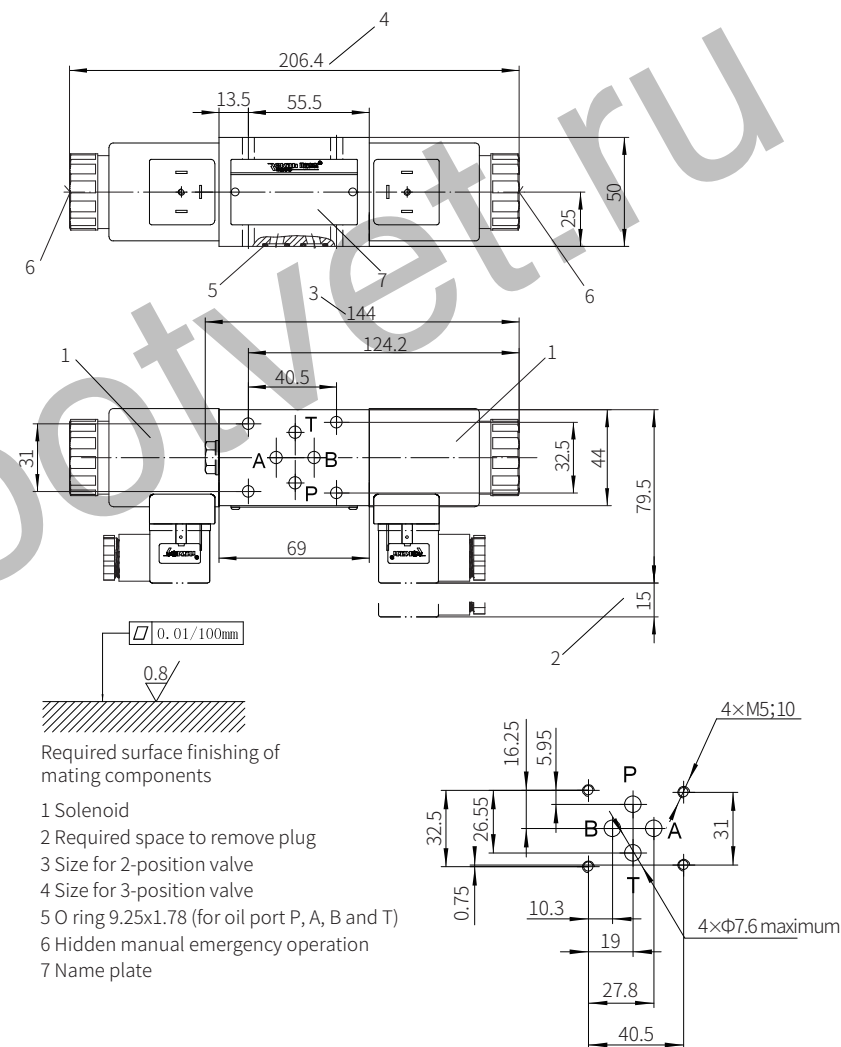
	W230-50Hz	W230-60Hz
E63	11	14
E68	12	16
E53	13	16
E137	15	15
E51	15	15
D24	15	15

(Measured when using HLP46,
 $\vartheta_{oil}=40^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and 230VAC)

Component size

Size unit: mm

Valve with DC or AC rectified solenoid



Required surface finishing of mating components

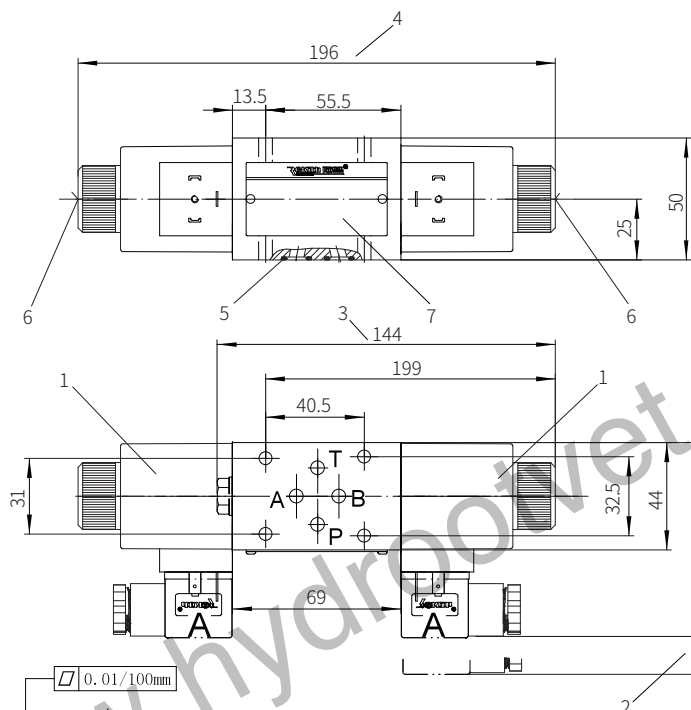
- 1 Solenoid
- 2 Required space to remove plug
- 3 Size for 2-position valve
- 4 Size for 3-position valve
- 5 O ring 9.25x1.78 (for oil port P, A, B and T)
- 6 Hidden manual emergency operation
- 7 Name plate

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)

Valve fixing screw
M5-10.9 grade GB/T70.1-2000
Tightening torque $M_A=7.8\text{Nm}$

Valve with AC solenoid

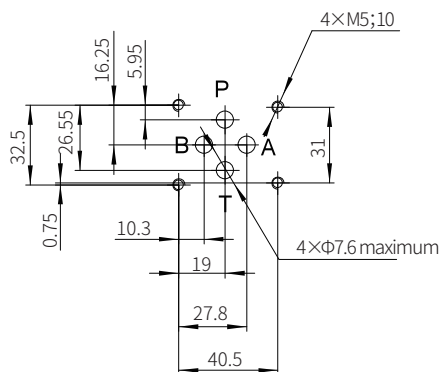


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