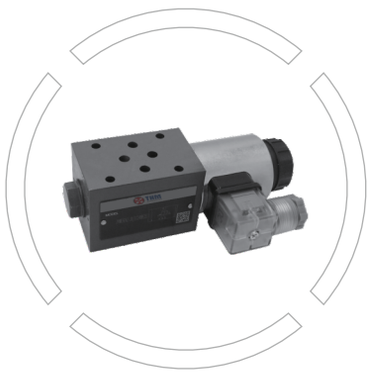
Z4WE6

Isolating valve
Size 6
Maximum working pressure 315 bar
Maximum working flow 40 L/min



Index

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

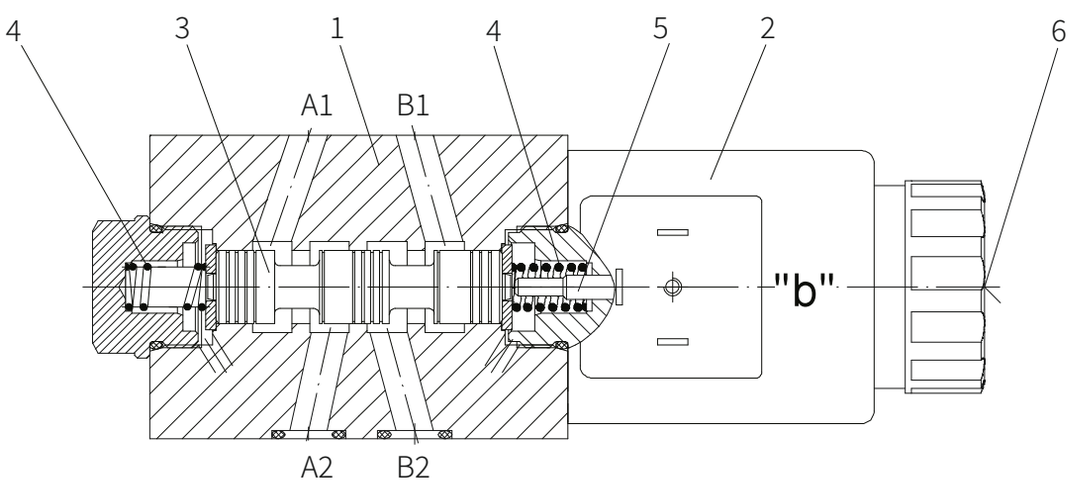
Functional Description, Sectional Drawing

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-energised, 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...XT/

Technical data

Z4WE	6		-	3X	T	/	C						*

- Isolating valve
- size 6 =6
- symbols e.g.: D24, E63...
- 30 to 39 series =3X
  (30 to 39 series installation and connection size unchanged)
- THM = T
- wet-pin solenoid = C

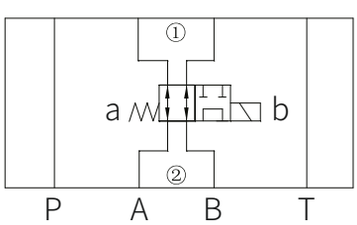
Note: If AC voltage used, it is recommended to use the rectified AC voltage

- more information in text
- sealing material
  - No code = NBR seals
  - V = FKM seals
  (consult for other seals)
- Z4 = standard plug (not for rectified type)
- Z5L = large right angle lamp plug
- N9 = with hidden manual emergency operation
- G24 = 24V DC
- W220R = 220VAC with rectifier
- W110R = 110VAC with rectifier
- other voltages see technical parameters

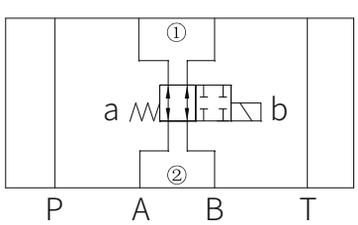
Functional Symbol

(①= Valve side, ②= Subplate side)

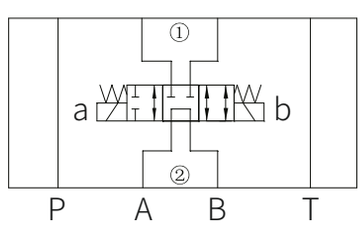
D24



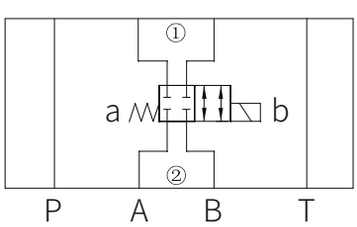
E51



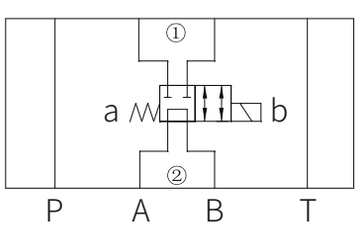
E53



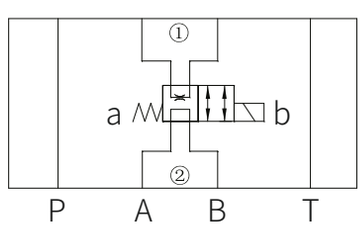
E63



E68



E137



Technical Parameters

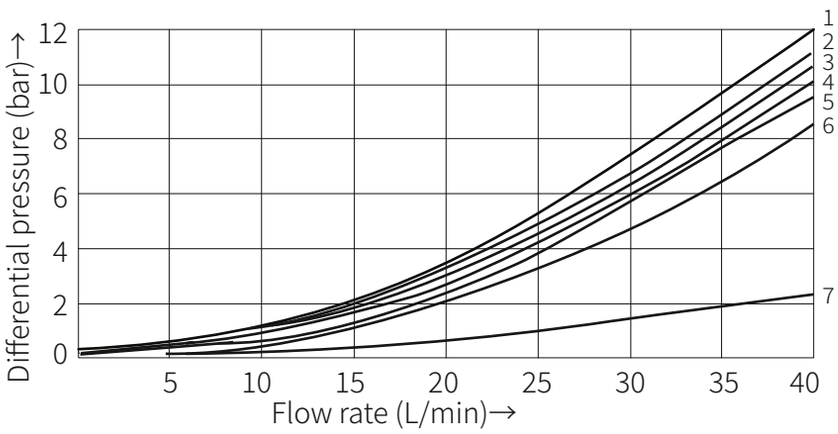
Installation position			Optional
Environment temperature range		°C	-30 to + 50 (NBR seal)
			-20 to + 50 (FKM seal)
Weight	Valve with one solenoid	kg	1.5
	Valve with two solenoids	kg	2.0
Maximum working pressure	Oil port A, B, P	bar	315
	Oil port T	bar	210 (DC) , 160 (AC)
Maximum flow		L/min	40
Working 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		mm^2/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 ISO 6403	on	ms	20 to 45	10 to 20
	off	ms	10 to 25	15 to 40
Switching frequency		times/h	to 15000	to 7200
Protection grade to DIN 40050			IP 65	

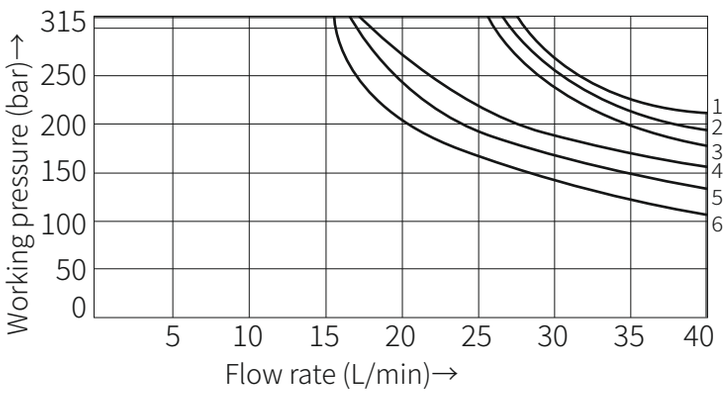
Note:
When electrical connection, the protective conductor (PE) must be connected properly as rules.

Characteristic curves



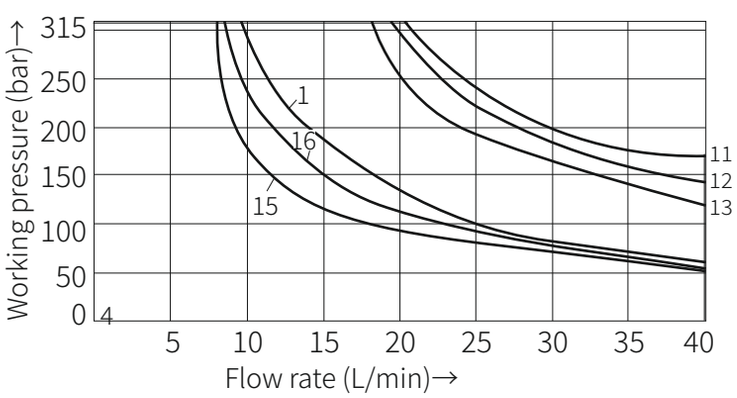
	A2 to A1	A1 to A2	B2 to B1	B1 to B2	A2 to B2	B2 to A2	T2 to T2	P2 to P1
D24	4	1	2	4	3	2	7	7
E51	3	1	1	3	-	-	7	7
E53	2	2	2	2	5	2	7	7
E63	2	5	5	3	-	-	7	7
E68	4	4	6	5	4	5	7	7
E137	1	4	3	2	5	6	7	7

Characteristic limit



1 E63 1 E51
2 E68 2 E137
3 E53 3 D24

(Measured when using HLP46,
j_{oil}=40°C ± 5°C and 24VDC)

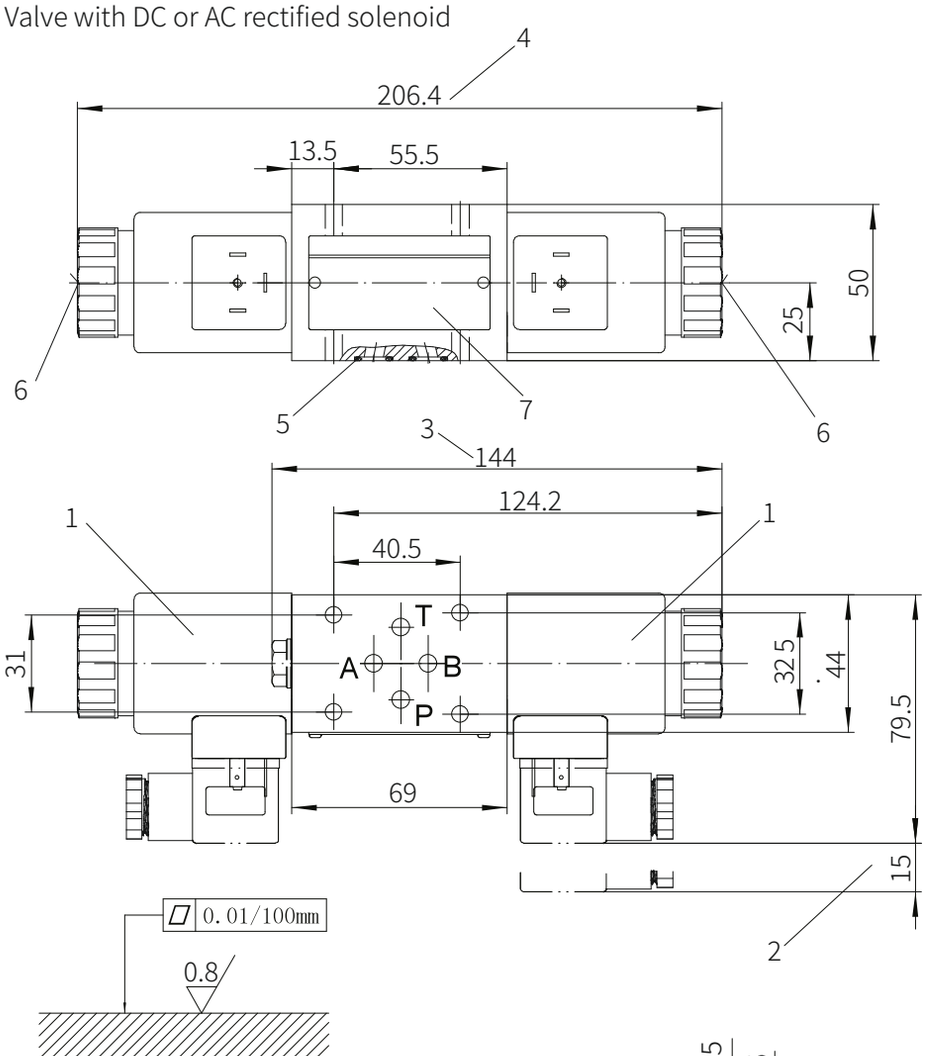


	W230-50Hz	W230-60Hz
E63	11	14
E68	12	16
E53	13	16
E137	15	15
E51	15	15
D24	15	15

(Measured when using HLP46,
j_{oil}=40°C ± 5°C and 230VAC)

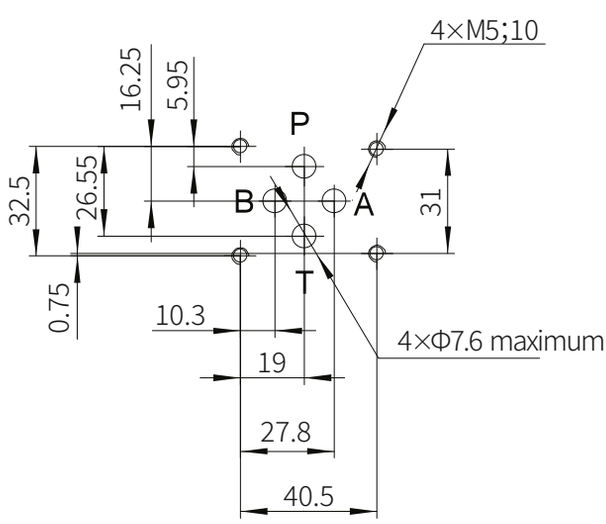
Unit Dimensions (Dimensions in mm)

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

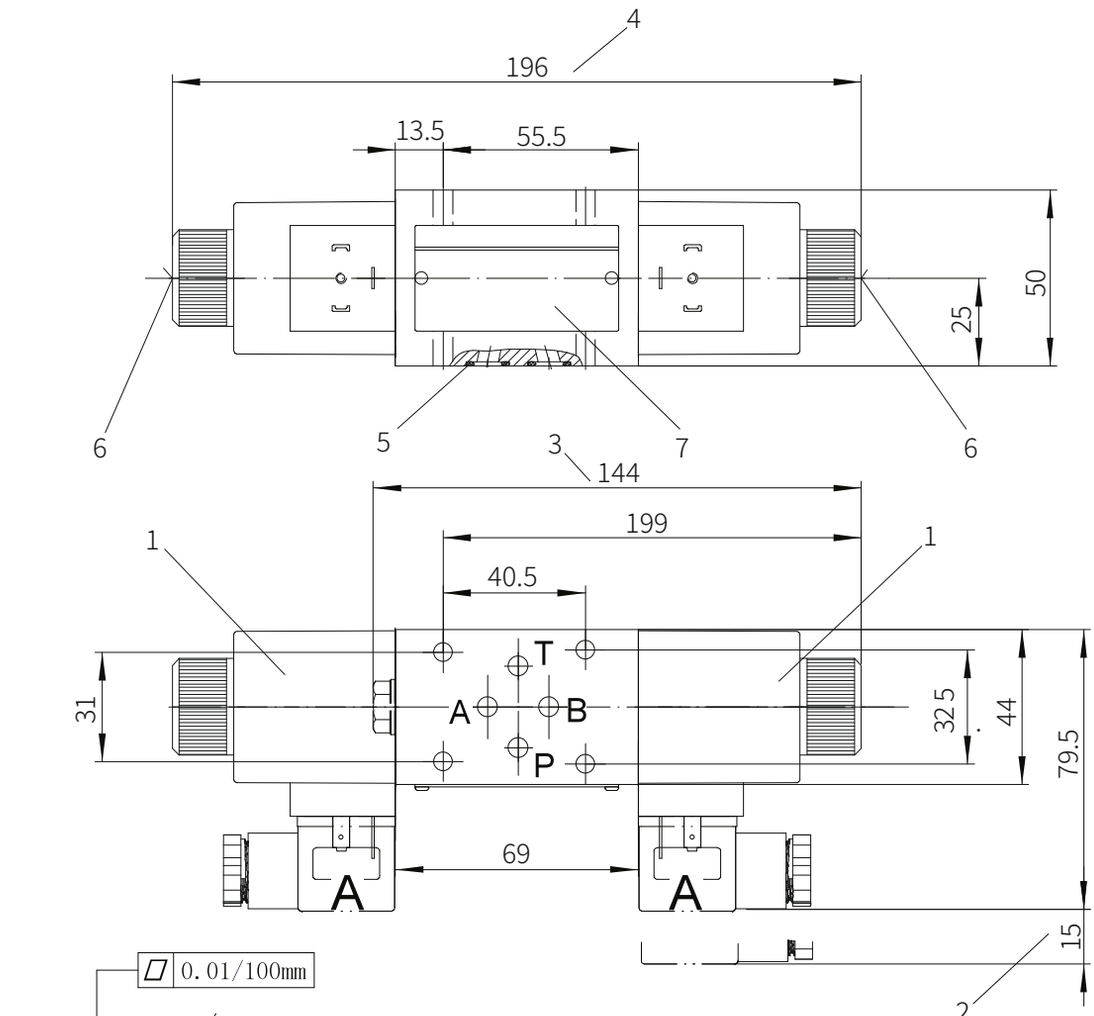


It must be ordered separately if connection subplate is needed.
Subplate model:
G341/01(G1/4"); G341/02(M14x1.5)
G342/01(G3/8"); G342/02(M18x1.5)
G502/01(G1/2"); G502/02(M22x1.5)

Valve fixing screw
M5-10.9 grade GB/T70.1-2000
Tightening torque M_A=7.8Nm

Unit Dimensions (Dimensions in mm)

Valve with AC solenoid



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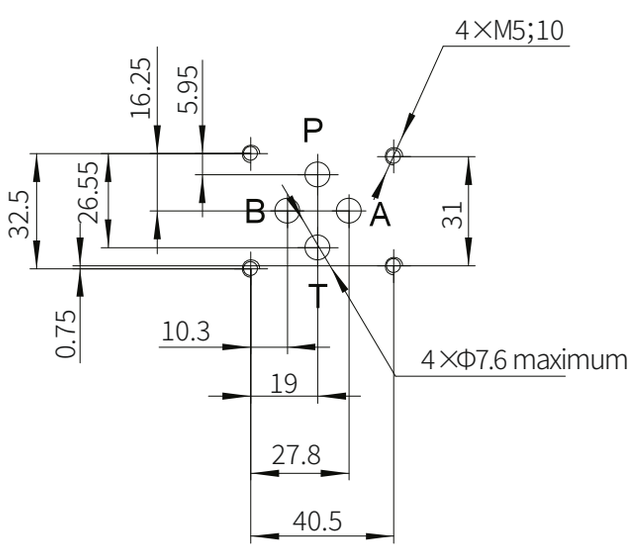

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Valve fixing screw
M5-10.9 grade GB/T70.1-2000
Tightening torque M_A=7.8Nm

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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