2.15

4/2 way isolator valve

Type Z4WE6...L3X

Size 6
Up to 315 bar
Up to 40 L/min

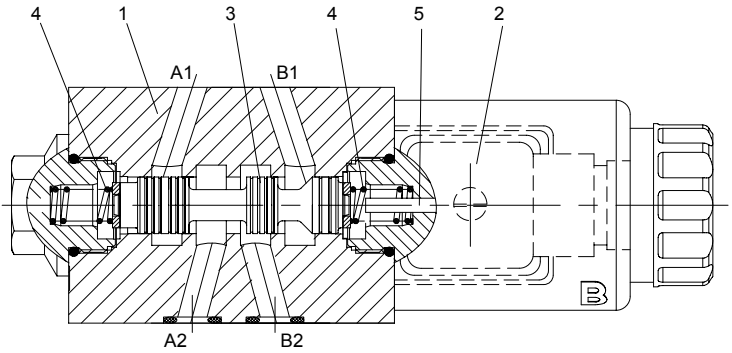
Contents

Features

- Solenoid operated directional spool valve is the standard version
- Porting pattern to DIN 24 340 form A, ISO 4401 and CETOP–RP 121 H,
- Free-flow through ports P and T in all switched positions
- Sandwich plate valve
- Wet pin AC or DC solenoids
- Hand override, (optional)

Function and configuration

Type Z4WE6 Isolator valves are solenoid operated directional spool valves. They control the flow connection and isolating of flow.
Essentially the directional control valves consist of housing (1), one or two solenoids (2), the control spool (3), and two return springs (4).
In the de-energized condition the control spool (3) is held in the neutral or initial position by means of return springs (4) (except for pulse valves). The control spool (3) is actuated via wet pin solenoids (2).
To ensure satisfactory operation care should be taken that the solenoid pressure chamber is filled with oil.
The force of the solenoids (2) acts via the push rod (5) on the control spool (3), control spool (3) is pushed from its neutral position to the required position. Then port A1, A2, B1 and B2 can be either connected or disconnected. P and T always flow freely.
When solenoid (2) is de-energised, the control spool (3) is returned to its neutral position by means of the return springs (4).
An optional hand override allows movement of the control spool without energizing the solenoid.



Ordering code

Z4WE	6	–	L3X	/	E		N			★

Isolator valve

Nominal size 6 = 6

Symbols e.g. D24, E63 etc.

Series L30 to L39 = L3X
(L30 to L39: unchanged installation and connection dimensions)

High performance solenoid =E

Notes: If use AC electric source, the rectification AC is recommended.

Further details in clear text

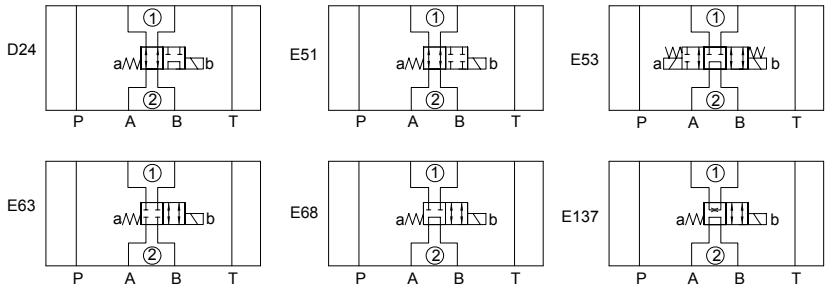
No code = NBR seals
V = FKM seals

Z4 = Electrical plug without lamp (Not suit rectification AC)
Z5L = Electrical plug with lamp

N= With override button

G24 = 24V DC
W220R= Plug rectification 220V
W110R= Plug rectification 110V
Other voltage see Technical data

Symbols (① =valve side, ② = sub-plate side)



Technical data

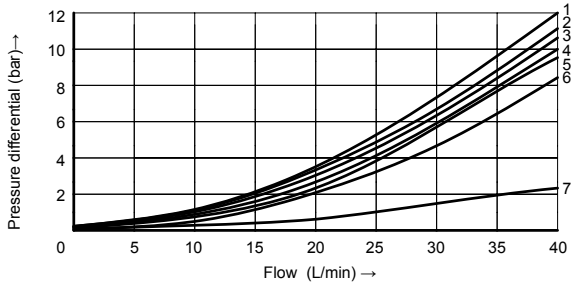
Fixing position			Optional
Environment temperature range		°C	-30 to +50 (NBR seals)
			-20 to +50 (FKM seals)
Weight	Single solenoid	kg	1.5
	Double solenoids	kg	2.0
Max.operating pressure	Port A, B, P	bar	315
	Port T	bar	210 (DC), 160 (AC)
Max. flow		L/min	40
Fluid			Mineral oil suitable for NBR and FKM seal
			Phosphate ester for FKM seal
Fluid temperature range		°C	-30 to +80 (NBR seal)
			-20 to +80 (FKM seal)
Viscosity range		mm^2/s	2.8 to 500
Degree of contamination			Maximum permissible degree of fluid contamination: Class 9. NAS 1638 or 20/18/15, ISO4406

Electrical data

Type of voltage			DC	AC 50/60Hz
Usable voltage		V	12, 24, 96, 110, 205, 220	110, 220, 230
Voltage tolerance (nominal voltage)		%	+10~ -15	
Power consumption (DC)		W	30	-
Holding power (AC)		VA	-	50
Switch-on power (AC)		VA	-	220
Duty			Continuous	
Switched time	ON	ms	20 to 45	10 to 20
Accord with ISO 6403	OFF	ms	10 to 25	15 to 40
Switched frequency		times/h	to 15000	to 7200
Preventive grade according to DIN 40050			IP65	

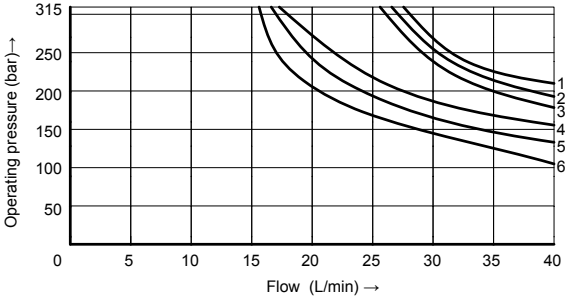
Caution: with electrical connections the protective conductor(PE ⏚)must be connected according to the relevant regulations.

Characteristic curves (Measured at ϑ_{oil}=40°C ±5°C , using HLP46)



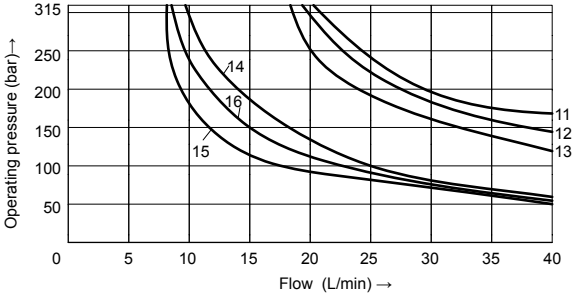
	A2 to A1	A1 to A2	B2 to B1	B1 to B2	A2 to B2	B2 to A2	T2 to T2	P2 to P1
D24	4	1	2	4	3	2	7	7
E51	3	1	1	3	-	-	7	7
E53	2	2	2	2	5	2	7	7
E63	2	5	5	3	-	-	7	7
E68	4	4	6	5	4	5	7	7
E137	1	4	3	2	5	6	7	7

Performance limit



1 E63 4 E51
2 E68 5 E137
3 E53 6 D24

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



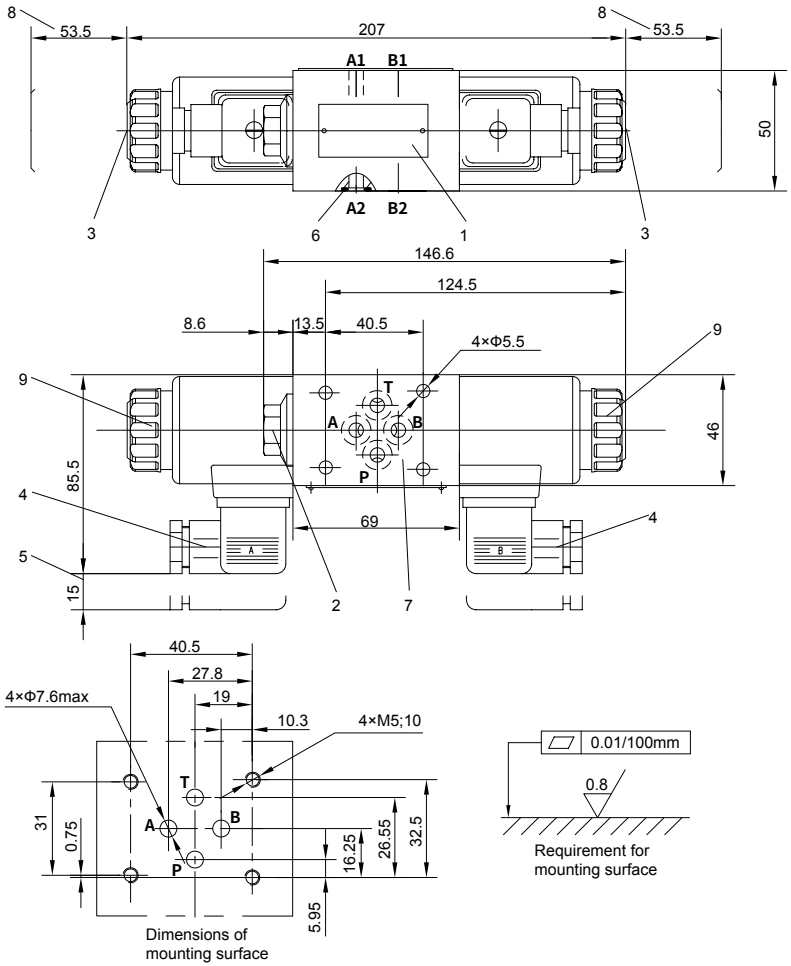
	W230-50Hz	W230-60Hz
E63	11	14
E68	12	16
E53	13	16
E137	15	15
E51	15	15
D24	15	15

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

Unit dimensions

(Dimensions in mm)

Valve with DC solenoid



1 Nameplate
2 Plug for valves with one solenoid
3 Hand override button
4 Plug-in connector
5 Space required to remove Plug-in connector
6 O-ring 9.25×1.78
7 Porting pattern to ISO 4401 and CETOP–RP 121 H, without pin hole
8 Space required to remove solenoid
9 Securing nut, tightening torque M_A =4Nm

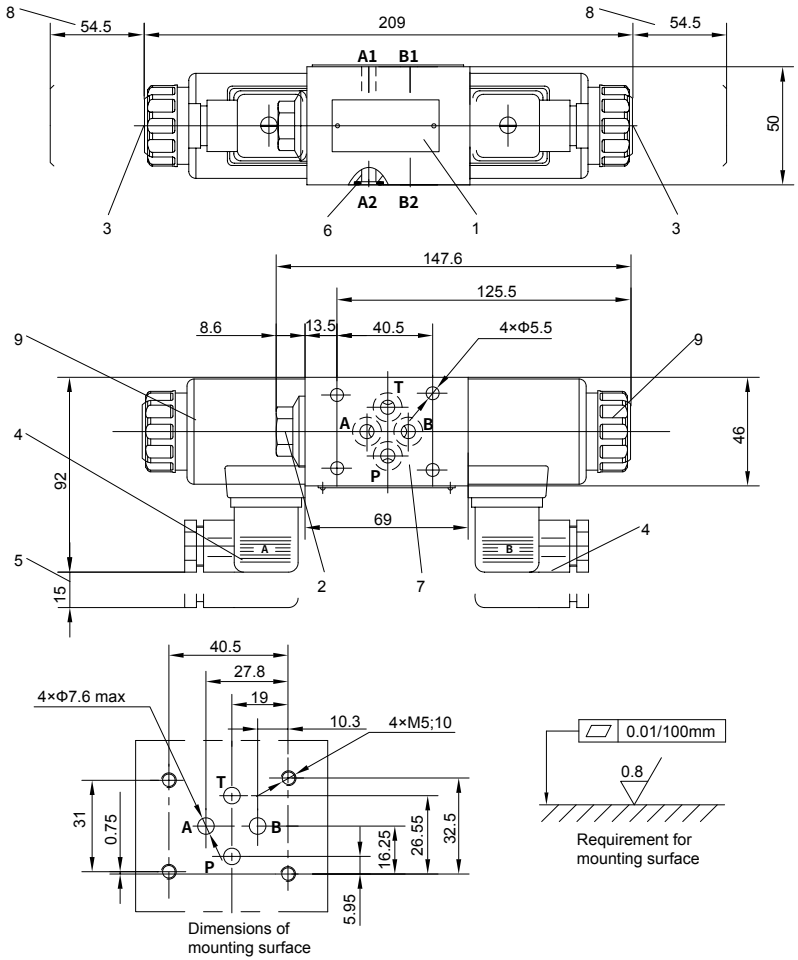
Valve fixing screws:
4-M5 GB/T 70.1-10.9, Tightening torque M_A =8.9Nm must be ordered separately.

It must be ordered separately if connection plate is needed.
Type:
G341/01(G1/4), G341/02 (M14×1.5)
G342/01(G3/8), G342/02(M18×1.5)
G502/01(G1/2), G502/02(M22×1.5)

Unit dimensions

(Dimensions in mm)

Valve with AC solenoid



1 Nameplate
2 Plug for valves with one solenoid
3 Hand override button
4 Plug-in connector
5 Space required to remove Plug-in connector
6 O-ring 9.25×1.78
7 Porting pattern to ISO 4401 and CETOP–RP 121 H, without locating pin hole
8 Space required to remove solenoid
9 Securing nut, tightening torque M_A=4Nm

Valve fixing screws:
4-M5 GB/T 70.1-10.9, Tightening torque M_A=8.9Nm must be ordered separately.

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