

Z50

Solenoid directional control valve

Spools: 1 to 6

Max Flow up to 50Lpm

Max. Pressure up to 315Bar



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Applications and Features

- Built-in check valve: The check valve inside the valve body is to ensure the hydraulic oil does not return.
 - Built-in relief valve: The relief valve inside the valve body is provided to adjust the hydraulic system working pressure.
 - Oil way: Parallel circuit, power beyond option
 - Coils, Connector ISO4400: 12VDC, 24VDC
 - Threads: P,T ports - G1/2", A,B ports - G3/8"
 - Valve construction: Monoblock construction, 1-7 spools.
 - Bores are honed precisely and fine spool grinding results in less cross-port leakage and hence less heat generated.
- Z50 series valves with middle-high pressure monoblock construction is developed based on Europe technology. The monoblock directional control valves-solenoid operated, offer perfect choice whether you are designing a new system or just simply trying to get more out of your current system. With two special spools and 7 different monoblock housing these valves can meet the specific needs of your application and hydraulic schemes by their double acting in 3 positions A and D spools.

Ordering code

	Z50	A	ES3	12VDC	G
Monoblock directional control valve:					
1 Spool	= Z50				
2 Spool	= 02Z50				
3 Spool	= 03Z50				
4 Spool	= 04Z50				
5 Spool	= 05Z50				
6 Spool	= 06Z50				
Spool options:					
Double acting, 3 positions with A and B closed in neutral position		= A			
Double acting, 3 positions with A and B open to Tank in neutral position		= D			
Code	Spool Type	Code	Spool Type		
A		D			
Control Kit:					
Single acting P - A with spring return in neutral position				= ES1	
Single acting P - B with spring return in neutral position				= ES2	
Double acting P - A(B) with spring return in neutral position				= ES3	
Coils with connector ISO4400:					
Nominal Voltage 12VDC				= 12VDC	
Nominal Voltage 24VDC				= 24VDC	
Port size:					
PT - 1/2", AB - 3/8"					= G

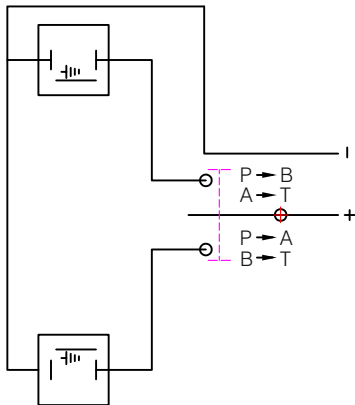
Technical data

Nominal Pressure (Bar)	Maximum Pressure (Bar)	Nominal Flow rate (L/min)	Maximum Flow rate (L/min)	Back Pressure (Bar)	Hydraulic Oil		
					Temperature range (°C)	Visc. range (mm ² /s)	Filtrating accuracy (µm)
200	315	40	50	≤1	-20 ~ +80	10 ~ 400	≤1



Electric circuit

- Electric wiring scheme



Control:

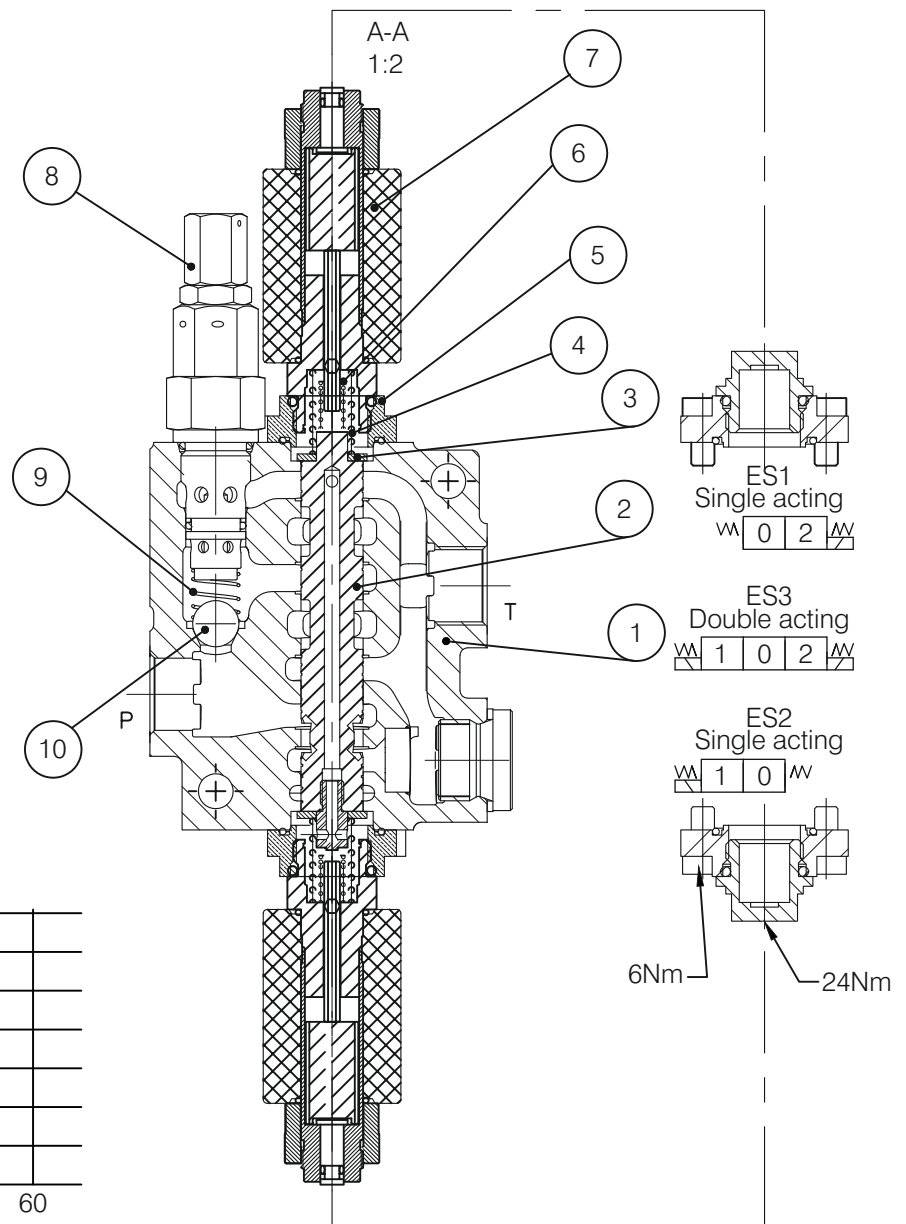
Internal leakage A(B) → T
 (p = 100 bar)
 viscosity 35cSt: max. 18cc/min

Coil:

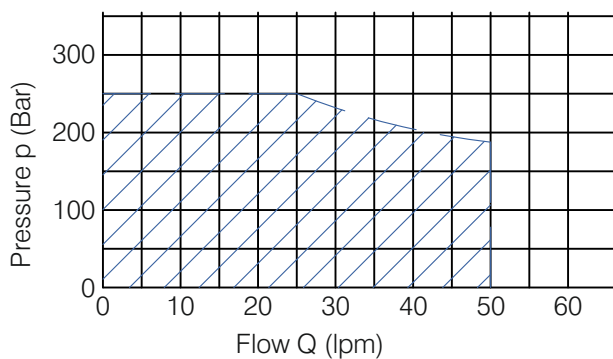
Nominal voltage tolerance..... ±10%
 Power rating 37W
 Coil insulation..... class H
 Duty cycle..... 100%
 Voltage.....12VDC, 24VDC
 Connector ISO 4400 with emergency manual override

Sectional view and performance graph

1. Valve Body
2. Spool
3. Retainer Pad
4. Spring
5. End Cap
6. Core Pin
7. Coil
8. Relief Valve
9. Spring
10. Check Valve



Performance Graph

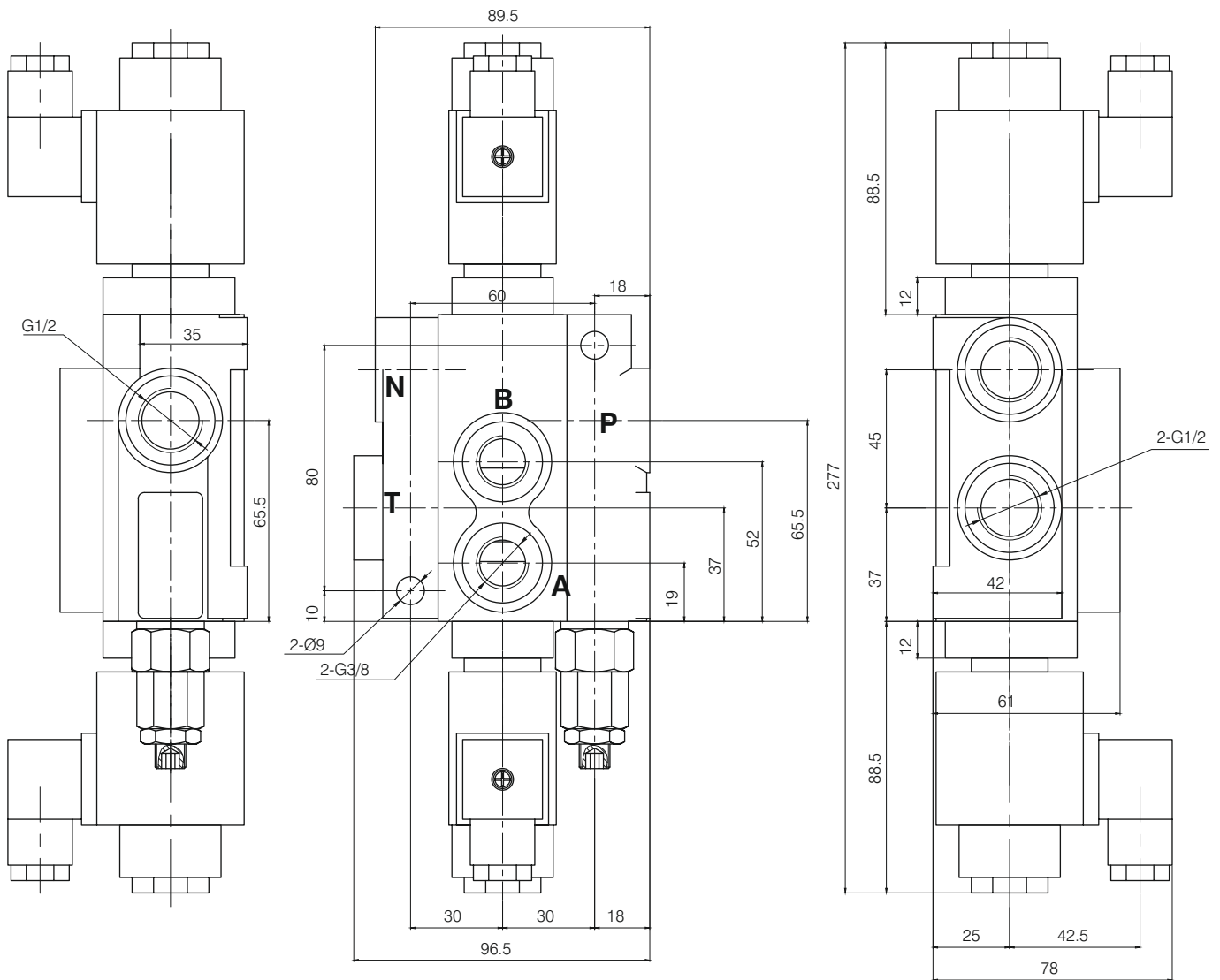




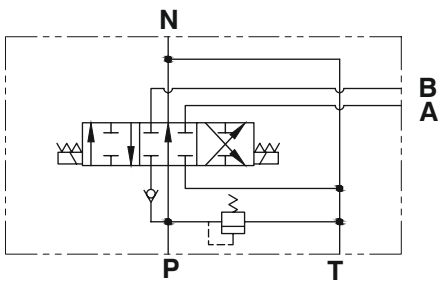
Unit Dimensions

(Dimensions in mm)

- 1 Spool- Z50 *** G



Schematic diagram:



- Technical Parameters:
- 1). Nominal Pressure: 200Bar
 - 2). Flow: 40L/min
 - 3). Voltage: DC12V, DC24V

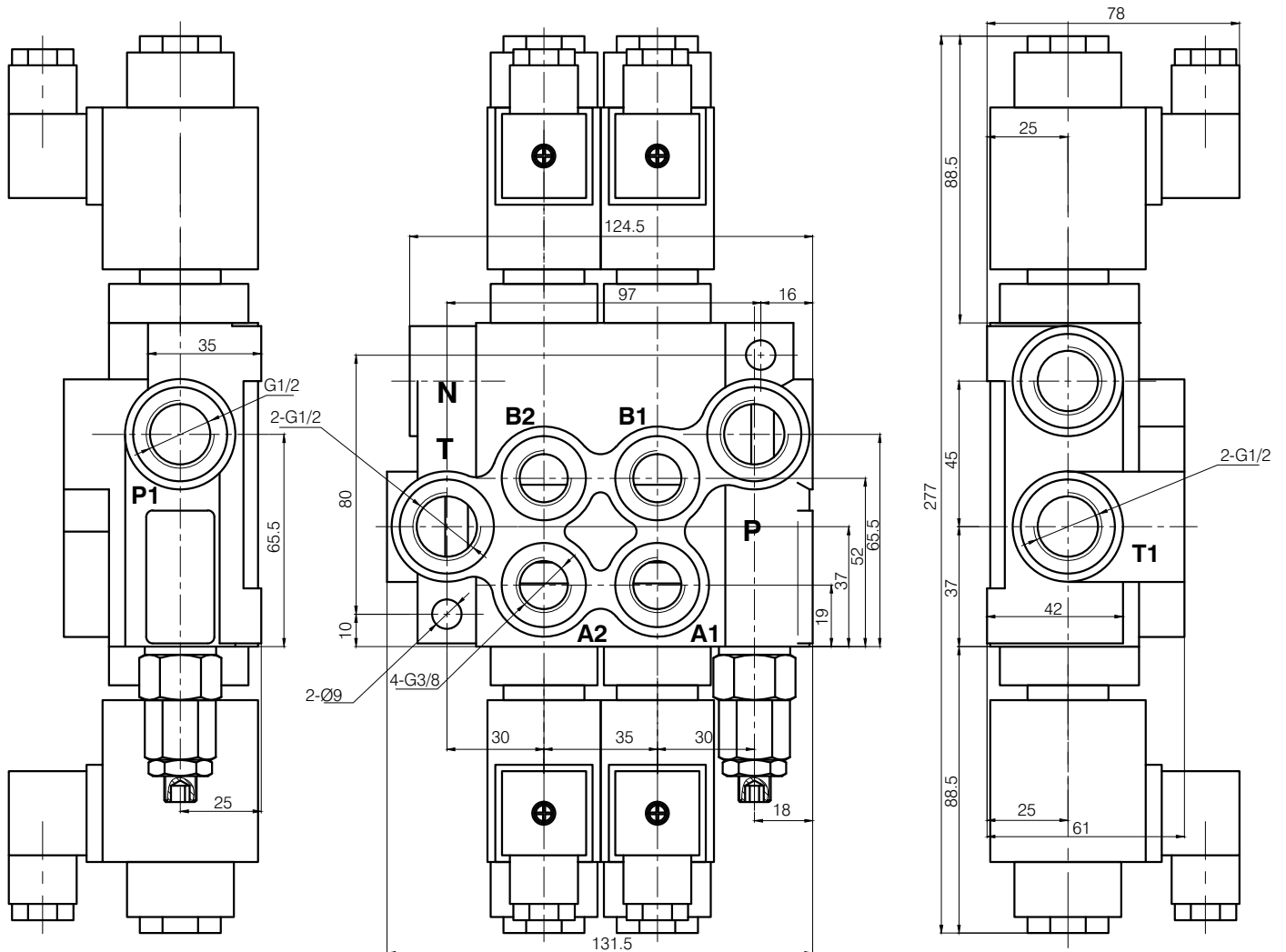
Note: Special features not listed can often be made to your specifications. Please consult your sales representative.



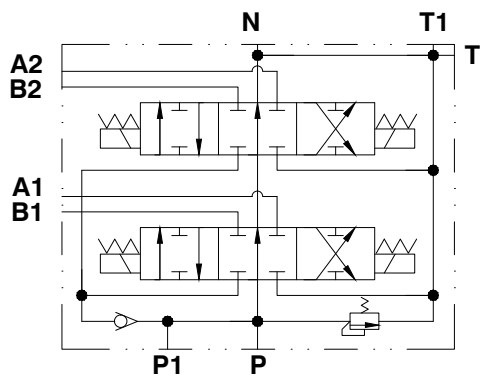
Unit Dimensions

(Dimensions in mm)

- 2 Spool- 02Z50 *** G



Schematic diagram:



Technical Parameters:

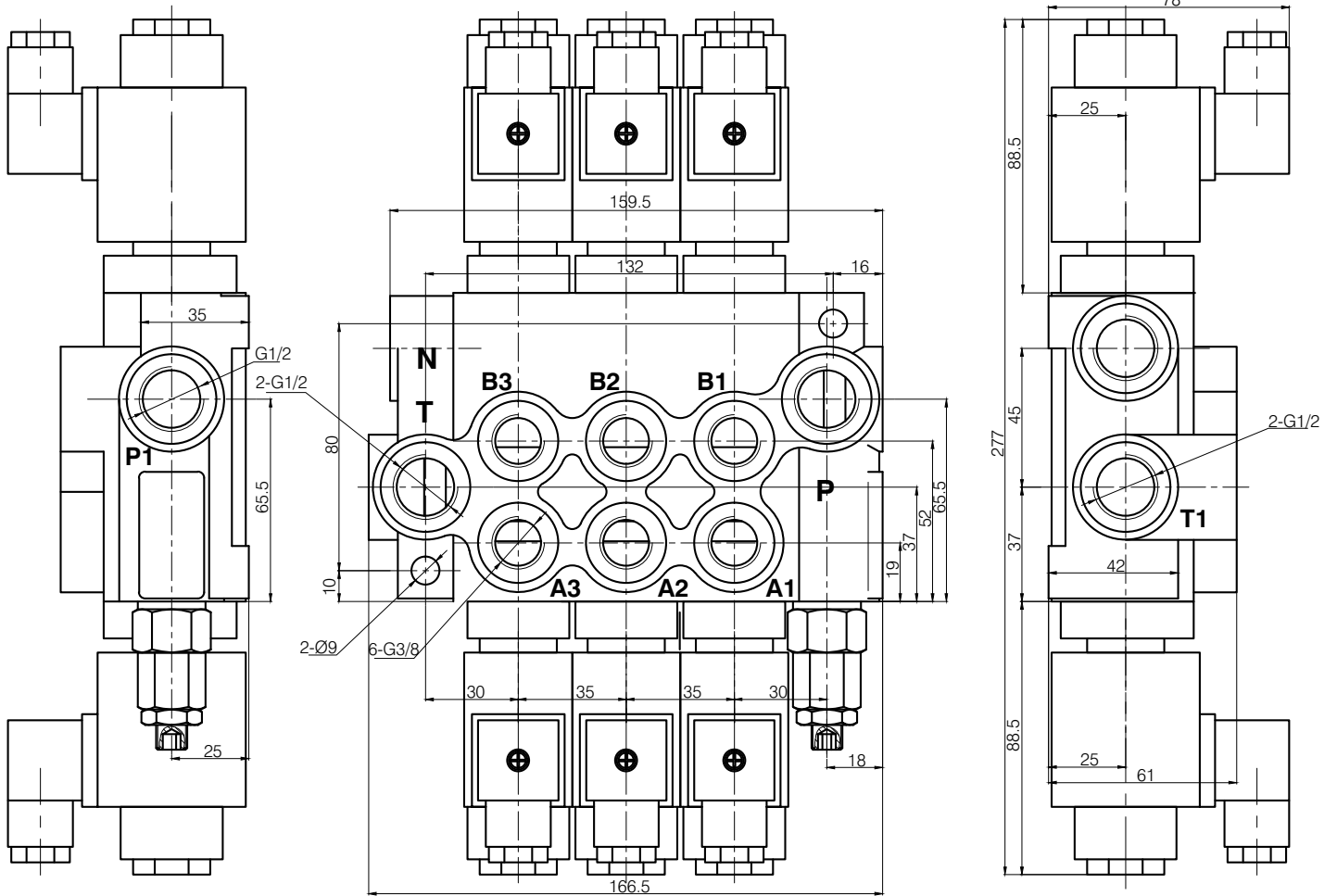
- 1). Nominal Pressure: 200Bar
- 2). Flow: 40L/min
- 3). Voltage: DC12V, DC24V



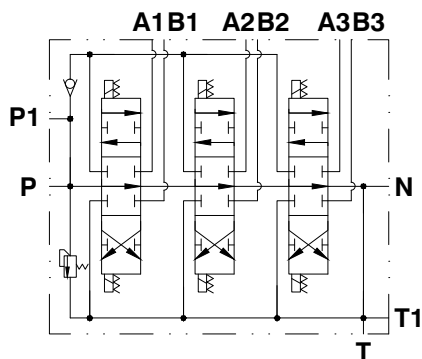
Unit Dimensions

(Dimensions in mm)

- 3 Spool- 03Z50 *** G



Schematic diagram:



Technical Parameters:

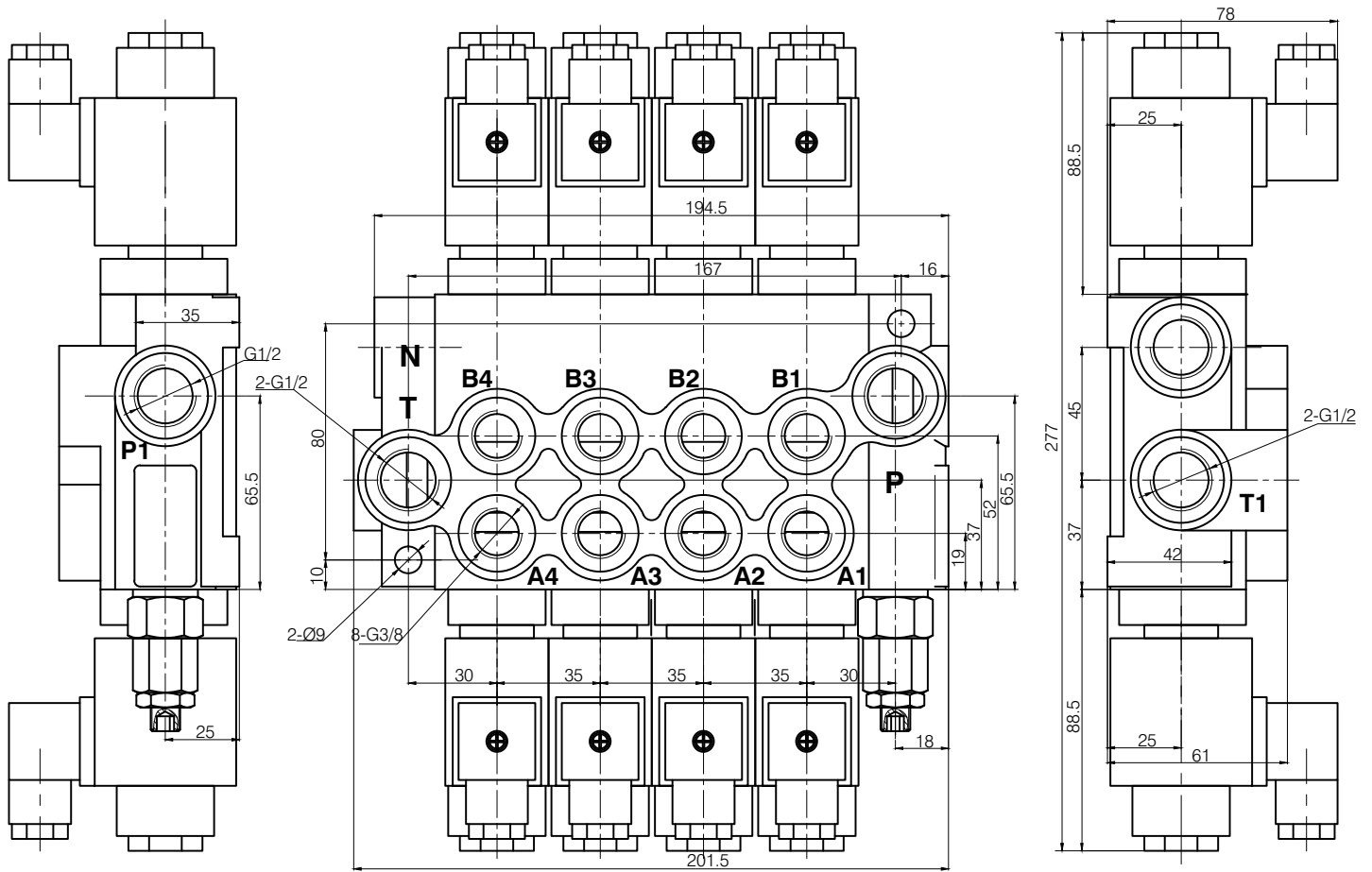
- 1). Nominal Pressure: 200Bar
- 2). Flow: 40L/min
- 3). Voltage: DC12V, DC24V



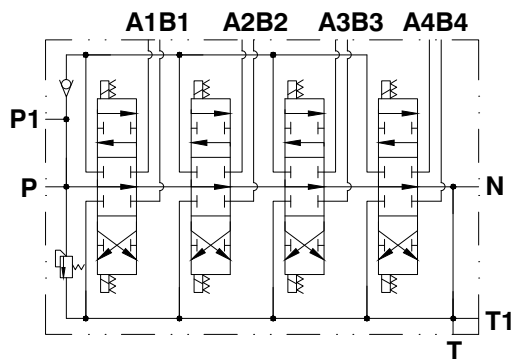
Unit Dimensions

(Dimensions in mm)

- 4 Spool- 04Z50 *** G



Schematic diagram:



Technical Parameters:

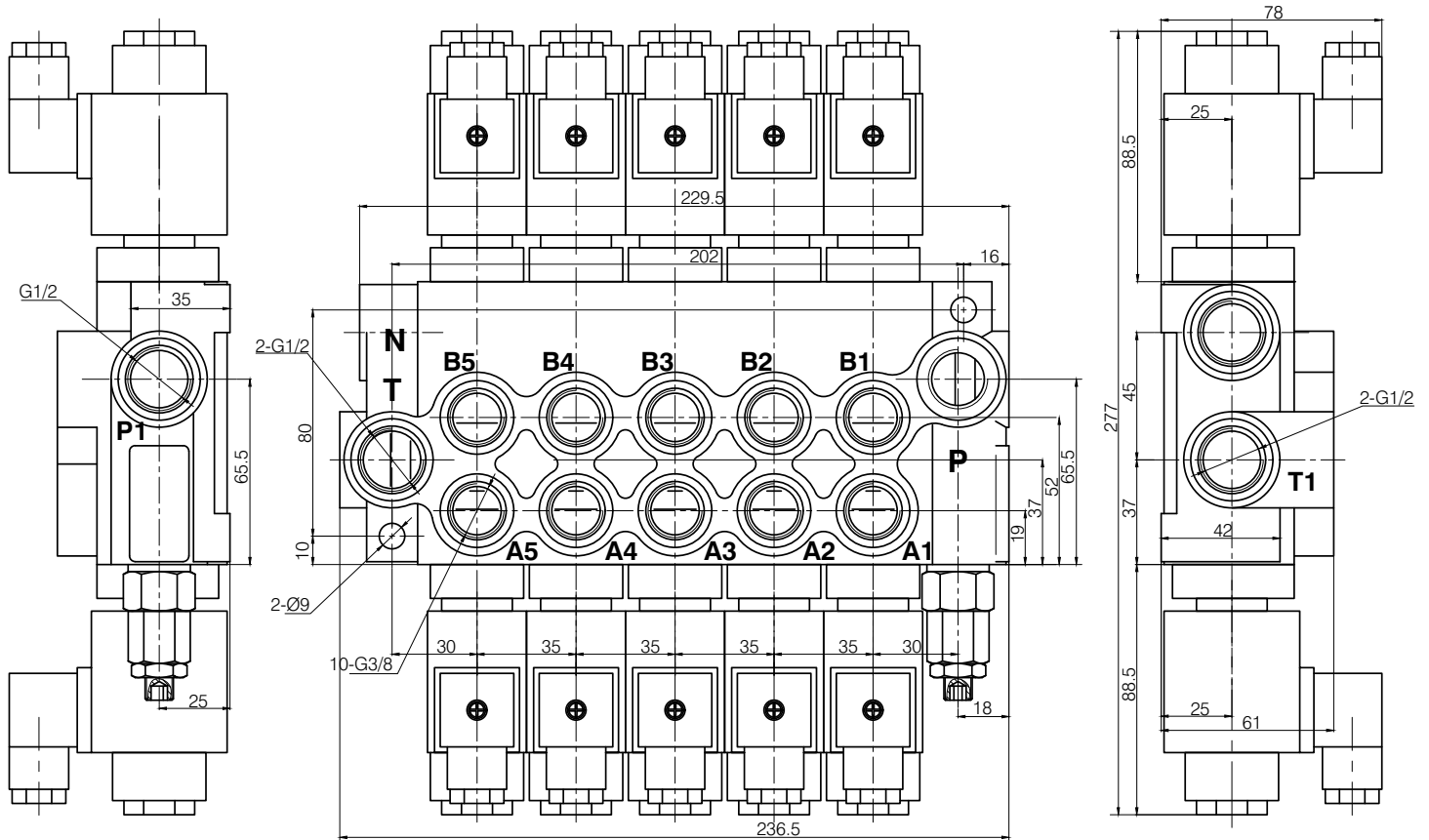
- 1). Nominal Pressure: 200Bar
- 2). Flow: 40L/min
- 3). Voltage: DC12V, DC24V



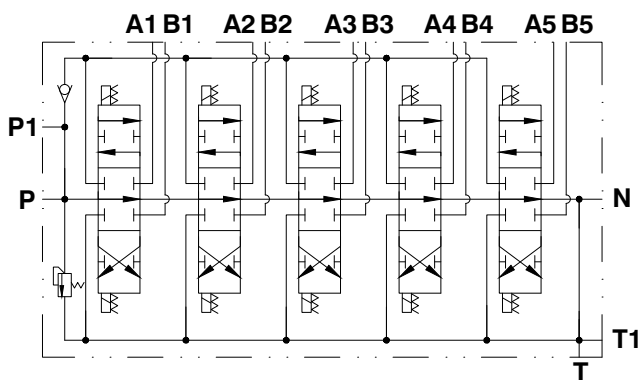
Unit Dimensions

(Dimensions in mm)

- 5 Spool- 05Z50 *** G



Schematic diagram:



Technical Parameters:

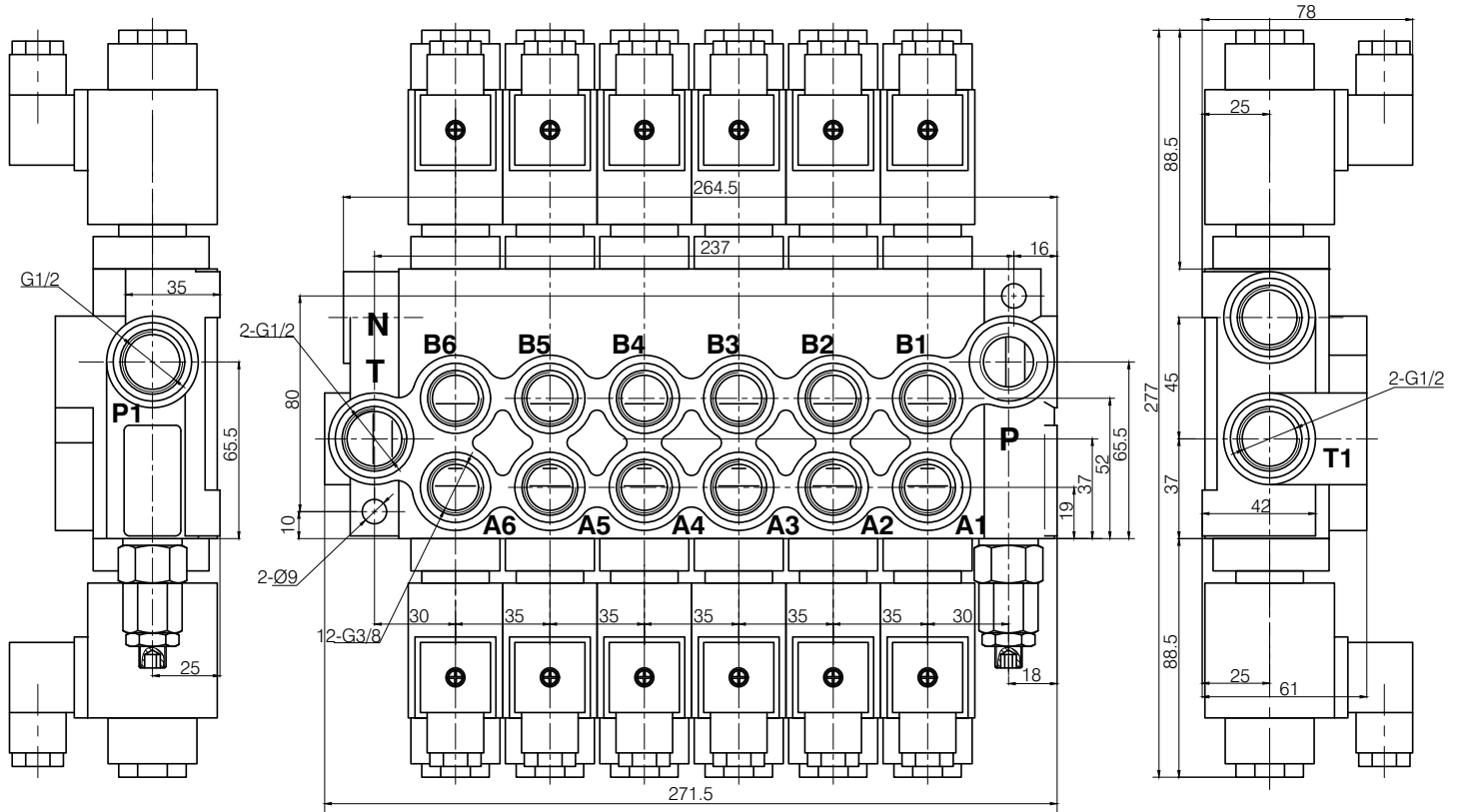
- 1). Nominal Pressure: 200Bar
- 2). Flow: 40L/min
- 3). Voltage: DC12V, DC24V



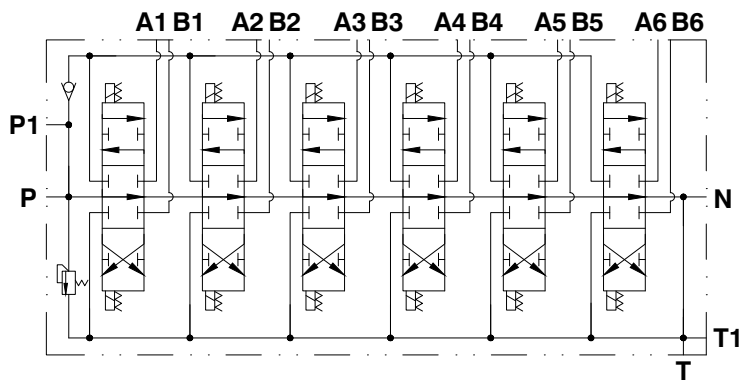
Unit Dimensions

(Dimensions in mm)

- 6 Spool- 06Z50 *** G



Schematic diagram:



Technical Parameters:

- 1). Nominal Pressure: 200Bar
- 2). Flow: 40L/min
- 3). Voltage: DC12V, DC24V



Assembly

- Solenoid direct control with spring return to neutral position.

Need Special spools and special body Z50

1. Body Kit
2. Spool Options
3. Control Kit
4. Coils

