

Description

Назначение и применение

For starting, controlling and stopping the working fluid between the generator of pressure flow, the consumers and the Tank. Предназначение для изменения направления потока, ограничения давления рабочей жидкости в гидрелинии, разгрузка насоса в нейтральной позиции золотника.

Specifications

Основные показатели

1. Valve monoblock	моноблок
Конструктивное решение	
2. Mounting	2 bolts M8
Крепление	
3. Ports	internal thread
Присоединительные отверстия	резбовые отверстия
4. Ambient temperature	-40 – +60 C
температура воздуха	
5. Pressure medium	mineral oil
Рабочая жидкость	
6. Viskosity	12...800 mm/s
Вязкость	20...100 mm/s
	recommended range
7. Fluid temperature	-30 – +80 C
8. Filtration	oil contaminations
	class 10 to NAS 1683
	achived with filter 75
9. Max. operating pressure	P = 250 bar
	A, B = 300 bar
	T < 50 bar
10 Internal leakage	7 ccm/min at 100 bar
	viscosity 46 mm/s
11. Nominal flow	40 l/min (operating diagram)
12. Spool stroke	+– 6 mm
13. Actuating force	< 200 N in spool axis

directional control valve Z50

Left hand configuration – standard

Right hand configuration

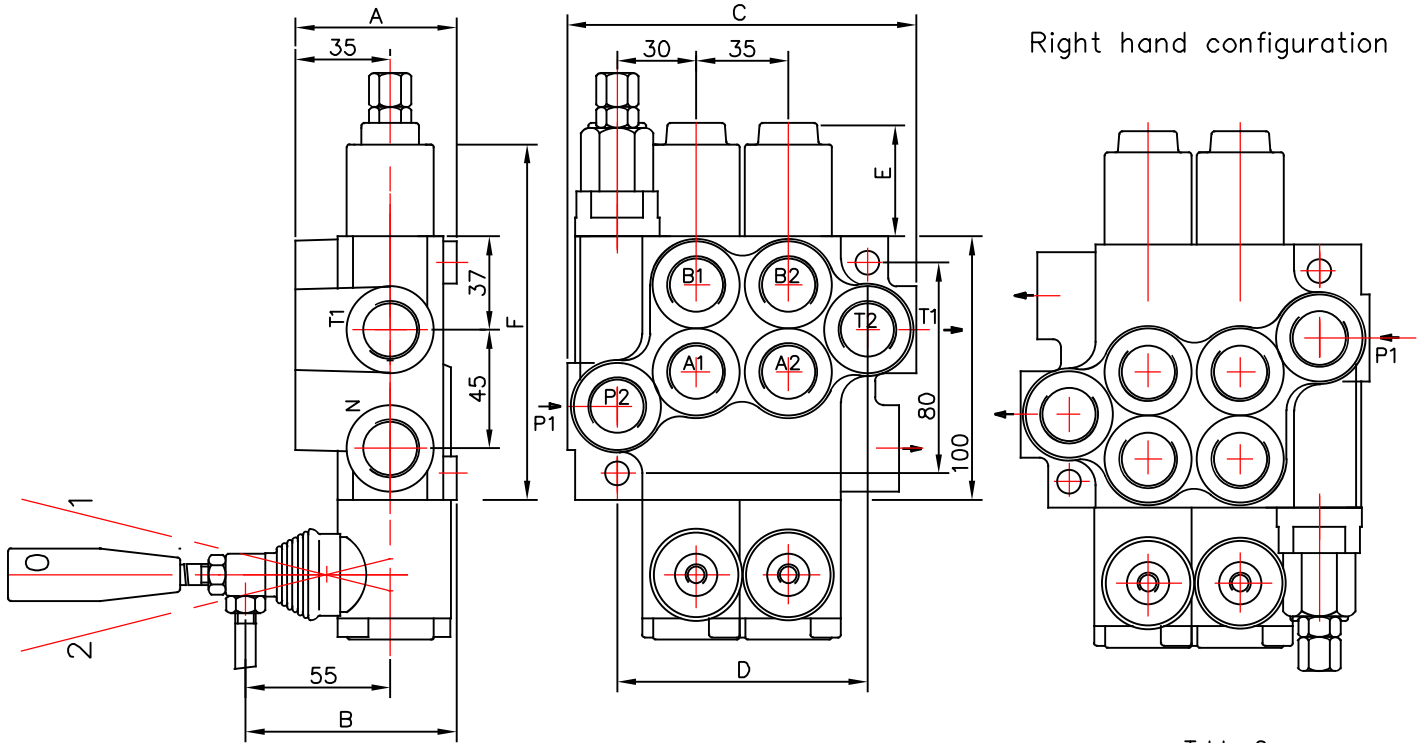


Table 1

	A	B	C	D	P1	P2	T1	T2
01Z50	60	80	85	60	+	-	+	-
02Z50	60	80	129	97	+	+	+	+
03Z50	60	80	164	132	+	+	+	+
04Z50	60	80	199	167	+	+	+	+
05Z50	60	80	234	202	+	+	+	+
06Z50	60	80	269	237	+	+	+	+
07Z50	60	80	304	272	+	+	+	+

Table 2

spool control фиксация золотника	E	F
1; 4; 5; 6; 7; 8; 9; 10; 11;	40	193
2; 3;	72	225
16	+	+

Table 3

code	spools
01	1
02	2
03	3

ets.

- 0 block with common check valve / распределитель с общим клапаном
- 2 number of spools / количество золотников
- Z50 directional control valve type ... / распределитель типа ...
- R inlet high pressure – right / вход давления с правой стороны
- relief valve – standard setting 175; without indication (4) Spring for 160 to 315 bar; standard setting 220 bar; red; (svp) relief valve blanking plug; без предопр. клапана
- A first spool distribution type / характеристика первого золотника
- 1 spool control/detend and ets./ / контроль золотника/фиксации и грузе/
- A second spool distribution type / вид второго золотника
- 1 spool control/detend and estr./ / контроль золотника/фиксации и грузе/
- G ports /treads/ / резьбовые отверстия
- KZ1 general operation feature / вид ручного управления
- T with "teton" / исполнение ручного управления с "тетон"
- H operation feature /pneumatic, .../ / другое управление
- E with electric switch / с электрическим выключателем
- C2 high pressure carry over / продолжител потока высокого давления
- 11 connection parts in use / присоединительные отверстия

directional control valve Z50

INLET RELIEF OPTIONS

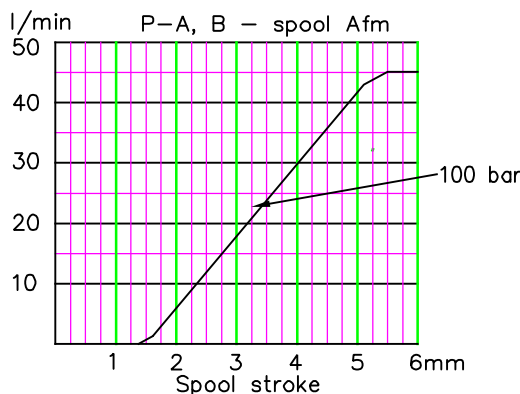
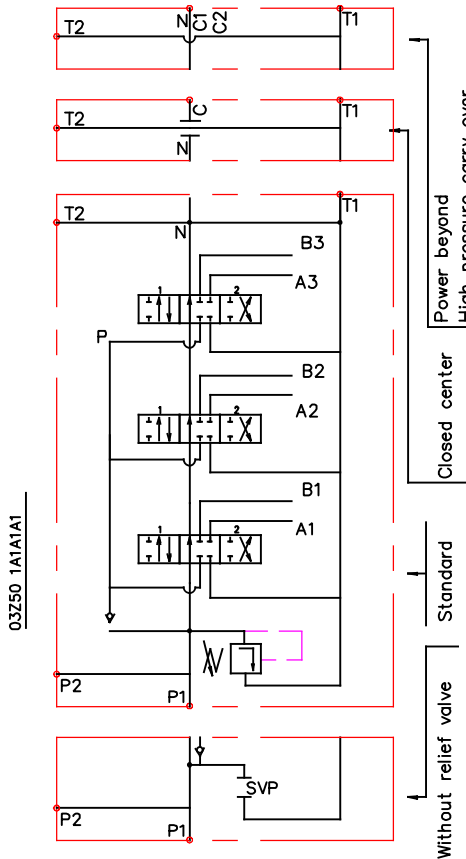
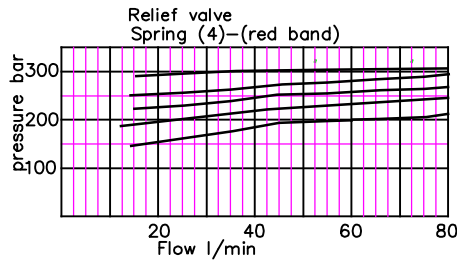
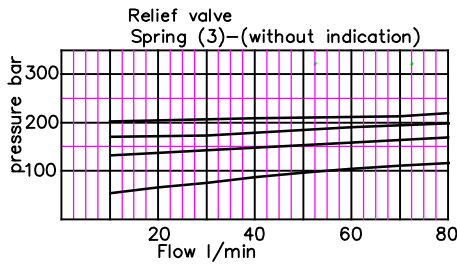


Table 4

code	way of distribution ; распределение потока
1	parallel ; параллельное

Table 5

code	spool type
A	
B	
C	
D	
E	
F	
G	
H	
M	
N	
O	
P	
Q	
R	
S	
T	
* K	
** L	

Table 6

code	spool control
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

* 15	
* 16	

* только при вход слева
only for left hand configuration

** 12	
** 13	

** только при вход справа
only for right hand configuration

*** Spool Afm – fine metering

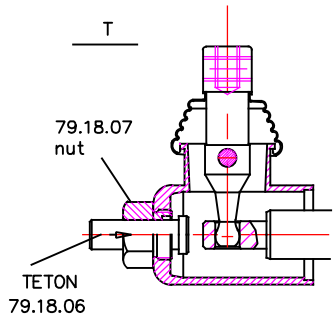
Table 7

code	с микро шаллер ; incorporated microswitch
E	<div style="display: inline-block; vertical-align: middle;"> mikroswitch type Omron-V 165 I C5 </div>

Table 8

code	другое управление ; operation feature
P	<div style="display: inline-block; vertical-align: middle;"> пневматическое ; ports NPTF 1/8-27 on-off pneumatic control; pn = 5-10 bar ; </div>
H	<div style="display: inline-block; vertical-align: middle;"> гидравлическое ; ports G 1/4 on-off hydraulic control ; pn = 5 - 20 bar </div>

directional control valve Z50



Z50

Table 9

code	ports (threads) ; присоединительные отверстия				
	P	A ; B	T	N	C2
M	M22x1.5	M18x1.5	M22x1.5	M22x1.5	M22x1.5
G	G1/2	G3/8	G1/2	G1/2	G1/2
S	7/8-14UNF	3/4-16UNF	7/8-14UNF	7/8-14UNF	7/8-14UNF

kind of hand control ; вид ручного управления

Table 10

code	ескиз feature	code	ескиз feature	code	ескиз feature
KZ		KY		KI	
KZ1		KY1		KI1	
KZ0		KY0		KI0	
KZ01		KY01		KI01	
-	without hand control ; без ричажная система управления				

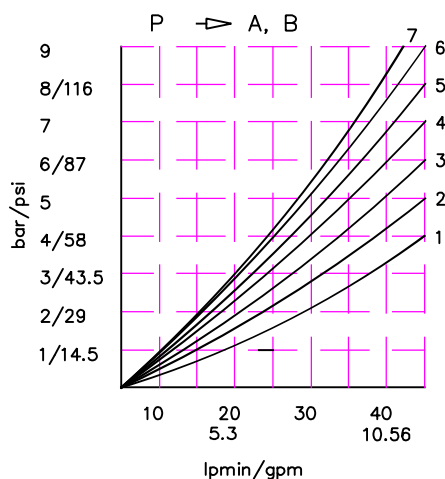
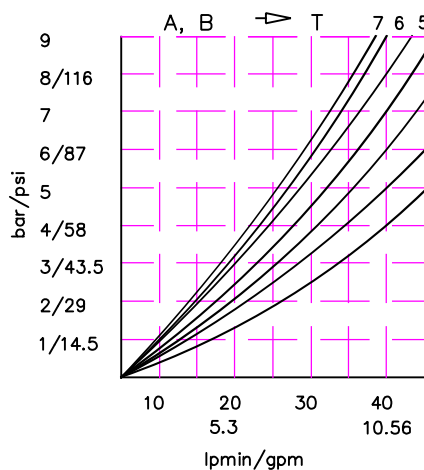
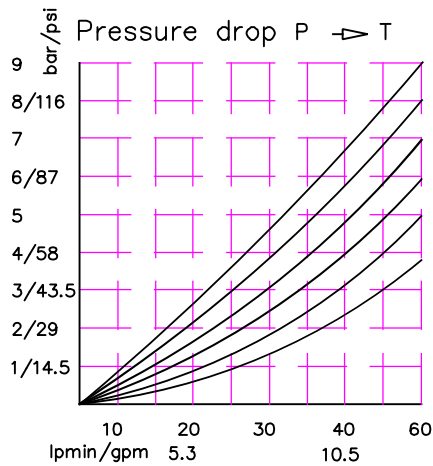


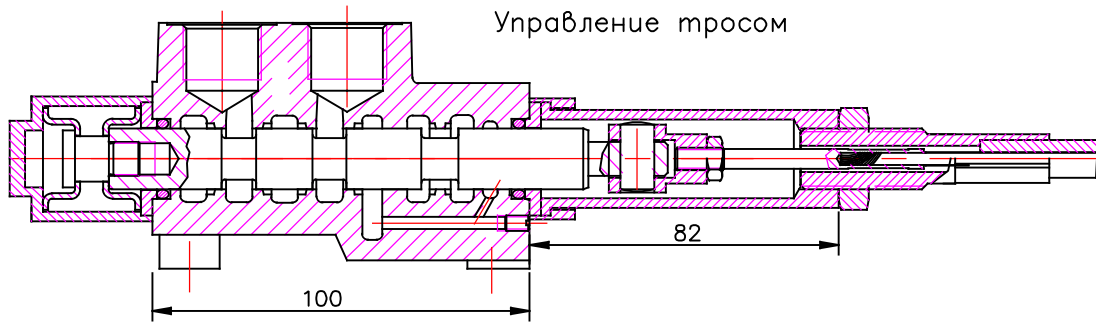
Table 11

code	вид продължение на дебита	
C	отвор "N" затворен closed center	
C2	отвор "N" продължава за следващ консуматор part for power beyond sleeve(carry over)	
-	отвор "N" е свързан с "T" without part for pressure carry over	
X	отвор "N" е винаги свързан с "T" power beyond ever to tank	

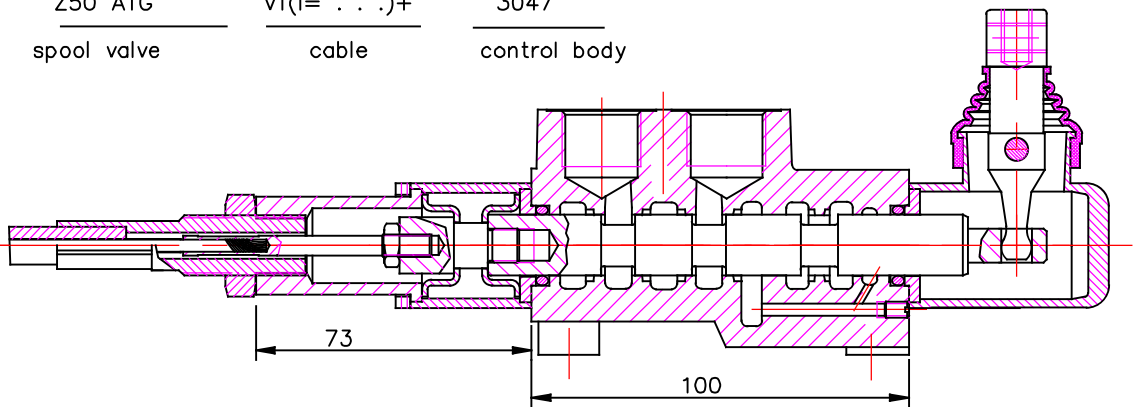
Table 12

code	used connection ports ; присоединительные отверстия
11	P1 ; T1
12	P1 ; T2
21	P2 ; T1
22	P2 ; T2

REMOTE CONTROLS
Управление тросом



Z50 A1G V1(l= . . .)+ 3047
spool valve cable control body



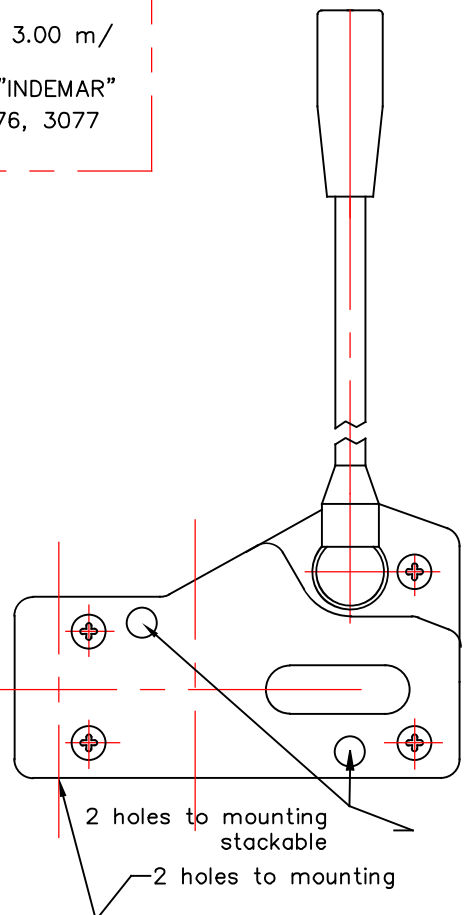
Z50 A1GKZ V2(l= . . .)+ 3047
spool valve cable control body

Cable "INDEMAR" Cod. IT 3056 /l=1.00; 1.50; 2.00; 2.50; 3.00 m/

+control body "INDEMAR"
code 3047, 3076, 3077

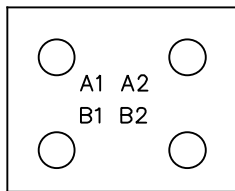
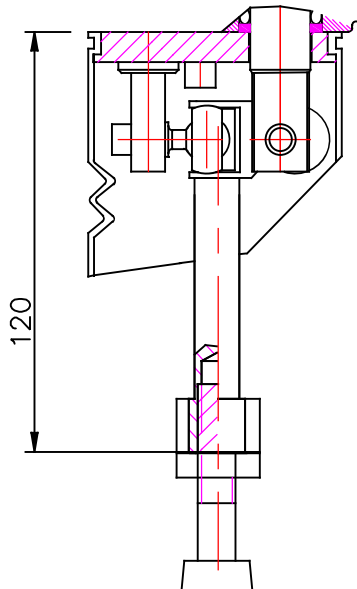
Technical specifications			
	3047	3076	3077
Stroke	13+13 mm	13+13 mm	13+13 mm
Max. load	45 kg	45 kg	45 kg
Level ratio	10:1	10:1	10:1
Lock in neutral	No	No	Yes
Antireverse lock	No	Yes	No
Body colour	Black	Black	Black
Cables type	Heavy Duty	Heavy Duty	Heavy Duty
Operating temperature	-40/+80C	-40/+80C	-40/+80C

High solidity controls for easy mounting on every type of distributor. They can be mounted stand alone or packed together. They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in three different models to meet different needs of Clients.

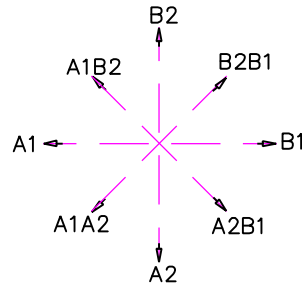
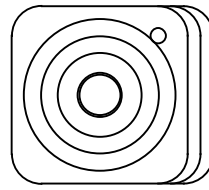


JOYSTICK "+"

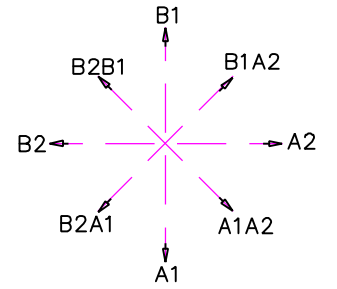
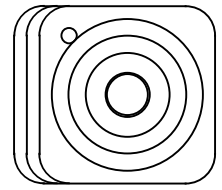
This control gives the possibility to operate, at the same time two spools with a "+" movement.



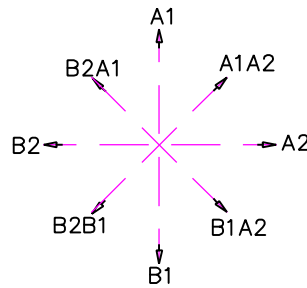
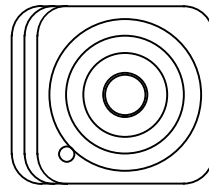
standard version 1



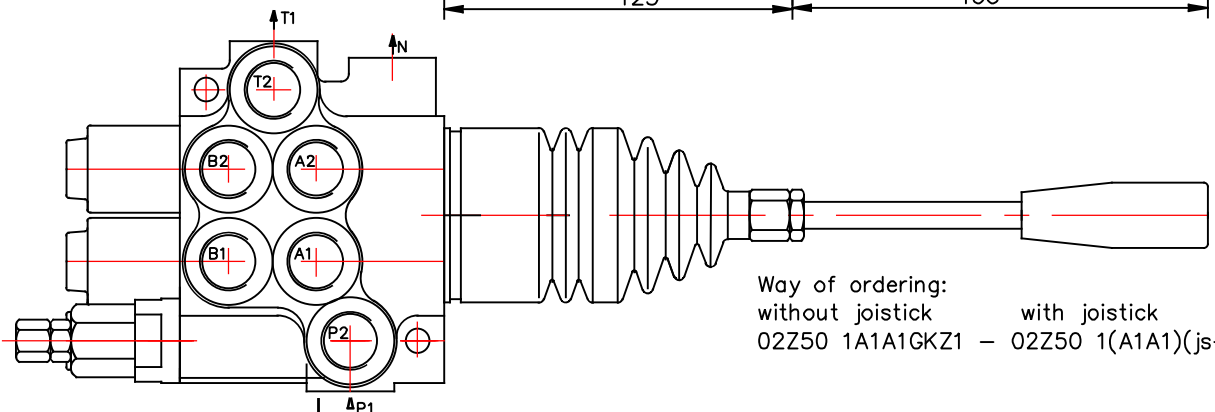
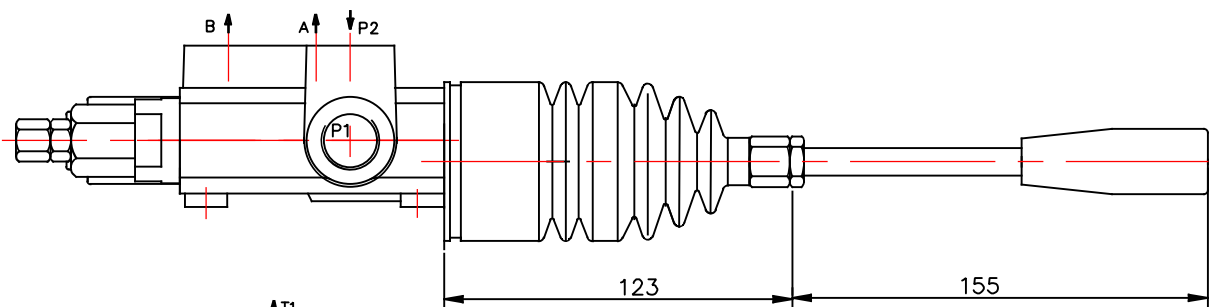
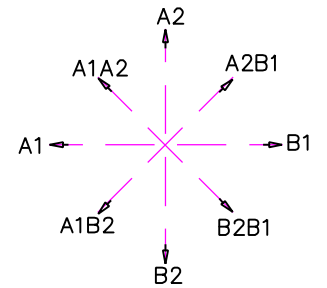
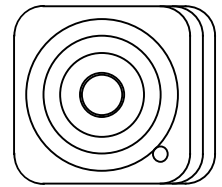
standard version 2



standard version 3



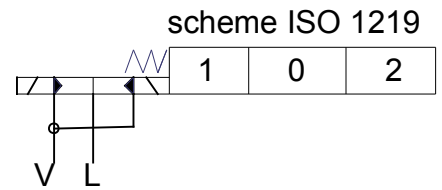
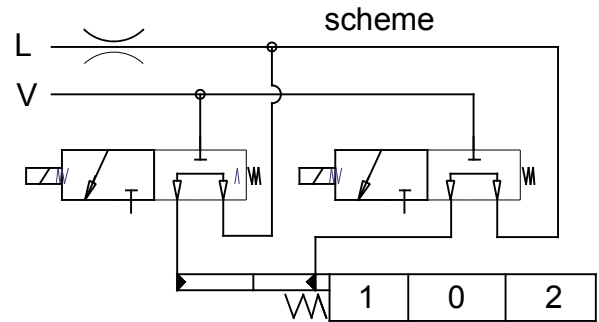
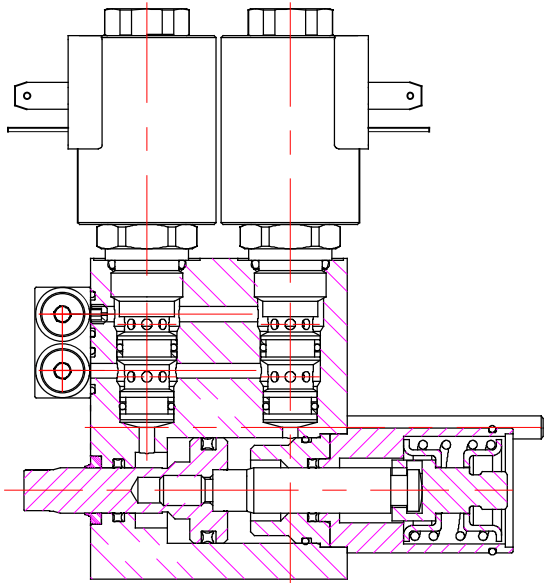
standard version 4



Way of ordering:
without joystick with joystick
02Z50 1A1A1GKZ1 - 02Z50 1(A1A1)(js+3)G

directional control valve Z50

ED3 – electro-hydraulic control ON-OFF
 Электрогидравлический контрол ON-OFF

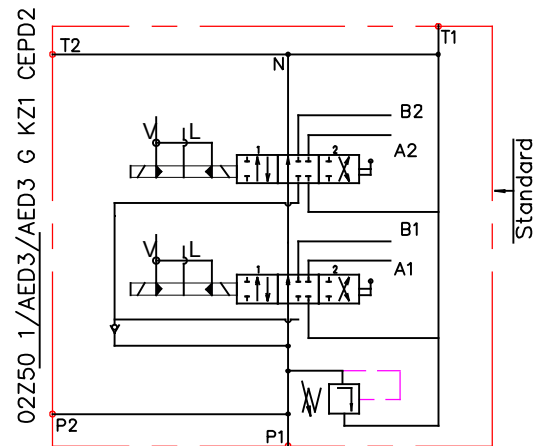
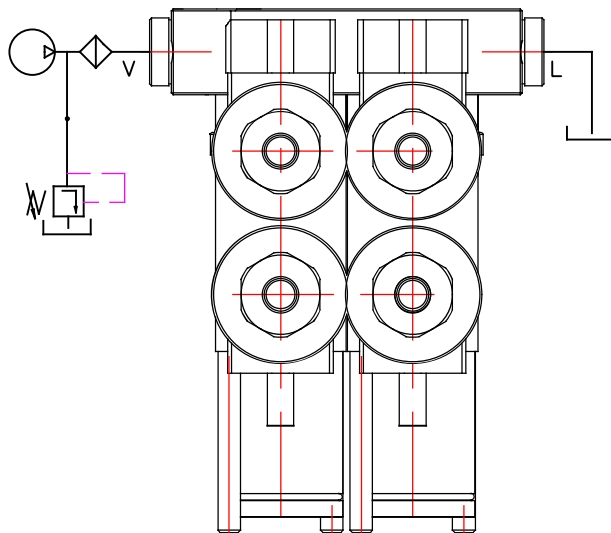


Operating pressure min 10 bar(145 psi)
 max 50 bar(725 psi)
 Max operating pressure in L (T line) 25 bar(360 psi)

Solenoid operating features
 Nominal voltage tolerance ±10%
 Power rating 24W
 Duty cycle 100 %

Ordering codes
 3-wai solenoid valve-SV08-33
 coil P40ED3-G-12VDC
 coil P40ED3-G-24VDC

Collector kit for external pilot and drain – CEED...(1,2,3 ...)
 Колектор для внешнего питания управления и слив



Ordering example

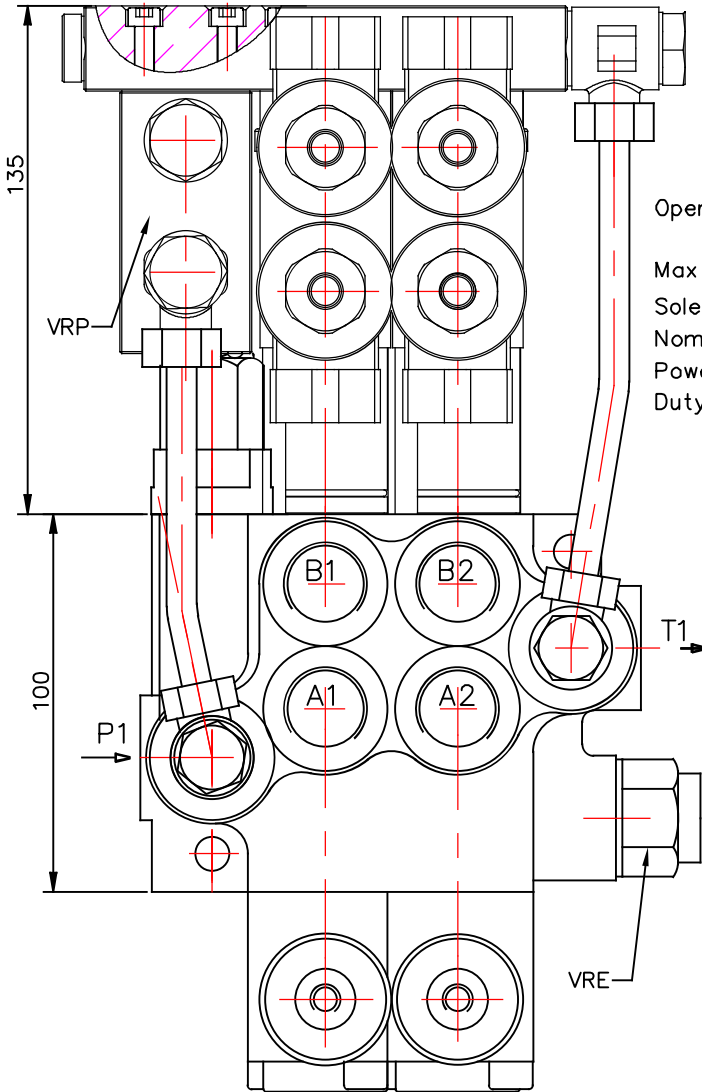
02Z50-1/A1ED3/A1ED3 G KZ1-CEED2-12VDC

Ordering codes (BSP threads)

CEED1P40	Kit for 1 section
CEED2P40	Kit for 2 section
CEED3P40	Kit for 3 section
CEED4P40	Kit for 4 sektion
.....	

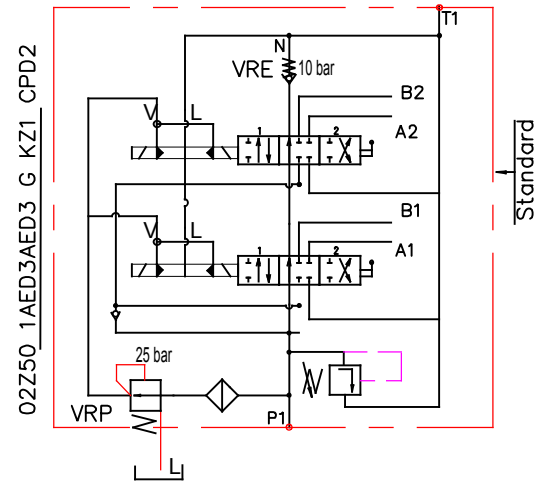
directional control valve Z50

ED3 – electro-hydraulic control ON-OFF
 Электрогидравлический контрол ON-OFF



Order codes
 3-wai solenoid valve-LSV2-08-3C
 coil P40ED3-G-12VDC
 coil P40ED3-G-24VDC

Operating pressure min 10 bar(145 psi)
 max 50 bar(725 psi)
 Max operating pressure in L (T line) 25 bar(360 psi)
 Solenoid operating features
 Nominal voltage tolerance ±10%
 Power rating 24W
 Duty cycle 100 %



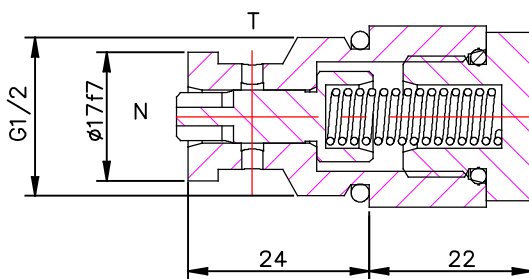
Ordering example

02Z50-VRP- 1/A1ED3/A1ED3 G KZ1-CED2-VRE-12VDC

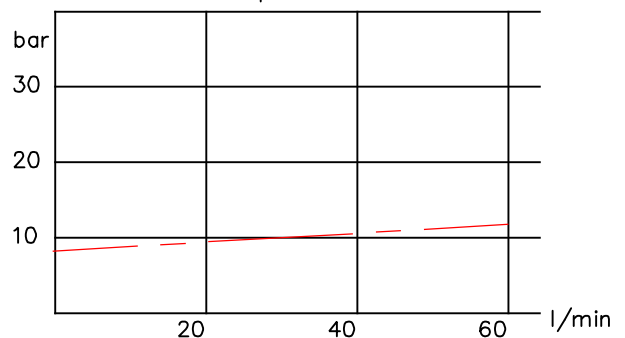
Collector kit – BSP threads
 Ordering codes

CED1 Kit for 1 section
 CED2 Kit for 2 section
 CED3 Kit for 3 section
 CED4 Kit for 4 sektion

Back pressure valve VRE-P40
 Клапан подпорный на слив

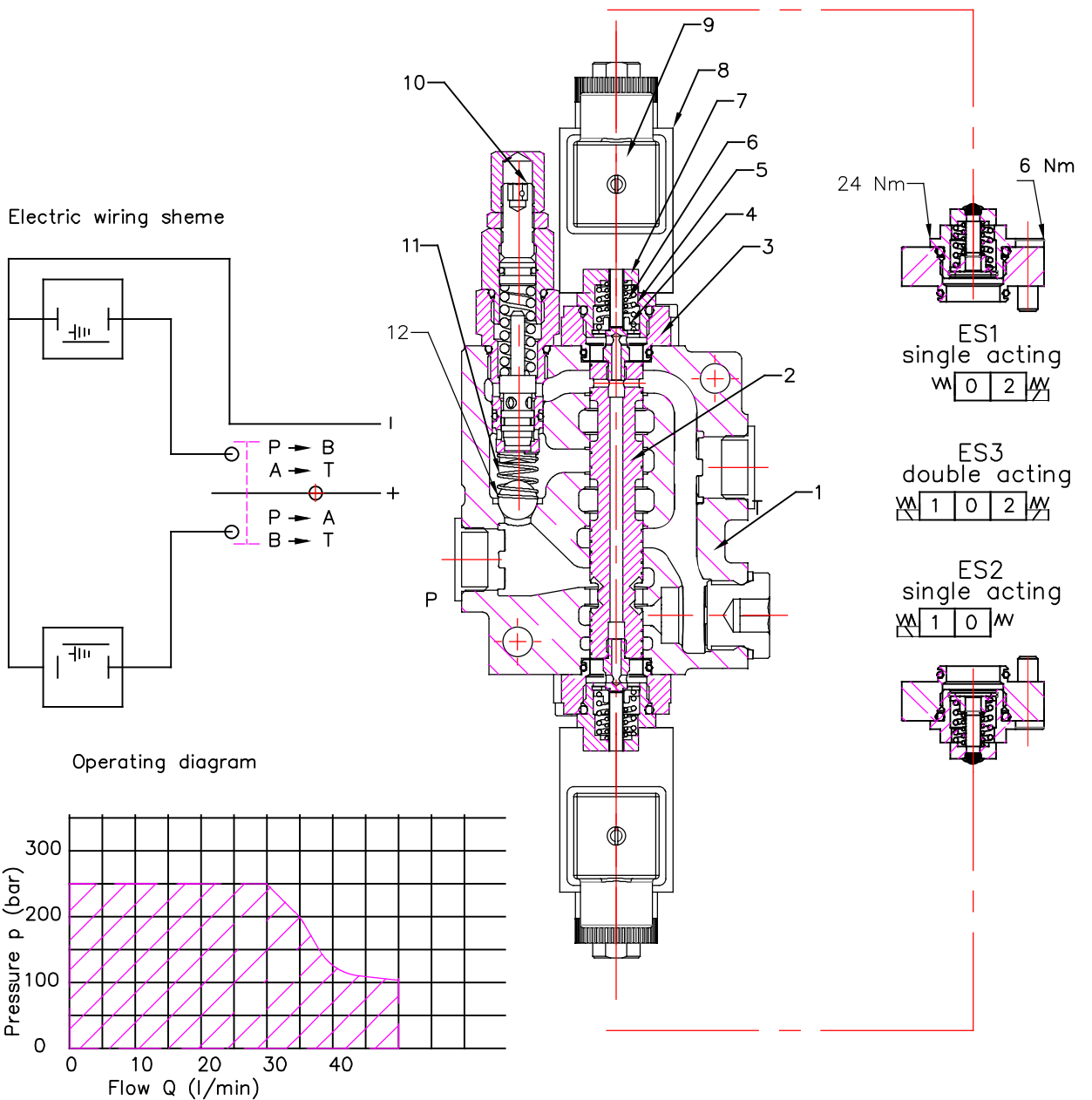


Pressure drop N-T



directional control valve Z50

ES ... SOLENOID DIRECT CONTROL



Operating features

Технические примечания

Control

Internal leakage A(B) → T
(p=120 bar, Viscosity=32 mm²/s : max 30 ccm/min)
Fluid temperature – –20°C(short time) ... 80°C
Max. back pressure on outlet port T – 25 bar(360 psi)

Coil

Nominal voltage tolerance ±10%
Power rating 37 W
Coil insulation class H
Duty cycle 100%
Connector ISO 4400
Emergency manual override

pos.	Part.No	Description	Quantity
12		Ball 12	1
11	79.00.03	Spring	1
10	79.04.00	Relief valve	1
9		Connector	2
8	C35D012RC P01	Solenoid coil	2
7	GM4060/BD	Solenoid Tube	2
6	542.02.04.15	Additional spring	2
5	542.02.04.12	Spring	2
4	542.02.04.04	Washer	2
3	542.02.08.00	Intermediate unit	2
2		Spool ...	1
1		Body ...	1

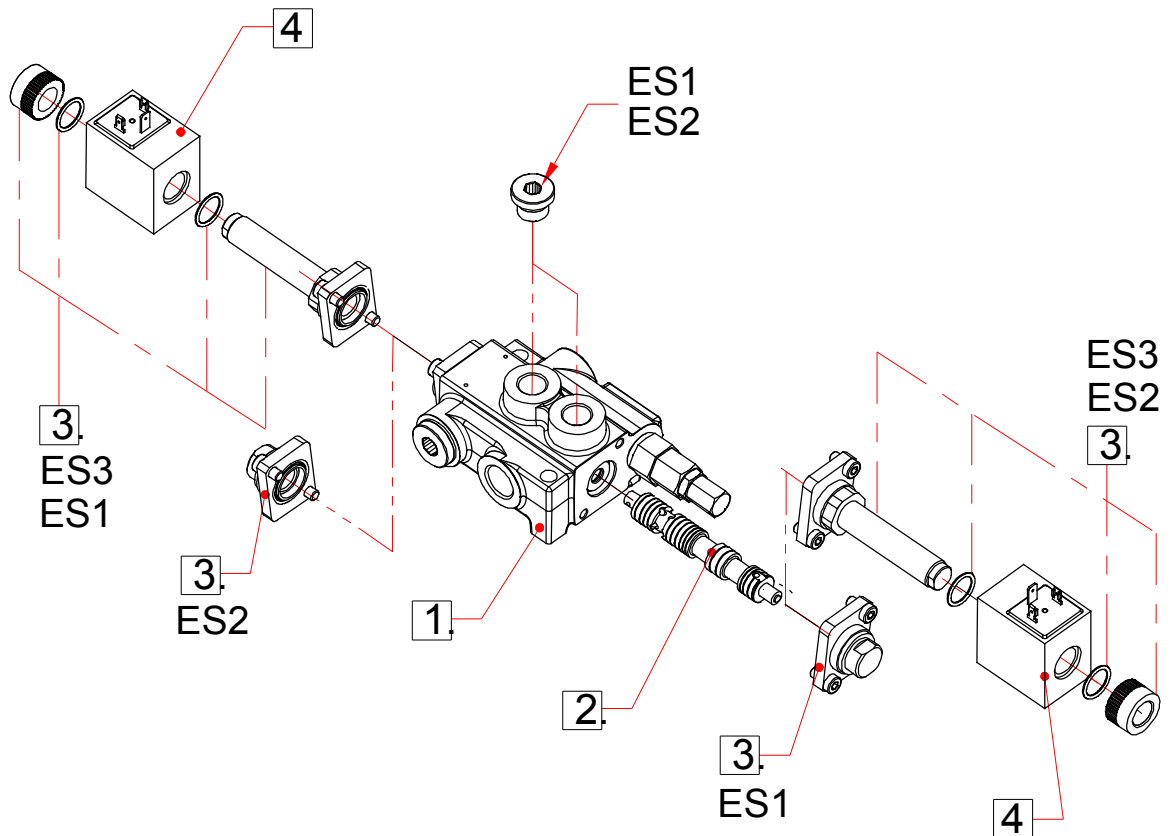
directional control valve Z50

ES ... SOLENOID DIRECT CONTROL

Solenoid direct control with spring return to neutral position.
 Needs special spools and special body Z50.

ORDERING EXAMPLE

Z50 A ES3 12VDC G
 1 2 3 4 5



1.Body kit

Type	Description
Z50	1 spool
02Z50	2 spool
03Z50	3 spool
04Z50	4 spool
05Z50	5 spool
06Z50	6 spool

3.Control kit

Type	Description
ES1	Single acting P – A with spring return in neutral position
ES2	Single acting P – B with spring return in neutral position
ES3	Double acting P – A (B) with spring return in neutral position

2.Spool options

Type	Description
A	Double acting, 3 positions with A and B closed in neutral position
D	Double acting, 3 positions with A and B open to Tank in neutral position

4.Coils

Type	Description
(with connector ISO 4400)	
12VDC	Nominal voltage 12VDC
24VDC	Nominal voltage 24VDC

5.Threads

G	P, T – G1/2; A, B – G3/8
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