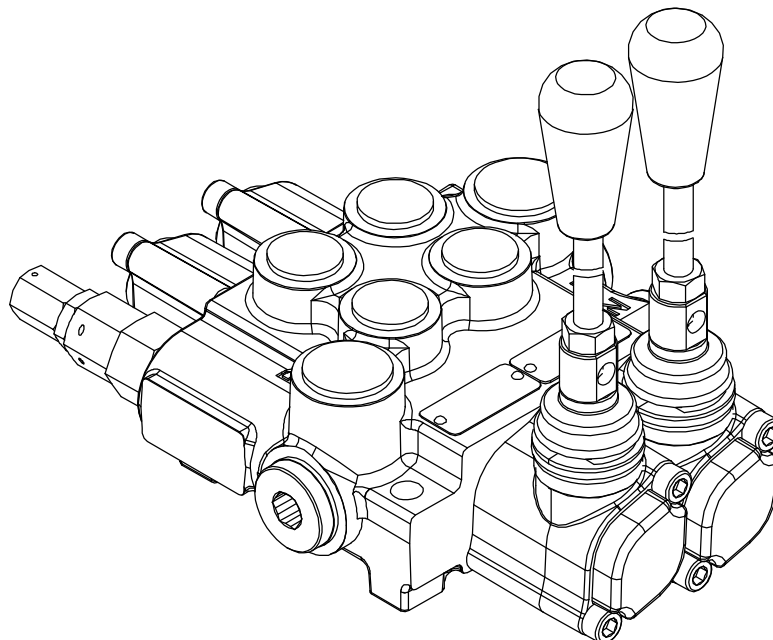


directional control valve Z50

Description

Назначение и область применения

For starting, controlling and stopping the working fluid between the generator of pressured flow, the consumers at the Tank. Предназначен для изменения направления потока, ограничения давления рабочей жидкости гидролиниях, разгрузки насоса в нейтральной позиции золотников.

Specifications

Основные показатели:

1. Valve monoblock	моноблок
Конструктивное исполнение	2 bolts M8
2. Mounting	
Крепление	
3. Pressure connections	internal thread
Присоединительные отверстия	внутренние резьбы
4. Ambient temperature	-40C...+60C
Температура воздуха	
5. Pressure medium	mineral oil based hydraulic oil
Рабочая жидкость	
6. Viskosity	12...800 mm ² /s permissible range
Кинематическая вязкость	20...100 mm ² /s recommended range
7. Fluid temperature	- 15C...+80C
8. Filtration	Oil contamination 10 to NAS1638
9. Max. operating pressure	P = 250 bar
Давление max. bar	T = 50 bar
	A, B = 300 bar
10. Leakage	15 cm ³ /min at 120 bar
Внутренние потери (A, B – T)	
11. Nominal flow	40 l/min (see “operating” diagram)
Разход рабочей жидкости	
12. Spool stroke	± 6 mm
Ход золотника	
13. Actuating force	< 200 N in spool axis direction

directional control valve Z50

Left hand configuration – standard

Right hand configuration

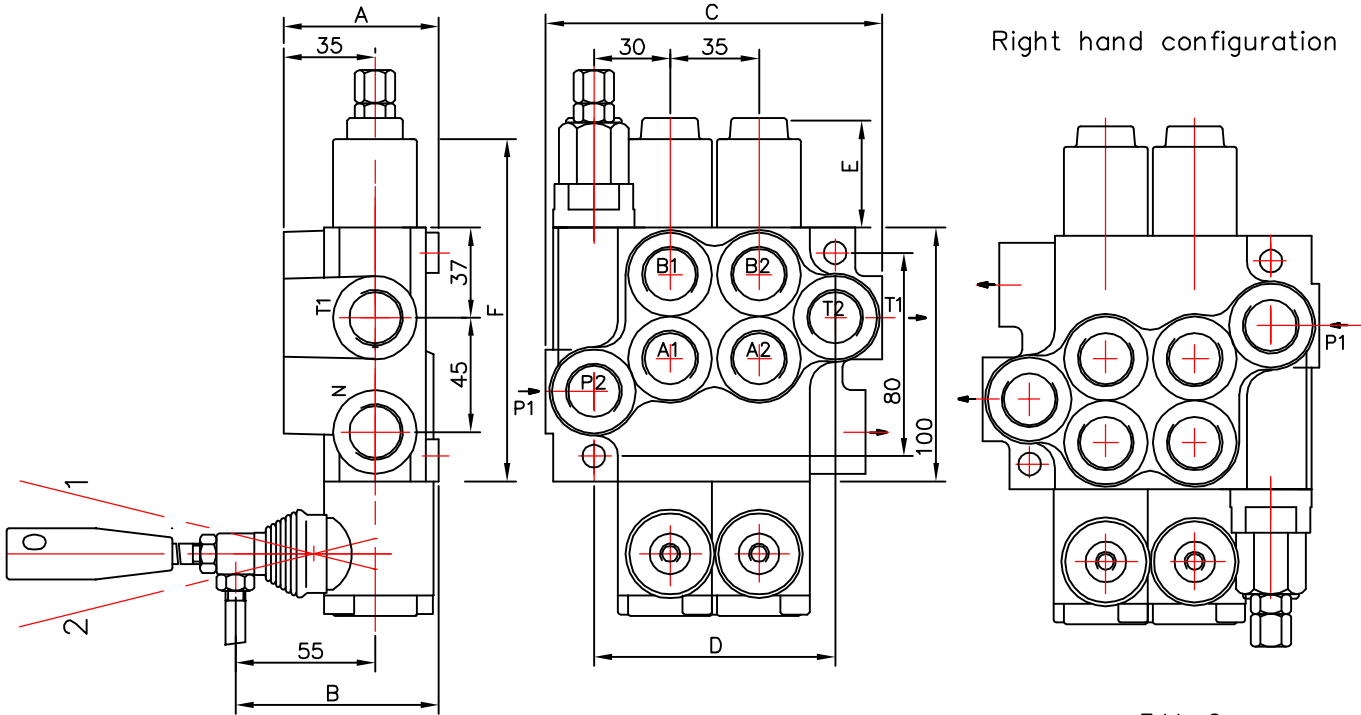


Table 1

	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 фиксации 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
A 1 _____
 first spool distribution type
 характеристика первого золотника
A _____
 spool control/detend and est./
 контрол золотника/фиксация и грузе/
1 _____
 second spool distribution type
 вид второго золотника
1 _____
 spool control/detend and est./
 контрол золотника/фиксация и грузе/
G _____
 ports /treads/
 резьбовые отверстия
KZ1 _____
 general operation feature
 вид ручного управления
T _____
 with "teton"
 исполнение ручного управления с "метон"
H _____
 operation feature /pneumatic, .../
 грузе управление
E _____
 with electric switch
 с электрическим выключателем
C2 _____
 high pressure carry over
 продолжител потока высокого давления
11 _____
 connection ports in use
 присоединительные отверстия

directional control valve Z50

Table 4

code	way of distribution ; распределение потока
1	parallel ; параллельное

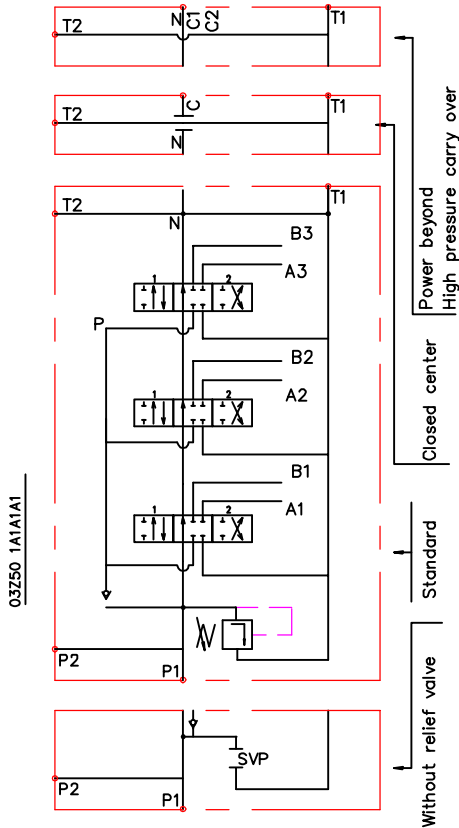
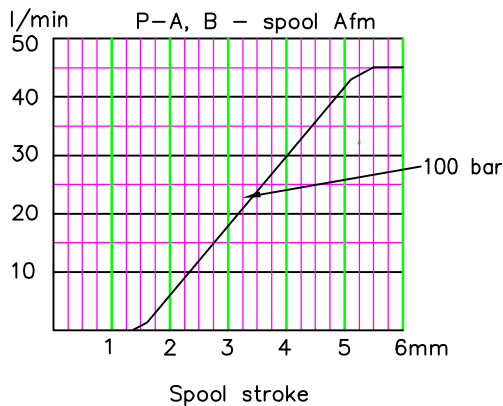


Table 5

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	



* только при вход слева (дв8) only for left hand configuration

** только при вход справа (дв8) only for right hand configuration

*** Spool Afrm - fine metering

* 15	
* 16	

* только при вход слева only for left hand configuration

** 12	
** 13	

** только при вход справа only for right hand configuration

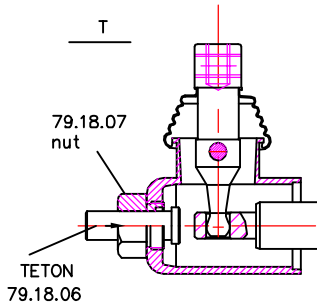
Table 7

code	с микро шалмер ; incorporated microswitch	
E		mikroswitch type Omron-V 165 I C5

Table 8

code	другое управление ; operation feature	
P		пневматическое on-off pneumatic control; 5-10 bar ; ports NPTF 1/8-27
H		гидравлическое on-off hydraulic control ; pn = 5 - 20 bar ; ports G1/4

directional control valve Z50



Z50

Table 9

code	ports (treads) ; 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				

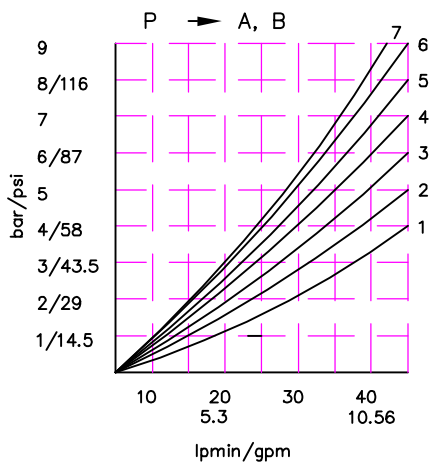
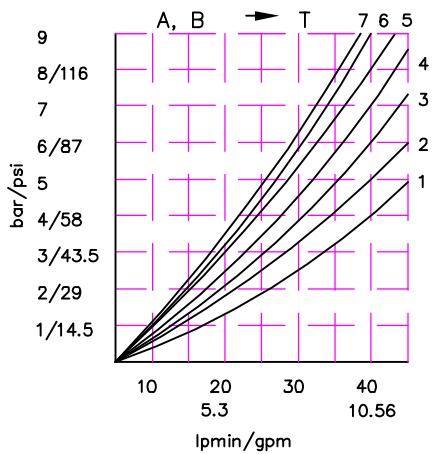
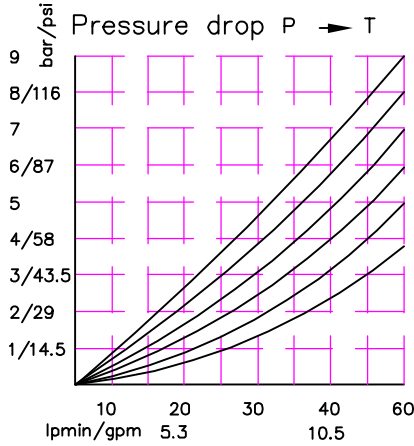


Table 11

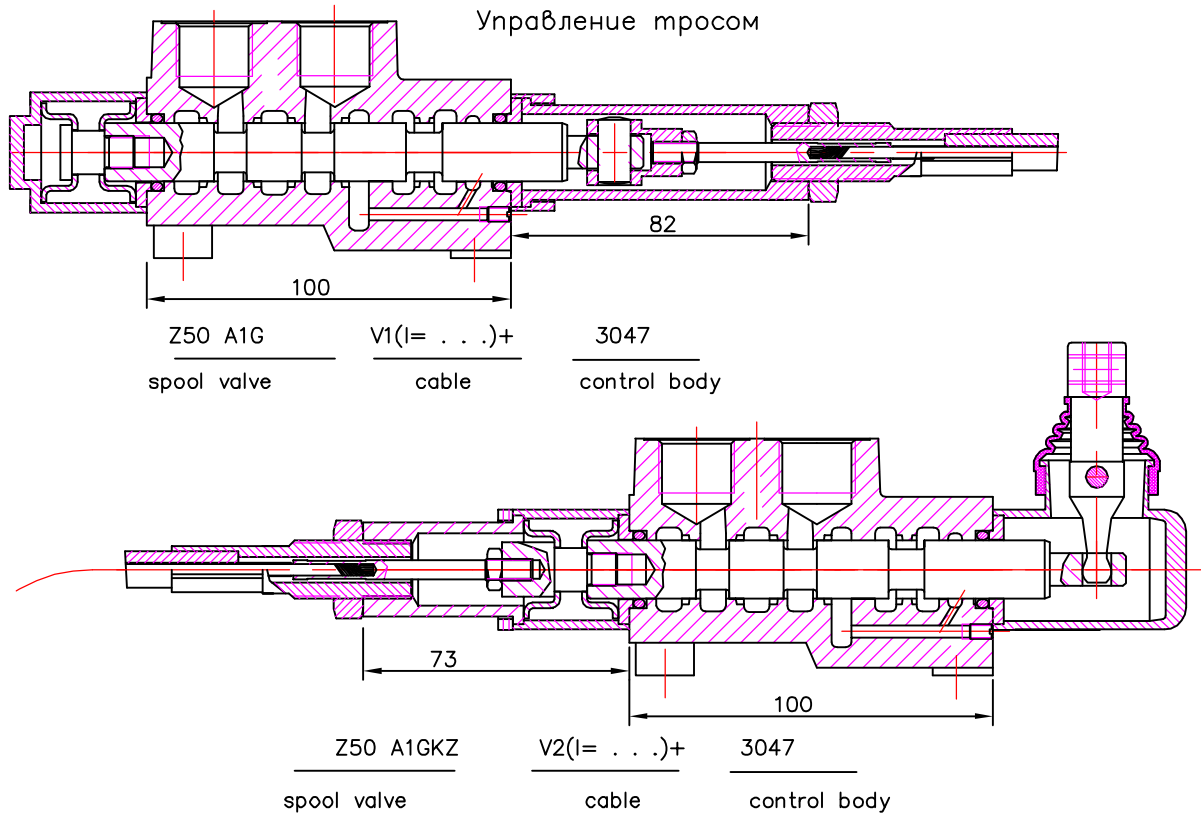
code	вид продължение на дебита	
C	отвор "N" затворен closed center	
C2	отвор "N" продължава за следващ консуматор part for power beyond sleeve (carry over)	
-	отвор "N" е свързан с "T" without part for pressure carry over	
X	отвор "N" е винаги свързан с "T" power beyond ever to tank	

Table 12

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

directional control valve Z50

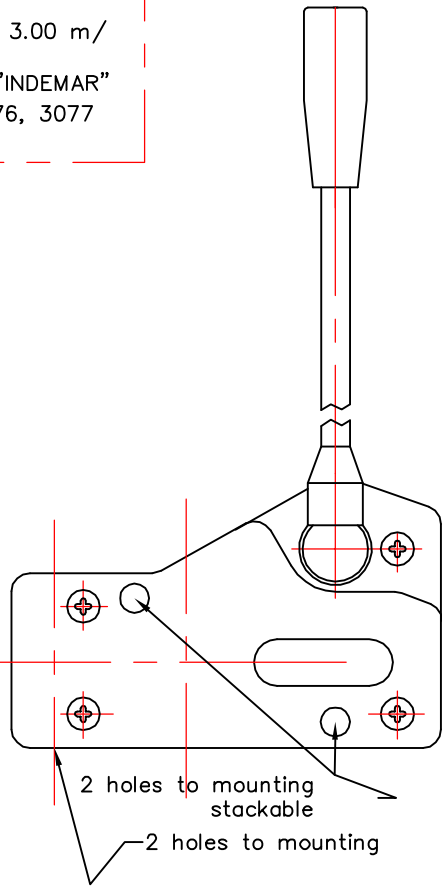
REMOTE CONTROLS
Управление тросом



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

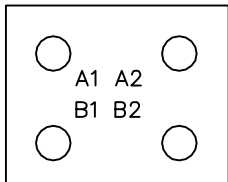
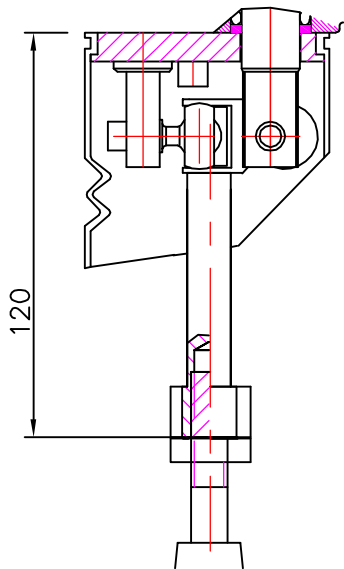
High solidity controls for easy mounting on every type of distributor. They can be mounted stand alone or packed together. They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in a three different models to meet different needs of Clients.



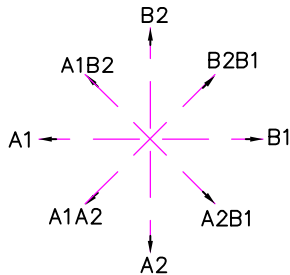
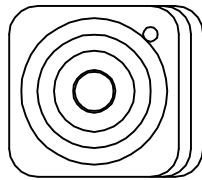
directional control valve 750

JOYSTICK "+"

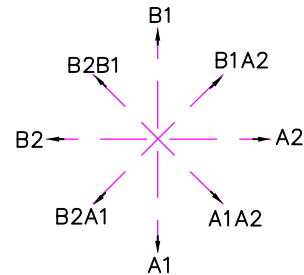
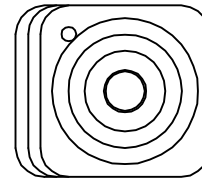
This control gives the possibility to operate, at the same time two spools with a "+" movement.



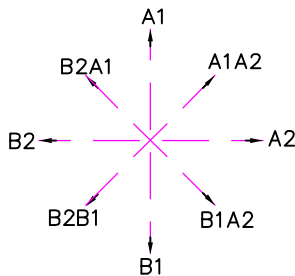
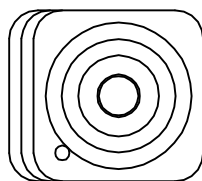
standard version 1



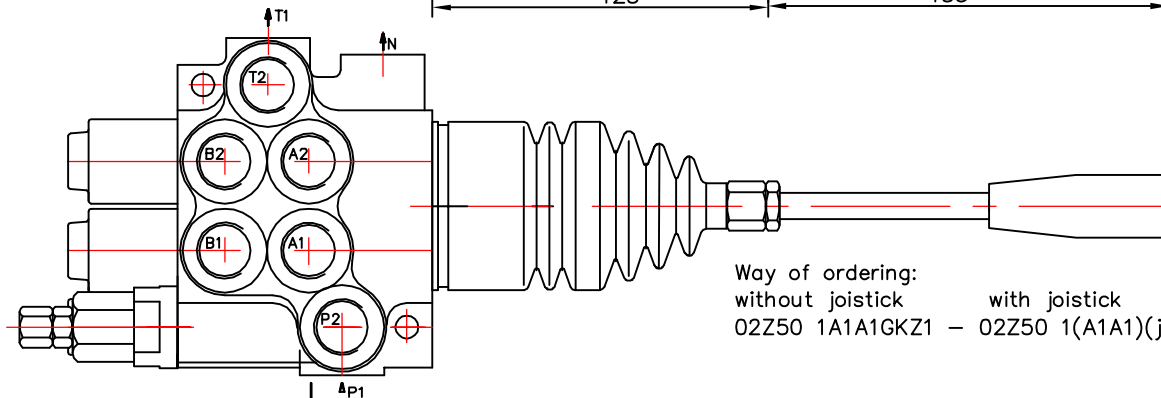
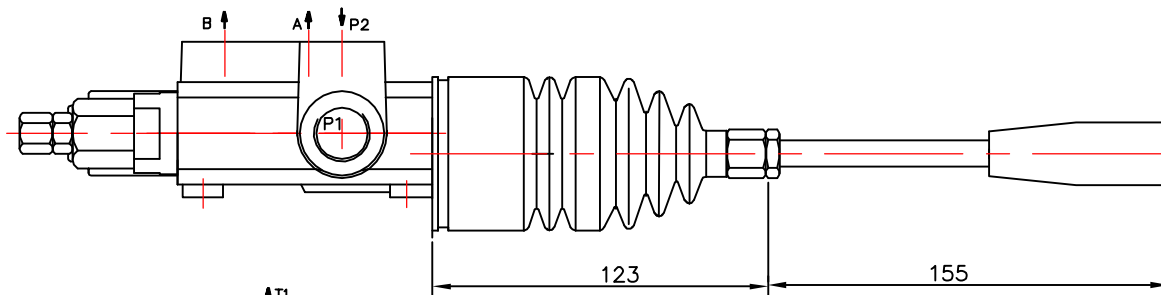
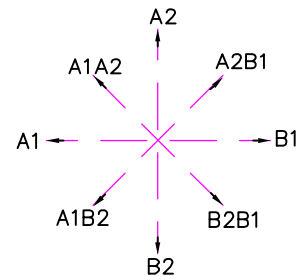
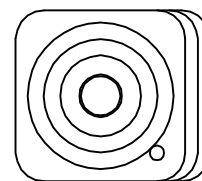
standard version 2



standard version 3



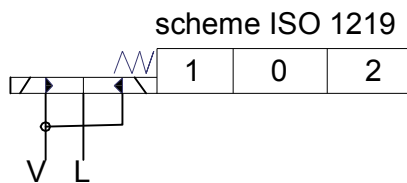
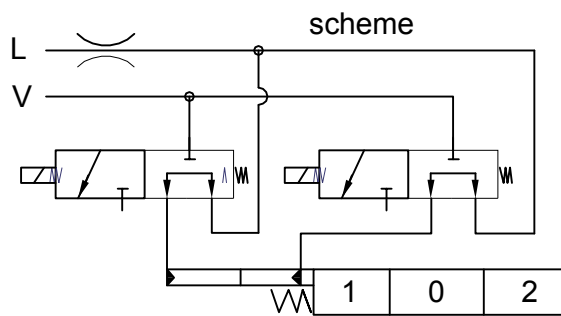
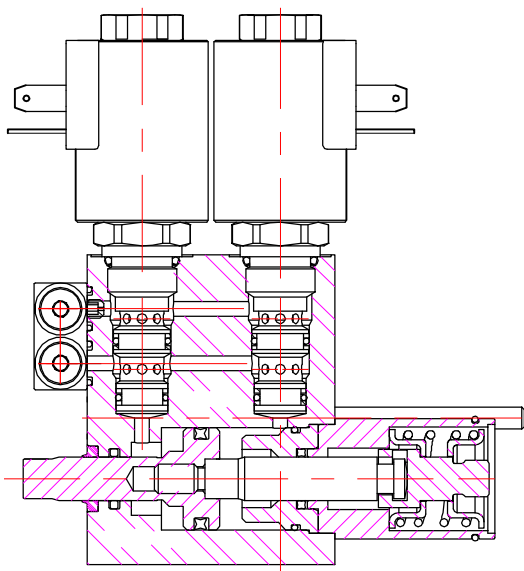
standard version 4



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)

Ordering codes

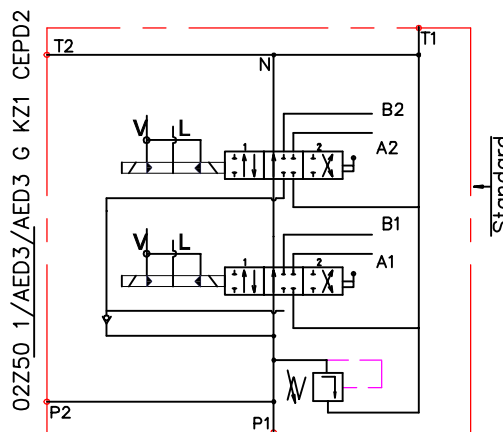
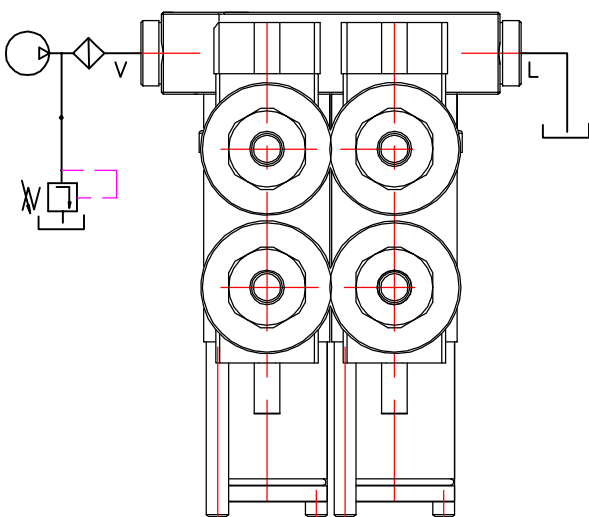
3-way solenoid valve-SV08-33
 coil P40ED3-G-12VDC
 coil P40ED3-G-24VDC

Solenoid operating features

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

Collector kit for external pilot and drain – CEED...(1,2,3 ...)

Коллектор для внешнего питания управления и слив



Ordering example

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

Ordering codes (BSP threads)

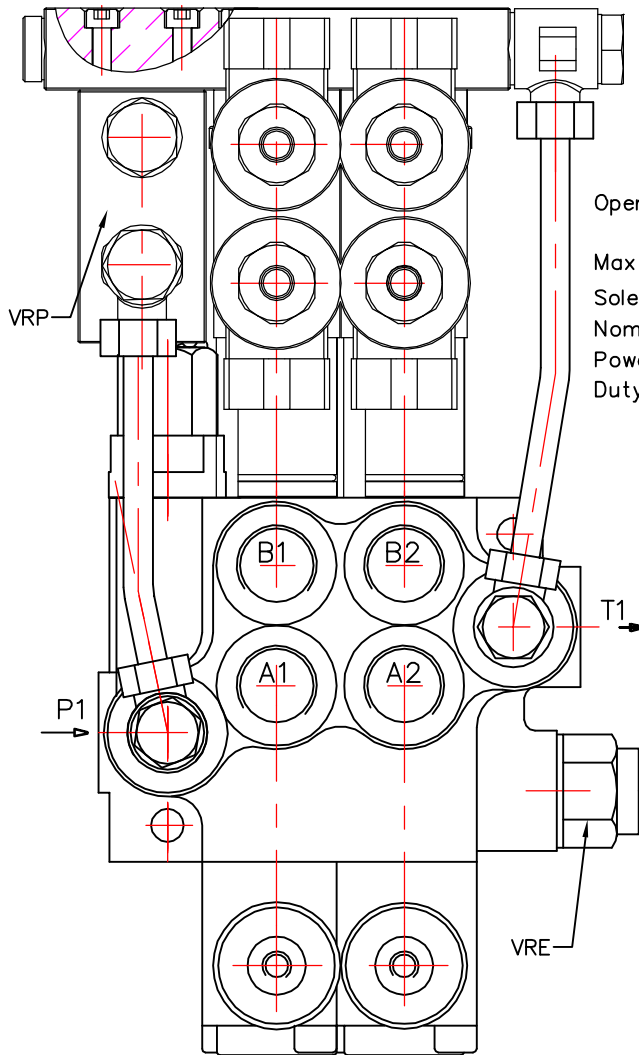
CEED1P40 Kit for 1 section
 CEED2P40 Kit for 2 section
 CEED3P40 Kit for 3 section
 CEED4P40 Kit for 4 section

directional control valve Z50

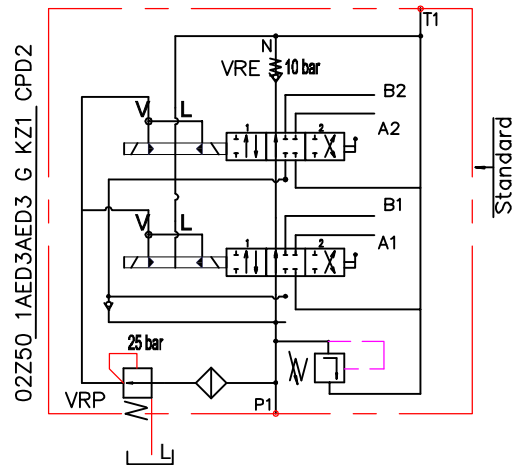
ED3 – electro-hydraulic control ON-OFF
 Електрогидравлически контрол ON-OFF

Order codes

3-way 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 %



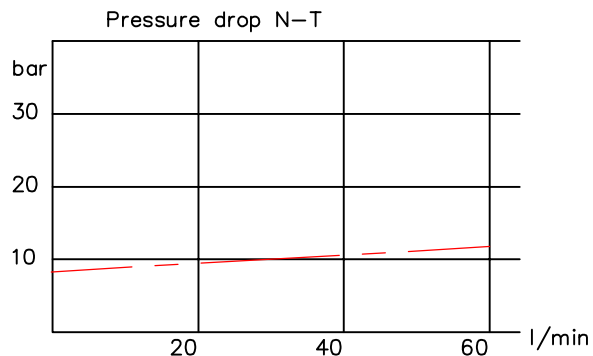
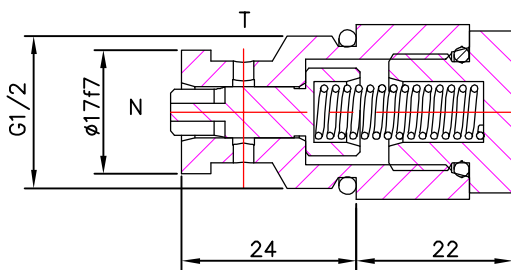
Ordering example

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

Collector kit - BSP threads
 Ordering codes

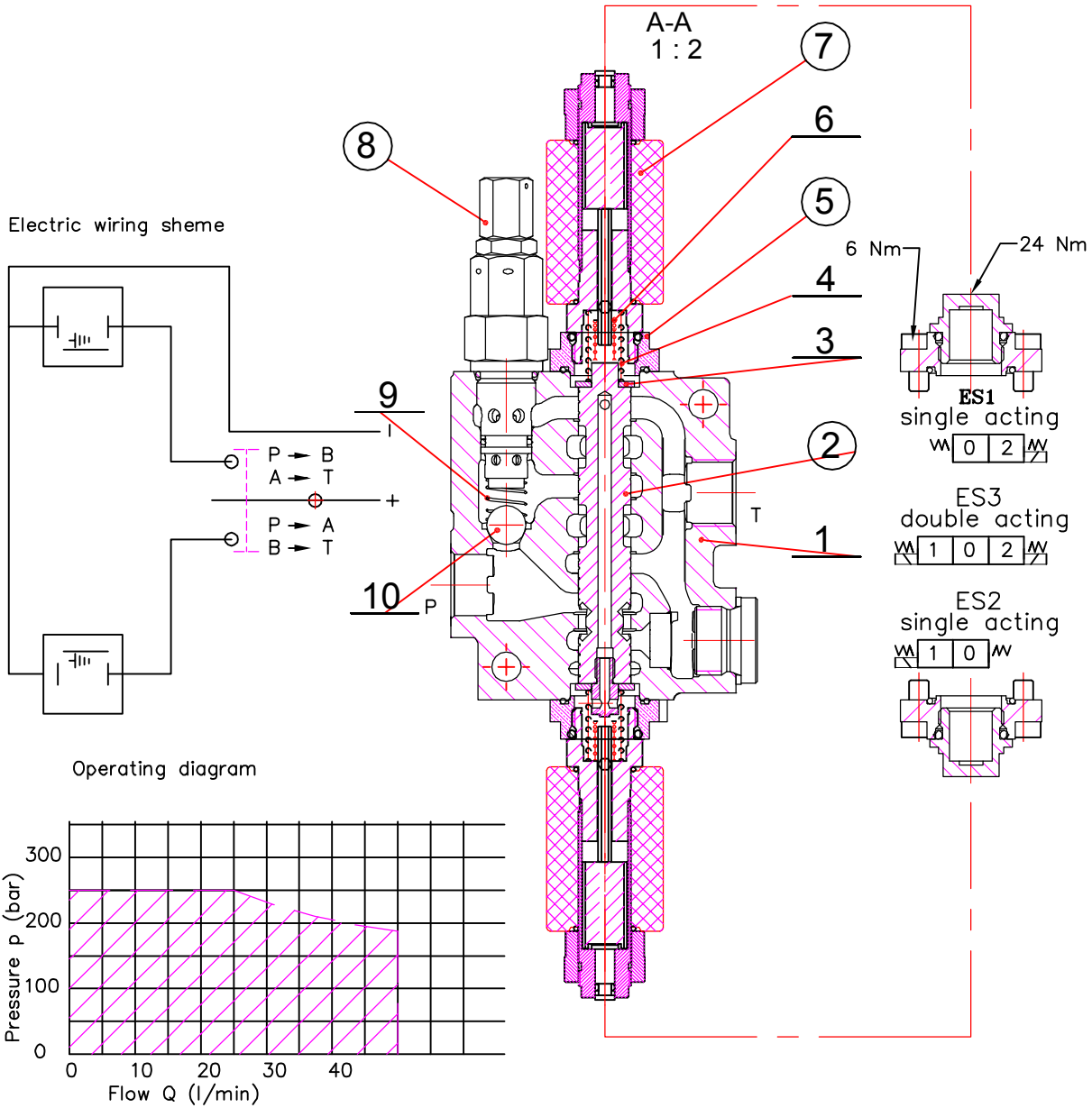
- CED1 Kit for 1 section
- CED2 Kit for 2 section
- CED3 Kit for 3 section
- CED4 Kit for 4 sektion
-

Back pressure valve VRE-P40
 Клапан подпорний на слив



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
10		Ball 12	1
9	79.00.03	Spring	1
8	79.04.00	Relief valve	1
7b	C35D012RC P01	Solenoid coil	2
7a	GM4060/BD	Solenoid Tube	2
6	542.02.00.07	Additional spring	2
5	542.02.03.00	Intermediate unit	2
4	542.02.00.04	Spring	2
3	542.02.00.02	Washer	2
2		Spool ...	1
1		Body ...	1

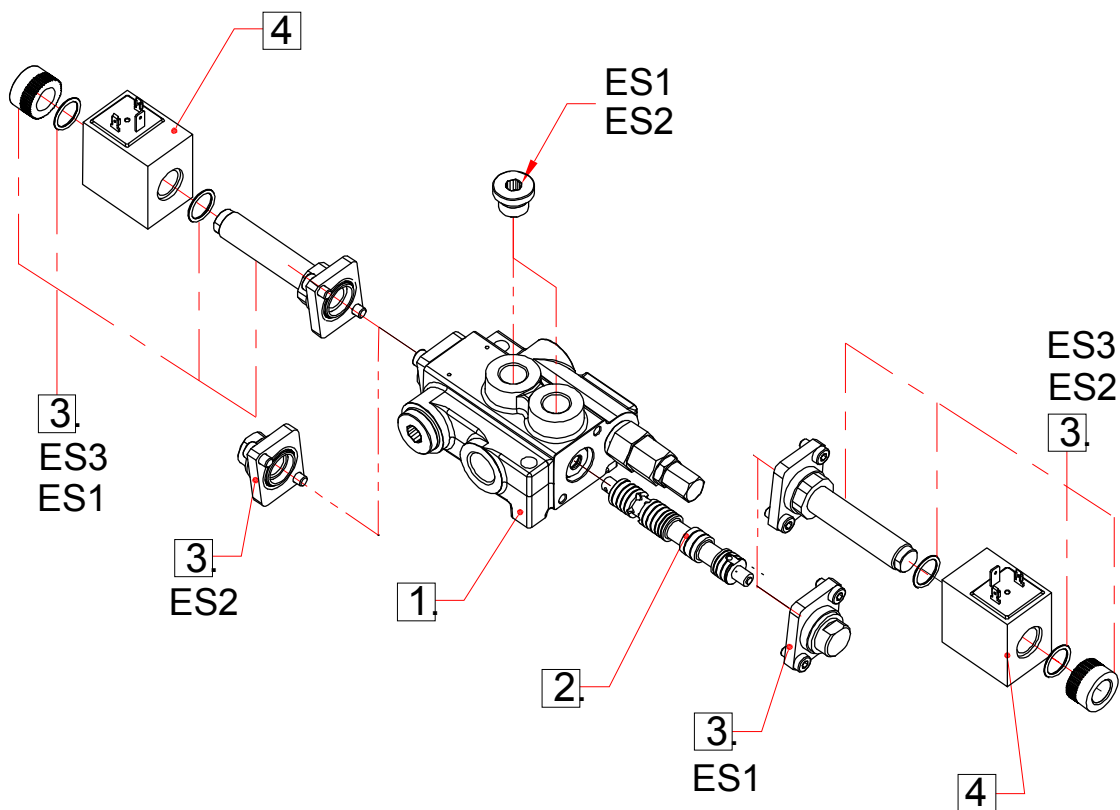
directional control valve Z50

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

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

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

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