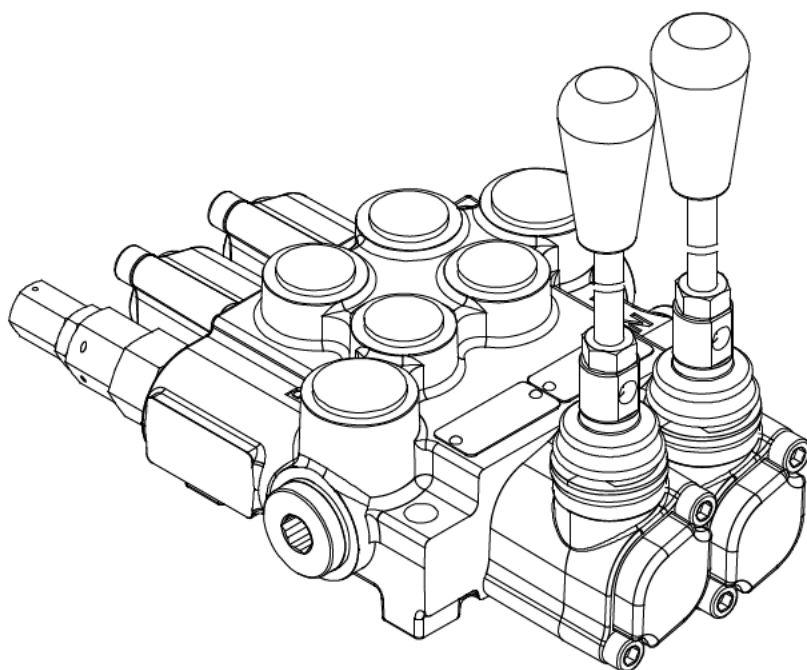




Description

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 гидролинии, разгрузка насоса в нейтральной позиции золотника.

Specifications

Основные показатели

1. Valve monoblock

Конструктивное решение

моноблок

2. Mounting

Крепление

2 bolts M8

3.Ports

Присоединительные отверстия

internal thread

4.Ambient temperature

температура воздуха

резбовые отверстия

5.Pressure medium

Рабочая жидкость

−40 — +60 C

6.Viscosity

Вязкость

mineral oil

12...800 mm²/s

20...100 mm²/s

recommended range

−30 — +80 C

7.Fluid temperature

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 mm²/s

11.Nominal flow

12.Spool stroke

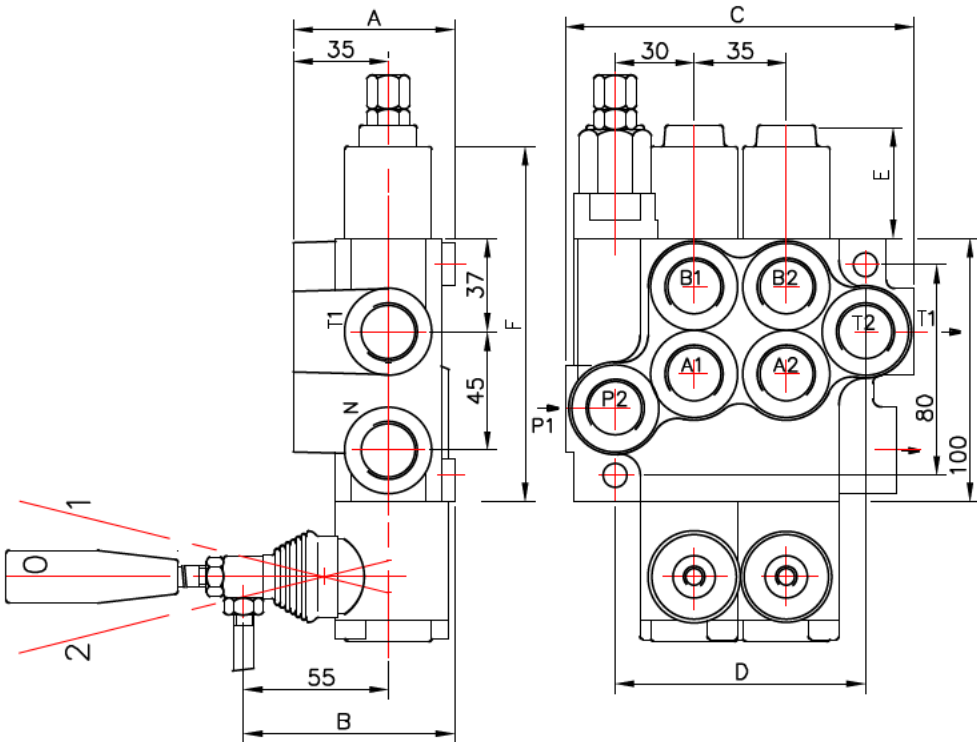
13.Actuating force

40 l/min (operating diagram)

+− 6 mm

< 200 N in spool axis

Left hand configuration – standard



Right hand configuration

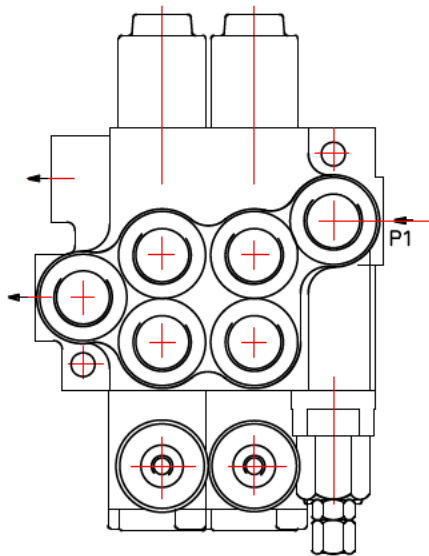


Table 1

	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 2 Z50 R – A 1 A 1 G KZ1 T H E C2 11

block with common check valve
распределитель с общим клапаном

number of spools
количество золотников

directional control valve type ...
распределитель типа ...

inlet high pressure – right
вход высокого давления с правой стороны

relief valve – standard setting 175; without indication
(4) Spring for 160 to 315 bar; standard setting 220 bar; red;
(exp) relief valve blanking plug; без предохран. клапана

first spool distribution type
характеристика первого золотника

spool control/detend and ets./
контроль золотника/фиксация и грузе/

second spool distribution type
тип второго золотника

spool control/detend and estr./
контроль золотника/фиксация и грузе/

ports /treads/
разброс отверстия

general operation feature
общая характеристика управления

with "teton"
исполнение ручного управления с "тетон"

operation feature /pneumatic, .../
грузе управление

with electric switch
с электрическим выключателем

high pressure carry over
продолжительный поток высокого давления

connection ports in use
присоединительные отверстия

directional control valve Z50

INLET RELIEF OPTIONS

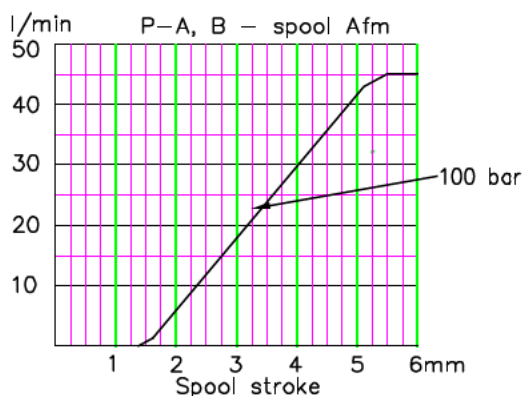
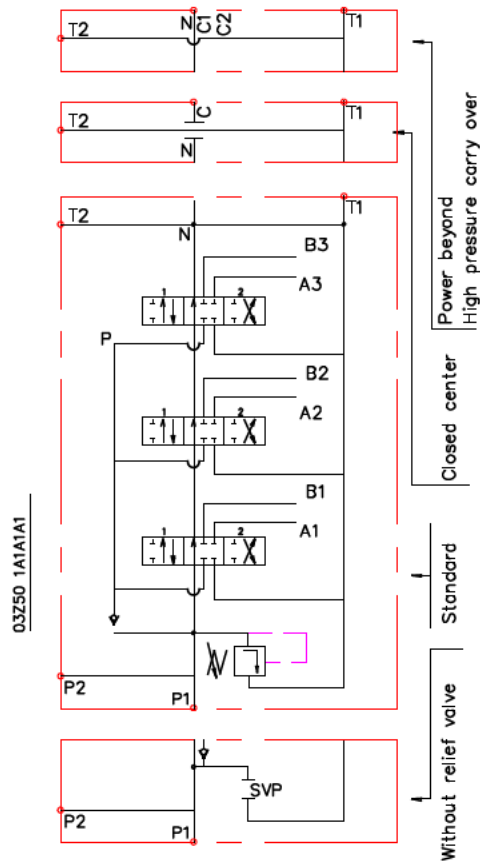
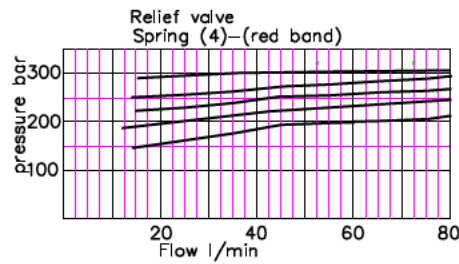
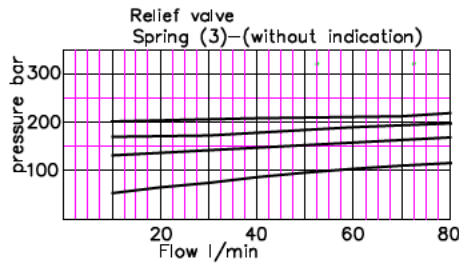


Table 4

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	

* только при входе слева (дуг)
only for left hand configuration

** L

** только при входе справа (дуг)
only for right hand configuration

*** Spool Afm – fine metering

Table 6

code	spool control
1	1 0 2
2	1 0 2
3	1 0 2
4	0 2
5	1 0
6	1 2
7	1 2
8	1 0 2
9	1 0
10	0 2
11	1 2

* 15	3 1 0 2
* 16	3 1 0 2

* только при входе слева
only for left hand configuration

** 12	1 0 2 3
** 13	1 0 2 3

** только при входе справа
only for right hand configuration

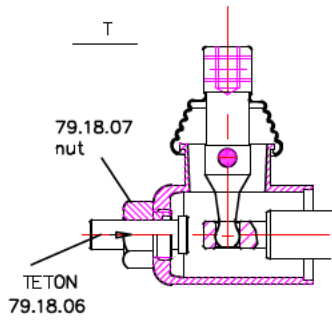
Table 7

code	с микро шалтер ; incorporated microswitch
E	mikroswitch type Omron–V 165 I C5

Table 8

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

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 рычажная система управления					

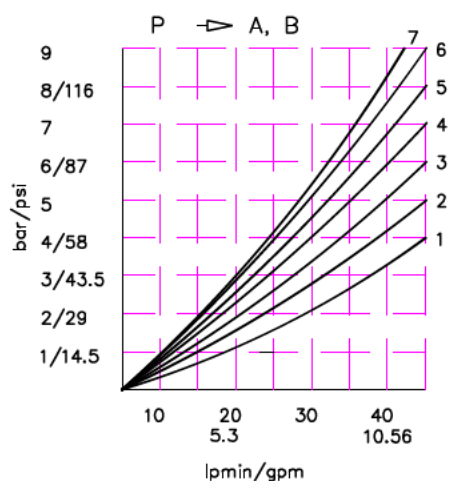
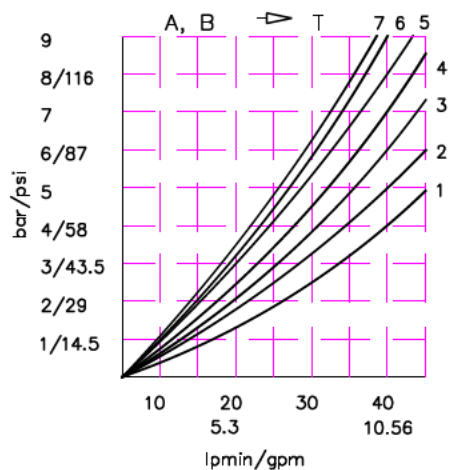
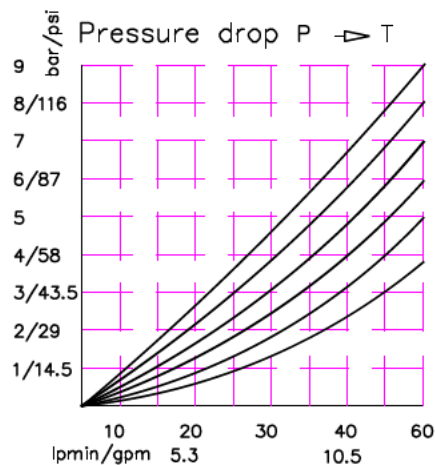


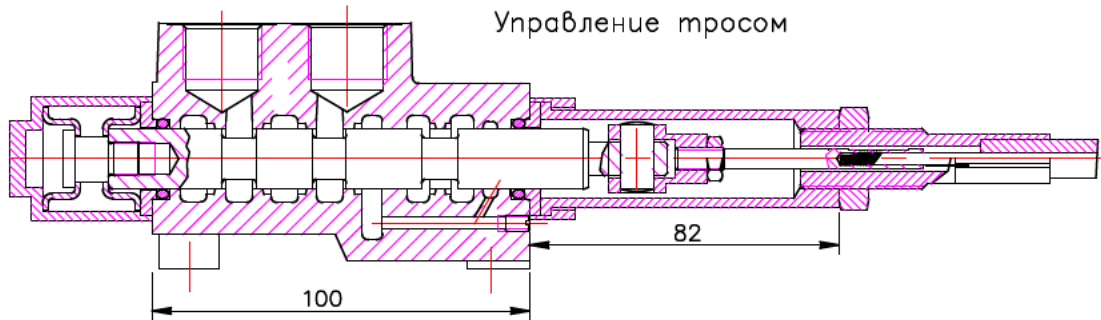
Table 11

code	вид продолжение 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	

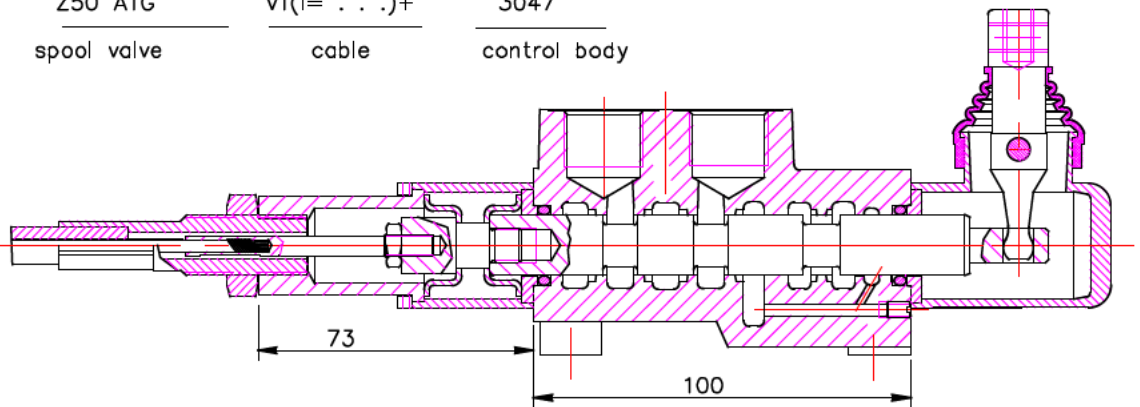
Table 12

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

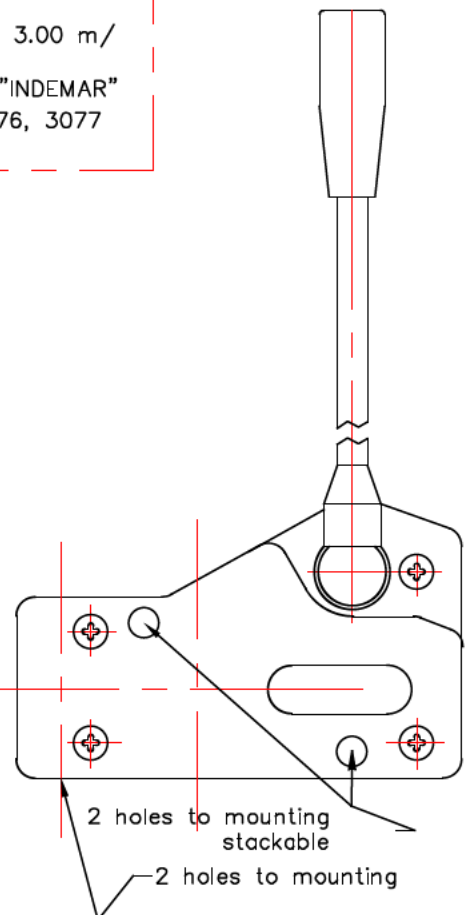
Cable "INDEMAR" Cod. IT 3056 /l=1.00; 1.50; 2.00; 2.50; 3.00 m/

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

Technical specifications

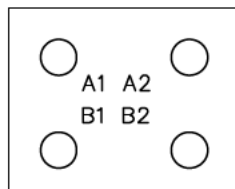
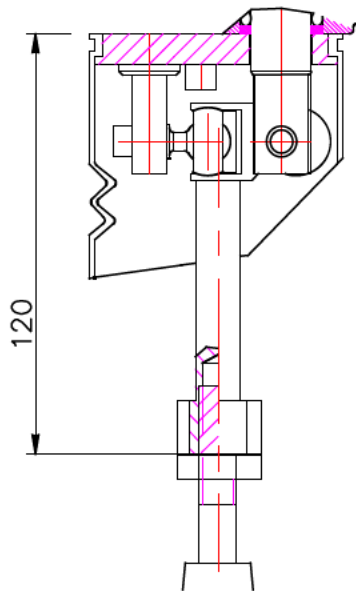
	3047	3076	3077
Stroke	13+13 mm	13+13 mm	13+13 mm
Max. load	45 kg	45 kg	45 kg
Level ratio	10:1	10:1	10:1
Lock in neutral	No	No	Yes
Antireverse lock	No	Yes	No
Body colour	Black	Black	Black
Cables type	Heavy Duty	Heavy Duty	Heavy Duty
Operating temperature	-40/+80C	-40/+80C	-40/+80C

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.

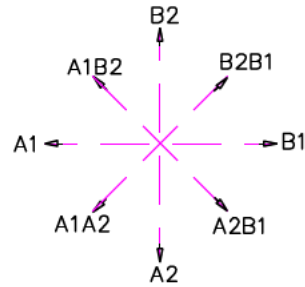
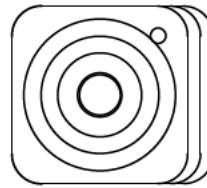


JOYSTICK "+"

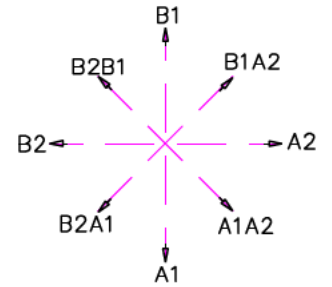
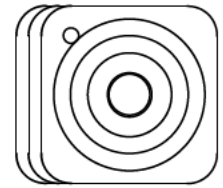
This control gives the possibility to operate, at the same time two spools with a "+" movement.



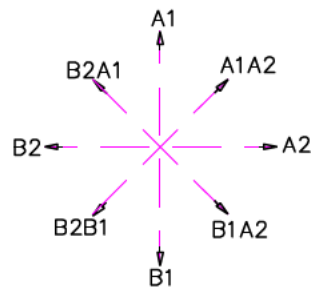
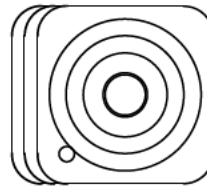
standard version 1



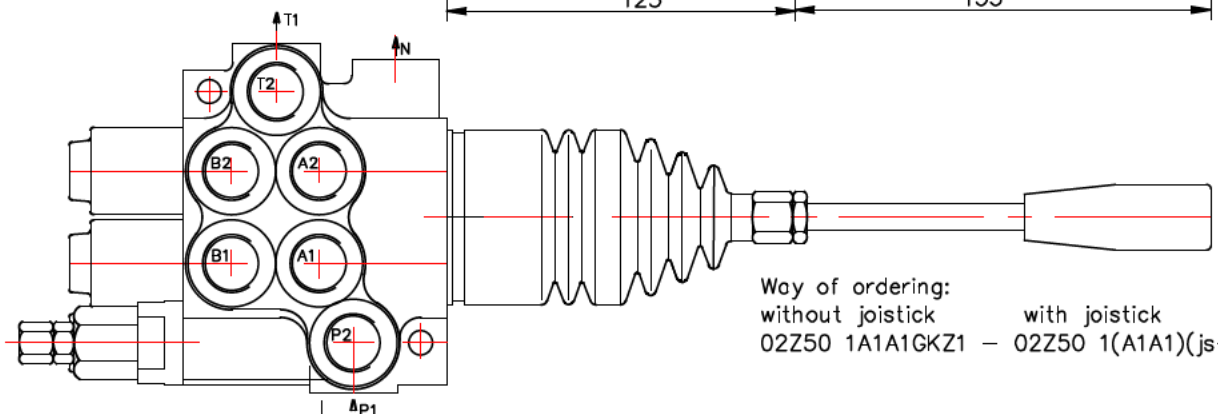
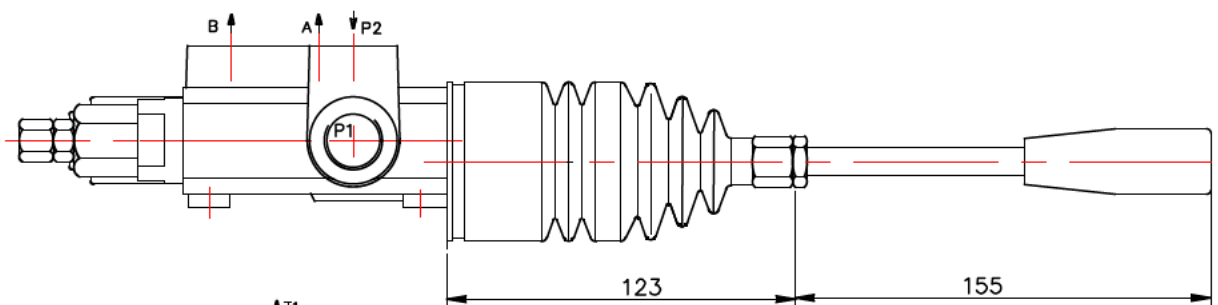
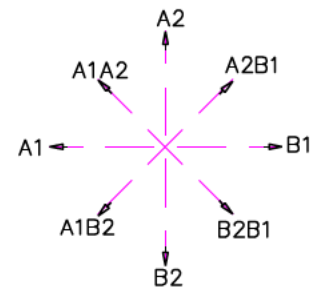
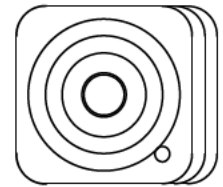
standard version 2



standard version 3



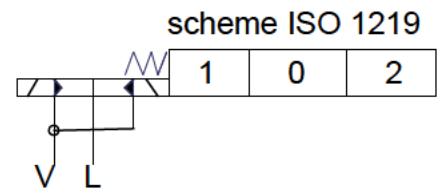
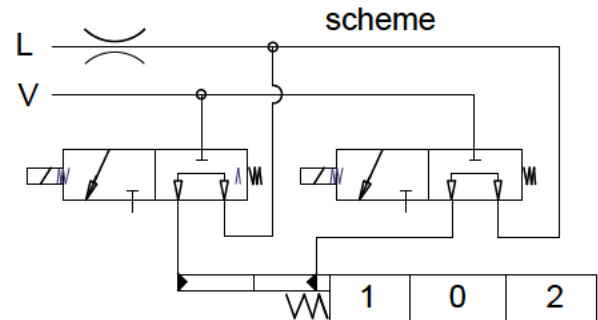
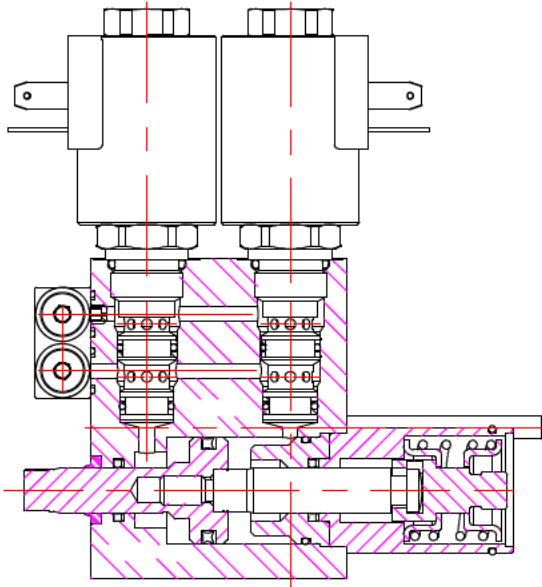
standard version 4



Way of ordering:
without joystick 02Z50 1A1A1GKZ1 - with joystick 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)

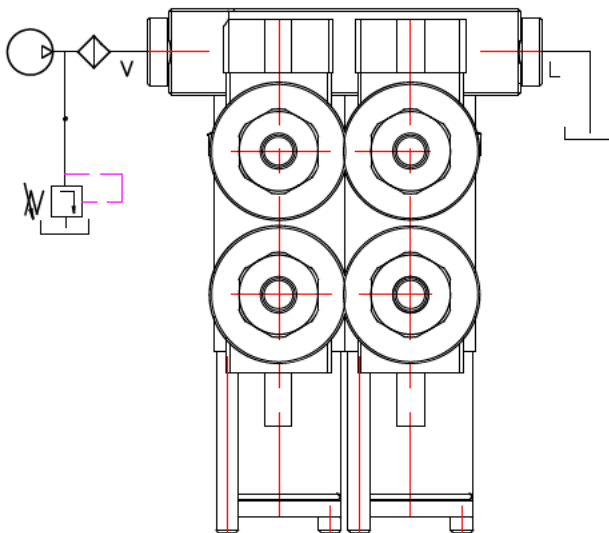
Solenoid operating features
 Nominal voltage tolerance $\pm 10\%$
 Power rating 24W
 Duty cycle 100 %

Ordering codes

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

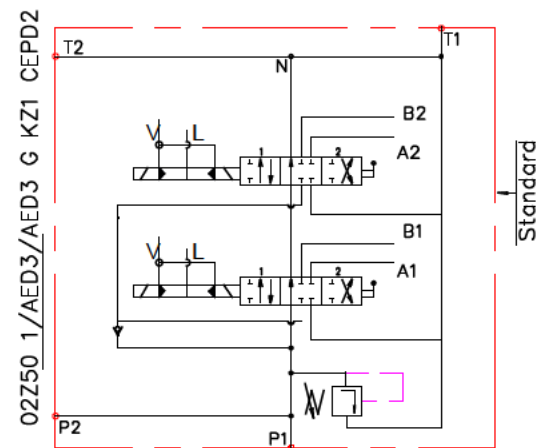
Collector kit for external pilot and drain – CEED...(1,2,3 ...)

Коллектор для внешнего питания управления и слив



Ordering example

02Z50–1/A1ED3/A1ED3 G KZ1–CEED2–12VDC

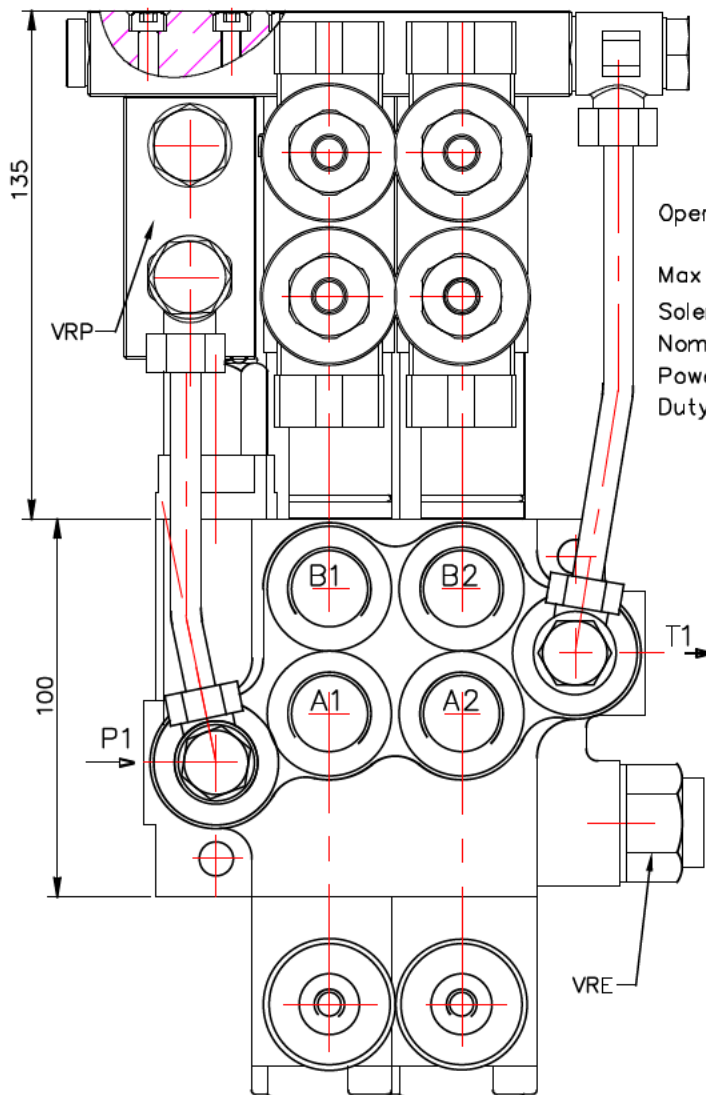


Ordering codes (BSP threads)

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

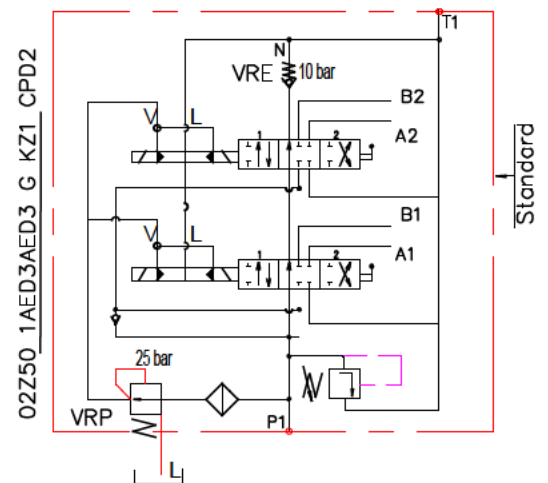
directional control valve Z50

ED3 – electro-hydraulic control ON–OFF
 Электрогидравлический 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 $\pm 10\%$
 Power rating 24W
 Duty cycle 100 %



Ordering example

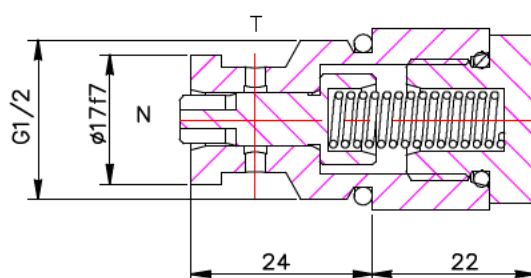
02Z50–VRP– 1/A1ED3/A1ED3 G KZ1–CED2–VRE–12VDC

Collector kit – BSP threads
 Ordering codes

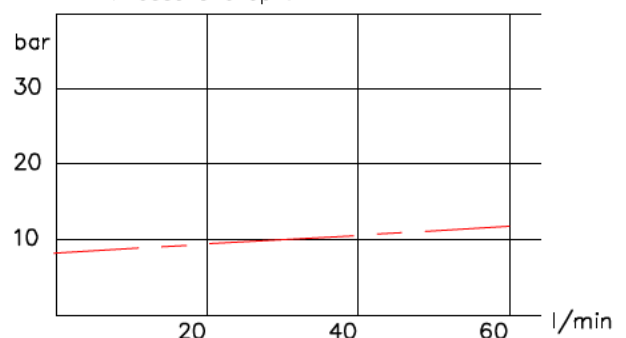
CED1	Kit for 1 section
CED2	Kit for 2 section
CED3	Kit for 3 section
CED4	Kit for 4 section
...	

Back pressure valve VRE–P40

Клапан подпорный на слив



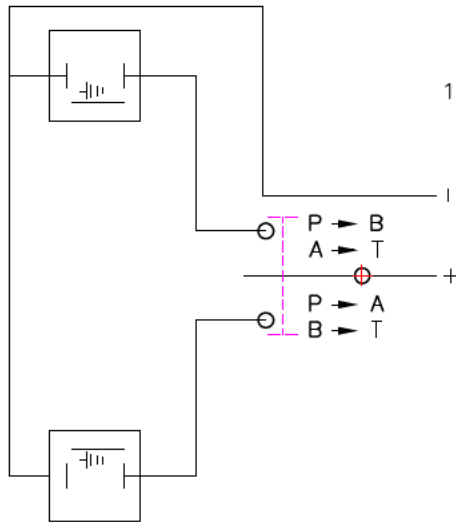
Pressure drop N–T



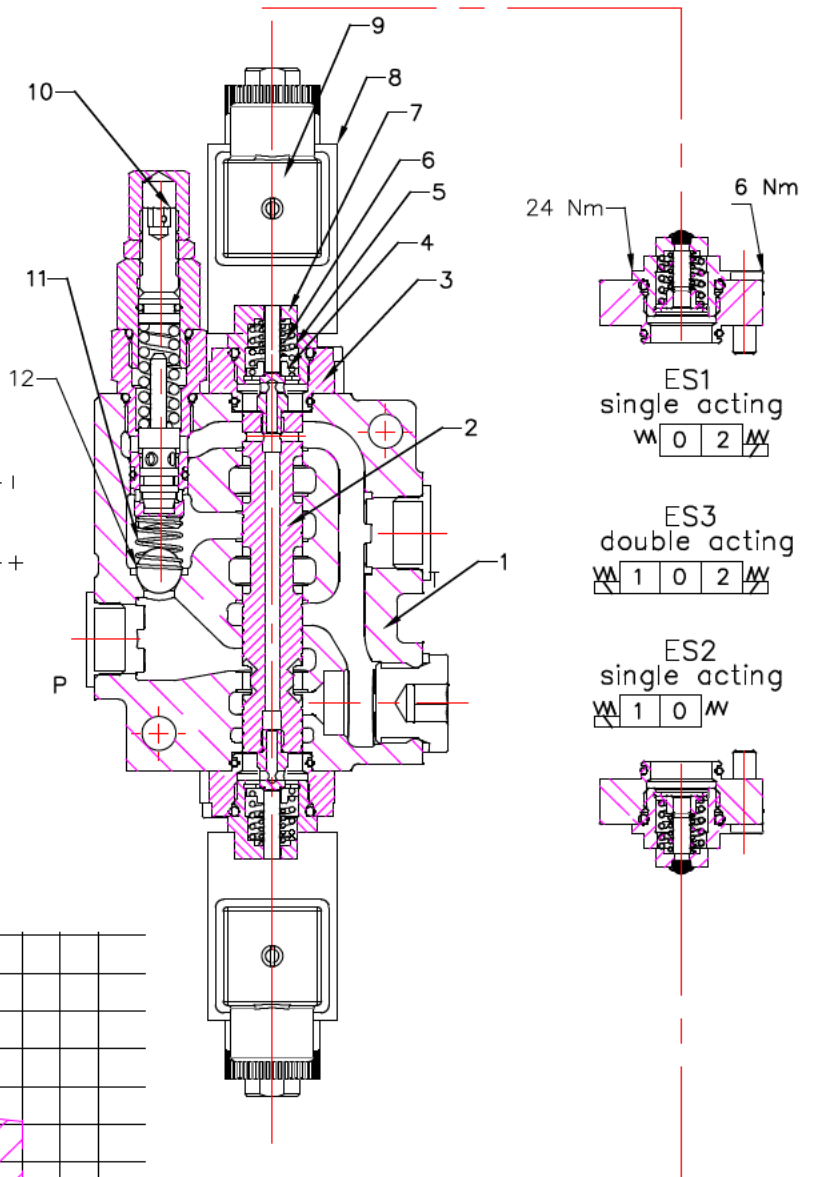
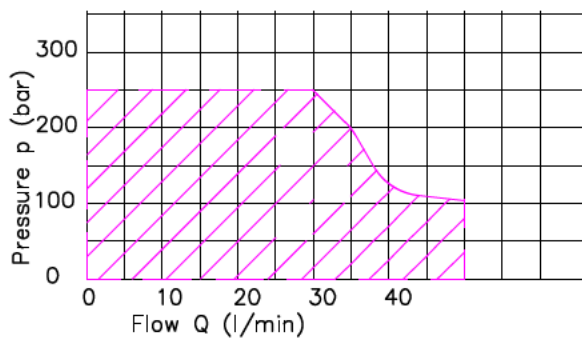
directional control valve Z50

ES ... SOLENOID DIRECT CONTROL

Electric wiring sheme



Operating diagram



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 insulance class H
Duty cycle 100%
Connector ISO 4400
Imergency 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

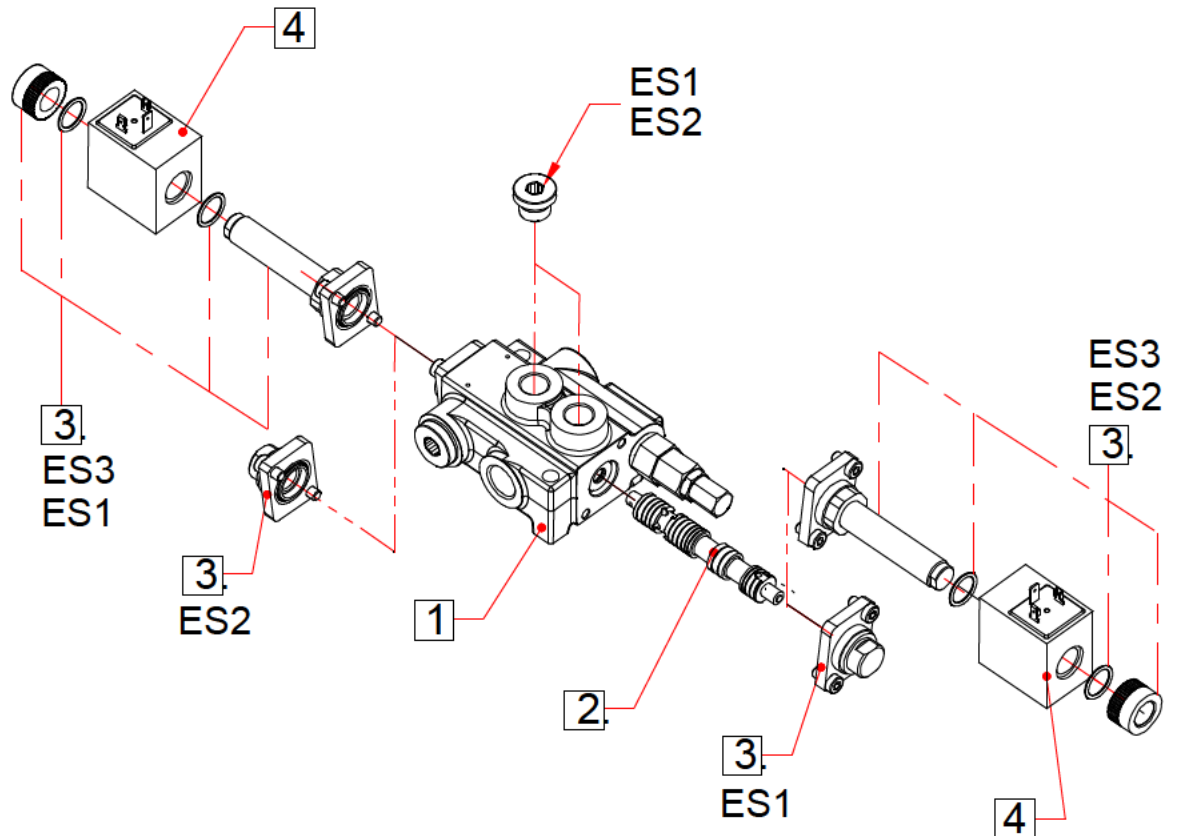
directional control valve Z50

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

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
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