

HYDRAULIC DIRECTIONAL CONTROL VALVES

РАСПРЕДЕЛИТЕЛИ ГИДРАВЛИЧЕСКИЕ



Description

Назначение и область применения

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

Specifications

Основные показатели:

1. Valve monoblock	моноблок
Конструктивное выполнение	
2. Mounting	2 bolts M8
Крепление	
3. Pressure connections	internal thread
При соединении отверстия	внутренние резьбы
4. Ambient temperature	-40C...+60C
Температура воздуха	
5. Pressure medium	mineral oil based hydraulic oil
Рабочая жидкость	
6. Viscosity	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. Internal (46 mm ² /s) Leakage	5 cm ³ /min at 100 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
Усилие на движение золотника	

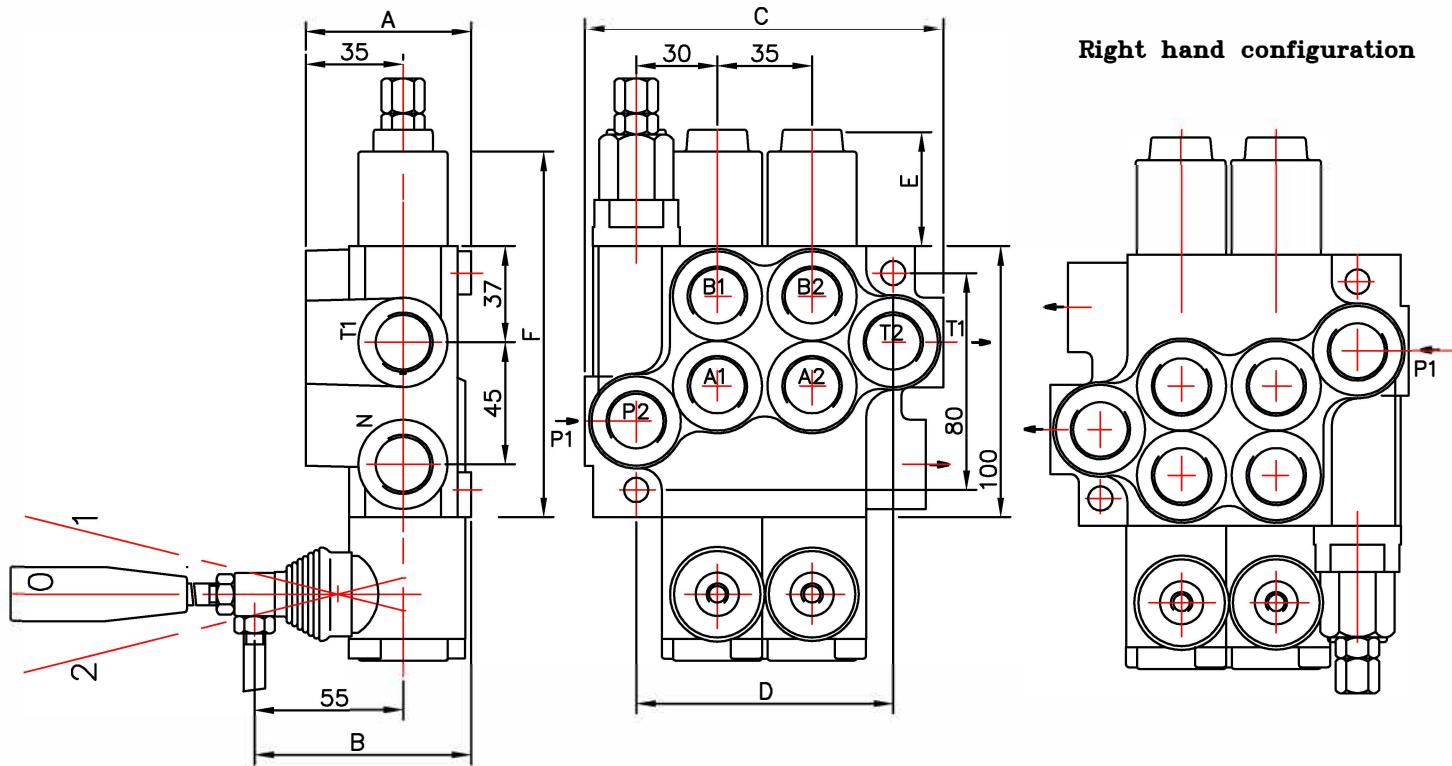
Left hand configuration - standart

Table 1

	A	B	C	D	P1	P2	T1	T2
P40	60	80	85	60	+	-	+	-
02P40	60	80	129	97	+	+	+	+
03P40	60	80	164	132	+	+	+	+
04P40	60	80	199	167	+	+	+	+
05P40	60	80	234	202	+	+	+	+
06P40	60	80	269	237	+	+	+	+
07P40	60	80	304	272	+	+	+	+
2P40	60	80	129	97	+	+	+	+
3P40	60	80	164	132	+	+	+	+
4P40	60	80	199	167	+	+	+	+

Table 2

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

0 2 P40 R 1 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 давления с правой стороны

way of distribution/parallel or .../

способ распределения потока

first spool distribution type

характеристика первого золотника

spool control/detend and etc./

контроль золотника/фиксации и другие/

second spool distribution type

второго золотника

spool control/detend and estr./

контроль золотника/фиксации и другие/

ports/treads/rezboe отверстия

general operation feature
функция ручного управления

with "teton"

исполнение ручного управления с "тетоном"

operation feature/pneumatic, .../

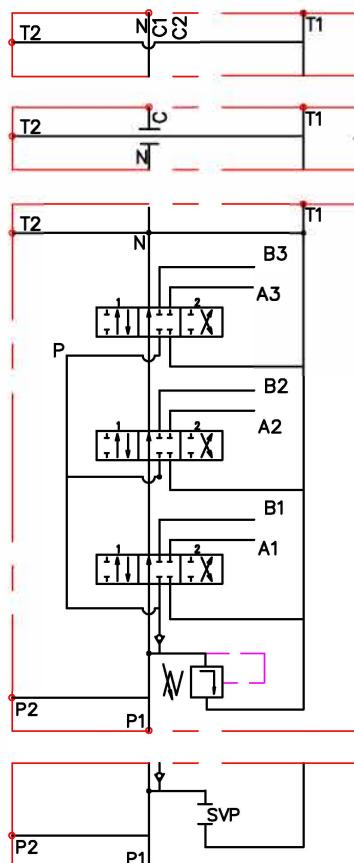
другое управление

with electric switch

с электрическим выключателем

high pressure carry over
продолжительность потока высокого давленияconnection ports in use
присоединительные отверстия

03P40 14141414

Power beyond
High pressure carry over

Closed center

Standard
Without relief valve

Standard

Standard

3P40 14141414

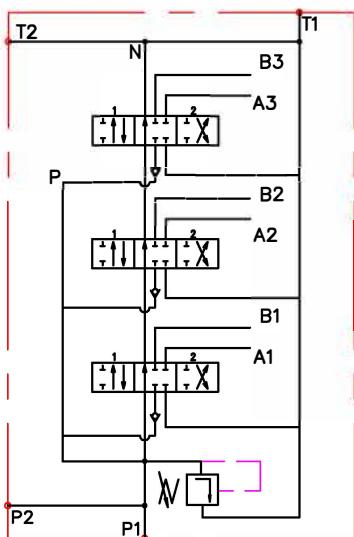


Table 3

code	Number of spools
	1
02, 2	2
03, 3	3

ets.

Table 5

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

* только при вход слева (dy8)
only for left hand configuration** только при вход справо (dy8)
only for right hand configuration

Table 4

code	way of distribution ; распределение потока
1	parallel ; паралельное
2	tandem(series parallel) ; серийно-паралельное

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 вход слева
only for left hand configuration

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

** только при вход справо
only for right hand configuration

Table 7

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

Table 8

code	грузое 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

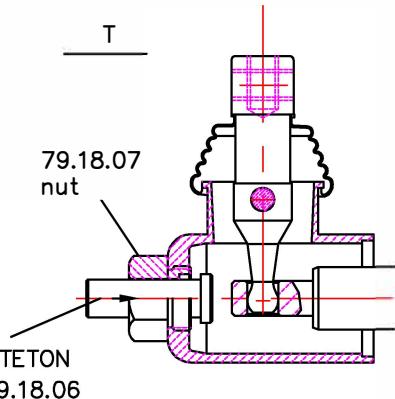
directional control valve P40

Table 9

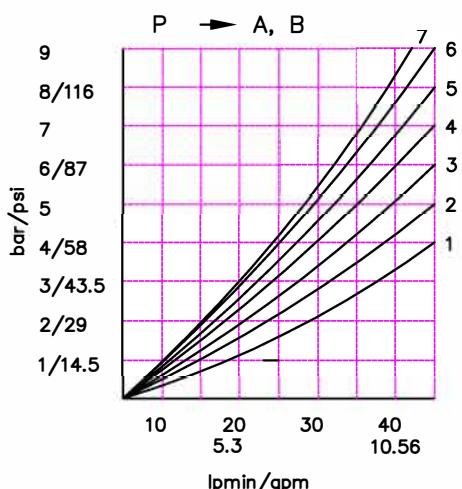
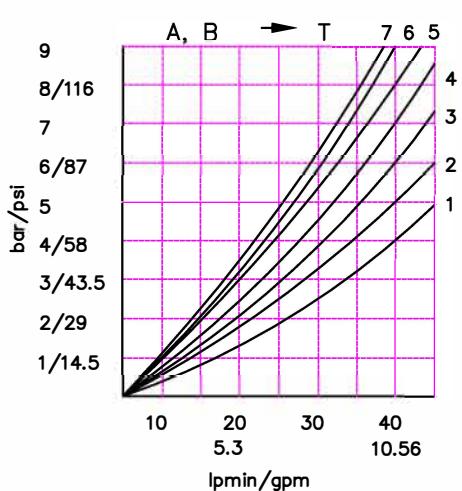
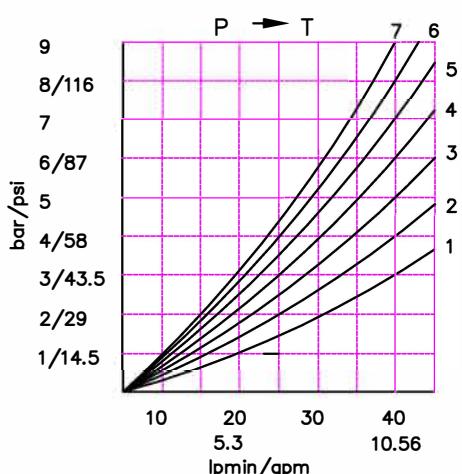
P40

code ports (treads) ; присоединительные отверстия

	P	A ; B	T	N
M	M22x1.5	M18x1.5	M22x1.5	M22x1.5
G	G1/2	G3/8	G1/2	G1/2
G1/2	G1/2	G1/2 on request	G1/2	G1/2
S	7/8-14UNF	3/4-16UNF	7/8-14UNF	7/8-14UNF



P40 directional control valve



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 лостова система за управление				

Table 11

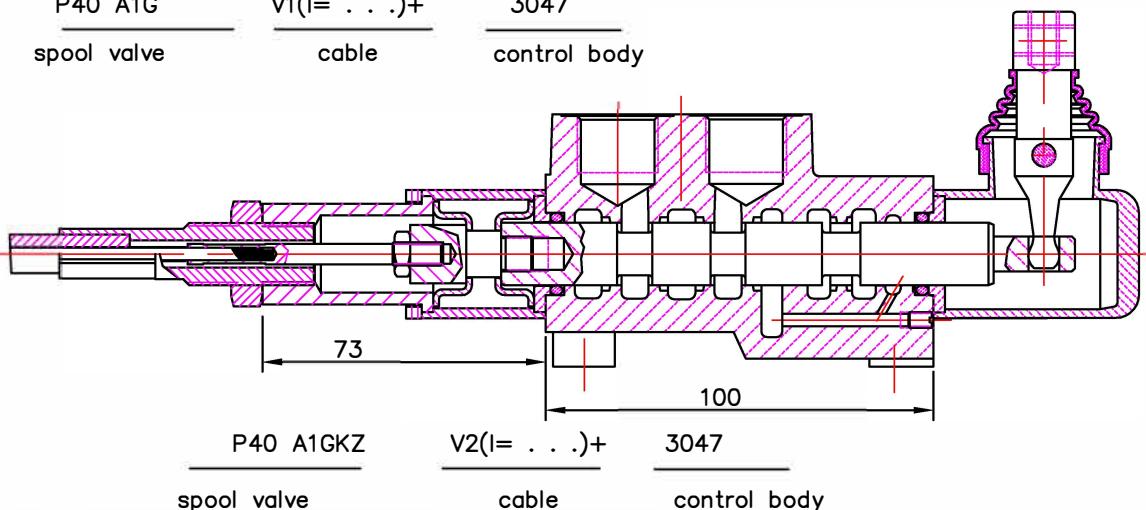
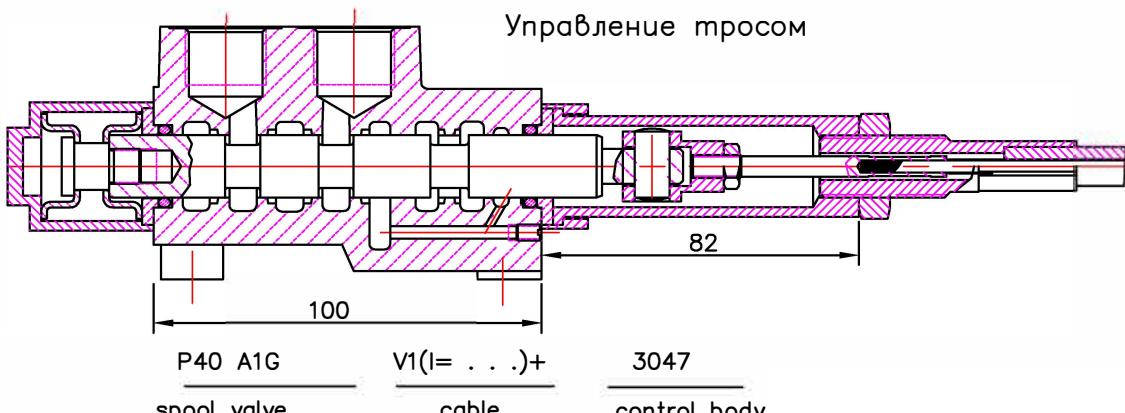
code	вид продължение на дебита
C	отвор "N" затворен closed center
C1	отвор "N" продължава за следващ консуматор part for power beyond sleeve(carry over)
C2	отвор "N" продължава за следващ консуматор part for power beyond sleeve(carry over)
—	отвор "N" е свързан с "T" without part for pressure carry over
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

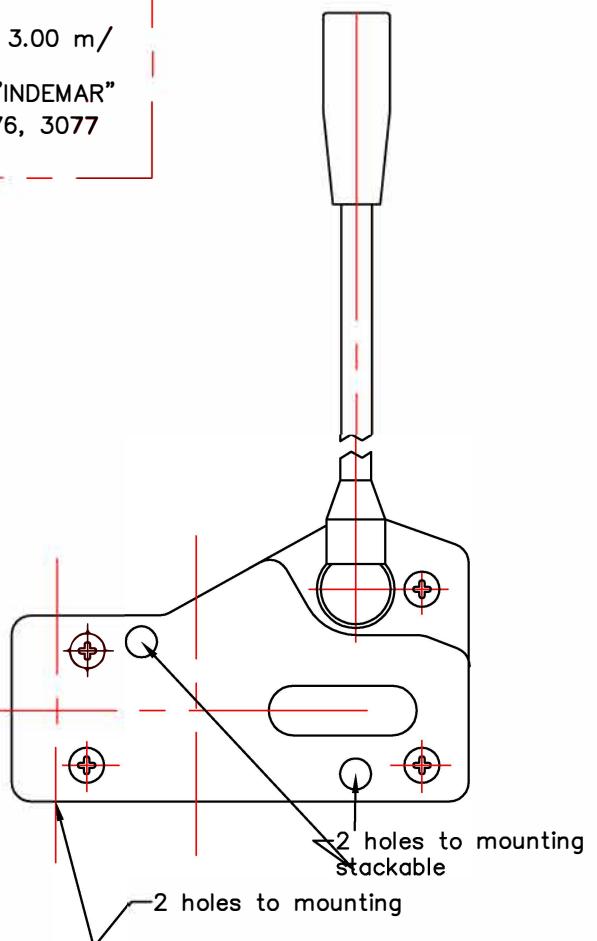
Управление тросом



Cable "INDEMAR" Cod. IT 3056 /l=1.00; 1.50; 2.00; 2.50; 3.00 m/
+control body "INDEMAR"
code 3047, 3076, 3077

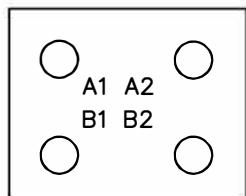
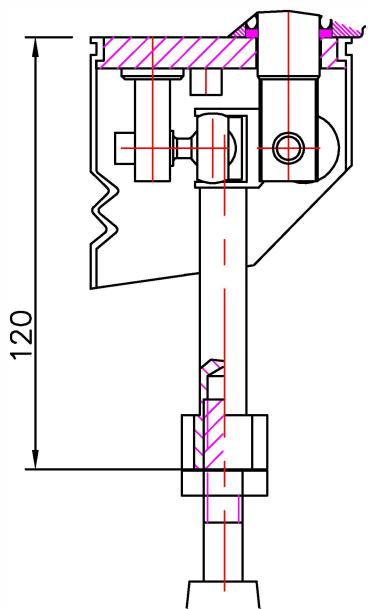
Technical specifications			
	3047	3076	3077
Stroke	13+13 mm	13+13 mm	13+13 mm
Max. load	45 kg	45 kg	45 kg
Level ratio	10:1	10:1	10:1
Lock in neutral	No	No	Yes
Antireverse lock	No	Yes	No
Body colour	Black	Black	Black
Cables type	Heavy Duty	Heavy Duty	Heavy Duty
Operating temperature	-40/+80C	-40/+80C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

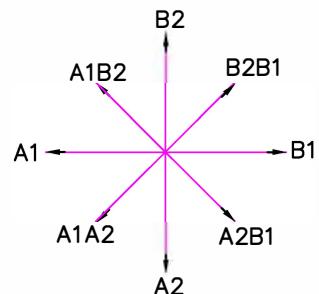
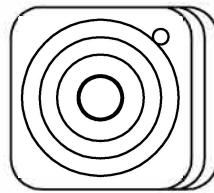


JOYSTICK "+"

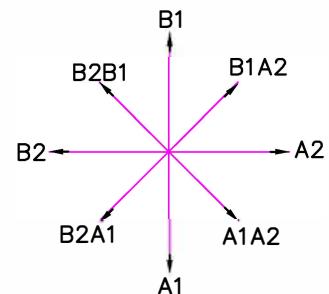
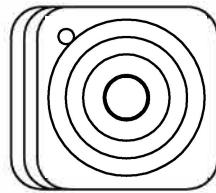
This control gives the possibility to operate, at the same time two spools with a "+" movement.



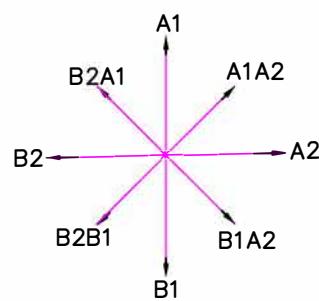
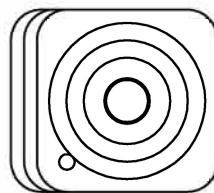
standard version 1



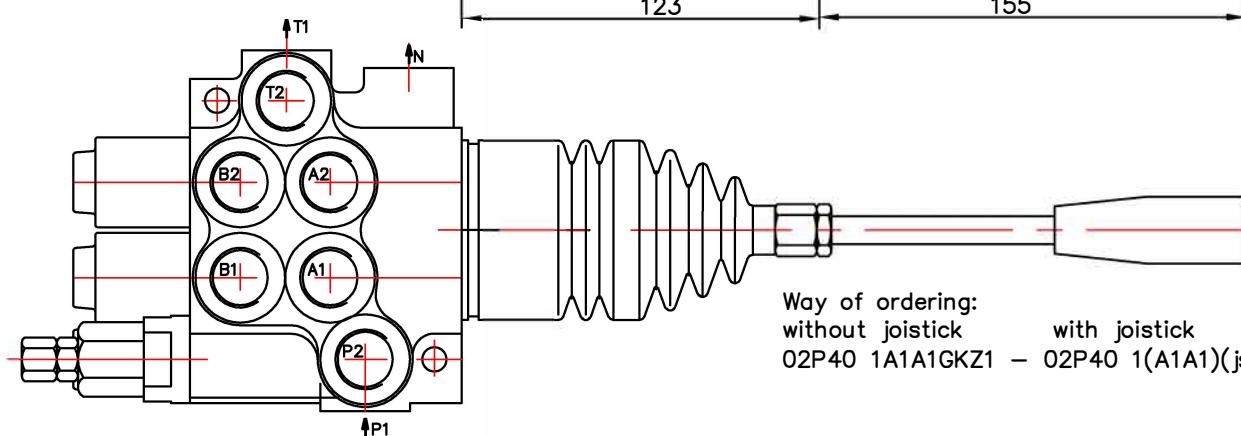
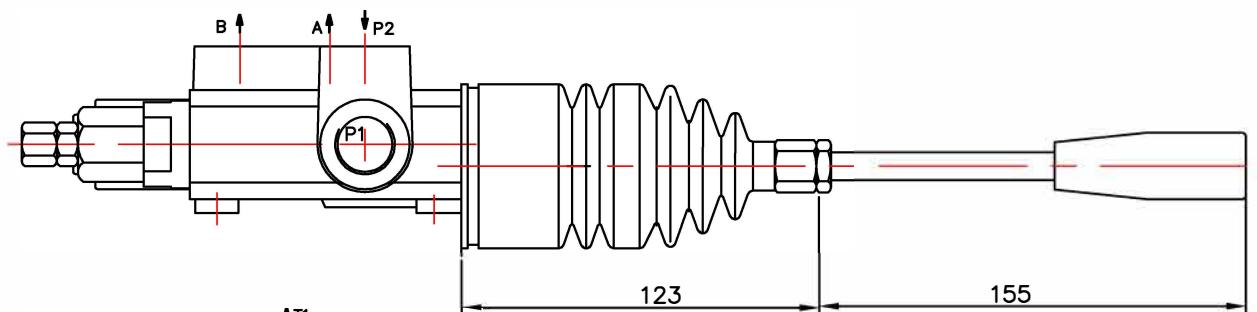
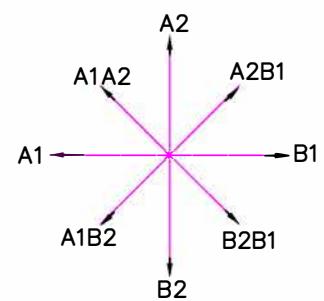
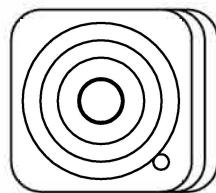
standard version 2



standard version 3



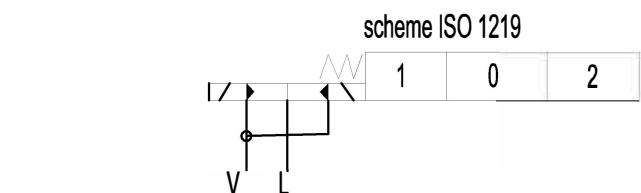
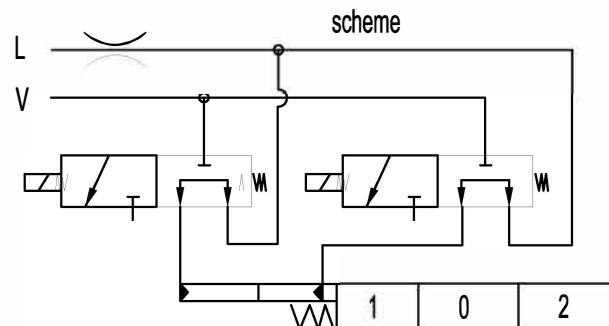
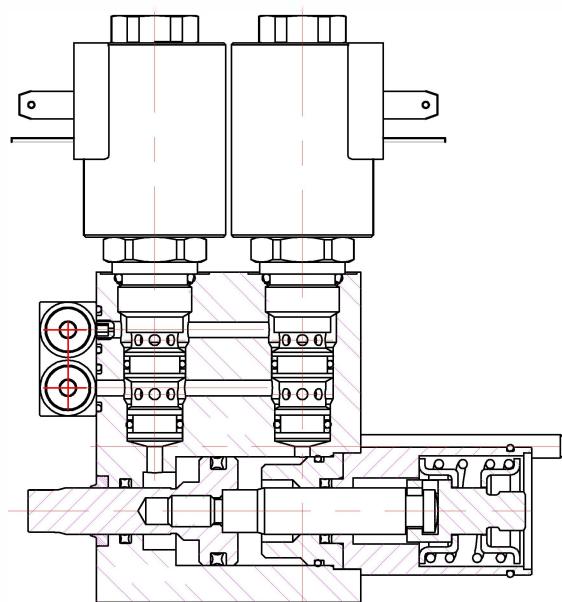
standard version 4



Way of ordering:
without joystick with joystick
02P40 1A1A1GKZ1 - 02P40 1(A1A1)(js+3)G

directional control valve P40

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



Operating pressure

min 10 bar(145 psi)

max 50 bar(725 psi)

25 bar(360 psi)

Max operating pressure in L (T line)

Solenoid operating features

$\pm 10\%$

Nominal voltage tolerance

24W

Power rating

100 %

Duty cycle

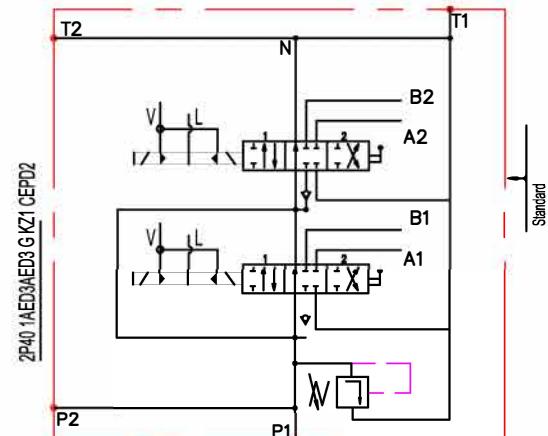
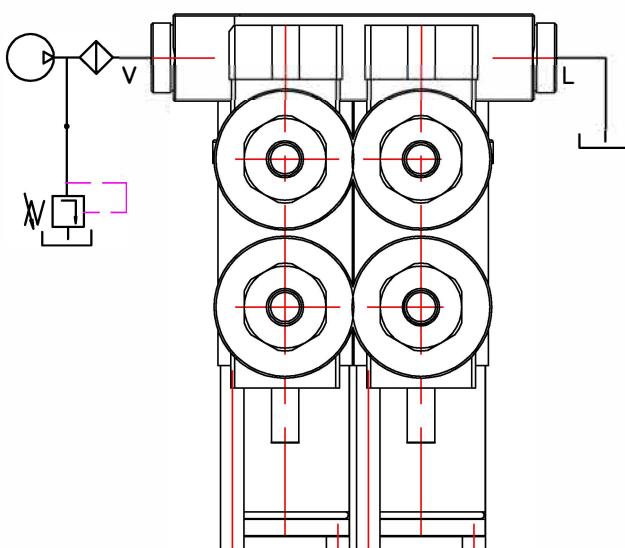
Ordering codes

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 ...)
Коллектор для внешнего питания управления и слива



Ordering example

2P40-1A1ED3A1ED3 G KZ1-CEED2-12VDC

Ordering codes (BSP threads)

CEED1P40

Kit for 1 section

CEED2P40

Kit for 2 section

CEED3P40

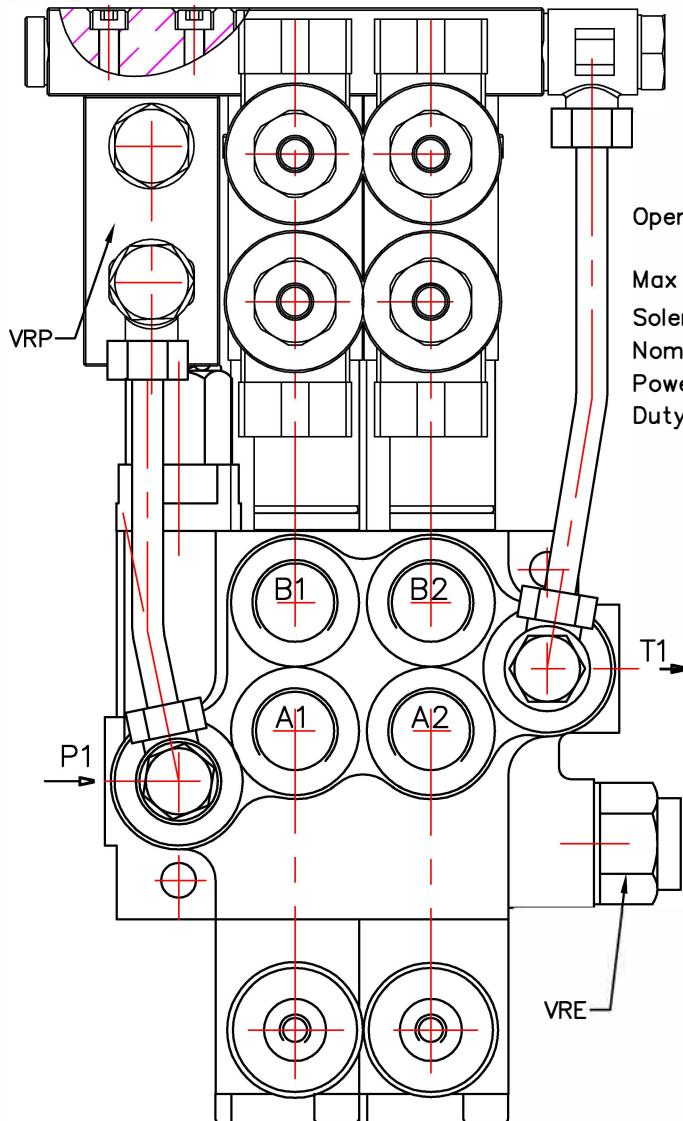
Kit for 3 section

CEED4P40

Kit for 4 section

... . . .

ED3 – electro-hydraulic control ON-OFF
Электрорегуляторный контроллер ON-OFF



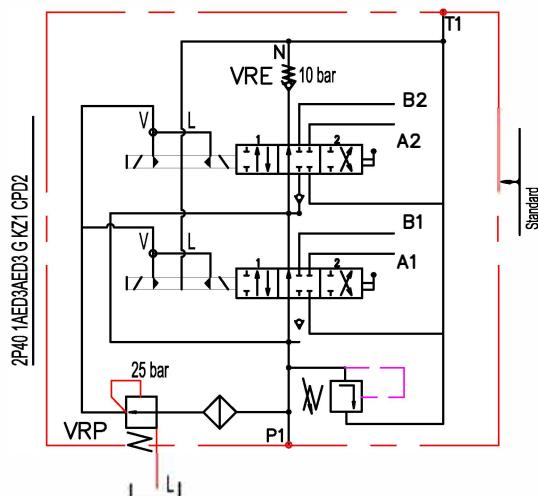
Ordering example

2P40–VRP– 1A1ED3A1ED3 G KZ1–CED2–VRE–12VDC

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 %



Collector kit

CED1
CED2
CED3
CED4

**Ordering codes
BSP threads**

Kit for 1 section
Kit for 2 section
Kit for 3 section
Kit for 4 section

Back pressure valve VRE–P40
Клапан подпорний на слив

