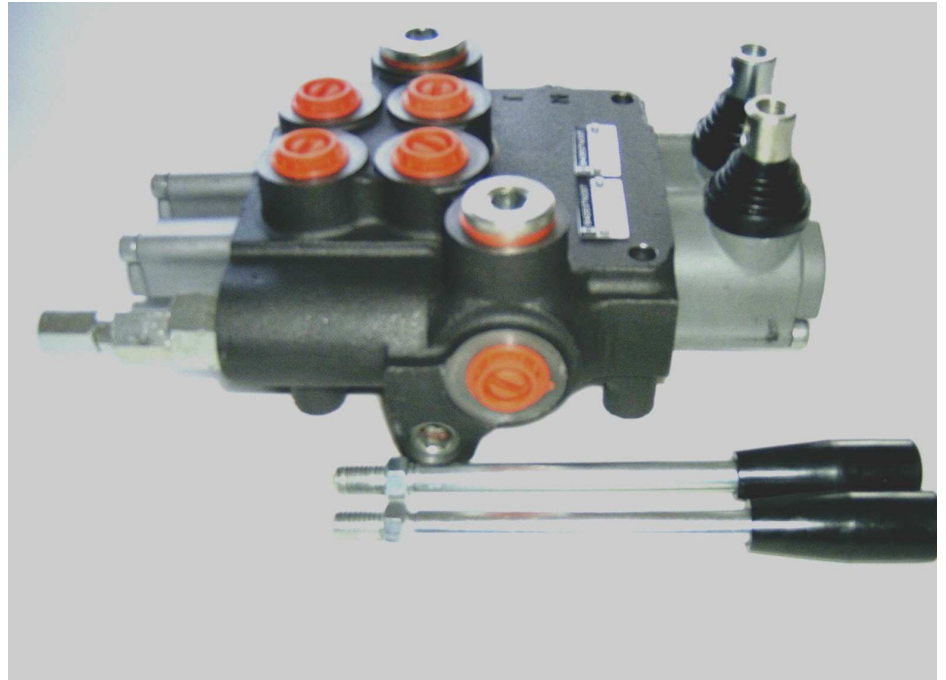


## HYDRAULIC DIRECTIONAL CONTROL VALVES РАСПРЕДЕЛИТЕЛИ ГИДРАВЛИЧЕСКИЕ



### 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 и управления потока, ограничения давления рабочей жидкости в гидролиниях, разгрузки насоса в нейтральной позиции золотников.

### Specifications

Основные показатели :

1. Valve monoblock	моноблок
Конструктивное исполнение	3 bolts M8
2. Mounting	
Крепление	
3. Pressure connections	internal thread
При соединительные 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 <sup>2</sup> /s permissible range
Кинематическая вязкость	20...100 mm <sup>2</sup> /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
	6 cm <sup>3</sup> /min at 100 bar
10. Internal (46 mm <sup>2</sup> /s )Leakage	
Внутренние потери (A, B – T)	
11. Nominal flow	80 l/min (see “operating” diagram)
Разход рабочей жидкости	
12. Spool stroke	±7 mm
Ход золотника	
13. Actuating force	< 220 N in spool axis direction
Усилие на движения золотника	

directional control valve P80

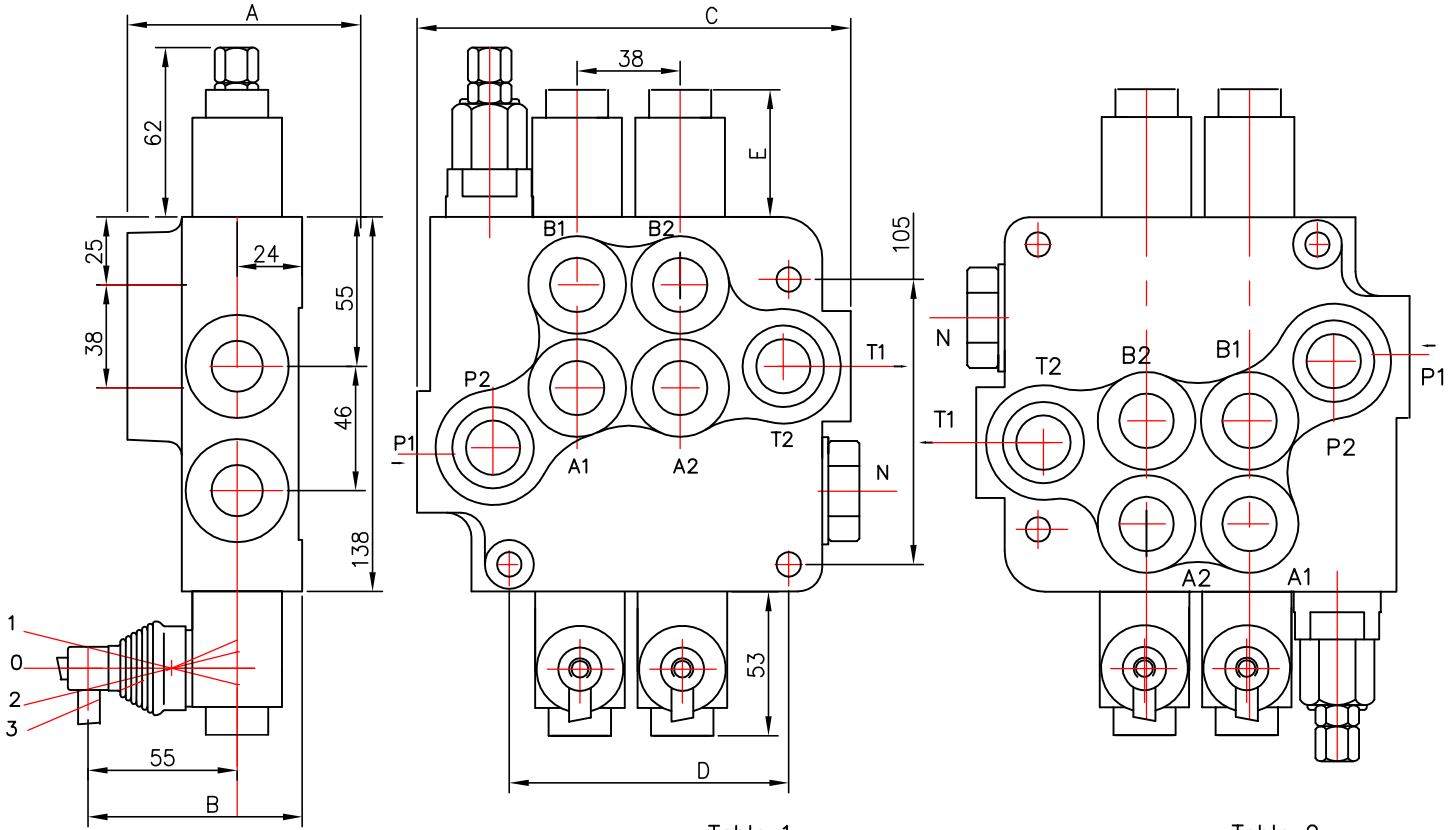


Table 1

	A	B	C	D	P1	P2	T1	T2
P80	65	79	107	65	*	*	–	–
2P80	80	94	160	103	*	*	*	*
3P80	80	94	198	141	*	*	*	*
4P80	80	94	236	179	*	*	*	*
5P80	80	94	274	217	*	*	*	*
6P80	80	94	312	255	*	*	*	*

Table 2

Spool control	E
1, 4, 5, 6, 7, 8, 9, 10, 11,	40
2, 3, 12, 14	72
13	44

**0** \_\_\_\_\_  
 block with common check valve  
 распределитель с общим клапаном

**2** \_\_\_\_\_  
 number of spools  
 количество золотников

**P80 R** \_\_\_\_\_  
 directional control valve type ...  
 распределитель типа ...

**1** \_\_\_\_\_  
 inlet high pressure – right  
 вход давления с правой стороны

**1** \_\_\_\_\_  
 way of distribution/parallel or .../  
 способ распределения потока

**A 1** \_\_\_\_\_  
 first spool distribution type  
 характеристика первого золотника

**1** \_\_\_\_\_  
 spool control/detend and estr./  
 контрол золотника/фиксация и груеуе/

**A 1** \_\_\_\_\_  
 second spool distribution type  
 тип второго золотника

**1** \_\_\_\_\_  
 spool control/detend and estr./  
 контрол золотника/фиксация и груеуе/

**G** \_\_\_\_\_  
 ports/treads/  
 резьбные отверстия

**KZ1** \_\_\_\_\_  
 general operation feature  
 вид ручного управления

**T** \_\_\_\_\_  
 with "teton"  
 исполнение ручного управления с "тетон"

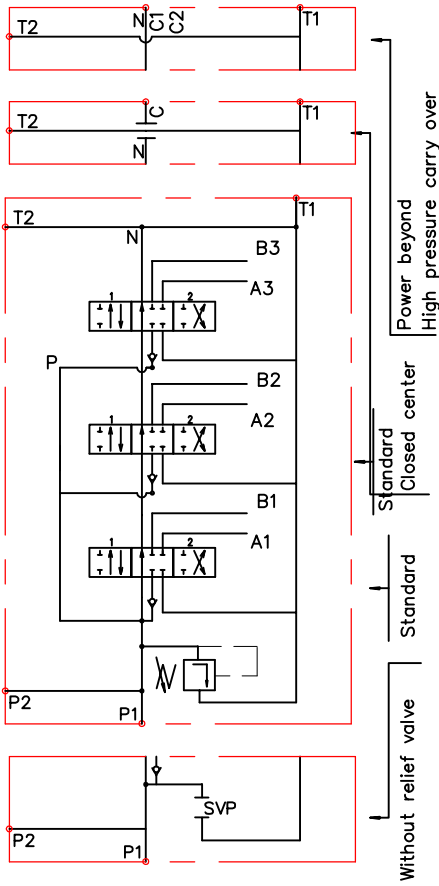
**H** \_\_\_\_\_  
 operation feature /pneumatic, .../  
 груеуе управление

**E** \_\_\_\_\_  
 with electric switch  
 с электрическим выключателем

**C2** \_\_\_\_\_  
 high pressure carry over  
 продолжител потока високого давления

**11** \_\_\_\_\_  
 connection ports in use  
 присоединительные отверстия

SP80 1A1A1A1



SP80 2A1A1A1

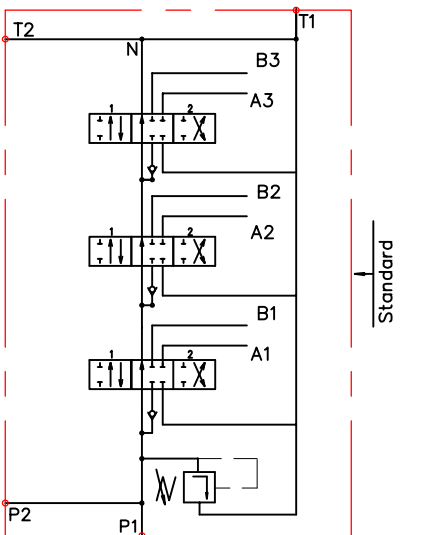


Table 3

code	Number of spools
1	1
2	2
3	3

ets.

Table 4

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

Table 5

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

Table 6

code	spool control
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

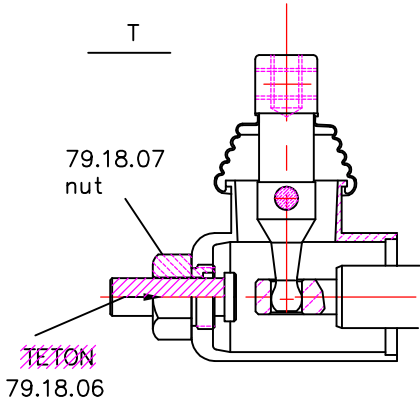
Table 7

code	с микро шалпер ; incorporated microswitch
E	<div style="display: inline-block; vertical-align: middle; margin-left: 20px;">                     mikroswitch type Omron-V 165 I C5                 </div>

Table 8

code	группое управление ; operation feature
P	<div style="display: inline-block; vertical-align: middle; margin-left: 20px;">                     пневматическое on-off pneumatic control; 5-10 bar ; ports 1/8 NPTF                 </div>
H	<div style="display: inline-block; vertical-align: middle; margin-left: 20px;">                     гидравлическое on-off hydraulic control ; pn = 5 - 20 bar ; ports G1/4                 </div>

directional control valve P80



P80

Table 9

code	ports (threads) ; присоединительные отверстия			
	P	A ; B	T	N
M	M22x1.5	M22x1.5	M26x1.5	M26x1.5
G	G1/2	G1/2	G3/4	G3/4
S	7/8-14UNF	7/8-14UNF	1 1/16-14UNF	1 1/16-14UNF

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 лостова система за управление					

P80 directional control valve

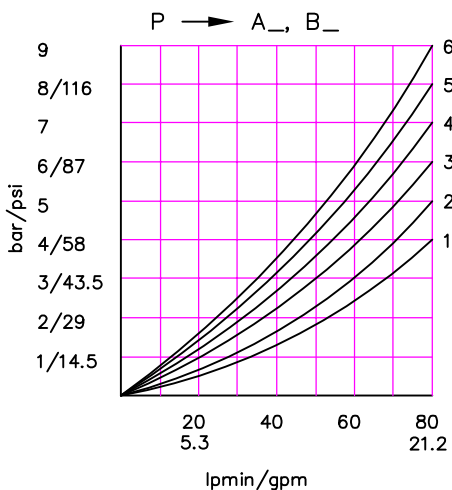
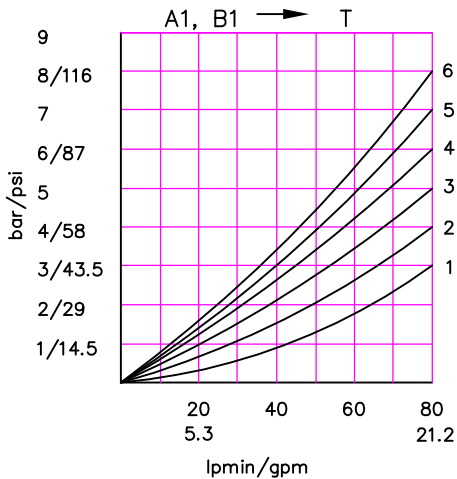
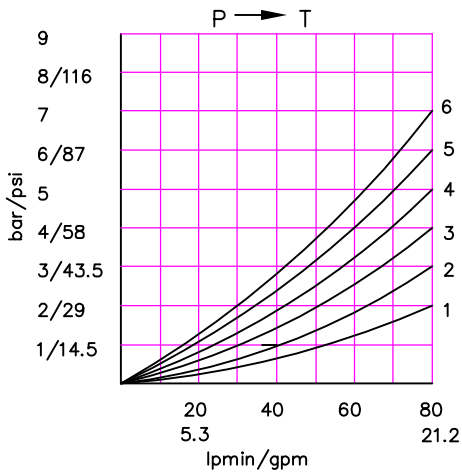


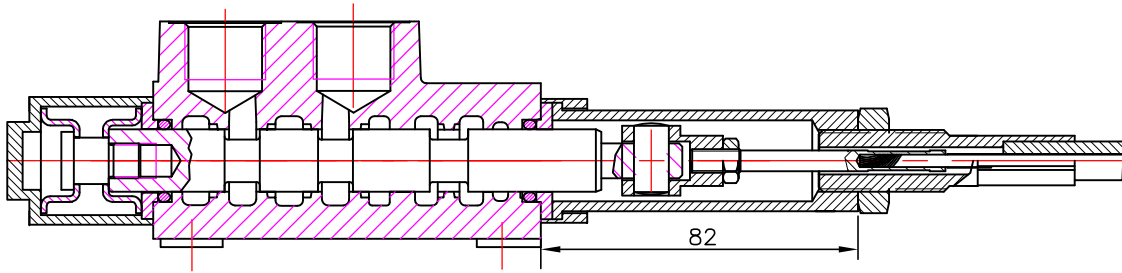
Table 11

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)	G 1/2 M22x1.5
-	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	

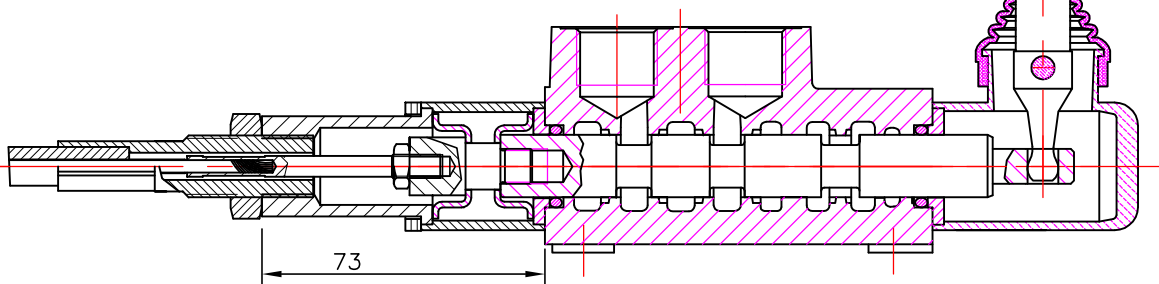
Table 12

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

REMOTE CONTROLS  
 Управление тросом



P80 A1G      V1(l= . . .)+      3047  
 spool valve      cable      control body

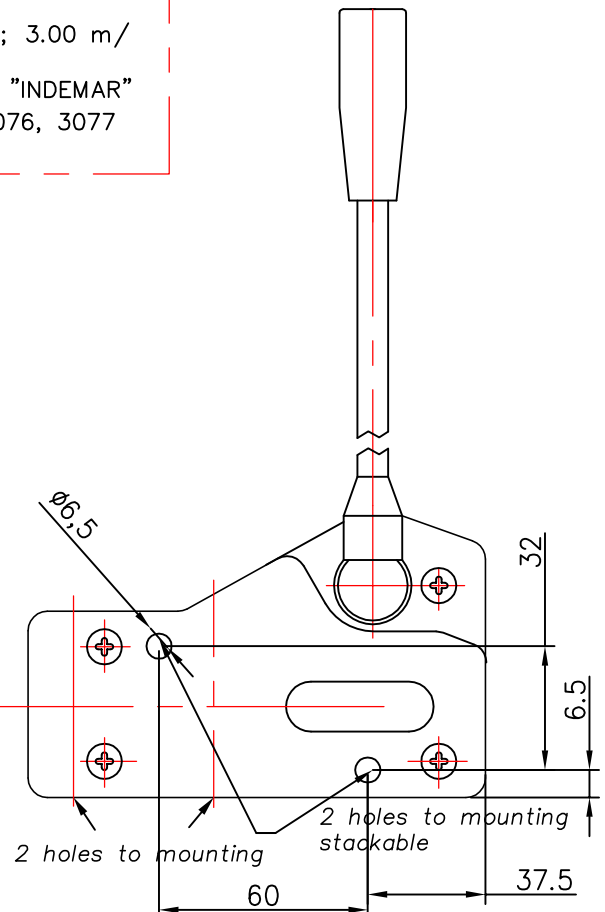


P80 A1G      V2KZ1(l= . . .)+      3047  
 spool valve      cable      control body

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

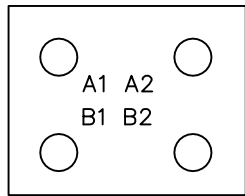
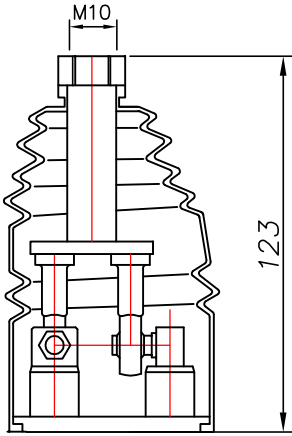
Technical specifications			
	3047	3076	3077
Stroke	13+13 mm	13+13 mm	13+13 mm
Max. load	45 kg	45 kg	45 kg
Level ratio	10:1	10:1	10:1
Lock in neutral	No	No	Yes
Antireverse lock	No	Yes	No
Body colour	Black	Black	Black
Cables type	Heavy Duty	Heavy Duty	Heavy Duty
Operating temperature	-40/+80C	-40/+80C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

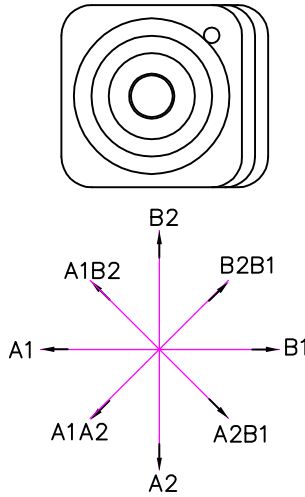


JOYSTICK "+"

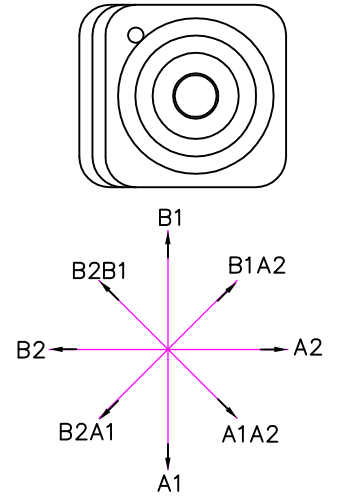
This control gives the possibility to operate, at the same time two spools with a "+" movement.



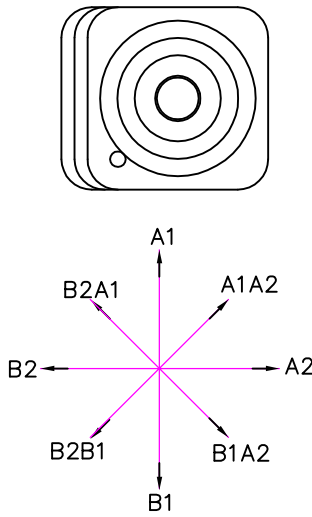
standard version 1



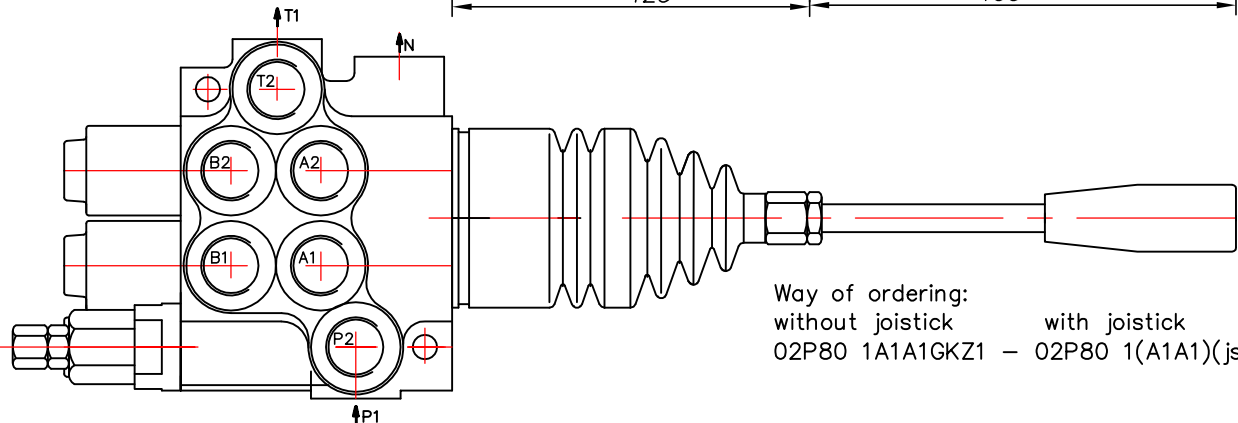
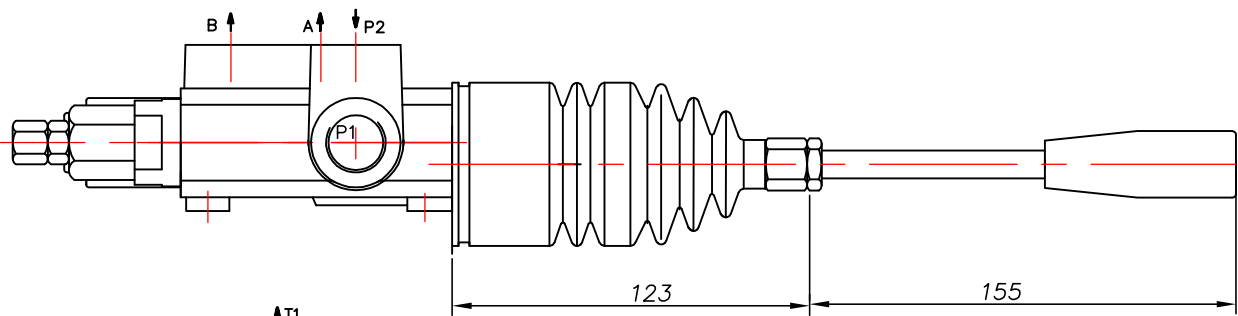
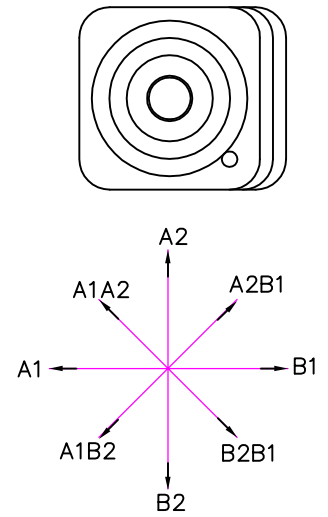
standard version 2



standard version 3



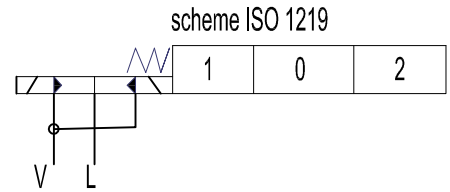
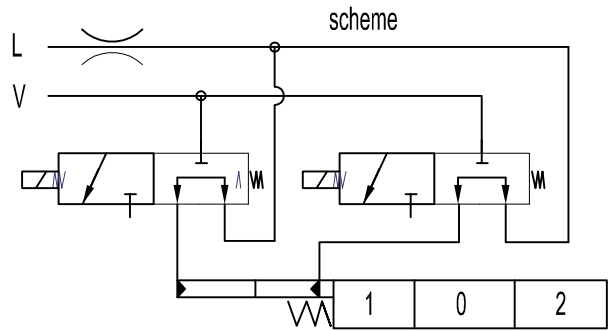
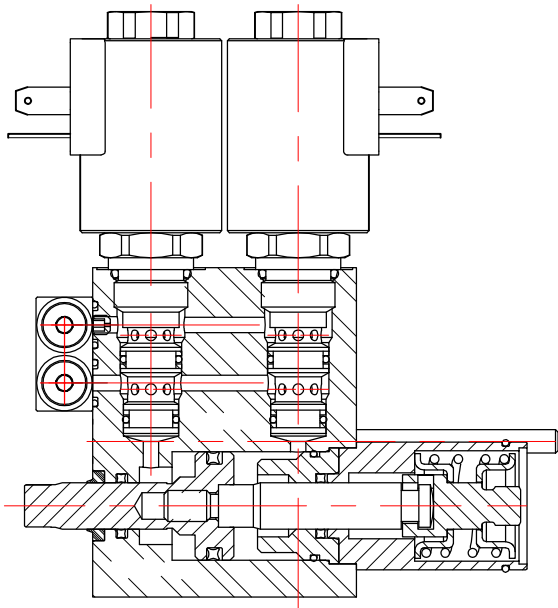
standard version 4



Way of ordering:  
 without joystick                      with joystick  
 02P80 1A1A1GKZ1 – 02P80 1(A1A1)(js+3)G

directional control valve P80

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)

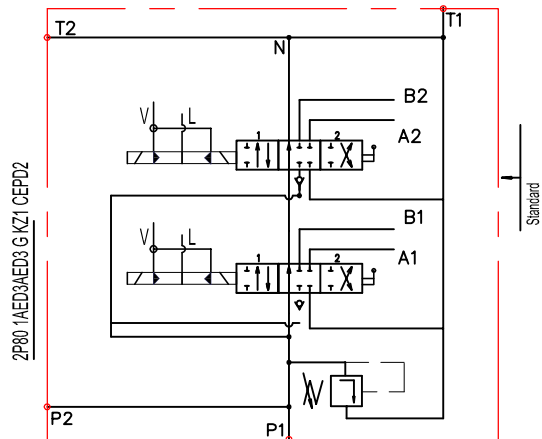
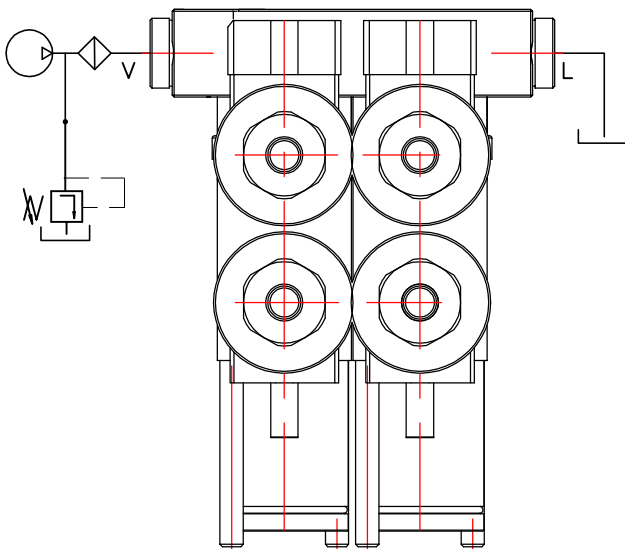
**Ordering codes**

3-way solenoid valve-SV08-33  
 coil P80ED3-G-12VDC  
 coil P80ED3-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 ...)*  
*Колектор для внешнего питания управления и слив*



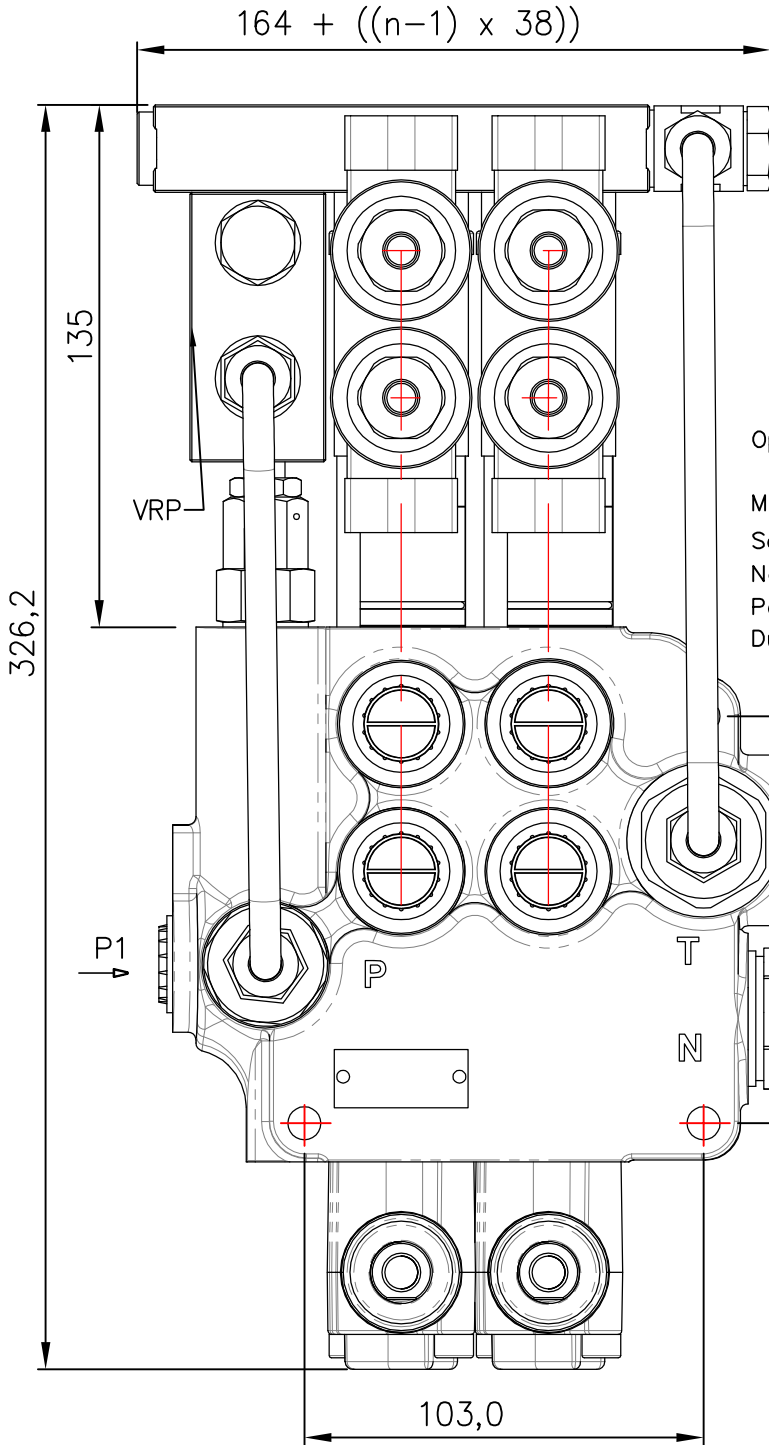
**Ordering example**

2P80 1A1ED3A1ED3 G KZ1-CEED2-12VDC

**Ordering codes (BSP threads)**

CEED1P80 Kit for 1 section  
 CEED2P80 Kit for 2 section  
 CEED3P80 Kit for 3 section  
 CEED480 Kit for 4 sektion  
 . . . . .

directional control valve P80

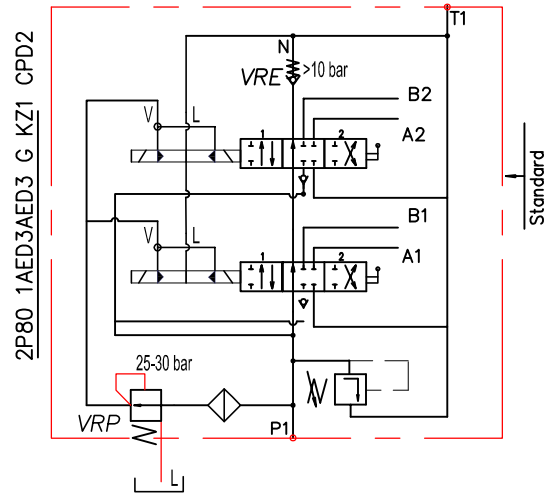


ED3 – electro-hydraulic control ON-OFF  
 Электрогидравлический контрол ON-OFF

**Order codes**

3-way solenoid valve-LSV2-08-3C-NNN  
 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 %



**Colector kit**

CED1Z80 \*  
 CED2P80  
 CED3P80  
 CED480

**Ordering codes  
 BSP threads**

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

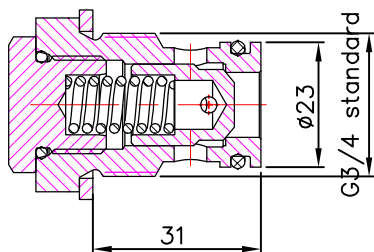
**Ordering example**

2P80 VRP 1A1ED3A1ED3 G KZ1-CED2-VRE-12VDC

.....

**Back pressure valve VRE-P80**

**Клапан подпорный на слив**



Pressure drop N-T

