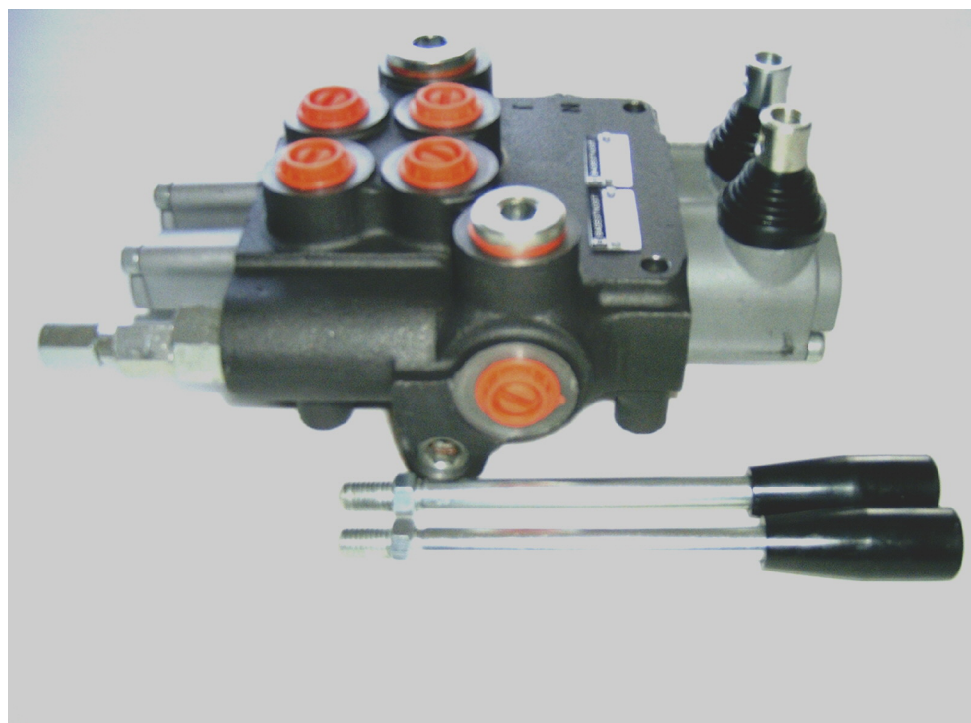


## HYDRAULIC DIRECTIONAL CONTROL VALVES РАСПРЕДЕЛИТЕЛИ ГИДРАВЛИЧЕСКИЕ



### 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 гидрочастях, разгрузки насоса в нейтральной позиции золотников.

### Specifications

Основные показатели:

#### 1. Valve monoblock

Конструктивное исполнение

моноблок

#### 2. Mounting

Крепление

3 bolts M8

#### 3. Pressure connection

При соединительные отверстия

internal thread

#### 4. Ambient temperature

Температура воздуха

внутренние резьбы

-40C...+60C

#### 5. Pressure medium

Рабочая жидкость

mineral oil based hydraulic oil

#### 6. Viskosity

Кинематическая вязкость

12...800 mm<sup>2</sup>/s permissible range

#### 7. Fluid temperature

Температура жидкости

20...100 mm<sup>2</sup>/s recommended range

-15C...+80C

#### 8. Filtration

Фильтрация

Oil contamination 10 to NAS1638

#### 9. Max. operating pressure

Давление max. bar

P = 250 bar

T = 50 bar

A, B = 300 bar

8 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

Разход рабочей жидкости

80 l/min (see "operating" diagram)

#### 12. Spool stroke

Ход золотника

±7 mm

#### 13. Actuating force

Усилия на движения золотника

< 220 N in spool axis direction

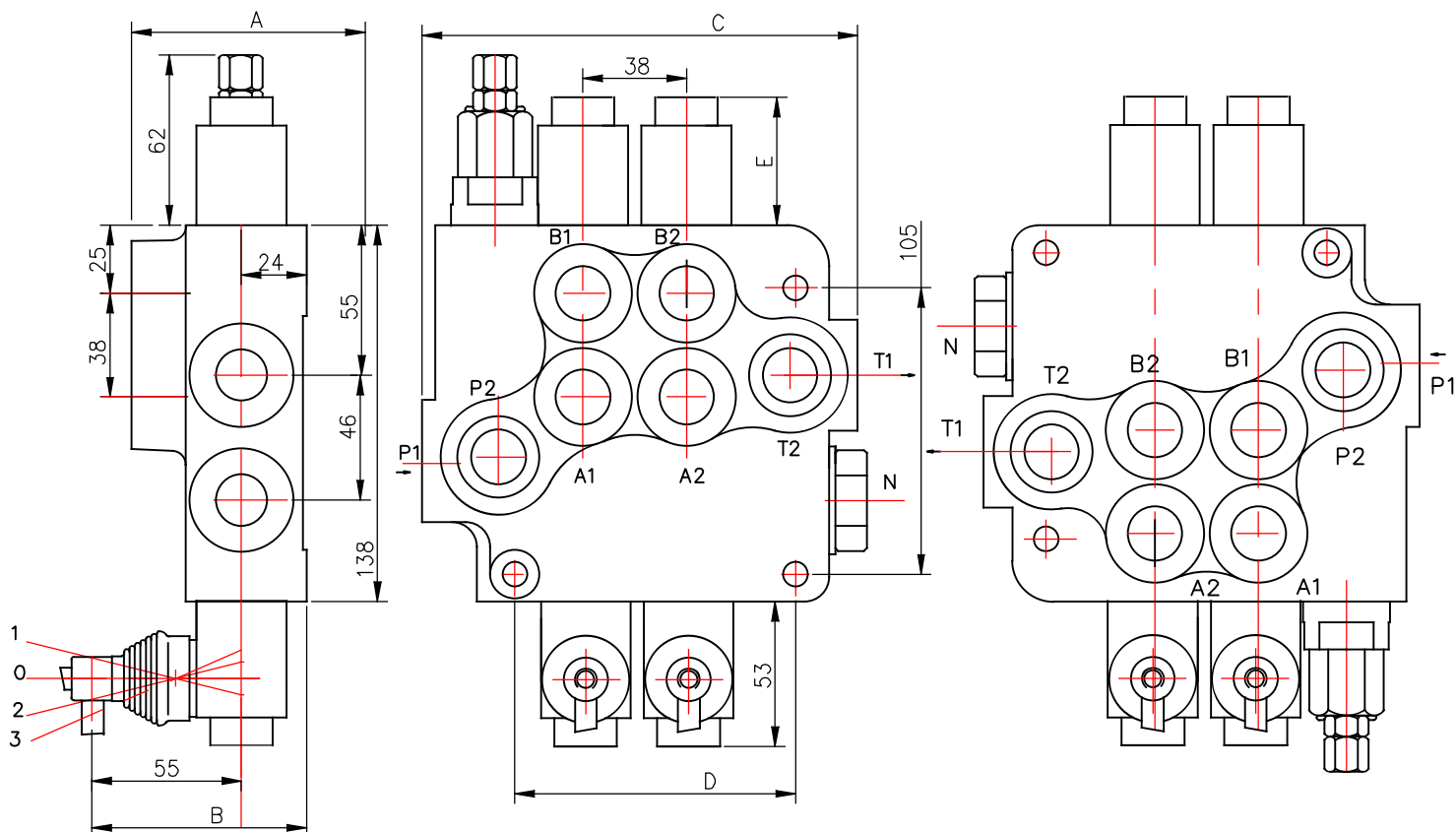


Table 1

	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** directional control valve type ...  
 распределитель типа ...  
**R** inlet high pressure – right  
 вход давления с правой стороны  
 relief valve; – standard setting 175 bar;  
 (svr) relief valve blanking plug; без предопр. клапана  
 (4) Spring for 160 to 315 bar; standard setting 220 bar;  
 way of distribution/parallel or .../  
 способ распределения потока  
**1** first spool distribution type  
 характеристика первого золотника  
**A** spool control/detend and ets./  
 контрол золотника/фиксация и грузие/  
**1** second spool distribution type  
 вид второго золотника  
**A** spool control/detend and estr./  
 контрол золотника/фиксация и грузие/  
**1** ports /treads/  
 резьбовые отверстия  
**G** general operation feature  
 вид ручного управления  
**KZ1** with "teton"  
 исполнение ручного управления с "тетон"  
**T** operation feature /pneumatic, .../  
 грузие управление  
**H** with electric switch  
 с электрическим выключателем  
**E** high pressure carry over  
 продолжител потока высокого давления  
**C2** connection ports in use  
 присоединительные отверстия  
**11**

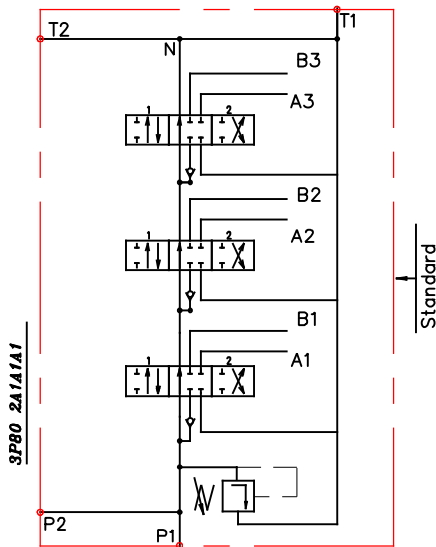
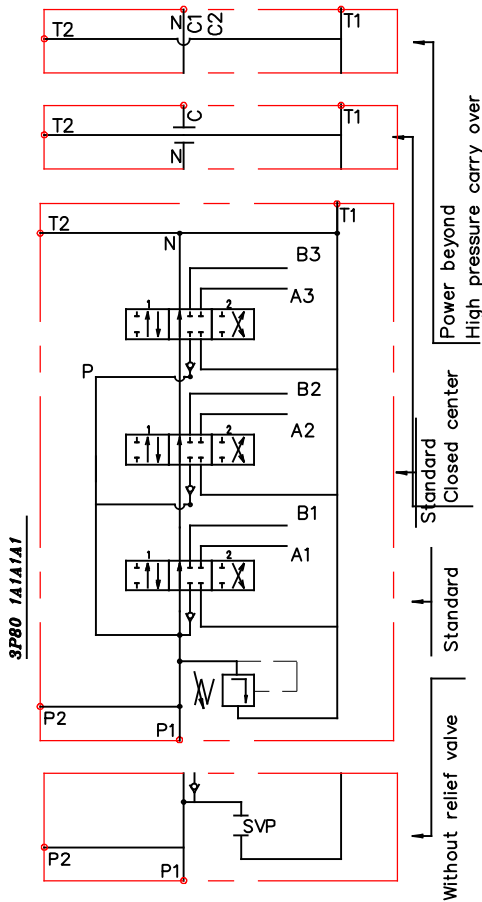


Table 3

code	Number of spools
1	1
2	2
3	3

Table 4

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

ets.

Table 5

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

Table 6

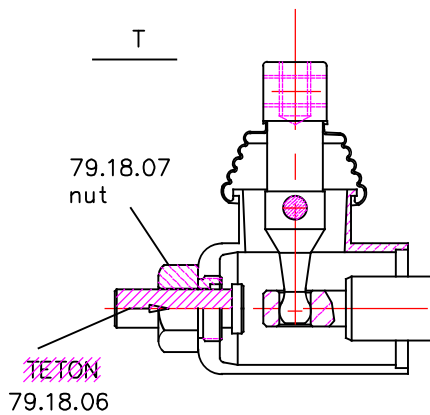
code	spool control
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

Table 7

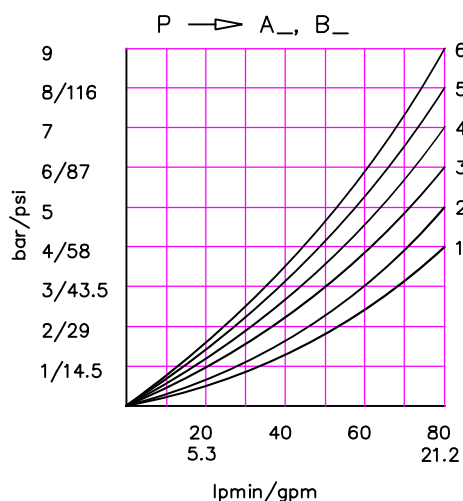
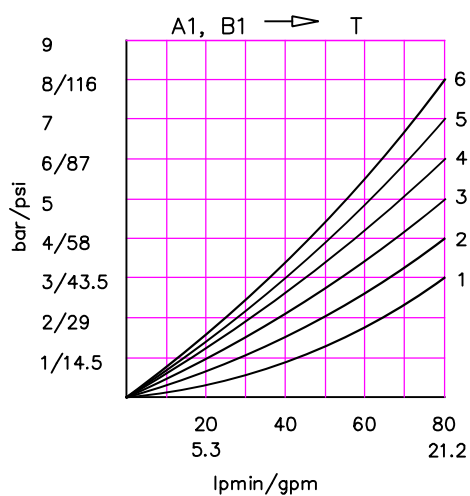
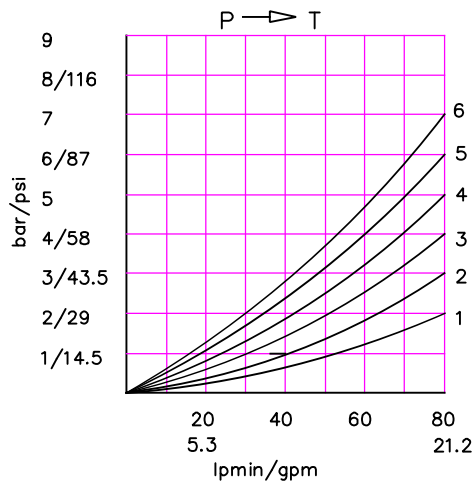
code	с микро шалтер ; incorporated microswitch
E	<div style="display: inline-block; vertical-align: middle;"> <p>mikroswitch type Omron-V 165 I C5</p> </div>

Table 8

code	другое управление ; operation feature
P	<div style="display: inline-block; vertical-align: middle;"> <p>пневматическое on-off pneumatic control; 5–10 bar ; ports G1/4</p> </div>
H	<div style="display: inline-block; vertical-align: middle;"> <p>гидравлическое on-off hydraulic control ; pn = 5 – 20 bar ; ports G1/4</p> </div>



P80 directional control valve



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					

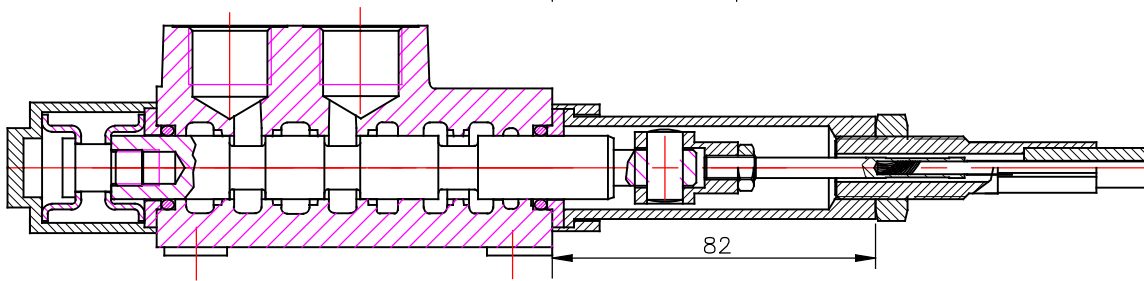
Table 11

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	

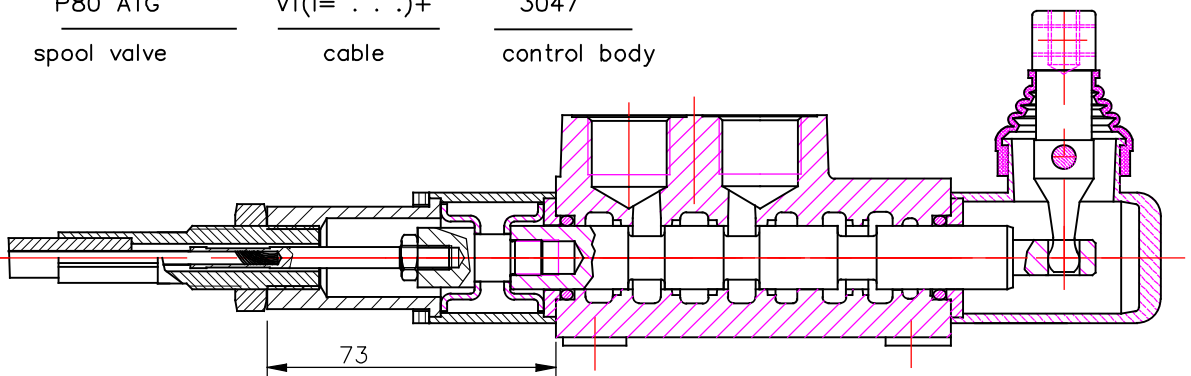
Table 12

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



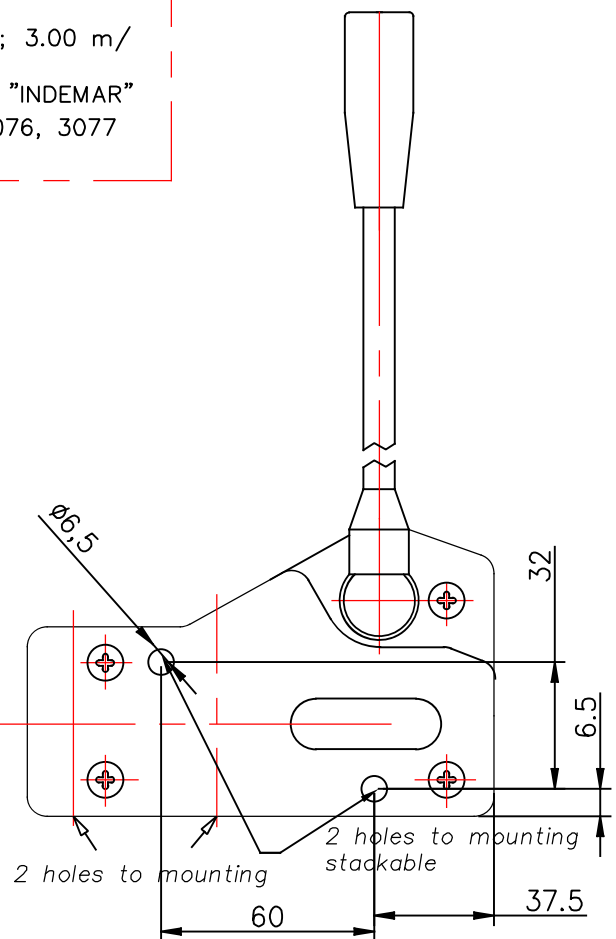
P80 A1G      V2KZ1(l= . . .)+      3047  
 spool valve      cable      control body

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

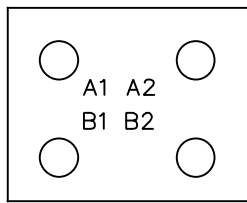
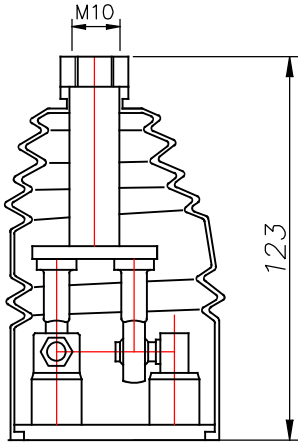
	3047	3076	3077
Stroke	13+13 mm	13+13 mm	13+13 mm
Max. load	45 kg	45 kg	45 kg
Level ratio	10:1	10:1	10:1
Lock in neutral	No	No	Yes
Antireverse lock	No	Yes	No
Body colour	Black	Black	Black
Cables type	Heavy Duty	Heavy Duty	Heavy Duty
Operating temperature	-40/+80C	-40/+80C	-40/+80C

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.

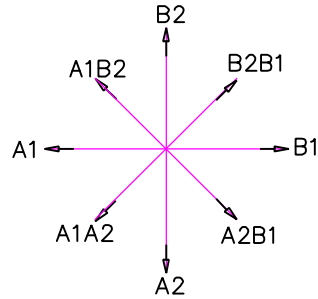
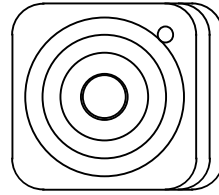


JOYSTICK "+"

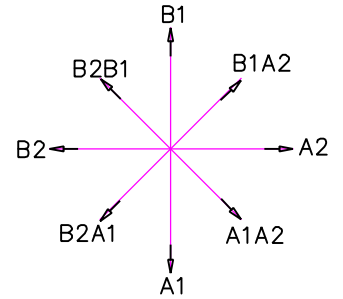
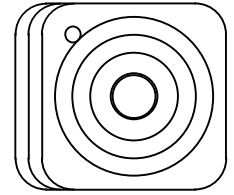
This control gives the possibility to operate, at the same time two spools with a "+" movement.



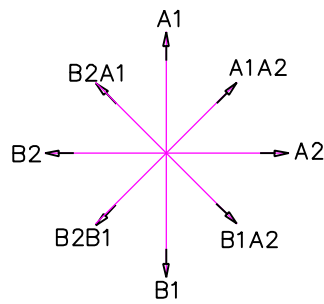
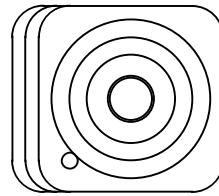
standard version 1



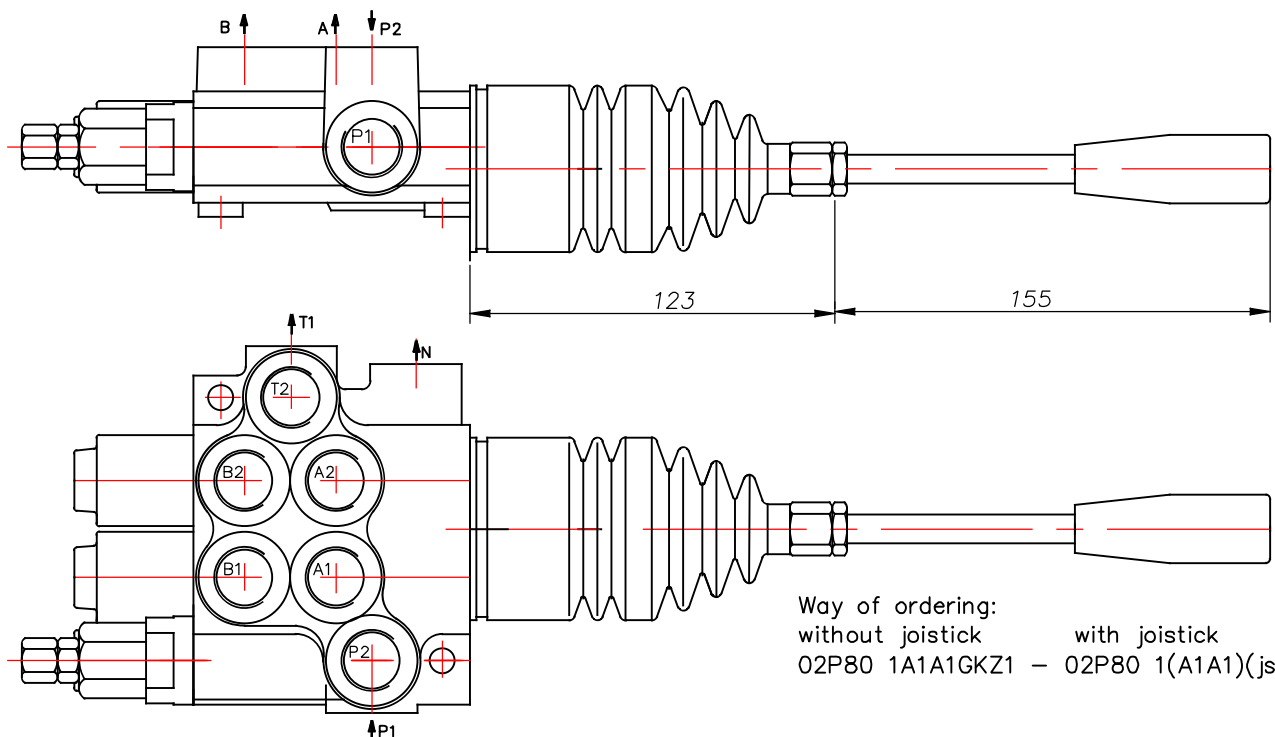
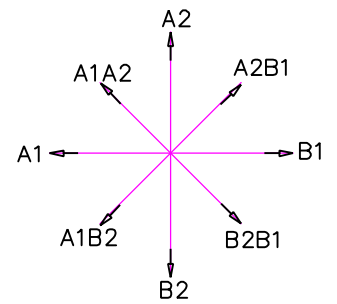
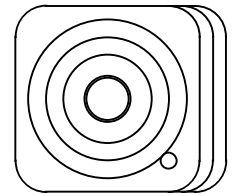
standard version 2



standard version 3



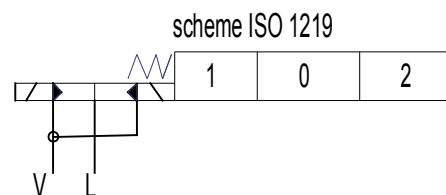
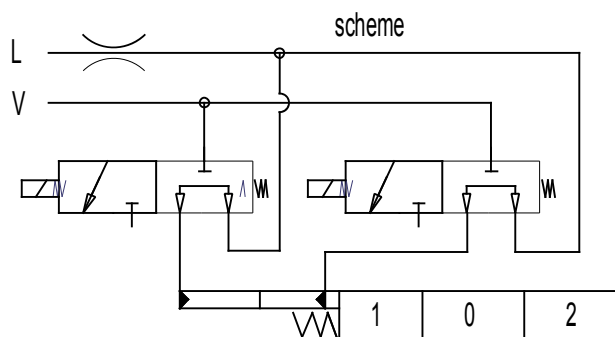
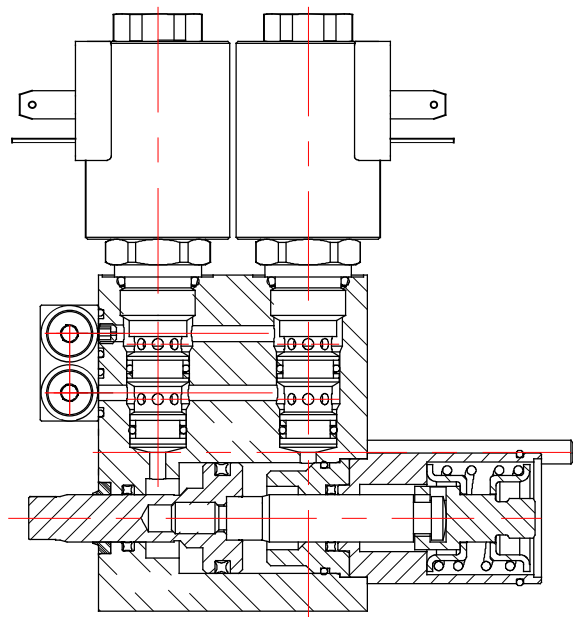
standard version 4



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



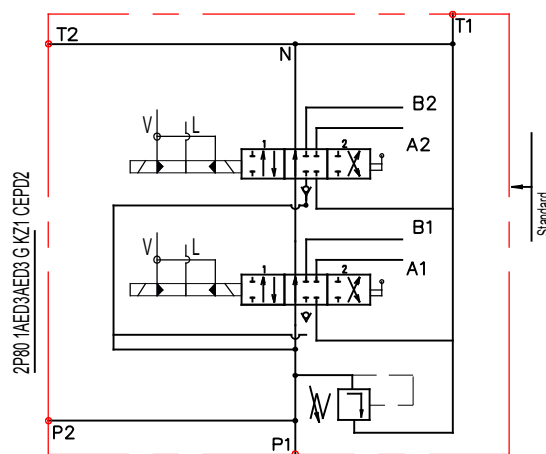
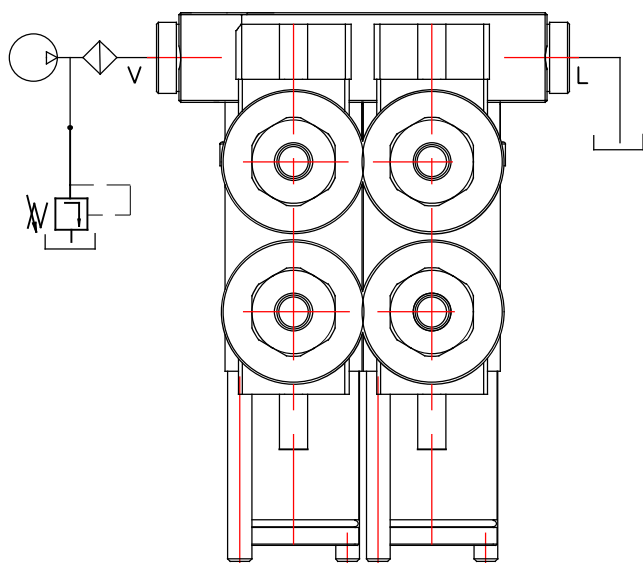
Operating pressure min 10 bar(145 psi)  
 max 50 bar(725 psi)  
 Max operating pressure in L (T line) 25 bar(360 psi)

**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*



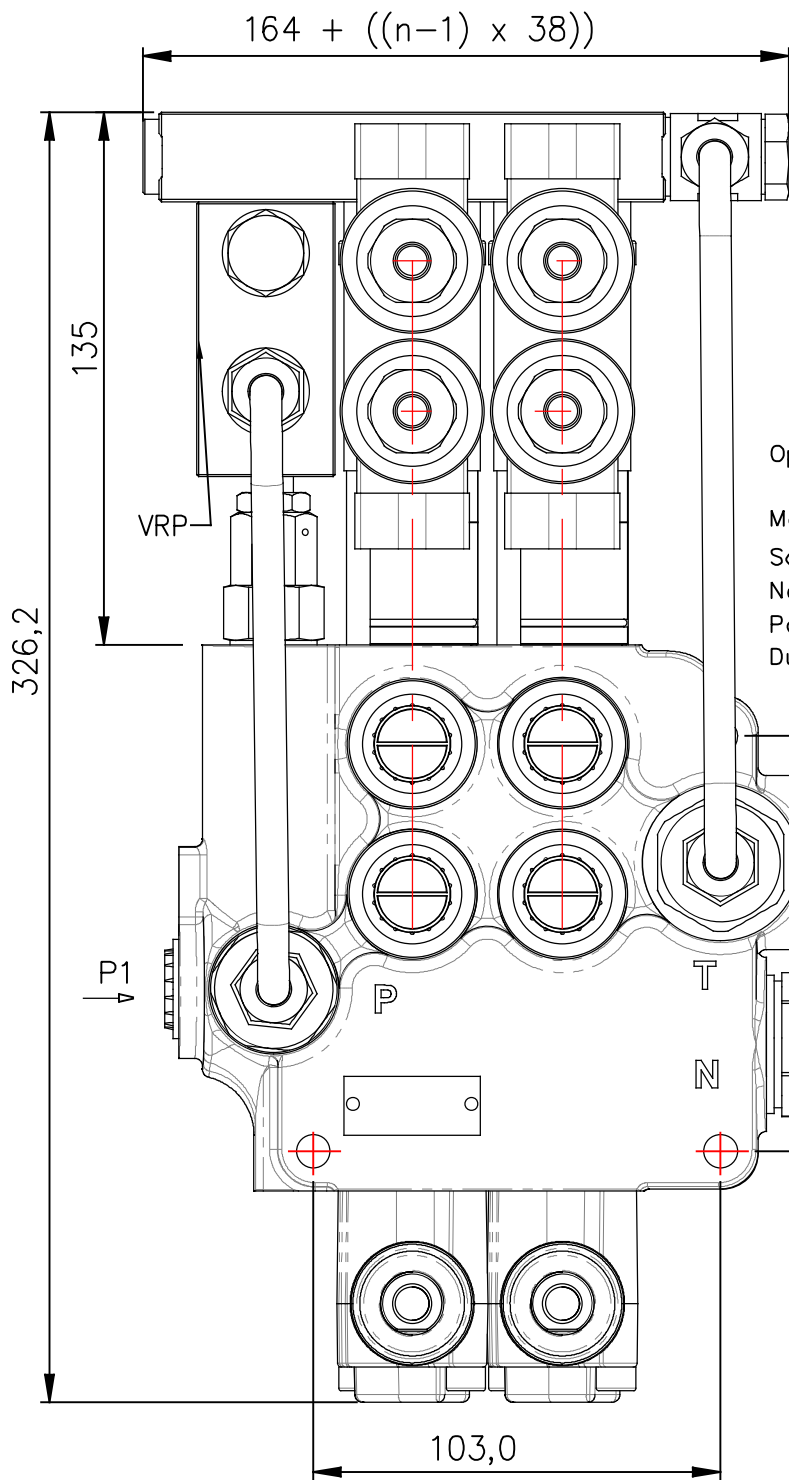
**Ordering example**

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

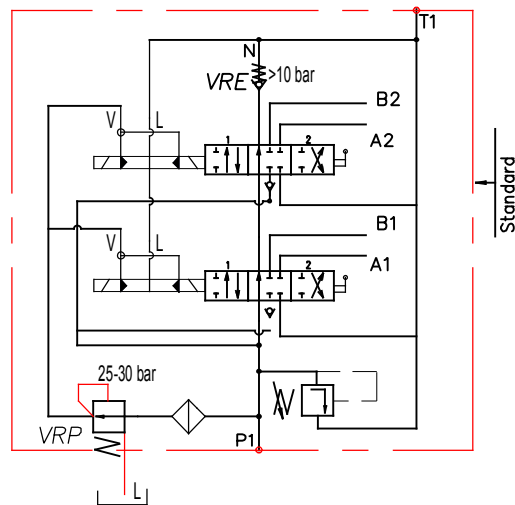


ED3 – electro-hydraulic control ON-OFF  
 Электрогидравлический контрол ON-OFF

**Order codes**

3-wai 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 %



**Ordering example**

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

**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

**Back pressure valve VRE-P80**  
 Клапан подпорный на слив

