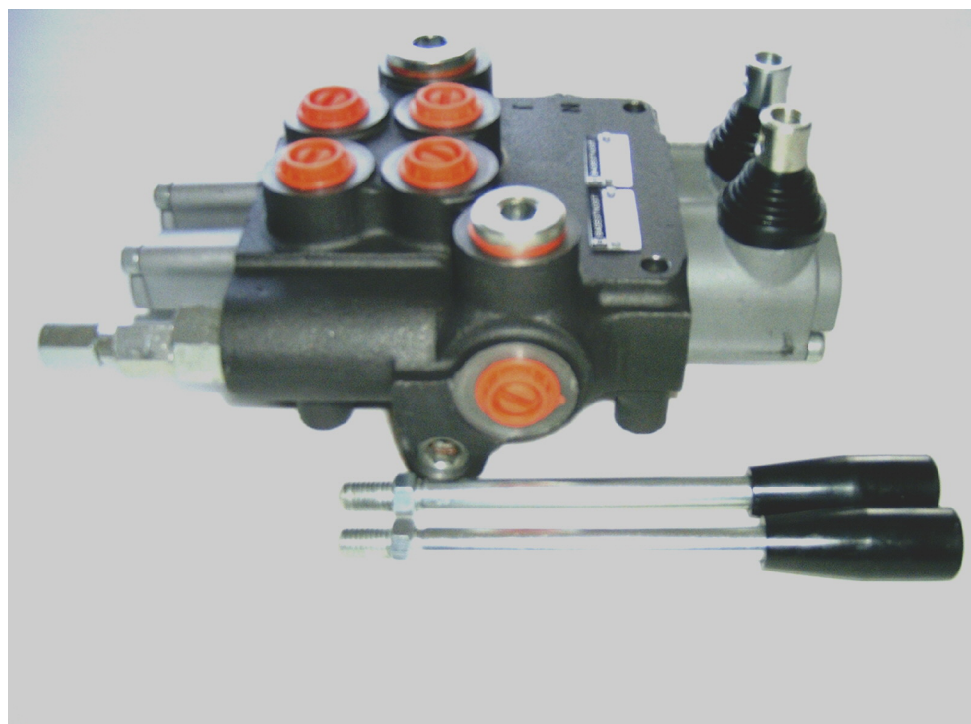


## HYDRAULIC DIRECTIONAL CONTROL VALVES



### Description

For starting, controlling and stopping the working fluid between the generator of pressured flow, the consumers and the Tank.

### Specifications

1. Valve monoblock	
2. Mounting	3 bolts M8
3. Pressure connections	internal thread
4. Ambient temperature	-40C...+60C
5. Pressure medium	mineral oil based hydraulic oil
6. Viskosity	12...800 mm <sup>2</sup> /s permissible range 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 T = 50 bar A, B = 300 bar
10. Internal (46 mm <sup>2</sup> /s) Leakage	8 cm <sup>3</sup> /min at 100 bar
11. Nominal flow	80 l/min (see "operating" diagram)
12. Spool stroke	±7 mm
13. Actuating force	< 220 N in spool axis direction

directional control valve P80

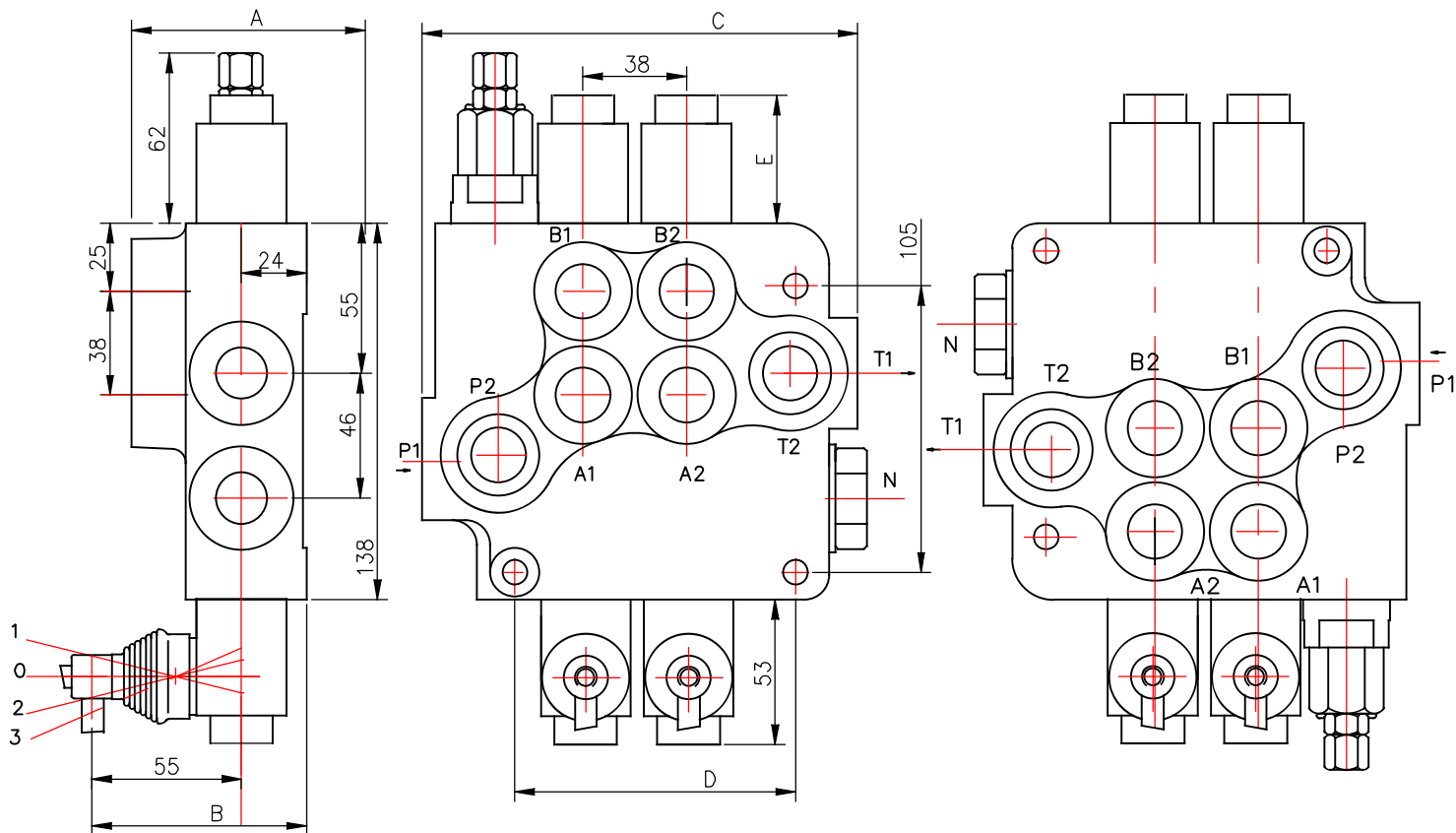


Table 1

	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

**2** \_\_\_\_\_  
 number of spools

**P80** \_\_\_\_\_  
 directional control valve type ...

**R** \_\_\_\_\_  
 inlet high pressure – right

relief valve; – standard setting 175 bar;  
 (sp) relief valve blanking plug;  
 (4) Spring for 160 to 315 bar; standard setting 220 bar;  
 way of distribution/parallel or .../

**1** \_\_\_\_\_  
 first spool distribution type

**A** \_\_\_\_\_  
 spool control/detend, and estr./

**1** \_\_\_\_\_  
 second spool distribution type

**A** \_\_\_\_\_  
 spool control/detend, and estr./

**1** \_\_\_\_\_  
 spool control/detend, and estr./

**G** \_\_\_\_\_  
 ports /treads/

**KZ1** \_\_\_\_\_  
 general operation feature

**T** \_\_\_\_\_  
 with "teton"

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

**E** \_\_\_\_\_  
 with electric switch

**C2** \_\_\_\_\_  
 high pressure carry over

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

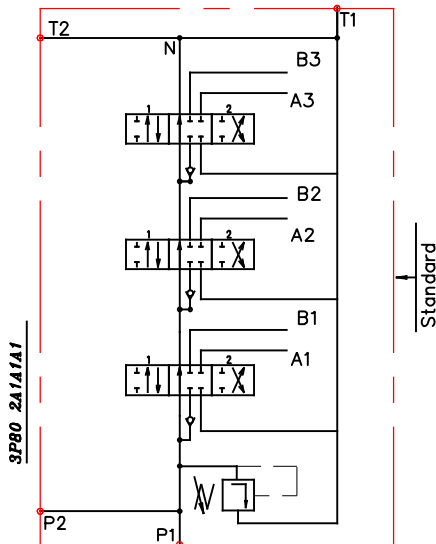
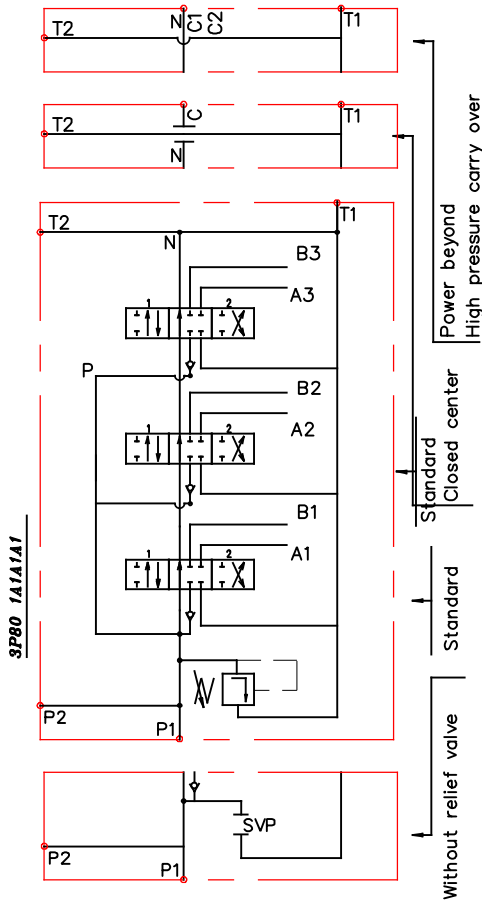


Table 3

code	Number of spools
	1
2	2
3	3

Table 4

code	way of distribution
1	parallel
2	tandem(series parallel)

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	

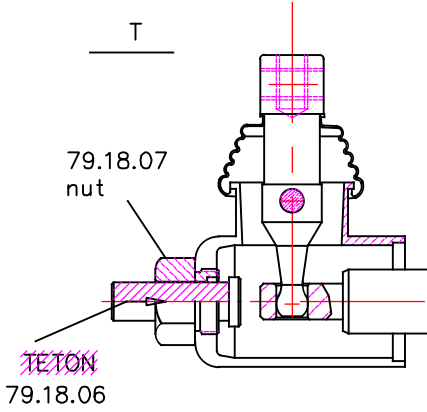
Table 7

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

Table 8

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

directional control valve P80



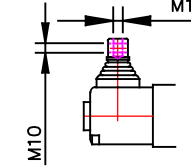
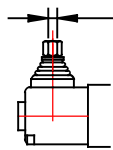
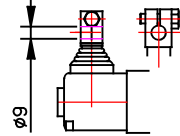
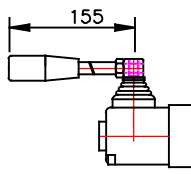
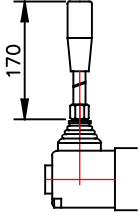
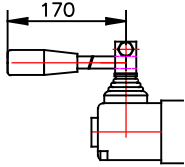
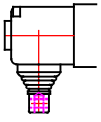
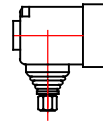
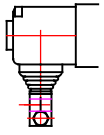
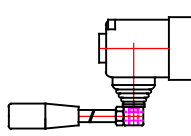
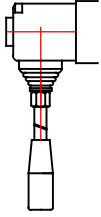
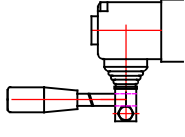
P80

Table 9

code	ports (threads)			
	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 ;

Table 10

code	feature	code	feature	code	feature
KZ		KY		KI	
KZ1		KY1		KI1	
KZ0		KY0		KI0	
KZ01		KY01		KI01	
_ without hand control					

P80 directional control valve

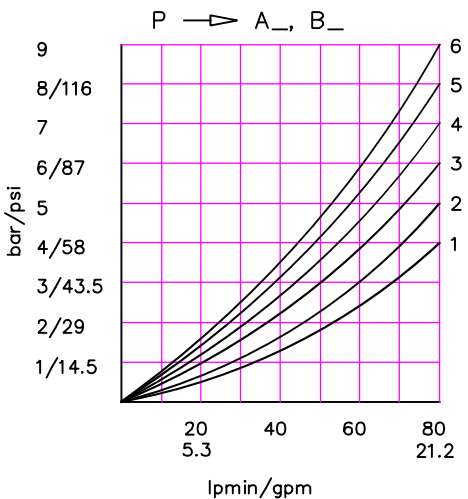
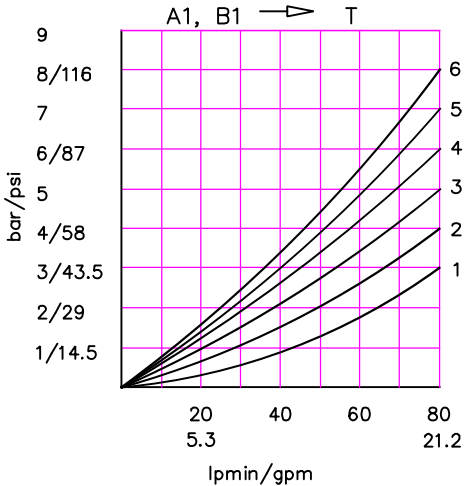
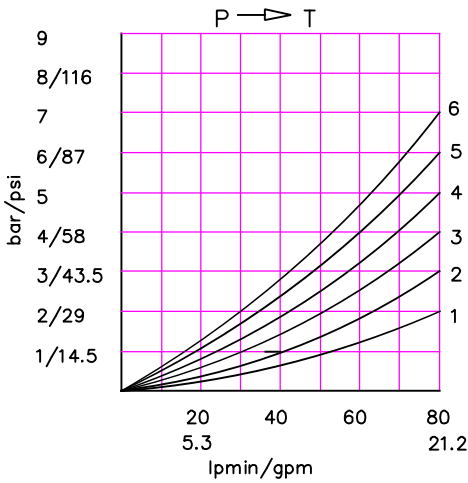


Table 11




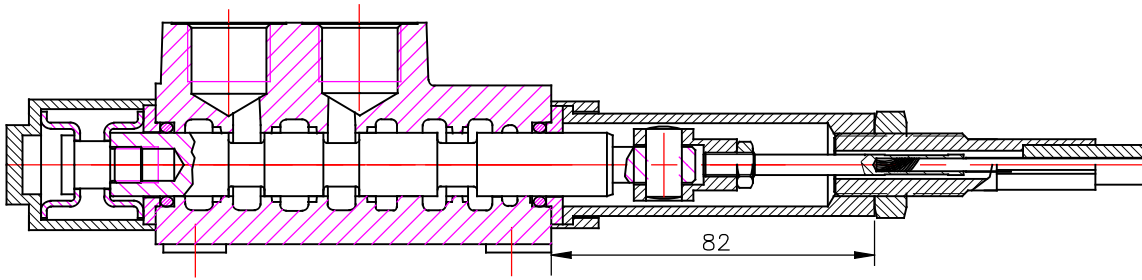
code	description	diagram
C	closed center	
C2	part for power beyond sleeve (carry over)	
-	without part for pressure carry over	
X	power beyond ever to tank	

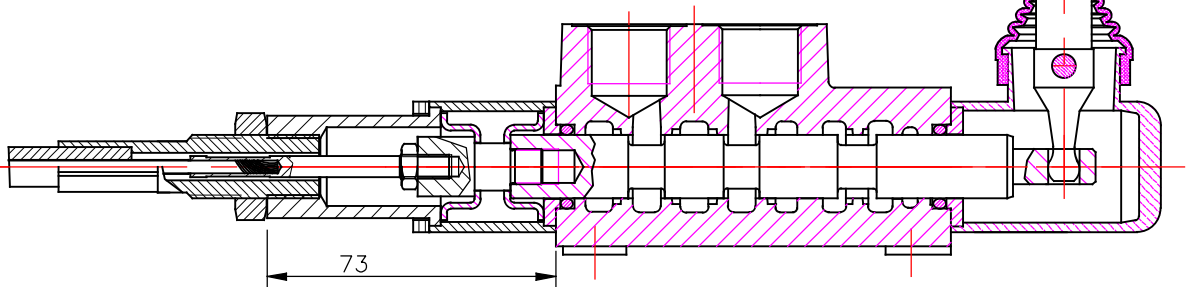
Table 12

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

REMOTE CONTROLS  
Управление тросом



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



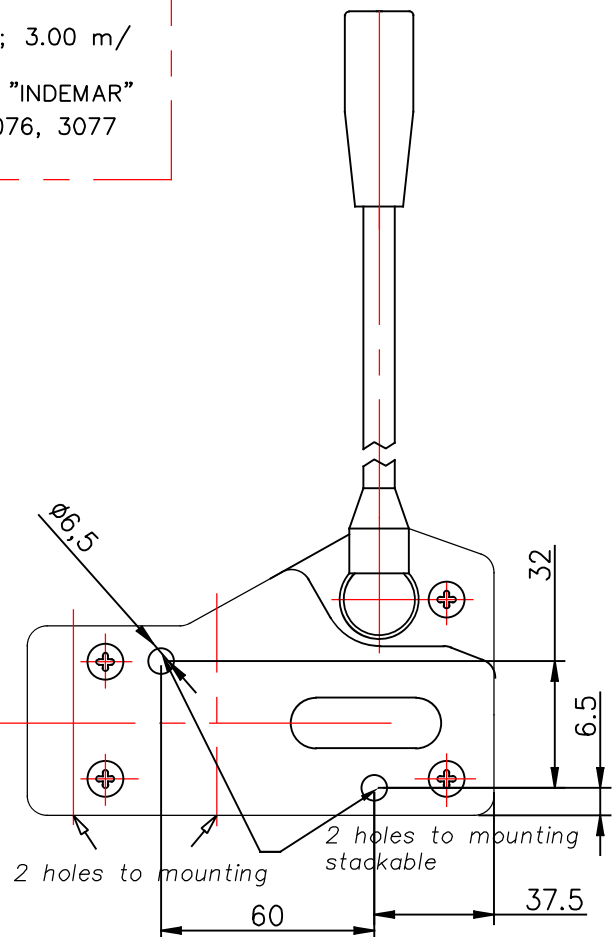
P80 A1G      V2KZ1(I= . . .)+      3047  
spool valve      cable      control body

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

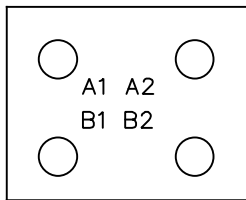
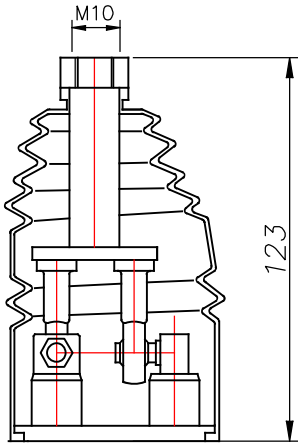
High solidity controls for easy mounting on every type of distributor. They can be mounted stand alone or packed together. They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in a three different models to meet different needs of Clients.



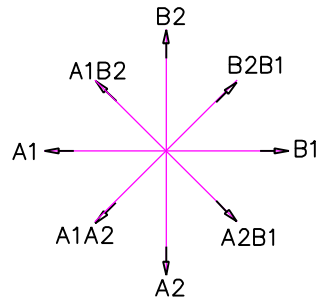
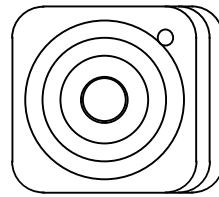
directional control valve P80

JOYSTICK "+"

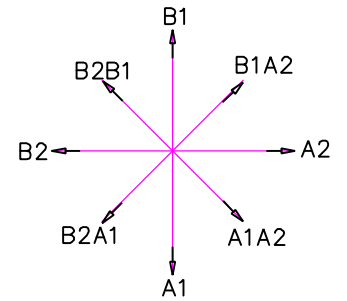
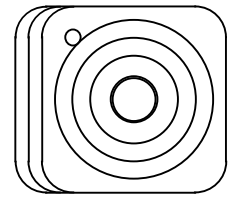
This control gives the possibility to operate, at the same time two spools with a "+" movement.



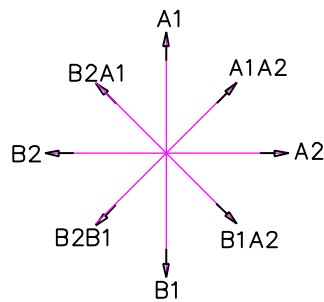
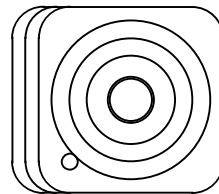
standard version 1



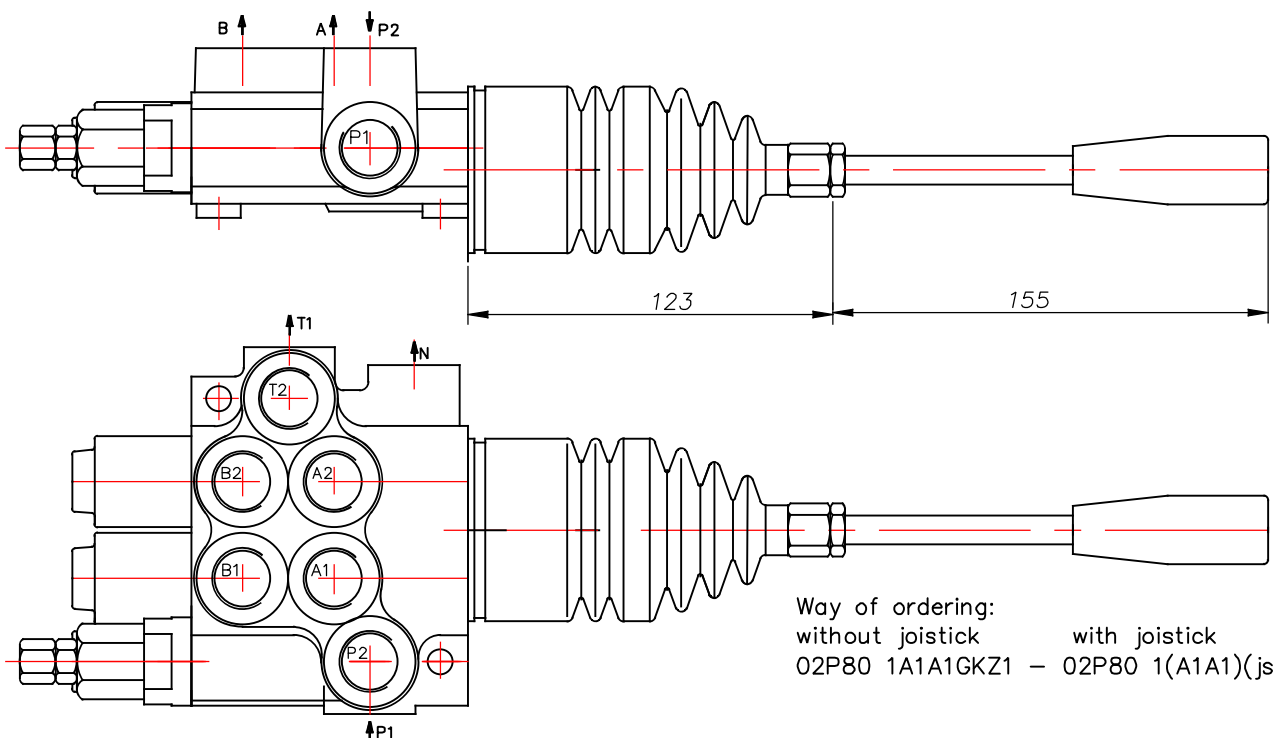
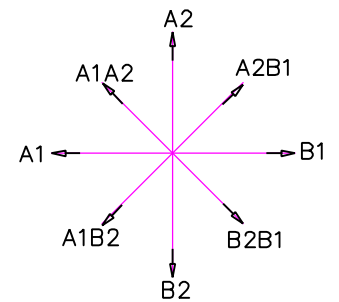
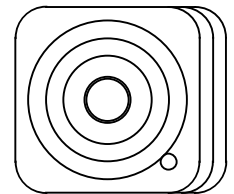
standard version 2



standard version 3

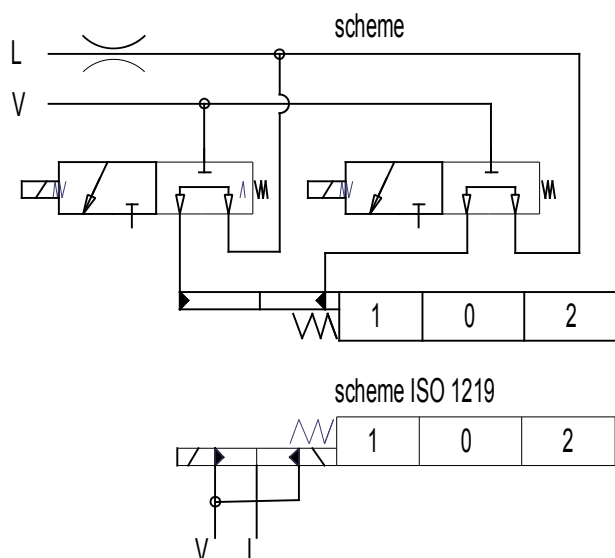
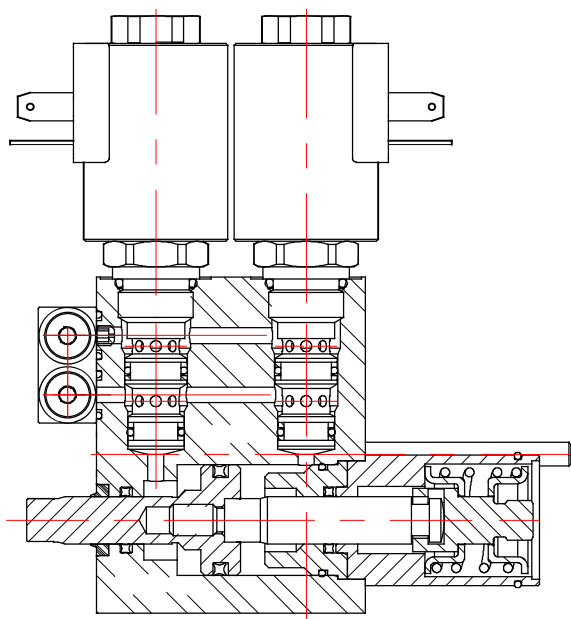


standard version 4



directional control valve P80

ED3 – electro–hydraulic control ON–OFF



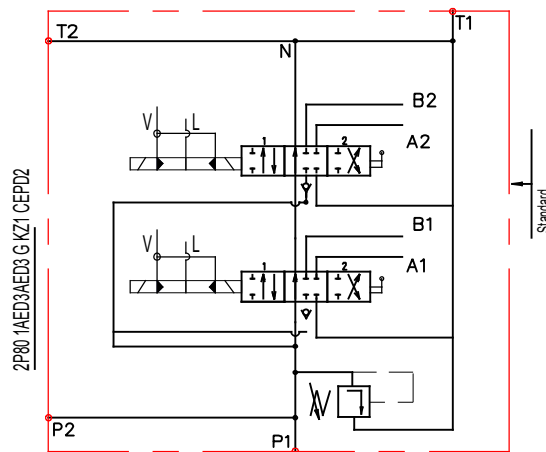
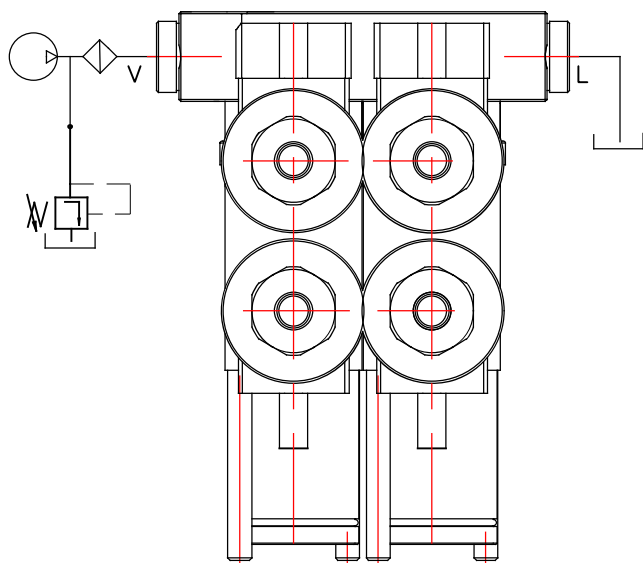
**Ordering codes**

3–way solenoid valve–SV08–33  
 coil P80ED3–G–12VDC  
 coil P80ED3–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 for external pilot and drain – CEED...(1,2,3 ...)*  
*Колектор для внешнего питания управления и слив*



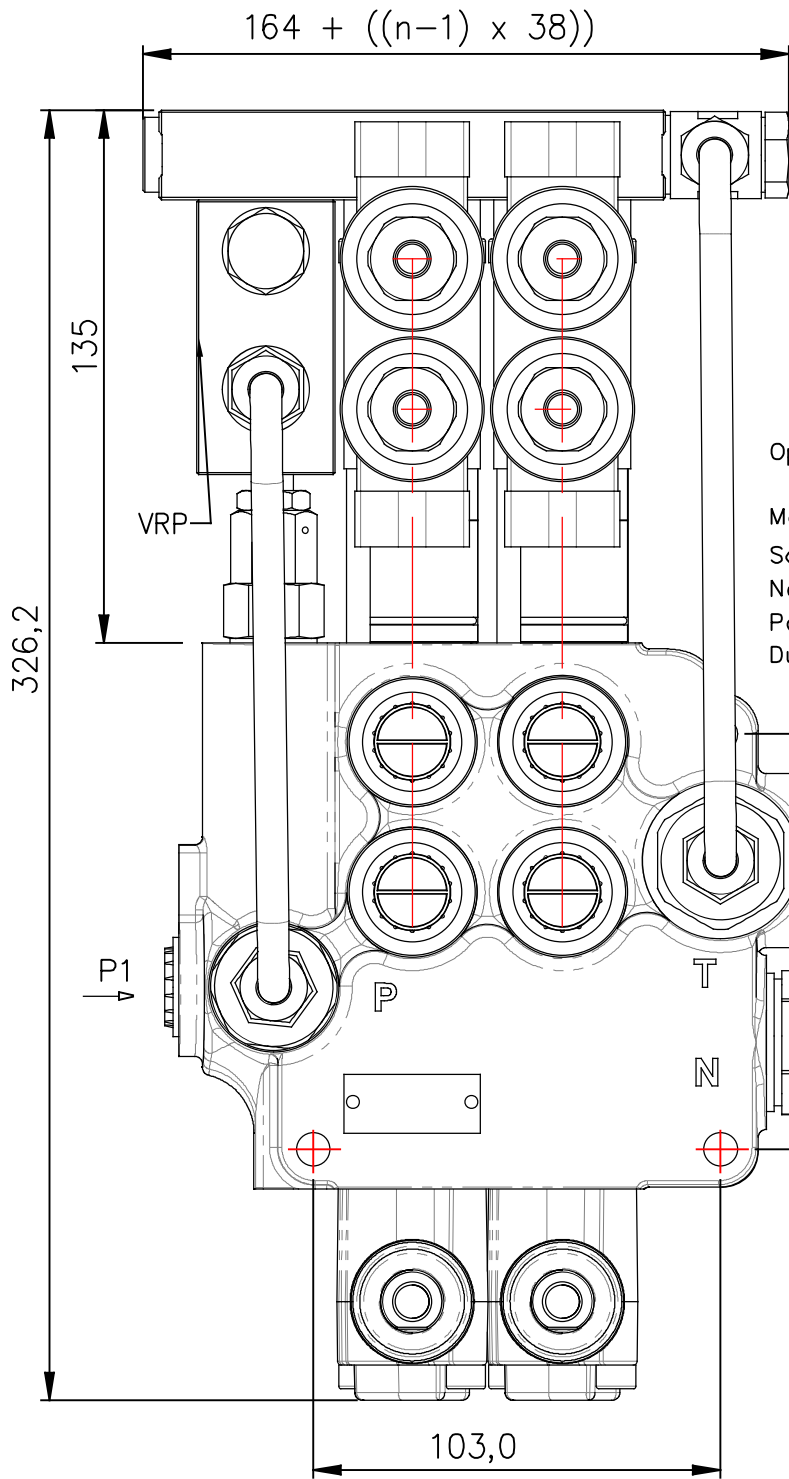
**Ordering example**

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

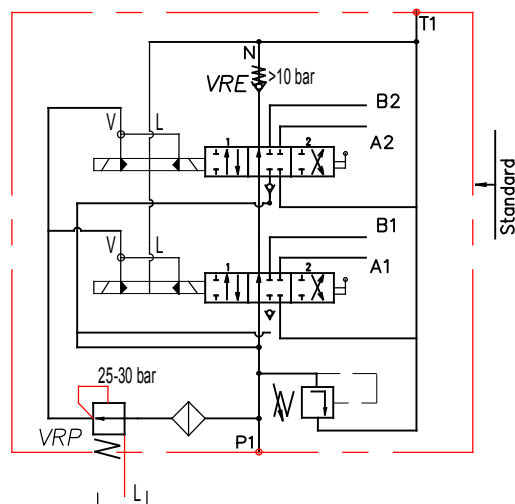


ED3 – electro-hydraulic control ON-OFF  
 Электрогидравлический контрол ON-OFF

**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 %



**Ordering example**

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

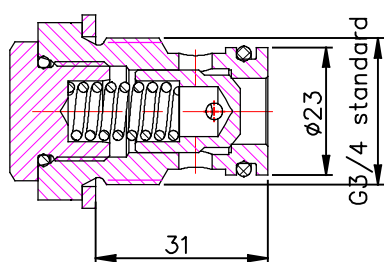
**Colector kit**

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**



Pressure drop N-T

