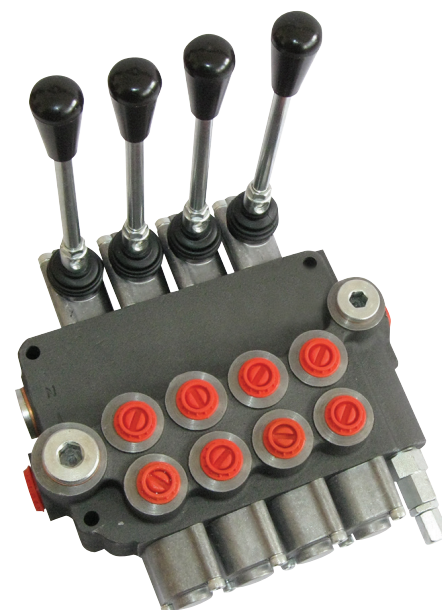


Hydraulic Directional Control Valves

Nordvalves
hydraulic components



Description

For starting, controlling and stopping the working fluid between the generator of pressured flow and consumers at 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.Viscosity	12...800 mm ² /s permissible range 20...100 mm ² /s recommended range
7.Fluid temperature	- 15C...+80C
8.Filtration	Oil contamination 10 to NAS1638
9. Max. operating pressure max. bar	P = 250 bar T = 50 bar A, B = 300 bar
10.Leakage (A, B – T)	18 cm ³ /min at 120 bar
11.Nominal flow	80 l/min (see "operating" diagram)
12.Spool stroke	± 7 mm
13.Actuating force	< 220 N in spool axis direction

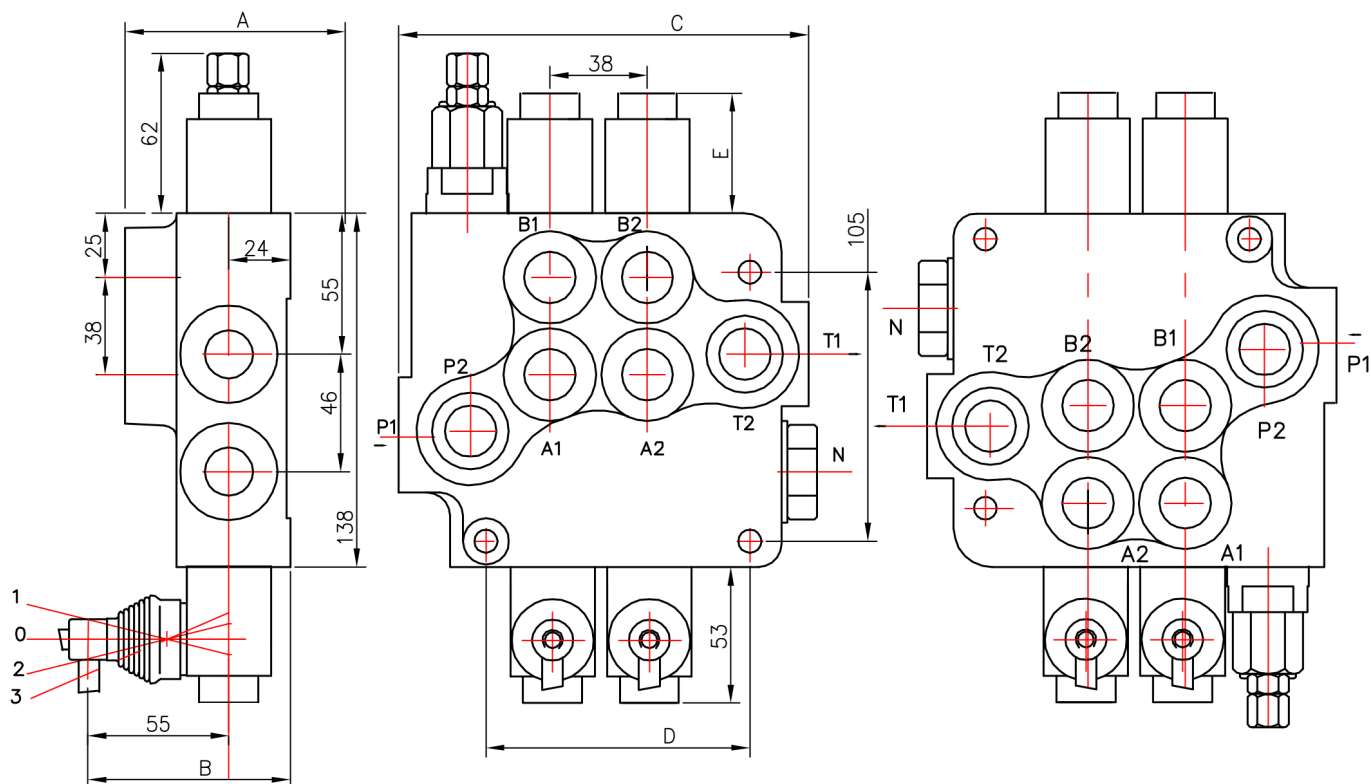


Table 1

	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
 2 number of spools
 P80 directional control valve type ...
 R inlet high pressure — right
 1 way of distribution/parallel or .../
 A first spool distribution type
 1 spool control/detend and estr./
 A second spool distribution type
 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

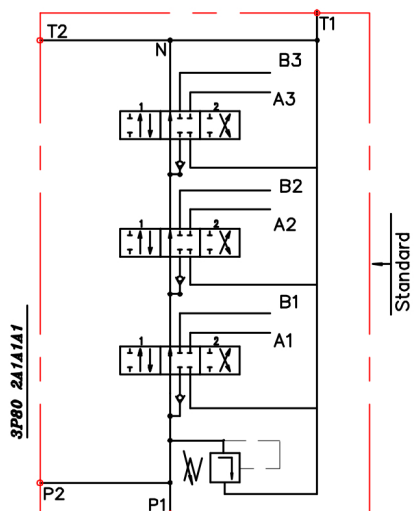
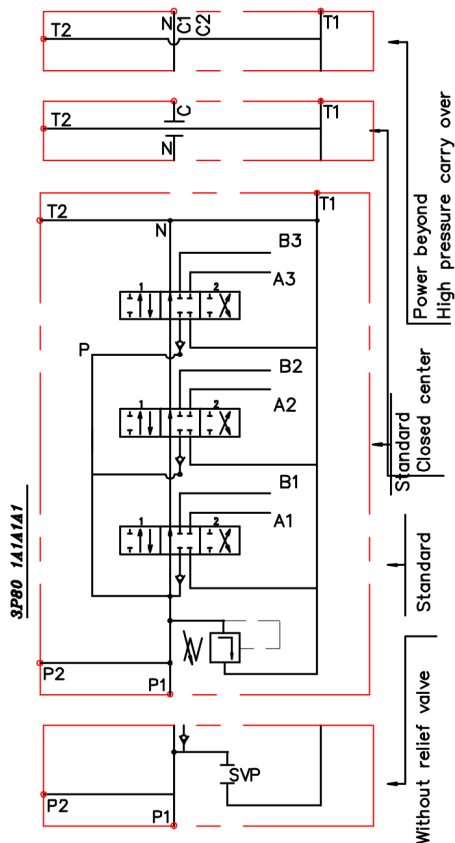


Table 3

code	Number of spools
1	1
2	2
3	3

ets.

Table 4

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

Table 5

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

Table 6

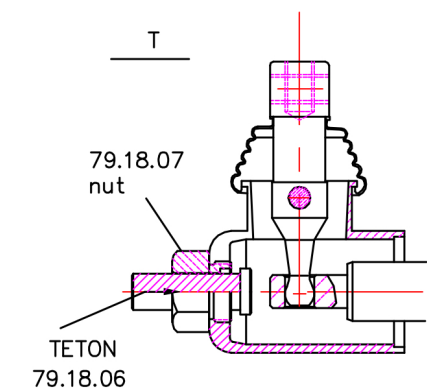
code	spool control
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

Table 7

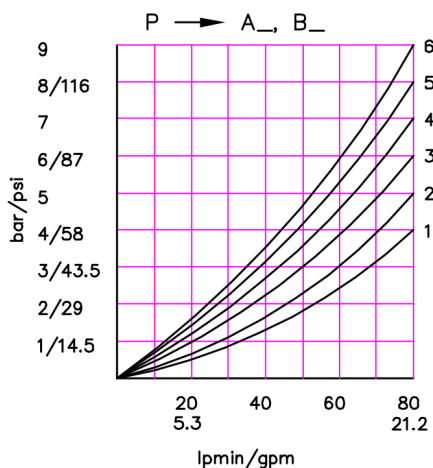
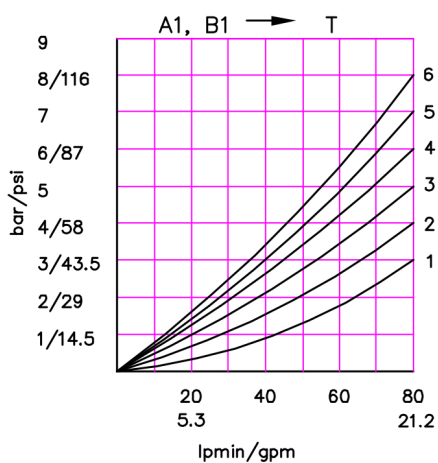
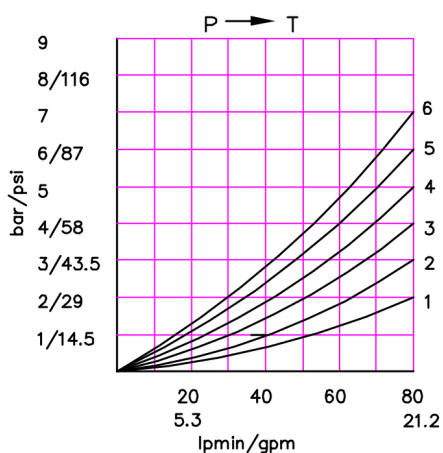
code	incorporated microswitch
E	<div> mikroswitch type Omron-V 165 I C5 </div>

Table 8

code	operation feature
P	on-off pneumatic control; 5-10 bar ; ports G1/4
H	on-off hydraulic control ; pn = 5 - 20 bar ; ports G1/4



P80 directional control valve



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 ; 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					

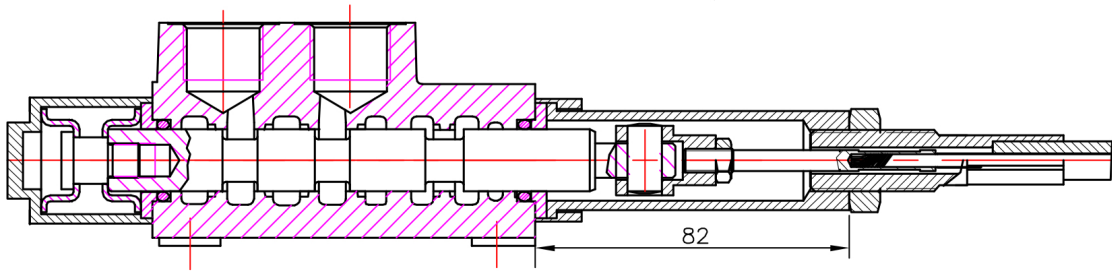
Table 11

code	bug	
C	отвор "N" затворен closed center	
C2	отвор "N" продължава за следващ консуматор part for power beyond sleeve (carry over)	G 1/2 M 22x1.5
—	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	

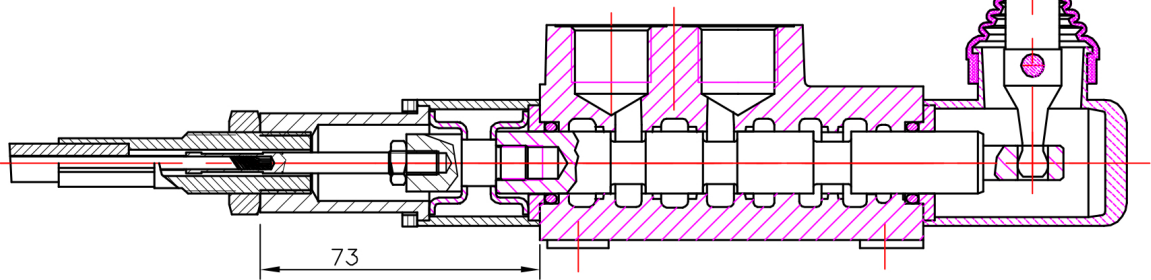
Table 12

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

REMOTE CONTROLS



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



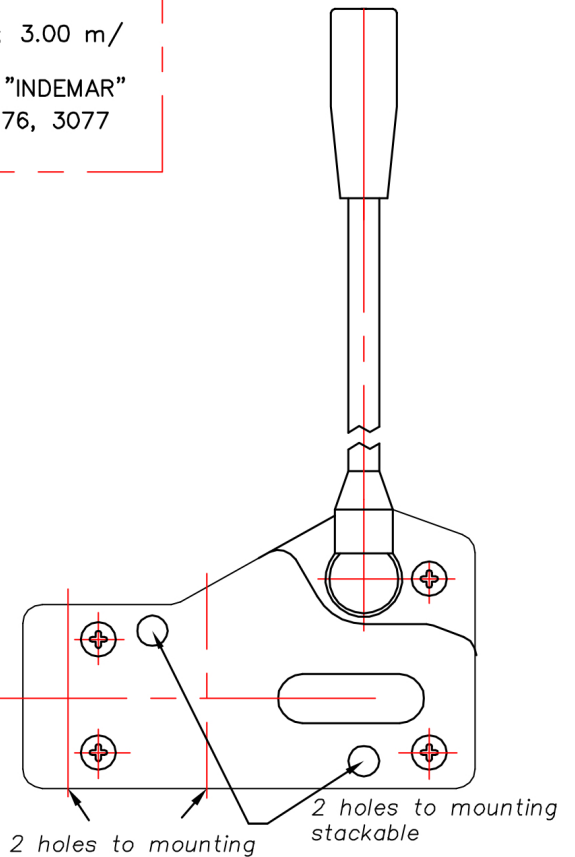
P80 A1G V2KZ1(I= . . .)+ 3047
spool valve cable control body

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

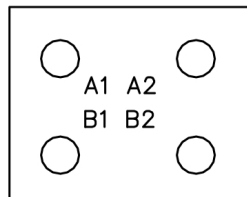
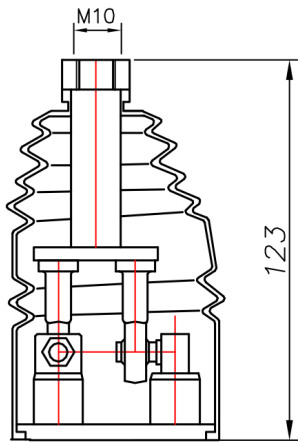
	3047	3076	3077
Stroke	13+13 mm	13+13 mm	13+13 mm
Max. load	45 kg	45 kg	45 kg
Level ratio	10:1	10:1	10:1
Lock in neutral	No	No	Yes
Antireverse lock	No	Yes	No
Body colour	Black	Black	Black
Cables type	Heavy Duty	Heavy Duty	Heavy Duty
Operating temperature	-40/+80C	-40/+80C	-40/+80C

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 three different models to meet different needs of Clients.

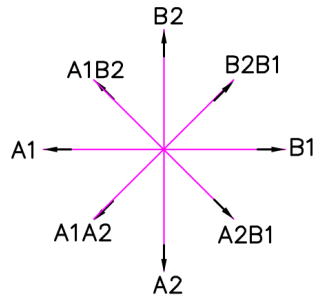
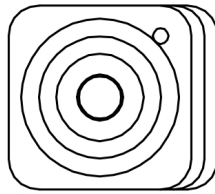


JOYSTICK "+"

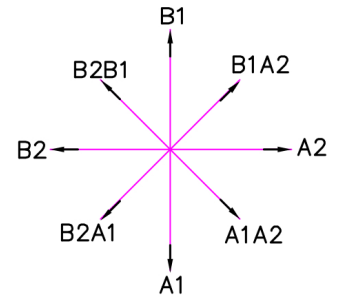
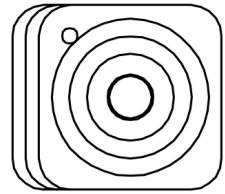
This control gives the possibility to operate, at the same time two spools with a "+" movement.



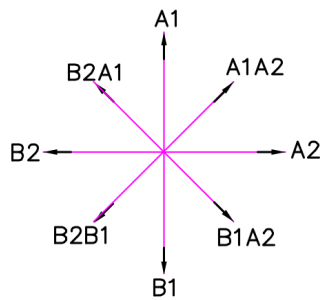
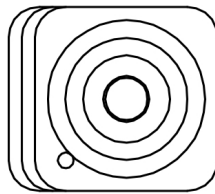
standard version 1



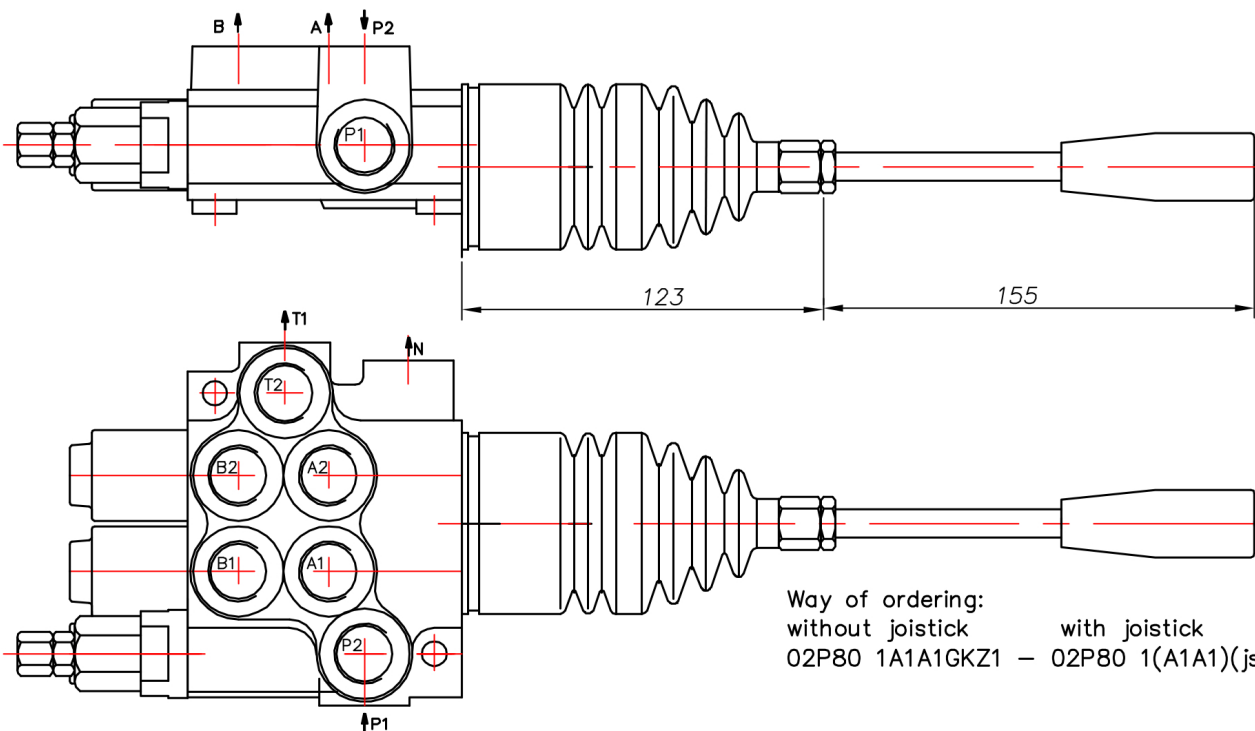
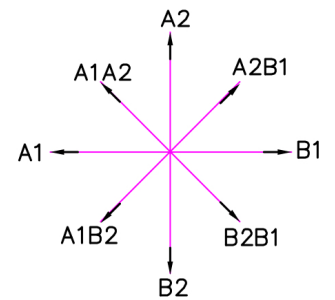
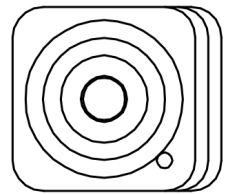
standard version 2



standard version 3

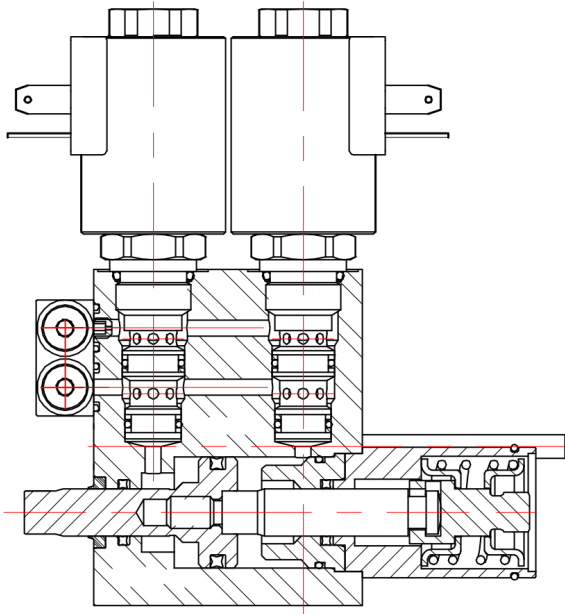


standard version 4



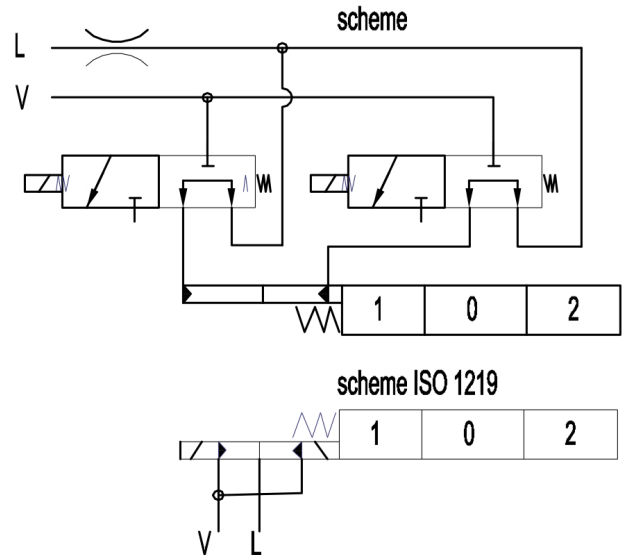
Way of ordering:
without joystick with joystick
02P80 1A1A1GKZ1 - 02P80 1(A1A1)(js+3)G

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



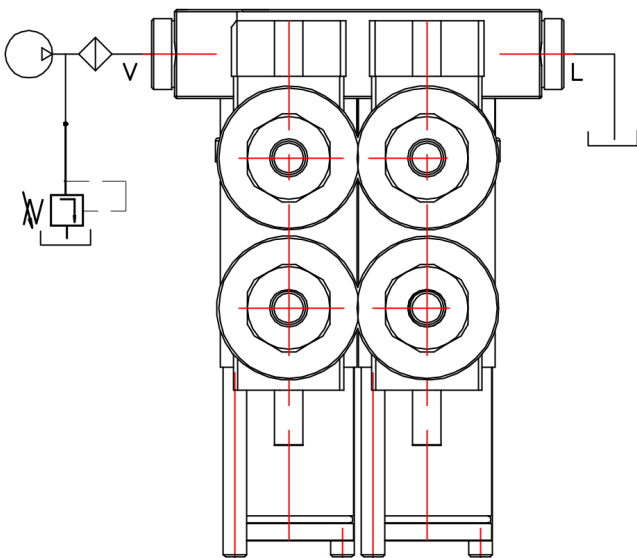
Ordering codes

3-way solenoid valve–SV08–33
coil P80ED3–G–12VDC
coil P80ED3–G–24VDC



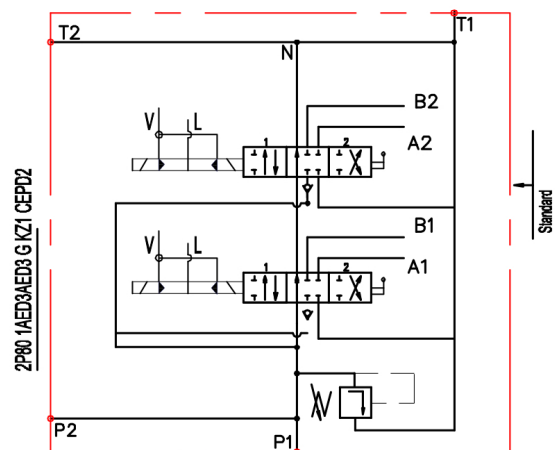
Operating pressure	min 10 bar(145 psi)
Max operating pressure in L (T line)	max 50 bar(725 psi) 25 bar(360 psi)
Solenoid operating features	
Nominal voltage tolerance	±10%
Power rating	24W
Duty cycle	100 %

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



Ordering example

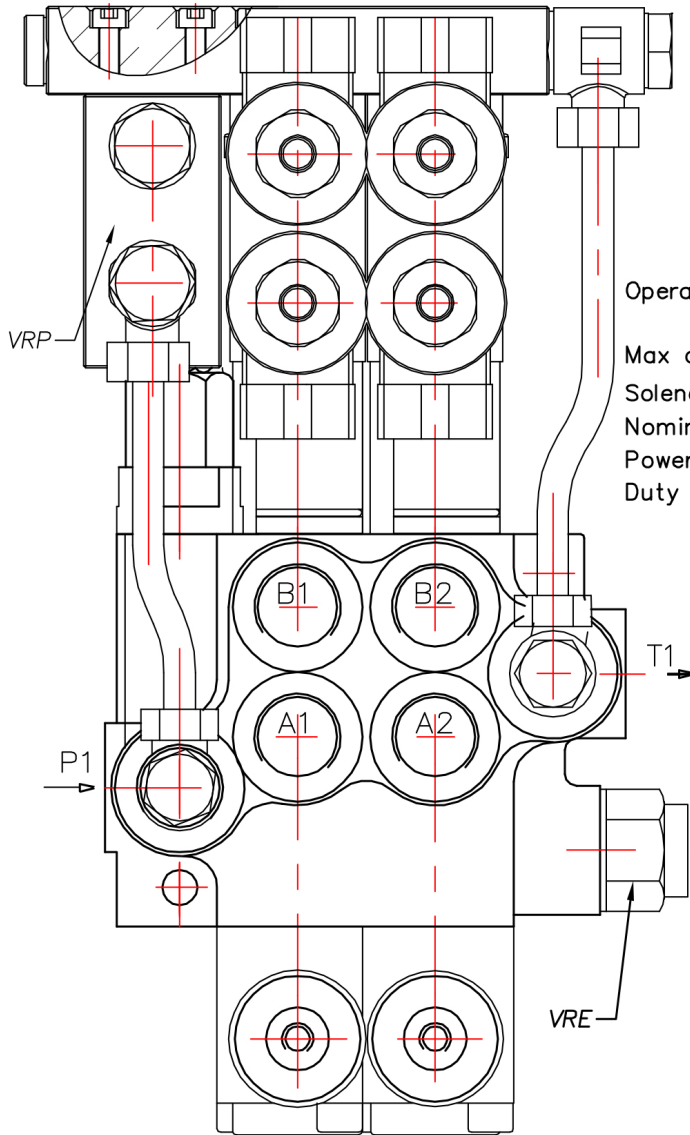
2P80 1A1ED3A1ED3 G KZ1–CEED2–12VDC



Ordering codes (BSP threads)

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

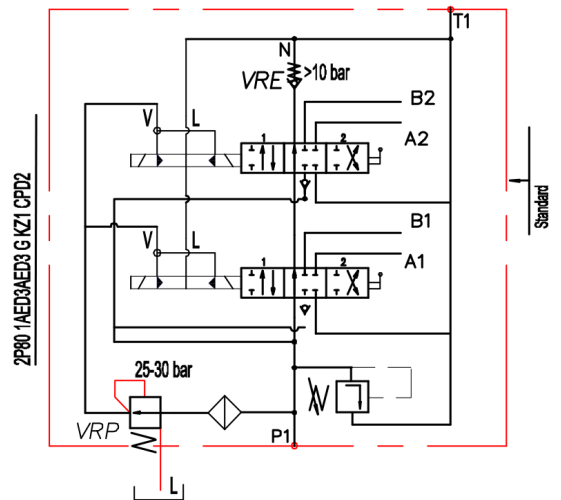
ED3 – electro-hydraulic control ON-OFF
ON-OFF



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 $\pm 10\%$
Power rating 24W
Duty cycle 100 %



Ordering example

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

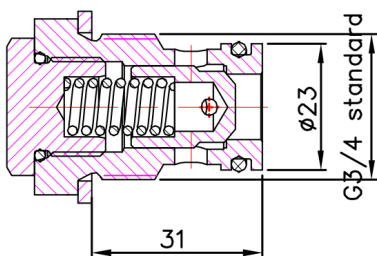
Collector kit

CED1P80
CED2P80
CED3P80
CED480
...

Ordering codes BSP threads

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

Back pressure valve VRE-P80



Pressure drop N-T

