

HYDRAULIC DIRECTIONAL CONTROL VALVES



Description

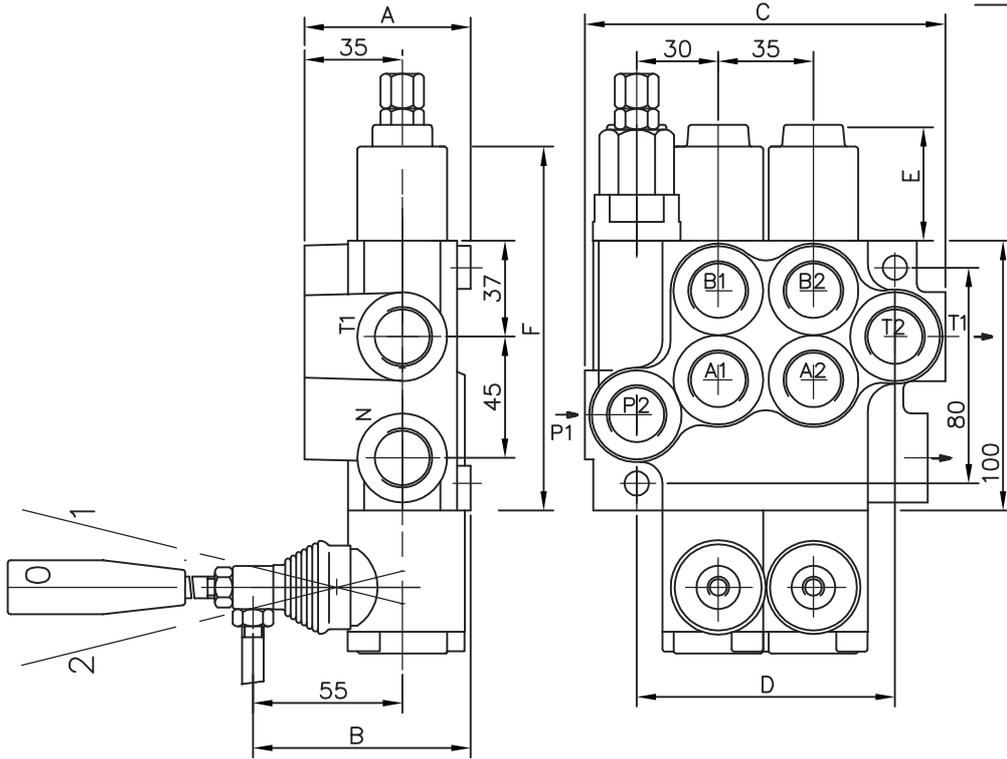
For starting, controlling and stopping the working fluid between the generator of pressured flow, the consumers at the Tank.

Specifications

1. Valve monoblock	
2. Mounting	2 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 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	P = 250 bar A, B = 300 bar
10. Leakage	15 cm ³ /min at 120 bar
11. Nominal flow	40 l/min (see "operating" diagram)
12. Spool stroke	± 6 mm
13. Actuating force	< 200 N in spool axis direction

Left hand configuration - standart

directional control valve P40



Right hand configuration

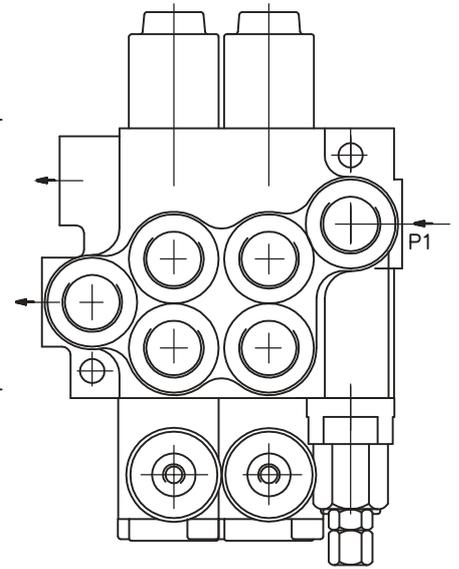


Table 1

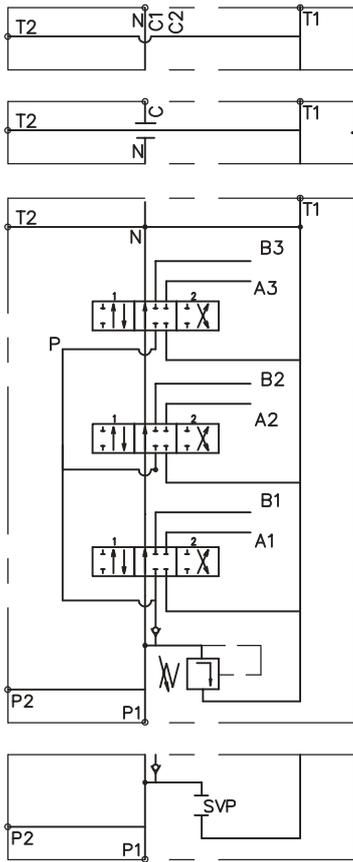
	A	B	C	D	P1	P2	T1	T2
P40	60	80	85	60	+	-	+	-
02P40	60	80	129	97	+	+	+	+
03P40	60	80	164	132	+	+	+	+
04P40	60	80	199	167	+	+	+	+
05P40	60	80	234	202	+	+	+	+
06P40	60	80	269	237	+	+	+	+
07P40	60	80	304	272	+	+	+	+
2P40	60	80	129	97	+	+	+	+
3P40	60	80	164	132	+	+	+	+
4P40	60	80	199	167	+	+	+	+

Table 2

spool control	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 _____
 number of spools _____
 directional control valve type ... _____
 inlet high pressure - right _____
 way of distribution/parallel or .../ _____
 first spool distribution type _____
 spool control/detend and etc./ _____
 second spool distribution type _____
 spool control/detend and estr./ _____
 ports /treads/ _____
 general operation feature _____
 with "teton" _____
 operation feature /pneumatic, .../ _____
 with electric switch _____
 high pressure carry over _____
 connection ports in use _____

03P40 1A1A1A1



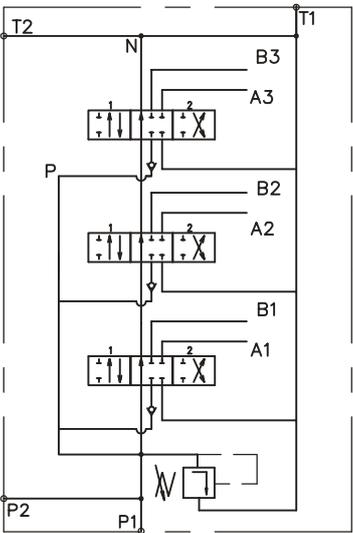
Power beyond
High pressure carry over

Closed center

Standard

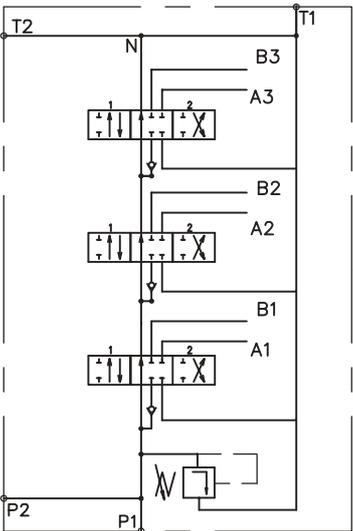
Without relief valve

3P40 1A1A1A1



Standard

3P40 2A1A1A1



Standard

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	
** L	

* only for left hand configuration

** only for right hand configuration

directional control valve P40

Table 4

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

Table 6

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

* 15	
* 16	

* only for left hand configuration

** 12	
** 13	

** only for right hand configuration

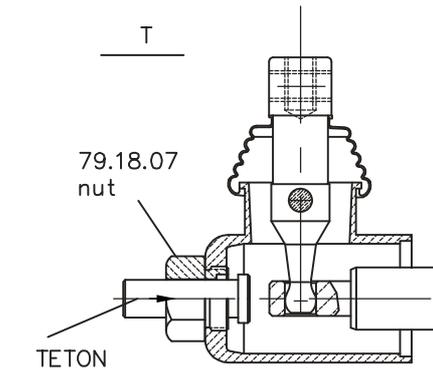
Table 7

code	incorporated microswitch	
E		mikroswitch type Omron-V 165 I C5

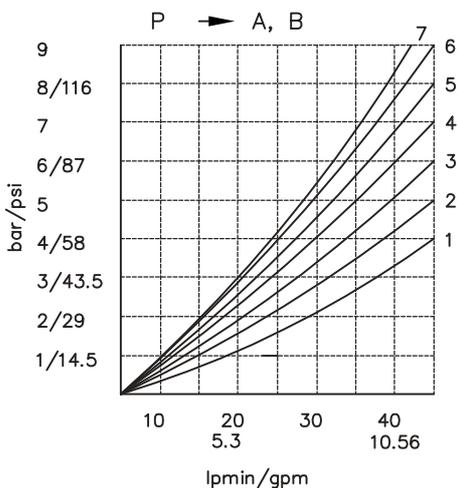
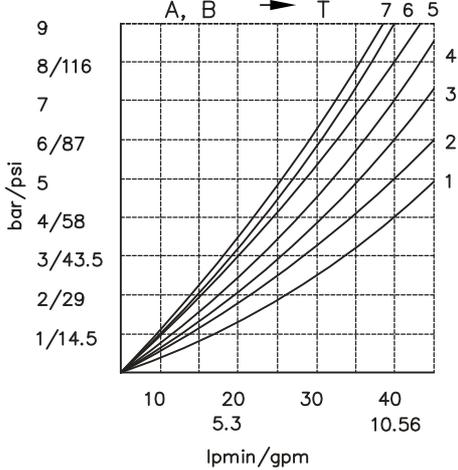
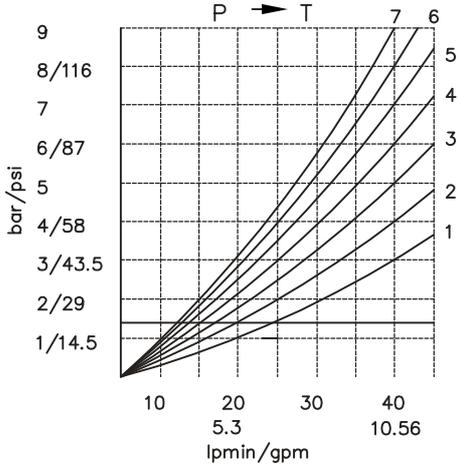
Table 8

code	operation feature	
P		on-off pneumatic control; 5-10 bar ; ports NPTF 1/8-27
H		on-off hydraulic control ; pn = 5 - 20 bar ; ports G1/4

directional control valve P40



79.18.06
P40 directional control valve



code ports (treads) ;

	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

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 ;				

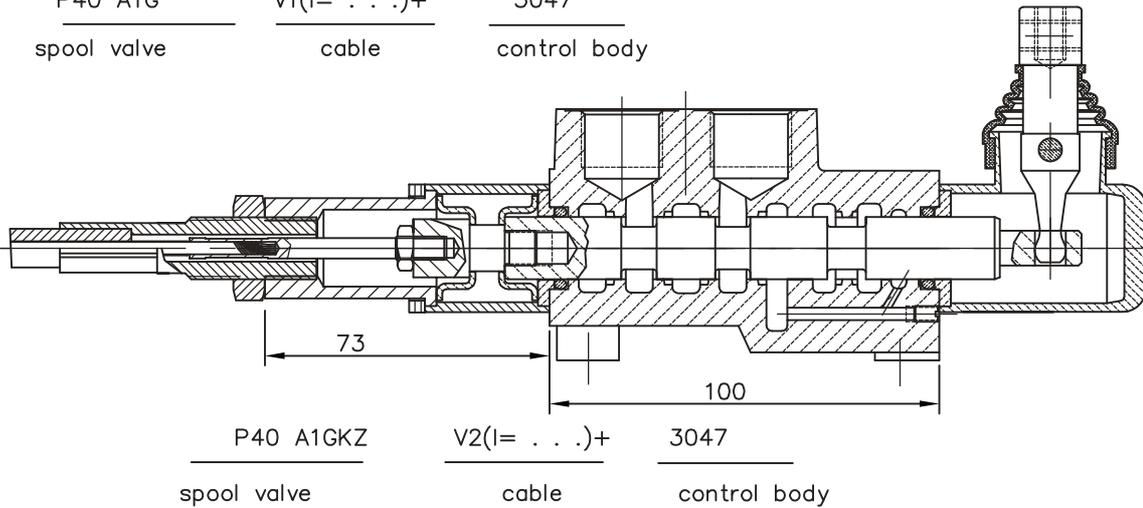
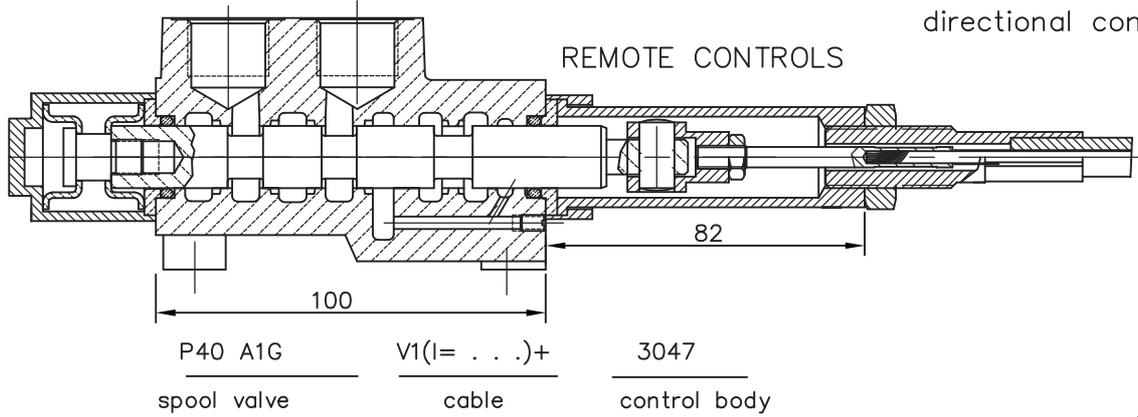
Table 11

code	feature	feature
C	closed center	
C1	part for power beyond sleeve(carry over)	Ø14 mm M22x1.5
C2	part for power beyond sleeve(carry over)	G 1/2 M22x1.5
-	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

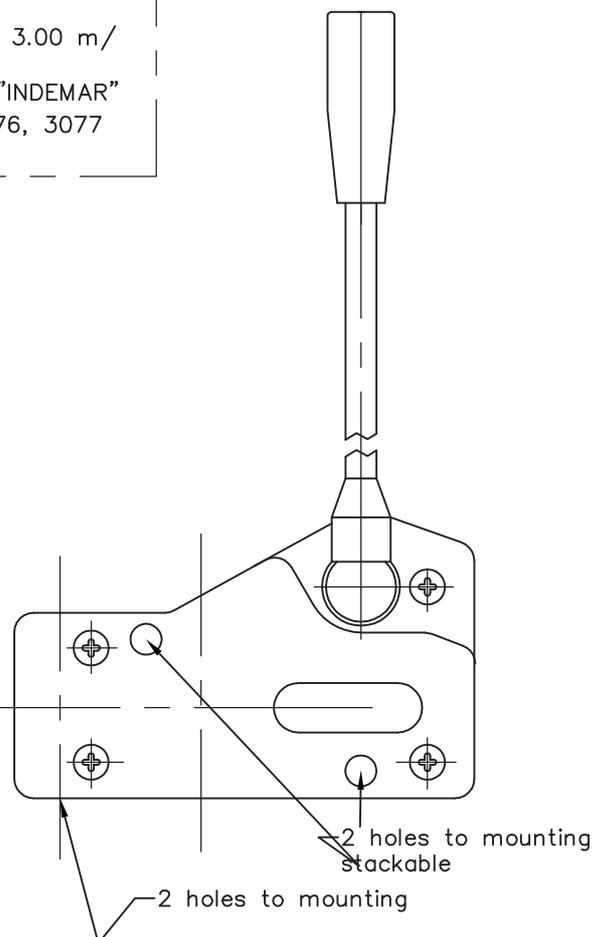
directional control valve P40



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.



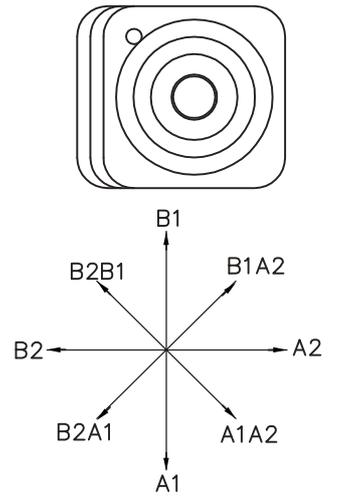
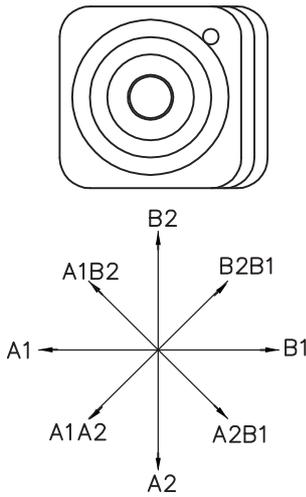
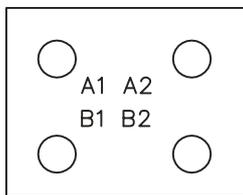
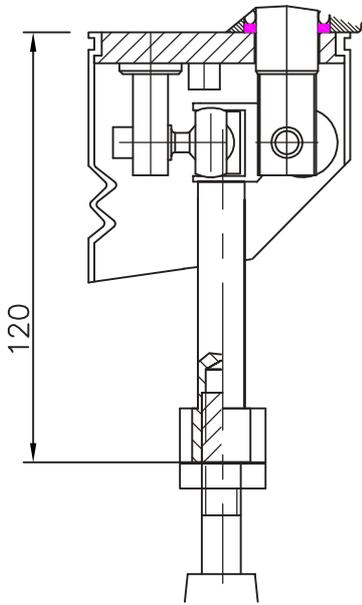
directional control valve P40

standard version 1

standard version 2

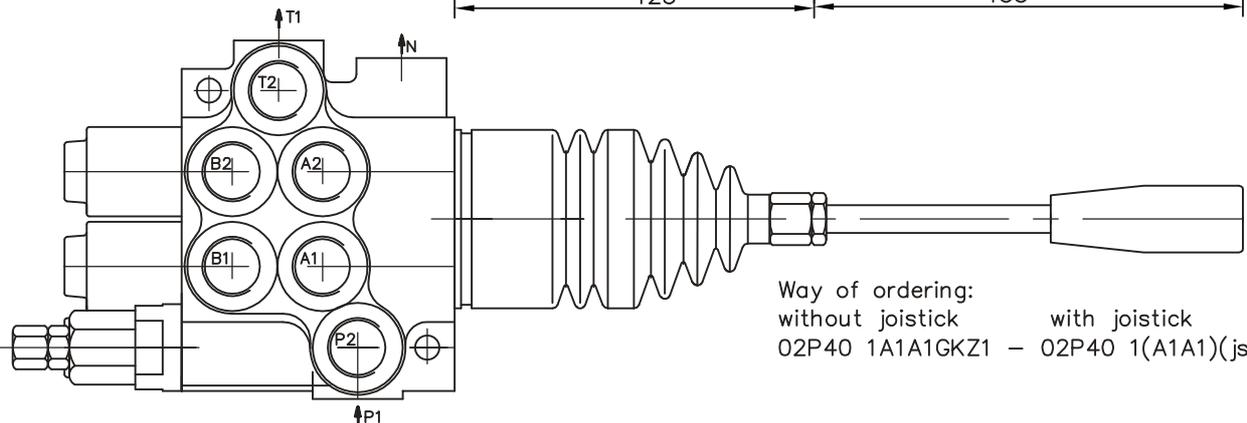
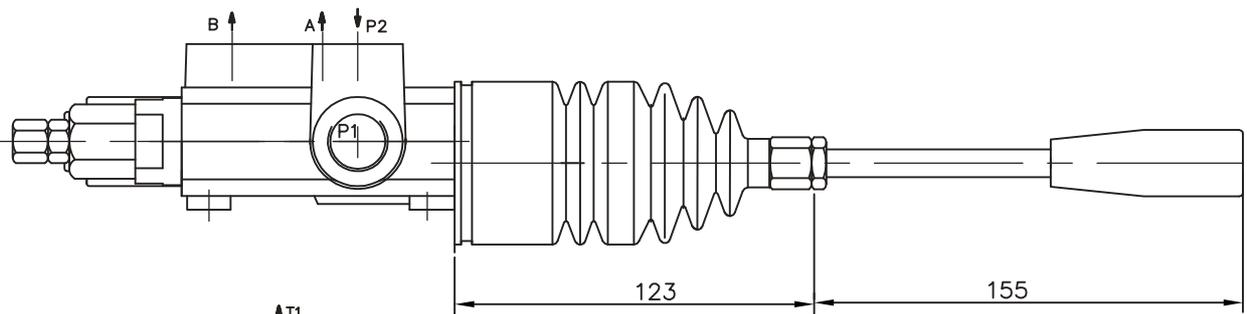
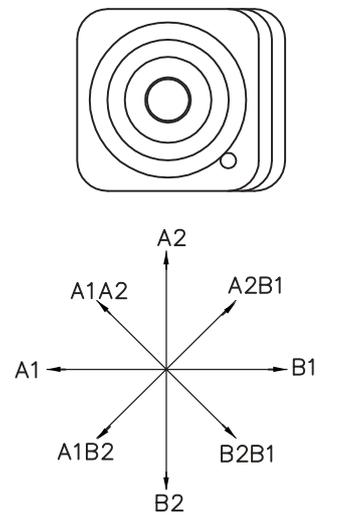
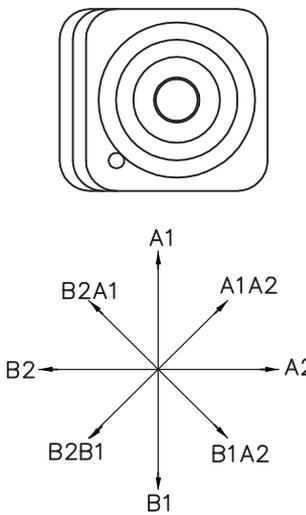
JOYSTICK "+"

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



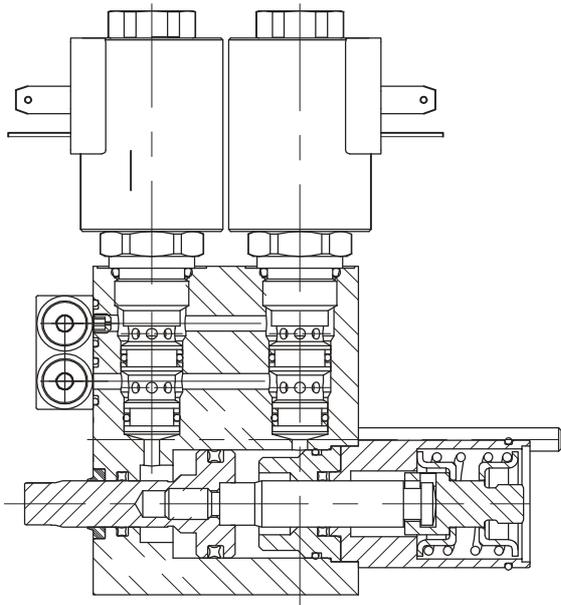
standard version 3

standard version 4



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

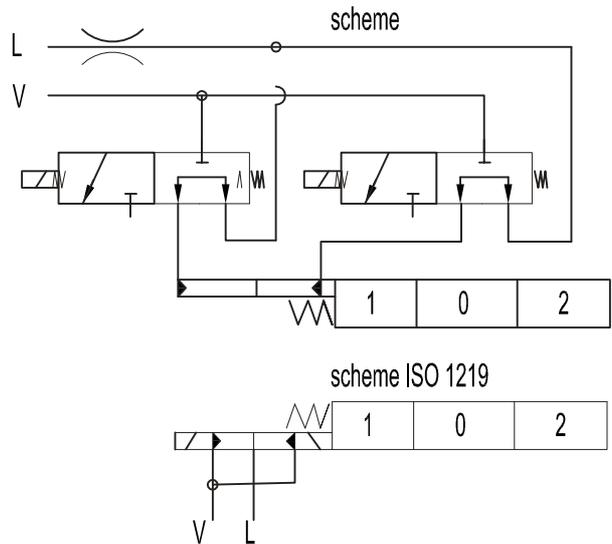
directional control valve P40



Ordering codes

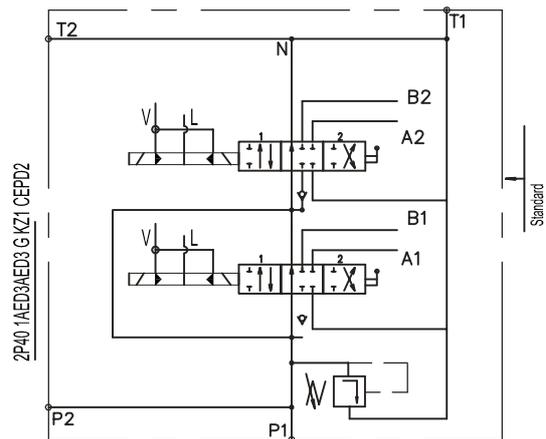
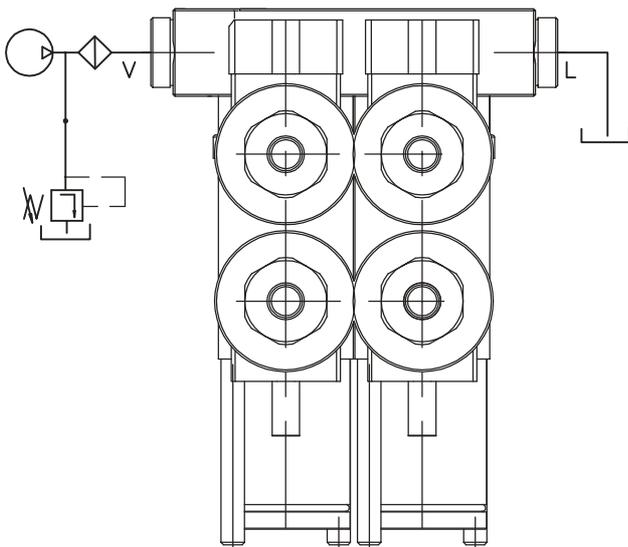
3-way solenoid valve—SV08—33
 coil P40ED3—G—12VDC
 coil P40ED3—G—24VDC

ED3 — electro-hydraulic control 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)
 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

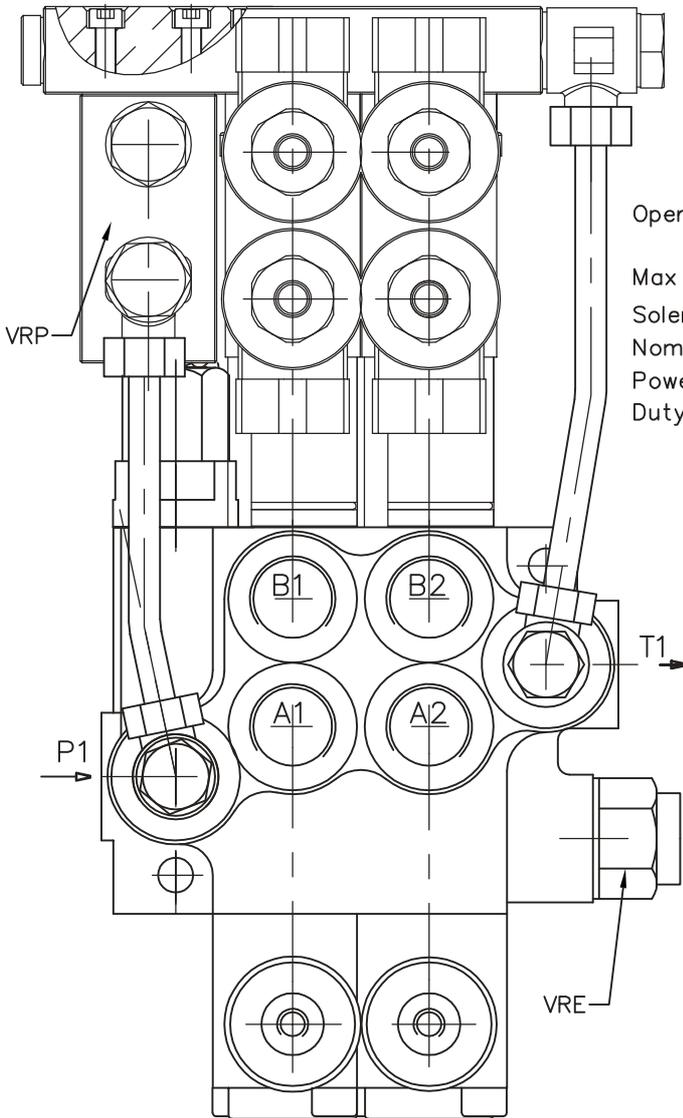
2P40—1A1ED3A1ED3 G KZ1—CEED2—12VDC

Ordering codes (BSP threads)

CEED1P40 Kit for 1 section
 CEED2P40 Kit for 2 section
 CEED3P40 Kit for 3 section
 CEED4P40 Kit for 4 sektion

directional control valve P40

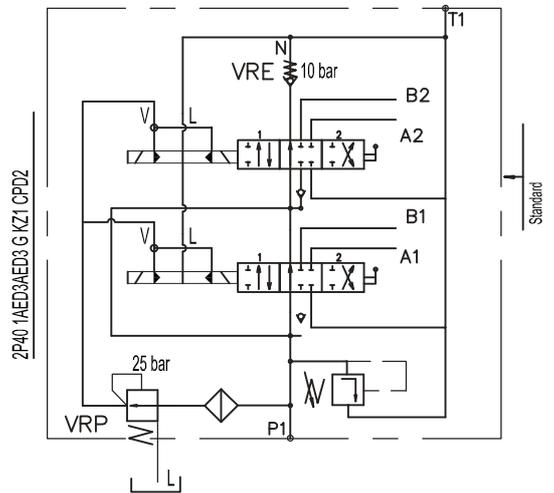
ED3 – electro-hydraulic control ON-OFF



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 %



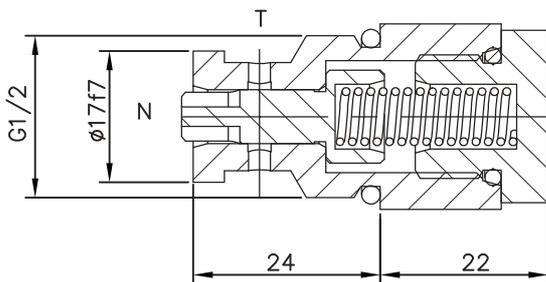
Ordering example

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

**Colector kit – Ordering codes
 BSP threads**

CED1	Kit for 1 section
CED2	Kit for 2 section
CED3	Kit for 3 section
CED4	Kit for 4 sektion
...	

Back pressure valve VRE-P40



Pressure drop N-T

