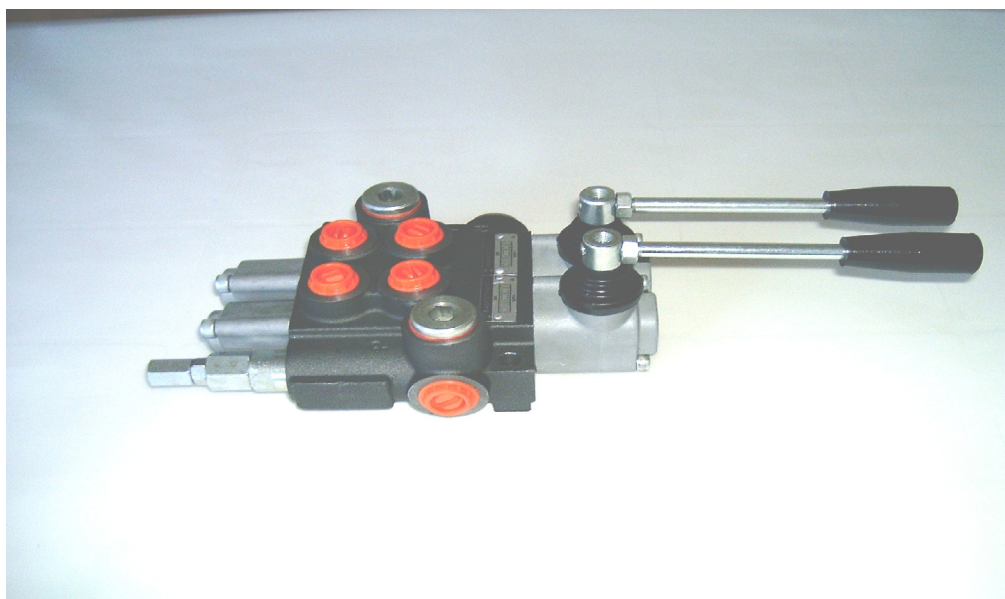


HYDRAULIC DIRECTIONAL CONTROL VALVES



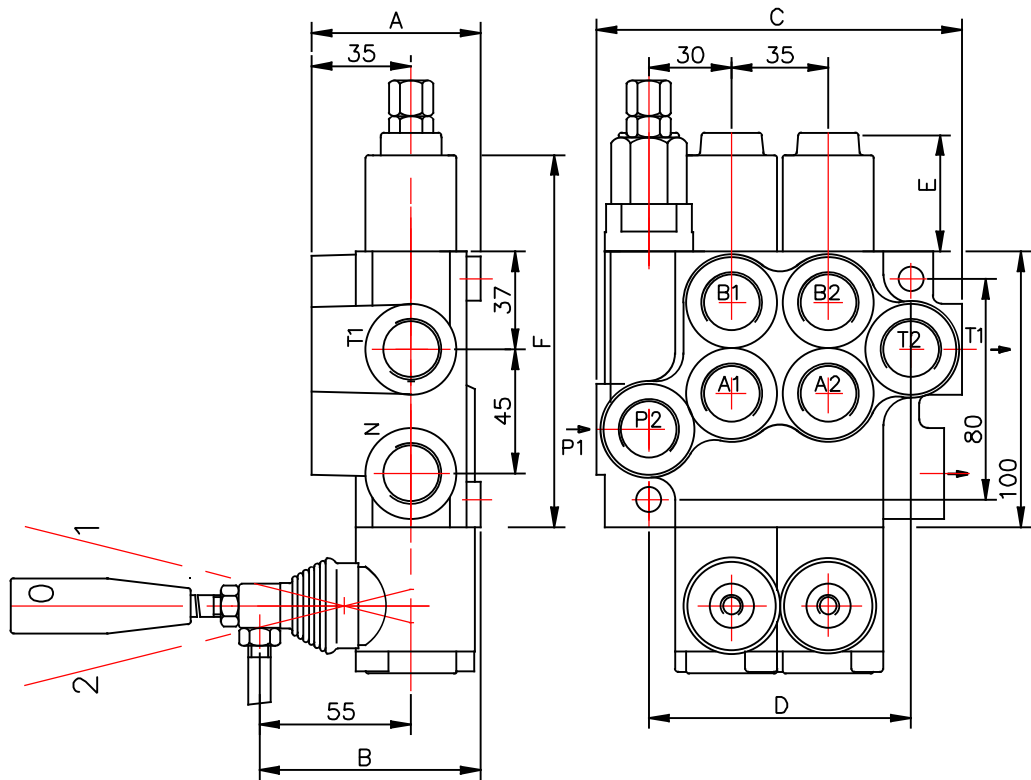
Description

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	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 T = 50 bar A, B = 300 bar
10. Internal (46 mm ² /s) Leakage	7 cm ³ /min at 100 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



Right hand configuration

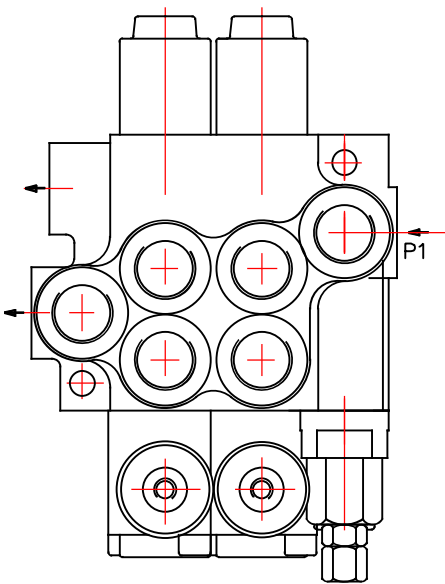


Table 1

	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 фиксация золотника	E	F
1; 4; 5; 6; 7; 8; 9; 10; 11;	40	193
2; 3;	72	225
16	+	+

0 2 P40R 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

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

first spool distribution type

spool control/detend and ets./

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

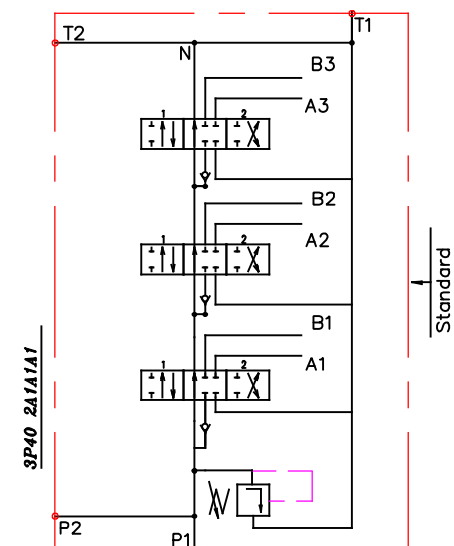
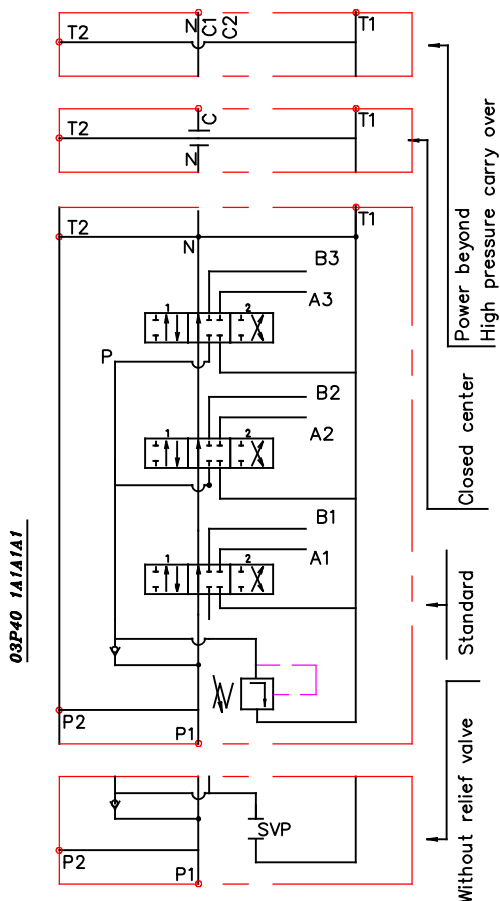


Table 3

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

only for left hand configuration

** L

only for right hand configuration

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

Table 9

P40

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

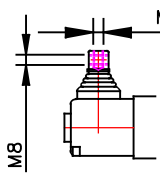
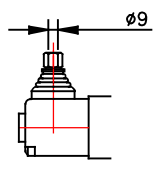
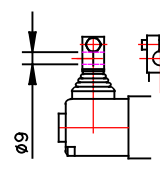
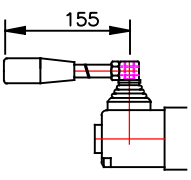
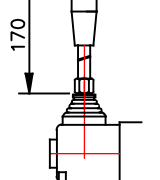
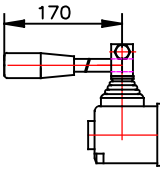
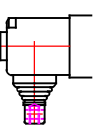
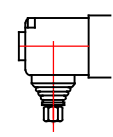
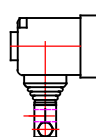
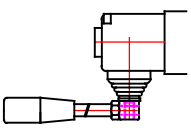
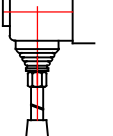
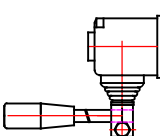
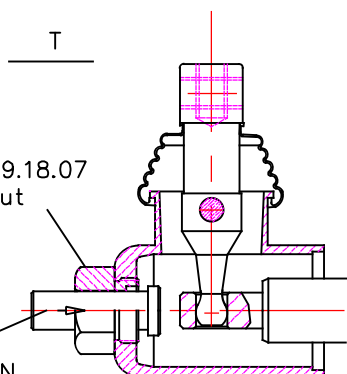
code	feature	code	feature	code	feature
KZ		KY		KI	
KZ1		KY1		KI1	
KZ0		KY0		KI0	
KZ01		KY01		KI01	
–	without hand control				

Table 11

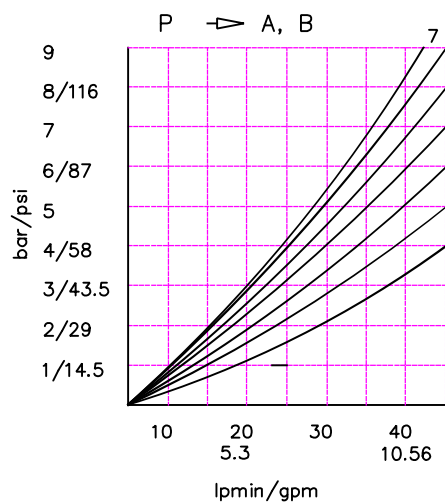
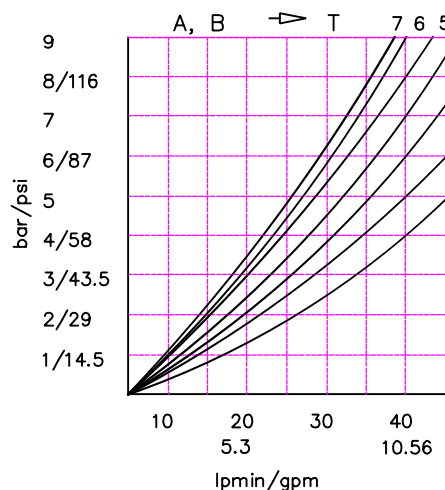
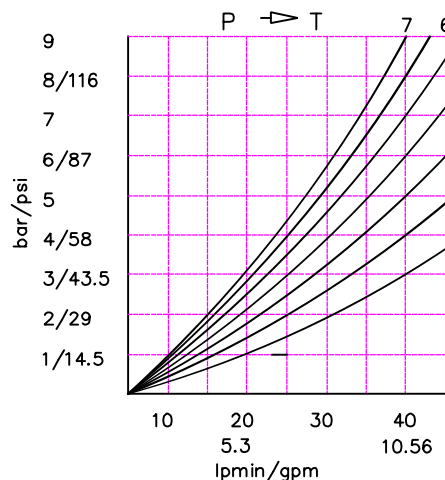
code		
C	closed center	
C1	part for power beyond sleeve(carry over)	
C2	part for power beyond sleeve(carry over)	
–	without part for pressure carry over	
X	power beyond ever to tank	

Table 12

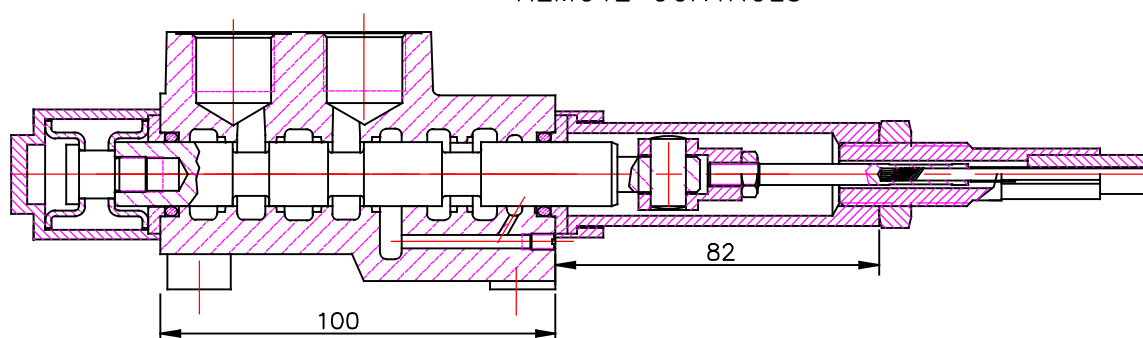
code	used connection ports
11	P1 ; T1
12	P1 ; T2
21	P2 ; T1
22	P2 ; T2



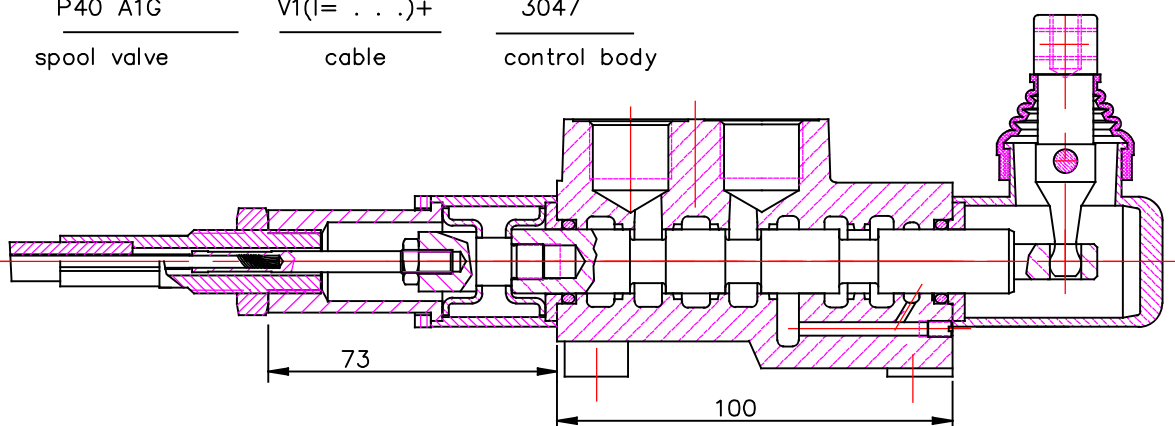
P40 directional control valve



REMOTE CONTROLS



P40 A1G V1(l= . . .)+ 3047
spool valve cable control body



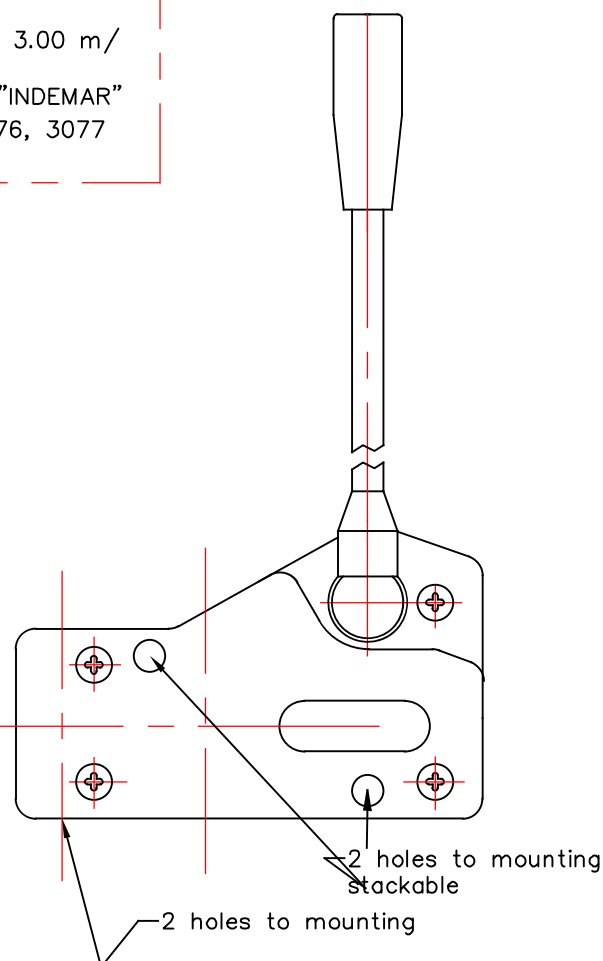
P40 A1GKZ V2(l= . . .)+ 3047
spool valve cable control body

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

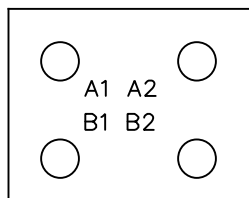
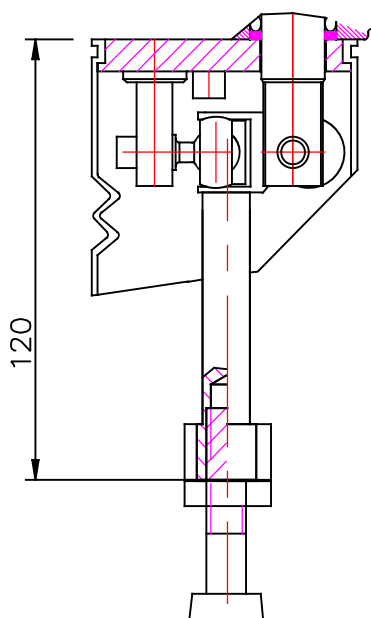
	3047	3076	3077
Stroke	13+13 mm	13+13 mm	13+13 mm
Max. load	45 kg	45 kg	45 kg
Level ratio	10:1	10:1	10:1
Lock in neutral	No	No	Yes
Antireverse lock	No	Yes	No
Body colour	Black	Black	Black
Cables type	Heavy Duty	Heavy Duty	Heavy Duty
Operating temperature	-40/+80C	-40/+80C	-40/+80C

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 three different models to meet different needs of Clients.

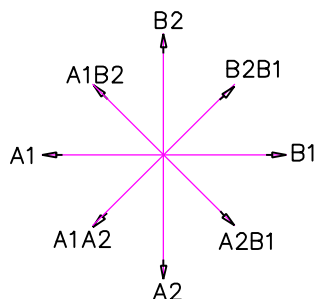
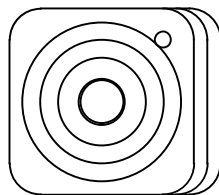


JOYSTICK "+"

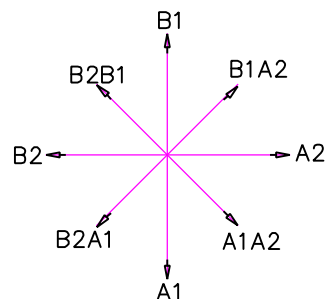
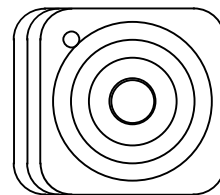
This control gives the possibility to operate, at the same time two spools with a "+" movement.



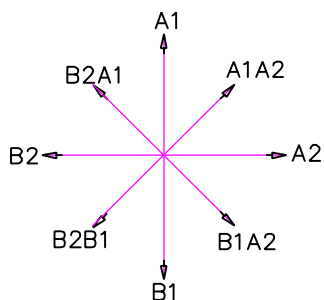
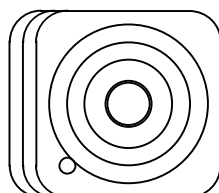
standard version 1



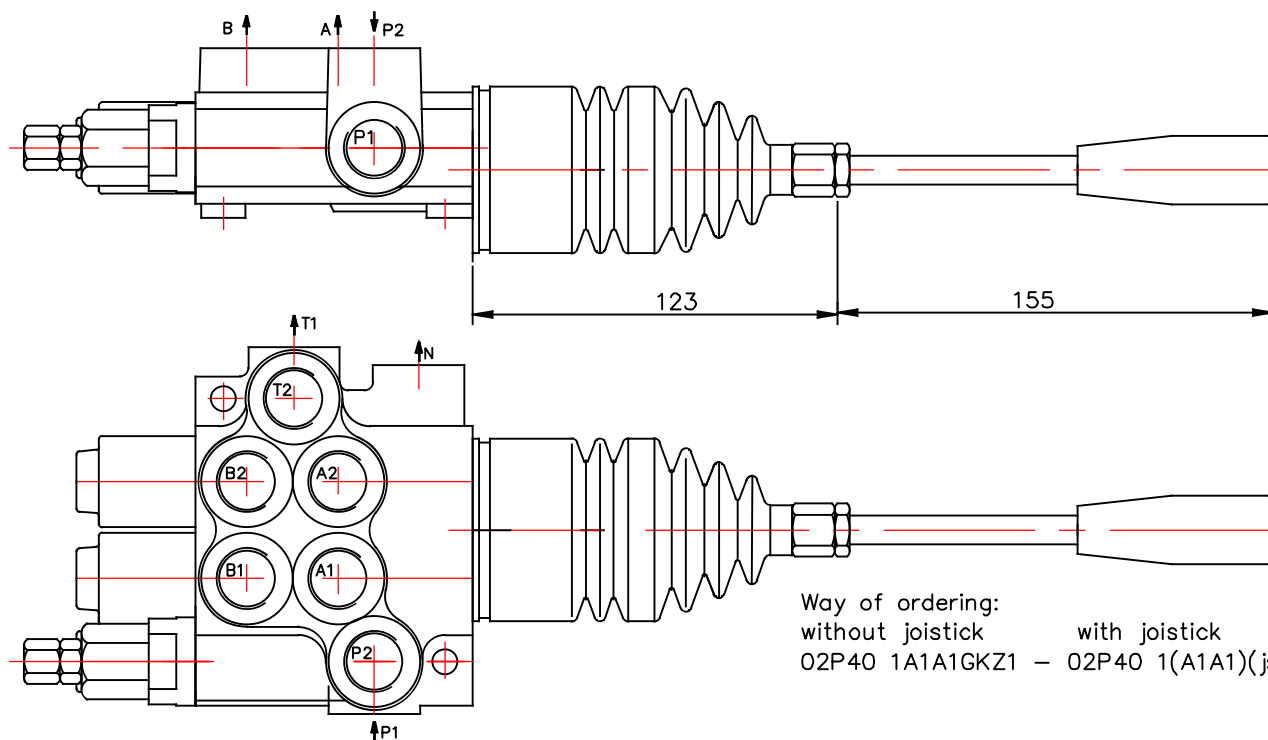
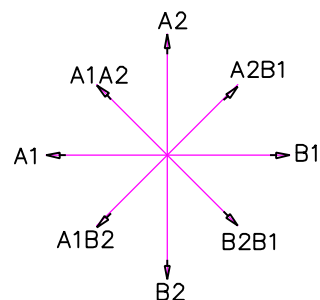
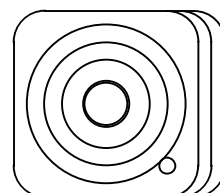
standard version 2



standard version 3



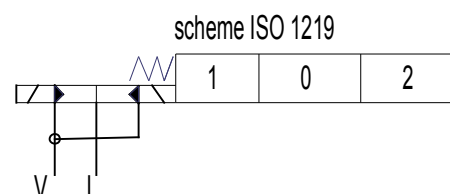
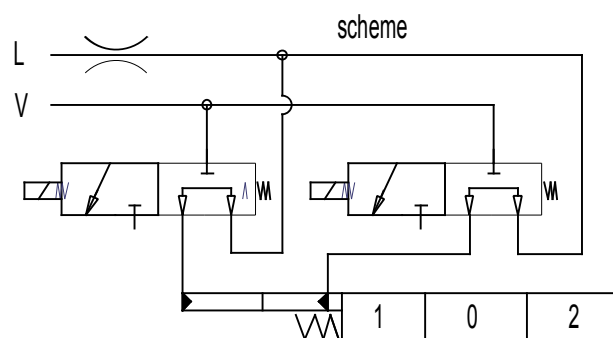
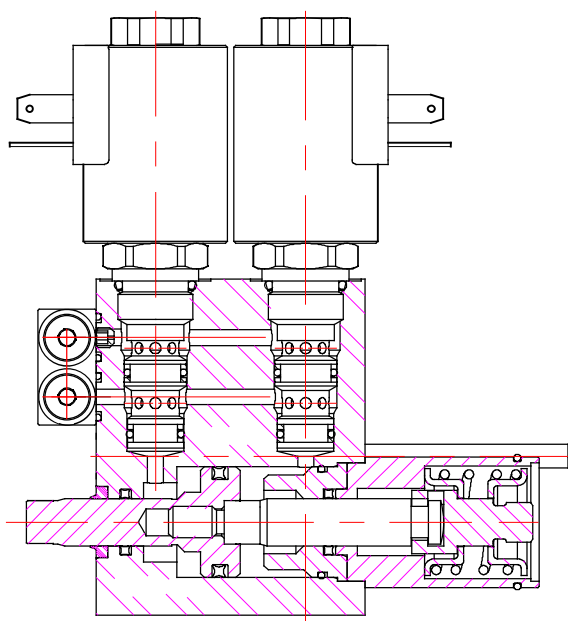
standard version 4



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

directional control valve P40

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



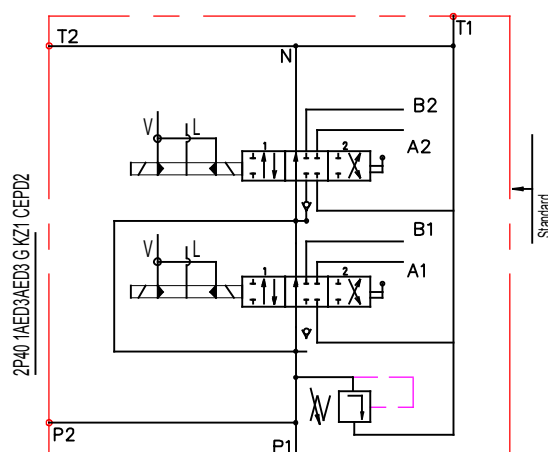
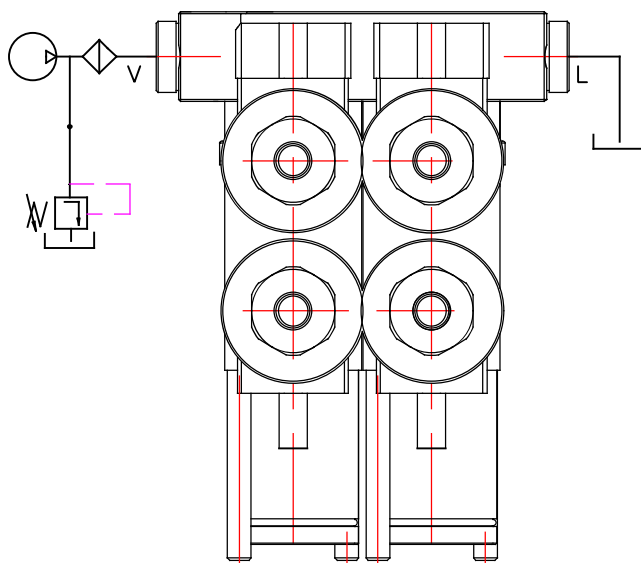
Operating pressure min 10 bar(145 psi)
max 50 bar(725 psi)
Max operating pressure in L (T line) 25 bar(360 psi)

Solenoid operating features
Nominal voltage tolerance ±10%
Power rating 24W
Duty cycle 100 %

Ordering codes

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

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



Ordering example

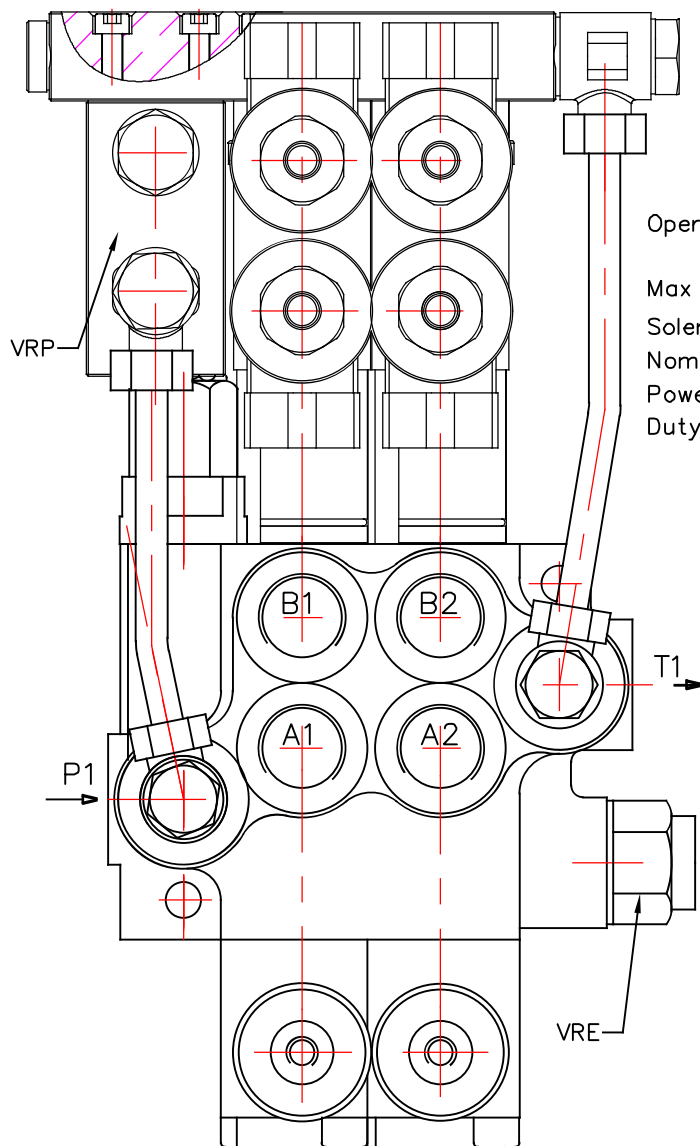
2P40–1A1ED3A1ED3 G KZ1–CEED2–12VDC

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-way 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)

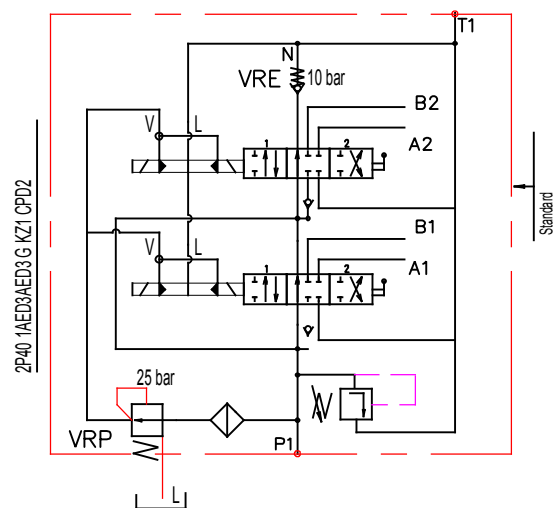
Max operating pressure in L (T line) 25 bar(360 psi)

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

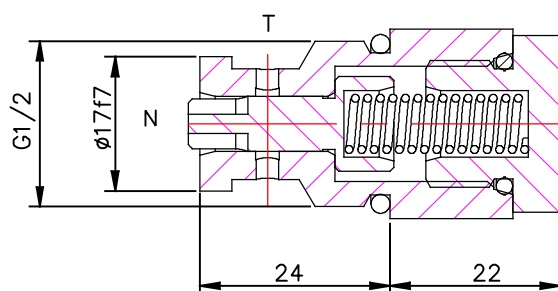
CED2 Kit for 2 section

CED3 Kit for 3 section

CED4 Kit for 4 sektion

.....

Back pressure valve VRE–P40



Pressure drop N–T

