



***DIRECTIONAL
CONTROL
VALVES***

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Monoblock hydraulic distributors

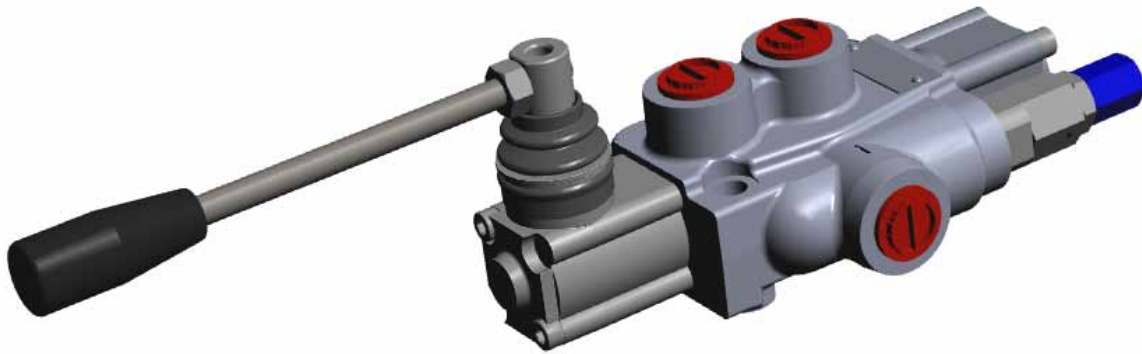
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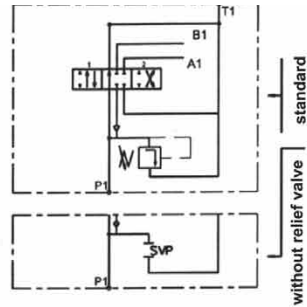
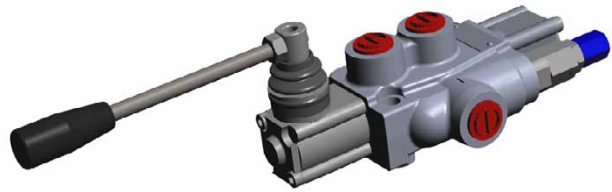
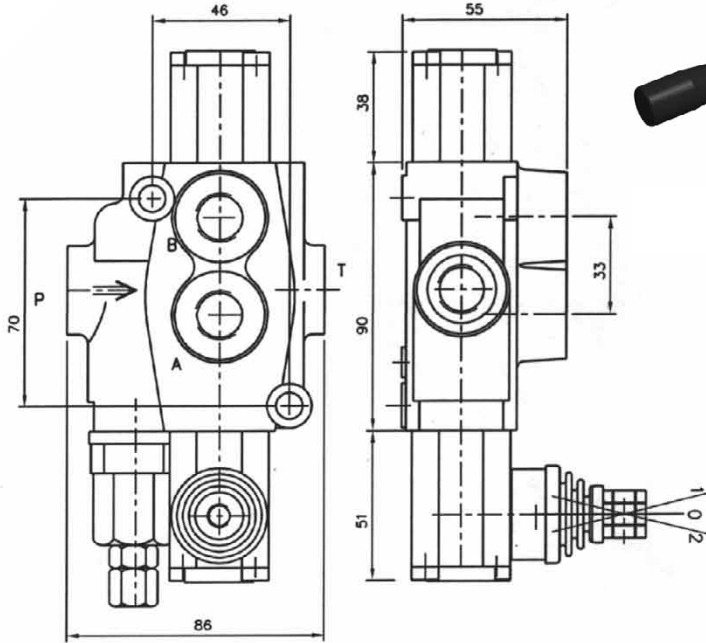
Technical parameters:

Ambient temperature	-40C...+60C
Hydraulic liquid -mineral oil based/hydraulic oil Viscosity	12 ...800 mm2/s
Fluid temperature	-15C...+80C
Filtration	10 to NAS 1638
Max operating pressure, P=250; T=50 bar	A , B = 300 bar
Nominal flow	35 l/min
Leakage	10-15 cm3/min at 120 bar

DESCRIPTION: Manually or mechanically controlled hydraulic distributor P35 is designed for distribution and control of work flow between generator (pump) and executive mechanisms (cylinder, hydro-motor, etc.). Relief valve is integrated therein.

CONSTRUCTION: P35 is a mono-block distributor. Its body is made of cast iron EN-GJL300. Spool is made of carburized steel with hard chrome plating.

MOUNTING: Fixing is with two bolts M8.



ORDERING CODES

P35 — Directional control valve type...
 R — Inlet high pressure - right
 A — First spool distribution type
 1 — Spool control / dedant and etc./
 G — Ports / threads
 KZ1 — General operation feature
 T — With "Teton"
 E — With electric switch

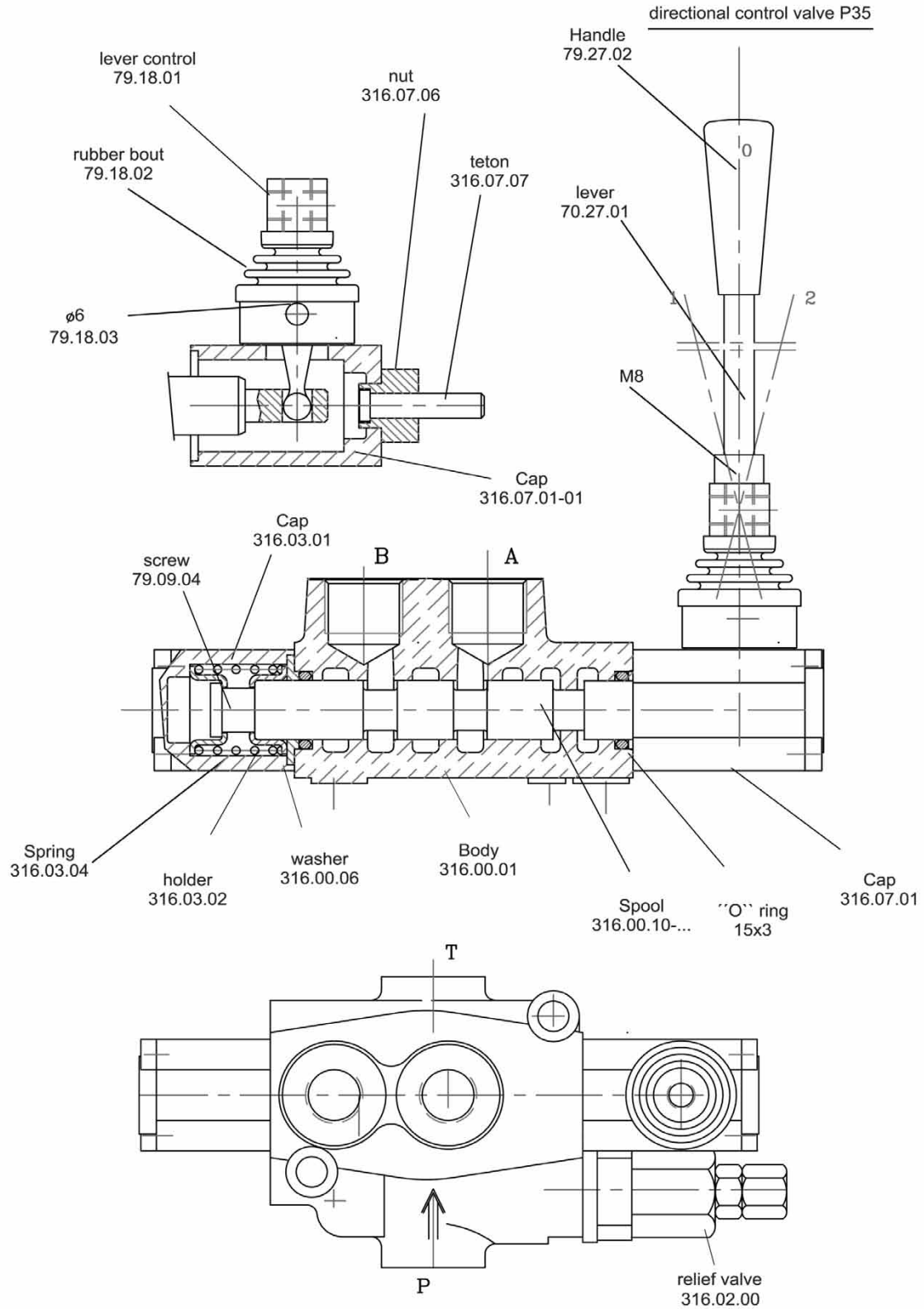
code	spool type
A	
B	
C	
D	
E	
F	
M	
N	
O	
P	
Q	
R	

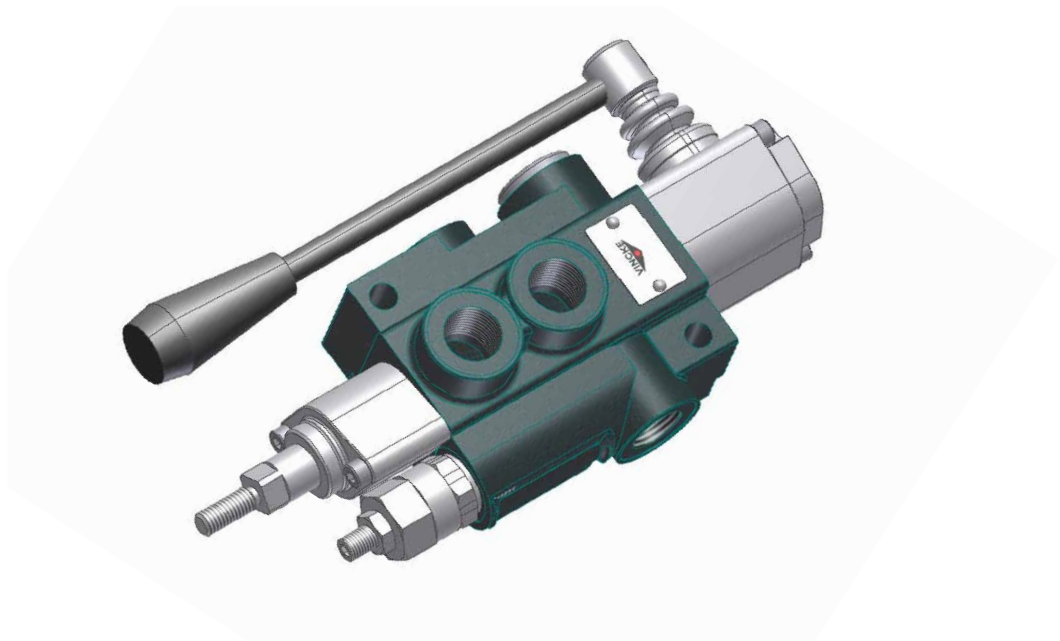
code	spool control
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

code	incorporated microswitch
E	 microswitch type omron-V 165 I C 5

Code	ports (threads)		
	P	A ; B	T
M	M18x1.5	M18x1.5	M18x1.5
G	G3/8	G3/8	G3/8
S	3/4-16UNF	3/4-16UNF	3/4-16UNF

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





Technical parameters:

Ambient temperature	-40C...+60C
Hydraulic liquid -mineral oil based/hydraulic oil Viscosity	12 ...800 mm2/s
Fluid temperature	-15C...+80C
Filtration	10 to NAS 1638
Max operating pressure, P=250; T=50 bar	A , B = 300 bar
Pressure for authomatical release of spool	70-140, bar
Leakage(A,B-T)	10cm3/min at 120bar
Nominal flow	35 l/min
Spool stroke	+/- 7,9 mm
Actuating force	< 220 N

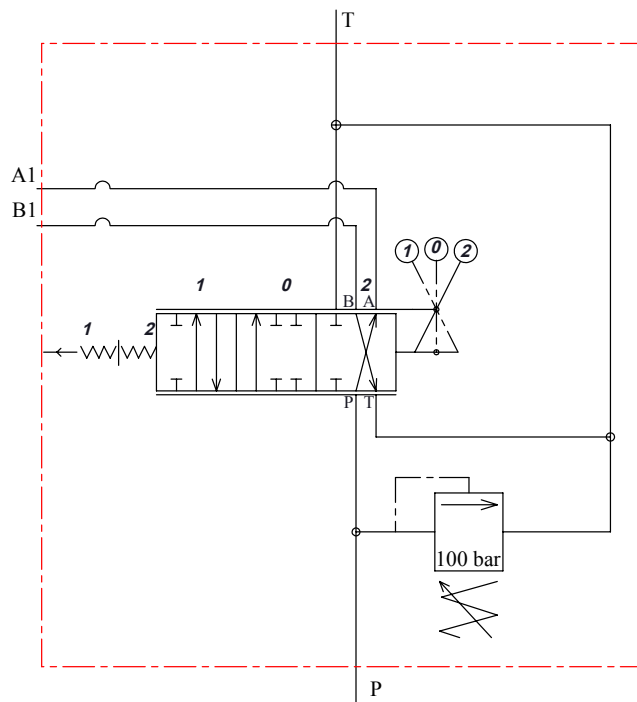
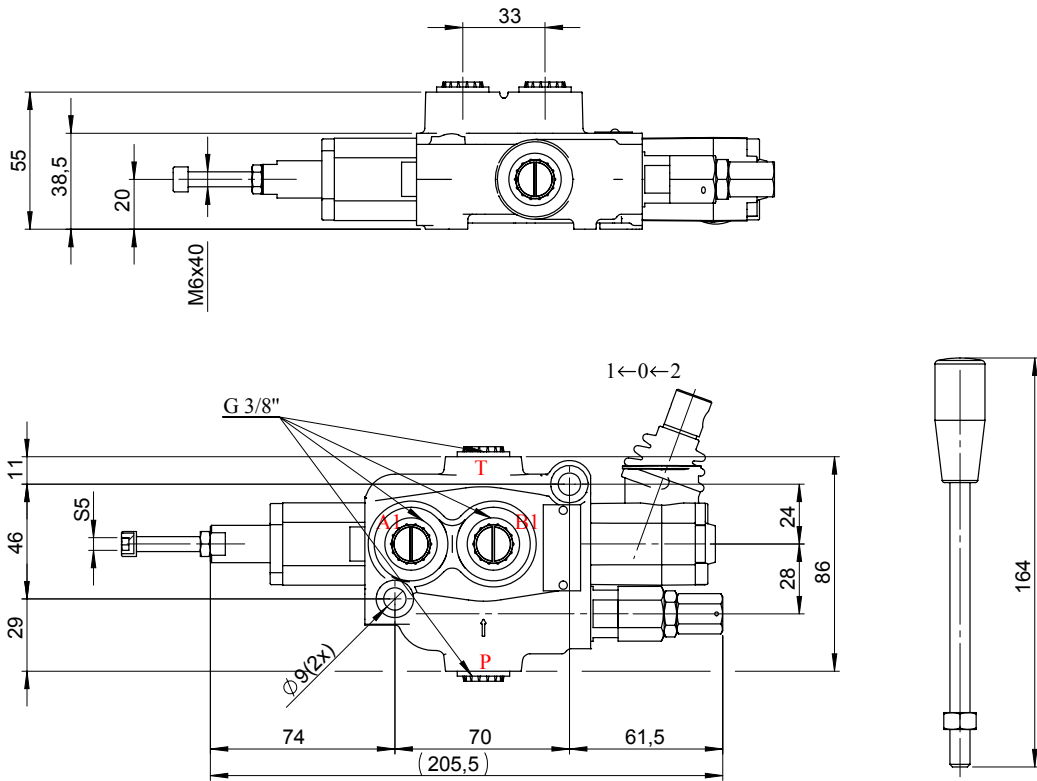
- Hydraulically balanced, hard chrome plated spool
- Lever system in which the handle can be installed in up or down position
- In neutral position both works ports are blocked and the pump unloads to tank

DESCRIPTION: The hydraulic distributor P35S is used for switching on/off and directing the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tank. It has a setting from 70 to 140 bar for automatic switch-off. It is designed as a "log splitter valve".

CONSTRUCTION: The hydraulic distributor P35S is a mono-block distributor with manual control. The body is made of cast iron EN-GJL300, and the spool is made of carburized steel with hard chrome plating.

MOUNTING: The distributor is fixed with 3 (three) bolts M8

DIRECTIONAL CONTROL VALVES
P35S LOG SPLITTER – D.C. VALVE





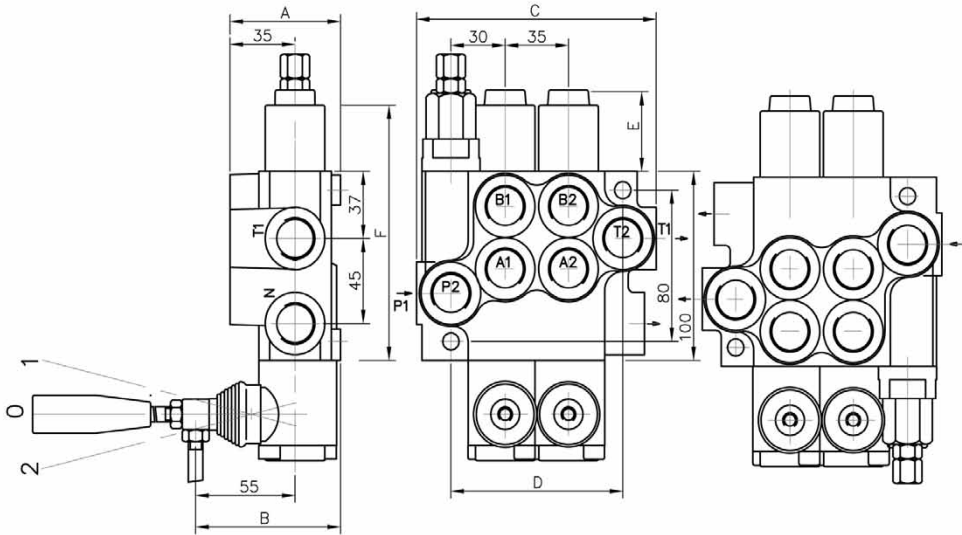
Technical parameters:

Ambient temperature	-40C...+60C
Hydraulic liquid -mineral oil based/hydraulic oil Viscosity	12 ...800 mm2/s
Fluid temperature	-15C...+80C
Filtration	10 to NAS 1638
Max operating pressure, P=250; T=50 bar	A , B = 300 bar
Leakage(A,B-T)	15cm3/min at 120bar
Nominal flow	40 l/min
Spool stroke	6 mm
Actuating force	< 200 N
Modification/ Spools	with 1 to 7

DESCRIPTION: Manually or mechanically controlled hydraulic directional control valve P40 is designed for distribution and control of work flow between generator (pump) and executive mechanisms (cylinder, hydro-motor, etc.). It is manufactured with 1 to 7 plungers, with parallel or serial action, with common or individual back valve for each plunger, with or without safety valve

CONSTRUCTION: P40 is a mono-block distributor. Its body is made of cast iron EN-GJL300. Plungers are made of carburized steel with hard chrome plating.

MOUNTING: The distributor is fixed with two bolts M8



ORDERING CODES

- 0** block with common check valve Table 3
- 2** number of spools
- P40** directional control valve type...
- R** inlet high pressure - right
- 1** way of distribution / parallel or.../ Table 4
- A** first spool distribution type Table 5
- 1** spool control / dedant and etc./ Table 6
- A** second spool distribution type
- 1** spool control / dedant and etc./
- G** ports / treads / Table 9
- KZ1** general operation feature Table 10
- T** with "teton"
- H** operation feature / pneumatic,.../ Table 8
- E** with electric switch Table 7
- C2** high pressure carry over Table 11
- 11** connection ports in use Table 12

	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	+	+	+	+
02P40	60	80	129	97	+	+	+	+
03P40	60	80	164	132	+	+	+	+
04P40	60	80	199	167	+	+	+	+

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

code	number of spools
	1
02, 2	2
03, 3	3

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

Table 5

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

Table 6

code	spool control
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
* 13	
* 16	
** 13R	
** 12	

code	Incorporated microswitch	
E		microswitch type omron-V 165 I C 5

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

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
S	7/8-14UNF	3/4-16UNF	7/8-14UNF	7/8-14UNF

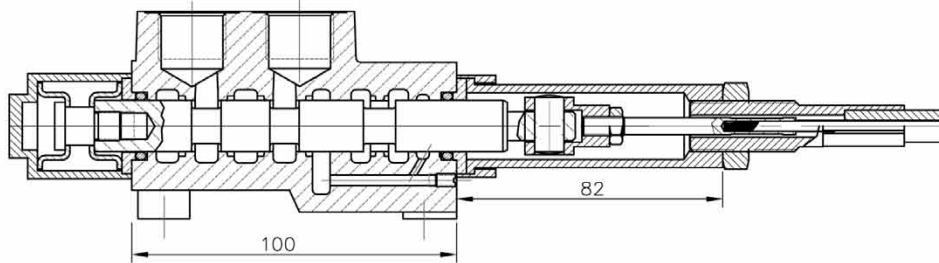
Table 10

code	feature	code	feature	code	feature
KZ		KY		KI	
KZ1		KY1		KI1	
KZO		KY0		KI0	
KZO1		KY01		KI01	
-	without hand control				

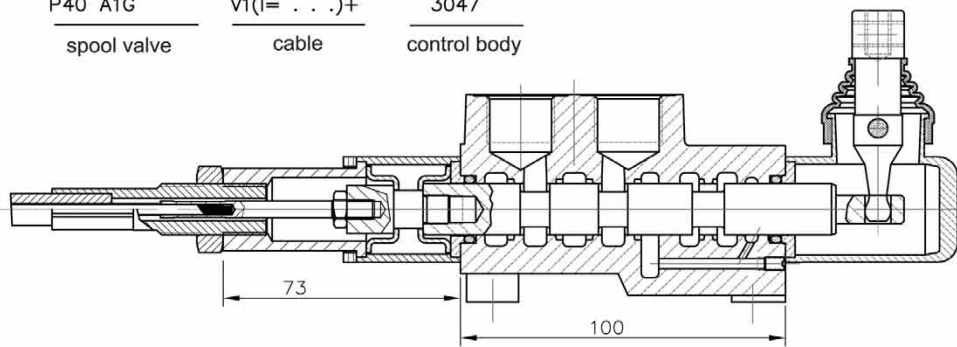
code	feature	
C	closed center	
C1	part for power beyond sleeve (carry over)	M22x1.5
C2	part for power beyond sleeve (carry over)	Ø14 mm M22x1.5
-	without part for pressure carry over	G 1/2
X	power beyond ever to tank	

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

REMOTE CONTROLS

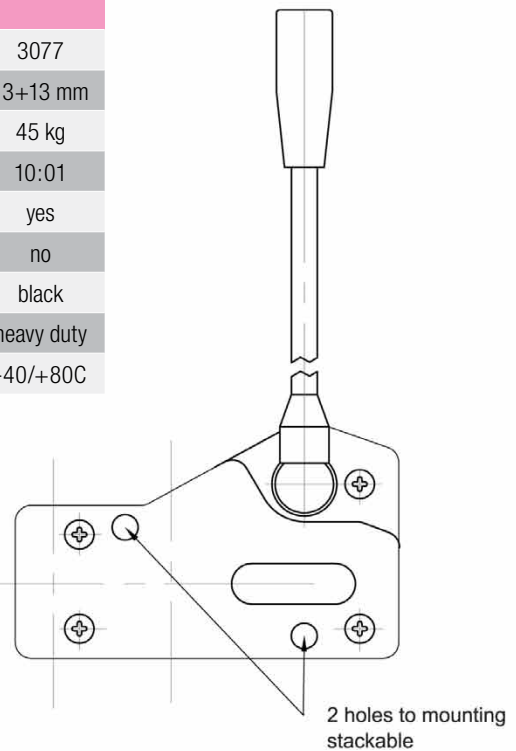


P40 A1G spool valve V1(l= . . .)+ cable 3047 control body



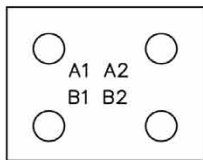
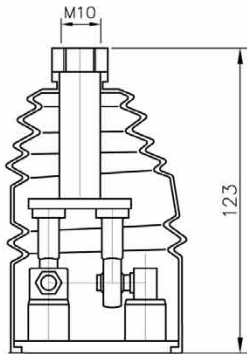
P40 A1G spool valve V2KZ1(l= . . .)+ cable 3047 control body

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	10:01	10:01	10:01
lock in neutral	no	no	yes
antireverse lock	no	yes	no
body color	black	black	black
cables type	heavy duty	heavy duty	heavy duty
operating temperature	-40/+80C	-40/+80C	-40/+80C

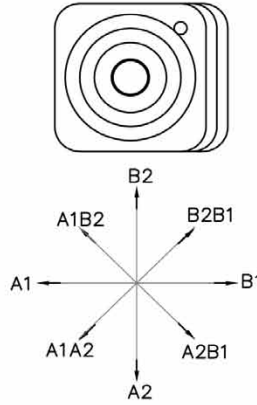


High solidity controls for easy mounting on every type of distributor. They can be mounted stand alone or packed together. They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in three different models to meet different needs of Clients.

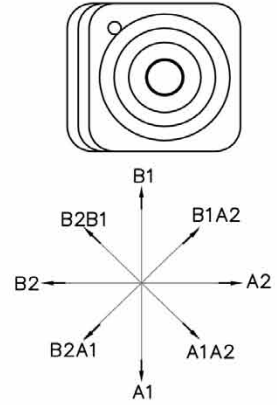
JOYSTICK "++"
 This control gives the possibility to operate, at the same time two spool with a "++" movement



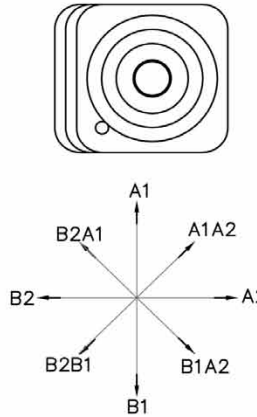
standart versiyon 1



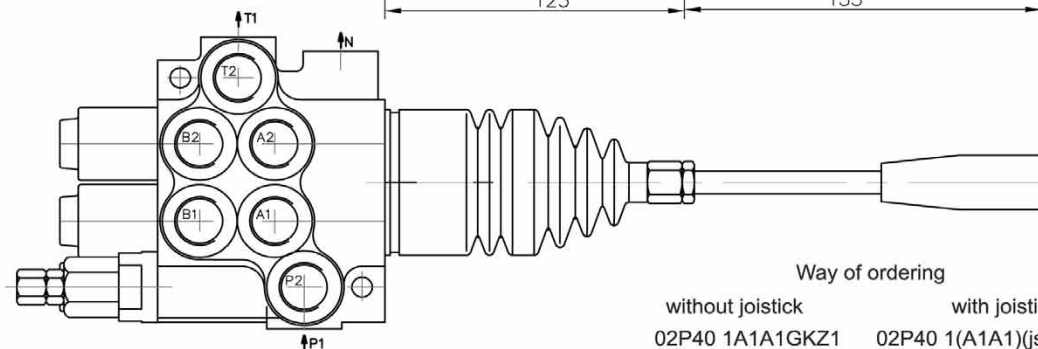
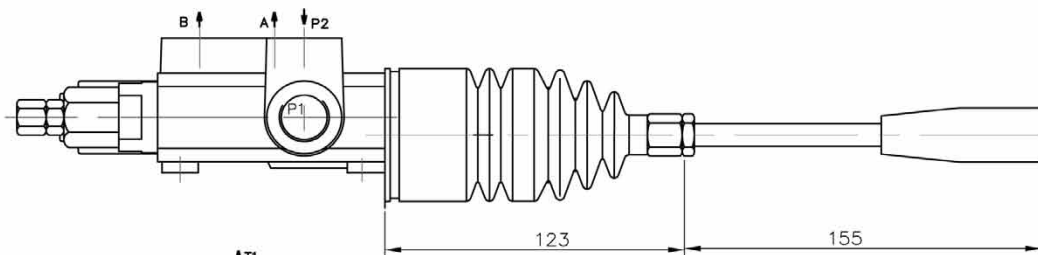
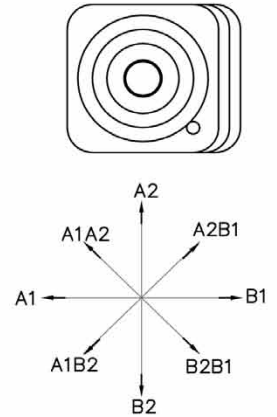
standart versiyon 2



standart versiyon 3



standart versiyon 4



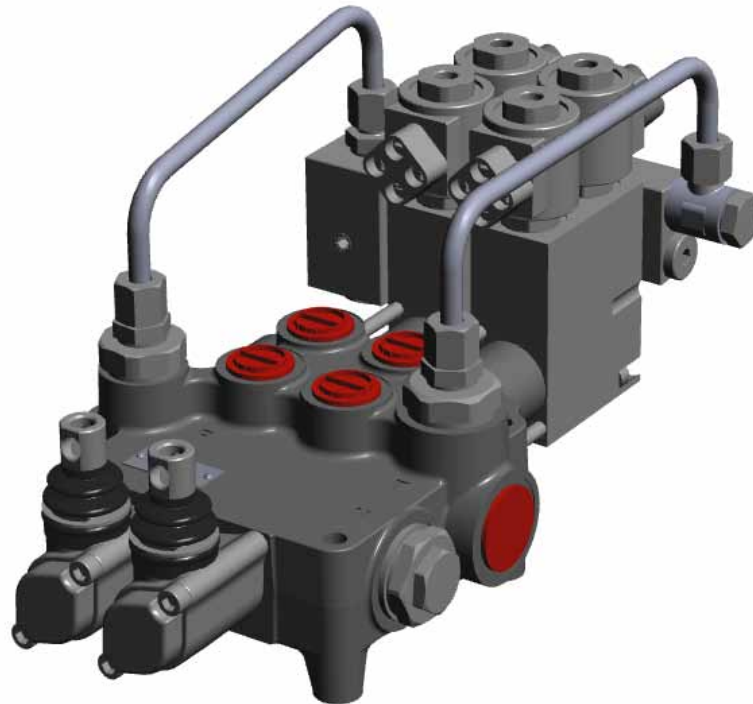
Way of ordering

without joystick

02P40 1A1A1GKZ1

with joystick

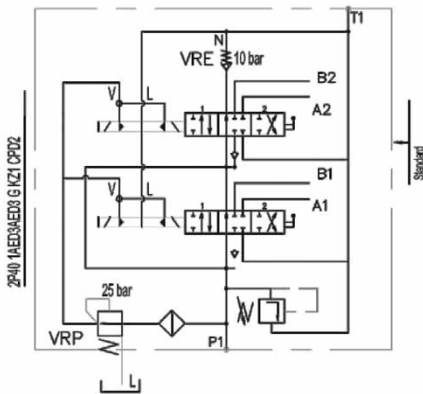
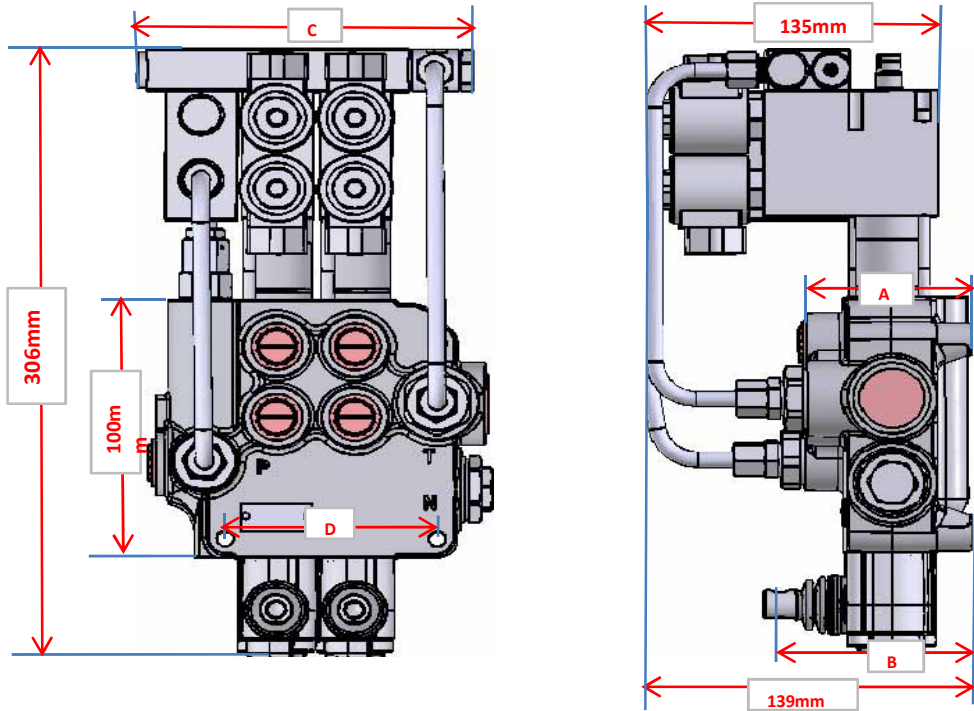
02P40 1(A1A1)(js+3)G



Technical parameters:

Maximum operating pressure of the valve, P=250;T=50 bar	A, B = 300 bar
Nominal flow	40 l /min
Leakage(A, B-T)	15cm ³ /min at 120 bar
Operating pressure min/max	10/50 bar
Max operating pressure in L (T line)	25 bar
Solenoid operating feature - Nom voltage tolerance	+/-10%
Power rating , Duty cycle	24W / 100 %
Collector Kit for 1 to 4 sections	

DESCRIPTION: The electrohydraulic control option is designed for standard monoblock valve P40.

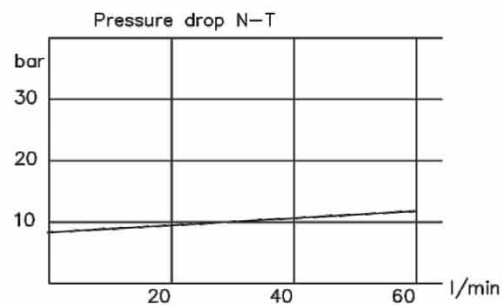
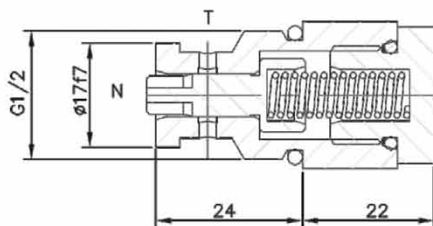


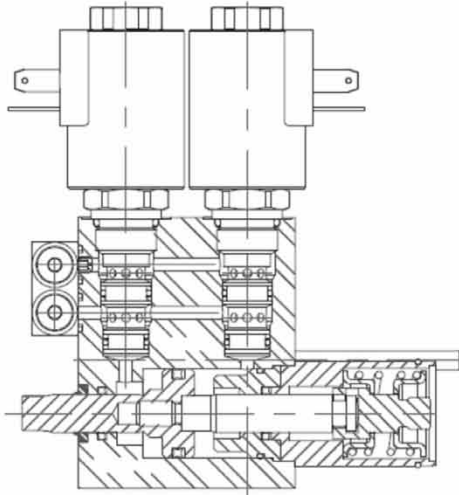
ordering codes (BSP threads)	
CED1	kit for 1 section
CED2	kit for 2 section
CED3	kit for 3 section
CED4	kit for 4 section

Ordering example

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

Back pressure valve VRE-P40

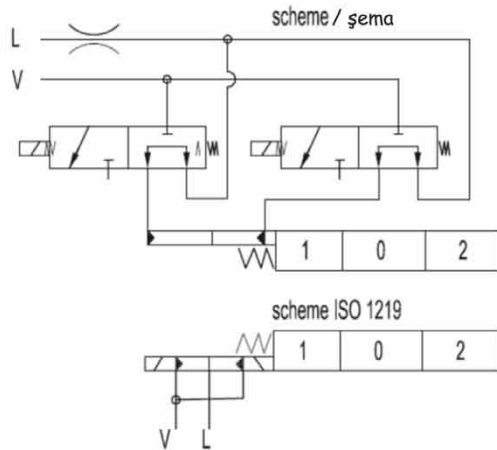




Ordering codes

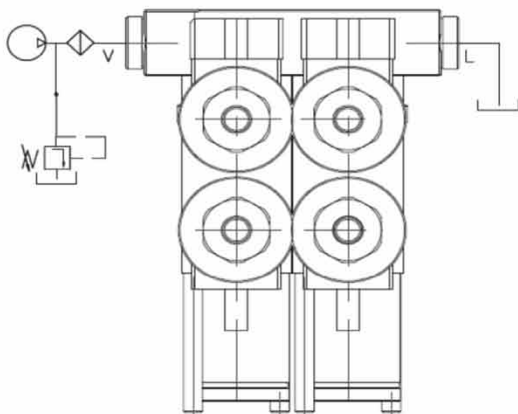
3-wai solenoid valve-SV08-33
coil P40ED3-G-12VDC
coil P40ED3-G-24VDC

**Directional control valve P40
ED3 - Electro - hydraulic control ON-OFF**



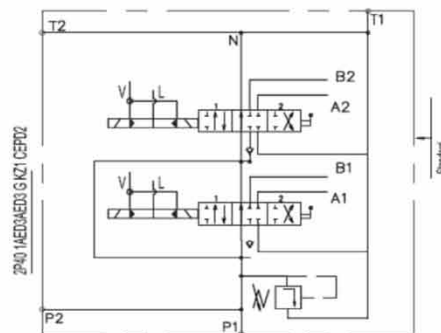
Operating pressure	min 10 bar(145 psi)
Max operating pressure in .L (T line)	max 50 bar(725 psi)
Solenoid operating features	25 bar(360 psi)
Nominal voltage tolerance	±10%
Power rating	24W
Duty cycle	100 %

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

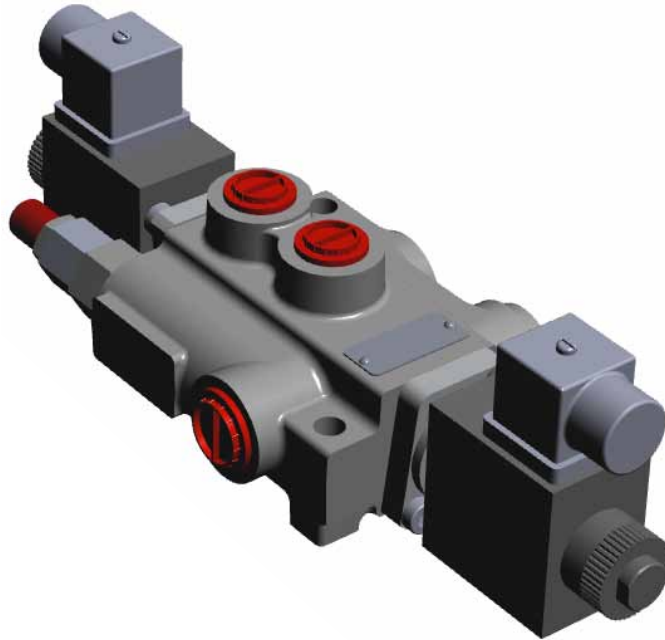


Ordering example

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 section



Technical parameters:

Nominal flow	50 l/min
Max operating pressure, P=250; T=10 bar	A , B = 300 bar
Leakage (A,B>T)	15 cm ³ /min at 120 bar
Hydraulic liquid	Mineral base oil
Viscosity	12...800 mm ² /s
Fluid temperature	-20C to 80C
Ambient temperature	-40C...+60C
Spool stroke	6 mm
Actuating force	<220 N

DESCRIPTION: The monoblock directional control valves-solenoid operated, offer perfect choice whether you are designing a new system or just simply trying to get more out of your current system. With two special spools and 7 different monoblock housings these valves can meet the specific needs of your application and hydraulic schemes by their double acting in 3 positions A and D spools.

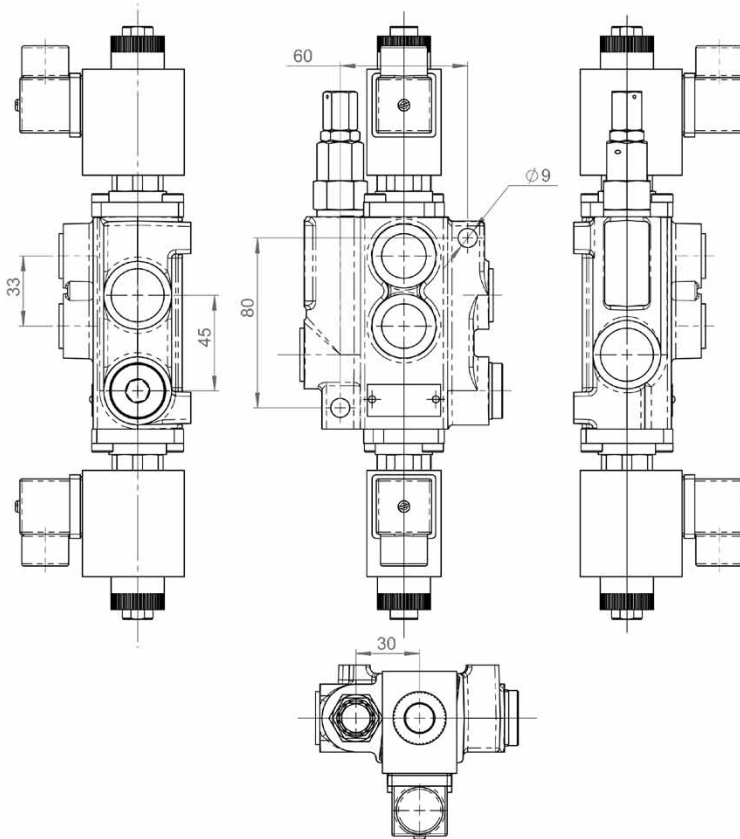
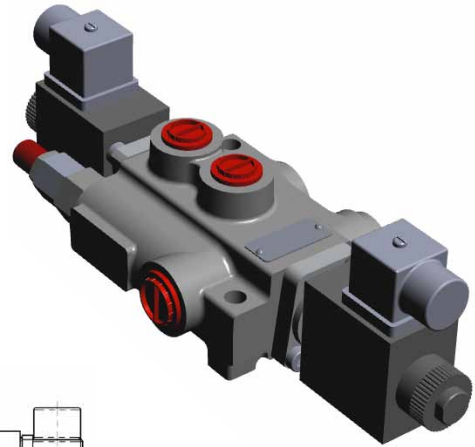
CONSTRUCTION: Precise bore honing and spool grinding results in less cross-port leakage and less wasted energy. These precise valves also allow for interchangeable spools for easy on place maintenance.

MOUNTING: The mounting is the same as standard monoblock valves using bolts M8 or complete line of stud kits.

Solenoid direct control with spring return to neutral position.
Needs special spools and special body Z50.

ORDERING EXAMPLE

Z50 A ES3 12VDC G
 1 2 3 4 5



1.Body kit

Type	Description
Z50	1 spool
02Z50	2 spool
03Z50	3 spool
04Z50	4 spool
05Z50	5 spool
06Z50	6 spool

2.Spool options / Spol seçenekleri

Type/Tipi	Description / Tanımı
A	Double acting, 3 positions with A and B closed in neutral position
D	Double acting, 3 positions with A and B open to Tank in neutral position

3.Control kit

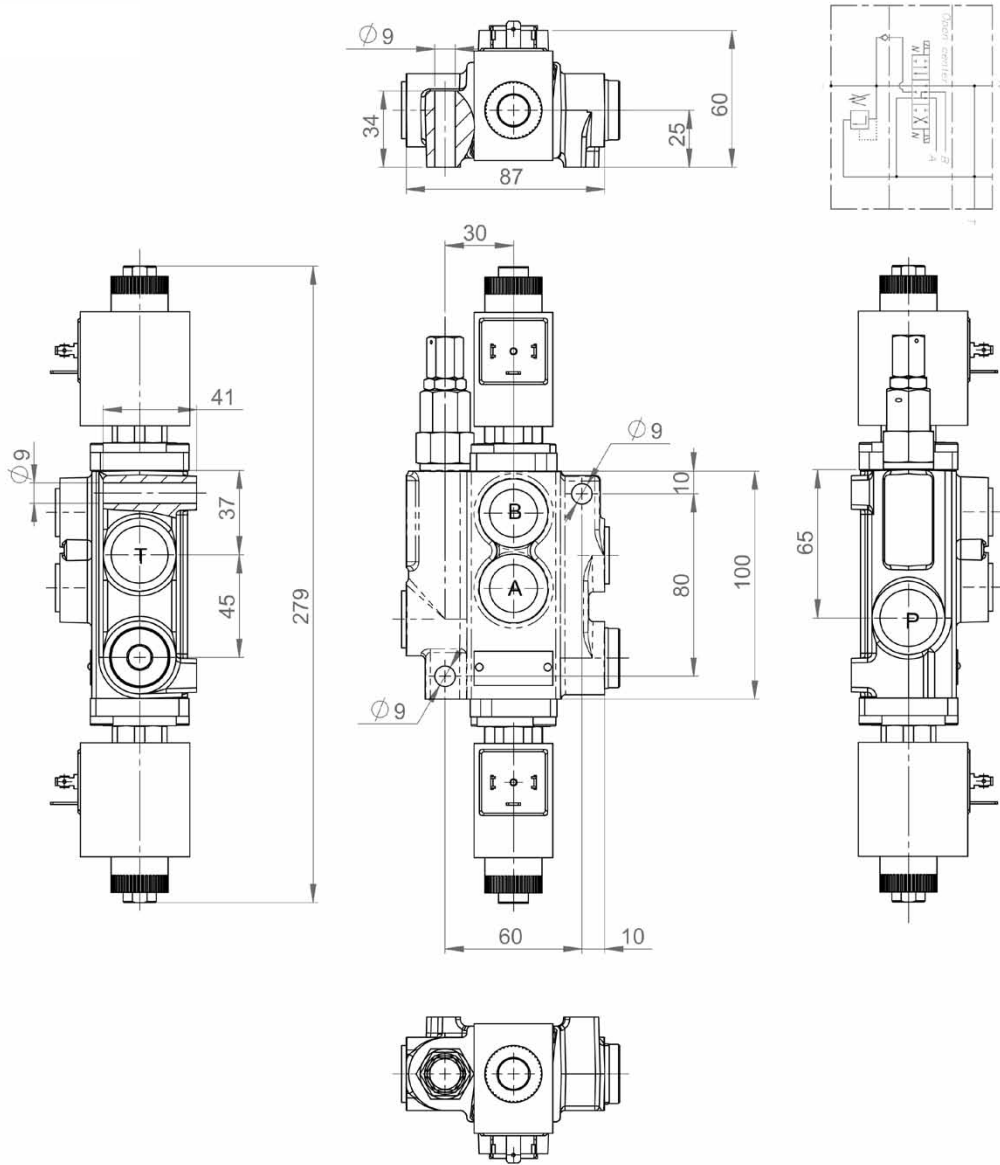
Type	Description
Es1	Single acting P-A with spring return in neutral position
Es2	Single acting P-B with spring return in neutral position
ES3	Double acting P-(B) with spring return in neutral position

4.Coils

Type / Tipi	Description / Tanımı
	(with connector ISO 4400)
12VDC	Nominal voltage 12VDC
24VDC	Nominal voltage 24VDC

5.Threads

G	P.T - G1/2; A,B - G3/8
---	------------------------



Operating features

Control

Internal leakage A(B)-T
(p=100 bar Viscosity 35 cST : max 18 cc/min)

Coil

Nominal voltage tolerance.....±10%
power rating.....37 W
Coil insulation.....class H
Duty cycle100%
Connector ISO 4400
Emergency manual override



Technical parameters:

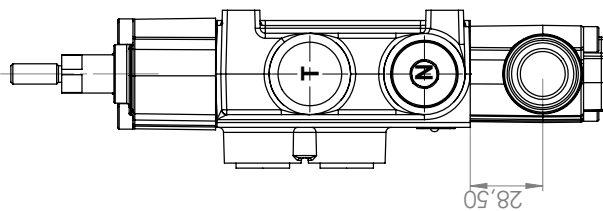
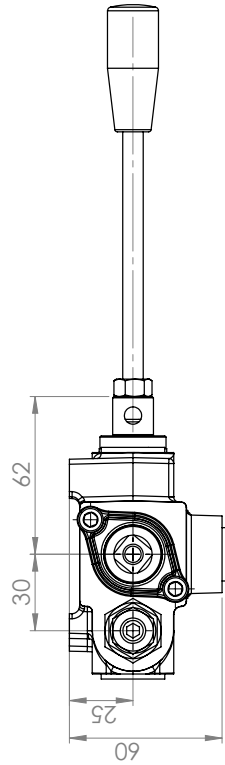
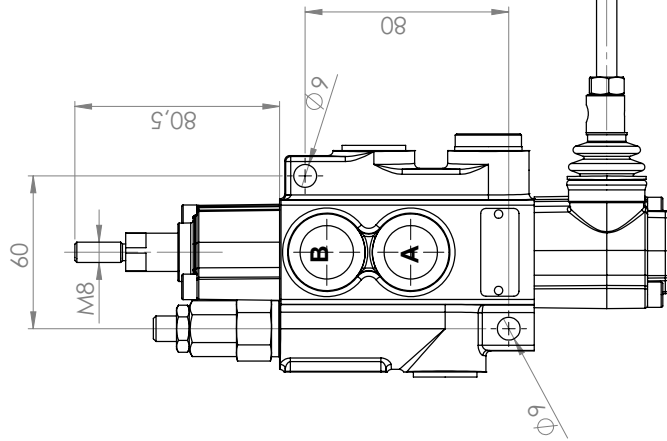
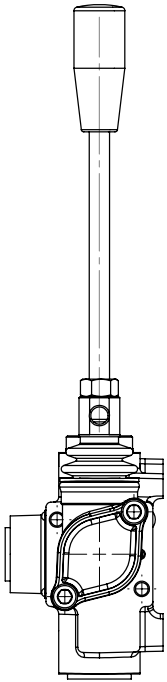
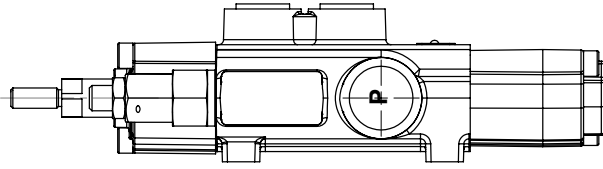
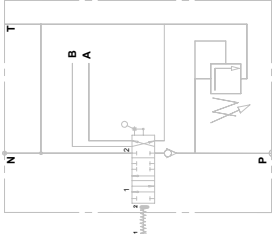
Ambient temperature	-40C...+60C
Hydraulic liquid -mineral oil based/hydraulic oil Viscosity	12 ...800 mm ² /s
Fluid temperature	-15C...+80C
Filtration	10 to NAS 1638
Max operating pressure, P=250; T=50 br	A , B = 300 bar
Pressure for authomatical release of spool	70-140, bar
Leakage(A,B-T)	15cm ³ /min at 120bar
Nominal flow	50 l/min
Spool stroke	+/- 7,9 mm
Actuating force	< 220 N

- Hydraulically balanced, hard chrome plated spool
- Lever system in which the handle can be installed in up or down position
- In neutral position both works ports are blocked and the pump unloads to tank

DESCRIPTION: The hydraulic distributor Z50 LS is used for switching on/off and directing the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tank. It has a setting from 70 to 140 bar for automatic switch-off. It is designed as a "log splitter valve".

CONSTRUCTION: The hydraulic distributor Z50 LS is a mono-block distributor with manual control. The body is made of cast iron EN-GJL300, and the spool is made of carburized steel with hard chrome plating.

MOUNTING: The distributor is fixed with 3 (three) bolts M8.





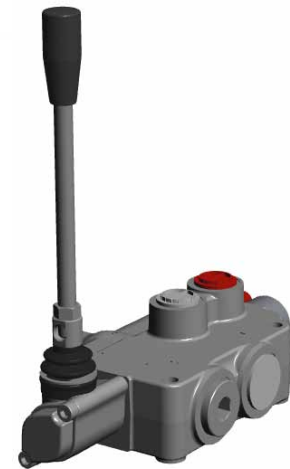
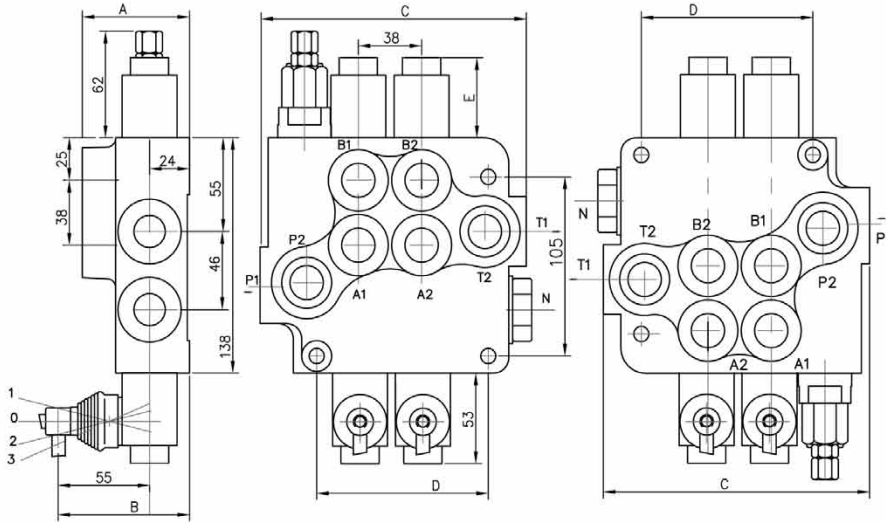
Technical parameters:

Ambient temperature	-40C...+60C
Hydraulic liquid -mineral oil based/hydraulic oil Viscosity	12 ...800 mm ² /s
Fluid temperature	-15C...+80C
Filtration	10 to NAS 1638
Max operating pressure, P=250; T=50 bar	A , B = 300 bar
Leakage(A,B-T)	18cm ³ /min at 120bar
Nominal flow	80 l/min
Spool stroke	+/- 7 mm
Actuating force	< 220 N
Modification / Spools	with 1 to 6

DESCRIPTION: The hydraulic distributor P80 is used for switching on/off and directing the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tank. It is manufactured with up to 6 plungers with parallel or serial distribution

CONSTRUCTION: The hydraulic distributor P80 is a mono-block distributor with manual control. The body is made of cast iron EN-GJL300, and the spools are made of carburized steel with hard chrome plating

MOUNTING: The distributor is fixed with 3 (three) bolts M8.



ORDERING CODES

- 0 ————— block with common check valve
- 2 ————— number of spools
- P80 ————— directional control valve type ...
- R ————— inlet high pressure - right
- 1 ————— way of distribution / paralel or .../
- A ————— first spool distribution type
- 1 ————— spool control / detend and etc./
- A ————— second spool distribution type
- 1 ————— spool control / detend and etc./
- G ————— ports / treads /
- KZ1 ————— general operation feature
- T ————— with "teton"
- H ————— operation feature .../
- E ————— with electric switch
- C2 ————— high pressure carry over
- 11 ————— connection ports in use

	A	B	C	D	P1	P2	T1	T2
P80	65	79	107	65	*	*	-	-
2P80	60	94	160	103	*	*	*	*
3P80	60	94	198	141	*	*	*	*
4P80	60	94	242	179	*	*	*	*
5P80	60	94	280	217	*	*	*	*
6P80	60	94	318	255	*	*	*	*

code	number of spools
	1
2	2
3	3
4	4
5	5
6	6

spool control	E
1, 4, 5, 6, 7, 8, 10, 11	40
2, 3, 12 14	72
13	44

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

Table / Tablo 5

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

Table / Tablo 6

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

code	incorporated microswitch	
E		microswitch type omron-V 165 I C 5

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

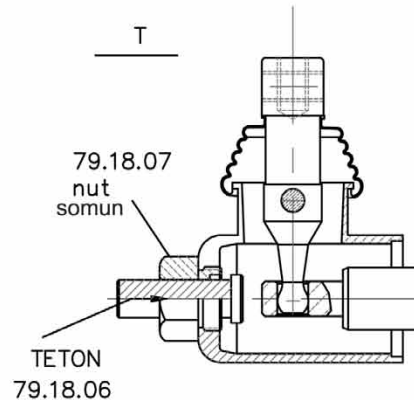
code	ports (threads)			
	P	A ; B	T	N
M	M22x1.5	M22x1.5	M26x1.5	M26x1.5
G	G1/2	G1/2	G3/4	G3/4
S	7/8-14UNF	7/8-14UNF	1 1/16-14UNF	1 1/16-14UNF

Table / Tablo 10

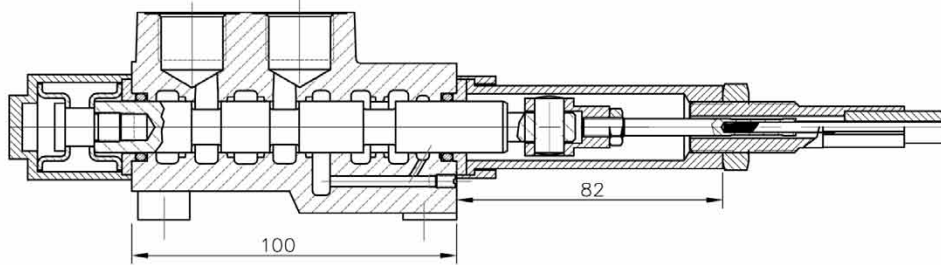
code kod	feature / özellik	code kod	feature / özellik	code kod	feature / özellik
KZ		KY		KI	
KZ1		KY1		KI1	
KZ0		KY0		KI0	
KZ01		KY01		KI01	
-	without hand control / elle kontrol olmadan				

code	feature / özellik	
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	

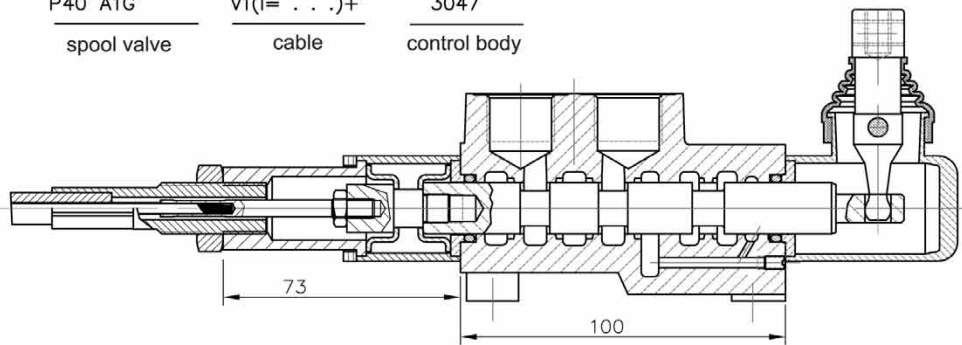
code	used connection ports	
11	P1 ; T1	
12	P1 ; T2	
21	P2 ; T1	
22	P2 ; T2	



REMOTE CONTROLS

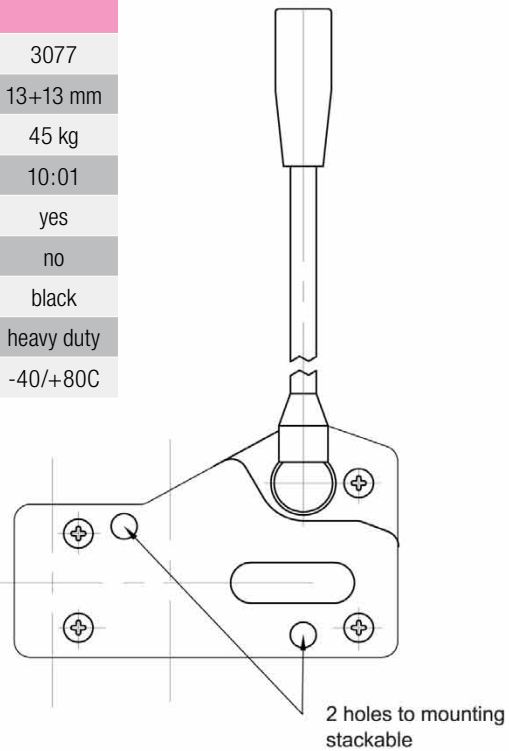


P40 A1G V1(l= . . .)+ 3047
 spool valve cable control body



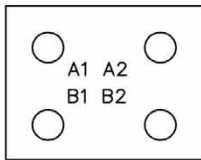
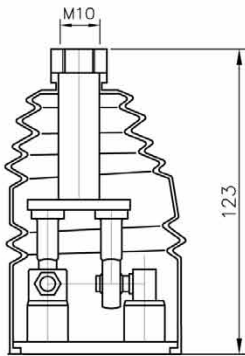
P40 A1G V2KZ1(l= . . .)+ 3047
 spool valve cable control body

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	10:01	10:01	10:01
lock in neutral	no	no	yes
antireverse lock	no	yes	no
body color	black	black	black
cables type	heavy duty	heavy duty	heavy duty
operating temperature	-40/+80C	-40/+80C	-40/+80C

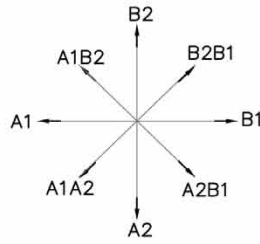
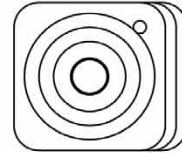


High solidity controls for easy mounting on every type of distributor. They can bymounted stand alone or packed together. They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in a three differents models to meet different needs of Clients.

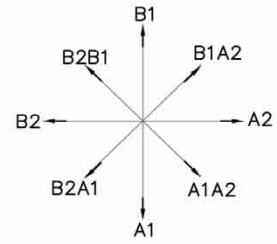
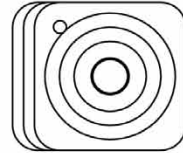
JOYSTICK“+”
his control gives the possibility to operate, at the same time two spool with a “+” movement



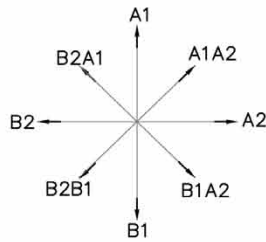
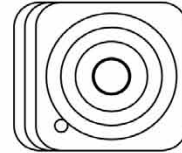
standart versiyon 1



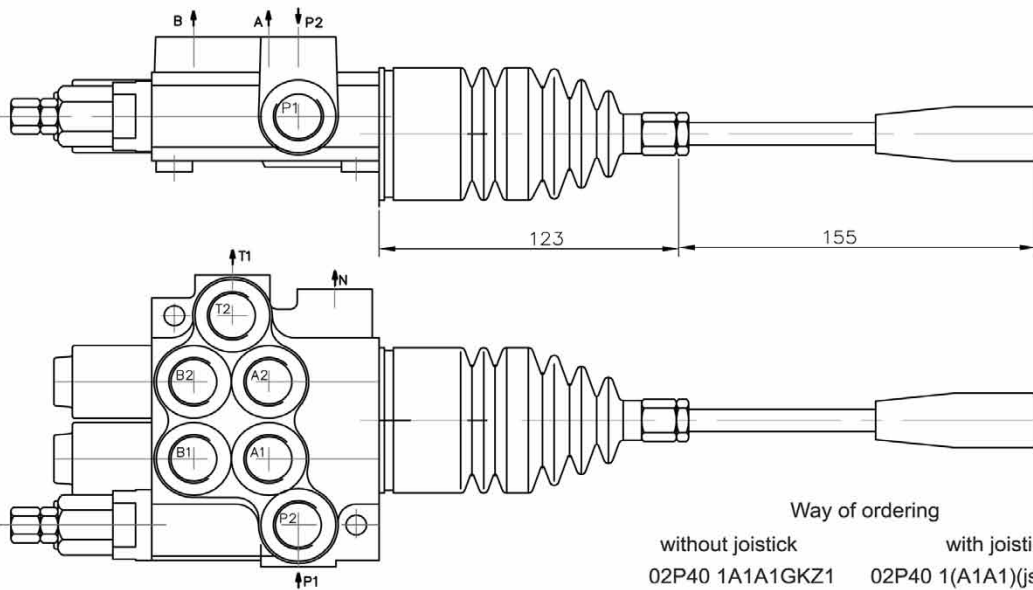
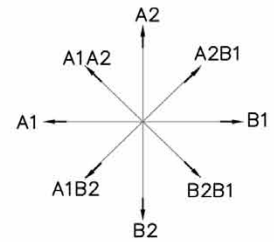
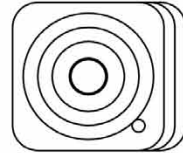
standart versiyon 2



standart versiyon 3



standart versiyon 4



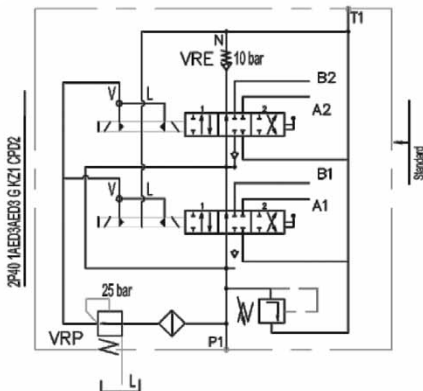
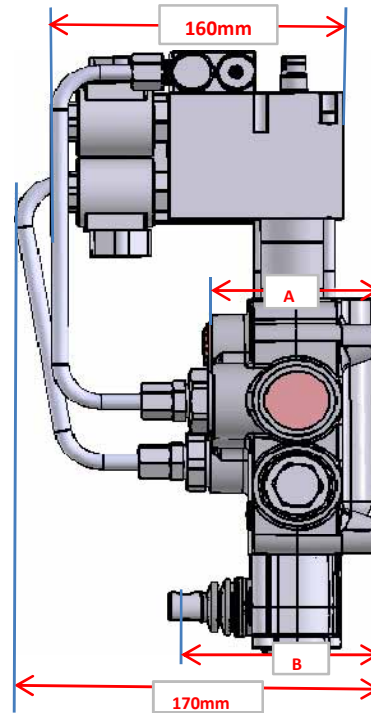
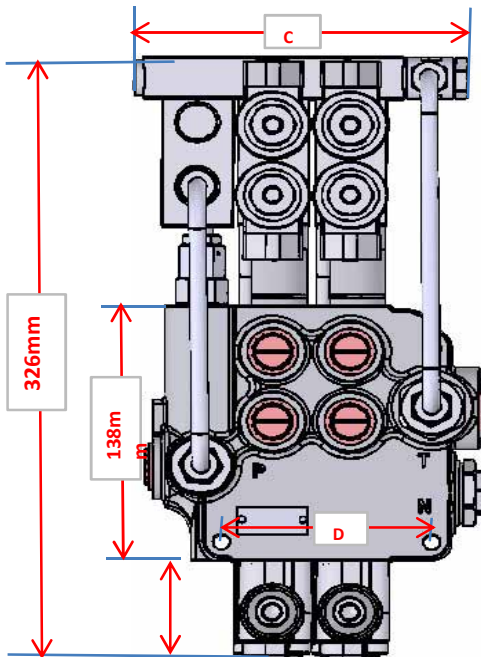
Way of ordering
without joystick 02P40 1A1A1GKZ1
with joystick 02P40 1(A1A1)(js+3)G



Technical parameters:

Maximum operating pressure of the valve, P=250;T=50 bar	A, B = 300 bar
Nominal flow	40 l /min
Leakage(A, B-T)	15cm ³ /min at 120 bar
Operating pressure min/max	10/50 bar
Max operating pressure in L (T line)	25 bar
Solenoid operating feature - Nom voltage tolerance	+/-10%
Power rating , Duty cycle	24W / 100 %
Collector Kit for 1 to 4 sections	

DESCRIPTION: The electrohydraulic control option is designed for standard monoblock valve P40.

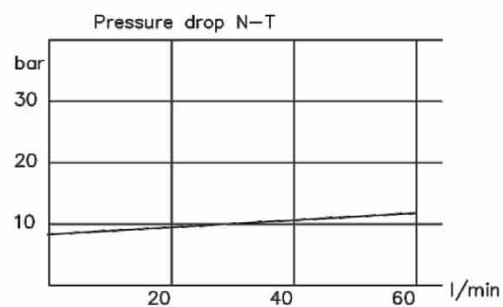
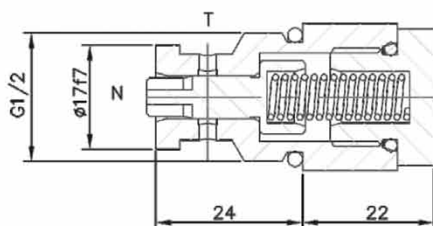


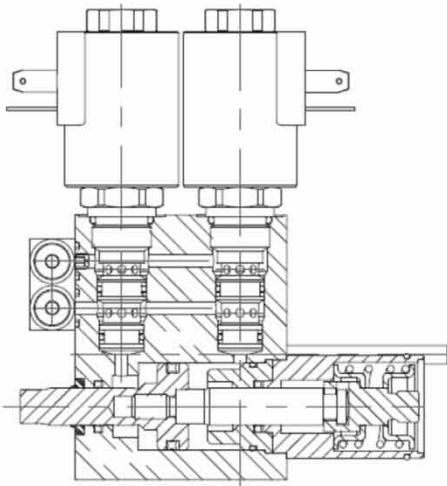
ordering codes (BSP threads)	
CED1	kit for 1 section
CED2	kit for 2 section
CED3	kit for 3 section
CED4	kit for 4 section

Ordering example

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

Back pressure valve VRE-P40

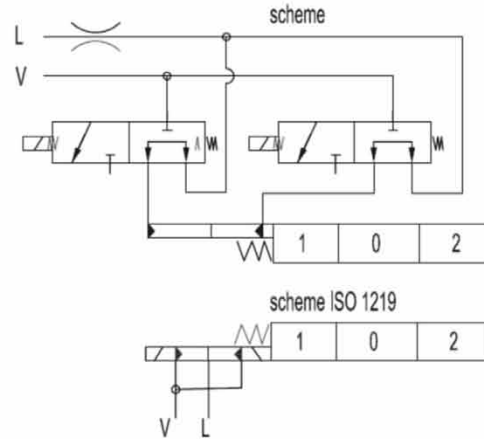




Ordering codes

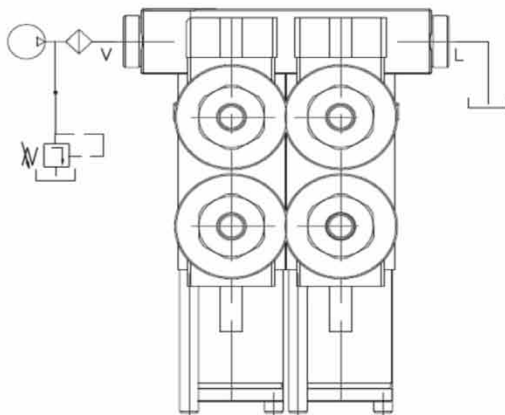
3-wai solenoid valve-SV08-33
 coil P80ED3-G-12VDC
 coil P80ED3-G-24VDC

**Directional control valve P80
 ED3 - Electro - hydraulic control ON-OFF**



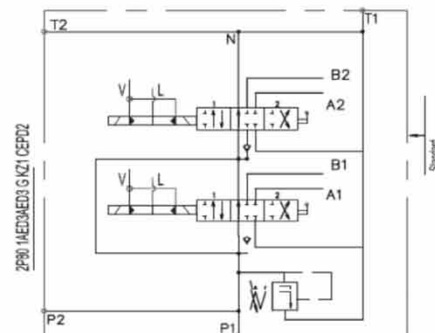
Operating pressure	min 10 bar(145 psi)
Max operating pressure in .L (T line)	max 50 bar(725 psi)
Solenoid operating features	25 bar(360 psi)
Nominal voltage tolerance	±10%
Power rating	24W
Duty cycle	100 %

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

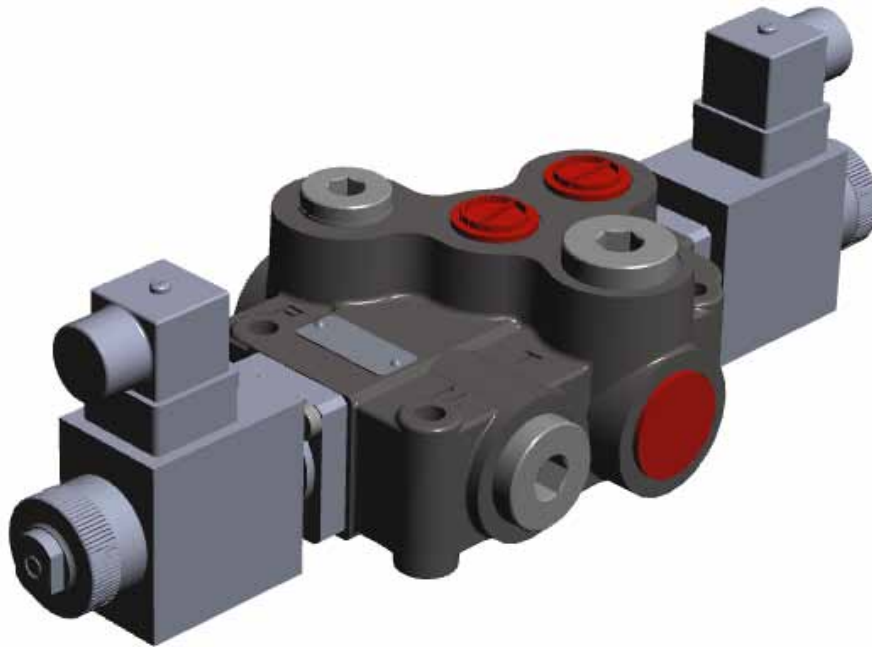


Ordering example

2P80-1A1ED3A1ED3 G KZ1-CEED2-12VDC



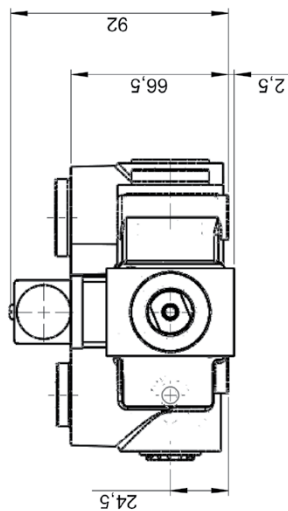
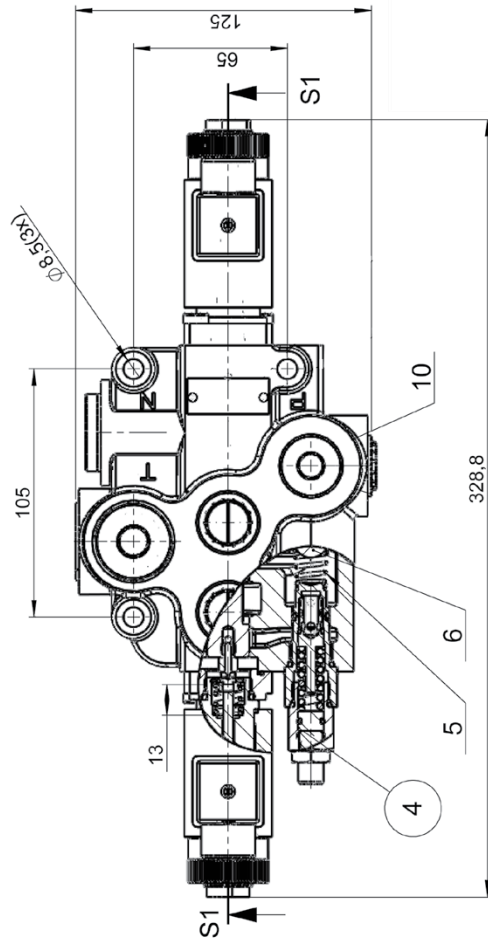
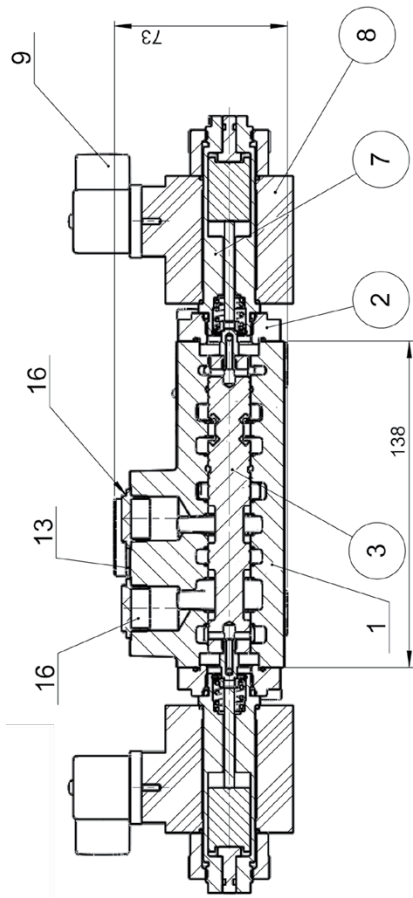
ordering codes (BSP threads)	
CEED1P80	kit for 1 section
CEED2P80	kit for 2 section
CEED3P80	kit for 3 section
CEED4P80	kit for 4 section



Technical parameters:

Nominal flow	80 l/min
Max operating pressure, P=250; T=10 bar	A , B = 300 bar
Leakage (A,B>T)	18 cm ³ /min at 120 bar
Hydraulic liquid Mineral base oil Viscosity	20...800 mm ² /s
Fluid temperature	-20C to 80C
Ambient temperature	-40C...+60C
Spool stroke	6 mm
Actuating force	<220 N

DESCRIPTION: The directional mono block valve Z80 is a valve with specially machined body. The throttle channels are realized at the spool's surface. The design of the valve is implemented for applications which need precise and lightly distribution of hydraulic fluid. The construction guarantee precise metering diagram.



Part	P1	P2	A	B	T1	T2	N
511.00.00.01-01	G1/2	G1/2	G1/2	G1/2	G3/4	G3/4	G3/4
-02	7/8 SAE	7/8 SAE	7/8 SAE	7/8 SAE	1"1/16 SAE	1"1/16 SAE	1"1/16 SAE
-03	1/2 NPT	1/2 NPT	1/2 NPT	1/2 NPT	3/4 NPT	3/4 NPT	3/4 NPT
-04	M22x1,5	M22x1,5	M22x1,5	M22x1,5	M26x1,5	M26x1,5	M26x1,5

CONTROL

Internal leakage A(B) → T
(P=120 bar, viscosity = 32 mm ² /s : max. 40 l/m)
Fluid temperature - 20° C (short time).....80 °C
Max. back pressure on outlet port T – 25 bar (360 psi)

COIL

Nominal voltage tolerance ± 10%
Power rating 37 W
Coil insurance class H
Duty cycle 100%
Connector ISO 4400
Emergency manual override

BODY KIT

Type	Description
01Z80	1 spool
02Z80	2 spool
03Z80	3 spool
04Z80	4 spool
05Z80	5 spool
06Z80	6 spool



SPOOL OPTIONS

Type	Description
A	Double acting, 3 positions with A and B closed in neutral position
B	Double acting, 3 positions with A and B open to tank in neutral position

CONTROL KIT

Type	Description
ES1	Single acting P – A with spring return in neutral position
ES2	Single acting P – B with spring return in neutral position
ES3	Double acting P – A (B) with spring return in neutral position

COIL (with connector ISO 4400)

Type	Description
12 VDC	Nominal voltage 12 VDC
24 VDC	Nominal voltage 24 VDC

THREADS

G	P, A, B – G1/2 ; T – G3/4
---	---------------------------



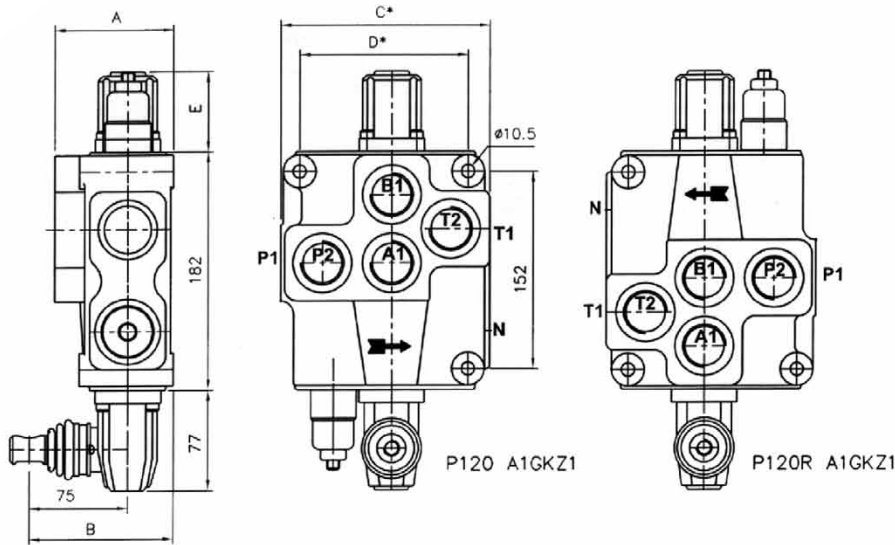
Technical parameters:

Ambient temperature	-40C...+60C
Hydraulic liquid -mineral oil based/hydraulic oil Viscosity	12 ...800 mm ² /s
Fluid temperature	-15C...+80C
Filtration	10 to NAS 1638
Max operating pressure, P=250; T=50 bar	A , B = 300 bar
Leakage(A,B-T)	30cm ³ /min at 120bar
Nominal flow	120 l/min
Spool stroke	10 mm,L12+/-10/6
Actuating force	< 300 N
Modification/Spools	with 1 to 4

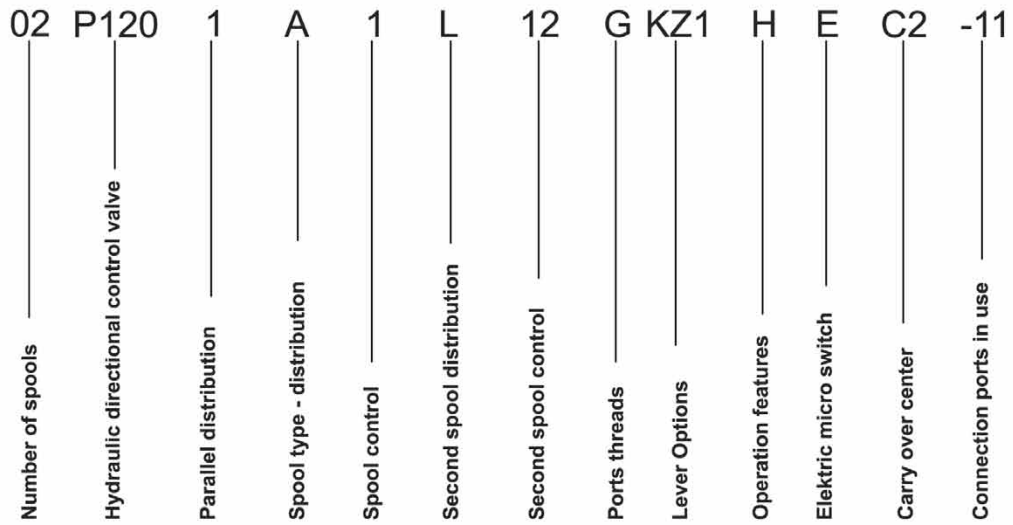
DESCRIPTION: The hydraulic distributor P120 is used for switching on/off and controlling of the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tanks of hydraulic systems of mobile machines (electrical and diesel forklifts, excavators, auto-cranes, etc.).

CONSTRUCTION: The hydraulic distributor P120 is a mono-block type with manual control. The body is made of cast iron EN-GJL300, and the spools are made of carburized steel with hard chrome plating

MOUNTING: The distributor is fixed with 3 bolts M10



ORDERING CODES



	A	B	C	D	P1	P2	T1	T2
P120	92	110	160	129	+	+	+	+
2P120	92	110	213	182				
3P120	92	110	266	235				
4P120	92	110	319	288				

code	number of spools
P	1
02, 2	2
03, 3	3
04, 4	4

spool control	E
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11;	64
12	74

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

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

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

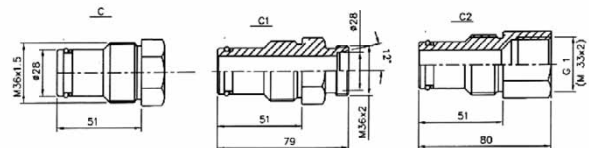
code	Incorporated microswitch
E	<p>microswitch type Omron-V 165 I C 5</p>

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

outlets / ports	metric	BSP	SAE	NPT
P, A, B, T	M33X2	G 1"	SAE 16	1 - 11.5
N	M36X1.5	-	-	-

code	with thread M12	code	with cange ø12	code	with cange ø12
KZ		KY		KI	
KZ1		KY1		KI1	
KZ0		KY0		KI0	
KZ01		KY01		KI01	

code	metric
X	without N
-	with N but closed
C	with N but closed center
C1	with N-carry over for ermeto
C2	with N-carry, internal thread



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



Technical parameters:

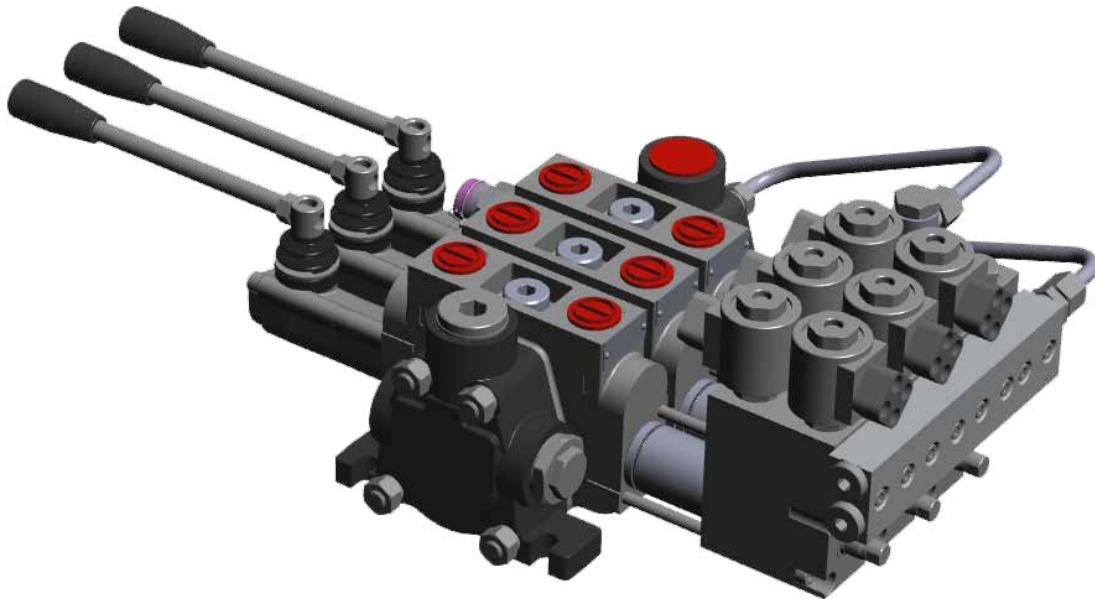
Nominal flow rating	120 l/min
Max operating pressure, P=250; T=10 bar	A , B = 300 bar
Leakage (A,B>T)	30 cm ³ /min at 120 bar
Hydraulic liquid Mineral base oil Viscosity	12...800 mm ² /s
Fluid temperature	-20C to 80C
Ambient temperature	-40C...+60C
Spool stroke	10 mm
Actuating force	<300 N

- Hydraulically balanced, hard chrome plated spool
- Lever system in which the handle can be installed in up or down position
- In neutral position both works ports are blocked and the pump unloads to tank

DESCRIPTION: The hydraulic distributor P120 LS is used for switching on/off and directing the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tank. It has a setting from 70 to 140 bar for automatic switch-off. It is designed as a "log splitter valve".

CONSTRUCTION: The hydraulic distributor P120S is a mono-block distributor with manual control. The body is made of cast iron EN-GJL300, and the spool is made of carburized steel with hard chrome plating.

MOUNTING: The distributor is fixed with 3 (three) bolts M10.



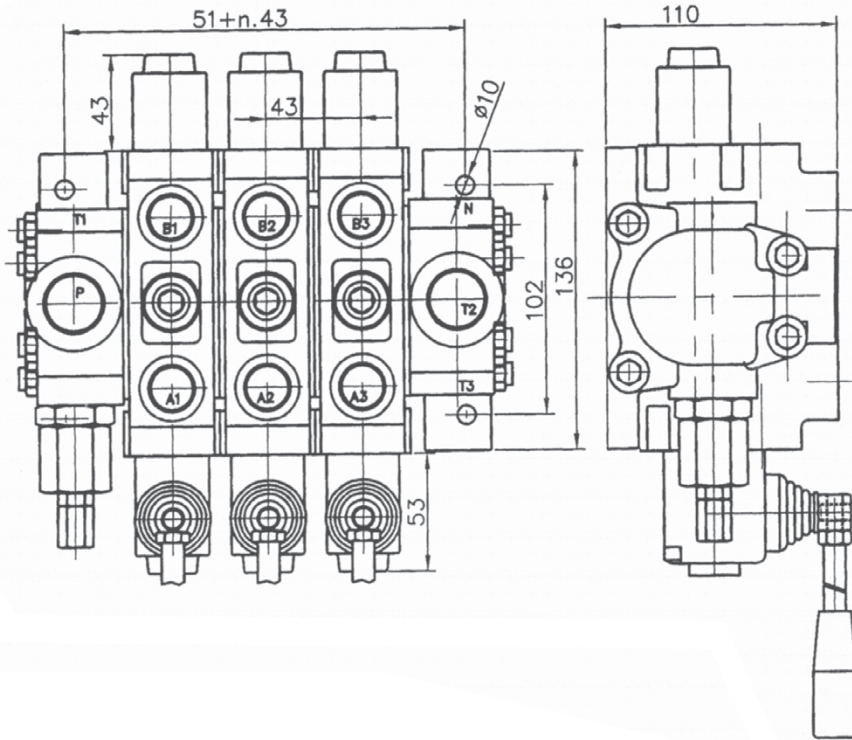
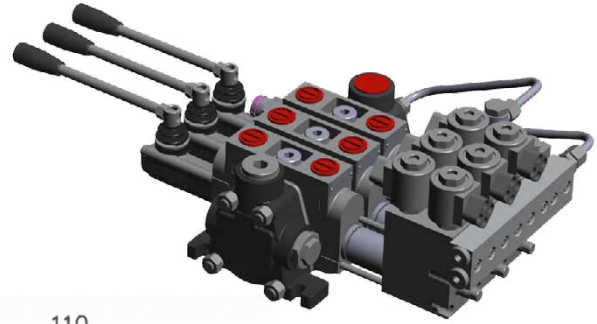
Technical parameters:

Nominal flow	70 l/min
Max operating pressure, P=250; T=10 bar	A , B = 300 bar
Leakage (A,B>T)	18 cm ³ /min at 120 bar
Hydraulic liquid Mineral base oil Viscosity	12...800 mm ² /s
Fluid temperature	-20C to 80C
Ambient temperature	-40C...+60C
Spool stroke	7 mm
Actuating force	<220 N
Modification/Sections	up to 8

DESCRIPTION: The hydraulic distributor P70 is used for switching on/off and directing the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tank.

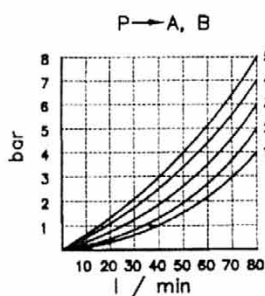
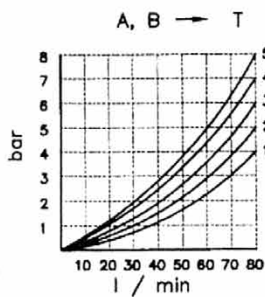
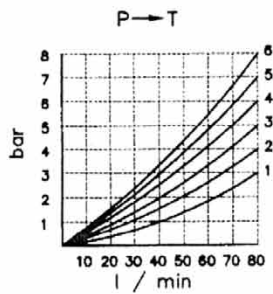
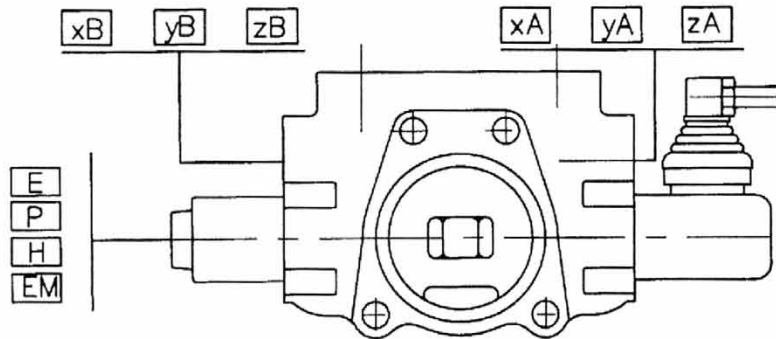
CONSTRUCTION: PC70 is a sectional directional control valve with manual control. The distributors are manufactured as either parallel or serial working flow distribution versions. They can be integrated in packages of up to 8 sections

MOUNTING: The distributor is fixed with 3 (three) bolts M8.



ORDERING CODES

03	PC70	R	N1	P	A1	A8xAzB	D1	T1	G	KZ1
Number of spools	Sectional control valve	Only when inlet cover is on right	Type of the inlet cover	Way of distribution of oil	First distribution type	Second spool distribution type	Third spool distribution type	Type of the outlet cover	Threads (P, A, B, T, N)	General operation feature



code	spool type
A	
B	
C	
D	
E	
F	
G	
H	
L	

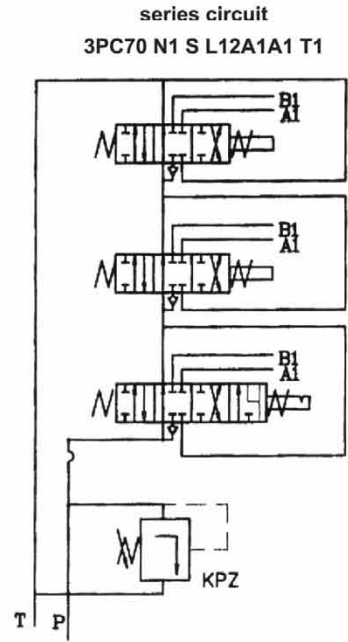
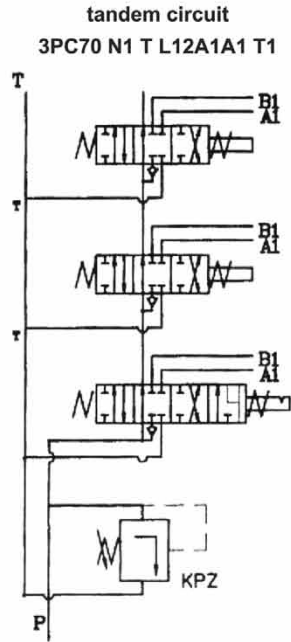
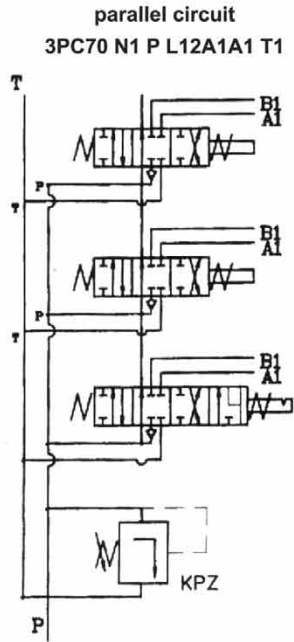
code	spool control
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

code	threaded connections	code	way of oil distribution
	P, A, B	T, N	parallel
M	M22x1.5	M26x1.5	tandem (series parallel)
G	1/2	3/4	series

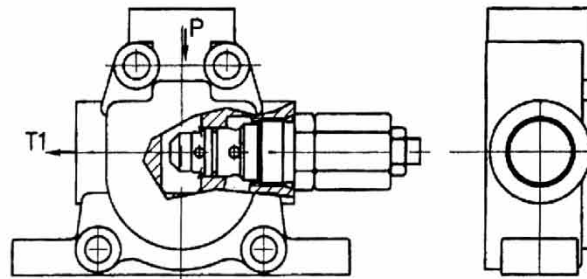
code	with electric switch	
E		microwitch omron -V 165 I C5

code	operation feature	
P		pneumatic
H		hydraulic

xA	xB	anti cavitation valve for A and / or B
yA	yB	secondary pressure relief valve for A and /or B
zA	zB	shock abosorber valve A and/ or B



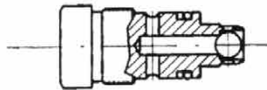
Inlet cover



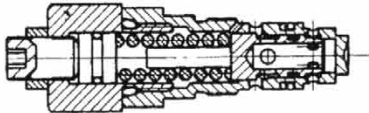
code	Inlet cover
N1	
N2	
N3	

general operation feature

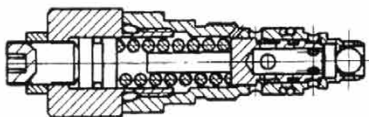
Anticavitation Valve(X)



Second relief valve(Y)



Relief and anticavitation valve (Z)



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

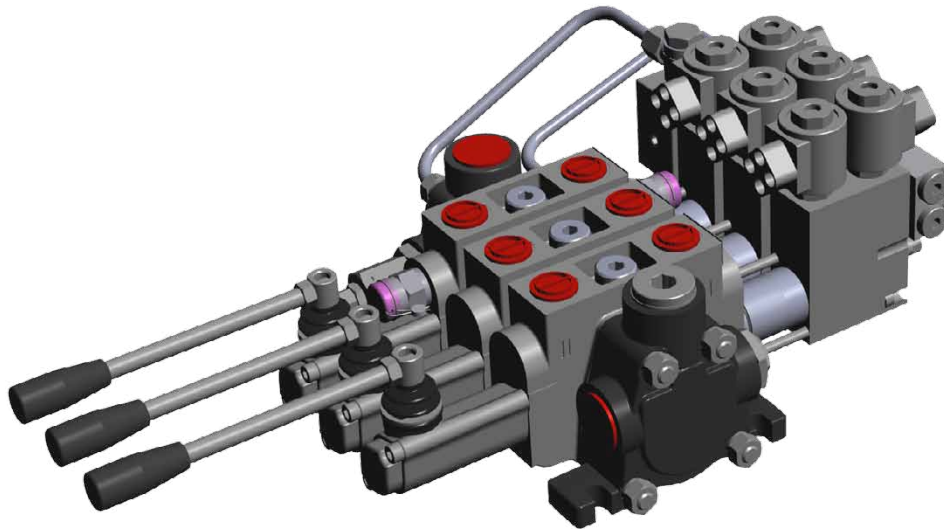
high pressure carry over

C-closed center

C1-pressure carry over

C2-pressure carry over

number of spool	1	2	3	4	5	6	7	8
L	139	182	225	258	311	354	397	440



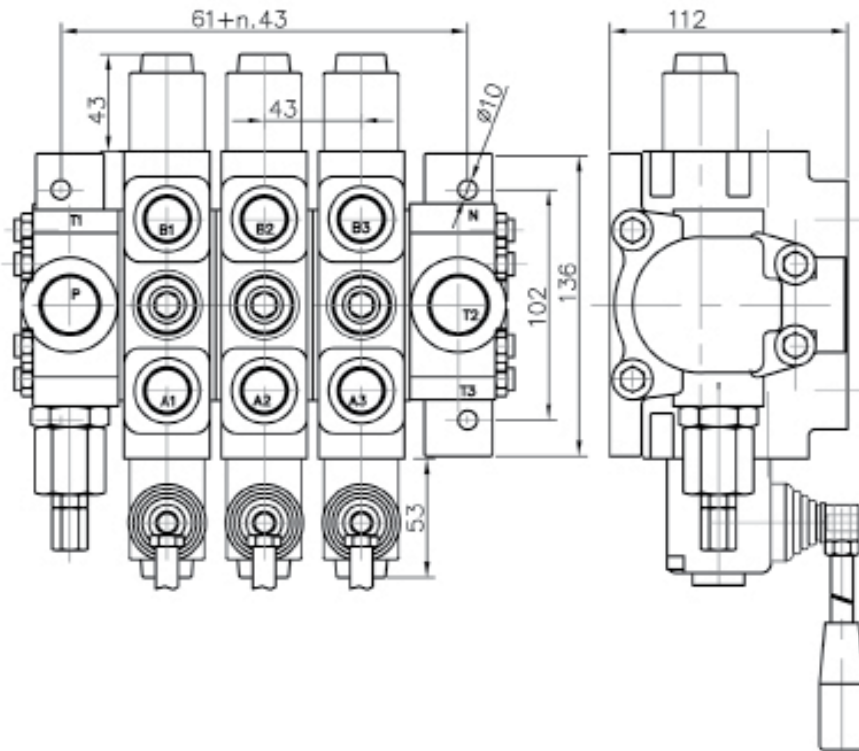
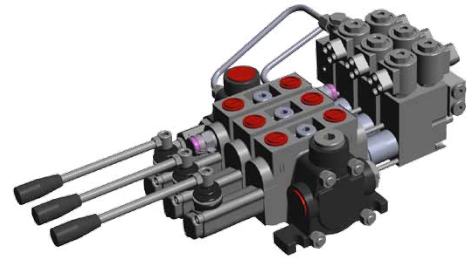
Technical parameters:

Nominal flow	80 l/min
Max. flow	100 l/min
Max operating pressure, P=250; T=10 bar	A , B = 300 bar
Leakage (A,B>T)	18 cm ³ /min at 120 bar
Hydraulic liquid Mineral base oil Viscosity	20...1000 mm/s
Fluid temperature	-20C to 80C
Ambient temperature	-40C...+60C
Spool stroke	7 mm
Actuating force	<220 N
Modification/Sections	up to 8

DESCRIPTION: The hydraulic distributor P100 is used for switching on/off and directing the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tank.

CONSTRUCTION: PC100 is a sectional directional control valve with manual control. The distributors are manufactured as either parallel or serial working flow distribution versions. They can be integrated in packages of up to 8 sections

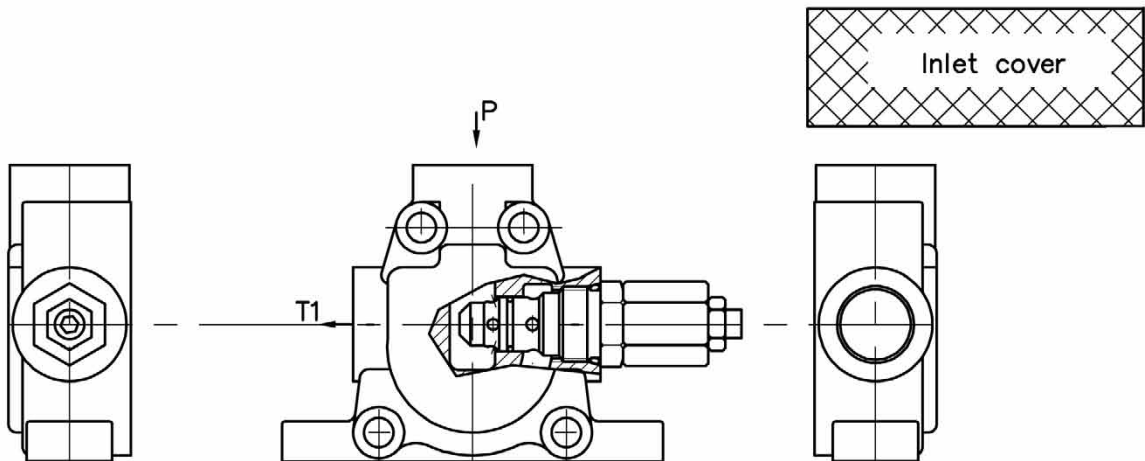
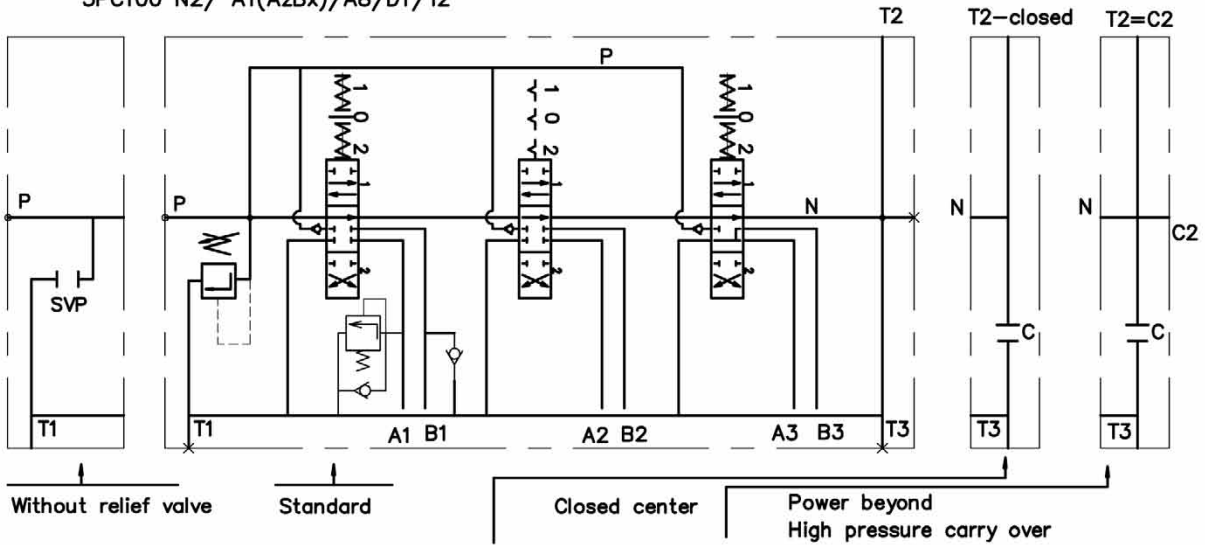
MOUNTING: The distributor is fixed with 3 (three) bolts M8



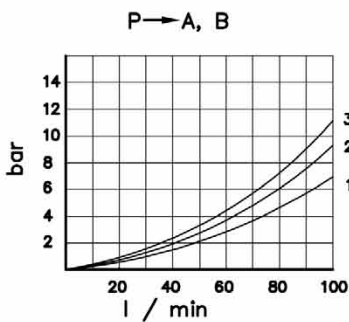
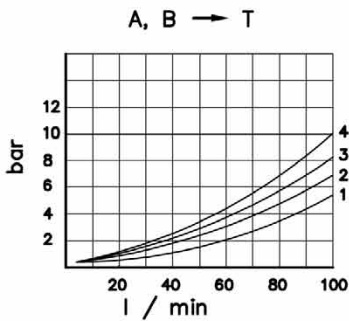
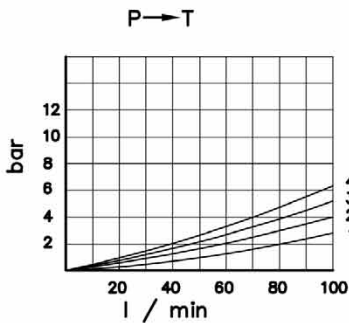
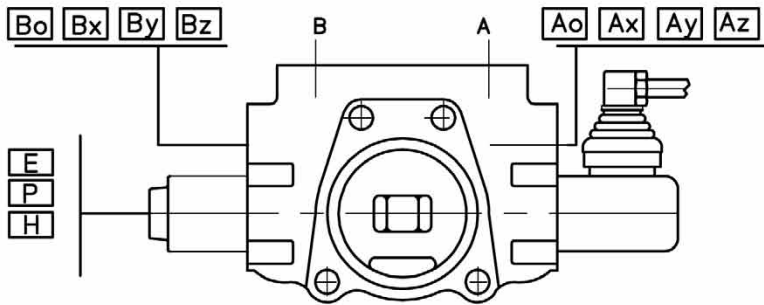
ORDERING CODES

03	PC 100	R	N2 A1(-AzBx)	A8	D1	T2	G	KZ1	P	E	C2	
number of spools	directional control valve type...	inlet high pressure - right	type of the inlet cover	second spool distribution type	second spool distribution type	Third spool distribution	type of the outlet cover (T port)	threads (P, A, B, T, N)	lever options	operation feature	with micro switch	high pressure carry over

parallel circuit
3PC100 N2/ A1(AzBx)/A8/D1/T2



code	inlet cover	
N1	N1 (210 bar)	
N1 svp		
N2	N2 (210 bar)	
N2 svp		



operating diagrams

code std	code met	вид золотника spool type
A	As	
B	Bs	
C	Cs	
D	Ds	
E	Es	
F	Fs	
G		
H		

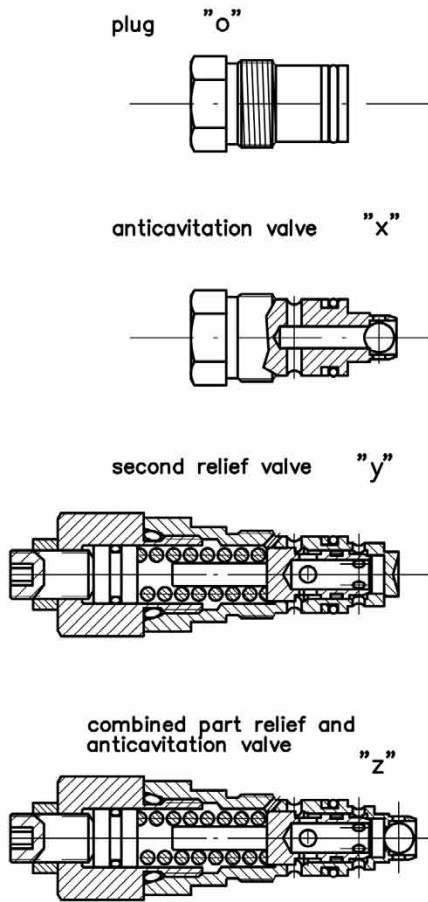
code	способ фиксации spool control
1	1 0 2
2	1 0 2
3	1 0 2
4	0 2
5	1 0
6	1 2
7	1 2
8	1 0 2
9	1 0
10	0 2
11	1 2

code	threaded connections			code	way of oil distribution		
	P, T	A, B	catty over C2		P, T	A, B	catty over C2
M	M22x1.5	M26x1.5	G 3/4	S1	SAE 12	SAE 10	SAE 12
G	1/2	3/4	G 3/4	S2	SAE 12	SAE 12	SAE 12

code	with electric switch
E	microwitch omron -V 165 I C5

code	operation feature
P	pneumatic
H	hydraulic

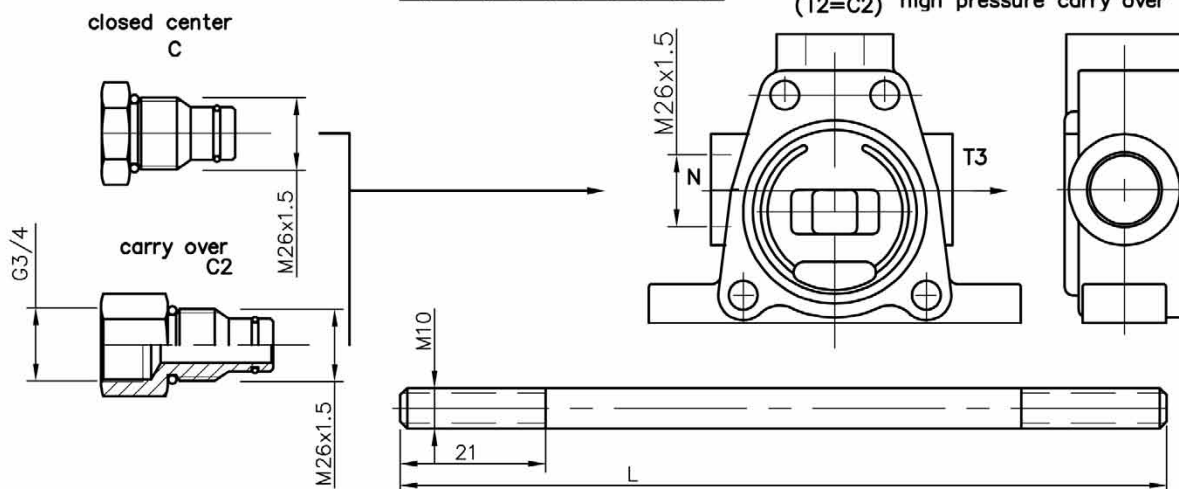
oA	oB	plug for A and / or B (without mark)
xA	xB	anti cavitation valve for A and / or B
yA	yB	secondary pressure relief valve A and/ or B
zA	zB	shockabsorber valve for A and / or B



code	feature	code	feature	code	feature
KZ		KY		KI	
KZ1		KY1		KI1	
KZ0		KY0		KI0	
KZ01		KY01		KI01	
-	without lever system				

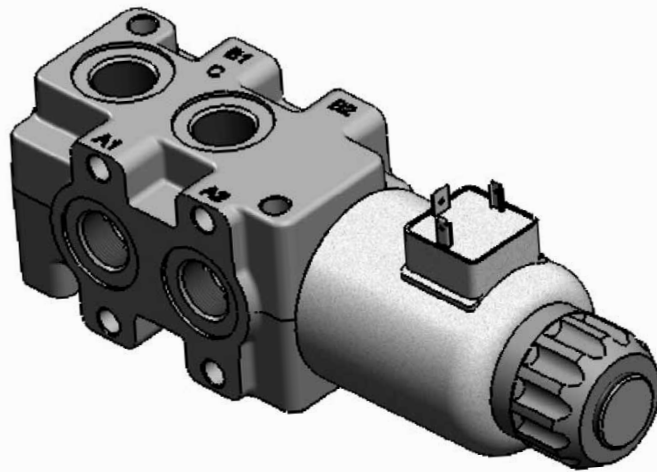


T2
or
(T2=C2) high pressure carry over



* "C" in the port N -+ Plug in T2 - closed center
 ** "C" in the port N - carry over in T2
 *** "C2" +plug in T2 - carry over in N

numbers of spools	1	2	3	4	5	6	7	8
L	145	188	230	275	320	360	405	445



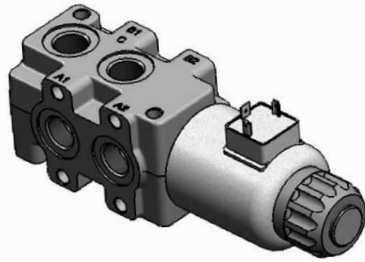
Technical parameters:

Nominal flow	50 l/min
Max operating pressure, with/without L	315 / 210 bar
Filtration	9 to NAS 1638
Hydraulic liquid	Mineral base oil
Viscosity	15-380 mm ² /s
Fluid temperature	-20C to 70C
Ambient temperatura	-30C...+50C
Supply voltaje, V	12DC/24DC
Power, W	39;29
Switching frequency, 1/h	15 000
Duty cycle	100%
Modification/Sections	up to 5

DESCRIPTION: DVS Selector valve has been designed to meet the demand of progressive machine manufacturers for versatile, cost effective, reliable circuit selector. The valve body is produced by cast iron EN-GJL300 alloy and it is machined using high precision, advanced, contemporary techniques. The advanced design of the valve spool ensures that fast spool switching can take place under any conditions without the use of a separate drain line.

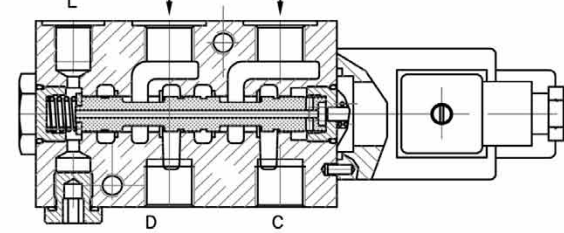
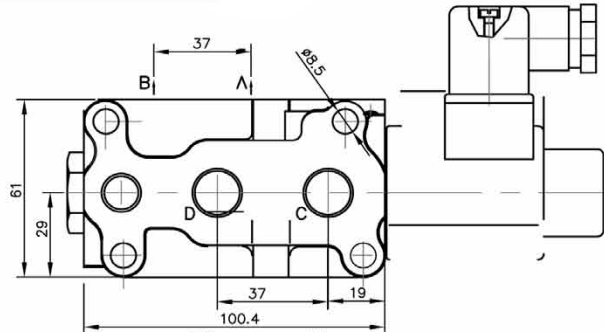
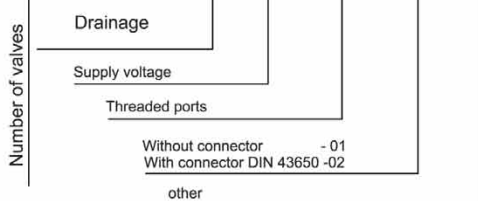
CONSTRUCTION: DVS Selector valve stackable 6 port/2way change over valves are designed to be used when extra circuits are to be operated from one control lever on machines such as fork lift trucks, agricultural front end loader, telescopic handlers, and in transmission circuits.SVV can be stacked up to 3 valves allowing for the diverting of flow 2,3 or 4 directions depending on the combination chosen.

MOUNTING: The distributor is fixed with two bolts M8. DVS valve bank can be optionally equipped with housing, containing relief valve, on the outlet end of the valve, protecting the motor or cylinder operated by the B ports against excessive pressure.

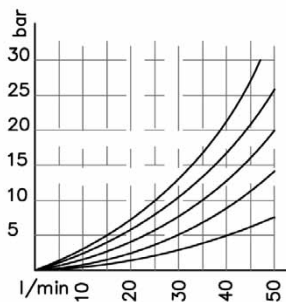
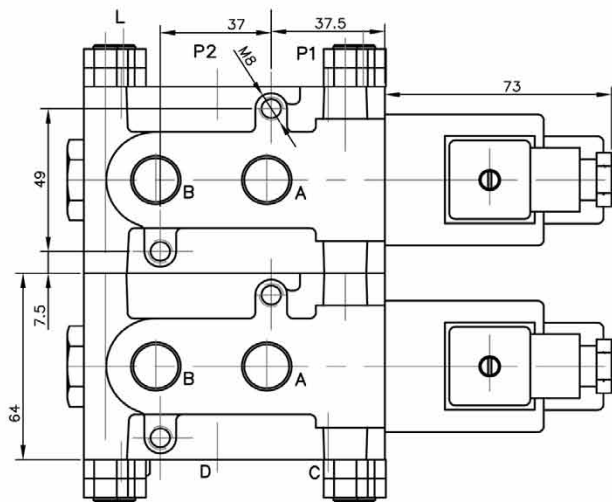
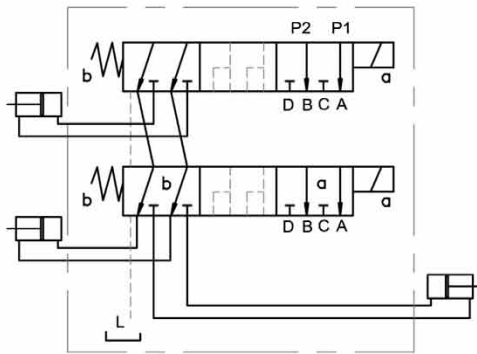


Ordering Code

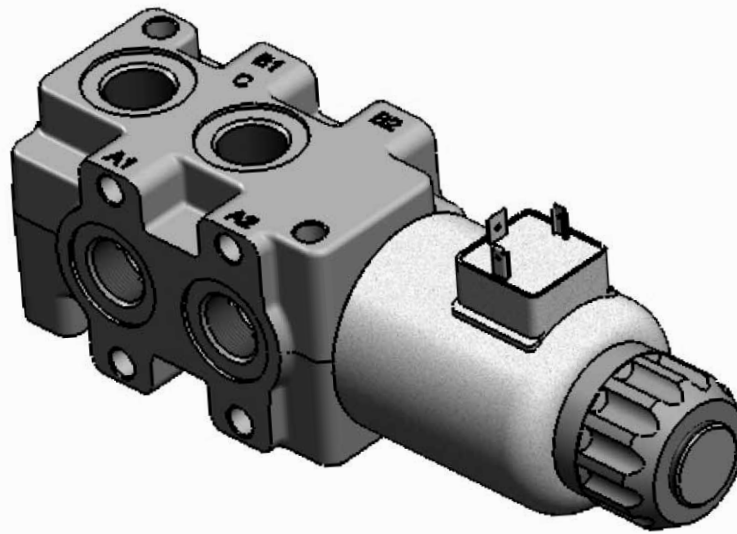
2DVS6 - 6/2 - L - 12DC - G38 - ... -



	supply voltage
code	Threaded connections
G38	P1, P2, A, B, C, D - G3/8 ; L = G1/4
M18	P1, P2, A, B, C, D - M18x1.5 ; L = M14x1.5
SAE	P1, P2, A, B, C, D - SAE3/8 ; L = SAE4



max P	with L	bar	315	supply voltage	V	12 ; 24 DC
max P	without L	bar	210	power	W	36, 29
flow rate	max	l/min	50	switching frequency	1/h	15 000
oil temperature		°C	-20+70	ambient temperature		to 50°C
viscosity		mm/s	15-380	coil temperature		to 180°C
filtration	NAS1638		9	duty cycle		100%



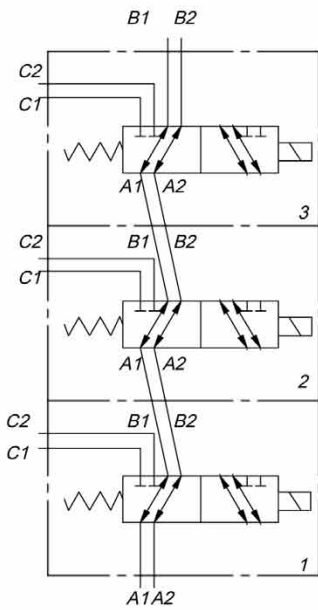
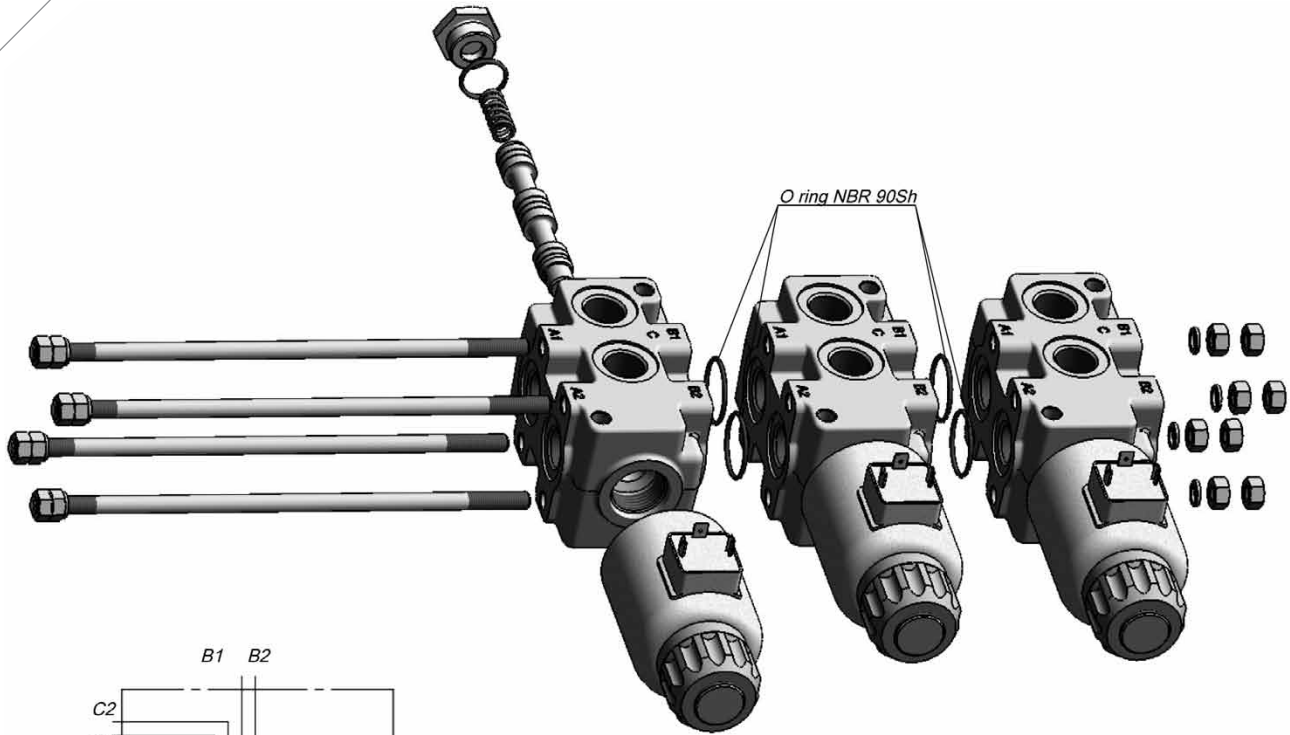
Technical parameters:

Nominal flow	90 l/min
Max operating pressure, with/without L	280 bar
Filtration	18/14 acc. to ISO4406
Hydraulic liquid	Mineral base oil
Viscosity	10-400 mm ² /s
Fluid temperature	-20C to 70C
Ambient temperatura	-30C...+50C
Supply voltaje, V	12DC/24DC
Power, W	65
Switching frequency, 1/h	15 000
Duty cycle	100%
Modification/Sections	up to 3

DESCRIPTION: SVV Selector valve has been designed to meet the demand of progressive machine manufacturers for versatile, cost effective, reliable circuit selector. The valve body is produced by cast iron EN-GJL300 alloy and it is machined using high precision, advanced, contemporary techniques. The advanced design of the valve spool ensures that fast spool switching can take place under any conditions without the use of a separate drain line.

CONSTRUCTION: SVV Selector valve stackable 6 port/2way change over valves are designed to be used when extra circuits are to be operated from one control lever on machines such as fork lift trucks, agricultural front end loader, telescopic handlers, and in transmission circuits. SVV can be stacked up to 3 valves allowing for the diverting of flow 2,3 or 4 directions depending on the combination chosen.

MOUNTING: The distributor is fixed with two bolts M8. SVV valve bank can be optionally equipped with housing, containing relief valve, on the outlet end of the valve, protecting the motor or cylinder operated by the B ports against excessive pressure.



for stacking 1-3units

Ordering code :

3 SVV 6/2 - 12DC - G -

Number of valves

Ports / switching positions

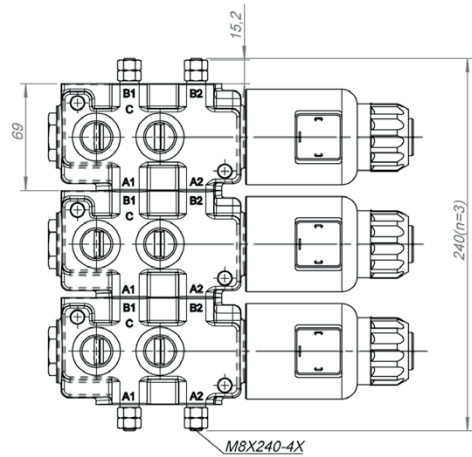
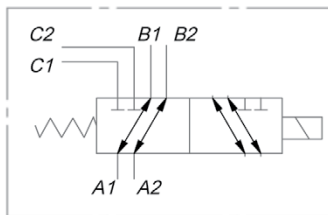
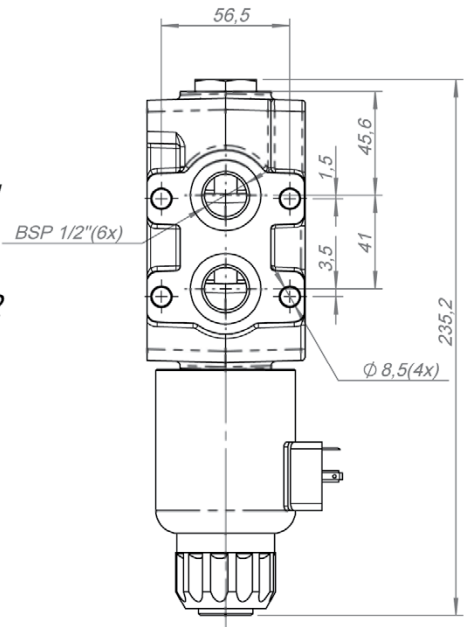
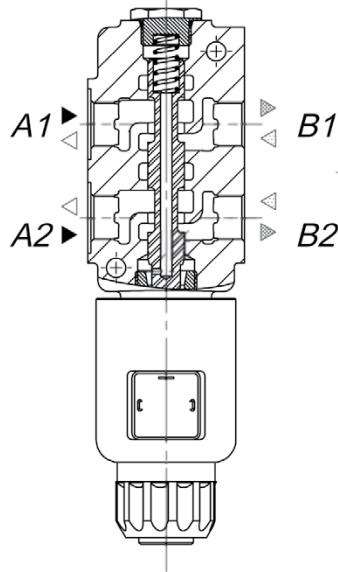
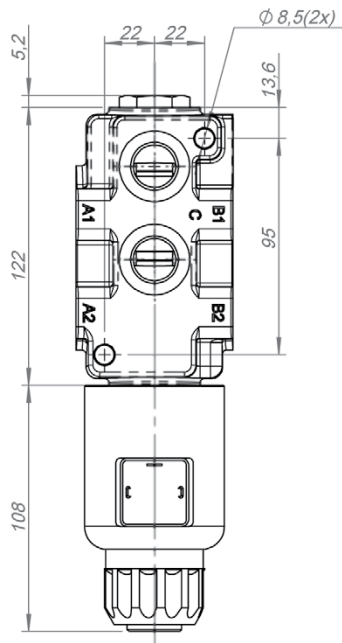
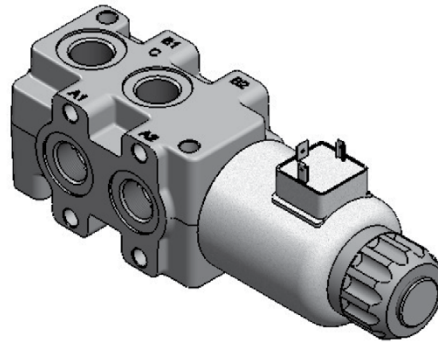
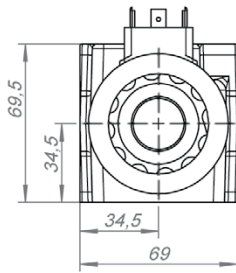
Supply voltage 12V DC / 24V DC

Threaded connections

other

code	threaded connections
G	A1, A2, B1, B2, C1, C2 -G1/2
M	A1, A2, B1, B2, C1, C2 -M18x1.5
S	A1, A2, B1, B2, C1, C2 -SAE8

flow rate	l/min	90
P	bar	250
oil temperature	°C	-20/+70
viscosity	mm ² /s	15-380
filtration		9



code	threaded connections
G	A1, A2, B1, B2, C1, C2 -G1/2
M	A1, A2, B1, B2, C1, C2 -M18x1.5
S	A1, A2, B1, B2, C1, C2 -SAE8

flow rate	l/min	90
P	bar	250
oil temperature	°C	-20/+70
viscosity	mm ² /s	15-380
filtration		9

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