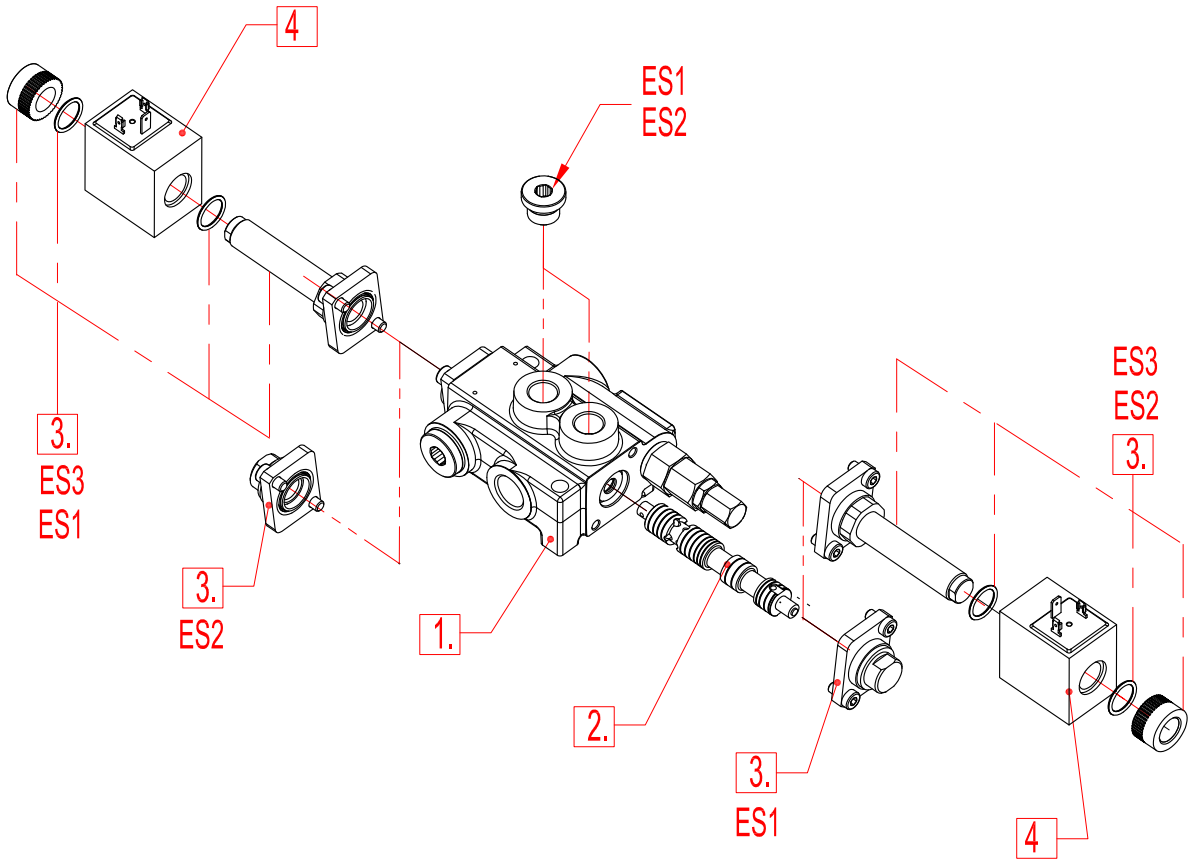
BADESTNOST AD 6200 Chirpan, Bulgaria, Tel: 00359 416 941 35, Fax: 00359 416 955 34
E –mail: badestnost@hydraulic–vlv.com www.hydraulic–vlv.com

ES ... SOLENOID DIRECT CONTROL

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

Type	Description
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 – A (B) with spring return in neutral position

4.Coils

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

5.Threads

G	P, T – G1/2; A, B – G3/8

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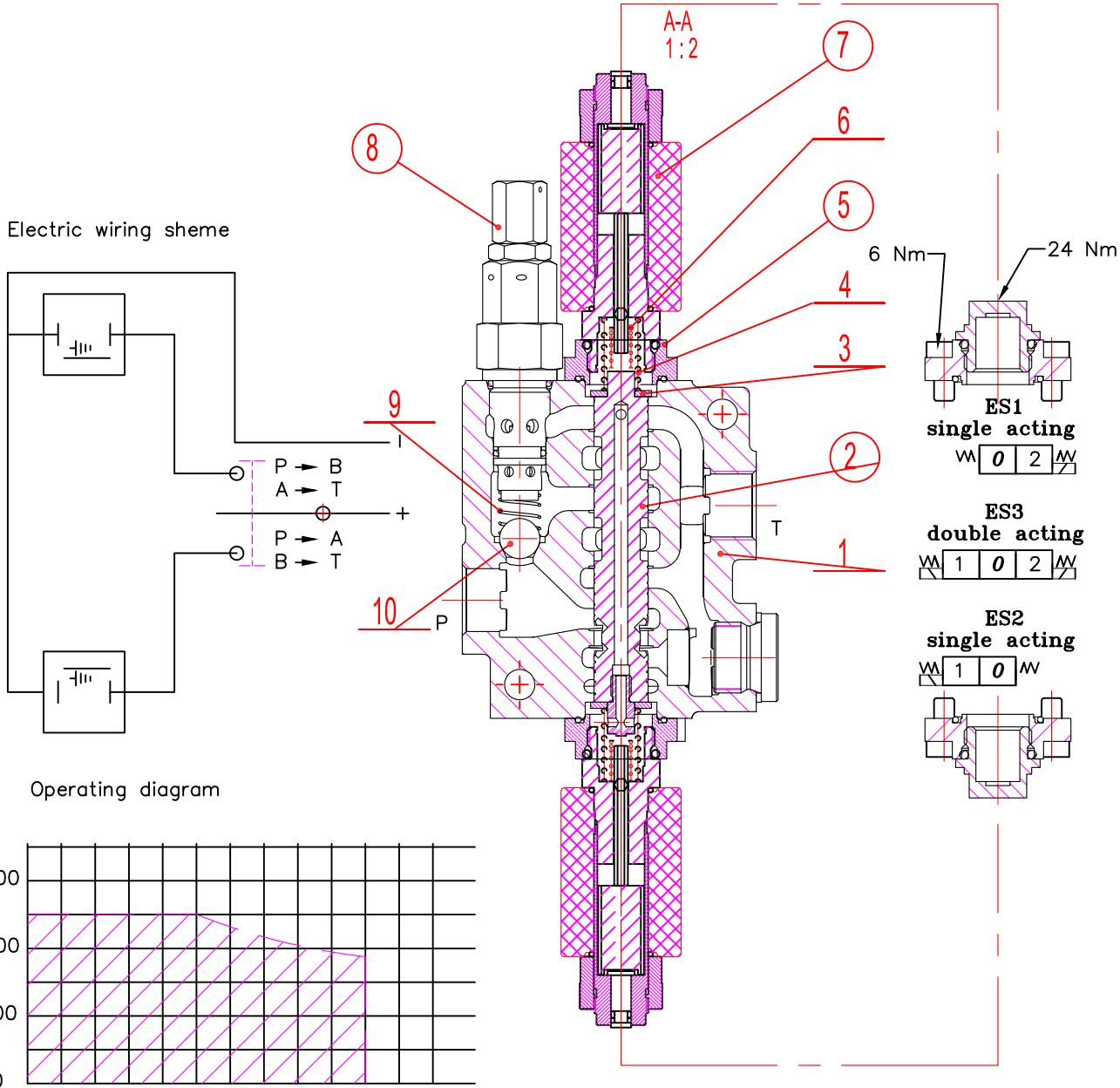


Operating features
Технические примечания

Control

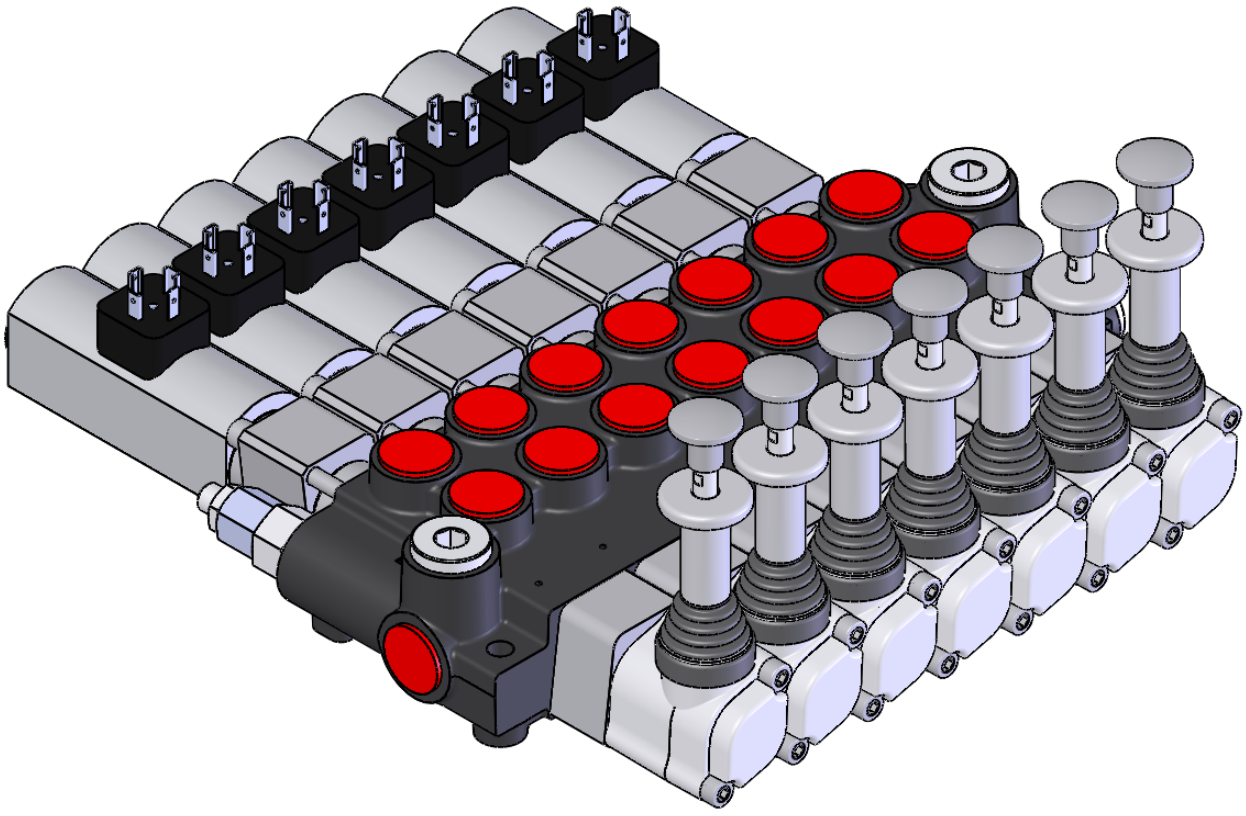
Internal leakage A(B) ► T
(p=100 bar Viscosity 35 cSt : max 18 ccm/min

Coil

Nominal voltage tolerance . . . . . ±10%
Power rating . . . . . 37 W
Coil insulance . . . . . class H
Duty cicle 100%
Connector ISO 4400
Imergency manual override

Badestnost
hydraulic components

Monoblock directional control valve - double solenoid control



Model Z50A1ESD

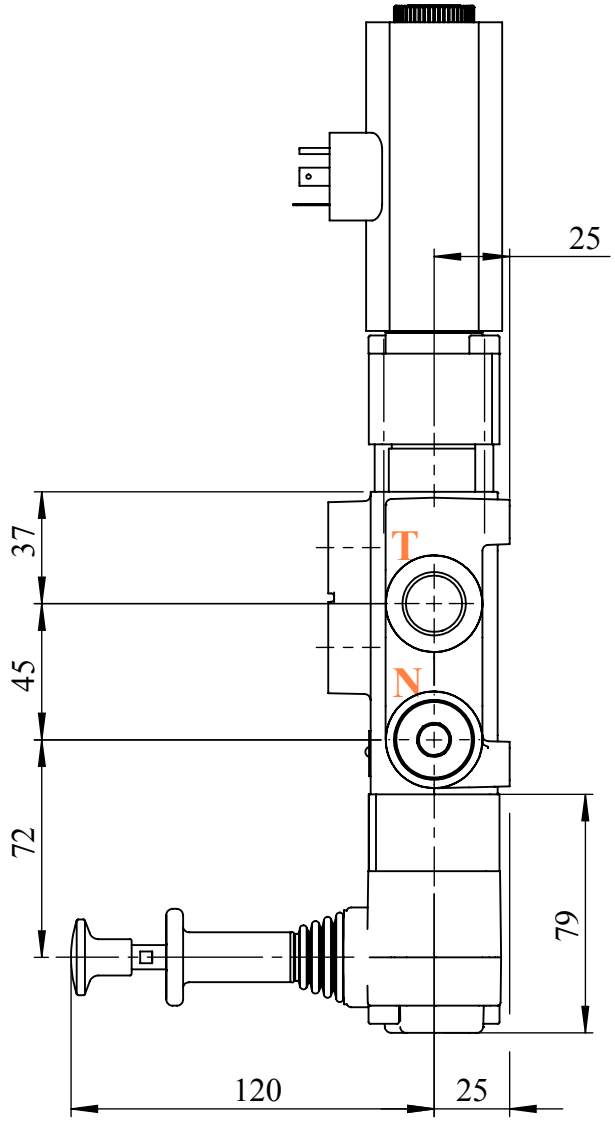
Mar 2014

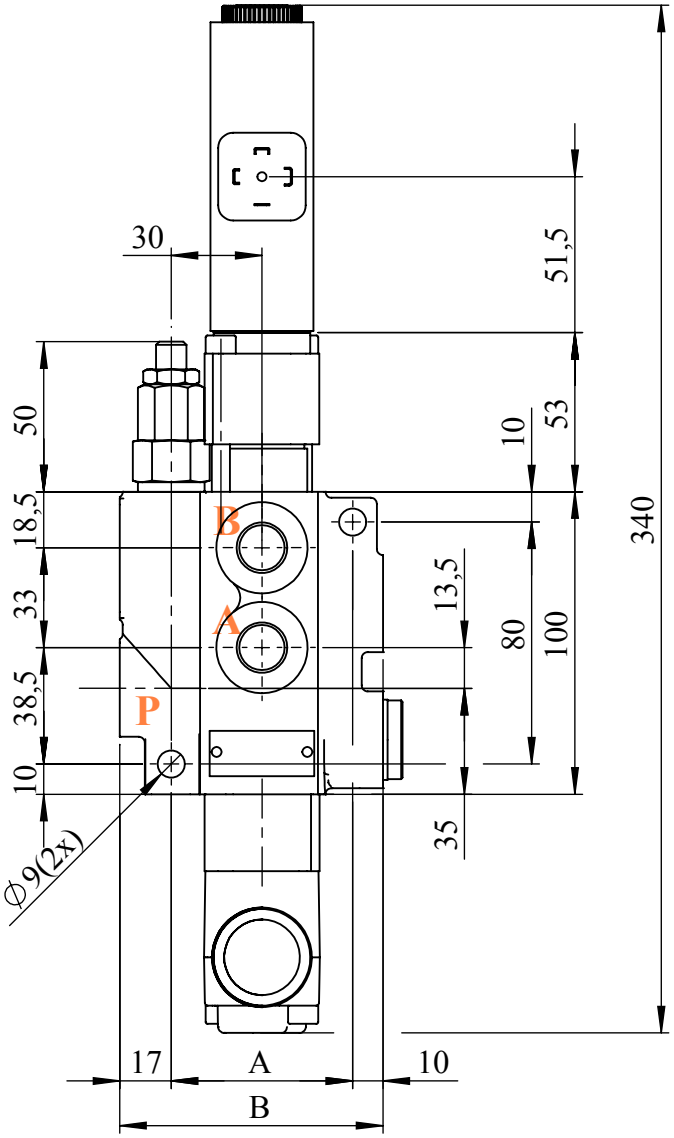
Z50A1ESD is the new generation of our monoblock directional control valves - solenoid operated Z50ES and also offers perfect choice whether you are designing a new system or just simply trying to get more out of your current system. With two special spools and option of having 7 spool valve body configuration these valves can meet the specific needs of your application. Its new feature is that the control is achieved by double solenoid with spring return to neutral position, available with emergency manual override. Due to it's relation to the eariler Z50ES the bodies are interchangeble requiring only spool seals change.

Standard features

- Hydraulically balanced, hard chrome plated spool
- Fitted with main pressure relief valve and a load check valve
- Lever system which can be installed both up and down
- Flow capacity of 50 l/min
- In neutral position both work ports are blocked and the pump unloads to tank

Max. flow		50 l/min	*13.2 gpm*
Operating pressure (max.)	at port P at work ports A and B	250 bar 300 bar	*3600 psi* *4300 psi*
Back pressure (max.)	outlet port T	20 bar	*150 psi*
Internal leakage (standard) A(B)> T	p = 100 bar	18 cm^3 /min	*1,1 in^3/min*
Fluid		Mineral base oil	
Fluid temperature	with NRB (BUNA-N) seals	from -20°C to 80°C	*from -4°F to 176°F*
Viscosity	operating range	from 15 to 75 mm^2/s	*from 15 to 75cSt*
	min.	12 mm^2/s	*12 cSt*
	max.	400 mm^2/s	*400 cSt*
Max. contamination level		-/19/16 – ISO 4406	*NAS 1638 – class 10*
Ambient temperature for working conditions		from -40°C to 60°C	*from -40°F to 140°F*
Spool stroke		3,2 mm	*0,12 in*
Actuating force		<100 N	*<25 lbs*

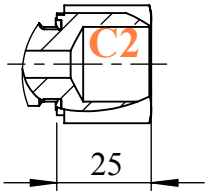




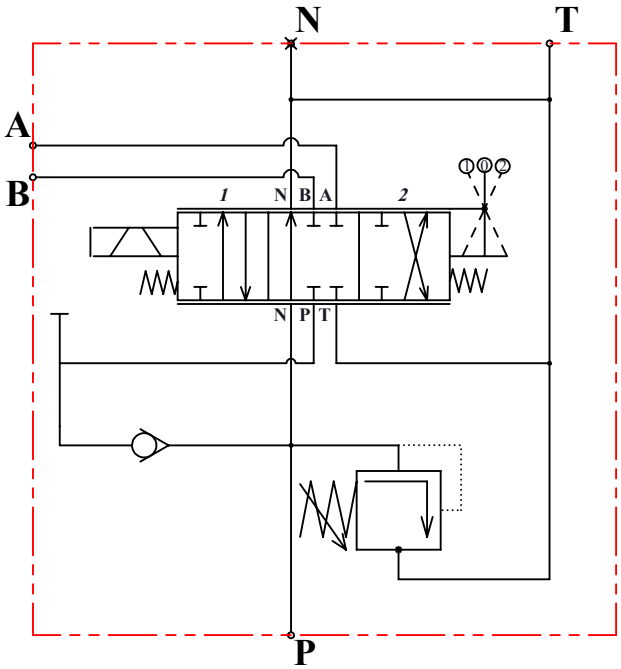
	A	B
Z50 A1ESD	60	85
02Z50 A1ESD	97	129
03Z50 A1ESD	132	164
04Z50 A1ESD	167	199
05Z50 A1ESD	202	234
06Z50 A1ESD	237	269
07Z50 A1ESD	272	304

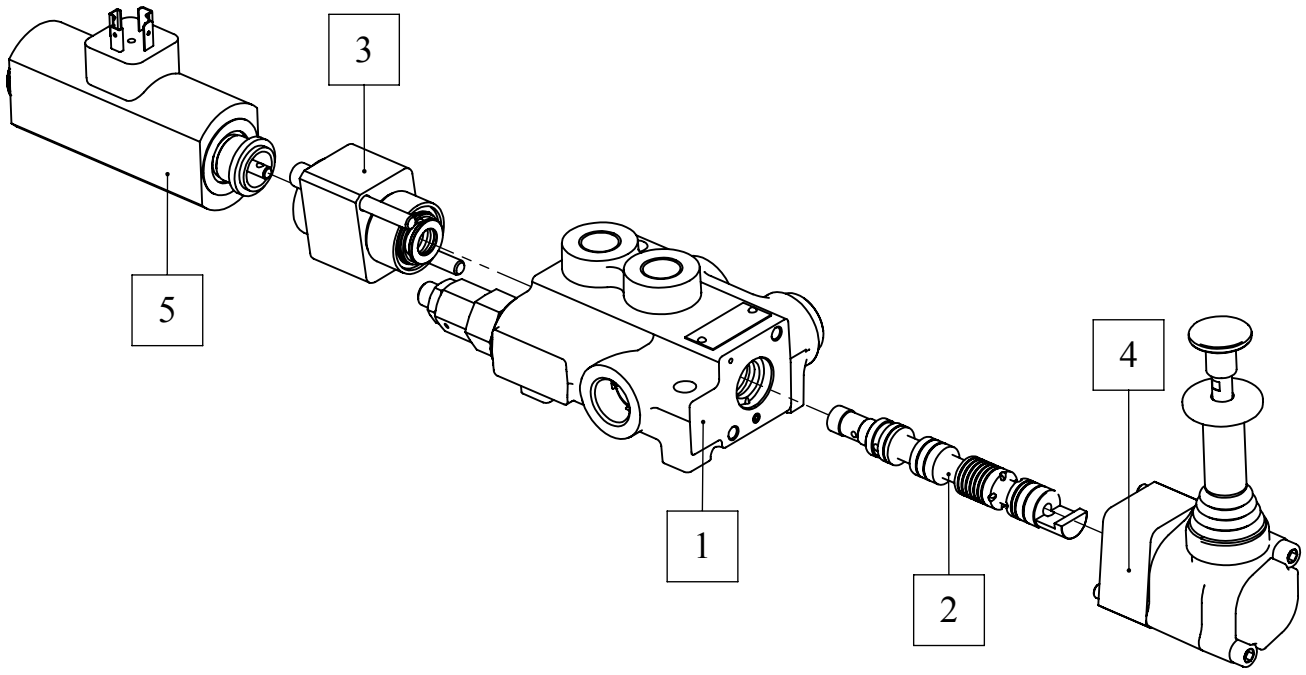
*Spool to spool distance - 35 mm

Possible placement of a carry-over at N



Hydraulic scheme of 1Z50A1ESD K1





Description example:

Z50 / A / 1ESD K1 / G1/2-24VDC

5	Solenoid (12 VDC or 24 VDC)
	Thread type (G1, G2, S, M1, M2)
4	Lever system (Options - "K1" or "-" (endcap))
3	Connection kit with spring return in neutral position
2	Spool type (Spool options - "A" or "D")
1	Valve body (1 to 7 sections)

Availabe threads for that valve:

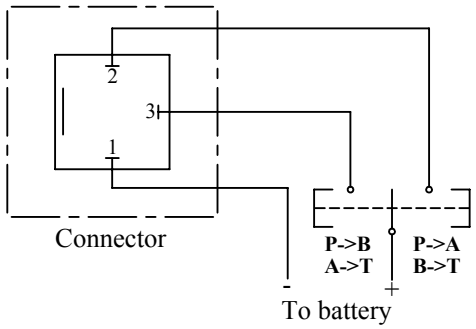
BSP (order code G1/2)	
Working ports A, B:	G 1/2
Inlet port P:	G 1/2
Outlet port T:	G 1/2
Port N:	G 1/2

METRIC (order code M)	
Working ports A, B:	M18x1.5
Inlet port P:	M22x1.5
Outlet port T:	M22x1.5
Port N:	M22x1.5

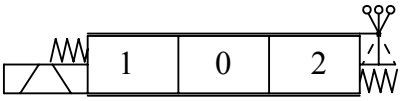
UN-UNF (order code S)	
Working ports A, B:	3/4-16UNF
Inlet port P:	7/8-14UNF
Outlet port T:	7/8-14UNF
Port N:	7/8-14UNF

BSP (order code G)	
Working ports A, B:	G 3/8
Inlet port P:	G 1/2
Outlet port T:	G 1/2
Port N:	G 1/2

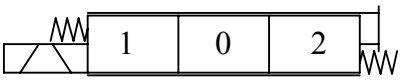
Electric wiring example



1ESD K1 kit



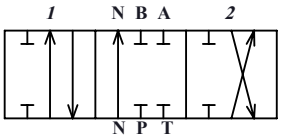
1ESD - (end cap)



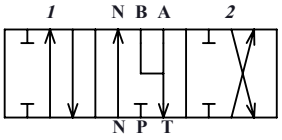
Operating features

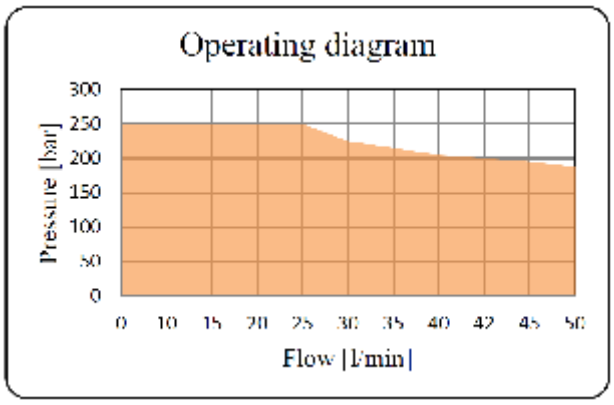
CONTROL
Internal Leakage A(B)->T
(△p=100 bar - 1450 psi / T = 40 °C) : max 25 ccm/min - 1.1 cin/min
COIL
Nominal voltage tolerance.....: ±10 %
Power rating.....: 53 W
Coil insulance.....: class H
Duty cycle.....: 100 %

Spool A

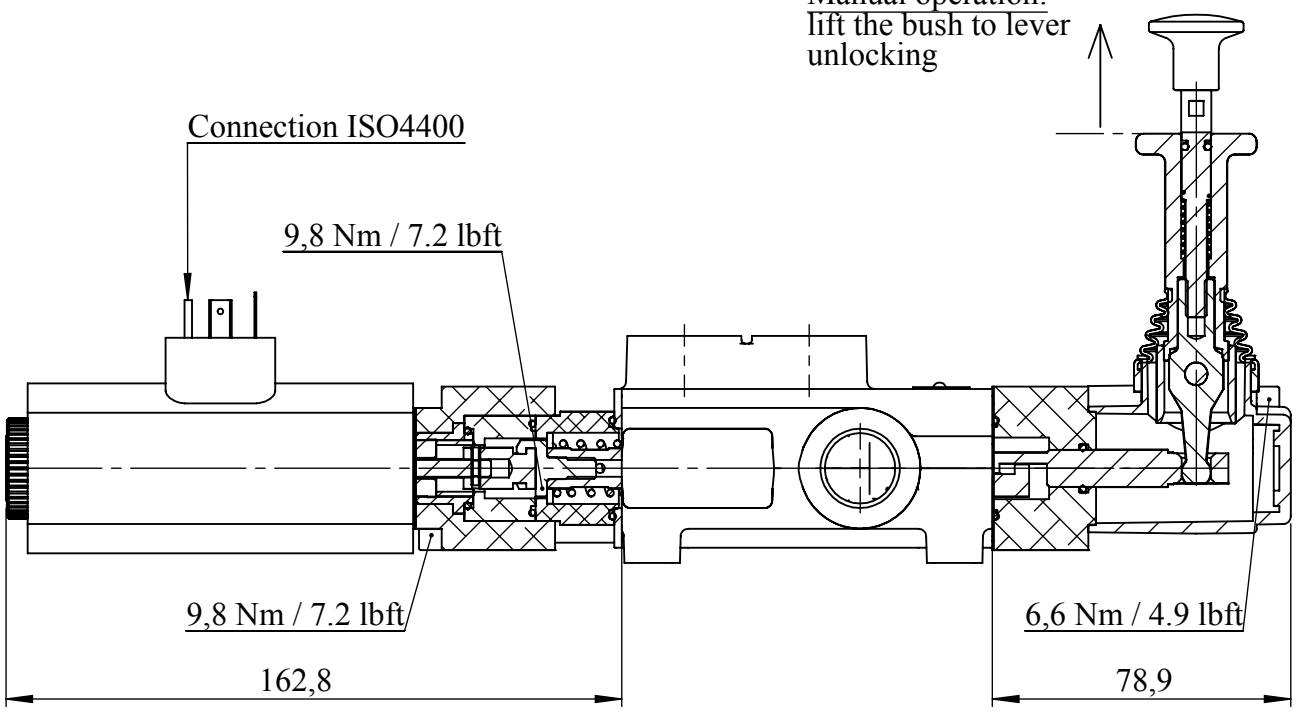


Spool D

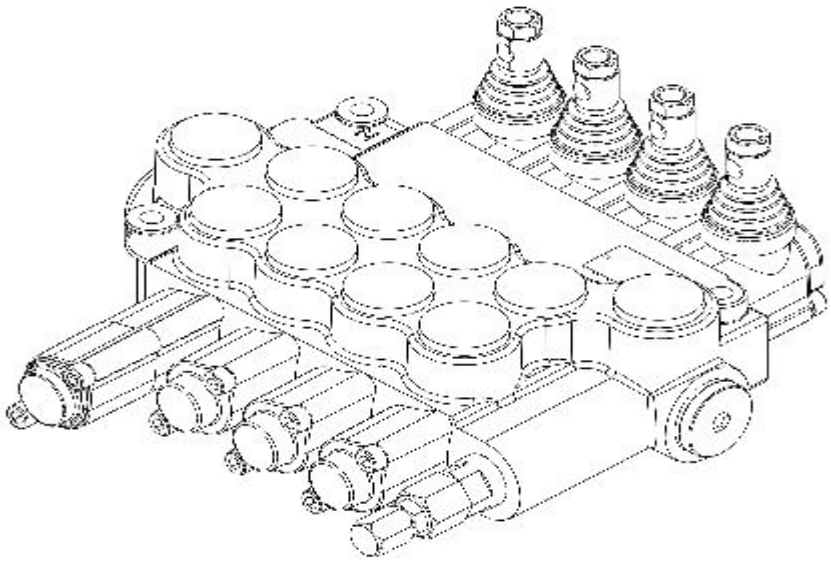




Manual operation:
lift the bush to lever unlocking



HYDRAULIC DIRECTIONAL CONTROL VALVES
РАСПРЕДЕЛИТЕЛИ ГИДРАВЛИЧЕСКИЕ



Description
Назначение и область применения
For starting, controlling and stopping the working fluid between the generator of pressured flow, the consumers ai the Tank.Предназначен для изменения направления потока, ограничения давления рабочей жидкости гидролиниях, разгрузки насоса в нейтральной позиции золотников.

Specifications
Основные показатели:

1.Valve monoblock Конструктивное выполнение	моноблок
2.Mounting Крепление	3 bolts M8
3.Pressure connections Присоединительные отверстия	internal thread внутренние резби
4.Ambient temperature Температура воздуха	-40C…+60C
5.Pressure medium Рабочая жидкость	mineral oil based hydraulic oil
6.Viskosity Кинематическая вязкость	12…800 mm²/s permissible range 20…100 mm²/s recommended range
7.Fluid temperature	- 15C…+80C
8.Filtration	Oil contamination 10 to NAS1638
9. Max. operating pressure Давление max. bar	P = 250 bar T = 50 bar A, B = 300 bar
10.Leakage Внутренние потери (A, B – T)	18 cm³/min at 120 bar
11.Nominal flow Разход рабочей жидкости	80 l/min (see “operating” diagram)
12.Spool stroke Ход золотника	± 7 mm
13.Actuating force	< 220 N in spool axis direction

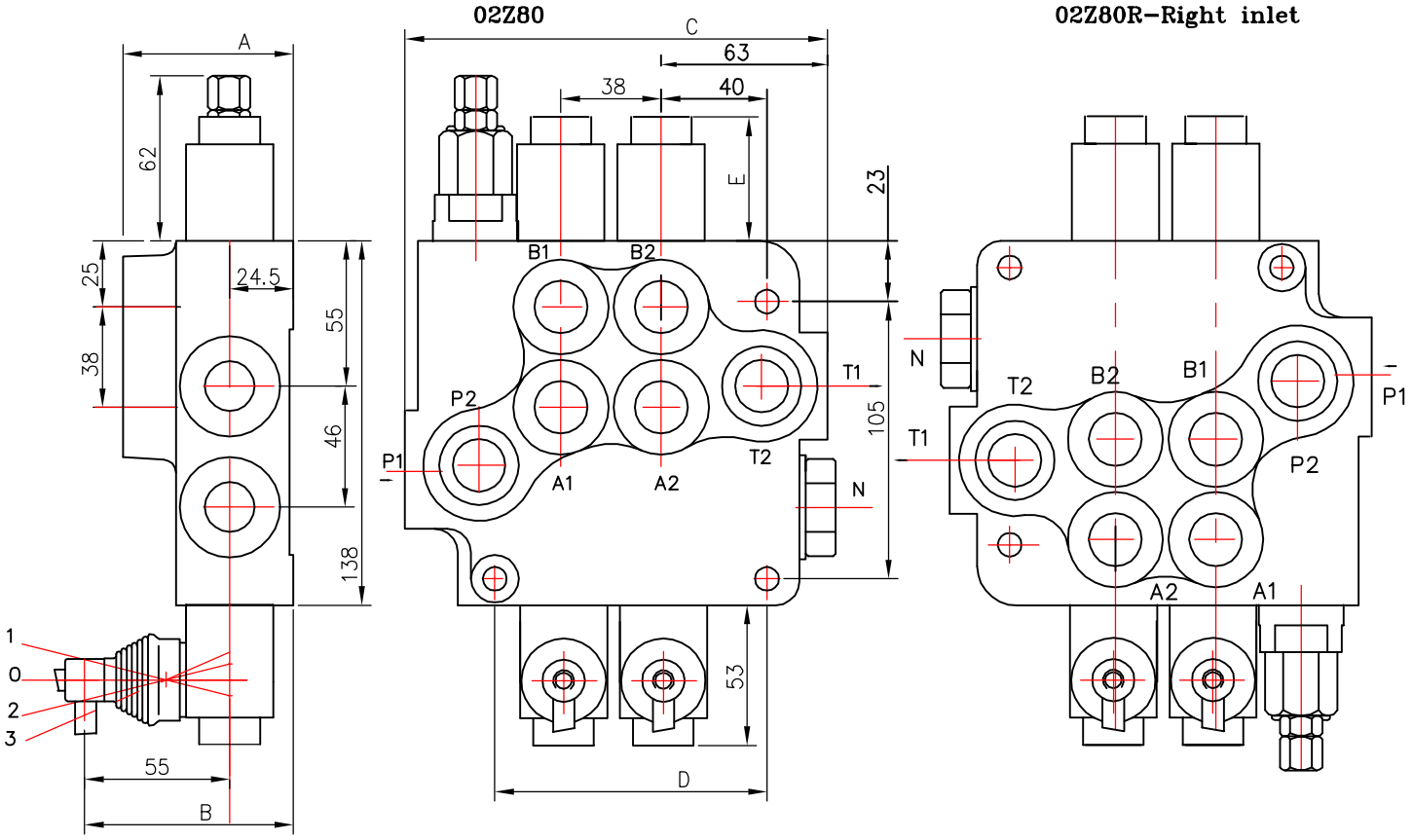


Table 1

	A	B	C	D	P1	P2	T1	T2
01Z80	67	80	122	65	*	*	–	–
02Z80	67	80	160	103	*	*	*	*
03Z80	67	80	198	141	*	*	*	*
04Z80	67	80	236	179	*	*	*	*
05Z80	67	80	274	217	*	*	*	*
06Z80	67	80	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	2	Z80	R	A	1	A	1	G	KZ1	T	P	E	C2	11
block with common check valve распределитель с общим клапаном	number of spools количество золотников	directional control valve type ... распределитель типа ...	inlet high pressure – right вход давления с правой стороны	first spool distribution type характеристика первого золотника	spool control/detend and ets./ контрол золотника/фиксации и другие/	second spool distribution type вид второго золотника	spool control/detend and estr./ контрол золотника/фиксации и другие/	ports /treads/ резбовие отверстия	general operation feature вид ручного управления	with "teton" исполнение ручного управления с "метон"	operation feature /pneumatic, .../ другое управление	with electric switsh с електическим виключателем	high pressure carry over продолжител потока високого давления	connection ports in use присоединительные отверстия

way of distribution – parallel; распределение – паралелное

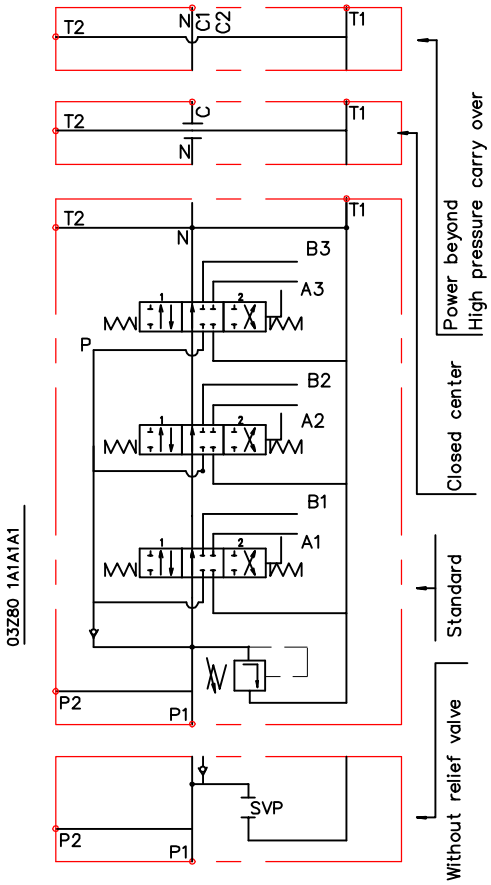
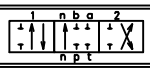
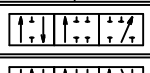


Table 3

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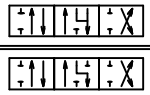
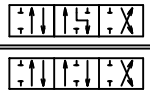
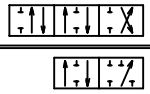
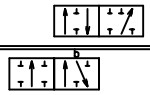
D	
E	
F	
G	
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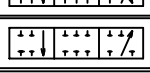
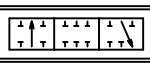
M	
N	
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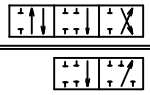
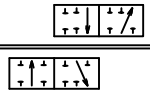
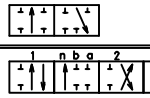
P	
Q	
R	
S	
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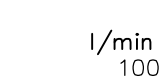
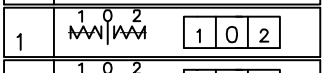
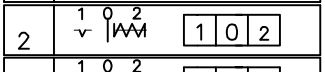
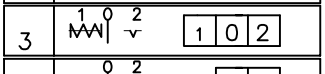
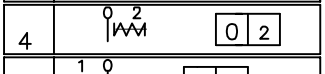
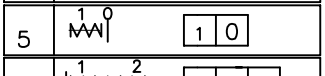
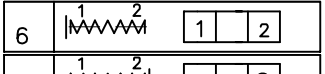
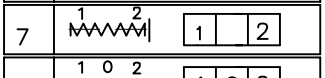
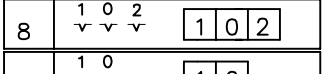
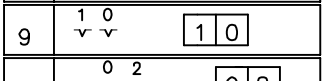
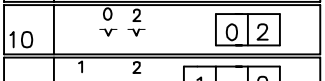
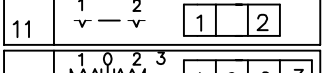
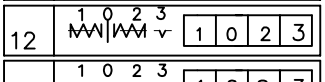
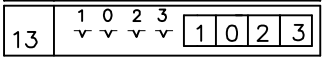
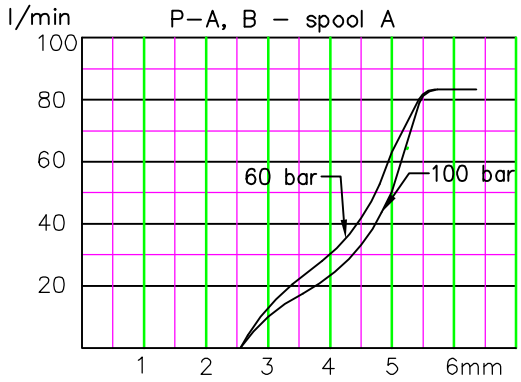
L	

Table 4

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



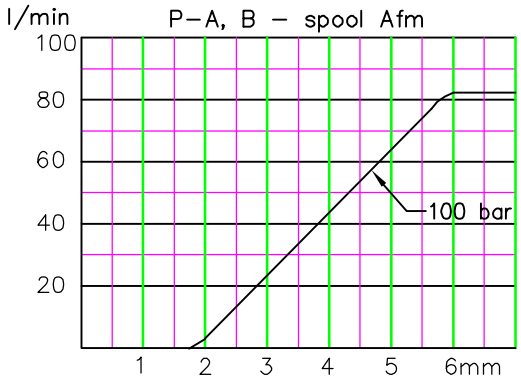


Table 5

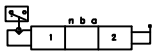
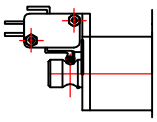
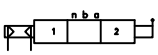
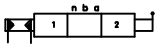
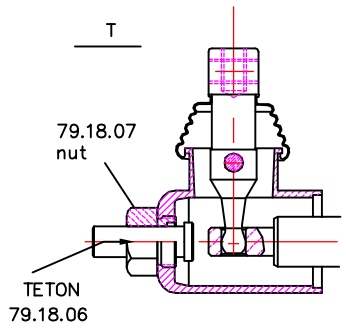
code	с микро шалтер ; incorporated microswitch	
E		mikroswitch type Omron–V 165 I C5 

Table 6

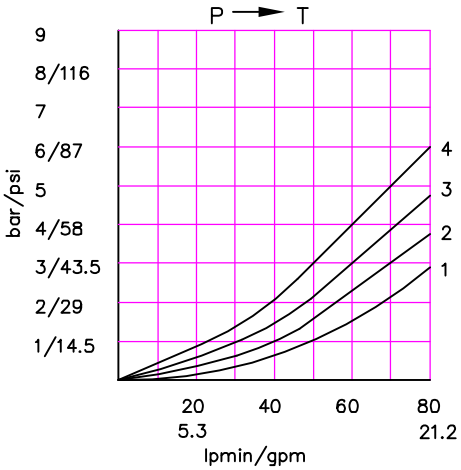
code	другое управление ; operation feature	
P		пневматическое on–off pneumatic contol; 5–10 bar ; ports NPTF 1/8–27
H		гидравлическое on–off hydraulic control ; pn = 5 – 20 bar ; ports G1/4

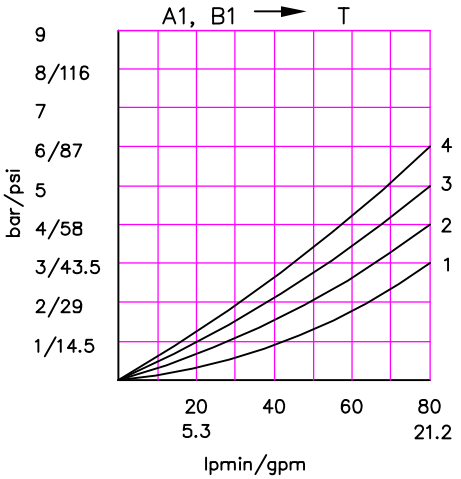


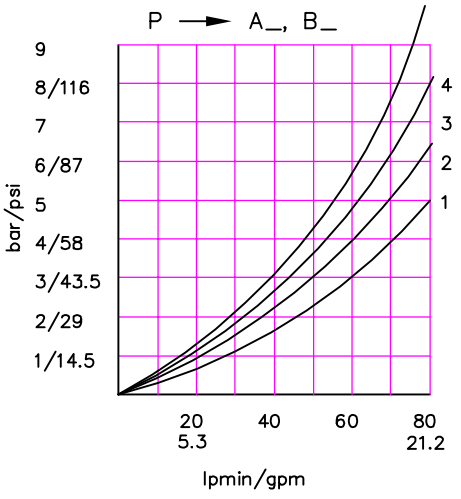
Z80 Table 7

code	ports (threads) ; присоединительные отверстия				
	P	A ; B	T	N	C2
M	M22x1.5	M22x1.5	M26x1.5	M26x1.5	M26x1.5
G	G1/2	G1/2	G3/4	G3/4	G3/4
S	7/8–14UNF	7/8–14UNF	1 1/16–14UNF	1 1/16–14UNF	1 1/16–14UNF

..Z80 directional control valve – A







kind of hand control ; вид ръчного управления Table 10

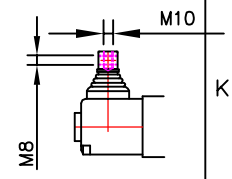
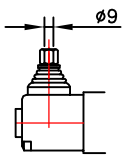
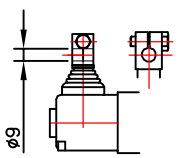
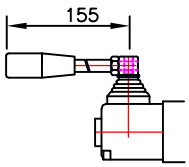
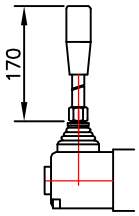
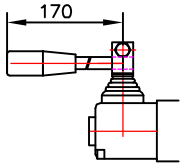
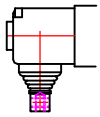
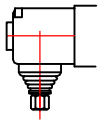
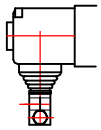
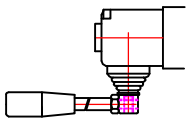
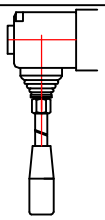
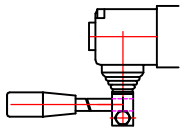
code	ескиз feature	code	ескиз feature	code	ескиз feature
KZ		KY		KI	
KZ1		KY1		KI1	
KZ0		KY0		KI0	
KZ01		KY01		KI01	
_	without hand control ; без ричажная система управления				

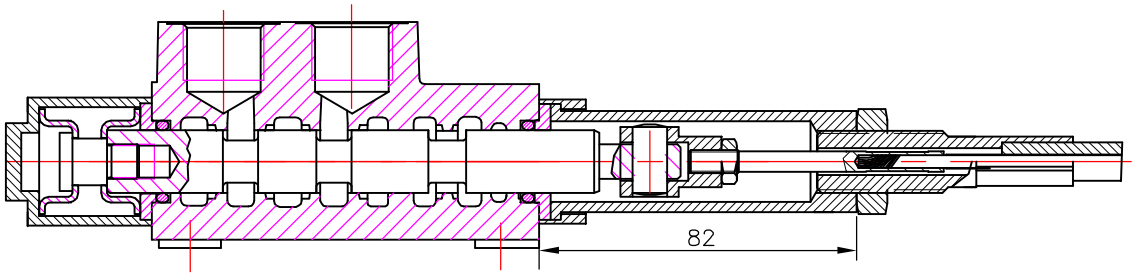
Table 11

code	вид продължение на дебита
C	отвор "N" затворен closed center 
C2	отвор "N" продължава за следващ консуматор part for power beyond sleeve(carry over) 
_	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

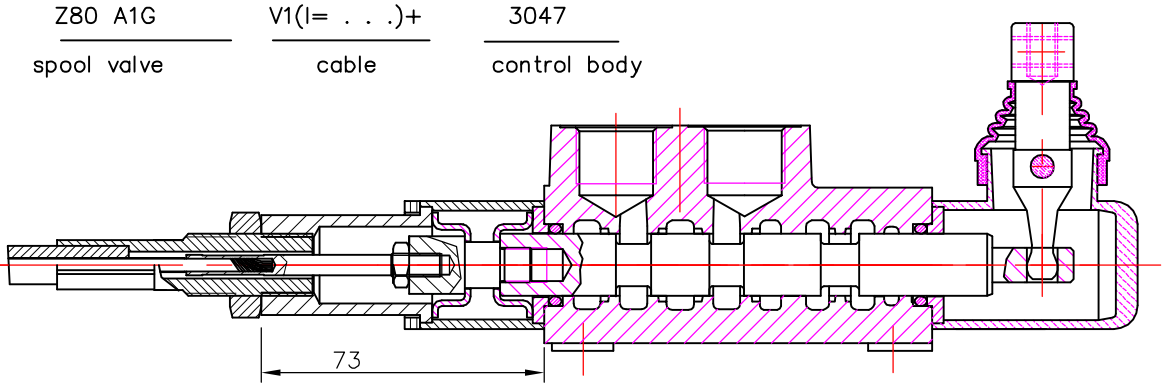
Table 12

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

REMOTE CONTROL
Управление тросом



Z80 A1G — spool valve
V1(l= . . .)+ — cable
3047 — control body

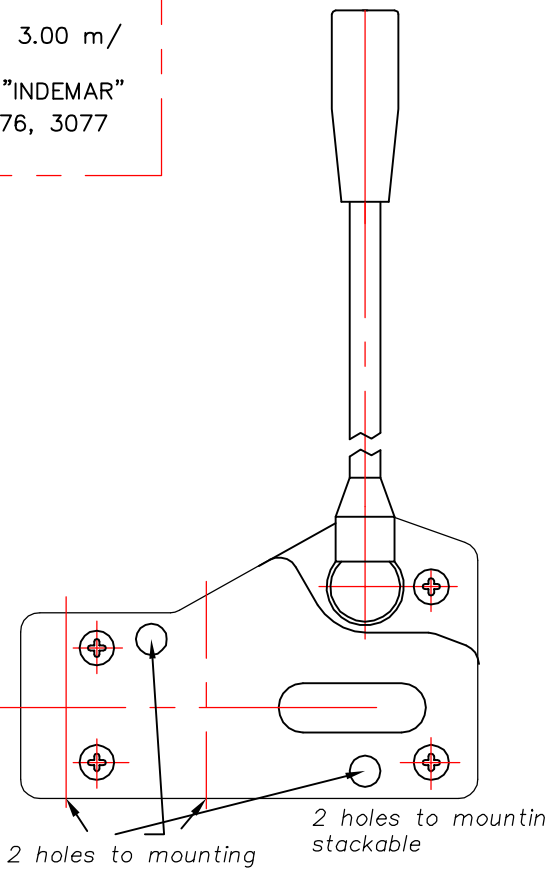


Z80 A1G — spool valve
V2KZ1(l= . . .)+ — cable
3047 — control body

Cable "INDEMAR" Cod. IT 3056 /l=1.00; 1.50; 2.00; 2.50; 3.00 m/

+control body "INDEMAR"
code 3047, 3076, 3077

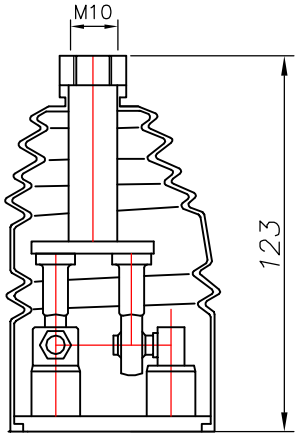
Technical specifications			
	3047	3076	3077
Stroke	13+13 mm	13+13 mm	13+13 mm
Max. load	45 kg	45 kg	45 kg
Level ratio	10:1	10:1	10:1
Lock in neutral	No	No	Yes
Antireverse lock	No	Yes	No
Body colour	Black	Black	Black
Cables type	Heavy Duty	Heavy Duty	Heavy Duty
Operating temperature	–40/+80C	–40/+80C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

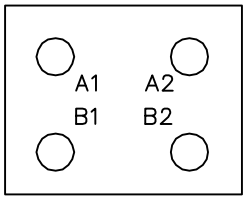


High solidity controls for easy mounting on every type of distributor.They can by mounted stand alone or packed together.
They use push–pull heavy duty cables that provide a positive smooth operating lever and are manifactured in a three differents models to meet different needs of Clients.

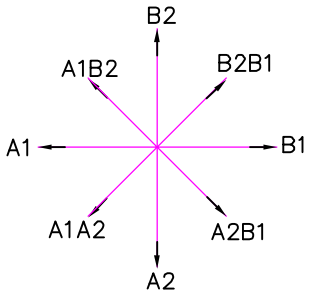
JOYSTICK "+"

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

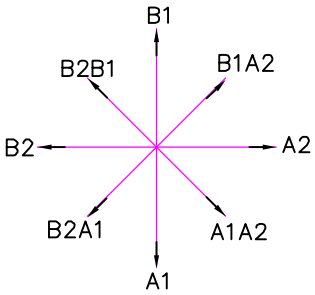




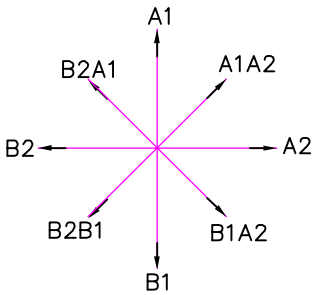
standard version 1



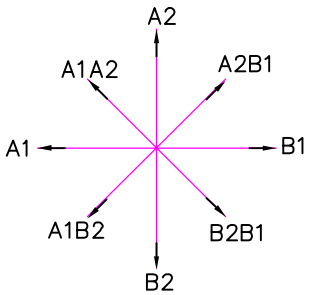
standard version 2

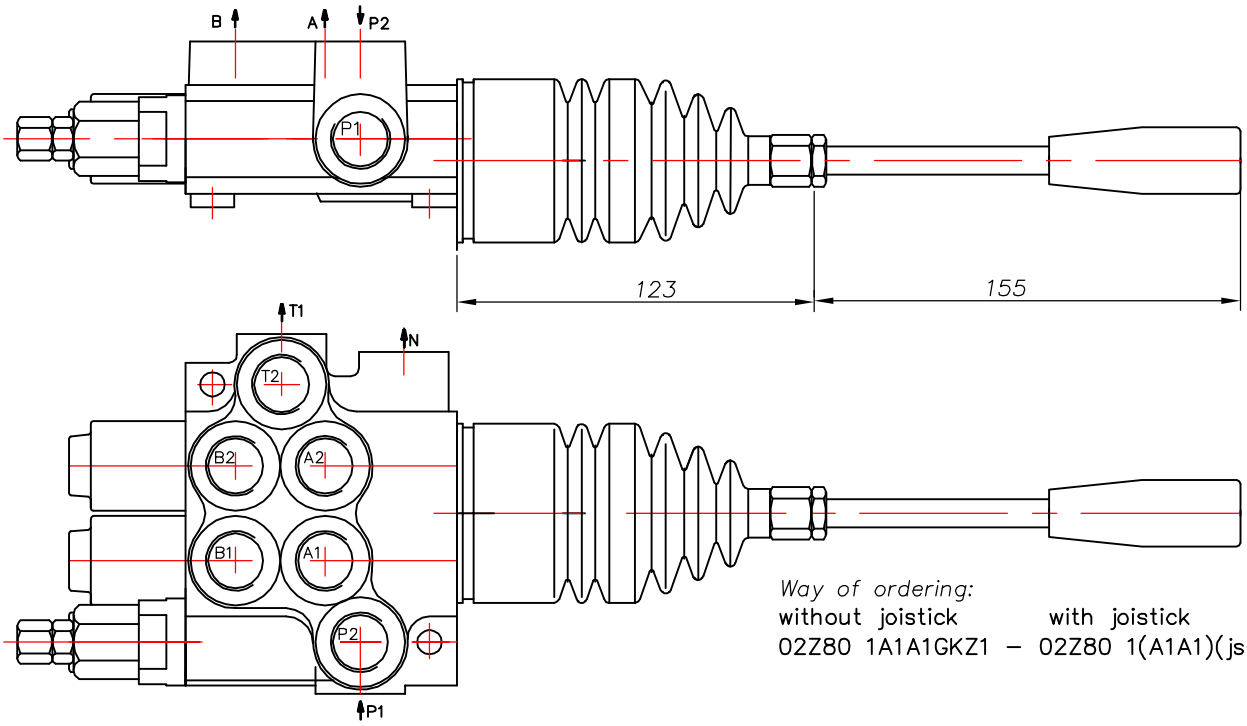


standard version 3



standard version 4

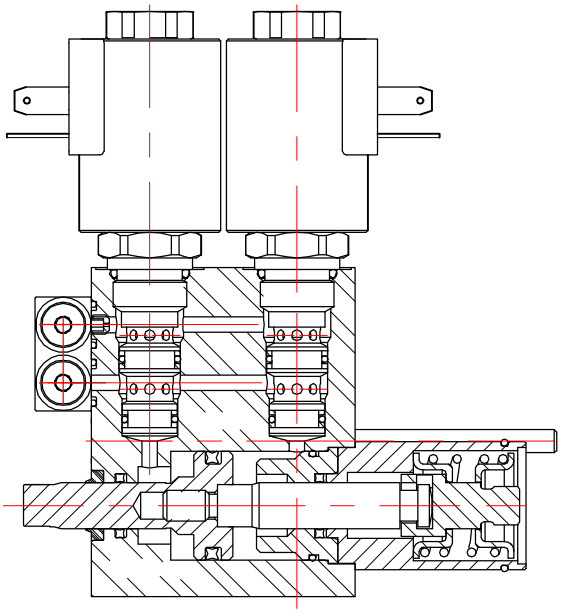


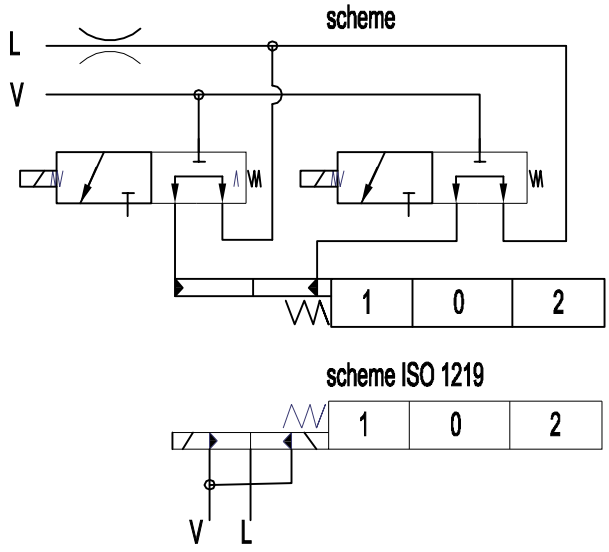


Way of ordering:
without joistick with joistick
02Z80 1A1A1GKZ1 – 02Z80 1(A1A1)(js+3)G

directional control valve ..Z80

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



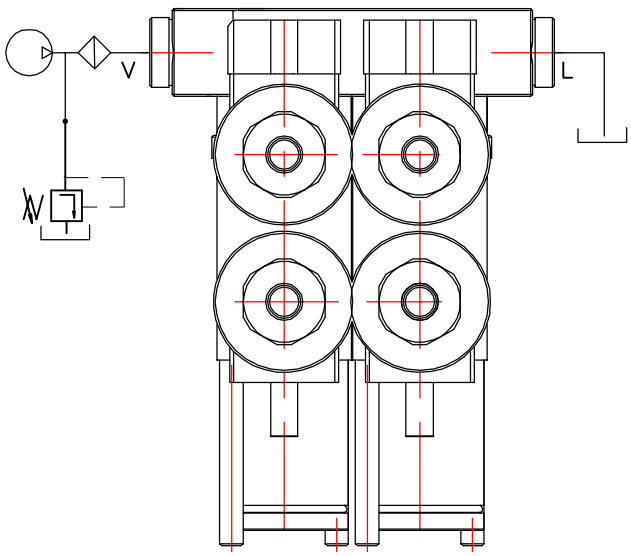


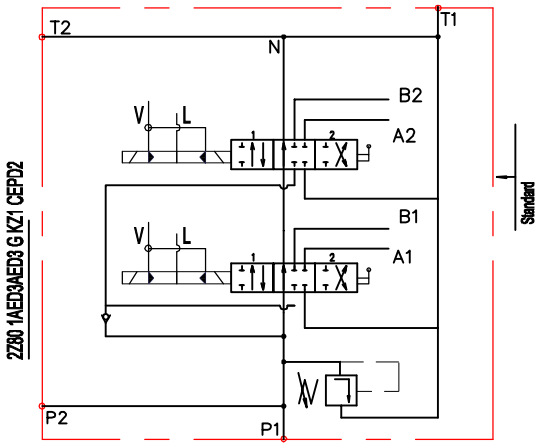
Operating pressure	min 10 bar(145 psi) max 50 bar(725 psi)
Max operating pressure in L (T line)	25 bar(360 psi)

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

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

Collector kit for external pilot and drain – CEED...(1,2,3 ...)
Коллектор для внешнего питания управления и слив





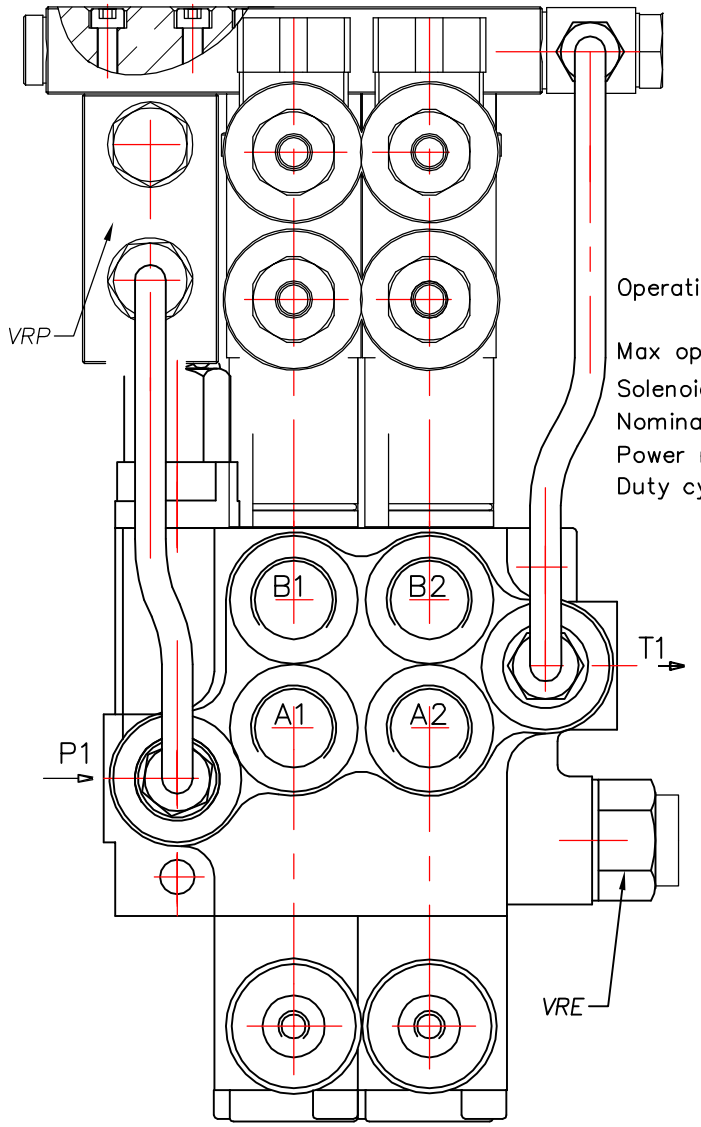
Ordering example
02Z80 1A1ED3A1ED3 G KZ1–CEED2–12VDC

Ordering codes (BSP threads)

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

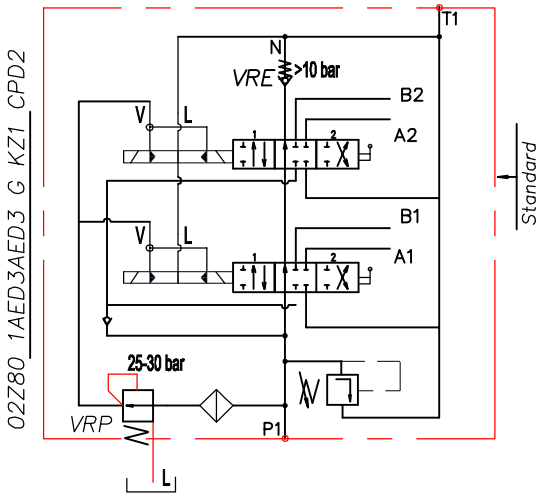
directional control valve ..Z80

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



Order codes
3–way solenoid valve–LSV2–08–3C–NNN
coil P40ED3–G–12VDC
coil P40ED3–G–24VDC

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



BSP threads

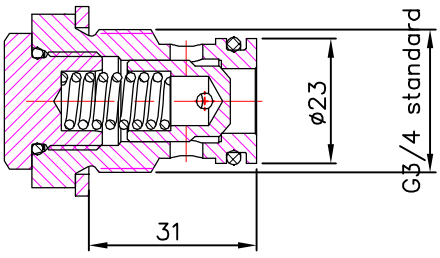
Ordering example

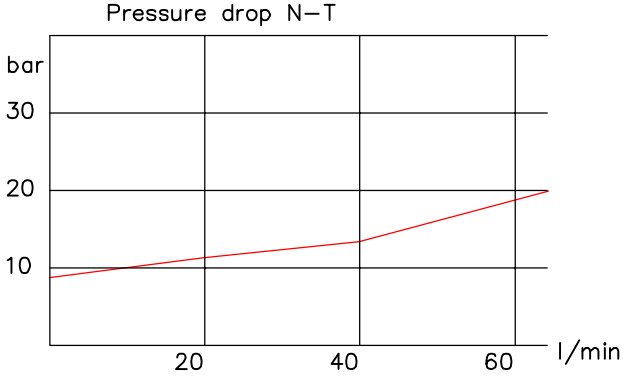
02Z80 VRP 1A1ED3A1ED3 G KZ1–CED2–VRE–12VDC

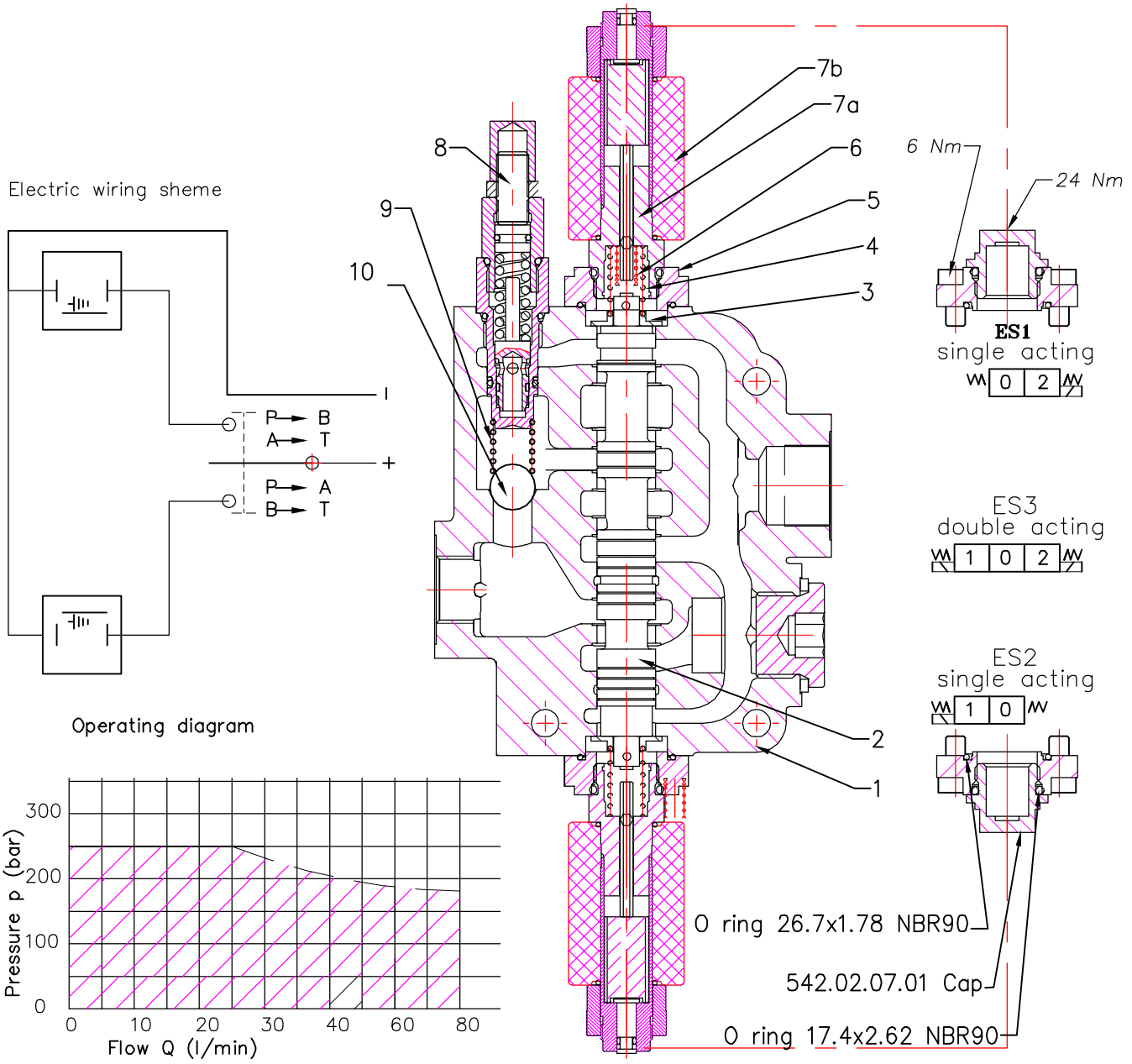
Colector kit – Ordering codes

CED1P80	Kit for 1 section
CED2P80	Kit for 2 section
CED3P80	Kit for 3 section
CED480	Kit for 4 sektion
. . . .	

Back pressure valve VRE–P80
Клапан поднора







Operating features
Технические примечания

Control

Internal leakage A(B)→ T
(p=120 bar, Viscosity=32 mm²/s : max 40 ccm/min)
Fluid temperature – –20°C(short time) ... 80°C

Max. back pressure on outlet port T – 25 bar (360psi)

Coil

Nominal voltage tolerance . . . . . ±10%
Power rating . . . . . 37 W
Coil insulance . . . . . class H
Duty cicle 100%
Connector ISO 4400
Imergency manual override

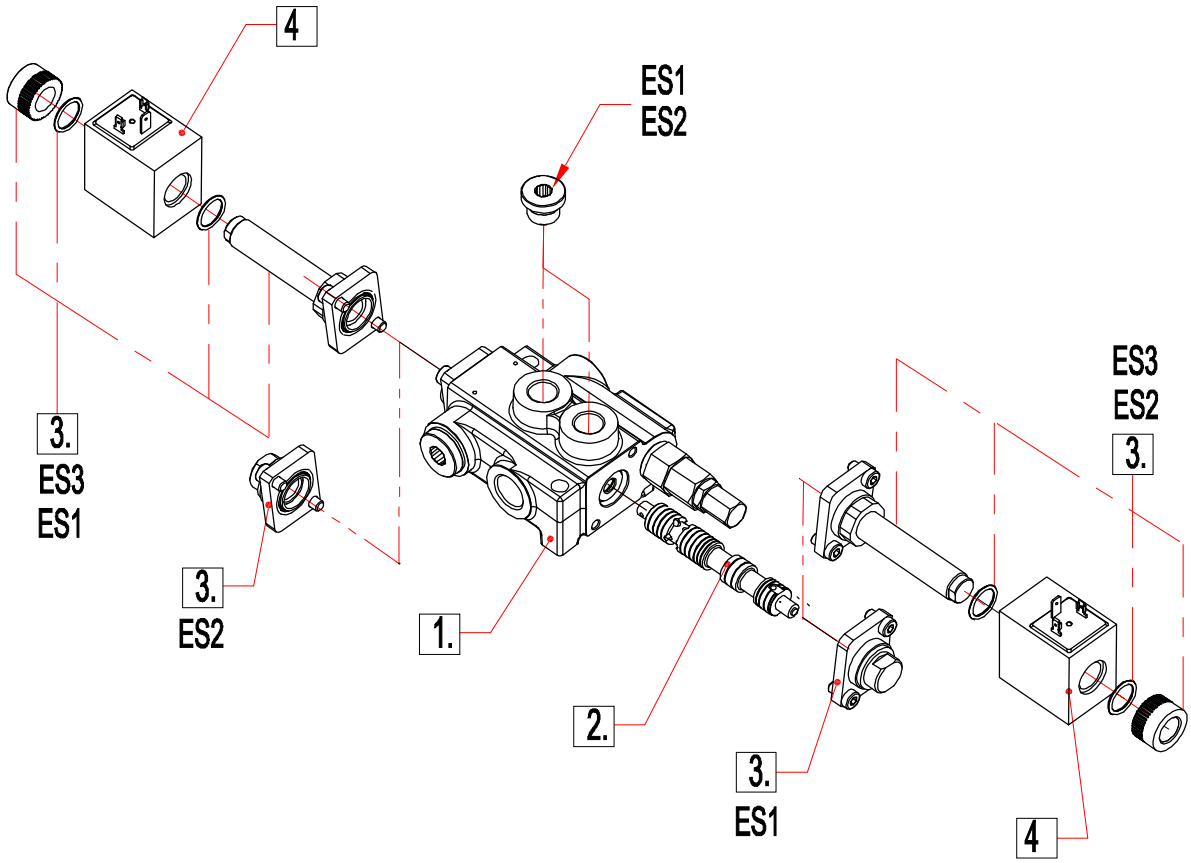
pos.	Part.No	Description	Quantity
10		Ball 14.28	1
9	123.00.47	Spring	1
8	79.04.00	Relief valve	1
7b	C35D012RC P01	Solenoid coil	2
7a	GM4060/BD	Solenoid Tube	2
6	542.02.00.07	Additional spring	2
5	511.02.02.00	Intermediate unit	2
4	542.02.00.04	Spring	2
3	511.02.00.02	Washer	2
2		Spool ...	1
1		Body ...	1

ES ... SOLENOID DIRECT CONTROL

Solenoid direct control with spring return to neutral position.
Needs special spools and special body Z80.

ORDERING EXAMPLE

Z80 A ES3 12VDC G
1 2 3 4 5



1.Body kit

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

2.Spool options

Type	Description
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 – A (B) with spring return in neutral position

4.Coils

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

5.Threads

G P, A, B – G1/2; T – G3/4

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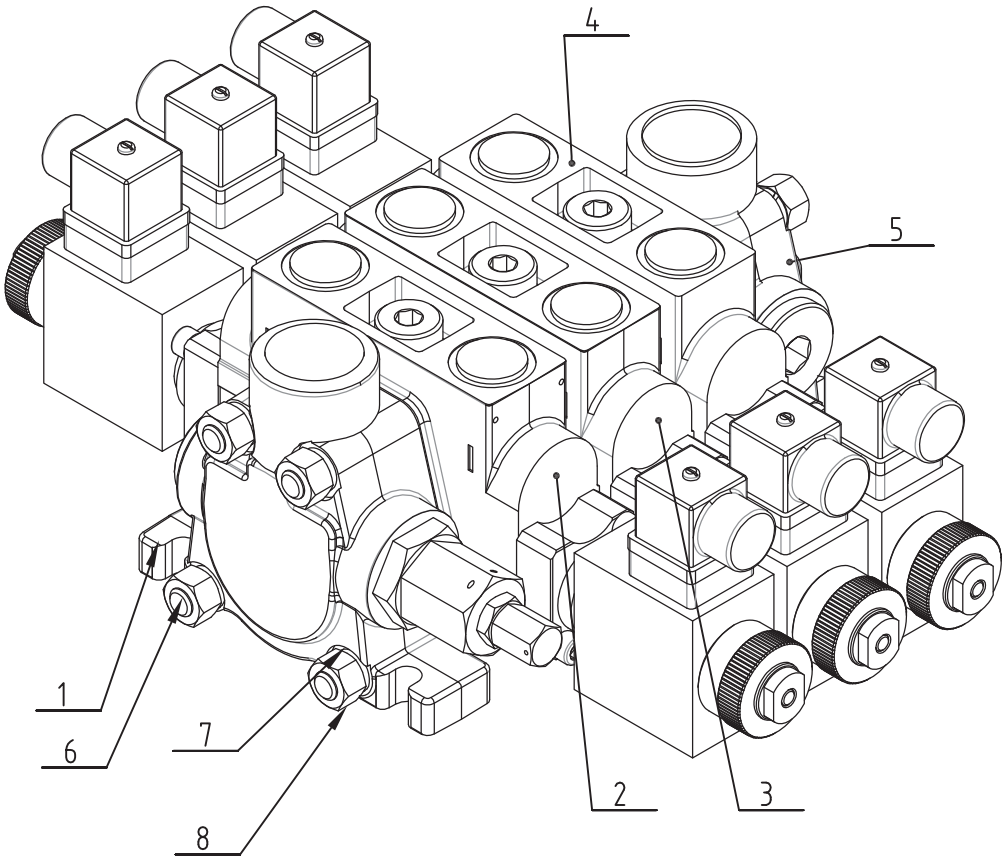
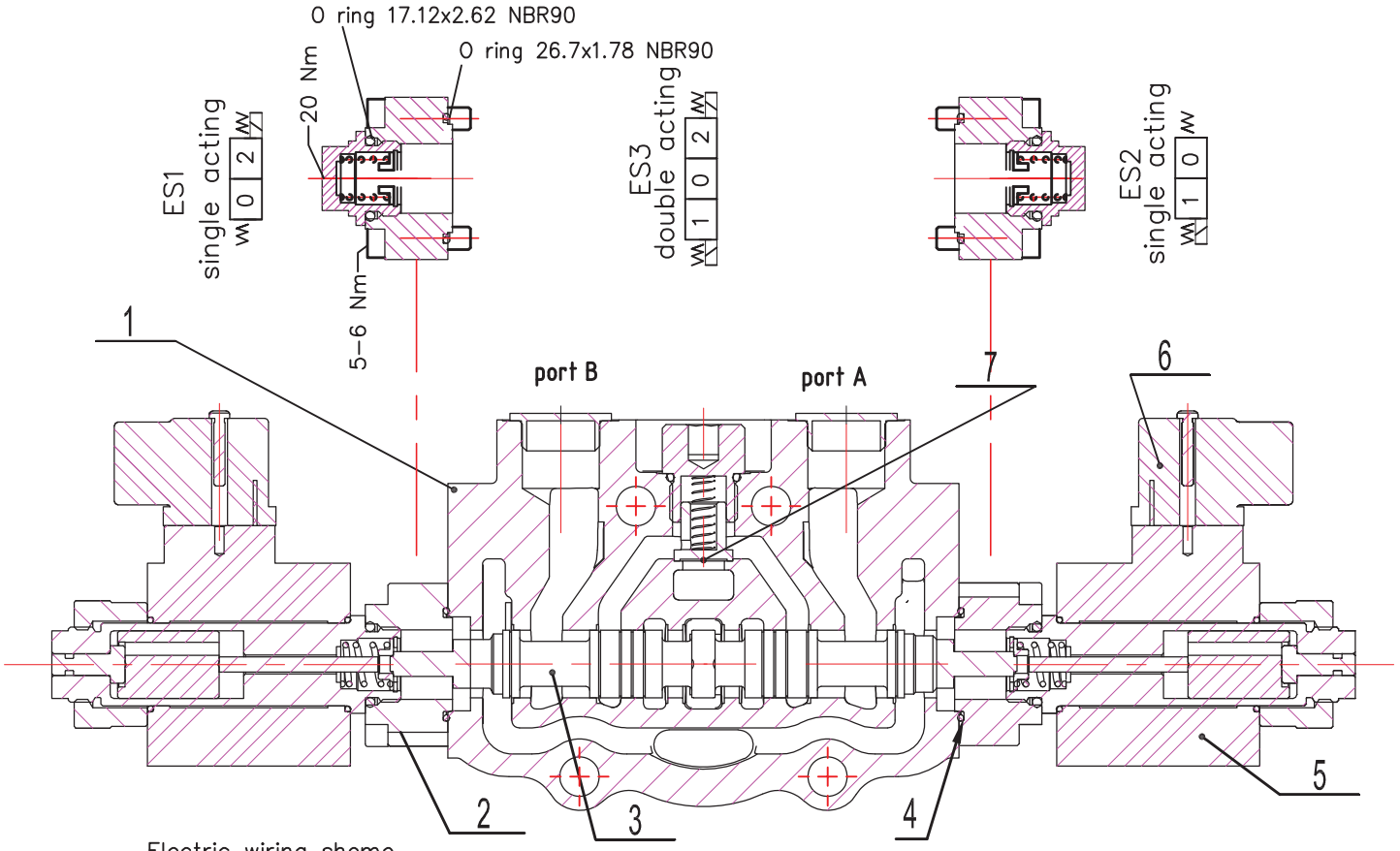
Распределитель гидравлический ZC 70
Directional control valve ZC 70

3ZC70/N2/SAES3/TAES3/PAES3/T2/M2

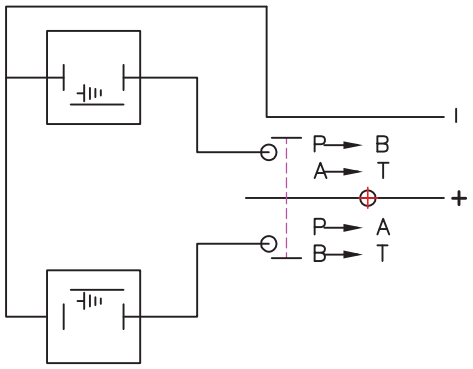


ITEM NO.	PartNo	DESCRIPTION	QTY.
1	293.00.00.00	subplate with pr. relief valve	1
2	564.02.00.00–02	dir. control valve–series–SAES3	1
3	563.02.00.00–02	dir.control valve–tandem–TAES3	1
4	562.02.00.00–04	dir.control valve–parallel–PAES3	1
5	291.00.00.00	endplate	1
6	200.00.00.01–02	tie bolts M10	4
7		spring washer M10	8
8		nut M10	8

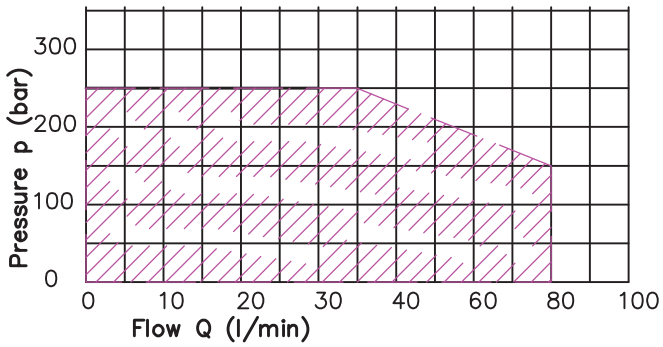
weight = 16.079 kg.



Electric wiring sheme



Operating diagram



Operating features
Технические примечания

2

Control

Internal leakage A(B)→ T
(p=120 bar, Viscosity=32 ^{o}mm ^{2}/s : 20 – 40 ^{o}Ccm/min)
Fluid temperature – –20 C(short time) ... 80 C
Max. back pressure on outlet port T – 25 bar (360psi)

Coil

Nominal voltage tolerance . . . . . ±10%
Power rating . . . . . 60 W
Coil insulance . . . . . class H
Duty cicle 100%
Connector ISO 4400
Imergency manual override

pos.	Part.No	Description	Quantity
7		Check valve	1
6	DIN 43650	connector Pg11	2
5	558.02.04.00	magnet	2
4	O ring 26.7x1.78 NBR90		2
3	562.02.01.00–...	Spool ...ES	2
2	511.02.02.00	Intermediate unit	1
1	562.00.00.01...	Body ...	1

directional control valve ZC70

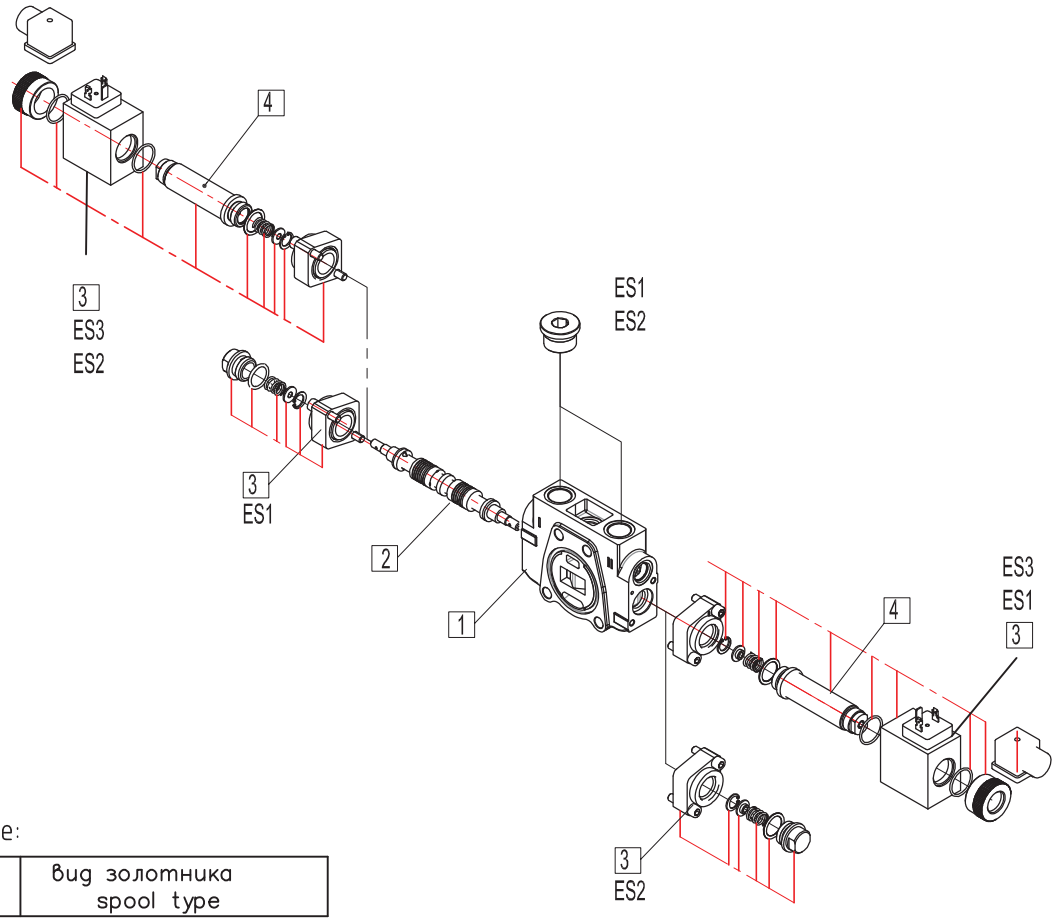
ES ... SOLENOID DIRECT CONTROL

ORDERING EXAMPLE

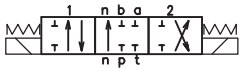
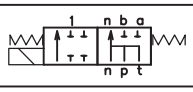
Section ZC70 PAES3 12VDC G

1 2 3 4 5

Solenoid direct control valve with spring return to neutral position.



Example:

code	Вид золотника spool type
PAES3	
EUL	

1.Body kit

Type		Description
562.00.00.01	parallel	1 spool
563.00.00.01	tandem	1 spool
564.00.00.01	series	1 spool

2.Spool options

Type	Description
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
B	Single acting, 3 positions with A closed in neutral position
C	Single acting, 3 positions with B closed in neutral position
EUL	electric control unloader spool

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 – A, B with spring return in neutral position

4.Coils

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

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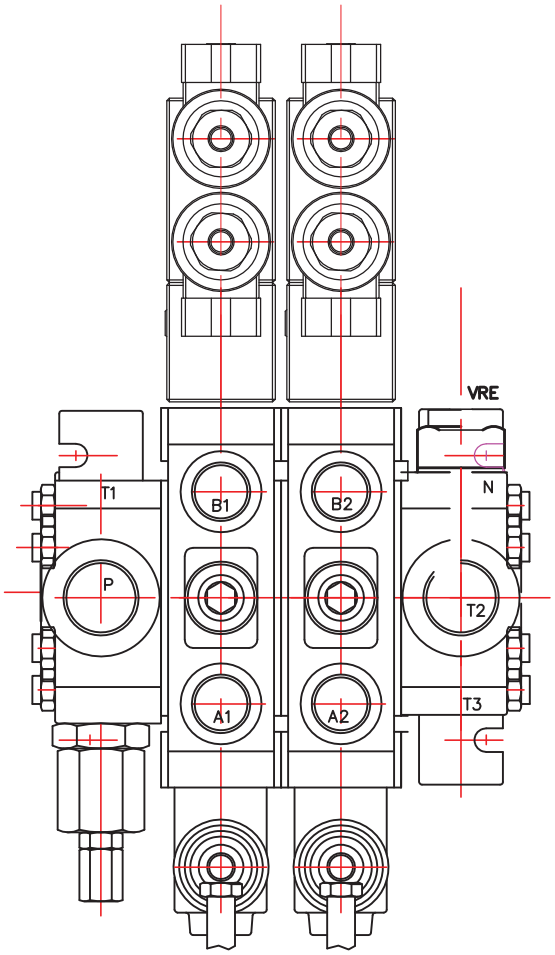
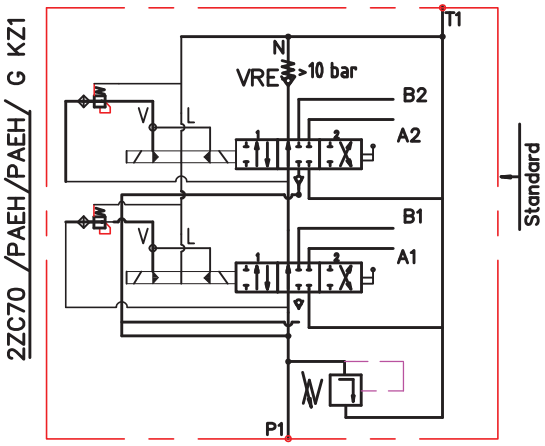
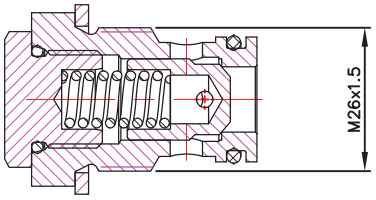
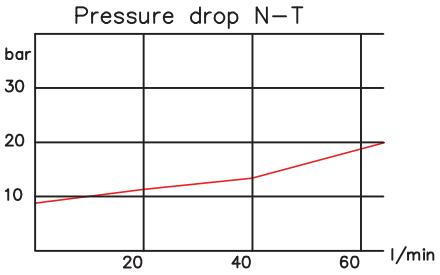
Распределитель гидравлический ZC 70
Directional control valve ZC 70

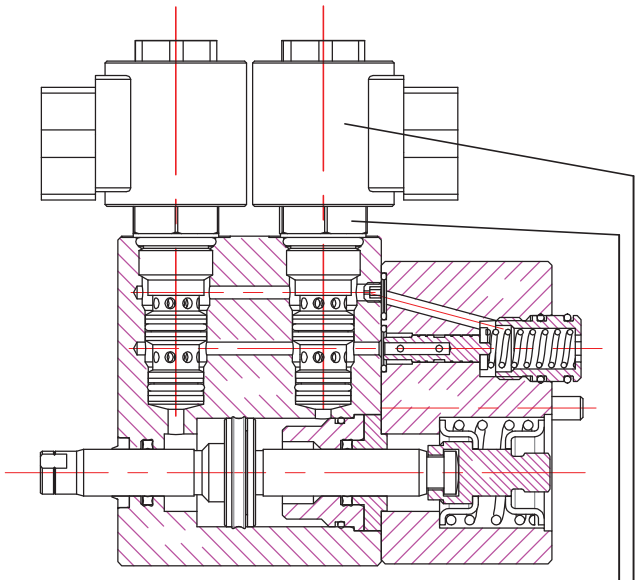


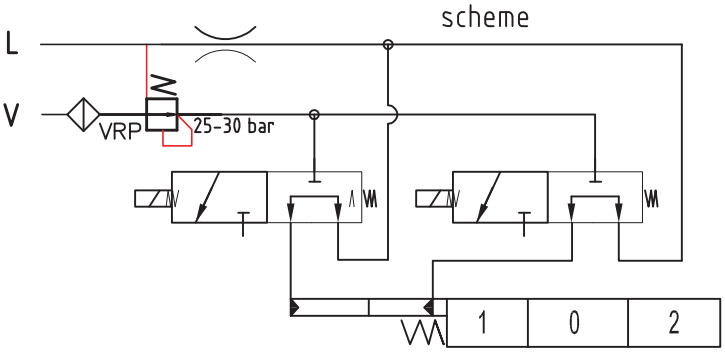


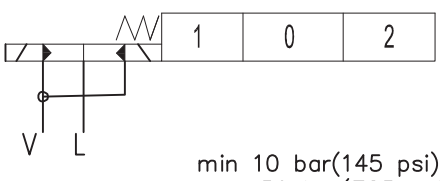




EH– electro–hydraulic control ON–OFF
Електрогидравлический контрол ON–OFF







Ordering codes
3–wai solenoid valve–LCV2–08–3C–NNN
coil LC2–08–C–1H–(12VDC)
coil LC2–08–C–2H–(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 %

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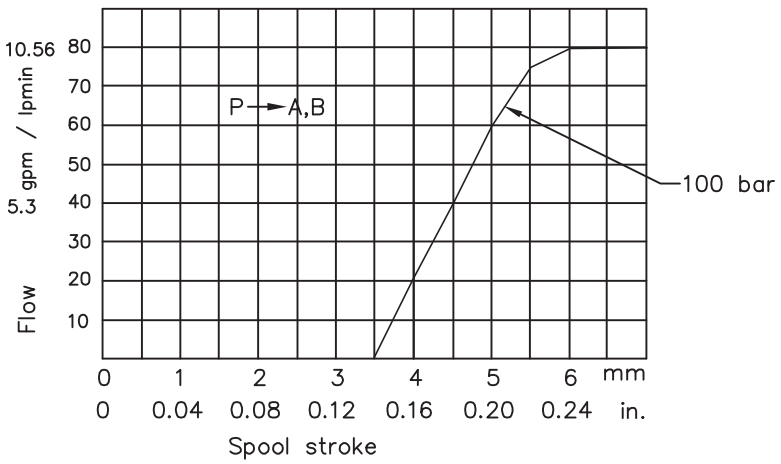
Распределитель гидравлический ZC 70
Directional control valve ZC 70

FEATURES

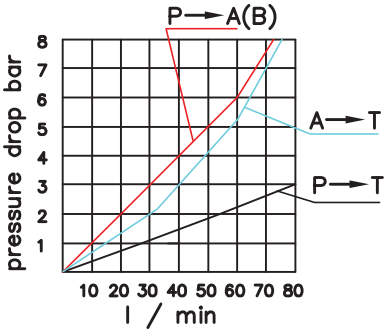
Directional control valve ZC70 is a variant of directional control valve PC70–special body and new spools. In this variant the situation of the spools thowards the body is positioned much more precisely and due to this the valve has better throughput.This implies more precise metering diagram too.

The hydraulic valve ZC70 can be implemented with direct control by solenoids ON–OFF (see ZC70 – ES ... solenoid direct control) and series section

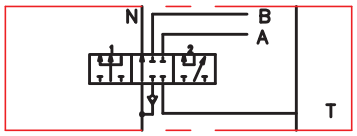
Metering curve section PA1, TA1
Flow characteristics / spool travel



pressure drops section SA1

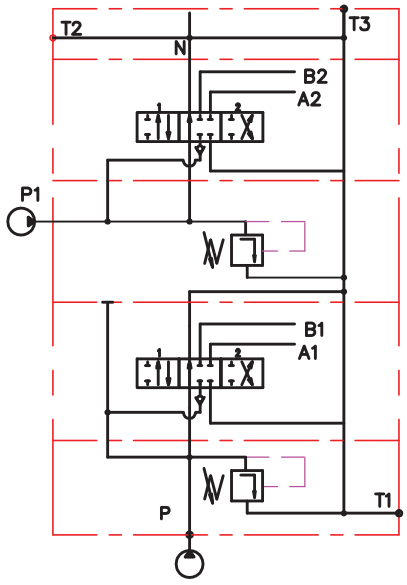


series directional valve element

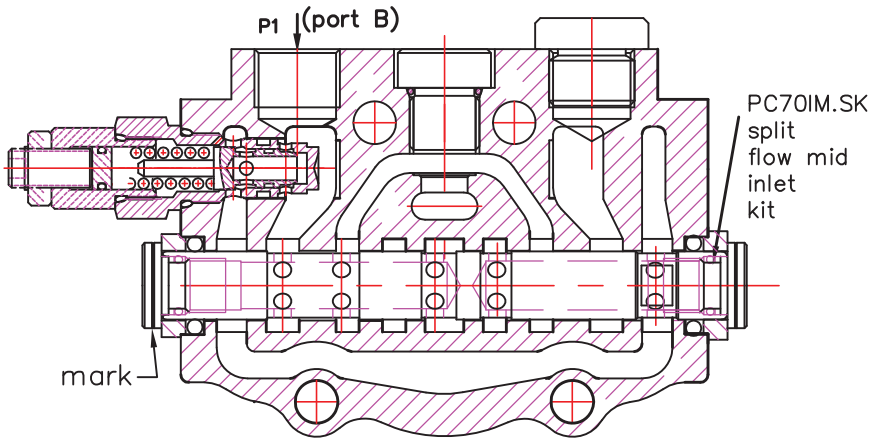


Распределитель гидравлический ZC 70
Directional control valve ZC 70
Mid inlet PC70IM...

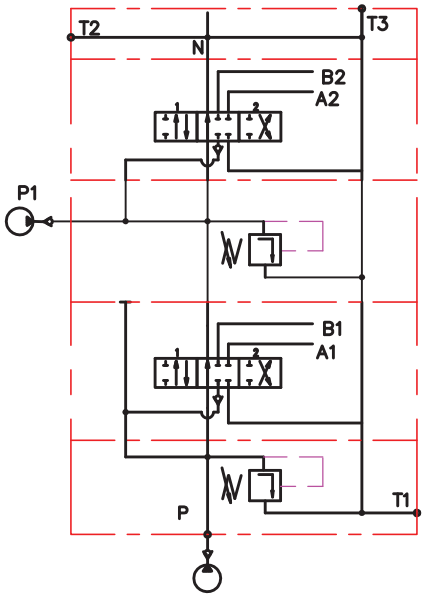
Sheme with
PC70IM.S_ – Split Flow Mid–Inlet



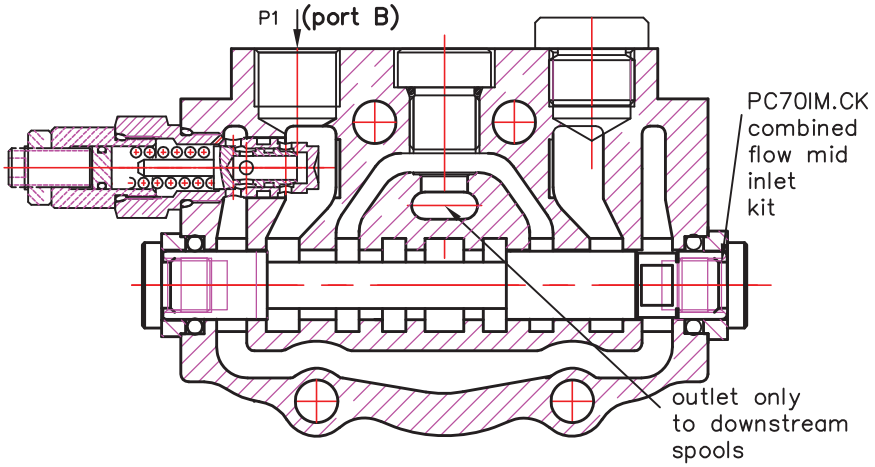
PC70IM.S...G/byway of example/



Sheme with
PC70IM.C_– Combined Flow Mid–Inlet



PC70IM.C...S /byway of example/



Description

A Mid–Inlet provides an inlet port for a second pump mid stream in the valve stack.

A relief valve can be provided in this section.

The split flow inlet completely separates the two pump flows.The common tank passage is shared between the two pump flows.

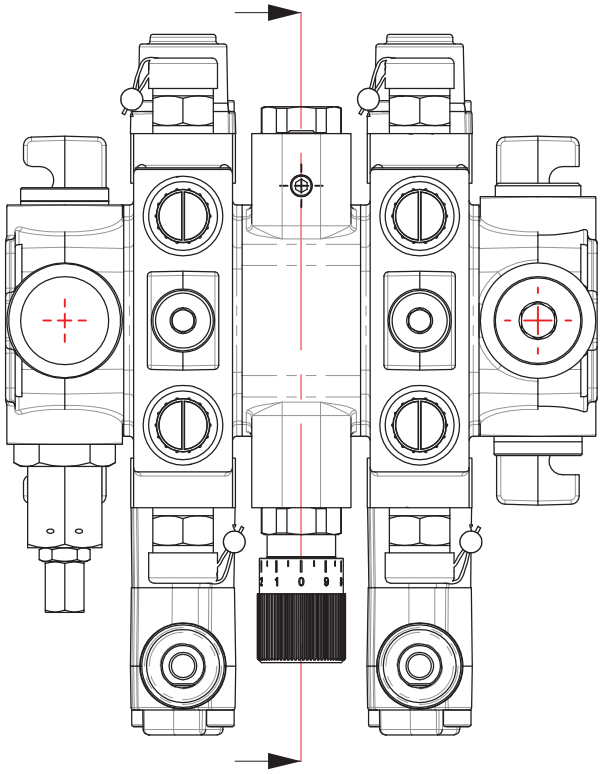
With the combined flow inlet the flow from both pumps is available to the downstream section when all the work sections upstream are in neutral.

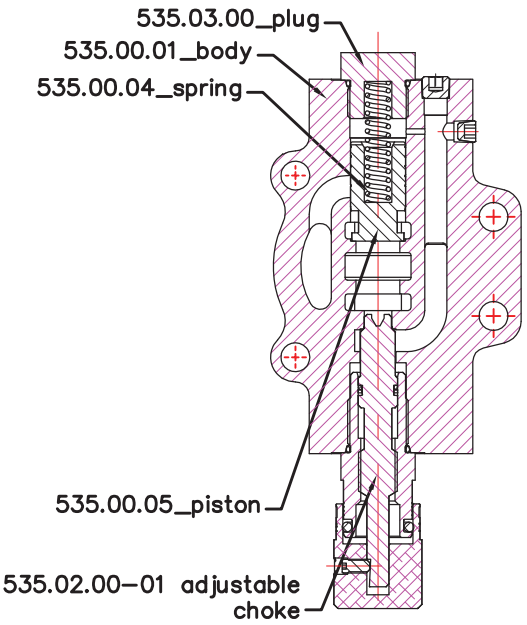
PC70IM.XXX

- G – Port size G1/2
  S – Port size #10 (7/8–14UNF)
- (svp) – No relief valve
  Blank– Adjustable relief valve 50–250 bar(setting 180 at 35 l/min)
  Out of standard relief pressure – text
- S – Split flow mid–inlet
  C – Combined flow mid–inlet

* Section appearances are of parallel section – special body..

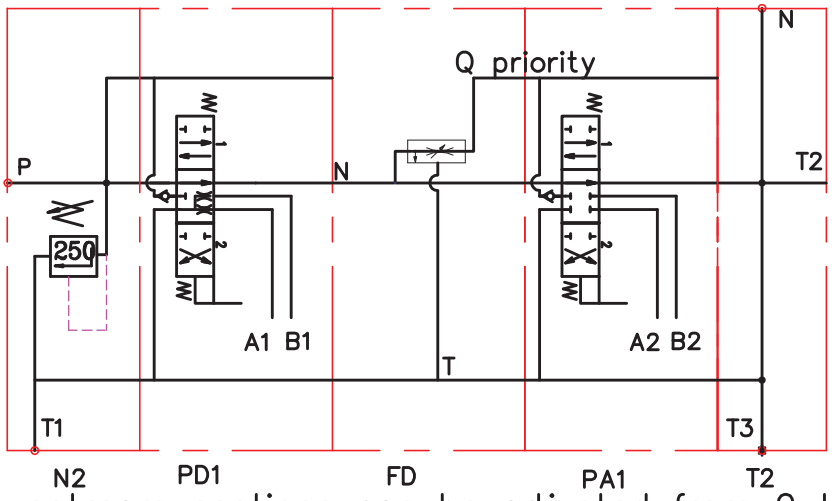
Распределитель гидравлический ZC 70
DF – pressure compensated flow divider section





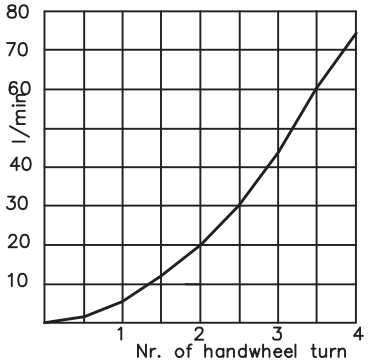
2PC70/N2/PD1/DF/PA1/T2/G/KZ1

Hydraulic circuit

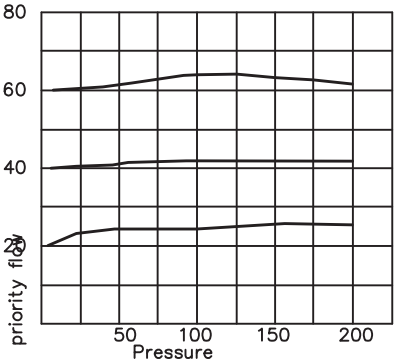


The flow on the downstream sections can be adjusted from 0 to 70 l/min by means of graduated handwheel. Residual flow goes to tank.

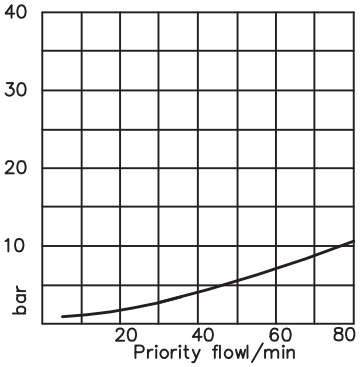
Flow regulation diagram
Qn = 80 l/min ; P = 100 bar



Pressure–flow diagram
Qn = 80 l/min



Pressure drop
P in – P out



july 2013

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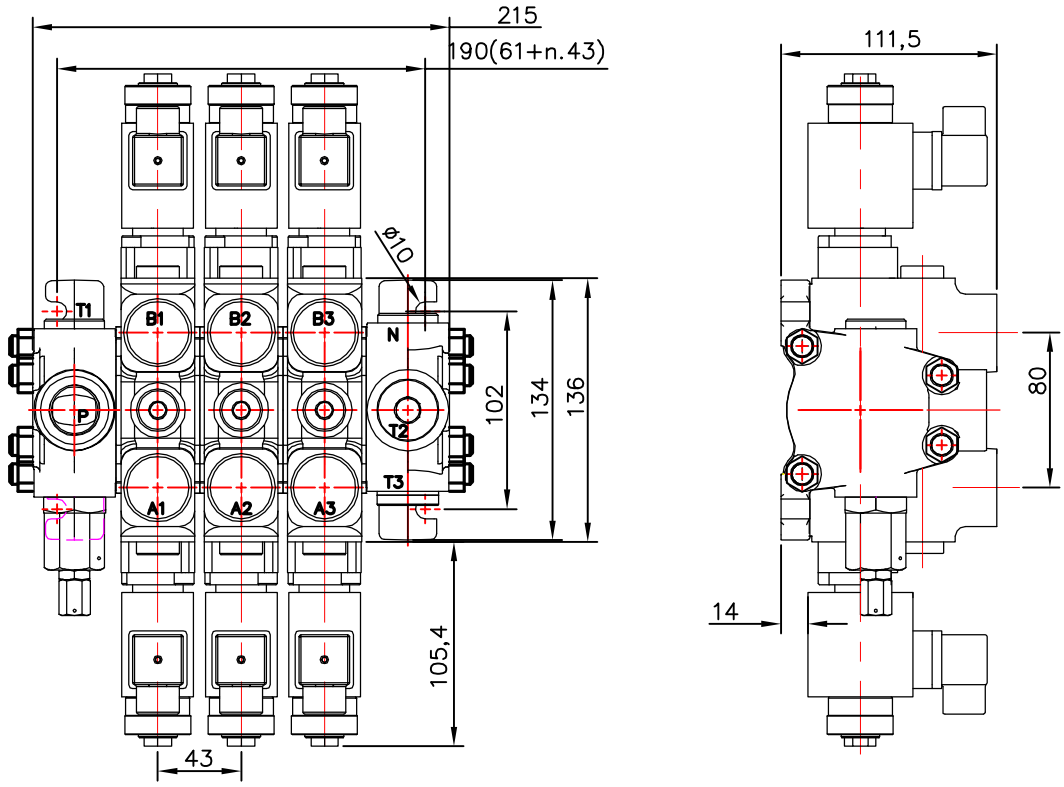
Распределитель гидравлический ZC 100
Directional control valve ZC 100

Directional control valve ZC100 is PC100 with direct solenoid control.
Sections ZC100 uses PC100 body wich has additional mashining.
ZC100 sections can be assembled in Bank with PC100 and PC70 sections.



nom. operating pressure P=210 bar; A,B=250 bar; T<50 bar
pressure medium – mineral hydraulic oil
20 ... 100 mm /s recommended range
max flow – 100 l/min (see "operating " diagram)
nominal flow – 80 l/min (see "operating " diagram)
n – number of Sections per Valve Bank– max 10

Структура обозначения распределителя
Order code

3 ZC100 R N2 /AES3(AzBx) /AES3 /DES3 /T2 / G C2

- 3 — количество золотников / number of spools
- ZC100 — распределитель типа / directional control valve
- R — вход давления с правой стороны / inlet high pressure – right
- N2 — тип напорной секции / type of the inlet cover
- /AES3(AzBx) — характеристика первого золотника / first spool distribution type
- /AES3 — характеристика второго золотника / second spool distribution type
- /DES3 — характеристика третего золотника / third spool distribution
- /T2 — тип сливной секции (T) / type of the outlet cover (T port)
- / G — размер присоединительных отверстий (P, A, B, T, N) / threads (P, A, B, T, N)
- C2 — продолжитель потока / high pressure carry over

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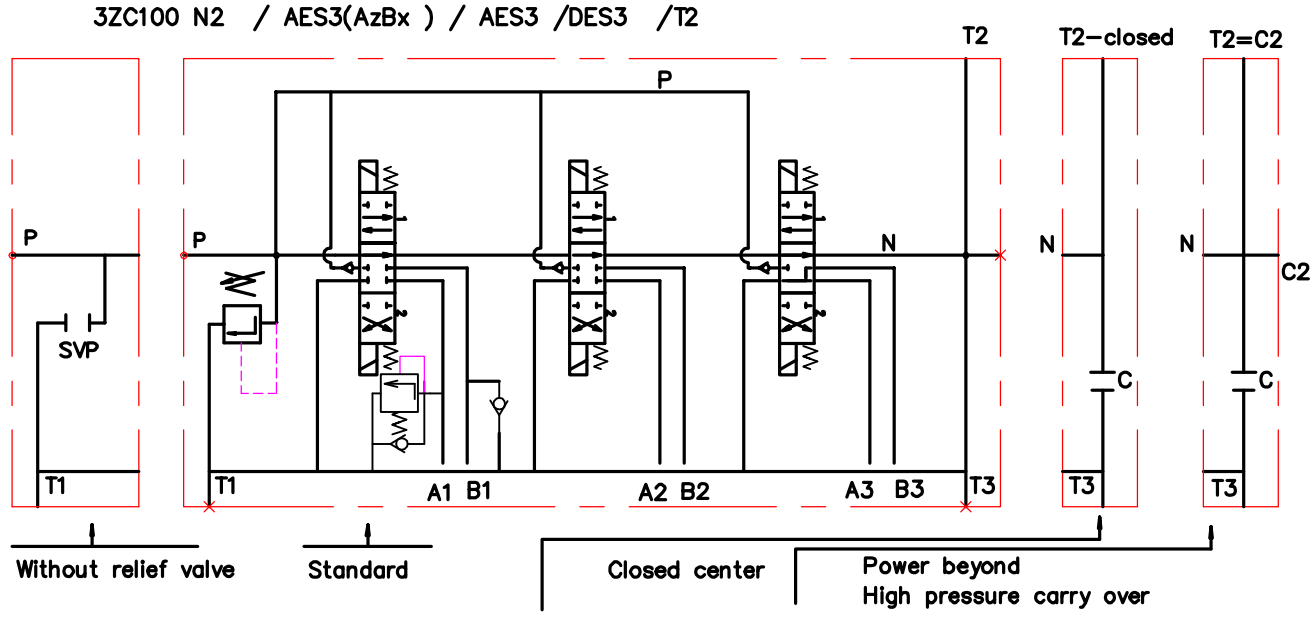
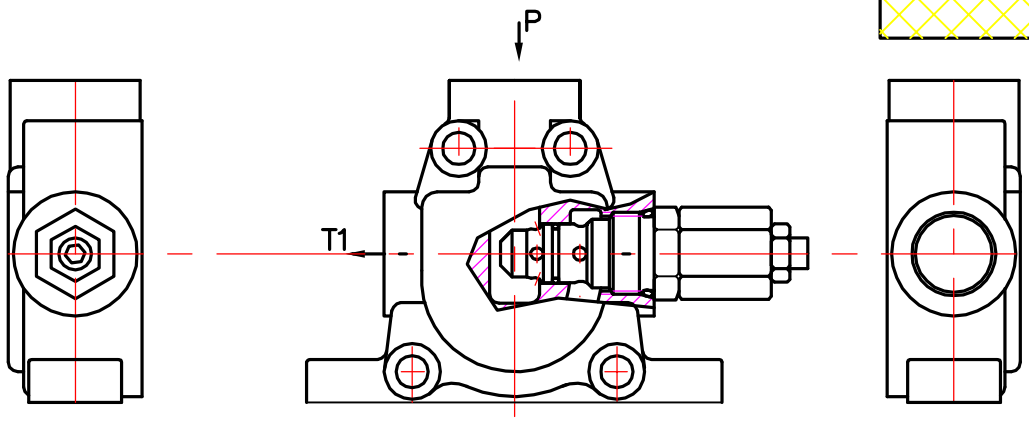
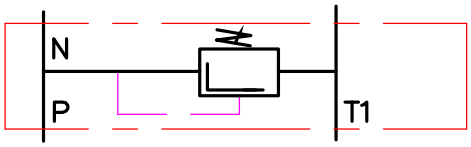
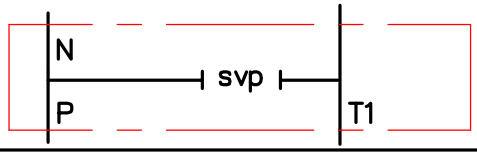
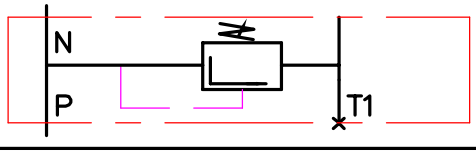
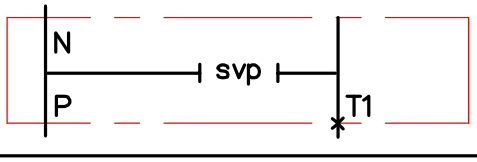
Распределитель гидравлический ZC 100
Directional control valve ZC 100

паралельное распределение
parallel circuit
3ZC100 N2 / AES3(AzBx) / AES3 /DES3 /T2



Напорная секция
Inlet cover



code	напорная секция / inlet cover
N1	N1 (210 bar) 
N1svp	
N2	N2 (210 bar) 
N2svp	

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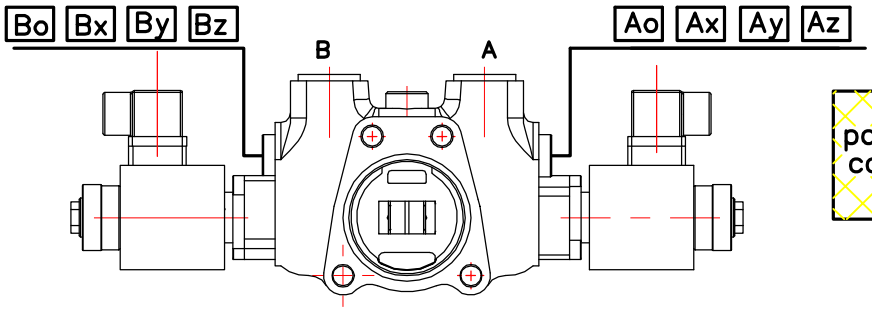
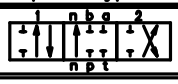
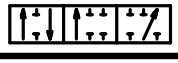
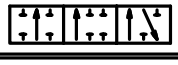
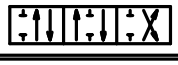
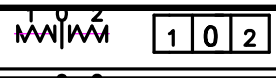
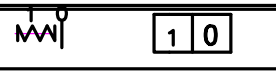
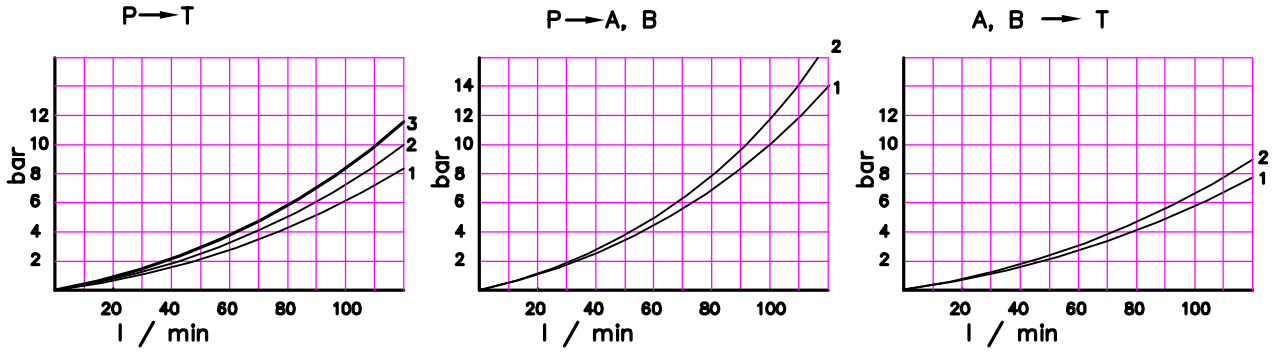
Распределитель гидравлический ZC 100
Directional control valve ZC 100



распределительная секция
control valve

code std	вид золотника spool type
A	
B	
C	
D	
E	
F	
G	
H	

code	способ фиксации spool control
ES3	
ES1	
ES2	



operating diagrams

code	резьбовие отверстия threads			code	резьбовие отверстия threads		
	P, T	A,B	carry over C2		P, T	A,B	carry over C2
G1	G 3/4	G 1/2	G 3/4	S1	SAE 12	SAE 10	SAE 12
G2	G 3/4	G 3/4	G 3/4	S2	SAE 12	SAE 12	SAE 12

Ao	Bo	пробка соответно к A и/или B (без означения) plug for A and/or B (without mark)
Ax	Bx	антикавитационний клапан соответно к A и/или B anti cavitation valve for A and/or B
Ay	By	предохранительний клапан соответно к A и/или B secondary pressure relief valve for A and/or B
Az	Bz	шок абсорбер к A и/или B shockabsorber valve for A and/or B

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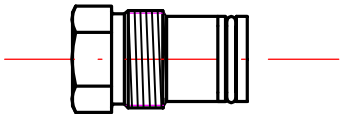
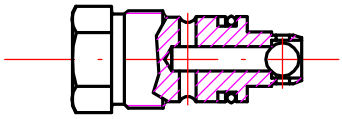
Распределитель гидравлический ZC 100
Directional control valve ZC 100

вторичные клапани/ second valves

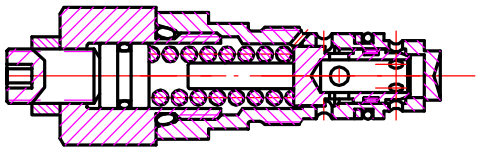
plug "o"



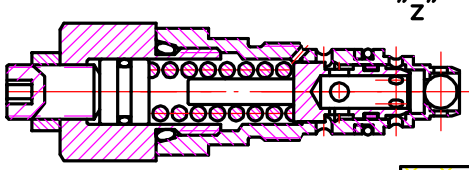
anticavitation valve "x"



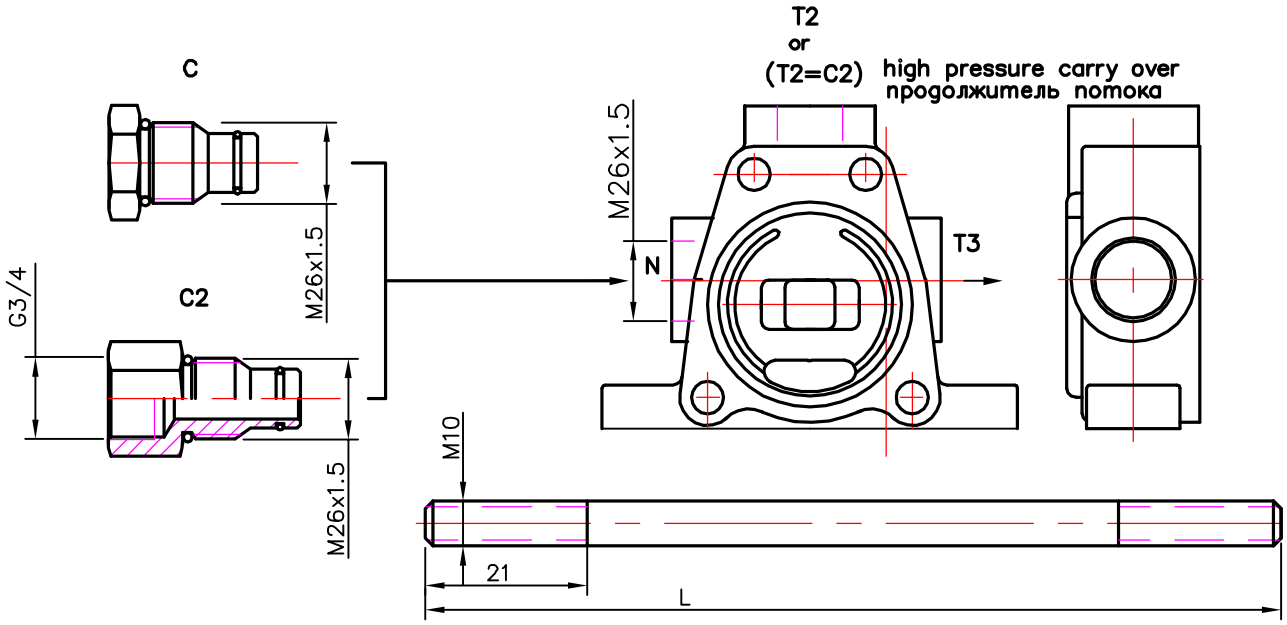
second relief valve "y"



combined part relief and anticavitation valve "z"



сливная секция
end plate



*C – C in port N–+plug in T2–closed center
**(T2=C2)– C in port N–carry over in T2
***C2–C2 in port N+Plug in T2– carry over in N

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

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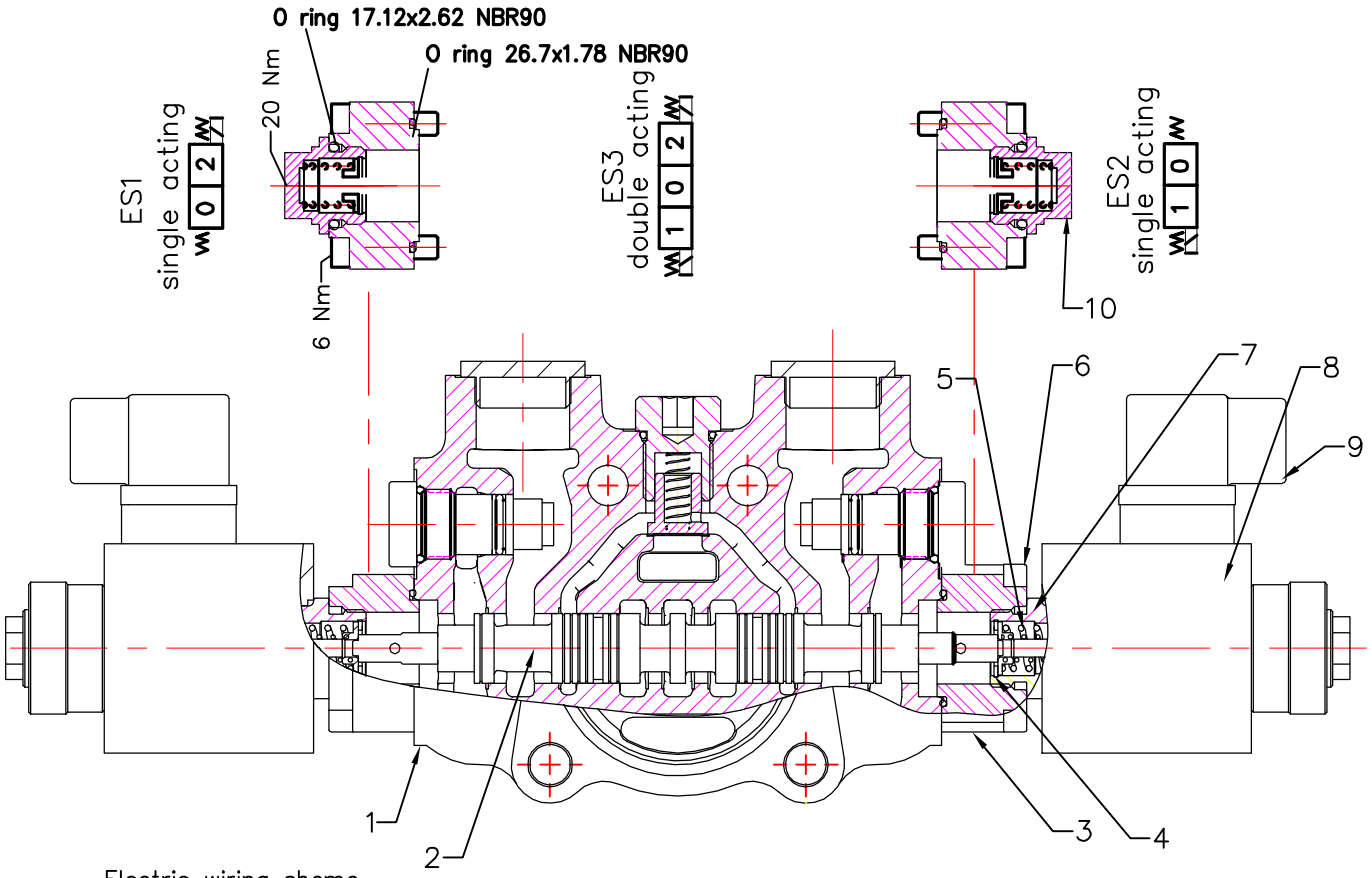
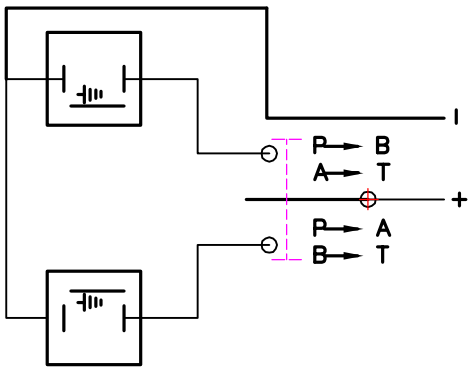
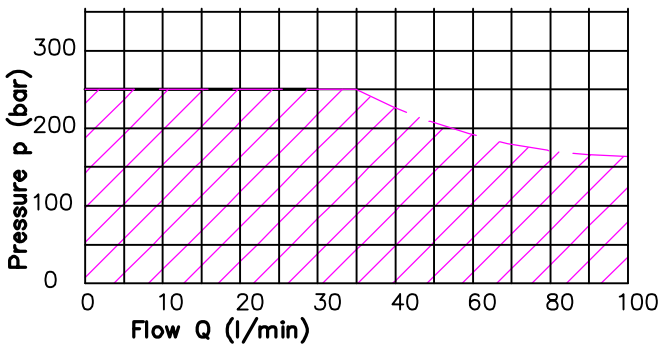
ES ... SOLENOID DIRECT CONTROL



Electric wiring sheme



Operating diagram



Operating features 2
Технические примечания 2

Control

Internal leakage A(B)→ T
(p=120 bar, Viscosity=32 mm²/s : 20 – 40 ccm/min)
Fluid temperature – –20 C(short time) ... 80 C
Max. back pressure on outlet port T – 25 bar (360psi)

Coil

Nominal voltage tolerance . . . . . ±10%
Power rating . . . . . 60 W
Coil insulance . . . . . class H
Duty cicle 100%
Connector ISO 4400
Imergency manual override

pos.	Part.No	Description	Quantity
10	558.02.06.00	End cap	...
9	to ISO 4400	Connector	2
8	CD37V...DC	Solenoid coil	2
7	ST701598	Tube	2
6	DIN912	M6x25	2
5	542.02.00.04	Spring	2
4	511.02.00.03	Washer	2
3	511.02.02.00	Intermediate unit	2
2	558.02.01.00	Spool AES	1
1	558.00.00.01...	Body ...	1

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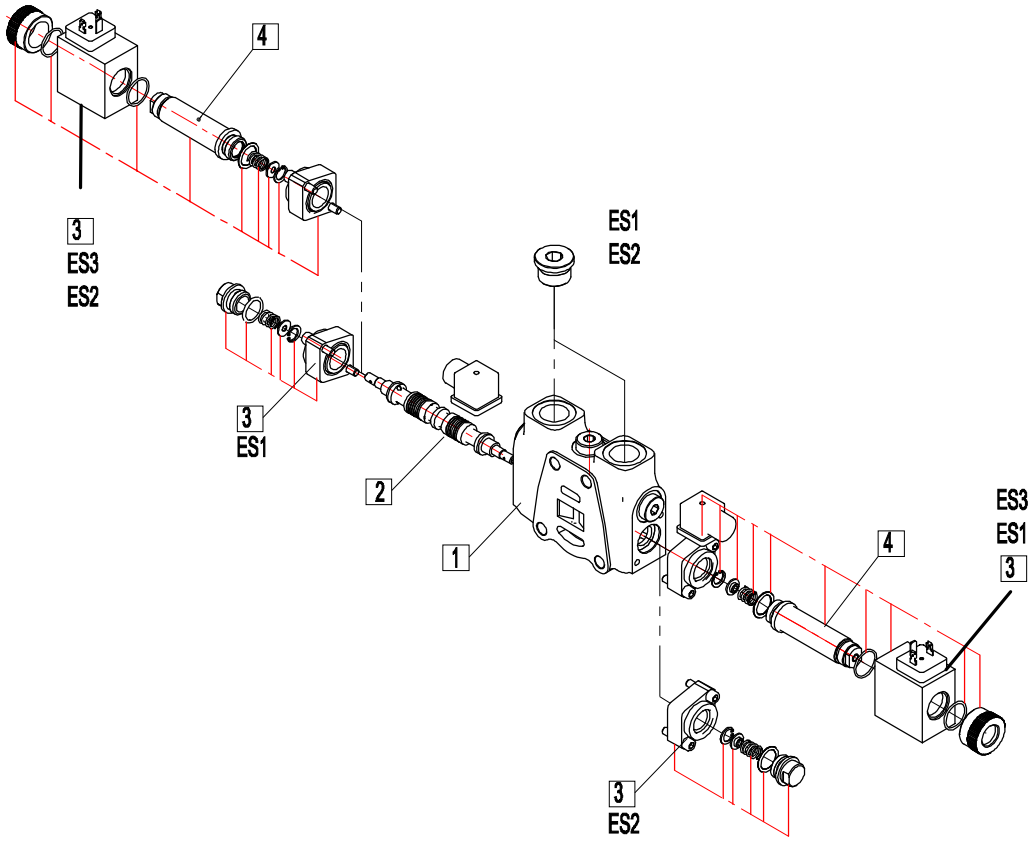
ES ... SOLENOID DIRECT CONTROL

Solenoid direct control with spring return to neutral position.

ORDERING EXAMPLE

Section ZC100 A ES3 12VDC G

1 2 3 4 5



1.Body kit

Type	Description
558.00.00.01 parallel	1 spool

2.Spool options

Type	Description
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
B	Single acting, 3 positions with A closed in neutral position
C	Single acting, 3 positions with B closed 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 – A, B with spring return in neutral position

4.Coils

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

5.Port threads