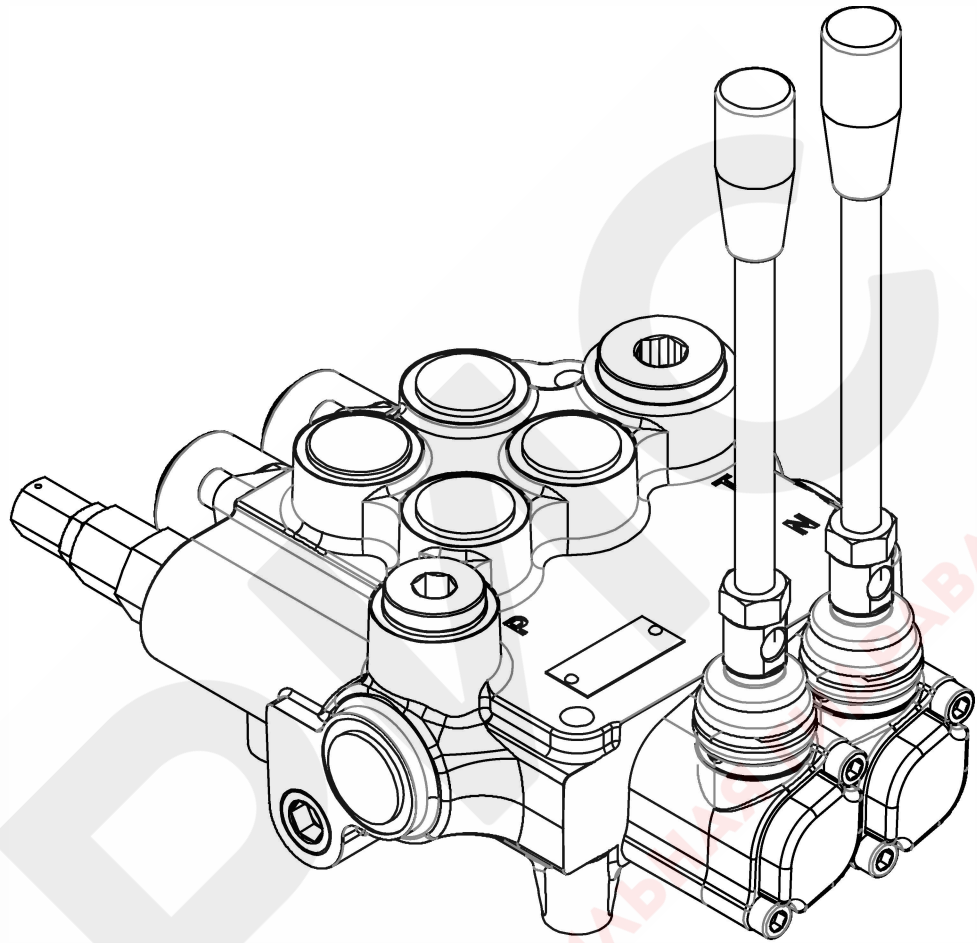


HYDRAULIC DIRECTIONAL CONTROL VALVES

РАСПРЕДЕЛИТЕЛИ ГИДРАВЛИЧЕСКИЕ



Description

Назначение и область применения

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

Specifications / Основные показатели

1. Valve monoblock

Конструктивное выполнение

2. Mounting / Крепление

3. Pressure connections / присоединительные отверстия

4. Ambient temperature

Температура воздуха

5. Medium

Рабочая жидкость

6. Viscosity

Кинематическая вязкость

7. Fluid temperature

Температура

8. Filtration

Фильтрация

9. Max. operating pressure

10. Internal leakage at 46 mm²/s

A, B to T

11. Nominal flow

12. Spool stroke

Ход золотника

13. Actuating force

Усилие движения золотника

моноблок

3 bolts M8

internal threads

-40 - +60°C

mineral oil based hydraulic oil

12 - 800 mm²/s permissible range20 - 100 mm²/s recommended range

-20 - +80°C

Oil contamination 10 to NAS 1683

P = 250 bar

A, B = 300 bar

T < 50 bar

6 ccm/min at 100 bar

80 l/min

± 7 mm

< 220 N in spool axis direction

directional control valve ..Z80

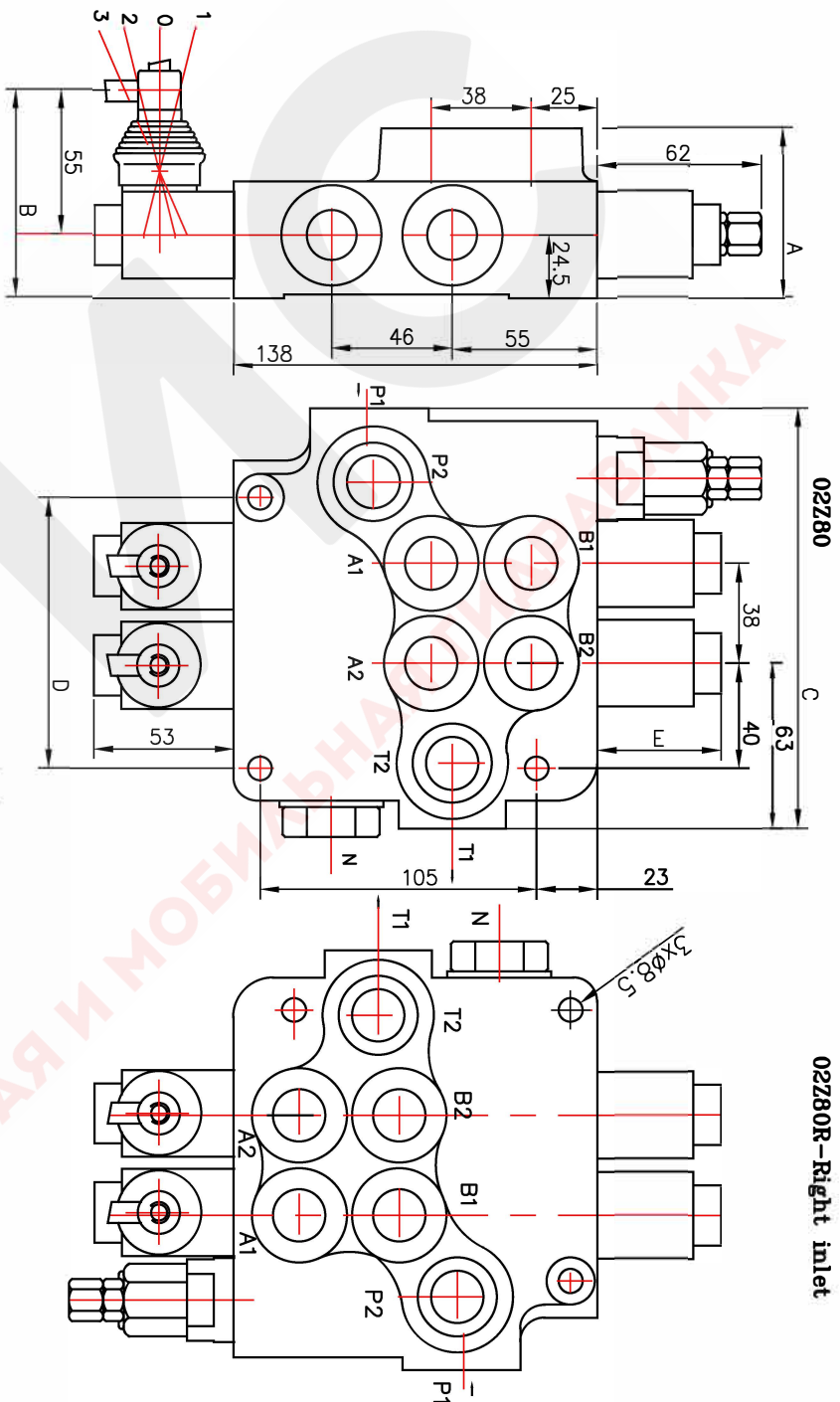


Table 1

	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

block with common check valve
распределитель с общим клапаном

number of spools
количество золотников

directional control valve type ...
распределитель муна ...

inlet high pressure – right _____
вход давления с правой стороны

(4) Spring for 160 to 315 bar; setting 220 bar; red;
(svp) relief valve blanking plug; без прегохр. клапана

first spool distribution type _____
характеристика первого золотника

second spool distribution type_
bug второго золотника

spool control/detend and estr./
контрол золотника/фиксаци и гругие/

ports /treads/
резбовые отверстия

general operation feature
bug ручного управления

with "teton"
исполнение ручного управления с "тетон"

operation feature /pneumatic, .../
другое управление

with electric switch
с электрическим выключателем

high pressure carry over
продолжител потока високого даблення

connection ports in use
присоединительные отверстия

INLET RELIEF OPTIONS

way of distribution – parallel; распределение – параллельное

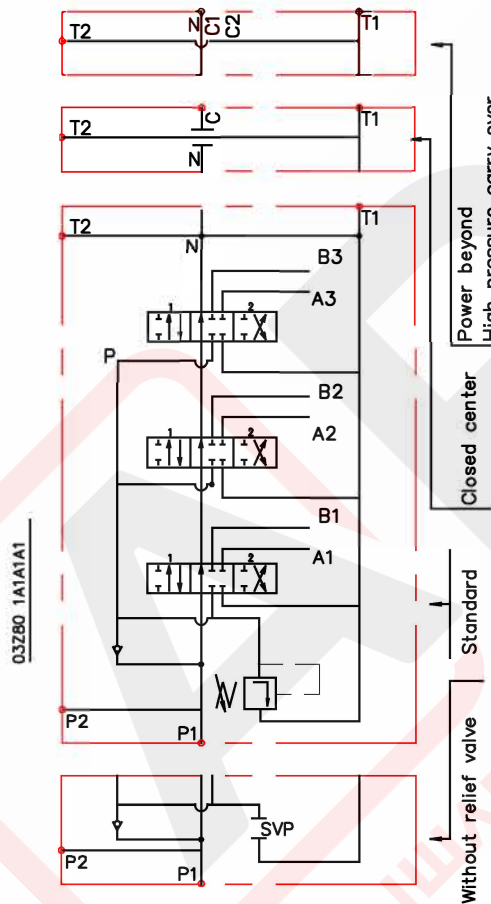
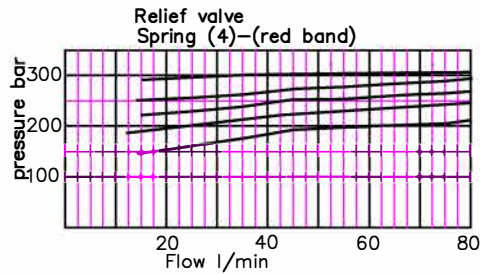
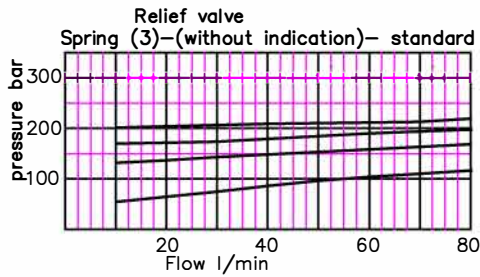


Table 3

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

Table 4

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

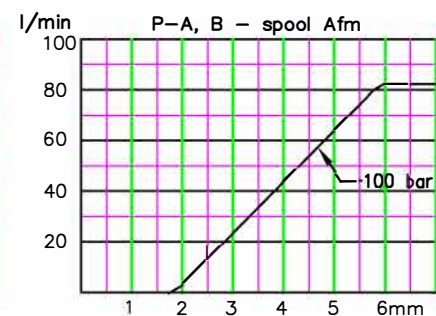
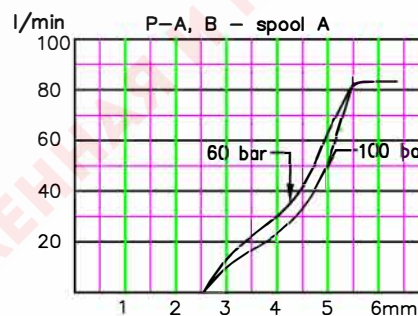


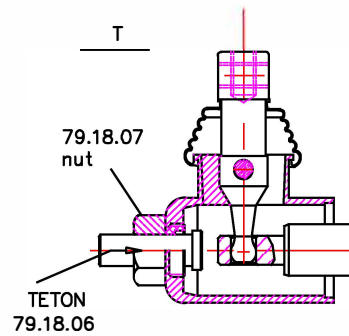
Table 5

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

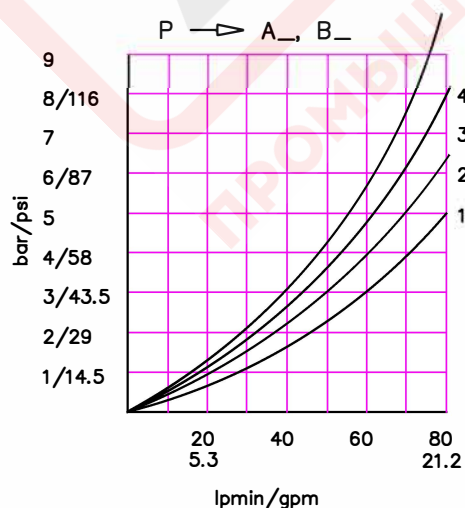
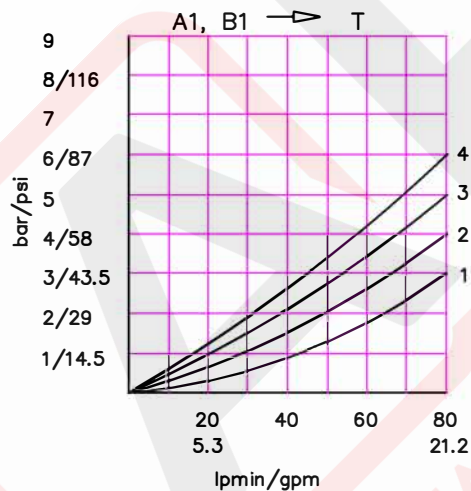
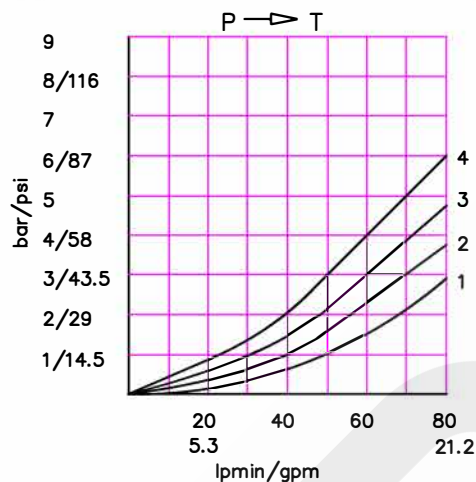
Table 6

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

directional control valve ..Z80



..Z80 directional control valve – A



Z80

Table 7

code	ports (treads) ; 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

kind of hand control ; вид ручного управления

Table 10

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

Table 11

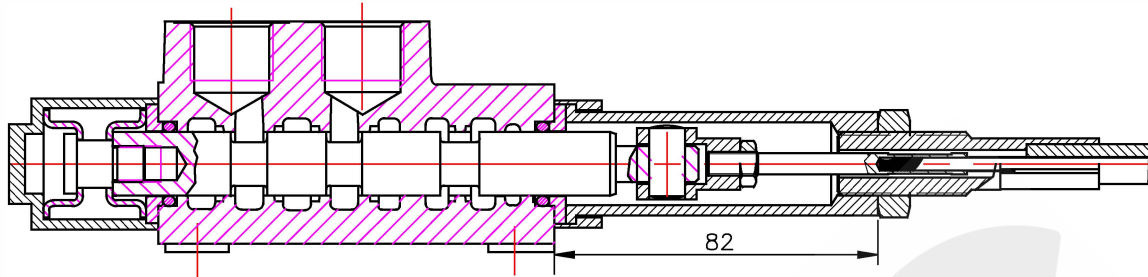
code	вид продолжение на дебита	
C	отвор "N" затворен closed center	
C2	отвор "N" продължава за следващ консуматор part for power beyond sleeve(carry over)	
—	отвор "N" е свързан с "T" without part for pressure carry over	
X	отвор "N" е винаги свързан с "T" power beyond ever to tank	

Table 12

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

REMOTE CONTROL

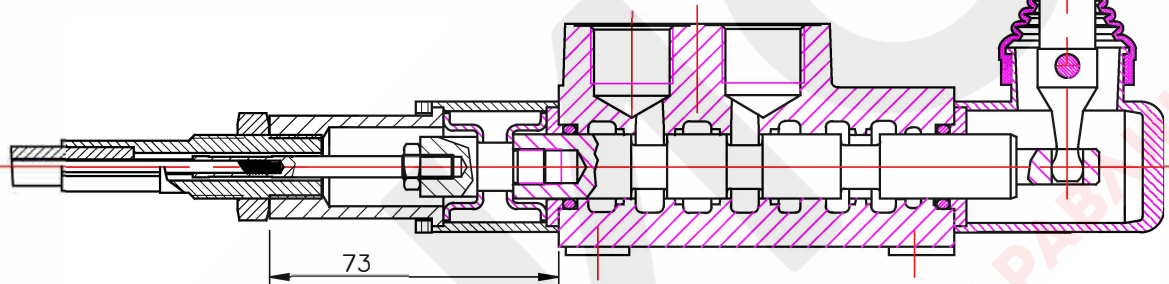
Управление тросом



Z80 A1G
spool valve

V1(l= . . .)+
cable

3047
control body



Z80 A1G
spool valve

V2KZ1(l= . . .)+
cable

3047
control body

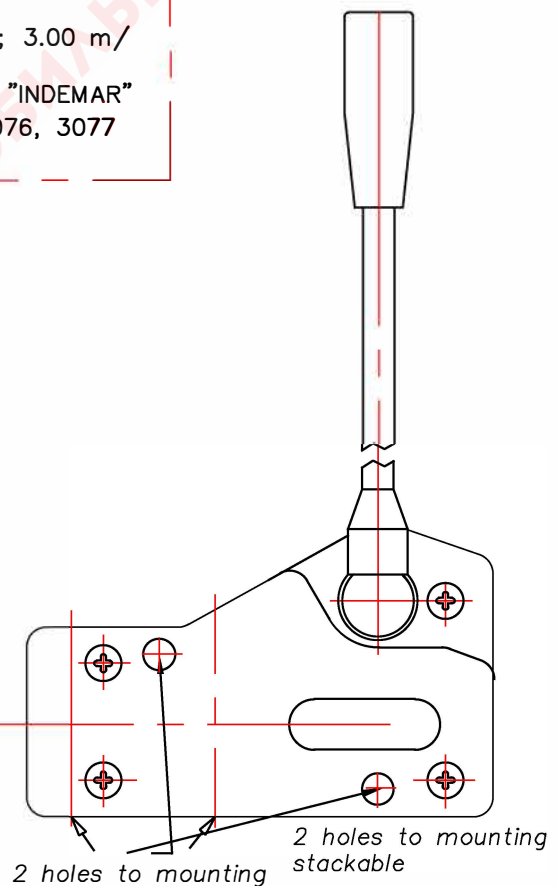
Cable "INDEMAR" Cod. IT 3056 /l=1.00; 1.50; 2.00; 2.50; 3.00 m/

+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

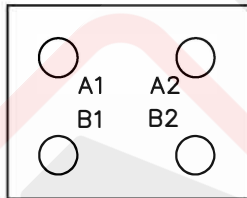
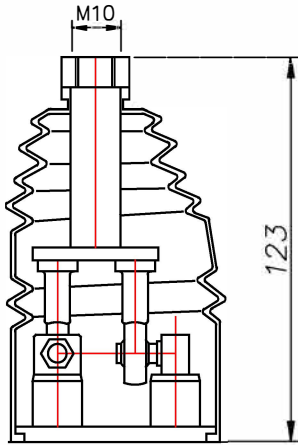
High solidity controls for easy mounting on every type of distributor. They can be mounted stand alone or

They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in a three different models to meet different needs of Clients.

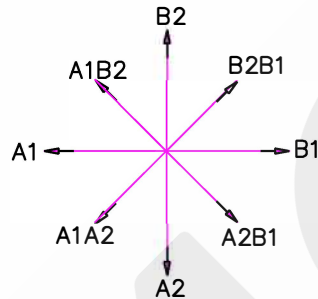
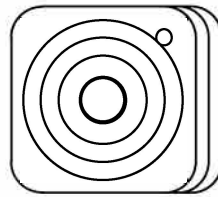


JOYSTICK "+"

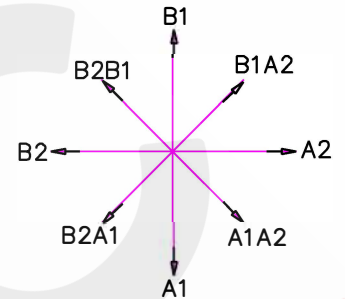
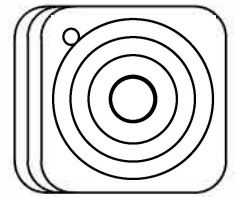
This control gives the possibility to operate, at the same time two spools with a "+" movement.



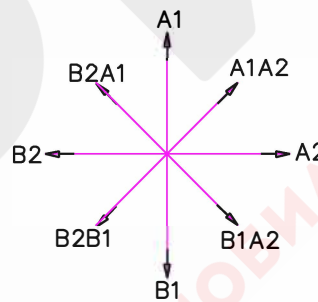
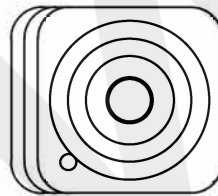
standard version 1



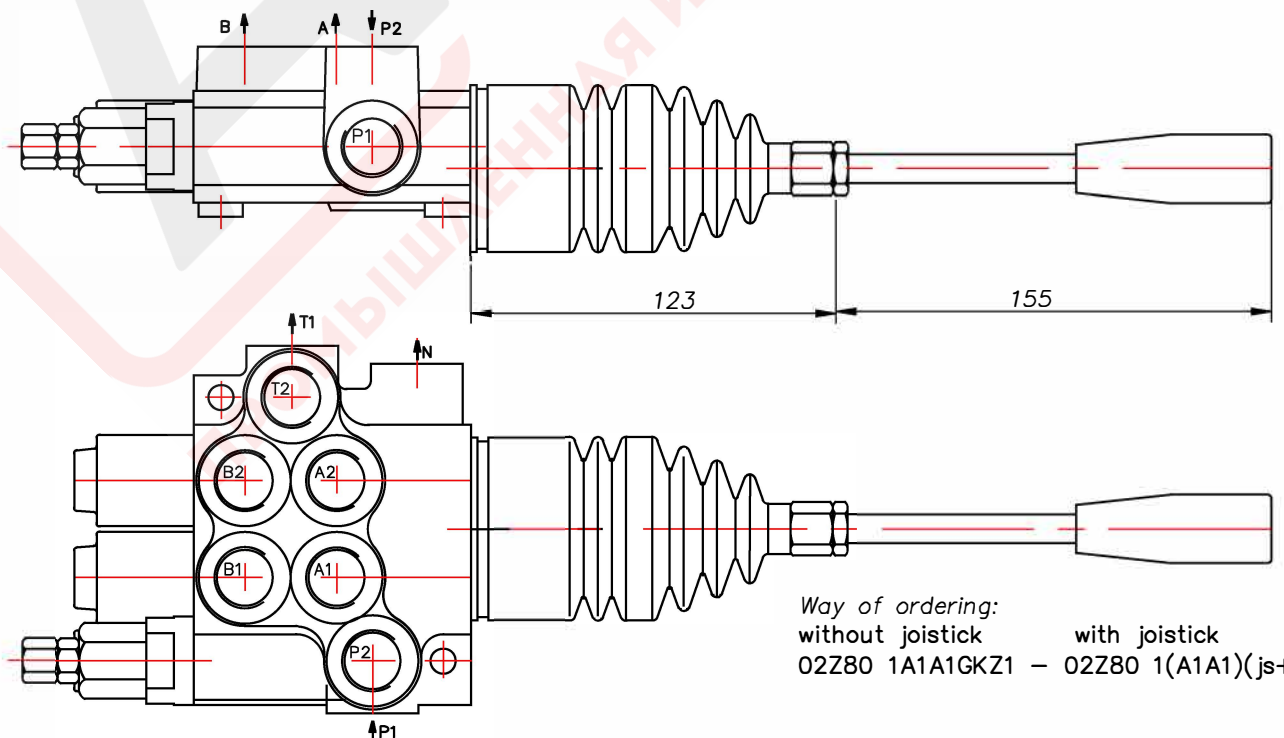
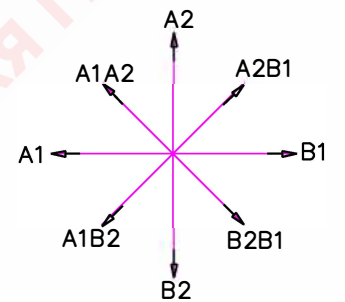
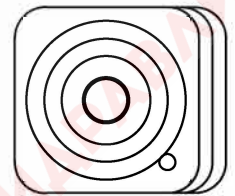
standard version 2



standard version 3



standard version 4



Way of ordering:

without joystick

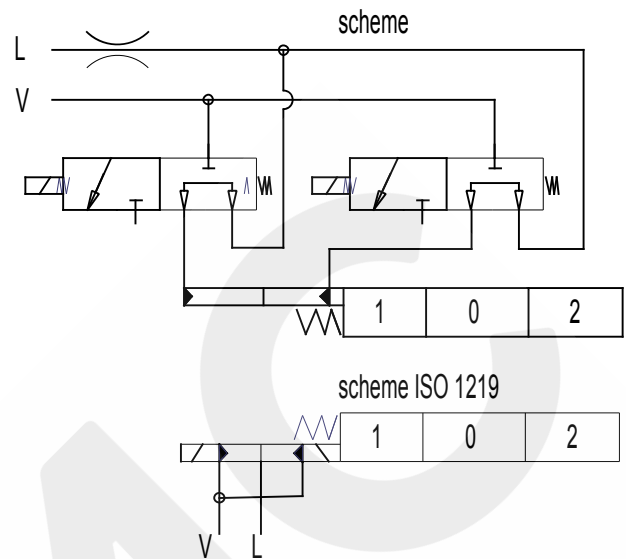
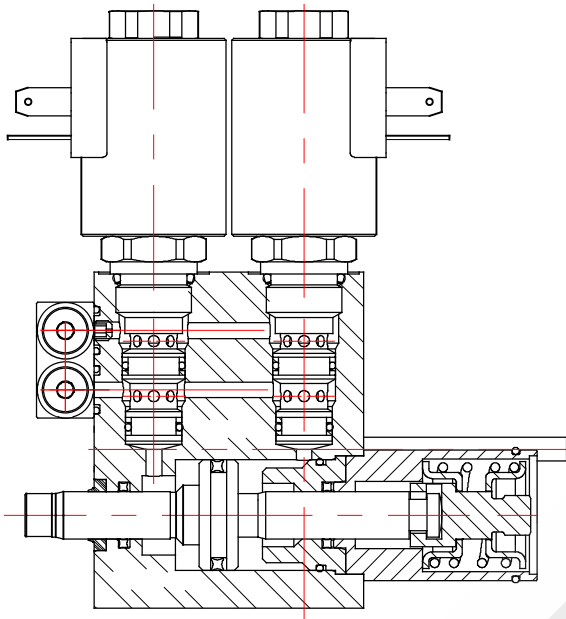
with joystick

02Z80 1A1A1GKZ1 - 02Z80 1(A1A1)(js+3)G

directional control valve ..Z80

ED3 – electro-hydraulic control ON–OFF

Электрогидравлический контрол ON–OFF



Ordering codes

3-way solenoid valve–SV08–33

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

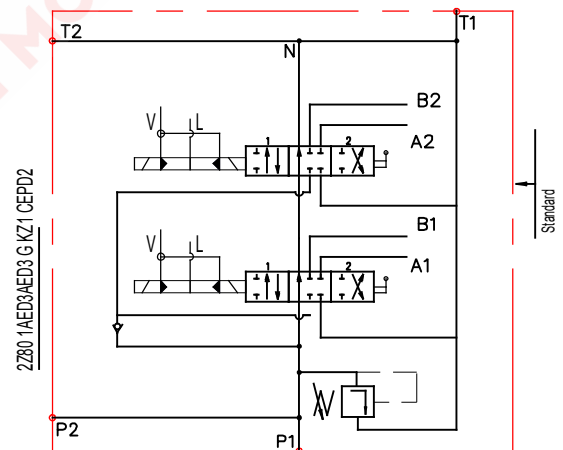
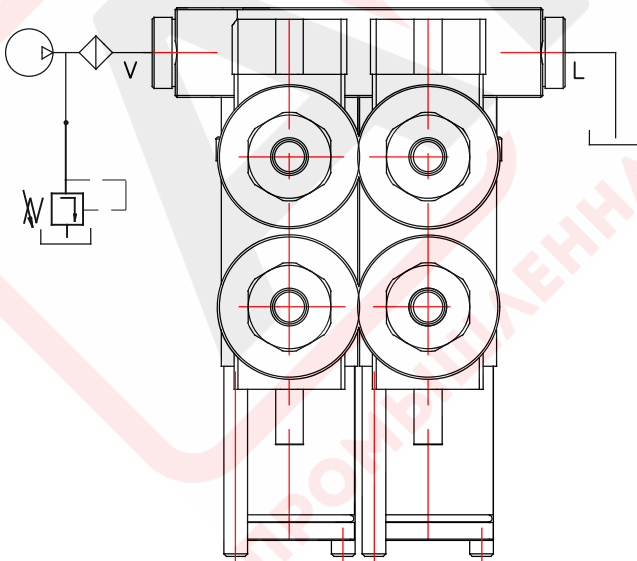
24W

Duty cycle

100 %

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

CEED2P80

CEED3P80

CEED480

...

Kit for 1 section

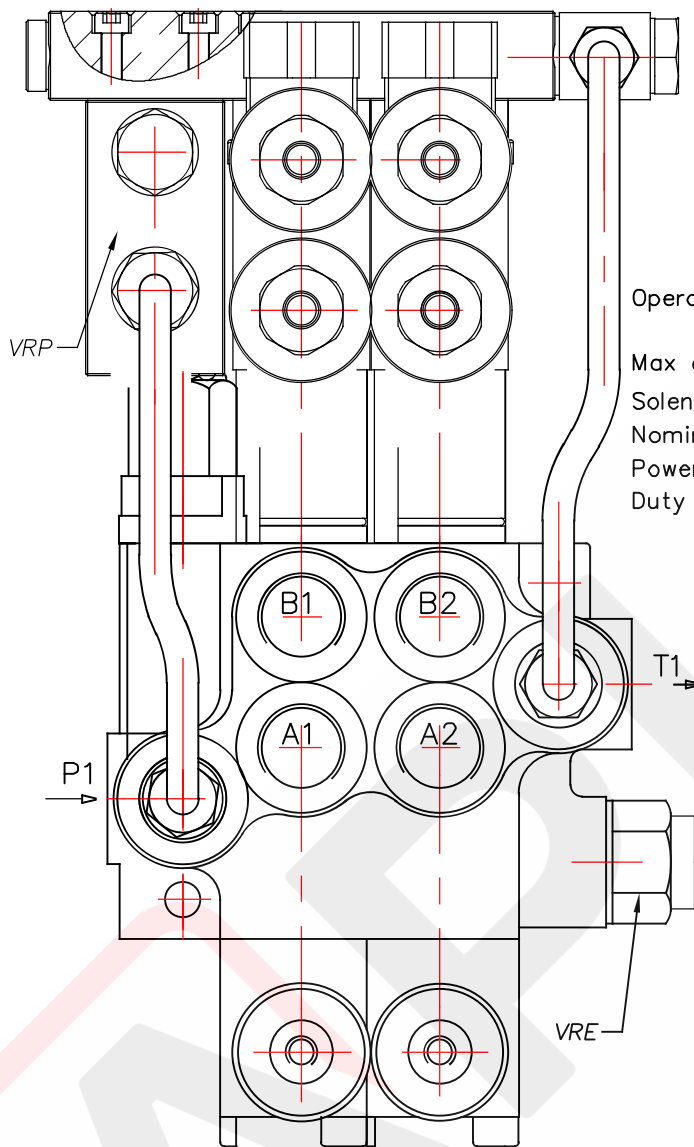
Kit for 2 section

Kit for 3 section

Kit for 4 sektion

directional control valve ..Z80

ED3 – electro-hydraulic control ON-OFF
 Электрогидравлический 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

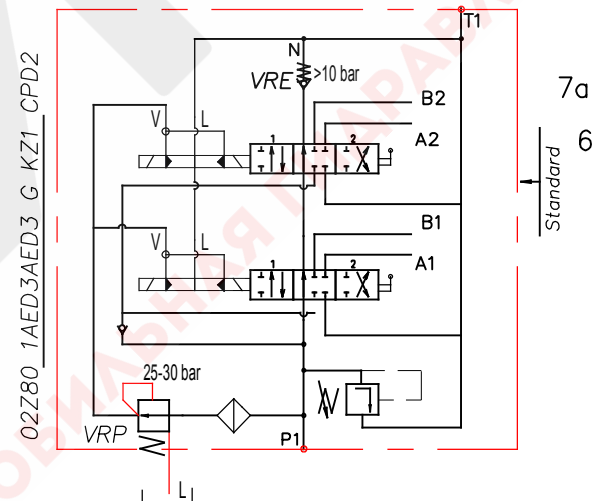
±10%

Power rating

24W

Duty cycle

100 %



Ordering example

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

Colector kit

BSP threads

Ordering codes

CED1P80

Kit for 1 section

CED2P80

Kit for 2 section

CED3P80

Kit for 3 section

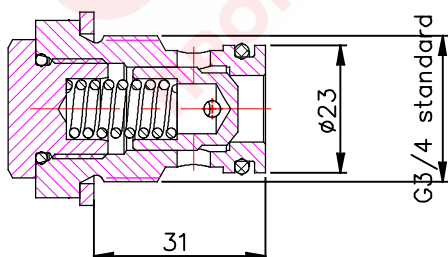
CED480

Kit for 4 section

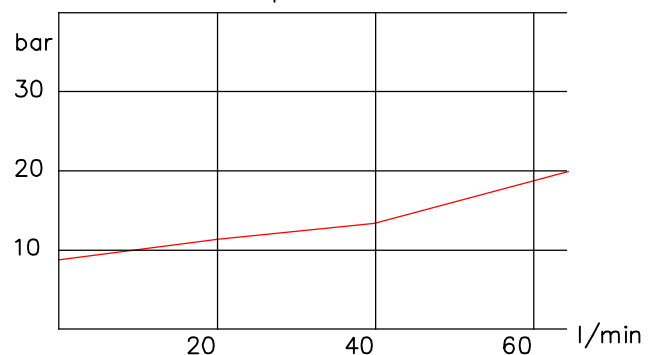
...

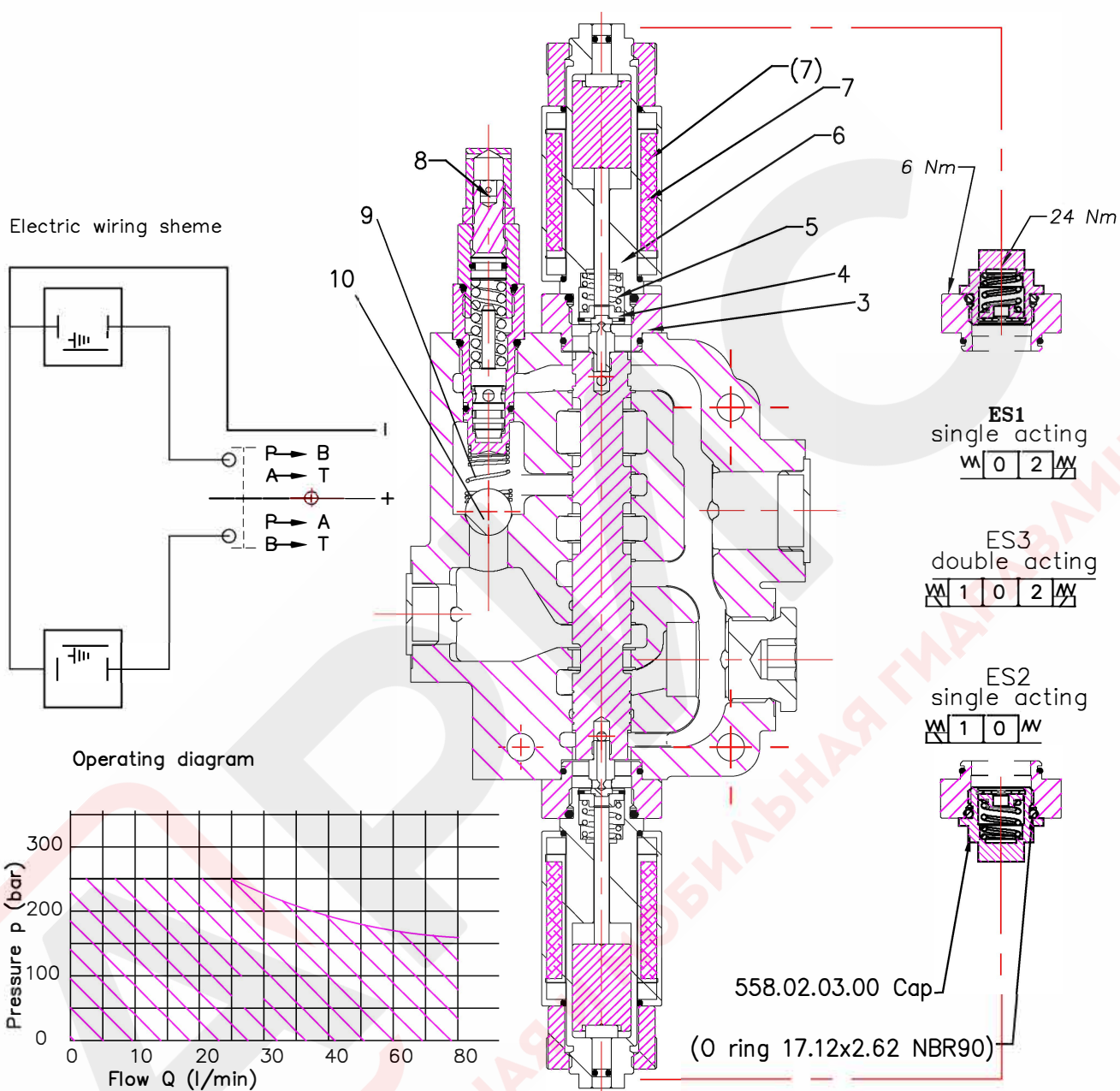
Back pressure valve VRE-P80

Клапан подпора



Pressure drop N-T





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

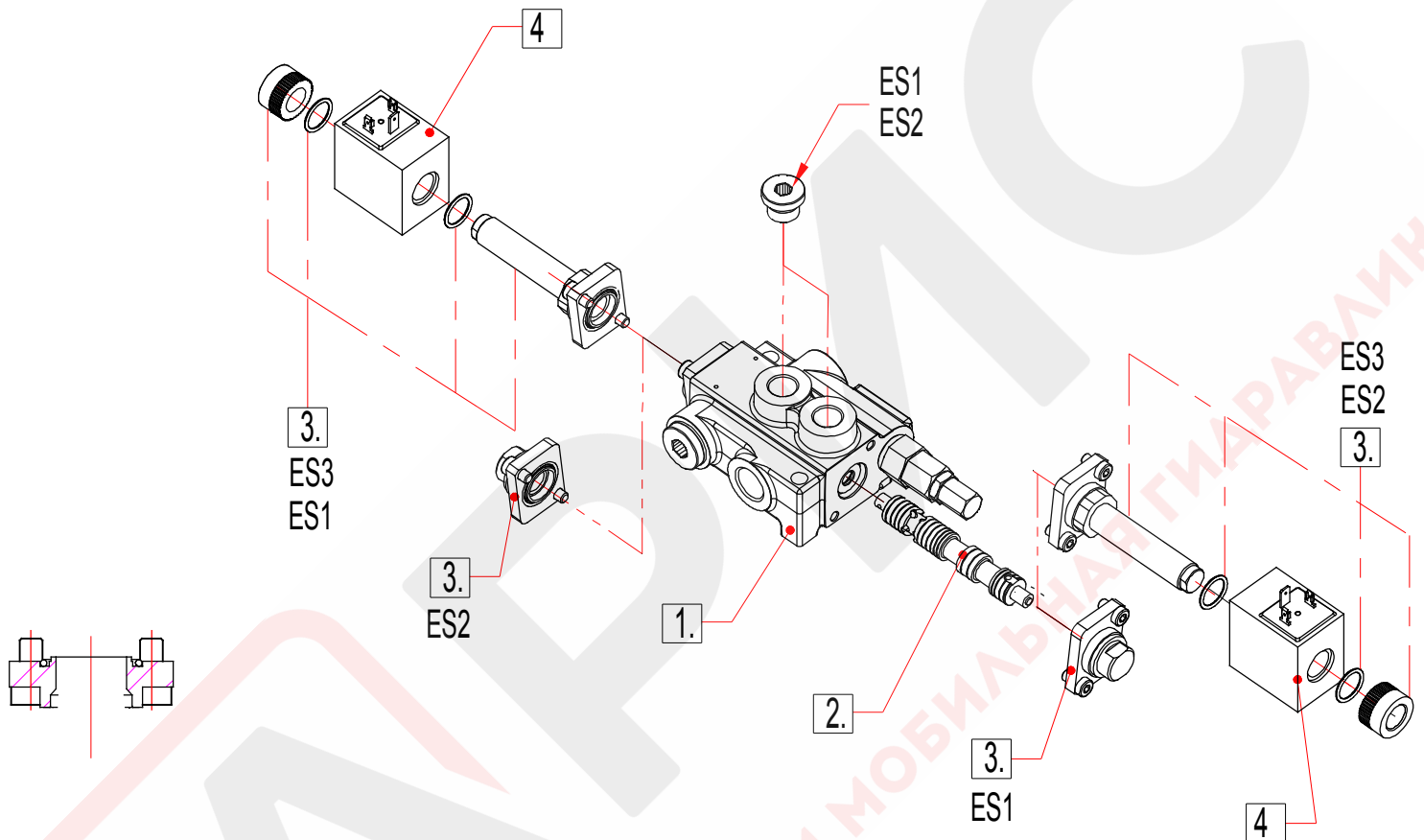
Nominal voltage tolerance ±10%
 Power rating 60 W
 Coil insulation class H
 Duty cycle 100%
 Connector ISO 4400
 Emergency manual override

pos.	Part.No	Description	Quantity
10		Ball 14.288	1
9	123.00.57	Spring	1
8	79.04.00	Relief valve	1
7	C37D024DCX01	Solenoid coil	(2)
7	C37D012DCX01	Solenoid coil	2
6	GM7042/BD	Solenoid Tube 22	2
5	558.02.04.05	Spring	2
4	558.02.04.03	Washer	2
3	511.02.06.00	Intermediate unit	2
2		Spool ...	1
1		Body ...	1

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