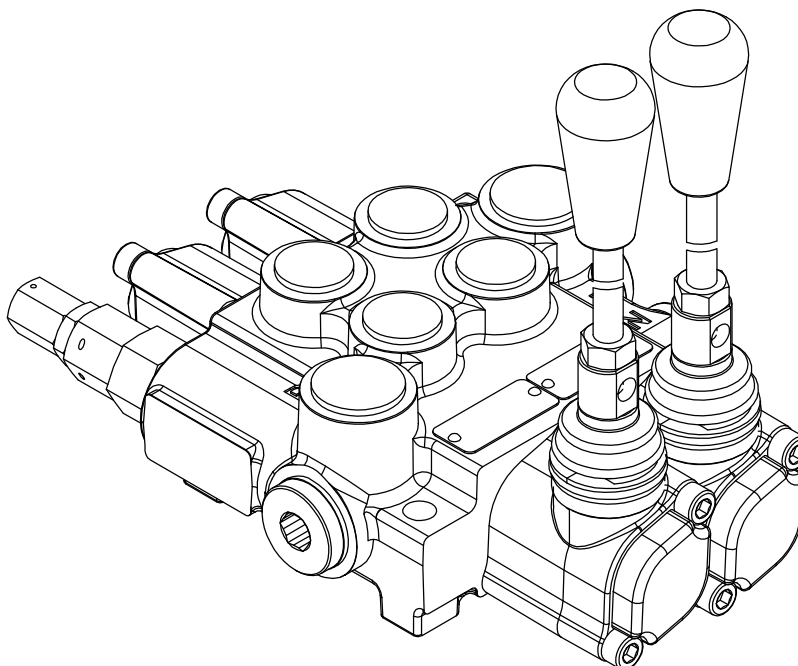


directional control valve Z50

Description

Назначение и применение

For starting, controlling and stopping the working fluid between the generator of pressure flow, the consumers and the Tank. Предназначение для изменения направления потока, ограничения давления рабочей жидкости в гидролинии, разгрузка насоса в нейтральной позиции золотника.

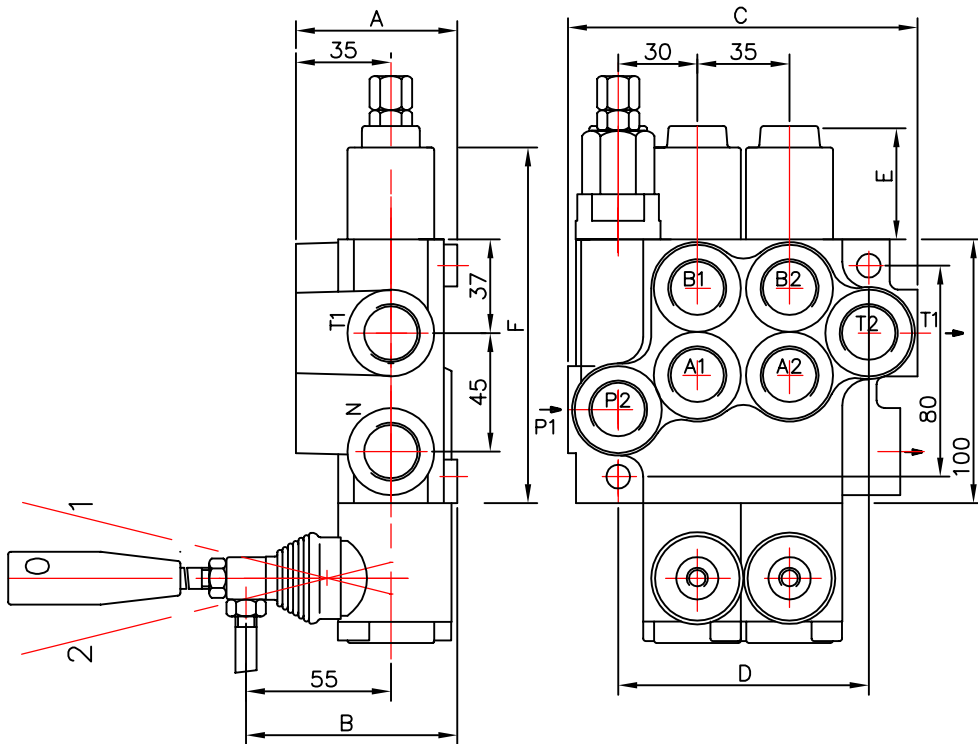
Specifications

Основные показатели

| | |
|-----------------------------|------------------------------|
| 1. Valve monoblock | моноблок |
| Конструктивное решение | |
| 2. Mounting | 2 bolts M8 |
| Крепление | |
| 3. Ports | internal thread |
| Присоединительные отверстия | резбовые отверстия |
| 4. Ambient temperature | -40 – +60 C |
| температура воздуха | |
| 5. Pressure medium | mineral oil |
| Рабочая жидкость | |
| 6. Viscosity | 12...800 mm/s |
| Вязкость | 20...100 mm/s |
| | recommended range |
| 7. Fluid temperature | -30 – +80 C |
| 8. Filtration | oil contaminations |
| | class 10 to NAS 1683 |
| | achived with filter 75 |
| 9. Max. operating pressure | P = 250 bar |
| | A, B = 300 bar |
| | T < 50 bar |
| 10 Internal leakage | 5 ccm/min at 100 bar |
| | viscosity 46 mm/s |
| 11. Nominal flow | 40 l/min (operating diagram) |
| 12. Spool stroke | +– 6 mm |
| 13. Actuating force | < 200 N in spool axis |

directional control valve Z50

Left hand configuration – standard



Right hand configuration

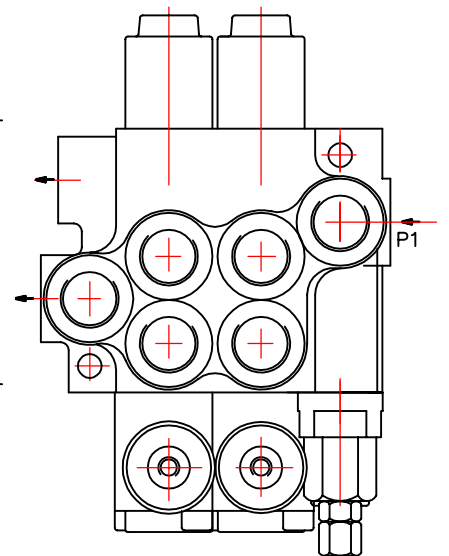


Table 1

| | A | B | C | D | P1 | P2 | T1 | T2 |
|-------|----|----|-----|-----|----|----|----|----|
| 01Z50 | 60 | 80 | 85 | 60 | + | - | + | - |
| 02Z50 | 60 | 80 | 129 | 97 | + | + | + | + |
| 03Z50 | 60 | 80 | 164 | 132 | + | + | + | + |
| 04Z50 | 60 | 80 | 199 | 167 | + | + | + | + |
| 05Z50 | 60 | 80 | 234 | 202 | + | + | + | + |
| 06Z50 | 60 | 80 | 269 | 237 | + | + | + | + |
| 07Z50 | 60 | 80 | 304 | 272 | + | + | + | + |

Table 2

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

Table 3

| code | spools |
|------|--------|
| 01 | 1 |
| 02 | 2 |
| 03 | 3 |

ets.

- 0 block with common check valve
распределитель с общим клапаном
- 2 number of spools
количество золотников
- Z50 directional control valve type ...
распределитель типа ...
- R inlet high pressure – right
вход давления с правой стороны
- A first spool distribution type
характеристика первого золотника
- 1 spool control/detend and ets./
контрол золотника/фиксация и грузе/
- A second spool distribution type
вид второго золотника
- 1 spool control/detend and estr./
контрол золотника/фиксация и грузе/
- G ports/treads/
резьбовые отверстия
- KZ1 general operation feature
вид ручного управления
- T with "teton"
исполнение ручного управления с "тетон"
- H operation feature /pneumatic, .../
грузе управление
- E with electric switch
с электрическим выключателем
- C2 high pressure carry over
продолжител потока высокого давления
- 11 connection ports in use
присоединительные отверстия

directional control valve Z50

Table 4

| code | way of distribution ; распределение потока |
|------|--|
| 1 | parallel ; параллельное |

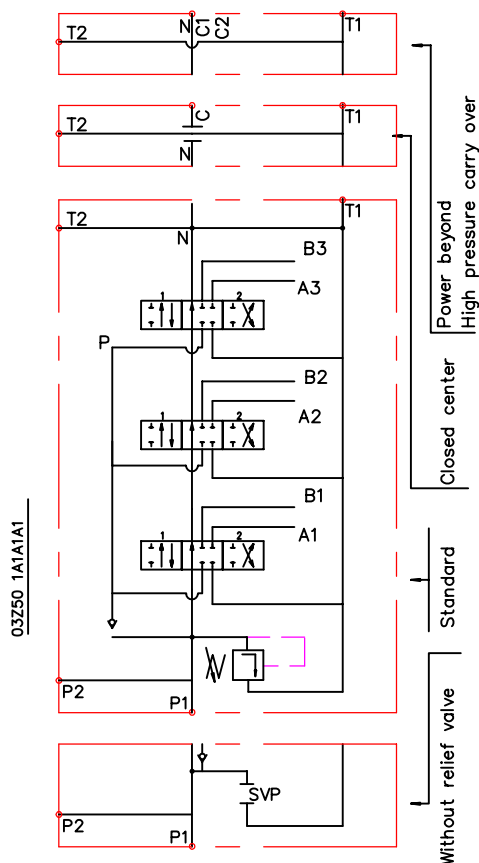
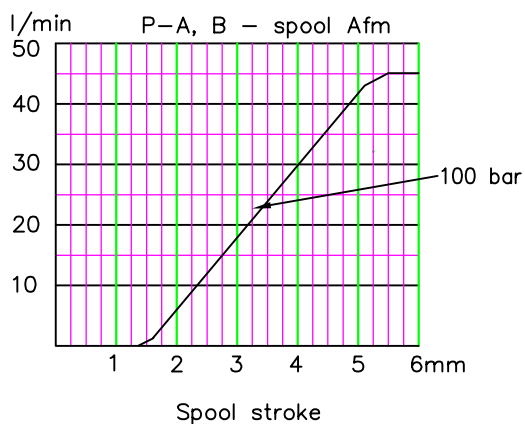


Table 5

| 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 | |
| * 15 | |
| * 16 | |
| ** 12 | |
| ** 13 | |



* только при вход слева (дуг) only for left hand configuration

** только при вход справа (дуг) only for right hand configuration

*** Spool Afm – fine metering

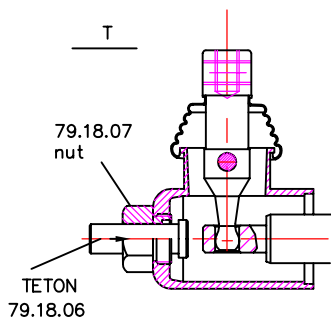
Table 7

| code | с микро шалтер ; incorporated microswitch |
|------|---|
| E | <div style="display: inline-block; vertical-align: middle;"> mikroswitch type Omron-V 165 I C5 </div> |

Table 8

| code | другое управление ; operation feature |
|------|--|
| P | <div style="display: inline-block; vertical-align: middle;"> пневматическое on-off pneumatic control; 5–10 bar ; ports NPTF 1/8–27 </div> |
| H | <div style="display: inline-block; vertical-align: middle;"> гидравлическое on-off hydraulic control ; pn = 5 – 20 bar ; ports G1/4 </div> |

directional control valve Z50



Z50

Table 9

| code | ports (treads) ; присоединительные отверстия | | | | |
|------|--|-----------|-----------|-----------|-----------|
| | P | A ; B | T | N | C2 |
| M | M22x1.5 | M18x1.5 | M22x1.5 | M22x1.5 | M22x1.5 |
| G | G1/2 | G3/8 | G1/2 | G1/2 | G1/2 |
| S | 7/8-14UNF | 3/4-16UNF | 7/8-14UNF | 7/8-14UNF | 7/8-14UNF |

kind of hand control ; вид ручного управления

Table 10

| code | ескуз feature | code | ескуз feature | code | ескуз feature |
|------|--|------|---------------|------|---------------|
| KZ | | KY | | KI | |
| KZ1 | | KY1 | | KI1 | |
| KZO | | KYO | | KIO | |
| KZ01 | | KY01 | | KI01 | |
| - | without hand control ; без ричажная система управления | | | | |

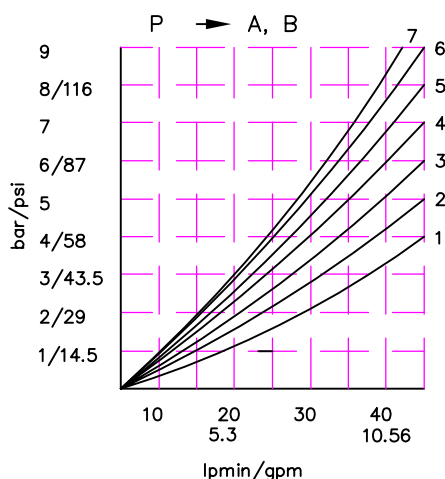
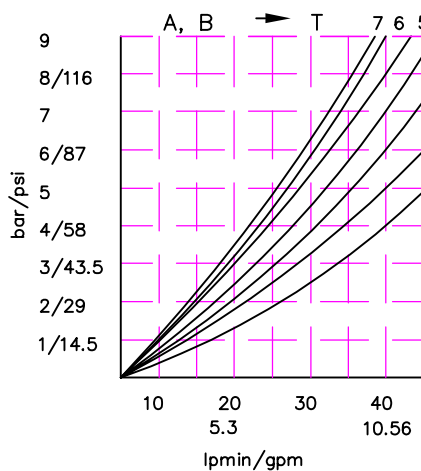
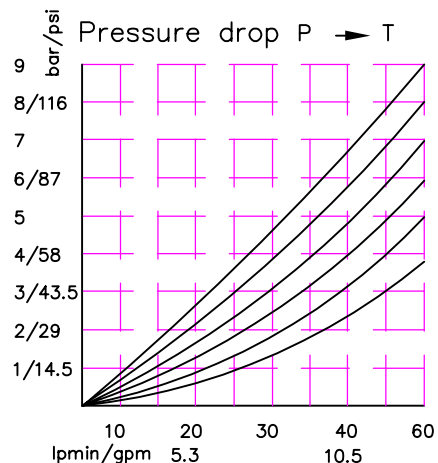


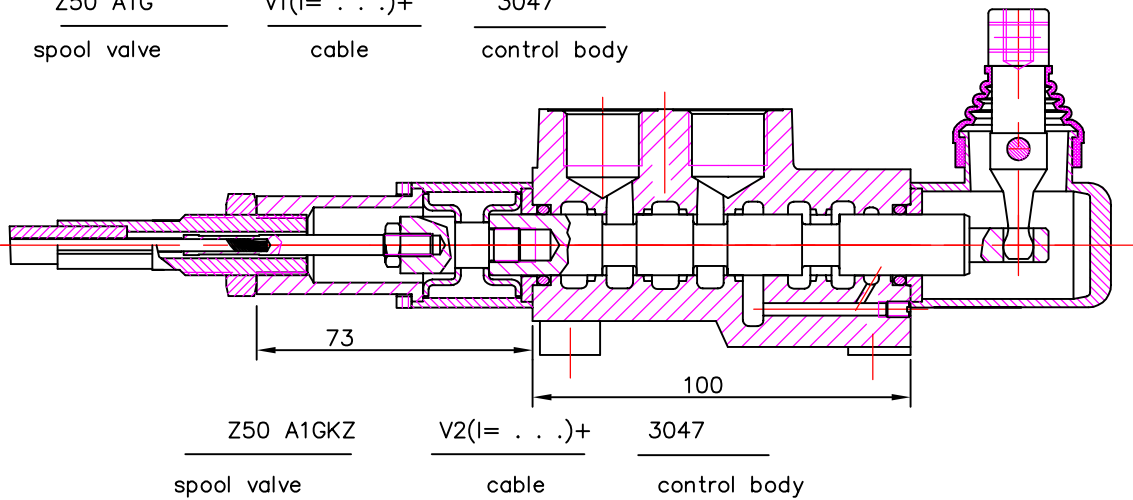
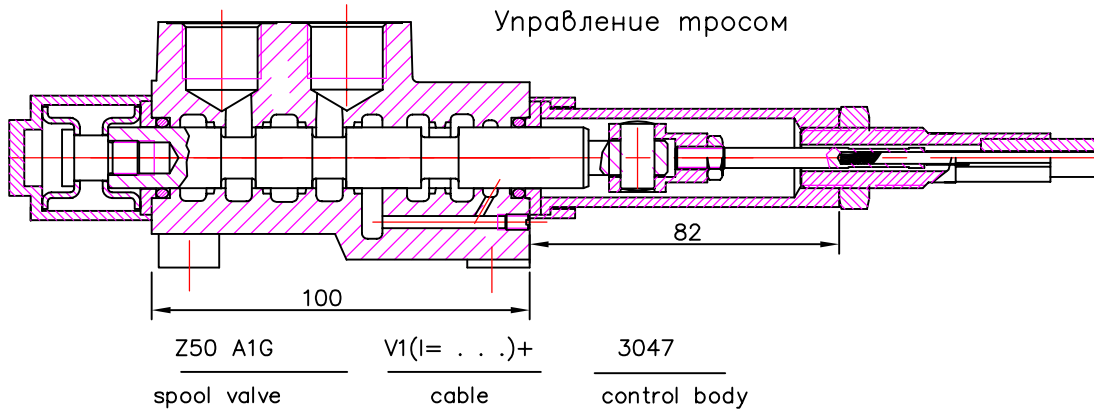
Table 11

| code | вид прогължение на дебита | |
|------|--|--|
| C | отвор "N" затворен closed center | |
| C2 | отвор "N" прогължава 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 |

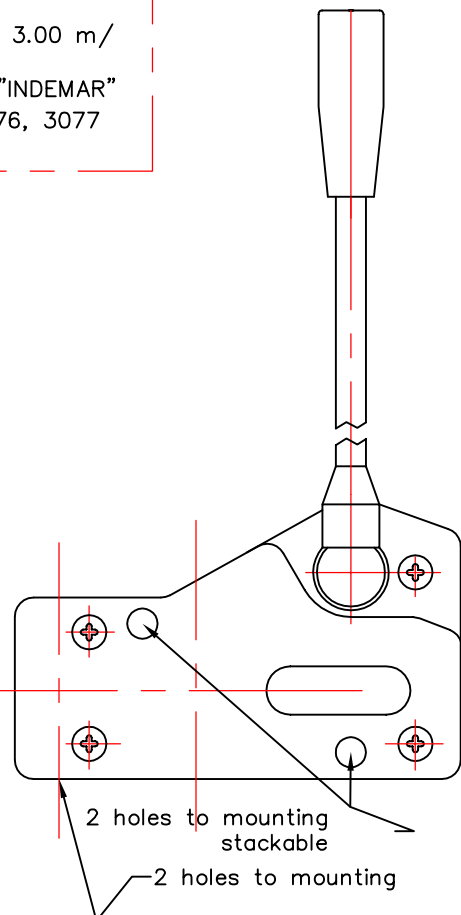
REMOTE CONTROLS
Управление тросом



Cable "INDEMAR" Cod. IT 3056 /l=1.00; 1.50; 2.00; 2.50; 3.00 m/
+control body "INDEMAR" code 3047, 3076, 3077

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

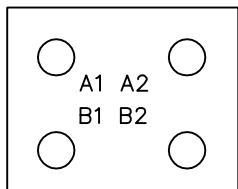
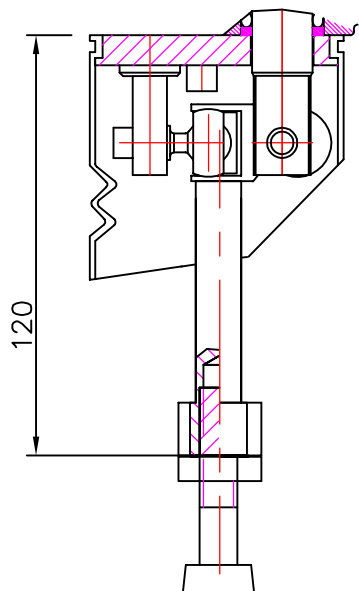
High solidity controls for easy mounting on every type of distributor. They can be mounted stand alone or packed together. They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in a three different models to meet different needs of Clients.



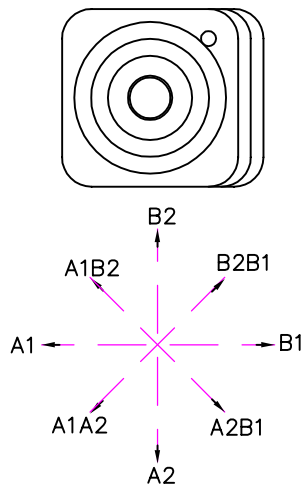
directional control valve 750

JOYSTICK "+"

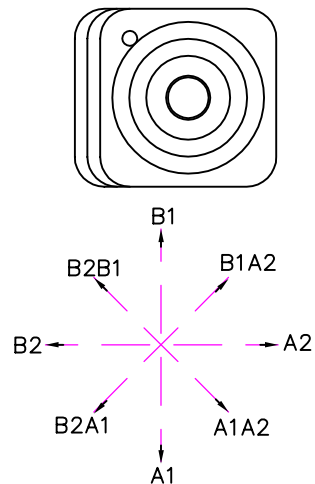
This control gives the possibility to operate, at the same time two spools with a "+" movement.



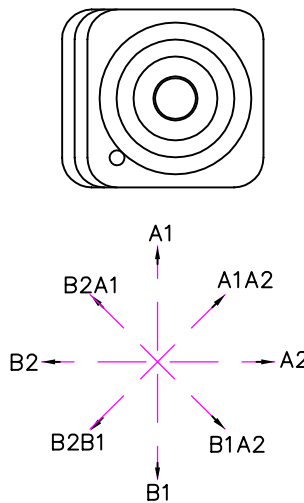
standard version 1



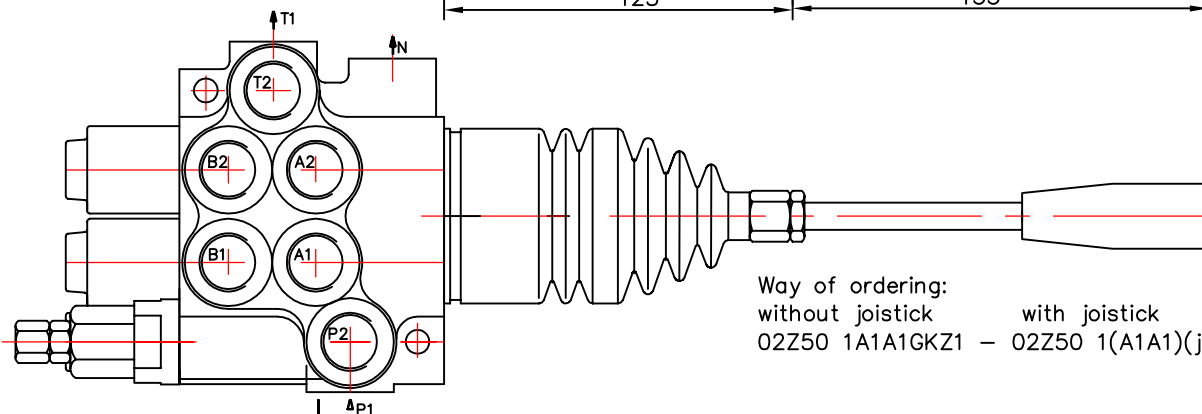
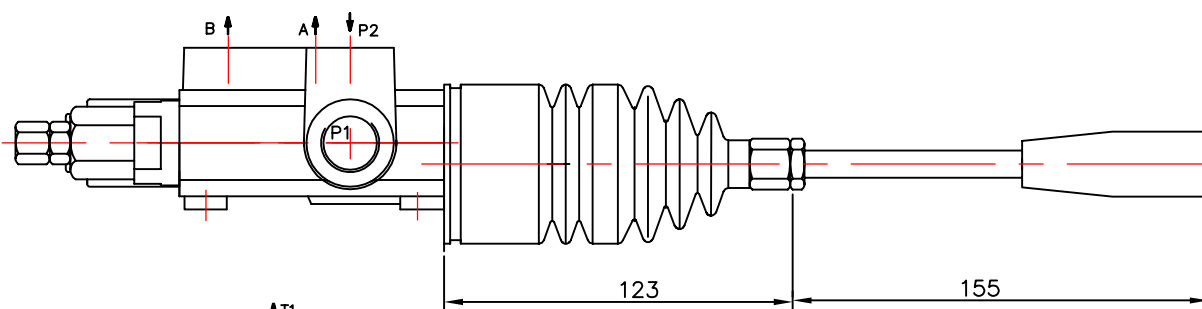
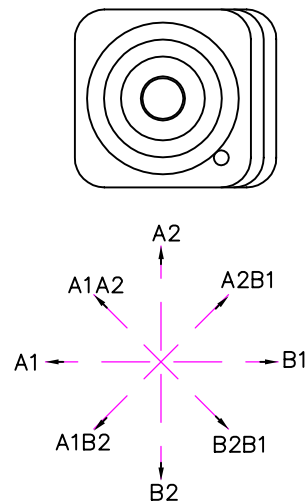
standard version 2



standard version 3



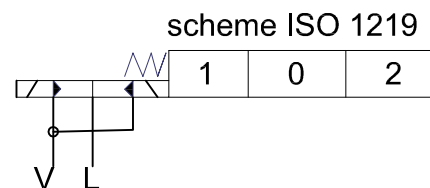
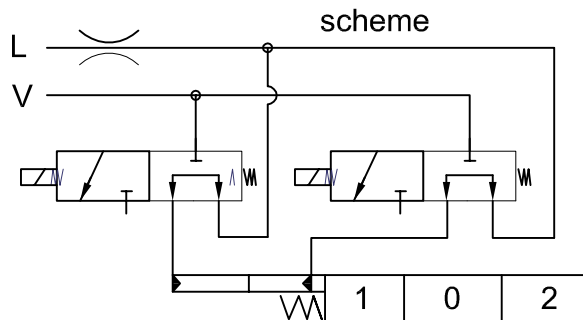
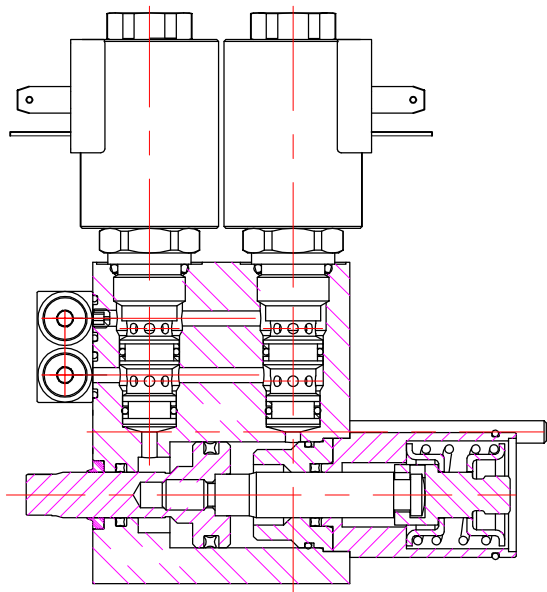
standard version 4



Way of ordering:
 without joystick with joystick
 02Z50 1A1A1GKZ1 - 02Z50 1(A1A1)(js+3)G

directional control valve Z50

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

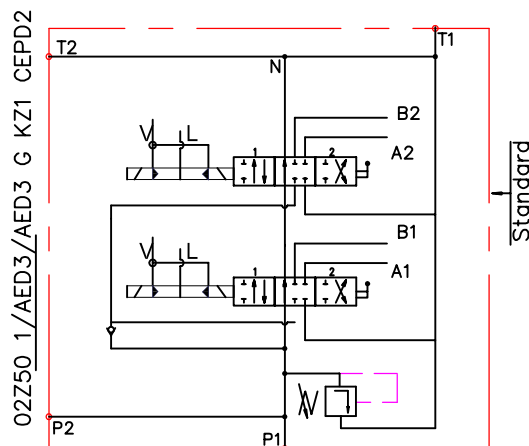
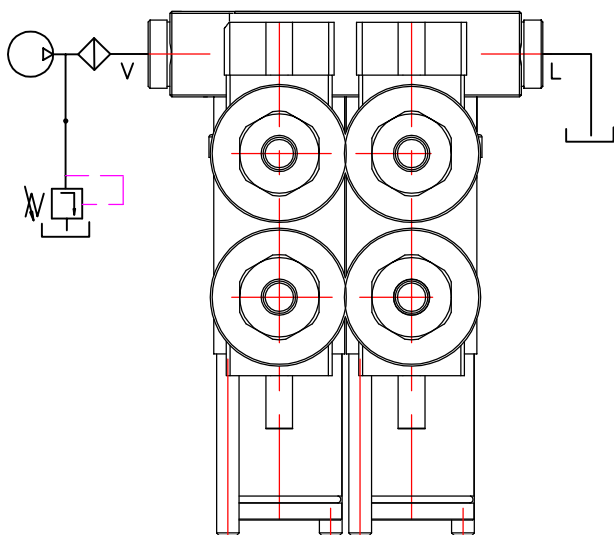


Operating pressure min 10 bar(145 psi)
 max 50 bar(725 psi)
 Max operating pressure in L (T line) 25 bar(360 psi)

Ordering codes
 3-wai 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

02Z50-1/A1ED3/A1ED3 G KZ1-CEED2-12VDC

Ordering codes (BSP threads)

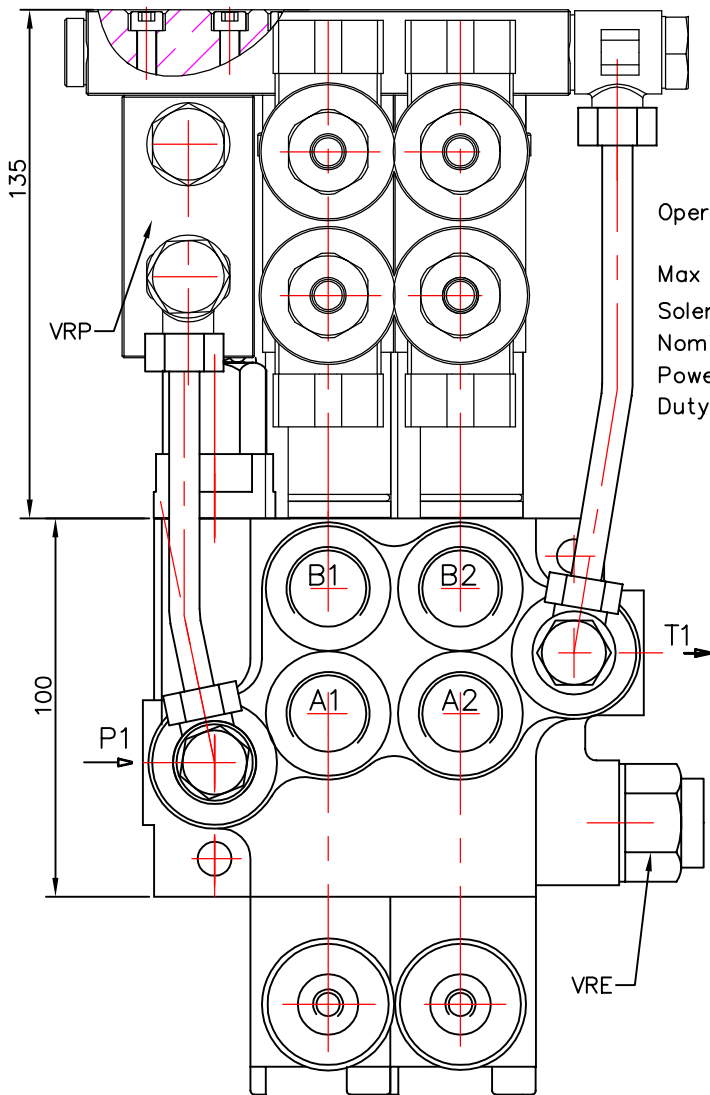
| | |
|----------|-------------------|
| CEED1P40 | Kit for 1 section |
| CEED2P40 | Kit for 2 section |
| CEED3P40 | Kit for 3 section |
| CEED4P40 | Kit for 4 sektion |
| | |

directional control valve Z50

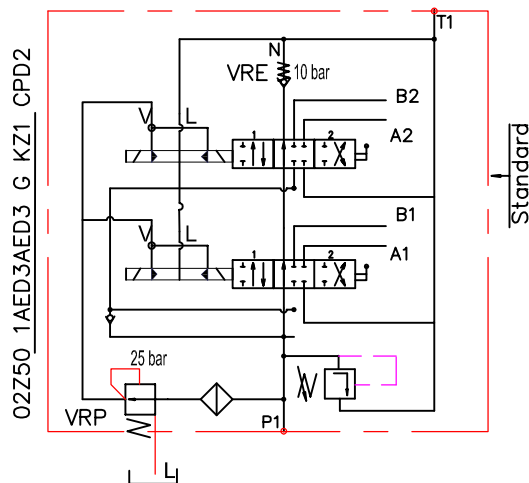
ED3 – electro-hydraulic control ON-OFF
 Электрогидравлический контрол ON-OFF

Order codes

3-wai solenoid valve-LSV2-08-3C
 coil P40ED3-G-12VDC
 coil P40ED3-G-24VDC



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



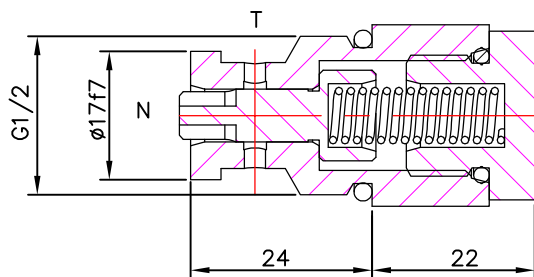
Ordering example

02Z50-VRP- 1/A1ED3/A1ED3 G KZ1-CED2-VRE-12VDC

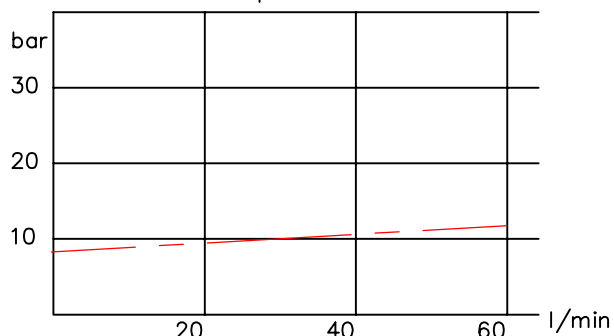
Colector kit - BSP threads
 Ordering codes

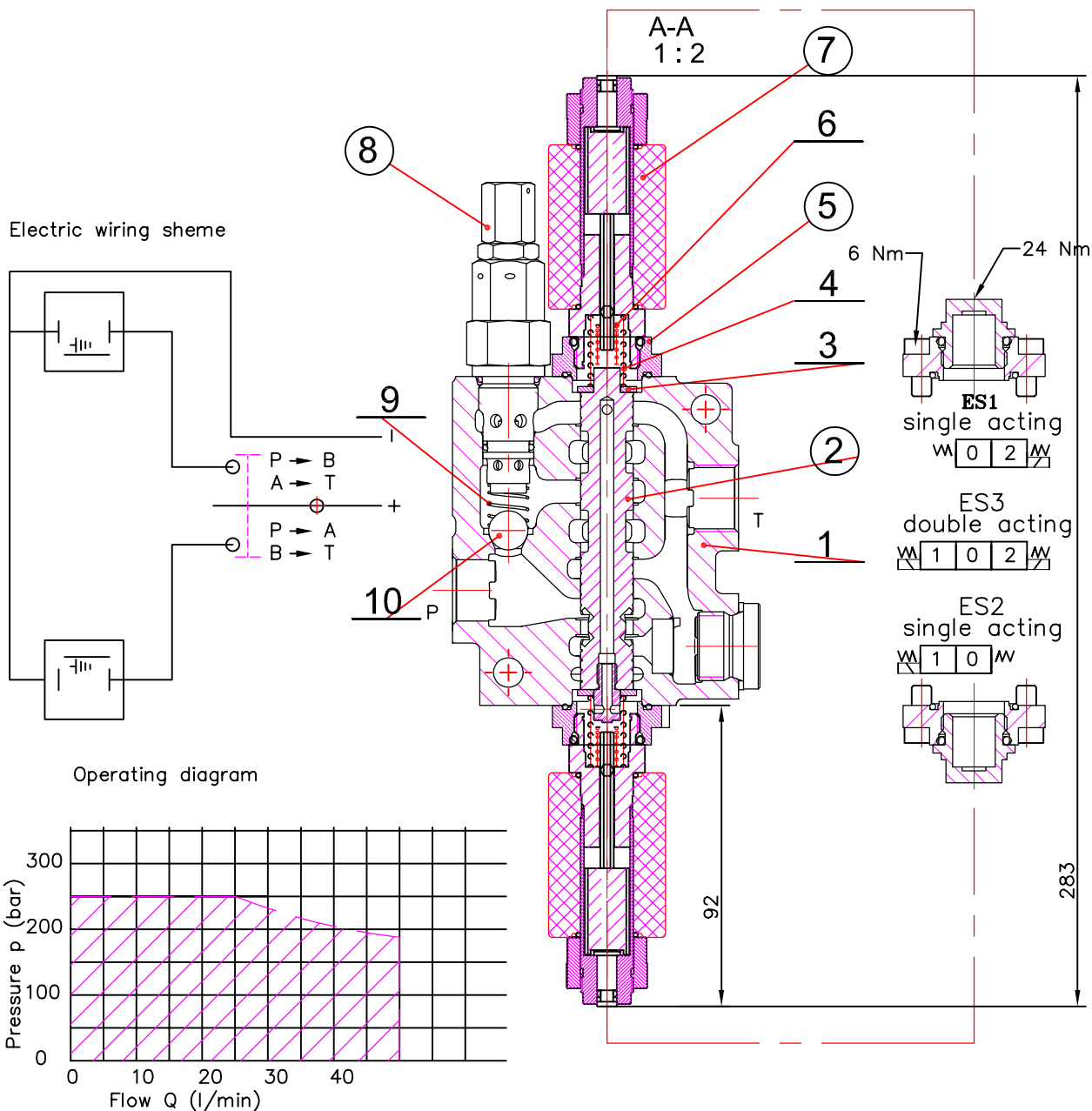
CED1 Kit for 1 section
 CED2 Kit for 2 section
 CED3 Kit for 3 section
 CED4 Kit for 4 sektion

Back pressure valve VRE-P40
 Клапан погнорний на слив



Pressure drop N-T





Operating features

Технические примечания

Control

Internal leakage A(B) → T
 (p=120 bar, Viscosity=32 mm²/s : max 30 ccm/min)
 Fluid temperature - -20°C(short time) ... 80°C
 Max. back pressure on outlet port T - 25 bar(360 psi)

Coil

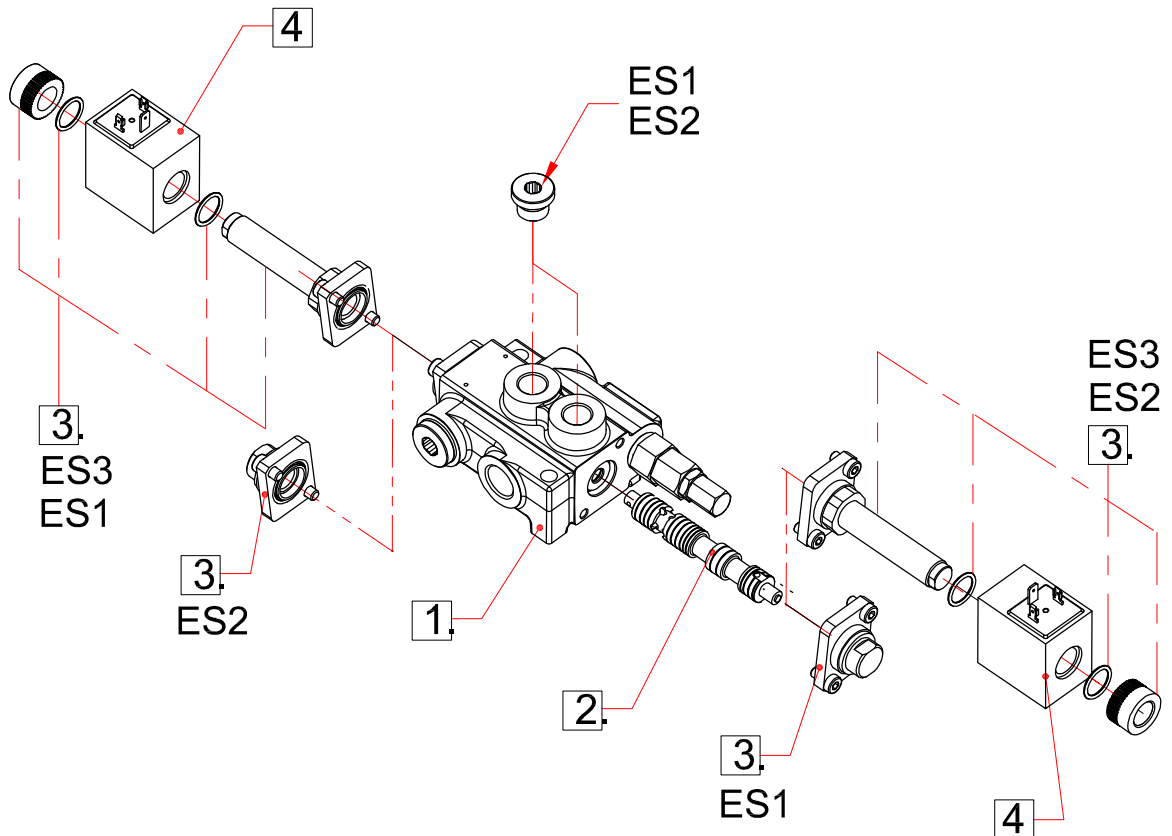
Nominal voltage tolerance ±10%
 Power rating 37 W
 Coil insulation class H
 Duty cycle 100%
 Connector ISO 4400
 lmergency manual override

| pos. | Part.No | Description | Quantity |
|------|---------------|-------------------|----------|
| 10 | | Ball 12 | 1 |
| 9 | 79.00.03 | 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 | 542.02.03.00 | Intermediate unit | 2 |
| 4 | 542.02.00.04 | Spring | 2 |
| 3 | 542.02.00.02 | Washer | 2 |
| 2 | | Spool ... | 1 |
| 1 | | Body ... | 1 |

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