

### 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 <sup>2</sup> /s     |
| Вязкость                    | 20...100 mm <sup>2</sup> /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         | 7 ccm/min at 100 bar            |
|                             | viscosity 46 mm <sup>2</sup> /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

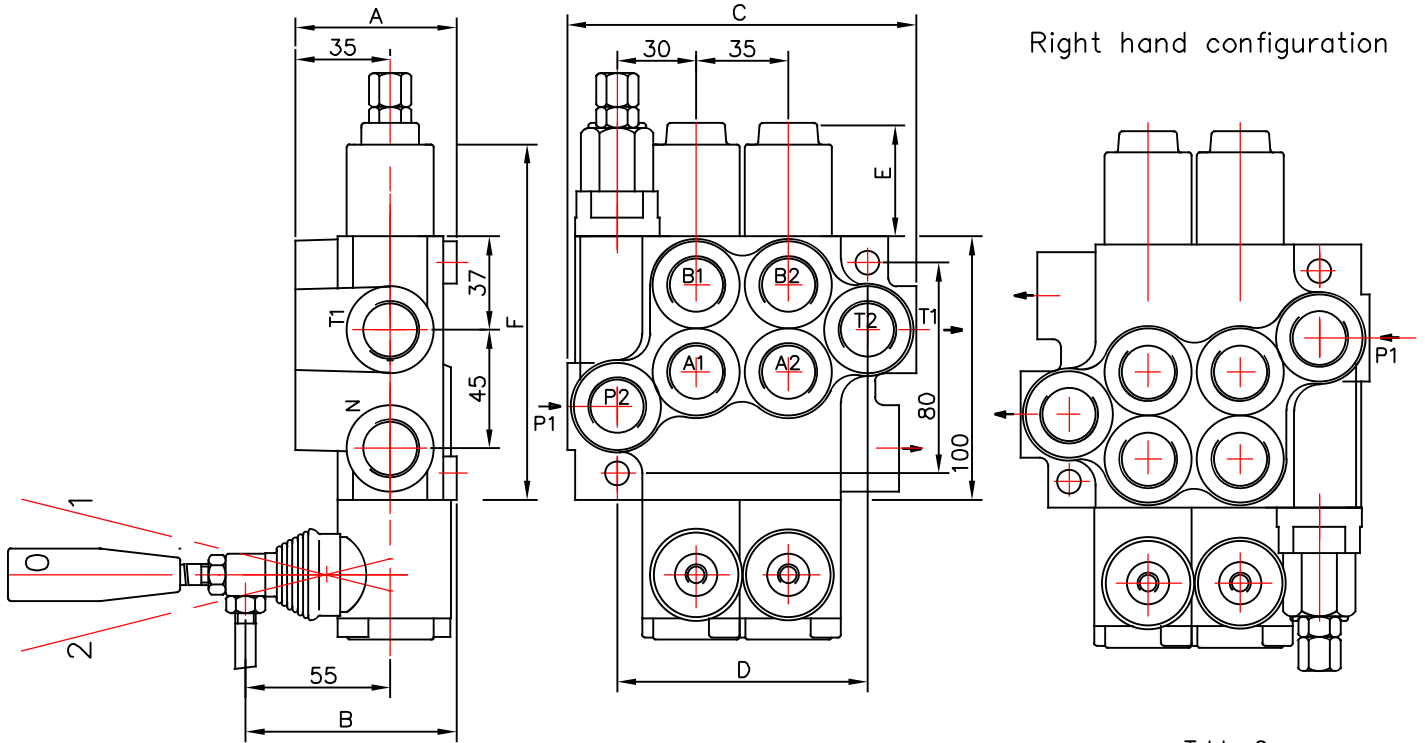


Table 1

|       | 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<br>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  
**-** relief valve – standard setting 175; without indication  
 (4) Spring for 160 to 315 bar; standard setting 220 bar; red;  
 (спр) relief valve blanking plug; без предопр. клапана  
**A 1** first spool distribution type  
 характеристика первого золотника  
**A 1** spool control/detend and ets./  
 контрол золотника/фиксации и грузе/  
**1** second spool distribution type  
 вид второго золотника  
**1** spool control/detend and estr./  
 контрол золотника/фиксации и грузе/  
**G** ports /treads/  
 резьбовые отверстия  
**KZ1** general operation feature  
 вид ручного управления  
**T** with "teton"  
 исполнение ручного управления с "тетон"  
**H E** operation feature /pneumatic, .../  
 другое управление  
 с электрическим выключателем  
**C2** high pressure carry over  
 продолжител потока высокого давления  
**11** connection parts in use  
 присоединительные отверстия

directional control valve Z50

INLET RELIEF OPTIONS

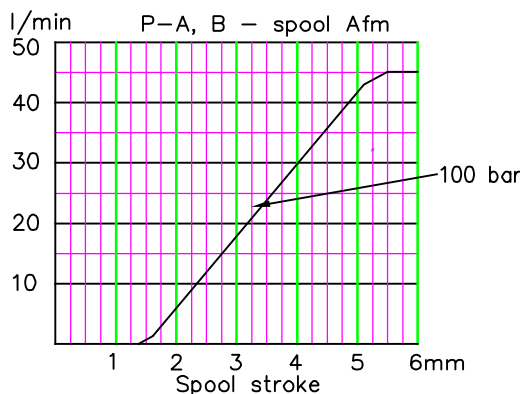
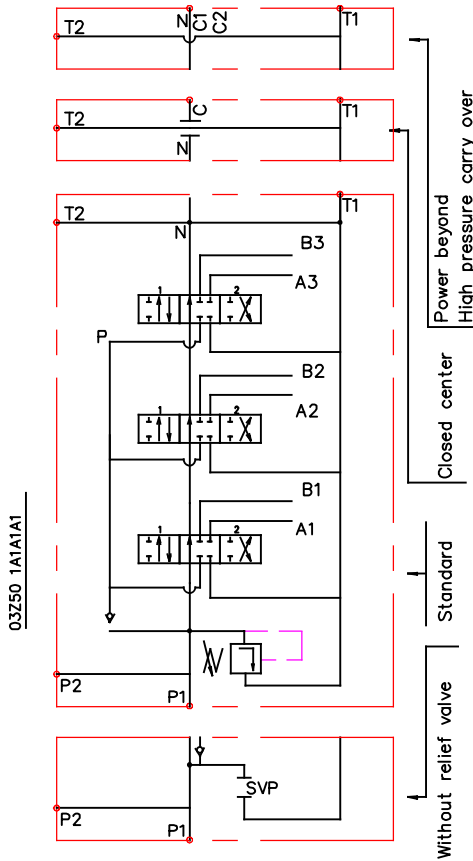
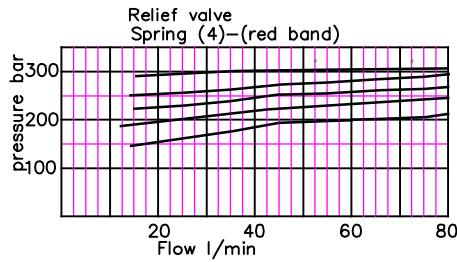
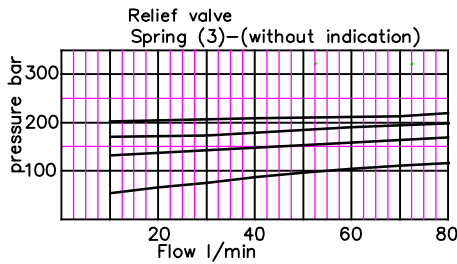


Table 4

| 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    | 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           |

|      |         |
|------|---------|
| * 15 | 3 1 0 2 |
| * 16 | 3 1 0 2 |

\* только при входе слева  
only for left hand configuration

|       |         |
|-------|---------|
| ** 12 | 1 0 2 3 |
| ** 13 | 1 0 2 3 |

\*\* только при входе справа  
only for right hand configuration

\*\*\* Spool Afm – fine metering

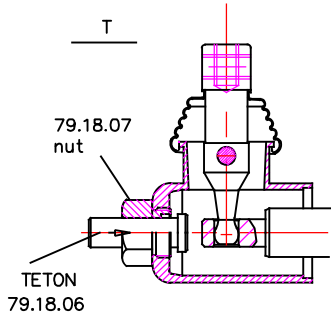
Table 7

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

Table 8

| code | другое управление ; operation feature   |
|------|---|
| P    | пневматическое ; ports NPTF 1/8-27<br>on-off pneumatic control; pn = 5-10 bar ; |
| H    | гидравлическое ; ports G 1/4<br>on-off hydraulic control ; pn = 5 - 20 bar      |

directional control valve Z50



Z50

Table 9

| code | ports (threads) ; 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 | 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 |      |               |      |               |

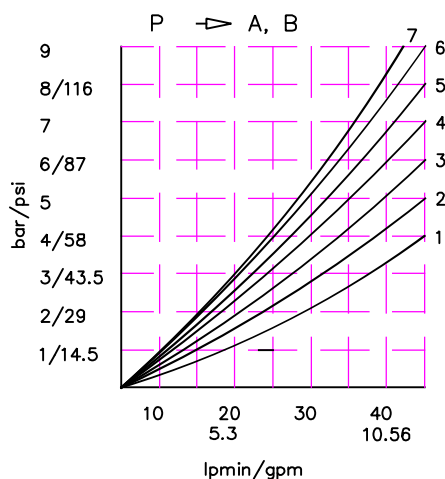
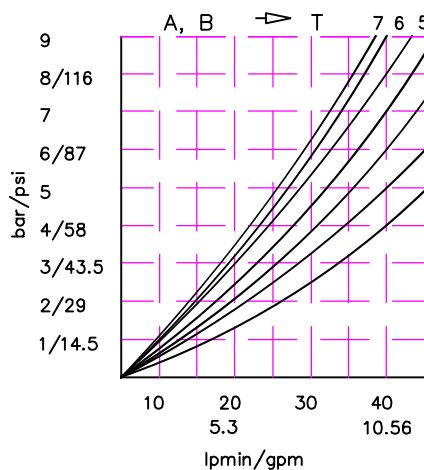
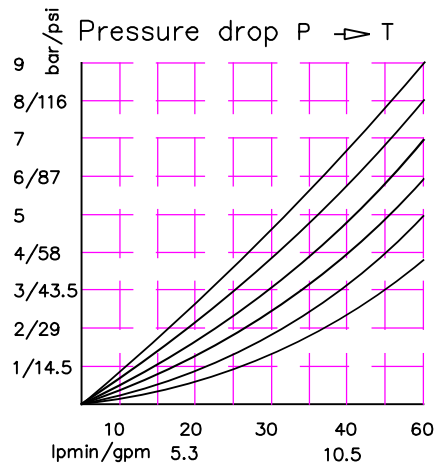


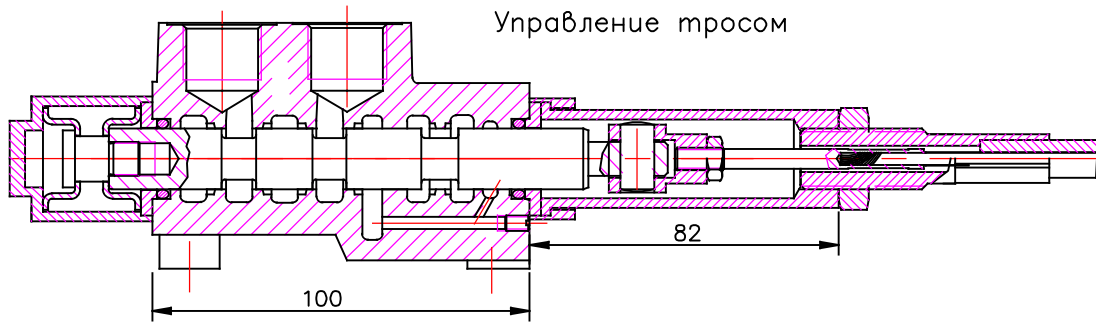
Table 11

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

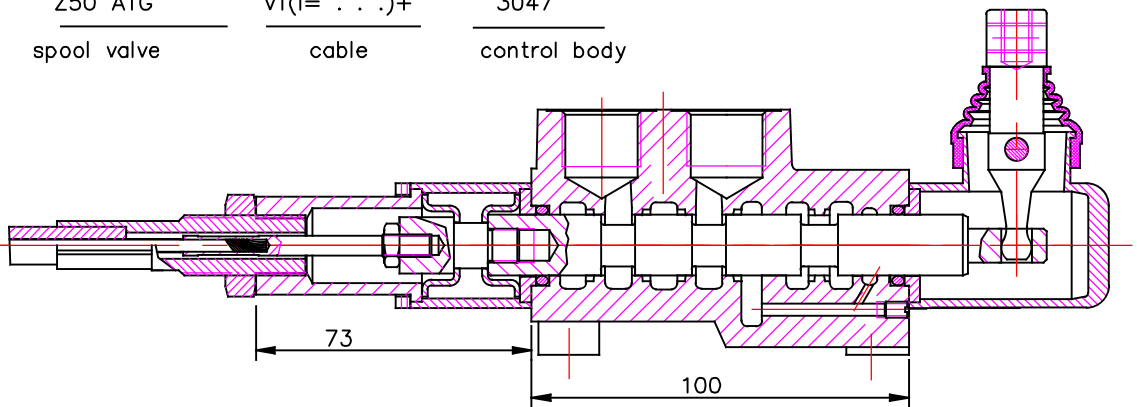
Table 12

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

REMOTE CONTROLS  
Управление тросом



Z50 A1G      V1(l= . . .)+      3047  
spool valve      cable      control body



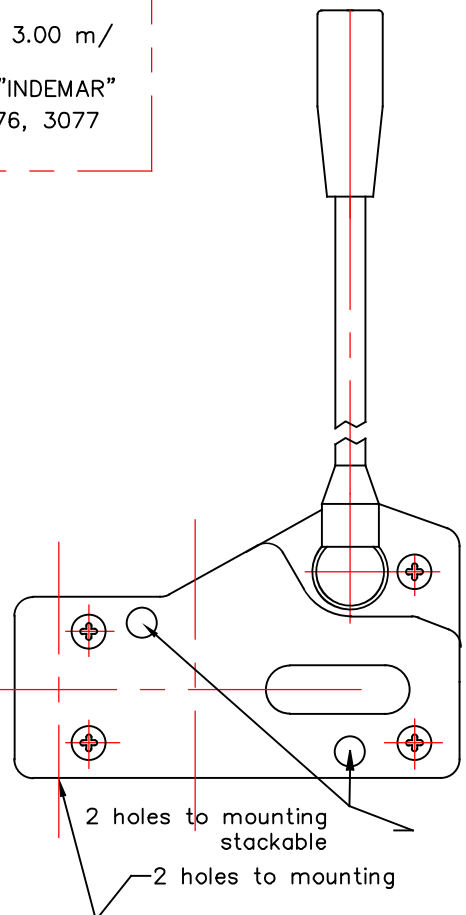
Z50 A1GKZ      V2(l= . . .)+      3047  
spool valve      cable      control body

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

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

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

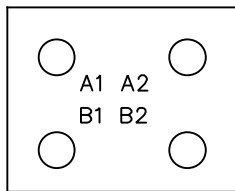
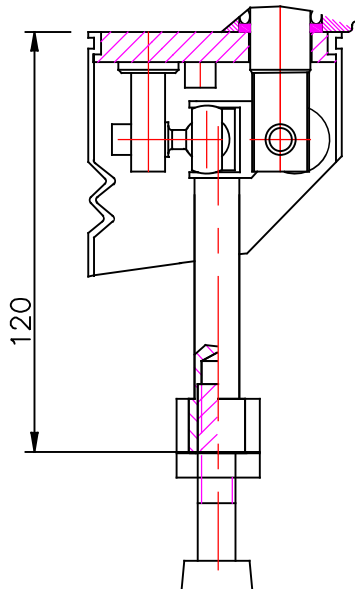
High solidty controls for easy mounting on every type of distributor.They can by mounted stand alone or packed together.  
They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in a three differents models to meet different needs of Clients.



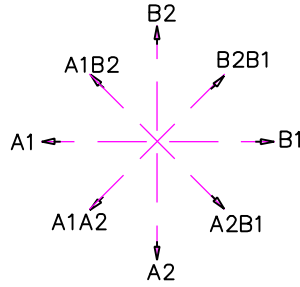
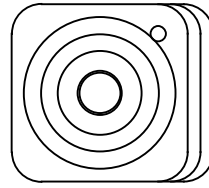
directional control valve 750

JOYSTICK "+"

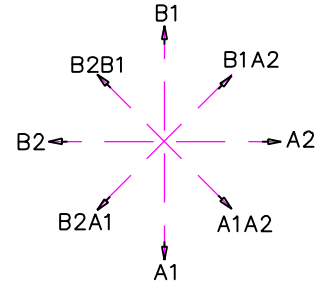
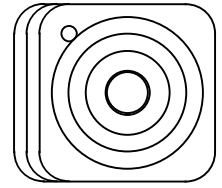
This control gives the possibility to operate, at the same time two spools with a "+" movement.



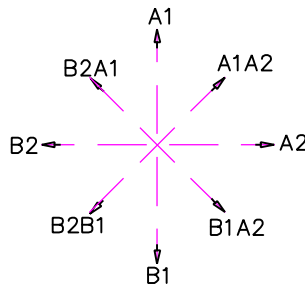
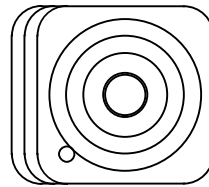
standard version 1



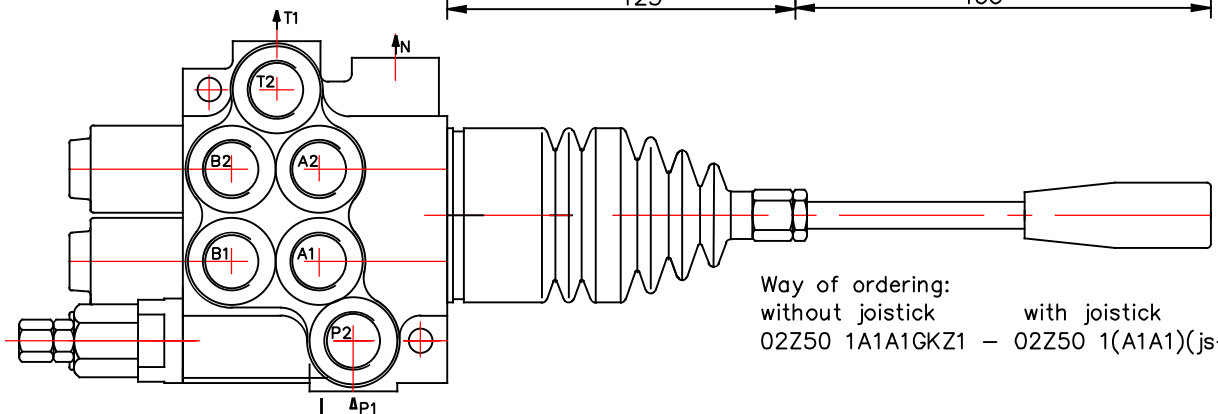
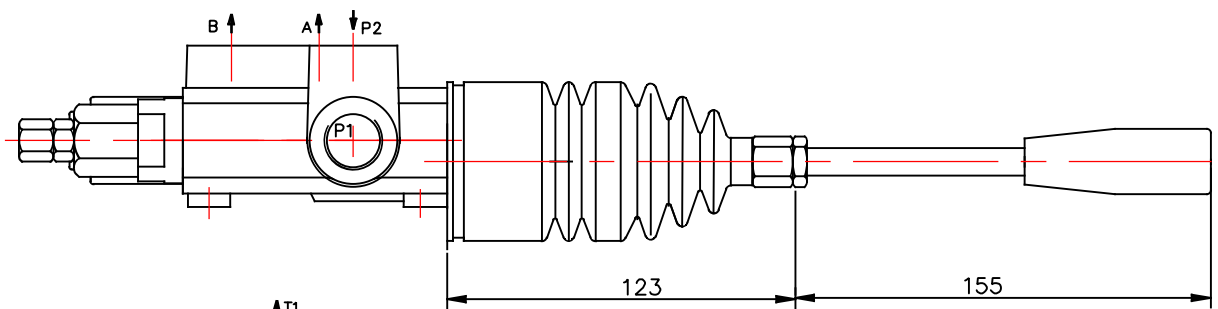
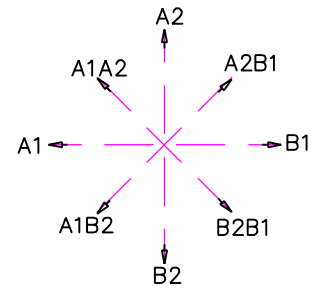
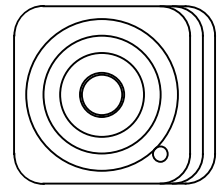
standard version 2



standard version 3



standard version 4



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