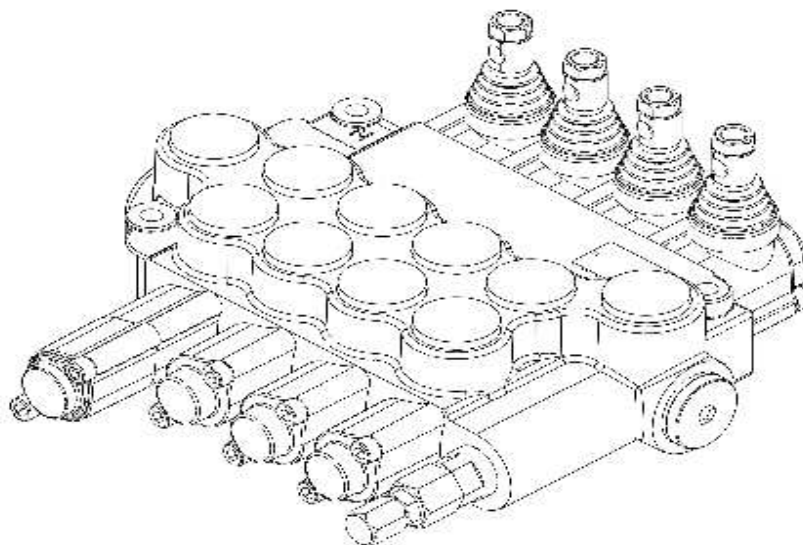


# HYDRAULIC DIRECTIONAL CONTROL VALVES

## РАСПРЕДЕЛИТЕЛИ ГИДРАВЛИЧЕСКИЕ



### Description

Назначение и область применения

For starting, controlling and stopping the working fluid between the generator of pressured flow, the consumers at 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

4. Ambient temperature

Температура воздуха

внутренние резьбы

5. Pressure medium

Рабочая жидкость

-40C...+60C

6. Viskosity

Кинематическая вязкость

mineral oil based hydraulic oil

7. Fluid temperature

8. Filtration

9. Max. operating pressure

Давление max. bar

12...800 mm<sup>2</sup>/s permissible range

20...100 mm<sup>2</sup>/s recommended range

- 15C...+80C

Oil contamination 10 to NAS1638

P = 250 bar

T = 50 bar

A, B = 300 bar

18 cm<sup>3</sup>/min at 120 bar

10. Leakage

Внутренние потери (A, B – T)

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

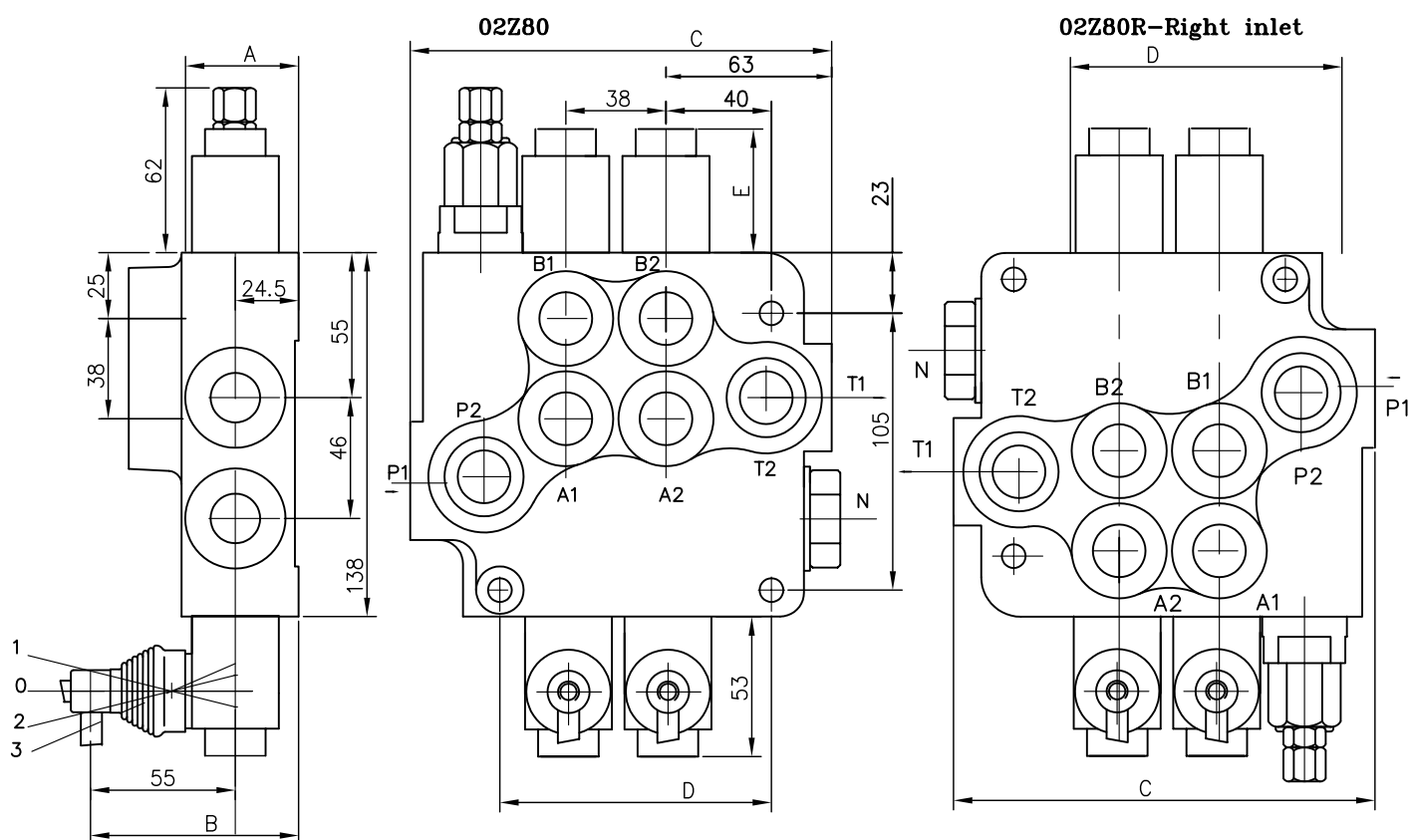


Table 1

|       | 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 | *  | *  | *  | *  |

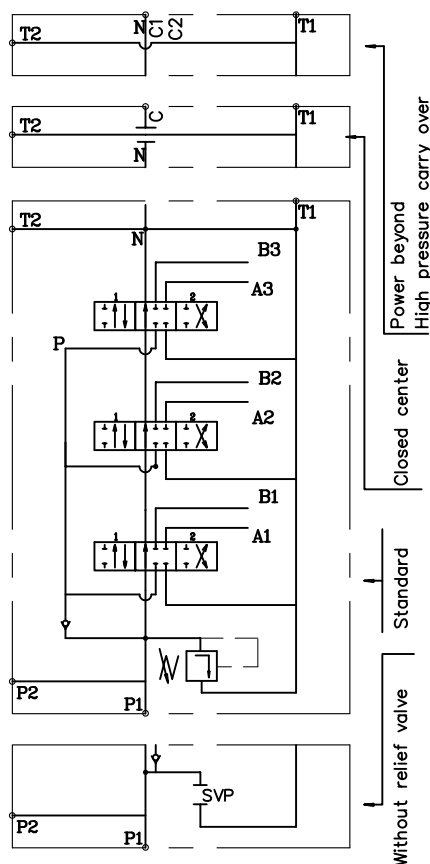
Table 2

| Spool control                | E  |
|------------------------------|----|
| 1, 4, 5, 6, 7, 8, 9, 10, 11, | 40 |
| 2, 3, 12, 14                 | 72 |
| 13                           | 44 |

**0** block with common check valve  
 распределитель с общим клапаном  
**2** number of spools  
 количество золотников  
**Z80** directional control valve type ...  
 распределитель типа ...  
**R** inlet high pressure – right  
 вход давления с правой стороны  
**1** way of distribution/parallel or .../  
 способ распределения потока  
**A 1** first spool distribution type  
 характеристика первого золотника  
**1** spool control/detend and etc./  
 контрол золотника/фиксация и другие/  
**A** second spool distribution type  
 тип второго золотника  
**1** spool control/detend and estr./  
 контрол золотника/фиксация и другие/  
**G** ports /treads/  
 резьбовые отверстия  
**KZ1** general operation feature  
 вид ручного управления  
**T** with "teton"  
 исполнение ручного управления с "тетон"  
**H** operation feature /pneumatic, .../  
 другое управление  
**E** with electric switch  
 с электрическим выключателем  
**C2** high pressure carry over  
 продолжител потока высокого давления  
**11** connection ports in use  
 присоединительные отверстия

way of distribution – parallel; распределение – параллельное

03280 1A1A1A1



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

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

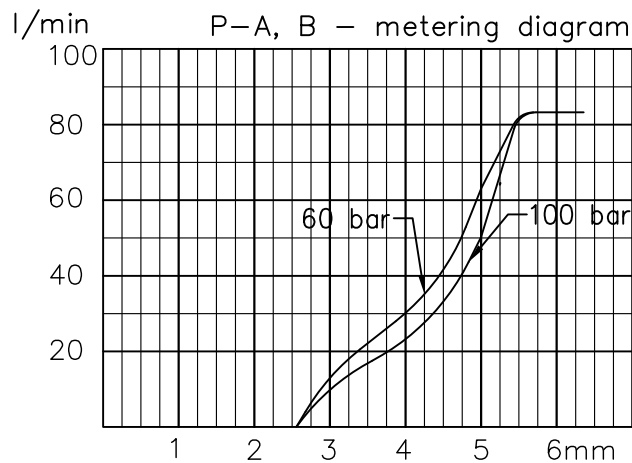


Table 3

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

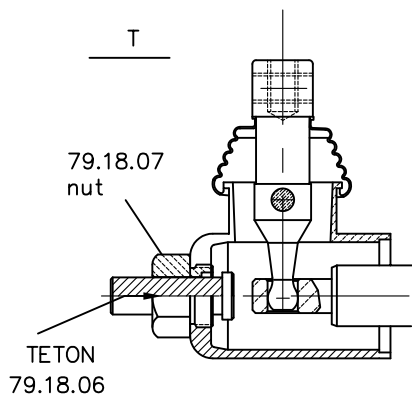
ets.

Table 7

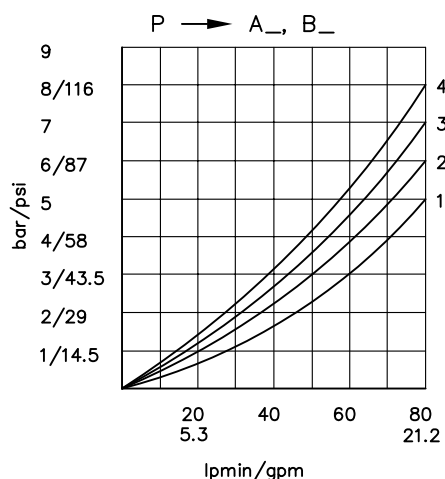
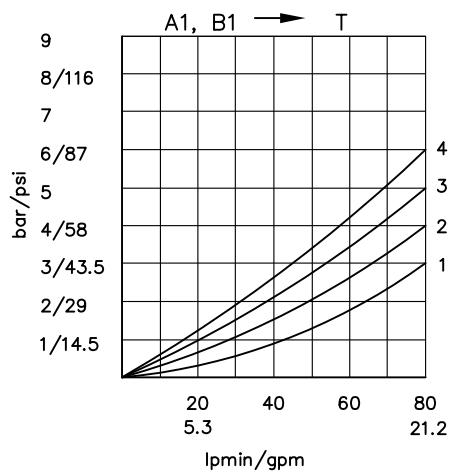
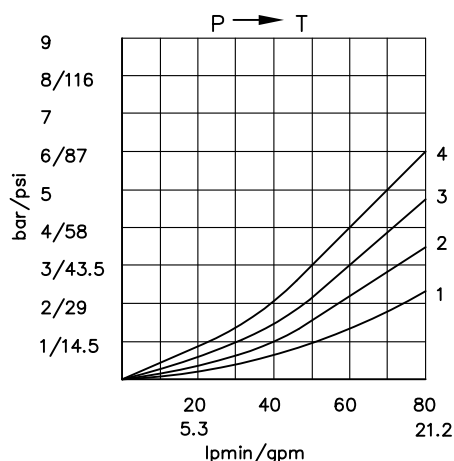
| code | с микро шалтер ; incorporated microswitch           |
|------|-----------------------------------------------------|
| E    | <div> mikroswitch type<br/>Omron-V 165 I C5  </div> |

Table 8

| code | групповое управление ; operation feature                                                |
|------|-----------------------------------------------------------------------------------------|
| P    | <div> пневматическое<br/>on-off pneumatic control; 5–10 bar ; ports NPTF 1/8–27 </div>  |
| H    | <div> гидравлическое<br/>on-off hydraulic control ; pn = 5 – 20 bar ; ports G1/4 </div> |



..Z80 directional control valve



P80

Table 9

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

kind of hand control ; вид ручного управления

Table 10

| code                                            | ескюз feature | code | ескюз feature | code | ескюз feature |
|-------------------------------------------------|---------------|------|---------------|------|---------------|
| KZ                                              |               | KY   |               | KI   |               |
| KZ1                                             |               | KY1  |               | KI1  |               |
| KZ0                                             |               | KY0  |               | KI0  |               |
| KZ01                                            |               | KY01 |               | KI01 |               |
| — without hand control ; без ручного управления |               |      |               |      |               |

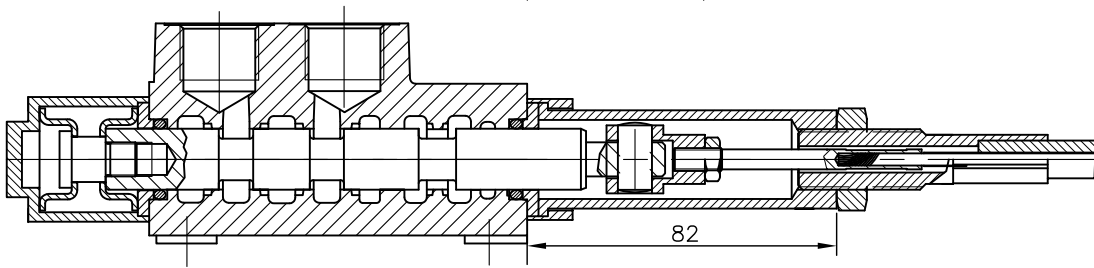
Table 11

| code | продолжение потока                                                          |  |
|------|-----------------------------------------------------------------------------|--|
| C    | отверстие "N" закрыто<br>closed center                                      |  |
| C1   | отверстие "N" with "carry over"<br>part for power beyond sleeve(carry over) |  |
| C2   | отверстие "N" with "carry over"<br>part for power beyond sleeve(carry over) |  |
| —    | отверстие "N" связано с "T"<br>without part for pressure carry over         |  |
| X    | "N" всегда связан с "T"<br>power beyond ever to tank                        |  |

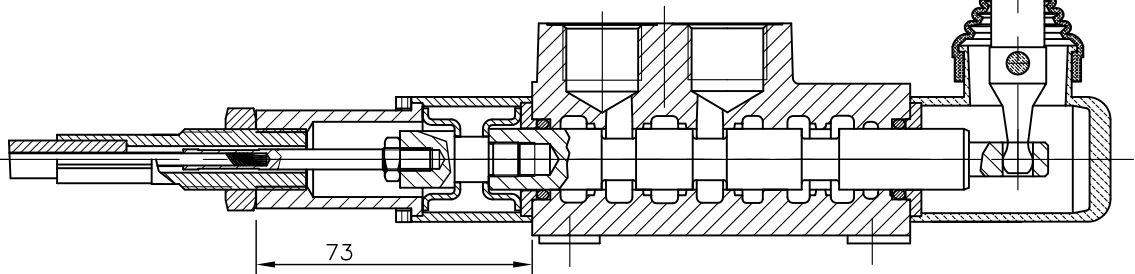
Table 12

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

# REMOTE CONTROL Управление тросом



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



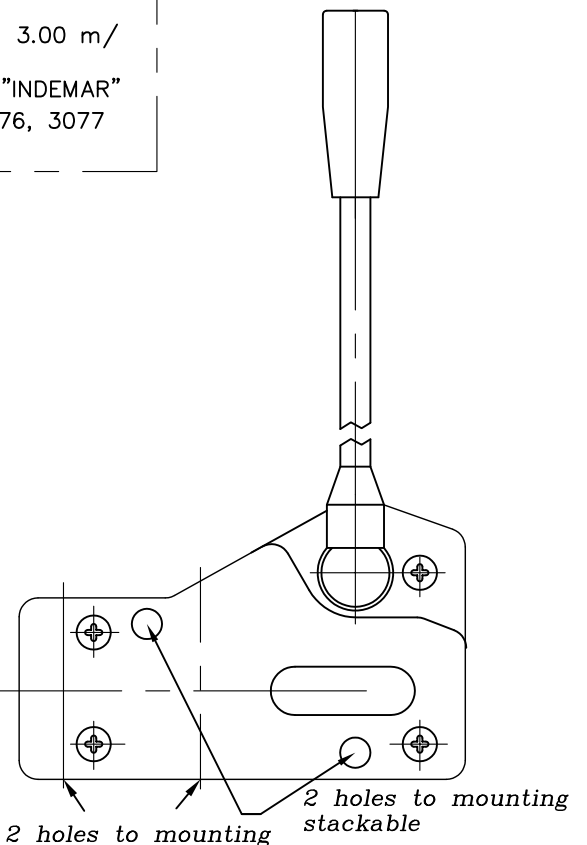
Z80 A1G      V2KZ1(l= . . .)+      3047  
spool valve      cable      control body

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

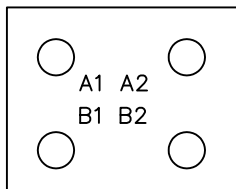
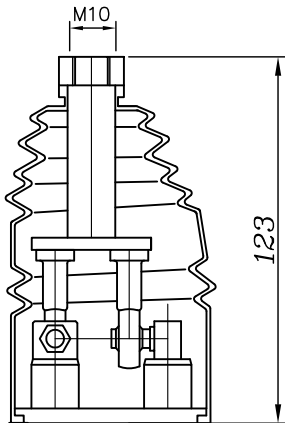
|                       | 3047       | 3076       | 3077       |
|-----------------------|------------|------------|------------|
| Stroke                | 13+13 mm   | 13+13 mm   | 13+13 mm   |
| Max. load             | 45 kg      | 45 kg      | 45 kg      |
| Level ratio           | 10:1       | 10:1       | 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 solidity controls for easy mounting on every type of distributor. They can be mounted stand alone or packed together. They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in three different models to meet different needs of Clients.

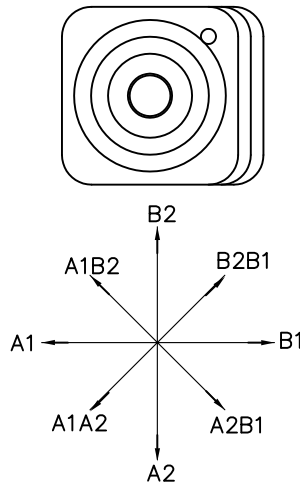


## JOYSTICK "+"

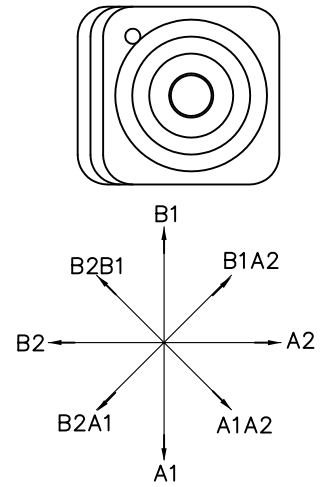
This control gives the possibility to operate, at the same time two spools with a "+" movement.



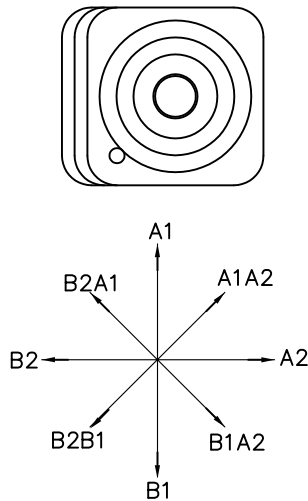
standard version 1



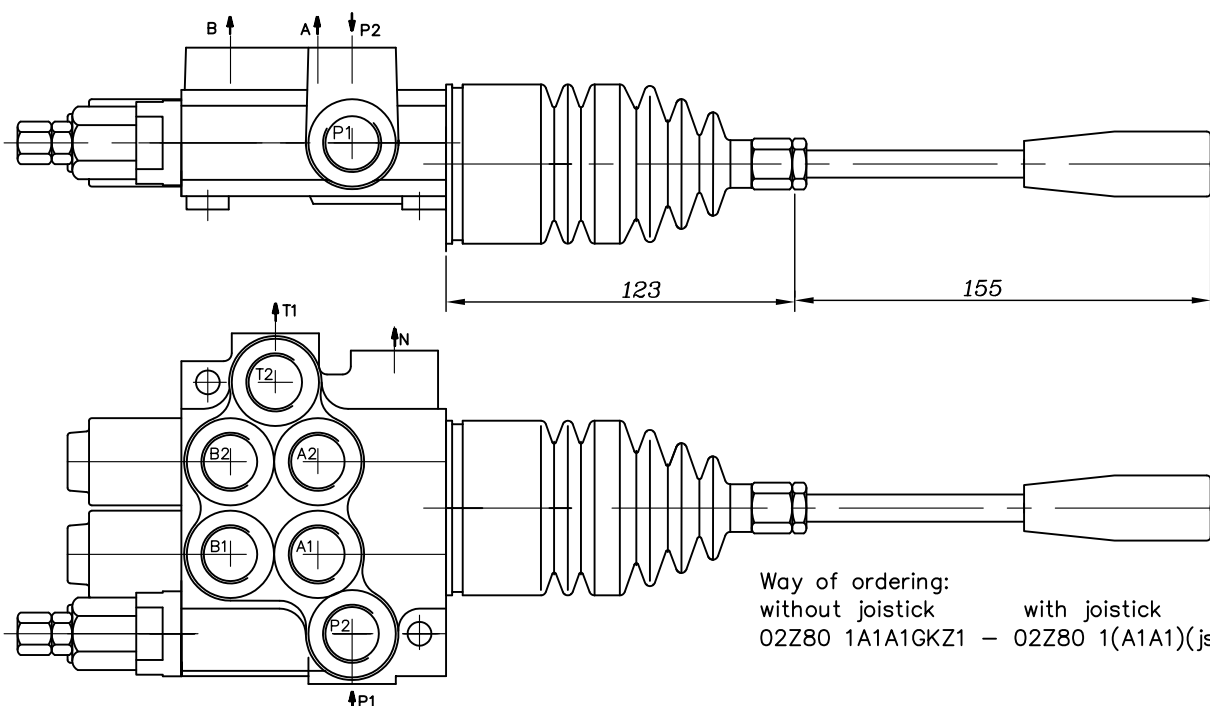
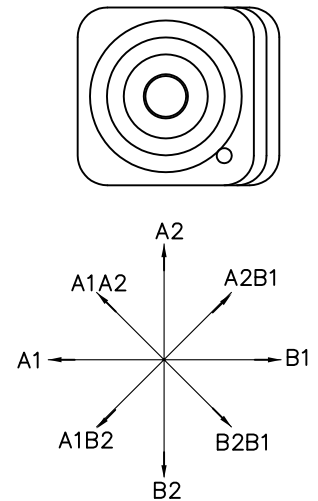
standard version 2



standard version 3



standard version 4



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