

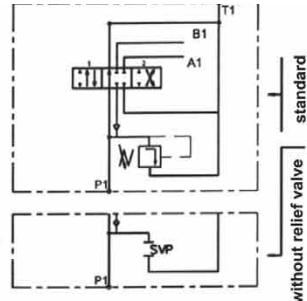
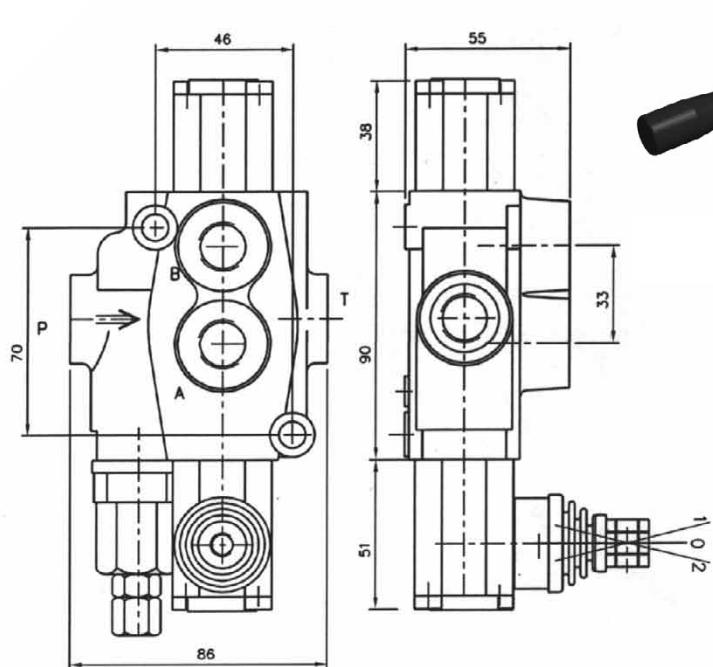
Technical parameters:

| | |
|---|---------------------------------------|
| Ambient temperature | -40C...+60C |
| Hydraulic liquid -mineral oil based/hydraulic oil Viscosity | 12 ...800 mm ² /s |
| Fluid temperature | -15C...+80C |
| Filtration | 10 to NAS 1638 |
| Max operating pressure, P=250; T=50 bar | A , B = 300 bar |
| Nominal flow | 35 l/min |
| Leakage | 10-15 cm ³ /min at 120 bar |

DESCRIPTION: Manually or mechanically controlled hydraulic distributor P35 is designed for distribution and control of work flow between generator (pump) and executive mechanisms (cylinder, hydro-motor, etc.). Relief valve is integrated therein.

CONSTRUCTION: P35 is a mono-block distributor. Its body is made of cast iron EN-GJL300. Spool is made of carburized steel with hard chrome plating.

MOUNTING: Fixing is with two bolts M8.



ORDERING CODES

P35 R A 1 G KZ1 T E

- Directional control valve type...
- Inlet high pressure - right
- First spool distribution type
- Spool control / detent and etc./
- Ports / threads
- General operation feature
- With "Teton"
- With electric switch

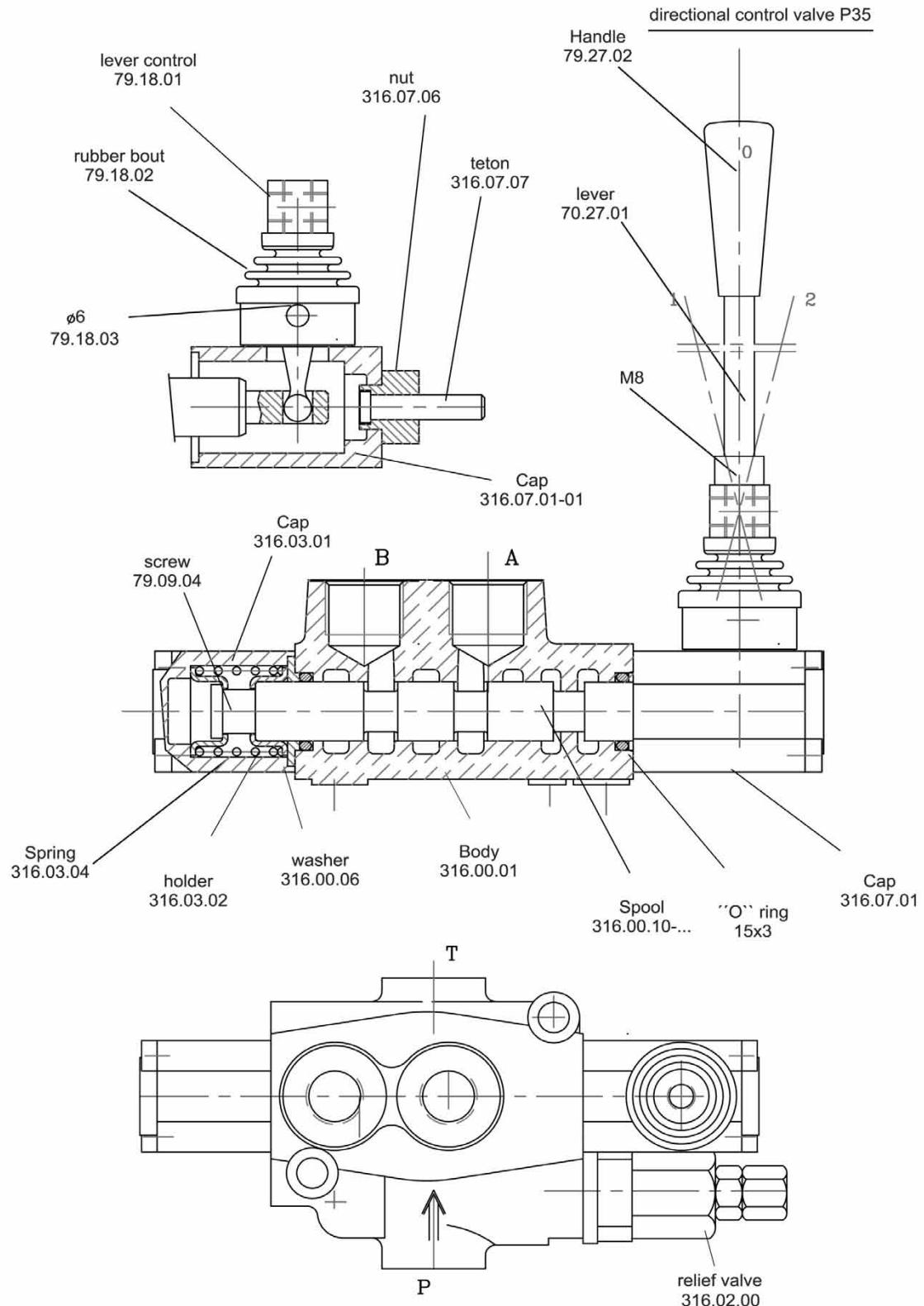
| code | incorporated microswitch | |
|------|--------------------------|---------------------------------------|
| E | | microswitch type omron-V 165 I C 5 |

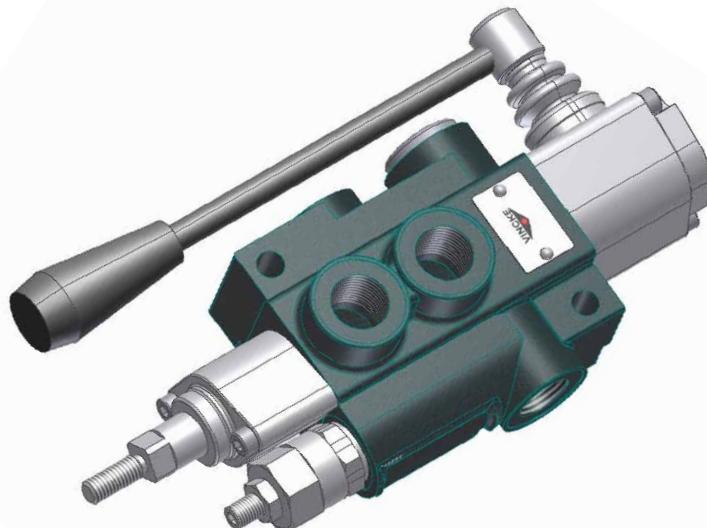
| Code | ports (treads) | | |
|------|----------------|-----------|-----------|
| | P | A ; B | T |
| M | M18x1.5 | M18x1.5 | M18x1.5 |
| G | G3/8 | G3/8 | G3/8 |
| S | 3/4-16UNF | 3/4-16UNF | 3/4-16UNF |

| code | spool type |
|------|------------|
| A | |
| B | |
| C | |
| D | |
| E | |
| F | |
| M | |
| N | |
| O | |
| P | |
| Q | |
| R | |

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

| code | feature | code | feature | code | feature |
|------|----------------------|------|---------|------|---------|
| KZ | | KY | | KI | |
| KZ1 | | KY1 | | KI1 | |
| KZ0 | | KY0 | | KI0 | |
| KZ01 | | KY01 | | KI01 | |
| - | without hand control | | | | |





Technical parameters:

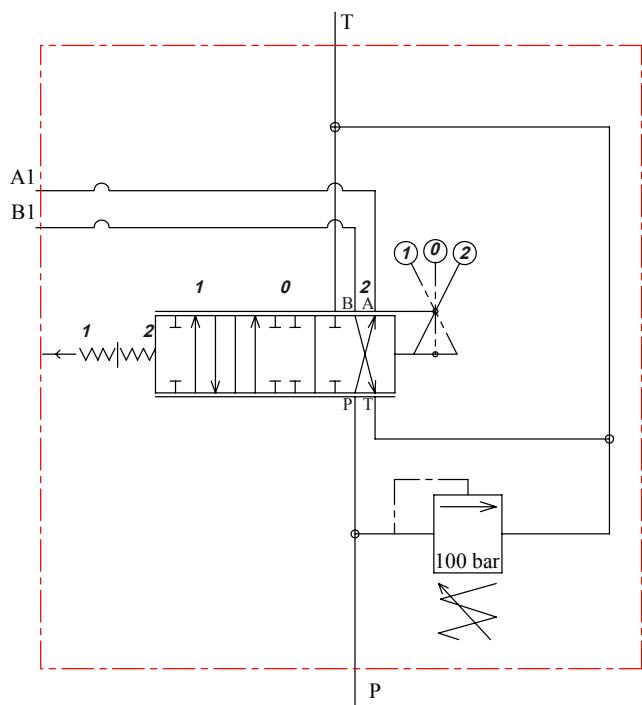
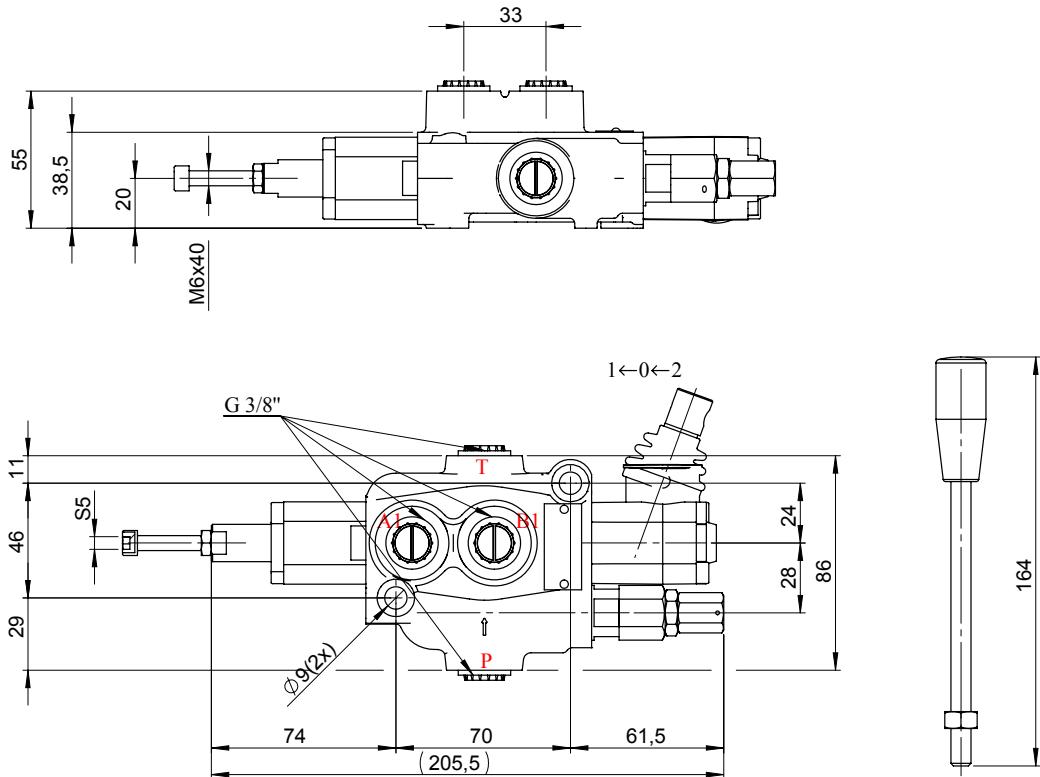
| | |
|---|----------------------------------|
| Ambient temperature | -40C...+60C |
| Hydraulic liquid -mineral oil based/hydraulic oil Viscosity | 12 ...800 mm ² /s |
| Fluid temperature | -15C...+80C |
| Filtration | 10 to NAS 1638 |
| Max operating pressure, P=250; T=50 bar | A , B = 300 bar |
| Pressure for authomatical release of spool | 70-140, bar |
| Leakage(A,B-T) | 10cm ³ /min at 120bar |
| Nominal flow | 35 l/min |
| Spool stroke | +/- 7,9 mm |
| Actuating force | < 220 N |

- Hydraulically balanced, hard chrome plated spool
- Lever system in which the handle can be installed in up or down position
- In neutral position both works ports are blocked and the pump unloads to tank

DESCRIPTION: The hydraulic distributor P35S is used for switching on/off and directing the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tank. It has a setting from 70 to 140 bar for automatic switch-off. It is designed as a "log splitter valve".

CONSTRUCTION: The hydraulic distributor P35S is a mono-block distributor with manual control. The body is made of cast iron EN-GJL300, and the spool is made of carburized steel with hard chrome plating.

MOUNTING: The distributor is fixed with 3 (three) bolts M8





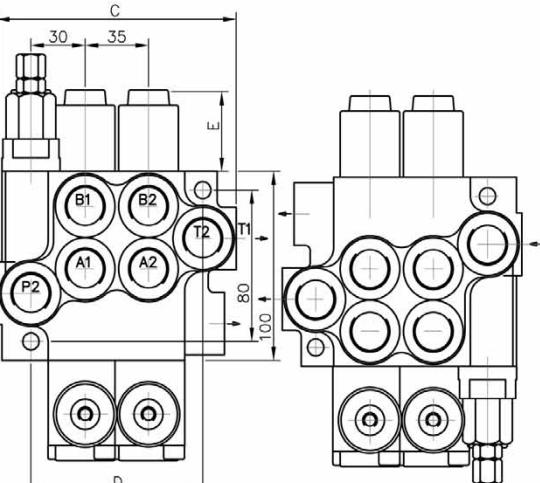
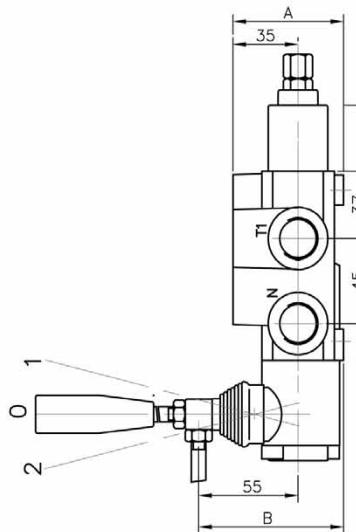
Technical parameters:

| | |
|---|----------------------------------|
| Ambient temperature | -40C...+60C |
| Hydraulic liquid -mineral oil based/hydraulic oil Viscosity | 12 ...800 mm ² /s |
| Fluid temperature | -15C...+80C |
| Filtration | 10 to NAS 1638 |
| Max operating pressure, P=250; T=50 bar | A , B = 300 bar |
| Leakage(A,B-T) | 15cm ³ /min at 120bar |
| Nominal flow | 40 l/min |
| Spool stroke | 6 mm |
| Actuating force | < 200 N |
| Modification/ Spools | with 1 to 7 |

DESCRIPTION: Manually or mechanically controlled hydraulic directional control valve P40 is designed for distribution and control of work flow between generator (pump) and executive mechanisms (cylinder, hydro-motor, etc.). It is manufactured with 1 to 7 plungers, with parallel or serial action, with common or individual back valve for each plunger, with or without safety valve

CONSTRUCTION: P40 is a mono-block distributor. Its body is made of cast iron EN-GJL300. Plungers are made of carburized steel with hard chrome plating.

MOUNTING: The distributor is fixed with two bolts M8



ORDERING CODES

| | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---------|------------------|-----------------------------------|---------|-----------------------------|---------------------------------------|---------|-------------------------------|---------|----------------------------------|---------|------------------|----------|------------------------------------|---------|----------------------|---------|--------------------------|----------|-------------------------|----------|
| 0 | 2 | P40 | R | 1 | A | 1 | A | 1 | G | KZ1 | T | H | E | C2 | 11 | | | | | | |
| block with common check valve | Table 3 | number of spools | directional control valve type... | Table 4 | inlet high pressure - right | way of distribution / parallel or.../ | Table 5 | first spool distribution type | Table 6 | spool control / dedant and etc./ | Table 9 | ports / treads / | Table 10 | operation feature / pneumatic,.../ | Table 8 | with electric switch | Table 7 | high pressure carry over | Table 11 | connection ports in use | Table 12 |
| | | | | | | | | | | second spool distribution type | | | | | | | | | | | |
| | | | | | | | | | | spool control / dedant and etc./ | | | | | | | | | | | |
| | | | | | | | | | | general operation feature | | | | | | | | | | | |
| | | | | | | | | | | with "teton" | | | | | | | | | | | |

| | A | B | C | D | P1 | P2 | T1 | T2 |
|-------|----|----|-----|-----|----|----|----|----|
| P40 | 60 | 80 | 85 | 60 | + | - | + | - |
| 02P40 | 60 | 80 | 129 | 97 | + | + | + | + |
| 03P40 | 60 | 80 | 164 | 132 | + | + | + | + |
| 04P40 | 60 | 80 | 199 | 167 | + | + | + | + |
| 05P40 | 60 | 80 | 234 | 202 | + | + | + | + |
| 06P40 | 60 | 80 | 269 | 237 | + | + | + | + |
| 07P40 | 60 | 80 | 304 | 272 | + | + | + | + |
| 02P40 | 60 | 80 | 129 | 97 | + | + | + | + |
| 03P40 | 60 | 80 | 164 | 132 | + | + | + | + |
| 04P40 | 60 | 80 | 199 | 167 | + | + | + | + |

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

| code | number of spools |
|-------|------------------|
| 1 | 1 |
| 02, 2 | 2 |
| 03, 3 | 3 |

| code | way of distribution / |
|------|--------------------------|
| 1 | parallel |
| 2 | tandem (parallel series) |

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 | |

* 13 3 1 0 2
 * 16 3 1 0 2

** 13R 1 0 2 3
 ** 12 1 0 2 3

Table 10

| code | feature | code | feature | code | feature |
|------|----------------------|------|---------|------|---------|
| KZ | | KY | | KI | |
| KZ1 | | KY1 | | KI1 | |
| KZO | | KYO | | KIO | |
| KZO1 | | KYO1 | | KIO1 | |
| - | without hand control | | | | |

code Incorporated microswitch

| | | |
|---|--|---------------------------------------|
| E | | microswitch type omron-V 165 I C 5 |
|---|--|---------------------------------------|

code operation feature

| | | |
|---|--|--|
| P | | on-off pneumatic control; 5-10 bar; ports G1/4 |
| H | | on-off hydraulic control; pn = 5-20 bar; ports G1/4 |

code ports (treads)

| code | P | A ; B | T | N |
|------|-----------|-----------|-----------|-----------|
| M | M22x1.5 | M18x1.5 | M22x1.5 | M22x1.5 |
| G | G1/2 | G3/8 | G1/2 | G1/2 |
| S | 7/8-14UNF | 3/4-16UNF | 7/8-14UNF | 7/8-14UNF |

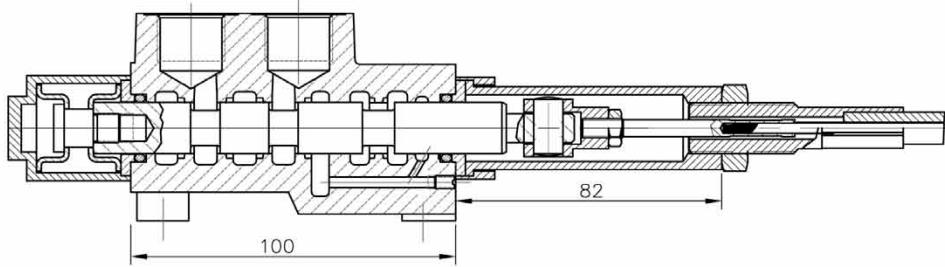
code closed center

| | | |
|----|---|--|
| C | closed center | |
| C1 | part for power beyond sleeve (carry over) | |
| C2 | part for power beyond sleeve (carry over) | |
| - | without part for pressure carry over | |
| X | power beyond ever to tank | |

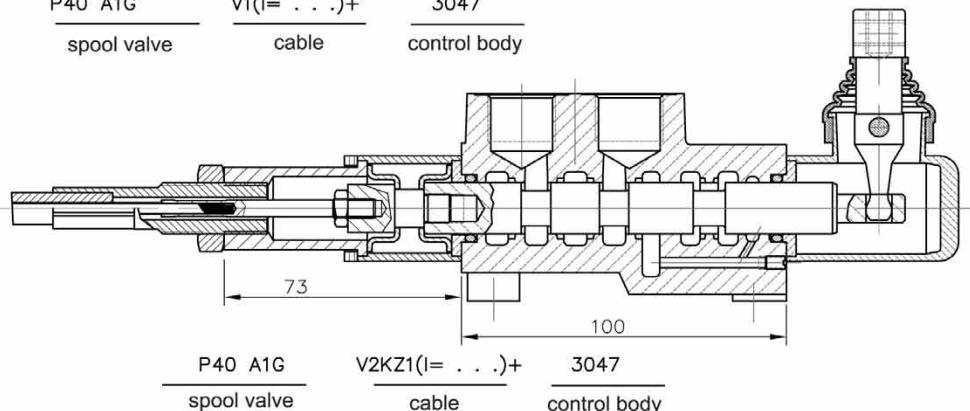
code used connection ports

| | |
|----|---------|
| 11 | P1 ; T1 |
| 12 | P1 ; T2 |
| 21 | P2 ; T1 |
| 22 | P2 ; T2 |

REMOTE CONTROLS

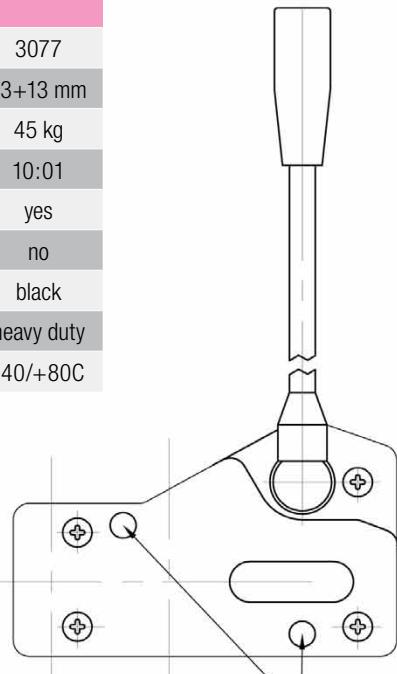


P40 A1G V1(l= . . .)+ 3047
spool valve cable control body



P40 A1G V2KZ1(l= . . .)+ 3047
spool valve cable control body

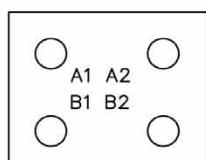
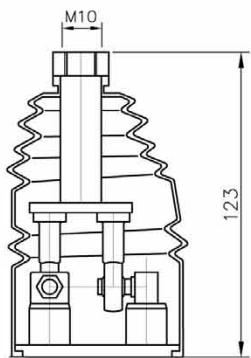
| technical specifications | | | |
|--------------------------|------------|------------|------------|
| | 3047 | 3076 | 3077 |
| stroke | 13+13 mm | 13+13 mm | 13+13 mm |
| max. load | 45 kg | 45 kg | 45 kg |
| level ratio | 10:01 | 10:01 | 10:01 |
| lock in neutral | no | no | yes |
| antireverse lock | no | yes | no |
| body color | black | black | black |
| cables type | heavy duty | heavy duty | heavy duty |
| operating temperature | -40/+80C | -40/+80C | -40/+80C |



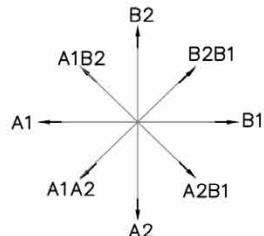
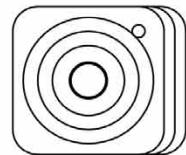
High solidity controls for easy mounting on every type of distributor.
They can be mounted stand alone or packed together.
They use push-pull heavy duty cables that provide a positive smooth
operating lever and are manufactured in a three different models to meet
different needs of Clients.

JOYSTICK[™]++

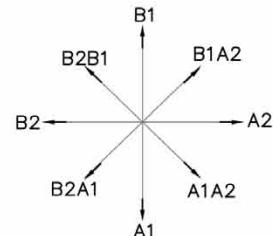
This control gives the possibility to operate, at the same time two spool with a "++" movement



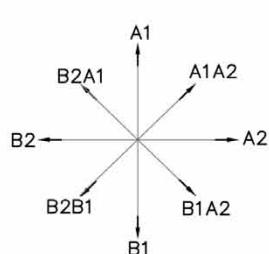
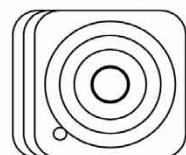
standart versiyon 1



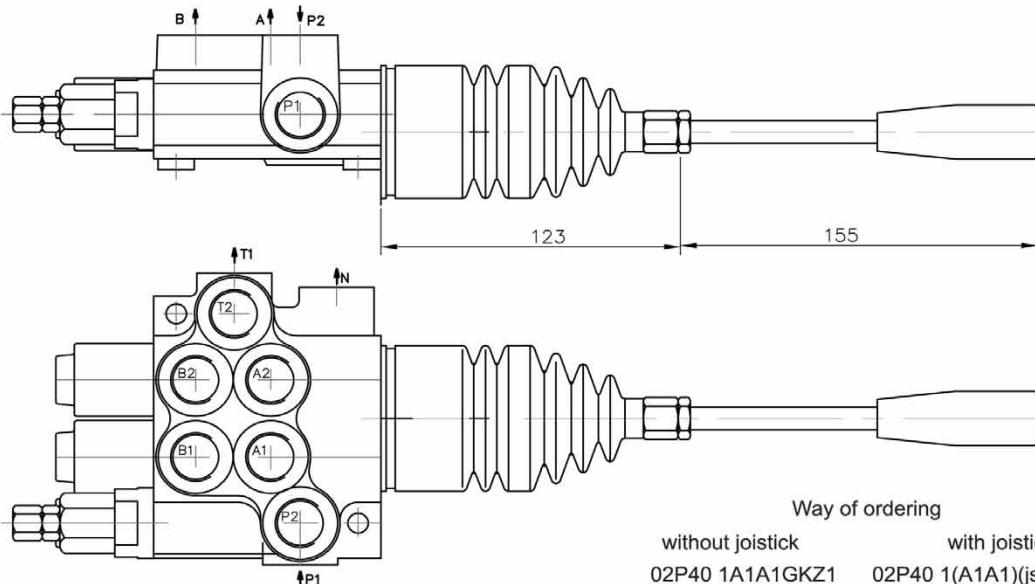
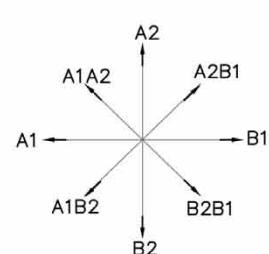
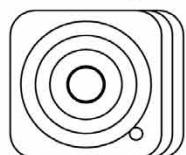
standart versiyon 2



standart versiyon 3



standart versiyon 4



Way of ordering

| | |
|------------------|----------------------|
| without joystick | with joystick |
| 02P40 1A1A1GKZ1 | 02P40 1(A1A1)(js+3)G |



Technical parameters:

Maximum operating pressure of the valve, P=250;T=50 bar

A, B = 300 bar

Nominal flow

40 l /min

Leakage(A, B-T)

15cm³/min at 120 bar

Operating pressure min/max

10/50 bar

Max operating pressure in L (T line)

25 bar

Solenoid operating feature - Nom voltage tolerance

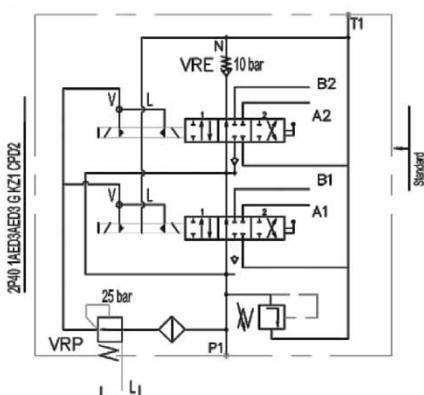
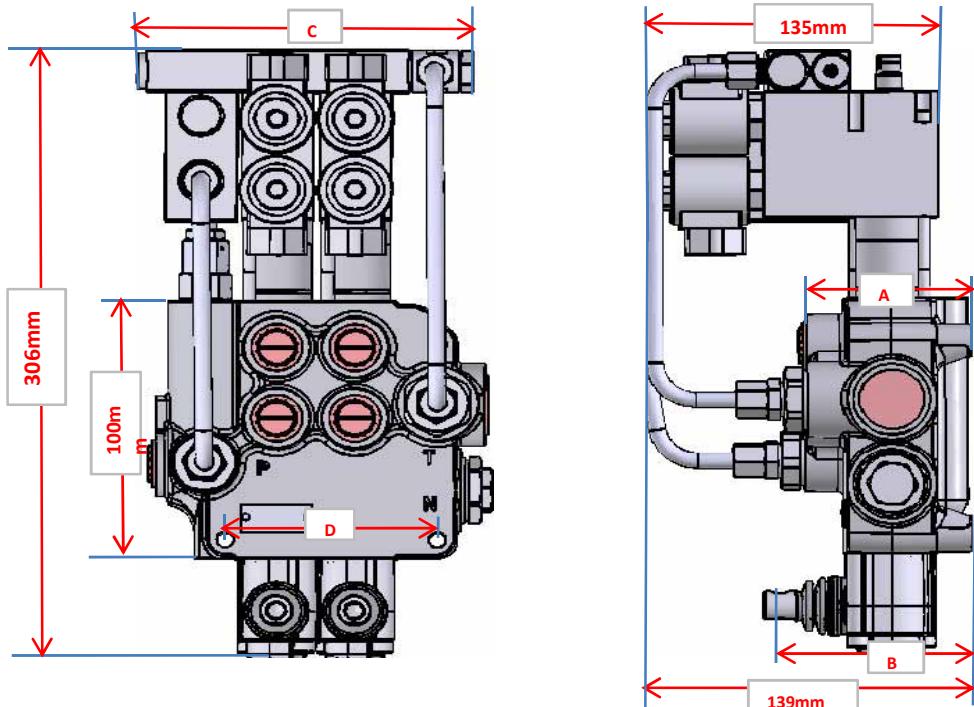
+/-10%

Power rating , Duty cycle

24W / 100 %

Collector Kit for 1 to 4 sections

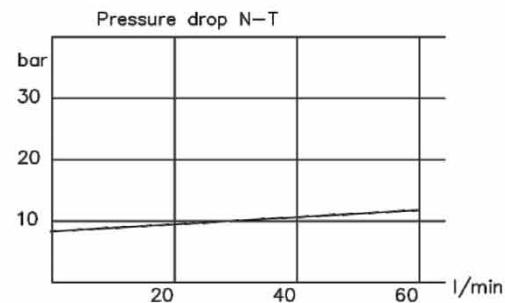
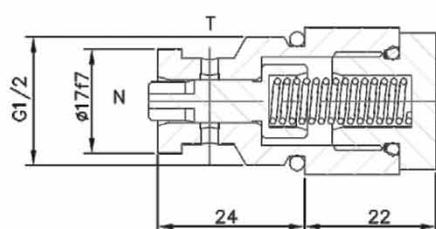
DESCRIPTION: The electrohydraulic control option is designed for standard monoblock valve P40.

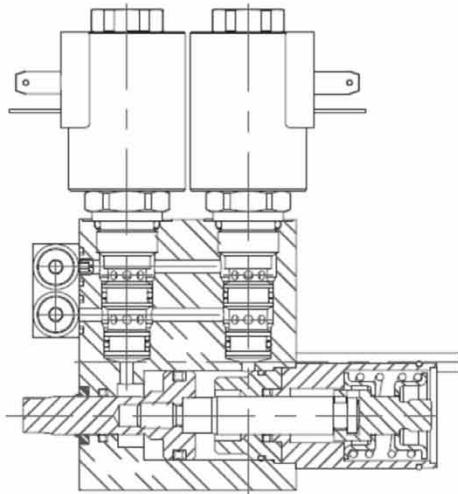


| ordering codes (BSP threads) | |
|------------------------------|-------------------|
| CED1 | kit for 1 section |
| CED2 | kit for 2 section |
| CED3 | kit for 3 section |
| CED4 | kit for 4 section |

Ordering example

2P40-VRP-1A1ED3A1ED3 G KZ1-CED2-VRE-12VDC

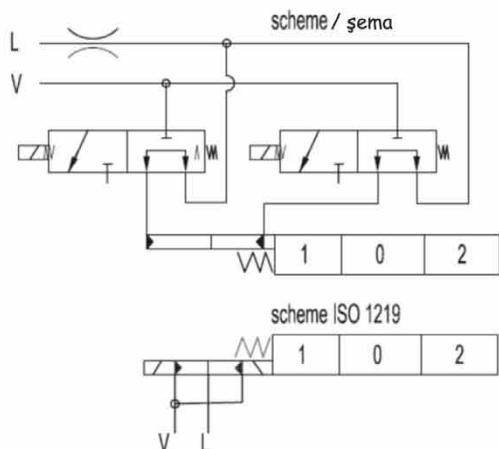
Back pressure valve VRE-P40




Ordering codes

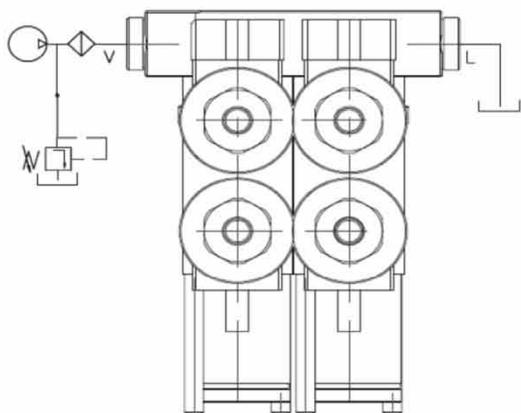
3-wai solenoid valve-SV08-33
coil P40ED3-G-12VDC
coil P40ED3-G-24VDC

Directional control valve P40
ED3 - Electro - hydraulic control ON-OFF



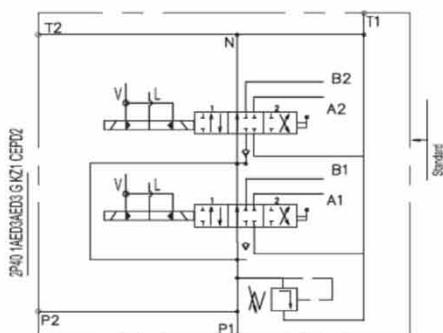
| | |
|---------------------------------------|---------------------|
| Operating pressure | min 10 bar(145 psi) |
| Max operating pressure in .L (T line) | max 50 bar(725 psi) |
| Solenoid operating features | 25 bar(360 psi) |
| Nominal voltage tolerance | ±10% |
| Power rating | 24W |
| Duty cycle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

Collector kit for external pilot and drain - CEED...(1,2,3 ...)

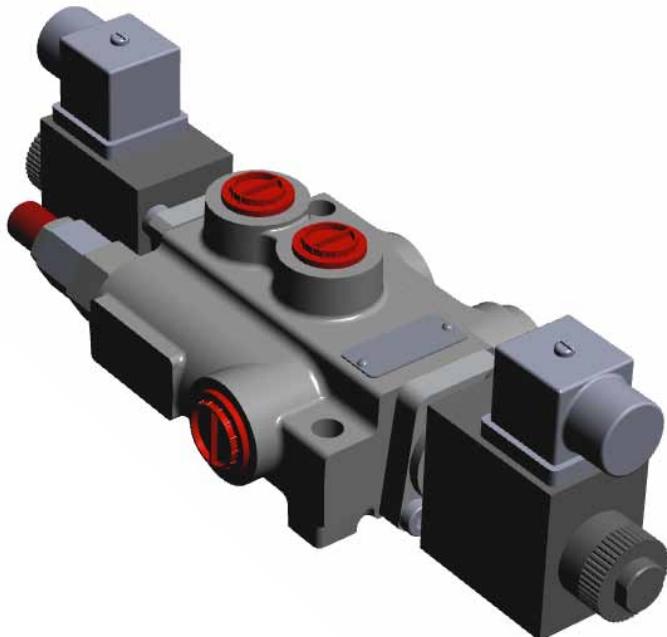


Ordering example

2P40-1A1ED3A1ED3 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 section |



Technical parameters:

| | |
|---|------------------------------------|
| Nominal flow | 50 l/min |
| Max operating pressure, P=250; T=10 bar | A , B = 300 bar |
| Leakage (A,B>T) | 15 cm ³ /min at 120 bar |
| Hydraulic liquid | Mineral base oil |
| Viscosity | 12...800 mm ² /s |
| Fluid temperature | -20C to 80C |
| Ambient temperature | -40C...+60C |
| Spool stroke | 6 mm |
| Actuating force | <220 N |

DESCRIPTION: The monoblock directional control valves-solenoid operated, offer 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 7 different monoblock housings these valves can meet the specific needs of your application and hydraulic schemes by their double acting in 3 positions A and D spools.

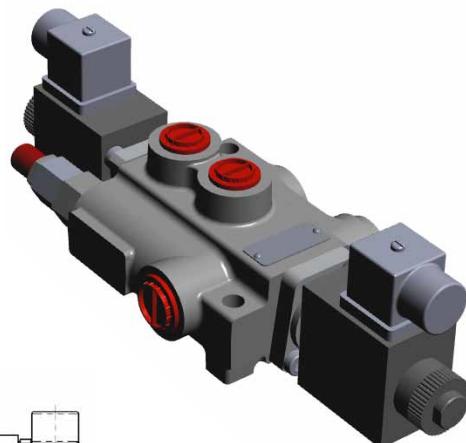
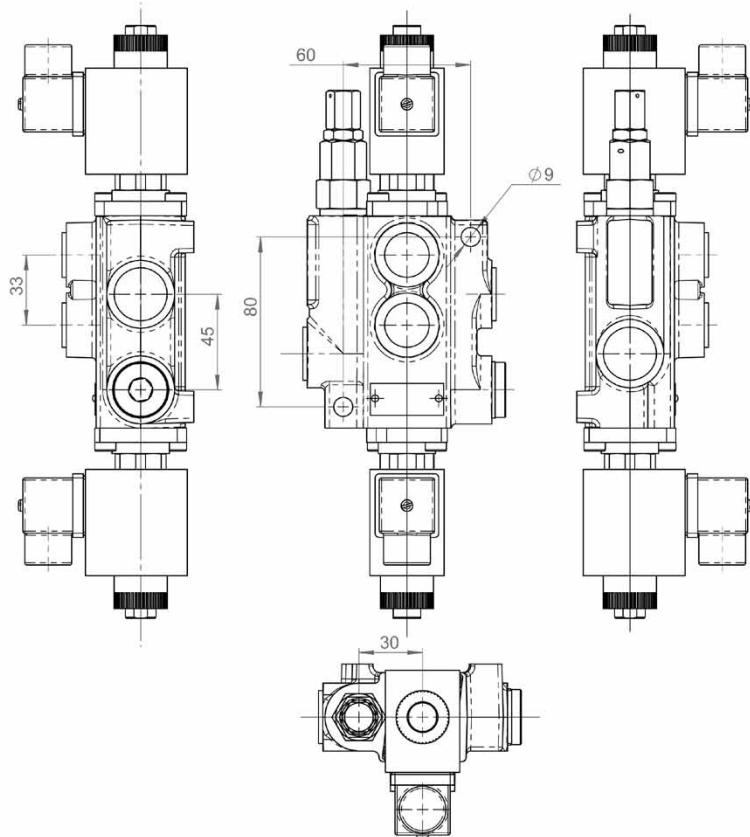
CONSTRUCTION: Precise bore honing and spool grinding results in less cross-port leakage and less wasted energy. These precise valves also allow for interchangeable spools for easy on place maintenance.

MOUNTING: The mounting is the same as standard monoblock valves using bolts M8 or complete line of stud kits.

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 |

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-(B) with spring return in neutral position |

2.Spool options / Spol seçenekleri

Type/Tipi Description / Tanımı

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

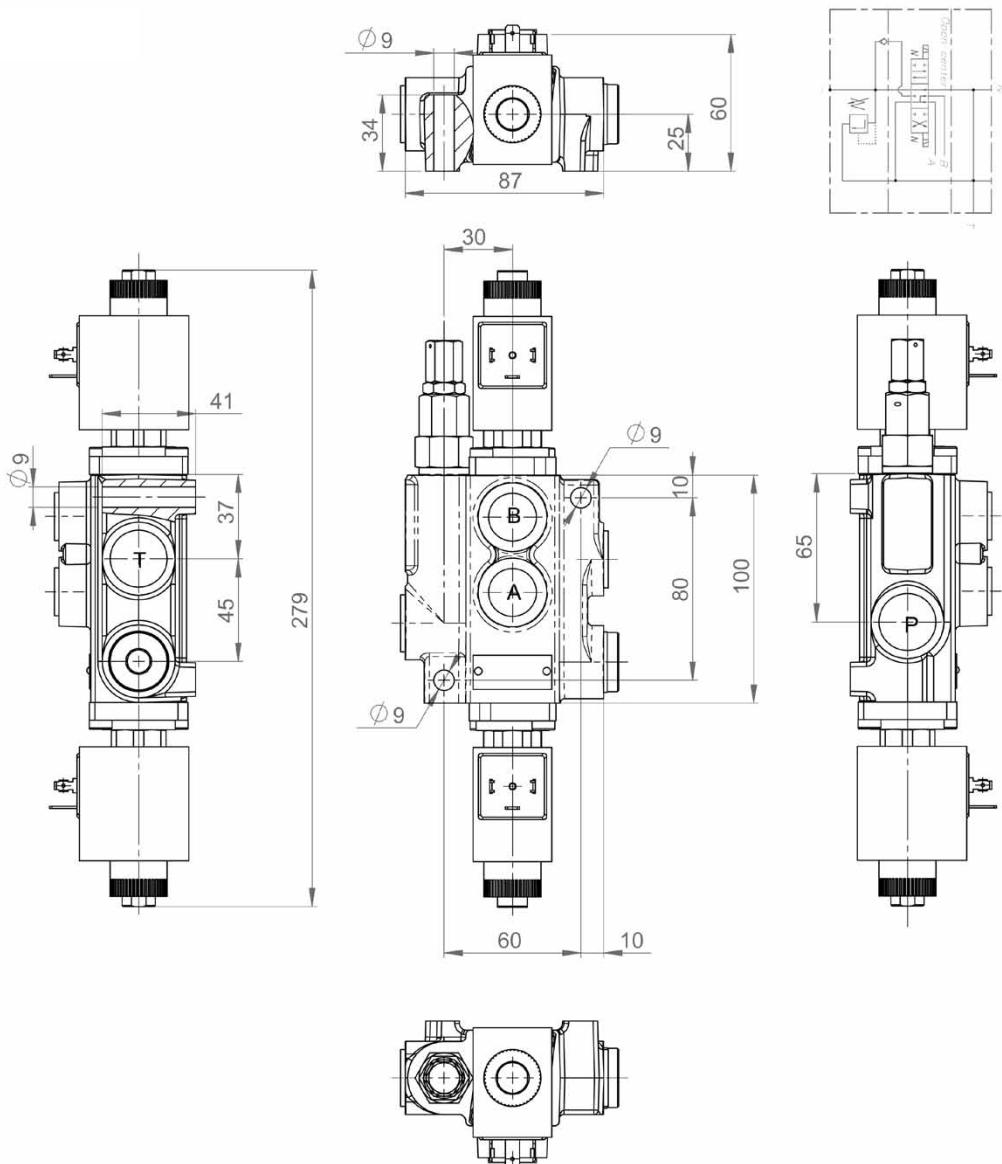
4.Coils

Type / Tipi Description / Tanımı (with connector ISO 4400)

12VDC Nominal voltage 12VDC
24VDC Nominal voltage 24VDC

5.Threads

G P.T - G1/2; A,B - G3/8



Operating features

Control

Internal leakage A(B)-T
(p=100 bar Viscosity 35 cST : max 18 cc/min)

Coil

Nominal voltage tolerance.....±10%
power rating.....37 W
Coil insulation.....class H
Duty cycle100%
Connector ISO 4400
Emergency manual override



Technical parameters:

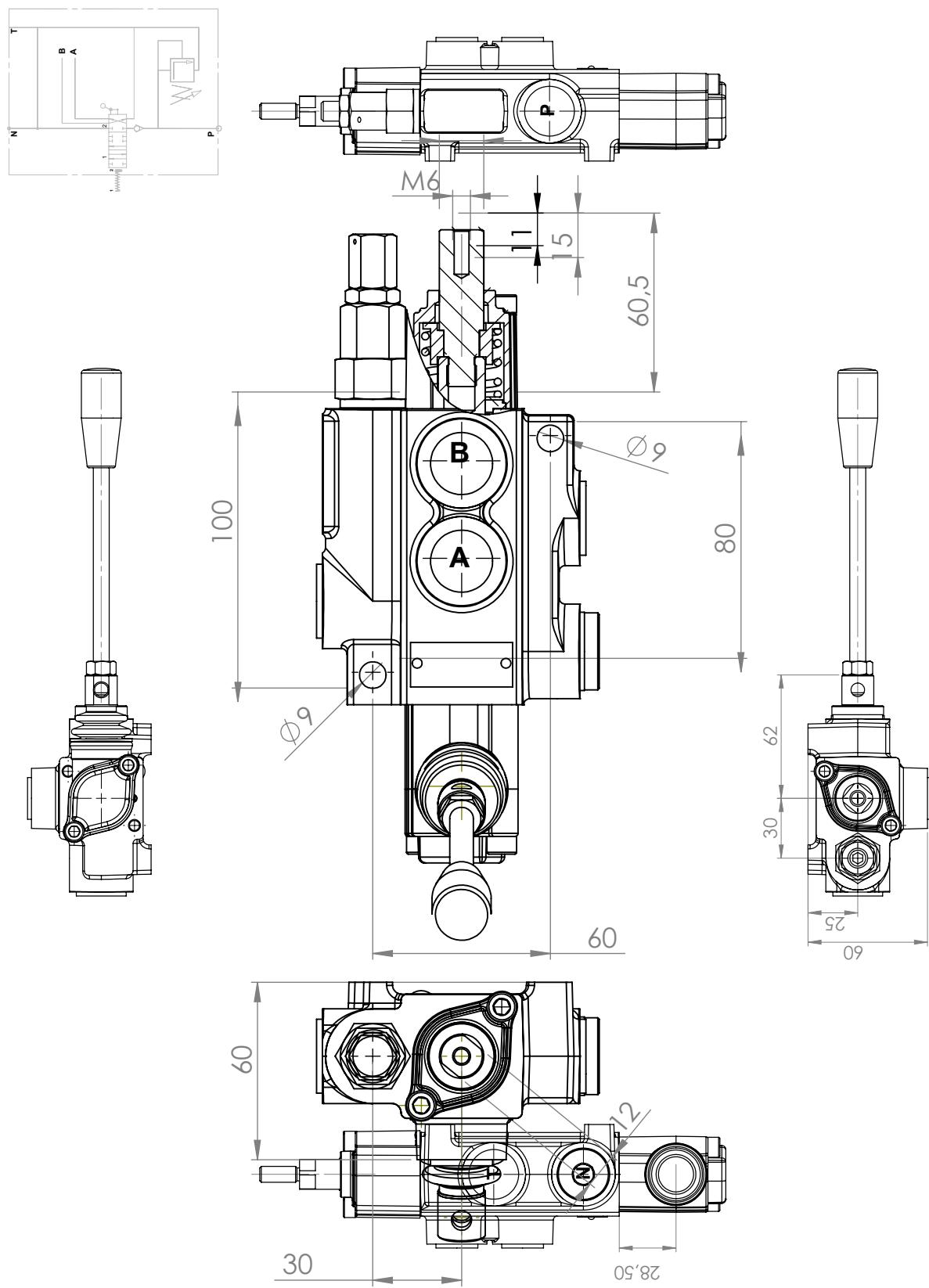
| | |
|---|----------------------------------|
| Ambient temperature | -40C...+60C |
| Hydraulic liquid -mineral oil based/hydraulic oil Viscosity | 12 ...800 mm ² /s |
| Fluid temperature | -15C...+80C |
| Filtration | 10 to NAS 1638 |
| Max operating pressure, P=250; T=50 br | A , B = 300 bar |
| Pressure for authomatical release of spool | 70-140, bar |
| Leakage(A,B-T) | 15cm ³ /min at 120bar |
| Nominal flow | 50 l/min |
| Spool stroke | +/- 7,9 mm |
| Actuating force | < 220 N |

- Hydraulically balanced, hard chrome plated spool
- Lever system in which the handle can be installed in up or down position
- In neutral position both works ports are blocked and the pump unloads to tank

DESCRIPTION: The hydraulic distributor Z50 LS is used for switching on/off and directing the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tank. It has a setting from 70 to 140 bar for automatic switch-off. It is designed as a "log splitter valve".

CONSTRUCTION: The hydraulic distributor Z50 LS is a mono-block distributor with manual control. The body is made of cast iron EN-GJL300, and the spool is made of carburized steel with hard chrome plating.

MOUNTING: The distributor is fixed with 3 (three) bolts M8.





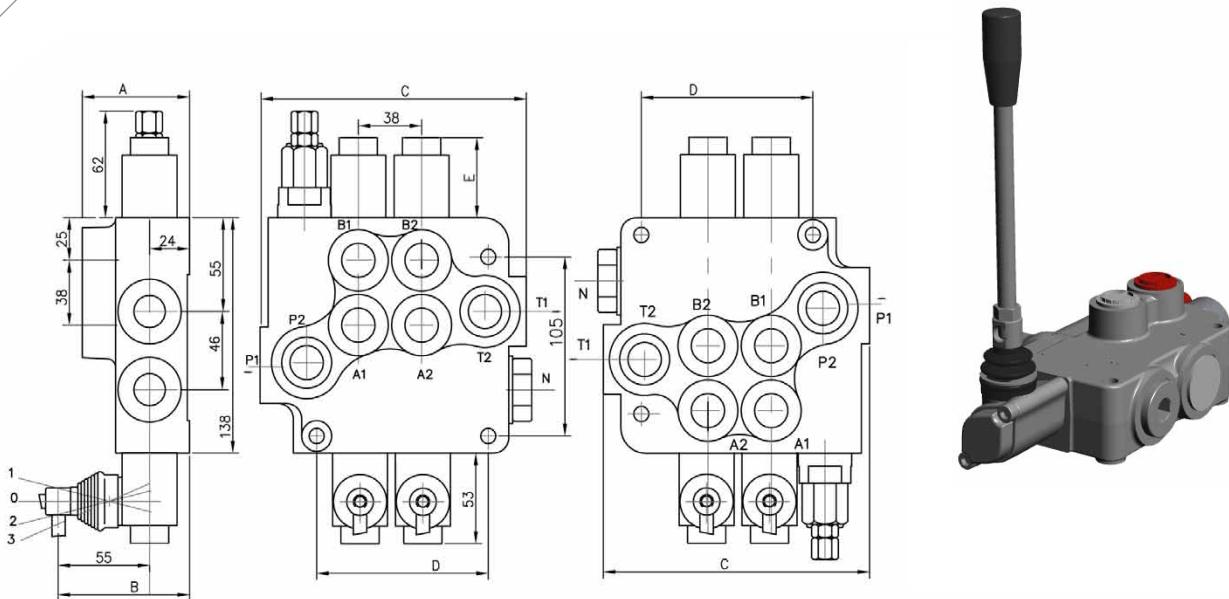
Technical parameters:

| | |
|---|----------------------------------|
| Ambient temperature | -40C...+60C |
| Hydraulic liquid -mineral oil based/hydraulic oil Viscosity | 12 ...800 mm ² /s |
| Fluid temperature | -15C...+80C |
| Filtration | 10 to NAS 1638 |
| Max operating pressure, P=250; T=50 bar | A , B = 300 bar |
| Leakage(A,B-T) | 18cm ³ /min at 120bar |
| Nominal flow | 80 l/min |
| Spool stroke | +/- 7 mm |
| Actuating force | < 220 N |
| Modification / Spools | with 1 to 6 |

DESCRIPTION: The hydraulic distributor P80 is used for switching on/off and directing the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tank. It is manufactured with up to 6 plungers with parallel or serial distribution

CONSTRUCTION: The hydraulic distributor P80 is a mono-block distributor with manual control. The body is made of cast iron EN-GJL300, and the spools are made of carburized steel with hard chrome plating

MOUNTING: The distributor is fixed with 3 (three) bolts M8.



ORDERING CODES

| | | | | | | | | | | | | | | | |
|-------------------------------|---|------------------------------------|-----------------------------|--|-------------------------------|----------------------------------|--------------------------------|----------------------------------|------------------|---------------------------|--------------------------|---|---|----|-------------------------|
| 0 | 2 | P80 | R | 1 | A | 1 | A | 1 | G | KZ1 | T | H | E | C2 | 11 |
| block with common check valve | | directional control valve type ... | inlet high pressure - right | way of distribution / parallel or .../ | first spool distribution type | spool control / detent and etc./ | second spool distribution type | spool control / detent and etc./ | ports / treads / | general operation feature | | | | | |
| number of spools | | | | | | | | | | with "teton" | operation feature .../ | | | | |
| | | | | | | | | | | | with electric switch | | | | |
| | | | | | | | | | | | high pressure carry over | | | | |
| | | | | | | | | | | | | | | | connection ports in use |

| | A | B | C | D | P1 | P2 | T1 | T2 |
|------|----|----|-----|-----|----|----|----|----|
| P80 | 65 | 79 | 107 | 65 | * | * | - | - |
| 2P80 | 60 | 94 | 160 | 103 | * | * | * | * |
| 3P80 | 60 | 94 | 198 | 141 | * | * | * | * |
| 4P80 | 60 | 94 | 242 | 179 | * | * | * | * |
| 5P80 | 60 | 94 | 280 | 217 | * | * | * | * |
| 6P80 | 60 | 94 | 318 | 255 | * | * | * | * |

| code | number of spools |
|------|------------------|
| | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |

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

| code | way of distribution |
|------|--------------------------|
| 1 | parallel |
| 2 | tandem (series parallel) |

Table / Tablo 5

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

Table / Tablo 6

| code kod | spool control / sürgü kontrolü |
|-------------|--------------------------------|
| 1 | 1 0 2 |
| 2 | 1 0 2 |
| 3 | 1 0 2 |
| 4 | 0 2 |
| 5 | 1 0 |
| 6 | 1 1 2 |
| 7 | 1 1 2 |
| 8 | 1 0 2 |
| 9 | 1 0 |
| 10 | 0 2 |
| 11 | 1 1 2 |
| 12 | 1 0 2 3 |
| 13 | 1 0 2 3 |

code incorporated microswitch

| | | |
|---|--|---------------------------------------|
| E | | microswitch type omron-V 165 I C 5 |
|---|--|---------------------------------------|

code operation feature

| | | |
|---|--|---|
| P | | on-off pneumatic control; 5-10 bar; ports G1/4 |
| H | | on-off hydraulic control; pn = 5-20 bar; ports G1/4 |

code ports (treads)

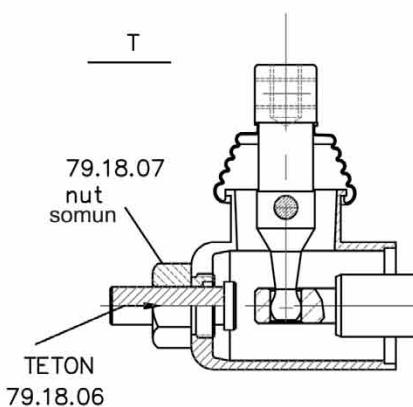
| code | P | A ; B | T | N |
|------|-----------|-----------|--------------|--------------|
| M | M22x1.5 | M22x1.5 | M26x1.5 | M26x1.5 |
| G | G1/2 | G1/2 | G3/4 | G3/4 |
| S | 7/8-14UNF | 7/8-14UNF | 1 1/16-14UNF | 1 1/16-14UNF |

Table / Tablo 10

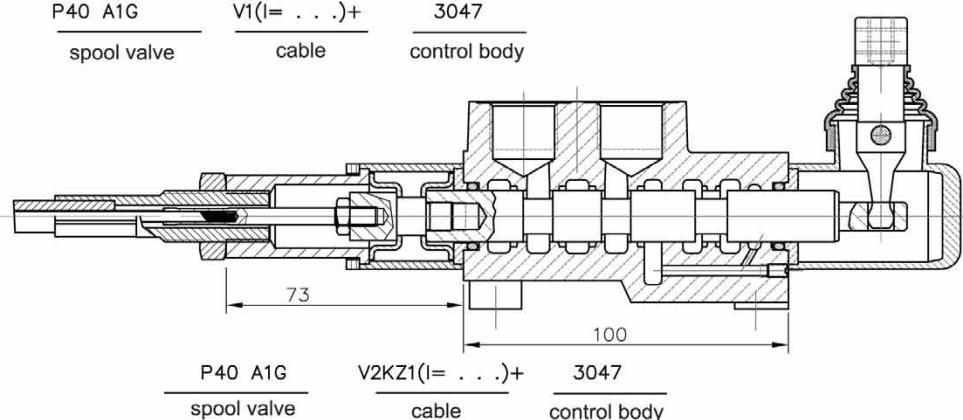
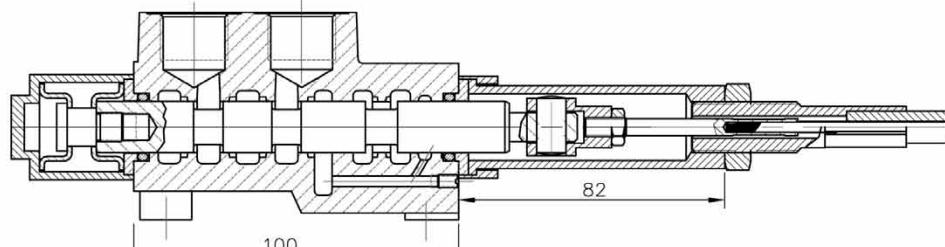
| code kod | feature / özellik | code kod | feature / özellik | feature / özellik |
|-------------|---|-------------|-------------------|-------------------|
| KZ | | KY | | |
| KZ1 | | KY1 | | |
| KZ0 | | KY0 | | |
| KZ01 | | KY01 | | |
| - | without hand control / elle kontrol olmadan | | | |

| code | closed center |
|------|---|
| C | |
| C1 | part for power beyond sleeve (carry over) |
| C2 | part for power beyond sleeve (carry over) |
| - | without part for pressure carry over |
| X | power beyond ever to tank |

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

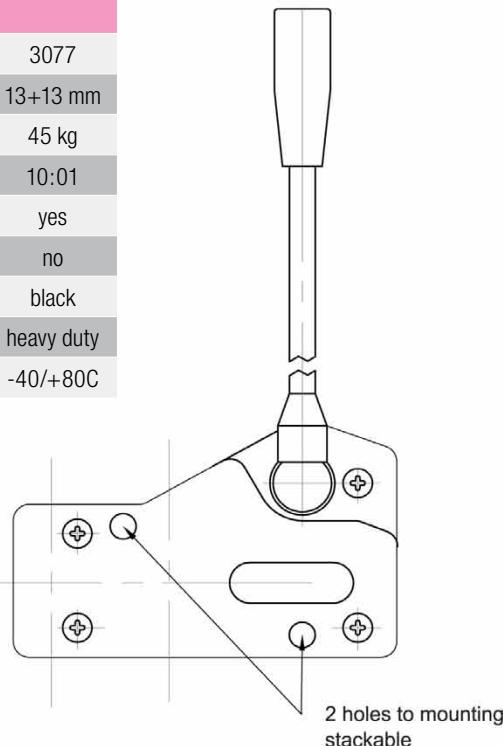


REMOTE CONTROLS



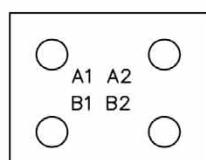
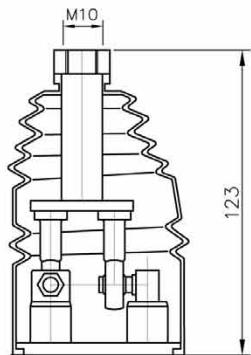
| technical specifications | | |
|--------------------------|------------|------------|
| | 3047 | 3076 |
| stroke | 13+13 mm | 13+13 mm |
| max. load | 45 kg | 45 kg |
| level ratio | 10:01 | 10:01 |
| lock in neutral | no | no |
| antireverse lock | no | yes |
| body color | black | black |
| cables type | heavy duty | heavy duty |
| operating temperature | -40/+80C | -40/+80C |
| 3077 | | |

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.

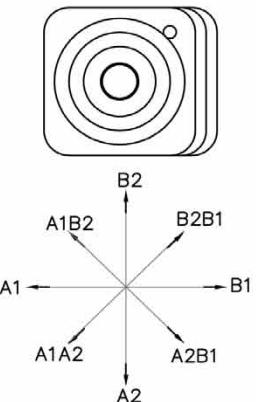


JOYSTICK^{“+”}

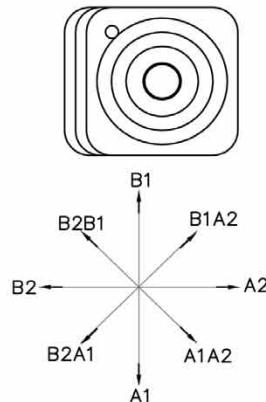
This control gives the possibility to operate, at the same time two spool with a “+” movement



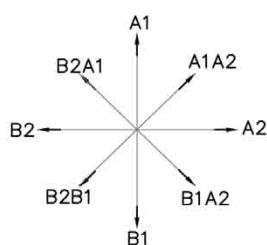
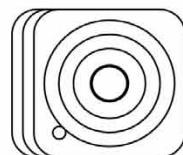
standard version 1



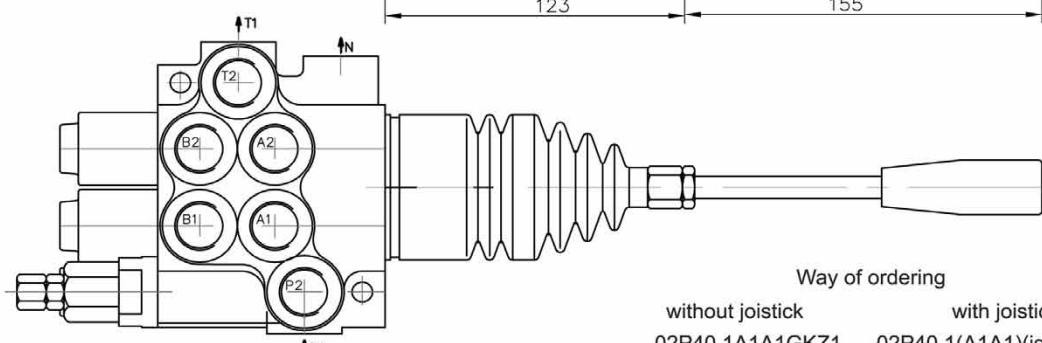
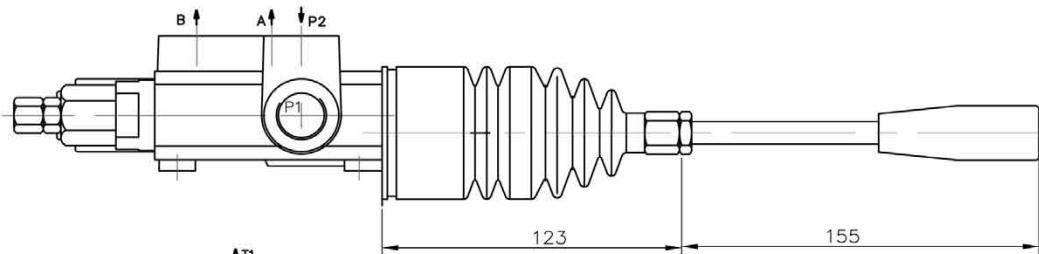
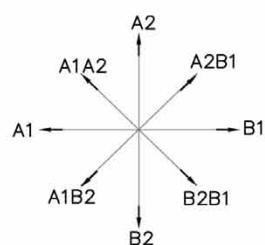
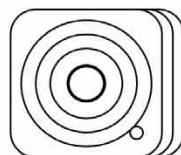
standard version 2



standard version 3



standard version 4



Way of ordering

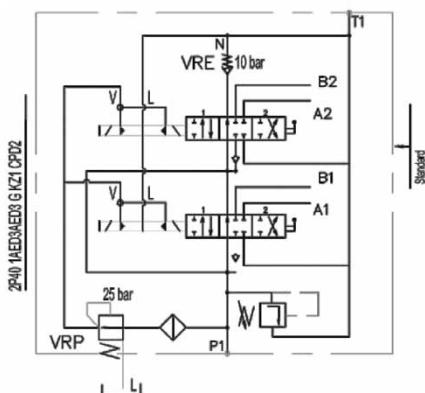
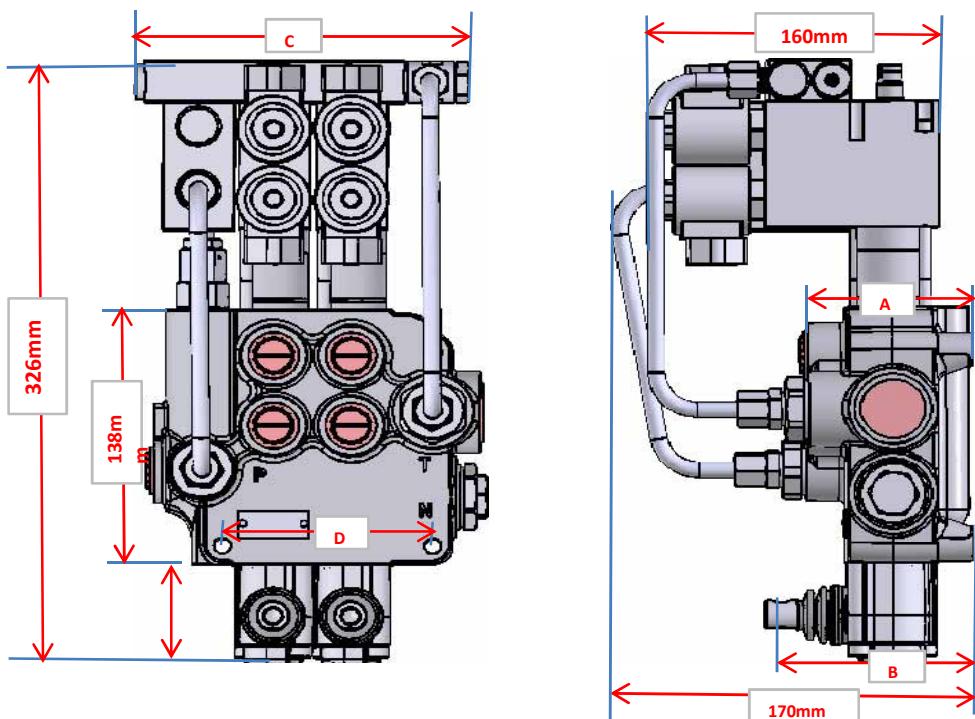
| | |
|------------------|----------------------|
| without joystick | with joystick |
| 02P40 1A1A1GKZ1 | 02P40 1(A1A1)(js+3)G |



Technical parameters:

| | |
|---|----------------------|
| Maximum operating pressure of the valve, P=250;T=50 bar | A, B = 300 bar |
| Nominal flow | 40 l /min |
| Leakage(A, B-T) | 15cm3/min at 120 bar |
| Operating pressure min/max | 10/50 bar |
| Max operating pressure in L (T line) | 25 bar |
| Solenoid operating feature - Nom voltage tolerance | +/-10% |
| Power rating , Duty cycle | 24W / 100 % |
| Collector Kit for 1 to 4 sections | |

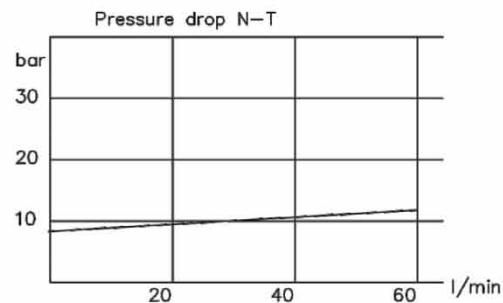
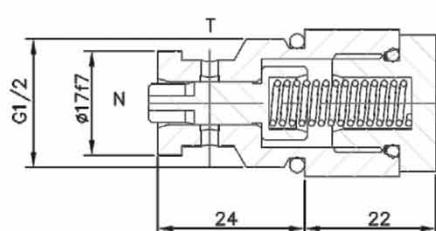
DESCRIPTION: The electrohydraulic control option is designed for standard monoblock valve P40.

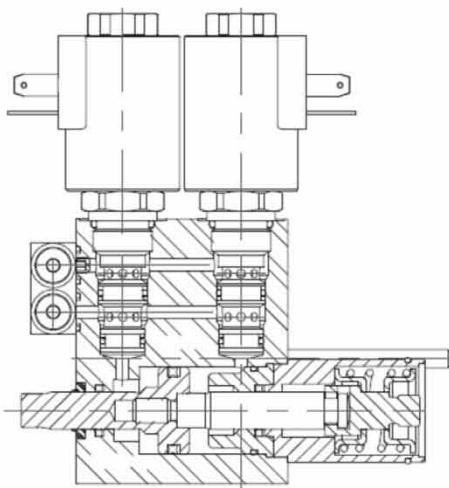


| ordering codes (BSP threads) | |
|------------------------------|-------------------|
| CED1 | kit for 1 section |
| CED2 | kit for 2 section |
| CED3 | kit for 3 section |
| CED4 | kit for 4 section |

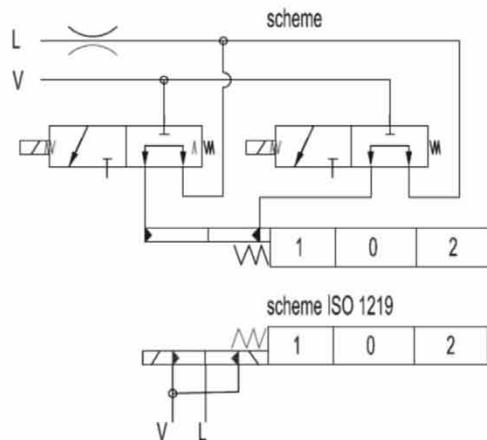
Ordering example

2P40-VRP-1A1ED3A1ED3 G KZ1-CED2-VRE-12VDC

Back pressure valve VRE-P40




**Directional control valve P80
ED3 - Electro - hydraulic control ON-OFF**



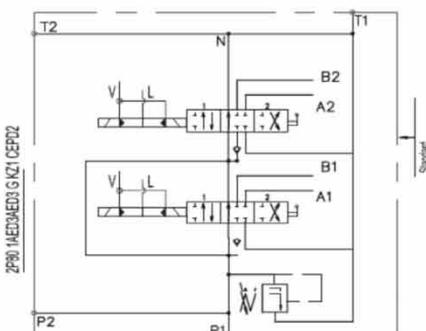
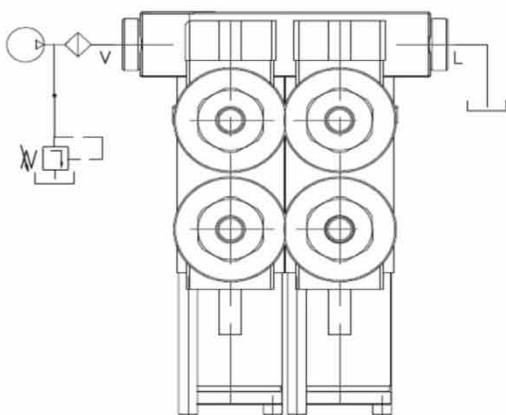
scheme ISO 1219

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

Ordering codes

3-wai solenoid valve-SV08-33
coil P80ED3-G-12VDC
coil P80ED3-G-24VDC

Collector kit for external pilot and drain - CEED...(1,2,3 ...)

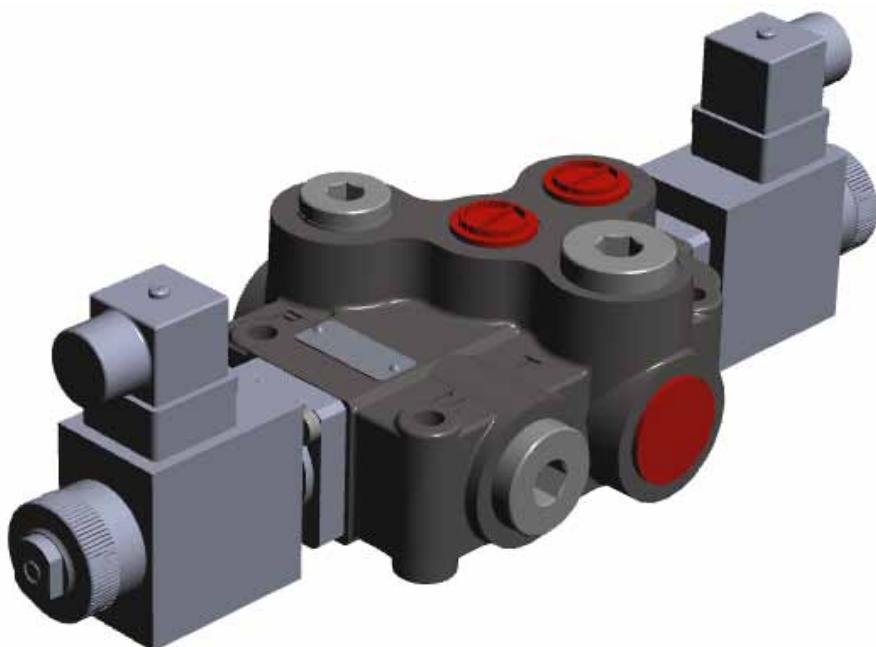


Ordering example

2P80-1A1ED3A1ED3 G KZ1-CEED2-12VDC

ordering codes (BSP threads)

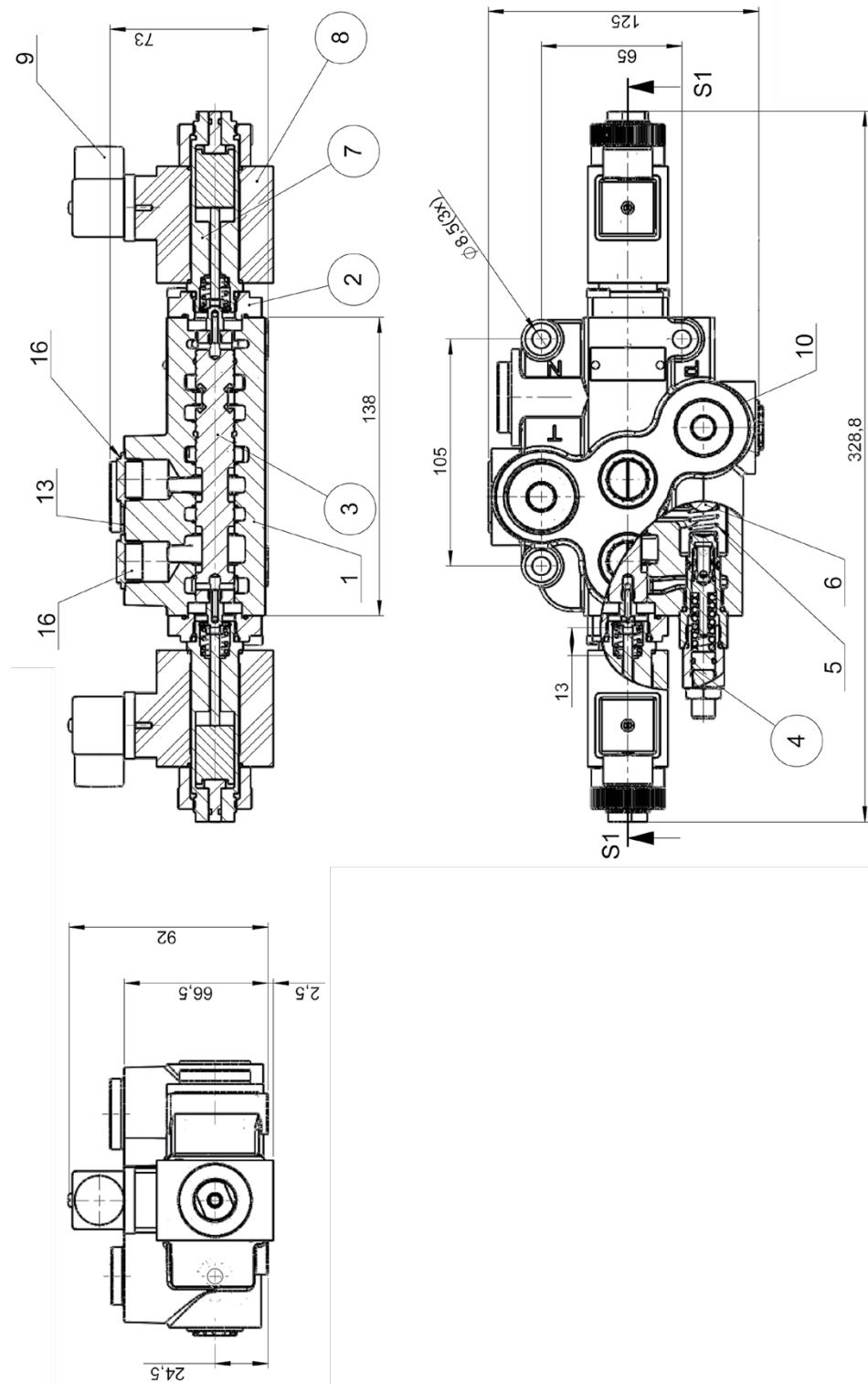
| | |
|----------|-------------------|
| CEED1P80 | kit for 1 section |
| CEED2P80 | kit for 2 section |
| CEED3P80 | kit for 3 section |
| CEED4P80 | kit for 4 section |



Technical parameters:

| | |
|---|------------------------------------|
| Nominal flow | 80 l/min |
| Max operating pressure, P=250; T=10 bar | A , B = 300 bar |
| Leakage (A,B>T) | 18 cm ³ /min at 120 bar |
| Hydraulic liquid Mineral base oil Viscosity | 20...800 mm ² /s |
| Fluid temperature | -20C to 80C |
| Ambient temperature | -40C...+60C |
| Spool stroke | 6 mm |
| Actuating force | <220 N |

DESCRIPTION: The directional mono block valve Z80 is a valve with specially machined body. The throttle channels are realized at the spool's surface. The design of the valve is implemented for applications which need precise and lightly distribution of hydraulic fluid. The construction guarantee precise metering diagram.



| Part | P1 | P2 | A | B | T1 | T2 | N |
|-----------------|---------|---------|---------|---------|------------|------------|------------|
| 511.00.00.01-01 | G1/2 | G1/2 | G1/2 | G1/2 | G3/4 | G3/4 | G3/4 |
| -02 | 7/8 SAE | 7/8 SAE | 7/8 SAE | 7/8 SAE | 1"1/16 SAE | 1"1/16 SAE | 1"1/16 SAE |
| -03 | 1/2 NPT | 1/2 NPT | 1/2 NPT | 1/2 NPT | 3/4 NPT | 3/4 NPT | 3/4 NPT |
| -04 | M22x1,5 | M22x1,5 | M22x1,5 | M22x1,5 | M26x1,5 | M26x1,5 | M26x1,5 |

CONTROL

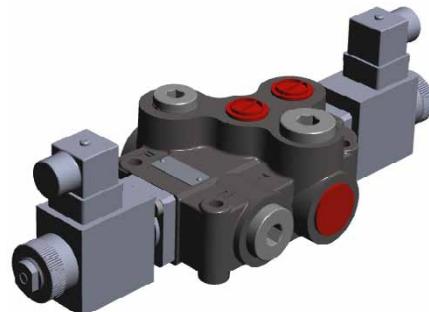
| |
|--|
| Internal leakage A(B) → T (P=120 bar, viscosity = 32 mm²/s : max. 40 l/m) |
| Fluid temperature - 20° C (short time).....80 °C |
| Max. back pressure on outlet port T – 25 bar (360 psi) |

COIL

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

BODY KIT

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


SPOOL OPTIONS

| Type | Description |
|------|--|
| A | Double acting, 3 positions with A and B closed in neutral position |
| B | Double acting, 3 positions with A and B open to tank in neutral position |

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 |

COIL (with connector ISO 4400)

| Type | Description |
|--------|------------------------|
| 12 VDC | Nominal voltage 12 VDC |
| 24 VDC | Nominal voltage 24 VDC |

THREADS

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



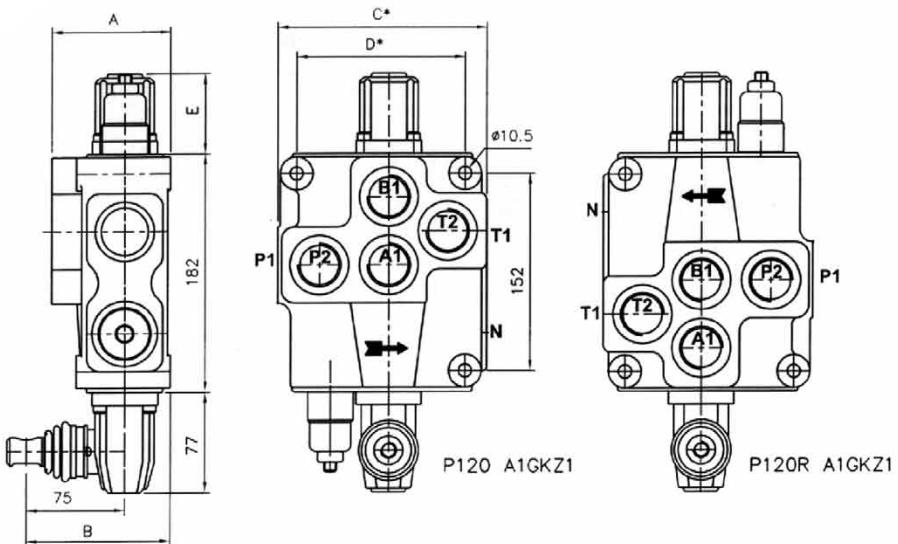
Technical parameters:

| | |
|---|----------------------------------|
| Ambient temperature | -40C...+60C |
| Hydraulic liquid -mineral oil based/hydraulic oil Viscosity | 12 ...800 mm ² /s |
| Fluid temperature | -15C...+80C |
| Filtration | 10 to NAS 1638 |
| Max operating pressure, P=250; T=50 bar | A , B = 300 bar |
| Leakage(A,B-T) | 30cm ³ /min at 120bar |
| Nominal flow | 120 l/min |
| Spool stroke | 10 mm,L12+-10/6 |
| Actuating force | < 300 N |
| Modification/Spools | with 1 to 4 |

DESCRIPTION: The hydraulic distributor P120 is used for switching on/off and controlling of the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tanks of hydraulic systems of mobile machines (electrical and diesel forklifts, excavators, auto-crane, etc.).

CONSTRUCTION: The hydraulic distributor P120 is a mono-block type with manual control. The body is made of cast iron EN-GJL300, and the spools are made of carburized steel with hard chrome plating

MOUNTING: The distributor is fixed with 3 bolts M10


ORDERING CODES

| | | | | | | | | | | | |
|------------------|-------------------------------------|-----------------------|---------------------------|---------------|---------------------------|----------------------|---------------|---------------|--------------------|-----------------------|-------------------------|
| 02 | P120 | 1 | A | 1 | L | 12 | G KZ1 | H | E | C2 | -11 |
| Number of spools | Hydraulic directional control valve | Parallel distribution | Spool type - distribution | Spool control | Second spool distribution | Second spool control | Ports threads | Lever Options | Operation features | Electric micro switch | Carry over center |
| | | | | | | | | | | | Connection ports in use |

| | A | B | C | D | P1 | P2 | T1 | T2 |
|-------|----|-----|-----|-----|----|----|----|----|
| P120 | 92 | 110 | 160 | 129 | + | + | + | + |
| 2P120 | 92 | 110 | 213 | 182 | | | | |
| 3P120 | 92 | 110 | 266 | 235 | | | | |
| 4P120 | 92 | 110 | 319 | 288 | | | | |

| code | number of spools |
|-------|------------------|
| P | 1 |
| 02, 2 | 2 |
| 03, 3 | 3 |
| 04, 4 | 4 |

| spool control | E |
|------------------------------------|----|
| 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11; | 64 |
| 12 | 74 |

| code | way of distribution |
|------|--------------------------|
| 1 | parallel |
| (2) | tandem (series parallel) |

| 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 | |

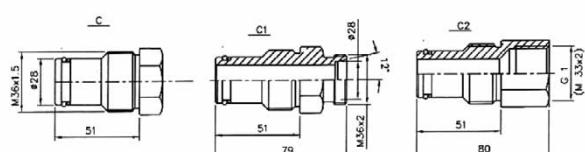
| code | Incorporated microswitch |
|------|--|
| E | microswitch type Omron-V 165 I C 5 |

| code | operation feature |
|------|--|
| P | on-off pneumatic control; 5-10 bar; ports G1/4 |
| H | on-off hydraulic control; pn = 5-20 bar; ports G1/4 |

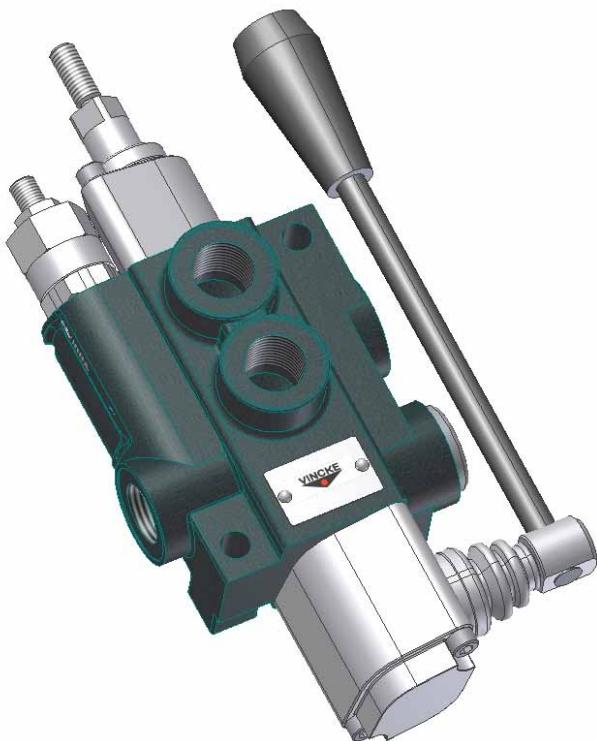
| outlets / ports | metric | BSP | SAE | NPT |
|-----------------|---------|------|--------|----------|
| P, A, B, T | M33X2 | G 1" | SAE 16 | 1 - 11.5 |
| N | M36X1.5 | - | - | - |

| code | with thread M12 | code | with cage ø12 | code | with cage ø12 |
|------|----------------------------|------|---------------|------|---------------|
| KZ | M12 Ø75 77 38 | KY | | KI | |
| KZ1 | | KY1 | | KI1 | |
| KZ0 | | KY0 | | KI0 | |
| KZ01 | | KY01 | | KI01 | |

| code | metric |
|------|-------------------------------|
| X | without N |
| - | with N but closed |
| C | with N but closed center |
| C1 | with N-carry over for ermeto |
| C2 | with N-carry, internal thread |



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



Technical parameters:

| | |
|---|------------------------------------|
| Nominal flow rating | 120 l/min |
| Max operating pressure, P=250; T=10 bar | A , B = 300 bar |
| Leakage (A,B>T) | 30 cm ³ /min at 120 bar |
| Hydraulic liquid Mineral base oil Viscosity | 12...800 mm ² /s |
| Fluid temperature | -20C to 80C |
| Ambient temperature | -40C...+60C |
| Spool stroke | 10 mm |
| Actuating force | <300 N |

- Hydraulically balanced, hard chrome plated spool
- Lever system in which the handle can be installed in up or down position
- In neutral position both works ports are blocked and the pump unloads to tank

DESCRIPTION: The hydraulic distributor P120 LS is used for switching on/off and directing the working fluid between head flow generators (hydraulic pumps), head flow consumers (hydraulic cylinders, motors, etc.), and the tank. It has a setting from 70 to 140 bar for automatic switch-off. It is designed as a "log splitter valve".

CONSTRUCTION: The hydraulic distributor P120S is a mono-block distributor with manual control. The body is made of cast iron EN-GJL300, and the spool is made of carburized steel with hard chrome plating.

MOUNTING: The distributor is fixed with 3 (three) bolts M10.