



MONOBLOCK VALVES

CATALOGUE / 2025

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■ Directional control valve

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DCV Series Directional control valve

DCV directional control valve is designed for high pressure hydraulic system such as drilling machine, sanitation, etc.

- ◆ Auxiliary valve: over-load valve, anti-cavitation valve, combined valve, etc. (not for DCV40-45)
- ◆ Control type: manual, joystick, cable, pneumatic, solenoid, electro-pneumatic, electro-hydraulic, etc.
- ◆ Structure: monoblock, sectional.
- ◆ Carry-over port as hydraulic source for other parts.



◆ Ordering Code

DCV XX/X - XXX - XXXX - XXXX ... - X- XX

(1) (2) (3)(4)(5) (6)(7)(8)(9) (6)(7)(8)(9) (10) (11)(12)

- ① Flow: 20, 40, 45, 60, 100, 140, 200
- ② Number of spools: 1-12
- ③ Inlet section type: see table (1)
- ④ Relief valve set pressure: 100-315 bar
- ⑤ Inlet port size: see table (2)
- ⑥ Spool type: see table (3)
- ⑦ Handle side arrangement: see table (4)
- ⑧ Spool cap side arrangement: see table (5)
- ⑨ Working section arrangement: see table (6)
- ⑩ Work port size: see table (2)
- ⑪ Outlet section type: see table (7)
- ⑫ Outlet port size: see table (2)

◆ Table (1)

Code	Type	Description	Code	Type	Description
A1		Side inlet, with relief valve	A2		Top inlet, with relief valve
A3		Inlet port on top of inlet section, Outlet on outlet section (only for DCV60-100, see table 7, F5-F6)	A4		Inlet and outletport on top of inlet section (only for DCV60-100, match F7 table 7)

◆ Table (2)

BSP threa		Metric thread		US standard UNF thread		US standard NPT thread	
Code	Thread size	Code	Thread size	Code	Thread size	Code	Thread size
G06	G 3/8	M 18	M 18 X 1.5	U10	9/16-18UNF	N04	NP T1/4
G08	G 1/2	M 20	M 20 X 1.5	U12	3/4-16UNF	N06	NP T3/8
G12	G 3/4	M 22	M 22 X 1.5	U14	7/8-14UNF	N08	NP T1/2
G16	G 1	M 27	M 27 X 2	U16	1-12UNF	N12	NP T3/4
		M 33	M 33 X 2	U20	1-1/16-12 UNF	N16	NP T1
				U22	1-1/8-12UNF		
				U26	1-3/16-12 UNF		
				U28	1-5/16-12 UNF		

◆ Table (3)

Code	Spool Type	Description	Code	Spool Type	Description
ST1		3 positions, double acting	ST6		3 positions, single acting in B
ST2		3 positions, double acting A & B open	ST7		3 positions, single acting in A, A open
ST3		3 positions, double acting A open, B blocked	ST8		3 positions, single acting in B, B open
ST4		3 positions, double acting A blocked, B open	ST9		4 positions, double acting with 4th floating position
ST5		3 positions, single acting A			

◆ Table (4)

Code	Type	Description	Code	Type	Description
C1		standard handle	C5		Flexible cable (standard length 1.5m.customizable)
C2		Handle at 180°	C6		Joystick with cable (standard length 1.5m, customizable)
C3		Handle at 180°	C7		Hydraulic control Pilot pressure:5-10bar
C4		Joystick			

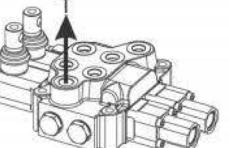
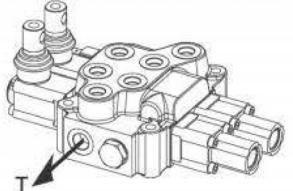
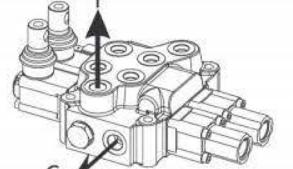
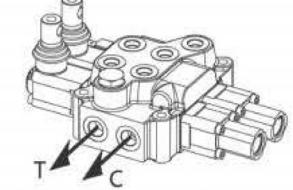
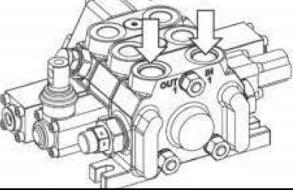
◆ Table (5)

Code	Type	Description	Code	Type	Description
D1		3 positions, spring return	D10		2 positions (0, b), spring return, detent in b
D2		3 positions, spring return, detent in a and b	D11		2 positions (0, a), spring return, detent in a
D3		3 positions, spring return, detent in a	D12		pneumatic control ONOFF, pilot pressure 5-10 bar
D4		3 positions, spring return, detent in b	D13		electro-hydraulic control ON-OFF, 12Vdc, with pressure reduce valve, pilot pressure 20-25 bar
D5		4 positions, spring return, detent in 4 th position	D14		electro-hydraulic control ON-OFF, 24Vdc, with pressure reduce valve, pilot pressure 20-25 bar
D6		4 positions detent in all positions	D15		electro-pneumatic control ON-OFF, 12Vdc, pilot pressure 5-10 bar
D7		3 positions detent in 0, a & b	D16		electro-pneumatic control ON-OFF, 24Vdc, pilot pressure 5-10 bar
D8		3 positions (0,b), spring return	D17		Hydraulic control pilot pressure 20-25 bar
D9		2 positions (0,a), spring return	D18		Dual control with spring return, M8 thread

◆ Table (6)

Code	Work section arrangement	Type	Description
E1			Overload valve inposition A
E2			Anti-cavitation valve in position A
E3			Anti-cavitation relief valve in position A
E4			Prearrangement cavity(plugged)
E5			Overload valve inposition B
E6			Anti-cavitation valve in position B
E7			Anti-cavitation relief valve in position B
E8			Prearrangement cavity(plugged)
E9			Intermediate outlet section
E10			Intermediate connection section

◆ Table (7)

Code	Type	Description
F1		Top outlet (For DCV60-100 no carry over for this arrangement)
F2		Side outlet (for OCV60-100 no carry-over for this arrangement)
F3		Top outlet with carry over
F4		Side outlet with carry over
F5		Inlet & outlet both on inlet section, carry-over available (only for DCV60-100)

DCV20

Monoblock Directional Control Valve



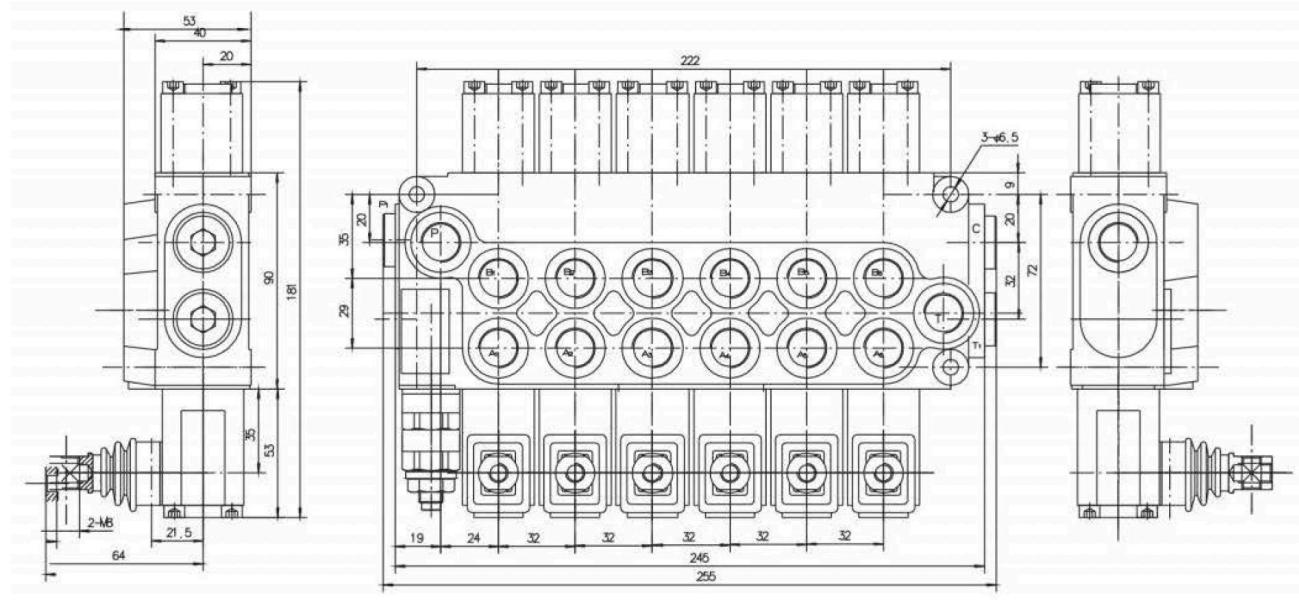
Specifications

Nominal flow rate	20 L/min	5.3 US GPM
Max pressure	350 bar	5076 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 6 sections	

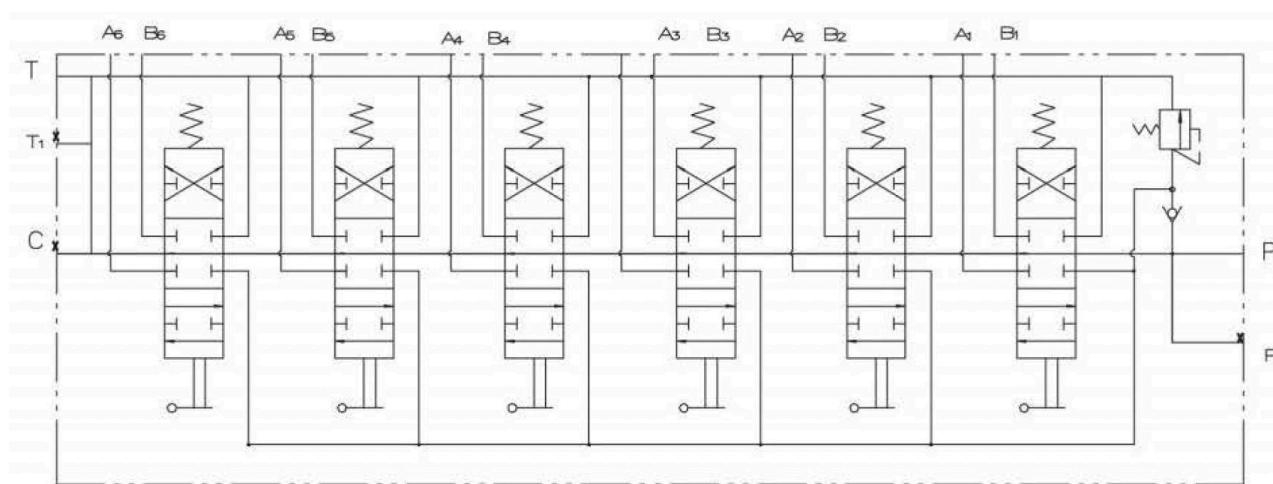
DCV20

Monoblock Directional Control Valve

◆ Dimension



◆ Hydraulic Schema



DCV40

Monoblock Directional Control Valve



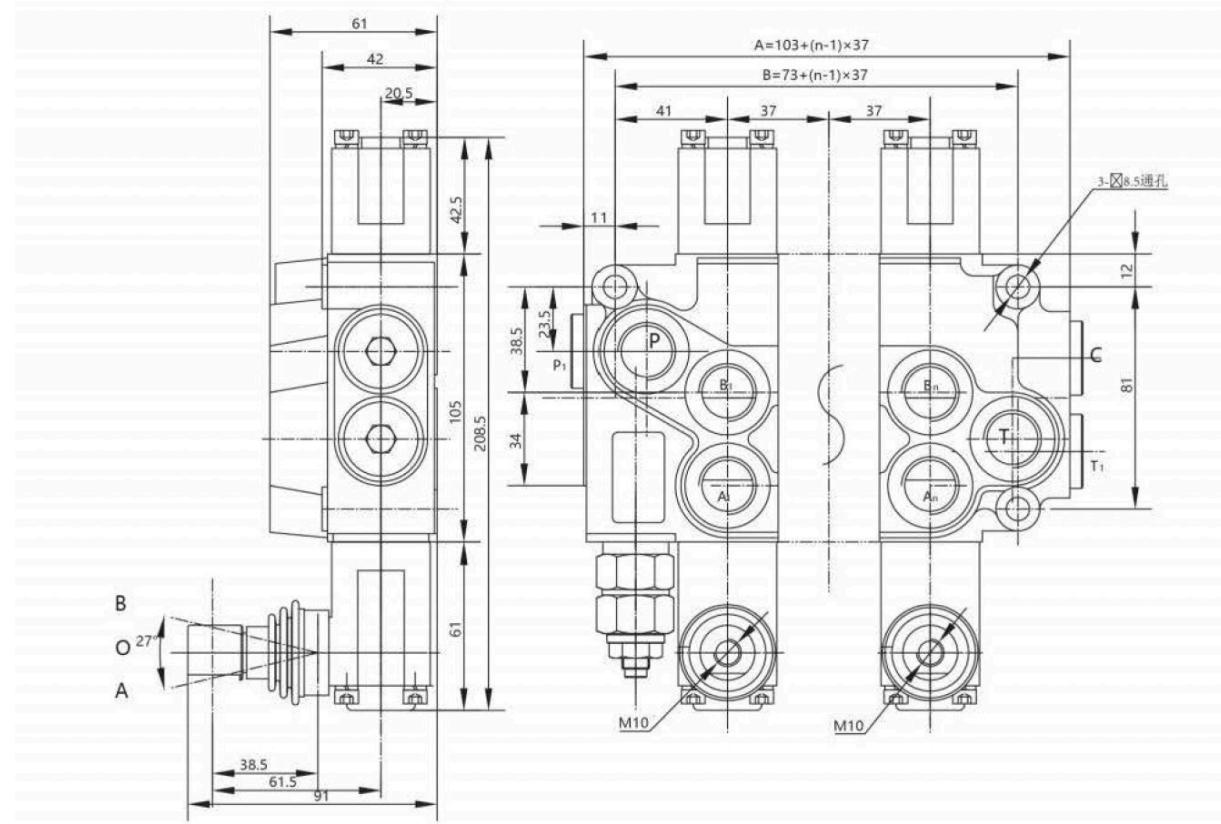
Specifications

Nominal flow rate	40 L/min	10.5 US GPM
Max pressure	350 bar	5076 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 8 sections	

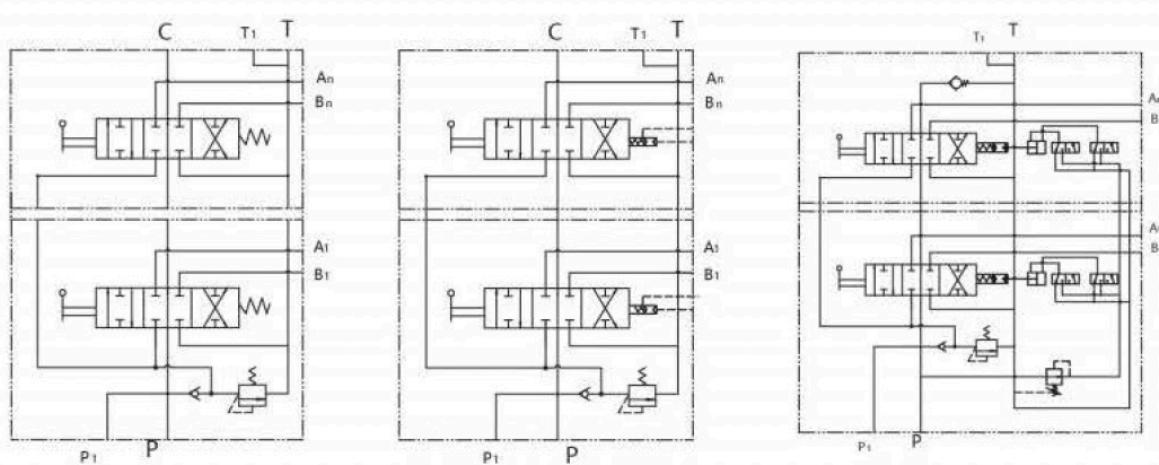
DCV40

Monoblock Directional Control Valve

◆ Dimension



◆ Hydraulic Schema



Manual control

Pneumatic control

Electro-hydraulic control

DCV45

Monoblock Directional Control Valve



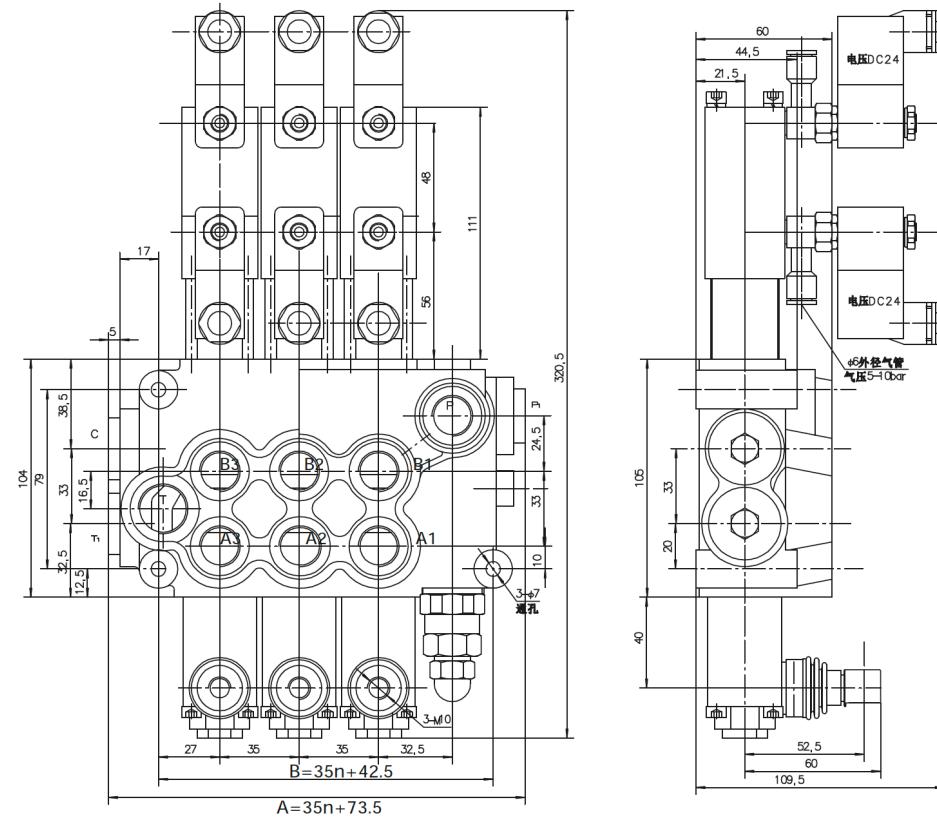
Specifications

Nominal flow rate	45 L/min	11.8 US GPM
Max pressure	350 bar	5076 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 8 sections	

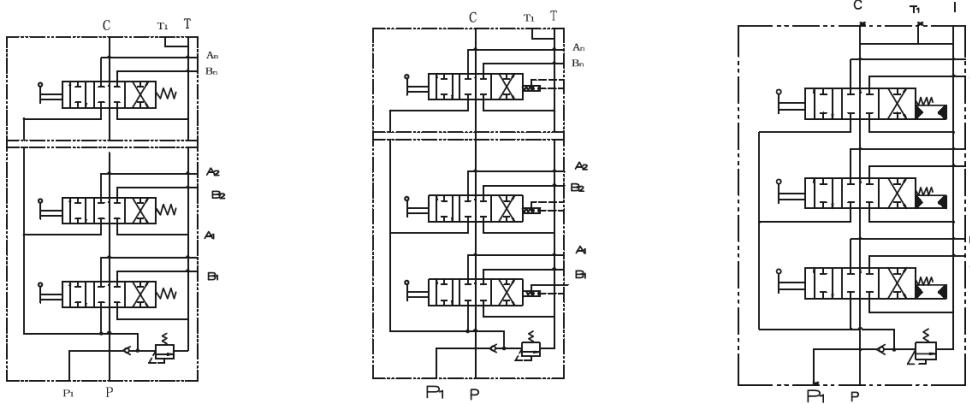
DCV45

Monoblock Directional Control Valve

◆ Dimension



◆ Hydraulic Schema



Manual control

Pneumatic control

Electro-hydraulic control

DCV60

Sectional Directional Control Valve



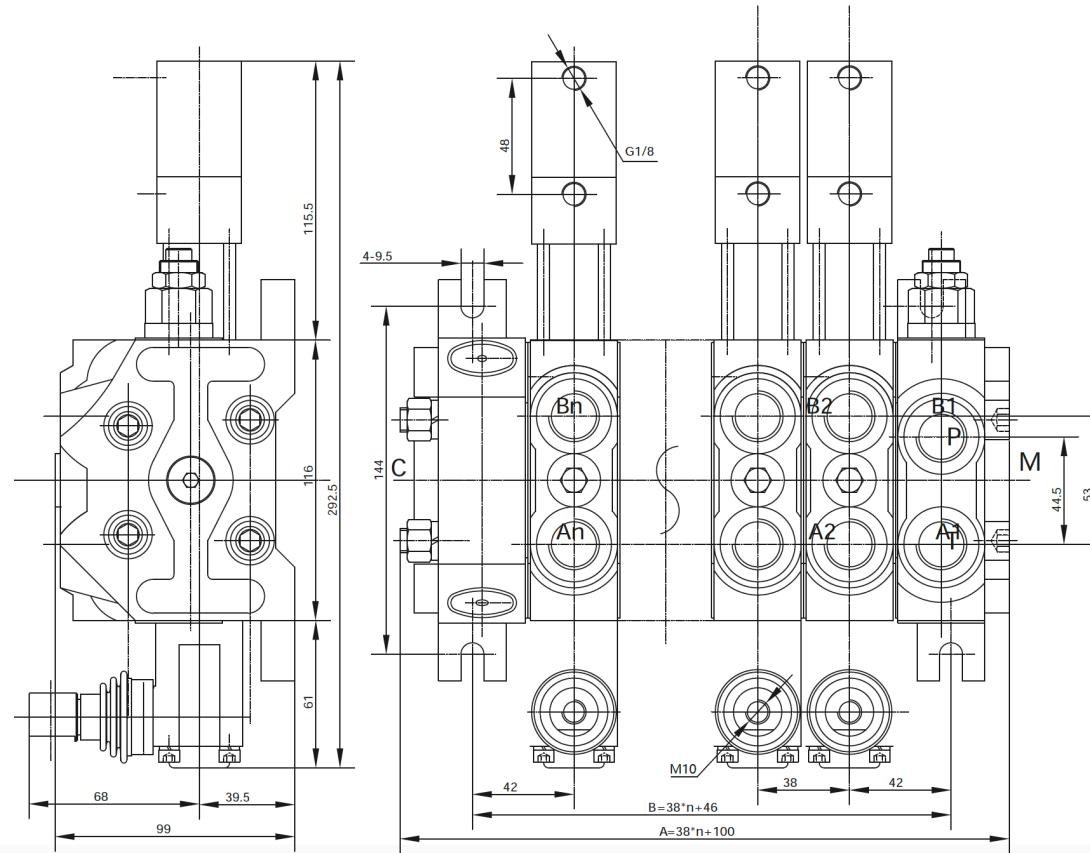
Specifications

Nominal flow rate	60 L/min	15.8 US GPM
Max pressure	350 bar	5076 psi
Operating range	15 ~ 75 mm ² / s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 12 sections	

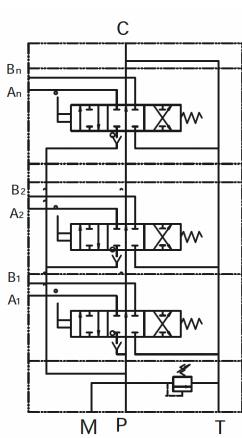
DCV60

Sectional Directional Control Valve

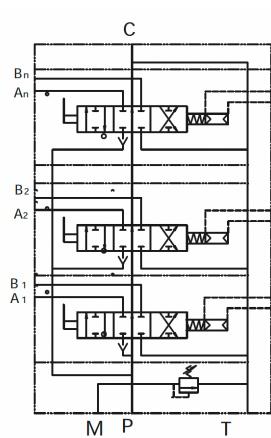
◆ Dimension



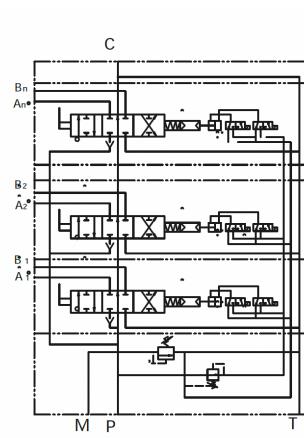
◆ Hydraulic Schema



Manual control



Pneumatic control



Electro-hydraulic control

DCV100

Sectional Directional Control Valve



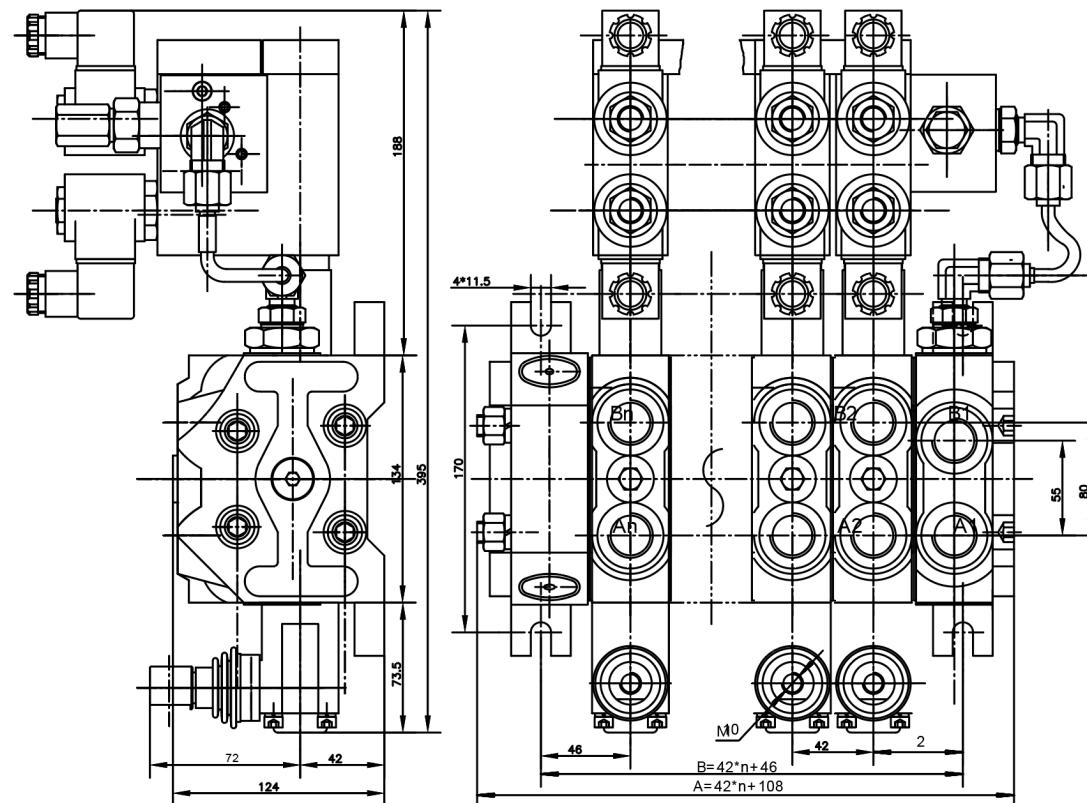
Specifications

Nominal flow rate	100 L/min	26.2 US GPM
Max pressure	350 bar	5076 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 12 sections	

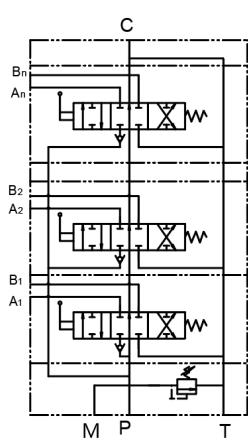
DCV100

Sectional Directional Control Valve

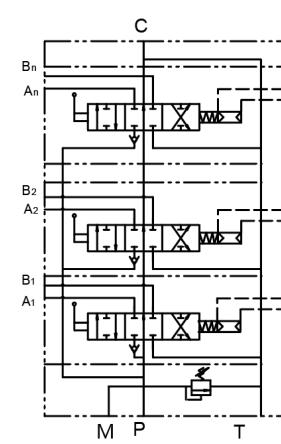
◆ Dimension



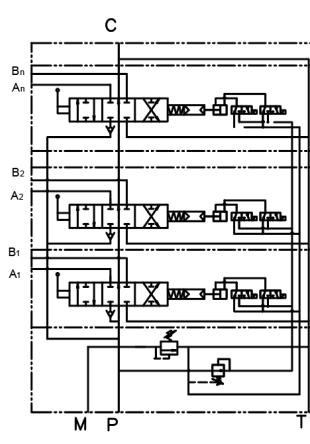
◆ Hydraulic Schema



Manual control



Pneumatic control



Electro-hydraulic control

DCV140

Sectional Directional Control Valve



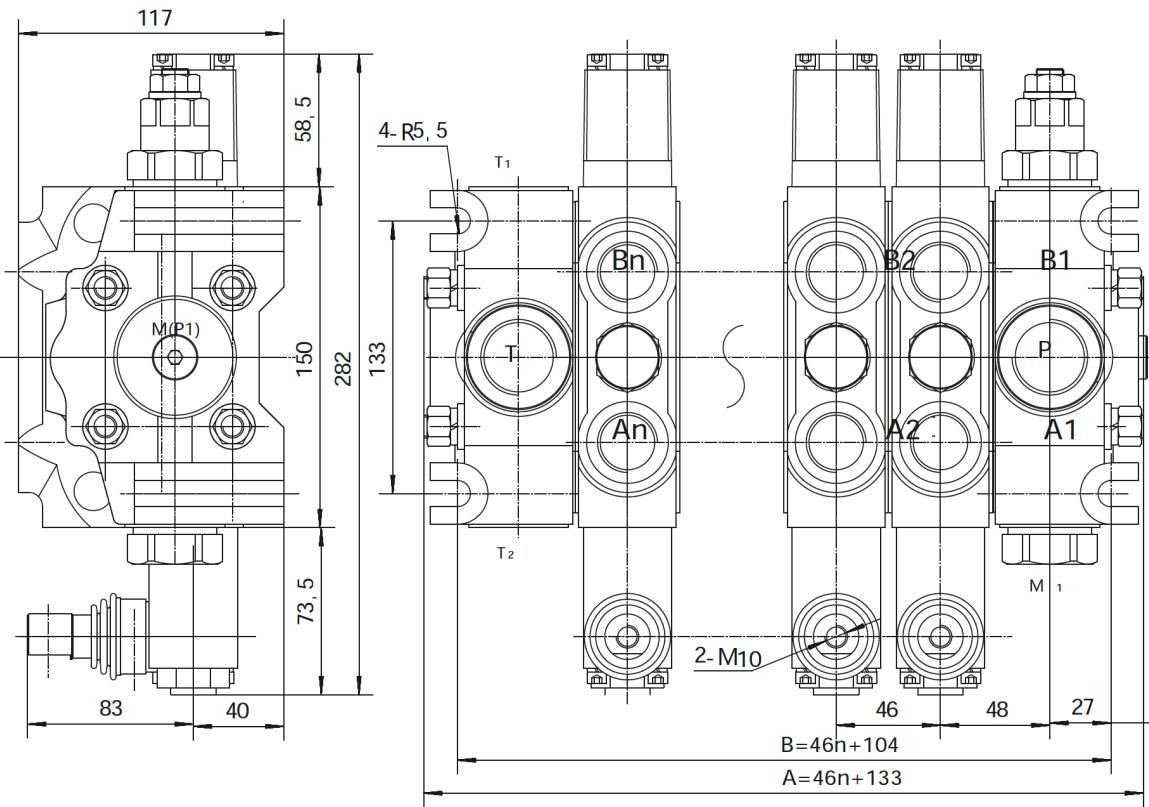
Specifications

Nominal flow rate	140 L/min	26.8 US GPM
Max pressure	350 bar	5076 psi
Operating range	15 ~ 75 mm ² / s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 12 sections	

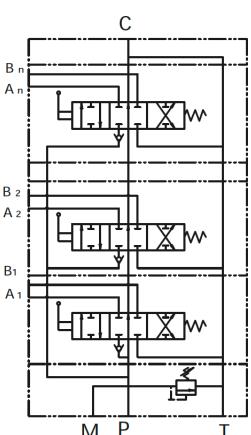
DCV140

Sectional Directional Control Valve

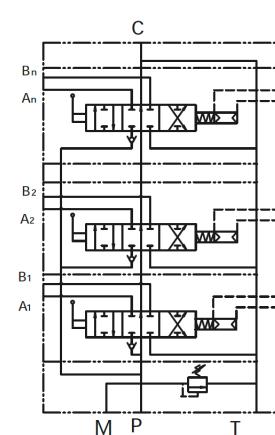
◆ Dimension



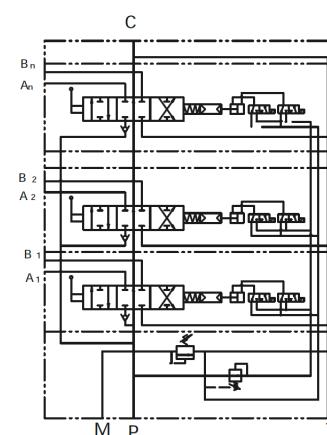
◆ Hydraulic Schema



Manual control



Pneumatic control



Electro-hydraulic control

DCV200

Sectional Directional Control Valve



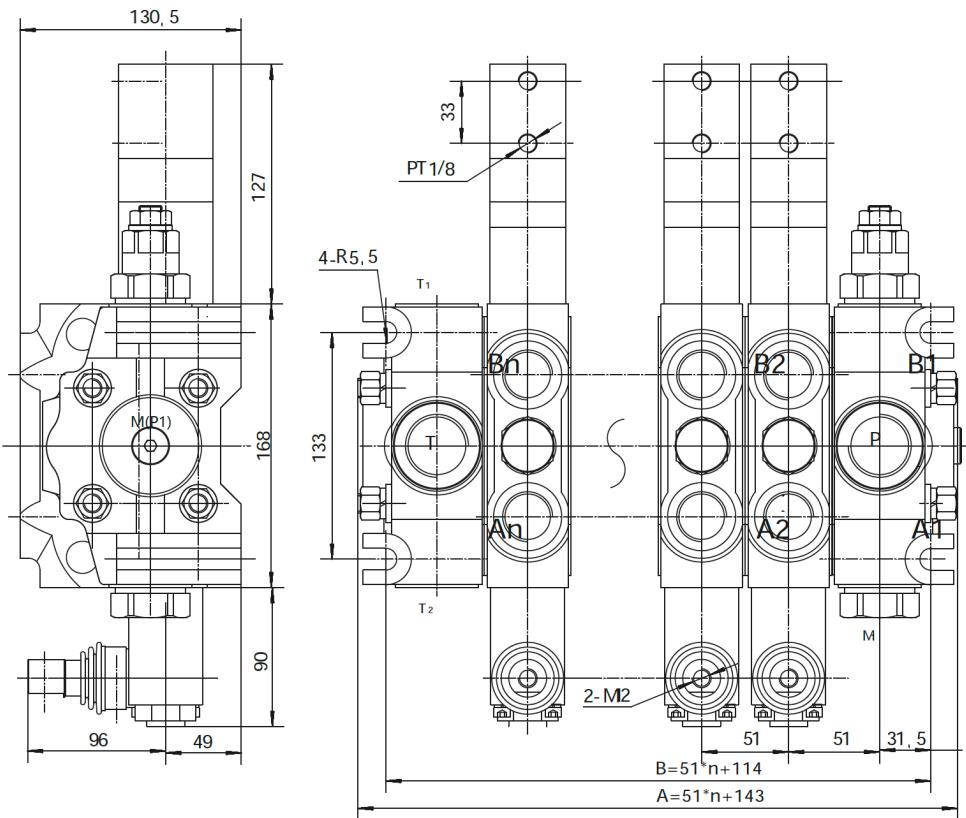
Specifications

Nominal flow rate	200 L/min	52.5 US GPM
Max pressure	350 bar	5076 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 12 sections	

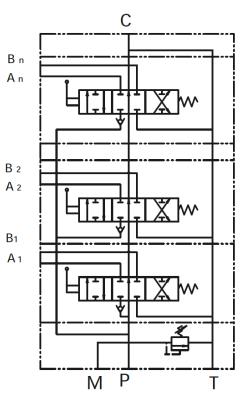
DCV200

Sectional Directional Control Valve

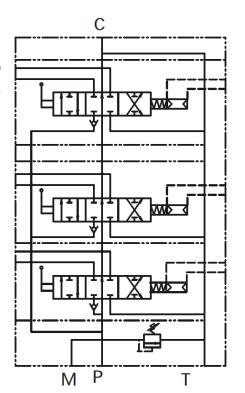
◆ Dimension



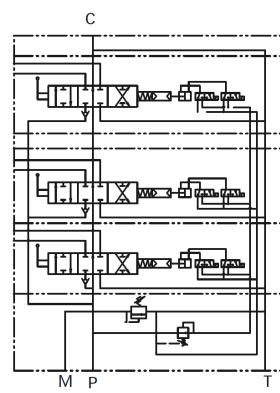
◆ Hydraulic Schema



Manual control



Pneumatic control



Electro-hydraulic control



P Series Directional Control Valve

P40, P80, P120 series are economical monoblock directional control valves with various applications and features of compact structure, stable performance, low price and high universality.

- ◆ Control type: manual, cable, solenoid, pneumatic, electro-hydraulic, etc.
- ◆ Circuit type: parallel.
- ◆ Monoblock structure, 1-7 sections.



◆ Ordering code

P XX - X - X - X - XXX - XXX ... - X - X

- ① Flow: 20, 80,120
- ② Number of sections: 1-7
- ③ Relief valve set pressure: 100-250 bar
- ④ Inlet port size: see table (1)
- ⑤ Control type: see table (2)
- ⑥ Spool type: see table (3)
- ⑦ Spool returning type; see table (4)
- ⑧ Work port size: see table (1)
- ⑨ Outlet port size: see table (1)

◆ Table (1)

BSP thread		Metric thread		US standard UNF-thread		US standard NPT thread	
Code	Thread size	Code	Thread size	Code	Thread size	Code	Thread size
G04	G1/4	M16	M16 X1.5	U10	5/8-12UNF	N06	NPT3/8
G06	G3/8	M18	M18X1.5	U12	3/4-16UNF	N08	NPT1/2
G08	G1/2	M20	M20X1.5	U14	7/8-14UNF	N12	NPT3/4
G12	G3/4	M22	M22X1.5	U16	1/12UNF		
G16	G1	M27	M27X2	U22	11/8-12UNF	N16	NPT 1

◆ Table (2)

Code	Type	Description	Code	Type	Description
C1		Standard handle	C6		Joystick with cable(standard length 1.5m, customizable)
C2		Handle at 180°	C7		Pneumatic control
C3		Handle at 180°	C8		Electro-hydraulic control
C4		Joystick	C9		Solenoid control
C5		Flexible cable (standard length 1.5m, customizable)	C10		Dual control

◆ Table (3)

Code	Spool Type	Description	Code	Spool Type	Description
ST1		3 positions, double acting	ST4		3 positions, double acting A blocked, B open
ST2		3 positions, double acting A & B open	ST5		3 positions, single acting in A. A open
ST3		3 positions, double acting A open, B blocked	ST6		4 positions, double acting with 4th floating position

◆ Table (4)

Code	Type	Description	Code	Type	Description
D1		3 positions, spring return	D6		4 positions, detent in all 4 positions
D2		3 positions, spring return, detent in a and b	D7		3 positions, detent in 0, a & b
D3		3 positions, spring return, detent in a	D8		2 positions (0, b), spring return
D4		3 positions, spring return, detent in b	D9		2 positions (0, a), spring return
D5		4 positions, spring return, detent in 4 th position			

P40

Monoblock Directional Control Valve



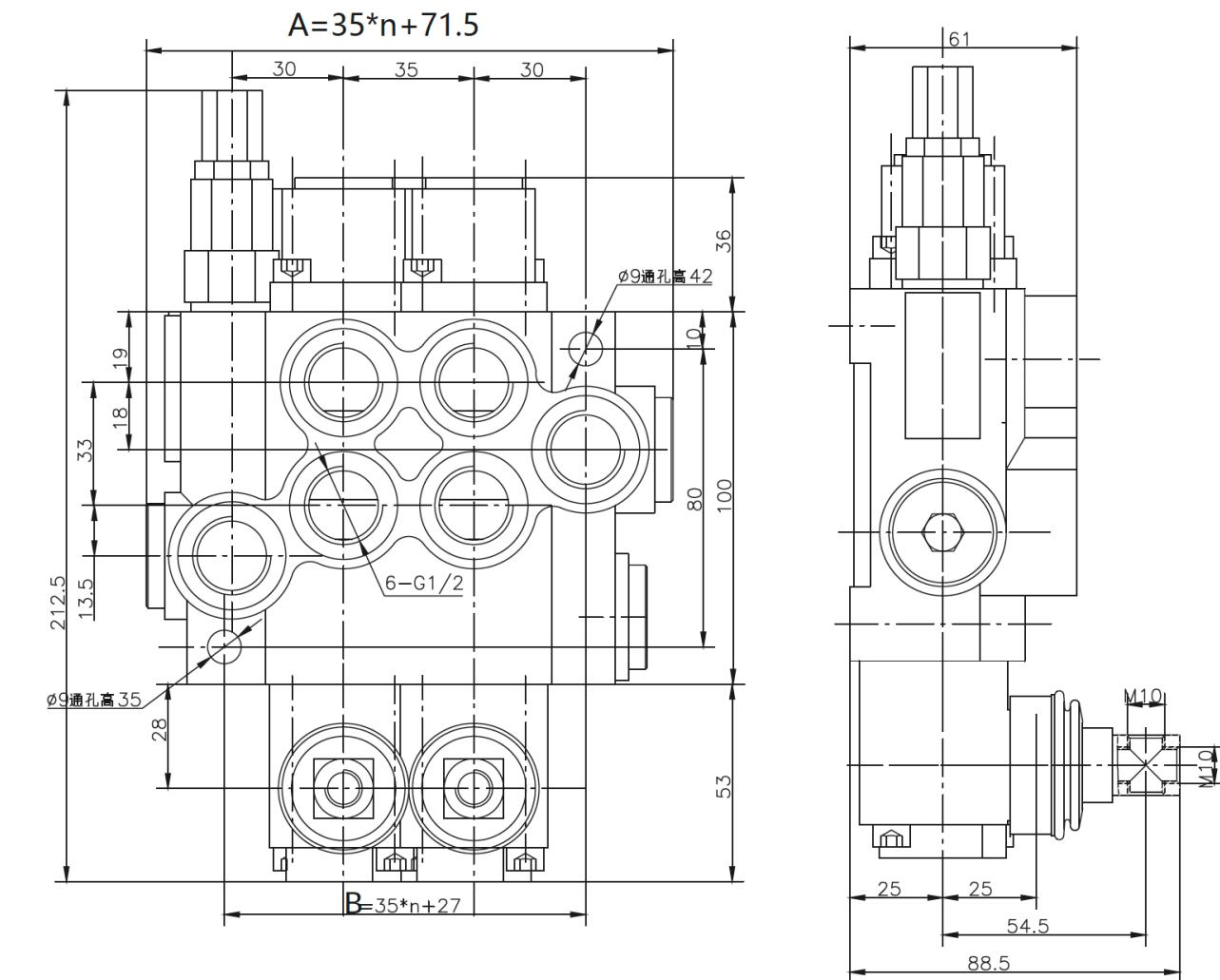
Specifications

Nominal flow rate	40 L/min	10.6 US GPM
Max pressure	250 bar	3626 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 7 sections	

P4C

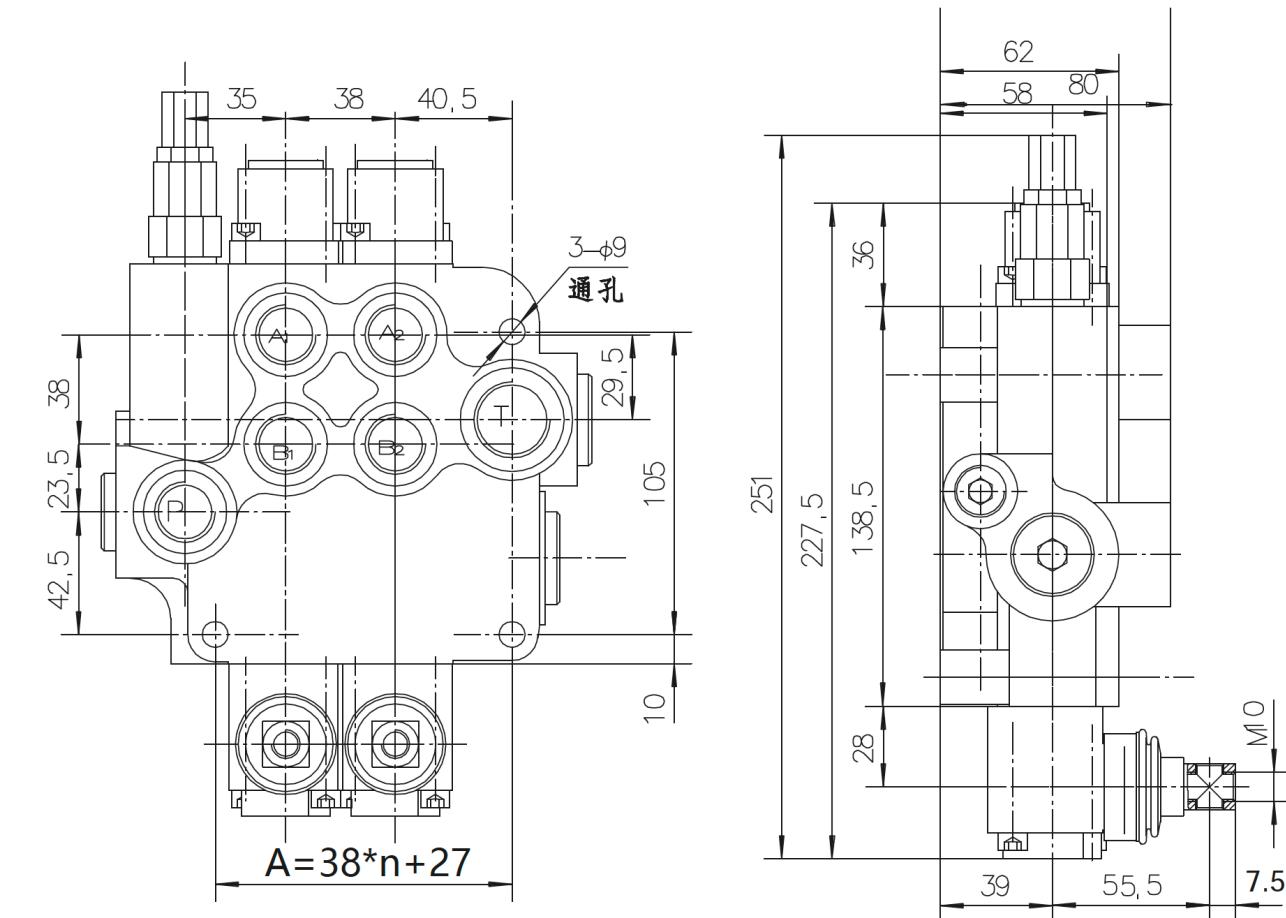
Monoblock Directional Control Valve

◆ Dimension



P80**Monoblock Directional Control Valve****Specifications**

Nominal flow rate	80 L/min	21 US GPM
Max pressure	250 bar	3626 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 7 sections	

P80**Monoblock Directional Control Valve****◆ Dimension**

P120

Monoblock Directional Control Valve



Specifications

Nominal flow rate 120 L/min 31,5 US GPM

Max pressure 250 bar 3626 psi

Operating range 15 ~ 75 mm²/s 15 ~ 75 cst

Viscosity min 12 mm²/s 12 cst

max 400 mm²/s 400 cst

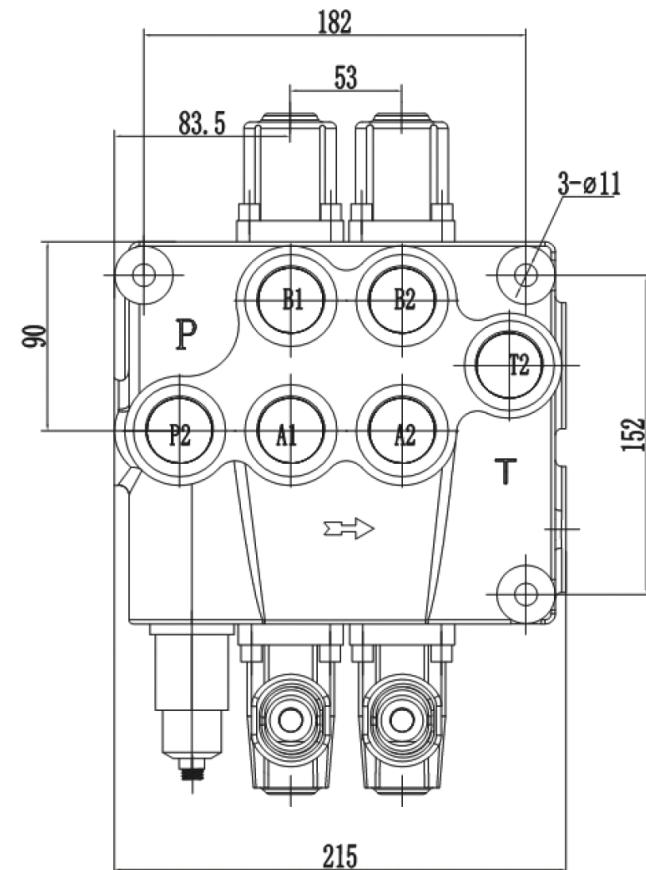
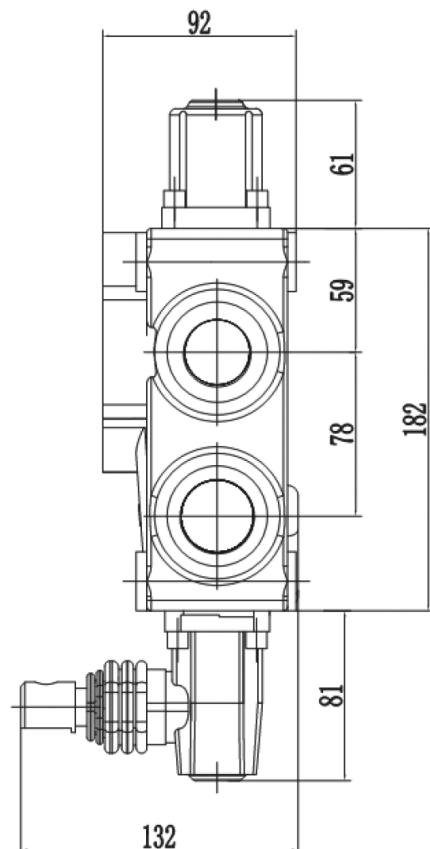
Ambient temperature range -40 ~ 80 °C -40 ~ 176 °F

Structure Monoblock: 1 ~ 7 sections

P120

Monoblock Directional Control Valve

◆ Dimension





Log Splitter Valve

P63

P63 Log Splitter Valve



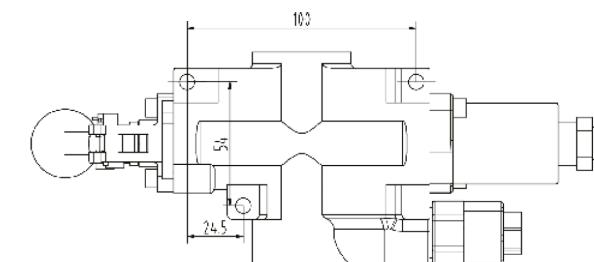
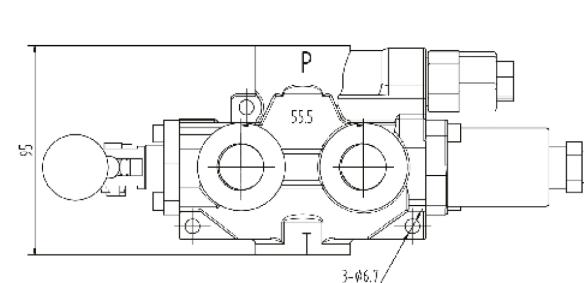
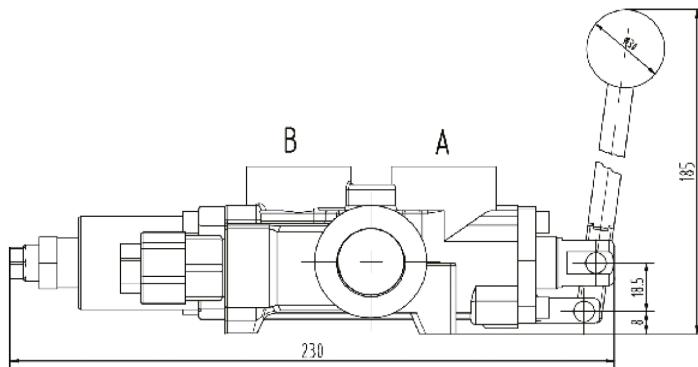
Specifications

Nominal flow rate	65 L/min	17 US GPM
Max pressure	250 bar	3626 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity min	12 mm ² /s	12 cst
max	400 mm ² /s	400 cst
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 8 sections	

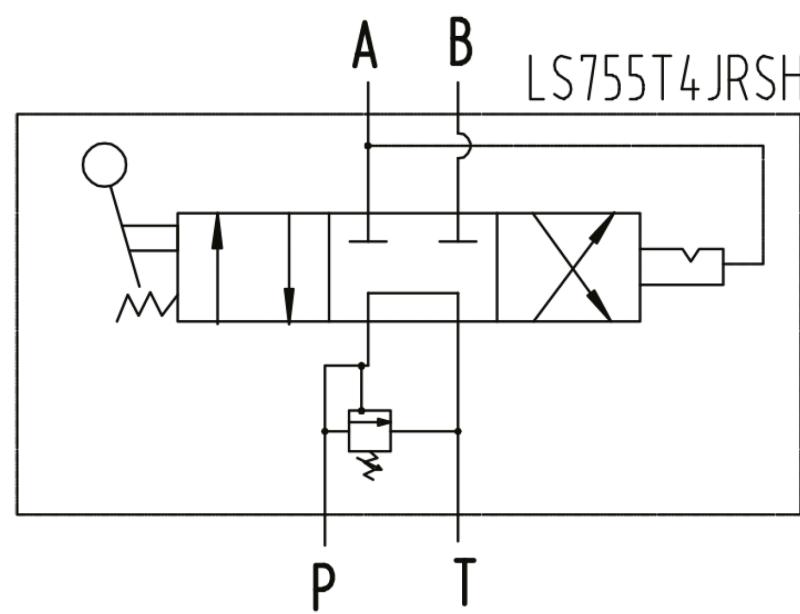
P63

P63 Log Splitter Valve

◆ Dimension



◆ Hydraulic Schema



P81

P81 Log Splitter Valve



P81 type splitting machine valve is through the lever cation make valve core do axial movement and the oil circuit to switch straight acting reversing valve. The splitting machine valve owns overload protection.compact structure,flexible control,easy to use and reliable,dedicated to splitting machine oil circuit control. Can make the splitting machine fast and stable work.

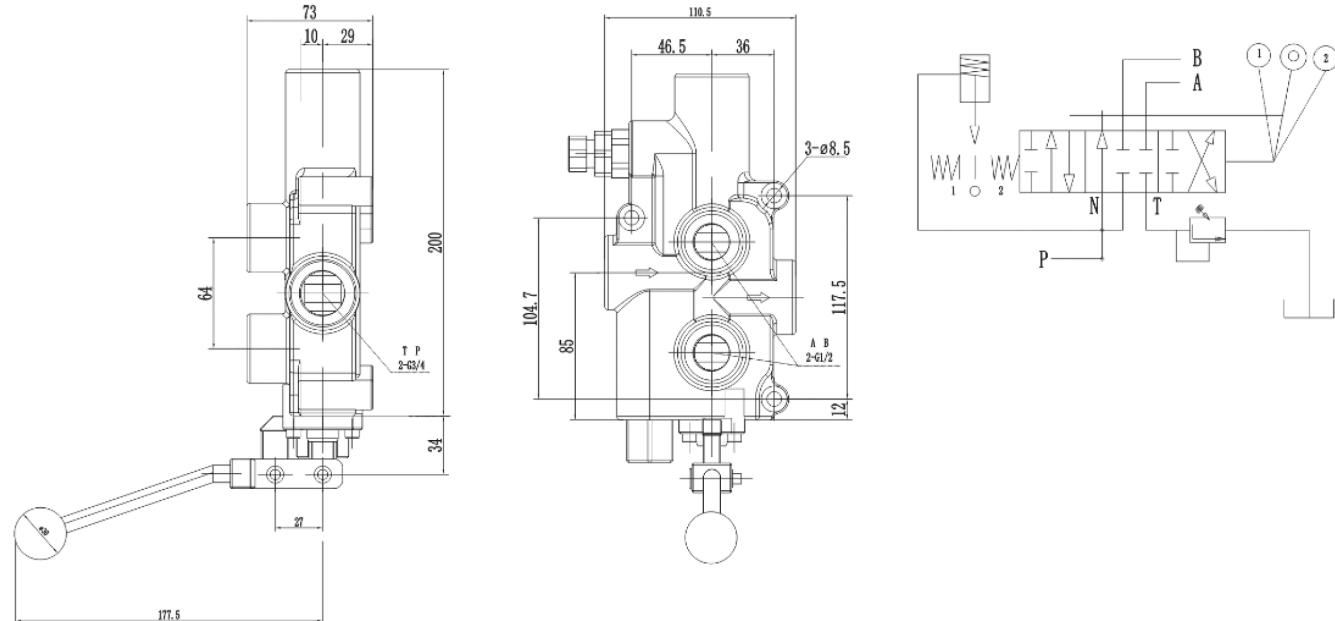
Specifications

Nominal flow rate	95 L/min	25 US GPM
Max pressure	250 bar	3626 psi
Operating range	15 ~ 75 mm ² / s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Kick out set pressure	70 - 140 bar	1015 - 2030 psi

P81

P81 Log Splitter Valve

◆ Dimension



LVA1-95

LVA1-95 Log Splitter Valve



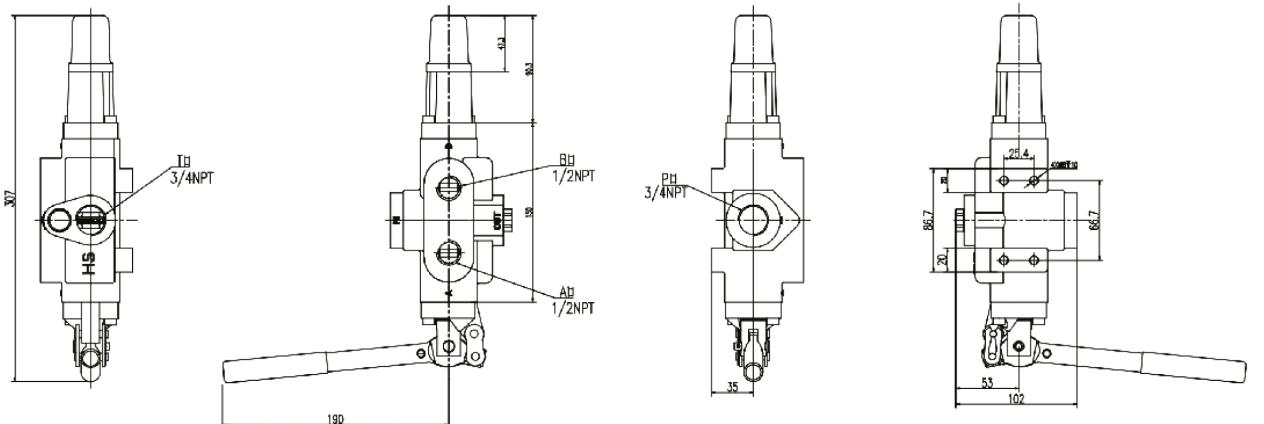
Specifications

Nominal flow rate	90 L/min	23.8 US GPM
Max pressure	315 bar	4600 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Kick out set pressure	70 - 140 bar	1015 - 2030 psi

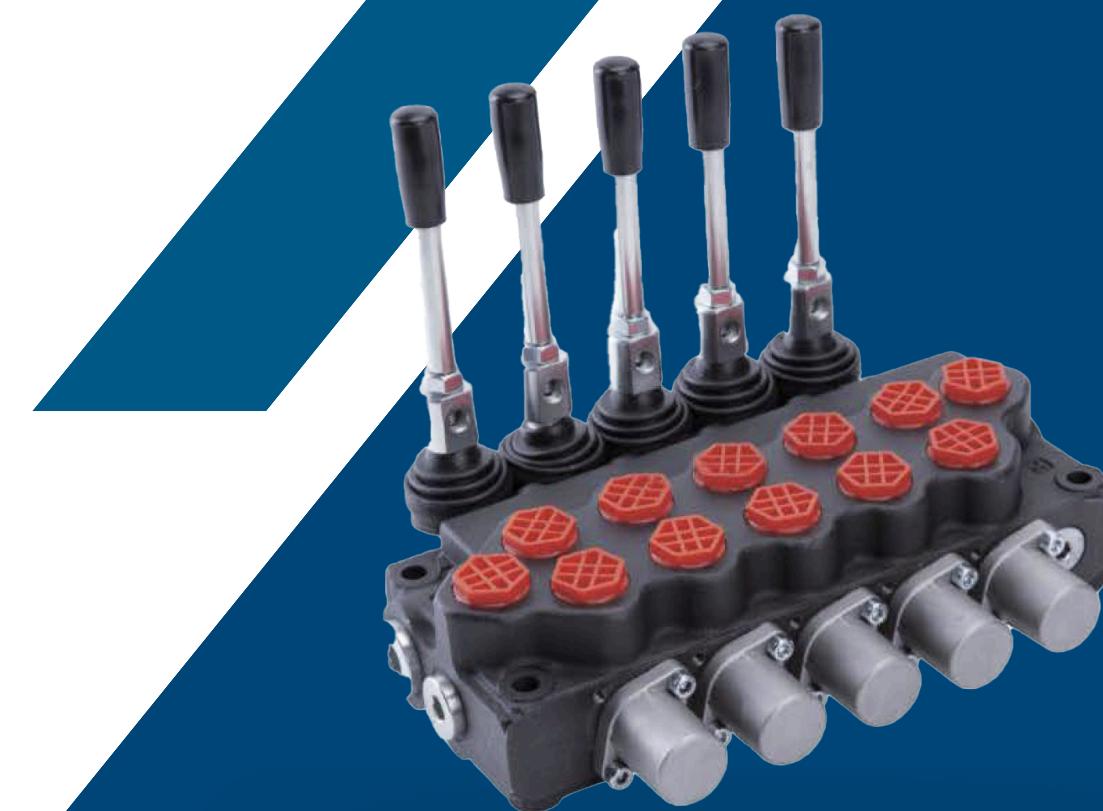
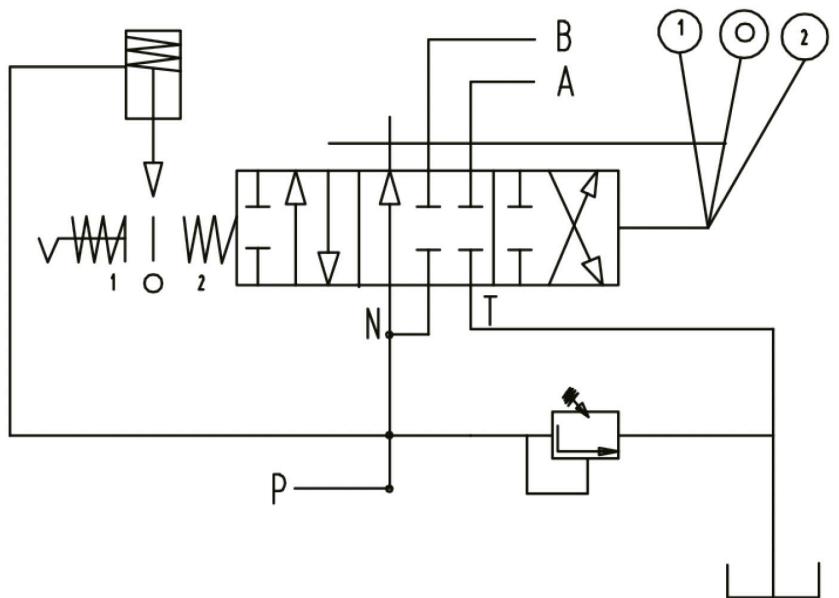
LVA1-95

LVA1-95 Log Splitter Valve

◆ Dimension



◆ Hydraulic Schema



HSSD Series Directional Control Valve

HSSD series directional control valve, flow range of 30-400L/min, can meet different flow requirements; Its compact, heavy and simple design, can be used in a variety of work scenarios for open or closed centre hydraulic systems; stable performance, a variety of control methods to choose.

- ◆ Control type: manual, cable, solenoid, pneumatic, electro-hydraulic, etc.
- ◆ Circuit type: parallel.
- ◆ Structure: monoblock or sectional.



◆ Ordering code

HSSD XX - X - X - X - XXX - XXX ... - X - X

- ① Flow
- ② Number of sections
- ③ Relief valve set pressure: 100-250 bar
- ④ Inlet port size: see table (1)
- ⑤ Control type: see table (2)
- ⑥ Spool type: see table (3)
- ⑦ Spool returning type; see table (4)
- ⑧ Work port size: see table (1)
- ⑨ Outlet port size: see table (1)

◆ Table (1)

BSP thread		Metric thread		US standard UNF-thread		US standard NPT thread	
Code	Thread size	Code	Thread size	Code	Thread size	Code	Thread size
G04	G1/4	M16	M16 X1.5	U10	5/8-12UNF	N06	NPT3/8
G06	G3/8	M18	M18X1.5	U12	3/4-16UNF	N08	NPT1/2
G08	G1/2	M20	M20X1.5	U14	7/8-14UNF	N12	NPT3/4
G12	G3/4	M22	M22X1.5	U22	11/16-12UNF		
G16	G1	M27	M27X2	U24	15/16-12UNF	N16	NPT 1

◆ Table (2)

Code	Type	Description	Code	Type	Description
C1		Standard handle	C6		Joystick with cable(standard length 1.5m, customizable)
C2		Handle at 180°	C7		Pneumatic control
C3		Handle at 180°	C8		Electro-hydraulic control
C4		Joystick	C9		Solenoid control
C5		Flexible cable (standard length 1.5m, customizable)	C10		Dual control

◆ Table (3)

Code	Spool Type	Description	Code	Spool Type	Description
ST1		3 positions, double acting	ST4		3 positions, double acting A blocked, B open
ST2		3 positions, double acting A & B open	ST5		3 positions, single acting in A. A open
ST3		3 positions, double acting A open, B blocked	ST6		4 positions, double acting with 4th floating position

◆ Table (4)

Code	Type	Description	Code	Type	Description
D1		3 positions, spring return	D6		4 positions, detent in all 4 positions
D2		3 positions, spring return, detent in a and b	D7		3 positions, detent in 0, a & b
D3		3 positions, spring return, detent in a	D8		2 positions (0, b), spring return
D4		3 positions, spring return, detent in b	D9		2 positions (0, a), spring return
D5		4 positions, spring return, detent in 4 th position			

HSSD4

HSSD4 Monoblock Directional Control Valve



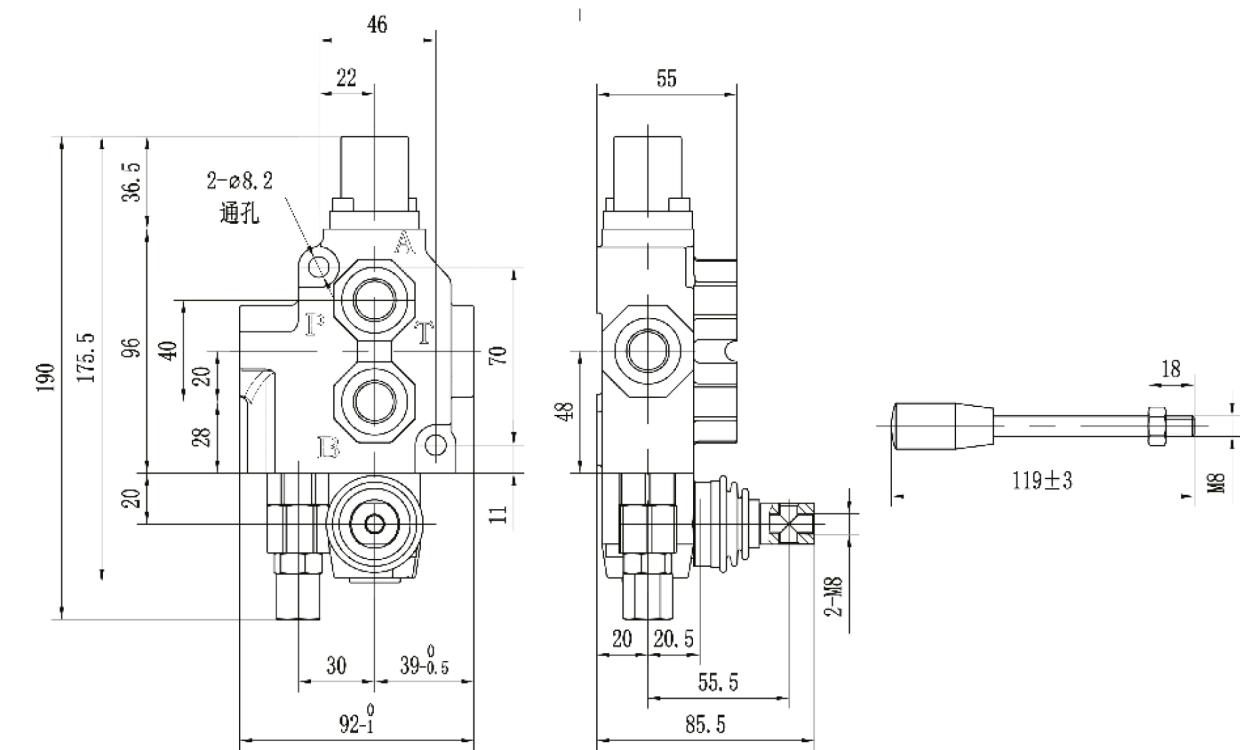
Specifications

Nominal flow rate	45 L/min	12 US GPM
Operating pressure (max)	250 bar	3600 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: one sections	

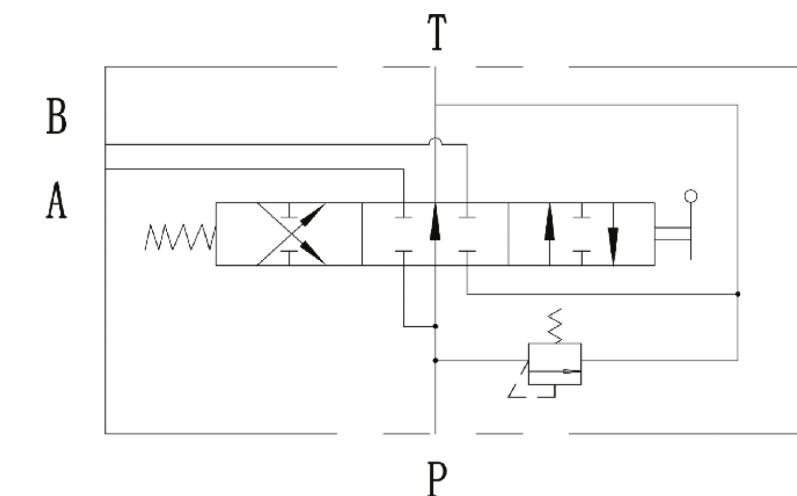
HSSD4

HSSD4 Monoblock Directional Control Valve

◆ Dimension



◆ Hydraulic Schema



HSSD5

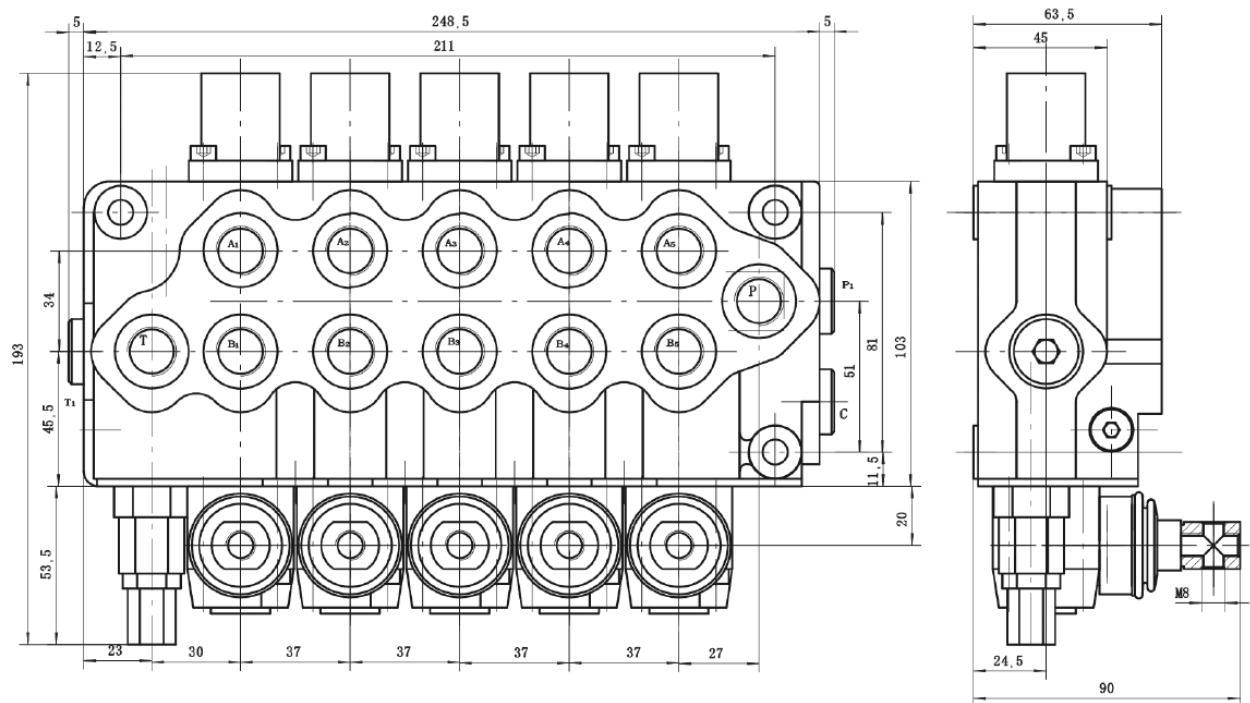
HSSD5 Monoblock Directional Control Valve



HSSD5

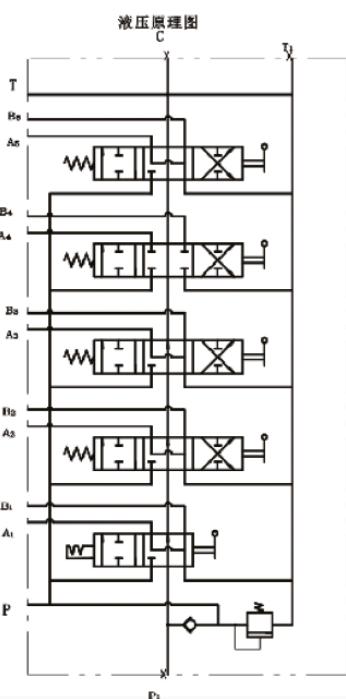
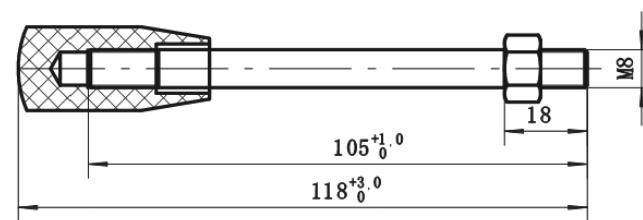
HSSD5 Monoblock Directional Control Valve

◆ Dimension



Specifications

Nominal flow rate	45 L/min	12 US GPM
Operating pressure (max)	315 bar	4568 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 7 sections	



HSSD8

HSSD8 Monoblock Directional Control Valve



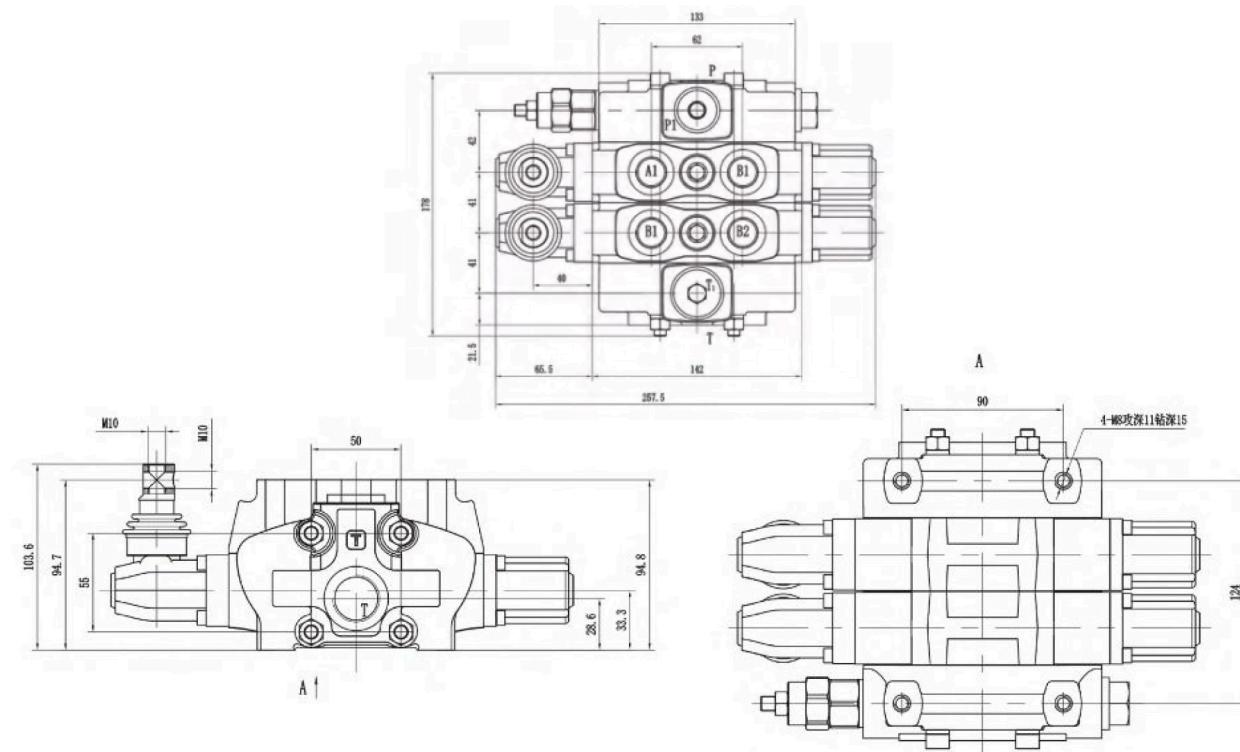
Specifications

Nominal flow rate	80 L/min	21 US GPM
Operating pressure (max)	315 bar	4568 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	sectional: 1 ~ 12 sections	

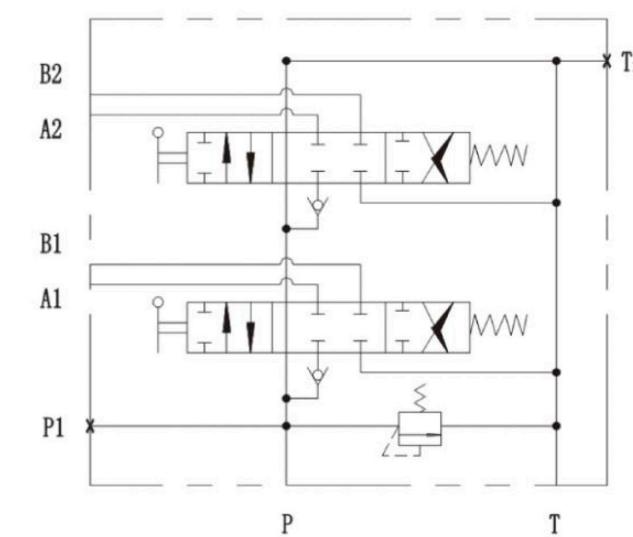
HSSD8

HSSD8 Monoblock Directional Control Valve

◆ Dimension



◆ Hydraulic Schema

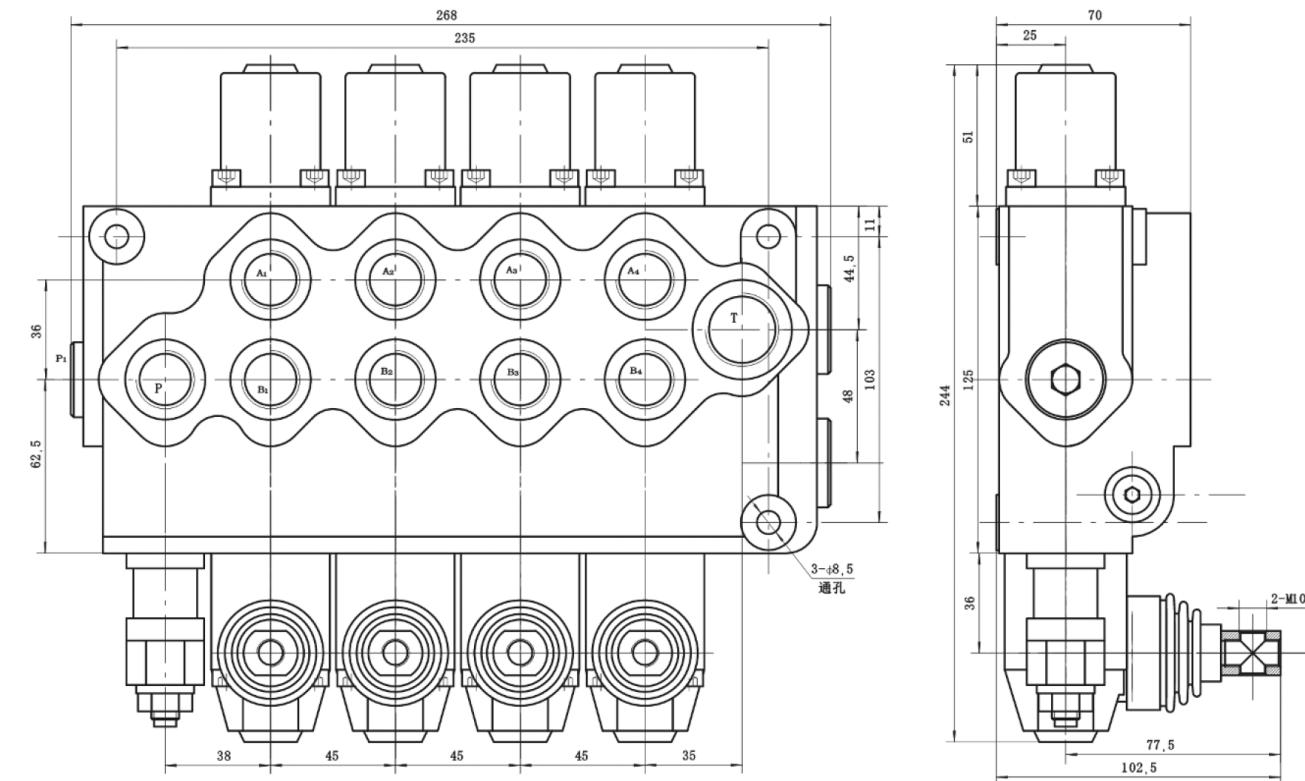


HSSD11**HSSD11 Monoblock Directional Control Valve****specifications**

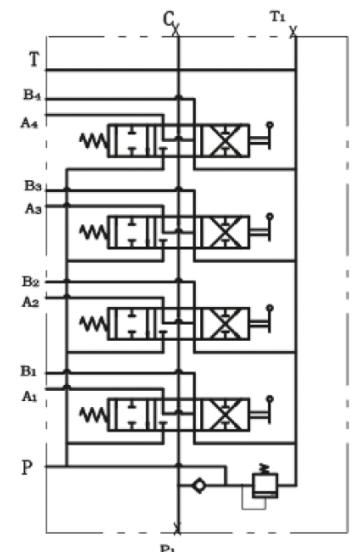
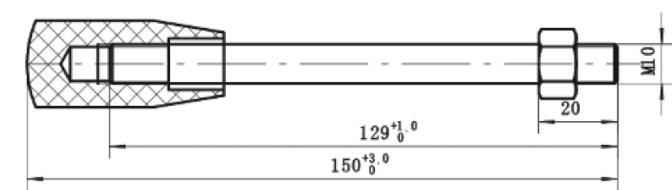
Nominal flow rate	75 L/min	19.6 US GPM
Operating pressure (max)	315 bar	4568 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	12 cst
	min	400 mm ² /s
	max	400 cst
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 7 sections	

HSSD11**HSSD11 Monoblock Directional Control Valve**

◆ Dimension



液压原理图



HSSD14

HSSD14 Monoblock Directional Control Valve



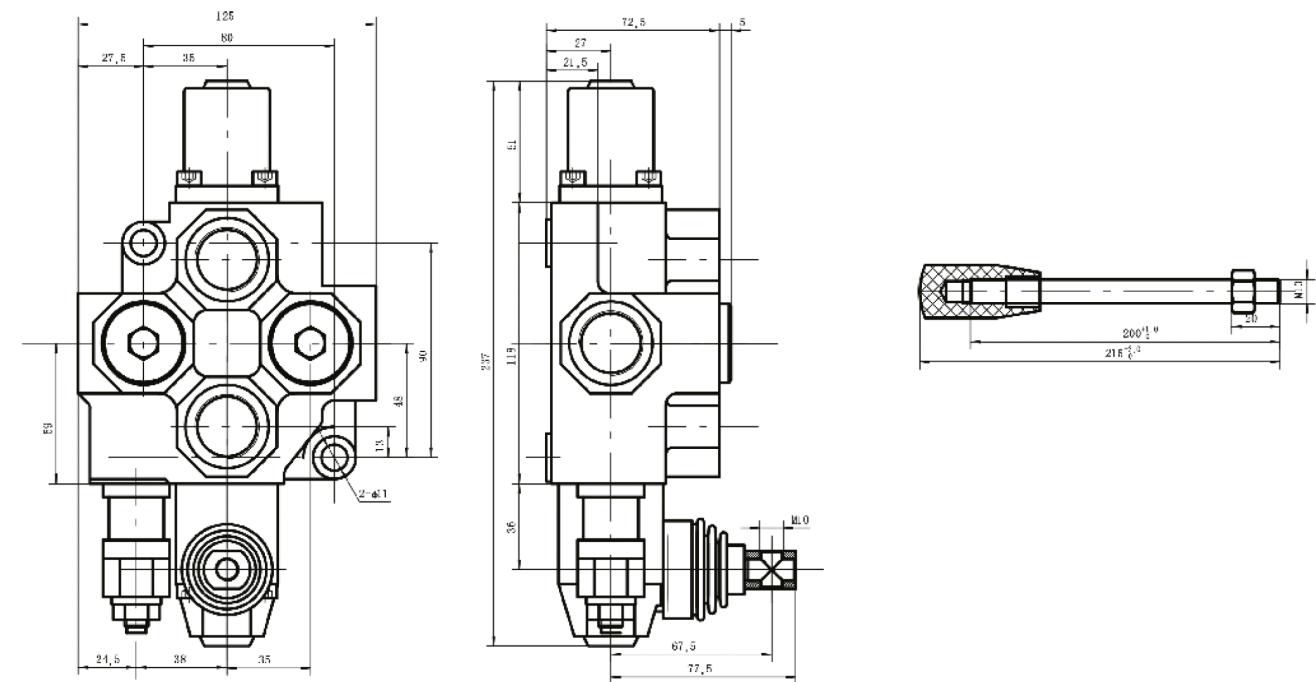
Specifications

Nominal flow rate	120 L/min	31.5 US GPM
Operating pressure (max)	250 bar	3600 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity min	12 mm ² /s	12 cst
max	400 mm ² /s	400 cst
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: only one sections	

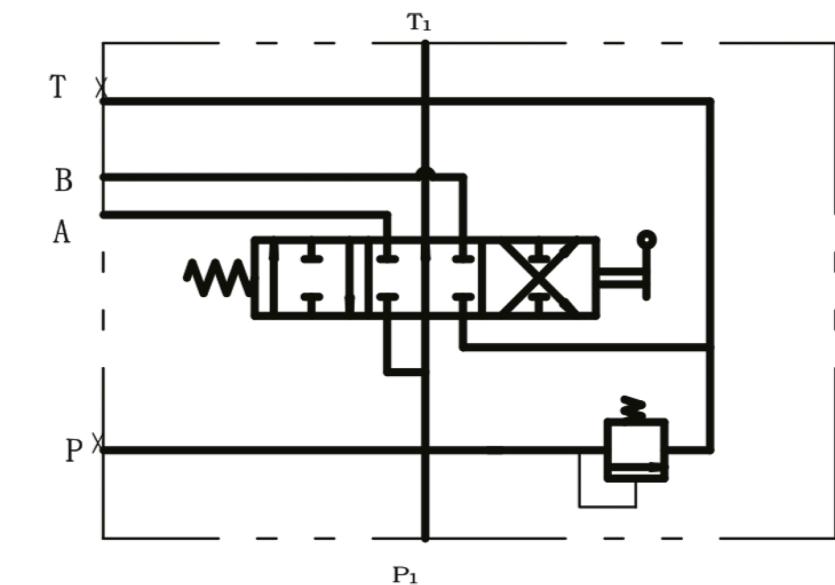
HSSD14

HSSD14 Monoblock Directional Control Valve

◆ Dimension



◆ Hydraulic Schema



HSSD18

HSSD18 Monoblock Directional Control Valve



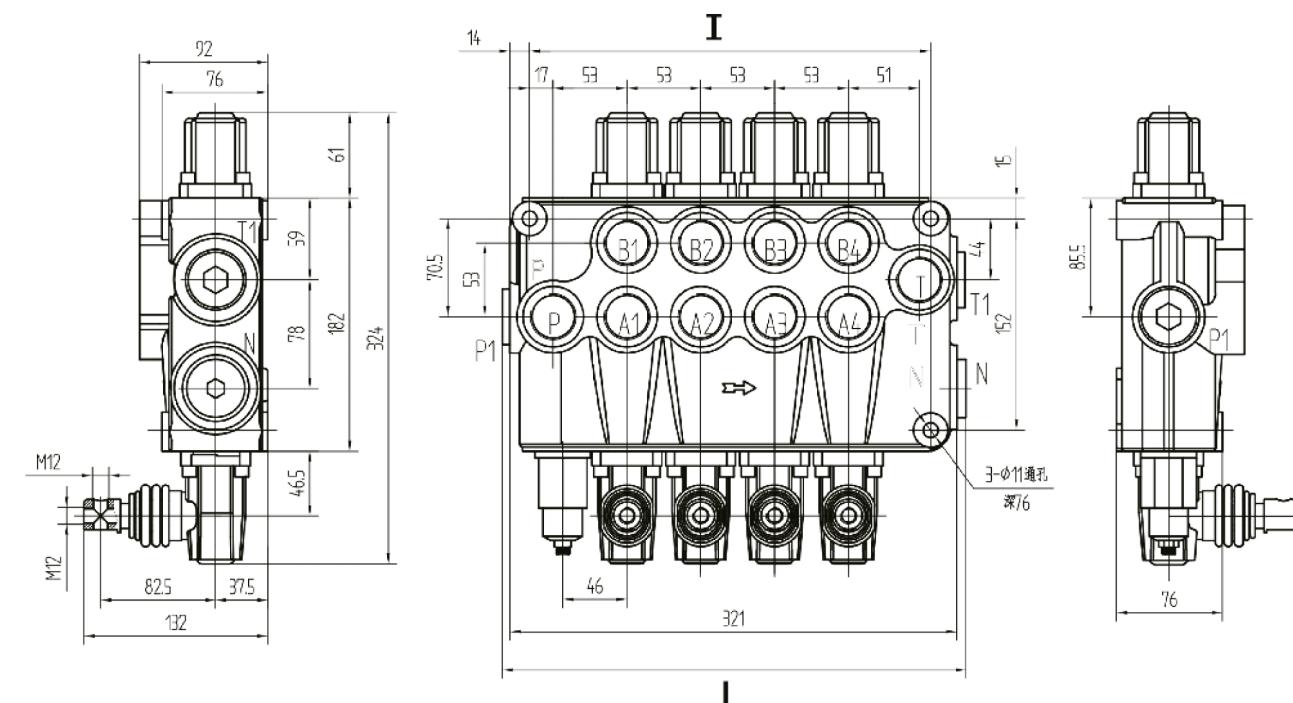
Specifications

Nominal flow rate	160 L/min	42 US GPM
Operating pressure (max)	250 bar	3600 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 4 sections	

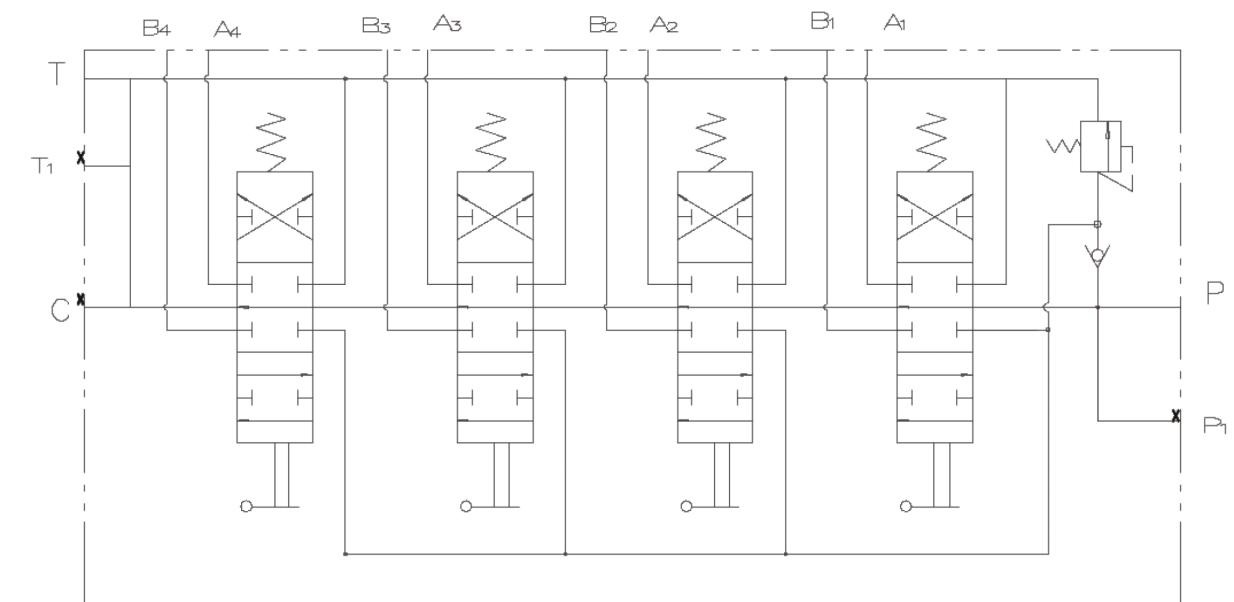
HSSD18

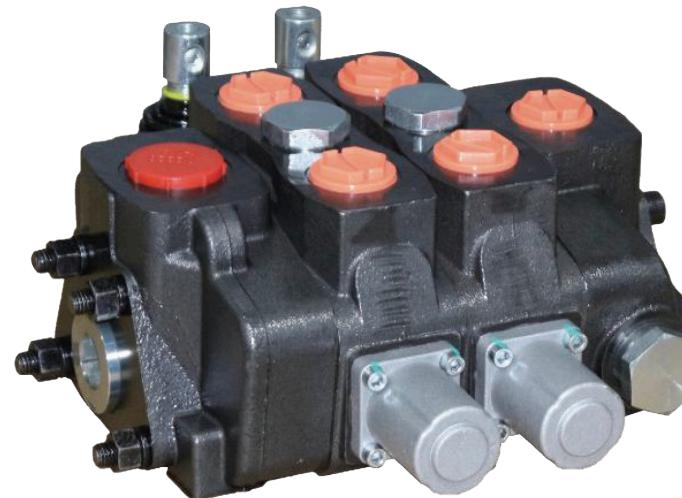
HSSD18 Monoblock Directional Control Valve

◆ Dimension



◆ Hydraulic Schema

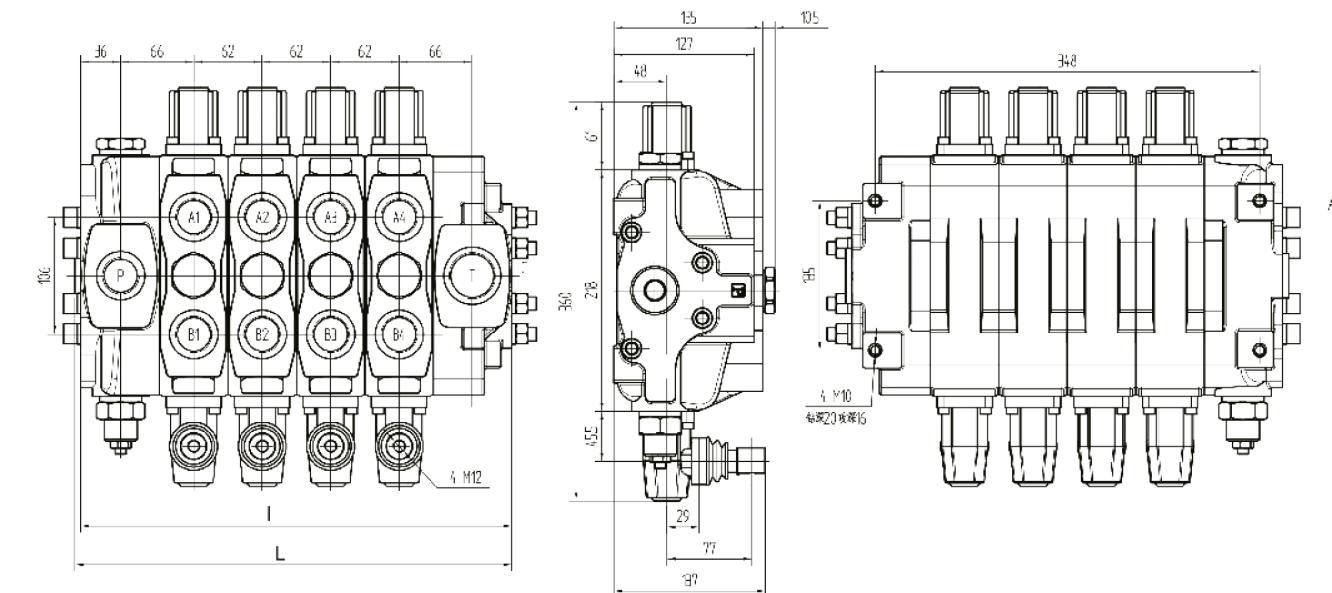


HSSD25**HSSD25 Monoblock Directional Control Valve****Specifications**

Nominal flow rate	240 L/min	63 US GPM
Operating pressure (max)	250 bar	3600 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity min	12 mm ² /s	12 cst
max	400 mm ² /s	400 cst
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	sectional: 1 ~ 12 sections	

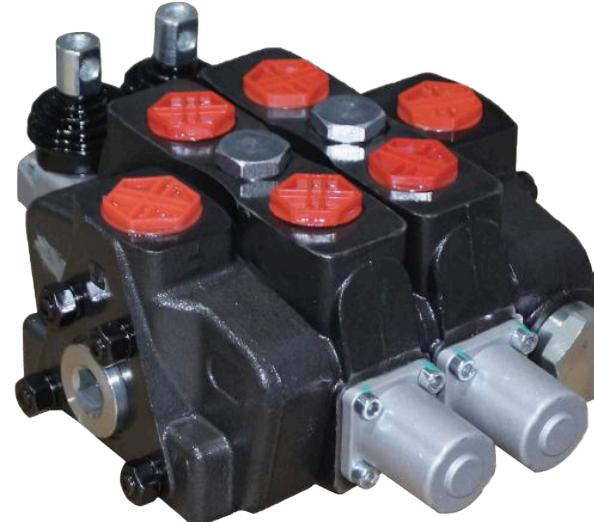
HSSD25**HSSD25 Monoblock Directional Control Valve**

◆ Dimension



SDS180

SDS180 Monoblock Directional Control Valve



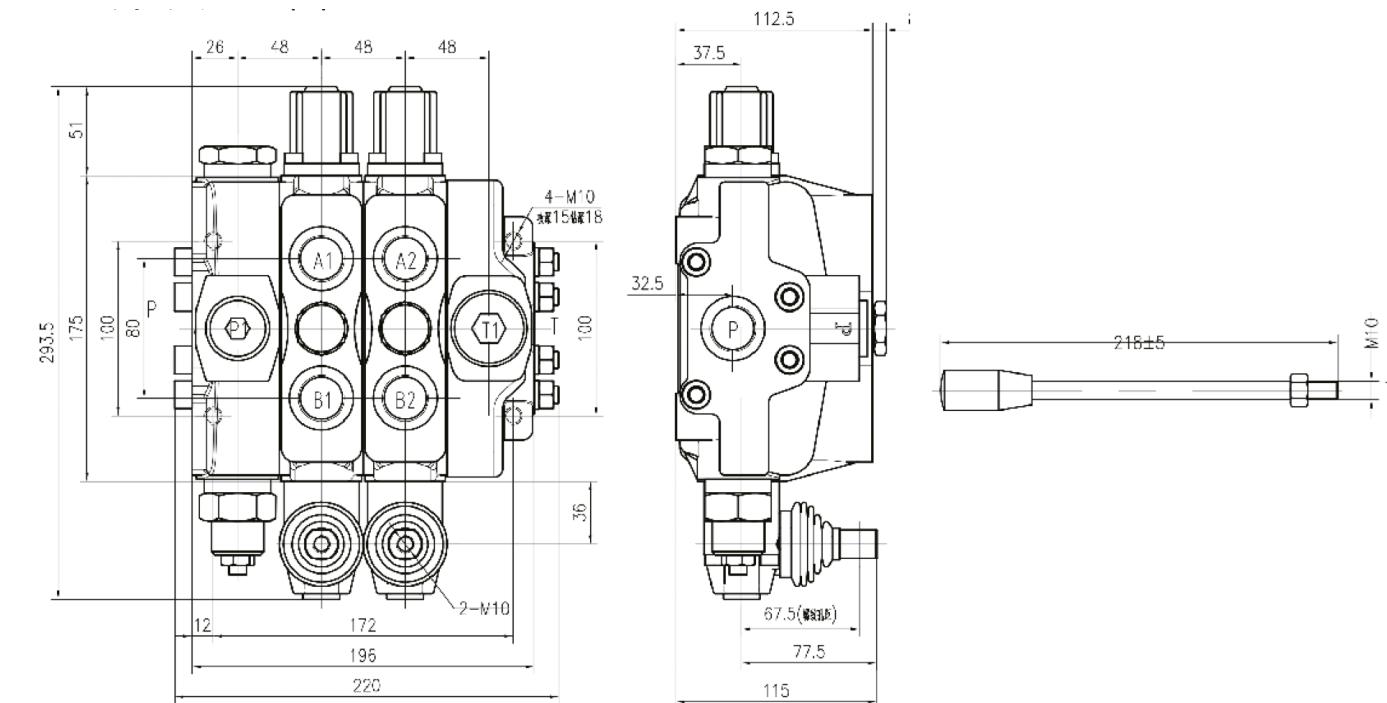
Specifications

Nominal flow rate	160 L/min	42 US GPM
Operating pressure (max)	250 bar	3600 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	sectional: 1 ~ 12 sections	

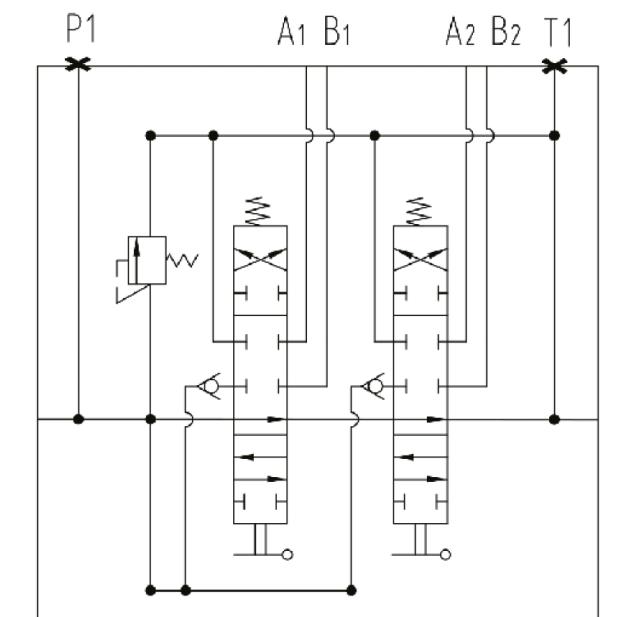
SDS180

SDS180 Monoblock Directional Control Valve

◆ Dimension



◆ Hydraulic Schema



SDS380

SDS380 Monoblock Directional Control Valve



Specifications

Nominal flow rate 380 L/min 100 US GPM

Operating pressure (max) 350 bar 5076 psi

Operating range 15 ~ 75 mm²/s 15 ~ 75 cst

Viscosity min 12 mm²/s 12 cst

 max 400 mm²/s 400 cst

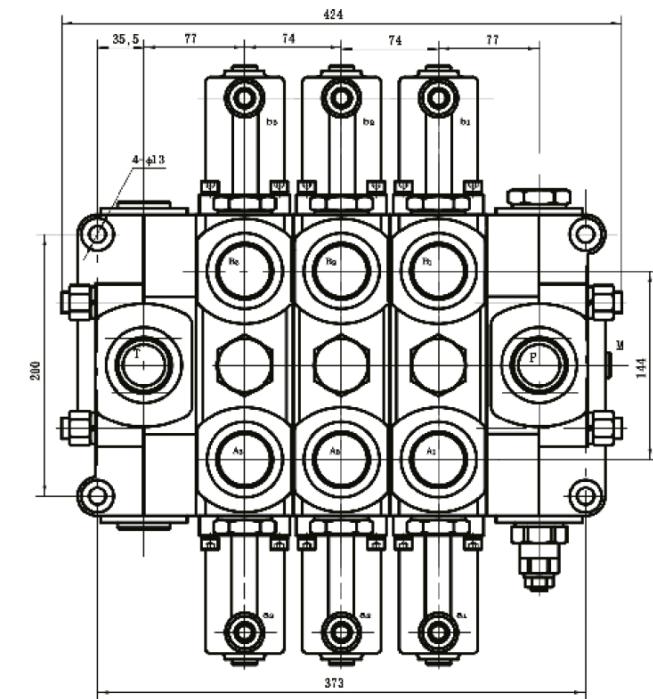
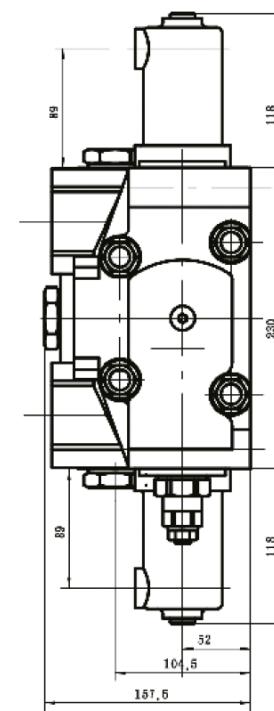
Ambient temperature range -40 ~ 80 °C -40 ~ 176 °F

Structure sectional: 1 ~ 12 sections

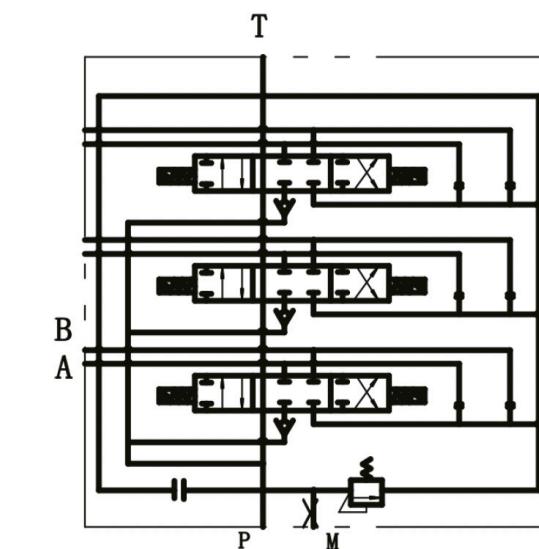
SDS380

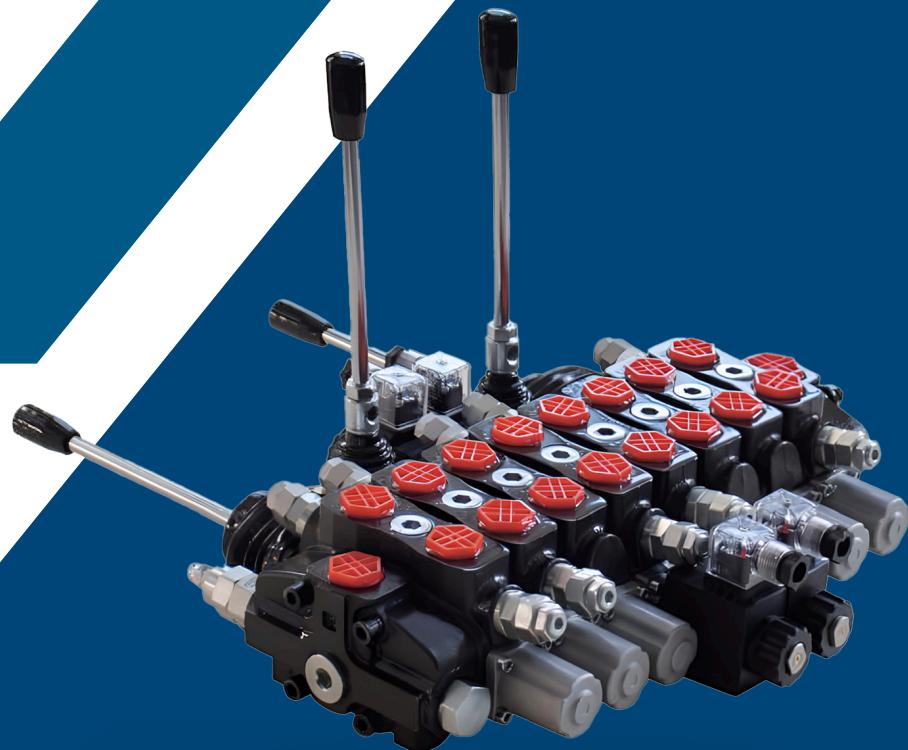
SDS380 Monoblock Directional Control Valve

◆ Dimension



◆ Hydraulic Schema





Wood Grabber Valve

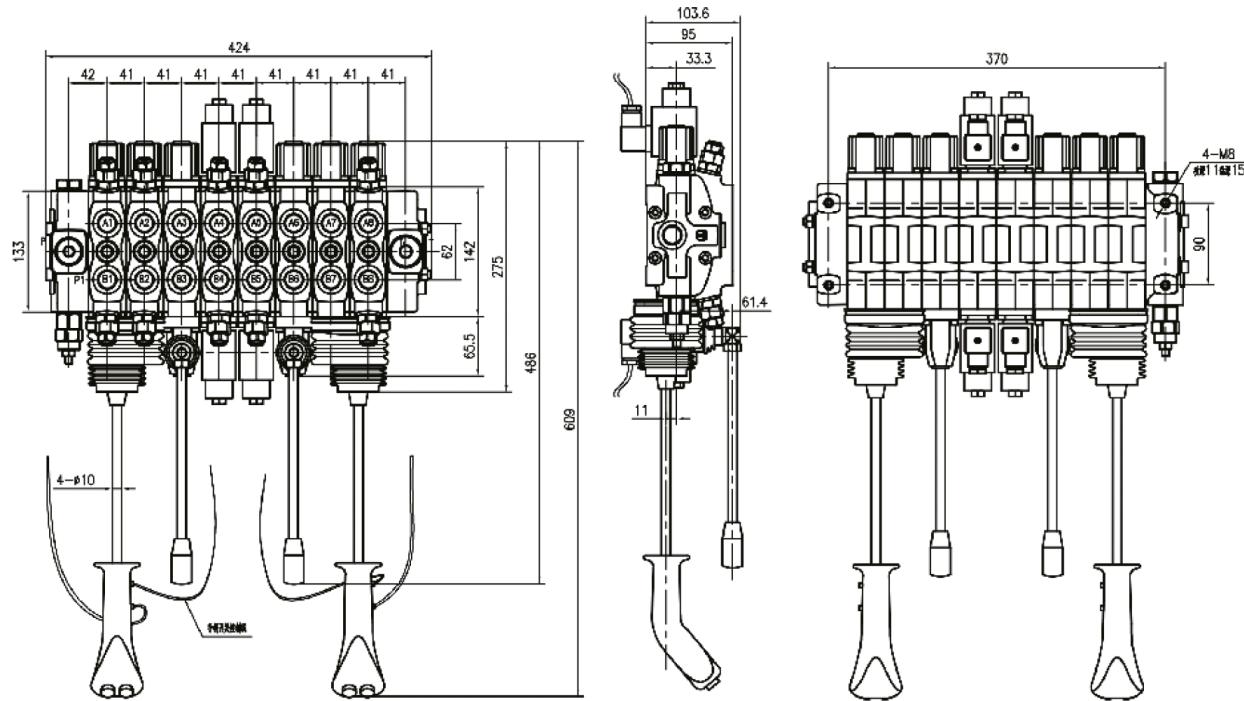
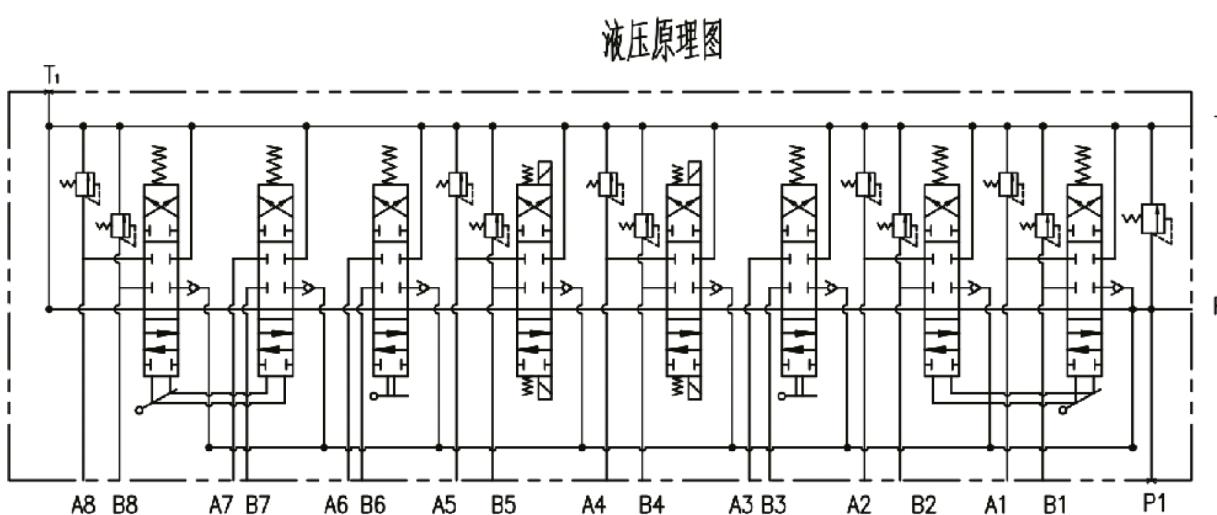
HSSD8

HSSD8 Wood Grabber Valve



Specifications

Nominal flow rate	80 L/min	21 US GPM
Max pressure	315 bar	4568 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Sectional: 1 ~ 12 sections	

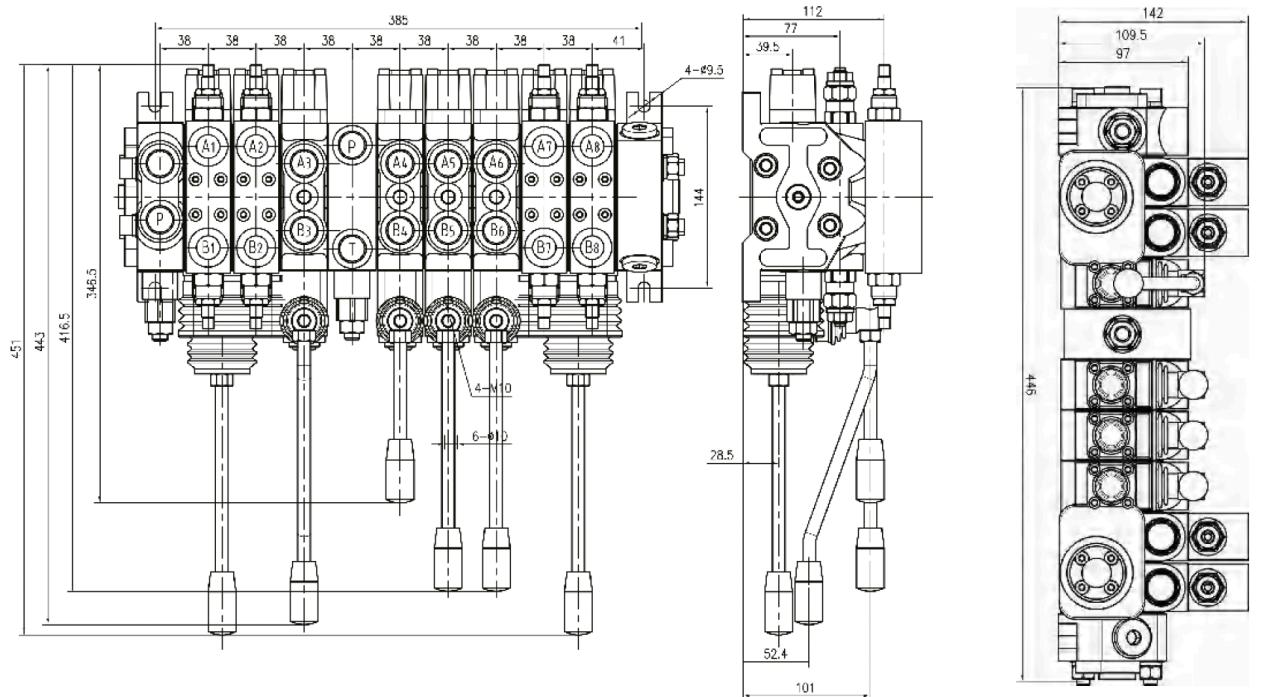
HSSD8**HSSD8 Wood Grabber Valve****◆ Dimension****◆ Hydraulic Schema****DCV60****DCV60 Wood Grabber Valvet****Specifications**

Nominal flow rate	60 L/min	15.8 US GPM
Max pressure	350 bar	5076 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity min	12 mm ² /s	12 cst
Viscosity max	400 mm ² /s	400 cst
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Sectional: 1 ~ 12 sections	

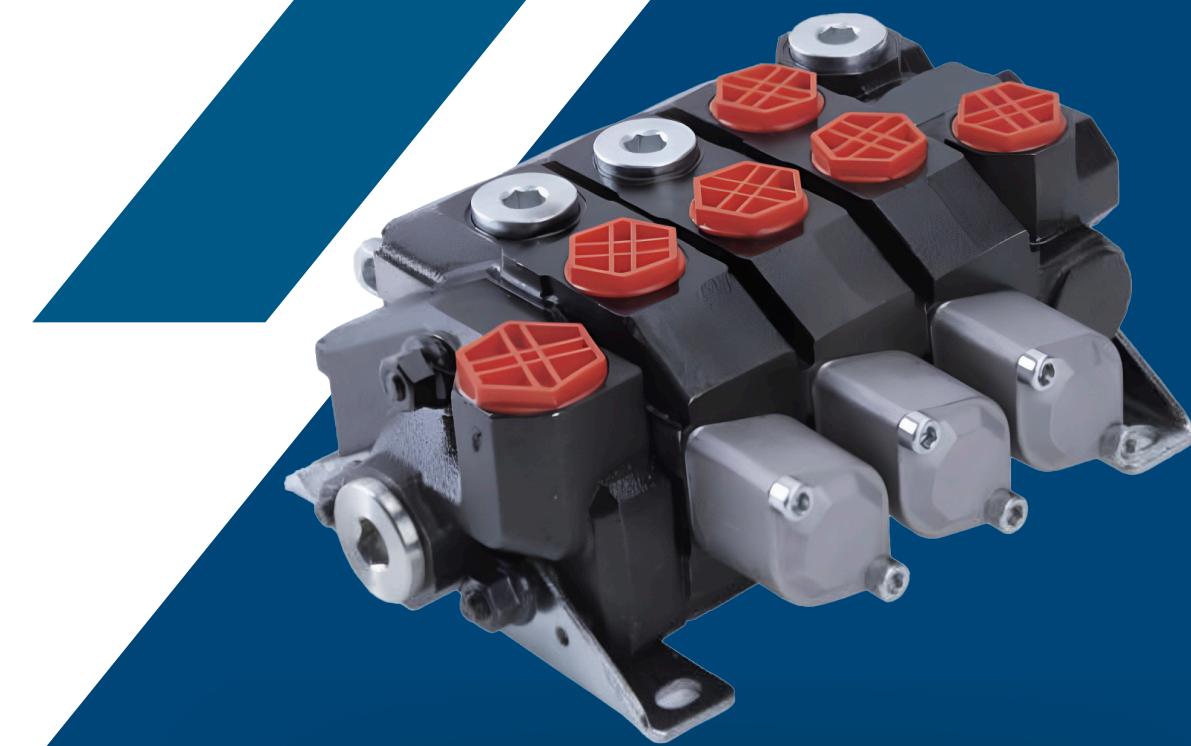
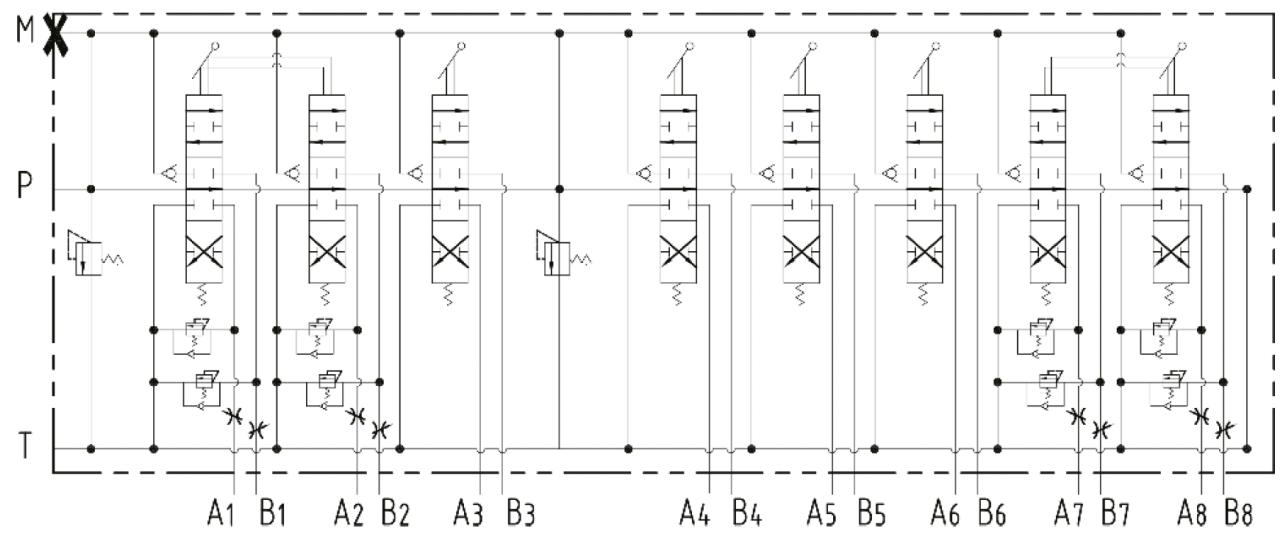
DCV60

DCV60 Wood Grabber Valvet

◆ Dimension



◆ Hydraulic Schema



HSDS15 Directional Control Valve

HSDS15 series are economical sectional directional control valves with various applications and features of compact structure, stable performance, low price and high universality.

- ◆ Control type: manual, cable, solenoid, pneumatic, electro-hydraulic, etc.
- ◆ Circuit type: parallel.
- ◆ Structure: sectional, 1-12 sections



◆ Ordering code

HSDS15 X - X - X - XXX - XXX ... - X - X

- ① Number of sections: 1-12
- ② Relief valve set pressure: 100-250 bar
- ③ Inlet port size: see table (1)
- ④ Control type: see table (2)
- ⑤ Spool type: see table (3)
- ⑥ Spool returning type; see table (4)
- ⑦ Work port size: see table (1)
- ⑧ Outlet port size: see table (1)

◆ Table (1)

BSP thread		Metric thread		US standard UNF-thread		US standard NPT thread	
Code	Thread size	Code	Thread size	Code	Thread size	Code	Thread size
G04	G1/4	M16	M16X1.5	U1	5/8-12UNF	N06	NPT3/8
G06	G3/8	M18	M18X1.5	U12	3/4-16UNF	N08	NPT1/2
G08	G1/2	M20	M20X1.5	U14	7/8-14UNF	N12	NPT3/4
G12	G3/4	M22	M22X1.5	U16	1-12UNF		
G16	G1	M27	M27X2	U22	11/8-12UNF	N16	NPT 1

◆ Table (2)

Code	Type	Description	Code	Type	Description
C1		Standard handle	C6		Joystick with cable (standard length 1.5m, customizable)
C2		Handle at 180°	C7		Pneumatic control
C3		Handle at 180°	C8		Electro-hydraulic control
C4		Joystick	C9		Solenoid control
C5		Flexible cable (standard length 1.5m, customizable)	C10		Dual control

◆ Table (3)

Code	Spool Type	Description	Code	Spool Type	Description
ST1		3 positions, double acting	ST4		3 positions, double acting A blocked, B open
ST2		3 positions, double acting A & B open	ST5		3 positions, single acting in A. A open
ST3		3 positions, double acting A open, B blocked	ST6		4 positions, double acting with 4th floating position

◆ Table (4)

Code	Type	Description	Code	Type	Description
D1		3 positions, spring return	D6		4 positions, detent in all 4 positions
D2		3 positions, spring return, detent in a and b	D7		3 positions, detent in 0, a & b
D3		3 positions, spring return, detent in a	D8		2 positions (0, b), spring return
D4		3 positions, spring return, detent in b	D9		2 positions (0, a), spring return
D5		4 positions, spring return, detent in 4th position			

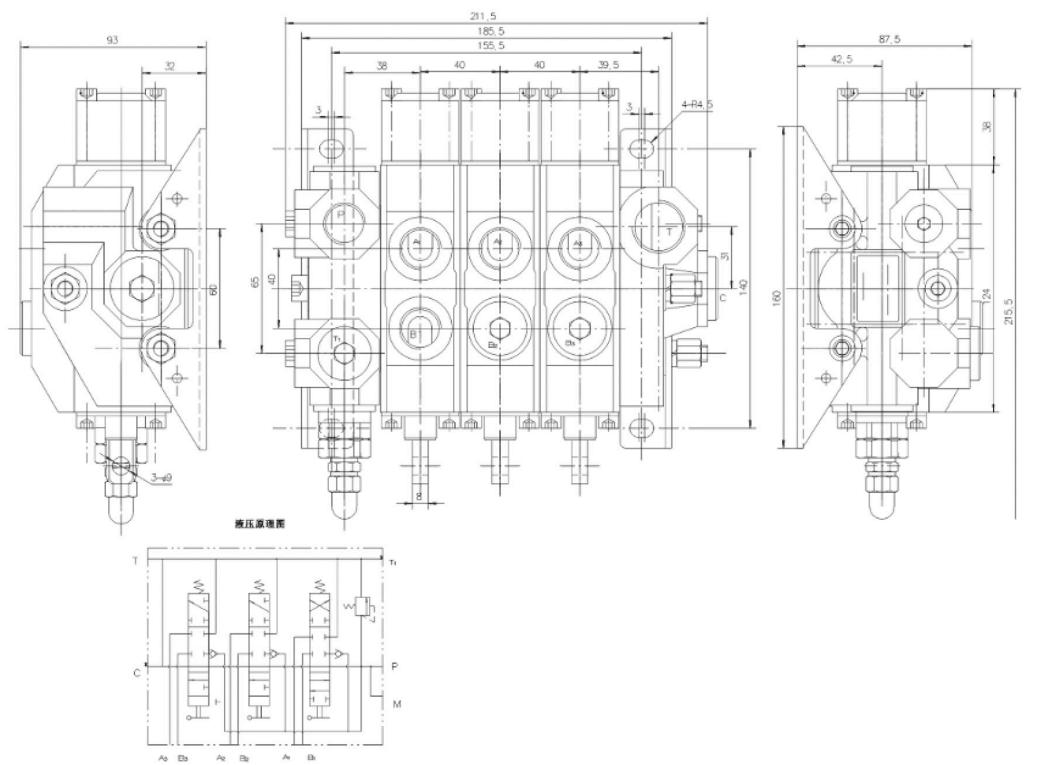
HSSD15

HSSD15 Monoblock Directional Control Valve

Specifications

Nominal flow rate	60 L/min	15.8 US GPM
Operating pressure (max)	315 bar	4568 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Sectional: 1 ~ 12 sections	

◆ Dimension



RD Directional Control Valve

RD

RD Directional Control Valve



RD series is a Middle - highpressuremonoblock valve, it can be divided in to RD5100,RD5200,RD5300 three models, using foreign advanced technology.

1. It can be set on the valve body overflow valve, one-way valve. The one-way valve effectively prevents the backflow of oil, and the relief valve can adjust the pressure.
2. It can be arbitrarily customized according to the requirements of customers ,to realize operate in different directions by choosing the installation modes.
3. Oil lines can be parallel or series.
4. Tight sealing and stable performance.
5. Available manual,pneumatic control,electric and pneumatic control,hydraulic and electric control and etc.
6. This product is widely used in small loaders, forklifts, sanitation vehicles and other construction machinery hydraulic system.

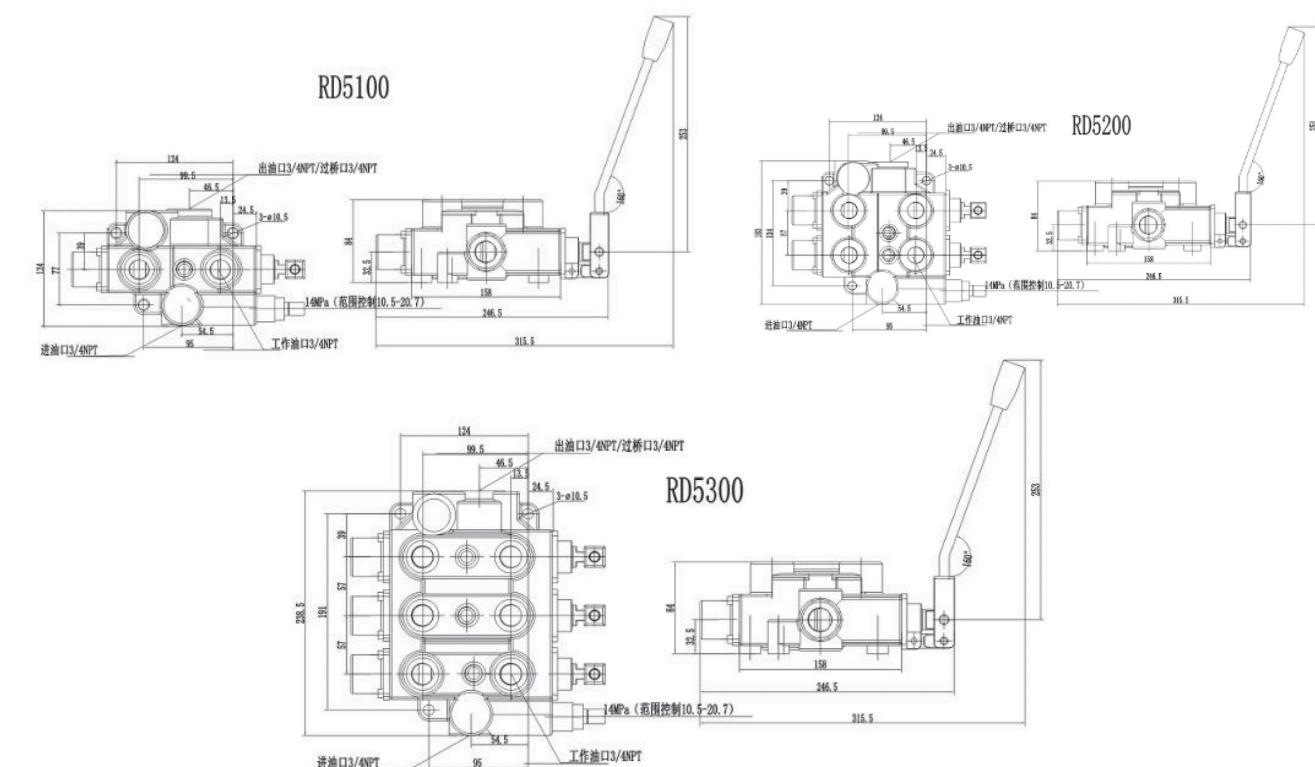
RD

RD Directional Control Valve

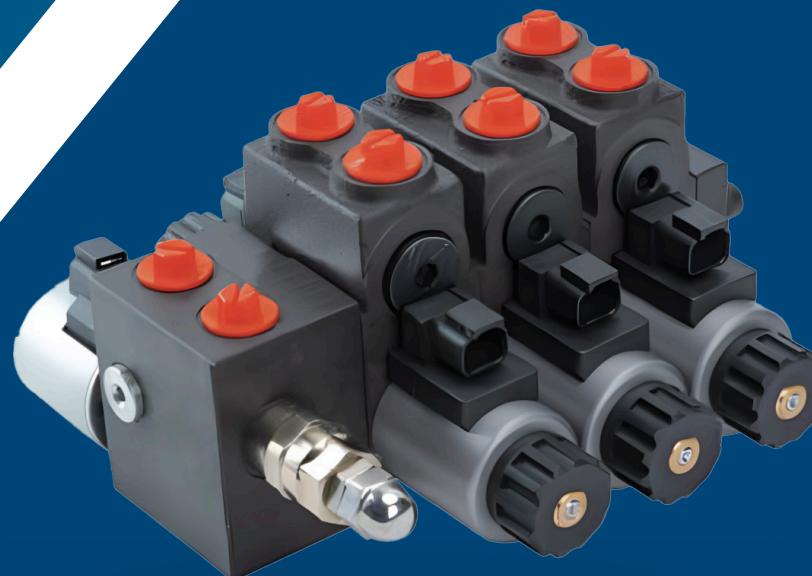
Specifications

Nominal flow rate	100 L/min	26.5 US GPM
Max pressure	315 bar	4568 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Kick out set pressure	70 - 140 bar	1015 - 2030 psi

◆ Dimension



H DCF Series Directional Control Valve



KLÜG
HYDRAULICS

HDCF50

HDCF50 series valve is developed independently by BXHS, it can be used in agricultural, sanitation, and construction machines, with a built-in single direction lock and anti-pollution direct-action relief valve.



Specifications

Model	HDCF50
Nom. Dia.	6mm
Rated flow	50L/min
Working pressure	20Mpa
Allowed back pressure	3Mpa
Oil Temp.	-20 ~ 80 °C

◆ Ordering code

HDCF XX - X - XX - XX - XX ... - XXX
① ② ③④ ⑤⑥ ⑤⑥ ⑦⑧⑨

- ① Rated flow: (50:50L/min)
- ② Number of spools: 1 - 12
- ③ Inlet port size: see table (1)
- ④ Relief valve set pressure: 150-250 bar
- ⑤ Spools type: see table (2)
- ⑥ Work port size: see table (1)
- ⑦ Solenoid type: see table (3)
- ⑧ Voltage: 12V, 24V
- ⑨ Outlet port size: see table (1)

◆ Table (1)

BSP thread		Metric thread		US standard UNF-thread		US standard NPT thread	
Code	Thread size	Code	Thread size	Code	Thread size	Code	Thread size
G06	G3/8	M18	M18X1.5	U10	5/8-18UNF	N06	NPT3/8
G08	G1/2					N08	NPT1/2

◆ Table (2)

Code	Description	Code	Description	Code	Description
O		Y		YSA	
YSB		YS2			

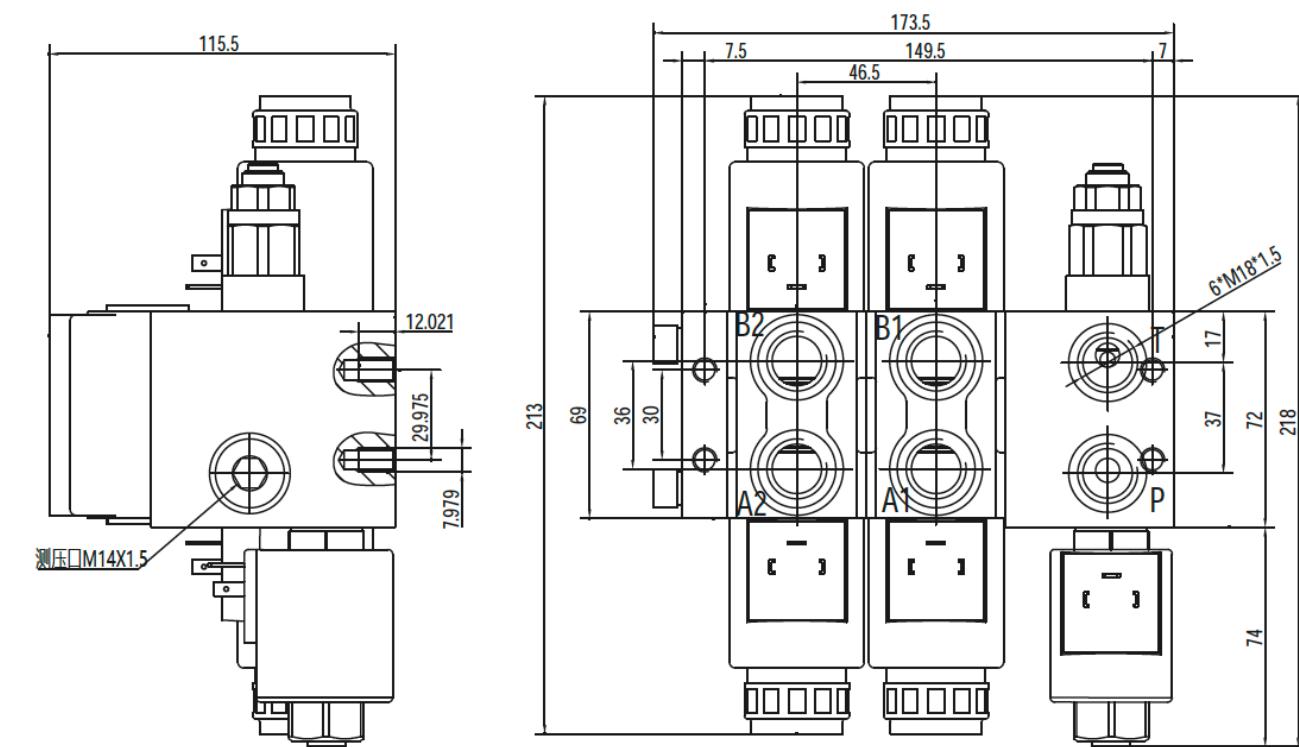
◆ Table (3)

Code	Solenoid Type	Description
S1		2 pin water-proof
S2		3 pin

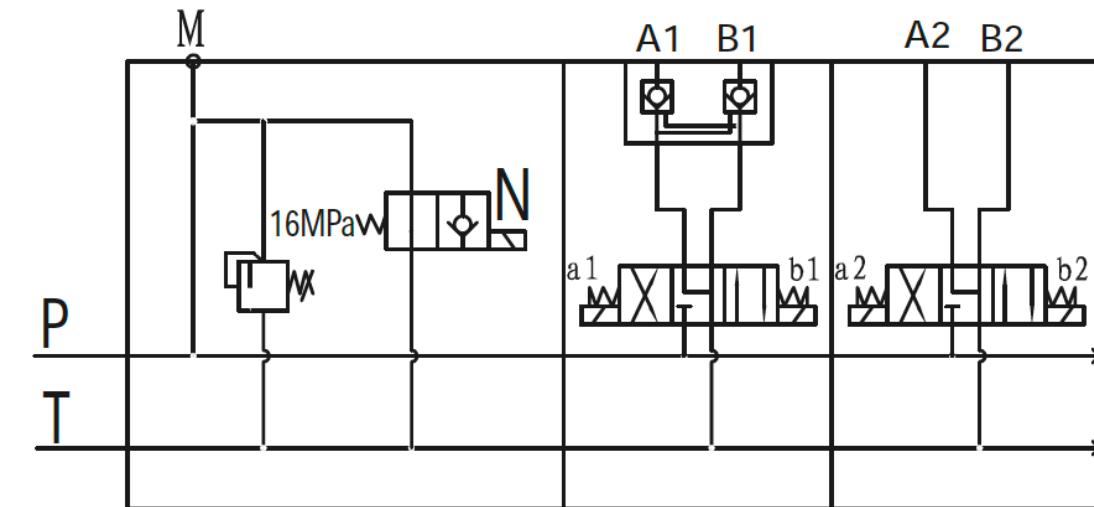
HDCF50

HDCF50 solenoid directional valve

◆ Dimension



◆ Hydraulic Schema



HDCF10 series valve is developed independently by BXHS, it can be used in agricultural, sanitation, and construction machines, with a built-in single direction lock and anti-pollution direct-action relief valve.



Specifications

Model	HDCF10
Nom. Dia.	10mm
Rated flow	100L/min
Working pressure	20Mpa
Allowed back pressure	3Mpa
Oil Temp.	-20 ~ 80 °C

◆ Ordering code

HDCF XX - X - XX - XX - XX ... - XXX
① ② ③④ ⑤⑥ ⑤⑥ ⑦⑧⑨

- ① Rated flow: (10 100L/min)
- ② Number of spools: 1 - 12
- ③ Inlet port size: see table (1)
- ④ Relief valve set pressure: 150-250 bar
- ⑤ Spools type: see table (2)
- ⑥ Work port size: see table (1)
- ⑦ Solenoid type: see table (3)
- ⑧ Voltage: 12V, 24V
- ⑨ Outlet port size: see table (1)

◆ Table (1)

BSP thread		Metric thread		US standard UNF-thread		US standard NPT thread	
Code	Thread size	Code	Thread size	Code	Thread size	Code	Thread size
G06	G3/8	M18	M18X1.5	U10	5/8-18UNF	N06	NPT3/8
G08	G1/2					N08	NPT1/2

◆ Table (2)

Code	Description	Code	Description	Code	Description
O		Y		YSA	
YSB		YS2			

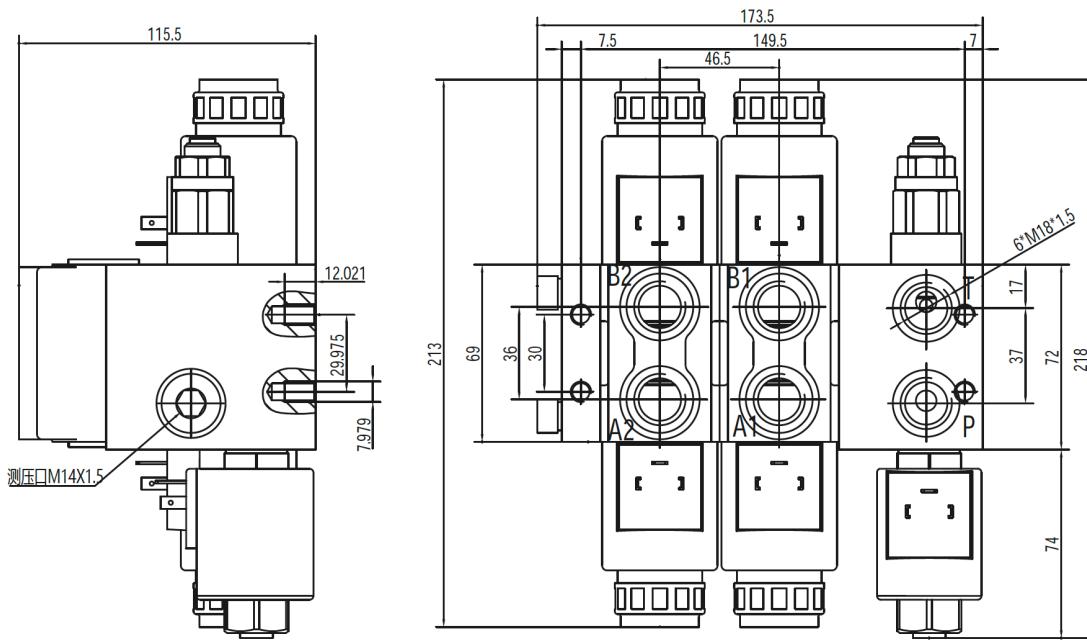
◆ Table (3)

Code	Solenoid Type	Description
S1		2 pin water-proof
S2		3 pin

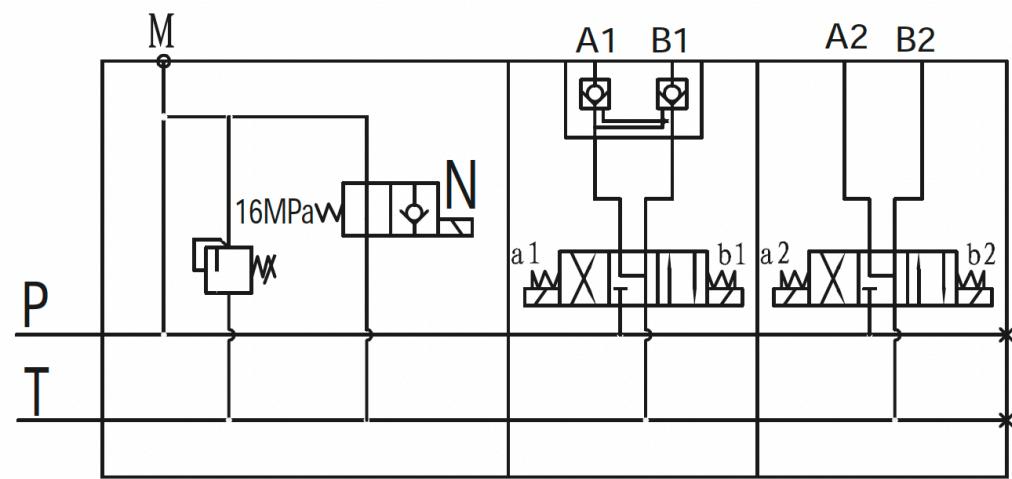
HDCF10

HDCF10 solenoid directional valve

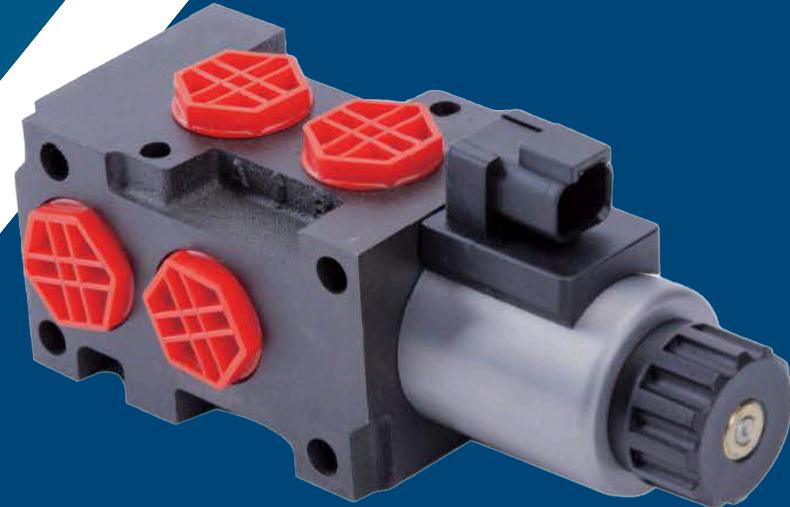
◆ Dimension



◆ Hydraulic Schema



HSV Series Directional Control Valve



HSV series selector valve is capable of switching from one circuit to another at a variety of flows and pressures. It can be connected to the service ports of a directional control valve and used to direct service line flow to and from either of two separate devices. It can also be connected to a pump and direct the flow to either one of two different circuits.

◆ Stack up to sections (A, B type)



◆ 12V/24V DC optional

◆ 3-pin or 2-pin water-proof plug optional

Specifications	HSV6	HSV9
Max flow	50L/min	90L/min
Rated pressure	25Mpa	25Mpa
Oil temp range	-20~80°C	-20~80°C

◆ Ordering code

HSVX - ① - ② - ③ - ④ - ⑤

① Series code: 6,9

② A, B, C Model Type

③ Number of sections: 1 - 3 (Model A, B available for stack)

④ Oil port size: see table (1)

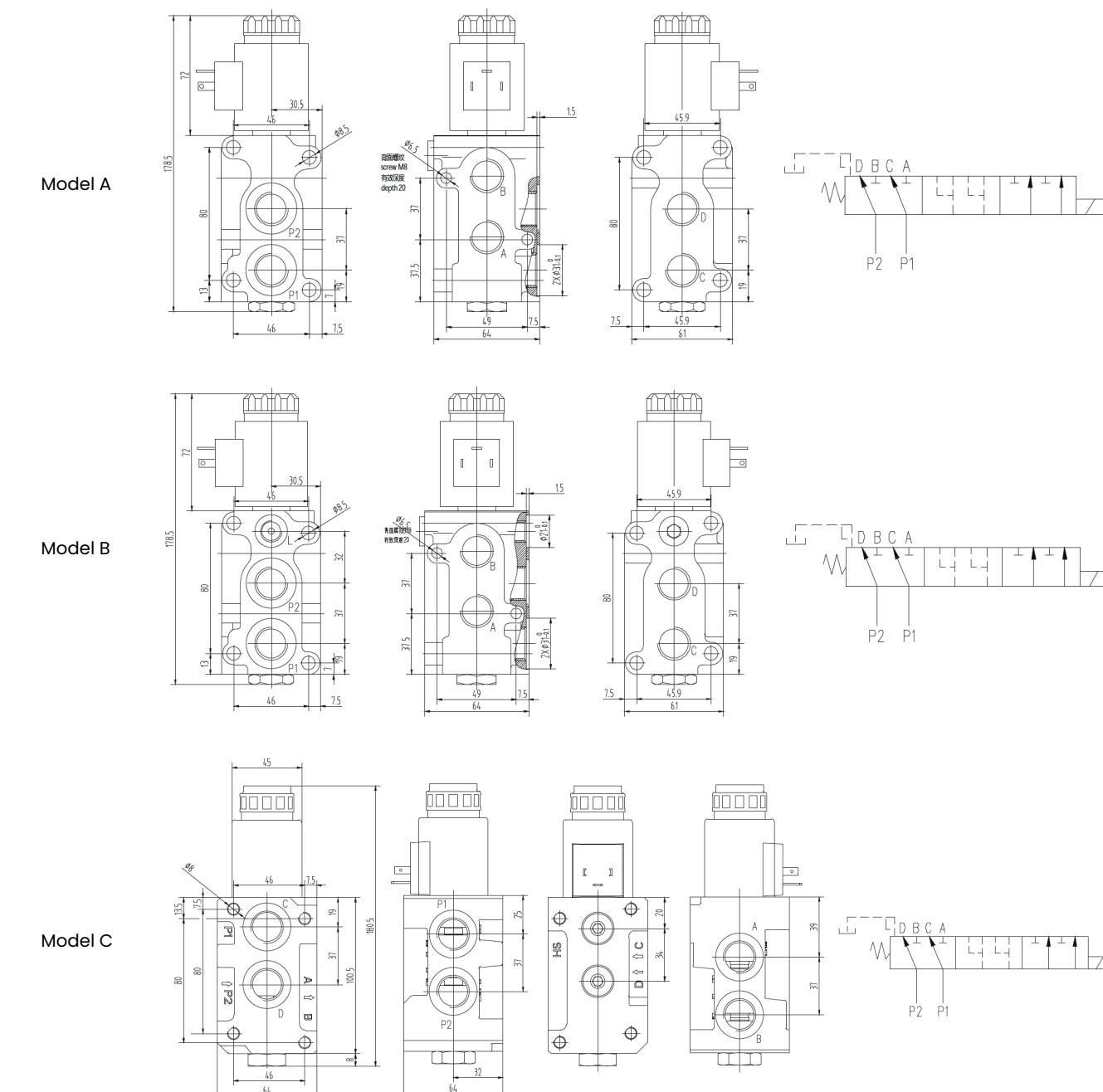
⑤ Solenoid type: see table (2)

◆ Table (1)

Code	Port thread size
P1	G1/2
P2	G3/8
P3	7/8-14UNF
P4	9/16-18UNF
P5	G3/4
P6	3/4-16UNF

◆ Table (1)

Code	Voltage	Solenoid type	Description
S1	12V DC		3 pin
S2	24V DC		
S3	12V DC		2 pin water-proof
S4	24V DC		



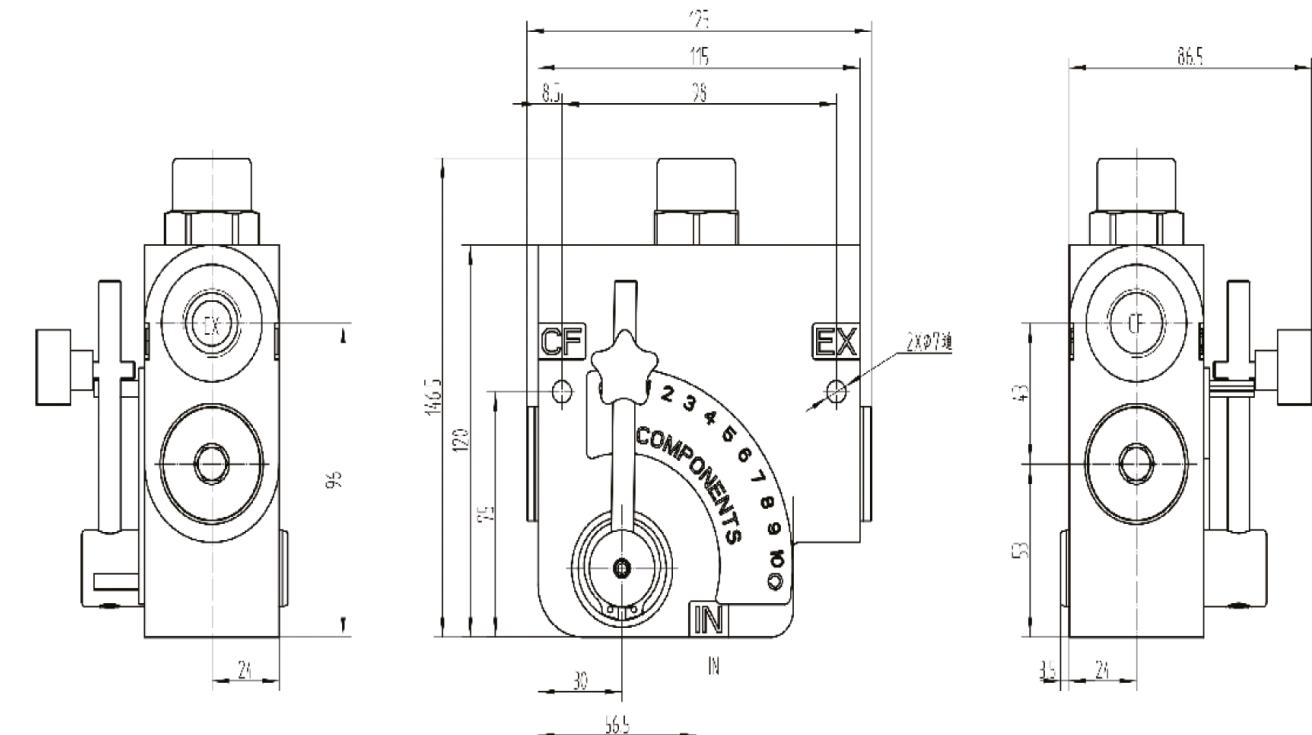
LKF series pressure compensated flow control valves



LKF

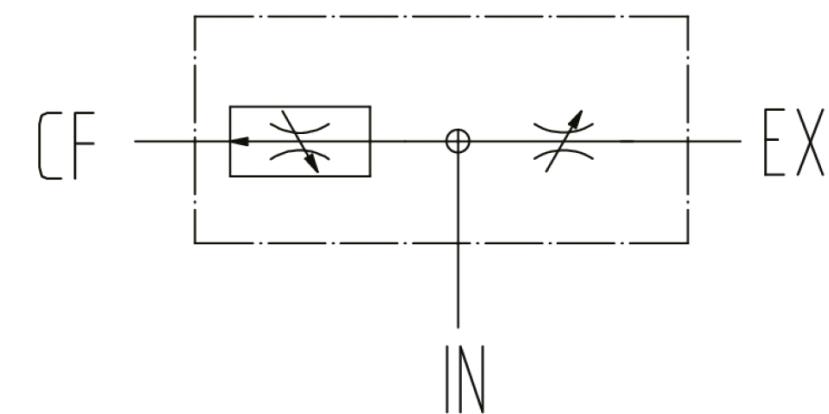
LKF series pressure compensated flow control valves

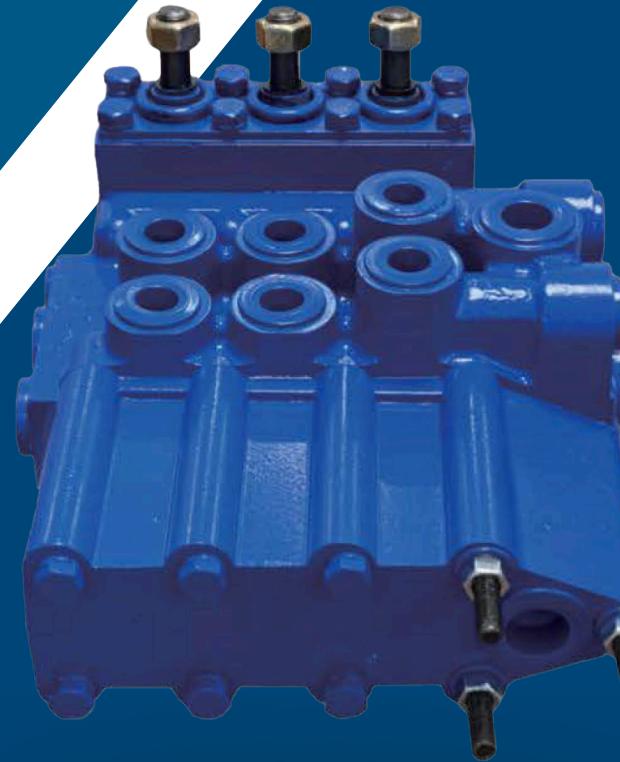
◆ Dimension



◆ Hydraulic Schema

Hydraulic schematic diagram

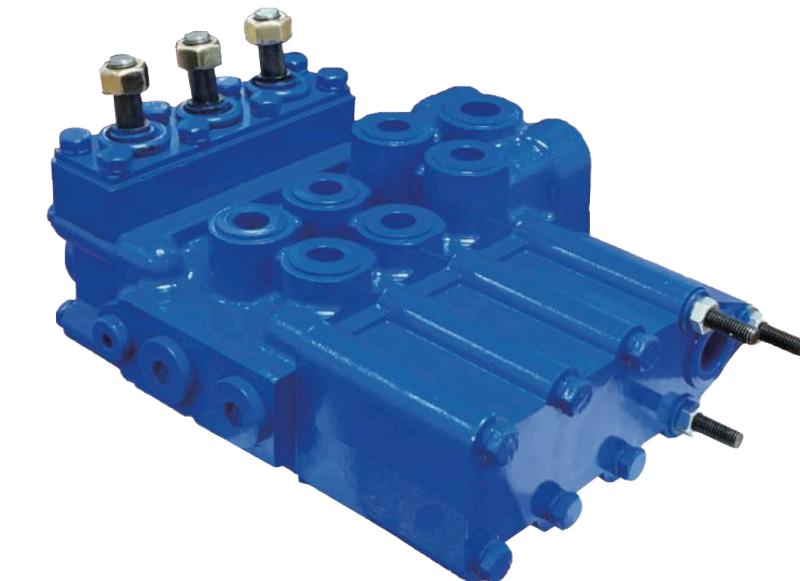




MP80/MPC70Directional Control Valve

MP80

MP80 monoblock directional control valve

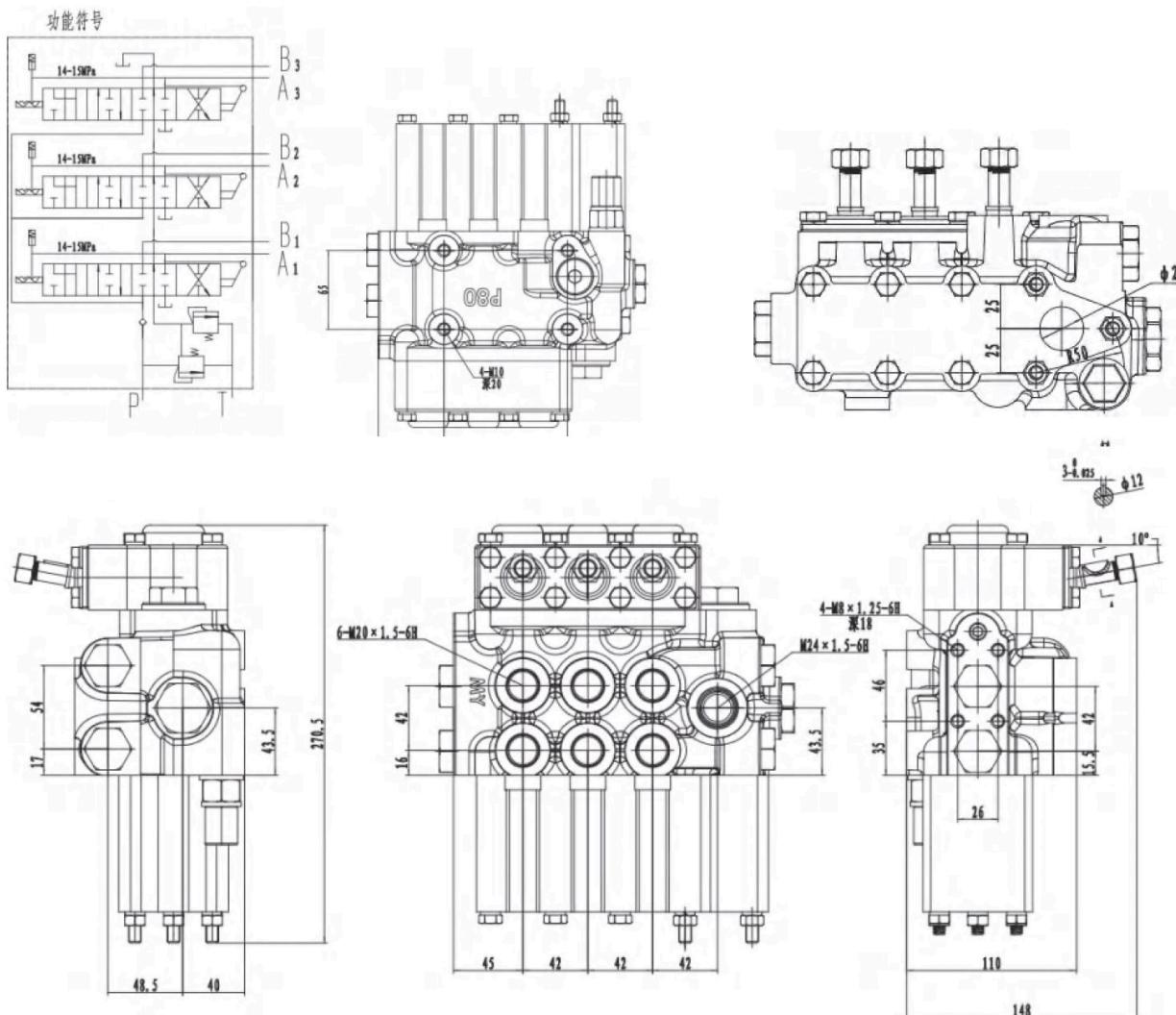
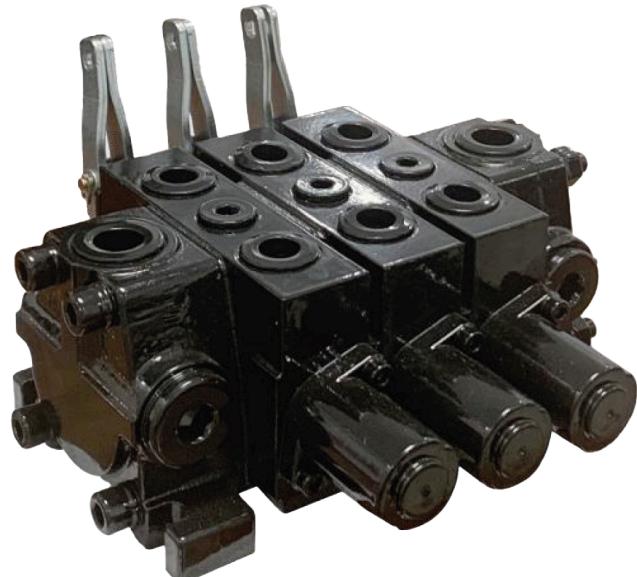


Specifications

Nominal flow rate	80 L/min	21 US GPM
Operating pressure (max)	250 bar	3600 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity min	12 mm ² /s	12 cst
Viscosity max	400 mm ² /s	400 cst
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Sectional: 1 ~ 7 sections	

MP80**MP80 monoblock directional control valve**

Port	BSP		UNF		Metric	
	Port size	Code	Port size	Code	Port size	Code
P	G1/2, G3/4	G1, G2	7/8-14UNF, 11/16-12UNF	U1, U2	M20x1.5, M27x1.5	M1, M2
T	G3/4, G1	G2, G3	11/16-12UNF, 15/16-12UNF	U2, U3	M27x1.5, M30x1.5	M2, M3
A/B	G1/2, G3/4	G1, G2	7/8-14UNF, 11/16-12UNF	U1, U2	M20x1.5, M27x1.5	M1, M2

◆ Dimension**MPC70****MPC70 monoblock directional control valve****Specifications**

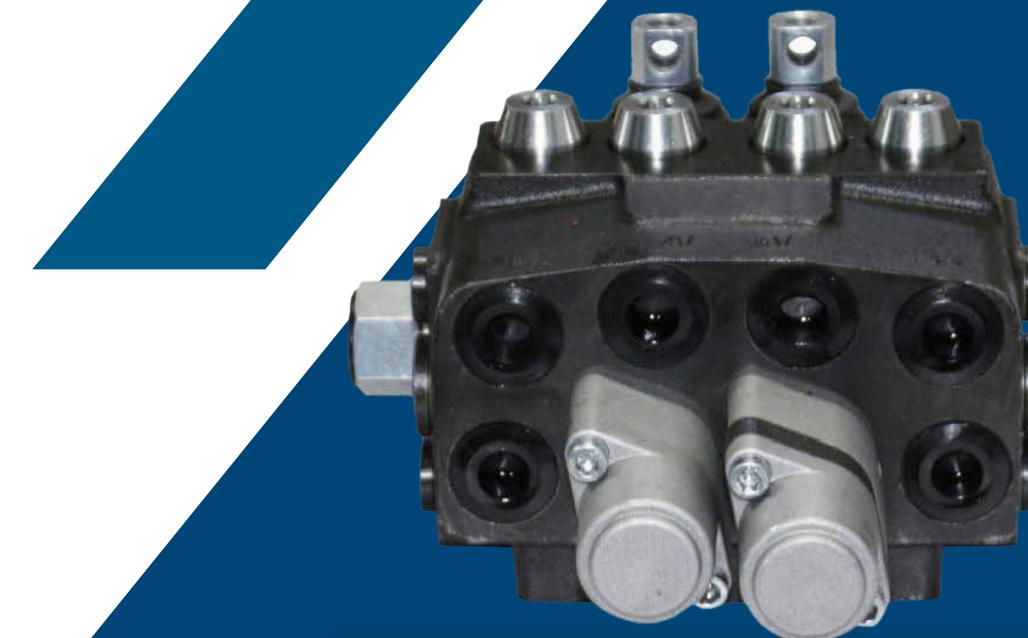
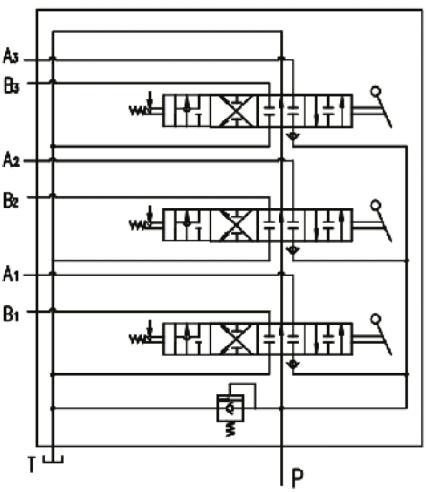
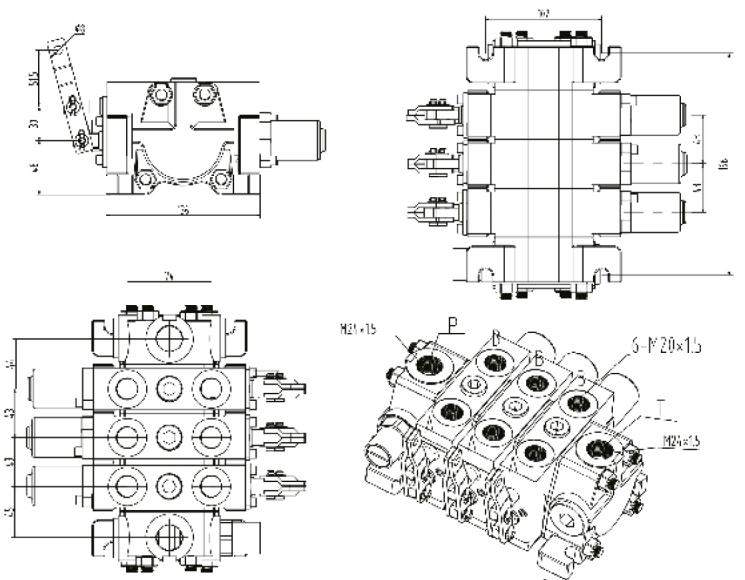
Nominal flow rate	70 L/min	12 US GPM
Operating pressure (max)	250 bar	3600 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Sectional: 1 ~ 7 sections	

MPC70

MPC70 monoblock directional control valve

Port	BSP		UNF		Metric	
	Port size	Code	Port size	Code	Port size	Code
P	G1/2, G3/4	G1, G2	7/8-14UNF, 11/16-12UNF	U1, U2	M20x1.5, M27x1.5	M1, M2
T	G3/4, G1	G2, G3	11/16-12UNF, 15/16-12UNF	U2, U3	M27x1.5, M30x1.5	M2, M3
A/B	G1/2, G3/4	G1, G2	7/8-14UNF, 11/16-12UNF	U1, U2	M20x1.5, M27x1.5	M1, M2

◆ Dimension



HMDM45 Directional Control Valve

HMDM45

HMDM45 Monoblock Directional Control Valve



Specifications

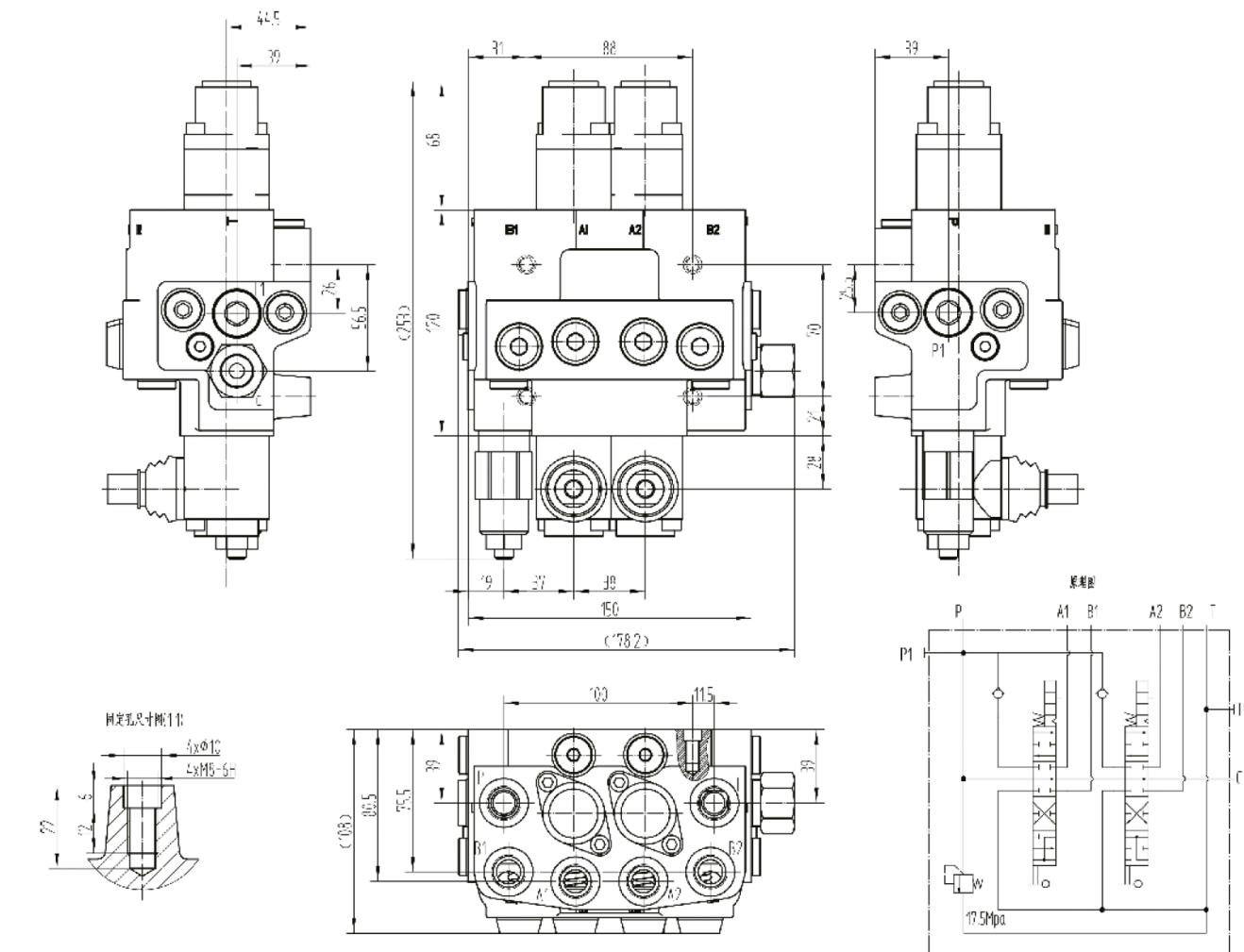
Nominal flow rate	45 L/min	11.8 US GPM
Operating pressure (max)	250 bar	3600 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	12 cst
	max	400 mm ² /s
	Ambient temperature range	400 cst
Structure	sectional: 1 ~ 7 sections	

HMDM45

HMDM45 Monoblock Directional Control Valve

Port	BSP		UNF		Metric	
	Port size	Code	Port size	Code	Port size	Code
P	G1/2, G3/8	G1, G2	7/8-14UNF, 3/4-16UNF	U1, U2	M20x1.5, M27x1.5	M1, M2
T	G1/2, G3/4	G2, G3	11/16-12UNF, 11/16-12UNF	U2, U3	M27x1.5, M30x1.5	M2, M3
A/B	G1/2, G3/8	G1, G2	7/8-14UNF, 3/4-16UNF	U1, U2	M20x1.5, M27x1.5	M1, M2

◆ Dimension





HSDV10 Rotary diverter valve

HSDV10

HSDV10 Rotary diverter valve

The HSDV10 rotary diverter valve is a two-position three-way valve. When the rotor is placed in selected positions inlet and outlet ports are connected in various combinations permitting the start stop or directional change of fluid under pressure. The functions specific to a valve depends primarily on rotor type selected.

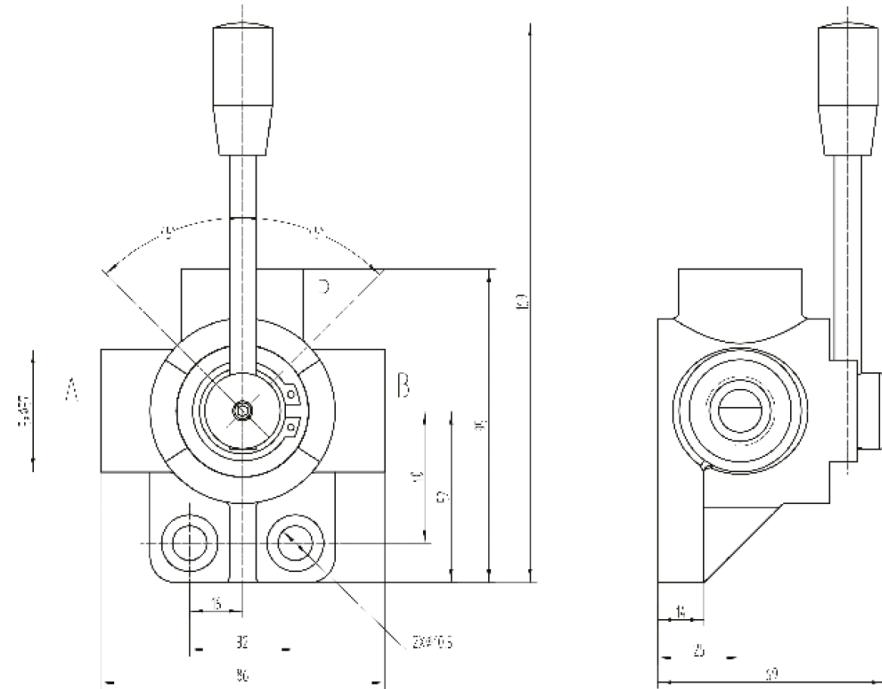


Specifications

Model	Oil port size	Rated flow	Working pressure
HSDV10-A	G1/2	90L/min	31.5 Mpa
HSDV10-B	G1/2	90L/min	31.5 Mpa

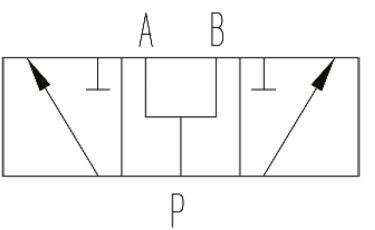
HSDV10**HSDV10 Rotary diverter valve**

◆ Dimension

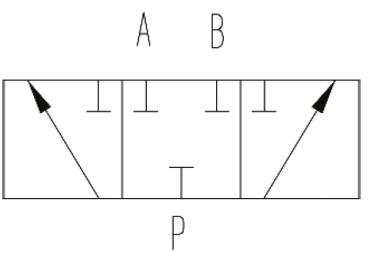


◆ Hydraulic Schema

Type A is normal



Type B is normally closed

**TRSS monoblock directional control valve**

TR55

TR55 monoblock directional control valvt

TR55 monoblock valve has a wide range of applications, allowing flexibility to achieve a variety of machinery specific functional requirements, such as: Compact Wheel Loaders, Agricultural Machines, Compact Backhoe Loaders, Backhoes, etc. You can choose the left and right positions of the oil inlet, whether there is a carry over port, and a variety of auxiliary valves.



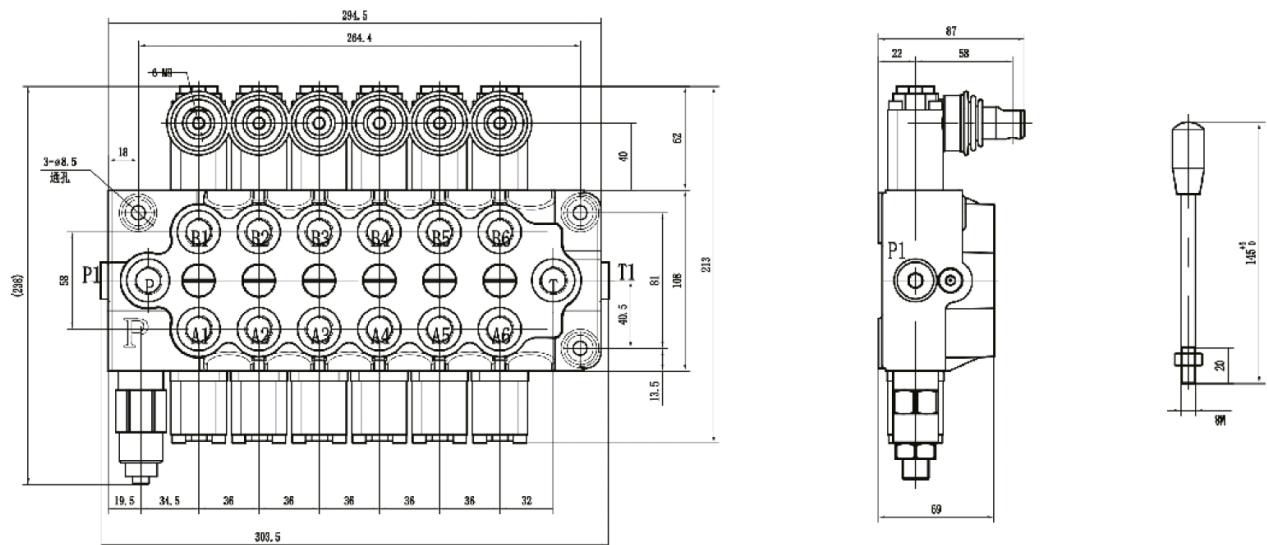
Specifications

Nominal flow rate	50 L/min	13US GPM
Operating pressure (max)	350 bar	5100 psi
Viscosity	min	15 mm ² /s
	max	300 mm ² /s
Ambient temperature range	-40 ~ 60 °C	-40 ~ 140 °F
Structure	Monoblock: 1 ~ 7 sections	

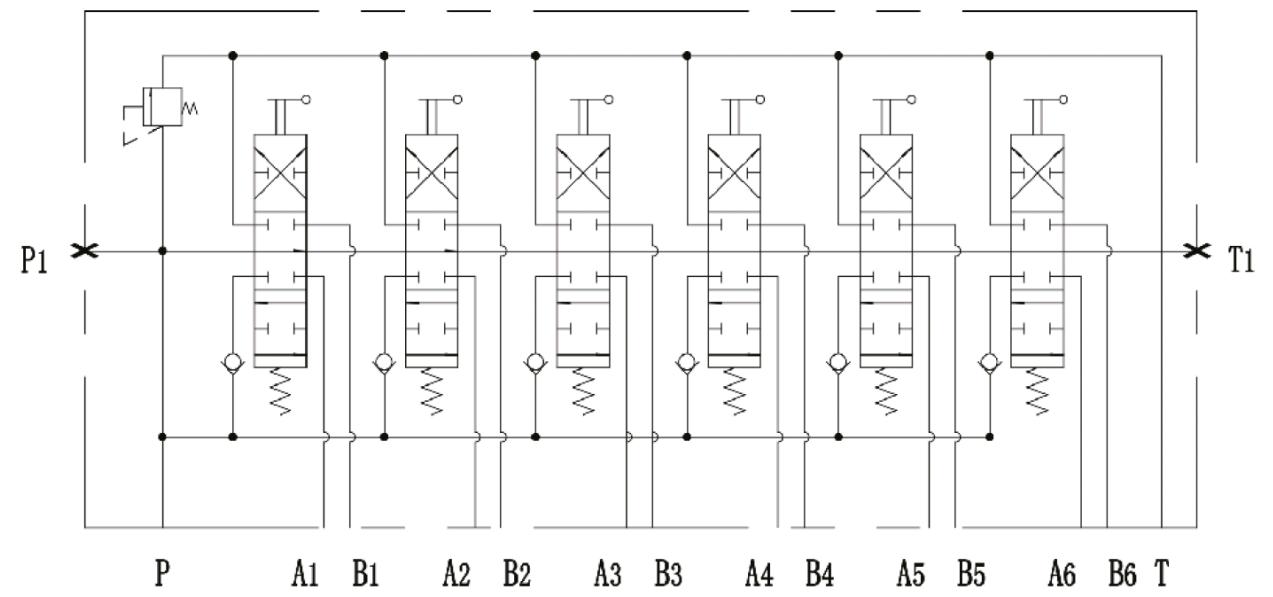
TR55

TR55 monoblock directional control valvt

◆ Dimension



◆ Hydraulic Schema





ZT Series Directional Control Valve

Z series is an economical monoblock valve with wide application and middle range working pressure.

- ◆ Built-in check valve: to prevent oil from backflow
- ◆ Control type manual, joystick, cable, etc.
- ◆ Monoblock structure, 1-7 sections



Specifications

Model	ZT12	ZT20
Rated flow	40L/min	100L/min
Working pressure	20Mpa	20Mpa
Nom. Dia.	12mm	12mm

◆ Ordering code

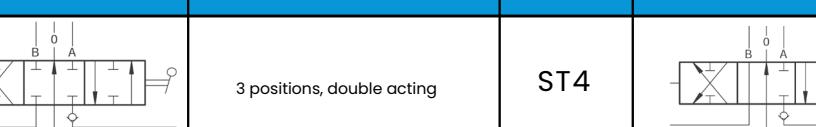
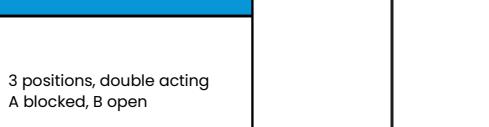
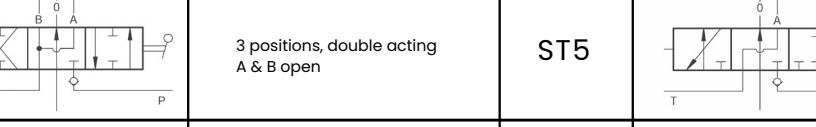
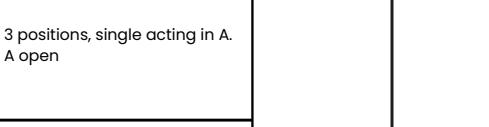
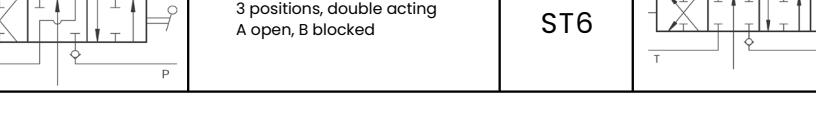
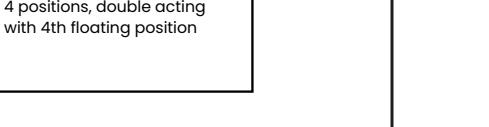
ZTXX - X - X - X - XXX - XXX ... - X - X

- ① Nom. diameter: 12, 20
- ② Number of sections: 1 - 7
- ③ Oil port size: see table (1)
- ④ Control type: S (manual) J (joystick, C (cable)
- ⑤ Spool type: see table (2)
- ⑥ Spool return type: see table (3)
- ⑦ Work port size: see table(1)
- ⑧ Outlet port size: see table(1)

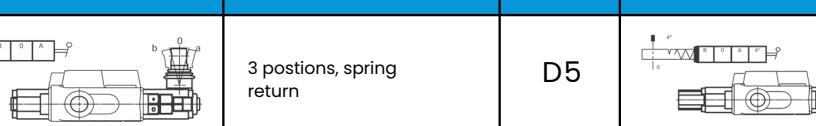
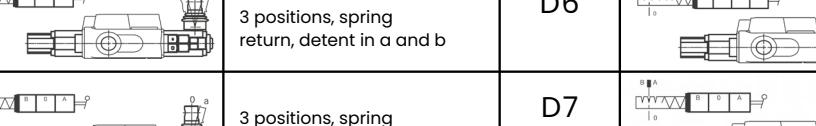
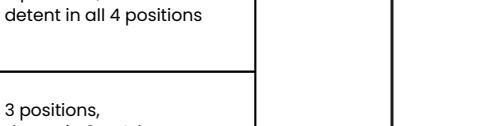
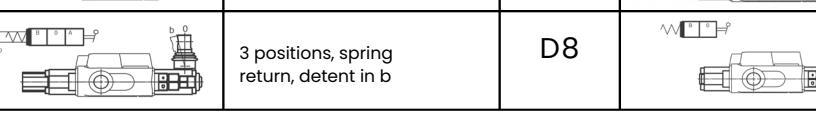
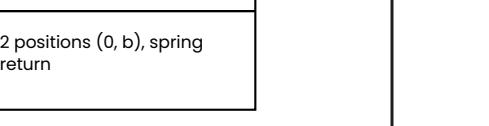
◆ Table (1)

BSP thread		Metric thread		US standard UNF-thread		US standard NPT thread	
Code	Thread size	Code	Thread size	Code	Thread size	Code	Thread size
G06	G3/8	M16	M16X1.5	U10	5/8-18UNF	N06	NPT3/8
G08	G1/2	M18	M18X1.5	U12	3/4-16UNF	N08	NPT1/2
		M20	M20X1.5	U16	1-12UNF	N12	NPT3/4
		M22	M22X1.5				

◆ Table (2)

Code	Spool Type	Description	Code	Spool Type	Description
ST1		3 positions, double acting	ST4		3 positions, double acting A blocked, B open
ST2		3 positions, double acting A & B open	ST5		3 positions, single acting in A. A open
ST3		3 positions, double acting A open, B blocked	ST6		4 positions, double acting with 4th floating position

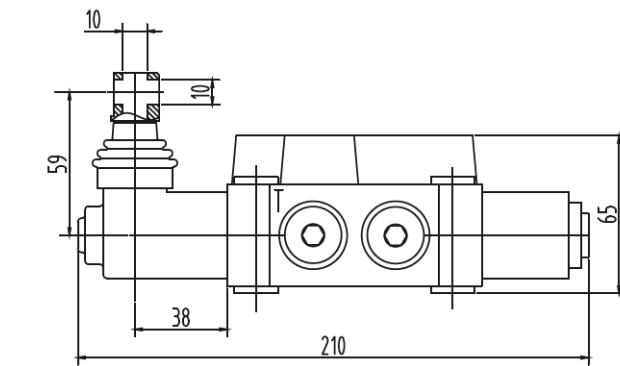
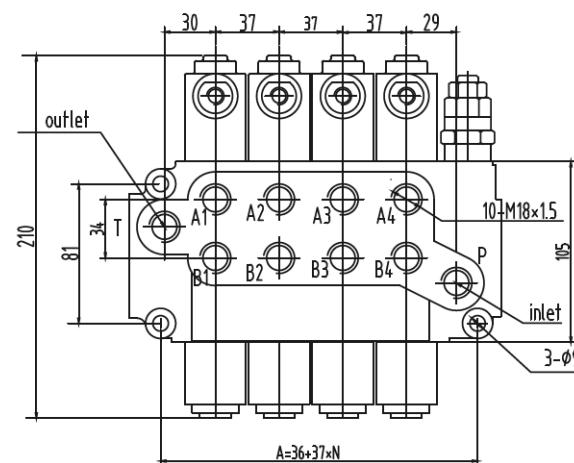
◆ Table (3)

Code	Type	Description	Code	Type	Description
D1		3 positions, spring return	D5		4 positions, spring return,detent in 4 th position
D2		3 positions, spring return, detent in a and b	D6		4 positions, detent in all 4 positions
D3		3 positions, spring return, detent in a	D7		3 positions, detent in 0, a & b
D4		3 positions, spring return, detent in b	D8		2 positions (0, b), spring return

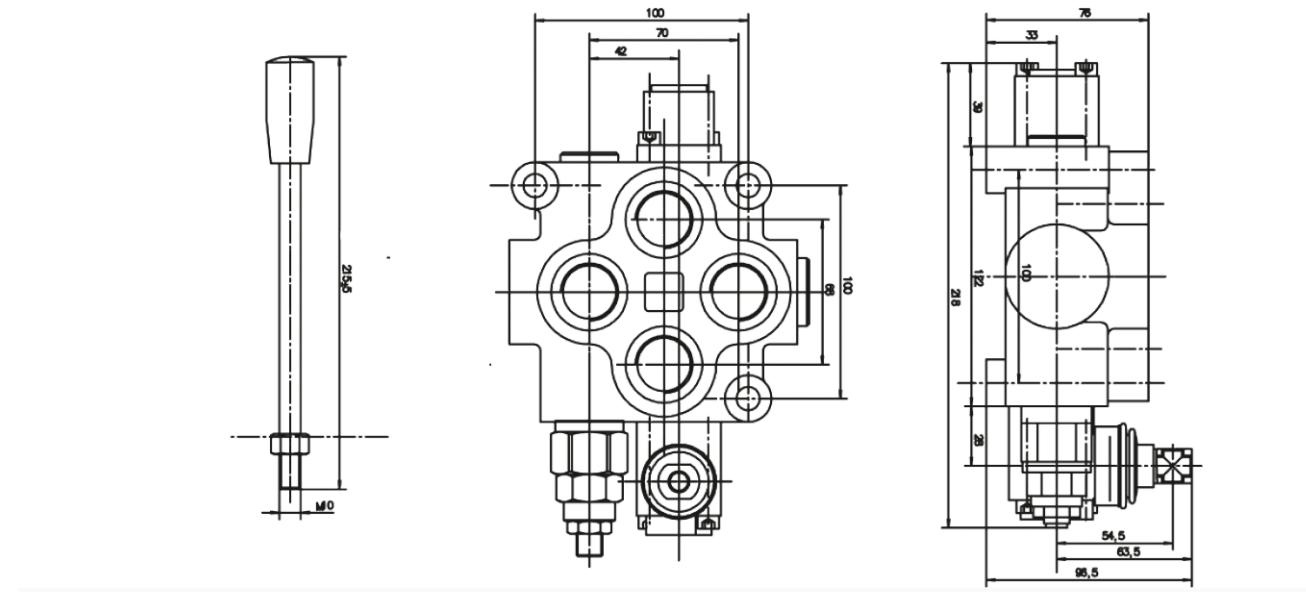
Monoblock Directional Control Valve

◆ Dimension

ZT12



ZT20





Lower vehicle valve

CDB15 series valve has a built-in flow steady valve to supply constant flow for steering function. Designed for small forklift, loader, excavator and sanitation machines.

- ◆ Built-in flow steady valve
- ◆ Check valve in each section to prevent back-flow
- ◆ Spool auto lock to ensure safety after power off
- ◆ Secondary auxiliary valve for work section
- ◆ Structure: sectional 1-10 sections
- ◆ Spool type: A, O, Y, Q, etc.



Specifications

Rated flow	63L/min
Rated pressure	20Mpa
Nom. Dia.	15mm
Dividing flow	8 ~ 12 L/min
Dividing flow valve pressure	9Mpa

◆ Ordering code

CDB - F 15 - XXXX - XXXX - - X - XX

- ① CDB Series
- ② Pressure grade F:20Mpa
- ③ Nom. Diameter: 15
- ④ Spool type: see table (1)
- ⑤ Auxiliary valve: see table (2)
- ⑥ Auxiliary overload valve pressure: 150-200 bar
- ⑦ Spool return type; see table (3)
- ⑧ Dividing flow: 8-16
- ⑨ Port size: see table (4)
- ⑩ A,B: see table (4)

◆ Table (1)

Spool type	Code	Symbol	Spool type	Code	Symbol
A	A		Y	Y	
O	O		M	M	

◆ Table (2)

Code	Symbol	Auxiliary valve		Code	Symbol	Auxiliary valve	
		A port	B port			A port	B port
N/A		no	no	5		Overload valve	anti-cavitation valve
1		no	Overload valve	6		anti-cavitation valve	no
2		no	anti-cavitation valve	7		anti-cavitation valve	Overload valve
3		Overload valve	no	8		anti-cavitation valve	anti-cavitation valve
4		Overload valve	Overload valve				

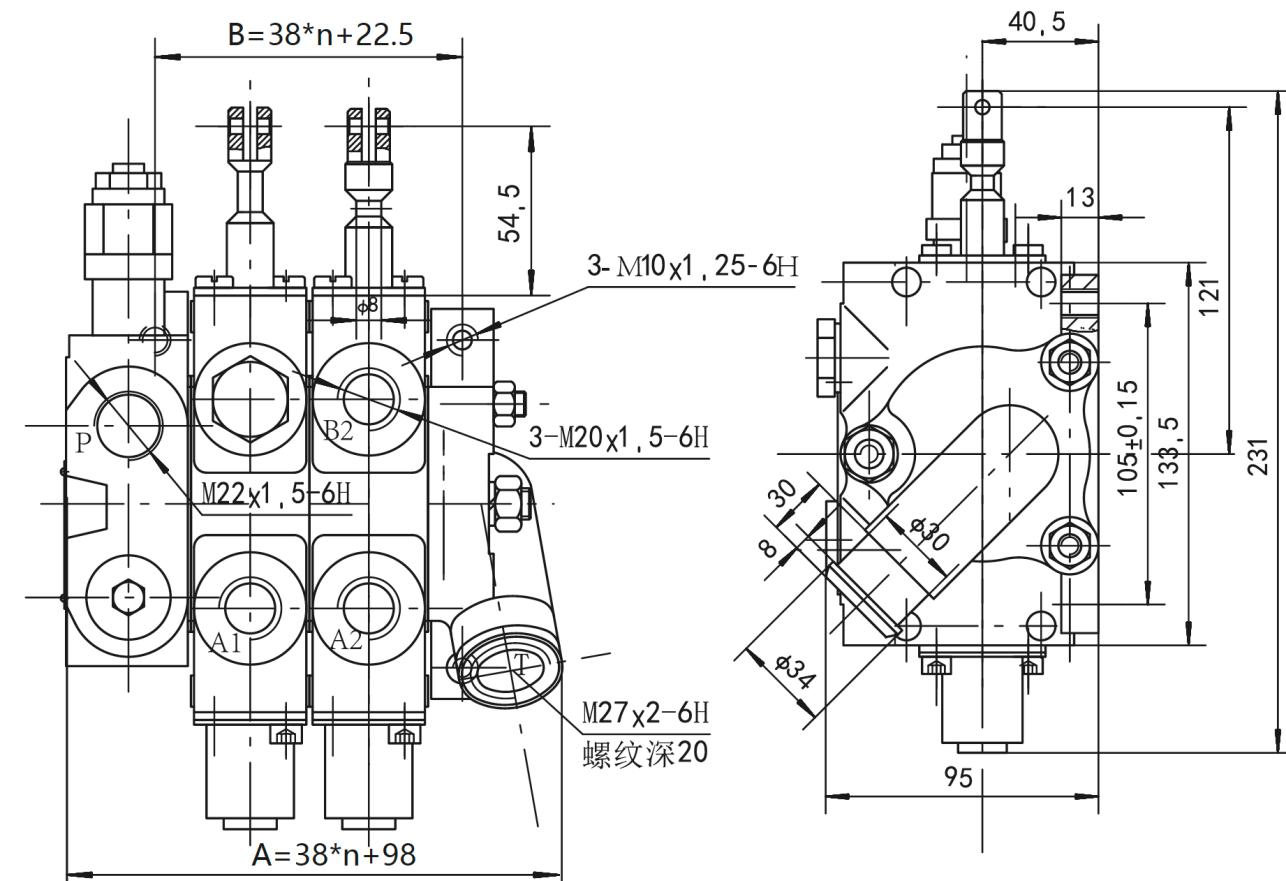
◆ Table (3)

Code	Auxiliary valve	Symbol	Code	Spool return type	Symbol
T1	3 positions spring return		W1	3 positions, all detent	
T2	4 positions, 1-3 spring return, 4th detent		S	4 positions, all detent	

◆ Table (4)

Code	Port Size	A, B	P, T
M18	M18*1.5	✓	
M20	M20*1.5	✓	
M22	M22*1.5		✓
G06	G3/8	✓	✓
G08	G1/2	✓	✓

◆ Dimension



DCV40Z

DCV40Z Lower vehicle valve



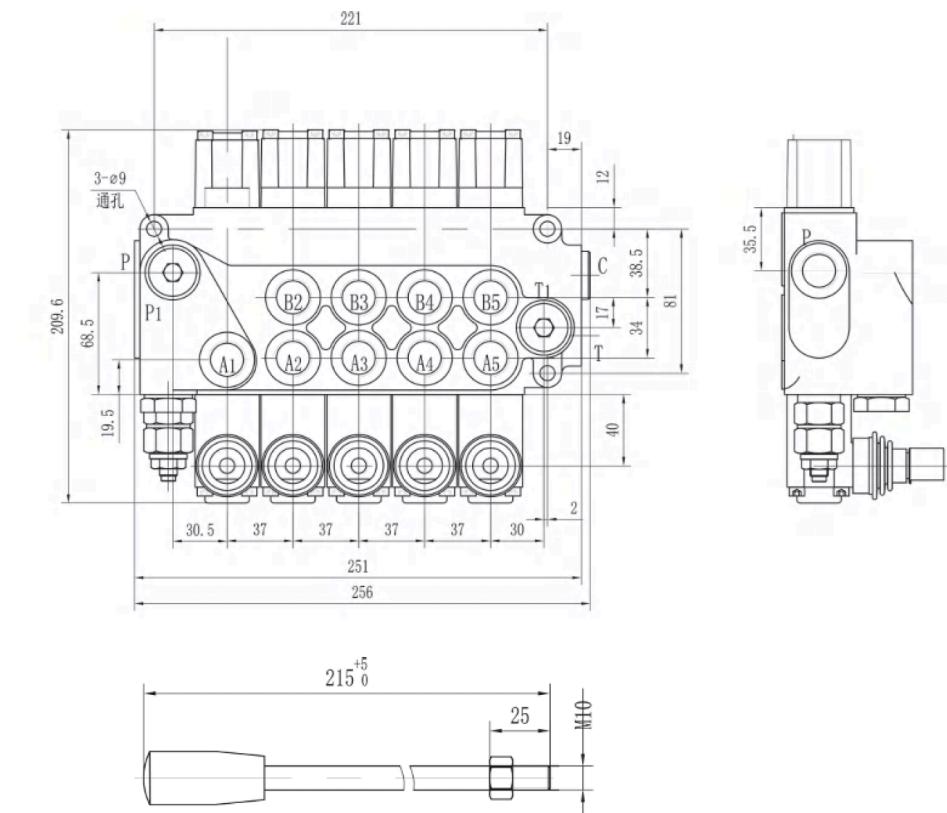
Specifications

Nominal flow rate	40 L/min	10.5 US GPM
Max pressure	350 bar	5076 psi
Operating range	15 ~ 75 mm ² /s	15 ~ 75 cst
Viscosity	min	12 mm ² /s
	max	400 mm ² /s
Ambient temperature range	-40 ~ 80 °C	-40 ~ 176 °F
Structure	Monoblock: 1 ~ 8 sections	

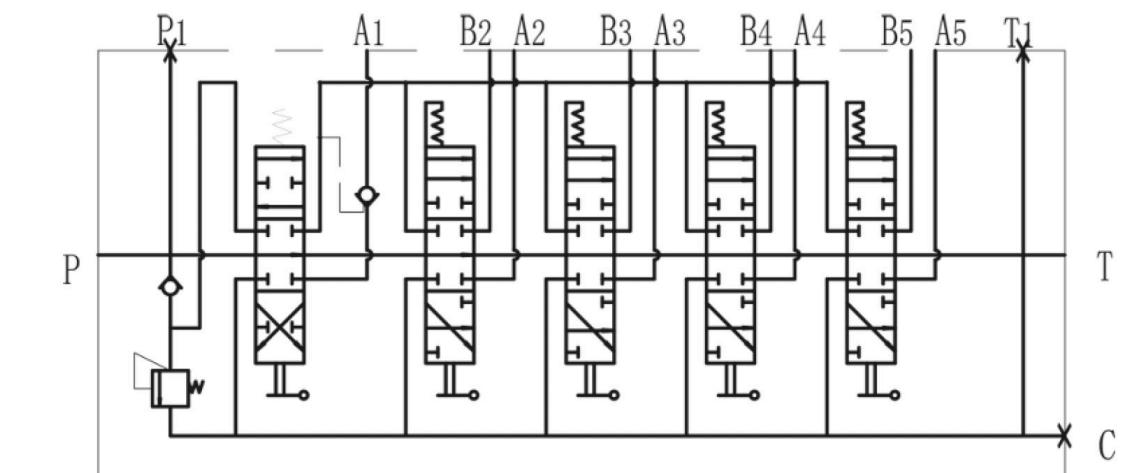
DCV40Z

DCV40Z Lower vehicle valve

◆ Dimension



◆ Hydraulic Schema





DF Series Directional Control Valve

DF50 directional control valve is specially designed for agricultural machines, with the features of low pressure-lose, high reliability, easy to install and maintain.

- ◆ Single/double acting switch in each work section, available to connect single or double acting cylinder.
- ◆ Single direction valve in each work section.
- ◆ Multiple spool type for cylinder motor, etc.
- ◆ Structure: DF50: Monoblock: 1 – 3 sections



Specifications

Model	DF50
Flow	50L/min
Rated pressure	16Mpa
Max pressure	20Mpa

◆ Ordering code

DF X XX - XX - XX - - XX
① ② ③ ④ ⑤ ④ ⑤ ⑥ ⑦

- ① Series code
- ② Number of sections
- ③ Flow: 50
- ④ Spool type: see table (1)
- ⑤ Spool return type: see table (2)
- ⑥ P, T port size: see table (3)
- ⑦ A, B port size: see table (3)

◆ Table (1)

Spool type	Code	Symbol	Spool type	Code	Symbol
A	A		Y	Y	
O	O		Q	Q	

◆ Table (2)

Code	Auxiliary valve	Symbol	Code	Spool return type	Symbol
T1	3 positions spring return		W1	3 positions, all detent	
T2	4 positions, 1-3 spring return, 4th detent		S	4 positions, all detent	

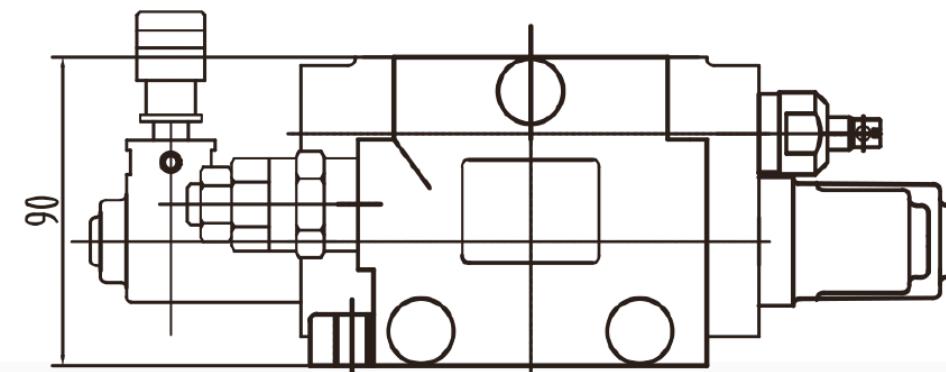
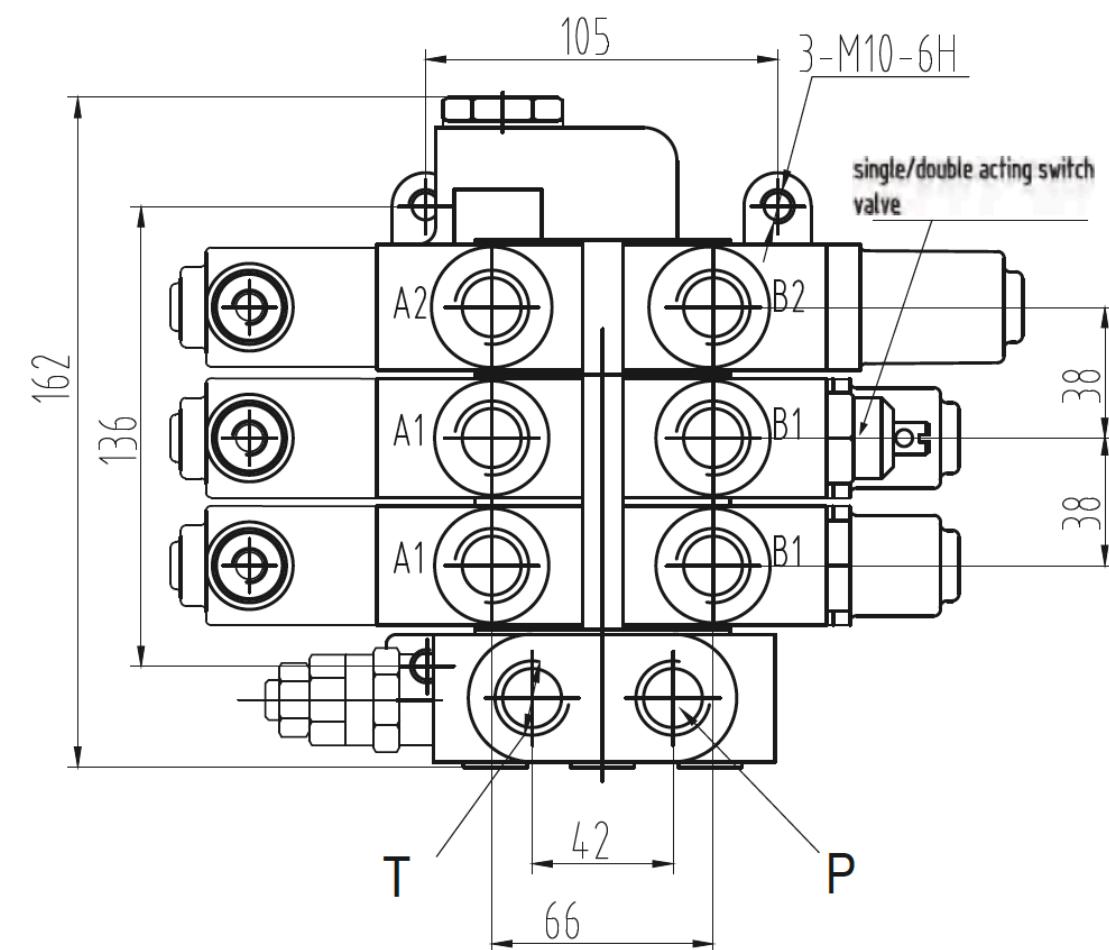
◆ Table (3)

Code	Port Size	DF50		DF80		
		A, B	P, T	A, B	P	T
M18	M18*1.5	✓				
M20	M20*1.5	✓				
M22	M22*1.5			✓	✓	
M27	M27*2				✓	
G06	G3/8					✓
G08	G1/2	✓	✓	✓		
G12	G3/4				✓	✓

DF50

DF50 Directional Control Valve

◆ Dimension

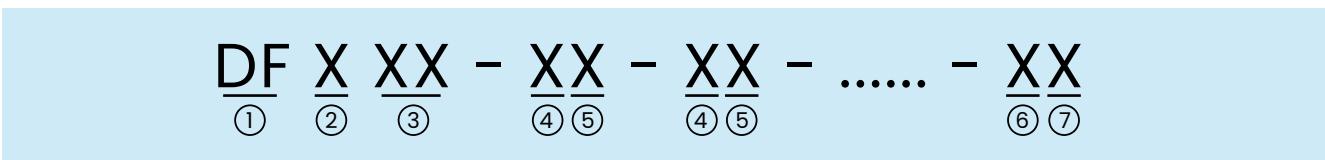


DF80 directional control valve is specially designed for agricultural machines, with the features of low pressure-loss, high reliability, easy to install and maintain.

- ◆ Single/double acting switch in each work section, available to connect single or double acting cylinder.
- ◆ Single direction valve in each work section.
- ◆ Multiple spool type for cylinder motor, etc.
- ◆ Structure: DF80: Monoblock: 3 sections, sectional: 1 - 10 sections

Specifications	
Model	DF80
Flow	80L/min
Rated pressure	16Mpa
Max pressure	20Mpa

◆ Ordering code



- ① Series code
- ② Number of sections
- ③ Flow: 80
- ④ Spool type: see table (1)
- ⑤ Spool return type: see table (2)
- ⑥ P, T port size: see table (3)
- ⑦ A, B port size: see table (3)

◆ Table (1)

Spool type	Code	Symbol	Spool type	Code	Symbol
A	A		Y	Y	
O	O		Q	Q	

◆ Table (2)

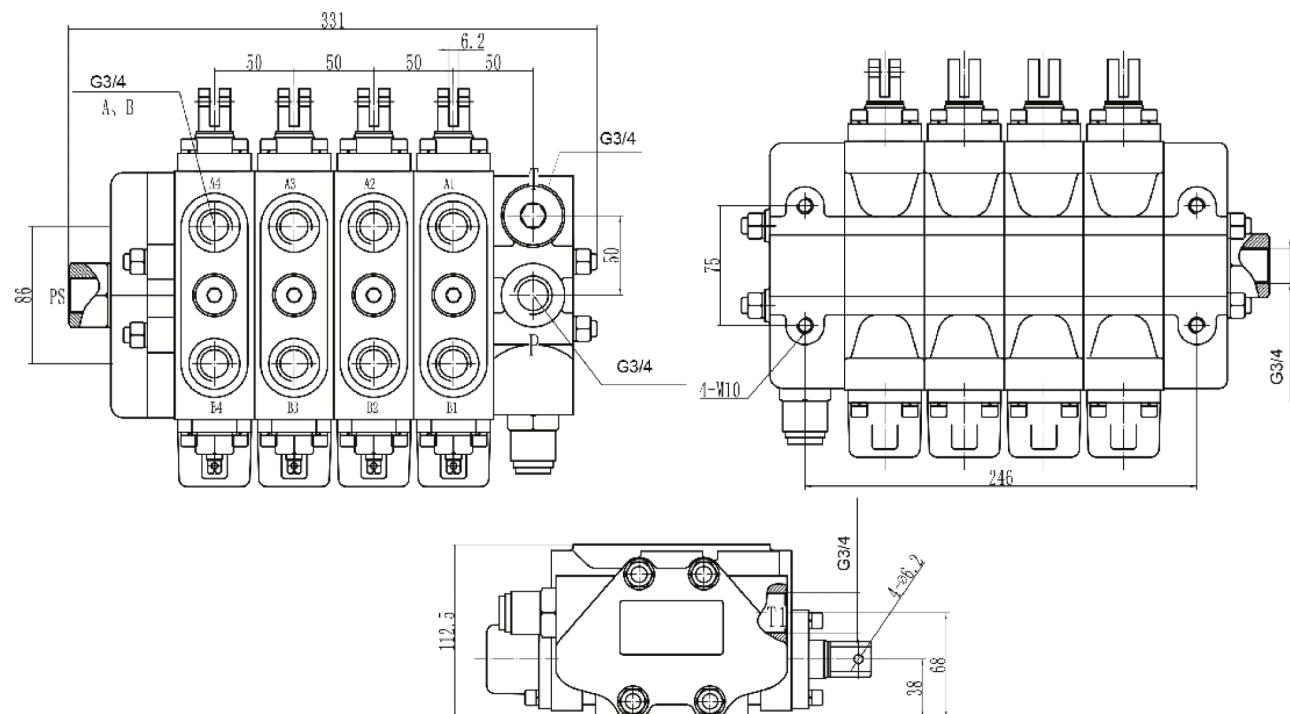
Code	Auxiliary valve	Symbol	Code	Spool return type	Symbol
T1	3 positions spring return		W1	3 positions, all detent	
T2	4 positions, 1-3 spring return, 4th detent		S	4 positions, all detent	

◆ Table (3)

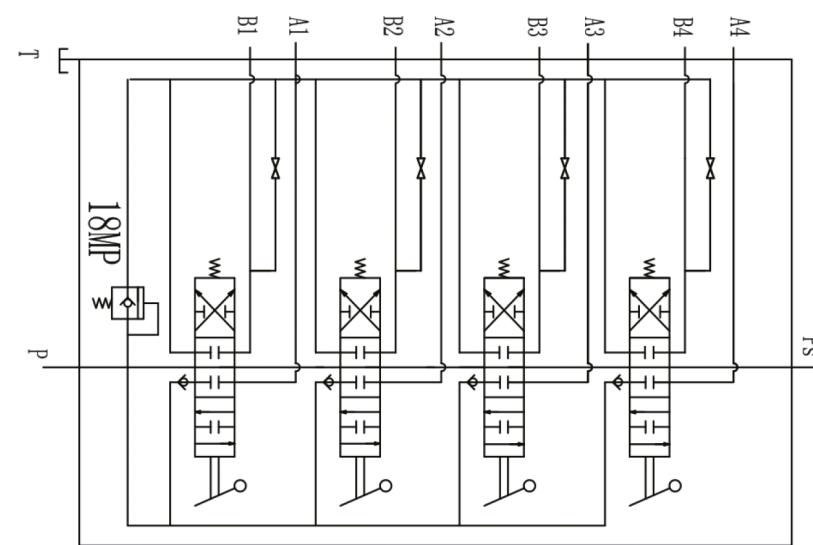
Code	Size	Port	DF50		DF80		
			A, B	P, T	A, B	P	T
M18	M18*1.5		✓				
M20	M20*1.5		✓				
M22	M22*1.5				✓	✓	
M27	M27*2						✓
G06	G3/8						✓
G08	G1/2		✓	✓	✓		
G12	G3/4					✓	✓

DF80**DF80 Directional Control Valve**

◆ Dimension



◆ Hydraulic Schema



DFS series directional control valve is a special model esigned by boxinghuasheng, it has a built-in single direction valve to prevent the static back flow of lift movement.

- ◆ Built-in single direction valve to prevent static group.
- ◆ Single/double acting switch in each work section, available to connect single or double acting cylinder.
- ◆ Single direction valve in each work section.
- ◆ Structure: DF50S: Monoblock: 3 sections, sectional: 1 - 10 sections



Specifications

Model	DF50S	DF80S
Flow	50L/min	80L/min
Rated pressure	16Mpa	16Mpa
Max pressure	20Mpa	16Mpa

◆ Ordering code

DF ① ② ③ ④ S - ⑤ ⑥ - ⑤ ⑥ - - ⑦ ⑧

- ① Series code
- ② Number of sections
- ③ Flow: 50, 80
- ④ Single direction valve
- ⑤ Spool type: see table (1)
- ⑥ Spool return type: see table (2)
- ⑦ P, T port size: see table (3)
- ⑧ A, B port size: see table (3)

◆ Table (1)

Spool type	Code	Symbol	Spool type	Code	Symbol
A	A		Y	Y	
O	O		Q	Q	

◆ Table (2)

Code	Auxiliary valve	Symbol	Code	Spool return type	Symbol
T1	3 positions spring return		W1	3 positions, all detent	
T2	4 positions, 1-3 spring return, 4th detent		S	4 positions, all detent	

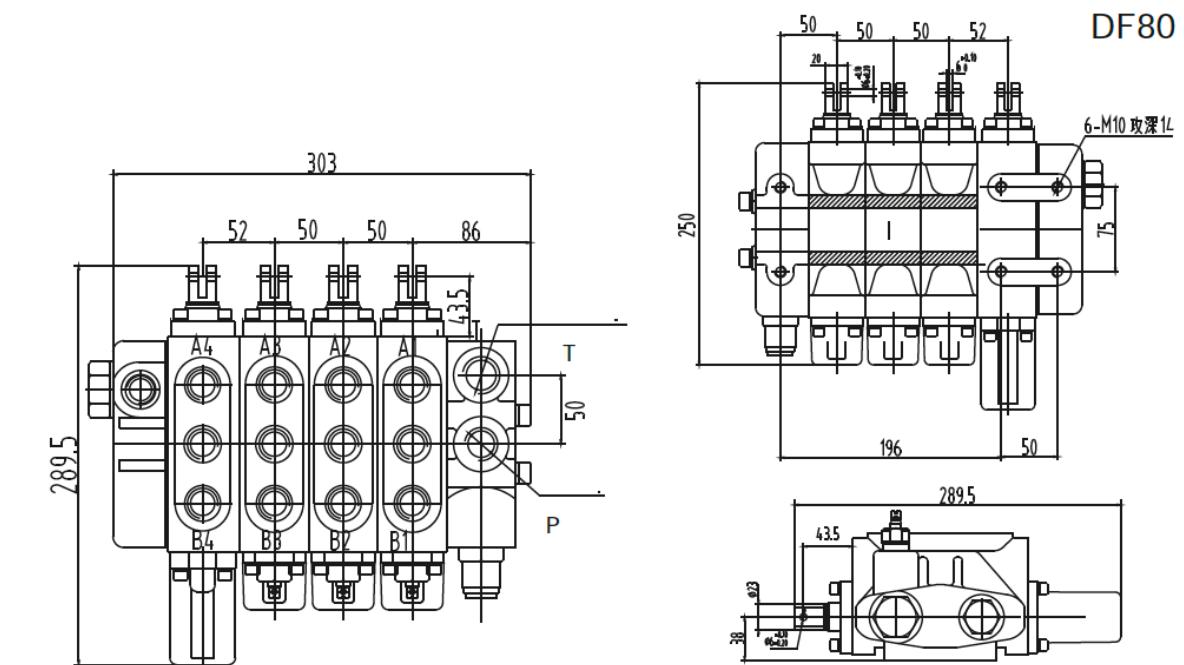
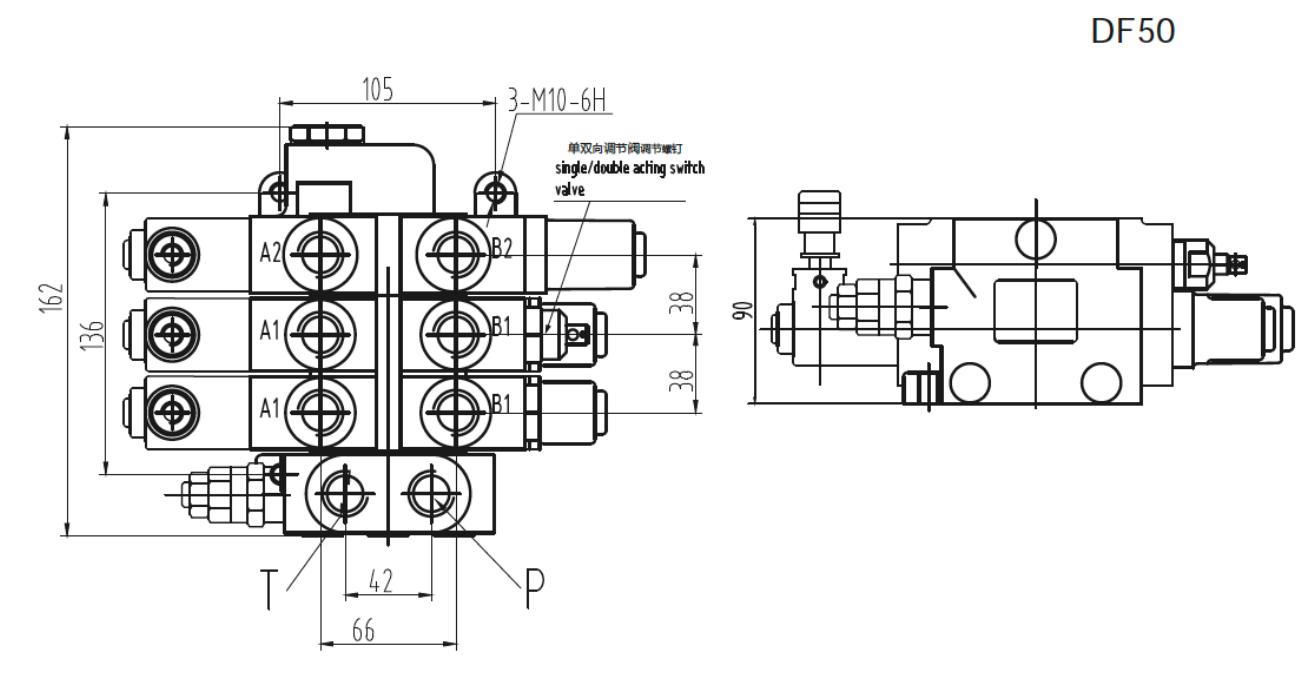
◆ Table (3)

Code	Port Size	DF50		DF80		
		A, B	P, T	A, B	P	T
M18	M18*1.5	✓				
M20	M20*1.5	✓				
M22	M22*1.5		✓	✓		
M24	M24*2				✓	
M27	M27*2					✓
G08	G1/2	✓	✓	✓		
G12	G3/4				✓	✓

DFS

Directional Control Valve

◆ Dimension



DL Series Directional Control Valve



DL series directional control valve is a kind of monoblock valve with the features of compact structure, big flow, low risk of leakage and high performance of relief valve. It is widely used in loader, mining machine, etc.

- ◆ Auxiliary valve: over-load valve, anti-cavitation valve
- ◆ Single direction valve in each work section.
- ◆ Multiple spool type for cylinder, motor, etc.
- ◆ Structure: Monoblock, DL15: 1-3 sections, DL20 2-3 sections

Specifications

Model	DL15	DL20
Flow	63L/min	100L/min
Rated pressure	16Mpa	16Mpa
Max pressure	20Mpa	16Mpa

◆ Ordering code

DL XX X - XXXX - XXXX - - XX
① ② ③ ④⑤⑥⑦ ④⑤⑥⑦ ⑧⑨

- ① Series code
- ② Nom. diameter: 15, 20
- ③ Number of sections
- ④ Spool type: see table (1)
- ⑤ Auxiliary valve: see table (2)
- ⑥ Auxiliary overload valve pressure: 150-200 bar
- ⑦ Spool return type: see table (3)
- ⑧ P, T port size: see table (4)
- ⑨ A, B port size: see table (4)

◆ Table (1)

Spool type	Code	Symbol	Spool type	Code	Symbol
A	A		Y	Y	
O	O		M	M	
Q	Q				

◆ Table (2)

Code	Symbol	Auxiliary valve		Code	Symbol	Auxiliary valve	
		A port	B port			A port	B port
N/A		no	no	5		Overload valve	anti-cavitation valve
1		no	Overload valve	6		anti-cavitation valve	no
2		no	anti-cavitation valve	7		anti-cavitation valve	Overload valve
3		Overload valve	no	8		anti-cavitation valve	anti-cavitation valve
4		Overload valve	Overload valve				

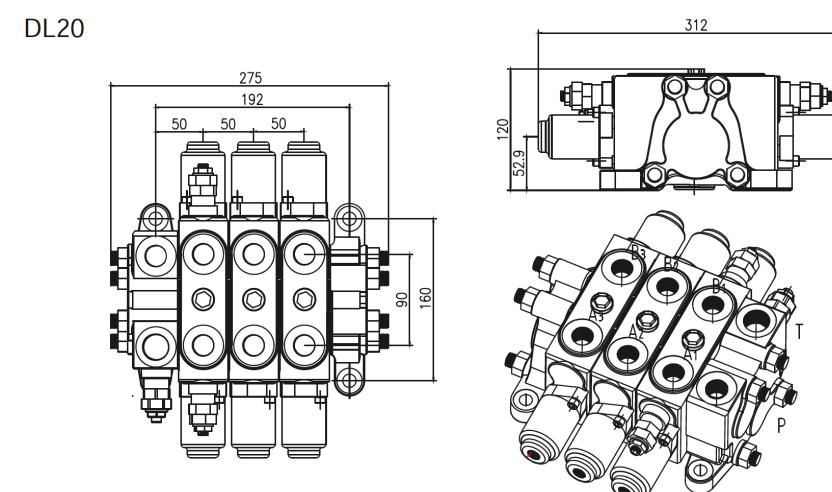
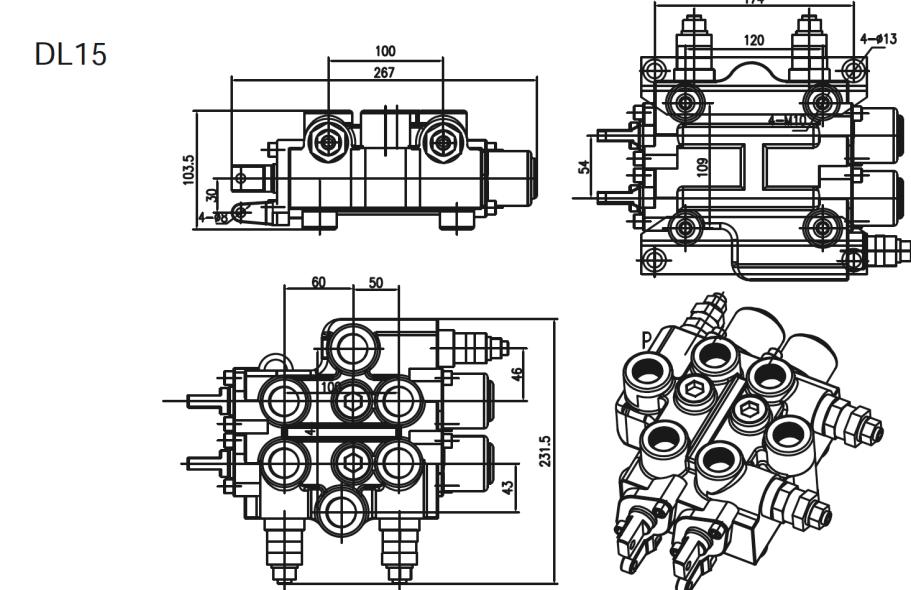
◆ Table (3)

Code	Auxiliary valve	Symbol	Code	Spool return type	Symbol
T1	3 positions spring return		W1	3 positions, all detent	
T2	4 positions, 1-3 spring return, 4th detent		S	4 positions, all detent	

◆ Table (4)

Code	Port Size	DL15		DL20	
		A, B	P, T	A, B	P, T
M22	M22*1.5	✓	✓		
M27	M27*2		✓	✓	✓
M06	G3/8	✓	✓		
G08	G1/2	✓	✓		
G12	G3/4			✓	✓

◆ Dimension



ZL Series Directional Control Valve



ZL series directional control valve is a kind of sectional valve with the features of compact structure, big flow, low risk of leakage and high performance of relief valve. It is widely used in loader, mining machine, etc.

- ◆ Auxiliary valve: over-load valve, anti-cavitation valve
- ◆ Single direction valve in each work section.
- ◆ Multiple spool type for cylinder, motor, etc.
- ◆ Structure: sectional.



Specifications

Model	ZL15	ZL20
Flow	63L/min	100L/min
Rated pressure	16Mpa	16Mpa
Max pressure	20Mpa	16Mpa

◆ Ordering code

ZL XX X - XXXX - XXXX - - XX

- ① Series code
- ② Nom. diameter: 15, 20
- ③ Number of sections
- ④ Spool type: see table (1)
- ⑤ Auxiliary valve: see table (2)
- ⑥ Auxiliary overload valve pressure: 150–200 bar
- ⑦ Spool return type: see table (3)
- ⑧ P, T port size: see table (4)
- ⑨ A, B port size: see table (4)

◆ Table (1)

Circuit type	Spool type	Code	Symbol	Circuit type	Spool type	Code	Symbol
parallel circuit	A			series-parallel circuit	A	A1	
	O				O	O1	
	Q				Q	Q1	
	Y				Y	Y1	
					M	M1	
					K	K1	

◆ Table (2)

Code	Symbol	Auxiliary valve		Code	Symbol	Auxiliary valve	
		A port	B port			A port	B port
N/A		no	no	5		Overload valve	anti-cavitation valve
1		no	Overload valve	6		anti-cavitation valve	no
2		no	anti-cavitation valve	7		anti-cavitation valve	Overload valve
3		Overload valve	no	8		anti-cavitation valve	anti-cavitation valve
4		Overload valve	Overload valve				

◆ Table (3)

Code	Auxiliary valve	Symbol	Code	Spool return type	Symbol
T1	3 positions spring return		W1	3 positions, all detent	
T2	4 positions, 1-3 spring return, 4th detent		S	4 positions, all detent	

◆ Table (4)

Code	Size	Port	ZL15		ZL20	
			A, B	P, T	A, B	P, T
M22	M22*1.5		✓	✓		
M27	M27*2				✓	✓
M06	G3/8		✓	✓		
G08	G1/2		✓	✓		
G12	G3/4				✓	✓

◆ Dimension

